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EFFECTS OF STEP ROUGHNESS IN SKIMMING FLOWS: AN EXPERIMENTAL STUDY

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RESEARCH REPORT CE160

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EFFECTS OF STEP ROUGHNESS IN SKIMMING FLOWS: AN EXPERIMENTAL STUDY

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Skimming flow of the rough stepped chute (Configuration A, $d_C/h = 1.3$, Re = 5.8 E+5)

ABSTRACT

On a stepped spillway at large flows, the waters skim over the pseudo-bottom formed by the step edges with very strong recirculation vortices in the step cavities. The effects of step roughness on the flow properties are little known despite the practical relevance : e.g., gabion stepped chutes, unprotected roller compacted concrete spillways, damaged concrete steps on older structures. In the present study, the effect of step roughness was investigated systematically in a new series of experiments. The work was performed in a large size laboratory facility, with step height of 0.10 m, step length of 0.25 m and chute width of 1 m, based upon an undistorted Froude similitude. Four configurations were thoroughly tested with identical flow conditions : a smooth stepped chute, and three configurations with rough step faces. The latters were achieved by placing rough screens on the step faces : i.e., on the vertical faces only (Config. B), on the horizontal step faces only (Config. C) and on both vertical and horizontal step faces (Config. A). Detailed air-water flow measurements were performed with a dual-tip phase detection probe (sensor size: 0.025 mm). Basic results included the vertical distributions of air concentration, bubble count rate, air-water velocity, turbulence level, and the air and water chord size distributions at each sampling point.

The results showed some similarities between all four stepped configurations. Three basic flow regimes were observed, and the flow conditions at the change from one flow regime to another were identical for all four geometries. In skimming flows, visual observations showed that the step roughness affected the recirculation patterns in the step cavities. For the roughest configuration A, clear-water recirculation regions were observed downstream of the inception point of air entrainment. Seepage was also observed through the rough screens. At a macroscopic level, the effects of step roughness were two-fold. The location of the inception point of free-surface aeration was further downstream than for a smooth stepped chute for an identical flow rate. In turn the residual energy at the downstream end of the chute was greater on the rough stepped chute.

At a microscopic level, the experimental results showed consistently several trends. The void fraction distribution results were very close for all stepped configurations, although there seemed to be slightly less entrained air in the rough stepped chute flows. Bubble count rate distributions indicated systematically lesser bubble count rates in the rough stepped chute flows. At step edges, the rough stepped chute flows were faster than smooth chute flows for a given flow rate and dimensionless location from the inception point of free-surface aeration. This was associated with lower turbulence intensities in rough stepped channel flows. A detailed analysis of air and water chord size distributions showed that, at each sampling location, the distributions of air and water chords were broad and spanned over two to three orders of magnitude. In the bubbly flow region ($C < 0.3$), the probability distribution functions of air chord sizes followed closely a log-normal law for all investigated configurations and flow conditions.

Keywords : Stepped chute, Skimming flow, Step roughness, Air-water flow, Physical Modelling, Flow resistance, Form drag, Energy dissipation, Gabion stepped spillway.

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NOTATION

The following symbols are used in this report :

A	flow cross-section area (m^2);
a	specific interface area (m^{-1}) defined as the air-water surface area per unit volume of air and water;
a_{mean}	mean interface area (m^{-1}) in a cross-section of fluid normal to the flow direction : $a_{mean} = \frac{1}{Y_{90}} * \int_0^{Y_{90}} a * dy$
C	air concentration defined as the volume of air per unit volume; (Note : it is also called void fraction);
C_{mean}	depth averaged air concentration defined as : $(1 - C_{mean}) * Y_{90} = d$;
ch	chord size (m);
D_H	hydraulic diameter (m) defined as : $D_H = 4* \frac{A_W}{P_W}$; $\left(D_H = \frac{4 * d*W}{W + 2*d} \text{ for a rectangular channel}\right)$
d	characteristic depth (m) defined as : $d = \int_0^{Y_{90}} (1 - C) *dy$;
d_{ab}	air bubble size (m);
d_{wd}	water droplet size (m);
d_c	critical flow depth (m); for a rectangular channel : $d_c = \sqrt[3]{q_w^2/g}$;
d_{crest}	flow depth (m) measured above the weir crest;
d_{50}	median grain size (m);
E	specific energy (m);
F	bubble count rate (Hz) : i.e., number of bubbles impacting a probe per second;
F_{max}	maximum bubble count rate (Hz) in a cross-section;
F_{scan}	scanning rate (Hz);
Fr	Froude number;
F∗	Froude number defined in terms of the roughness height : 1- $F* = q_w/\sqrt{g * \sin\theta * (k_s')^3}$ for smooth chute flow; 2- $F* = q_w/\sqrt{g * \sin\theta * k_s^3}$ for skimming flow on stepped chute;
f	Darcy-Weisbach friction factor;
g	gravity constant (m/s^2) : g = 9.80 m/s^2 in Brisbane, Australia;
H	total head (m);
H_{max}	maximum head available (m) using the spillway toe as datum;
H_{res}	residual head (m) at the downstream end of the spillway, using the spillway toe as datum : $H_{res} = H_{max} - \Delta H$;
H_1	upstream total head (m) measured from the inflow channel invert;
h	height of steps (m) (measured vertically);
k	rough screen height (m); herein k = 8 mm;
k_s	step dimension (m) measured normal to the flow direction : $k_s = h * \cos\theta$;
k_s'	equivalent sand roughness height (m) of the step surface : i.e., surface (skin) roughness height;
L	spillway chute length (m);
L_{cav}	cavity length (m);

L_I distance (m) from the start of growth of boundary layer to the inception point of air entrainment;

L_r ratio of prototype to model dimensions;

l horizontal length of steps (m) (measured perpendicular to the vertical direction);

Mo Morton number defined as : $Mo = \frac{g * \mu_w^4}{\rho_w * \sigma^3}$;

$n_{Manning}$ Gauckler-Manning coefficient ($s/m^{1/3}$);

P_w wetted perimeter (m);

Q discharge (m^3/s);

Q_w water discharge (m^3/s);

q discharge per unit width (m^2/s);

q_w water discharge per unit width (m^2/s);

Re Reynolds number defined in terms of the depth-averaged flow velocity and hydraulic diameter : $Re = \rho_w * U_w * D_H / \mu_w$;

R_{max} maximum cross-correlation function value;

R_{xx} normalised auto-correlation function;

R_{xy} normalised cross-correlation function;

S_f friction slope : $S_f = - \partial H / \partial x$;

S_o bed slope : $S_o = \sin\theta$;

T characteristic time (s) for which the cross-correlation function is maximum;

Tu turbulence intensity defined as : $Tu = u'/V$;

t time (s);

U_w equivalent clear-water flow velocity (m/s) : $U_w = q_w/d = q_w / \int_0^{Y_{90}} (1 - C) * dy$;

u' root mean square of longitudinal component of turbulent velocity (m/s);

V velocity (m/s);

V_b interfacial velocity (m/s);

V_c critical flow velocity (m/s); for a rectangular channel : $V_c = \sqrt[3]{g * q_w}$;

V_{90} characteristic velocity (m/s) where the air concentration is 90%;

v' root mean square of lateral component of turbulent velocity (m/s);

W channel width (m);

X_o dimensionless distance from the upstream step edge: $X_o = x'/L_{cav}$;

x longitudinal/streamwise distance (m);

x' streamwise distance (m) from the upstream step edge;

Y_{90} characteristic depth (m) where the air concentration is 90%;

y distance (m) from the pseudo-bottom (formed by the step edges) measured perpendicular to the flow direction;

Greek symbols

ΔT time scale (m) satisfying : $R_{xy}(T+\Delta T) = R_{max}/2$;

Δt characteristic time (s) for which the normalised autocorrelation function equals 0.5;

Δx streamwise distance (m) between the probe sensors;

Δz weir crest height (m) above the intake channel invert;

μ dynamic viscosity ($N.s/m^2$);

ν kinematic viscosity (m^2/s);

π $\pi = 3.14159265358979323846264338327950288419716939937510...$;

θ	angle between the pseudo-bottom formed by the step edges and the horizontal;
ρ	density (kg/m^3);
σ	surface tension between air and water (N/m);
τ	shear stress (Pa);
τ_o	boundary shear stress (Pa);

Subscript

a	air;
c	critical flow conditions;
I	inception point of free-surface aeration;
screen	rough screen property;
w	water flow;
wall	sidewall property;

Abbreviations

D/S	downstream;
HJ	hydraulic jump;
NA	nappe flow;
NA1	nappe flow with fully developed hydraulic jump;
NA2	nappe flow with partially developed hydraulic jump;
NA3	nappe flow without hydraulic jump;
RCC	roller compacted concrete;
SK	skimming flow regime;
SK1	skimming flow on flat chute (regime 1);
SK2	skimming flow (regime 2);
SK3	skimming flow on steep chute (regime 3);
TRA	transition flow regime;
U/S	upstream;

Notation

$\partial/\partial y$	partial differentiation with respect to y;
$\overline{V}$	time-average value of the parameter V.

1. INTRODUCTION

1.1 PRESENTATION

Stepped channels have been used for more than 3,500 years. The Greek engineers were possibly the first to design an overflow stepped spillway : i.e., an overflow stepped weir in Akarnania built around BC 1300 (CHANSON 2001-2002). Figure 1-1 presents several stepped chute designs. The stepped design increases the rate of energy dissipation on the chute (i.e. above the steps) and reduces the size of the downstream energy dissipator. During the last three decades, research in the hydraulics of stepped spillways has been very active (CHANSON 1995a,2001, OHTSU and YASUDA 1998). For a given stepped chute, water flows as a succession of free-falling nappes (nappe flow regime) at small discharges (Fig. 1-1A). For an intermediate range of flow rates, a transition flow regime is observed (Fig. 1-1C). Most prototype spillways operate at large discharges per unit width (i.e. skimming flow regime) for which the waters skim as a coherent stream over the pseudo-bottom formed by step edges (Fig. 1-1D). Skimming flows are characterised by very-significant form losses and momentum transfer from the main stream to the recirculation zones (e.g. RAJARATNAM 1990, OHTSU and YASUDA 1997, CHANSON et al. 2002). There is an obvious analogy with skimming flows past large elements and boundary layer flows past d-type roughness: e.g., KNIGHT and MACDONALD (1979), DJENIDI et al. (1999).

Stepped chute hydraulics is not simple because of different flow regimes, but importantly because of strong flow aeration, very-strong turbulence, and interactions between entrained air and turbulence (CHANSON and TOOMBES 2002a,b,2003, YASUDA and CHANSON 2003). Recently several studies investigated the effects of macro-roughness and turbulence manipulation on skimming flow properties (ANDRE et al. 2004, CHANSON and GONZALEZ 2004, GONZALEZ and CHANSON 2004a,2005, KOKPINAR 2004). Surprisingly, the effects of step roughness on the flow properties remain unknown, despite the practical relevance : e.g., gabion stepped chutes, unprotected roller compacted concrete chutes, damaged concrete steps on older structures (Fig. 1-2). PEYRAS et al. (1991,1992) studied experimentally the hydraulics of gabion stepped weirs. KELLS (1993,1995) discussed the interactions between of seepage and free-surface flows, while CHANSON (1995a,2001) reviewed basic design considerations.

It is the purpose of this study to study thoroughly the effects of step roughness in skimming flows on a stepped chute. New measurements were conducted in a large-size facility ($\theta = 22^\circ$, $h = 0.1$ m) with two step conditions (smooth and rough) and three types of step roughness. Detailed air-water flow properties were measured systematically for several flow rates. The results provide a new understanding of the effects of step face roughness on the flow characteristics of skimming flows.

Fig. 1-1 - Photographs of stepped chutes and spillways
(A) Nappe flow at Lake Wilde dam spillway (Maryland, USA) during a 1-year return period flood on 23 March 2005 (Courtesy of Christopher R. GOODELL, WEST Consultants)

(B) Overflow on the Opuha dam stepped spillway (Courtesy of Tonkin and Taylor, NZ) - Dam height: 47 m, completion: 1999, spillway slope: $\theta = 26.6^{\circ}$ (1V:2H), design flow: 315 m^3/s, h = 1 m, l = 2m

(C) Spray, splashing and waves in transition flow on a steep stepped chute downstream of a culvert near Sonson, Columbia (Courtesy of Sergio LLANO, International Institute for Infrastructural, Hydraulic and Environmental Engineer) - Original design operating with Q = 0.8 m^3/s, chute length: 36.3 m, width: 1.5 m, h = 1.5 m, l = 2 to 3 m - The chute step design was subsequently modified to avert transition flow regime operation

(D) Skimming flow on the Volymia experimental earth dam (20 m high) spillway in the Magadan region (Siberia) (Courtesy of Prof. Yuri PRAVDIVETS, Moscow Institute of Civil Engineers, Russia) - For 15 years, the stepped spillway has been discharging ice and water from early spring to late fall as an un-gated overflow - The chute slope is 1V:2H, ending with a ski jump (PRAVDIVETS 1992, CHANSON 2001)

Fig. 1-2 - Photographs of rough stepped chutes
(A) Gabion stepped weir at Robina, Gold Coast (Australia) on 2 Apr. 1997, shortly after completion - Stepped weir characteristics : h = 0.6 m, W = 10.5 m, Reno mattress construction

(B) Gabion stepped weir at Guaribraba, Capo Grande Brazil (Courtesy of Officine Maccaferri) - Note the seepage flow, the absence of overflow and the increasing seepage with downstream distance from the crest

(C) Nappe flow at Duralie NSW (Australia on 21 October 2004) (Courtesy of Tony MARSZALEK and Gilbert & Associates, Brisbane) - Slope : 1V:5H, h = 0.5 m, gabion/reno mattresses construction (d_{50} = 150 mm), completed in 2004

1.2 DIMENSIONAL ANALYSIS AND SIMILITUDE

A dominant characteristic of stepped chute flows is the strong flow aeration ('white waters') clearly seen in prototype and laboratory. Theoretical analysis (and numerical study) is limited considering the large number of relevant equations : i.e., three basic equations per phase plus a phase transfer equation. Experimental investigations are also difficult but recent advances in air-water flow instrumentation brought new measuring systems enabling successful experiments (e.g. CHANSON 2002, CHANSON and TOMBES 2002a). Traditionally model studies are performed with geometrically similar models and the geometric scaling ratio L_r is defined as the ratio of prototype to model dimensions. Laboratory studies of air-water flows require however the selection of an adequate similitude.

The relevant parameters needed for any dimensional analysis include the fluid properties and physical constants, the channel geometry and inflow conditions, the air-water flow properties including the entrained air bubble characteristics, and the geometry of the steps (CHANSON and GONZALEZ 2005). Considering a skimming flow down a stepped chute with flat horizontal steps at uniform equilibrium and for a prismatic rectangular channel, a complete dimensional analysis yields a relationship between the local air-water flow properties, and the fluid properties, physical constants, flow conditions and step geometry :

$$C, \frac{V}{\sqrt{g * d}}, \frac{u'}{V}, \frac{d_{ab}}{d}, ... = F_1\left(\frac{x}{d}; \frac{y}{d}; \frac{q_w}{\sqrt{g*d^3}}; \rho_w * \frac{q_w}{\mu_w}; \frac{g * \mu_w^4}{\rho_w * \sigma^3}; \frac{d}{h}; \frac{W}{h}; \theta; \frac{k_s'}{h}\right) \quad (1\text{-}1)$$

where C is the local void fraction, V is the local velocity, g is the gravity acceleration, d is the equivalent water depth at uniform equilibrium, u' is a characteristic turbulent velocity, d_{ab} is a characteristic size of entrained bubble, x is the coordinate in the flow direction measured from a step edge, y is the distance normal from the pseudo-bottom formed by the step edges, q_w is the water discharge per unit width, ρ_w and μ_w are the water density and dynamic viscosity

respectively, σ is the surface tension between air and water, W is the chute width, h is the step height, θ is the angle between the pseudo-bottom and the horizontal, and k_s' is the equivalent sand roughness height of the step surface (Fig. 1-3). In Equation (1-1), the characteristic length scale is taken as the equivalent clear water depth defined as :

$$d = \int_{y=0}^{y=Y_{90}} (1 - C) * dy \quad (1\text{-}2)$$

where Y_{90} is the depth where C = 0.9. In the following sections, alternate characteristic length scales may be introduced in some places whenever appropriate, including the critical flow depth (Section 3), the step roughness $k_s = h*\cos\theta$ (Eq. (3-7)) or the step cavity length $L_{cav} = \sqrt{h^2+l^2}$ (Section 4).

In Equation (1-1) right handside, the 3rd, 4th and 5th dimensionless terms are Froude, Reynolds and Morton numbers respectively, and the last four terms characterise the step cavity shape and the skin friction effects on the cavity wall. Note that compressibility of high-velocity air–water flow may be an important issue relevant to the design of spillways. A re-analysis of existing model and prototype data showed that transonic and supersonic flow conditions were achieved in a number of studies (CHANSON 1997, 2004c), but the results implied that, in free-surface flows, compressibility effects had little impact neither on the air bubble diffusion process nor on the mixing layer characteristics. Hence compressibility effects are not considered herein.

Any combination of dimensionless numbers is also dimensionless and may replace a dimensionless number. In particular, one parameter among the Froude, Reynolds and Weber numbers may be replaced by the Morton number $Mo = (g*\mu_w^4)/(\rho_w*\sigma^3)$ which is an invariant of the same fluids are used in model and prototype. In Equation (1-1), the Weber number was replaced by the Morton number.

Further simplifications may be derived by considering the depth-averaged air-water flow properties: i.e., the one-dimensional air-water flow properties. For a skimming flow at uniform equilibrium, Equations (1-1) yields :

$$F_2\left(\frac{U_w}{\sqrt{g * d}} ; \rho_w \frac{U_w * d}{\mu_w} ; \frac{g * \mu_w^4}{\rho_w * \sigma^3} ; C_{mean} ; \frac{d}{h} ; \frac{W}{h} ; \theta ; \frac{k_s'}{h}\right) = 0 \quad (1\text{-}3)$$

where U_w is the mean flow velocity ($U_w = q_w/d$) and C_{mean} is the depth-averaged void fraction:

$$C_{mean} = \frac{1}{Y_{90}} * \int_{y=0}^{y=Y_{90}} C * dy \quad (1\text{-}4)$$

In free-surface flows, most laboratory studies are based upon a Froude similitude (e.g. HENDERSON 1966, CHANSON 2004a). This is also the case with stepped spillway studies (e.g. BOES 2000, CHANSON and GONZALEZ 2005, TAKAHASHI et al. 2005). But cavity recirculation and momentum exchanges between cavity and stream flow are dominated by viscous effects suggesting the need for a Reynolds similitude, while the entrapment of air bubbles and the mechanisms of air bubble breakup and coalescence are dominated by surface tension effects implying the use of a Weber similitude. For geometrically-similar models, it is impossible to satisfy simultaneously Froude, Reynolds and Weber similarities unless $L_r = 1$. In small size models ($L_r >> 1$), the air entrainment process may be affected by significant scale effects. WOOD (1991) and CHANSON (1997) presented comprehensive reviews.

Despite very simplistic assumptions, Equation (1-1), and even Equation (1-3), demonstrate that true dynamic similarity of stepped chute flows is almost impossible to achieve with geometrically similar models, unless working at full-scale, because of the large number of relevant parameters. It is therefore important to clarify the ranges of flow conditions in which viscous and surface tension effects are negligible. Note that, usually, the same fluids (air and water) are used in model and

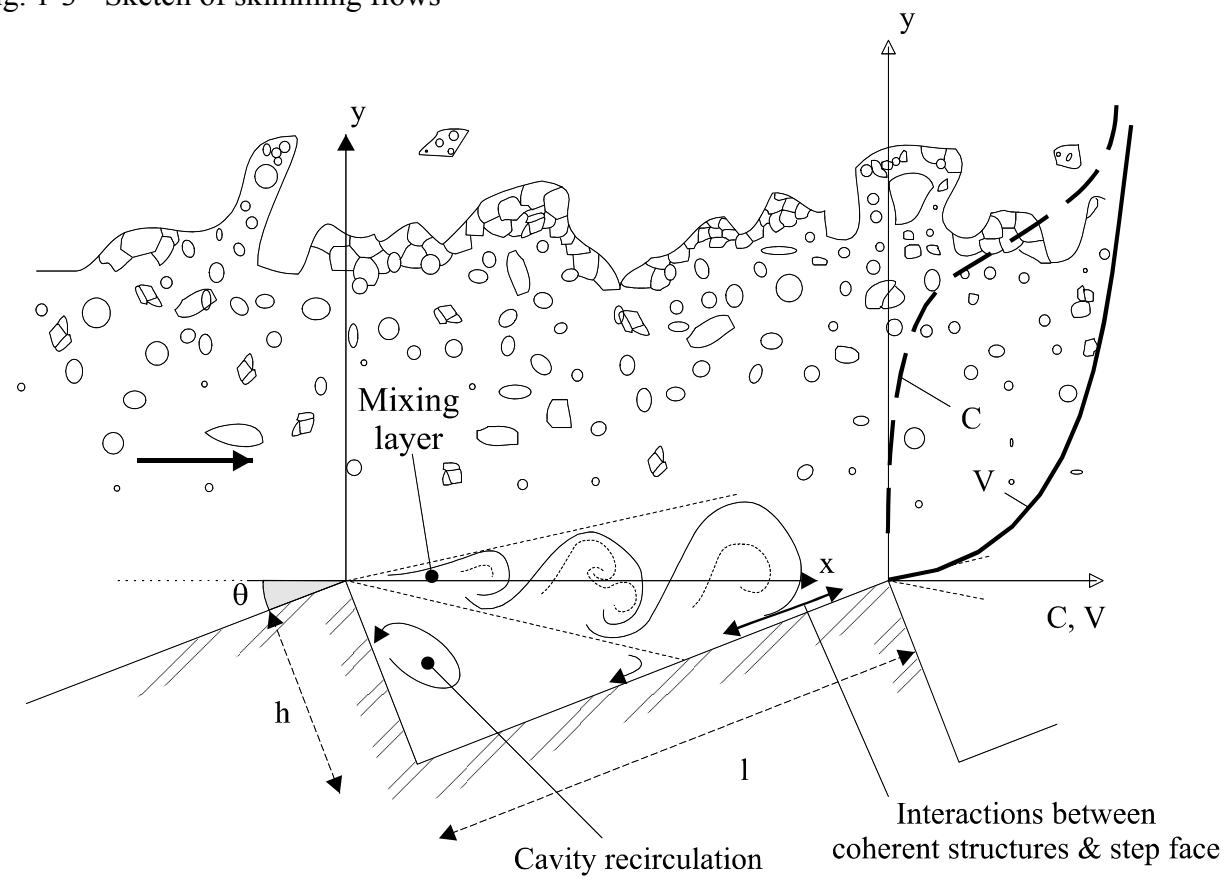
prototype, and the Morton number becomes an invariant.

Discussion

Few studies tested systematically the validity of a Froude similitude on stepped chutes based upon a geometric similarity using the same fluids in model and prototype (see review by CHANSON 2004b, pp. 358-364). These were based upon a Froude similitude with undistorted geometric scale and sometimes two-dimensional models. BaCaRa (1991) described a systematic laboratory investigation of M'Bali dam spillway with model scales of L_r = 10, 21.3, 25 and 42.7. No prototype test was conducted. For the smallest models (L_r = 25 & 42.7), the flow resistance was improperly reproduced. CHANSON et al. (2002) re-analysed more than 38 model studies and 4 prototype investigations with channel slopes ranging from 5.7º up to 55º, and with Reynolds numbers between 3 E+4 and 2 E+8. They concluded that physical modelling of flow resistance may be conducted based upon a Froude similitude if laboratory flow conditions satisfy h > 0.020 m and Re > 1E+5. They added that true similarity of air entrainment was achieved only for model scales L_r < 10. However detailed studies of local air-water flow properties (BOES 2000, GONZALEZ and CHANSON 2004b, CHANSON and GONZALEZ 2005) yielded more stringent conditions suggesting the impossibility to achieve dynamic similarity, even in large-size models.

In the present study, a Froude similitude was used as for most open channel flow studies and past studies. However experiments were conducted in a large size facility operating at large Reynolds numbers. These conditions are representative of full-scale storm waterway and could be considered as 3:1 to 6:1 scale studies of a RCC stepped spillway with step height of 0.3 to 0.6 m. The purpose of the present study was to investigate systematically the effects of step face roughness k_s' on skimming flow properties.

Fig. 1-3 - Sketch of skimming flows



2. EXPERIMENTAL SETUP

2.1 PRESENTATION

New experiments were conducted in the Gordon McKAY Hydraulic Laboratory of the Department of Civil Engineering at the University of Queensland. The experimental channel was previously used by CHANSON and TOOMBES (2001,2002a,2003) and GONZALEZ (2005) with smooth step faces. Waters were supplied from a large feeding basin (1.5 m deep, surface area 6.8 m×4.8 m) leading to a sidewall convergent with a 4.8:1 contraction ratio. The test section consisted of a broad-crested weir (1 m wide, 0.6 m long, with upstream rounded corner (0.057 m radius)) followed by ten identical steps (h = 0.1 m, l = 0.25 m) made of marine ply (Fig. 2-1). Rough screens or triangular vanes could be installed on the steps (CHANSON and GONZALEZ 2004, GONZALEZ 2005, Present study). The stepped chute was 1 m wide with perspex sidewalls followed by a horizontal concrete-invert canal ending in a dissipation pit.

A pump controlled with an adjustable frequency AC motor drive delivered the flow rate, enabling an accurate discharge adjustment in a closed-circuit system. Clear-water flow depths were measured with a point gauge. The discharge was measured from the upstream head above crest ([1]). Air-water flow properties were measured using a double-tip conductivity probe (∅ = 0.025 mm) designed at the University of Queensland. The probe sensors were aligned in the flow direction (Fig. 2-2). The leading tip had a small frontal area (i.e. 0.05 mm^2) and the trailing tip was offset to avoid wake disturbance from the first tip. Tests showed the absence of wake disturbance during all experiments (CHANSON 1995b). Further discussion on the probe design is developed in Appendix A. An air bubble detector (UQ82.518) excited the probe and its output signal was scanned at 20 kHz per sensor for 20 seconds.

The translation of the probes in the direction normal to the channel invert was controlled by a fine adjustment travelling mechanism connected to a Mitutoyo™ digimatic scale unit (Ref. No. 572-503).

Flow visualisations were conducted with high-shutter speed digital still- and video-cameras.

2.2 DATA PROCESSING

The measurement principle of conductivity probes is based upon the difference in electrical resistivity between air and water. The resistance of water is one thousand times lower than the resistance of air bubbles. When the probe tip is in contact with water, current will flow between the tip and the supporting metal; when it is in contact with air no current will flow. A sketch of double-tip conductivity probe is presented in Figure 2-2A. Typical probe signals are shown in Figure 2-2B. Each steep drop of probe output signal corresponds to an air bubble pierced by the probe tip. Although the signal is theoretically rectangular, the probe response is not square because of the finite size of the tip, the wetting/drying time of the interface covering the tip and the response time of the probe and electronics. Herein the signal was processed using a single threshold technique and the threshold was set between 45 and 55% of the full air-water voltage range. A sensitivity analysis was conducted with thresholds between 40 and 60% of the voltage range (TOOMBES 2002). The results showed little effect of the threshold on air-water flow properties. (Time-variations of the water voltage during the scan period (i.e. 20 sec.) was sometimes a problem however. Some data

---

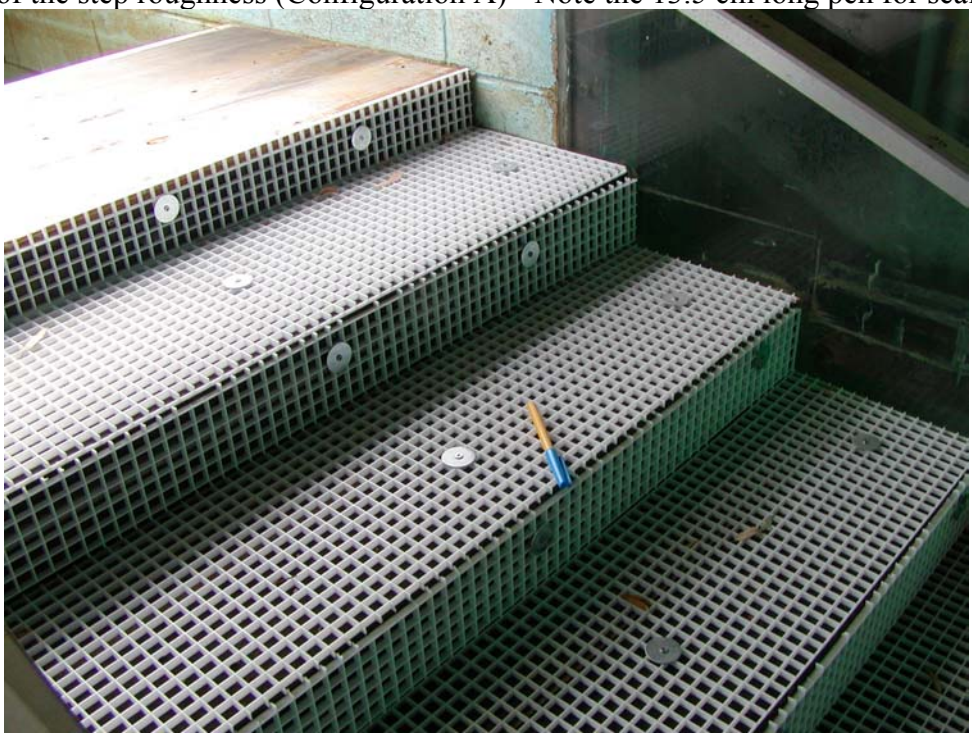
[1]The discharge measurements were based upon GONZALEZ' (2005) detailed velocity distribution measurements on the broad-crested weir. Present discharge estimates are based upon the re-analysis of his results and the resulting calibration curve :

$$\frac{Q_W}{W} = \left(1.013 - 0.37 * \frac{H_1 - \Delta z}{W}\right) * \sqrt{g * \left(\frac{2}{3} * (H_1 - \Delta z)\right)^3}$$

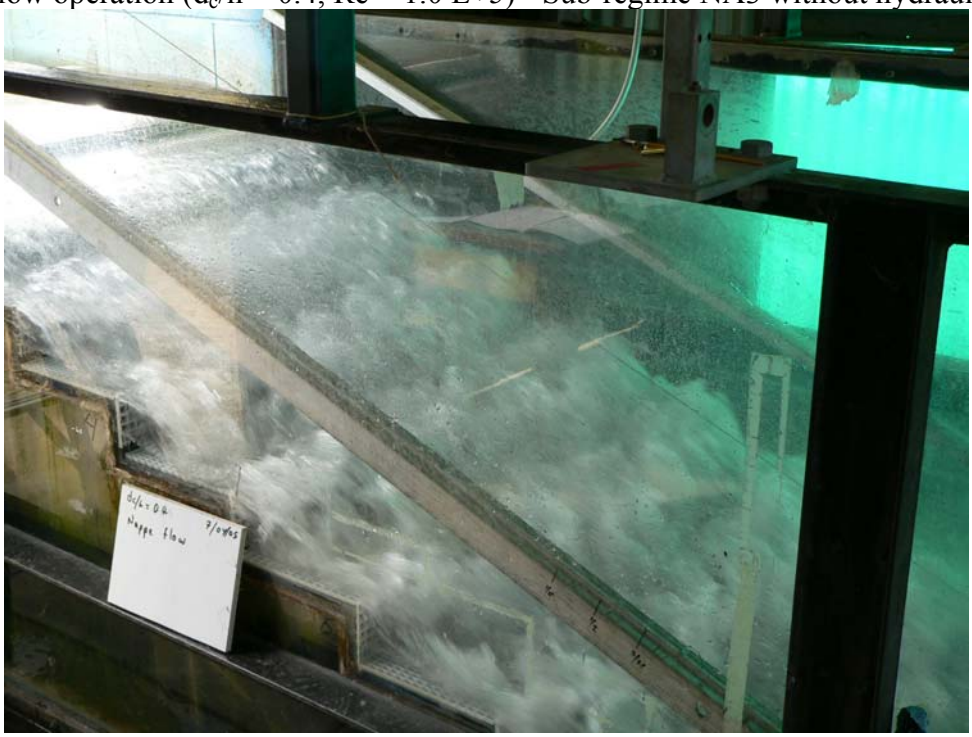
where H_1 is the upstream total head, Δz is the weir crest elevation and W is the channel width. The above relationship was derived for $0.05 \leq (H_1 - \Delta z)/W \leq 0.22$

sets had to be rejected when the water voltage variations exceeded 10% of the air-water voltage range during a scan.)

Fig. 2-1 - Photographs of the experimental channel with a rough stepped invert (θ = 22º, h = 0.1 m)
(A) Details of the step roughness (Configuration A) - Note the 13.5 cm long pen for scale



(B) Nappe flow operation (d_c/h = 0.4, Re = 1.0 E+5) - Sub-regime NA3 without hydraulic jump



The basic probe outputs were the void fraction, bubble count rate, velocity, turbulence intensity and air/water chord size distributions (e.g. CROWE et al. 1998, CHANSON 2002,2004b). The void fraction C is the proportion of time that the probe tip is in the air. The bubble count rate F is the number of bubbles impacting the probe tip. The bubble chord times provide information on the air-

water flow structure. With a dual-tip probe design, the velocity measurement is based upon the successive detection of air-water interfaces by two tips. In turbulent air-water flows, the detection of all bubbles by each tip is highly improbable and it is common to use a cross-correlation technique (e.g. CAIN and WOOD 1981, CROWE et al. 1998). The time-averaged air-water velocity equals: $V = \Delta x/T$, where Δx is the distance between tips and T is the time for which the cross-correlation function is maximum (Fig. 2-3).
The turbulence level Tu may be derived from the broadening of the cross-correlation function compared to the auto-correlation function :

$$Tu = 0.851 * \frac{\sqrt{\Delta T^2 - \Delta t^2}}{T} \quad (2\text{-}1)$$

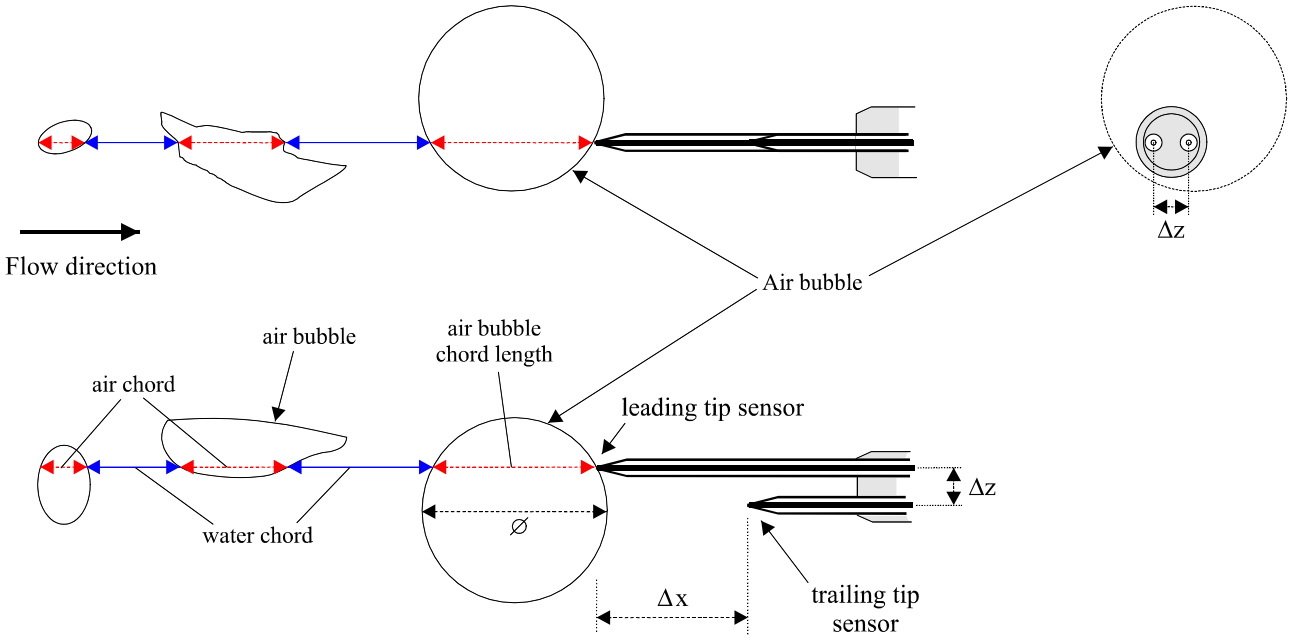
where ΔT is a time scale satisfying : $R_{xy}(T+\Delta T) = 0.5*R_{xy}(T)$, R_{xy} is the normalised cross-correlation function, and Δt is the characteristic time for which the normalised autocorrelation function R_{xx} equals 0.5 (Fig. 2-3) (CHANSON and TOOMBES 2001a,b, 2002a). Physically a thin and narrow cross-correlation function must correspond to little fluctuations in the interfacial velocity, hence a small turbulence level (Fig. 2-3, dotted line). Conversely, a broad cross-correlation function implies large turbulence level.
Equation (2-1) was derived for two-phase mixtures on pneumatic conveyor (KIPPHAN 1977) and for high-velocity turbulent bubbly flows (CHANSON and TOOMBES 2002a). It is a measure of the average velocity fluctuations and it was validated for dispersed phase, including in open channel flows with the LDA data of OHTSU and YASUDA (1997). It is acknowledged that the development is based upon few key assumptions (App. A). The turbulence level, defined in Equation (2-1), is not a point measurement, but some spatial average between probe sensors. A further approximation is that a characteristic time t' equals the time T for which the cross-correlation function is maximum (CHANSON and TOOMBES 2002a, pp. 1756-57). CHANSON and TOOMBES explicitly stated : "there is no indication of its validity for $0.05 < C < 0.95$" ! Since the results (Eq. (2-1)) are valid in very disperse phase and yield monophase flow observations, the approximation might be reasonable, at least in disperse phase. For $C < 0.05$ and $C > 0.95$, Equation (2-1) might not be equal to the "true" turbulence intensity, but it remains an expression of some turbulence level or average velocity fluctuations.
The autocorrelation function provides further information on the signal. A characteristic measure is the "noise" defined as :

$$Noise = 0.851 * \frac{\Delta t}{T} \quad (2\text{-}2)$$

where Δt is the characteristic time for which the normalised autocorrelation function R_{xx} equals 0.5 (Fig. 2-3). The "noise" is somewhat comparable to an integral time scale of the voltage signal.
Bubble chord sizes may be calculated from the raw probe signal outputs. The results provide a complete characterisation of the streamwise distribution of air and water chords. In turn information on the flow structure may be analysed in terms of particle clustering and grouping (CHANSON and TOOMBES 2002a). In this study, two air bubbles formed parts of a cluster when the water chord separating the bubbles was less than one tenth of the mean water chord size.
Although the autocorrelation function provides some information, a Fourier spectral analysis of the probe signal gives further information on the frequency distribution and the reproductibility of the signal with itself, that is related to the air+water length scale distribution of the flow (CHANSON and GONZALEZ 2004, GONZALEZ 2005). The auto power spectrum provides some information on the sensor signal periodicity. In a typical auto power spectrum, the power spectral density (PSD) curve displays the partitioning of power, or voltage variation (interface length scale fluctuation), according to frequency. The frequency of voltage fluctuation (*f*) is a function of the velocity at which the interfaces are convected past the probe (local flow velocity V) and on the air+water length scale that may be calculated as $\lambda = V/f$.

A combined analysis of chord length, clustering and spectral characteristics describes the air-water flow structure and its behaviour.

Fig. 2-2 - Sketch of the dual-tip conductivity probe and its operation
(A) Side view, front view and view in elevation (bottom)



(B) Typical probe signal output and corresponding binary signal

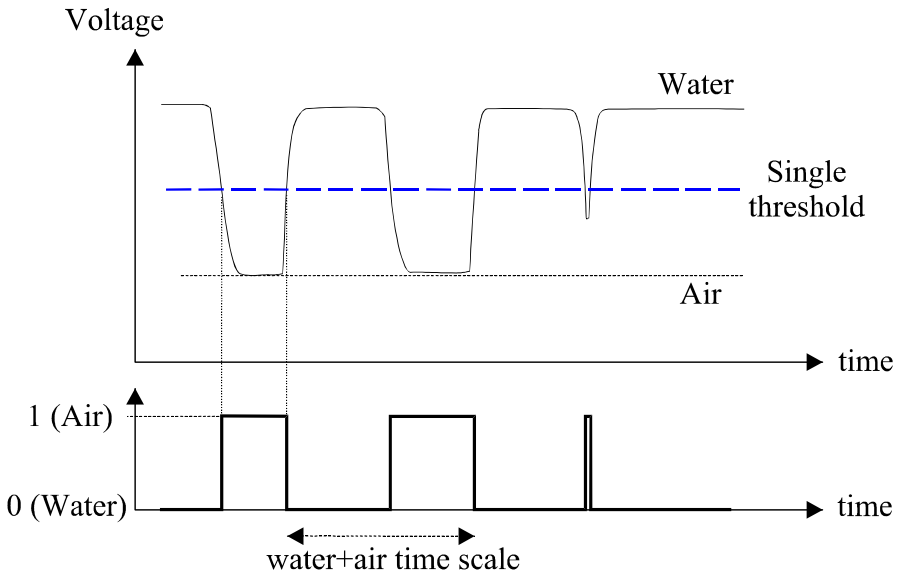
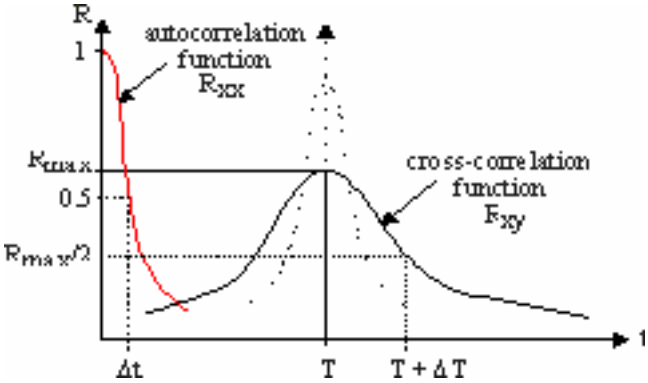


Fig. 2-3 - Sketch of the cross-correlation and auto-correlation functions deduced from the analysis of a dual-tip phase-detection probe signal analysis



Quality control, scan frequency and scan duration

Phase-detection probes are very sensitive devices and they are susceptible to a number of problems. In the present study, the quality control procedure developed by TOOMBES (2002, pp. 70-72) was applied thoroughly. Specifically, the probe signals were checked systematically for (1) long-term signal decays often induced by probe tip contamination, (2) short-term signal fluctuations caused by debris and water impurities, (3) electrical noise and (4) non-representative samples. While most quality control procedure can be automatised, it must be stressed that human supervision and intervention are essential to validate each quality control step.

The scan frequency determines the resolution of the intrusive phase-detection probe, in particular the accuracy of chord size measurement, minimum detectable air/water chord length, and the accuracy of the interfacial velocity :

$$\Delta ch = \frac{V}{F_{scan}} \qquad (2\text{-}2)$$

$$\frac{\Delta V}{V} = 1 - \left(1 + \frac{V}{F_{scan} * \Delta x}\right)^{-1} \qquad (2\text{-}3)$$

where ch is the chord size, V is the velocity, F_{scan} is the scan rate and Δx is the streamwise distance between probe sensors. Herein the scan frequency was 20 kHz per sensor and the streamwise distance between probe sensor was : $\Delta x = 7.74$ mm.

TOOMBES (2002, pp. 69-70) performed a detailed sensitivity analysis of the scan period using the double-tip conductivity probe in nappe flows. His results showed that the scan period had to be greater than 5 seconds. In the present study, a scan duration of 20 seconds was selected.

2.3 DATA ACCURACY

The water discharge was measured with an accuracy of about 2% ([2]).

The translation of the double-tip conductivity probe in the direction normal to the channel invert was controlled with an error of less than 0. 5 mm. The accuracy on the longitudinal probe position was estimated as $\Delta x < +/- 0.5$ cm. The error on the transverse position of the probe was less than 1 mm.

With the double-tip conductivity probe, the error on the air concentration (void fraction) measurements was estimated as : $\Delta C/C = 4$ % for $0.05 < C < 0.95$, $\Delta C/C \sim 0.002/(1 - C)$ for $C >$

[2]GONZALEZ (2005) performed detailed velocity distribution measurements on the broad-crest for a range of flow rates. Measurements were conducted in clear-water flows with a Prandtl-Pitot tube (∅ = 3.3 mm). Present discharge estimates are based upon the re-analysis of his results.

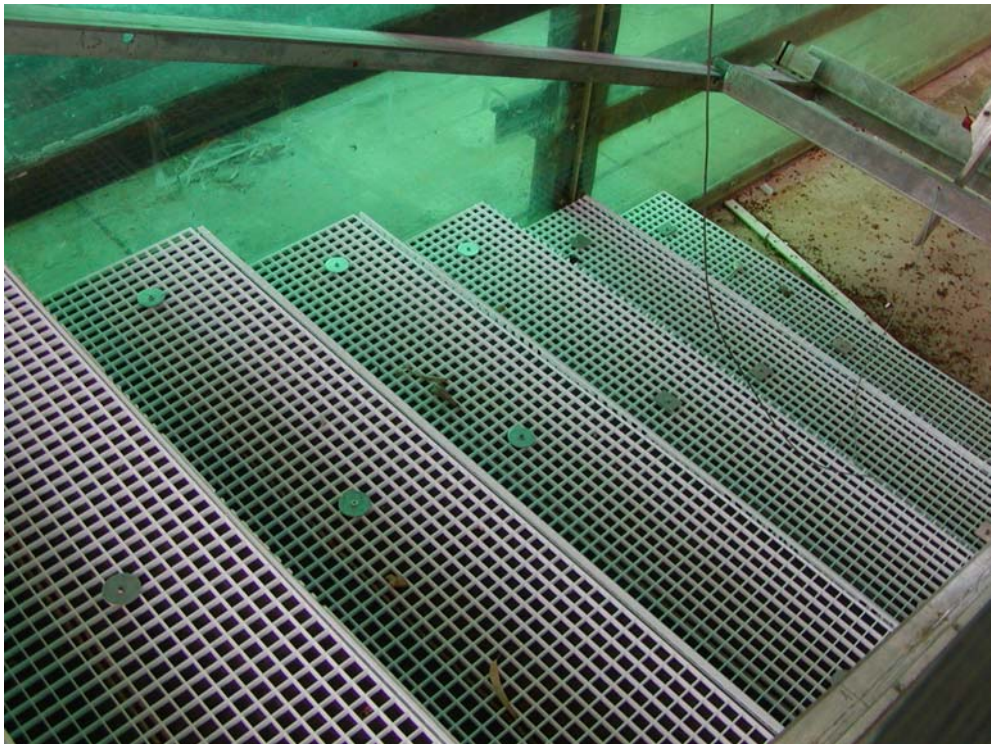
0.95, and $\Delta C/C \sim 0.005/C$ for $C < 0.05$. The mean air-water velocities were computed with a cross-correlation technique. The analysis of the velocity field and chord length distributions implied no slip between the air and water phases. The error on the mean air-water velocity measurements was estimated as : $\Delta V/V = 5$ %. for $0.05 < C < 0.95$, $\Delta V/V = 10$ %. for $0.01 < C < 0.05$ and $0.95 < C < 0.99$ (CUMMINGS and CHANSON 1997, CHANSON and BRATTBERG 1997). The guidelines are consistent with Equation (2-3). With the two-tip conductivity probe, the minimum detectable bubble chord length was about 150 μm in a 3 m/s flow based upon a data acquisition frequency of 20 kHz per channel (Eq. (2-2)).

2.4 CHANNEL CONFIGURATIONS AND GEOMETRIES

In the present study, four step surface configurations were tested systematically (Table 2-1). In Configuration A, the vertical and horizontal step faces were covered by rough screens with square patterns (16 mm size, 1 mm thick, 8 mm high) (Fig. 2-4 and 2-5). In Configuration B, only the vertical step faces were covered with the same rough screens. The horizontal step faces were smooth. In Configuration C, the horizontal step faces were covered with the rough screens while the vertical faces were smooth. The last configuration was a smooth stepped cascade. It was similar to the flow configurations used by CHANSON and TOOMBES (2001a,2002a) and GONZALEZ (2005).

The hydraulic roughness of the screens was tested independently in a 20 m long, 0.25 m wide tilting flume with glass sidewalls (App. B). For a 10 m length, the channel bed was covered with the rough screen pattern (Fig. 2-5B). The gradually-varied free-surface profile was recorded in the fully-developed flow region for a range of flow rates (0.017 to 0.04 m^3/s) and bed slopes ($S_o = 0.09$ to 0.15). For each run, the average boundary shear stress τ_o was calculated from the friction slope S_f which satisfied the differential form of the energy equation :

Fig. 2-4 - Photographs of the channel configurations
(A) Configuration A



(B) Configuration B - Note the 13.5 cm long pen on the horizontal step face for scale

(C) Configuration C for $d_c/h = 1.1$, $Q = 0.114$ m^3/s, $Re = 4.5$ E+5 - Cavity aeration upstream of the inception point of free-surface aeration (high-shutter speed photograph)

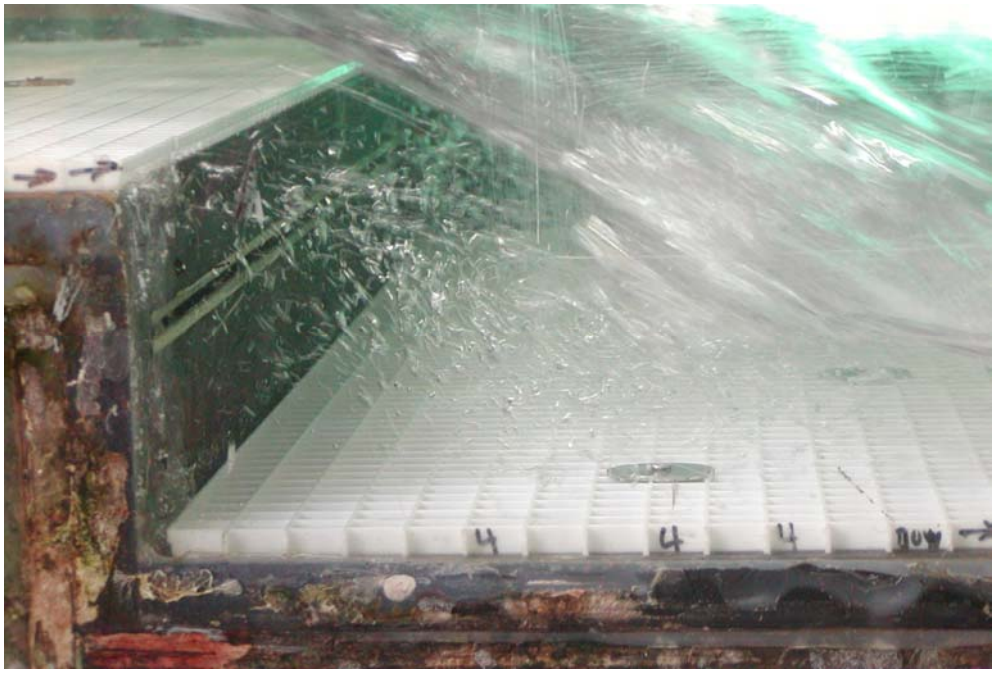


Table 2-1 - Experimental investigations of skimming flows in a 22º stepped chute

Reference (1)	Step geometry (2)	Flow conditions (3)	Instrumentation (4)	Remarks (5)
CHANSON and TOOMBES (2001a)	Smooth horizontal steps (h = 0.1 m, l = 0.25 m).			W = 1 m. k_S' = 0.5 mm.
Series 1		q_W = 0.046 to 0.182 m^2/s, Re = 1.8 to 7.3 E+5.	Single-tip conductivity probe (Ø = 0.35 mm).	Experiments EV200.
Series 2		q_W = 0.058 to 0.182 m^2/s, Re = 2.3 to 7.3 E+5.	Double-tip conductivity probe (Ø = 0.025 mm).	Experiments TC200.
GONZALEZ (2005)	Smooth horizontal steps (h = 0.1 m, l = 0.25 m).		Double-tip conductivity probe (Ø = 0.025 mm).	W = 1 m. k_S' = 0.5 mm.
Present study	Horizontal steps (h = 0.1 m, l = 0.25 m).	q_W = 0.01 to 0.219 m^2/s, Re = 5 E+4 to 7 E+5.	Double-tip conductivity probe (Ø = 0.025 mm).	W = 1 m.
Configuration A	Rough step faces: 8-mm high screens on both vertical and horizontal step faces			k = 8 mm (k_S' ≈ 6.6 mm).
Configuration B	8-mm high screens on each vertical step face			k = 8 mm (k_S' ≈ 6.6 mm).
Configuration C	8-mm high screens on each horizontal step face			k = 8 mm (k_S' ≈ 6.6 mm).
Configuration S (smooth steps)	Smooth horizontal steps			k_S' = 0.5 mm.

Notes : Re : flow Reynolds number defined in terms of hydraulic diameter.

$$\frac{\partial H}{\partial x} = - S_f \quad (2\text{-}4)$$

where H is the total head and x is the streamwise coordinate (HENDERSON 1966, CHANSON 1999,2004a). The average boundary shear stress τ_o along the wetted perimeter (W + 2*d) is the combination of bed shear stress and sidewall shear stress weighted by their respective wetted perimeter. Hence the bed shear stress τ_{screen} was deduced as :

$$\tau_o * (W + 2*d) = \tau_{screen} * W + \tau_{wall} * 2 * d \quad (2\text{-}5)$$

where W is the channel width, d is the water depth and τ_{wall} is the glass sidewall shear stress which was deduced from the Moody diagram assuming an equivalent roughness height k_S = 0.1 mm (IDELCHIK 1969,1986,1994, HENDERSON 1966, CHANSON 2004a).

The results in terms of Darcy friction factors are reported in Figure 2-6A and compared with Colebrook-White formula. The correlation is poor but the Colebrook-White formula is not truly applicable to present roughness elements. Indeed the screens are porous and the induced flow resistance is a combination of skin friction and form drag. In Figure 2-6B, the data are shown in terms of the relative roughness height k/D_H where k = 8 mm and D_H is the hydraulic diameter. The results are compared with fully-rough turbulent flow results. Overall, the equivalent Darcy friction factor of the screens ranged from f_{screen} = 0.05 to 0.08, corresponding to a Gauckler-Manning coefficient of about 0.016 to 0.02 $s/m^{1/3}$. The results were basically independent of Reynolds number and the flow conditions were fully-rough turbulent. The data were best correlated by :

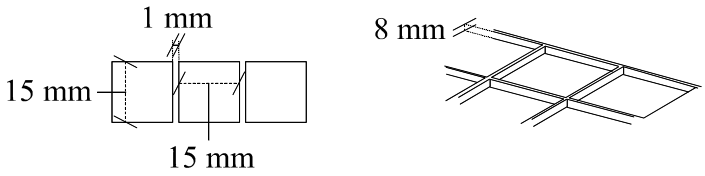
$$\frac{1}{\sqrt{f_{screen}}} = 0.252 * \left(\frac{k}{D_H}\right)^{-0.823} \qquad (2\text{-}6)$$

with a normalised correlation coefficient of 0.783, where k is the screen height (k = 8 mm). Equation (2-4) is shown in Figure 2-6B

The best correlation with the Colebrook-White formula was achieved for an equivalent sand roughness height k_S' = 6.6 mm that is comparable to the screen thickness k = 8 mm.

Fig. 2-5 - Step roughness

(A) Dimensioned sketch of the screens



(B) Screens in the 0.25 m wide tilting flume for hydraulic roughness tests

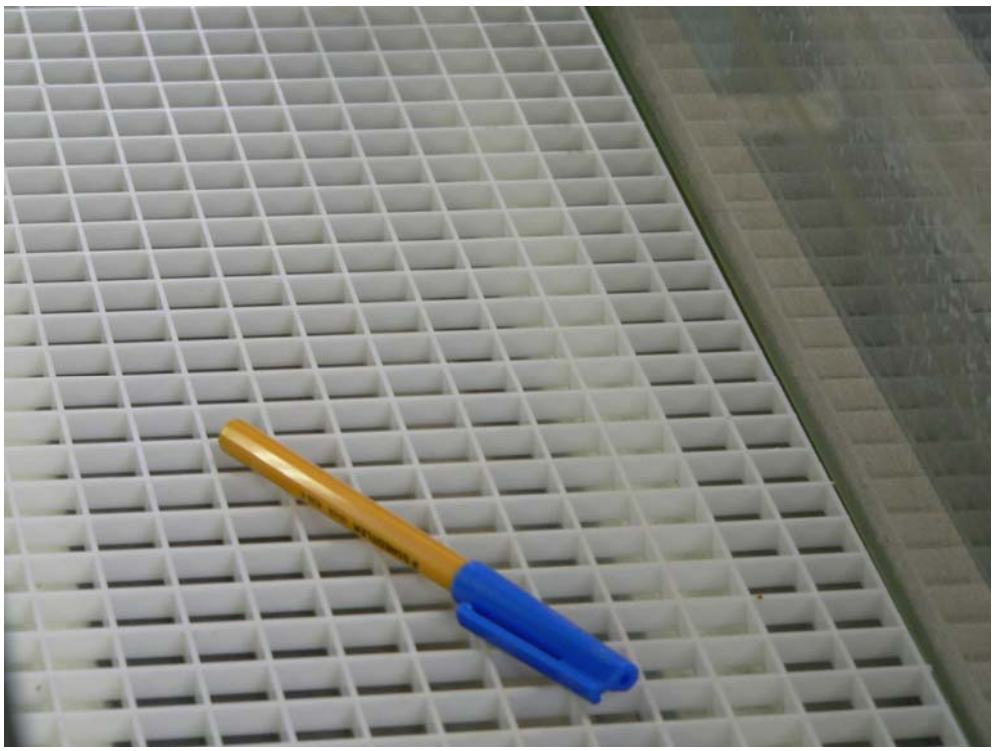
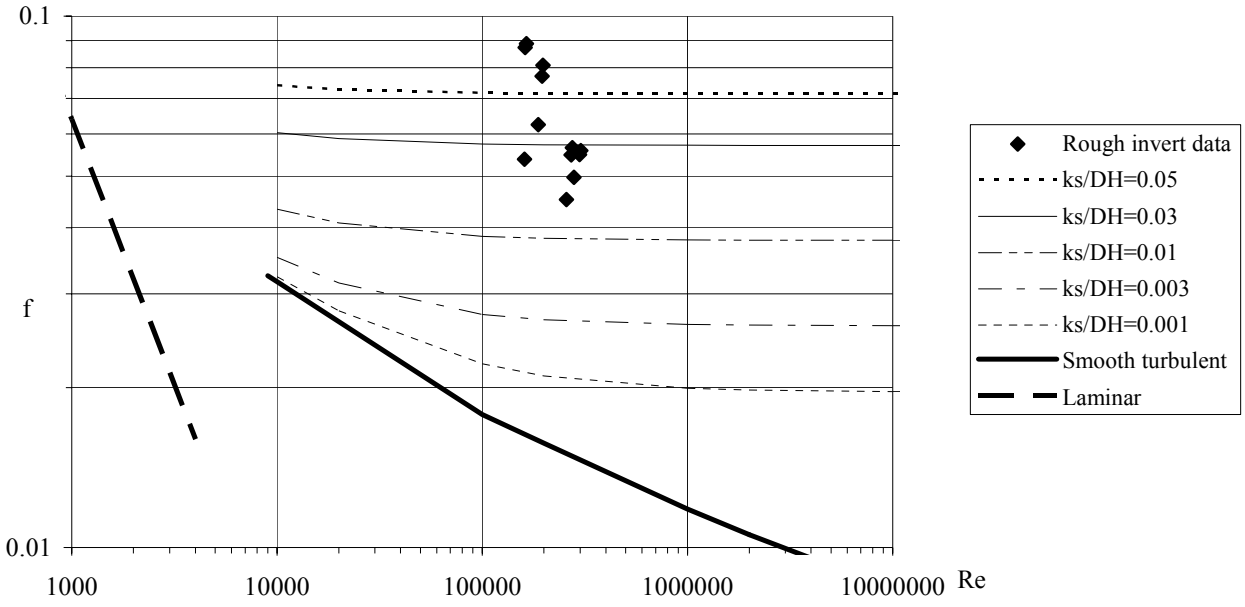
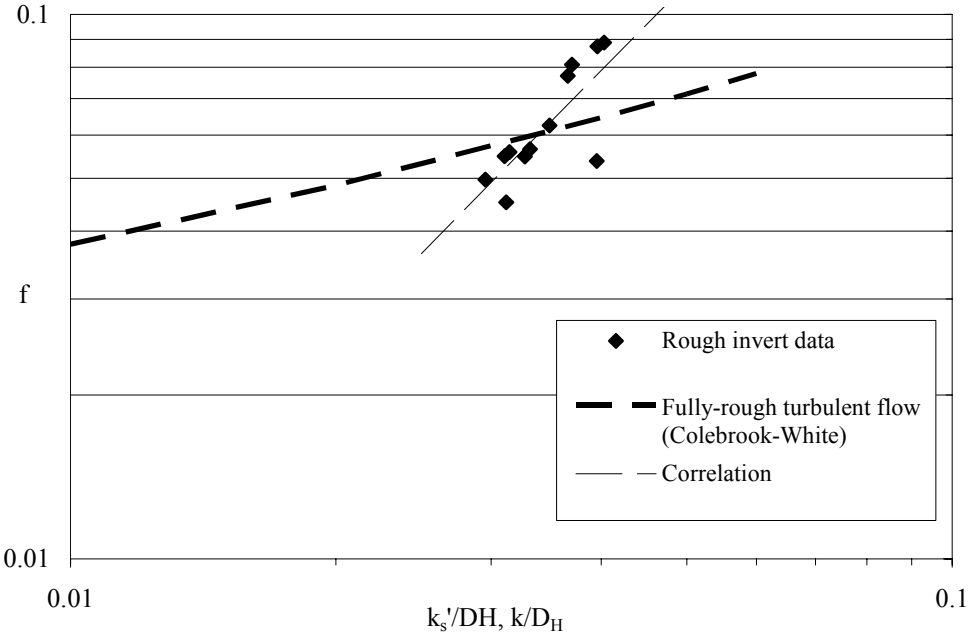


Fig. 2-6 - Equivalent Darcy friction factor of the 8-mm high screens
(A) Comparison with the Colebrook-White formula (Moody diagram presentation)



(B) Comparison with fully-rough turbulent flow formula (Colebrook-White) and Equation (2-6)



2.5 FLOW CONFIGURATIONS

Experiments were conducted for flow rates ranging from 0.004 to 0.220 m^3/s although the focus was on the highly aerated skimming flows (Table 2-1). Detailed air-water flow measurements were performed for flow rates between 0.11 and 0.2 m^3/s corresponding to dimensionless discharges d_c/h = 1.1 to 1.5 and flow Reynolds numbers $\rho*U_W*D_H/\mu$ between 4.6 E+5 and 7.3 E+5, where d_c is the critical flow depth, h is the step height, U_W is the depth-averaged velocity, D_H is the hydraulic diameter, and ρ and μ are the water density and dynamic viscosity respectively.

Present measurements were performed systematically at step edges downstream of the inception

point of free-surface aeration and between adjacent step edges (i.e. above recirculation cavity). Above the cavities, measurements were conducted at step edge and at 3 streamwise locations X_o = 0.25, 0.5 and 0.75, where $X_o = x'/L_{cav}$, x' is the streamwise distance measured from the upstream step edge and L_{cav} is the cavity length ($L_{cav} = \sqrt{h^2 + l^2}$). For each configuration, measurements were repeated systematically. A total of more than 90 vertical profiles were recorded with a minimum of 25 measurement points per profile. At each measurement point, the data acquisition yielded 400,000 data per probe sensor. (Altogether the present data set encompassed over 1 billion of samples.) Note that uniform equilibrium flow conditions were not achieved at the downstream end of the chute because the flume was relatively short.

Fig. 2-7 - Definition sketch of step edge numbering

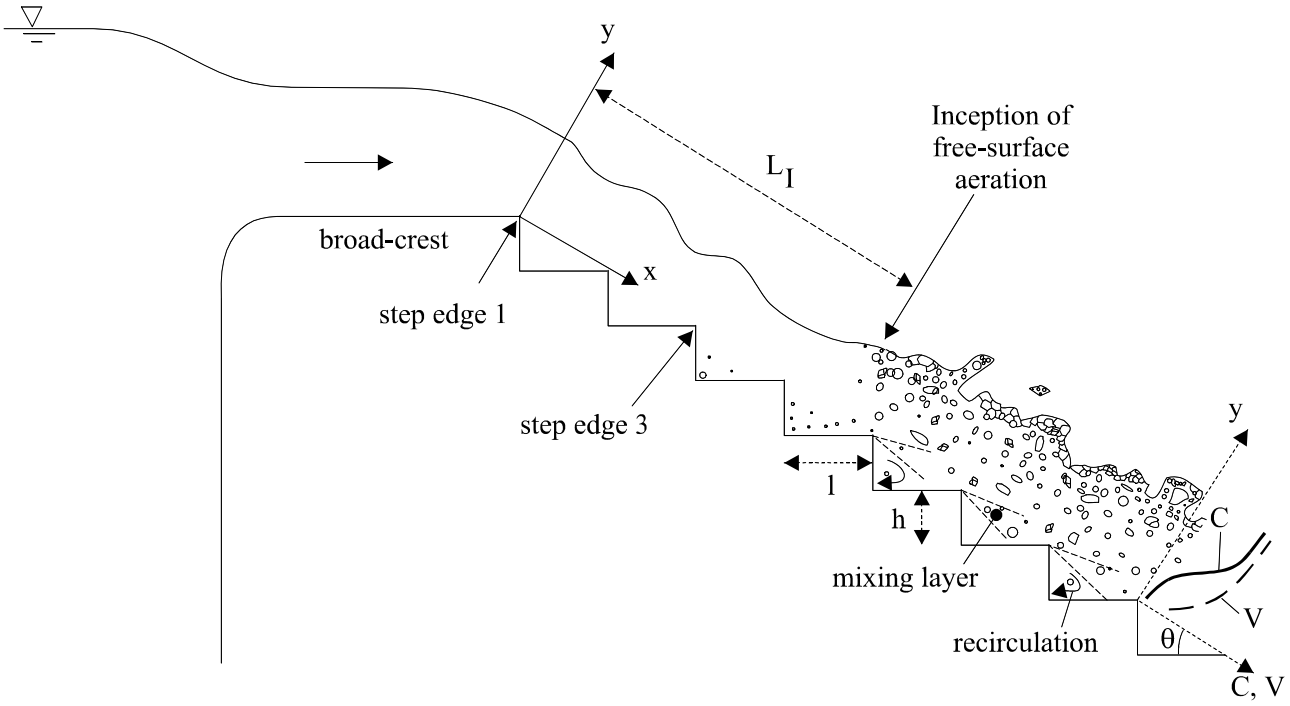


Table 2-2 - Summary of flow conditions for detailed air-water flow measurements

Run	Q	$\frac{d_c}{h}$	$\frac{d_{crest}}{h}$	Re	Inception point of free-surface aeration	Air-water flow measurement locations	Remarks
	m^3/s						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(7)
Configuration A							W = 1.0 m.
Run 1.1A	0.1149	1.10	1.10	4.6 E+5	between step edges 6 & 7	7, 71, 72, 73, 8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.3A	0.1381	1.25	1.30	5.5 E+5	step edge 7	8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.5A	0.1629	1.39	1.50	6.5 E+5	between step edges 7 & 8	9, 91, 92, 93, 10	
Run 1.7A	0.1838	1.50	1.70	7.3 E+5	step edge 8	10	
Configuration B							W = 1.0 m.
Run 1.1B	0.1149	1.10	1.10	4.6 E+5	step edge 7	7, 71, 72, 73, 8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.3B	0.1381	1.25	1.30	5.5 E+5	between step edges 7 & 8	8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.5B	0.1629	1.39	1.50	6.5 E+5	step edge 8	8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.7B	0.1838	1.50	1.70	7.3 E+5	between step edges 8 & 9	9, 91, 92, 93, 10	
Configuration C							W = 1.0 m.
Run 1.1C	0.1149	1.10	1.10	4.6 E+5	between step edges 6 & 7	7, 71, 72, 73, 8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.3C	0.1381	1.25	1.30	5.5 E+5	step edge 7	8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.5C	0.1629	1.39	1.50	6.5 E+5	step edge 8	8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.7C	0.1838	1.50	1.70	7.3 E+5	step edge 9	9, 91, 92, 93, 10	
Configuration Smooth Steps							W = 1.0 m.
Run 1.1S	0.1149	1.10	1.10	4.6 E+5	step edge 6	7, 71, 72, 73, 8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.3S	0.1381	1.25	1.30	5.5 E+5	between step edges 6 & 7	8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.5S	0.1629	1.39	1.50	6.5 E+5	between step edges 6 & 7	8, 81, 82, 83, 9, 91, 92, 93, 10	
Run 1.7S	0.1838	1.50	1.70	7.3 E+5	step edge 7	9, 91, 92, 93, 10	

Notes :
Measurement locations : 9 = step edge 9; 91 = 25% distance between step edge 9 and 10; 92 = 50% distance between step edge 9 and 10; 93 = 75% distance between step edge 9 and 10.
Step edge numbering as defined in Figure 2-7.

3. BASIC FLOW PATTERNS

Waters cascading down stepped chutes with smooth step faces are highly turbulent self-aerated flows. They are difficult to describe, mainly because of the different flow regimes observed. For a given chute geometry, the type of stepped flow regime is a function of the discharge and is usually divided into three separate flow regimes.

For small discharges, water cascades down the chute step by step as a succession of nappes sometimes followed by a hydraulic jump, this flow regime is called Nappe flow.

If the water discharge is increased, a transition flow regime can be observed, this regime is characterised by strong hydrodynamic fluctuations, significant splashing, large amounts of spray near the free-surface and longitudinal variations of the flow properties from one step to another (Fig. 3-1). Transition flows are further divided in sub regimes TRA1 for low water discharges, where small and large air-filled cavities alternate irregularly in the step cavities located downstream of inception point and TRA2 for the upper range of transition flows where different sized air-filled cavities alternate with flow-filled recirculating vortices at every step in locations downstream the inception point (CHANSON and TOOMBES 2004).

For larger discharges, the flow skims over the pseudo-bottom formed by the steps as a coherent stream and intense recirculating vortices are observed between step edges beneath the pseudo-bottom. For flat to moderate slope stepped chutes ($5.7^o < \theta < 30^o$) with smooth step faces CHANSON (2001) and OHTSU et al. (2004) proposed further division of the skimming flow in two sub regimes: SK1 sub-regime for the lower range of skimming flow discharges, where the wake and recirculating eddy formed between step edges do not extend the full step length allowing the main water stream to impact in the horizontal face of the step and SK2 sub regime for the upper range of discharges, where the wake and recirculating eddy region extend the full step length sometimes interfering with the developing wake of the subsequent step.

Fig. 3-1 - Nappe/Transition flow at Duralie coal mine stepped spillway NSW, Australia (on 23 March 2005; Courtesy of Tony MARSZALEK, Gilbert & Associates Pty LTD, Brisbane)

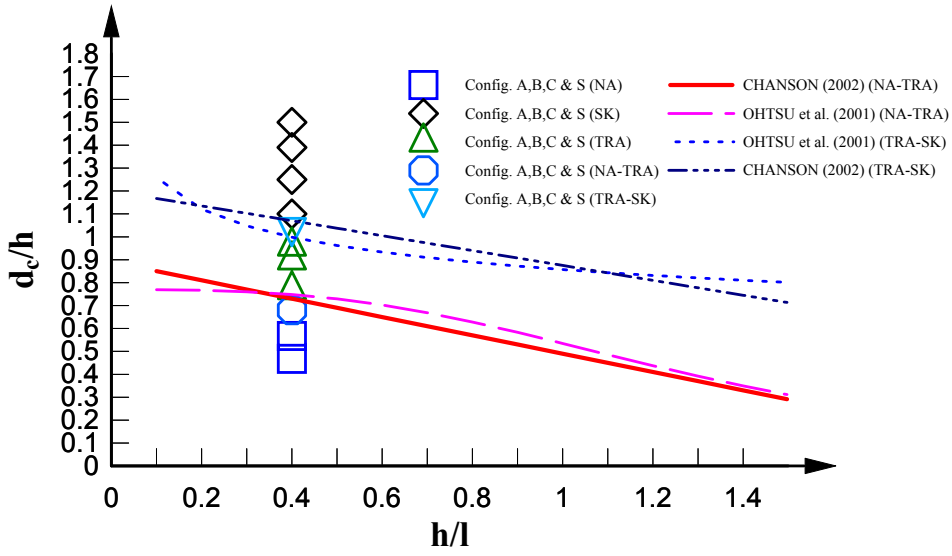
Although the scope of this study is on skimming flows, detailed visualizations were conducted for rough step configurations (Table 2-1) with flow rates ranging from 0.014 to 0.182 m^3/s to document the influence of the step roughness on the nappe, transition and skimming flow regimes. Results showed that the classification of flow regimes with rough steps and the conditions for changes in

flow regimes were identical on all rough step configurations (A,B,C) and on smooth step chutes. The results are summarised in Table 3-1.
CHANSON (2001) and OHTSU et al. (2004) recommended approximate limits for the changes between flow regimes in smooth stepped chutes. Present data are shown in Fig. 3-2 and compared with the correlations of CHANSON (2001) and OHTSU et al. (2004). Present results showed that the different roughness placed on to the steps had no influence on the type of flow regime nor on the flow regime variation.

Table 3-1 - Flow regimes for stepped chutes with smooth and rough step faces (Configurations A, B, C & S, $\theta = 21.8^o$, h = 0.1 m)

d_{crest}/h	d_c/h	$H_1-\Delta z$ (m)	Flow regime
0.4	0.40	0.07	NA
0.5	0.51	0.085	NA
0.6	0.64	0.102	NA-TRA
0.7	0.75	0.116	TRA
0.8	0.90	0.135	TRA
0.9	0.97	0.144	TRA-SK
1.0	1.06	0.156	SK
1.1	1.18	0.169	SK
1.3	1.25	0.193	SK
1.5	1.39	0.222	SK
1.7	1.5	0.236	SK
Note: d_c : critical depth; d_{crest} : depth measured above the weir crest; h : step height; H : total head.			

Fig. 3-2 - Comparison of flow regime transition observations in rough step faced stepped chutes with transition criterions for smooth step faced stepped chutes - NA-TRA : change from nappe to transition flow regime; TRA-SK : change from transition to skimming flow regime



Visual observations suggested a number of different flow patterns for chutes with step roughness. These were seen more specifically in the flow recirculation zones located between the step edges beneath the main stream. Upstream of the point of inception, more aerated cavities were

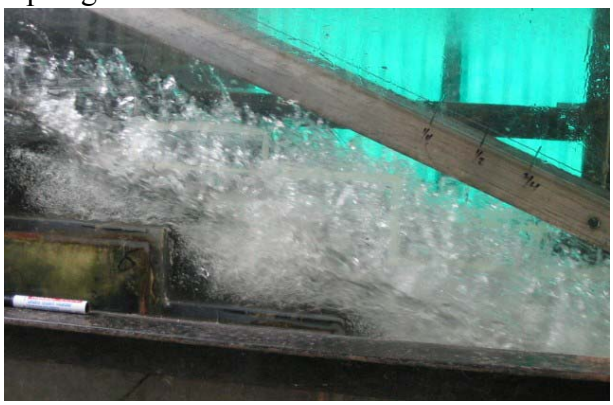
consistently observed for Configuration A than for the rest of the configurations including smooth steps (Fig. 3-3).
In waters skimming down Configuration A with a discharge of $d_c/h = 1.25$, the air entrainment started at the cavity in between steps 7 & 8 and three aerated cavities were observed upstream this point (Fig. 3-3A). For identical flow conditions in Configurations B and C, the inception point was also located between steps 7 and 8 for both scenarios but only one to two aerated cavities were observed upstream of the inception point (Fig. 3-3B & C). For the same discharge in smooth stepped chutes, the inception point was further upstream, between step edges 6 & 7. In addition, only 1 to 2 aerated cavities were seen upstream the point of inception.

Fig. 3-3 - Recirculation cavities upstream the point of inception

(A) Skimming flow in Configuration A (d_c/h = 1.25, d_{crest}/h =1.3) - Inception point: between step edges 7 & 8.

(B) Skimming flow in Configuration B (d_c/h = 1.25, d_{crest}/h =1.3) - Inception point: between step edges 7 & 8.

(C) Skimming flow in Configuration C (d_c/h = 1.25, d_{crest}/h =1.3) - Inception point: between step edges 7 & 8.



(D) Skimming flow in Configuration S smooth steps (d_c/h = 1.25, d_{crest}/h =1.3) - Inception point: between step edges 6 & 7

In the aerated flow region downstream of the inception point, recirculation cavity patterns were observed in rough and smooth stepped chutes. Some differences were consistently observed. Recirculating eddies with clear water cores in the step corners were seen in Configurations A & C while recirculating vortices covering the whole cavity length occurred in chutes for Configuration B and for chutes with smooth steps. This is seen in Figure 3-4, for example, where clear water cores are observed in the step corners underneath the recirculating eddies for Configurations A & C (Fig. 3-4A & C) while recirculating eddies covering the whole cavity without clear water cores are observed for Configuration B and smooth stepped chutes (Fig. 3-4B & D).
In the present study, the location of the inception point differed for chutes with and without step roughness, specifically for the larger relative discharges tested (d_c/h = 1.39 & 1.5). Basically, the inception point was further downstream for chutes with rough steps (Refer to Appendix C for

detailed data) ([1]). Positions of inception point are compared with smooth faced stepped chutes in Table 3-1 and Fig. 3-5. The results indicate that the inception point distance from the crest L_I was approximately 35% greater for rough step faced spillways than that for smooth step faced chutes. The findings suggest that the turbulent boundary layer growth is 'slower" on rough stepped invert and that lesser rate of energy dissipation occurred in the upstream clear-water flow region on the rough stepped chute.

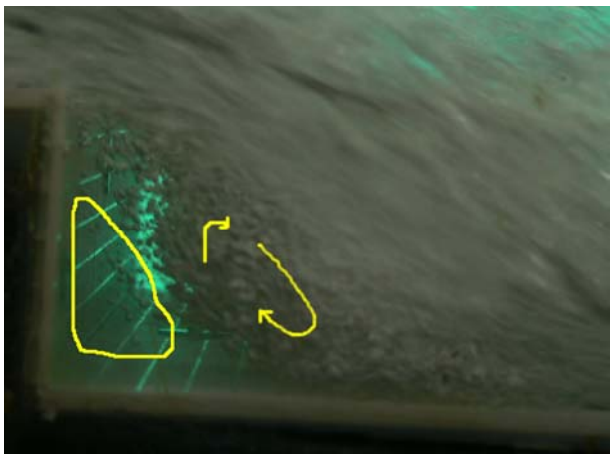
The finding is counter-intuitive compared to smooth-invert chute flows where increased bed roughness is associated with a shorter clear-water flow region (e.g. WOOD et al. 1983).

For the present study, the data corresponding to the rough-step-faced configurations were best correlated by:

$$\frac{L_I}{h * \cos\theta} = 8.15 + 11.43 * \mathrm{Ln}(F*) \qquad \text{(Configurations A, B, C)} \qquad (3\text{-}5)$$

while data corresponding to the smooth step chute (Config. S) were best fitted by:

Fig. 3-4 - Recirculation cavities for rough and smooth step configurations



(A) Configuration A (d_c/h = 1.0, d_{crest}/h =1.06) – Cavity located between step edges 7 & 8, Inception point: between step edges 6 & 7.

(B) Configuration B (d_c/h = 1.1, d_{crest}/h =1.1) – Cavity: between step edges 5 & 6, Inception point: step edge 7.

(C) Skimming flow in Configuration C (d_c/h = 1.25, d_{crest}/h =1.3) – Cavity located between step edges 6 & 7, Inception point: between step edges 7 & 8.

(D) Skimming flow in Configuration S smooth steps (d_c/h = 1.25, d_{crest}/h =1.3) – Cavity located between step edges 5 & 6, Inception point: between step edges 6 & 7.

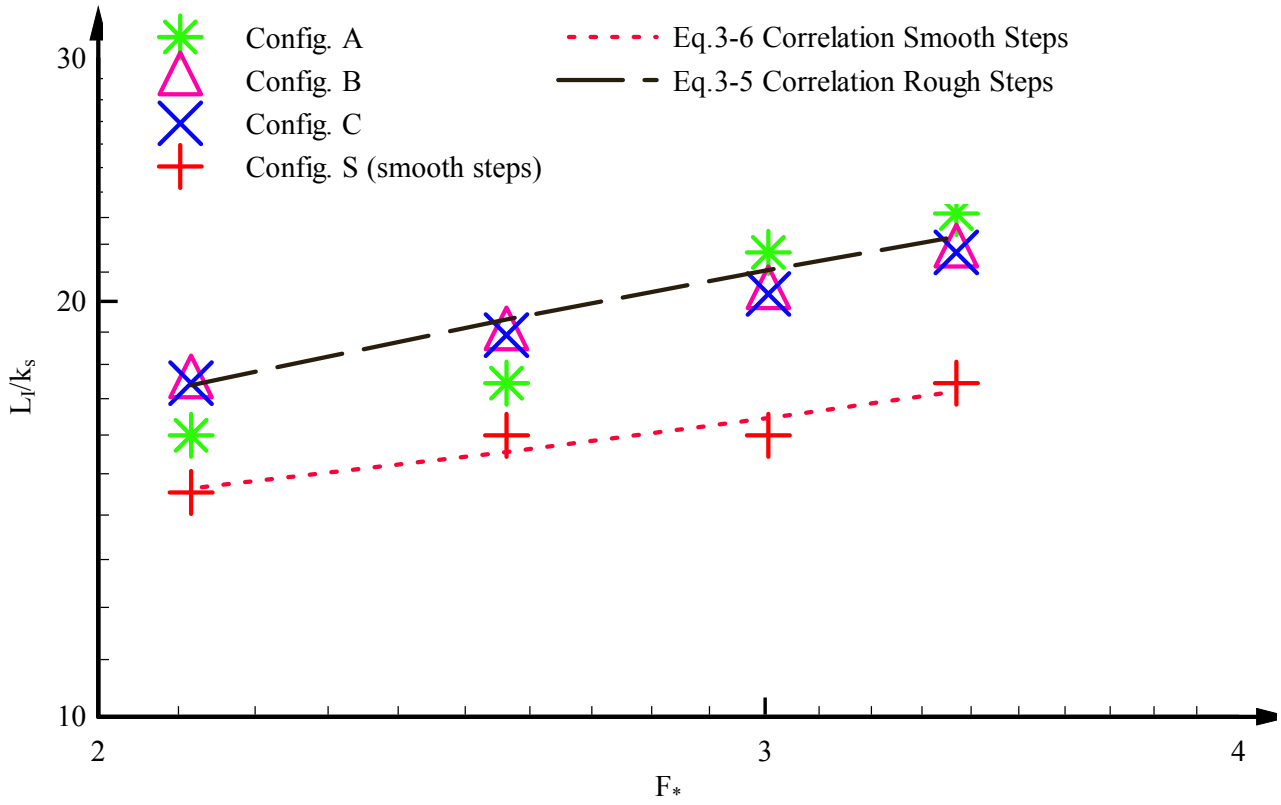
[1]With both smooth and rough step configurations, the location of the inception point was always further upstream than that for a smooth-invert chute flow with the same flow rate and bed slope.

Table 3-2 - Positions of the inception point for spillways with smooth and rough step faces ($\theta = 21.8^{o}$, h= 0.1 m)

		Point of inception distance from the crest (L_I)			
d_c/h	d_{crest}/h	Config. S (Smooth steps)	Config. A	Config. B	Config. C
1.1	1.1	Step 6 (1.35 m)	Between step edges 6 & 7 (~1.485 m)	Step 7 (1.62 m)	Step 7 (1.62 m)
1.25	1.3	Between step edges 6 & 7 (~1.485 m)	Step 7 (1.62 m)	Between step edges 7 & 8 (~1.75 m)	Between step edges 7 & 8 (~1.75 m)
1.39	1.5	Between step edges 6 & 7 (~1.485 m)	Between step edges 8 & 9 (~2.015 m)	Step 8 (1.88 m)	Step 8 (1.88 m)
1.5	1.7	Step 7 (1.62 m)	Step 9 (2.15 m)	Between step edges 8 & 9 (~2.02 m)	Between step edges 8 & 9 (~2.02 m)

Note: Configuration A: Vertical and horizontal covered with a rough screen with square patterns, Configuration B: Only Vertical faces covered with the screed, Configuration C: Only horizontal faces covered with the screen, Grid's squares size: (16 mm area, 1 mm thickness and 8 mm high), d_c is the critical depth, d_{crest} is the depth measured above the crest of the weir, h is the step height and L_I is distance form the point of inception to the step edge 1 (Refer to Appendix C).

Fig. 3-5 - Comparison of inception point locations for spillways with smooth (CG2005 data set) and rough step faces (Config. A, B & C)



$$\frac{L_I}{h \cdot \cos\theta} = 10.3 + 2.05 \cdot F_* \qquad \text{(Smooth steps, Config. S)} \qquad (3\text{-}6)$$

where L_I is the length to the point of inception, h is the vertical step height, θ is the channel slope, and F_* is the step roughness Froude number defined as:

$$F_* = \frac{q_w}{\sqrt{g \cdot \sin\theta \cdot k_s^3}} \qquad (3\text{-}7)$$

where $k_s = h^* \cos\theta$ is the roughness height measured perpendicular to the flow direction and q_w is the water discharge per unit width (CHANSON 1995a).

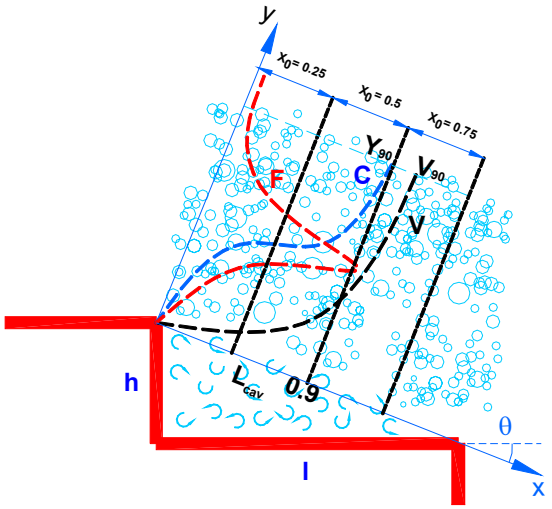
4. AIR-WATER FLOW PROPERTIES

4.1 PRESENTATION

This section aims to describe quantitatively the impact of the different step roughness on the air-water flow characteristics. Experimental air-water flow measurements were conducted with a double tip conductivity probe on a near-full-scale stepped chute model with four step roughness configurations (Table 2-1). In the direction normal to the flow, measurements were obtained above and below the pseudo-bottom formed by the step edges up to the spray region. In the flow direction, they were performed at step edges downstream of the point of inception and at three locations in between adjacent step edges X_0 =0.25, 0.50 and 0.75 where $X_0 = x'/L_{cav}$, x' is the distance from the upstream edge and L_{cav} is the cavity length $L_{cav} = \sqrt{h^2 + l^2}$ (Fig. 4-1).

A detailed comparison of flow properties obtained for all tested configurations including smooth steps was conducted. Results included void fraction C, velocity V, turbulence intensity Tu, bubble count rate F and specific interface area a distributions.

Fig. 4-1 Definition sketch of air-water flow properties and location measurements



4.2 AIR CONCENTRATION AND VELOCITY DISTRIBUTIONS

Dimensionless air concentration distributions are presented in Fig. 4-2A. The data were obtained for the same flow conditions ($d_c/h \approx 1.39$) at step edges and at the same dimensionless distance from the inception point $(x-L_I)/L_{cav} = 2$. The results are presented in terms of the dimensionless depth (y/d_c) in Fig. 4-2A for the four tested configurations (Table 2-1). Present data are also compared with previous experimental data collected in the same smooth stepped chute ($\theta = 21.8^o$, h = 0.1 m, Config. S) by CHANSON and TOOMBES (2001a) and GONZALEZ (2005).

Overall the experimental results showed similar distributions of air concentrations at step edges for all configurations (Fig. 4-2A). Results seemed to suggest that air-water flows over rough-step faced chutes were slightly less aerated than in smooth-step chutes. The finding was especially seen in the lower flow region ($y/d_c < 0.3$), but also in the intermediate air-water region ($0.3 < C < 0.7$). This is seen in Figure 4-2A, where a flatter curve y/d_c versus C is observed for rough stepped chutes (e.g. Configurations A and C).Void fraction distributions for Configurations A & C showed a similar trend while distributions for Configuration B were closer to smooth-step data.

Air-water flow velocity distributions corresponding to the same flow conditions as in Figure 4-2A are presented in Figure 4-2B where V is the air-water flow and V_c is the critical flow velocity. Results showed consistently faster velocities for rough step chutes, especially for Configurations A & C. Basically, larger flow velocities and slightly less flow aeration were observed systematically

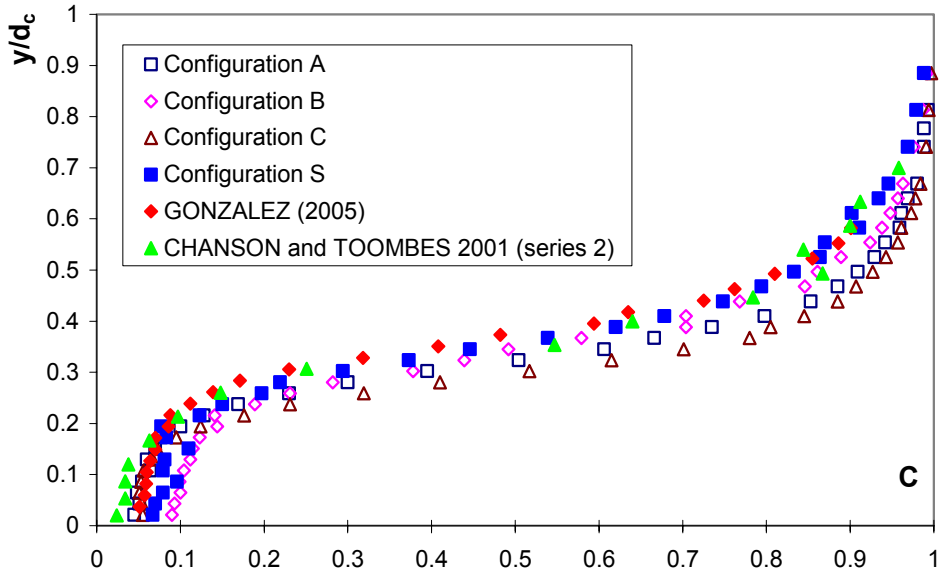
on rough-step chutes at an identical dimensionless distance from the inception point of free-surface aeration. Although the result might be counter-intuitive, the finding was consistently observed for all investigated discharges.

Fig. 4-2 - Dimensionless air water flow distributions for $d_c/h \approx 1.37$ and $(x-L_I)/L_{cav} = 2$

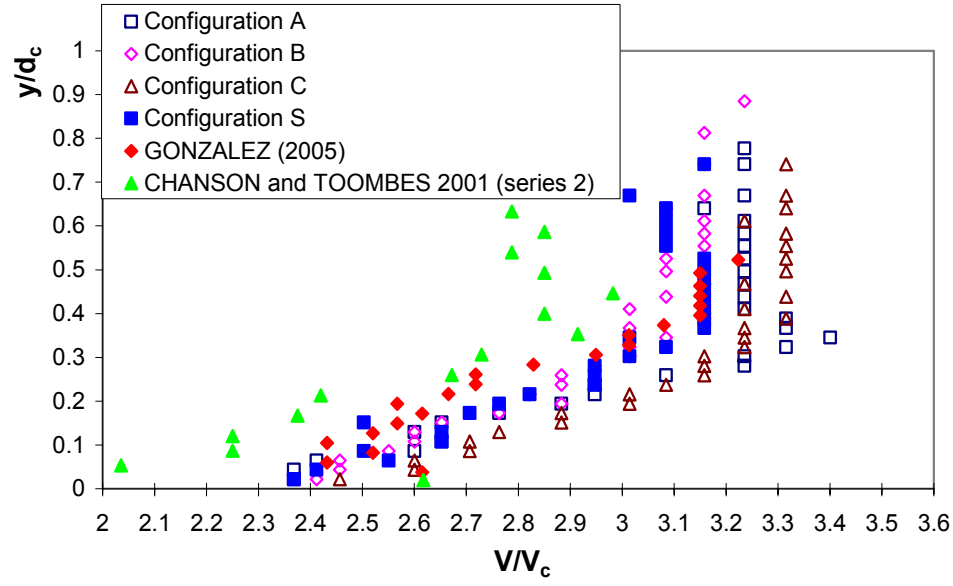
Configuration	d_c/h	x (m)	Step edge	L_I (m)	$(x-L_I)/L_{cav}$
A	1.39	2.42	10	1.88	2
B	1.39	2.42	10	1.88	2
C	1.39	2.42	10	1.88	2
S (smooth steps)	1.39	2.15	9	1.62	2
CHANSON & TOOMBES (2001a)	1.5	1.89	8	1.35	2
GONZALEZ (2005)	1.34	2.15	9	1.62	2

Notes: x is the distance from step edge 1 to the measurement location, L_I is the length to the point of inception and L_{cav} is the cavity length, $L_{cav} = 0.27$ m.

(A) Dimensionless air concentration distributions: C versus y/d_c



(B) Dimensionless air-water flow velocity distributions: V/V_c versus y/d_c

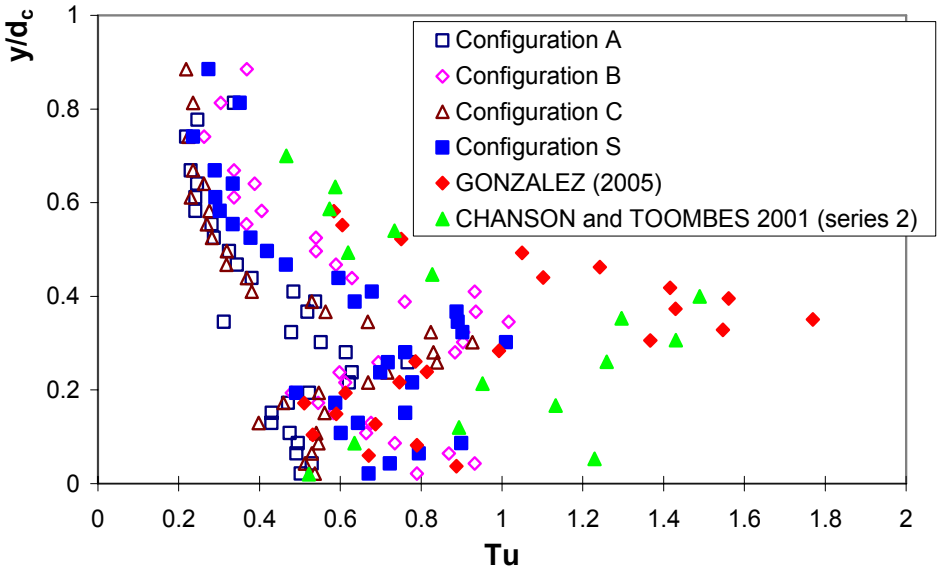


Comparisons performed throughout the whole experimental data set showed that flow velocities for Configurations A & C were identical and consistently larger than those for Configuration B. Relatively faster velocities were recorded in Configuration B than on smooth steps, although the difference was small (Fig. 4-2A).
In summary, present results yielded :

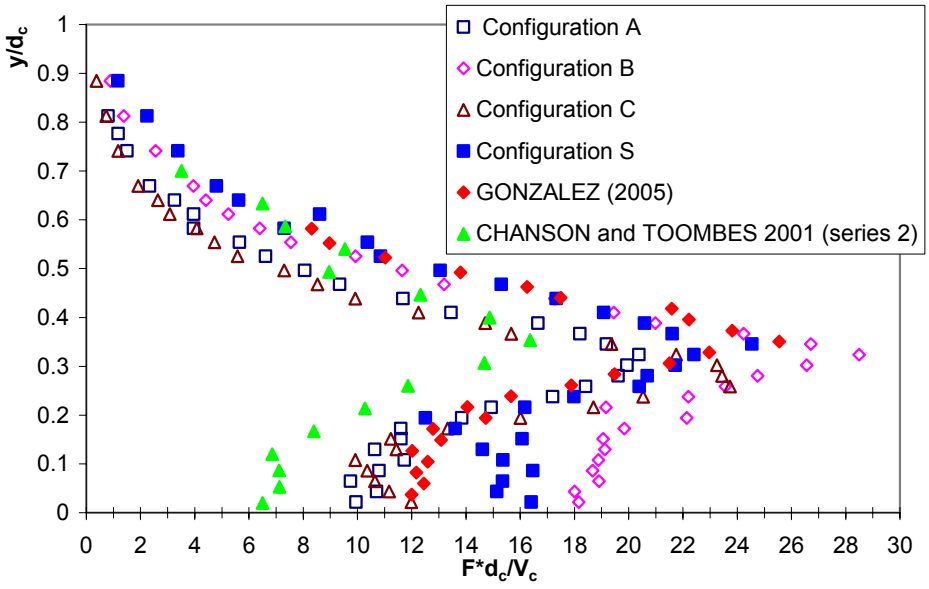
$$\left(\frac{V}{V_c}[A\,\&\,C] > \frac{V}{V_c}[B] > \frac{V}{V_c}[\text{smooth steps}]\right)$$

Fig. 4-3 - Air water flow distributions for ($d_c/h \approx 1.37$) and ($x\text{-}L_l/L_{cav} = 2$), flow conditions and symbols as in Figure 4-2

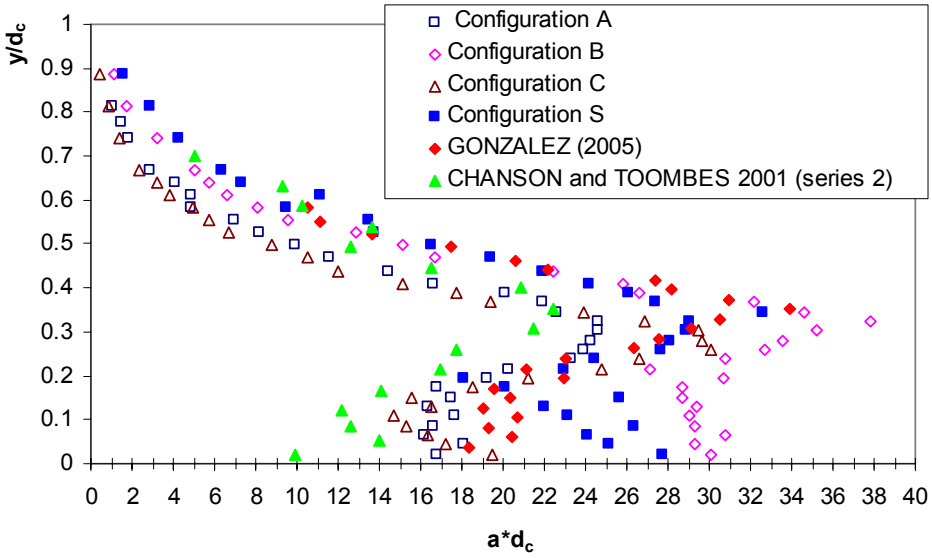
(A) Dimensionless turbulence intensity distributions: Tu versus y/d_c



(B) Dimensionless bubble count rate distributions: $F{\cdot}d_c/V_c$ versus y/d_c



(C) Dimensionless specific interface area distributions: $a \cdot d_c$ versus y/d_c



4.3 DISTRIBUTIONS OF TURBULENCE INTENSITY, BUBBLE COUNT RATE AND SPECIFIC INTERFACE AREA

A comparison of experimental dimensionless turbulence intensity, bubble count rate and specific interface area distributions obtained for the same flow conditions ($d_c/h \approx 1.39$) at step edges equally separated from the inception point is presented in Fig. 4-3. Turbulence intensity distributions for Configurations A & C were observed to be consistently lower than those for Configuration B and chutes with smooth steps (Fig. 4-3A). In terms of bubble count rate, Fig.4-3B showed a similar trend, with lowest bubble count rate distributions corresponding to Configurations A & C. Figure 4-3C also showed that specific interface area distributions are largest for configurations B & S (smooth steps).

4.4 FLOW PROPERTIES BETWEEN STEP EDGES

Experimental data obtained between step edges are presented in Figures 4-4 and 4-5. The data were obtained at the same dimensionless distances from the inception point $(x-L_I)/L_{cav} = 1.5$. Air concentration distributions exhibited a similar trend than at step edges with Configurations A & C showing less aeration than with Configurations B and smooth steps (Fig. 4.4A). Velocity distributions also confirmed that the flows in configurations with rough steps were faster than flows on smooth step chutes (Fig. 4-4B).

Turbulent intensity distributions showed that, between step edges, the flow is more turbulent for Configuration B and smooth step configurations than for Configuration A & C (Fig.4-5A). The same trend was observed at step edges. Higher values of bubble count rate and specific interface area were recorded for Configurations B and smooth step chutes throughout the flow cross-section than with Configurations A & C (Fig. 4-5B & C).

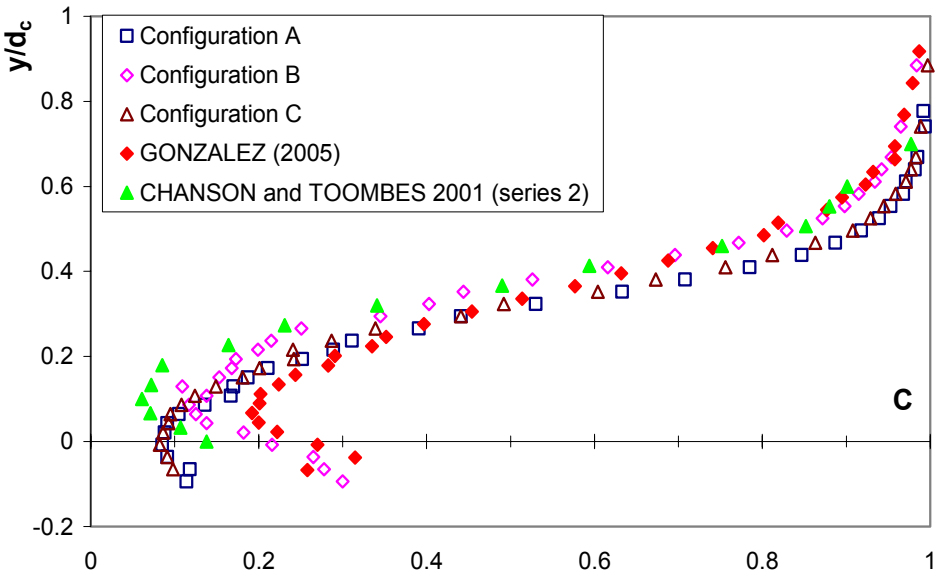
Measurements at step edges and between step edges showed little difference. This consistent trend strongly suggested that roughness configurations placed on the steps affected the flow characteristics both below and above the pseudo-bottom formed by the step edges.

Fig. 4-4 - Air water flow distributions between step edges ($d_c/h \approx 1.37$, $(x-L_I)/L_{cav} = 1.5$)

Configuration	d_c/h	x (m)	X_0	Location	L_I (m)	$(x-L_I)/L_{cav}$
A	1.39	2.285	0.5	Between step edges 9 & 10	1.88	1.5
B	1.39	2.42	0.5	Between step edges 9 & 10	1.88	1.5
C	1.39	2.42	0.5	Between step edges 9 & 10	1.88	1.5
CHANSON and TOOMBES (2001)	1.5	1.75	0.5	Between step edges 7 & 8	1.35	~1.5
GONZALEZ (2005)	1.34	2.15	0.5	Between step edges 8 & 9	1.62	~1.5

Note: x is the distance from step edge 1 to the measurement location, L_I is the length to the point of inception, $X_0 = x'/L_{cav}$, x' is the distance downstream the nearest step edge and L_{cav} is the cavity length $L_{cav} = 0.27$ m.

(A) Dimensionless air concentration distributions: C versus y/d_c



(B) Dimensionless air-water flow velocity distributions: V/V_c versus y/d_c

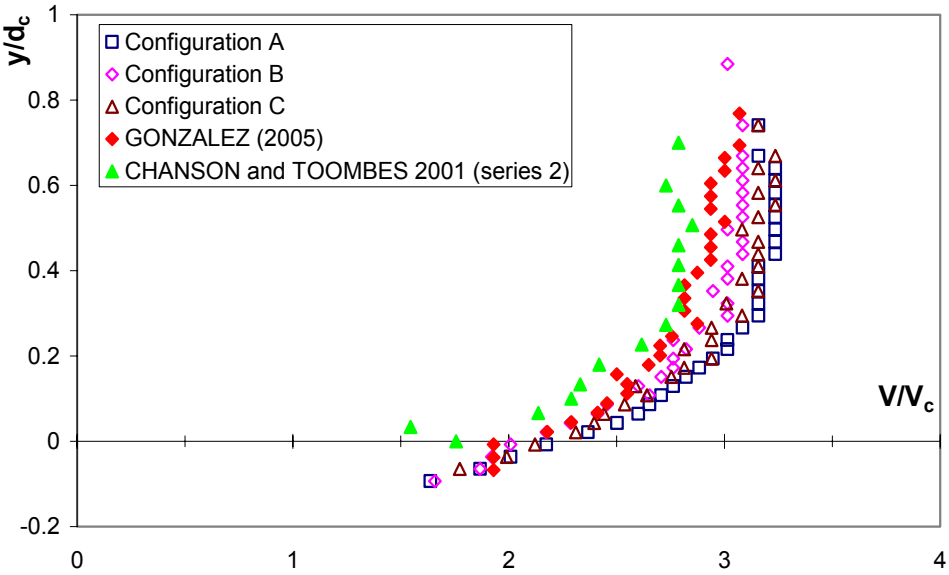
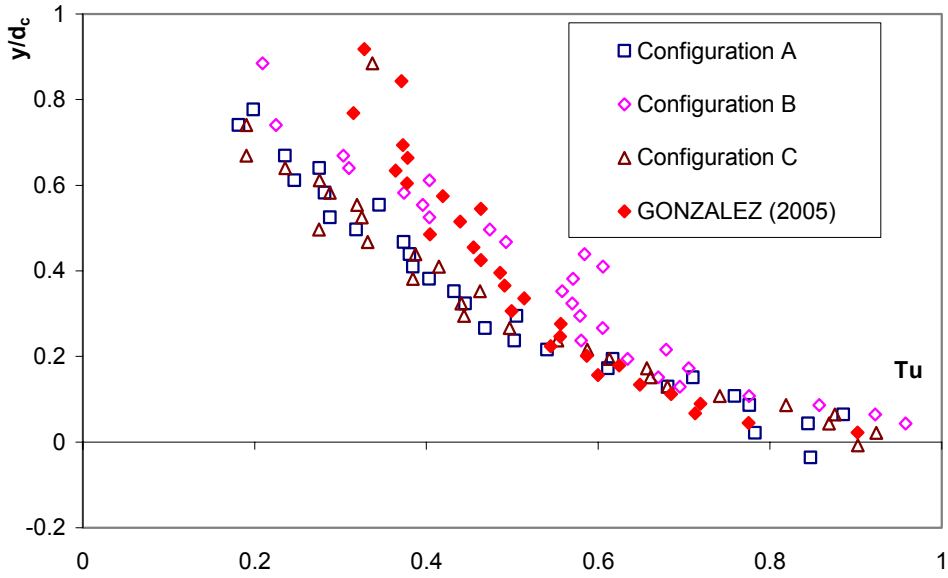
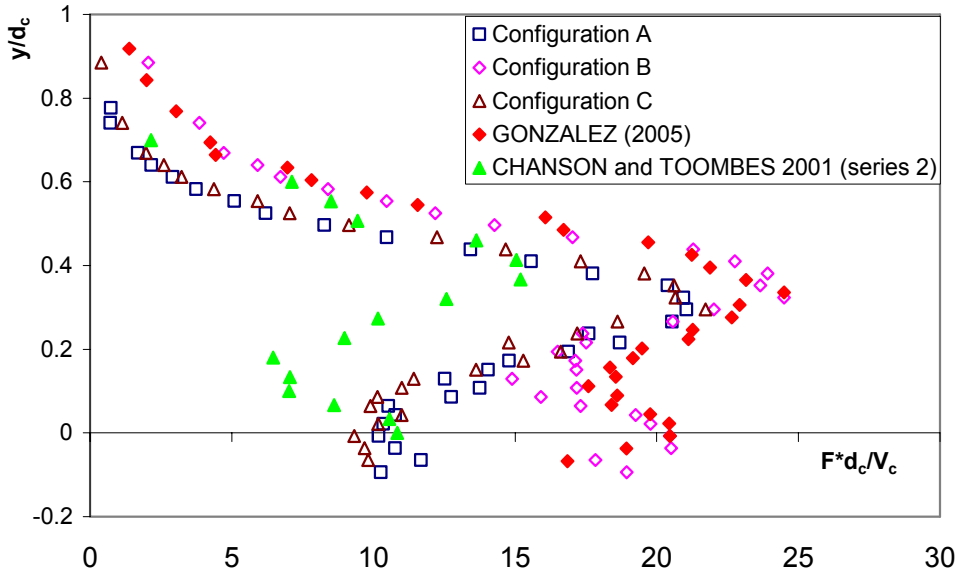


Fig. 4-5 - Air-water flow properties between step edges $d_c/h \approx 1.37$, $(x-L_I)/L_{cav} = 1.5$, flow conditions and symbols as Figure 4-4

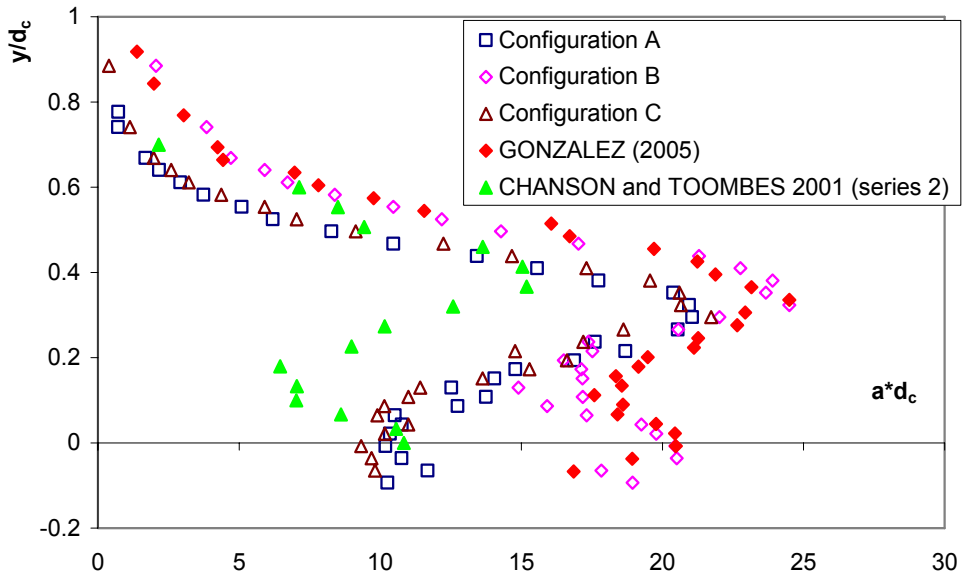
(A) Dimensionless turbulence intensity distributions: Tu versus y/d_c



(B) Dimensionless bubble count rate distributions: $F \cdot d_c/V_c$ versus y/d_c



(C) Dimensionless specific interface area distributions: $a \cdot d_c$ versus y/d_c



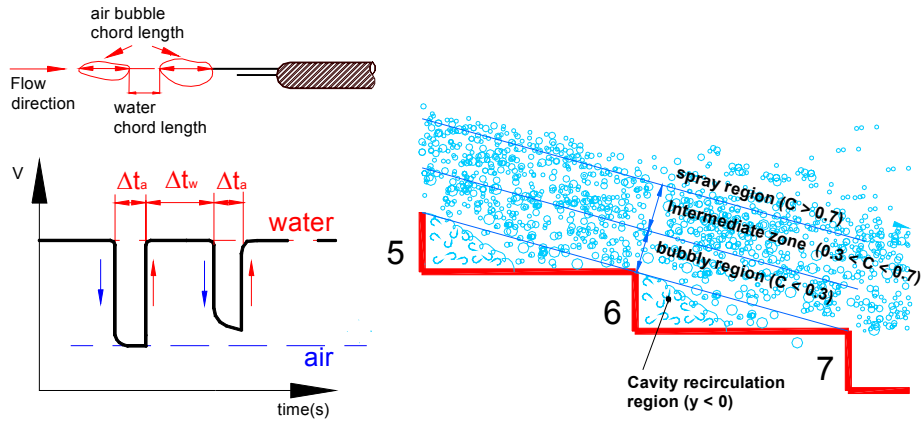
5. AIR-WATER CHORD PROPERTIES

Air-water flow experimental measurements were also analysed in terms of the streamwise air and water structures detected by the probe tip to obtain a microscopic description of the flow.

In bubbly flows, an air bubble is commonly thought to be a discrete pocket of air completely surrounded by water. For regions of low air concentration ($C < 0.3$) such air-bubbles do exist. Conversely, in spray regions defined as $C > 0.7$, water droplets completely surrounded by air are likely to be found. However, in the intermediate zone ($0.3 < C < 0.7$), the air-water mixture is complex and difficult to describe. It is also difficult to identify the exact nature of the air-water flow because of the diversity in shape and size of the observed air-bubbles and water droplets, as spherical and irregular air-bubbles in water, semi-elliptical water droplets in air, fluctuations near the free surface or a combination of the above can be observed in a skimming flow. TOOMBES (2002) observed that the small probability of the probe tip piercing an air bubble or water droplet on its centreline further complicates the air-water flow structure identifying process.

Using a conductivity probe aligned in the flow direction, only streamwise air-water structures bounded by air-water interfaces are detected by the tip. The probe signal provides information on the chord size of air-bubbles and water droplets comprising the flow (Fig. 5-1).

Fig. 5-1 - Air-water interface detection with a conductivity probe



Air bubble/water droplet chord sizes (ch_a and ch_w) are calculated assuming the velocity of the detected bubbles V_b to be identical to the local interfacial velocity (no-slip condition) as:

$$ch_a = V_b \cdot \Delta t_a \qquad (5\text{-}1A)$$

$$ch_w = V_b \cdot \Delta t_w \qquad (5\text{-}1B)$$

where Δt_a is the time between a water-to-air interface and the following air-to-water interface and Δt_w is the time between an air-to-water interface and the following water-to-air interface (Fig. 5-1).

Skimming flows comprise a broad range of chord sizes and is common practice to present its distribution as a histogram where the horizontal axis represents discrete intervals of size Δch and the vertical axis the percentage of the indicated chord sizes detected by the probe during the sample time (e.g. CHANSON and TOOMBES 2002a, YASUDA and CHANSON 2003, GONZALEZ 2005, TOOMBES 2002).

Average chord sizes were calculated from the continuity equation for air or water as:

$$\overline{ch_a} = \frac{\overline{V_b} * C}{F} \qquad \text{Air bubbles} \quad (5\text{-}2A)$$

$$\overline{ch_w} = \frac{\overline{V_b} * (1 - C)}{F} \qquad \text{Water droplets} \quad (5\text{-}2B)$$

where $\overline{V_b}$ is the mean interfacial velocity, C is the air concentration and F is the bubble count rate.

A comparison of experimental chord size distributions obtained in the bubbly flow (y > 0, C < 0.3), spray (C > 0.7) and cavity recirculation (y < 0, C < 0.3) regions is presented in Figures 5-2 to 5-4 for Configurations A, B, C and S (smooth steps). Analysed data were obtained for the same flow conditions at identical dimensionless distances from the inception point L_I for the four tested configurations. Present data were also compared with previous experimental data collected in the smooth faced stepped chute ($\theta = 21.8^o$, h = 0.1 m) by GONZALEZ (2005).

Figure 5-2A presents air-bubble chord size distributions obtained in bubbly flow regions (C < 0.3) for $d_c/h \approx 1.37$ at $(x-L_I)/L_{cav} = 2$ in Configurations A, B, C and smooth faced step chutes. Figure 5-2B shows water-droplet chord size distributions in spray regions (C > 0.7) for the same conditions above described. For all distributions, the horizontal axis represents intervals of size $\Delta L = 0.5$ mm (i.e. 0.5 = 0.5 mm < $ch_{a,w}$ < 1 mm).

Overall, air chord length distributions in bubbly flows (y > 0, C < 0.3) followed closely a log-normal probability distribution function in all configurations. This is illustrated in Figure 5-3 where the data are compared with the corresponding log-normal distribution.

Results in terms of number of bubbles detected and chord size distributions demonstrated that the structure of the bubbly and spray flow recorded at step edges was relatively similar for all the configurations. The results suggested that the different roughness placed on the steps did not affect significantly the microscopic-scale structure of the upper flow region.

Fig. 5-2 - Chord size distributions at step edge for $d_c/h \approx 1.37$ and $(x-L_I)/L_{cav} = 2$

Configuration	d_c/h	x (m)	Step edge	L_I (m)	$x-L_I/L_{cav}$
A	1.39	2.42	10	1.88	2
B	1.39	2.42	10	1.88	2
C	1.39	2.42	10	1.88	2
S (smooth steps)	1.39	2.15	9	1.62	2
GONZALEZ (2005)	1.34	2.15	9	1.62	2

Note: x is the distance from step edge 1 to the measurement location, L_I is the length to the point of inception and L_{cav} is the cavity length, $L_{cav} = 0.27$ m.

(A) Bubbly flow region (y > 0, C < 0.3)

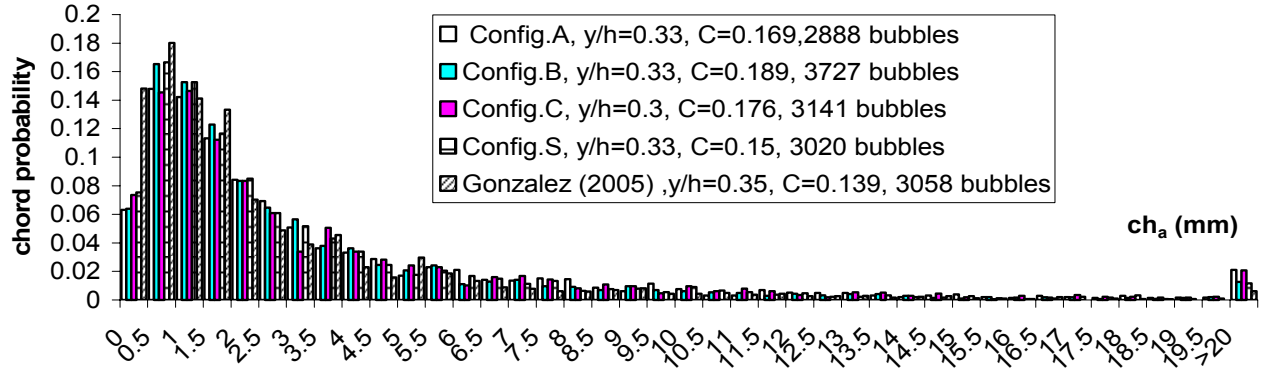


Figure 5-4A presents air-bubble and water-droplet chord size distributions recorded in the cavity recirculation between step edges ($y < 0$, $C < 0.3$). Figure 5-4 includes also bubbly flow ($y > 0$, $C < 0.3$) and spray ($C > 0.7$) data recorded at an identical distance from the inception point $(x-L_I)/L_{cav} = 1.25$ for all tested configurations.
Results were similar to those obtained at step edges. They also suggested that the microscopic-scale structure in the recirculation cavity flow was barely affected by the step roughness.

(B) Spray region ($C > 0.7$)

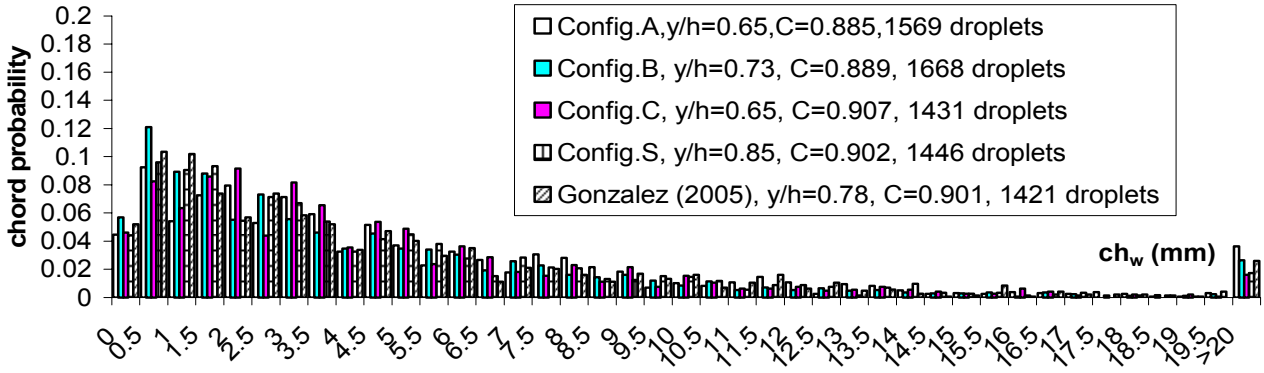


Fig. 5-3 - Probability distribution functions in bubbly flow region at step edges ($C < 0.3$)

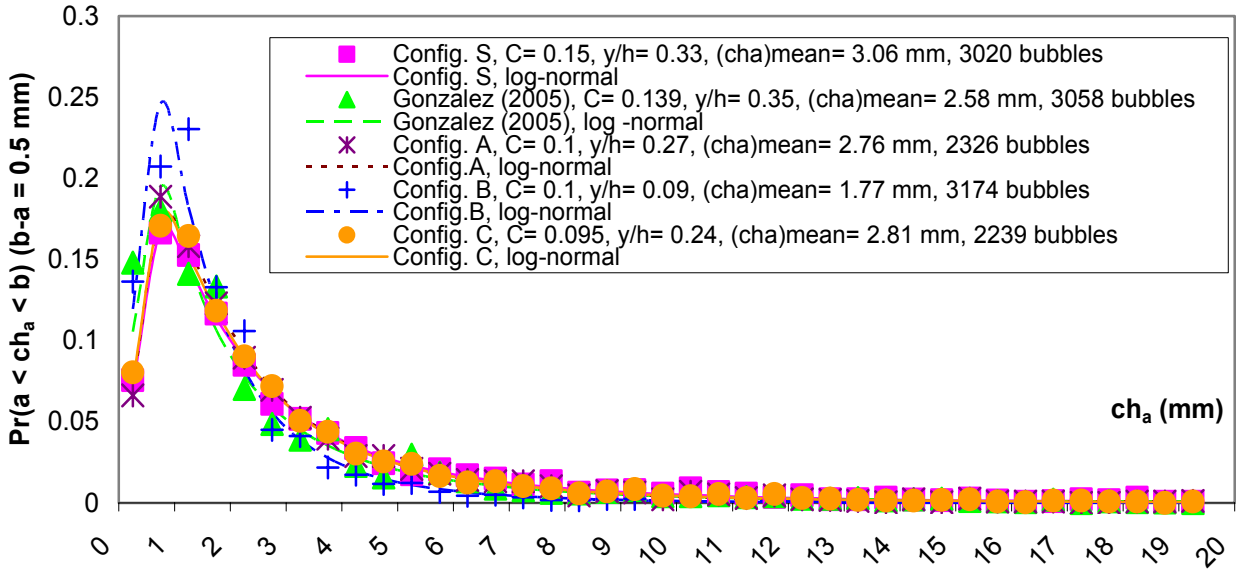
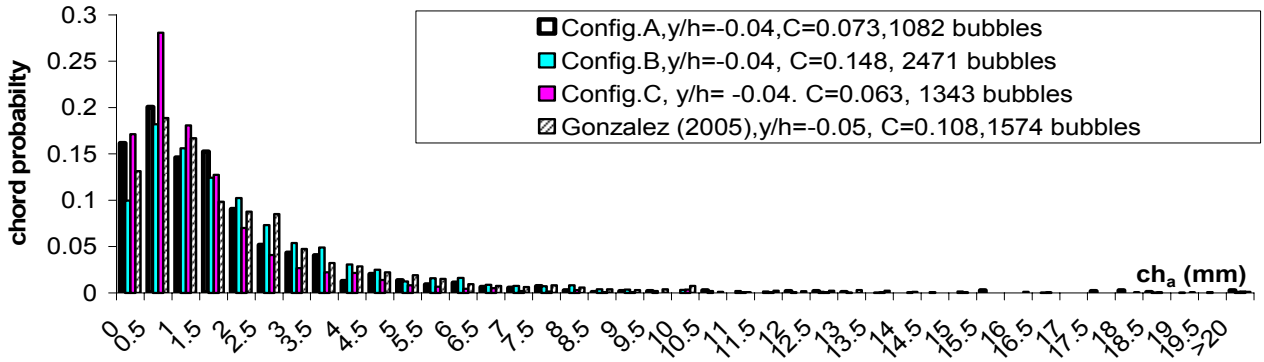


Fig. 5-4 - Chord size distributions between step edges ($d_c/h \approx 1.2$, $(x-L_I)/L_{cav} = 1.25$)

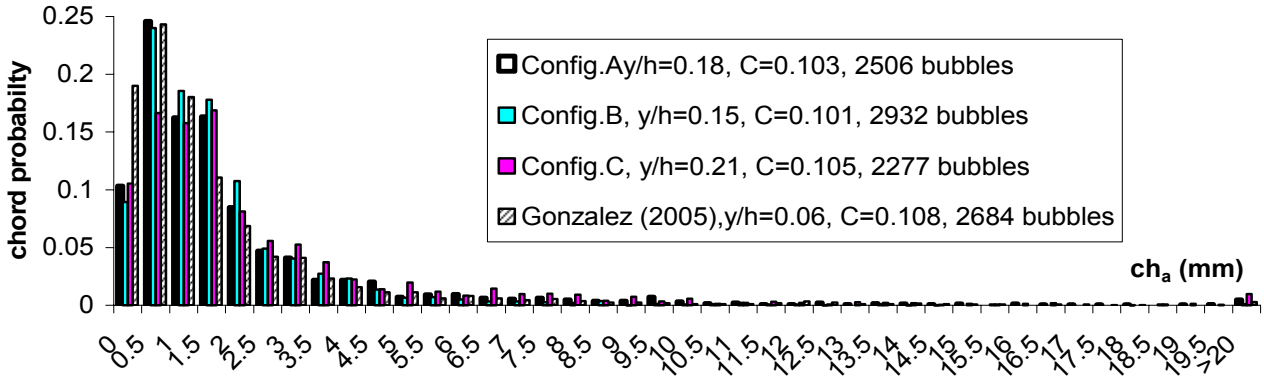
Configuration	d_c/h	x (m)	X_0	Location	L_I (m)	$x-L_I/L_{cav}$
A	1.25	2.22	0.25	between step edges 9 & 10	1.88	1.25
B	1.25	2.22	0.25	between step edges 9 & 10	1.88	1.25
C	1.25	2.22	0.25	between step edges 9 & 10	1.88	1.25
S (smooth steps)	1.25	1.95	0.25	between step edges 8 & 9	1.62	~1.25
GONZALEZ (2005)	1.18	1.95	0.25	between step edges 8 & 9	1.62	~1.25

Note: x is the distance from step edge 1 to the measurement location, L_I is the length to the point of inception, $X_0 = x'/L_{cav}$, x' is the distance downstream the nearest step edge and L_{cav} is the cavity length $L_{cav} = 0.27$ m.

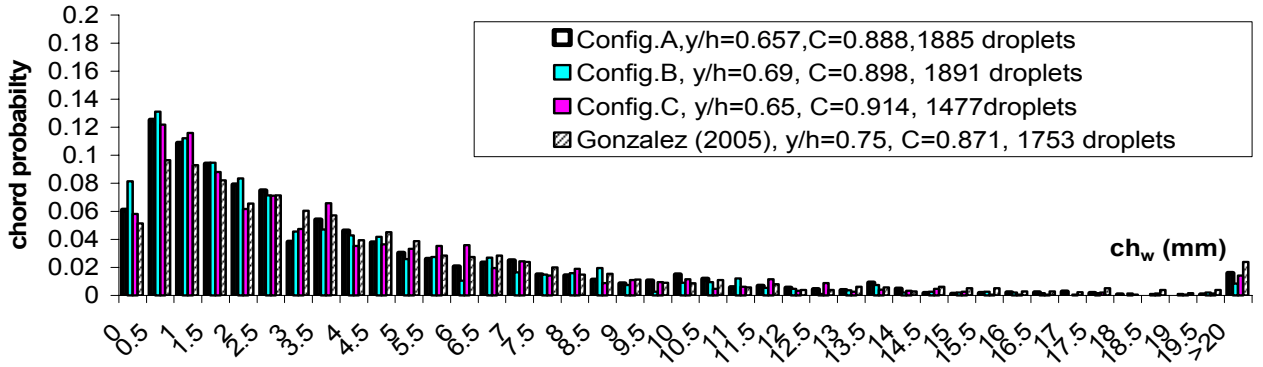
(A) Cavity recirculation region ($y < 0$, $C < 0.3$)



(B) Bubbly flow region above pseudo-bottom formed by step edges ($y > 0$, $C < 0.3$)



(C) Spray region ($C > 0.7$)



6. DISCUSSION

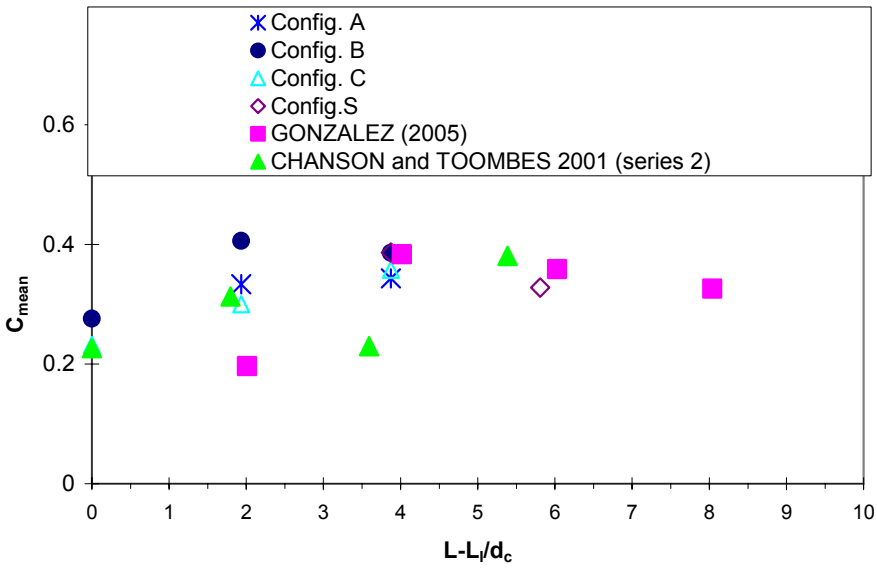
6.1 LONGITUDINAL FLOW PROPERTIES

Present results in terms of flow property distributions demonstrated that the presence of different step roughness configurations influenced the air-water flow properties on a stepped chute. Configurations A (roughness in vertical and horizontal faces) and Configuration C (roughness in horizontal face only) exhibited the largest differences, compared to smooth step results. Configuration B results seemed to be barely affected by the step roughness and yielded flow properties very close to those of a smooth stepped chute. Overall, there were only slight differences in terms of void fraction distributions, but the flow velocities were larger for chutes with rough steps while turbulence intensity, bubble count rate and specific interface area were higher in smooth step chute flows.

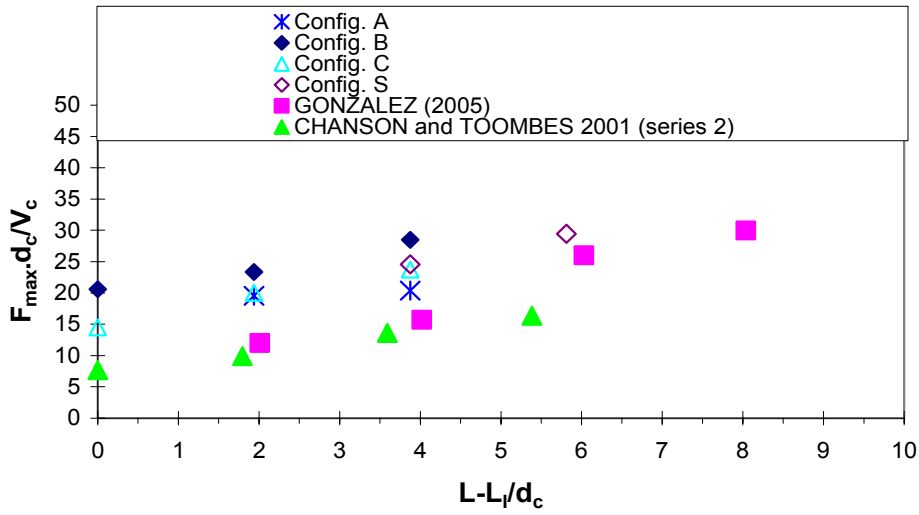
In terms of depth averaged flow properties, however, results showed little difference between all tested configurations. This is seen in Figure 6-1 where a comparison of depth averaged flow properties is presented. Data include dimensionless maximum bubble count rate $F_{max} \cdot d_c/V_c$, depth averaged air content C_{mean}, dimensionless depth Y_{90}/d_c for C = 0.90 and dimensionless air-water flow velocity V_{90}/V_c at $y = Y_{90}$. (See Appendix E for detailed experimental data.)

Fig. 6-1 - Depth averaged flow conditions for $d_c/h \approx 1.37$

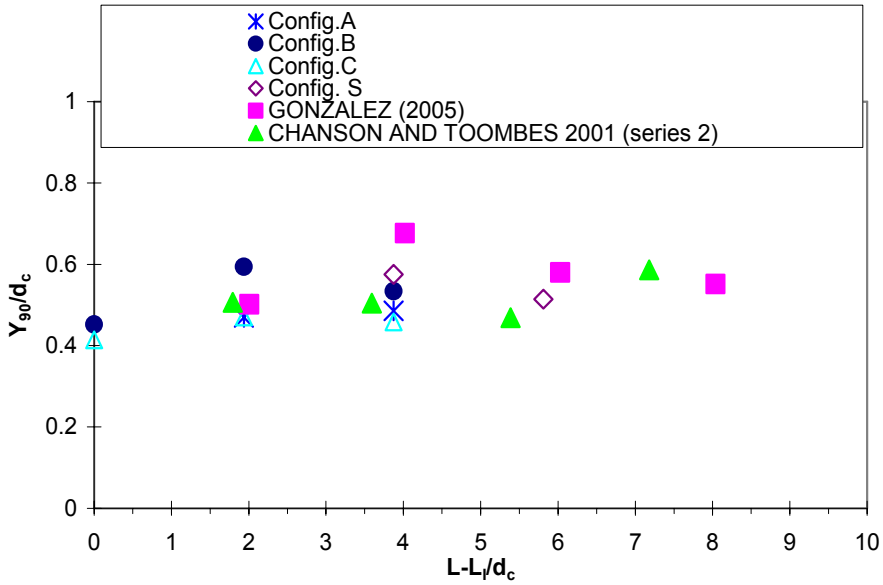
(A) Mean air concentration C_{mean}



(B) Dimensionless maximum bubble count rate $F_{max}*d_c/V_c$



(C) Dimensionless depth at C = 0.90 : Y_{90}/d_c



Such results need to be understood. It is well known that, in skimming flows over smooth faced stepped chutes, a shear layer develops at each step edge and three-dimensional cavity vortices are observed underneath the mainstream. Flow recirculation is maintained through momentum and shear stress exchange between the main stream and cavity flows (Fig. 1-3 and 6-2). For the tested configurations it is hypothesized that the grid acting as step roughness affected the shear layer development at each step edge and the flow recirculation zone between step edges especially in Configurations A & C, with grids on the horizontal step face. The recirculation eddies with clear water core observed for Configurations A & C and those covering the whole cavity without clear water core underneath, observed for Configurations B & S, seem to support this idea (Figs. 3-4 and 6-2).

In Configurations A and C, the roughness grid was placed in the steps horizontal face, generating some uncertainty about where the pseudo-bottom of the chute should start. Indeed both top and bottom of the grid could be the "reference" invert. In the present study, the pseudo-bottom start was set at the top of the grid for configurations A & C and at the step edge for configurations B & S due to measurement convenience. One could argue that different pseudo-bottom definitions for each configuration might yield an erroneous comparison of values in terms of relative flow depth y/d_c,

void fraction C and characteristic depth Y_{90}. However the magnitude of the differences observed in the velocity, turbulence intensity, specific interface area and bubble count rate distribution comparisons seemed to suggest that the air-water flow structure differences observed for each configuration were truly caused by the different roughness configurations ruling out any possibility of measurement inconsistency.

In addition, it is hypothesized that a shear layer develops on the top of the grid placed in the horizontal step face but the grid was porous and water infiltrated through the bottom of the grid allowing some fluid to drain into the step cavity (Fig. 6-2). Such seepage flow was observed visually during experiments. WOOD (1964) and NAUDASCHER and ROCKWELL (1994) stated that fluid injection behind a bluff body is associated with drag reduction. In the same manner, this porous bottom effect, may affect the cavity recirculation patterns and in turn the turbulent dissipation process. This could enhance the flow velocities in the recirculation cavity and within the main stream, as observed in Configurations A & C (roughness in the horizontal step face).

(D) Dimensionless velocity V_{90}/V_c measured at C = 0.90

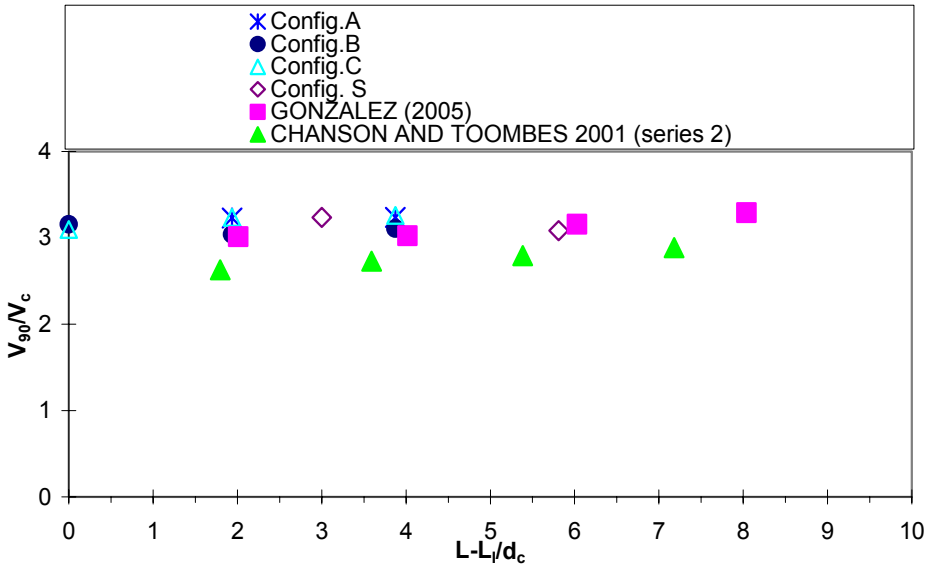
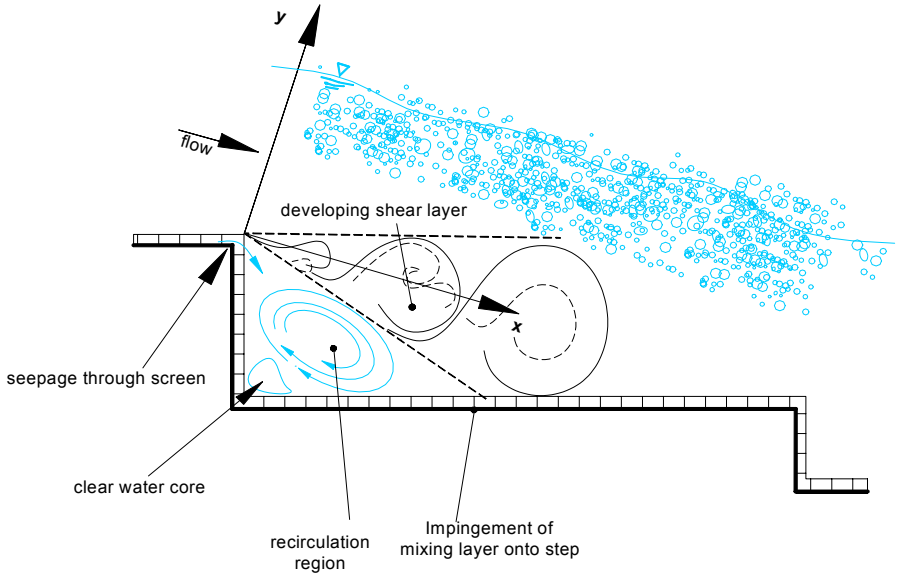


Fig. 6-2 - Sketch of seepage though roughness screen and interaction with cavity recirculation



6.2 TURBULENCE STRUCTURE

In skimming flow, turbulence levels are markedly higher than monophase flow results on a smooth invert (e.g. OHTSU and YASUDA 1997, AMADOR et al. 2004a). In skimming flows, OHTSU and YASUDA (1997) and AMADOR et al. (2004a,b) measured turbulence levels upstream of the inception point of air entrainment. With a 1-component LDA system, OHTSU and YASUDA (1997) observed turbulence levels of about 15-25%, while AMADOR et al. (2004a,b) obtained turbulence intensities between 20 to 100% using a PIV system. Downstream of the inception point of air entrainment, experimental results showed further enhanced turbulence levels for $0.1 < C < 0.9$ (e.g. CHANSON and TOOMBES 2002a, Present study).

For all configurations during the present study, the data showed relatively strong correlations between turbulence levels and bubble count rates, associated with a monotonic increase in turbulence intensity with increasing bubble frequencies. This is illustrated in Figure 6-3 showing the relationships between turbulence intensity Tu and dimensionless bubble count rate $F*d_c/V_c$ at several cross-sections. Present results were consistent with the earlier limited data sets of CHANSON and TOOMBES (2002a,2003) and YASUDA and CHANSON (2003).

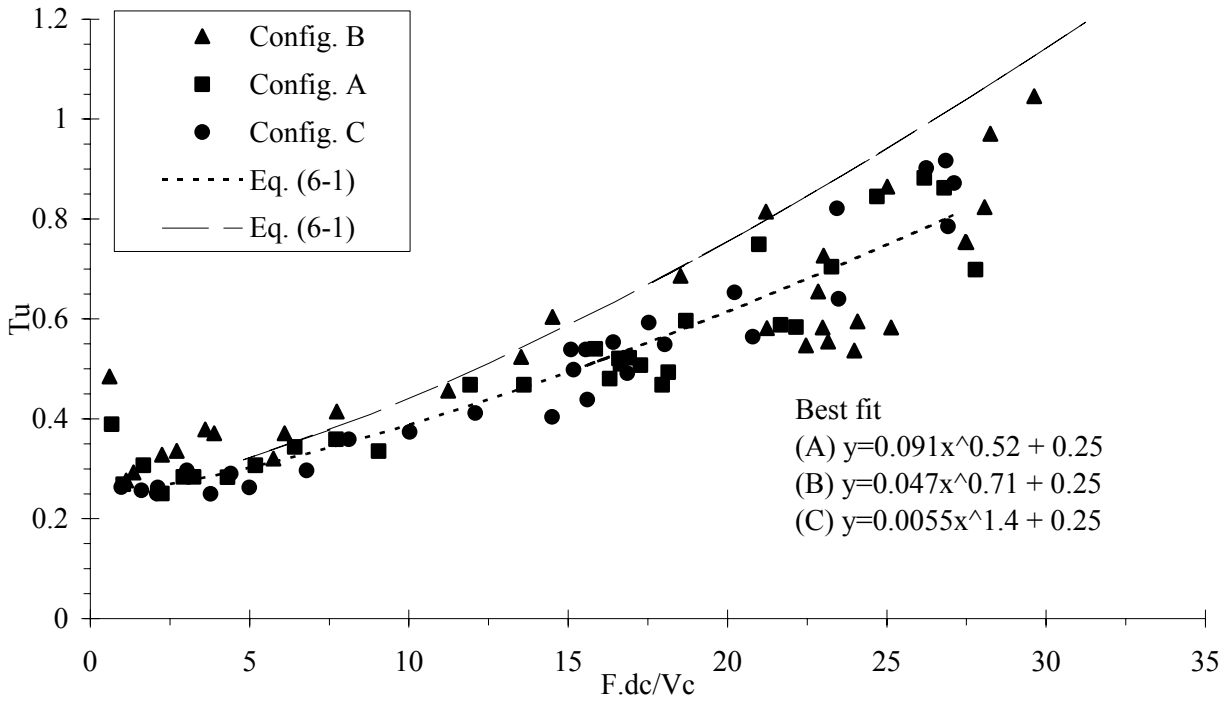
At step edges, the results suggested that :

$$Tu = 0.25 + \alpha * \left(\frac{F * d_c}{V_c} \right)^{\beta} \quad (6\text{-}1)$$

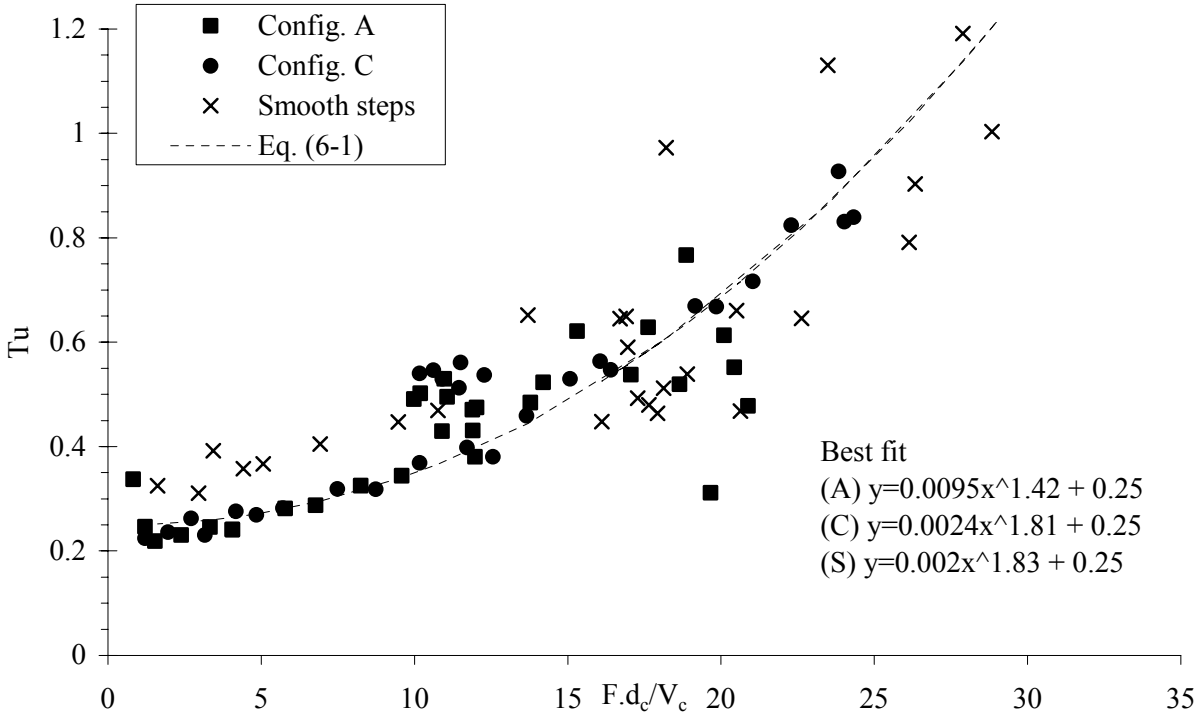
where Tu is the turbulence level (Section 2, App. A), F is the bubble count rate, d_c and V_c are the critical flow depth and velocity respectively. For the present study, the exponent β ranged from about 1.0 to 1.9 depending upon the discharge, step edge position and step configuration, and the coefficient α decreased with increasing distance from the inception point of free-surface aeration. The latter trend reflected a longitudinal monotonic increase in bubble count rate (Fig. 6-1B), while the levels of turbulence were roughly independent of the longitudinal location.

In skimming flow above a stepped invert, high turbulence levels are generated by the step cavities (Fig. 2-4C, 3-3 & 3-4). The resulting turbulent fluctuations acting next to the free surface contribute to a drastic air entrapment and advective dispersion. At the "pseudo-free-surface", air is continuously entrained and released. Interfacial aeration involves both entrainment of air bubbles and formation of water droplets (Fig. 6-4). The exact location of the "pseudo-free-surface" becomes undetermined, and very large bubble count rates and specific interface area were recorded (Fig. 4-3 & 4-5). The writers hypothesise that large bubble count rates, associated with large number of air-water interfaces, contribute to higher turbulence levels, compared to clear-water skimming flows. This would be consistent with the strong correlation between turbulence levels and bubble count rates shown in Figure 6-3. For $0.05 \leq C \leq 0.95$, the air-water flow structure is dominated by collisions between particles (bubbles, droplets, packets) and by interactions between particles and turbulence Such dynamic processes are associated continuous bubble/droplet break-up, coalescence and interfacial deformations which contribute to large fluctuations in air-water interfacial velocity. Continuous deformations and modification of air-water interfaces must induce large turbulence levels as measured by an intrusive phase-detection probe.

Fig. 6-3 - Dimensionless relationship between turbulence levels and bubble count rates in skimming flow at the downstream end of the chute (step edge 10)
(A) d_c/h = 1.25, Re = 5.5 E+5, step edge 10 - Comparison with Eq. (6-1) for Configurations A & B



(B) d_c/h = 1.39, Re =6.4 E+5 , step edge 10 - Comparison with Eq. (6-1) for Configuration C



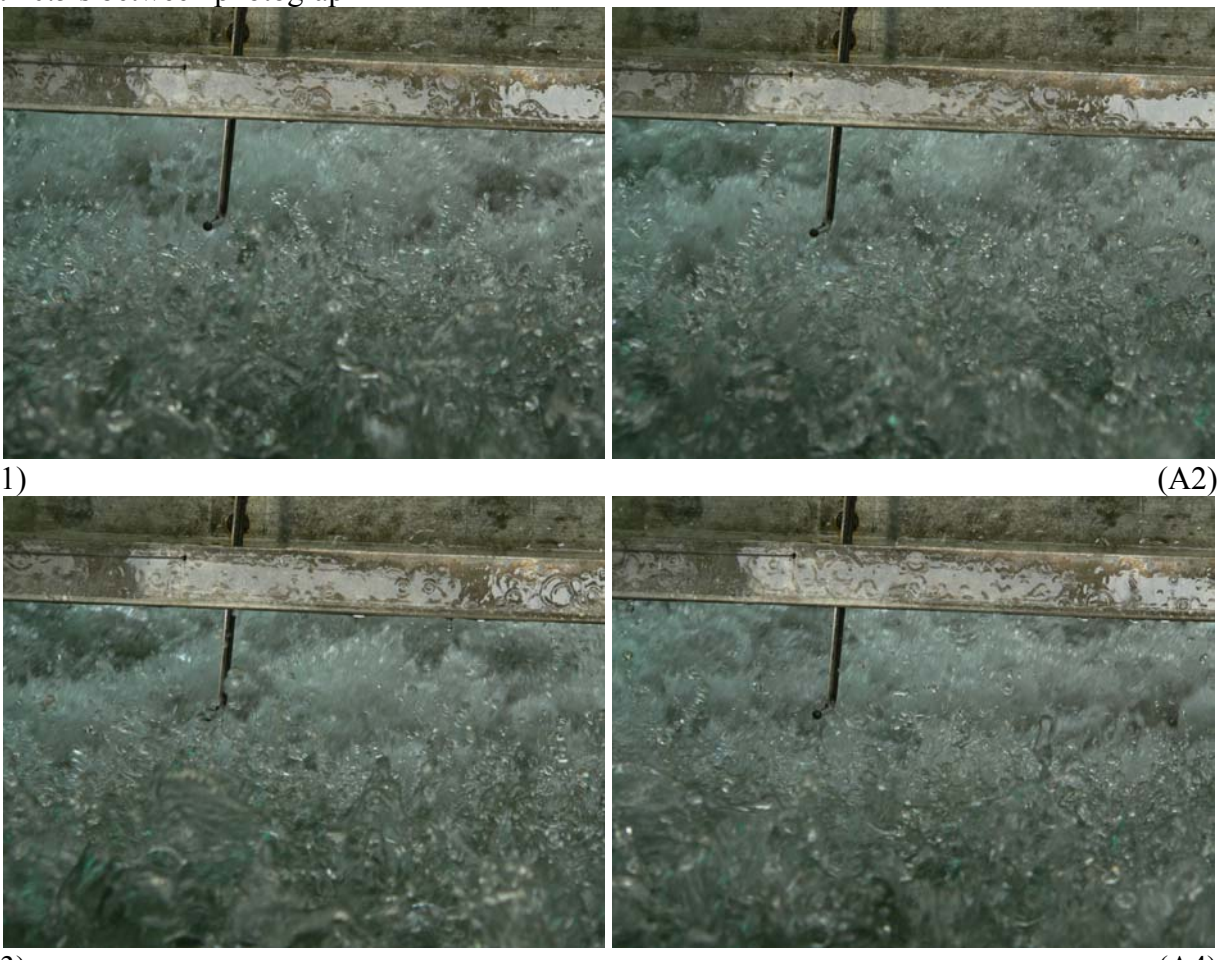
6.3 AIR-WATER EXCHANGES AND SPRAY GENERATION

The study of spray and splashing remains limited in high-velocity water flows (Fig. 6-4). Some researchers used visual techniques ([2]), while others used intrusive phase detection probes (CHANSON 1999, TOOMBES 2002, HONG et al. 2004, CHANSON and GONZALEZ 2004).

AUGIER (1996) measured droplet size distributions beneath full-scale irrigation water guns. He observed that the droplet sizes increased with increasing distance from the jet nozzle, with maximum drop sizes downstream of jet breakup. REIN (1998) discussed drop generation in high-velocity open channel flows. CHANSON (1999) presented relevant experimental evidence for smooth invert chutes, but showed the limitations of REIN's developments. CHANSON and GONZALEZ (2004) used turbulence manipulation to enhance the rate of energy dissipation on a stepped chute, and their results demonstrated a drastic increase in spray production (e.g. Fig. 6-4C).

Despite the limited data sets, experimental results in supercritical flows (CHANSON 1999, TOOMBES 2002, CHANSON and GONZALEZ 2004, Present study) and water jets (HONG et al. 2004) showed a wide range of droplet chord lengths at each sampling location (e.g. Fig. 5-2B & 5-4C). The chord length distributions were skewed with a preponderance of small chord sizes relative to the mean. The probability of droplet chord lengths was the largest for droplet sizes between 0.5 and 5 mm, with decreasing numbers of droplets and decreasing droplet sizes with increasing heights y and decreasing liquid fractions (1-C).

Fig. 6-4 - Photographs of air-water exchanges in spray region looking downstream from weir crest
(A) Configuration A, d_c/h = 1.25, Re = 5.5 E+5, high shutter speed (1/250 s) - Sequence of 4 shots with 0.5 s between photograph



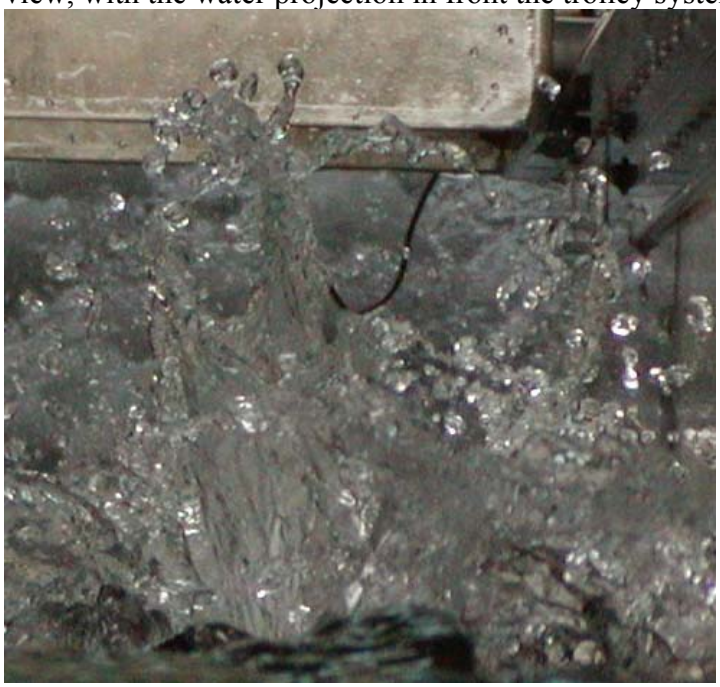
(A1) (A2)

(A3) (A4)

[2] That is, photography (HOYT and TAYLOR 1996,1997), infra-red sensors (AUGIER 1996) and video-observations (WU and FAETH 1995, WU et al. 1995).

(B) Configuration C, d_c/h = 1.1, Re= 4.3 E+5, inception point at step edge 6, probe located at step edge 8, high shutter speed (1/1,000 s)

(C) Spray and droplet generation captured with high-shutter speed, looking downstream (CHANSON and GONZALEZ 2004, Configuration B, d_c/h = 1.1, Re = 4.4 E+5) (Inset : general view, with the water projection in front the trolley system on the right)



Observations in highly turbulent open channel flows suggested that the spray region (defined as C > 0.7) may be sub-divided into three sub-zones. That is, (1) a spray/splashing region consisting of water droplets and entities surrounded by air (0.7 < C < 0.9); (2) a spray/mist region (0.9 < C < 0.99) with smaller densities of water droplets, and (3) an outer "foggy/aerosol" region with very-fine water droplets. For void fractions between 70% and 99%, measured droplet size distributions showed a broad range of droplet sizes from less than 0.05 mm up to more than 40 mm, with a mode around 2-5 mm. Above this spray layer, an upper spray field consisted primarily of very fine droplets (i.e. mist) with a few large (several millimetres) droplets reaching heights in excess of 10 water depths.

Basic considerations

In the spray region, drop formation results from surface distortion, tip-streaming of ligaments and interactions between eddies and free-surface (e.g. HOYT and TAYLOR 1977, REIN 1998, Fig. 6-4C). The formation and ejection of a droplet must be associated with a transfer of turbulent kinetic energy from the main flow. Once a droplet is ejected, its ejection process is the dominant effect because the droplet response time is nearly two orders of magnitude larger than the air flow response time. The energy of each droplet is a combination its potential energy and kinetic energy, although NIELSEN (2004, *Pers. Comm.*) suggested possibly some pressure increase induced by surface tension.

In an open channel flow (Fig. 3A), the energy flux per unit area in the spray at a point M(x,y) equals :

$$\rho_W * (1 - C) * V * g * \left(z + \frac{V^2}{2 * g} + \frac{4 * \sigma}{\rho_W * g * d_{wd}} \right) \qquad (6\text{-}2)$$

where ρ_W is the water density, C is the void fraction and (1-C) is the liquid fraction, V is the velocity, z is the vertical elevation measured above a reference level, σ is the surface tension and d_{wd} is a characteristic droplet diameter. In Equation (6-2), the three terms in the brackets are proportional respectively the potential energy, the kinetic energy and some pressure work induced by capillary forces. Note that the liquid fraction (1-C) accounts for the droplet density in Equation (6-2).

For millimetric droplets (e.g. d_{wd} = 2 mm, V = 3 m/s, z = 50 mm), the contribution of each term would correspond to a total head ([3]) of 50, 460 and 14 mm of water respectively for the three terms in brackets. The last term would become significant for sub-millimetric droplets only.

[3] That is, the total energy per unit mass.

7. SUMMARY AND CONCLUSION

On a stepped chute, the waters skim over the pseudo-bottom formed by the step edges at large discharges (Fig. 7-1). The skimming flow pattern is associated with very strong recirculation and large vortical structures in the step cavities. To date, the effects of step roughness on the flow properties are little known despite the practical relevance which includes the design of gabion stepped chutes and unprotected roller compacted concrete chutes, and the hydraulics of damaged concrete steps on older structures (Fig. 7-2).

In the present study, the effect of step roughness was investigated systematically in a new series of experiments. The work was performed in a large size facility with step height of 0.10 m, step length of 0.25 m and chute width of 1 m. The results may be extrapolated to larger prototypes based upon an undistorted Froude similitude, although great care must be considered (see discussion in Section 1). Four configurations were thoroughly tested with identical flow conditions : a smooth stepped chute and three configurations with rough step faces (Configurations A, B and C). The latters were achieved by placing rough screens (8 mm high) on the step faces : on the vertical faces (Config. B), on the horizontal step faces (Config. C) and on both faces (Config. A). Preliminary tests showed that the equivalent sand roughness height of the screens used as step roughness was about $k_s' = 6.6$ mm (App. B). Detailed air-water flow measurements were performed with a dual-tip phase detection probe (sensor size: 0.025 mm). A total of more than 90 vertical profiles were recorded corresponding to about 2,300 measurement points. At each sampling point, the data acquisition yielded 400,000 data per probe sensor. Basic results included the vertical distributions of air concentration, bubble count rate, air-water velocity, turbulence level, and the air and water chord size distributions at each sampling point.

Key outcomes

1. The results showed some similarities between all four stepped configurations. Three basic flow regimes were observed : i.e., nappe flow at low discharges, transition flow for intermediate flow rates and skimming flow for large discharges. The flow conditions at the change from one flow regime to another were identical for all four geometries (Section 3).

2. In skimming flows, visual observations showed that the step roughness affected the recirculation patterns in the step cavities. The recirculation regions (i.e. $y < 0$) were typically more aerated on smooth stepped chute than on rough steps. For the roughest configuration A, clear-water recirculation regions were observed downstream of the inception point of air entrainment. Seepage was also observed through the rough screens. This is believed to have a significant impact on the recirculation flows and on the developing shear layers downstream of each step edge.

3. At a macroscopic level, the effects of step roughness were two-fold. The location of the inception point of free-surface aeration was further downstream than for a smooth stepped chute for an identical flow rate (Section 3). In turn the residual energy at the downstream end of the chute was greater on the rough stepped chute. Although this finding contradicts an "intuitive" perception, it derives from the downstream position of the inception point of air entrainment and the lesser rate of energy dissipation in the upstream clear-water flow region on the rough stepped chute.

4. At a microscopic level, the experimental results showed consistently several trends (Table 7-1). The void fraction distribution results at step edges were very close for all stepped configurations, although there seemed to be slightly less entrained air in the rough stepped chute flows. Bubble count rate distributions indicated systematically lesser bubble count rates in the rough stepped chute flows. At step edges, the velocities of rough stepped chute flows were larger and faster than those of smooth chute flows for a given flow rate and dimensionless location from the inception point of free-surface aeration. This was associated with lower turbulence intensities in rough stepped

channel flows, particularly for $0.2 \leq y/Y_{90} \leq 0.8$. Similar trends were also observed above step cavities in between step edges.
A detailed analysis of air and water chord size distributions showed that, at each sampling location, the distributions of air and water chords were broad and spanned over two to three orders of magnitude. That is, from less than 0.2 mm to more than 20 mm typically. In the bubbly flow region ($C < 0.3$), the probability distribution functions of air chord sizes followed closely a log-normal law for all investigated configurations and flow conditions. The results in terms of probability distribution function data were close for all four configurations, although the PDFs of air chord size appeared more peaky for the smooth stepped chute configuration in the bubbly flow region.

Table 7-1 – Effects of step roughness on air-water flow properties : comparative trends at a microscopic scale (downstream of inception point of free-surface aeration)

Microscopic Results	Remarks
$(F)_{rough} < (F)_{smooth}$	$0.2 \leq y/Y_{90} \leq 0.8$
$(V/V_c)_{rough} > (V/V_c)_{smooth}$	$y/Y_{90} \leq 1$
$(Tu)_{rough} < (Tu)_{smooth}$	$0.2 \leq y/Y_{90} \leq 0.8$

Fig. 7-1 - Photograph of skimming flow on Configuration A - Looking downstream, through the right sidewall - $d_c/h = 1.5$, Re = 7.2 E+5, h = 0.1 m, l = 0.25 m (High-shutter speed)

Fig. 7-2 - Photographs of damage concrete steps on stepped chutes and spillways
(A) Damaged steps of the Gilbao stepped spillway in 2003 (New York, USA) (Courtesy of GZA GeoEnvironmental) - Completed in 1926, the masonry steps were extensively damaged by long-term freeze/thaw

(B) Damage concrete step on Gold Creek dam stepped chute in April 1996 - Completed in 1890, the un-reinforced steps were the world's first use of concrete for a stepped spillway (h = 1.5 m, l = 4 m)

General remarks

The present results may provide some information for the design of rough concrete stepped chutes (e.g. Fig. 7-2 & 7-3). For gabion stepped chutes, however, the flow pattern is affected by both the step face roughness and seepage through the gabions. The latter effect was not studied herein although it may affect significantly the flow field on gabion stepped weirs.

It is acknowledged that the present study was limited to one chute slope (22º) and one type of roughness (8 mm high rough screens). Further investigations must be performed with different chute slopes and step roughness to ascertain the findings to other spillway geometries.

Overall the flow properties in the Configuration B (rough vertical faces) were close to the smooth stepped chute flow properties, while relatively close results were obtained with the Configurations A and C.

Fig. 7-3 - Stepped spillway of Les Olivettes dam (France) in March 2003 (Courtesy of Mr and Mrs CHANSON) - Flood mitigation, completed in 1987, RCC dam (H = 36 m, L = 254 m), catchment area : 29.5 km^2, design flow = 290 m^3/s, W = 40 m

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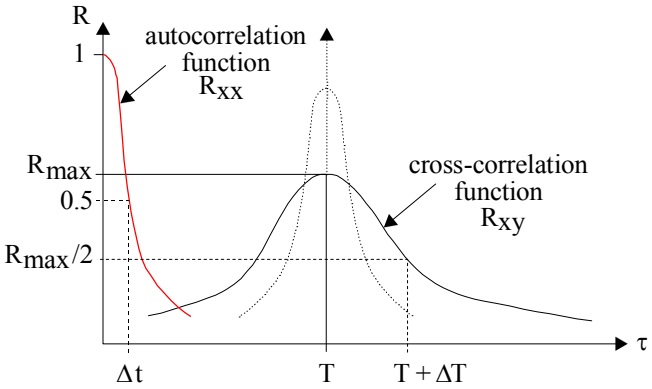
APPENDIX A - TURBULENT VELOCITY MEASUREMENTS WITH DUAL-TIP PROBES IN AIR-WATER FLOWS

In turbulent air-water flows, the velocity measurement with a dual-tip intrusive phase-detection probe is based upon the successive detection of air-water interfaces by two tips. The technique assumes that the probe sensors are aligned along a streamline, the bubble/droplet characteristics are little affected by the leading tip, and the bubble impact on the trailing tip is similar to that on the leading tip. In disperse bubbly flows with low void fractions (e.g. C < 2 to 5%), the interfacial velocity of individual particles may be deduced from successive interface detections by both probe sensors. In highly turbulent air-water flows with large void fractions, the successive detections of a bubble by each probe sensor is highly improbable, and it is common to use a cross-correlation technique (e.g. CROWE et al. 1998, CHANSON and TOOMBES 2001a, CHANSON 2002). The time-averaged air-water velocity equals:

$$V = \frac{\Delta x}{T} \quad (A\text{-}1)$$

where Δx is the distance between probe sensors and T is the average interface travel time for which the cross-correlation function is maximum : i.e., $R_{xy}(T) = R_{max}$ where R_{xy} is the normalised cross-correlation function and R_{max} is the maximum cross-correlation value (Fig. A-1).

Fig. A-1 - Sketch of the cross-correlation function for a dual-tip phase-detection intrusive probe



The shape of the cross-correlation function provides some information on the turbulent velocity fluctuations. Flat cross-correlation functions are associated with large velocity fluctuations around the mean and large turbulence intensity. Thin high cross-correlation curves are characteristics of small turbulent velocity fluctuations. The information must be corrected to account for the intrinsic noise of the leading probe signal and the turbulence intensity is related to the broadening of the cross-correlation function compared to the autocorrelation function.

The definition of the standard deviation of the velocity leads to :

$$u'^2 = \frac{V^2}{N} \sum_{i=1}^{N} \frac{1}{\tau^2} * (\tau - T)^2 \quad (A\text{-}2)$$

where V is the mean velocity, N is the number of samples and τ is the bubble travel time data. With an infinitely large number of data points N, an extension of the mean value theorem for definite integrals may be used as the functions $1/\tau^2$ and $(\tau\text{-}T)^2$ are positive and continuous over the interval (i = 1, N) (SPIEGEL 1974). The mean value theorem implies that there exists at least one characteristic bubble travel time τ' satisfying $\tau_1 \leq \tau' \leq \tau_N$ such that :

$$\left(\frac{u'}{V}\right)^2 = \frac{1}{N} * \frac{1}{\tau'^2} * \sum_{i=1}^{N} (\tau - T)^2 \quad \text{(A-3)}$$

The standard deviation of the velocity is basically proportional to the standard deviation of the bubble travel time:

$$\frac{u'}{V} = \frac{\sigma_\tau}{\tau'} \quad \text{(A-4)}$$

Assuming that the successive detections of bubbles by the probe sensors is a true random process (e.g. affected only by random advective dispersion of the bubbles and random velocity fluctuations over the distance separating the probe sensors), the cross-correlation function is a Gaussian distribution :

$$R_{xy}(\tau) = R_{max} * \exp\left(- \left(\frac{\tau - T}{\sigma_T}\right)^2 \right) \quad \text{(A-5)}$$

where σ_T is the standard deviation of the cross-correlation function. Defining ΔT as a time scale satisfying : $R_{xy}(T+\Delta T) = R_{max}/2$, the standard deviation equals : $\sigma_T = \Delta T/1.175$ for a true Gaussian distribution. The standard deviation of the bubble travel time σ_τ is a function of both the standard deviations of the cross-correlation and autocorrelation functions :

$$\sigma_\tau = \frac{\sqrt{\Delta T^2 - \Delta t^2}}{1.175} \quad \text{(A-6)}$$

where Δt is the characteristic time for which the normalised autocorrelation function equals 0.5. Assuming that $\tau' \sim T$ and that the bubble/droplet travel distance is a constant Δx, Equation (A-4) implies that the turbulence intensity u'/V equals :

$$Tu = \frac{u'}{V} \approx 0.851 * \frac{\sqrt{\Delta T^2 - \Delta t^2}}{T} \quad \text{(A-7)}$$

Tu is a dimensionless velocity scale that is characteristic of the turbulent velocity fluctuations over the distance Δx separating the probe sensors. Although Tu is not strictly equal to the dimensionless turbulent velocity fluctuation, it provides some information on the turbulence level in air-water flows.

DISCUSSION: EFFECT OF THE DUAL-TIP PROBE DESIGN

Hubert CHANSON's experience in air-water flows suggested that the standard deviation of the bubble travel time could also be a function of the distance Δx between sensors. For a given bubbly flow configuration and probe sensors, the cross-correlation function broaden and the maximum cross-correlation decreases with increasing distance Δx. KIPPHAN (1977) recommended an optimum distance Δx between sensor equal to :

$$\frac{(\Delta x)_{opt}}{\delta x} \approx \frac{0.35}{Tu} \quad \text{(A-8)}$$

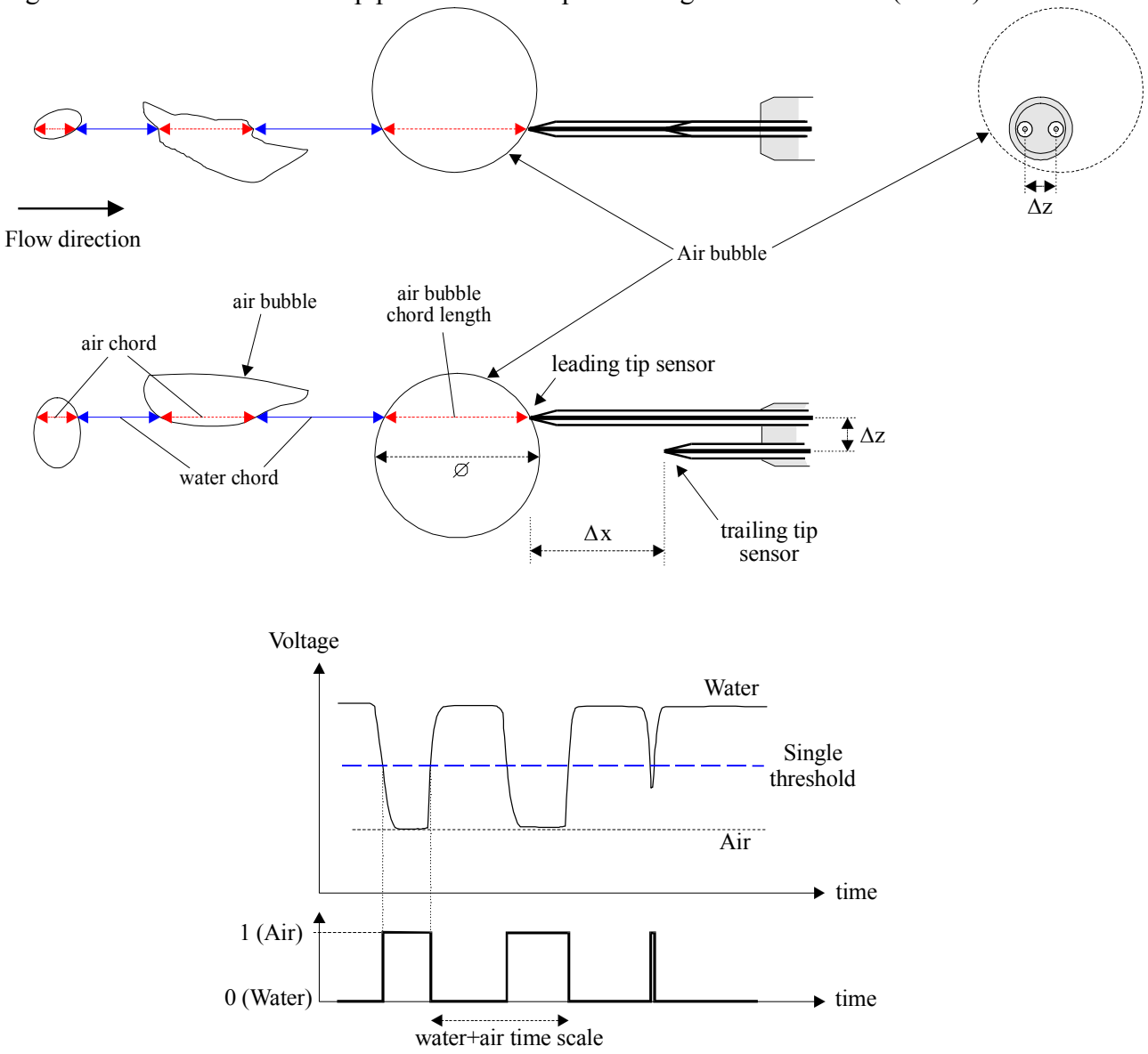
where δx is the characteristic sensor size in the flow direction. Equation (A-8) does not account however for the characteristic size of the two-phase flow structure.

CHANSON and TOOMBES (2001a) reviewed a number of successful designs of dual-tip resistivity and optical fibre probes. Based upon these designs and their successful operation, CHANSON and TOOMBES proposed an "optimum" probe spacing :

$$\frac{(\Delta x)_{opt}}{\delta x} = 33.5 * V_{max}^{0.27} \quad \text{(A-9)}$$

where V_{max} is the maximum bubbly flow velocity in m/s. Equation (A-9) is based upon laboratory and prototype studies conducted with $0.4 \leq V_{max} \leq 18.5$ m/s and $1.5 \leq \Delta x \leq 102$ mm. During the present study, the streamwise distance between probe sensors was $\Delta x = 7.74$ mm, and the characteristic sensor size in the flow direction was about : $\delta x = 0.025$ to 0.05 mm.
The velocity and turbulent velocity fluctuation calculations may be further affected by any offset between the leading and trailing tips of the probe. For example, CHANSON (1995b,1997) introduced successfully such an offset to reduce the effects of separation and wake downstream of the leading tip reported by SENE (1984) and CHANSON (1988). The probe design is sketched in Figure A-2. With this design, CUMMINGS (1996) studied the effects of trailing probe offset Δz. His tests indicated that, for $\Delta x = 8$ mm, a lateral displacement of 0.43 mm experienced some wake problems similar to those observed by SENE (1984) and CHANSON (1988). He tested further $\Delta z =$ 0.58 mm, 1.33 mm and 1.57 mm, which all performed satisfactorily, although the 0.58 mm lateral offset gave the "best performance" (CUMMINGS 1996). In the present study, the lateral offset was $\Delta z = 0.472$ mm while $\Delta x = 7.74$ mm. No wake problem was experienced.

Fig. A-2 - Sketch of the dual-tip phase-detection probe design of CHANSON (1995b)



APPENDIX B - HYDRAULIC ROUGHNESS OF THE SCREENS

The hydraulic roughness of the screens was tested in a 20 m long, 0.25 m wide tilting flume with glass walls at the University of Queensland Gordon McKAY Hydraulics Laboratory. For a 10 m length, the channel bed was covered with the rough screen pattern (Fig. B-1). (The sidewalls were made of glass.) The gradually-varied free-surface profile was recorded in the fully-developed flow region for a range of flow rates (0.017 to 0.04 m^3/s) and bed slopes (S_o = 0.09 to 0.15). Visually the water depth was significantly larger over the rough invert than with a glass bottom, demonstrating the enhanced flow resistance. This is illustrated in Figure B-1B showing the flow at the downstream end of the screen bed section, with a rapid drop in surface elevation once the waters flow over the smooth glass bottom.

For each run, the average boundary shear stress τ_o was calculated from the friction slope S_f which satisfied the differential form of the energy equation :

$$\frac{\partial H}{\partial s} = - S_f \qquad \text{(B-1)}$$

where H is the total head and s is the streamwise coordinate. The friction slope was related to the overall boundary shear stress τ_o :

$$S_f = \frac{4 * \tau_o}{\rho * g * D_H} \qquad \text{(B-2)}$$

where ρ is the fluid density, g is the gravity acceleration and D_H is the hydraulic diameter.

The bed shear stress τ_{screen} was deduced as :

$$\tau_o * (W + 2*d) = \tau_{screen} * W + \tau_{wall} * 2 * d \qquad \text{(B-3)}$$

where W is the channel width, d is the water depth and τ_{wall} is the glass sidewall shear stress which was deduced from the Moody diagram assuming an equivalent roughness height k_S = 0.1 mm (IDELCHIK 1969,1986,1994, HENDERSON 1966, CHANSON 2004a). The results in terms of the Darcy friction factors for the screens are reported in Table B-1 (column 7). For the tests, the equivalent Darcy friction factor of the screens ranged from f_{screen} = 0.05 to 0.08, corresponding to a Gauckler-Manning coefficient of about 0.016 to 0.02 $s/m^{1/3}$.

The dimensionless screen shear stress results are compared with the Colebrook-White formula in Figure B-2A. The correlation is poor but the Colebrook-White formula is not truly applicable to present roughness elements. Indeed the screens are porous and the induced flow resistance is a combination of skin friction and form drag. The best correlation with the Colebrook-White formula was achieved for an equivalent sand roughness height k_S' = 6.6 mm that is comparable to the screen thickness k = 8 mm.

Overall the flow conditions were fully-rough turbulent and the results were basically independent of Reynolds number. The data were best correlated by :

$$\frac{1}{\sqrt{f_{screen}}} = 0.252 * \left(\frac{k}{D_H}\right)^{-0.823} \qquad \text{(B-4)}$$

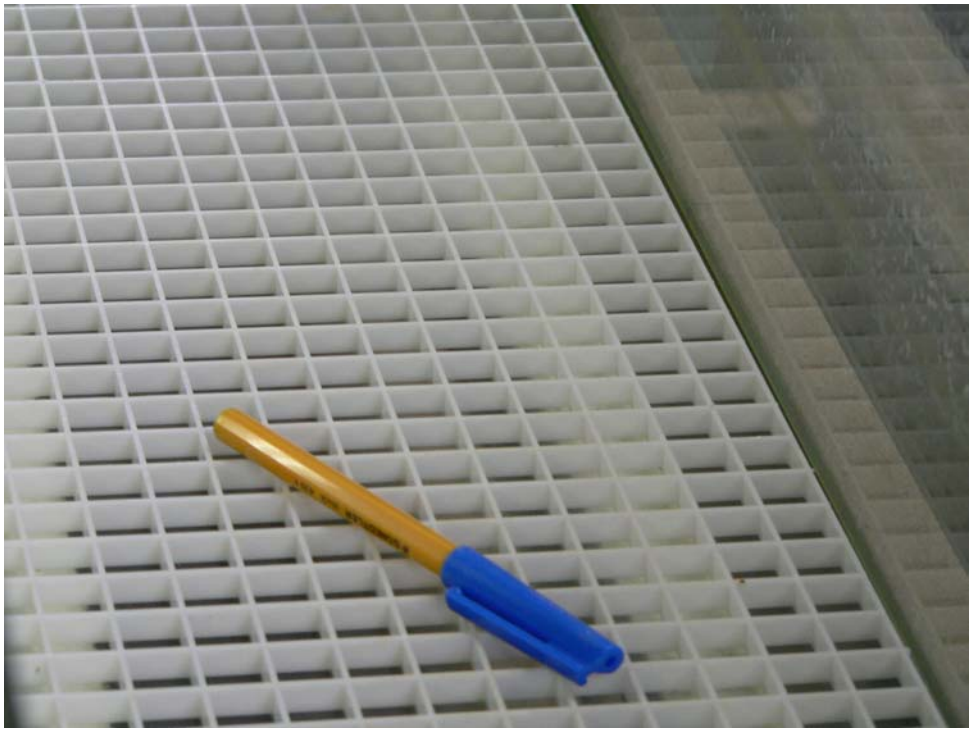
with a normalised correlation coefficient of 0.783, where k is the screen height (k = 8 mm). Equation (B-4) is shown in Figure B-2B and compared with the experimental results.

Table B-1 - Experimental results

Run	Q	S_o	D_H (average)	$\rho * \frac{V * D_H}{\mu}$ (average)	$\frac{k}{D_H}$	$\frac{f_{screen}}{8 * \tau_{screen}}{\rho * V^2}$
	L/s		m			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
12	38.5	0.006033	0.27067	2.8 E+5	0.0296	0.0497
11	38.5	0.0094	0.25740	3.0 E+5	0.0311	0.0549
10	38.5	0.010333	0.25416	3.0 E+5	0.0315	0.0559
9	33.2	0.010333	0.24096	2.7 E+5	0.0332	0.0565
8	33.2	0.0094	0.2442	2.7 E+5	0.0328	0.0548
7	33.2	0.006033	0.25633	2.6 E+5	0.0312	0.0452
6	21.8	0.006033	0.22906	1.9 E+5	0.0349	0.0625
5	21.8	0.0094	0.21836	2.0 E+5	0.0366	0.0771
4	21.8	0.010333	0.21590	2.0 E+5	0.0371	0.0809
3	17	0.010333	0.19856	1.6 E+5	0.0403	0.0887
2	17	0.0094	0.20217	1.6 E+5	0.0396	0.0873
1	17	0.006033	0.20244	1.6 E+5	0.0395	0.0538

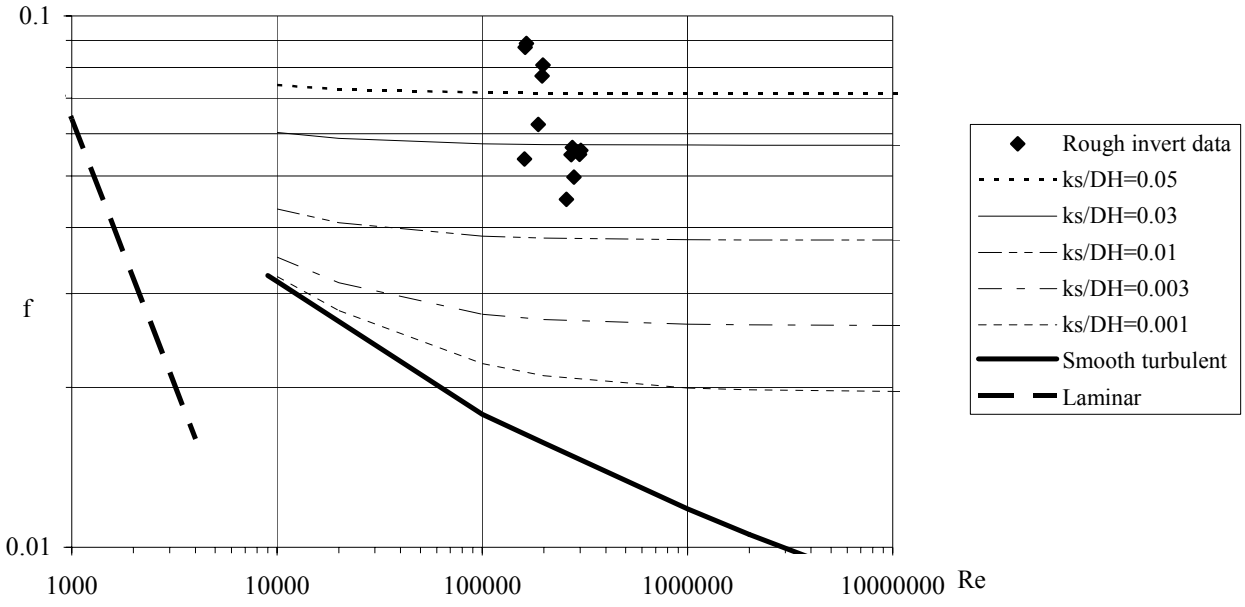
Note: k : screen thickness (k = 8 mm).

Fig. B-1 - Step roughness tests
(A) Screens in the 0.25 m wide tilting flume for hydraulic roughness tests

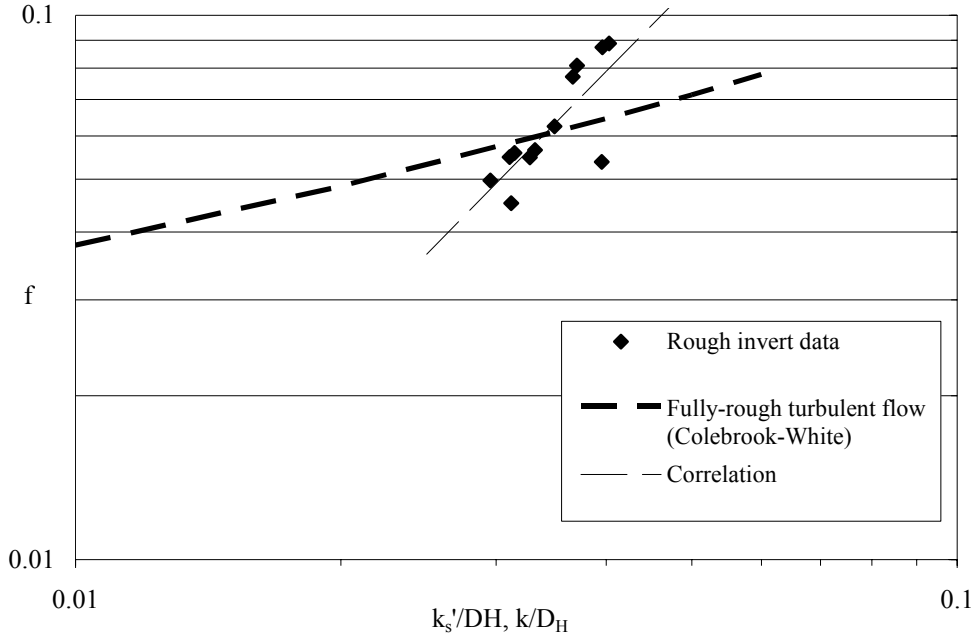


(B) Side view of the flow at the end of the screen invert - Q = 0.017 m^3/s, S_o = 0.006033, flow from left to right

Fig. B-2 - Equivalent Darcy friction factor f_{screen} of 8 mm high screens
(A) Comparison with the Colebrook-White formula (Moody diagram presentation)



(B) Comparison with fully-rough turbulent flow formula (Colebrook-White) and Equation (B-43)



APPENDIX C - INCEPTION OF AIR ENTRAINMENT

Skimming flows cascading down stepped spillways exhibit an appearance similar to self-aerated flows down a smooth chute invert (Fig. C-1). The upstream end has a smooth and transparent look characteristic of clear-water flow. However next to the upstream chute inlet a boundary layer develops. When the outer edge of the boundary layer reaches the free surface, the turbulence induces natural aeration. This point is called the point of inception of air entrainment.

In the developing boundary layer region, the velocity distribution follows closely a power law given by:

$$\frac{V}{V_{max}} = \left(\frac{y}{\delta_{BL}}\right)^{\frac{1}{N}} \quad \text{for} \quad 0 < \frac{y}{\delta} < 1 \tag{C-1}$$

where δ_{BL} is the boundary layer thickness, y is the distance normal to the pseudo-bottom and V_{max} is the ideal fluid velocity, deduced from the Bernoulli equation as:

$$V_{max} = \sqrt{2g(H_{max} - d \cdot \cos\theta)} \tag{C-2}$$

where H_{max} is the upstream total head, θ is the channel slope and d the flow depth .

CHANSON (1995a) re-analysed the flow properties for a wide range of model data (e.g. BEITZ and LAWLESS 1992, BINDO et al. 1993, FRIZELL and MEFFORD 1991, SORENSEN 1985, TOZZI 1992) to predict the growth of the boundary layer and to locate the point of inception.

The best data fit is given by:

$$\frac{L_I}{h \cdot \cos\theta} = 9.719 \cdot (\sin\theta)^{0.713} \cdot \left(F_*\right)^{0.713} \tag{C-3}$$

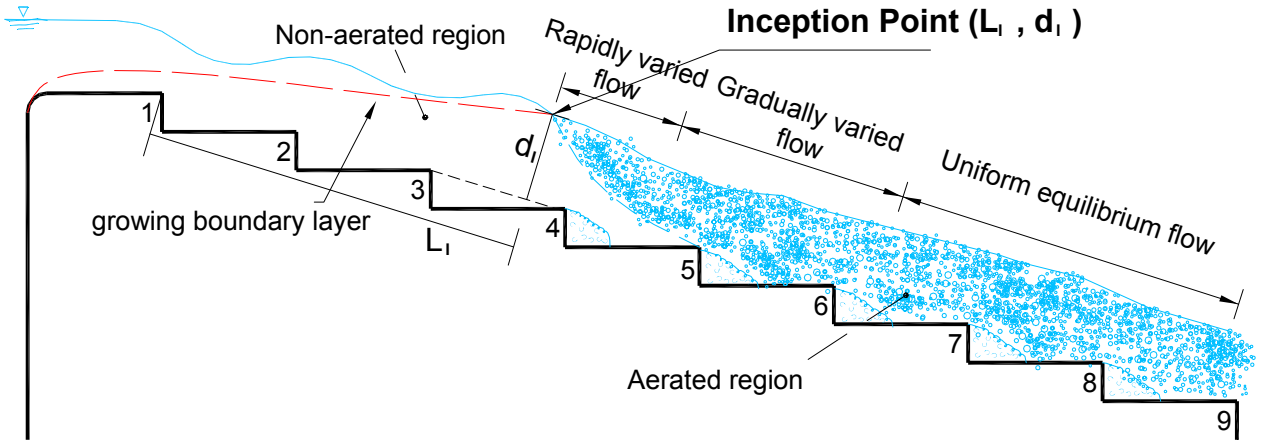
$$\frac{d_I}{h \cdot \cos\theta} = \frac{0.4034}{(\sin\theta)^{0.04}} \cdot \left(F_*\right)^{0.592} \tag{C-4}$$

where L_I and d_I are the length to, and depth at, the point of inception, θ is is the channel slope, $k_s = h*\cos\theta$ is the roughness height measured perpendicular to the flow direction and F_* is the Froude number defined in terms of the roughness height calculated as:

$$F_* = \frac{q_w}{\sqrt{g \cdot \sin\theta \cdot k_s^3}} \tag{C-5}$$

where q_w is the water discharge per unit width

Fig. C-1 - Location of the inception point



The position of the inception point is function of both water discharge and step roughness. For a given channel geometry, the location of the point of inception moves downstream with increasing discharges.

In this study, it was observed that the location of the inception point changed with the step roughness for larger relative discharges (d_c/h = 1.4 & 1.5). Such position shifted downstream for rough step faced spillways. A comparison of inception point positions for the three tested rough step faced configurations (Config. A, B &C) with smooth faced stepped chutes is shown in Table C-1 and Fig. C-2. The results indicate that the inception point position for rough step face spillways was approximately 35% larger than that on smooth step faced chutes.

For this study, the data corresponding to the rough step faced configurations was best correlated by:

$$\frac{L_I}{h \cdot \cos\theta} = 9.51 + 10.51 \cdot \ln\left(F_*\right) \qquad \text{(C-6)}$$

while data corresponding to the smooth step chute was best fitted by:

$$\frac{L_I}{h \cdot \cos\theta} = 10.3 + 2.05 \cdot F_* \qquad \text{(C-7)}$$

where L_I is the length to the point of inception, θ is is the channel slope, and F_* is the Froude number. A comparison of model and prototype data obtained by several authors is shown in Figure C-3 as reference

Table C-1 - Positions of the inception point for spillways with smooth and rough step faces (θ = 21.8°, h = 0.1 m)

		Point of inception location (L_I)			
d_c/h	d_{crest}/h	Smooth Step	Config. A	Config.B	Config. C
1.1	1.1	Step 6 (1.35 m)	Between steps 6 & 7 (~1.485 m)	Step 7 (1.62 m)	Step 7 (1.62 m)
1.25	1.3	Between steps 6 & 7 (~1.485 m)	Step 7 (1.62 m)	Between steps 7 & 8 (~2.015 m)	Between steps 7 & 8 (~2.015 m)
1.39	1.5	Between steps 6 & 7 (~1.485 m)	Between steps 8 & 9 (~2.015 m)	Step 8 (1.88 m)	Step 8 (1.88 m)
1.5	1.7	Step 7 (1.62 m)	Step 9 (2.15 m)	Between steps 8 & 9 (~2.015 m)	Between steps 8 & 9 (~2.015 m)

Note: Configuration A: vertical and horizontal covered with a rough screen with square patterns, Configuration B: only vertical faces covered with the screed, Configuration C: only horizontal faces covered with the screen, Grid's squares size: (16 mm area, 1 mm thickness and 8 mm high), d_c is the critical depth, d_{crest} is the depth measured above the crest of the weir, h is the step height and L_I is distance form the point of inception to the step edge 1 (Fig. C-1).

Fig. C-2 - Position of the inception point of air entrainment

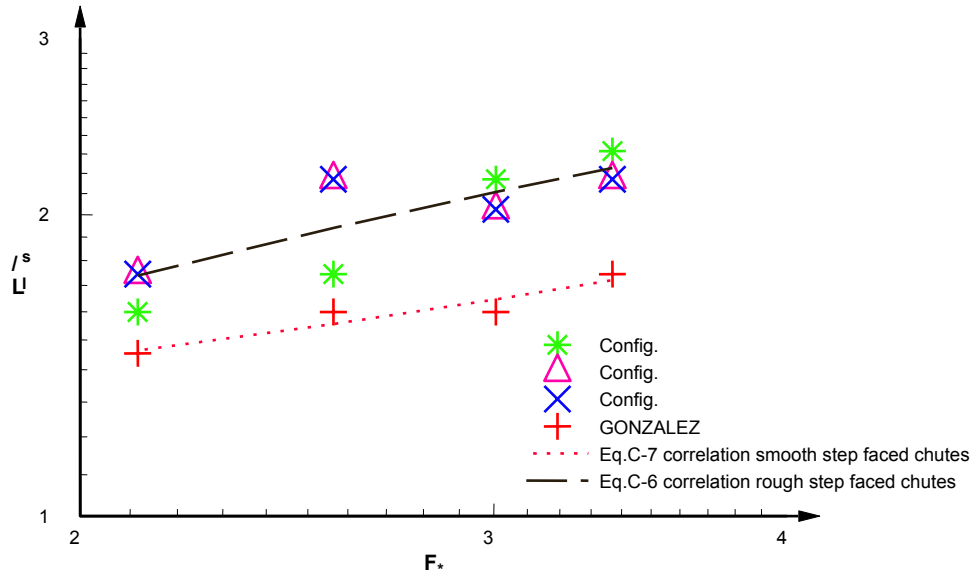
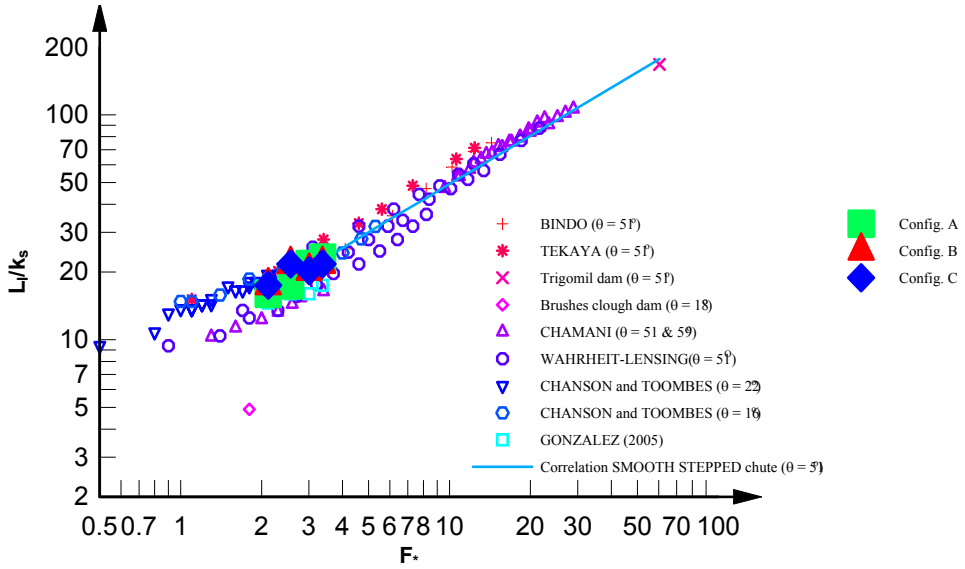


Fig. C-3 - Position of the inception point of air entrainment in chutes with smooth steps



APPENDIX D - AIR-WATER FLOW PROPERTIES

Four water discharges ranging from 0.114 to 0.219 m^3/s in skimming flow regime were investigated for each of the four channel configurations (Smooth and rough step faced chutes). Table D-1 summarises the investigated conditions.

Measurements were conducted with a double-tip conductivity probe located on the channel centreline at step edges and at dimensionless distances X_0 = 0.25, 0.5 and 0.75 between step edges where $X_0 = x/L_{cav}$, x is the distance to the upper step edge and L_{cav} is the distance between step edges ($L_{cav} = \sqrt{h^2 + l^2}$; Fig. D-1). Basic experimental double tip conductivity probe results comprised void fraction C , air-water flow velocity V, bubble count rate F, turbulence intensity Tu, noise ξ ([1]) and bubble chord size distributions.

Detailed experimental air-water flow properties distributions measured normally to the flow for all investigated discharges and locations are presented in Table D-2, where y is the measurement depth, C is the void fraction , V is the air-water flow velocity , F is the bubble count rate, Tu is the turbulence intensity and ξ is the noise defined as $\xi = 0.851 \cdot \Delta t/T$, where Δt is the characteristic time for which the normalised autocorrelation function equals 0.5 and T is the average interface travel time for which the cross-correlation function is maximum (Appendix A).

Table D-1 Experimental flow conditions for air-water flow measurements (h = 0.1 m, $\theta = 21.8^o$)

Configuration (1)	d_{crest}/h (2)	d_c/h (3)	q_w (m^2/s) (4)	Ref. (5)
S No roughness	1.1	1.03	0.1034	Run 1.1
A (screens on vertical and horizontal face)	1.1	1.1	0.114	Run 1.1A
B (screens on vertical face)	1.1	1.1	0.114	Run 1.1B
C (screens on horizontal face)	1.1	1.1	0.114	Run 1.1C
S No roughness	1.3	1.18	0.126	Run 1.3
A (screens on vertical and horizontal face)	1.3	1.25	0.138	Run 1.3A
B (screens on vertical face)	1.3	1.25	0.138	Run 1.3B
C (screens on horizontal face)	1.3	1.25	0.138	Run 1.3C
S No roughness	1.5	1.34	0.153	Run 1.3
A (screens on vertical and horizontal face)	1.5	1.39	0.162	Run 1.3A
B (screens on vertical face)	1.5	1.39	0.162	Run 1.3B
C (screens on horizontal face)	1.5	1.39	0.162	Run 1.3C
S No roughness	1.7	1.47	0.176	Run 1.7
A (screens on vertical and horizontal face)	1.7	1.5	0.181	Run 1.7A
B (screens on vertical face)	1.7	1.5	0.181	Run 1.7B
C (screens on horizontal face)	1.7	1.5	0.181	Run 1.7C
Note: d_{crest} = depth measured above crest, d_c = critical depth				

[1] $\xi = 0.851 * \Delta t/T$ (Eq. (2-1), Section 2.2 & App. A).

Fig. D-1 – Location of air-water flow properties measurements

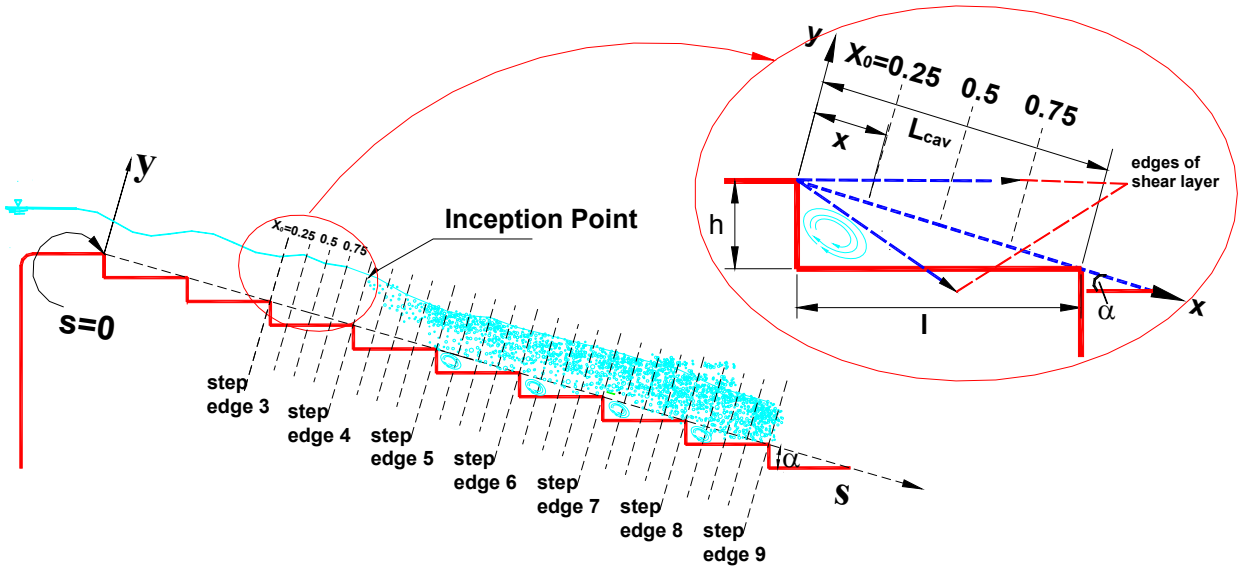


Table D-2 Detailed experimental air-water properties.

$d_{crest}/h=1.1$, $d_c/h=1.05$, Step 7

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.001	2.787	0.823	0.080	143.6	0.149	0.003	2.497	0.480	0.071	94.3	0.165	0.003	2.538	0.474	0.087	129.9	0.167	0.003	2.538	0.419	0.067	92.6	0.153
0.003	2.648	0.750	0.099	156.8	0.156	0.006	2.497	0.505	0.076	96.2	0.178	0.006	2.538	0.583	0.099	136.6	0.140	0.006	2.538	0.459	0.075	93.9	0.167
0.006	2.562	0.821	0.110	158.9	0.165	0.009	2.716	0.628	0.074	87.9	0.194	0.009	2.624	0.570	0.105	136.6	0.159	0.009	2.669	0.461	0.081	97.8	0.191
0.009	2.604	0.789	0.113	157.2	0.181	0.012	2.669	0.591	0.092	104.6	0.220	0.012	2.624	0.479	0.099	127.2	0.159	0.012	2.716	0.469	0.096	112.4	0.194
0.012	2.604	0.860	0.117	155.9	0.181	0.015	2.716	0.612	0.102	104.6	0.239	0.015	2.716	0.517	0.123	140.1	0.194	0.015	2.764	0.456	0.104	110.2	0.243
0.015	2.562	0.645	0.129	163.8	0.192	0.018	2.867	0.684	0.140	128.4	0.284	0.018	2.669	0.571	0.137	152.9	0.191	0.018	2.921	0.556	0.163	148.3	0.289
0.018	2.837	0.586	0.102	134.3	0.213	0.021	2.867	0.573	0.169	141.3	0.331	0.021	2.867	0.667	0.200	183.4	0.284	0.021	2.977	0.586	0.213	169.4	0.360
0.021	2.888	0.550	0.123	148.7	0.248	0.024	3.035	0.723	0.278	180.8	0.417	0.024	2.867	0.722	0.232	188.6	0.315	0.024	2.977	0.651	0.285	186.5	0.409
0.024	2.837	0.680	0.154	163.9	0.304	0.027	3.096	0.805	0.376	191.7	0.511	0.027	2.977	0.792	0.352	221.7	0.393	0.027	3.096	0.705	0.409	209.4	0.477
0.027	2.997	0.896	0.235	197.3	0.434	0.030	3.096	0.894	0.495	201.4	0.528	0.030	2.977	0.921	0.428	229.4	0.426	0.030	3.035	0.809	0.529	207.0	0.501
0.030	2.997	0.924	0.299	226.1	0.450	0.033	3.096	0.736	0.608	200.6	0.460	0.033	2.921	0.886	0.497	237.6	0.417	0.033	3.096	0.702	0.622	198.3	0.511
0.033	3.055	1.094	0.390	232.4	0.556	0.036	3.096	0.634	0.679	180.8	0.460	0.036	3.035	0.644	0.616	211.8	0.417	0.036	3.159	0.536	0.681	178.9	0.469
0.036	3.055	1.001	0.475	238.4	0.556	0.039	3.159	0.586	0.762	146.8	0.434	0.039	3.035	0.644	0.686	189.2	0.417	0.039	3.159	0.567	0.740	152.9	0.486
0.039	3.177	1.061	0.581	225.2	0.579	0.042	3.225	0.522	0.804	125.7	0.426	0.042	3.035	0.624	0.738	166.9	0.417	0.042	3.159	0.432	0.801	124.3	0.452
0.042	3.055	0.877	0.662	209.2	0.573	0.045	3.225	0.402	0.835	104.2	0.426	0.045	2.977	0.544	0.795	140.2	0.393	0.045	3.159	0.400	0.826	110.3	0.434
0.045	3.115	0.746	0.735	176.5	0.534	0.048	3.159	0.368	0.863	90.5	0.417	0.048	3.035	0.418	0.810	121.1	0.384	0.048	3.096	0.373	0.835	98.8	0.443
0.048	3.115	0.596	0.787	149.1	0.484	0.051	3.225	0.420	0.872	83.3	0.408	0.051	3.035	0.425	0.848	103.2	0.400	0.051	3.159	0.288	0.858	87.7	0.434
0.051	3.177	0.548	0.808	126.8	0.511	0.054	3.159	0.404	0.893	71.4	0.382	0.054	2.977	0.357	0.853	97.2	0.360	0.054	3.225	0.289	0.876	79.6	0.426
0.054	3.115	0.410	0.830	115.5	0.484	0.057	3.159	0.246	0.895	68.1	0.399	0.057	2.977	0.380	0.892	78.8	0.360	0.057	3.159	0.250	0.883	75.8	0.417
0.057	3.177	0.418	0.870	88.2	0.494	0.061	3.225	0.256	0.910	58.2	0.426	0.061	2.977	0.357	0.899	72.2	0.360	0.061	3.096	0.312	0.905	59.8	0.426
0.063	3.115	0.367	0.887	75.0	0.517	0.065	3.159	0.272	0.930	48.9	0.382	0.065	3.035	0.357	0.904	70.2	0.350	0.065	3.159	0.215	0.913	56.1	0.417
0.066	3.115	0.322	0.900	68.9	0.467	0.069	3.159	0.295	0.940	43.5	0.365	0.069	3.035	0.315	0.913	64.2	0.367	0.069	3.159	0.288	0.913	56.8	0.434
0.069	3.115	0.337	0.902	64.3	0.517	0.073	3.096	0.236	0.947	37.0	0.374	0.073	3.035	0.309	0.919	58.1	0.350	0.073	3.159	0.246	0.926	51.1	0.399
0.072	3.177	0.323	0.918	58.9	0.460	0.077	3.159	0.272	0.945	38.5	0.382	0.077	2.977	0.295	0.923	50.7	0.393	0.077	3.159	0.250	0.935	44.2	0.417
						0.081	3.159	0.272	0.950	35.0	0.382	0.081	2.977	0.309	0.944	40.6	0.360	0.081	3.096	0.245	0.947	37.8	0.408
						0.085	3.159	0.368	0.953	32.0	0.417	0.085	2.977	0.303	0.946	39.9	0.344	0.085	3.096	0.245	0.955	30.4	0.408
						0.089	3.096	0.206	0.965	24.4	0.391	0.089	3.035	0.309	0.948	38.3	0.350	0.089	3.096	0.292	0.960	25.8	0.460
						0.093	3.096	0.312	0.965	23.5	0.426	0.093	3.035	0.321	0.957	29.3	0.384	0.093	3.096	0.219	0.960	27.4	0.443
						0.103	3.096	0.206	0.981	13.8	0.391	0.103	2.867	0.392	0.977	17.0	0.410	0.103	3.096	0.245	0.974	17.6	0.408
						0.108	3.159	0.215	0.981	13.1	0.417	0.113	2.921	0.370	0.988	8.8	0.401	0.113	3.096	0.215	0.984	11.8	0.426
						0.118	3.096	0.236	0.988	8.9	0.374	0.123	2.921	0.291	0.986	11.0	0.321	0.133	3.035	0.202	0.992	5.5	0.384
						0.128	3.096	0.388	0.994	5.4	0.357	0.143	2.764	0.292	0.997	3.0	0.243						

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 71

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.032	0.000	0.000	0.008	1.5	0.000	-0.029	1.012	0.009	0.010	4.7	0.000	-0.029	0.000	0.000	0.081	21.1	0.000	-0.029	0.000	0.450	0.007	2.3	5.734
-0.028	1.889	0.392	0.019	4.5	0.625	-0.024	3.776	0.000	0.021	6.4	0.000	-0.024	3.035	0.000	0.129	37.4	0.000	-0.024	3.035	0.000	0.010	4.3	1.354
-0.024	0.000	0.000	0.045	9.4	0.000	-0.019	1.114	0.000	0.033	9.8	0.459	-0.019	1.759	0.000	0.117	34.6	0.609	-0.019	0.000	0.000	0.037	11.4	11.506
-0.020	0.999	0.000	0.046	13.5	0.309	-0.014	1.075	0.000	0.050	22.5	0.313	-0.014	1.548	0.000	0.152	51.5	0.579	-0.014	1.474	0.000	0.042	19.5	0.431
-0.016	2.489	1.126	0.085	31.7	0.527	-0.009	1.865	0.000	0.088	51.4	0.338	-0.009	1.474	0.000	0.178	75.7	0.340	-0.009	1.518	0.000	0.080	54.7	0.260
-0.012	1.005	0.000	0.114	57.5	0.158	-0.004	1.865	0.000	0.098	88.6	0.205	-0.004	2.121	0.000	0.151	103.6	0.303	-0.004	1.985	0.791	0.083	91.1	0.164
-0.008	1.537	0.409	0.127	93.6	0.167	0.001	2.310	0.664	0.107	104.2	0.216	0.001	2.211	0.848	0.152	143.0	0.219	0.001	2.243	0.575	0.101	112.4	0.185
-0.004	2.010	0.824	0.135	127.3	0.164	0.006	2.497	0.577	0.120	114.0	0.220	0.006	2.580	0.761	0.149	146.1	0.227	0.006	2.497	0.572	0.118	109.9	0.233
0.000	2.306	0.912	0.141	156.4	0.163	0.009	2.538	0.560	0.148	128.6	0.251	0.009	2.580	0.631	0.165	157.0	0.255	0.009	2.624	0.604	0.152	126.3	0.274
0.003	2.208	0.741	0.132	154.0	0.144	0.012	2.716	0.611	0.170	128.4	0.314	0.012	2.716	0.628	0.196	160.9	0.314	0.012	2.669	0.567	0.168	126.6	0.308
0.006	2.340	0.848	0.140	155.1	0.165	0.015	2.764	0.570	0.206	144.9	0.319	0.015	2.669	0.573	0.191	160.4	0.264	0.015	2.764	0.553	0.196	141.0	0.319
0.009	2.306	0.733	0.145	157.5	0.163	0.018	2.815	0.545	0.214	147.6	0.325	0.018	2.815	0.563	0.215	164.7	0.325	0.018	2.867	0.537	0.218	149.2	0.331
0.012	2.340	0.653	0.163	165.6	0.165	0.021	2.867	0.601	0.254	159.3	0.347	0.021	2.716	0.508	0.231	176.2	0.314	0.021	2.867	0.496	0.267	163.9	0.362
0.015	2.375	0.676	0.177	174.0	0.168	0.024	2.921	0.564	0.297	170.2	0.369	0.024	2.669	0.524	0.268	186.8	0.352	0.024	2.921	0.506	0.304	176.4	0.369
0.018	2.412	0.750	0.212	192.6	0.183	0.027	3.035	0.557	0.341	188.9	0.367	0.027	2.867	0.555	0.319	195.9	0.331	0.027	2.977	0.482	0.367	190.4	0.393
0.021	2.375	0.696	0.219	188.8	0.193	0.030	3.035	0.513	0.432	200.5	0.400	0.030	2.815	0.527	0.353	203.4	0.325	0.030	3.035	0.492	0.430	203.0	0.400
0.024	2.450	0.827	0.247	195.7	0.199	0.033	3.096	0.523	0.486	205.6	0.408	0.033	2.815	0.544	0.424	211.0	0.356	0.033	3.035	0.492	0.523	202.3	0.400
0.027	2.489	0.785	0.284	220.3	0.203	0.037	3.159	0.547	0.569	199.2	0.399	0.037	2.867	0.545	0.474	219.9	0.347	0.037	3.035	0.470	0.587	200.1	0.400
0.030	2.529	0.847	0.324	222.7	0.233	0.041	3.096	0.523	0.658	186.3	0.408	0.041	2.977	0.515	0.583	214.9	0.376	0.041	3.096	0.457	0.678	186.9	0.408
0.034	2.570	0.850	0.368	239.5	0.223	0.045	3.225	0.468	0.743	160.1	0.408	0.045	2.977	0.536	0.664	192.1	0.376	0.045	3.096	0.434	0.750	158.0	0.408
0.038	2.613	0.827	0.436	238.6	0.255	0.049	3.225	0.491	0.797	135.9	0.408	0.049	2.977	0.564	0.722	170.3	0.393	0.049	3.159	0.442	0.808	126.9	0.417
0.042	2.703	0.855	0.518	243.8	0.264	0.053	3.159	0.481	0.848	110.6	0.399	0.053	3.035	0.475	0.780	145.2	0.367	0.053	3.159	0.411	0.853	102.8	0.399
0.046	2.703	0.958	0.607	226.5	0.279	0.057	3.159	0.435	0.879	86.0	0.399	0.057	2.977	0.515	0.831	124.6	0.376	0.057	3.159	0.386	0.889	83.8	0.399
0.050	2.800	0.854	0.676	214.8	0.274	0.061	3.225	0.368	0.904	69.5	0.408	0.061	2.977	0.487	0.862	106.0	0.360	0.061	3.159	0.313	0.907	66.3	0.417
0.054	2.800	0.806	0.771	172.9	0.274	0.065	3.225	0.427	0.928	52.3	0.426	0.065	3.035	0.454	0.886	85.4	0.367	0.065	3.225	0.348	0.914	61.2	0.426
0.058	2.851	0.832	0.818	139.1	0.294	0.069	3.225	0.380	0.935	49.6	0.372	0.069	3.035	0.364	0.903	72.0	0.367	0.069	3.225	0.319	0.927	50.4	0.426
0.062	2.800	0.752	0.854	112.6	0.289	0.073	3.159	0.335	0.948	37.8	0.399	0.073	3.035	0.385	0.925	54.0	0.417	0.073	3.159	0.318	0.942	41.4	0.434
0.066	2.851	0.631	0.892	87.6	0.294	0.077	3.225	0.307	0.951	35.0	0.390	0.077	3.096	0.360	0.934	47.8	0.408	0.077	3.159	0.250	0.952	34.4	0.417
0.070	2.851	0.648	0.931	56.0	0.294	0.081	3.159	0.307	0.968	24.2	0.399	0.081	3.035	0.425	0.955	35.2	0.400	0.081	3.159	0.219	0.956	30.5	0.434
						0.085	3.096	0.282	0.971	20.3	0.426	0.085	3.035	0.327	0.961	28.1	0.400	0.085	3.159	0.211	0.962	28.7	0.399
						0.089	3.159	0.313	0.981	14.3	0.417	0.089	3.035	0.282	0.954	32.5	0.434	0.089	3.225	0.228	0.964	25.3	0.461
						0.093	3.159	0.307	0.980	15.5	0.399	0.093	3.035	0.300	0.968	23.1	0.400	0.093	3.159	0.180	0.966	22.7	0.452
						0.103	3.159	0.307	0.986	10.5	0.399	0.103	3.096	0.250	0.973	18.5	0.426	0.103	3.159	0.215	0.979	14.7	0.417
						0.108	3.035	0.283	0.991	6.8	0.350	0.113	2.977	0.276	0.979	14.5	0.426						
												0.133	2.921	0.344	0.995	4.1	0.289						

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 72

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.012	1.989	0.749	0.280	152.4	0.404	-0.013	1.865	1.068	0.162	102.1	0.267	-0.013	2.064	0.000	0.379	150.3	0.363	-0.013	2.064	0.000	0.156	102.2	0.274
-0.009	2.125	0.704	0.286	152.5	0.478	-0.009	2.064	0.978	0.179	114.8	0.284	-0.009	2.180	0.000	0.308	161.0	0.300	-0.009	2.121	0.000	0.150	105.2	0.270
-0.006	2.155	0.750	0.232	146.6	0.402	-0.005	2.382	0.847	0.163	116.3	0.314	-0.005	2.345	0.000	0.302	166.7	0.335	-0.005	2.382	0.948	0.174	123.7	0.301
-0.003	2.387	0.991	0.229	159.7	0.445	-0.001	2.538	0.878	0.179	127.1	0.321	-0.001	2.457	0.754	0.273	170.4	0.297	-0.001	2.538	0.737	0.166	120.1	0.335
0.000	2.424	0.826	0.223	161.8	0.399	0.003	2.624	0.666	0.213	131.9	0.375	0.003	2.580	0.730	0.278	178.9	0.312	0.003	2.669	0.618	0.217	138.2	0.367
0.003	2.543	0.860	0.218	155.6	0.432	0.006	2.764	0.684	0.246	145.4	0.395	0.006	2.624	0.777	0.266	162.3	0.346	0.006	2.764	0.640	0.258	150.0	0.380
0.006	2.586	0.769	0.244	157.3	0.482	0.009	2.815	0.641	0.266	148.4	0.433	0.009	2.764	0.701	0.288	169.0	0.365	0.009	2.815	0.614	0.273	149.1	0.418
0.009	2.675	0.676	0.251	172.3	0.440	0.012	2.815	0.622	0.307	151.0	0.433	0.012	2.815	0.589	0.332	174.7	0.371	0.012	2.815	0.530	0.308	160.1	0.402
0.012	2.722	0.668	0.261	165.0	0.478	0.015	2.921	0.578	0.353	163.4	0.434	0.015	2.815	0.634	0.317	170.4	0.387	0.015	2.921	0.530	0.358	168.3	0.417
0.015	2.821	0.654	0.284	171.4	0.495	0.018	2.921	0.558	0.362	163.9	0.434	0.018	2.867	0.609	0.363	177.0	0.394	0.018	2.977	0.505	0.414	172.6	0.442
0.018	2.821	0.629	0.314	176.5	0.526	0.021	3.035	0.485	0.445	177.4	0.434	0.021	2.921	0.553	0.388	188.4	0.385	0.021	3.035	0.432	0.447	182.6	0.417
0.021	2.821	0.634	0.319	189.6	0.356	0.024	3.035	0.492	0.481	185.3	0.400	0.024	2.921	0.514	0.426	188.4	0.385	0.024	3.035	0.462	0.472	183.3	0.434
0.024	2.873	0.600	0.359	191.6	0.378	0.027	3.096	0.457	0.524	181.0	0.408	0.027	2.867	0.551	0.431	186.9	0.394	0.027	3.035	0.432	0.531	179.6	0.417
0.027	2.927	0.630	0.406	196.9	0.385	0.030	3.096	0.449	0.562	189.8	0.391	0.030	2.977	0.482	0.507	191.3	0.393	0.030	3.035	0.409	0.567	178.7	0.417
0.030	3.042	0.607	0.427	206.9	0.350	0.033	3.096	0.434	0.614	177.8	0.408	0.033	2.921	0.481	0.513	193.0	0.401	0.033	3.096	0.434	0.614	180.9	0.408
0.033	3.042	0.568	0.465	223.7	0.350	0.037	3.096	0.403	0.672	169.6	0.391	0.037	2.977	0.474	0.592	194.7	0.376	0.037	3.035	0.385	0.691	161.3	0.417
0.036	3.042	0.606	0.500	199.0	0.384	0.041	3.159	0.435	0.718	158.1	0.399	0.041	3.035	0.492	0.647	180.5	0.400	0.041	3.159	0.368	0.739	152.5	0.417
0.039	3.042	0.568	0.555	203.2	0.350	0.045	3.159	0.442	0.768	140.0	0.417	0.045	3.035	0.448	0.700	168.4	0.400	0.045	3.096	0.360	0.775	139.6	0.408
0.042	3.042	0.568	0.594	204.7	0.350	0.049	3.225	0.436	0.800	129.7	0.390	0.049	2.977	0.482	0.738	155.4	0.393	0.049	3.096	0.379	0.812	118.6	0.391
0.045	3.042	0.588	0.636	203.9	0.350	0.053	3.159	0.419	0.844	106.1	0.365	0.053	3.035	0.425	0.784	135.4	0.400	0.053	3.096	0.306	0.854	100.8	0.408
0.048	3.042	0.588	0.674	193.0	0.350	0.057	3.159	0.427	0.877	88.5	0.382	0.057	3.035	0.462	0.811	124.1	0.384	0.057	3.096	0.360	0.888	82.8	0.408
0.051	3.042	0.626	0.725	169.4	0.350	0.061	3.096	0.340	0.897	79.2	0.357	0.061	3.096	0.396	0.863	97.2	0.374	0.061	3.096	0.385	0.902	71.2	0.408
0.055	3.103	0.589	0.767	153.4	0.374	0.065	3.225	0.387	0.917	61.8	0.390	0.065	3.035	0.418	0.891	84.3	0.384	0.065	3.096	0.277	0.925	56.2	0.408
0.059	3.103	0.577	0.790	135.3	0.579	0.069	3.096	0.372	0.940	46.8	0.374	0.069	3.035	0.340	0.903	72.9	0.367	0.069	3.096	0.354	0.935	49.2	0.391
0.063	3.103	0.395	0.814	128.1	0.596	0.073	3.159	0.322	0.950	38.8	0.365	0.073	3.159	0.386	0.918	59.5	0.399	0.073	3.159	0.368	0.950	37.7	0.417
0.067	3.166	0.434	0.878	91.3	0.608	0.077	3.225	0.387	0.955	32.4	0.390	0.077	3.035	0.418	0.938	48.1	0.384	0.077	3.225	0.289	0.958	32.0	0.426
0.071	3.166	0.451	0.925	59.1	0.573	0.081	3.225	0.328	0.959	31.7	0.372	0.081	3.159	0.386	0.944	42.2	0.399	0.081	3.225	0.331	0.965	25.8	0.461
0.075	3.166	0.393	0.919	61.9	0.573	0.085	3.294	0.335	0.970	23.3	0.380	0.085	3.035	0.340	0.962	30.8	0.367	0.085	3.225	0.325	0.974	19.2	0.443
						0.089	3.294	0.335	0.974	20.8	0.380	0.089	3.159	0.340	0.963	29.9	0.347	0.089	3.225	0.215	0.978	17.4	0.408
						0.093	3.225	0.301	0.977	17.7	0.372	0.093	3.096	0.360	0.964	25.5	0.408	0.093	3.225	0.215	0.982	14.4	0.408
						0.103	3.159	0.261	0.987	11.0	0.347	0.103	3.096	0.266	0.983	13.5	0.374	0.103	3.225	0.215	0.986	10.6	0.408
						0.108	3.225	0.315	0.991	8.1	0.337	0.113	3.096	0.334	0.984	11.0	0.408	0.113	3.225	0.256	0.990	7.6	0.426
												0.123	3.096	0.272	0.990	7.9	0.391						

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 73

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.003	2.302	0.791	0.235	173.2	0.345	0.000	2.276	0.672	0.134	124.4	0.200	0.000	2.310	0.846	0.207	167.2	0.229	0.000	2.382	0.630	0.141	128.4	0.223
0.000	2.444	0.774	0.245	181.4	0.353	0.003	2.382	0.680	0.150	131.1	0.236	0.003	2.419	0.799	0.230	178.7	0.253	0.003	2.497	0.605	0.156	134.9	0.261
0.003	2.482	0.790	0.263	180.0	0.412	0.006	2.580	0.762	0.175	148.4	0.269	0.006	2.497	0.688	0.236	176.6	0.275	0.006	2.580	0.721	0.183	146.9	0.298
0.006	2.693	0.783	0.286	179.7	0.462	0.009	2.716	0.743	0.219	167.4	0.314	0.009	2.538	0.782	0.286	183.6	0.335	0.009	2.669	0.749	0.222	157.6	0.337
0.009	2.648	0.778	0.310	180.0	0.468	0.012	2.815	0.827	0.285	183.3	0.387	0.012	2.580	0.836	0.316	187.6	0.355	0.012	2.764	0.754	0.274	173.3	0.395
0.012	2.837	0.788	0.374	189.9	0.517	0.015	2.867	0.889	0.334	187.8	0.441	0.015	2.764	0.882	0.372	196.8	0.410	0.015	2.921	0.816	0.369	192.7	0.450
0.015	2.888	0.802	0.386	188.2	0.526	0.018	2.977	0.887	0.404	196.2	0.458	0.018	2.867	0.764	0.437	206.5	0.410	0.018	2.977	0.775	0.419	195.9	0.458
0.018	2.942	0.798	0.441	192.8	0.536	0.021	2.977	0.898	0.481	193.8	0.507	0.021	2.867	0.764	0.459	203.0	0.410	0.021	3.035	0.740	0.494	196.9	0.484
0.021	2.997	0.694	0.452	187.3	0.546	0.024	3.096	0.746	0.542	193.4	0.477	0.024	2.867	0.746	0.509	194.4	0.441	0.024	3.096	0.795	0.539	190.5	0.494
0.024	2.997	0.666	0.497	195.3	0.530	0.027	3.159	0.616	0.616	187.4	0.452	0.027	2.921	0.676	0.566	189.1	0.434	0.027	3.096	0.621	0.612	180.5	0.477
0.027	3.055	0.651	0.535	190.4	0.573	0.030	3.159	0.534	0.677	169.5	0.417	0.030	2.977	0.552	0.615	183.3	0.409	0.030	3.096	0.472	0.682	163.9	0.443
0.030	3.055	0.586	0.572	185.3	0.524	0.033	3.225	0.522	0.711	157.2	0.426	0.033	3.035	0.555	0.661	179.7	0.400	0.033	3.096	0.509	0.706	161.2	0.426
0.033	3.055	0.504	0.607	187.9	0.491	0.037	3.159	0.435	0.752	143.4	0.399	0.037	3.035	0.440	0.728	160.5	0.384	0.037	3.159	0.442	0.757	144.5	0.417
0.036	3.055	0.488	0.640	183.0	0.507	0.041	3.159	0.411	0.796	127.4	0.399	0.041	3.035	0.433	0.758	150.4	0.367	0.041	3.159	0.361	0.806	121.3	0.399
0.039	3.115	0.497	0.661	176.1	0.517	0.045	3.225	0.412	0.820	117.6	0.390	0.045	3.096	0.419	0.786	139.4	0.374	0.045	3.159	0.393	0.825	111.9	0.417
0.042	3.115	0.537	0.685	170.4	0.501	0.049	3.159	0.354	0.861	95.8	0.382	0.049	3.096	0.396	0.809	124.4	0.374	0.049	3.096	0.367	0.875	85.1	0.426
0.045	3.115	0.435	0.737	154.5	0.484	0.053	3.096	0.372	0.878	84.9	0.374	0.053	3.035	0.388	0.855	100.2	0.367	0.053	3.159	0.361	0.890	78.3	0.399
0.048	3.177	0.437	0.767	149.9	0.477	0.057	3.225	0.355	0.908	68.4	0.372	0.057	3.035	0.340	0.872	88.6	0.367	0.057	3.225	0.335	0.905	70.1	0.390
0.051	3.115	0.460	0.804	130.5	0.484	0.061	3.225	0.335	0.920	59.3	0.390	0.061	3.035	0.371	0.891	78.3	0.384	0.061	3.159	0.335	0.928	54.2	0.399
0.054	3.177	0.500	0.824	118.8	0.511	0.065	3.159	0.322	0.934	50.1	0.365	0.065	3.096	0.365	0.910	68.5	0.357	0.065	3.225	0.313	0.933	49.9	0.408
0.057	3.177	0.399	0.844	112.8	0.443	0.069	3.225	0.328	0.944	43.1	0.372	0.069	3.159	0.379	0.919	60.4	0.382	0.069	3.225	0.313	0.942	41.5	0.408
0.060	3.177	0.385	0.857	103.5	0.477	0.073	3.159	0.354	0.958	33.0	0.382	0.073	2.977	0.357	0.937	49.6	0.360	0.073	3.159	0.361	0.962	28.5	0.399
0.063	3.177	0.399	0.884	89.0	0.443	0.077	3.225	0.272	0.968	25.6	0.372	0.077	3.035	0.340	0.945	43.2	0.367	0.077	3.225	0.335	0.968	24.9	0.390
0.066	3.177	0.399	0.893	81.3	0.443	0.081	3.096	0.289	0.971	24.4	0.357	0.081	3.096	0.322	0.947	40.1	0.374	0.081	3.159	0.301	0.975	20.1	0.382
0.069	3.177	0.405	0.891	81.1	0.460	0.085	3.159	0.335	0.976	19.1	0.399	0.085	3.159	0.354	0.973	20.8	0.382	0.085	3.294	0.266	0.974	18.3	0.453
0.072	3.177	0.346	0.914	66.0	0.443	0.089	3.159	0.307	0.978	16.9	0.399	0.089	2.977	0.403	0.968	25.3	0.360	0.089	3.225	0.266	0.981	17.4	0.355
						0.093	3.225	0.278	0.983	13.6	0.390	0.093	3.159	0.328	0.974	21.7	0.382	0.093	3.225	0.325	0.985	10.3	0.443
						0.103	3.096	0.315	0.991	6.5	0.357	0.103	3.159	0.361	0.983	13.1	0.399	0.103	3.225	0.368	0.990	8.0	0.408
												0.113	3.225	0.347	0.988	9.9	0.355						
												0.123	3.225	0.382	0.991	6.4	0.443						

$d_{crest}/h=1.1$, $d_c/h=1.05$, Step edge 8

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.006	2.787	0.795	0.084	146.4	0.134	0.003	2.378	0.397	0.078	119.9	0.113	0.003	2.867	0.663	0.107	175.3	0.142	0.003	2.764	0.557	0.075	119.7	0.152
0.009	2.787	1.017	0.106	165.9	0.164	0.006	2.378	0.397	0.082	118.7	0.113	0.006	2.764	0.620	0.100	151.8	0.152	0.006	2.716	0.485	0.082	118.5	0.149
0.012	2.562	0.613	0.108	160.2	0.151	0.009	2.488	0.494	0.084	114.1	0.131	0.009	2.716	0.655	0.106	154.8	0.149	0.009	2.764	0.473	0.086	122.7	0.167
0.015	2.837	0.834	0.110	160.7	0.167	0.012	2.567	0.537	0.090	119.2	0.135	0.012	2.764	0.663	0.126	174.0	0.167	0.012	2.867	0.490	0.091	126.3	0.173
0.018	2.739	0.564	0.116	171.4	0.161	0.015	2.608	0.432	0.097	129.8	0.137	0.015	2.764	0.526	0.117	162.3	0.152	0.015	2.921	0.476	0.098	129.1	0.193
0.021	2.888	0.574	0.129	177.9	0.186	0.018	2.651	0.478	0.099	125.3	0.153	0.018	2.867	0.535	0.141	181.1	0.189	0.018	2.921	0.424	0.108	138.9	0.193
0.024	2.888	0.618	0.152	193.1	0.201	0.024	2.888	0.543	0.134	153.4	0.198	0.021	3.035	0.513	0.148	187.7	0.200	0.021	2.921	0.498	0.126	146.8	0.225
0.027	2.888	0.607	0.177	207.2	0.232	0.027	2.940	0.523	0.183	187.1	0.232	0.024	2.921	0.556	0.178	207.5	0.209	0.024	3.035	0.557	0.164	170.6	0.267
0.030	2.997	0.897	0.229	242.0	0.305	0.030	2.994	0.608	0.245	208.6	0.299	0.027	3.035	0.820	0.236	222.5	0.284	0.027	3.159	0.721	0.242	206.0	0.382
0.033	3.055	1.041	0.282	257.7	0.393	0.033	3.051	0.792	0.346	242.5	0.353	0.030	3.035	0.855	0.296	245.3	0.334	0.030	3.159	0.831	0.321	225.9	0.434
0.036	3.055	1.185	0.372	281.1	0.475	0.036	3.110	0.986	0.481	249.3	0.442	0.033	3.035	0.859	0.383	272.0	0.367	0.033	3.159	0.902	0.446	245.4	0.521
0.039	3.055	1.289	0.448	290.8	0.524	0.039	3.171	0.884	0.572	239.1	0.434	0.036	3.225	1.045	0.520	278.5	0.443	0.036	3.225	0.921	0.571	236.4	0.532
0.042	3.177	1.237	0.565	266.8	0.647	0.042	3.171	0.894	0.698	202.8	0.451	0.039	3.225	1.102	0.606	262.2	0.443	0.039	3.225	0.827	0.672	217.3	0.550
0.045	3.177	1.186	0.653	240.0	0.596	0.045	3.171	0.838	0.761	177.0	0.451	0.042	3.159	0.978	0.657	235.1	0.452	0.042	3.225	0.765	0.761	175.4	0.514
0.048	3.177	0.893	0.739	196.9	0.562	0.048	3.171	0.703	0.815	141.9	0.417	0.045	3.225	0.839	0.759	187.4	0.461	0.045	3.294	0.597	0.828	141.0	0.471
0.051	3.177	0.853	0.788	172.4	0.562	0.051	3.234	0.566	0.880	100.8	0.408	0.048	3.225	0.839	0.798	156.5	0.461	0.048	3.365	0.496	0.870	107.8	0.444
0.054	3.177	0.732	0.826	141.4	0.528	0.054	3.300	0.547	0.905	78.8	0.399	0.051	3.225	0.580	0.835	134.0	0.408	0.051	3.294	0.444	0.900	80.7	0.453
0.057	3.177	0.555	0.857	114.8	0.477	0.057	3.300	0.473	0.919	68.7	0.382	0.054	3.225	0.536	0.867	108.6	0.408	0.054	3.294	0.362	0.913	66.3	0.453
0.060	3.177	0.437	0.887	93.4	0.477	0.061	3.234	0.463	0.933	50.7	0.374	0.057	3.225	0.514	0.890	91.1	0.408	0.057	3.225	0.278	0.927	58.1	0.390
0.063	3.177	0.479	0.901	78.1	0.460	0.065	3.300	0.450	0.946	40.2	0.382	0.061	3.294	0.461	0.922	66.2	0.380	0.061	3.225	0.278	0.947	42.5	0.390
0.066	3.115	0.439	0.924	62.2	0.434	0.069	3.171	0.475	0.956	33.2	0.367	0.065	3.294	0.342	0.924	59.3	0.398	0.065	3.365	0.345	0.948	36.7	0.481
0.069	3.115	0.353	0.933	56.2	0.400	0.073	3.234	0.457	0.961	29.7	0.408	0.069	3.365	0.430	0.949	40.8	0.407	0.069	3.294	0.220	0.961	31.3	0.416
0.072	3.115	0.391	0.939	52.4	0.434	0.077	3.300	0.435	0.971	21.6	0.399	0.073	3.294	0.355	0.949	38.0	0.435	0.073	3.294	0.256	0.969	24.1	0.416
0.075	3.115	0.366	0.944	44.9	0.434	0.081	3.300	0.411	0.973	20.0	0.399	0.077	3.294	0.390	0.956	32.5	0.453	0.077	3.225	0.170	0.974	20.0	0.390
0.078	3.115	0.359	0.951	40.2	0.417	0.085	3.300	0.374	0.977	16.3	0.434	0.081	3.225	0.387	0.963	28.9	0.390	0.081	3.225	0.174	0.981	14.4	0.408
						0.089	3.300	0.407	0.978	15.2	0.452	0.085	3.294	0.421	0.970	24.7	0.000	0.085	3.294	0.278	0.982	14.9	0.380
						0.093	3.171	0.347	0.983	13.6	0.384	0.089	3.294	0.355	0.968	23.8	0.435	0.089	3.294	0.220	0.985	12.4	0.416
						0.103	3.171	0.425	0.993	6.2	0.350	0.093	3.365	0.392	0.973	20.9	0.444	0.093	3.294	0.174	0.988	9.4	0.398
												0.103	3.365	0.277	0.982	13.7	0.481	0.103	3.365	0.295	0.992	5.7	0.426

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 81

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.030	0.749	0.815	0.100	27.6	0.000	-0.029	0.000	0.000	0.005	3.0	0.000	-0.029	25.800	0.000	0.068	16.5	0.000	-0.029	1.433	0.000	0.024	8.6	0.458
-0.027	2.037	1.238	0.111	30.0	0.622	-0.024	0.000	0.000	0.012	5.5	0.000	-0.024	25.800	0.000	0.070	16.5	0.000	-0.024	0.999	0.000	0.034	11.1	0.330
-0.021	1.168	0.767	0.146	41.0	0.369	-0.019	0.000	0.000	0.019	9.4	0.000	-0.019	1.665	0.000	0.146	36.0	0.622	-0.019	25.800	0.000	0.056	20.8	8.385
-0.018	1.527	0.742	0.173	56.7	0.417	-0.014	1.057	0.008	0.054	19.2	0.000	-0.014	1.701	0.210	0.077	24.2	0.570	-0.014	1.238	0.000	0.066	33.6	0.273
-0.015	1.457	0.764	0.202	73.8	0.375	-0.009	1.216	0.007	0.065	29.7	0.000	-0.009	1.518	0.261	0.156	69.3	0.367	-0.009	1.865	0.000	0.078	59.6	0.237
-0.012	1.346	0.806	0.181	86.0	0.274	-0.004	2.741	0.003	0.082	58.2	0.000	-0.004	1.800	0.667	0.122	101.2	0.188	-0.004	1.985	0.000	0.087	93.1	0.176
-0.009	1.765	1.117	0.171	115.5	0.246	0.001	2.378	1.089	0.086	95.9	0.163	0.001	2.243	0.805	0.149	155.6	0.185	0.001	2.310	0.741	0.100	115.9	0.178
-0.006	1.785	1.155	0.162	128.6	0.220	0.006	2.450	0.697	0.095	127.3	0.129	0.006	2.419	0.535	0.122	153.9	0.160	0.006	2.538	0.626	0.111	127.3	0.195
-0.003	1.869	0.879	0.168	156.7	0.200	0.009	2.527	0.583	0.100	128.7	0.133	0.009	2.624	0.641	0.130	160.4	0.173	0.009	2.624	0.519	0.130	134.6	0.216
0.000	2.176	0.869	0.143	159.6	0.175	0.012	2.567	0.628	0.127	146.9	0.162	0.012	2.624	0.464	0.132	164.1	0.159	0.012	2.764	0.600	0.148	142.1	0.258
0.003	2.371	0.744	0.117	149.8	0.165	0.015	2.567	0.562	0.126	141.9	0.149	0.015	2.669	0.540	0.165	181.0	0.191	0.015	2.815	0.587	0.168	151.3	0.279
0.006	2.604	0.688	0.122	156.5	0.181	0.018	2.695	0.596	0.146	149.4	0.184	0.018	2.716	0.533	0.172	180.5	0.194	0.018	2.867	0.519	0.202	167.4	0.299
0.009	2.604	0.523	0.139	167.1	0.195	0.021	2.741	0.602	0.160	149.1	0.202	0.021	2.764	0.520	0.181	175.6	0.213	0.021	2.921	0.556	0.214	165.4	0.321
0.012	2.648	0.541	0.150	175.1	0.213	0.024	2.837	0.628	0.190	157.9	0.239	0.024	2.867	0.557	0.206	194.1	0.221	0.024	3.035	0.528	0.264	181.4	0.350
0.015	2.693	0.550	0.150	169.3	0.216	0.027	2.888	0.590	0.217	178.9	0.243	0.027	2.921	0.500	0.251	210.1	0.257	0.027	3.096	0.548	0.308	198.4	0.374
0.018	2.739	0.564	0.194	189.2	0.249	0.030	2.940	0.645	0.255	189.1	0.263	0.030	2.977	0.556	0.282	219.4	0.278	0.030	3.096	0.523	0.340	199.2	0.408
0.021	2.787	0.541	0.192	190.6	0.254	0.033	3.051	0.627	0.309	211.8	0.289	0.033	3.035	0.530	0.304	230.1	0.284	0.033	3.159	0.525	0.424	226.1	0.399
0.024	2.888	0.535	0.221	198.0	0.279	0.037	3.110	0.641	0.412	233.9	0.327	0.037	2.921	0.528	0.361	234.1	0.305	0.037	3.159	0.564	0.505	223.8	0.434
0.027	2.942	0.546	0.259	214.5	0.315	0.041	3.110	0.642	0.521	232.1	0.360	0.041	3.096	0.599	0.515	248.4	0.357	0.041	3.159	0.559	0.604	210.3	0.469
0.030	2.997	0.556	0.294	227.9	0.321	0.045	3.051	0.677	0.612	213.5	0.401	0.045	3.096	0.638	0.585	243.9	0.391	0.045	3.159	0.551	0.685	196.9	0.452
0.033	3.055	0.642	0.330	234.4	0.360	0.049	3.171	0.645	0.722	195.2	0.384	0.049	3.159	0.601	0.682	219.6	0.382	0.049	3.159	0.528	0.785	157.7	0.452
0.036	3.055	0.633	0.384	247.8	0.376	0.053	3.171	0.645	0.802	151.3	0.384	0.053	3.159	0.651	0.769	180.6	0.399	0.053	3.225	0.507	0.836	127.9	0.443
0.039	3.055	0.612	0.441	247.1	0.409	0.057	3.234	0.559	0.871	112.6	0.357	0.057	3.159	0.682	0.818	152.5	0.417	0.057	3.294	0.501	0.892	94.6	0.416
0.042	3.115	0.653	0.518	253.6	0.434	0.061	3.171	0.616	0.914	73.2	0.367	0.061	3.096	0.668	0.869	113.7	0.408	0.061	3.225	0.368	0.920	72.1	0.408
0.045	3.177	0.736	0.602	238.5	0.460	0.065	3.234	0.540	0.941	55.3	0.323	0.065	3.159	0.486	0.911	85.2	0.365	0.065	3.225	0.476	0.945	49.6	0.426
0.048	3.177	0.766	0.668	221.7	0.477	0.069	3.171	0.499	0.956	40.3	0.334	0.069	3.225	0.571	0.932	61.3	0.390	0.069	3.225	0.436	0.959	39.2	0.390
0.051	3.242	0.740	0.735	192.8	0.486	0.073	3.300	0.486	0.969	26.3	0.365	0.073	3.225	0.483	0.945	49.3	0.390	0.073	3.365	0.426	0.969	26.8	0.463
0.054	3.177	0.687	0.785	172.1	0.443	0.077	3.171	0.400	0.978	19.1	0.300	0.077	3.294	0.525	0.961	32.8	0.416	0.077	3.440	0.314	0.980	16.6	0.473
0.055	3.242	0.659	0.835	136.4	0.452	0.081	3.300	0.396	0.982	14.5	0.365	0.081	3.294	0.498	0.974	24.0	0.362	0.081	3.440	0.278	0.983	14.9	0.473
0.058	3.242	0.650	0.879	103.9	0.434	0.085	3.300	0.456	0.985	12.4	0.347	0.085	3.294	0.380	0.975	22.4	0.362	0.085	3.225	0.362	0.988	11.3	0.390
0.061	3.242	0.517	0.906	91.0	0.382	0.089	3.300	0.372	0.989	9.2	0.365	0.089	3.159	0.404	0.986	11.7	0.382	0.089	3.365	0.224	0.990	9.6	0.426
0.064	3.242	0.503	0.920	71.9	0.399	0.093	3.300	0.464	0.987	10.1	0.365	0.093	3.365	0.446	0.982	15.7	0.444	0.093	3.365	0.320	0.991	8.0	0.407
0.067	3.310	0.460	0.939	57.1	0.390	0.103	3.300	0.435	0.992	4.9	0.399	0.103	3.365	0.377	0.989	9.2	0.407	0.103	3.365	0.251	0.993	5.6	0.389
0.070	3.242	0.458	0.948	45.4	0.399							0.113	3.365	0.430	0.996	4.0	0.352	0.113	3.518	0.309	0.995	4.0	0.445

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 82

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.007	2.336	1.115	0.303	186.7	0.413	-0.013	2.073	0.000	0.241	119.0	0.338	-0.013	2.121	0.000	0.335	174.4	0.315	-0.009	2.243	0.952	0.177	135.8	0.259
-0.004	2.444	0.903	0.280	196.2	0.419	-0.009	2.277	0.000	0.213	127.6	0.312	-0.009	2.243	1.011	0.323	176.1	0.321	-0.005	2.419	0.989	0.179	142.8	0.266
-0.001	2.482	1.042	0.263	185.8	0.439	-0.005	2.527	1.174	0.218	145.2	0.293	-0.005	2.538	1.021	0.349	197.1	0.335	-0.001	2.538	0.799	0.184	144.3	0.293
0.002	2.604	0.763	0.236	190.8	0.377	-0.001	2.488	1.216	0.204	149.3	0.262	-0.001	2.497	0.830	0.308	199.6	0.288	0.003	2.764	0.690	0.210	162.4	0.319
0.005	2.693	0.764	0.239	194.0	0.375	0.003	2.527	0.854	0.192	149.3	0.253	0.003	2.669	0.799	0.299	203.4	0.293	0.006	2.764	0.702	0.244	158.6	0.395
0.008	2.739	0.643	0.233	180.2	0.411	0.006	2.741	0.974	0.220	155.5	0.317	0.006	2.669	0.647	0.289	202.4	0.279	0.009	2.764	0.631	0.252	159.9	0.395
0.011	2.888	0.572	0.272	193.1	0.449	0.009	2.837	0.839	0.229	157.3	0.314	0.009	2.764	0.783	0.312	199.8	0.334	0.012	2.921	0.620	0.281	167.3	0.401
0.014	2.888	0.572	0.270	188.9	0.449	0.012	2.888	0.842	0.263	163.4	0.350	0.012	2.764	0.709	0.336	203.0	0.350	0.015	2.977	0.581	0.328	179.8	0.426
0.017	2.942	0.463	0.302	198.1	0.473	0.015	2.994	0.815	0.287	165.3	0.378	0.015	2.867	0.646	0.379	213.2	0.362	0.018	3.035	0.563	0.359	190.9	0.417
0.020	3.055	0.364	0.317	209.1	0.442	0.018	2.994	0.762	0.307	170.4	0.378	0.018	2.867	0.627	0.413	210.4	0.394	0.021	3.096	0.591	0.403	186.1	0.460
0.023	3.055	0.451	0.375	213.7	0.475	0.021	2.994	0.700	0.351	182.8	0.362	0.021	2.867	0.591	0.380	206.8	0.362	0.024	3.096	0.555	0.447	193.4	0.477
0.026	3.177	0.481	0.393	184.5	0.596	0.024	3.051	0.686	0.382	179.6	0.385	0.024	2.921	0.611	0.474	217.6	0.385	0.027	3.159	0.512	0.507	207.1	0.417
0.029	3.177	0.508	0.420	199.0	0.596	0.027	3.110	0.680	0.434	193.8	0.393	0.027	2.977	0.604	0.510	215.5	0.393	0.030	3.159	0.474	0.551	203.1	0.434
0.032	3.177	0.508	0.478	215.0	0.596	0.030	3.171	0.674	0.473	196.2	0.400	0.030	3.035	0.606	0.525	225.4	0.384	0.033	3.159	0.450	0.600	198.4	0.434
0.035	3.115	0.523	0.504	217.0	0.584	0.033	3.171	0.664	0.511	191.6	0.417	0.033	3.035	0.526	0.528	221.2	0.384	0.037	3.225	0.427	0.643	190.9	0.426
0.038	3.115	0.603	0.571	216.5	0.601	0.037	3.234	0.638	0.587	196.5	0.391	0.037	3.035	0.505	0.595	210.8	0.384	0.041	3.225	0.427	0.712	173.7	0.426
0.041	3.115	0.551	0.603	220.6	0.534	0.041	3.171	0.586	0.630	185.0	0.384	0.041	2.977	0.536	0.633	209.1	0.376	0.045	3.225	0.375	0.765	154.1	0.426
0.044	3.055	0.541	0.659	215.9	0.524	0.045	3.234	0.589	0.701	177.4	0.374	0.045	3.096	0.536	0.697	199.2	0.391	0.049	3.159	0.341	0.816	132.1	0.417
0.047	3.055	0.563	0.707	210.4	0.524	0.049	3.234	0.536	0.754	156.9	0.391	0.049	3.035	0.484	0.755	173.1	0.384	0.053	3.159	0.368	0.863	108.8	0.417
0.050	3.177	0.555	0.765	164.9	0.528	0.053	3.234	0.548	0.820	130.4	0.374	0.053	3.035	0.492	0.794	153.9	0.400	0.057	3.159	0.368	0.883	94.1	0.417
0.053	3.177	0.521	0.785	147.6	0.562	0.057	3.171	0.508	0.858	108.5	0.350	0.057	3.035	0.440	0.834	132.1	0.384	0.061	3.294	0.362	0.913	77.9	0.380
0.056	3.177	0.571	0.834	125.3	0.511	0.061	3.110	0.450	0.897	84.4	0.327	0.061	3.096	0.471	0.872	109.7	0.391	0.065	3.294	0.314	0.940	55.2	0.398
0.059	3.177	0.601	0.851	117.8	0.528	0.065	3.171	0.395	0.923	67.2	0.334	0.065	3.035	0.496	0.891	99.2	0.367	0.069	3.225	0.328	0.953	47.2	0.372
0.062	3.177	0.601	0.879	100.2	0.528	0.069	3.171	0.438	0.934	59.5	0.334	0.069	2.977	0.466	0.906	82.4	0.360	0.073	3.294	0.369	0.962	34.4	0.398
0.065	3.242	0.542	0.911	81.2	0.434	0.073	3.171	0.400	0.957	41.1	0.300	0.073	3.035	0.425	0.930	68.1	0.350	0.077	3.225	0.319	0.968	26.5	0.426
0.068	3.177	0.540	0.921	65.6	0.494	0.077	3.171	0.438	0.963	33.8	0.334	0.077	3.035	0.446	0.946	54.3	0.350	0.081	3.294	0.405	0.978	21.0	0.362
0.071	3.177	0.591	0.932	61.1	0.460	0.081	3.300	0.425	0.975	24.2	0.330	0.081	3.159	0.458	0.964	36.8	0.399	0.085	3.294	0.372	0.985	16.1	0.344
						0.085	3.171	0.441	0.982	16.9	0.300	0.085	3.159	0.450	0.973	25.9	0.382	0.089	3.225	0.372	0.987	13.2	0.355
						0.089	3.171	0.462	0.987	13.0	0.300	0.089	3.225	0.427	0.977	22.8	0.426	0.099	3.365	0.284	0.993	6.6	0.389
						0.093	3.300	0.541	0.991	8.8	0.347	0.093	3.035	0.548	0.978	22.6	0.350	0.103	3.600	0.283	0.993	6.6	0.356
						0.103	3.515	0.469	0.995	5.4	0.296	0.103	3.035	0.343	0.987	13.0	0.317	0.113	3.518	0.396	0.997	3.5	0.309
												0.113	3.365	0.541	0.994	5.8	0.389						

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 83

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.003	2.302	0.791	0.235	173.2	0.345	0.000	2.310	0.778	0.145	133.8	0.195	0.000	2.345	0.642	0.195	189.9	0.193	0.000	2.382	0.669	0.124	134.3	0.183
0.000	2.444	0.774	0.245	181.4	0.353	0.003	2.413	0.731	0.166	145.1	0.216	0.003	2.497	0.723	0.245	199.8	0.261	0.003	2.497	0.534	0.118	138.4	0.178
0.003	2.482	0.790	0.263	180.0	0.412	0.006	2.527	0.682	0.171	154.7	0.226	0.006	2.580	0.812	0.281	208.0	0.298	0.006	2.538	0.523	0.121	132.3	0.195
0.006	2.693	0.783	0.286	179.7	0.462	0.009	2.567	0.764	0.205	163.0	0.270	0.009	2.716	0.775	0.315	223.8	0.314	0.009	2.716	0.765	0.172	163.7	0.254
0.009	2.648	0.778	0.310	180.0	0.468	0.012	2.695	0.842	0.235	173.5	0.298	0.012	2.764	0.809	0.355	227.9	0.350	0.012	2.815	0.732	0.206	182.1	0.294
0.012	2.837	0.788	0.374	189.9	0.517	0.015	2.837	0.918	0.279	185.4	0.358	0.015	2.815	0.912	0.411	227.7	0.387	0.015	2.921	0.844	0.261	203.1	0.353
0.015	2.888	0.802	0.386	188.2	0.526	0.018	2.940	0.895	0.333	199.6	0.387	0.018	2.977	0.810	0.473	233.1	0.393	0.018	3.035	1.012	0.333	214.1	0.434
0.018	2.942	0.798	0.441	192.8	0.536	0.021	2.994	0.917	0.407	198.4	0.457	0.021	2.921	0.832	0.472	216.6	0.417	0.021	3.096	1.001	0.403	213.0	0.511
0.021	2.997	0.694	0.452	187.3	0.546	0.024	3.051	0.834	0.465	200.7	0.450	0.024	2.977	0.727	0.561	214.5	0.442	0.024	3.096	1.011	0.467	211.4	0.528
0.024	2.997	0.666	0.497	195.3	0.530	0.027	3.110	0.813	0.533	195.6	0.458	0.027	2.977	0.660	0.583	206.7	0.426	0.027	3.159	0.801	0.567	206.3	0.521
0.027	3.055	0.651	0.535	190.4	0.573	0.030	3.171	0.732	0.584	192.6	0.434	0.030	2.977	0.660	0.619	200.4	0.426	0.030	3.159	0.677	0.613	199.0	0.486
0.030	3.055	0.586	0.572	185.3	0.524	0.033	3.171	0.713	0.632	183.5	0.434	0.033	3.096	0.607	0.689	184.6	0.408	0.033	3.225	0.669	0.701	171.5	0.496
0.033	3.055	0.504	0.607	187.9	0.491	0.037	3.234	0.657	0.700	169.6	0.426	0.037	3.035	0.542	0.708	174.0	0.417	0.037	3.225	0.523	0.762	152.0	0.479
0.036	3.055	0.488	0.640	183.0	0.507	0.041	3.234	0.607	0.751	150.6	0.408	0.041	3.096	0.493	0.761	158.6	0.391	0.041	3.294	0.410	0.797	138.4	0.435
0.039	3.115	0.497	0.661	176.1	0.517	0.045	3.300	0.547	0.802	131.9	0.399	0.045	3.096	0.426	0.788	147.4	0.391	0.045	3.225	0.402	0.832	120.7	0.426
0.042	3.115	0.537	0.685	170.4	0.501	0.049	3.234	0.536	0.839	113.3	0.391	0.049	3.096	0.396	0.823	130.7	0.374	0.049	3.225	0.412	0.876	94.9	0.390
0.045	3.115	0.435	0.737	154.5	0.484	0.053	3.234	0.468	0.873	101.3	0.340	0.053	3.096	0.441	0.837	122.2	0.374	0.053	3.225	0.322	0.900	85.4	0.355
0.048	3.177	0.437	0.767	149.9	0.477	0.057	3.234	0.433	0.897	85.8	0.357	0.057	3.159	0.404	0.876	101.2	0.382	0.057	3.225	0.272	0.923	66.1	0.372
0.051	3.115	0.460	0.804	130.5	0.484	0.061	3.234	0.433	0.915	69.6	0.357	0.061	3.096	0.334	0.897	90.1	0.340	0.061	3.225	0.340	0.935	60.1	0.337
0.054	3.177	0.500	0.824	118.8	0.511	0.065	3.171	0.417	0.938	53.5	0.334	0.065	3.096	0.357	0.916	76.9	0.340	0.065	3.225	0.288	0.944	52.9	0.337
0.057	3.177	0.399	0.844	112.8	0.443	0.069	3.171	0.459	0.944	49.7	0.334	0.069	3.096	0.357	0.926	68.6	0.340	0.069	3.225	0.266	0.956	40.6	0.355
0.060	3.177	0.385	0.857	103.5	0.477	0.073	3.234	0.419	0.958	36.9	0.374	0.073	3.096	0.334	0.943	53.0	0.340	0.073	3.159	0.282	0.965	34.0	0.330
0.063	3.177	0.399	0.884	89.0	0.443	0.077	3.171	0.373	0.969	29.7	0.334	0.077	3.096	0.309	0.951	47.2	0.340	0.077	3.159	0.308	0.968	31.0	0.330
0.066	3.177	0.399	0.893	81.3	0.443	0.081	3.234	0.357	0.978	23.1	0.289	0.081	3.159	0.301	0.962	36.7	0.313	0.081	3.225	0.295	0.977	23.1	0.355
0.069	3.177	0.405	0.891	81.1	0.460	0.085	3.110	0.421	0.981	19.7	0.311	0.085	3.159	0.326	0.972	28.3	0.313	0.085	3.225	0.300	0.984	18.0	0.301
0.072	3.177	0.346	0.914	66.0	0.443	0.089	3.171	0.296	0.984	14.9	0.317	0.089	3.096	0.350	0.975	24.2	0.323	0.089	3.159	0.301	0.984	17.5	0.313
						0.093	3.110	0.380	0.988	12.6	0.311	0.093	3.096	0.430	0.979	21.4	0.306	0.093	3.225	0.325	0.989	11.6	0.301
						0.103	3.171	0.450	0.992	8.6	0.317	0.103	3.035	0.381	0.990	10.2	0.350	0.103	3.294	0.380	0.993	7.2	0.362

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 9

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.005	2.693	0.809	0.101	181.4	0.144	0.003	2.608	0.535	0.088	149.1	0.124	0.003	2.764	0.822	0.120	188.4	0.152	0.003	2.669	0.557	0.087	146.5	0.132
0.008	2.604	0.851	0.113	181.6	0.153	0.006	2.651	0.572	0.097	153.2	0.126	0.006	2.815	0.695	0.119	183.5	0.155	0.006	2.716	0.597	0.086	139.8	0.134
0.011	2.787	0.987	0.124	189.3	0.164	0.009	2.567	0.537	0.100	151.3	0.135	0.009	2.867	0.691	0.132	186.7	0.158	0.009	2.764	0.577	0.088	141.7	0.137
0.014	2.787	0.759	0.123	185.5	0.164	0.012	2.651	0.558	0.108	153.4	0.126	0.012	2.867	0.655	0.134	185.9	0.173	0.012	2.815	0.454	0.090	135.1	0.155
0.017	2.787	0.694	0.126	183.9	0.179	0.015	2.788	0.511	0.103	148.0	0.132	0.015	2.867	0.594	0.129	179.8	0.158	0.015	2.921	0.539	0.102	149.7	0.161
0.020	2.837	0.694	0.133	192.2	0.167	0.018	2.741	0.423	0.111	151.4	0.144	0.018	2.867	0.573	0.147	194.6	0.173	0.018	2.977	0.463	0.110	158.4	0.164
0.023	2.942	0.728	0.151	203.7	0.205	0.021	2.940	0.514	0.130	165.6	0.170	0.021	2.921	0.528	0.173	214.0	0.193	0.021	2.977	0.538	0.129	166.5	0.196
0.026	2.837	0.650	0.169	216.6	0.213	0.024	2.940	0.585	0.162	189.8	0.201	0.024	2.977	0.636	0.210	237.0	0.213	0.024	3.159	0.564	0.167	195.1	0.226
0.029	2.997	0.710	0.210	249.1	0.257	0.027	2.994	0.652	0.201	206.9	0.236	0.027	2.977	0.648	0.229	240.9	0.229	0.027	3.096	0.679	0.196	204.4	0.272
0.032	3.055	0.879	0.242	258.6	0.311	0.030	3.171	0.796	0.275	238.5	0.300	0.030	3.035	0.754	0.308	266.6	0.317	0.030	3.096	0.839	0.263	225.6	0.374
0.035	2.997	0.953	0.295	272.2	0.385	0.033	3.171	0.954	0.365	253.6	0.400	0.033	3.096	0.987	0.397	285.8	0.374	0.033	3.225	1.006	0.388	270.5	0.443
0.038	3.115	1.300	0.394	287.4	0.567	0.036	3.234	1.069	0.513	264.5	0.443	0.036	3.096	0.906	0.469	290.6	0.391	0.036	3.294	1.105	0.508	262.0	0.543
0.041	3.115	1.223	0.498	284.8	0.651	0.039	3.234	1.006	0.602	248.6	0.460	0.039	3.225	1.064	0.573	274.9	0.443	0.039	3.294	1.034	0.596	245.2	0.561
0.044	3.177	1.374	0.587	263.9	0.715	0.042	3.300	0.931	0.716	209.4	0.469	0.042	3.159	1.004	0.647	251.1	0.434	0.042	3.225	0.982	0.698	212.2	0.532
0.047	3.242	1.143	0.683	240.0	0.660	0.045	3.300	0.782	0.788	173.1	0.417	0.045	3.159	0.892	0.723	201.2	0.469	0.045	3.365	0.780	0.791	175.8	0.463
0.050	3.177	1.189	0.767	188.8	0.664	0.048	3.234	0.638	0.841	134.5	0.391	0.048	3.159	0.742	0.783	173.0	0.417	0.048	3.294	0.579	0.840	135.4	0.435
0.053	3.177	0.962	0.798	160.6	0.613	0.051	3.300	0.601	0.879	103.1	0.382	0.051	3.225	0.634	0.835	137.7	0.390	0.051	3.294	0.510	0.875	104.6	0.435
0.056	3.177	0.736	0.828	134.7	0.579	0.054	3.369	0.531	0.907	82.4	0.355	0.054	3.159	0.495	0.868	114.1	0.382	0.054	3.365	0.404	0.914	77.7	0.407
0.059	3.177	0.608	0.869	113.5	0.494	0.057	3.369	0.518	0.918	70.1	0.372	0.057	3.225	0.496	0.885	98.6	0.372	0.057	3.365	0.396	0.923	70.6	0.389
0.062	3.177	0.455	0.897	90.7	0.460	0.061	3.300	0.425	0.941	53.7	0.330	0.061	3.225	0.428	0.899	89.0	0.372	0.061	3.294	0.320	0.937	53.3	0.416
0.065	3.177	0.479	0.910	80.9	0.460	0.065	3.300	0.486	0.948	43.8	0.365	0.065	3.225	0.443	0.923	70.0	0.355	0.065	3.294	0.320	0.949	43.6	0.416
0.068	3.177	0.431	0.922	67.4	0.460	0.069	3.300	0.447	0.961	36.7	0.330	0.069	3.159	0.396	0.933	59.2	0.365	0.069	3.225	0.278	0.956	40.1	0.390
0.071	3.177	0.424	0.937	56.6	0.443	0.073	3.300	0.417	0.969	30.6	0.313	0.073	3.159	0.403	0.940	56.1	0.330	0.073	3.294	0.272	0.966	31.1	0.362
0.074	3.177	0.392	0.948	46.9	0.426	0.077	3.234	0.357	0.974	23.6	0.340	0.077	3.159	0.365	0.953	43.7	0.347	0.077	3.294	0.272	0.973	25.2	0.362
0.077	3.177	0.379	0.955	43.5	0.391	0.081	3.300	0.357	0.980	20.3	0.330	0.081	3.096	0.403	0.963	36.3	0.340	0.081	3.294	0.301	0.979	19.9	0.362
						0.085	3.171	0.403	0.984	14.3	0.350	0.085	3.159	0.361	0.963	33.0	0.399	0.085	3.225	0.288	0.982	18.9	0.337
						0.089	3.234	0.381	0.984	15.7	0.340	0.089	3.159	0.350	0.973	26.7	0.313	0.089	3.225	0.295	0.984	15.1	0.355
						0.093	3.234	0.372	0.986	11.2	0.374	0.093	3.159	0.340	0.977	22.5	0.347	0.093	3.225	0.288	0.987	13.4	0.337
						0.103	3.234	0.327	0.995	4.7	0.323	0.103	3.035	0.395	0.987	12.4	0.334	0.103	3.294	0.278	0.993	6.9	0.380
												0.113	3.159	0.287	0.992	8.4	0.278						

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 91

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.033	1.007	0.761	0.080	20.2	0.000	-0.019	0.000	0.000	0.036	12.1	0.000	-0.029	2.121	0.000	0.129	36.5	0.758	-0.029	0.000	0.000	0.055	18.8	8.953
-0.027	1.007	0.737	0.063	13.8	0.426	-0.014	1.198	0.000	0.084	36.7	0.000	-0.024	0.000	0.000	0.161	45.4	0.000	-0.024	2.497	0.000	0.076	26.5	0.798
-0.024	1.007	0.737	0.087	19.8	0.426	-0.009	3.171	0.000	0.111	66.4	0.000	-0.019	1.580	0.000	0.194	51.6	0.556	-0.019	1.259	0.000	0.108	33.2	0.492
-0.021	1.007	0.769	0.067	18.4	0.365	-0.004	2.310	0.000	0.133	116.3	0.000	-0.014	1.701	0.000	0.212	69.8	0.496	-0.014	1.800	0.000	0.114	50.6	0.456
-0.018	1.385	0.761	0.100	37.8	0.380	0.001	2.310	0.675	0.116	134.6	0.000	-0.009	1.985	0.000	0.244	113.9	0.404	-0.009	1.701	0.000	0.122	80.4	0.263
-0.015	1.184	0.797	0.121	50.1	0.299	0.006	2.450	0.797	0.131	155.6	0.000	-0.004	2.211	0.000	0.214	164.6	0.243	-0.004	2.037	0.000	0.120	110.4	0.203
-0.012	1.231	0.825	0.114	69.0	0.209	0.009	2.741	0.804	0.142	165.4	0.173	0.001	2.276	0.884	0.186	193.1	0.175	0.001	2.382	0.935	0.112	125.6	0.196
-0.009	1.650	0.823	0.127	96.5	0.217	0.012	2.741	0.737	0.166	169.1	0.202	0.006	2.497	0.737	0.168	192.6	0.165	0.006	2.624	0.681	0.123	149.1	0.188
-0.006	1.743	0.829	0.134	125.3	0.191	0.015	2.741	0.733	0.176	169.5	0.216	0.009	2.624	0.600	0.146	180.9	0.159	0.009	2.716	0.748	0.133	150.2	0.209
-0.003	2.041	0.809	0.130	147.7	0.179	0.018	2.888	0.768	0.198	179.6	0.243	0.012	2.716	0.643	0.183	200.1	0.194	0.012	2.764	0.709	0.145	152.3	0.228
0.000	2.216	0.662	0.125	165.3	0.158	0.021	2.888	0.655	0.201	181.7	0.243	0.015	2.764	0.650	0.218	214.3	0.213	0.015	2.764	0.660	0.175	160.7	0.274
0.003	2.351	0.582	0.127	175.7	0.168	0.024	2.940	0.711	0.221	186.8	0.263	0.018	2.815	0.645	0.228	217.7	0.217	0.018	2.921	0.591	0.202	183.3	0.289
0.006	2.543	0.713	0.146	187.4	0.195	0.027	2.994	0.657	0.267	202.7	0.268	0.021	2.815	0.547	0.223	214.1	0.217	0.021	2.921	0.609	0.201	174.3	0.289
0.009	2.629	0.647	0.158	198.1	0.202	0.030	3.110	0.675	0.328	223.1	0.295	0.024	2.921	0.613	0.267	234.7	0.241	0.024	3.035	0.597	0.236	185.6	0.334
0.012	2.629	0.698	0.186	206.5	0.231	0.033	3.171	0.644	0.364	231.4	0.317	0.027	2.977	0.671	0.282	230.6	0.262	0.027	3.096	0.579	0.275	198.6	0.357
0.015	2.675	0.586	0.178	201.0	0.235	0.037	3.234	0.648	0.449	245.2	0.340	0.030	3.035	0.659	0.336	252.1	0.284	0.030	3.159	0.580	0.345	222.8	0.382
0.018	2.722	0.606	0.196	207.2	0.254	0.041	3.171	0.732	0.562	229.0	0.400	0.033	3.035	0.706	0.350	246.2	0.300	0.033	3.159	0.577	0.383	224.5	0.417
0.021	2.722	0.583	0.207	209.2	0.269	0.045	3.234	0.668	0.662	223.8	0.374	0.037	3.096	0.705	0.450	264.9	0.340	0.037	3.159	0.564	0.459	236.6	0.434
0.024	2.873	0.608	0.228	220.2	0.299	0.049	3.234	0.619	0.747	191.7	0.357	0.041	3.096	0.667	0.532	265.1	0.340	0.041	3.294	0.550	0.578	235.0	0.471
0.027	2.927	0.583	0.246	235.2	0.305	0.053	3.234	0.638	0.825	140.6	0.391	0.045	3.159	0.741	0.642	249.3	0.382	0.045	3.225	0.547	0.664	219.3	0.479
0.030	2.983	0.651	0.289	244.4	0.344	0.057	3.300	0.652	0.876	114.1	0.365	0.049	3.096	0.707	0.699	225.6	0.374	0.049	3.225	0.570	0.756	179.6	0.479
0.033	3.042	0.713	0.350	253.9	0.434	0.061	3.300	0.561	0.915	83.8	0.347	0.053	3.159	0.712	0.763	193.9	0.399	0.053	3.294	0.526	0.826	144.6	0.471
0.036	3.042	0.713	0.375	265.3	0.434	0.065	3.300	0.561	0.942	58.8	0.313	0.057	3.159	0.672	0.833	155.0	0.365	0.057	3.294	0.428	0.884	109.1	0.416
0.040	3.103	0.770	0.470	266.0	0.562	0.069	3.300	0.478	0.958	40.6	0.347	0.061	3.225	0.686	0.878	118.1	0.372	0.061	3.294	0.526	0.915	79.0	0.471
0.044	3.103	0.808	0.555	262.8	0.596	0.073	3.234	0.520	0.965	34.0	0.323	0.065	3.159	0.631	0.912	86.8	0.330	0.065	3.365	0.463	0.936	62.8	0.426
0.048	3.166	0.846	0.631	247.9	0.608	0.077	3.234	0.498	0.974	23.0	0.357	0.069	3.225	0.583	0.938	66.4	0.372	0.069	3.440	0.482	0.953	46.8	0.454
0.052	3.166	0.751	0.700	220.3	0.590	0.081	3.300	0.403	0.983	15.8	0.330	0.073	3.225	0.573	0.948	54.4	0.355	0.073	3.440	0.413	0.969	31.5	0.416
0.056	3.232	0.766	0.772	188.1	0.603	0.085	3.300	0.388	0.985	13.7	0.347	0.077	3.225	0.511	0.965	38.2	0.319	0.077	3.365	0.251	0.977	25.8	0.389
0.060	3.232	0.740	0.837	143.1	0.550	0.089	3.515	0.486	0.990	9.8	0.370	0.081	3.159	0.499	0.964	34.9	0.347	0.081	3.365	0.251	0.983	18.2	0.389
0.064	3.232	0.691	0.879	113.7	0.496	0.093	3.300	0.395	0.991	8.3	0.313	0.085	3.159	0.550	0.972	28.8	0.365	0.085	3.365	0.356	0.984	16.7	0.426
0.068	3.232	0.499	0.919	82.4	0.426	0.103	3.515	0.415	0.995	5.3	0.278	0.089	3.159	0.442	0.978	23.3	0.365	0.089	3.365	0.284	0.988	11.6	0.389
0.072	3.232	0.527	0.945	59.0	0.390							0.093	3.159	0.469	0.984	18.5	0.330	0.093	3.294	0.289	0.991	8.9	0.416
0.076	3.166	0.512	0.956	44.2	0.417							0.103	3.159	0.395	0.987	13.7	0.313	0.103	3.365	0.245	0.995	5.2	0.370
												0.113	3.294	0.332	0.994	7.4	0.308						

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 92

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.007	2.336	1.115	0.303	186.7	0.413	-0.013	2.215	0.000	0.232	134.0	0.279	-0.013	2.150	0.000	0.336	168.4	0.344	-0.009	2.345	1.105	0.256	164.1	0.309
-0.004	2.444	0.903	0.280	196.2	0.419	-0.009	2.215	0.000	0.224	148.3	0.256	-0.009	2.211	0.000	0.311	182.0	0.293	-0.005	2.419	0.939	0.250	175.4	0.293
-0.001	2.482	1.042	0.263	185.8	0.439	-0.005	2.695	1.209	0.252	172.4	0.312	-0.005	2.345	1.019	0.325	202.4	0.284	-0.001	2.669	0.934	0.249	168.1	0.352
0.002	2.604	0.763	0.236	190.8	0.377	-0.001	2.651	0.979	0.227	177.4	0.279	-0.001	2.457	0.990	0.291	204.3	0.270	0.003	2.764	0.809	0.276	188.6	0.350
0.005	2.693	0.764	0.239	194.0	0.375	0.003	2.741	0.968	0.239	175.7	0.288	0.003	2.624	0.765	0.272	208.0	0.260	0.006	2.815	0.837	0.283	178.4	0.402
0.008	2.739	0.643	0.233	180.2	0.411	0.006	2.940	0.913	0.268	178.8	0.340	0.006	2.624	0.729	0.270	205.4	0.274	0.009	2.921	0.805	0.301	190.2	0.401
0.011	2.888	0.572	0.272	193.1	0.449	0.009	2.888	0.832	0.279	180.2	0.334	0.009	2.764	0.698	0.277	212.1	0.258	0.012	3.035	0.673	0.320	187.1	0.434
0.014	2.888	0.572	0.270	188.9	0.449	0.012	2.994	0.863	0.296	184.4	0.347	0.012	2.815	0.732	0.279	205.6	0.294	0.015	3.096	0.696	0.360	192.4	0.460
0.017	2.942	0.463	0.302	198.1	0.473	0.015	3.051	0.736	0.306	193.1	0.321	0.015	2.764	0.660	0.281	210.0	0.274	0.018	3.096	0.646	0.389	205.1	0.443
0.020	3.055	0.364	0.317	209.1	0.442	0.018	3.171	0.786	0.358	205.1	0.367	0.018	2.867	0.688	0.331	215.7	0.315	0.021	3.159	0.586	0.409	210.7	0.434
0.023	3.055	0.451	0.375	213.7	0.475	0.021	3.110	0.689	0.394	200.4	0.376	0.021	2.977	0.603	0.367	239.8	0.295	0.024	3.159	0.595	0.474	205.2	0.452
0.026	3.177	0.481	0.393	184.5	0.596	0.024	3.171	0.749	0.413	210.6	0.367	0.024	2.921	0.593	0.376	224.7	0.321	0.027	3.159	0.564	0.479	211.1	0.434
0.029	3.177	0.508	0.420	199.0	0.596	0.027	3.234	0.698	0.466	209.5	0.391	0.027	2.977	0.576	0.412	237.4	0.311	0.030	3.225	0.507	0.534	213.3	0.443
0.032	3.177	0.508	0.478	215.0	0.596	0.030	3.234	0.678	0.502	208.5	0.391	0.030	2.977	0.557	0.451	237.4	0.344	0.033	3.225	0.539	0.560	210.7	0.461
0.035	3.115	0.523	0.504	217.0	0.584	0.033	3.234	0.678	0.543	210.1	0.391	0.033	3.035	0.559	0.488	246.9	0.334	0.037	3.294	0.486	0.645	199.7	0.435
0.038	3.115	0.603	0.571	216.5	0.601	0.037	3.234	0.589	0.598	208.3	0.374	0.037	3.035	0.568	0.551	236.8	0.350	0.041	3.294	0.469	0.696	188.5	0.453
0.041	3.115	0.551	0.603	220.6	0.534	0.041	3.300	0.610	0.670	193.0	0.399	0.041	3.035	0.528	0.603	234.5	0.350	0.045	3.294	0.478	0.747	175.1	0.416
0.044	3.055	0.541	0.659	215.9	0.524	0.045	3.369	0.571	0.731	179.9	0.390	0.045	3.035	0.537	0.669	214.3	0.367	0.049	3.225	0.394	0.788	159.8	0.408
0.047	3.055	0.563	0.707	210.4	0.524	0.049	3.300	0.591	0.791	150.6	0.365	0.049	3.096	0.578	0.738	191.9	0.391	0.053	3.225	0.394	0.840	129.6	0.408
0.050	3.177	0.555	0.765	164.9	0.528	0.053	3.300	0.529	0.845	126.3	0.365	0.053	3.096	0.545	0.783	165.5	0.408	0.057	3.294	0.421	0.872	113.1	0.398
0.053	3.177	0.521	0.785	147.6	0.562	0.057	3.234	0.489	0.880	105.6	0.340	0.057	3.159	0.568	0.836	141.2	0.399	0.061	3.294	0.421	0.906	86.8	0.398
0.056	3.177	0.571	0.834	125.3	0.511	0.061	3.300	0.490	0.896	92.2	0.330	0.061	3.096	0.515	0.870	111.9	0.391	0.065	3.294	0.362	0.929	69.7	0.380
0.059	3.177	0.601	0.851	117.8	0.528	0.065	3.234	0.438	0.927	70.0	0.323	0.065	3.096	0.493	0.906	82.4	0.391	0.069	3.225	0.380	0.941	58.2	0.372
0.062	3.177	0.601	0.879	100.2	0.528	0.069	3.234	0.395	0.939	59.1	0.323	0.069	3.225	0.540	0.923	76.2	0.372	0.073	3.294	0.395	0.954	44.9	0.398
0.065	3.242	0.542	0.911	81.2	0.434	0.073	3.171	0.395	0.959	40.0	0.334	0.073	3.225	0.496	0.939	59.9	0.372	0.077	3.294	0.428	0.968	31.2	0.416
0.068	3.177	0.540	0.921	65.6	0.494	0.077	3.300	0.480	0.969	33.3	0.313	0.077	3.159	0.458	0.954	46.5	0.399	0.081	3.294	0.372	0.974	27.8	0.344
0.071	3.177	0.591	0.932	61.1	0.460	0.081	3.234	0.400	0.982	20.9	0.289	0.081	3.159	0.473	0.965	36.4	0.382	0.085	3.365	0.372	0.981	22.8	0.333
						0.085	3.234	0.450	0.983	18.8	0.306	0.085	3.159	0.495	0.973	27.6	0.382	0.089	3.365	0.347	0.987	15.1	0.333
						0.089	3.369	0.394	0.988	12.7	0.301	0.089	3.225	0.420	0.980	21.5	0.355	0.093	3.365	0.350	0.988	12.5	0.407
						0.093	3.515	0.457	0.989	11.4	0.315	0.093	3.225	0.434	0.984	17.0	0.337	0.113	3.365	0.287	0.997	3.3	0.315
						0.103	3.515	0.566	0.995	6.0	0.315	0.113	3.294	0.356	0.996	4.6	0.308						

$d_{crest}/h=1.1$, $d_c/h=1.05$, Location 93

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.000	2.272	0.669	0.217	204.9	0.173	0.000	2.488	0.615	0.171	172.1	0.183	0.000	2.310	0.767	0.197	196.9	0.178	0.000	0.000	14.125	0.108	124.7	2.213
0.003	2.412	0.696	0.224	209.7	0.183	0.003	2.527	0.620	0.190	180.8	0.199	0.003	2.419	0.762	0.199	196.4	0.186	0.003	2.580	0.681	0.167	182.6	0.199
0.006	2.450	0.947	0.251	216.2	0.213	0.006	2.651	0.690	0.225	201.6	0.223	0.006	2.538	0.738	0.232	213.1	0.209	0.006	2.716	0.612	0.172	176.4	0.239
0.009	2.489	1.133	0.311	222.7	0.257	0.009	2.788	0.726	0.258	207.2	0.279	0.009	2.624	0.826	0.281	229.9	0.260	0.009	2.815	0.738	0.211	189.5	0.279
0.012	2.613	1.251	0.320	223.4	0.255	0.012	2.940	0.837	0.307	213.7	0.325	0.012	2.764	0.779	0.294	239.6	0.258	0.012	2.867	0.705	0.251	211.0	0.315
0.015	2.657	1.328	0.374	235.3	0.274	0.015	2.994	0.877	0.351	217.5	0.394	0.015	2.764	0.860	0.334	237.6	0.304	0.015	2.977	0.773	0.299	217.3	0.393
0.018	2.800	1.330	0.426	231.3	0.319	0.018	3.110	0.911	0.406	221.1	0.409	0.018	2.867	0.863	0.372	245.9	0.347	0.018	3.035	0.902	0.359	229.8	0.434
0.021	2.800	1.342	0.481	229.0	0.334	0.021	3.110	0.867	0.484	219.9	0.426	0.021	2.921	0.935	0.441	247.4	0.385	0.021	3.159	0.952	0.442	227.5	0.504
0.024	2.851	1.318	0.513	226.6	0.340	0.024	3.171	0.865	0.536	218.3	0.434	0.024	2.921	0.893	0.477	240.8	0.401	0.024	3.225	0.819	0.540	226.4	0.496
0.027	2.903	1.191	0.582	218.3	0.362	0.027	3.300	0.802	0.598	210.9	0.452	0.027	2.977	0.773	0.532	240.3	0.393	0.027	3.225	0.808	0.590	217.8	0.514
0.030	2.958	1.218	0.609	213.9	0.353	0.030	3.300	0.671	0.662	195.1	0.434	0.030	3.035	0.751	0.592	226.3	0.400	0.030	3.294	0.687	0.646	206.9	0.471
0.033	3.015	1.208	0.662	202.0	0.360	0.033	3.300	0.640	0.702	184.7	0.417	0.033	3.035	0.751	0.645	213.4	0.400	0.033	3.294	0.611	0.695	192.1	0.453
0.036	2.958	1.084	0.730	177.8	0.353	0.037	3.300	0.610	0.735	170.9	0.399	0.037	3.096	0.628	0.684	199.4	0.408	0.037	3.365	0.455	0.746	175.3	0.407
0.039	3.015	0.960	0.769	159.2	0.327	0.041	3.369	0.583	0.796	149.4	0.372	0.041	3.159	0.589	0.745	175.1	0.399	0.041	3.294	0.428	0.800	150.6	0.416
0.042	3.015	0.838	0.790	157.5	0.327	0.045	3.369	0.583	0.826	131.5	0.372	0.045	3.159	0.538	0.776	163.8	0.382	0.045	3.294	0.436	0.831	127.4	0.435
0.045	3.015	0.816	0.810	148.9	0.295	0.049	3.300	0.499	0.867	108.3	0.347	0.049	3.159	0.508	0.800	156.9	0.365	0.049	3.294	0.369	0.858	115.2	0.398
0.048	3.015	0.675	0.849	123.4	0.295	0.053	3.300	0.510	0.889	96.4	0.330	0.053	3.159	0.486	0.851	118.5	0.365	0.053	3.294	0.362	0.889	96.1	0.380
0.052	3.074	0.760	0.876	103.5	0.300	0.057	3.300	0.499	0.904	83.0	0.347	0.057	3.225	0.496	0.867	116.4	0.372	0.057	3.294	0.362	0.911	77.0	0.380
0.056	3.074	0.641	0.896	92.6	0.284	0.061	3.234	0.471	0.931	66.3	0.306	0.061	3.159	0.499	0.889	98.3	0.347	0.061	3.294	0.328	0.922	70.3	0.362
0.060	3.015	0.611	0.915	78.1	0.278	0.065	3.300	0.478	0.935	59.2	0.347	0.065	3.159	0.381	0.913	83.5	0.330	0.065	3.294	0.321	0.943	57.2	0.344
0.064	3.074	0.538	0.938	60.8	0.267	0.069	3.234	0.421	0.951	49.2	0.289	0.069	3.159	0.417	0.942	59.0	0.313	0.069	3.294	0.301	0.953	47.8	0.362
0.068	3.074	0.538	0.942	54.7	0.267	0.073	3.234	0.421	0.958	42.8	0.289	0.073	3.096	0.425	0.945	53.4	0.340	0.073	3.294	0.321	0.959	39.3	0.344
0.072	3.074	0.480	0.961	41.7	0.234	0.077	3.234	0.430	0.969	31.4	0.306	0.077	3.159	0.395	0.962	40.3	0.313	0.077	3.225	0.288	0.968	33.7	0.337
0.076	3.074	0.538	0.964	35.7	0.267	0.081	3.171	0.379	0.979	22.2	0.300	0.081	3.096	0.373	0.966	35.8	0.323	0.081	3.365	0.363	0.973	27.4	0.370
						0.085	3.234	0.387	0.978	23.3	0.306	0.085	3.159	0.372	0.970	31.3	0.313	0.085	3.294	0.294	0.980	19.7	0.344
						0.089	3.171	0.387	0.985	15.8	0.317	0.089	3.159	0.450	0.975	26.3	0.382	0.089	3.225	0.333	0.985	17.8	0.319
						0.093	3.171	0.395	0.990	12.0	0.250	0.093	3.159	0.434	0.982	18.4	0.347	0.093	3.365	0.364	0.987	14.4	0.315
						0.103	3.171	0.423	0.995	5.6	0.267	0.103	3.159	0.334	0.989	13.1	0.278	0.103	3.159	0.220	0.993	7.8	0.313
												0.113	3.225	0.317	0.994	6.3	0.284	0.113	3.518	0.401	0.996	4.8	0.271

$d_{crest}/h=1.1$, $d_c/h=1.05$, Step edge 10

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.001	2.742	0.562	0.087	172.2	0.108	0.003	2.608	0.524	0.110	182.5	0.110	0.003	0.000	0.000	0.099	165.1	1.362	0.003	2.867	0.582	0.110	173.2	0.142
0.002	2.693	0.565	0.093	168.2	0.122	0.006	2.608	0.577	0.117	179.9	0.124	0.006	2.716	0.734	0.129	194.6	0.134	0.006	2.867	0.610	0.118	178.9	0.158
0.003	2.846	0.613	0.101	173.7	0.128	0.009	2.695	0.509	0.117	174.3	0.128	0.009	2.815	0.523	0.128	199.6	0.139	0.009	2.921	0.572	0.127	187.3	0.161
0.006	2.742	0.511	0.102	171.2	0.124	0.012	2.695	0.564	0.131	179.5	0.142	0.012	2.867	0.582	0.151	219.9	0.142	0.012	3.035	0.472	0.133	186.4	0.167
0.009	2.846	0.514	0.116	187.4	0.128	0.015	2.741	0.514	0.136	178.2	0.144	0.015	2.921	0.510	0.155	220.0	0.145	0.015	3.035	0.490	0.141	195.6	0.167
0.012	2.957	0.530	0.123	194.9	0.150	0.018	2.888	0.446	0.150	191.7	0.152	0.018	2.921	0.488	0.165	226.3	0.161	0.018	3.096	0.535	0.175	216.1	0.221
0.015	2.957	0.599	0.138	202.3	0.150	0.021	2.888	0.537	0.168	207.1	0.213	0.021	3.035	0.554	0.195	247.9	0.184	0.021	3.159	0.614	0.203	226.2	0.243
0.018	2.957	0.542	0.144	209.1	0.167	0.024	2.994	0.579	0.202	220.4	0.205	0.024	2.977	0.555	0.226	269.3	0.196	0.024	3.159	0.754	0.270	254.5	0.313
0.021	3.016	0.659	0.175	238.2	0.170	0.027	3.051	0.630	0.258	246.1	0.241	0.027	3.035	0.678	0.282	286.1	0.234	0.027	3.294	0.873	0.353	271.9	0.398
0.024	3.016	0.760	0.202	253.6	0.187	0.030	3.110	0.775	0.329	265.6	0.311	0.030	3.096	0.752	0.324	295.0	0.272	0.030	3.294	0.936	0.454	292.5	0.435
0.027	3.078	0.906	0.262	287.4	0.243	0.033	3.234	0.865	0.423	281.8	0.357	0.033	3.159	0.946	0.439	310.0	0.347	0.033	3.365	0.980	0.557	283.2	0.481
0.030	3.279	1.290	0.374	325.5	0.333	0.036	3.300	1.012	0.540	282.5	0.417	0.036	3.159	0.951	0.511	307.8	0.382	0.036	3.365	0.876	0.646	253.1	0.481
0.033	3.279	1.471	0.448	325.5	0.370	0.039	3.234	0.899	0.646	249.8	0.408	0.039	3.159	1.016	0.629	274.4	0.452	0.039	3.365	0.758	0.732	215.6	0.463
0.036	3.352	1.596	0.530	308.0	0.473	0.042	3.369	0.967	0.693	223.1	0.443	0.042	3.225	0.978	0.683	251.7	0.461	0.042	3.440	0.652	0.787	178.5	0.454
0.039	3.352	1.344	0.642	281.9	0.454	0.045	3.369	0.839	0.774	178.6	0.461	0.045	3.159	0.801	0.740	224.0	0.417	0.045	3.365	0.596	0.832	148.6	0.407
0.042	3.428	1.409	0.730	245.7	0.484	0.048	3.369	0.727	0.823	144.0	0.408	0.048	3.225	0.798	0.789	181.0	0.426	0.048	3.440	0.481	0.875	115.6	0.397
0.046	3.428	1.072	0.793	194.2	0.445	0.051	3.369	0.624	0.847	131.9	0.372	0.051	3.225	0.613	0.846	141.0	0.390	0.051	3.365	0.396	0.894	98.3	0.389
0.050	3.428	0.975	0.849	151.6	0.426	0.054	3.369	0.604	0.885	101.0	0.372	0.054	3.225	0.549	0.887	108.7	0.390	0.054	3.365	0.380	0.911	84.8	0.352
0.054	3.428	0.768	0.887	118.3	0.367	0.057	3.369	0.604	0.900	88.7	0.372	0.057	3.225	0.536	0.895	93.8	0.408	0.057	3.440	0.405	0.924	72.6	0.397
0.058	3.428	0.636	0.912	91.3	0.367	0.061	3.369	0.521	0.922	72.1	0.337	0.061	3.225	0.465	0.937	62.0	0.355	0.061	3.365	0.320	0.940	54.6	0.407
0.062	3.428	0.636	0.927	75.9	0.367	0.065	3.300	0.486	0.938	56.6	0.365	0.065	3.225	0.412	0.941	58.9	0.337	0.065	3.365	0.278	0.948	49.6	0.370
0.066	3.428	0.535	0.944	57.6	0.348	0.069	3.300	0.510	0.947	48.5	0.330	0.069	3.225	0.388	0.949	51.8	0.337	0.069	3.365	0.320	0.957	39.2	0.407
0.070	3.428	0.464	0.962	40.4	0.348	0.073	3.300	0.395	0.959	41.9	0.313	0.073	3.294	0.364	0.958	44.0	0.326	0.073	3.365	0.271	0.963	38.0	0.352
0.074	3.428	0.478	0.965	38.8	0.329	0.077	3.300	0.403	0.968	32.7	0.330	0.077	3.225	0.357	0.968	34.2	0.319	0.077	3.365	0.336	0.972	27.8	0.370
						0.081	3.300	0.456	0.970	30.1	0.347	0.081	3.159	0.350	0.970	31.9	0.313	0.081	3.294	0.307	0.977	22.9	0.380
						0.085	3.369	0.434	0.976	24.1	0.337	0.085	3.225	0.308	0.979	23.2	0.319	0.085	3.365	0.355	0.983	18.3	0.352
						0.089	3.515	0.421	0.981	20.6	0.333	0.089	3.225	0.300	0.984	18.3	0.301	0.089	3.365	0.278	0.983	17.7	0.370
						0.093	3.234	0.430	0.984	17.4	0.306	0.093	3.159	0.364	0.985	17.5	0.295	0.093	3.365	0.294	0.987	14.8	0.333
						0.103	3.171	0.320	0.989	11.3	0.317	0.103	3.294	0.416	0.991	10.1	0.290	0.103	3.365	0.321	0.992	10.1	0.333
						0.108	3.369	0.388	0.993	7.4	0.337	0.113	3.159	0.326	0.992	9.1	0.313						

$d_{crest}/h=1.3$, $d_c/h=1.2$, Step edge 8

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.006	2.787	0.952	0.077	121.1	0.254	0.003	2.651	0.345	0.031	57.1	0.112	0.003	2.867	0.647	0.077	132.0	0.142	0.003	2.764	0.498	0.033	60.9	0.137
0.009	2.739	0.844	0.080	117.9	0.249	0.006	2.651	0.414	0.034	59.4	0.126	0.006	2.815	0.619	0.075	129.7	0.139	0.006	2.764	0.498	0.034	62.8	0.137
0.012	2.739	0.860	0.074	108.5	0.249	0.009	2.567	0.387	0.037	62.6	0.122	0.009	2.815	0.679	0.081	128.8	0.155	0.009	2.867	0.479	0.035	57.8	0.158
0.015	2.648	0.722	0.083	113.2	0.255	0.012	2.651	0.453	0.039	60.8	0.140	0.012	2.921	0.539	0.085	128.1	0.161	0.012	2.867	0.378	0.038	60.8	0.158
0.018	2.837	0.670	0.089	116.6	0.289	0.015	2.788	0.320	0.037	57.2	0.147	0.015	2.977	0.578	0.090	127.6	0.180	0.015	3.035	0.477	0.043	62.6	0.200
0.021	2.837	0.639	0.098	117.2	0.319	0.018	2.788	0.518	0.045	63.7	0.161	0.018	2.977	0.509	0.085	119.3	0.180	0.018	2.977	0.432	0.045	62.1	0.196
0.024	2.837	0.737	0.110	113.6	0.395	0.021	2.940	0.448	0.041	57.0	0.170	0.021	2.977	0.584	0.091	115.3	0.213	0.021	3.035	0.395	0.058	76.4	0.217
0.027	3.055	0.869	0.122	117.4	0.491	0.024	2.888	0.451	0.047	62.2	0.182	0.024	3.035	0.571	0.115	137.3	0.234	0.024	3.225	0.429	0.074	87.2	0.284
0.030	3.115	0.905	0.152	124.2	0.567	0.027	2.994	0.416	0.061	76.9	0.189	0.027	3.225	0.603	0.147	152.2	0.301	0.027	3.294	0.542	0.113	109.1	0.362
0.033	3.115	1.008	0.216	155.8	0.684	0.030	3.051	0.482	0.085	88.9	0.257	0.030	3.159	0.708	0.173	169.1	0.330	0.030	3.365	0.740	0.181	127.2	0.555
0.036	3.242	1.163	0.255	154.9	0.851	0.033	3.234	0.668	0.145	119.2	0.374	0.033	3.225	0.767	0.252	196.5	0.408	0.033	3.440	0.803	0.268	167.6	0.567
0.039	3.177	1.033	0.317	160.3	0.834	0.036	3.300	0.740	0.225	144.8	0.486	0.036	3.225	0.899	0.315	213.0	0.461	0.036	3.440	1.040	0.397	184.8	0.756
0.042	3.380	1.261	0.420	178.3	1.032	0.039	3.300	0.880	0.345	172.2	0.590	0.039	3.365	1.076	0.445	233.0	0.537	0.039	3.440	0.808	0.557	199.4	0.624
0.045	3.310	1.165	0.461	175.4	1.011	0.042	3.440	0.886	0.482	188.1	0.598	0.042	3.365	0.961	0.549	223.1	0.592	0.042	3.440	0.802	0.642	171.4	0.662
0.048	3.453	1.091	0.578	161.1	1.055	0.045	3.440	0.948	0.628	177.0	0.634	0.045	3.440	0.971	0.659	201.7	0.586	0.045	3.440	0.742	0.751	144.9	0.586
0.051	3.380	0.976	0.620	154.1	0.996	0.048	3.440	0.823	0.747	143.9	0.561	0.048	3.440	0.793	0.719	183.9	0.548	0.048	3.440	0.532	0.819	117.8	0.511
0.054	3.453	0.844	0.668	136.7	1.055	0.051	3.440	0.597	0.806	125.7	0.471	0.051	3.365	0.657	0.784	152.8	0.481	0.051	3.518	0.438	0.857	100.2	0.464
0.057	3.453	0.652	0.736	128.4	0.944	0.054	3.440	0.518	0.853	99.6	0.453	0.054	3.518	0.596	0.848	110.5	0.580	0.054	3.440	0.334	0.902	73.0	0.435
0.060	3.453	0.614	0.756	122.7	0.925	0.057	3.515	0.446	0.887	76.5	0.444	0.057	3.518	0.501	0.861	101.3	0.484	0.057	3.440	0.296	0.914	63.7	0.416
0.063	3.453	0.534	0.785	115.3	0.888	0.061	3.515	0.377	0.924	55.0	0.407	0.061	3.518	0.430	0.891	78.3	0.445	0.061	3.440	0.257	0.941	44.7	0.397
0.067	3.453	0.416	0.820	101.6	0.888	0.065	3.515	0.430	0.926	52.3	0.407	0.065	3.440	0.378	0.910	63.1	0.473	0.065	3.518	0.225	0.941	44.4	0.406
0.071	3.453	0.366	0.842	90.4	0.870	0.069	3.515	0.404	0.945	40.0	0.407	0.069	3.440	0.386	0.926	54.7	0.416	0.069	3.518	0.290	0.954	35.5	0.387
0.075	3.380	0.373	0.837	91.3	0.923	0.073	3.440	0.328	0.956	33.7	0.362	0.073	3.440	0.371	0.933	47.1	0.454	0.073	3.440	0.220	0.958	32.5	0.397
0.079	3.453	0.312	0.884	73.8	0.851	0.077	3.515	0.377	0.960	29.7	0.407	0.077	3.518	0.355	0.943	38.7	0.484	0.077	3.440	0.262	0.975	18.9	0.416
0.083	3.453	0.262	0.892	67.1	0.907	0.081	3.440	0.355	0.971	21.4	0.362	0.081	3.518	0.315	0.953	33.2	0.464	0.081	3.440	0.220	0.974	19.7	0.397
0.087	3.453	0.000	0.913	49.9	1.092	0.085	3.515	0.430	0.975	18.6	0.407	0.085	3.440	0.378	0.962	26.8	0.000	0.085	3.440	0.225	0.981	14.4	0.416
						0.089	3.440	0.307	0.977	17.5	0.380	0.089	3.440	0.364	0.967	23.8	0.435	0.089	3.440	0.220	0.986	12.6	0.397
						0.093	3.440	0.362	0.982	14.3	0.380	0.093	3.440	0.273	0.970	23.1	0.454	0.093	3.440	0.225	0.985	11.4	0.416
						0.103	3.300	0.340	0.990	7.8	0.347	0.103	3.440	0.296	0.976	18.6	0.416	0.103	3.365	0.220	0.992	6.3	0.407
						0.108	3.515	0.447	0.992	6.1	0.389	0.108	3.440	0.267	0.986	10.9	0.435	0.108	3.365	0.157	0.994	5.8	0.315
												0.118	3.440	0.302	0.985	11.0	0.435						
												0.128	3.518	0.380	0.990	8.4	0.464						

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 81

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.029	0.665	0.000	0.078	14.8	0.000	-0.029	0.000	0.000	0.010	4.1	0.000	-0.029	1.114	0.000	0.058	12.0	0.000	-0.029	1.155	0.000	0.014	6.1	0.356
-0.025	0.000	0.000	0.099	19.5	1.785	-0.024	0.000	0.000	0.017	7.2	0.000	-0.024	0.999	0.000	0.073	15.0	0.000	-0.024	1.114	0.000	0.023	9.7	0.367
-0.021	0.602	0.000	0.095	18.9	0.255	-0.019	0.000	0.000	0.025	9.1	0.000	-0.019	0.000	0.000	0.089	21.0	0.000	-0.019	1.548	0.000	0.030	14.2	0.325
-0.017	1.573	0.000	0.119	29.3	0.674	-0.014	0.000	0.000	0.034	14.5	0.000	-0.014	1.083	0.000	0.069	23.5	0.000	-0.014	1.046	0.000	0.029	18.3	0.196
-0.013	1.168	0.000	0.092	44.0	0.238	-0.009	2.888	0.000	0.037	19.5	0.000	-0.009	1.629	0.471	0.081	46.2	0.000	-0.009	1.720	0.000	0.031	29.0	0.238
-0.009	1.394	0.000	0.130	58.5	0.314	-0.004	1.431	0.000	0.042	35.3	0.000	-0.004	1.720	0.592	0.105	85.4	0.199	-0.004	2.121	0.872	0.035	43.7	0.256
-0.005	1.746	1.374	0.108	78.7	0.234	0.001	2.156	0.000	0.042	55.5	0.136	0.001	2.211	0.814	0.096	123.6	0.146	0.001	2.345	0.702	0.041	62.5	0.168
-0.001	1.805	0.672	0.106	102.8	0.184	0.006	2.488	0.657	0.040	67.7	0.118	0.006	2.497	0.549	0.076	118.3	0.124	0.006	2.538	0.695	0.039	55.6	0.209
0.003	2.090	0.838	0.110	121.8	0.202	0.009	2.450	0.579	0.040	62.2	0.129	0.009	2.624	0.494	0.078	112.2	0.159	0.009	2.624	0.546	0.042	57.9	0.188
0.006	2.407	0.889	0.109	134.2	0.219	0.012	2.567	0.565	0.058	83.5	0.135	0.012	2.716	0.612	0.106	134.7	0.194	0.012	2.716	0.680	0.056	61.1	0.269
0.009	2.522	0.718	0.108	144.9	0.189	0.015	2.450	0.523	0.059	75.7	0.142	0.015	2.716	0.475	0.102	126.3	0.179	0.015	2.977	0.574	0.074	77.2	0.278
0.012	2.482	0.751	0.130	150.0	0.226	0.018	2.888	0.643	0.065	79.2	0.182	0.018	2.815	0.547	0.114	128.9	0.217	0.018	2.977	0.539	0.086	80.7	0.311
0.015	2.562	0.728	0.142	156.1	0.247	0.021	2.741	0.632	0.080	86.3	0.202	0.021	2.867	0.488	0.120	131.5	0.221	0.021	3.035	0.577	0.098	82.1	0.367
0.018	2.693	0.714	0.147	155.2	0.274	0.024	2.837	0.612	0.111	107.4	0.239	0.024	2.921	0.500	0.140	138.8	0.257	0.024	3.096	0.566	0.118	90.4	0.408
0.021	2.739	0.688	0.143	144.1	0.293	0.027	2.940	0.611	0.120	105.6	0.263	0.027	2.977	0.574	0.156	144.5	0.278	0.027	3.159	0.573	0.159	105.2	0.452
0.024	2.739	0.752	0.168	159.4	0.293	0.030	3.051	0.591	0.133	111.1	0.289	0.030	3.035	0.539	0.174	150.3	0.300	0.030	3.225	0.507	0.190	116.7	0.443
0.027	2.837	0.610	0.135	142.0	0.274	0.033	3.171	0.558	0.173	131.1	0.300	0.033	3.096	0.580	0.212	163.1	0.323	0.033	3.365	0.479	0.252	150.0	0.463
0.030	2.942	0.655	0.191	164.6	0.347	0.037	3.234	0.639	0.222	142.5	0.357	0.037	3.225	0.509	0.280	193.6	0.355	0.037	3.365	0.495	0.334	164.4	0.500
0.033	2.997	0.686	0.200	158.4	0.385	0.041	3.300	0.650	0.344	180.9	0.434	0.041	3.225	0.654	0.371	203.5	0.426	0.041	3.440	0.548	0.439	180.0	0.548
0.036	3.177	0.625	0.201	165.3	0.443	0.045	3.300	0.629	0.461	187.9	0.434	0.045	3.365	0.660	0.451	224.0	0.444	0.045	3.518	0.489	0.572	185.8	0.522
0.039	3.177	0.697	0.248	179.1	0.426	0.049	3.369	0.629	0.593	180.1	0.461	0.049	3.225	0.589	0.590	219.0	0.426	0.049	3.518	0.497	0.678	164.1	0.542
0.042	3.177	0.666	0.311	198.7	0.443	0.053	3.440	0.593	0.704	173.7	0.416	0.053	3.294	0.656	0.663	194.8	0.453	0.053	3.440	0.471	0.789	132.8	0.492
0.045	3.242	0.638	0.302	202.8	0.452	0.057	3.440	0.626	0.790	144.6	0.398	0.057	3.365	0.672	0.754	169.9	0.426	0.057	3.518	0.430	0.858	105.5	0.445
0.048	3.310	0.744	0.427	211.4	0.514	0.061	3.369	0.451	0.863	103.7	0.372	0.061	3.365	0.605	0.825	137.7	0.426	0.061	3.518	0.466	0.892	81.4	0.464
0.051	3.242	0.734	0.499	203.7	0.556	0.065	3.440	0.461	0.904	75.3	0.380	0.065	3.365	0.550	0.889	94.3	0.407	0.065	3.440	0.357	0.936	53.7	0.416
0.054	3.310	0.749	0.570	204.8	0.567	0.069	3.369	0.436	0.938	47.1	0.390	0.069	3.365	0.527	0.898	86.0	0.407	0.069	3.600	0.336	0.949	42.8	0.416
0.057	3.380	0.810	0.624	199.3	0.579	0.073	3.515	0.453	0.959	34.2	0.352	0.073	3.440	0.533	0.932	52.4	0.454	0.073	3.600	0.336	0.965	29.0	0.416
0.060	3.380	0.774	0.693	169.4	0.598	0.077	3.440	0.372	0.967	26.9	0.344	0.077	3.518	0.406	0.952	42.7	0.387	0.077	3.518	0.230	0.970	24.2	0.426
0.063	3.380	0.623	0.761	149.2	0.525	0.081	3.515	0.447	0.968	23.8	0.389	0.081	3.440	0.457	0.956	38.8	0.397	0.081	3.518	0.225	0.975	20.1	0.406
0.067	3.380	0.567	0.797	129.6	0.507	0.085	3.440	0.413	0.982	14.3	0.380	0.085	3.365	0.480	0.972	22.5	0.407	0.085	3.518	0.220	0.985	12.9	0.387
0.071	3.380	0.510	0.847	104.3	0.489	0.089	3.515	0.307	0.984	12.4	0.370	0.089	3.365	0.430	0.977	18.2	0.407	0.089	3.518	0.235	0.985	11.8	0.445
0.075	3.380	0.477	0.871	87.6	0.471	0.093	3.515	0.328	0.986	11.0	0.352	0.093	3.440	0.386	0.975	19.7	0.416	0.093	3.518	0.201	0.986	9.3	0.503
0.079	3.380	0.417	0.900	72.4	0.453	0.103	3.515	0.284	0.988	8.8	0.389	0.103	3.440	0.507	0.982	12.3	0.454	0.103	3.518	0.257	0.991	7.4	0.387
0.083	3.453	0.350	0.921	59.9	0.407	0.108	3.515	0.312	0.991	6.3	0.481	0.108	3.440	0.350	0.987	9.9	0.397	0.108	3.518	0.303	0.995	4.3	0.426

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 82

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.006	2.090	1.120	0.232	152.9	0.358	-0.013	1.797	0.000	0.185	96.7	0.293	-0.013	2.211	0.000	0.258	144.1	0.000	-0.009	2.211	0.973	0.114	94.6	0.267
-0.003	2.302	1.081	0.220	161.2	0.345	-0.009	2.021	0.000	0.164	98.1	0.287	-0.009	2.211	0.000	0.315	161.9	0.353	-0.005	2.276	0.998	0.099	82.6	0.288
0.000	2.269	0.885	0.213	167.9	0.304	-0.005	2.310	0.000	0.147	100.6	0.304	-0.005	2.211	0.000	0.270	175.1	0.304	-0.001	2.580	0.893	0.107	89.1	0.326
0.003	2.837	0.728	0.280	180.1	0.410	-0.001	2.488	1.237	0.129	102.5	0.288	-0.001	2.497	0.902	0.222	174.8	0.288	0.003	2.716	0.974	0.132	95.3	0.418
0.006	2.482	0.754	0.203	166.1	0.332	0.003	2.695	1.152	0.113	90.7	0.355	0.003	2.624	0.775	0.200	169.1	0.274	0.006	2.815	0.795	0.134	95.5	0.449
0.009	2.562	0.824	0.183	159.6	0.343	0.006	2.695	0.917	0.131	105.0	0.298	0.006	2.764	0.713	0.192	157.4	0.304	0.009	2.867	0.791	0.136	96.9	0.426
0.012	2.648	0.857	0.239	163.5	0.411	0.009	2.888	0.956	0.126	97.2	0.350	0.009	2.815	0.719	0.201	159.1	0.325	0.012	2.977	0.706	0.169	105.4	0.475
0.015	2.787	0.784	0.217	153.7	0.463	0.012	2.940	0.797	0.133	100.8	0.340	0.012	2.921	0.685	0.202	150.4	0.353	0.015	3.035	0.646	0.195	115.7	0.501
0.021	2.837	0.745	0.265	168.4	0.471	0.015	2.994	0.773	0.161	99.2	0.426	0.015	2.921	0.649	0.224	158.7	0.353	0.018	3.159	0.628	0.230	125.4	0.521
0.024	2.997	0.740	0.267	172.1	0.482	0.018	3.051	0.742	0.179	111.2	0.417	0.018	2.867	0.600	0.244	156.9	0.378	0.021	3.159	0.559	0.267	134.5	0.521
0.027	2.997	0.738	0.287	166.4	0.514	0.021	3.110	0.784	0.212	117.5	0.442	0.021	3.035	0.624	0.283	163.8	0.417	0.024	3.225	0.539	0.299	141.9	0.514
0.030	3.055	0.683	0.318	172.9	0.507	0.024	3.110	0.717	0.238	123.0	0.458	0.024	3.096	0.587	0.291	166.6	0.408	0.027	3.294	0.542	0.338	153.1	0.507
0.033	3.055	0.663	0.353	179.6	0.507	0.027	3.369	0.746	0.289	144.4	0.479	0.027	3.096	0.545	0.335	180.6	0.408	0.030	3.294	0.479	0.371	150.4	0.543
0.036	3.177	0.651	0.369	186.4	0.494	0.030	3.234	0.705	0.313	141.9	0.477	0.030	3.159	0.556	0.352	181.9	0.417	0.033	3.365	0.502	0.435	163.4	0.518
0.039	3.242	0.651	0.390	189.6	0.521	0.033	3.300	0.608	0.362	161.5	0.434	0.033	3.294	0.557	0.397	193.7	0.435	0.037	3.365	0.433	0.508	175.0	0.481
0.042	3.242	0.664	0.455	199.3	0.504	0.037	3.300	0.638	0.419	164.6	0.452	0.037	3.225	0.499	0.454	196.1	0.426	0.041	3.440	0.421	0.571	173.0	0.511
0.045	3.310	0.618	0.487	196.4	0.532	0.041	3.369	0.589	0.499	175.3	0.426	0.041	3.225	0.514	0.514	209.5	0.408	0.045	3.440	0.414	0.663	159.6	0.492
0.048	3.310	0.571	0.522	191.1	0.532	0.045	3.440	0.565	0.564	171.4	0.453	0.045	3.225	0.491	0.577	198.0	0.408	0.049	3.440	0.359	0.728	142.1	0.511
0.051	3.310	0.563	0.576	187.8	0.514	0.049	3.440	0.525	0.650	169.9	0.416	0.049	3.294	0.486	0.632	187.1	0.435	0.053	3.440	0.359	0.793	122.6	0.511
0.055	3.310	0.586	0.634	171.1	0.567	0.053	3.440	0.548	0.703	159.2	0.416	0.053	3.365	0.463	0.688	181.6	0.426	0.057	3.518	0.315	0.847	105.4	0.464
0.059	3.380	0.672	0.706	152.7	0.579	0.057	3.369	0.428	0.791	132.3	0.372	0.057	3.365	0.455	0.741	168.5	0.407	0.061	3.518	0.342	0.876	89.2	0.445
0.063	3.380	0.558	0.775	137.5	0.543	0.061	3.440	0.469	0.831	109.1	0.398	0.061	3.365	0.404	0.802	142.9	0.407	0.065	3.600	0.310	0.909	72.4	0.435
0.067	3.380	0.559	0.822	116.6	0.489	0.065	3.440	0.437	0.863	95.8	0.380	0.065	3.440	0.439	0.819	137.4	0.416	0.069	3.518	0.303	0.927	58.8	0.426
0.071	3.380	0.534	0.850	101.2	0.489	0.069	3.369	0.404	0.911	68.0	0.372	0.069	3.365	0.463	0.877	98.9	0.426	0.073	3.600	0.310	0.946	45.7	0.435
0.075	3.453	0.446	0.883	84.8	0.444	0.073	3.440	0.388	0.938	55.1	0.326	0.073	3.365	0.419	0.895	83.5	0.444	0.077	3.518	0.262	0.961	34.9	0.406
0.079	3.453	0.463	0.908	73.8	0.426	0.077	3.369	0.308	0.950	42.6	0.319	0.077	3.365	0.377	0.923	66.8	0.407	0.081	3.518	0.268	0.971	23.9	0.426
0.083	3.380	0.461	0.923	59.0	0.435	0.081	3.515	0.444	0.963	31.7	0.333	0.081	3.440	0.364	0.932	59.6	0.435	0.085	3.600	0.336	0.976	20.8	0.416
0.087	3.453	0.396	0.939	52.3	0.389	0.085	3.515	0.421	0.973	24.2	0.333	0.085	3.440	0.378	0.958	37.9	0.397	0.089	3.518	0.257	0.982	16.0	0.387
						0.089	3.515	0.355	0.981	18.6	0.296	0.089	3.518	0.373	0.958	36.3	0.445	0.093	3.518	0.177	0.987	11.7	0.387
						0.099	3.515	0.379	0.991	8.6	0.296	0.093	3.518	0.315	0.969	26.0	0.464	0.103	3.440	0.165	0.994	6.5	0.340
						0.103	3.515	0.389	0.991	7.5	0.370	0.103	3.440	0.371	0.979	17.0	0.454	0.108	3.440	0.257	0.993	5.8	0.397
						0.108	3.515	0.343	0.993	5.4	0.389	0.108	3.440	0.328	0.987	11.8	0.416	0.118	3.440	0.257	0.998	2.4	0.303
												0.118	3.518	0.296	0.992	6.3	0.406						

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 82

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.006	2.090	1.120	0.232	152.9	0.358	-0.013	1.797	0.000	0.185	96.7	0.293	-0.013	2.211	0.000	0.258	144.1	0.000	-0.009	2.211	0.973	0.114	94.6	0.267
-0.003	2.302	1.081	0.220	161.2	0.345	-0.009	2.021	0.000	0.164	98.1	0.287	-0.009	2.211	0.000	0.315	161.9	0.353	-0.005	2.276	0.998	0.099	82.6	0.288
0.000	2.269	0.885	0.213	167.9	0.304	-0.005	2.310	0.000	0.147	100.6	0.304	-0.005	2.211	0.000	0.270	175.1	0.304	-0.001	2.580	0.893	0.107	89.1	0.326
0.003	2.837	0.728	0.280	180.1	0.410	-0.001	2.488	1.237	0.129	102.5	0.288	-0.001	2.497	0.902	0.222	174.8	0.288	0.003	2.716	0.974	0.132	95.3	0.418
0.006	2.482	0.754	0.203	166.1	0.332	0.003	2.695	1.152	0.113	90.7	0.355	0.003	2.624	0.775	0.200	169.1	0.274	0.006	2.815	0.795	0.134	95.5	0.449
0.009	2.562	0.824	0.183	159.6	0.343	0.006	2.695	0.917	0.131	105.0	0.298	0.006	2.764	0.713	0.192	157.4	0.304	0.009	2.867	0.791	0.136	96.9	0.426
0.012	2.648	0.857	0.239	163.5	0.411	0.009	2.888	0.956	0.126	97.2	0.350	0.009	2.815	0.719	0.201	159.1	0.325	0.012	2.977	0.706	0.169	105.4	0.475
0.015	2.787	0.784	0.217	153.7	0.463	0.012	2.940	0.797	0.133	100.8	0.340	0.012	2.921	0.685	0.202	150.4	0.353	0.015	3.035	0.646	0.195	115.7	0.501
0.021	2.837	0.745	0.265	168.4	0.471	0.015	2.994	0.773	0.161	99.2	0.426	0.015	2.921	0.649	0.224	158.7	0.353	0.018	3.159	0.628	0.230	125.4	0.521
0.024	2.997	0.740	0.267	172.1	0.482	0.018	3.051	0.742	0.179	111.2	0.417	0.018	2.867	0.600	0.244	156.9	0.378	0.021	3.159	0.559	0.267	134.5	0.521
0.027	2.997	0.738	0.287	166.4	0.514	0.021	3.110	0.784	0.212	117.5	0.442	0.021	3.035	0.624	0.283	163.8	0.417	0.024	3.225	0.539	0.299	141.9	0.514
0.030	3.055	0.683	0.318	172.9	0.507	0.024	3.110	0.717	0.238	123.0	0.458	0.024	3.096	0.587	0.291	166.6	0.408	0.027	3.294	0.542	0.338	153.1	0.507
0.033	3.055	0.663	0.353	179.6	0.507	0.027	3.369	0.746	0.289	144.4	0.479	0.027	3.096	0.545	0.335	180.6	0.408	0.030	3.294	0.479	0.371	150.4	0.543
0.036	3.177	0.651	0.369	186.4	0.494	0.030	3.234	0.705	0.313	141.9	0.477	0.030	3.159	0.556	0.352	181.9	0.417	0.033	3.365	0.502	0.435	163.4	0.518
0.039	3.242	0.651	0.390	189.6	0.521	0.033	3.300	0.608	0.362	161.5	0.434	0.033	3.294	0.557	0.397	193.7	0.435	0.037	3.365	0.433	0.508	175.0	0.481
0.042	3.242	0.664	0.455	199.3	0.504	0.037	3.300	0.638	0.419	164.6	0.452	0.037	3.225	0.499	0.454	196.1	0.426	0.041	3.440	0.421	0.571	173.0	0.511
0.045	3.310	0.618	0.487	196.4	0.532	0.041	3.369	0.589	0.499	175.3	0.426	0.041	3.225	0.514	0.514	209.5	0.408	0.045	3.440	0.414	0.663	159.6	0.492
0.048	3.310	0.571	0.522	191.1	0.532	0.045	3.440	0.565	0.564	171.4	0.453	0.045	3.225	0.491	0.577	198.0	0.408	0.049	3.440	0.359	0.728	142.1	0.511
0.051	3.310	0.563	0.576	187.8	0.514	0.049	3.440	0.525	0.650	169.9	0.416	0.049	3.294	0.486	0.632	187.1	0.435	0.053	3.440	0.359	0.793	122.6	0.511
0.055	3.310	0.586	0.634	171.1	0.567	0.053	3.440	0.548	0.703	159.2	0.416	0.053	3.365	0.463	0.688	181.6	0.426	0.057	3.518	0.315	0.847	105.4	0.464
0.059	3.380	0.672	0.706	152.7	0.579	0.057	3.369	0.428	0.791	132.3	0.372	0.057	3.365	0.455	0.741	168.5	0.407	0.061	3.518	0.342	0.876	89.2	0.445
0.063	3.380	0.558	0.775	137.5	0.543	0.061	3.440	0.469	0.831	109.1	0.398	0.061	3.365	0.404	0.802	142.9	0.407	0.065	3.600	0.310	0.909	72.4	0.435
0.067	3.380	0.559	0.822	116.6	0.489	0.065	3.440	0.437	0.863	95.8	0.380	0.065	3.440	0.439	0.819	137.4	0.416	0.069	3.518	0.303	0.927	58.8	0.426
0.071	3.380	0.534	0.850	101.2	0.489	0.069	3.369	0.404	0.911	68.0	0.372	0.069	3.365	0.463	0.877	98.9	0.426	0.073	3.600	0.310	0.946	45.7	0.435
0.075	3.453	0.446	0.883	84.8	0.444	0.073	3.440	0.388	0.938	55.1	0.326	0.073	3.365	0.419	0.895	83.5	0.444	0.077	3.518	0.262	0.961	34.9	0.406
0.079	3.453	0.463	0.908	73.8	0.426	0.077	3.369	0.308	0.950	42.6	0.319	0.077	3.365	0.377	0.923	66.8	0.407	0.081	3.518	0.268	0.971	23.9	0.426
0.083	3.380	0.461	0.923	59.0	0.435	0.081	3.515	0.444	0.963	31.7	0.333	0.081	3.440	0.364	0.932	59.6	0.435	0.085	3.600	0.336	0.976	20.8	0.416
0.087	3.453	0.396	0.939	52.3	0.389	0.085	3.515	0.421	0.973	24.2	0.333	0.085	3.440	0.378	0.958	37.9	0.397	0.089	3.518	0.257	0.982	16.0	0.387
						0.089	3.515	0.355	0.981	18.6	0.296	0.089	3.518	0.373	0.958	36.3	0.445	0.093	3.518	0.177	0.987	11.7	0.387
						0.099	3.515	0.379	0.991	8.6	0.296	0.093	3.518	0.315	0.969	26.0	0.464	0.103	3.440	0.165	0.994	6.5	0.340
						0.103	3.515	0.389	0.991	7.5	0.370	0.103	3.440	0.371	0.979	17.0	0.454	0.108	3.440	0.257	0.993	5.8	0.397
						0.108	3.515	0.343	0.993	5.4	0.389	0.108	3.440	0.328	0.987	11.8	0.416	0.118	3.440	0.257	0.998	2.4	0.303
												0.118	3.518	0.296	0.992	6.3	0.406						

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 83

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.003	2.302	0.683	0.151	148.9	0.284	0.000	2.215	0.806	0.114	110.2	0.187	0.000	2.382	0.798	0.153	150.0	0.209	0.000	2.382	0.619	0.060	74.7	0.170
0.006	2.444	0.848	0.168	153.9	0.380	0.003	2.378	0.769	0.116	107.8	0.225	0.003	2.580	0.642	0.146	148.4	0.227	0.003	2.538	0.607	0.081	93.6	0.209
0.009	2.562	0.816	0.191	153.9	0.453	0.006	2.378	0.664	0.112	100.6	0.225	0.006	2.716	0.686	0.162	151.4	0.254	0.006	2.669	0.695	0.083	93.1	0.235
0.012	2.604	0.813	0.201	168.5	0.432	0.009	2.608	0.713	0.133	110.9	0.288	0.009	2.716	0.733	0.190	159.2	0.299	0.009	2.716	0.612	0.091	99.6	0.239
0.015	2.739	0.769	0.216	168.1	0.514	0.012	2.788	0.797	0.158	119.0	0.337	0.012	2.764	0.816	0.208	166.6	0.334	0.012	2.815	0.651	0.118	106.9	0.325
0.018	2.837	0.744	0.239	170.2	0.577	0.015	2.837	0.769	0.162	121.2	0.328	0.015	2.921	0.812	0.260	179.1	0.385	0.015	2.867	0.655	0.133	110.8	0.347
0.021	2.942	0.902	0.249	161.5	0.662	0.018	2.994	0.835	0.231	147.5	0.410	0.018	3.035	0.809	0.295	176.1	0.434	0.018	3.035	0.722	0.184	131.5	0.451
0.024	2.997	0.879	0.313	183.2	0.674	0.021	3.110	0.850	0.273	149.9	0.458	0.021	3.096	0.884	0.358	189.1	0.477	0.021	3.096	0.865	0.246	150.6	0.511
0.027	2.997	0.935	0.360	183.6	0.706	0.024	3.171	0.729	0.317	151.6	0.584	0.024	3.096	0.756	0.375	194.1	0.460	0.024	3.294	0.876	0.313	164.6	0.579
0.030	3.055	0.985	0.397	185.6	0.786	0.027	3.234	0.834	0.376	160.8	0.528	0.027	3.225	0.767	0.428	200.8	0.479	0.027	3.294	0.873	0.401	172.5	0.616
0.033	3.115	1.093	0.444	185.1	0.851	0.030	3.300	0.751	0.418	173.3	0.469	0.030	3.225	0.629	0.465	197.6	0.461	0.030	3.440	0.742	0.462	178.6	0.586
0.036	3.242	0.837	0.486	189.0	0.834	0.033	3.369	0.765	0.485	171.6	0.514	0.033	3.225	0.682	0.502	192.6	0.479	0.033	3.440	0.693	0.527	178.6	0.586
0.039	3.310	0.886	0.520	187.2	0.869	0.037	3.440	0.665	0.540	177.1	0.471	0.037	3.294	0.629	0.574	182.4	0.489	0.037	3.440	0.575	0.620	164.9	0.548
0.042	3.310	0.710	0.557	183.4	0.816	0.041	3.440	0.597	0.638	160.8	0.471	0.041	3.365	0.571	0.617	175.1	0.500	0.041	3.440	0.478	0.677	152.8	0.511
0.045	3.310	0.696	0.613	171.4	0.851	0.045	3.440	0.510	0.693	151.9	0.435	0.045	3.365	0.463	0.680	186.2	0.426	0.045	3.440	0.391	0.748	137.2	0.511
0.048	3.310	0.673	0.641	167.3	0.869	0.049	3.440	0.510	0.739	136.2	0.435	0.049	3.365	0.471	0.721	160.6	0.444	0.049	3.518	0.386	0.798	118.4	0.484
0.051	3.380	0.638	0.699	145.8	0.923	0.053	3.515	0.512	0.781	129.1	0.426	0.053	3.365	0.404	0.775	145.9	0.407	0.053	3.518	0.348	0.836	106.4	0.464
0.055	3.310	0.526	0.775	130.5	0.904	0.057	3.515	0.422	0.823	117.6	0.389	0.057	3.365	0.377	0.808	129.9	0.407	0.057	3.518	0.335	0.870	90.3	0.426
0.059	3.380	0.465	0.791	125.4	0.942	0.061	3.440	0.445	0.863	94.6	0.398	0.061	3.365	0.377	0.833	119.9	0.407	0.061	3.440	0.290	0.904	73.1	0.397
0.063	3.453	0.462	0.827	109.6	0.907	0.065	3.440	0.405	0.895	80.4	0.362	0.065	3.365	0.314	0.853	113.3	0.389	0.065	3.440	0.290	0.922	60.6	0.397
0.067	3.380	0.366	0.879	82.1	0.887	0.069	3.440	0.355	0.919	63.5	0.362	0.069	3.365	0.377	0.881	93.2	0.407	0.069	3.518	0.290	0.938	50.7	0.387
0.071	3.380	0.261	0.908	68.9	0.923	0.073	3.440	0.355	0.933	55.0	0.362	0.073	3.294	0.321	0.920	69.7	0.344	0.073	3.440	0.257	0.954	38.2	0.397
0.075	3.380	0.000	0.926	54.6	0.923	0.077	3.440	0.405	0.948	42.5	0.362	0.077	3.365	0.343	0.918	70.6	0.389	0.077	3.440	0.257	0.965	29.5	0.397
0.079	3.453	0.000	0.946	41.8	0.944	0.081	3.440	0.321	0.957	37.2	0.344	0.081	3.365	0.301	0.940	54.3	0.352	0.081	3.440	0.262	0.970	25.8	0.416
0.083	3.453	0.000	0.946	39.1	1.055	0.085	3.440	0.388	0.970	25.7	0.380	0.085	3.365	0.328	0.942	53.5	0.352	0.085	3.518	0.220	0.980	18.5	0.387
0.087	3.380	0.000	0.950	37.2	0.996	0.089	3.440	0.420	0.980	18.4	0.344	0.089	3.440	0.363	0.955	42.6	0.359	0.089	3.440	0.220	0.985	14.4	0.397
						0.093	3.440	0.347	0.983	14.5	0.344	0.093	3.365	0.271	0.968	30.3	0.352	0.093	3.518	0.245	0.986	12.6	0.348
						0.103	3.234	0.350	0.991	7.8	0.323	0.103	3.440	0.386	0.974	23.9	0.416	0.103	3.365	0.170	0.992	7.2	0.370
						0.108	3.515	0.355	0.994	5.3	0.296	0.108	3.440	0.300	0.984	16.4	0.340	0.108	3.518	0.133	0.991	6.8	0.445
												0.118	3.440	0.357	0.991	8.8	0.416	0.118	3.518	0.320	0.997	3.2	0.309

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 9

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.005	2.942	0.817	0.071	140.0	0.173	0.003	2.764	0.502	0.059	107.4	0.122	0.003	2.815	0.543	0.082	148.7	0.124	0.003	2.815	0.527	0.048	92.9	0.124
0.008	2.888	0.695	0.070	130.5	0.155	0.006	2.815	0.631	0.066	107.8	0.155	0.006	2.764	0.533	0.084	147.6	0.122	0.006	2.764	0.545	0.052	94.2	0.137
0.011	2.942	0.683	0.078	135.8	0.189	0.009	2.867	0.594	0.071	113.1	0.158	0.009	2.815	0.539	0.093	152.0	0.139	0.009	3.035	0.702	0.058	96.0	0.150
0.014	2.888	0.563	0.076	127.0	0.170	0.012	2.921	0.555	0.070	109.6	0.161	0.012	2.921	0.510	0.086	136.9	0.145	0.012	2.815	0.535	0.061	97.7	0.155
0.017	2.888	0.687	0.079	127.5	0.186	0.015	2.977	0.566	0.071	107.2	0.164	0.015	2.977	0.463	0.087	134.5	0.164	0.015	3.035	0.490	0.057	90.1	0.167
0.020	2.997	0.539	0.090	139.6	0.209	0.018	3.035	0.572	0.078	109.3	0.184	0.018	3.096	0.493	0.101	149.2	0.187	0.018	2.977	0.463	0.066	99.8	0.164
0.023	2.997	0.704	0.092	134.0	0.225	0.021	3.096	0.479	0.088	116.6	0.221	0.021	3.035	0.466	0.111	157.1	0.184	0.021	3.159	0.485	0.074	106.8	0.191
0.026	2.942	0.591	0.096	145.0	0.221	0.024	3.096	0.490	0.099	119.4	0.238	0.024	3.159	0.522	0.121	165.8	0.191	0.024	3.159	0.459	0.096	125.3	0.208
0.029	3.055	0.571	0.105	148.0	0.245	0.027	3.159	0.530	0.127	137.9	0.261	0.027	3.096	0.523	0.132	169.9	0.204	0.027	3.159	0.519	0.098	116.3	0.243
0.032	3.055	0.641	0.134	163.8	0.327	0.030	3.294	0.596	0.175	164.2	0.344	0.030	3.225	0.552	0.177	196.6	0.284	0.030	3.365	0.619	0.158	156.9	0.333
0.035	3.177	0.639	0.148	173.3	0.357	0.033	3.365	0.694	0.244	189.1	0.426	0.033	3.294	0.782	0.266	226.8	0.380	0.033	3.440	0.840	0.223	188.5	0.435
0.038	3.177	1.051	0.217	186.1	0.562	0.036	3.440	0.917	0.333	200.9	0.567	0.036	3.294	0.844	0.307	234.1	0.416	0.036	3.440	0.862	0.316	209.1	0.511
0.041	3.380	1.213	0.271	211.1	0.688	0.039	3.518	0.912	0.461	217.7	0.619	0.039	3.365	1.044	0.410	240.5	0.518	0.039	3.440	1.037	0.430	217.3	0.624
0.044	3.453	1.322	0.331	213.6	0.851	0.042	3.440	0.925	0.566	200.4	0.624	0.042	3.365	0.854	0.483	243.7	0.518	0.042	3.518	1.003	0.536	216.5	0.658
0.047	3.530	1.471	0.437	232.4	0.964	0.045	3.440	0.889	0.668	183.4	0.643	0.045	3.440	0.884	0.569	237.8	0.511	0.045	3.600	0.871	0.667	191.6	0.653
0.050	3.530	1.423	0.525	219.7	1.097	0.048	3.518	0.706	0.761	158.5	0.542	0.048	3.440	0.884	0.638	219.6	0.511	0.048	3.518	0.835	0.743	166.0	0.561
0.053	3.530	1.562	0.609	193.5	1.286	0.051	3.518	0.571	0.797	134.7	0.522	0.051	3.440	0.695	0.714	183.6	0.492	0.051	3.600	0.602	0.809	133.6	0.515
0.056	3.610	1.288	0.709	165.6	1.199	0.054	3.440	0.482	0.857	103.4	0.454	0.054	3.440	0.600	0.754	153.2	0.492	0.054	3.518	0.438	0.853	105.6	0.464
0.059	3.530	1.208	0.726	162.9	1.172	0.057	3.440	0.393	0.887	85.7	0.435	0.057	3.518	0.536	0.788	151.6	0.445	0.057	3.518	0.402	0.885	89.8	0.445
0.062	3.530	0.862	0.789	133.1	1.078	0.061	3.518	0.358	0.914	66.6	0.406	0.061	3.518	0.449	0.816	129.4	0.426	0.061	3.518	0.268	0.906	72.8	0.426
0.066	3.610	0.604	0.837	105.8	1.102	0.065	3.518	0.321	0.935	54.2	0.387	0.065	3.440	0.431	0.883	93.5	0.397	0.065	3.518	0.290	0.932	53.8	0.387
0.070	3.610	0.406	0.882	80.2	1.025	0.069	3.518	0.296	0.939	50.3	0.406	0.069	3.440	0.371	0.889	90.6	0.378	0.069	3.518	0.225	0.939	48.8	0.406
0.074	3.530	0.000	0.917	60.7	0.927	0.073	3.518	0.262	0.958	34.4	0.406	0.073	3.440	0.371	0.910	73.1	0.378	0.073	3.518	0.296	0.955	36.8	0.406
0.078	3.453	0.000	0.919	58.7	0.907	0.077	3.518	0.251	0.964	31.9	0.367	0.077	3.440	0.371	0.917	67.8	0.378	0.077	3.518	0.220	0.964	31.4	0.387
0.082	3.610	0.000	0.945	43.6	0.870	0.081	3.518	0.262	0.970	25.3	0.406	0.081	3.440	0.371	0.940	51.0	0.378	0.081	3.518	0.262	0.972	24.2	0.406
						0.085	3.440	0.307	0.979	20.0	0.359	0.085	3.365	0.301	0.941	51.0	0.000	0.085	3.440	0.251	0.976	21.5	0.378
						0.089	3.440	0.257	0.980	17.5	0.397	0.089	3.440	0.336	0.958	38.2	0.359	0.089	3.518	0.215	0.979	19.5	0.367
						0.093	3.518	0.257	0.983	14.4	0.387	0.093	3.440	0.355	0.963	35.8	0.340	0.093	3.518	0.220	0.985	13.5	0.387
						0.103	3.440	0.300	0.993	6.8	0.340	0.103	3.365	0.294	0.976	25.6	0.333	0.103	3.518	0.245	0.992	7.7	0.348
						0.108	3.365	0.271	0.994	6.1	0.352	0.108	3.440	0.307	0.979	20.1	0.359	0.113	3.440	0.264	0.996	4.6	0.321
						0.113	3.518	0.284	0.995	5.6	0.367	0.113	3.365	0.287	0.984	16.3	0.315	0.123	3.518	0.225	0.998	2.3	0.406
												0.123	3.365	0.339	0.994	5.9	0.315	0.003	2.815	0.527	0.048	92.9	0.124

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 91

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.030	1.785	0.000	0.049	23.3	0.000	-0.029	1.005	0.000	0.017	6.3	0.309	-0.029	0.000	0.000	0.162	58.8	0.000	-0.029	0.000	0.000	0.020	7.8	7.068
-0.026	0.000	0.000	0.055	20.1	0.955	-0.024	1.433	0.000	0.017	6.3	0.433	-0.024	1.580	0.000	0.190	60.4	0.453	-0.024	1.370	0.000	0.026	10.4	0.369
-0.022	0.000	0.000	0.046	17.0	0.960	-0.019	0.999	0.000	0.033	10.6	0.335	-0.019	4.300	0.000	0.186	68.8	0.000	-0.019	0.000	0.000	0.037	14.1	7.916
-0.018	0.000	0.000	0.068	24.1	1.407	-0.014	1.665	0.000	0.046	16.8	0.485	-0.014	1.800	0.000	0.185	80.4	0.387	-0.014	0.999	0.000	0.049	21.5	0.296
-0.014	0.000	0.000	0.067	25.8	0.796	-0.009	1.433	0.000	0.061	30.2	0.323	-0.009	1.911	0.000	0.180	101.1	0.316	-0.009	1.346	0.000	0.049	38.4	0.177
-0.010	1.727	0.000	0.060	27.5	0.333	-0.004	1.580	0.000	0.073	54.1	0.226	-0.004	2.037	0.000	0.148	123.6	0.225	-0.004	1.779	0.000	0.063	67.2	0.156
-0.006	1.457	0.000	0.081	55.3	0.219	0.001	2.180	0.000	0.086	85.8	0.228	0.001	2.064	0.000	0.146	168.2	0.160	0.001	2.064	0.480	0.058	85.2	0.136
-0.002	1.690	0.000	0.078	69.2	0.199	0.006	2.276	0.704	0.078	99.1	0.175	0.006	2.497	0.728	0.110	158.4	0.137	0.006	2.538	0.626	0.061	97.9	0.140
0.002	1.638	0.000	0.069	80.9	0.149	0.009	2.580	0.674	0.072	104.1	0.170	0.009	2.716	0.686	0.107	158.6	0.149	0.009	2.624	0.585	0.063	97.7	0.159
0.005	1.746	0.000	0.055	80.0	0.131	0.012	2.669	0.727	0.083	115.3	0.176	0.012	2.764	0.584	0.122	164.4	0.167	0.012	2.716	0.543	0.071	99.9	0.164
0.008	2.562	0.627	0.057	103.0	0.151	0.015	2.764	0.639	0.094	121.6	0.198	0.015	2.764	0.498	0.101	146.6	0.137	0.015	2.921	0.573	0.086	113.3	0.209
0.011	2.444	0.639	0.056	101.0	0.144	0.018	2.764	0.580	0.103	125.3	0.228	0.018	2.867	0.524	0.125	162.4	0.173	0.018	2.921	0.487	0.088	109.7	0.209
0.014	2.739	0.606	0.063	107.4	0.176	0.021	2.867	0.701	0.128	132.9	0.284	0.021	3.035	0.566	0.138	166.7	0.200	0.021	3.035	0.575	0.105	113.8	0.267
0.017	2.837	0.440	0.071	120.8	0.167	0.024	3.035	0.765	0.133	130.1	0.334	0.024	3.159	0.564	0.157	176.8	0.226	0.024	3.096	0.530	0.109	118.9	0.272
0.020	2.888	0.569	0.074	120.9	0.201	0.027	3.035	0.568	0.149	144.1	0.350	0.027	3.159	0.519	0.176	185.4	0.243	0.027	3.159	0.561	0.141	132.9	0.313
0.023	2.888	0.552	0.074	113.7	0.201	0.030	3.159	0.580	0.153	138.0	0.382	0.030	3.159	0.549	0.188	184.6	0.261	0.030	3.225	0.521	0.160	142.3	0.337
0.026	2.888	0.496	0.088	128.1	0.217	0.033	3.159	0.489	0.178	154.6	0.417	0.033	3.294	0.552	0.230	210.4	0.272	0.033	3.365	0.509	0.191	156.7	0.370
0.029	2.942	0.550	0.090	122.5	0.236	0.037	3.294	0.588	0.230	175.6	0.453	0.037	3.294	0.595	0.282	223.5	0.308	0.037	0.000	10.710	0.247	162.7	3.915
0.032	3.115	0.491	0.098	123.4	0.284	0.041	3.365	0.454	0.299	185.1	0.537	0.041	3.365	0.662	0.356	238.7	0.370	0.041	3.440	0.498	0.363	201.2	0.492
0.035	3.115	0.586	0.104	132.3	0.284	0.045	3.440	0.521	0.407	207.1	0.624	0.045	3.440	0.687	0.426	242.3	0.435	0.045	3.440	0.506	0.492	219.3	0.511
0.038	3.055	0.649	0.122	142.3	0.311	0.049	3.440	0.485	0.519	214.0	0.605	0.049	3.440	0.605	0.542	245.9	0.454	0.049	3.440	0.478	0.606	212.3	0.511
0.041	3.242	0.702	0.128	140.3	0.382	0.053	3.440	0.571	0.626	200.2	0.605	0.053	3.440	0.740	0.621	224.6	0.492	0.053	3.600	0.557	0.740	175.7	0.534
0.044	3.242	0.712	0.184	168.1	0.434	0.057	3.518	0.596	0.735	168.4	0.580	0.057	3.365	0.638	0.714	200.4	0.444	0.057	3.600	0.493	0.811	139.7	0.515
0.050	3.242	0.698	0.196	169.1	0.486	0.061	3.600	0.521	0.822	131.6	0.515	0.061	3.440	0.609	0.797	162.9	0.416	0.061	3.600	0.419	0.874	103.4	0.475
0.053	3.453	0.905	0.272	193.5	0.611	0.065	3.518	0.438	0.888	94.3	0.464	0.065	3.518	0.623	0.844	135.1	0.426	0.065	3.600	0.356	0.914	73.8	0.475
0.056	3.380	0.939	0.303	206.0	0.616	0.069	3.518	0.430	0.919	67.6	0.445	0.069	3.518	0.517	0.898	94.6	0.406	0.069	3.518	0.303	0.941	53.8	0.426
0.059	3.530	1.182	0.522	216.4	0.851	0.073	3.600	0.411	0.947	46.5	0.455	0.073	3.518	0.483	0.926	69.7	0.387	0.073	3.600	0.240	0.958	37.9	0.455
0.062	3.530	1.072	0.597	205.3	0.870	0.077	3.518	0.321	0.959	36.7	0.387	0.077	3.440	0.448	0.943	52.8	0.378	0.077	3.600	0.190	0.965	30.8	0.435
0.066	3.610	1.247	0.692	171.1	0.948	0.081	3.600	0.329	0.968	28.6	0.396	0.081	3.518	0.414	0.944	50.6	0.406	0.081	3.686	0.241	0.975	24.4	0.446
0.070	3.610	1.170	0.772	153.4	0.890	0.085	3.518	0.342	0.975	20.0	0.445	0.085	3.440	0.405	0.967	31.2	0.397	0.085	3.686	0.142	0.978	18.4	0.486
0.074	3.610	0.837	0.845	112.2	0.832	0.089	3.600	0.329	0.980	18.0	0.396	0.089	3.440	0.300	0.962	37.0	0.340	0.089	3.518	0.169	0.985	14.6	0.348
0.078	3.610	0.730	0.890	88.7	0.774	0.093	3.518	0.300	0.986	13.9	0.329	0.093	3.365	0.321	0.976	25.1	0.333	0.093	3.518	0.127	0.986	12.4	0.406
0.082	3.694	0.573	0.907	71.7	0.831	0.103	3.518	0.307	0.990	9.1	0.348	0.103	3.440	0.321	0.985	14.6	0.397	0.103	3.518	0.215	0.992	7.5	0.367
						0.108	3.518	0.215	0.991	8.3	0.367	0.108	3.440	0.277	0.986	14.1	0.359	0.108	3.518	0.181	0.993	7.1	0.406
												0.118	3.365	0.294	0.993	7.4	0.333						

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 92

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.007	1.690	0.000	0.173	115.7	0.299	-0.013	1.985	0.000	0.181	126.6	0.262	-0.013	1.865	0.000	0.370	141.6	0.379	-0.009	2.064	0.000	0.170	121.1	0.272
-0.004	1.914	0.000	0.156	119.4	0.301	-0.009	2.180	0.000	0.203	141.4	0.292	-0.009	1.959	0.000	0.340	156.6	0.366	-0.005	2.382	0.000	0.181	137.0	0.301
-0.001	1.986	0.000	0.166	146.6	0.266	-0.005	2.382	0.962	0.191	143.9	0.301	-0.005	2.382	0.000	0.288	184.9	0.314	-0.001	2.538	0.892	0.160	137.8	0.279
0.002	2.237	0.792	0.138	148.6	0.240	-0.001	2.580	0.913	0.185	147.1	0.312	-0.001	2.419	1.140	0.256	200.0	0.266	0.003	2.815	0.837	0.174	144.7	0.325
0.005	2.522	0.912	0.145	155.1	0.297	0.003	2.669	0.813	0.205	157.1	0.337	0.003	2.419	0.995	0.215	184.1	0.239	0.006	2.921	0.840	0.191	143.1	0.401
0.008	2.648	1.014	0.129	157.4	0.269	0.006	2.764	0.766	0.197	149.6	0.334	0.006	2.669	0.894	0.184	180.2	0.235	0.009	2.921	0.676	0.182	142.3	0.369
0.011	2.693	0.744	0.133	158.6	0.274	0.009	2.977	0.836	0.227	163.5	0.376	0.009	2.764	0.816	0.182	177.9	0.243	0.012	2.977	0.709	0.208	147.6	0.409
0.014	2.648	0.777	0.129	155.5	0.269	0.012	2.921	0.777	0.224	158.2	0.385	0.012	2.867	0.696	0.189	178.8	0.252	0.015	3.096	0.747	0.242	161.7	0.408
0.017	2.837	0.646	0.136	157.3	0.304	0.015	3.096	0.747	0.253	161.4	0.443	0.015	2.921	0.675	0.196	183.6	0.257	0.018	3.225	0.654	0.260	165.3	0.426
0.020	2.942	0.637	0.154	165.0	0.347	0.018	3.096	0.657	0.276	168.0	0.426	0.018	2.977	0.682	0.209	188.8	0.278	0.021	3.294	0.646	0.304	180.5	0.435
0.023	2.888	0.590	0.141	151.7	0.340	0.021	3.225	0.694	0.308	170.5	0.461	0.021	3.035	0.641	0.219	191.0	0.284	0.024	3.365	0.624	0.334	182.6	0.463
0.026	2.942	0.682	0.180	167.7	0.426	0.024	3.225	0.598	0.326	182.6	0.443	0.024	3.159	0.610	0.246	195.9	0.295	0.027	3.294	0.559	0.341	172.1	0.489
0.029	2.997	0.542	0.195	178.7	0.401	0.027	3.294	0.597	0.377	186.9	0.471	0.027	3.035	0.587	0.249	191.9	0.317	0.030	3.365	0.505	0.382	188.1	0.463
0.032	2.997	0.648	0.209	182.4	0.417	0.030	3.365	0.601	0.388	187.1	0.463	0.030	3.159	0.531	0.279	200.5	0.330	0.033	3.365	0.513	0.435	189.6	0.481
0.035	3.115	0.601	0.232	186.4	0.451	0.033	3.365	0.529	0.451	196.1	0.463	0.033	3.225	0.583	0.355	222.4	0.372	0.037	3.440	0.455	0.502	203.8	0.454
0.038	3.310	0.634	0.293	198.6	0.567	0.037	3.440	0.566	0.515	197.5	0.473	0.037	3.225	0.571	0.400	223.3	0.390	0.041	3.440	0.471	0.567	191.0	0.492
0.041	3.177	0.646	0.292	196.1	0.528	0.041	3.440	0.524	0.576	192.3	0.492	0.041	3.225	0.549	0.439	234.2	0.390	0.045	3.518	0.438	0.637	194.1	0.464
0.044	3.242	0.668	0.322	196.8	0.608	0.045	3.440	0.471	0.653	181.5	0.492	0.045	3.365	0.550	0.535	233.4	0.407	0.049	3.518	0.446	0.693	175.4	0.484
0.047	3.310	0.658	0.389	217.2	0.621	0.049	3.440	0.463	0.719	167.5	0.473	0.049	3.365	0.569	0.612	217.1	0.444	0.053	3.518	0.409	0.779	151.4	0.464
0.050	3.380	0.647	0.434	223.4	0.634	0.053	3.518	0.484	0.796	143.4	0.445	0.053	3.294	0.550	0.679	196.1	0.471	0.057	3.518	0.373	0.828	124.6	0.445
0.054	3.453	0.629	0.496	227.3	0.703	0.057	3.518	0.409	0.840	119.7	0.464	0.057	3.365	0.569	0.745	178.2	0.444	0.061	3.440	0.334	0.867	103.9	0.435
0.058	3.453	0.677	0.621	204.1	0.833	0.061	3.440	0.413	0.892	89.6	0.416	0.061	3.365	0.488	0.816	144.6	0.426	0.065	3.518	0.328	0.904	81.2	0.406
0.062	3.530	0.611	0.693	188.5	0.794	0.065	3.440	0.343	0.922	70.2	0.378	0.065	3.440	0.431	0.859	123.1	0.397	0.069	3.518	0.328	0.933	61.9	0.406
0.066	3.530	0.586	0.772	160.2	0.813	0.069	3.518	0.414	0.944	52.4	0.406	0.069	3.365	0.412	0.897	90.5	0.426	0.073	3.518	0.303	0.947	47.6	0.426
0.070	3.530	0.618	0.800	147.3	0.813	0.073	3.440	0.314	0.960	37.7	0.378	0.073	3.365	0.488	0.921	72.9	0.426	0.077	3.518	0.358	0.957	39.7	0.406
0.074	3.530	0.399	0.874	104.4	0.794	0.077	3.518	0.314	0.966	32.7	0.367	0.077	3.440	0.378	0.944	53.1	0.397	0.081	3.518	0.290	0.969	30.0	0.387
0.078	3.694	0.470	0.892	92.7	0.871	0.081	3.518	0.371	0.976	24.9	0.367	0.081	3.440	0.378	0.958	40.8	0.397	0.085	3.600	0.335	0.979	23.3	0.336
0.082	3.610	0.316	0.918	69.1	0.832	0.085	3.518	0.321	0.977	22.5	0.387	0.085	3.365	0.343	0.964	33.7	0.389	0.089	3.518	0.358	0.982	17.3	0.406
0.086	3.530	0.329	0.924	59.6	0.927	0.089	3.518	0.422	0.982	16.3	0.426	0.089	3.440	0.296	0.972	27.5	0.416	0.093	3.518	0.251	0.987	13.4	0.367
						0.099	3.600	0.283	0.988	10.9	0.356	0.093	3.440	0.296	0.973	24.3	0.416	0.113	3.518	0.263	0.996	4.3	0.309
						0.103	3.518	0.270	0.995	5.6	0.329	0.113	3.365	0.256	0.988	10.6	0.407	0.123	3.870	0.205	0.998	2.0	0.298
						0.108	3.686	0.322	0.995	5.3	0.365	0.123	3.440	0.271	0.994	5.5	0.340						

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 93

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.000	2.148	0.695	0.143	163.5	0.152	0.000	2.457	0.568	0.122	139.1	0.176	0.000	2.211	0.851	0.189	172.1	0.207	0.000	2.457	0.736	0.107	131.0	0.176
0.003	2.375	0.732	0.134	157.3	0.155	0.003	2.624	0.571	0.124	139.9	0.202	0.003	2.382	0.943	0.197	183.2	0.223	0.003	2.624	0.632	0.106	127.3	0.202
0.006	2.375	0.672	0.157	166.1	0.181	0.006	2.764	0.629	0.140	148.4	0.228	0.006	2.497	0.751	0.206	192.4	0.220	0.006	2.716	0.654	0.108	124.1	0.209
0.009	2.375	0.752	0.154	163.8	0.181	0.009	2.815	0.661	0.175	168.4	0.263	0.009	2.624	0.856	0.228	194.0	0.260	0.009	2.815	0.557	0.110	126.6	0.232
0.012	2.529	0.995	0.185	180.6	0.206	0.012	2.921	0.701	0.194	171.6	0.321	0.012	2.815	0.842	0.231	205.1	0.263	0.012	2.867	0.746	0.155	149.9	0.299
0.015	2.570	0.976	0.215	182.9	0.237	0.015	3.035	0.741	0.236	177.1	0.384	0.015	2.867	0.801	0.247	197.6	0.331	0.015	3.035	0.757	0.181	158.2	0.350
0.018	2.657	0.864	0.217	186.8	0.231	0.018	3.096	0.875	0.274	169.4	0.494	0.018	2.867	0.858	0.266	200.6	0.315	0.018	3.159	0.821	0.234	180.3	0.417
0.021	2.703	1.140	0.266	199.1	0.279	0.021	3.225	0.870	0.357	201.0	0.514	0.021	3.035	0.805	0.296	207.6	0.367	0.021	3.294	0.847	0.291	190.3	0.489
0.024	2.751	1.276	0.307	202.8	0.314	0.024	3.365	0.766	0.424	207.1	0.518	0.024	3.159	0.898	0.351	218.4	0.417	0.024	3.294	0.878	0.334	191.0	0.543
0.027	2.851	1.258	0.342	208.6	0.325	0.027	3.365	0.786	0.446	196.8	0.555	0.027	3.159	0.812	0.376	212.3	0.434	0.027	3.440	0.839	0.394	200.2	0.548
0.030	2.903	1.322	0.404	212.4	0.362	0.030	3.440	0.733	0.516	194.1	0.567	0.030	3.225	0.778	0.398	219.3	0.426	0.030	3.440	0.737	0.470	203.2	0.530
0.033	2.958	1.359	0.434	213.6	0.385	0.033	3.518	0.656	0.589	188.6	0.542	0.033	3.225	0.768	0.466	221.9	0.443	0.033	3.518	0.681	0.530	198.3	0.542
0.036	2.958	1.293	0.498	218.4	0.385	0.037	3.440	0.583	0.640	180.2	0.511	0.037	3.294	0.742	0.515	220.4	0.453	0.037	3.518	0.622	0.603	184.4	0.522
0.039	3.015	1.266	0.544	214.7	0.393	0.041	3.518	0.517	0.711	159.4	0.522	0.041	3.365	0.647	0.589	208.1	0.463	0.041	3.518	0.517	0.667	175.4	0.522
0.042	3.015	1.307	0.592	199.1	0.426	0.045	3.518	0.446	0.774	141.6	0.484	0.045	3.365	0.634	0.606	204.8	0.481	0.045	3.600	0.485	0.740	157.6	0.495
0.045	3.074	1.256	0.663	186.8	0.400	0.049	3.600	0.426	0.810	128.2	0.495	0.049	3.365	0.586	0.684	186.0	0.481	0.049	3.600	0.388	0.794	136.1	0.475
0.048	3.074	1.032	0.726	167.3	0.384	0.053	3.518	0.365	0.857	105.9	0.426	0.053	3.440	0.499	0.741	172.3	0.435	0.053	3.600	0.343	0.830	120.9	0.435
0.052	3.136	0.993	0.771	157.6	0.357	0.057	3.518	0.379	0.887	93.5	0.387	0.057	3.440	0.499	0.781	154.5	0.435	0.057	3.518	0.402	0.865	99.3	0.445
0.056	3.136	0.890	0.808	141.4	0.340	0.061	3.440	0.350	0.904	77.2	0.397	0.061	3.440	0.465	0.820	138.5	0.416	0.061	3.518	0.303	0.889	86.8	0.426
0.060	3.136	0.842	0.848	116.6	0.323	0.065	3.518	0.394	0.933	58.5	0.426	0.065	3.440	0.439	0.870	106.7	0.416	0.065	3.600	0.297	0.923	67.6	0.396
0.064	3.136	0.675	0.891	89.6	0.323	0.069	3.518	0.321	0.946	48.8	0.387	0.069	3.440	0.397	0.906	80.4	0.378	0.069	3.600	0.283	0.944	54.0	0.356
0.068	3.200	0.697	0.905	81.2	0.313	0.073	3.518	0.314	0.960	38.7	0.367	0.073	3.440	0.389	0.921	75.1	0.359	0.073	3.600	0.257	0.947	49.4	0.376
0.072	3.136	0.578	0.923	68.1	0.289	0.077	3.518	0.307	0.967	31.9	0.348	0.077	3.440	0.363	0.941	56.1	0.359	0.077	3.440	0.251	0.957	40.1	0.378
0.076	3.136	0.672	0.944	50.7	0.289	0.081	3.518	0.314	0.977	23.8	0.367	0.081	3.440	0.307	0.955	44.0	0.359	0.081	3.518	0.257	0.970	27.4	0.387
						0.085	3.518	0.277	0.982	19.1	0.348	0.085	3.365	0.363	0.962	36.2	0.370	0.085	3.518	0.245	0.976	24.0	0.348
						0.089	3.518	0.314	0.984	16.5	0.367	0.089	3.440	0.355	0.970	29.4	0.340	0.089	3.600	0.290	0.980	20.8	0.376
						0.093	3.518	0.300	0.987	14.2	0.329	0.093	3.365	0.364	0.980	20.4	0.315	0.093	3.600	0.257	0.984	16.0	0.376
						0.103	3.518	0.300	0.992	8.3	0.329	0.103	3.440	0.321	0.986	12.8	0.397	0.103	3.518	0.263	0.992	8.8	0.309
						0.108	3.686	0.297	0.993	6.9	0.385	0.113	3.440	0.347	0.991	9.6	0.321	0.113	3.518	0.292	0.995	5.8	0.309
												0.123	3.365	0.339	0.995	5.5	0.315	0.123	3.518	0.263	0.998	2.4	0.309

$d_{crest}/h=1.3$, $d_c/h=1.2$, Location 10

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.010	2.375	0.595	0.090	159.0	0.116	0.003	2.716	0.520	0.088	146.0	0.134	0.003	2.867	0.727	0.118	202.4	0.142	0.003	2.764	0.498	0.078	133.4	0.137
0.003	2.613	0.669	0.097	164.1	0.128	0.006	2.815	0.507	0.094	151.9	0.139	0.006	2.867	0.582	0.117	186.8	0.142	0.006	2.977	0.554	0.087	144.4	0.147
0.006	2.412	0.564	0.098	156.6	0.118	0.009	2.921	0.522	0.096	148.8	0.161	0.009	2.977	0.655	0.131	200.9	0.147	0.009	2.921	0.539	0.084	132.7	0.161
0.009	2.450	0.491	0.099	155.1	0.120	0.012	2.921	0.510	0.095	146.4	0.145	0.012	3.035	0.547	0.128	197.6	0.150	0.012	3.225	0.539	0.089	136.8	0.177
0.012	2.529	0.563	0.110	167.9	0.124	0.015	2.977	0.480	0.098	143.4	0.164	0.015	2.977	0.583	0.135	202.2	0.164	0.015	3.159	0.491	0.098	148.3	0.174
0.015	2.529	0.460	0.120	169.5	0.137	0.018	3.096	0.493	0.114	159.6	0.187	0.018	3.035	0.554	0.149	203.7	0.184	0.018	3.096	0.438	0.098	137.2	0.187
0.018	2.529	0.574	0.124	174.9	0.137	0.021	3.096	0.468	0.122	157.9	0.204	0.021	3.035	0.537	0.161	210.9	0.184	0.021	3.294	0.549	0.126	158.6	0.235
0.021	2.450	0.498	0.140	183.4	0.146	0.024	3.225	0.588	0.167	190.6	0.248	0.024	3.159	0.595	0.163	211.8	0.191	0.024	3.365	0.564	0.159	182.9	0.278
0.024	2.570	0.720	0.157	189.5	0.167	0.027	3.294	0.584	0.184	194.8	0.290	0.027	3.159	0.583	0.190	221.1	0.226	0.027	3.365	0.640	0.213	206.6	0.333
0.027	2.703	0.874	0.195	216.8	0.191	0.030	3.365	0.704	0.232	204.6	0.370	0.030	3.294	0.754	0.253	241.6	0.308	0.030	3.440	0.785	0.291	236.8	0.416
0.030	2.703	1.213	0.246	242.1	0.220	0.033	3.440	0.699	0.332	244.4	0.416	0.033	3.225	0.754	0.279	241.8	0.355	0.033	3.440	0.917	0.373	236.2	0.530
0.033	2.903	1.444	0.296	259.0	0.252	0.036	3.440	0.862	0.405	235.7	0.511	0.036	3.225	0.824	0.316	246.9	0.372	0.036	3.440	0.872	0.456	238.5	0.567
0.036	2.903	0.813	0.381	274.8	0.299	0.039	3.440	0.882	0.500	230.3	0.586	0.039	3.440	1.629	0.387	254.5	0.492	0.039	3.518	0.902	0.584	230.8	0.600
0.039	3.015	0.789	0.464	274.0	0.360	0.042	3.518	0.845	0.587	217.2	0.580	0.042	3.440	1.046	0.529	260.6	0.530	0.042	3.518	0.821	0.662	206.1	0.580
0.042	3.015	0.773	0.544	261.0	0.393	0.045	3.518	0.749	0.682	184.6	0.580	0.045	3.440	0.971	0.578	248.5	0.511	0.045	3.600	0.653	0.732	177.9	0.515
0.045	3.136	0.766	0.628	242.7	0.408	0.048	3.518	0.597	0.744	164.4	0.522	0.048	3.365	0.865	0.660	220.0	0.500	0.048	3.600	0.592	0.792	154.2	0.495
0.048	3.136	0.757	0.706	208.1	0.426	0.051	3.600	0.540	0.800	139.4	0.495	0.051	3.518	0.815	0.745	186.5	0.484	0.051	3.600	0.404	0.841	127.5	0.435
0.052	3.200	1.587	0.779	180.1	0.382	0.054	3.600	0.468	0.839	119.7	0.455	0.054	3.518	0.687	0.783	162.9	0.503	0.054	3.600	0.411	0.862	106.3	0.455
0.056	3.200	1.196	0.825	144.9	0.365	0.057	3.600	0.468	0.864	104.9	0.455	0.057	3.518	0.604	0.841	127.6	0.484	0.057	3.600	0.374	0.891	88.2	0.435
0.060	3.200	1.013	0.867	110.2	0.365	0.061	3.518	0.335	0.899	79.6	0.426	0.061	3.440	0.524	0.854	118.9	0.435	0.061	3.600	0.359	0.916	71.4	0.396
0.064	3.200	0.915	0.891	96.0	0.330	0.065	3.600	0.359	0.921	67.9	0.396	0.065	3.440	0.457	0.885	98.8	0.397	0.065	3.600	0.297	0.933	59.7	0.396
0.068	3.200	0.803	0.915	77.3	0.330	0.069	3.518	0.343	0.938	56.5	0.367	0.069	3.518	0.415	0.932	68.0	0.348	0.069	3.518	0.262	0.950	43.9	0.406
0.072	3.266	0.731	0.926	66.3	0.319	0.073	3.518	0.307	0.950	45.6	0.348	0.073	3.518	0.371	0.943	53.6	0.367	0.073	3.600	0.290	0.958	38.8	0.376
0.076	3.200	0.754	0.938	56.5	0.313	0.077	3.600	0.283	0.960	37.9	0.356	0.077	3.440	0.320	0.950	50.5	0.321	0.077	3.686	0.250	0.967	33.2	0.344
						0.081	3.518	0.284	0.970	28.5	0.367	0.081	3.518	0.371	0.964	34.2	0.367	0.081	3.600	0.297	0.972	26.7	0.396
						0.085	3.518	0.284	0.975	25.7	0.367	0.085	3.518	0.379	0.968	31.7	0.000	0.085	3.600	0.250	0.982	18.4	0.356
						0.089	3.518	0.251	0.979	19.8	0.367	0.089	3.440	0.336	0.976	23.9	0.359	0.089	3.686	0.263	0.981	18.6	0.385
						0.093	3.518	0.307	0.986	14.7	0.348	0.093	3.440	0.328	0.981	19.8	0.340	0.093	3.600	0.257	0.986	14.1	0.376
						0.103	3.600	0.269	0.992	9.1	0.317	0.103	3.440	0.293	0.989	11.9	0.321	0.103	3.518	0.263	0.992	8.6	0.309
						0.108	3.518	0.389	0.994	5.9	0.348	0.113	3.518	0.277	0.991	9.9	0.348	0.113	3.776	0.305	0.995	5.9	0.311
												0.123	3.600	0.485	0.995	5.3	0.376						

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 8

No Roughness						Configuration A	Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ		y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.006	2.604	1.103	0.041	75.8	0.167		0.003	3.035	0.603	0.029	58.8	0.133	0.003	2.764	0.376	0.006	13.8	0.122
0.009	2.787	0.896	0.036	66.2	0.164		0.006	3.035	0.482	0.028	56.6	0.133	0.006	2.764	0.328	0.007	13.4	0.122
0.012	2.562	1.093	0.048	74.6	0.206		0.009	2.921	0.460	0.034	62.8	0.145	0.009	3.776	0.919	0.006	12.7	0.166
0.015	2.604	0.000	0.036	56.8	0.209		0.012	2.764	0.557	0.038	62.2	0.152	0.012	2.921	0.368	0.008	13.4	0.161
0.018	2.604	0.676	0.038	58.6	0.223		0.015	3.035	0.646	0.040	64.2	0.167	0.015	2.764	0.757	0.008	11.6	0.167
0.021	2.604	0.606	0.046	62.9	0.251		0.018	3.035	0.654	0.042	60.4	0.200	0.018	3.159	0.361	0.009	13.3	0.208
0.024	2.787	1.066	0.052	64.1	0.343		0.021	3.035	0.519	0.038	56.4	0.184	0.021	3.294	0.460	0.011	13.9	0.253
0.027	2.837	0.000	0.101	45.6	1.292		0.024	3.035	0.607	0.049	66.0	0.234	0.024	3.159	0.356	0.014	15.9	0.278
0.030	2.997	1.100	0.081	75.9	0.450		0.027	3.226	0.000	0.053	68.1	0.000	0.027	3.294	0.394	0.023	25.8	0.290
0.033	2.942	1.126	0.082	74.2	0.567		0.030	3.294	0.652	0.072	85.7	0.272	0.030	3.440	0.572	0.031	28.1	0.435
0.036	3.055	1.425	0.079	64.8	0.622		0.033	3.365	0.618	0.107	98.5	0.407	0.033	3.440	0.592	0.062	47.5	0.530
0.039	3.115	1.365	0.159	95.8	0.901		0.036	3.440	0.928	0.149	116.6	0.511	0.036	3.518	0.856	0.130	73.9	0.754
0.042	3.380	1.651	0.200	103.9	1.014		0.039	3.518	0.990	0.228	139.5	0.677	0.039	3.686	0.939	0.236	97.4	0.952
0.045	3.380	0.000	0.228	106.7	1.141		0.042	3.600	1.127	0.335	162.2	0.772	0.042	3.686	1.058	0.377	120.1	1.033
0.048	3.380	0.000	0.343	122.8	1.123		0.045	3.600	1.153	0.443	172.8	0.871	0.045	3.686	1.146	0.561	121.5	1.175
0.052	3.453	0.000	0.433	127.0	1.166		0.048	3.686	1.316	0.580	160.7	0.912	0.048	3.686	0.931	0.683	114.1	0.932
0.056	3.380	1.534	0.512	131.9	0.996		0.051	3.600	1.301	0.638	159.4	0.831	0.051	3.686	0.794	0.781	93.0	0.810
0.060	3.530	1.412	0.594	120.5	0.983		0.054	3.600	1.023	0.746	135.3	0.712	0.054	3.600	0.507	0.864	72.8	0.633
0.064	3.530	1.102	0.697	115.6	0.832		0.057	3.600	0.690	0.836	102.9	0.594	0.057	3.600	0.416	0.895	64.4	0.554
0.068	3.610	0.777	0.773	102.5	0.754		0.061	3.686	0.579	0.886	76.9	0.567	0.061	3.686	0.298	0.927	45.8	0.507
0.072	3.530	0.636	0.814	89.8	0.700		0.065	3.686	0.482	0.916	52.8	0.547	0.065	3.600	0.245	0.948	35.4	0.475
0.076	3.530	0.550	0.825	89.0	0.624		0.069	3.686	0.342	0.936	41.7	0.527	0.069	3.600	0.186	0.963	27.1	0.416
0.080	3.530	0.514	0.863	75.2	0.605		0.073	3.600	0.464	0.955	31.6	0.515	0.073	3.686	0.190	0.966	26.0	0.426
0.084	3.530	0.543	0.877	70.1	0.605		0.077	3.600	0.285	0.958	28.9	0.475	0.077	3.686	0.199	0.972	19.5	0.466
0.086	3.610	0.438	0.887	68.2	0.542		0.081	3.600	0.316	0.965	26.0	0.455	0.081	3.686	0.186	0.982	14.9	0.405
0.090	3.453	0.474	0.895	63.0	0.592		0.085	3.600	0.322	0.969	21.0	0.475	0.085	3.686	0.133	0.982	13.3	0.426
0.094	3.530	0.378	0.926	50.3	0.473		0.089	3.686	0.365	0.973	18.7	0.486	0.089	3.776	0.186	0.985	12.4	0.394
							0.093	3.518	0.332	0.978	14.0	0.522	0.093	3.686	0.133	0.989	7.6	0.426
							0.103	3.600	0.356	0.989	8.9	0.475	0.103	3.776	0.297	0.994	5.3	0.374
							0.118	3.600	0.402	0.989	7.6	0.515						
							0.128	3.440	0.185	0.992	5.8	0.435						

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 81

No Roughness						Configuration A	Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ		y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.053	0.822	0.000	0.048	12.3	0.241		-0.029	1.229	0.000	0.035	9.3	0.413	-0.029	0.000	0.000	0.010	4.7	9.645
-0.049	1.495	0.585	0.036	8.6	0.462		-0.024	0.000	0.000	0.044	12.6	1.650	-0.024	1.075	0.000	0.014	6.9	0.319
-0.045	0.801	0.000	0.030	7.9	0.234		-0.019	2.538	0.000	0.042	13.7	0.643	-0.019	0.000	0.000	0.013	6.1	6.241
-0.041	2.492	0.000	0.044	15.8	0.527		-0.014	4.300	0.000	0.054	19.2	1.161	-0.014	1.039	0.000	0.011	7.3	0.257
-0.037	0.801	0.000	0.032	8.8	0.274		-0.009	1.407	0.000	0.047	32.2	0.187	-0.009	1.114	0.000	0.011	12.5	0.159
-0.033	1.129	0.130	0.027	8.1	0.331		-0.004	2.180	0.000	0.050	54.4	0.181	-0.004	1.629	0.127	0.009	14.4	0.206
-0.029	0.801	0.000	0.027	8.6	0.187		0.001	2.010	0.719	0.047	70.1	0.122	0.001	2.211	0.000	0.005	13.1	0.620
-0.025	3.413	0.000	0.037	13.4	0.000		0.006	2.538	0.683	0.049	82.6	0.140	0.006	2.538	0.617	0.009	14.9	0.586
-0.021	0.801	0.000	0.038	18.0	0.139		0.009	2.669	0.602	0.030	55.5	0.132	0.009	2.764	0.509	0.011	15.2	0.410
-0.017	1.256	0.454	0.034	20.7	0.184		0.012	2.764	0.462	0.043	72.8	0.152	0.012	2.764	0.510	0.013	15.9	0.456
-0.013	1.217	0.436	0.052	45.5	0.106		0.015	2.764	0.596	0.057	82.2	0.182	0.015	2.815	0.000	0.014	17.5	0.882
-0.009	1.869	0.965	0.057	65.1	0.122		0.018	2.815	0.645	0.073	92.9	0.217	0.018	3.035	0.645	0.025	24.5	0.350
-0.005	1.847	0.824	0.082	101.6	0.110		0.021	2.867	0.535	0.055	74.3	0.189	0.021	3.035	0.528	0.028	26.4	0.350
-0.001	2.211	0.638	0.068	109.3	0.108		0.024	3.096	0.605	0.074	81.6	0.272	0.024	3.096	0.553	0.038	29.1	0.426
0.003	2.415	0.625	0.074	123.6	0.144		0.027	3.035	0.635	0.089	85.6	0.334	0.027	3.225	0.489	0.051	35.2	0.585
0.007	2.574	0.504	0.072	123.7	0.112		0.030	3.225	0.635	0.104	99.7	0.355	0.030	3.365	0.571	0.083	51.8	0.500
0.011	2.617	0.596	0.094	137.4	0.128		0.033	3.225	0.552	0.110	95.1	0.355	0.033	3.365	0.489	0.101	58.5	0.555
0.015	2.707	0.515	0.098	145.9	0.117		0.037	3.365	0.672	0.168	121.5	0.426	0.037	3.518	0.519	0.164	82.5	0.600
0.019	2.661	0.674	0.119	146.6	0.159		0.041	3.294	0.620	0.198	123.4	0.471	0.041	3.686	0.533	0.258	106.3	0.689
0.023	2.754	0.621	0.124	151.3	0.164		0.045	3.440	0.675	0.301	158.3	0.548	0.045	3.600	0.534	0.393	130.4	0.712
0.027	2.804	0.796	0.132	139.7	0.198		0.049	3.440	0.651	0.419	175.8	0.548	0.049	3.686	0.513	0.558	135.5	0.729
0.031	3.019	0.496	0.121	141.2	0.213		0.053	3.518	0.623	0.544	186.1	0.580	0.053	3.600	0.546	0.687	129.0	0.653
0.035	2.907	0.574	0.168	169.6	0.221		0.057	3.518	0.674	0.627	177.8	0.580	0.057	3.600	0.422	0.806	103.7	0.574
0.039	3.019	0.660	0.216	191.6	0.245		0.061	3.600	0.602	0.738	160.1	0.515	0.061	3.776	0.350	0.871	81.1	0.540
0.043	3.078	0.673	0.224	183.1	0.334		0.065	3.600	0.757	0.810	123.0	0.574	0.065	3.776	0.331	0.915	63.3	0.477
0.047	3.078	0.695	0.299	214.3	0.284		0.069	3.600	0.668	0.872	93.3	0.495	0.069	3.776	0.338	0.943	42.5	0.498
0.051	3.140	0.769	0.378	235.0	0.323		0.073	3.518	0.536	0.916	64.7	0.445	0.073	3.686	0.199	0.964	28.1	0.466
0.055	3.140	0.750	0.442	248.7	0.323		0.077	3.686	0.516	0.935	56.0	0.426	0.077	3.776	0.236	0.974	21.5	0.415
0.059	3.271	0.848	0.532	245.9	0.550		0.081	3.518	0.379	0.957	38.7	0.387	0.081	3.776	0.186	0.982	16.1	0.394
0.063	3.271	0.917	0.638	227.0	0.426		0.085	3.686	0.561	0.958	34.8	0.466	0.085	3.686	0.246	0.984	12.0	0.466
0.067	3.271	0.877	0.704	201.6	0.426		0.089	3.600	0.477	0.969	24.5	0.475	0.089	3.686	0.194	0.989	9.5	0.446
0.071	3.271	0.798	0.734	183.1	0.461		0.093	3.686	0.451	0.979	17.0	0.466	0.093	3.600	0.173	0.994	5.9	0.356
0.075	3.271	0.736	0.823	140.7	0.461		0.103	3.600	0.426	0.986	10.3	0.495	0.103	3.776	0.275	0.994	5.4	0.415
0.079	3.271	0.778	0.843	121.8	0.461		0.113	3.518	0.544	0.992	5.5	0.522						
0.087	3.340	0.784	0.917	72.2	0.453		0.133	3.365	0.339	0.997	2.5	0.315						

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 82

No Roughness						Configuration A	Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ		y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.005	2.176	0.938	0.179	132.6	0.385		-0.013	1.959	0.000	0.096	71.4	0.000	-0.009	2.211	0.000	0.258	144.1	0.340
-0.003	2.063	0.864	0.153	129.4	0.309		-0.009	2.211	0.000	0.122	91.2	0.292	-0.005	2.211	0.000	0.315	161.9	0.353
0.000	2.407	1.064	0.156	117.3	0.464		-0.005	2.180	0.000	0.137	108.4	0.276	-0.001	2.211	0.000	0.270	175.1	0.304
0.003	2.604	0.904	0.166	143.6	0.405		-0.001	2.382	0.950	0.095	90.1	0.249	0.003	2.497	0.902	0.222	174.8	0.288
0.006	2.562	0.970	0.148	123.5	0.453		0.003	2.538	0.853	0.093	94.2	0.265	0.006	2.624	0.775	0.200	169.1	0.274
0.009	2.693	0.976	0.118	113.4	0.433		0.006	2.669	0.989	0.107	105.4	0.279	0.009	2.764	0.713	0.192	157.4	0.304
0.012	2.739	0.779	0.134	116.0	0.440		0.009	2.921	0.829	0.105	104.5	0.305	0.012	2.815	0.719	0.201	159.1	0.325
0.015	2.739	0.864	0.179	133.6	0.499		0.012	2.977	0.836	0.124	105.6	0.376	0.015	2.921	0.685	0.202	150.4	0.353
0.018	2.837	0.865	0.203	135.9	0.593		0.015	3.035	0.713	0.124	100.1	0.400	0.018	2.921	0.649	0.224	158.7	0.353
0.021	2.888	0.785	0.157	116.7	0.603		0.018	3.096	0.766	0.162	111.3	0.477	0.021	2.867	0.600	0.244	156.9	0.378
0.024	2.942	0.764	0.229	142.5	0.583		0.021	3.096	0.707	0.181	118.8	0.443	0.024	3.035	0.624	0.283	163.8	0.417
0.027	3.055	0.760	0.278	154.3	0.622		0.024	3.159	0.659	0.208	130.6	0.452	0.027	3.096	0.587	0.291	166.6	0.408
0.030	3.115	0.780	0.231	137.4	0.601		0.027	3.159	0.616	0.197	116.1	0.452	0.030	3.096	0.545	0.335	180.6	0.408
0.033	3.115	0.775	0.266	144.0	0.634		0.030	3.225	0.691	0.262	136.0	0.496	0.033	3.159	0.556	0.352	181.9	0.417
0.036	3.242	0.776	0.323	163.2	0.643		0.033	3.365	0.571	0.314	156.3	0.500	0.037	3.294	0.557	0.397	193.7	0.435
0.039	3.242	0.676	0.348	165.4	0.625		0.037	3.365	0.612	0.352	157.6	0.537	0.041	3.225	0.499	0.454	196.1	0.426
0.042	3.310	0.737	0.370	162.9	0.638		0.041	3.294	0.623	0.407	162.4	0.525	0.045	3.225	0.514	0.514	209.5	0.408
0.045	3.310	0.705	0.411	165.7	0.674		0.045	3.440	0.524	0.457	182.7	0.492	0.049	3.225	0.491	0.577	198.0	0.408
0.048	3.310	0.809	0.469	159.4	0.745		0.049	3.440	0.550	0.522	180.5	0.492	0.053	3.294	0.486	0.632	187.1	0.435
0.051	3.453	0.753	0.495	170.4	0.685		0.053	3.518	0.528	0.608	180.4	0.484	0.057	3.365	0.463	0.688	181.6	0.426
0.055	3.530	0.691	0.556	171.6	0.700		0.057	3.518	0.528	0.660	165.1	0.484	0.061	3.365	0.455	0.741	168.5	0.407
0.059	3.380	0.826	0.612	161.4	0.760		0.061	3.518	0.438	0.726	160.1	0.464	0.065	3.365	0.404	0.802	142.9	0.407
0.063	3.453	0.777	0.695	140.0	0.740		0.065	3.518	0.484	0.776	142.4	0.445	0.069	3.440	0.439	0.819	137.4	0.416
0.067	3.530	0.702	0.750	134.6	0.662		0.069	3.600	0.460	0.818	130.5	0.435	0.073	3.365	0.463	0.877	98.9	0.426
0.071	3.453	0.713	0.807	102.4	0.777		0.073	3.518	0.422	0.866	101.3	0.426	0.077	3.365	0.419	0.895	83.5	0.444
0.075	3.530	0.659	0.843	96.6	0.624		0.077	3.518	0.422	0.888	88.9	0.426	0.081	3.365	0.377	0.923	66.8	0.407
0.079	3.530	0.600	0.869	85.7	0.681		0.081	3.518	0.476	0.910	72.9	0.426	0.085	3.440	0.364	0.932	59.6	0.435
0.083	3.530	0.478	0.896	69.8	0.586		0.085	3.600	0.388	0.930	60.1	0.396	0.089	3.440	0.378	0.958	37.9	0.397
0.087	3.530	0.521	0.908	61.8	0.624		0.089	3.518	0.371	0.957	40.0	0.367	0.093	3.518	0.373	0.958	36.3	0.445
							0.093	3.600	0.388	0.958	39.3	0.396	0.103	3.518	0.315	0.969	26.0	0.464
							0.103	3.686	0.496	0.979	19.7	0.385	0.113	3.440	0.371	0.979	17.0	0.454
							0.113	3.776	0.455	0.988	12.3	0.394	0.118	3.440	0.328	0.987	11.8	0.416
							0.123	3.518	0.277	0.995	4.8	0.348	0.123	3.518	0.296	0.992	6.3	0.406

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 83

No Roughness						Configuration A	Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ		y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.004	2.237	0.665	0.091	110.6	0.204		0.000	2.382	0.706	0.093	102.8	0.196	0.000	2.345	0.592	0.032	38.3	0.181
0.007	2.444	0.745	0.094	109.6	0.249		0.003	2.538	0.705	0.118	113.1	0.265	0.003	2.538	0.738	0.035	40.1	0.209
0.010	2.444	0.662	0.102	115.4	0.249		0.006	2.669	0.700	0.109	109.4	0.264	0.006	2.538	0.749	0.030	33.0	0.223
0.013	2.604	0.630	0.105	116.7	0.265		0.009	2.764	0.633	0.107	110.5	0.258	0.009	2.764	0.729	0.047	44.7	0.304
0.016	2.693	0.755	0.119	116.3	0.361		0.012	2.815	0.829	0.157	117.3	0.418	0.012	2.921	0.739	0.050	45.6	0.353
0.019	2.787	0.928	0.141	134.3	0.373		0.015	2.921	0.832	0.155	115.7	0.417	0.015	2.921	0.704	0.063	54.4	0.385
0.022	2.942	1.096	0.179	139.2	0.520		0.018	2.977	0.793	0.177	124.1	0.426	0.018	3.035	0.798	0.088	61.9	0.517
0.025	2.942	1.055	0.216	151.4	0.567		0.021	2.977	0.879	0.215	131.0	0.507	0.021	3.159	0.937	0.128	72.2	0.660
0.028	3.177	1.010	0.218	138.9	0.664		0.024	3.225	0.901	0.274	147.8	0.532	0.024	3.294	0.846	0.158	87.3	0.652
0.031	3.177	1.150	0.306	173.9	0.664		0.027	3.225	0.919	0.312	151.0	0.603	0.027	3.294	0.928	0.215	97.6	0.724
0.034	3.242	1.303	0.318	162.7	0.764		0.030	3.294	0.819	0.356	148.4	0.598	0.030	3.440	0.993	0.284	111.3	0.756
0.037	3.242	1.130	0.405	173.2	0.747		0.033	3.365	0.645	0.431	160.9	0.555	0.033	3.518	0.916	0.347	128.3	0.774
0.040	3.310	1.099	0.413	170.5	0.780		0.037	3.365	0.595	0.478	165.7	0.555	0.037	3.600	0.770	0.439	135.4	0.712
0.043	3.453	1.068	0.464	170.9	0.796		0.041	3.440	0.659	0.527	164.5	0.567	0.041	3.686	0.628	0.554	136.4	0.689
0.046	3.453	1.105	0.507	170.9	0.777		0.045	3.440	0.558	0.596	161.4	0.511	0.045	3.600	0.583	0.615	129.4	0.673
0.049	3.380	0.945	0.557	165.0	0.760		0.049	3.518	0.482	0.642	166.6	0.503	0.049	3.686	0.397	0.709	123.8	0.588
0.052	3.530	0.972	0.588	163.6	0.813		0.053	3.518	0.474	0.690	156.6	0.484	0.053	3.686	0.419	0.785	109.5	0.547
0.055	3.530	0.752	0.654	155.9	0.719		0.057	3.518	0.446	0.752	139.2	0.484	0.057	3.600	0.291	0.835	92.7	0.495
0.059	3.610	0.679	0.717	137.1	0.716		0.061	3.518	0.409	0.775	132.6	0.464	0.061	3.686	0.292	0.888	68.0	0.486
0.063	3.530	0.608	0.759	128.5	0.700		0.065	3.518	0.402	0.815	120.0	0.445	0.065	3.776	0.325	0.901	66.8	0.457
0.067	3.610	0.643	0.806	108.8	0.696		0.069	3.518	0.358	0.856	102.4	0.406	0.069	3.686	0.275	0.919	55.8	0.426
0.071	3.530	0.586	0.827	103.7	0.643		0.073	3.518	0.394	0.873	94.9	0.426	0.073	3.776	0.282	0.943	41.9	0.436
0.075	3.610	0.577	0.865	82.4	0.677		0.077	3.600	0.367	0.890	85.0	0.416	0.077	3.776	0.275	0.957	33.8	0.415
0.079	3.610	0.471	0.897	69.3	0.638		0.081	3.440	0.371	0.921	63.7	0.378	0.081	3.776	0.241	0.967	26.4	0.436
0.083	3.610	0.444	0.924	54.9	0.561		0.085	3.518	0.414	0.927	58.8	0.406	0.085	3.776	0.269	0.973	21.9	0.394
0.087	3.530	0.433	0.924	50.4	0.643		0.089	3.518	0.343	0.939	54.5	0.367	0.089	3.686	0.250	0.984	15.6	0.344
0.091	3.610	0.418	0.965	26.4	0.696		0.093	3.600	0.371	0.955	39.4	0.356	0.093	3.686	0.225	0.987	11.6	0.385
							0.103	3.518	0.458	0.969	28.4	0.387	0.103	3.776	0.275	0.992	6.6	0.415
							0.108	3.600	0.443	0.983	15.6	0.396	0.113	3.776	0.290	0.996	3.5	0.353
							0.123	3.600	0.380	0.988	11.6	0.376	0.123	3.776	0.282	0.997	2.5	0.332
							0.133	3.365	0.412	0.995	4.9	0.315						

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 9

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.005	2.997	0.887	0.051	102.6	0.145	0.003	2.764	0.514	0.039	74.2	0.137	0.003	2.764	0.439	0.048	96.3	0.122	0.003	2.764	0.533	0.025	50.4	0.122
0.008	2.787	0.670	0.057	106.4	0.149	0.006	2.764	0.541	0.042	73.8	0.152	0.006	2.669	0.647	0.057	103.5	0.132	0.006	2.624	0.636	0.024	44.9	0.130
0.011	2.888	0.790	0.059	104.1	0.155	0.009	3.035	0.642	0.042	69.5	0.184	0.009	2.867	0.500	0.060	102.9	0.142	0.009	3.035	0.525	0.023	40.3	0.167
0.014	2.787	0.532	0.060	107.7	0.149	0.012	2.921	0.517	0.044	72.0	0.177	0.012	2.867	0.549	0.062	103.8	0.142	0.012	2.921	0.500	0.022	36.2	0.177
0.017	2.888	0.687	0.064	102.8	0.186	0.015	3.035	0.513	0.045	69.3	0.200	0.015	2.921	0.555	0.065	103.6	0.161	0.015	3.035	0.572	0.026	43.2	0.184
0.020	2.942	0.590	0.070	111.9	0.173	0.018	3.225	0.583	0.041	61.7	0.213	0.018	3.035	0.525	0.062	96.3	0.167	0.018	3.096	0.431	0.030	46.8	0.204
0.023	2.997	0.511	0.070	109.3	0.193	0.021	3.035	0.470	0.051	71.2	0.217	0.021	3.096	0.523	0.069	97.7	0.204	0.021	3.159	0.390	0.033	52.1	0.191
0.026	2.942	0.613	0.086	126.0	0.205	0.024	3.225	0.510	0.049	62.8	0.248	0.024	3.096	0.493	0.061	91.8	0.187	0.024	3.225	0.430	0.035	45.4	0.248
0.029	3.055	0.746	0.088	120.2	0.245	0.027	3.225	0.522	0.067	75.2	0.301	0.027	3.225	0.538	0.084	111.5	0.230	0.027	3.294	0.481	0.046	57.2	0.290
0.032	3.115	0.814	0.112	133.9	0.300	0.030	3.518	0.566	0.112	109.3	0.406	0.030	3.225	0.521	0.087	111.3	0.266	0.030	3.365	0.587	0.063	68.1	0.352
0.035	3.115	0.786	0.139	152.9	0.367	0.033	3.365	0.708	0.140	108.7	0.537	0.033	3.365	0.704	0.146	139.8	0.370	0.033	3.518	0.561	0.097	89.3	0.445
0.038	3.242	0.993	0.171	166.6	0.417	0.036	3.518	0.898	0.226	137.1	0.735	0.036	3.365	0.789	0.171	150.9	0.407	0.036	3.600	0.737	0.153	116.1	0.534
0.041	3.380	1.367	0.230	183.9	0.579	0.039	3.600	1.043	0.336	160.8	0.851	0.039	3.365	0.929	0.255	172.2	0.537	0.039	3.686	0.983	0.250	141.9	0.750
0.044	3.453	1.546	0.318	196.4	0.796	0.042	3.686	0.896	0.442	163.9	0.851	0.042	3.518	0.948	0.366	194.0	0.600	0.042	3.686	0.888	0.355	161.5	0.831
0.047	3.453	1.769	0.408	218.5	0.888	0.045	3.600	0.911	0.552	164.1	0.792	0.045	3.600	1.096	0.427	190.7	0.673	0.045	3.686	1.060	0.464	168.2	0.912
0.050	3.530	1.429	0.482	203.7	0.889	0.048	3.686	0.749	0.649	145.8	0.770	0.048	3.600	1.085	0.496	196.1	0.653	0.048	3.776	0.852	0.587	160.9	0.851
0.053	3.610	1.561	0.594	190.0	1.006	0.051	3.686	0.612	0.732	134.1	0.648	0.051	3.518	0.925	0.597	190.6	0.600	0.051	3.686	0.831	0.704	135.3	0.831
0.056	3.610	1.416	0.635	184.6	0.909	0.054	3.686	0.528	0.803	113.3	0.588	0.054	3.518	0.845	0.651	174.6	0.580	0.054	3.870	0.587	0.759	121.3	0.702
0.059	3.610	1.102	0.725	149.6	0.851	0.057	3.686	0.412	0.842	96.0	0.527	0.057	0.000	0.000	0.692	154.8	0.000	0.057	3.776	0.413	0.819	104.3	0.623
0.062	3.610	1.242	0.762	139.0	0.890	0.061	3.686	0.358	0.875	83.7	0.466	0.061	3.600	0.566	0.764	135.0	0.495	0.061	3.776	0.276	0.869	81.6	0.581
0.066	3.610	1.049	0.810	118.0	0.793	0.065	3.776	0.331	0.898	68.3	0.477	0.065	3.518	0.466	0.799	120.8	0.464	0.065	3.776	0.262	0.897	67.9	0.519
0.070	3.694	0.751	0.855	94.3	0.732	0.069	3.686	0.281	0.929	50.0	0.446	0.069	3.600	0.396	0.839	110.2	0.416	0.069	3.776	0.208	0.926	53.0	0.498
0.074	3.694	0.605	0.886	76.7	0.732	0.073	3.600	0.240	0.942	40.4	0.455	0.073	3.600	0.404	0.856	97.6	0.435	0.073	3.776	0.203	0.946	39.4	0.477
0.078	3.610	0.584	0.901	71.1	0.696	0.077	3.776	0.282	0.950	38.0	0.436	0.077	3.600	0.396	0.878	89.0	0.416	0.077	3.776	0.212	0.954	31.5	0.519
						0.081	3.686	0.304	0.959	32.5	0.405	0.081	3.518	0.358	0.890	79.2	0.406	0.081	3.776	0.203	0.965	28.1	0.477
						0.085	3.686	0.235	0.974	20.1	0.426	0.085	3.600	0.359	0.916	65.6	0.000	0.085	3.776	0.142	0.968	25.3	0.477
						0.089	3.686	0.283	0.982	16.9	0.344	0.089	3.600	0.314	0.935	57.9	0.356	0.089	3.776	0.139	0.979	16.9	0.457
						0.093	3.600	0.250	0.986	13.3	0.356	0.093	3.518	0.379	0.954	39.3	0.387	0.093	3.776	0.142	0.981	16.5	0.477
						0.103	3.686	0.269	0.988	9.6	0.405	0.103	3.600	0.257	0.959	37.8	0.376	0.103	3.600	0.127	0.993	6.9	0.396
												0.113	3.600	0.329	0.974	22.6	0.396	0.113	3.776	0.195	0.995	5.6	0.436
																		0.123	3.776	0.000	0.996	3.0	0.498

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 91

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.030	0.000	0.000	0.084	28.1	0.000	-0.029	1.025	0.000	0.019	8.1	0.237	-0.029	0.000	0.000	0.119	55.8	0.000	-0.029	0.000	0.000	0.012	5.6	9.465
-0.026	1.194	0.823	0.078	32.5	0.218	-0.024	1.005	0.000	0.017	5.3	0.359	-0.024	0.000	0.000	0.164	64.9	0.000	-0.024	4.300	0.000	0.014	6.8	2.221
-0.022	1.805	0.851	0.063	14.0	0.000	-0.019	0.000	0.000	0.021	7.1	1.669	-0.019	1.911	0.000	0.127	57.5	0.411	-0.019	0.000	0.000	0.023	10.6	1.779
-0.018	1.052	0.799	0.072	30.6	0.293	-0.014	1.701	0.000	0.021	9.7	0.393	-0.014	2.457	0.000	0.161	76.3	0.488	-0.014	1.548	0.000	0.026	14.4	0.299
-0.014	0.999	0.824	0.061	29.0	0.214	-0.009	1.613	0.241	0.023	13.6	0.248	-0.009	1.800	0.000	0.127	79.3	0.288	-0.009	1.548	0.000	0.025	21.1	0.180
-0.010	1.499	0.800	0.062	33.2	0.289	-0.004	1.279	0.000	0.027	24.6	0.141	-0.004	1.911	0.000	0.120	105.1	0.211	-0.004	1.935	0.000	0.026	35.9	0.140
-0.006	1.431	0.825	0.070	48.5	0.207	0.001	2.180	0.000	0.034	42.8	0.168	0.001	2.121	0.000	0.100	127.7	0.165	0.001	1.720	0.461	0.025	42.2	0.104
-0.002	1.573	0.837	0.060	61.7	0.152	0.006	2.276	0.876	0.037	59.3	0.150	0.006	2.669	0.910	0.079	121.7	0.161	0.006	2.345	0.566	0.026	48.2	0.129
0.002	1.986	0.838	0.063	86.8	0.149	0.009	2.538	0.740	0.030	49.4	0.140	0.009	2.815	0.663	0.067	113.3	0.155	0.009	2.764	0.510	0.028	48.8	0.152
0.005	2.206	0.817	0.063	105.8	0.130	0.012	2.764	0.600	0.035	59.3	0.167	0.012	2.764	0.541	0.070	112.8	0.152	0.012	2.815	0.542	0.034	53.8	0.186
0.008	2.407	0.687	0.056	106.6	0.116	0.015	2.764	0.569	0.033	54.0	0.167	0.015	2.921	0.589	0.070	109.4	0.161	0.015	2.921	0.629	0.036	54.3	0.193
0.011	2.787	0.547	0.055	102.2	0.149	0.018	2.764	0.725	0.039	55.6	0.274	0.018	2.977	0.590	0.084	114.1	0.196	0.018	2.977	0.489	0.045	59.9	0.229
0.014	2.787	0.547	0.054	97.6	0.149	0.021	2.921	0.536	0.049	67.6	0.257	0.021	3.035	0.531	0.085	116.6	0.200	0.021	3.035	0.519	0.052	61.3	0.267
0.017	2.888	0.465	0.069	114.9	0.170	0.024	3.096	0.627	0.058	69.3	0.306	0.024	2.921	0.511	0.082	107.6	0.193	0.024	3.159	0.531	0.055	59.0	0.330
0.020	3.055	0.619	0.077	114.6	0.213	0.027	3.035	0.635	0.058	61.8	0.334	0.027	3.225	0.591	0.123	128.8	0.284	0.027	3.159	0.499	0.066	64.4	0.347
0.023	2.787	0.496	0.076	118.2	0.164	0.030	3.294	0.565	0.073	69.3	0.453	0.030	3.365	0.617	0.135	137.4	0.296	0.030	3.365	0.486	0.085	78.8	0.370
0.026	3.055	0.578	0.094	132.0	0.229	0.033	3.225	0.554	0.074	65.6	0.443	0.033	3.365	0.608	0.148	141.2	0.315	0.033	3.440	0.490	0.108	89.6	0.416
0.029	2.942	0.461	0.089	124.4	0.205	0.037	3.518	0.595	0.151	103.0	0.594	0.037	3.440	0.621	0.223	168.0	0.397	0.037	3.518	0.476	0.156	122.8	0.426
0.032	3.115	0.648	0.102	123.9	0.267	0.041	3.600	0.493	0.182	122.9	0.648	0.041	3.518	0.646	0.248	179.9	0.426	0.041	3.600	0.464	0.211	136.7	0.515
0.035	3.115	0.659	0.107	125.3	0.284	0.045	3.686	0.452	0.247	143.8	0.729	0.045	3.518	0.646	0.325	201.4	0.426	0.045	3.686	0.505	0.334	166.6	0.608
0.041	3.242	0.661	0.155	156.6	0.347	0.053	3.686	0.423	0.464	168.8	0.729	0.053	3.600	0.747	0.546	205.4	0.554	0.053	3.870	0.579	0.590	175.3	0.681
0.044	3.380	0.773	0.190	159.6	0.471	0.057	3.686	0.476	0.599	170.4	0.685	0.057	3.686	0.704	0.634	194.9	0.547	0.057	3.776	0.491	0.708	155.0	0.643
0.047	3.453	0.865	0.241	179.0	0.537	0.061	3.776	0.505	0.717	145.6	0.560	0.061	3.600	0.627	0.699	176.4	0.515	0.061	3.776	0.400	0.820	115.9	0.581
0.050	3.380	0.951	0.275	199.7	0.525	0.065	3.776	0.462	0.824	112.1	0.540	0.065	3.600	0.637	0.777	148.1	0.534	0.065	3.776	0.350	0.884	84.0	0.540
0.053	3.453	1.004	0.345	210.2	0.592	0.069	3.776	0.387	0.884	81.8	0.519	0.069	3.686	0.507	0.842	115.1	0.466	0.069	3.870	0.313	0.917	63.4	0.532
0.056	3.530	1.091	0.444	216.2	0.681	0.073	3.776	0.344	0.912	64.5	0.457	0.073	3.686	0.453	0.883	95.3	0.405	0.073	3.776	0.305	0.938	48.0	0.519
0.059	3.530	1.212	0.493	220.8	0.700	0.077	3.776	0.288	0.949	43.1	0.436	0.077	3.600	0.432	0.899	79.4	0.435	0.077	3.776	0.203	0.962	31.0	0.477
0.062	3.530	1.096	0.611	202.4	0.775	0.081	3.776	0.282	0.963	31.9	0.436	0.081	3.600	0.374	0.921	62.9	0.435	0.081	3.870	0.000	0.965	27.2	0.532
0.066	3.610	1.238	0.686	181.6	0.793	0.085	3.776	0.195	0.962	31.5	0.457	0.085	3.686	0.351	0.928	57.7	0.446	0.085	3.776	0.142	0.973	21.7	0.477
0.070	3.694	0.751	0.855	94.3	0.732	0.089	3.776	0.246	0.978	18.0	0.477	0.089	3.686	0.397	0.936	51.5	0.405	0.089	3.870	0.000	0.983	13.9	0.489
0.074	3.694	0.605	0.886	76.7	0.732	0.093	3.776	0.203	0.978	17.8	0.416	0.093	3.600	0.359	0.950	44.1	0.396	0.093	3.776	0.000	0.989	10.6	0.415
0.078	3.610	0.584	0.901	71.1	0.696	0.103	3.600	0.230	0.989	8.7	0.507	0.103	3.600	0.367	0.965	31.3	0.416	0.103	3.776	0.133	0.991	7.8	0.415
						0.108	3.686	0.145	0.989	8.1	0.416	0.108	3.518	0.335	0.970	25.5	0.426	0.113	3.870	0.133	0.995	4.9	0.404
						0.113	3.600	0.268	0.993	5.9	0.000	0.113	3.686	0.405	0.973	22.8	0.426						
												0.143	3.600	0.283	0.992	8.2	0.356						

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 92

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.012	2.357	1.216	0.127	119.3	0.226	-0.013	1.911	0.000	0.114	82.0	0.294	-0.013	1.935	0.000	0.300	151.4	0.363	-0.009	2.121	0.000	0.098	80.4	0.258
-0.009	2.251	1.107	0.131	127.2	0.229	-0.009	2.180	0.000	0.118	93.4	0.312	-0.009	2.180	0.000	0.278	142.6	0.433	-0.005	2.382	0.000	0.091	79.4	0.303
-0.006	2.357	0.999	0.130	130.9	0.226	-0.005	2.345	0.847	0.091	86.0	0.271	-0.005	2.243	0.000	0.265	163.9	0.371	-0.001	2.538	0.902	0.082	76.4	0.293
-0.003	2.693	1.148	0.130	144.3	0.228	-0.001	2.538	1.011	0.085	81.4	0.321	-0.001	2.345	0.000	0.216	163.5	0.298	0.003	2.764	0.924	0.086	83.3	0.304
0.000	2.646	1.010	0.142	143.1	0.269	0.003	2.764	0.783	0.088	82.7	0.334	0.003	2.538	0.000	0.182	158.1	0.295	0.006	2.867	0.869	0.093	90.1	0.331
0.003	2.600	0.881	0.147	140.7	0.279	0.006	2.921	0.844	0.091	86.1	0.353	0.006	2.669	0.958	0.138	153.9	0.220	0.009	2.921	0.876	0.095	81.1	0.401
0.006	2.600	1.144	0.170	146.5	0.323	0.009	3.035	0.885	0.105	84.1	0.467	0.009	2.815	0.923	0.125	138.4	0.263	0.012	3.035	0.819	0.108	83.1	0.451
0.009	2.693	1.053	0.168	144.7	0.350	0.012	3.096	0.776	0.136	101.9	0.460	0.012	2.867	0.857	0.117	127.2	0.268	0.015	3.159	0.742	0.124	90.1	0.452
0.012	2.742	1.050	0.187	148.1	0.371	0.015	3.159	0.759	0.167	109.9	0.521	0.015	3.096	0.776	0.138	137.3	0.306	0.018	3.096	0.681	0.149	93.6	0.511
0.015	3.078	0.896	0.156	143.1	0.330	0.018	3.225	0.681	0.170	100.1	0.567	0.018	3.035	0.695	0.109	119.1	0.284	0.021	3.294	0.661	0.181	111.6	0.507
0.018	3.078	0.883	0.181	148.0	0.365	0.021	3.294	0.710	0.187	112.3	0.561	0.021	3.159	0.670	0.153	137.2	0.330	0.024	3.365	0.657	0.201	125.3	0.481
0.021	3.209	0.786	0.151	138.9	0.326	0.024	3.365	0.611	0.211	118.2	0.592	0.024	3.225	0.706	0.168	136.9	0.372	0.027	3.518	0.613	0.242	136.1	0.503
0.024	3.279	0.831	0.197	151.0	0.407	0.027	3.440	0.617	0.252	134.9	0.586	0.027	3.225	0.634	0.173	131.9	0.390	0.030	3.365	0.587	0.241	121.1	0.537
0.027	3.279	0.883	0.211	152.9	0.426	0.030	3.518	0.541	0.289	149.4	0.580	0.030	3.294	0.679	0.199	140.0	0.416	0.033	3.518	0.552	0.287	140.9	0.542
0.030	3.209	0.968	0.297	177.4	0.453	0.033	3.518	0.502	0.311	140.7	0.638	0.033	3.225	0.580	0.215	138.9	0.408	0.037	3.518	0.497	0.339	152.5	0.542
0.033	3.279	0.927	0.303	176.7	0.463	0.037	3.600	0.468	0.391	164.2	0.614	0.037	3.365	0.605	0.251	164.4	0.426	0.041	3.686	0.444	0.441	178.0	0.527
0.036	3.142	0.870	0.335	174.4	0.479	0.041	3.686	0.505	0.441	168.3	0.608	0.041	3.518	0.579	0.345	176.0	0.484	0.045	3.600	0.441	0.492	169.2	0.534
0.039	3.591	0.772	0.307	189.7	0.446	0.045	3.686	0.445	0.530	167.4	0.628	0.045	3.518	0.570	0.403	195.8	0.464	0.049	3.776	0.462	0.604	168.8	0.560
0.042	3.591	0.819	0.362	194.1	0.486	0.049	3.686	0.432	0.633	162.9	0.588	0.049	3.440	0.558	0.444	189.1	0.511	0.053	3.686	0.384	0.673	160.3	0.547
0.046	3.507	0.891	0.458	190.4	0.554	0.053	3.686	0.403	0.708	141.8	0.608	0.053	3.518	0.571	0.526	191.1	0.522	0.057	3.776	0.415	0.756	141.8	0.519
0.050	3.507	0.844	0.513	194.9	0.554	0.057	3.686	0.384	0.785	124.4	0.547	0.057	3.518	0.605	0.616	181.9	0.542	0.061	3.776	0.387	0.812	120.2	0.540
0.054	3.770	0.909	0.584	196.7	0.553	0.061	3.776	0.380	0.847	107.3	0.519	0.061	3.600	0.584	0.696	170.2	0.534	0.065	3.776	0.331	0.863	100.3	0.477
0.058	3.679	0.773	0.643	175.9	0.560	0.065	3.776	0.374	0.887	83.7	0.498	0.065	3.600	0.493	0.772	136.1	0.515	0.069	3.686	0.275	0.908	74.8	0.426
0.062	3.679	0.784	0.720	152.6	0.581	0.069	3.776	0.318	0.918	66.1	0.436	0.069	3.518	0.474	0.829	114.1	0.484	0.073	3.776	0.325	0.929	57.7	0.457
0.066	3.591	0.825	0.767	124.5	0.588	0.073	3.776	0.288	0.939	49.5	0.457	0.073	3.600	0.404	0.872	97.4	0.435	0.077	3.870	0.319	0.945	48.4	0.426
0.070	3.770	0.707	0.827	113.5	0.511	0.077	3.776	0.345	0.953	40.7	0.415	0.077	3.600	0.396	0.898	83.7	0.416	0.081	3.776	0.288	0.959	35.8	0.457
0.074	3.679	0.638	0.863	96.7	0.498	0.081	3.776	0.282	0.968	29.9	0.436	0.081	3.600	0.374	0.915	67.1	0.435	0.085	3.870	0.276	0.971	26.4	0.404
0.078	3.679	0.585	0.882	80.7	0.498	0.085	3.776	0.246	0.971	23.3	0.457	0.085	3.600	0.404	0.934	53.7	0.435	0.089	3.776	0.236	0.977	21.3	0.415
0.082	3.770	0.627	0.910	63.2	0.511	0.089	3.776	0.275	0.982	17.3	0.415	0.089	3.600	0.310	0.942	47.2	0.435	0.093	3.870	0.190	0.983	16.2	0.404
0.086	3.679	0.602	0.925	56.0	0.477	0.093	3.686	0.235	0.985	13.5	0.426	0.093	3.600	0.303	0.954	37.7	0.416	0.103	3.776	0.190	0.989	9.3	0.415
						0.103	3.686	0.181	0.994	5.7	0.385	0.103	3.600	0.225	0.965	30.8	0.396	0.123	3.776	0.337	0.997	3.2	0.394
						0.108	3.686	0.199	0.992	5.8	0.466	0.123	3.518	0.209	0.984	16.4	0.348						
												0.133	3.600	0.310	0.987	10.8	0.435						
												0.143	3.440	0.336	0.994	5.9	0.359						

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 93

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.002	2.433	0.857	0.103	117.8	0.192	0.000	2.538	0.630	0.064	81.0	0.181	0.000	2.457	1.091	0.165	152.4	0.257	0.000	2.457	0.680	0.063	80.8	0.176
0.000	2.394	0.860	0.081	101.3	0.176	0.003	2.580	0.476	0.071	88.7	0.184	0.003	2.580	0.812	0.171	163.6	0.255	0.003	2.538	0.567	0.066	83.5	0.195
0.003	2.514	0.835	0.114	128.9	0.227	0.006	2.669	0.544	0.071	82.2	0.220	0.006	2.580	0.928	0.182	154.6	0.312	0.006	2.764	0.634	0.065	77.8	0.213
0.006	2.793	0.841	0.122	132.8	0.268	0.009	2.764	0.481	0.077	86.2	0.228	0.009	2.669	0.877	0.186	160.7	0.293	0.009	2.815	0.526	0.080	87.9	0.263
0.009	2.793	0.802	0.123	124.2	0.284	0.012	2.977	0.639	0.101	96.5	0.295	0.012	2.764	0.848	0.192	155.4	0.334	0.012	2.921	0.609	0.093	97.9	0.289
0.012	2.900	0.775	0.125	124.7	0.311	0.015	3.035	0.655	0.122	102.9	0.367	0.015	2.867	0.863	0.195	156.0	0.347	0.015	3.035	0.693	0.107	98.8	0.367
0.015	2.793	0.886	0.148	132.9	0.331	0.018	3.159	0.650	0.154	119.8	0.434	0.018	2.921	0.695	0.207	160.8	0.369	0.018	3.225	0.778	0.138	109.9	0.461
0.018	2.957	1.021	0.173	143.1	0.367	0.021	3.294	0.791	0.201	126.6	0.543	0.021	3.035	0.809	0.221	153.7	0.434	0.021	3.225	0.911	0.161	111.2	0.514
0.021	3.142	1.033	0.201	154.9	0.426	0.024	3.365	0.902	0.241	129.1	0.648	0.024	3.159	0.761	0.274	161.5	0.486	0.024	3.225	0.838	0.188	118.4	0.532
0.024	2.846	1.095	0.250	167.5	0.417	0.027	3.365	0.791	0.296	137.4	0.611	0.027	3.225	0.777	0.284	161.9	0.496	0.027	3.518	0.865	0.267	144.2	0.619
0.027	3.078	1.208	0.264	165.9	0.486	0.030	3.518	0.774	0.367	164.7	0.580	0.030	3.294	0.782	0.299	164.2	0.525	0.030	3.518	0.743	0.347	166.0	0.619
0.030	3.142	1.110	0.282	164.3	0.514	0.033	3.600	0.760	0.414	159.0	0.633	0.033	3.365	0.744	0.327	168.9	0.518	0.033	3.518	0.786	0.387	155.1	0.658
0.033	3.352	1.142	0.307	167.4	0.548	0.037	3.686	0.661	0.489	158.7	0.628	0.037	3.294	0.672	0.387	172.1	0.579	0.037	3.776	0.668	0.488	173.5	0.623
0.036	3.352	1.069	0.379	177.1	0.567	0.041	3.686	0.604	0.561	156.8	0.628	0.041	3.518	0.656	0.455	185.6	0.542	0.041	3.600	0.531	0.576	160.1	0.614
0.039	3.507	1.050	0.378	183.3	0.554	0.045	3.776	0.502	0.642	156.3	0.581	0.045	3.440	0.659	0.498	177.9	0.567	0.045	3.776	0.555	0.644	159.9	0.560
0.042	3.591	0.947	0.399	176.7	0.588	0.049	3.686	0.426	0.710	135.3	0.567	0.049	3.440	0.617	0.573	181.1	0.530	0.049	3.776	0.494	0.702	146.6	0.560
0.046	3.591	0.971	0.462	177.8	0.588	0.053	3.686	0.419	0.777	118.1	0.547	0.053	3.518	0.509	0.661	168.9	0.503	0.053	3.686	0.412	0.769	124.3	0.527
0.050	3.679	0.896	0.524	180.6	0.602	0.057	3.776	0.374	0.829	104.0	0.498	0.057	3.600	0.485	0.724	158.6	0.495	0.057	3.776	0.374	0.822	110.3	0.498
0.054	3.770	0.870	0.598	177.1	0.574	0.061	3.776	0.352	0.875	86.8	0.436	0.061	3.518	0.509	0.748	146.2	0.503	0.061	3.686	0.324	0.858	95.8	0.466
0.058	3.770	0.814	0.664	160.4	0.617	0.065	3.870	0.326	0.892	80.9	0.447	0.065	3.518	0.446	0.821	115.2	0.484	0.065	3.776	0.282	0.887	86.2	0.436
0.062	3.679	0.830	0.744	138.4	0.623	0.069	3.776	0.311	0.922	61.0	0.415	0.069	3.686	0.459	0.860	101.0	0.486	0.069	3.776	0.236	0.913	69.3	0.415
0.066	3.867	0.786	0.780	127.1	0.589	0.073	3.870	0.319	0.936	53.5	0.426	0.073	3.600	0.367	0.891	86.6	0.416	0.073	3.776	0.275	0.936	51.6	0.415
0.070	3.770	0.664	0.808	120.7	0.532	0.077	3.776	0.275	0.952	40.6	0.415	0.077	3.518	0.422	0.911	72.6	0.426	0.077	3.776	0.269	0.951	42.6	0.394
0.074	3.770	0.664	0.834	101.1	0.532	0.081	3.776	0.275	0.962	32.6	0.415	0.081	3.600	0.388	0.935	56.0	0.396	0.081	3.776	0.256	0.961	36.9	0.353
0.078	3.770	0.617	0.870	92.9	0.489	0.085	3.776	0.269	0.972	24.7	0.394	0.085	3.600	0.424	0.951	43.8	0.416	0.085	3.776	0.186	0.968	28.2	0.394
0.082	3.770	0.561	0.903	73.0	0.489	0.089	3.870	0.242	0.979	19.3	0.426	0.089	3.600	0.359	0.950	43.2	0.396	0.089	3.776	0.230	0.974	24.6	0.394
0.086	3.770	0.569	0.915	68.9	0.447	0.093	3.776	0.275	0.981	18.1	0.415	0.093	3.686	0.329	0.958	37.5	0.385	0.093	3.776	0.269	0.979	19.9	0.394
						0.103	3.776	0.186	0.992	8.4	0.394	0.103	3.600	0.303	0.971	24.1	0.416	0.103	3.776	0.269	0.989	10.1	0.394
						0.108	3.776	0.235	0.993	8.1	0.291	0.123	3.600	0.322	0.989	11.2	0.376	0.123	3.776	0.249	0.996	3.8	0.332
												0.133	3.518	0.328	0.989	10.5	0.406						
												0.143	3.518	0.307	0.993	6.7	0.348						

$d_{crest}/h=1.5$, $d_c/h=1.35$, Location 10

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.003	2.742	0.486	0.062	143.9	0.093	0.003	2.764	0.502	0.045	83.5	0.122	0.003	2.815	0.790	0.090	152.5	0.155	0.003	2.867	0.537	0.055	100.6	0.126
0.006	3.078	0.578	0.068	151.5	0.122	0.006	2.764	0.530	0.051	89.9	0.137	0.006	2.867	0.932	0.093	151.2	0.158	0.006	3.035	0.512	0.054	93.8	0.150
0.009	3.016	0.653	0.068	138.2	0.119	0.009	2.815	0.491	0.048	81.8	0.139	0.009	2.867	0.868	0.100	158.7	0.158	0.009	3.035	0.530	0.051	89.4	0.150
0.012	3.078	0.610	0.072	142.5	0.139	0.012	3.035	0.495	0.054	90.7	0.150	0.012	2.977	0.735	0.099	156.8	0.164	0.012	3.159	0.546	0.053	87.0	0.174
0.015	3.078	0.592	0.071	128.5	0.139	0.015	3.096	0.475	0.064	98.5	0.187	0.015	3.035	0.663	0.104	158.6	0.167	0.015	3.159	0.540	0.056	83.3	0.191
0.018	2.957	0.654	0.070	127.0	0.133	0.018	3.035	0.430	0.060	89.3	0.184	0.018	3.035	0.676	0.112	160.5	0.184	0.018	3.225	0.398	0.067	96.0	0.195
0.021	3.078	0.502	0.080	139.5	0.139	0.021	3.096	0.431	0.070	97.5	0.204	0.021	3.096	0.583	0.115	160.0	0.187	0.021	3.365	0.561	0.072	94.3	0.241
0.024	3.078	0.623	0.086	141.6	0.156	0.024	3.225	0.470	0.077	97.4	0.248	0.024	3.225	0.545	0.123	166.6	0.213	0.024	3.365	0.459	0.095	111.9	0.278
0.027	3.142	0.432	0.084	140.9	0.160	0.027	3.365	0.523	0.100	116.3	0.278	0.027	3.365	0.480	0.144	185.9	0.241	0.027	3.518	0.547	0.124	134.4	0.329
0.030	3.209	0.493	0.104	155.7	0.181	0.030	3.440	0.621	0.128	125.4	0.397	0.030	3.294	0.612	0.141	160.9	0.272	0.030	3.518	0.669	0.176	157.0	0.426
0.033	3.142	0.533	0.125	173.7	0.195	0.033	3.440	0.629	0.169	144.4	0.454	0.033	3.365	0.598	0.189	186.4	0.333	0.033	3.600	0.717	0.231	172.4	0.495
0.036	3.279	0.733	0.154	185.9	0.259	0.036	3.600	0.767	0.230	154.6	0.594	0.036	3.365	0.694	0.231	197.8	0.389	0.036	3.686	0.839	0.319	199.3	0.567
0.039	3.279	0.752	0.185	216.1	0.259	0.039	3.776	0.613	0.300	164.7	0.913	0.039	3.440	0.884	0.282	207.8	0.473	0.039	3.686	0.830	0.410	196.8	0.648
0.042	3.428	1.188	0.236	226.5	0.348	0.042	3.776	0.552	0.395	167.4	0.976	0.042	3.518	0.904	0.378	223.0	0.561	0.042	3.686	0.927	0.517	195.3	0.689
0.045	3.591	1.454	0.330	246.4	0.507	0.045	3.870	0.478	0.504	171.1	1.021	0.045	3.518	0.904	0.439	239.3	0.522	0.045	3.776	0.824	0.615	182.6	0.664
0.048	3.679	1.827	0.411	251.6	0.623	0.048	3.969	0.312	0.606	161.1	1.091	0.048	3.600	1.017	0.492	224.3	0.614	0.048	3.776	0.668	0.701	162.6	0.623
0.051	3.591	1.683	0.486	243.5	0.648	0.051	3.870	0.519	0.666	152.8	0.830	0.051	3.518	0.936	0.579	203.5	0.619	0.051	3.776	0.563	0.780	131.6	0.581
0.054	3.679	1.761	0.571	247.0	0.623	0.054	3.870	0.538	0.735	139.8	0.660	0.054	3.686	0.759	0.704	176.2	0.608	0.054	3.870	0.530	0.805	123.5	0.553
0.057	3.591	1.740	0.624	225.9	0.669	0.057	3.776	0.484	0.798	112.9	0.623	0.057	3.518	0.933	0.704	163.3	0.658	0.057	3.776	0.380	0.845	102.9	0.519
0.060	3.679	1.522	0.712	182.6	0.664	0.061	3.776	0.380	0.853	98.1	0.519	0.061	3.600	0.628	0.768	145.1	0.574	0.061	3.870	0.368	0.885	83.3	0.468
0.064	3.679	1.427	0.767	165.1	0.623	0.065	3.776	0.344	0.885	78.5	0.519	0.065	3.686	0.589	0.846	110.8	0.527	0.065	3.776	0.318	0.907	71.6	0.436
0.068	3.679	1.173	0.832	123.0	0.623	0.069	3.776	0.325	0.909	67.6	0.457	0.069	3.600	0.540	0.861	97.8	0.495	0.069	3.870	0.319	0.927	61.3	0.426
0.072	3.770	0.633	0.887	96.3	0.468	0.073	3.776	0.288	0.929	55.5	0.457	0.073	3.600	0.540	0.889	83.4	0.495	0.073	3.870	0.282	0.943	46.8	0.426
0.076	3.770	0.552	0.915	71.7	0.468	0.077	3.776	0.282	0.942	47.4	0.436	0.077	3.686	0.368	0.924	63.3	0.405	0.077	3.870	0.269	0.957	39.7	0.383
						0.081	3.776	0.241	0.959	33.3	0.436	0.081	3.686	0.405	0.938	53.7	0.426	0.081	3.870	0.276	0.961	34.2	0.404
						0.085	3.776	0.241	0.961	33.3	0.436	0.085	3.686	0.337	0.948	44.0	0.000	0.085	3.776	0.230	0.973	25.9	0.394
						0.089	3.686	0.246	0.969	27.3	0.466	0.089	3.600	0.388	0.957	37.0	0.396	0.089	3.870	0.262	0.978	22.2	0.362
						0.093	3.776	0.230	0.980	19.6	0.394	0.093	3.686	0.337	0.963	33.2	0.405	0.093	3.870	0.236	0.984	16.1	0.404
						0.103	3.776	0.219	0.988	12.6	0.353	0.103	3.686	0.263	0.976	21.5	0.385	0.103	3.870	0.224	0.991	9.9	0.362
												0.113	3.686	0.304	0.987	11.6	0.405	0.113	3.870	0.236	0.994	6.2	0.404
												0.123	3.776	0.368	0.992	7.5	0.394	0.123	3.776	0.219	0.997	3.2	0.353

$d_{crest}/h=1.7$, $d_c/h=1.5$, Location 9

No Roughness						Configuration A	Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ		y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.006	2.846	0.667	0.022	54.3	0.096		0.003	2.764	0.475	0.021	44.7	0.106	0.003	2.764	0.471	0.008	16.7	0.122
0.009	2.846	0.567	0.023	53.8	0.112		0.006	3.035	0.572	0.020	41.9	0.117	0.006	2.764	0.686	0.007	14.4	0.137
0.012	2.846	0.583	0.021	48.0	0.112		0.009	2.815	0.495	0.022	42.6	0.124	0.009	3.035	0.753	0.006	12.3	0.150
0.015	2.846	1.031	0.033	61.0	0.161		0.012	2.867	0.582	0.027	48.8	0.142	0.012	2.764	0.498	0.008	15.8	0.137
0.018	2.693	0.831	0.040	64.6	0.182		0.015	3.035	0.564	0.023	43.3	0.150	0.015	3.035	0.418	0.007	12.6	0.167
0.021	2.846	0.734	0.024	41.8	0.177		0.018	3.035	0.460	0.026	45.8	0.150	0.018	3.035	0.584	0.008	12.4	0.200
0.024	3.142	0.897	0.024	37.8	0.213		0.021	3.035	0.298	0.025	43.1	0.267	0.021	3.159	0.341	0.009	13.7	0.208
0.027	2.957	0.776	0.028	44.3	0.200		0.024	3.096	0.493	0.028	41.3	0.187	0.024	3.365	0.385	0.009	13.3	0.222
0.030	3.142	0.663	0.029	44.7	0.195		0.027	3.225	0.580	0.044	55.9	0.266	0.027	3.294	0.470	0.018	21.7	0.272
0.033	3.142	0.808	0.040	54.3	0.266		0.030	3.365	0.630	0.060	62.5	0.352	0.030	3.440	0.600	0.021	24.0	0.321
0.036	3.142	0.731	0.048	55.7	0.319		0.033	3.440	0.652	0.086	76.4	0.454	0.033	3.518	0.566	0.030	28.4	0.406
0.039	3.142	0.959	0.061	66.8	0.319		0.036	3.518	0.798	0.109	77.4	0.580	0.036	3.600	0.602	0.062	50.3	0.515
0.042	3.279	1.009	0.113	94.8	0.463		0.039	3.518	0.919	0.161	100.7	0.677	0.039	3.600	0.726	0.103	66.9	0.673
0.045	3.507	1.222	0.116	77.8	0.653		0.042	3.518	0.981	0.207	106.5	0.754	0.042	3.686	0.870	0.141	75.8	0.790
0.048	3.428	1.271	0.167	101.3	0.658		0.045	3.600	1.033	0.293	124.8	0.831	0.045	3.870	1.093	0.266	104.4	1.042
0.051	3.679	1.414	0.218	109.1	0.789		0.048	3.600	0.982	0.374	137.0	0.831	0.048	3.870	1.208	0.368	119.9	1.106
0.054	3.770	1.720	0.293	121.2	0.979		0.051	3.600	1.017	0.473	148.7	0.851	0.051	3.870	0.964	0.497	123.8	1.021
0.058	3.867	1.560	0.416	134.4	1.004		0.054	3.600	0.751	0.563	138.6	0.732	0.054	3.870	0.949	0.609	111.4	1.064
0.062	3.867	1.574	0.566	137.3	0.982		0.057	3.776	0.627	0.610	137.5	0.664	0.057	3.870	0.884	0.704	100.2	0.979
0.066	3.867	1.216	0.634	125.9	0.851		0.061	3.686	0.658	0.674	131.0	0.689	0.061	3.870	0.531	0.802	85.2	0.745
0.070	3.969	1.161	0.775	103.4	0.761		0.065	3.686	0.505	0.748	116.8	0.608	0.065	3.969	0.441	0.863	64.8	0.676
0.074	3.969	0.760	0.828	90.1	0.627		0.069	3.776	0.415	0.797	109.4	0.519	0.069	3.870	0.278	0.914	48.4	0.574
0.078	3.867	0.789	0.850	81.8	0.655		0.073	3.776	0.344	0.832	97.9	0.519	0.073	3.969	0.270	0.935	40.0	0.524
0.082	3.867	0.693	0.861	74.9	0.633		0.077	3.686	0.330	0.831	95.3	0.486	0.077	3.870	0.263	0.948	32.4	0.511
0.086	3.867	0.654	0.884	66.3	0.611		0.081	3.776	0.374	0.876	75.9	0.498	0.081	3.870	0.204	0.959	26.9	0.468
0.090	3.770	0.490	0.908	61.0	0.532		0.085	3.686	0.330	0.889	69.4	0.000	0.085	3.870	0.263	0.973	17.6	0.511
0.094	3.867	0.385	0.933	46.0	0.502		0.089	3.686	0.246	0.900	68.2	0.466	0.089	3.870	0.149	0.978	15.2	0.511
							0.093	3.776	0.325	0.924	54.7	0.457	0.093	3.870	0.140	0.986	10.5	0.447
							0.103	3.776	0.318	0.944	45.0	0.436	0.103	3.969	0.335	0.991	7.1	0.458
							0.113	3.870	0.319	0.964	29.4	0.426	0.113	3.870	0.218	0.995	4.2	0.340
							0.133	3.776	0.398	0.985	14.4	0.394	0.133	3.870	0.307	0.999	0.8	0.191
							0.143	3.600	0.388	0.993	5.9	0.475						

$d_{crest}/h=1.7$, $d_c/h=1.5$, Location 91

No Roughness						Configuration A	Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ		y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.046	1.300	0.000	0.067	26.5	0.000		-0.029	0.000	0.000	0.106	44.0	5.532	-0.029	1.005	0.000	0.011	5.7	0.227
-0.042	0.000	0.000	0.066	25.0	0.000		-0.024	1.701	0.000	0.088	36.6	0.000	-0.024	1.025	0.000	0.011	5.4	0.226
-0.038	0.000	0.000	0.084	31.0	0.000		-0.019	0.000	0.000	0.099	46.2	1.146	-0.019	0.000	0.000	0.013	6.7	6.116
-0.034	2.846	0.000	0.058	22.4	0.723		-0.014	0.000	0.000	0.082	45.7	5.276	-0.014	1.025	0.000	0.014	9.8	0.170
-0.030	3.679	0.000	0.073	31.9	0.706		-0.009	1.739	0.000	0.081	56.7	0.239	-0.009	1.229	0.000	0.012	13.3	0.116
-0.026	0.000	0.000	0.087	30.9	0.000		-0.004	1.665	0.000	0.060	71.4	0.128	-0.004	1.533	0.000	0.012	16.9	0.102
-0.022	1.423	0.219	0.070	25.5	0.297		0.001	2.211	0.000	0.045	72.4	0.158	0.001	2.538	0.842	0.010	18.3	0.126
-0.018	1.493	0.328	0.038	16.7	0.278		0.006	2.382	0.486	0.030	62.0	0.105	0.006	2.815	1.259	0.009	15.9	0.155
-0.014	2.846	1.542	0.042	26.7	0.385		0.009	2.815	0.527	0.027	55.3	0.124	0.009	3.035	0.754	0.011	17.0	0.217
-0.010	1.359	0.274	0.047	36.7	0.153		0.012	2.921	0.526	0.035	63.2	0.145	0.012	2.764	0.596	0.010	15.5	0.182
-0.006	1.839	0.716	0.040	55.4	0.125		0.015	3.035	0.616	0.038	64.6	0.150	0.015	3.096	0.578	0.013	19.2	0.204
-0.002	2.186	0.940	0.038	62.0	0.136		0.018	3.035	0.554	0.041	62.5	0.184	0.018	3.035	0.619	0.014	17.7	0.250
0.002	2.957	1.179	0.034	76.8	0.117		0.021	3.035	0.553	0.051	65.8	0.234	0.021	3.096	0.471	0.016	21.1	0.238
0.006	2.846	0.580	0.034	72.1	0.128		0.024	3.096	0.431	0.046	62.8	0.204	0.024	3.159	0.481	0.019	20.3	0.278
0.010	2.957	0.702	0.035	68.9	0.150		0.027	3.159	0.576	0.052	64.3	0.243	0.027	3.225	0.614	0.031	29.7	0.355
0.014	3.078	0.500	0.036	70.1	0.243		0.030	3.365	0.577	0.070	72.4	0.333	0.030	3.294	0.570	0.034	28.9	0.416
0.018	3.078	0.681	0.049	73.4	0.208		0.033	3.365	0.598	0.070	71.4	0.333	0.033	3.365	0.521	0.046	36.9	0.444
0.022	2.957	0.926	0.065	76.2	0.334		0.037	3.365	0.737	0.108	90.3	0.426	0.037	3.518	0.493	0.072	51.2	0.464
0.026	2.957	0.000	0.080	94.1	0.984		0.041	3.600	0.816	0.202	121.4	0.594	0.041	3.686	0.525	0.106	71.8	0.507
0.030	3.142	0.824	0.075	75.4	0.904		0.045	3.600	0.707	0.221	128.1	0.574	0.045	3.686	0.505	0.161	88.9	0.608
0.034	3.279	0.987	0.095	90.7	0.370		0.049	3.600	0.760	0.316	152.9	0.633	0.049	3.776	0.539	0.286	121.7	0.685
0.038	3.352	0.813	0.094	87.6	0.359		0.053	3.776	0.741	0.489	165.7	0.726	0.053	3.776	0.630	0.421	131.5	0.851
0.042	3.279	0.863	0.135	102.3	0.426		0.057	3.776	0.741	0.572	156.9	0.726	0.057	3.870	0.552	0.580	137.6	0.808
0.046	3.507	1.028	0.207	128.4	0.554		0.061	3.686	0.706	0.655	148.9	0.669	0.061	3.870	0.481	0.736	121.1	0.702
0.050	3.770	1.483	0.285	150.4	0.745		0.065	3.518	0.727	0.713	138.0	0.638	0.065	3.969	0.493	0.810	94.9	0.720
0.054	3.770	1.277	0.398	166.7	0.766		0.069	3.686	0.542	0.800	118.2	0.547	0.069	3.969	0.436	0.888	73.8	0.546
0.058	3.867	1.360	0.483	162.4	0.829		0.073	3.776	0.455	0.848	95.7	0.540	0.073	3.969	0.332	0.921	51.5	0.589
0.062	3.867	1.384	0.577	151.1	0.873		0.077	3.776	0.338	0.866	85.7	0.498	0.077	3.870	0.268	0.948	38.0	0.532
0.066	3.969	1.036	0.699	138.1	0.784		0.081	3.776	0.360	0.892	77.0	0.457	0.081	3.969	0.209	0.970	23.1	0.480
0.070	3.867	1.131	0.756	124.7	0.742		0.085	3.600	0.316	0.920	57.8	0.455	0.085	3.870	0.208	0.982	15.1	0.489
0.074	3.867	0.807	0.838	101.1	0.633		0.089	3.686	0.375	0.915	60.8	0.426	0.089	3.870	0.200	0.986	12.7	0.447
0.078	3.867	0.789	0.856	86.1	0.655		0.093	3.776	0.423	0.925	54.6	0.457	0.099	3.969	0.200	0.992	6.9	0.436
0.082	3.969	0.611	0.902	66.3	0.560		0.103	3.600	0.404	0.957	32.3	0.435	0.103	3.870	0.221	0.993	4.9	0.553
							0.113	3.518	0.414	0.969	26.4	0.406	0.113	3.870	0.195	0.996	3.3	0.426
							0.133	3.518	0.440	0.990	10.1	0.348	0.133	3.518	0.181	0.999	1.0	0.406

$d_{crest}/h=1.7$, $d_c/h=1.5$, Location 92

No Roughness						Configuration A	Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ		y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.012	2.124	0.000	0.077	74.3	0.228		-0.013	2.180	0.000	0.205	130.4	0.384	-0.009	2.064	0.000	0.030	30.0	0.228
-0.009	2.394	1.141	0.088	97.3	0.216		-0.009	1.911	0.000	0.225	128.6	0.378	-0.005	2.419	0.000	0.037	37.7	0.268
-0.006	2.394	0.000	0.108	117.2	0.216		-0.005	2.180	0.000	0.195	131.1	0.384	-0.001	2.580	1.102	0.039	39.2	0.326
-0.003	2.600	0.864	0.086	103.6	0.235		-0.001	2.180	0.000	0.168	133.5	0.312	0.003	2.867	1.047	0.036	34.7	0.394
0.000	2.742	1.206	0.089	102.6	0.279		0.003	2.419	0.000	0.134	117.7	0.306	0.006	2.921	1.022	0.035	34.8	0.385
0.003	2.693	0.992	0.077	85.1	0.289		0.006	2.764	1.126	0.103	105.3	0.319	0.009	3.035	0.694	0.040	34.5	0.400
0.006	2.433	1.123	0.080	88.9	0.261		0.009	2.764	1.026	0.110	107.3	0.334	0.012	3.035	0.885	0.047	37.4	0.467
0.009	2.793	0.947	0.083	93.4	0.299		0.012	2.921	0.885	0.095	100.7	0.289	0.015	3.096	0.775	0.059	44.7	0.494
0.012	2.600	1.089	0.158	127.4	0.396		0.015	3.035	0.888	0.106	96.0	0.384	0.018	3.294	0.791	0.065	45.0	0.543
0.015	2.742	0.999	0.144	113.3	0.418		0.018	3.035	0.830	0.100	91.3	0.350	0.021	3.365	0.767	0.089	51.7	0.611
0.018	2.957	1.203	0.113	92.6	0.451		0.021	3.159	0.732	0.139	100.4	0.434	0.024	3.365	0.637	0.091	54.4	0.537
0.021	3.209	0.968	0.109	93.1	0.453		0.024	3.294	0.689	0.148	106.8	0.435	0.027	3.440	0.677	0.108	61.5	0.605
0.024	3.279	0.924	0.102	86.6	0.426		0.027	3.365	0.746	0.139	96.7	0.481	0.030	3.518	0.631	0.136	70.3	0.600
0.027	3.279	0.950	0.195	130.5	0.500		0.030	3.159	0.712	0.133	92.2	0.434	0.033	3.686	0.566	0.171	87.2	0.608
0.030	3.016	1.047	0.224	135.4	0.494		0.033	3.440	0.708	0.180	112.6	0.473	0.037	3.686	0.596	0.214	99.2	0.608
0.033	3.142	1.121	0.262	140.9	0.532		0.037	3.518	0.604	0.234	132.3	0.484	0.041	3.870	0.571	0.257	111.1	0.660
0.036	3.279	1.046	0.244	132.6	0.555		0.041	3.600	0.611	0.259	134.0	0.534	0.045	3.870	0.545	0.350	133.1	0.681
0.039	3.279	1.015	0.288	146.6	0.574		0.045	3.518	0.666	0.354	149.1	0.561	0.049	3.969	0.531	0.462	138.8	0.720
0.042	3.591	1.018	0.280	140.6	0.588		0.049	3.518	0.639	0.380	149.2	0.619	0.053	3.969	0.480	0.561	146.4	0.676
0.046	3.591	0.982	0.329	147.9	0.608		0.053	3.686	0.587	0.520	168.1	0.588	0.057	3.969	0.480	0.649	139.6	0.676
0.050	3.679	1.040	0.373	153.2	0.685		0.057	3.686	0.587	0.607	156.4	0.588	0.061	4.074	0.397	0.736	120.1	0.649
0.054	3.770	0.978	0.426	161.8	0.681		0.061	3.600	0.590	0.633	151.4	0.614	0.065	3.969	0.332	0.815	101.7	0.589
0.058	3.770	0.952	0.510	165.3	0.681		0.065	3.686	0.528	0.729	131.6	0.588	0.069	3.969	0.321	0.865	82.7	0.546
0.062	3.969	0.918	0.598	159.1	0.717		0.069	3.776	0.584	0.783	120.4	0.560	0.073	4.074	0.277	0.914	60.1	0.537
0.066	3.770	0.973	0.650	140.1	0.723		0.073	3.686	0.412	0.843	94.3	0.527	0.077	4.074	0.277	0.935	46.7	0.537
0.070	3.867	1.041	0.711	137.4	0.720		0.077	3.776	0.431	0.882	80.8	0.477	0.081	4.074	0.304	0.954	35.7	0.470
0.074	3.867	0.741	0.792	115.8	0.611		0.081	3.600	0.477	0.904	67.9	0.475	0.085	4.074	0.266	0.966	28.0	0.493
0.078	3.867	0.741	0.815	105.8	0.611		0.085	3.600	0.448	0.919	57.6	0.475	0.089	4.074	0.304	0.974	22.5	0.470
0.082	3.867	0.779	0.843	88.8	0.633		0.089	3.776	0.384	0.933	54.2	0.436	0.093	4.074	0.272	0.980	17.5	0.515
0.086	3.867	0.789	0.880	69.4	0.655		0.093	3.776	0.311	0.941	46.3	0.415	0.103	3.969	0.133	0.992	7.6	0.393
0.090	3.867	0.692	0.906	62.2	0.567		0.103	3.686	0.275	0.964	29.4	0.426	0.123	3.870	0.205	0.998	2.0	0.298
							0.123	3.686	0.297	0.983	16.0	0.385						
							0.133	3.686	0.269	0.985	12.6	0.405						
							0.138	3.686	0.275	0.987	11.0	0.426						
							0.148	3.600	0.214	0.994	6.3	0.356						

$d_{crest}/h=1.7$, $d_c/h=1.5$, Location 93

No Roughness						Configuration A	Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ		y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
-0.002	2.693	1.079	0.092	101.7	0.258		0.000	2.345	1.055	0.101	99.7	0.245	0.000	2.382	0.585	0.031	44.1	0.144
0.000	2.646	0.963	0.078	100.7	0.209		0.003	2.538	1.160	0.123	118.6	0.307	0.003	2.538	0.601	0.032	43.1	0.181
0.003	2.556	0.815	0.100	112.2	0.245		0.006	2.624	0.948	0.122	119.0	0.303	0.006	2.764	0.709	0.035	44.8	0.228
0.006	2.793	0.869	0.109	116.0	0.284		0.009	2.764	0.833	0.111	111.3	0.289	0.009	2.815	0.611	0.035	39.0	0.263
0.009	2.742	0.971	0.094	106.3	0.263		0.012	2.764	0.897	0.116	106.1	0.334	0.012	2.921	0.609	0.045	48.5	0.289
0.012	2.742	0.881	0.095	100.3	0.294		0.015	2.815	0.775	0.127	103.7	0.387	0.015	3.096	0.668	0.046	42.6	0.374
0.015	2.900	0.714	0.085	86.1	0.327		0.018	3.096	0.882	0.157	118.4	0.443	0.018	3.096	0.796	0.071	54.0	0.460
0.018	3.078	0.942	0.120	109.6	0.556		0.021	3.035	0.981	0.147	99.6	0.501	0.021	3.294	0.825	0.096	68.9	0.525
0.021	2.900	0.918	0.176	139.2	0.393		0.024	3.035	1.055	0.154	104.2	0.501	0.024	3.294	0.756	0.106	70.7	0.561
0.024	3.078	1.342	0.201	124.9	0.573		0.027	3.225	0.869	0.179	107.2	0.550	0.027	3.440	0.912	0.154	83.9	0.643
0.027	3.016	1.117	0.233	140.9	0.545		0.030	3.365	0.772	0.221	122.1	0.574	0.030	3.518	0.895	0.177	94.4	0.677
0.030	3.209	1.173	0.236	142.1	0.525		0.033	3.365	0.782	0.251	129.7	0.592	0.033	3.686	0.824	0.250	118.0	0.689
0.033	3.078	1.186	0.293	161.9	0.538		0.037	3.518	0.802	0.282	130.0	0.638	0.037	3.686	0.760	0.315	116.6	0.729
0.036	3.507	1.051	0.293	150.8	0.594		0.041	3.518	0.735	0.340	136.1	0.658	0.041	3.870	0.712	0.413	141.9	0.702
0.039	3.591	1.017	0.287	141.3	0.628		0.045	3.686	0.779	0.495	146.6	0.709	0.045	3.870	0.667	0.479	132.7	0.745
0.042	3.507	1.040	0.351	154.9	0.614		0.049	3.686	0.620	0.494	149.7	0.669	0.049	3.969	0.559	0.600	136.9	0.698
0.046	3.679	1.042	0.407	158.3	0.643		0.053	3.600	0.690	0.529	151.8	0.653	0.053	3.969	0.524	0.664	126.9	0.698
0.050	3.679	1.004	0.487	162.6	0.664		0.057	3.776	0.588	0.644	147.7	0.643	0.057	3.969	0.428	0.755	112.2	0.633
0.054	3.591	1.040	0.533	162.4	0.669		0.061	3.776	0.627	0.677	138.1	0.664	0.061	3.969	0.368	0.803	105.5	0.567
0.058	3.867	0.900	0.603	158.1	0.655		0.065	3.686	0.612	0.735	124.4	0.648	0.065	3.969	0.315	0.859	86.0	0.524
0.062	3.679	0.907	0.654	145.9	0.623		0.069	3.776	0.502	0.815	100.3	0.581	0.069	4.074	0.351	0.894	71.4	0.493
0.066	3.770	0.851	0.708	137.6	0.638		0.073	3.776	0.374	0.871	86.3	0.498	0.073	3.969	0.296	0.916	59.7	0.458
0.070	3.867	0.889	0.768	123.3	0.633		0.077	3.776	0.407	0.887	74.4	0.498	0.077	3.969	0.296	0.940	46.7	0.458
0.074	3.867	0.813	0.804	111.3	0.589		0.081	3.870	0.346	0.900	66.8	0.511	0.081	3.969	0.195	0.956	36.7	0.415
0.078	3.867	0.736	0.837	100.1	0.546		0.085	3.686	0.358	0.925	53.5	0.466	0.085	4.074	0.248	0.963	32.9	0.426
0.082	3.770	0.637	0.875	83.3	0.532		0.089	3.776	0.352	0.942	47.1	0.436	0.089	4.074	0.283	0.975	22.8	0.403
0.086	3.770	0.617	0.900	70.4	0.489		0.093	3.776	0.345	0.952	39.0	0.415	0.093	3.969	0.248	0.979	17.8	0.436
							0.103	3.870	0.289	0.964	29.2	0.447	0.103	3.969	0.230	0.991	9.4	0.371
							0.113	3.686	0.304	0.978	19.0	0.405	0.113	3.969	0.169	0.995	5.4	0.305
							0.133	3.600	0.225	0.989	10.1	0.396	0.133	3.870	0.247	0.999	1.6	0.234
							0.143	3.776	0.269	0.992	7.3	0.394						

$d_{crest}/h=1.7$, $d_c/h=1.5$, Step edge 10

No Roughness						Configuration A						Configuration B						Configuration C					
y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ	y(m)	V(m/s)	Tu	C	F(Hz)	ξ
0.003	2.957	0.524	0.042	114.9	0.100	0.003	2.764	0.471	0.021	41.8	0.122	0.003	3.096	0.771	0.061	126.4	0.136	0.003	3.035	0.448	0.018	36.3	0.133
0.006	2.900	0.545	0.049	116.6	0.115	0.006	3.035	0.606	0.020	42.1	0.117	0.006	2.977	0.658	0.060	113.6	0.131	0.006	3.035	0.378	0.020	39.4	0.133
0.009	2.957	0.572	0.056	125.2	0.117	0.009	3.035	0.512	0.024	44.3	0.150	0.009	2.669	0.704	0.072	122.5	0.147	0.009	3.035	0.671	0.020	36.8	0.133
0.012	3.078	0.542	0.057	120.2	0.122	0.012	3.035	0.495	0.022	38.5	0.150	0.012	3.035	0.766	0.066	113.8	0.167	0.012	3.159	0.424	0.025	43.5	0.156
0.015	3.016	0.632	0.049	97.4	0.136	0.015	3.035	0.425	0.023	41.3	0.150	0.015	3.159	0.533	0.062	107.4	0.156	0.015	3.159	0.473	0.021	35.6	0.174
0.018	2.957	0.482	0.053	102.2	0.133	0.018	3.225	0.464	0.026	43.7	0.177	0.018	3.225	0.520	0.070	115.5	0.177	0.018	3.365	0.427	0.029	43.5	0.222
0.021	3.142	0.476	0.055	102.8	0.142	0.021	3.365	0.529	0.034	50.8	0.222	0.021	3.096	0.637	0.078	117.8	0.187	0.021	3.365	0.438	0.029	39.1	0.241
0.024	3.209	0.442	0.066	113.9	0.163	0.024	3.365	0.438	0.038	54.2	0.241	0.024	3.294	0.557	0.082	116.7	0.217	0.024	3.518	0.390	0.038	50.4	0.251
0.027	3.209	0.499	0.064	107.0	0.163	0.027	3.440	0.469	0.044	56.7	0.284	0.027	3.159	0.602	0.076	102.7	0.226	0.027	3.600	0.491	0.053	61.7	0.297
0.030	3.078	0.501	0.065	106.7	0.278	0.030	3.518	0.545	0.060	64.0	0.367	0.030	3.365	0.837	0.101	120.6	0.296	0.030	3.600	0.613	0.071	68.1	0.435
0.033	3.209	0.544	0.080	116.0	0.199	0.033	3.518	0.566	0.083	75.6	0.406	0.033	3.294	0.624	0.096	107.8	0.290	0.033	3.776	0.690	0.100	85.4	0.498
0.036	3.279	0.680	0.094	126.0	0.241	0.036	3.776	0.777	0.130	101.0	0.519	0.036	3.365	0.630	0.117	118.0	0.352	0.036	3.870	0.840	0.155	109.9	0.617
0.039	3.428	0.855	0.129	147.2	0.309	0.039	3.776	0.820	0.151	101.8	0.602	0.039	3.440	0.872	0.162	138.5	0.454	0.039	3.870	0.920	0.222	125.6	0.723
0.042	3.428	0.915	0.164	168.3	0.367	0.042	3.776	0.927	0.243	123.9	0.768	0.042	3.686	0.947	0.249	175.4	0.588	0.042	3.870	1.008	0.280	135.4	0.851
0.046	3.507	1.245	0.219	188.6	0.455	0.045	3.870	0.942	0.323	141.3	0.830	0.045	3.686	0.966	0.312	179.4	0.669	0.045	3.969	1.072	0.405	147.9	0.895
0.050	3.679	1.666	0.299	200.4	0.581	0.048	3.870	0.932	0.425	148.8	0.808	0.048	3.776	1.209	0.432	195.3	0.768	0.048	4.074	0.991	0.504	155.9	0.873
0.054	3.679	1.612	0.374	212.6	0.664	0.051	3.870	0.855	0.526	148.3	0.830	0.051	3.776	1.073	0.454	182.0	0.747	0.051	4.074	0.831	0.602	149.7	0.784
0.058	3.770	1.480	0.518	215.6	0.702	0.054	3.969	0.739	0.613	148.2	0.742	0.054	3.686	1.135	0.535	172.6	0.851	0.054	4.074	0.718	0.688	131.9	0.739
0.062	3.770	1.470	0.594	196.6	0.723	0.057	3.969	0.650	0.691	131.7	0.676	0.057	3.776	0.780	0.651	163.6	0.685	0.057	4.074	0.593	0.756	119.1	0.672
0.066	3.867	1.307	0.697	172.1	0.655	0.061	3.969	0.544	0.775	110.1	0.655	0.061	3.776	0.907	0.673	153.5	0.726	0.061	4.074	0.470	0.816	97.1	0.627
0.070	3.867	1.272	0.752	144.2	0.720	0.065	3.969	0.400	0.849	89.0	0.546	0.065	3.776	0.705	0.763	127.1	0.643	0.065	4.074	0.403	0.870	80.6	0.537
0.074	3.770	1.056	0.805	126.5	0.638	0.069	3.969	0.385	0.881	78.5	0.502	0.069	3.776	0.613	0.846	96.5	0.560	0.069	4.074	0.310	0.905	63.5	0.493
0.078	3.867	0.866	0.864	93.7	0.589	0.073	3.969	0.302	0.907	64.3	0.480	0.073	3.776	0.546	0.841	99.9	0.540	0.073	4.074	0.310	0.925	54.0	0.493
0.082	3.770	0.858	0.870	89.8	0.553	0.077	4.074	0.304	0.927	54.9	0.470	0.077	3.776	0.431	0.901	72.9	0.477	0.077	4.074	0.304	0.945	41.9	0.470
0.086	3.867	0.622	0.905	73.9	0.480	0.081	3.969	0.242	0.947	43.1	0.415	0.081	3.686	0.405	0.917	57.6	0.507	0.081	4.074	0.210	0.959	33.0	0.470
						0.085	4.074	0.290	0.955	38.7	0.426	0.085	3.870	0.326	0.937	48.1	0.000	0.085	3.969	0.195	0.971	26.0	0.415
						0.089	3.969	0.236	0.970	27.4	0.393	0.089	3.776	0.392	0.948	41.5	0.457	0.089	4.074	0.290	0.975	21.7	0.426
						0.093	4.074	0.248	0.973	24.2	0.426	0.093	3.870	0.333	0.954	36.5	0.468	0.093	3.969	0.140	0.979	18.9	0.436
						0.103	4.074	0.236	0.986	13.7	0.381	0.103	3.686	0.317	0.970	25.1	0.446	0.103	3.969	0.175	0.989	10.8	0.327
						0.108	3.969	0.312	0.989	9.9	0.393	0.113	3.776	0.282	0.984	16.4	0.332	0.113	3.969	0.136	0.995	4.8	0.415
						0.113	3.870	0.352	0.993	7.1	0.340	0.133	3.600	0.283	0.993	6.7	0.356	0.133	3.870	0.181	0.998	2.7	0.362

APPENDIX E – DEPTH AVERAGED AIR-WATER FLOW PROPERTIES

Depth averaged air-water flow properties corresponding to measurements conducted at step edges are presented in Table E-1 and Figure E-1. Basic results include dimensionless maximum bubble count rate $F_{max} \cdot d_c/V_c$, depth averaged air content C_{mean}, dimensionless depth Y_{90}/d_c for C = 0.90, dimensionless air-water flow velocity V_{90}/V_c at y = Y_{90}, , dimensionless mean flow velocity U_w/V_c and equivalent clear water depth d where d_c is the critical depth and V_c is the critical velocity.
The depth averaged concentration C_{mean} is defined as:

$$C_{mean} = \int_0^{Y_{90}} C \cdot dy \tag{E-1}$$

where y is measured normal to the pseudo-bottom formed by the step edges and Y_{90} is the depth corresponding to C = 0.90. The equivalent clear water depth, d is defined as:

$$d = \int_0^{Y_{90}} (1-C) \cdot dy = \left(1 - C_{mean}\right) \cdot Y_{90} \tag{E-2}$$

The mean flow velocity U_w is calculated as:

$$U_w = \frac{q_w}{d} \tag{E-3}$$

where q_w is the water discharge per unit width.

Table E-1– Depth averaged air-water flow properties

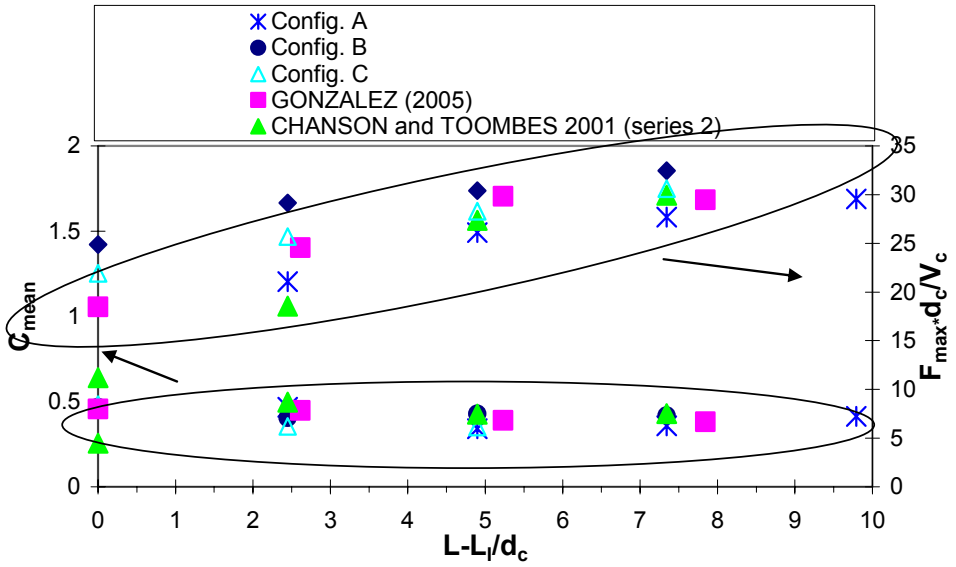
d_{crest}/h =1.1, d_c/h =1.1												
	No roughness						Configuration A					
Step edge	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max} \cdot d_c/V_c$	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max} \cdot d_c/V_c$
6	0.46	0.70	3.11	0.039	2.55	18.45						
7	0.45	0.64	3.10	0.036	2.87	24.55	0.47	0.53	3.06	0.031	3.67	21.08
8	0.39	0.61	3.16	0.038	2.99	29.81	0.34	0.49	3.17	0.035	3.25	26.09
9	0.38	0.61	3.16	0.039	2.86	29.46	0.36	0.48	3.23	0.034	3.34	27.68
10	0.41	0.54	3.41	0.033	3.47	34.49	0.41	0.52	3.24	0.033	3.42	29.57
	Configuration B						Configuration C					
Step edge	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max} \cdot d_c/V_c$	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max} \cdot d_c/V_c$
7	0.47	0.56	2.88	0.033	3.47	24.87	0.48	0.55	3.00	0.031	3.67	21.92
8	0.40	0.53	3.13	0.035	3.29	29.15	0.35	0.46	3.17	0.033	3.47	25.68
9	0.43	0.56	3.11	0.035	3.27	30.41	0.35	0.48	3.22	0.034	3.33	28.31
10	0.42	0.52	3.11	0.033	3.42	32.44	0.42	0.47	3.24	0.030	3.80	30.61

d_{crest}/h =1.3, d_c/h =1.25													
	No roughness						Configuration A						
Step edge	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$
7	0.35	0.55	3.21	0.042	2.76	17.91						
8	0.42	0.68	3.23	0.047	2.66	19.56	0.29	0.47	3.18	0.042	3.67	21.24
9	0.34	0.61	3.32	0.048	2.77	25.50	0.34	0.47	3.14	0.039	3.92	24.59
10	0.41	0.56	2.98	0.039	2.43	31.04	0.39	0.49	3.18	0.038	4.08	27.60
	Configuration B						Configuration C					
Step edge	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$
8	0.37	0.50	3.15	0.040	3.87	26.31	0.30	0.43	3.11	0.038	4.06	22.52
9	0.41	0.57	3.11	0.042	3.64	27.52	0.33	0.48	3.18	0.040	3.84	24.54
10	0.41	0.53	3.13	0.039	3.89	29.43	0.39	0.47	3.25	0.036	4.27	26.94
	Configuration S											
9	0.40	0.55	3.11	0.041	3.70	29.95						
10	0.34	0.50	3.18	0.041	3.72	32.46						

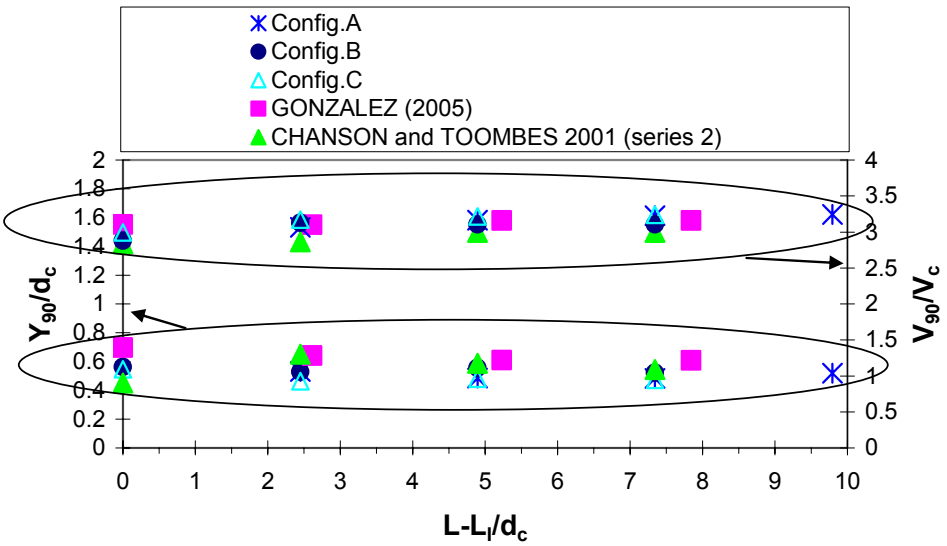
d_{crest}/h =1.5, d_c/h =1.39												
	No roughness						Configuration A					
Step edge	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$
7	0.20	0.50	3.01	0.05	2.62	12.00						
8	0.38	0.68	3.02	0.06	2.54	15.70						
9	0.36	0.58	3.16	0.05	2.84	26.02	0.33	0.47	3.23	0.039	3.20	19.54
10	0.33	0.55	3.29	0.05	2.84	29.96	0.34	0.49	3.24	0.038	3.14	20.38
	Configuration B						Configuration C					
Step edge	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$
8	0.28	0.45	3.16	0.046	3.05	20.58	0.23	0.41	3.10	0.054	3.14	14.47
9	0.41	0.59	3.04	0.049	2.83	23.35	0.30	0.47	3.24	0.056	3.04	20.03
10	0.39	0.53	3.11	0.046	3.05	28.50	0.36	0.46	3.26	0.050	3.40	23.74
	Configuration S (No roughness)											
9	0.39	0.58	3.08	0.049	2.83	24.55						
10	0.33	0.51	3.24	0.048	2.89	29.46						
d_{crest}/h =1.7, d_c/h =1.5												
	No roughness						Configuration A					
Step edge	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$
8	0.29	0.54	2.99	0.056	2.67	14.77						
9	0.32	0.60	3.17	0.061	2.56	16.82						
10	0.33	0.58	3.21	0.057	2.68	26.41	0.30	0.48	3.27	0.050	2.99	18.41
	Configuration B						Configuration C					
Step edge	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$	C_{mean}	Y_{90}/d_c	V_{90}/V_c	d (m)	U_w/V_c	$F_{max}\cdot d_c/V_c$
9	0.38	0.59	2.74	0.055	3.04	18.40	0.24	0.45	3.21	0.051	2.92	15.32
10	0.34	0.51	2.94	0.051	3.11	24.16	0.30	0.46	3.36	0.048	3.13	19.29

Figure E-1– Depth averaged air-water flow properties

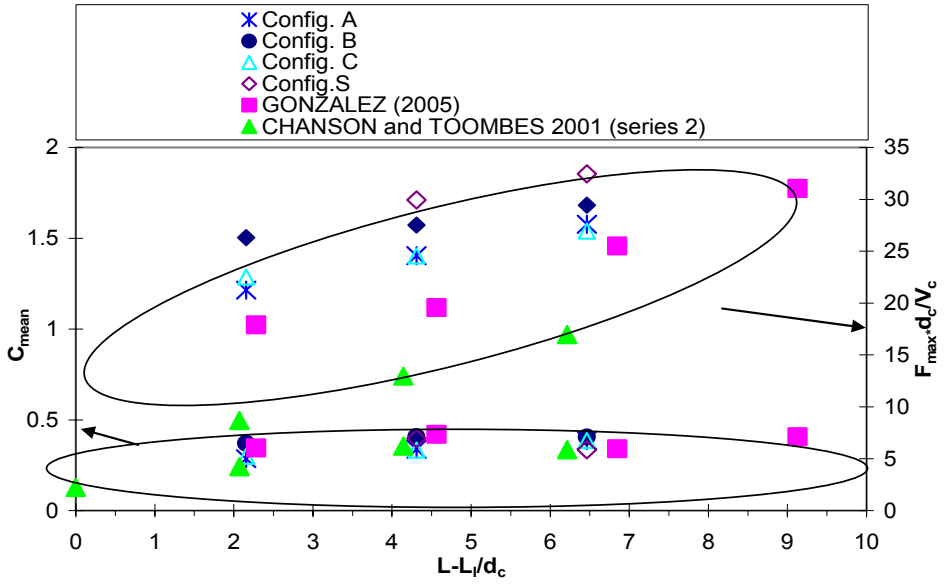
(A) Mean air content and Maximum bubble countrate (d_c/h =1.05)



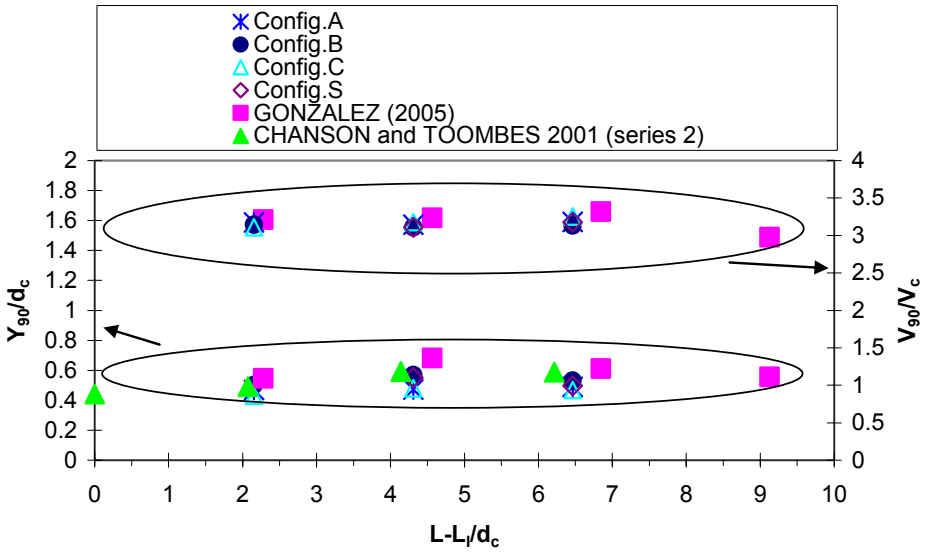
(B) Dimensionless Y_{90} and V_{90} (d_c/h =1.05)



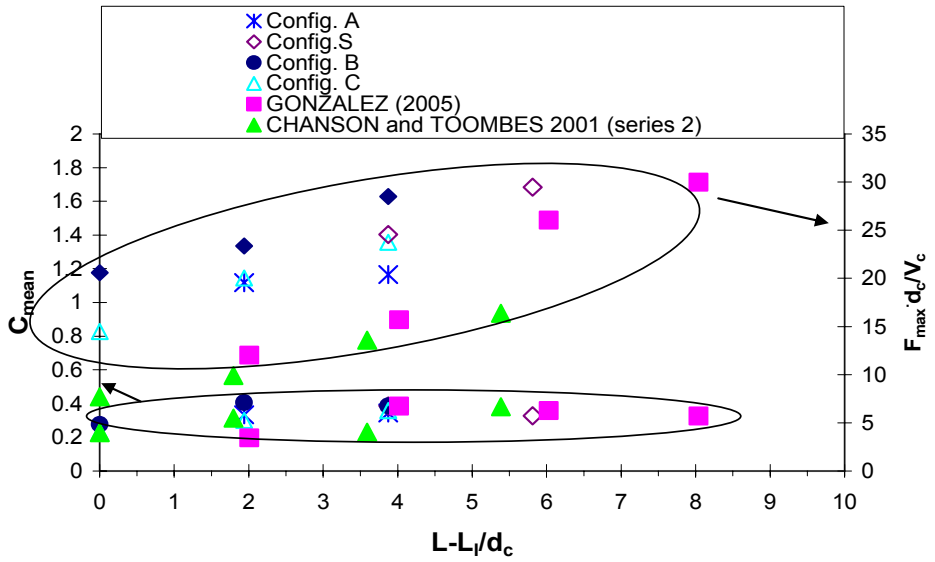
(C) Mean air content and Maximum bubble countrate (d_c/h =1.2)



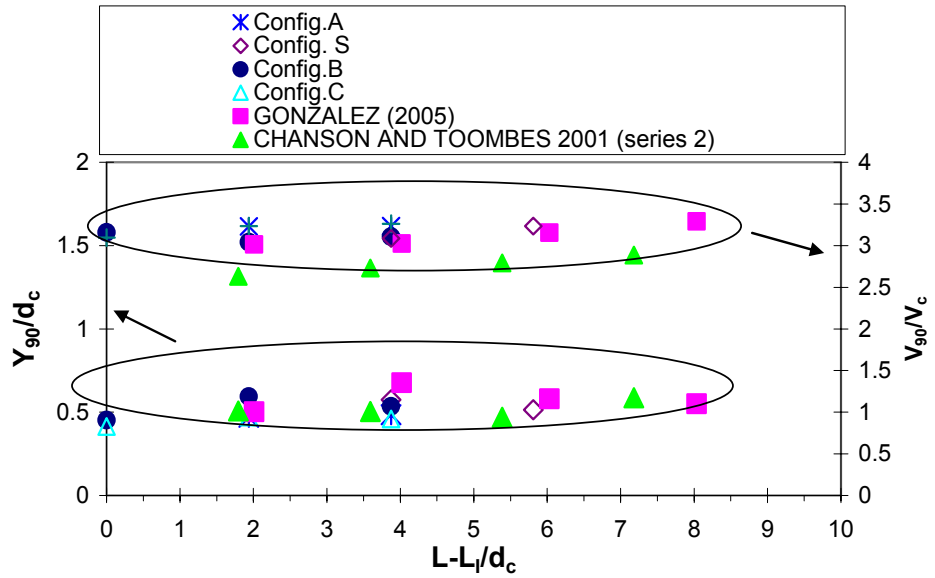
(D) Dimensionless Y_{90} and V_{90} (d_c/h =1.2)



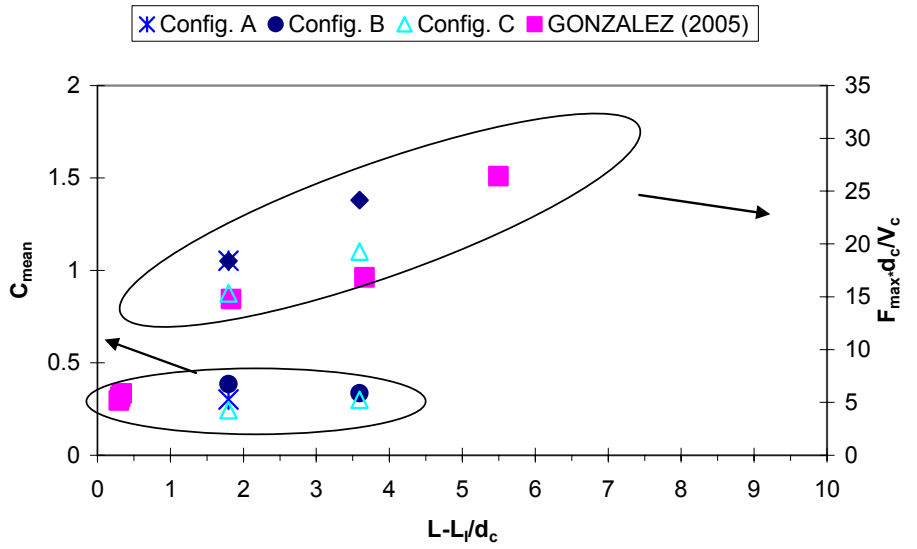
(E) Mean air content and Maximum bubble countrate (d_c/h =1.35)



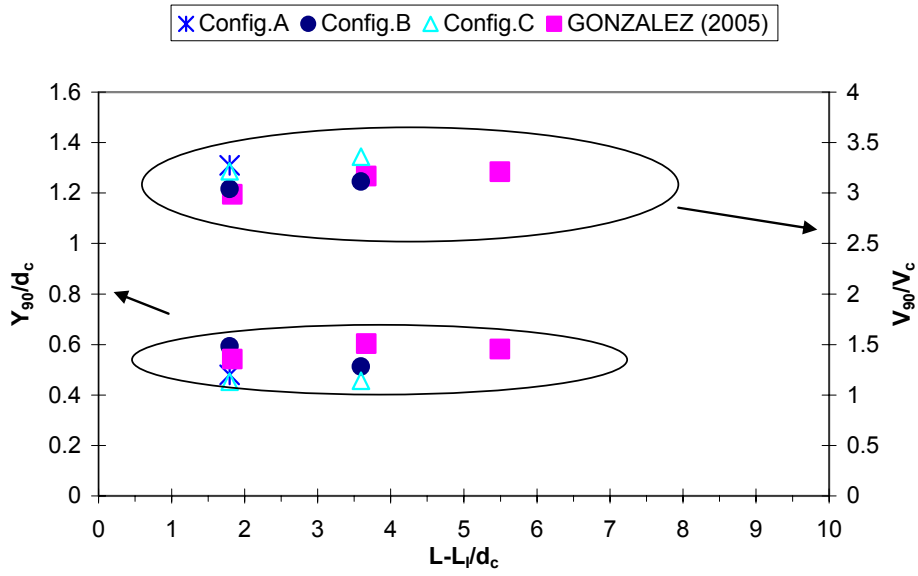
(F) Dimensionless Y_{90} and V_{90} (d_c/h =1.35)



(G) Mean air content and Maximum bubble countrate (d_c/h =1.5)



(H) Dimensionless Y_{90} and V_{90} (d_c/h =1.5)



APPENDIX F – EXPERIMENTAL DATA : BUBBLE AND WATER DROPLET CHORD LENGTHS

Location:	University of Queensland (Australia)
Date:	April - May 2005
Experiments by:	Carlos GONZALEZ and Masayuki TAKAHASHI
Data Processing by:	Carlos GONZALEZ, Masayuki TAKAHASHI, and Hubert CHANSON
Stepped Chute Characteristics:	θ = 21.8 degrees, h = 0.1 m, l = 0.25 m, W = 1 m
Artificial Roughness Properties	Plastic grid with area= 15 mm × 15 mm, height = 8mm Configuration A: Step roughness both in vertical and horizontal face Configuration B: Step roughness in the vertical face only Configuration C: Step roughness in the horizontal face only Smooth steps, Configuration S : no roughness
Instrumentation:	Double-tip conductivity probe

Table F-1 - Summary of flow conditions for detailed air-water chord measurements

Run	Q	$\frac{d_c}{h}$	$\frac{d_{crest}}{h}$	Re	Remarks
	m^3/s				
(1)	(2)	(3)	(4)	(5)	(6)
Configuration A					W = 1.0 m.
Run 1.1A	0.115	1.1	1.10	4.6 E+5	
Run 1.3A	0.138	1.25	1.30	5.5 E+5	
Run 1.5A	0.163	1.4	1.50	6.5 E+5	
Run 1.7A	0.183	1.5	1.70	7.3 E+5	
Configuration B					W = 1.0 m.
Run 1.1B	0.115	1.1	1.10	4.6 E+5	
Run 1.3B	0.138	1.25	1.30	5.5 E+5	
Run 1.5B	0.163	1.4	1.50	6.5 E+5	
Run 1.7B	0.183	1.5	1.70	7.3 E+5	
Configuration C					W = 1.0 m.
Run 1.1C	0.115	1.1	1.10	4.6 E+5	
Run 1.3C	0.138	1.25	1.30	5.5 E+5	
Run 1.5C	0.163	1.4	1.50	6.5 E+5	
Run 1.7C	0.183	1.5	1.70	7.3 E+5	
Configuration S smooth steps					W = 1.0 m.
Run 1.1S	0.115	1.1	1.10	4.6 E+5	
Run 1.3S	0.138	1.25	1.30	5.5 E+5	
Run 1.5S	0.163	1.4	1.50	6.5 E+5	
Run 1.7S	0.183	1.5	1.70	7.3 E+5	

Run 1.3S, d_{crest}/h = 1.3, no roughness, location 9

Filename	13S9_00		13S9_01		13S9_02		13S9_03		13S9_04		13S9_05		13S9_06		13S9_07		13S9_08		13S9_09		13S9_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.101		0.111		0.108		0.111		0.118		0.131		0.133		0.141		0.163		0.204		0.254	
Nab	3540		3501		3421		3357		3341		3482		3568		3674		3869		4412		4557	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	F(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	12.9%	10.7%	11.3%	9.7%	11.6%	8.2%	11.4%	7.4%	11.2%	7.5%	10.6%	7.7%	11.9%	7.7%	13.0%	7.3%	11.6%	8.3%	11.7%	10.5%	6.5%	6.7%
0.5	29.5%	11.0%	25.3%	9.9%	18.9%	7.0%	19.1%	7.1%	18.6%	7.4%	17.7%	6.5%	18.6%	7.0%	17.6%	6.5%	16.4%	8.0%	16.6%	7.5%	14.9%	10.0%
1	18.7%	6.3%	18.9%	6.0%	26.2%	7.2%	24.7%	6.9%	22.5%	6.4%	22.3%	7.3%	17.2%	5.2%	17.0%	5.2%	16.9%	5.9%	15.0%	6.8%	15.2%	7.2%
1.5	16.3%	5.1%	17.6%	4.9%	13.1%	4.9%	13.0%	4.1%	13.0%	3.8%	13.1%	3.7%	13.4%	4.1%	13.3%	3.9%	12.5%	4.5%	12.3%	4.3%	12.2%	6.1%
2	7.5%	2.9%	7.6%	3.6%	10.8%	4.6%	9.0%	4.0%	11.9%	4.7%	11.5%	4.0%	9.2%	3.4%	8.5%	3.6%	10.0%	3.6%	7.7%	4.0%	8.9%	4.5%
2.5	5.0%	3.8%	6.8%	4.0%	4.3%	2.6%	6.8%	3.7%	5.1%	2.9%	5.8%	3.6%	6.3%	3.0%	6.4%	3.4%	6.5%	3.2%	6.5%	3.6%	6.9%	3.8%
3	2.6%	2.4%	3.1%	2.1%	3.9%	2.9%	4.0%	2.7%	4.5%	2.8%	5.1%	3.1%	6.6%	4.0%	4.3%	2.5%	5.6%	3.9%	5.1%	3.1%	5.3%	3.3%

3.5	2.3%	2.0%	2.5%	2.9%	3.0%	2.5%	2.3%	2.0%	2.8%	1.9%	2.3%	2.1%	3.3%	2.5%	3.6%	2.5%	3.1%	2.7%	3.6%	2.7%	3.9%	2.5%
4	1.1%	2.2%	1.3%	2.1%	2.0%	1.9%	2.2%	2.4%	2.3%	2.6%	2.4%	2.3%	2.3%	2.5%	2.8%	2.4%	3.1%	2.3%	2.9%	2.9%	2.9%	2.9%
4.5	1.0%	2.1%	1.5%	2.1%	1.3%	2.2%	1.2%	1.7%	1.4%	1.8%	1.4%	2.4%	1.9%	2.2%	3.0%	2.6%	1.8%	1.9%	2.6%	2.4%	2.9%	3.0%
5	0.7%	1.9%	1.0%	2.2%	0.7%	2.0%	1.0%	1.8%	1.2%	2.3%	1.5%	2.4%	1.3%	1.5%	1.6%	1.9%	1.7%	1.4%	2.4%	2.3%	2.0%	2.1%
5.5	0.3%	1.3%	0.4%	1.3%	1.0%	2.0%	1.2%	2.2%	0.7%	1.5%	0.8%	1.6%	1.0%	1.3%	1.2%	1.9%	1.5%	2.0%	1.5%	2.0%	2.0%	2.4%
6	0.5%	1.9%	0.4%	1.6%	0.6%	1.3%	0.6%	1.7%	1.1%	1.8%	0.8%	2.3%	1.2%	2.0%	0.9%	1.8%	1.4%	2.4%	1.2%	1.6%	1.7%	2.2%
6.5	0.3%	1.2%	0.3%	1.1%	0.3%	1.3%	0.7%	1.8%	0.2%	1.2%	0.6%	1.3%	0.8%	1.3%	1.0%	1.7%	0.7%	1.4%	1.1%	1.6%	1.4%	1.8%
7	0.3%	1.4%	0.5%	1.5%	0.5%	1.8%	0.5%	1.1%	0.5%	1.5%	0.5%	1.8%	0.6%	1.1%	0.6%	1.5%	0.6%	1.7%	0.9%	1.5%	1.0%	1.5%
7.5	0.2%	1.1%	0.1%	1.2%	0.1%	1.1%	0.4%	1.3%	0.3%	1.6%	0.5%	1.4%	0.5%	1.3%	0.4%	1.3%	0.9%	1.3%	0.9%	1.7%	1.1%	1.5%
8	0.1%	1.2%	0.2%	1.4%	0.2%	1.2%	0.2%	1.6%	0.3%	1.6%	0.5%	1.4%	0.4%	1.5%	0.5%	1.2%	0.6%	1.2%	0.8%	1.3%	0.9%	2.0%
8.5	0.1%	1.0%	0.2%	1.0%	0.1%	0.8%	0.1%	1.0%	0.3%	1.0%	0.3%	1.0%	0.4%	1.6%	0.6%	1.4%	0.5%	1.1%	0.8%	1.5%	0.9%	1.3%
9	0.1%	1.2%	0.1%	1.3%	0.1%	1.2%	0.2%	1.0%	0.2%	1.7%	0.4%	1.4%	0.4%	1.7%	0.5%	1.2%	0.7%	1.6%	0.7%	1.4%	0.9%	1.2%
9.5	0.1%	1.5%	0.1%	1.1%	0.2%	1.0%	0.2%	1.3%	0.2%	0.9%	0.2%	1.1%	0.4%	1.3%	0.4%	1.9%	0.4%	1.2%	0.6%	0.8%	0.9%	1.3%
10	0.0%	0.7%	0.1%	0.8%	0.2%	1.1%	0.1%	0.7%	0.2%	1.1%	0.2%	1.0%	0.2%	1.1%	0.3%	1.3%	0.3%	1.2%	0.4%	1.1%	0.4%	1.0%
10.5	0.0%	1.0%	0.1%	1.2%	0.1%	1.5%	0.1%	0.8%	0.1%	1.0%	0.1%	0.9%	0.2%	1.1%	0.2%	1.3%	0.3%	1.2%	0.3%	1.2%	0.6%	1.2%
11	0.0%	0.7%	0.0%	0.9%	0.0%	0.9%	0.1%	1.4%	0.1%	1.6%	0.2%	1.2%	0.2%	1.3%	0.3%	0.9%	0.2%	0.9%	0.5%	0.7%	0.5%	1.2%
11.5	0.0%	1.1%	0.1%	0.9%	0.0%	1.1%	0.1%	0.6%	0.1%	0.8%	0.0%	0.9%	0.3%	1.0%	0.1%	0.9%	0.1%	1.2%	0.3%	1.0%	0.4%	0.9%
12	0.1%	0.8%	0.0%	0.7%	0.1%	1.2%	0.1%	1.0%	0.2%	1.0%	0.1%	1.3%	0.2%	1.0%	0.2%	1.1%	0.4%	1.3%	0.3%	0.9%	0.4%	1.0%
12.5	0.0%	0.8%	0.1%	1.1%	0.1%	0.7%	0.1%	1.6%	0.1%	0.9%	0.0%	0.8%	0.2%	0.8%	0.1%	1.1%	0.2%	1.0%	0.3%	0.9%	0.4%	0.9%
13	0.1%	0.8%	0.0%	0.7%	0.0%	0.7%	0.0%	0.9%	0.0%	1.4%	0.1%	1.5%	0.1%	1.0%	0.1%	1.0%	0.2%	0.9%	0.3%	0.9%	0.3%	0.8%
13.5	0.0%	0.8%	0.1%	1.1%	0.0%	0.7%	0.0%	1.2%	0.0%	0.9%	0.0%	0.8%	0.2%	0.8%	0.1%	0.9%	0.1%	0.7%	0.4%	1.5%	0.2%	0.7%
14	0.0%	0.8%	0.0%	0.8%	0.0%	1.2%	0.0%	1.0%	0.1%	1.0%	0.1%	1.0%	0.1%	1.0%	0.1%	1.2%	0.2%	0.8%	0.2%	0.8%	0.3%	1.0%
14.5	0.0%	0.5%	0.0%	0.4%	0.0%	0.6%	0.1%	0.7%	0.1%	0.4%	0.1%	0.6%	0.0%	0.9%	0.1%	0.9%	0.1%	0.8%	0.1%	1.1%	0.1%	0.5%
15	0.0%	0.8%	0.0%	0.9%	0.0%	0.7%	0.0%	1.0%	0.1%	0.9%	0.1%	1.1%	0.1%	1.3%	0.1%	1.1%	0.2%	1.1%	0.1%	0.8%	0.2%	0.7%
15.5	0.1%	0.7%	0.0%	0.7%	0.0%	0.8%	0.0%	0.6%	0.1%	0.5%	0.1%	0.7%	0.0%	0.6%	0.1%	0.8%	0.2%	0.7%	0.1%	0.8%	0.2%	0.6%
16	0.0%	0.8%	0.0%	0.7%	0.1%	0.7%	0.1%	0.7%	0.0%	0.7%	0.0%	0.9%	0.1%	0.7%	0.1%	0.8%	0.1%	0.6%	0.2%	1.0%	0.1%	0.7%
16.5	0.0%	0.5%	0.0%	0.4%	0.0%	0.9%	0.0%	0.8%	0.0%	0.7%	0.0%	0.9%	0.0%	0.6%	0.1%	0.8%	0.1%	0.7%	0.1%	0.7%	0.1%	0.5%
17	0.0%	0.5%	0.0%	0.7%	0.0%	0.7%	0.0%	0.4%	0.0%	0.7%	0.0%	0.7%	0.1%	0.5%	0.1%	0.8%	0.1%	0.8%	0.1%	0.9%	0.3%	0.5%
17.5	0.1%	0.4%	0.0%	0.4%	0.0%	0.6%	0.0%	0.4%	0.0%	0.6%	0.1%	0.6%	0.0%	0.7%	0.1%	0.8%	0.2%	0.3%	0.0%	0.8%	0.0%	0.6%
18	0.0%	0.5%	0.1%	0.6%	0.0%	0.5%	0.0%	0.6%	0.0%	1.0%	0.0%	1.0%	0.1%	1.0%	0.1%	0.8%	0.0%	1.1%	0.0%	0.6%	0.2%	0.7%
18.5	0.0%	0.6%	0.0%	0.4%	0.0%	0.9%	0.0%	0.4%	0.0%	0.9%	0.1%	0.5%	0.0%	0.7%	0.1%	0.6%	0.0%	0.7%	0.2%	0.7%	0.2%	0.5%
19	0.0%	0.3%	0.0%	0.3%	0.0%	0.4%	0.0%	0.9%	0.1%	0.7%	0.0%	0.8%	0.0%	0.6%	0.1%	0.4%	0.1%	0.4%	0.0%	0.3%	0.2%	0.6%
19.5	0.0%	0.6%	0.0%	0.3%	0.0%	0.6%	0.0%	0.5%	0.0%	0.3%	0.0%	0.5%	0.0%	0.7%	0.0%	0.9%	0.1%	0.5%	0.1%	0.5%	0.2%	0.5%
>20	0.1%	23.9%	0.1%	24.9%	0.1%	25.6%	0.1%	26.9%	0.2%	25.9%	0.3%	23.7%	0.2%	26.5%	0.2%	25.9%	0.6%	23.4%	0.8%	19.2%	2.2%	17.7%

Filename	13S9_11		13S9_12		13S9_13		13S9_14		13S9_15		13S9_16		13S9_17		13S9_18		13S9_19		13S9_20		13S9_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.3		0.386		0.451		0.542		0.615		0.711		0.761		0.788		0.849		0.868		0.903	
Nab	5033		5304		5162		4517		4073		3956		3194		2843		2260		2004		1513	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	F(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	5.7%	7.2%	5.3%	9.3%	4.6%	8.9%	6.1%	12.8%	3.1%	8.3%	3.4%	9.7%	2.5%	7.9%	2.0%	6.7%	1.7%	5.8%	1.7%	5.7%	1.1%	5.9%
0.5	14.5%	11.2%	13.2%	12.2%	10.3%	11.7%	10.4%	10.3%	8.0%	11.2%	7.8%	14.1%	6.5%	11.7%	6.3%	11.5%	5.2%	10.8%	4.6%	10.0%	4.5%	9.7%
1	14.1%	7.9%	12.7%	8.4%	12.3%	9.2%	9.6%	7.8%	9.5%	9.1%	9.0%	10.6%	6.9%	10.3%	6.9%	9.0%	6.4%	9.6%	6.9%	9.3%	4.8%	9.8%
1.5	11.4%	6.4%	11.0%	7.2%	10.1%	7.3%	9.5%	7.1%	8.6%	7.0%	8.0%	7.6%	7.5%	8.5%	6.1%	8.4%	5.0%	8.0%	5.4%	7.8%	4.9%	9.5%
2	9.4%	4.9%	7.9%	5.2%	8.1%	5.8%	7.3%	5.5%	7.2%	6.4%	6.9%	6.6%	4.9%	6.6%	4.8%	7.6%	5.1%	7.7%	4.3%	7.1%	5.2%	7.3%
2.5	7.1%	4.0%	6.1%	4.7%	6.5%	5.3%	5.2%	4.6%	6.2%	5.3%	4.9%	5.5%	4.7%	6.2%	4.7%	6.2%	4.3%	6.8%	3.7%	8.5%	3.6%	6.9%
3	5.4%	3.9%	5.5%	3.8%	5.4%	4.0%	4.9%	4.1%	4.5%	4.6%	4.2%	4.2%	3.7%	5.0%	3.1%	5.1%	3.8%	5.4%	3.5%	6.0%	2.9%	5.7%
3.5	4.0%	3.5%	4.3%	3.4%	4.5%	3.1%	3.8%	3.7%	4.3%	3.2%	3.6%	4.4%	3.2%	4.4%	3.2%	4.8%	3.0%	5.2%	3.3%	5.3%	2.5%	6.9%
4	3.3%	3.0%	3.4%	2.8%	3.7%	3.1%	2.9%	3.0%	3.1%	3.8%	3.6%	3.1%	3.1%	3.9%	2.9%	4.4%	2.8%	5.2%	2.7%	5.6%	2.8%	4.6%
4.5	2.7%	2.6%	3.1%	2.8%	3.0%	2.6%	2.7%	2.8%	3.0%	2.8%	2.7%	2.6%	2.9%	3.0%	2.5%	3.4%	2.3%	4.0%	1.7%	4.3%	1.6%	3.9%
5	2.2%	2.3%	2.5%	2.2%	2.4%	2.4%	2.7%	2.6%	2.3%	2.8%	1.8%	1.8%	2.1%	1.8%	2.6%	2.9%	1.8%	3.2%	1.3%	2.5%	1.2%	1.9%
5.5	1.9%	2.0%	2.3%	2.2%	2.1%	2.3%	2.3%	3.0%	2.4%	2.6%	2.4%	2.6%	2.3%	3.3%	2.3%	2.8%	1.7%	3.0%	1.6%	2.9%	1.7%	2.6%
6	1.6%	2.1%	1.8%	2.1%	2.0%	1.8%	1.9%	1.8%	2.1%	2.1%	2.0%	2.1%	2.3%	2.2%	1.5%	2.5%	1.5%	3.4%	1.7%	2.8%	1.7%	3.1%
6.5	1.7%	2.1%	1.6%	2.0%	1.6%	1.9%	2.0%	1.9%	1.7%	2.1%	1.8%	2.0%	2.0%	2.3%	1.9%	2.2%	1.9%	2.3%	1.0%	2.5%	1.2%	2.4%
7	1.3%	1.5%	1.5%	1.6%	1.4%	1.7%	1.5%	1.5%	1.5%	1.6%	1.4%	1.8%	1.7%	1.8%	1.4%	1.6%	1.5%	1.8%	1.6%	2.2%	1.7%	1.9%
7.5	1.2%	1.4%	1.3%	1.7%	1.8%	1.6%	1.1%	1.6%	1.8%	1.7%	1.8%	1.9%	1.6%	1.6%	1.5%	2.1%	1.3%	1.7%	1.3%	1.5%	1.2%	2.0%
8	1.1%	1.7%	1.3%	1.5%	1.4%	1.4%	1.2%	1.4%	1.1%	1.6%	1.4%	1.3%	1.6%	1.4%	1.5%	1.5%	1.3%	2.1%	1.6%	1.5%	0.7%	1.6%
8.5	0.9%	1.5%	0.9%	1.2%	1.2%	1.1%	1.2%	1.6%	1.3%	1.6%	1.6%	1.5%	1.7%	1.3%	1.7%	1.4%	1.5%	1.7%	1.0%	1.7%	1.5%	1.7%
9	0.8%	1.1%	1.0%	0.9%	1.1%	1.4%	1.3%	1.1%	1.5%	1.5%	1.3%	1.3%	1.5%	1.0%	1.3%	1.2%	1.1%	1.5%	0.8%	1.4%	1.0%	1.2%
9.5	0.7%	1.2%	0.8%	0.9%	1.0%	1.1%	0.8%	0.9%	1.1%	1.3%	1.2%	1.1%	0.9%	1.3%	0.8%	1.2%	1.1%	0.9%	1.1%	1.3%	0.8%	1.3%
10	0.6%	1.1%	0.9%	0.9%	0.7%	1.1%	0.9%	1.4%	1.0%	1.5%	1.0%	1.3%	1.2%	0.9%	1.0%	1.0%	0.9%	0.7%	0.9%	0.8%	0.5%	1.3%
10.5	0.7%	1.4%	0.7%	1.3%	0.8%	0.9%	1.0%	1.2%	1.2%	1.3%	0.8%	0.6%	0.9%	0.6%	1.3%	0.8%	0.7%	0.4%	0.7%	0.4%	0.5%	0.5%
11	0.6%	1.2%	0.8%	0.8%	0.7%	1.1%	0.9%	0.8%	0.9%	0.6%	1.1%	0.6%	0.9%	1.0%	1.0%	1.2%	0.8%	0.5%	1.2%	1.0%	0.4%	0.7%
11.5	0.4%	0.9%	0.5%	0.9%	0.7%	0.6%	0.8%	0.9%	0.8%	0.9%	0.8%	0.8%	1.1%	1.1%	1.2%	0.9%	1.0%	0.5%	0.8%	0.8%	0.9%	0.9%
12	0.4%	1.0%	0.5%	1.0%	0.8%	0.8%	0.6%	0.9%	1.1%	0.7%	0.9%	0.8%	0.7%	0.8%	0.8%	0.8%	0.9%	0.8%	0.9%	0.7%	1.1%	0.9%
12.5	0.4%	0.8%	0.6%	0.8%	0.7%	0.9%	0.5%	0.7%	0.9%	0.9%	0.7%	0.7%	0.7%	0.6%	0.8%	0.7%	0.8%	0.7%	0.7%	0.4%	0.5%	0.5%
13	0.3%	0.8%	0.5%	0.6%	0.5%	0.8%	0.4%	0.6%	0.7%	1.0%	0.8%	0.7%	0.7%	0.5%	1.3%	0.9%	0.9%	0.5%	0.6%	0.5%	0.9%	0.5%
13.5	0.3%	0.8%	0.4%	0.6%	0.6%	0.8%	1.0%	0.8%	0.5%	0.6%	0.7%	0.6%	0.6%	0.6%	0.8%	0.7%	0.8%	0.5%	0.6%	0.5%	0.9%	0.9%
14	0.3%	0.6%	0.5%	0.7%	0.6%	0.7%	0.4%	0.6%	0.5%	0.5%	0.8%	0.7%	0.7%	0.6%	0.9%	0.2%	0.6%	0.3%	1.0%	0.6%	0.5%	0.3%
14.5	0.4%	0.8%	0.2%	0.8%	0.5%	0.6%	0.5%	0.6%	0.6%	0.6%	0.6%	0.5%	0.8%	0.7%	0.8%	0.6%	0.7%	0.4%	0.6%	0.2%	0.1%	0.3%
15	0.3%	0.8%	0.3%	0.6%	0.4%	0.6%	0.5%	0.6%	0.6%	0.6%	0.5%	0.5%	0.7%	0.5%	0.7%	0.3%	0.7%	0.7%	0.4%	0.4%	0.6%	0.1%
15.5	0.2%	0.5%	0.3%	0.6%	0.3%	0.5%	0.6%	0.4%	0.5%	0.6%	0.5%	0.3%	0.6%	0.4%	0.7%	0.5%	0.5%	0.3%	0.4%	0.3%	0.2%	0.3%
16	0.3%	0.7%	0.3%	0.6%	0.4%	0.4%	0.5%	0.6%	0.5%	0.5%	0.4%	0.3%	0.3%	0.3%	0.4%	0.4%	0.3%	0.1%	0.2%	0.1%	0.3%	0.3%
16.5	0.4%	0.7%	0.3%	0.6%	0.2%	0.4%	0.6%	0.4%	0.4%	0.5%	0.7%	0.3%	0.8%	0.4%	0.5%	0.3%	0.6%	0.3%	0.8%	0.4%	0.5%	0.4%
17	0.2%	0.5%	0.2%	0.5%	0.4%	0.5%	0.4%	0.5%	0.4%	0.3%	0.4%	0.2%	0.5%	0.4%	0.5%	0.2%	0.5%	0.0%	0.8%	0.1%	0.8%	0.2%
17.5	0.1%	0.2%	0.1%	0.4%	0.2%	0.4%	0.3%	0.5%	0.3%	0.4%	0.5%	0.3%	0.5%	0.2%	0.2%	0.0%	0.8%	0.3%	0.5%	0.2%	0.5%	0.4%
18	0.1%	0.4%	0.2%	0.4%	0.3%	0.4%	0.3%	0.5%	0.3%	0.3%	0.4%	0.3%	0.4%	0.3%	0.6%	0.2%	0.4%	0.3%	0.5%	0.2%	0.3%	0.1%
18.5	0.1%	0.5%	0.1%	0.5%	0.4%	0.6%	0.3%	0.4%	0.5%	0.5%	0.5%	0.3%	0.5%	0.4%	0.3%	0.2%	0.4%	0.2%	0.4%	0.3%	0.9%	0.1%
19	0.1%	0.4%	0.2%	0.7%	0.3%	0.2%	0.4%	0.2%	0.4%	0.3%	0.3%	0.1%	0.3%	0.3%	0.8%	0.2%	0.7%	0.2%	0.8%	0.1%	0.7%	0.1%
19.5	0.1%	0.5%	0.4%	0.4%	0.3%	0.3%	0.4%	0.5%	0.3%	0.3%	0.4%	0.4%	0.3%	0.3%	0.4%	0.2%	0.2%	0.2%	0.4%	0.2%	0.1%	0.2%
>20	2.4%	14.1%	4.1%	10.4%	5.9%	9.4%	9.9%	7.7%	13.3%	6.4%	16.7%	3.9%	23.1%	3.4%	26.0%	3.2%	32.7%	1.9%	35.1%	1.2%	42.1%	1.2%

Filename	13S9_22		13S9_23		13S9_24		13S9_25		13S9_26		13S9_27		13S9_28		13S9_29		13S9_30	
y(mm)	73		77		81		85		89		93		103		113		123	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23	
C	0.923		0.936		0.944		0.956		0.967		0.974		0.98		0.991		0.994	
Nab	1316		1069		970		755		606		511		379		183		131	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.1%	5.1%	1.0%	6.4%	1.2%	4.6%	1.9%	5.7%	1.7%	5.4%	1.8%	6.1%	0.5%	5.3%	1.6%	4.4%	3.1%	6.9%
0.5	4.2%	11.5%	3.1%	9.9%	2.9%	10.8%	3.2%	9.9%	3.0%	11.1%	3.9%	8.6%	2.1%	7.9%	3.8%	10.9%	3.1%	6.9%
1	5.1%	9.8%	4.8%	10.7%	4.9%	11.4%	5.0%	8.5%	5.1%	9.4%	3.7%	12.1%	4.5%	12.1%	4.4%	9.3%	3.1%	9.2%
1.5	4.4%	8.7%	4.7%	8.2%	4.3%	7.6%	3.7%	9.5%	3.5%	9.4%	4.5%	10.8%	5.0%	8.7%	2.2%	13.7%	7.6%	9.9%
2	3.6%	7.2%	4.3%	7.1%	3.7%	9.8%	2.3%	8.6%	4.0%	7.1%	4.7%	8.6%	2.1%	9.2%	5.5%	10.4%	3.8%	9.9%
2.5	3.8%	8.1%	3.2%	7.4%	2.8%	7.0%	3.2%	7.4%	3.8%	8.3%	2.7%	6.1%	3.7%	8.2%	1.1%	7.7%	3.1%	10.7%
3	2.5%	6.5%	2.8%	6.5%	3.3%	6.3%	2.1%	6.6%	1.8%	5.6%	1.2%	5.7%	3.2%	6.9%	2.2%	7.1%	0.8%	9.9%
3.5	2.2%	6.5%	2.3%	6.8%	2.3%	4.5%	3.3%	6.8%	2.3%	6.3%	2.3%	5.9%	1.8%	6.6%	0.0%	6.6%	1.5%	6.9%
4	1.8%	4.4%	2.1%	4.1%	2.1%	5.1%	2.4%	4.4%	1.3%	4.6%	2.5%	5.5%	1.8%	6.1%	1.6%	2.7%	0.8%	3.8%
4.5	2.7%	5.2%	1.2%	4.7%	2.2%	4.5%	1.3%	4.8%	1.5%	5.4%	1.2%	5.5%	2.1%	3.7%	1.1%	4.9%	0.0%	3.1%
5	1.7%	2.7%	0.7%	3.3%	2.2%	4.8%	2.0%	5.0%	0.8%	5.1%	0.8%	5.5%	1.3%	3.4%	0.5%	3.3%	0.0%	5.3%
5.5	2.0%	3.5%	1.3%	2.6%	1.2%	3.5%	1.3%	3.0%	0.8%	2.5%	1.6%	2.9%	1.1%	3.7%	0.5%	1.6%	0.8%	3.8%
6	1.6%	2.5%	1.4%	3.6%	0.7%	2.5%	0.4%	3.8%	1.2%	3.6%	0.2%	2.0%	1.1%	5.5%	1.6%	3.8%	0.8%	3.1%
6.5	1.7%	2.1%	1.5%	2.3%	1.4%	1.6%	1.6%	1.7%	1.2%	2.1%	0.8%	2.3%	0.8%	3.4%	0.5%	3.3%	0.8%	0.8%
7	1.1%	1.7%	2.1%	2.2%	1.1%	1.6%	1.5%	1.6%	1.0%	3.1%	1.6%	2.5%	0.5%	1.1%	0.0%	1.1%	0.0%	3.1%
7.5	0.8%	1.9%	1.0%	1.3%	1.1%	1.8%	0.5%	1.7%	1.5%	2.0%	0.8%	2.2%	0.8%	2.4%	0.0%	0.5%	0.0%	0.8%
8	0.7%	1.7%	1.7%	1.8%	0.6%	2.0%	0.8%	1.6%	0.8%	2.1%	0.6%	1.4%	0.3%	0.8%	0.0%	3.3%	0.0%	1.5%
8.5	1.0%	2.1%	0.9%	1.5%	0.7%	1.4%	0.8%	0.9%	0.7%	1.3%	0.2%	1.2%	0.5%	0.3%	0.5%	1.6%	0.0%	0.8%
9	1.0%	1.4%	0.7%	0.9%	0.9%	1.1%	1.2%	1.3%	0.7%	0.7%	0.6%	1.2%	0.3%	0.8%	0.0%	1.1%	0.0%	0.0%
9.5	1.1%	1.1%	0.5%	1.2%	0.5%	0.6%	0.5%	0.8%	0.3%	1.0%	0.4%	0.6%	0.3%	1.1%	0.0%	0.0%	0.0%	0.0%
10	0.3%	0.7%	0.9%	1.0%	0.6%	1.0%	0.5%	0.3%	0.5%	0.2%	0.4%	0.8%	0.5%	0.3%	0.5%	0.0%	0.0%	0.8%
10.5	0.8%	0.2%	0.6%	0.4%	0.5%	0.4%	0.7%	0.7%	0.3%	0.8%	0.2%	0.4%	0.5%	0.3%	0.5%	0.5%	0.0%	0.8%

11	0.8%	0.8%	0.4%	0.4%	0.4%	1.4%	0.5%	0.9%	0.7%	0.5%	0.0%	0.2%	0.5%	0.5%	0.0%	1.1%	0.0%	0.0%
11.5	0.9%	1.0%	0.4%	0.6%	0.4%	0.5%	0.1%	0.4%	0.3%	0.2%	0.4%	0.6%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
12	0.5%	0.5%	0.6%	0.7%	0.6%	0.5%	0.9%	0.1%	0.5%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%
12.5	0.2%	0.4%	0.7%	0.6%	0.5%	0.4%	0.1%	0.7%	0.2%	0.0%	0.0%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.8%
13	0.6%	0.2%	0.5%	0.7%	0.1%	0.4%	1.3%	0.0%	0.2%	0.3%	0.2%	0.2%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%
13.5	1.1%	0.2%	0.4%	0.0%	0.3%	0.4%	0.5%	0.1%	0.7%	0.0%	0.8%	0.0%	0.5%	0.3%	0.0%	0.5%	0.0%	0.0%
14	0.6%	0.2%	0.7%	0.2%	0.2%	0.4%	0.1%	0.4%	0.2%	0.0%	0.2%	0.4%	0.3%	0.0%	0.0%	0.0%	0.8%	0.8%
14.5	0.5%	0.2%	0.5%	0.3%	0.4%	0.3%	0.1%	0.4%	0.5%	0.0%	0.4%	0.0%	0.3%	0.3%	0.0%	0.0%	0.8%	0.0%
15	0.5%	0.2%	0.5%	0.1%	0.3%	0.2%	0.0%	0.1%	0.0%	0.5%	0.2%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
15.5	0.5%	0.3%	0.7%	0.4%	0.3%	0.1%	0.3%	0.3%	0.7%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.2%	0.2%	0.6%	0.3%	0.5%	0.1%	0.1%	0.3%	0.3%	0.3%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
16.5	0.7%	0.1%	0.5%	0.3%	0.2%	0.0%	0.4%	0.5%	0.5%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.8%	0.2%	0.6%	0.2%	0.4%	0.1%	0.8%	0.0%	0.0%	0.2%	0.2%	0.2%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%
17.5	0.2%	0.2%	0.6%	0.1%	0.3%	0.1%	0.3%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.5%	0.0%	0.5%	0.2%	0.6%	0.3%	0.1%	0.0%	0.3%	0.2%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
18.5	0.5%	0.1%	0.3%	0.0%	0.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
19	0.6%	0.1%	0.7%	0.0%	0.4%	0.0%	0.3%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.4%	0.2%	0.3%	0.1%	0.5%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
>20	44.8%	0.6%	48.1%	0.9%	51.4%	0.3%	53.0%	0.7%	56.3%	0.2%	59.7%	0.0%	59.4%	0.0%	70.5%	0.0%	67.2%	0.0%

Run 1.3A, dcrest/h = 1.3, Configuration A, location 9

Filename	13S9_00		13S9_01		13S9_02		13S9_03		13S9_04		13S9_05		13S9_06		13S9_07		13S9_08		13S9_09		13S9_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.059		0.066		0.071		0.07		0.071		0.078		0.088		0.099		0.127		0.175		0.244	
Nab	2148		2157		2261		2193		2144		2186		2332		2389		2757		3285		3783	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	13.6%	7.3%	13.3%	6.4%	12.4%	5.9%	12.6%	6.4%	12.0%	5.5%	11.9%	5.8%	12.7%	6.9%	12.8%	5.5%	11.8%	5.8%	10.7%	8.3%	5.4%	6.3%
0.5	29.6%	7.4%	25.1%	8.5%	18.9%	6.4%	20.1%	5.3%	20.1%	4.6%	19.8%	5.2%	18.4%	5.3%	17.2%	4.7%	15.9%	5.9%	15.2%	7.0%	13.1%	9.4%
1	18.3%	3.6%	17.3%	3.6%	25.3%	5.6%	24.5%	5.5%	23.2%	4.7%	16.7%	3.9%	16.2%	4.2%	16.0%	5.6%	14.6%	4.8%	13.9%	5.9%	12.8%	6.8%
1.5	15.1%	3.7%	16.4%	5.0%	13.7%	3.1%	11.9%	3.9%	14.0%	2.7%	17.7%	3.9%	12.7%	2.7%	11.1%	2.8%	12.4%	3.6%	10.6%	4.5%	11.3%	4.7%
2	9.9%	3.7%	7.7%	2.6%	10.6%	3.4%	9.8%	3.3%	7.8%	2.4%	9.2%	3.0%	11.4%	3.4%	11.1%	3.0%	8.6%	3.3%	7.2%	3.8%	8.2%	4.1%
2.5	4.2%	1.7%	7.0%	2.6%	4.9%	2.2%	5.1%	1.6%	6.6%	3.5%	5.1%	2.6%	5.8%	3.1%	5.9%	2.1%	6.0%	2.8%	6.5%	3.3%	6.7%	3.9%
3	3.4%	2.2%	2.6%	2.4%	4.1%	2.5%	3.3%	1.3%	3.7%	1.5%	5.2%	2.7%	3.8%	1.6%	4.7%	2.8%	6.7%	3.7%	5.4%	3.3%	5.3%	3.4%
3.5	1.1%	2.2%	3.7%	2.3%	2.2%	1.5%	3.9%	2.2%	2.4%	1.8%	2.4%	1.6%	3.4%	2.3%	3.0%	2.1%	3.8%	2.4%	4.3%	2.4%	4.4%	2.6%
4	1.4%	1.4%	1.4%	1.4%	2.3%	2.2%	1.6%	1.2%	2.2%	2.2%	1.6%	1.8%	3.0%	2.1%	3.6%	2.9%	3.0%	1.8%	3.0%	2.2%	4.2%	2.4%
4.5	0.9%	1.8%	1.4%	1.4%	0.7%	1.3%	2.2%	2.0%	1.4%	1.7%	1.3%	2.1%	2.2%	1.8%	2.2%	1.6%	1.8%	1.6%	2.8%	2.3%	2.9%	2.5%
5	0.4%	1.0%	1.1%	1.8%	1.1%	2.0%	0.7%	1.5%	0.7%	1.3%	2.3%	2.1%	2.0%	1.3%	1.6%	1.7%	1.6%	1.4%	1.9%	1.9%	2.8%	2.1%
5.5	0.5%	1.2%	0.7%	1.2%	0.7%	1.0%	0.5%	1.3%	1.6%	1.7%	1.0%	1.0%	1.5%	1.5%	1.5%	1.3%	1.6%	1.4%	2.5%	2.0%	2.1%	2.0%
6	0.5%	1.3%	0.4%	1.6%	0.8%	1.6%	0.7%	1.3%	0.6%	1.4%	0.7%	1.0%	0.9%	1.4%	0.8%	1.3%	2.4%	2.3%	1.9%	1.4%	2.0%	2.3%
6.5	0.1%	1.0%	0.2%	0.9%	0.4%	1.2%	0.3%	0.9%	0.5%	1.6%	0.6%	1.2%	0.9%	1.5%	1.6%	1.8%	1.1%	1.2%	1.5%	1.8%	1.6%	1.4%
7	0.3%	1.2%	0.4%	1.7%	0.3%	1.6%	0.4%	1.8%	0.8%	1.0%	0.7%	1.0%	0.6%	1.1%	1.1%	1.2%	0.9%	2.0%	1.3%	1.4%	1.4%	1.5%
7.5	0.1%	1.0%	0.2%	1.4%	0.2%	1.1%	0.4%	1.2%	0.1%	1.3%	0.6%	0.9%	0.4%	1.5%	0.6%	1.2%	0.7%	1.5%	1.4%	1.5%	1.4%	1.6%
8	0.2%	1.1%	0.0%	1.4%	0.3%	1.5%	0.1%	1.3%	0.1%	1.3%	0.6%	1.5%	0.6%	1.5%	0.9%	0.8%	0.8%	0.9%	0.9%	1.2%	1.1%	1.1%
8.5	0.2%	0.8%	0.0%	0.9%	0.1%	1.3%	0.2%	0.6%	0.2%	1.0%	0.3%	0.9%	0.3%	0.9%	0.9%	1.8%	0.6%	1.3%	1.0%	1.5%	1.0%	1.2%
9	0.0%	0.5%	0.3%	1.6%	0.2%	1.1%	0.3%	0.7%	0.4%	1.1%	0.4%	0.8%	0.5%	0.8%	0.2%	0.9%	0.8%	1.7%	0.8%	0.9%	0.9%	1.6%
9.5	0.0%	1.1%	0.2%	1.0%	0.2%	1.1%	0.3%	0.9%	0.3%	1.3%	0.2%	0.6%	0.3%	0.8%	0.6%	1.0%	0.4%	1.2%	0.8%	1.0%	1.1%	1.1%
10	0.0%	1.0%	0.0%	0.5%	0.1%	1.0%	0.1%	0.8%	0.2%	0.6%	0.3%	1.5%	0.3%	1.0%	0.3%	1.0%	0.6%	0.9%	0.5%	1.1%	0.6%	1.1%
10.5	0.0%	1.5%	0.1%	1.2%	0.0%	0.9%	0.1%	1.4%	0.1%	1.2%	0.0%	0.9%	0.5%	1.3%	0.3%	1.3%	0.4%	0.8%	0.5%	0.9%	0.7%	1.2%
11	0.0%	1.2%	0.1%	0.5%	0.1%	1.1%	0.1%	0.5%	0.1%	1.4%	0.1%	1.1%	0.3%	0.7%	0.4%	0.9%	0.3%	1.0%	0.5%	1.1%	0.8%	1.1%
11.5	0.0%	1.0%	0.0%	1.0%	0.0%	0.7%	0.1%	1.5%	0.2%	0.9%	0.1%	1.0%	0.2%	1.1%	0.1%	0.9%	0.2%	0.8%	0.3%	1.1%	0.6%	1.2%
12	0.0%	0.7%	0.0%	0.7%	0.1%	0.9%	0.1%	0.7%	0.0%	0.7%	0.2%	1.1%	0.2%	0.9%	0.2%	1.0%	0.3%	1.4%	0.6%	0.9%	0.4%	1.0%
12.5	0.0%	0.8%	0.0%	0.7%	0.1%	0.8%	0.1%	1.2%	0.2%	0.8%	0.0%	0.5%	0.1%	0.6%	0.0%	1.0%	0.1%	0.6%	0.3%	0.8%	0.7%	1.0%
13	0.0%	0.4%	0.0%	0.5%	0.0%	1.0%	0.0%	0.7%	0.0%	0.7%	0.0%	0.9%	0.0%	0.8%	0.2%	0.8%	0.1%	1.1%	0.3%	0.8%	0.7%	1.0%
13.5	0.0%	0.8%	0.0%	1.0%	0.0%	0.6%	0.0%	1.0%	0.1%	0.7%	0.1%	0.8%	0.1%	0.7%	0.0%	0.7%	0.3%	1.1%	0.3%	0.9%	0.4%	0.9%
14	0.0%	0.2%	0.0%	0.7%	0.0%	1.1%	0.2%	1.0%	0.0%	0.9%	0.0%	0.8%	0.0%	0.9%	0.1%	0.5%	0.2%	1.0%	0.2%	0.7%	0.3%	1.2%
14.5	0.0%	0.7%	0.0%	0.7%	0.0%	0.6%	0.0%	0.4%	0.1%	0.8%	0.0%	0.8%	0.1%	0.5%	0.0%	0.7%	0.1%	0.7%	0.2%	0.6%	0.5%	0.9%
15	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.0%	0.9%	0.0%	0.9%	0.0%	0.9%	0.1%	0.4%	0.4%	0.9%	0.2%	0.9%	0.2%	0.9%	0.1%	0.8%
15.5	0.0%	0.6%	0.0%	0.3%	0.0%	0.8%	0.0%	0.5%	0.0%	0.5%	0.0%	0.7%	0.2%	0.8%	0.0%	0.8%	0.1%	0.7%	0.2%	0.8%	0.2%	0.7%
16	0.0%	0.9%	0.0%	0.7%	0.0%	0.8%	0.0%	0.7%	0.0%	0.5%	0.0%	0.5%	0.0%	0.6%	0.1%	0.8%	0.2%	0.8%	0.4%	0.5%	0.4%	0.7%
16.5	0.0%	0.6%	0.0%	0.4%	0.0%	0.6%	0.0%	1.2%	0.1%	0.8%	0.0%	0.9%	0.0%	0.9%	0.0%	0.8%	0.1%	0.4%	0.1%	0.5%	0.3%	0.6%
17	0.0%	0.5%	0.0%	0.5%	0.0%	0.9%	0.0%	0.4%	0.0%	0.8%	0.1%	0.6%	0.0%	1.1%	0.0%	0.8%	0.1%	0.6%	0.2%	0.7%	0.2%	0.8%
17.5	0.0%	0.7%	0.0%	0.5%	0.0%	0.5%	0.0%	0.7%	0.0%	0.4%	0.0%	0.5%	0.0%	0.5%	0.1%	0.6%	0.1%	0.6%	0.2%	0.6%	0.3%	0.3%
18	0.0%	0.7%	0.0%	0.6%	0.0%	0.8%	0.0%	0.5%	0.0%	0.7%	0.0%	0.3%	0.0%	0.9%	0.0%	0.8%	0.2%	0.8%	0.2%	0.4%	0.2%	0.4%
18.5	0.0%	0.5%	0.0%	0.6%	0.0%	0.5%	0.0%	0.8%	0.0%	0.5%	0.1%	1.1%	0.0%	0.5%	0.1%	0.8%	0.0%	0.5%	0.2%	0.8%	0.2%	0.7%
19	0.0%	0.5%	0.0%	0.5%	0.0%	0.6%	0.0%	0.9%	0.0%	1.2%	0.0%	0.6%	0.0%	0.3%	0.0%	0.7%	0.0%	0.5%	0.1%	0.5%	0.2%	0.4%
19.5	0.0%	0.5%	0.0%	0.4%	0.0%	0.4%	0.0%	0.5%	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.0%	0.9%	0.1%	0.6%	0.1%	0.5%	0.2%	0.4%
>20	0.0%	40.4%	0.0%	37.4%	0.0%	36.7%	0.0%	39.5%	0.0%	41.2%	0.2%	40.3%	0.1%	39.2%	0.3%	37.3%	0.7%	33.7%	1.1%	27.5%	2.5%	21.6%

Filename	13S9_11		13S9_12		13S9_13		13S9_14		13S9_15		13S9_16		13S9_17		13S9_18		13S9_19		13S9_20		13S9_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.333		0.461		0.566		0.668		0.761		0.797		0.857		0.887		0.914		0.935		0.939	
Nab	4018		4354		4009		3667		3170		2694		2068		1715		1332		1084		1006	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	4.8%	7.0%	4.6%	8.3%	3.7%	8.6%	3.1%	8.8%	3.2%	8.8%	2.4%	7.4%	1.6%	6.4%	1.4%	6.6%	1.4%	5.3%	1.1%	4.5%	1.5%	3.8%
0.5	11.4%	10.5%	9.9%	12.0%	8.1%	11.4%	8.2%	12.5%	6.3%	12.6%	5.8%	12.2%	4.1%	11.3%	3.3%	10.7%	3.4%	9.9%	3.5%	9.8%	3.4%	10.4%
1	11.7%	7.9%	10.1%	9.4%	8.6%	9.4%	7.6%	9.7%	7.2%	9.7%	5.0%	9.6%	5.1%	9.4%	4.8%	8.9%	3.3%	9.0%	3.8%	9.8%	3.7%	10.9%
1.5	9.9%	5.9%	9.0%	6.9%	7.7%	7.5%	6.3%	7.9%	6.6%	8.4%	6.0%	7.9%	4.1%	9.0%	5.1%	7.8%	3.0%	8.5%	4.2%	8.6%	3.6%	9.9%
2	8.1%	5.1%	6.5%	5.2%	6.0%	5.6%	6.0%	6.3%	5.0%	7.0%	5.1%	6.9%	3.2%	7.1%	3.9%	8.3%	3.2%	7.5%	2.8%	8.3%	2.8%	7.7%
2.5	6.0%	4.1%	6.1%	4.3%	5.7%	4.9%	4.7%	5.0%	4.1%	5.6%	3.5%	5.1%	4.2%	6.5%	2.9%	6.7%	2.9%	7.1%	3.3%	6.0%	2.0%	5.7%
3	4.8%	3.7%	3.3%	2.5%	4.1%	3.7%	4.1%	4.9%	2.3%	3.1%	2.5%	3.0%	2.8%	5.6%	2.3%	5.5%	2.0%	3.2%	2.0%	4.6%	2.5%	4.7%
3.5	3.9%	3.0%	4.0%	3.7%	4.3%	3.5%	4.0%	4.1%	3.2%	3.9%	2.7%	4.3%	3.0%	4.7%	1.7%	5.1%	2.5%	5.9%	2.9%	5.0%	2.7%	6.6%
4	3.8%	3.4%	3.5%	2.9%	3.3%	3.8%	3.7%	2.9%	3.3%	4.0%	2.9%	4.9%	2.9%	4.5%	2.6%	5.4%	1.7%	6.0%	2.4%	7.0%	2.3%	4.8%
4.5	3.0%	2.4%	3.3%	2.8%	3.0%	2.8%	2.9%	3.0%	2.5%	3.4%	2.9%	3.9%	2.9%	4.2%	2.3%	4.1%	2.0%	5.3%	1.5%	5.1%	1.2%	5.3%
5	2.2%	1.4%	2.9%	2.2%	1.9%	1.9%	1.9%	1.8%	2.1%	3.2%	2.6%	3.6%	1.7%	2.2%	1.1%	2.7%	2.1%	4.6%	1.9%	5.2%	1.6%	4.9%
5.5	2.6%	2.1%	2.4%	2.3%	2.9%	2.4%	2.6%	2.6%	1.8%	2.5%	2.2%	3.0%	1.7%	2.9%	2.7%	3.7%	2.4%	2.9%	1.4%	4.6%	1.3%	2.8%
6	2.2%	1.7%	1.6%	1.2%	2.6%	2.0%	2.4%	2.4%	1.6%	1.5%	1.5%	1.7%	2.0%	2.0%	1.3%	2.7%	1.0%	2.3%	0.6%	2.6%	0.6%	2.6%
6.5	1.8%	1.7%	2.4%	2.1%	1.9%	2.1%	2.0%	2.0%	1.8%	2.1%	2.7%	2.6%	1.5%	2.1%	1.2%	1.7%	1.3%	2.5%	1.2%	2.3%	1.6%	2.2%
7	1.7%	1.6%	2.3%	1.5%	2.0%	1.6%	1.7%	2.0%	2.1%	2.1%	1.3%	2.1%	1.7%	1.7%	1.6%	2.3%	1.5%	2.0%	1.0%	2.3%	1.3%	2.2%
7.5	1.3%	1.8%	1.7%	1.6%	2.0%	1.6%	1.8%	1.4%	1.9%	1.9%	1.9%	1.6%	1.5%	1.7%	1.6%	2.2%	1.1%	2.8%	0.6%	2.1%	0.8%	2.1%
8	1.2%	1.2%	1.7%	1.5%	1.5%	1.3%	1.4%	1.4%	1.9%	1.7%	1.4%	1.6%	1.5%	1.5%	1.0%	1.9%	1.3%	2.0%	0.9%	1.9%	1.1%	1.7%
8.5	1.4%	1.4%	1.7%	1.3%	1.5%	1.4%	1.5%	1.1%	1.6%	1.3%	1.4%	1.7%	1.3%	1.7%	1.2%	1.1%	1.7%	1.8%	1.1%	1.6%	0.6%	1.7%
9	1.2%	1.2%	1.2%	1.2%	1.7%	1.4%	0.9%	1.3%	1.2%	1.2%	1.3%	1.7%	1.5%	1.5%	1.1%	1.7%	0.9%	1.2%	0.9%	1.4%	0.8%	1.6%
9.5	0.8%	1.2%	0.7%	0.7%	1.4%	1.0%	1.2%	1.1%	0.8%	0.9%	0.8%	1.0%	0.9%	1.2%	1.5%	1.6%	0.5%	1.3%	0.6%	0.8%	1.0%	0.6%
10	1.3%	0.9%	1.0%	1.3%	0.8%	1.2%	1.4%	1.0%	1.4%	1.1%	1.4%	1.0%	1.1%	1.1%	1.0%	0.5%	0.7%	1.0%	0.6%	0.6%	0.3%	1.1%
10.5	0.7%	0.8%	1.0%	1.0%	0.8%	0.9%	1.0%	0.5%	1.2%	0.9%	1.0%	0.9%	1.1%	0.6%	0.5%	0.3%	1.1%	1.1%	1.0%	0.8%	0.6%	1.0%
11	1.1%	1.2%	1.1%	1.0%	1.3%	1.0%	0.9%	0.9%	1.2%	0.8%	0.9%	0.9%	1.1%	0.9%	1.1%	1.2%	0.8%	1.1%	0.7%	0.3%	0.8%	0.8%
11.5	0.8%	1.0%	1.0%	1.0%	0.8%	0.9%	1.1%	1.1%	0.9%	0.9%	1.0%	0.8%	1.1%	1.1%	0.6%	0.5%	0.8%	0.6%	0.6%	0.6%	0.5%	0.5%
12	0.6%	1.0%	0.8%	1.0%	0.6%	0.6%	0.8%	0.7%	1.1%	0.6%	0.8%	0.6%	0.6%	1.2%	1.2%	0.6%	0.5%	0.5%	0.9%	0.7%	0.7%	0.5%
12.5	0.6%	0.9%	0.6%	0.3%	0.9%	0.9%	0.9%	0.7%	0.7%	0.3%	0.7%	0.5%	0.6%	1.0%	0.8%	0.3%	0.2%	0.5%	0.1%	0.3%	0.6%	0.3%
13	0.5%	0.7%	0.7%	0.9%	0.8%	0.8%	0.9%	0.5%	1.0%	0.7%	0.8%	0.7%	0.9%	0.6%	0.8%	0.6%	0.8%	0.5%	0.8%	0.0%	0.4%	0.4%
13.5	0.6%	0.7%	0.8%	0.9%	0.4%	0.7%	0.7%	0.6%	0.8%	0.7%	0.7%	0.4%	0.8%	0.2%	0.5%	0.3%	1.0%	0.2%	0.6%	0.2%	0.6%	0.4%
14	0.3%	0.8%	0.8%	0.8%	0.5%	0.6%	0.8%	0.5%	0.7%	1.0%	0.9%	0.9%	0.7%	0.4%	0.5%	0.6%	0.5%	0.4%	0.6%	0.1%	0.1%	0.3%
14.5	0.6%	0.8%	0.6%	0.6%	0.6%	0.7%	0.9%	0.8%	0.9%	0.5%	1.1%	0.4%	0.7%	0.8%	0.3%	0.5%	0.5%	0.3%	0.6%	0.5%	0.5%	0.5%
15	0.5%	0.8%	0.7%	0.5%	0.8%	0.5%	0.2%	0.4%	0.8%	0.4%	0.9%	0.3%	0.7%	0.3%	0.6%	0.2%	0.7%	0.3%	0.6%	0.7%	0.4%	0.3%
15.5	0.6%	0.6%	0.2%	0.5%	0.7%	0.4%	0.7%	0.2%	0.6%	0.4%	0.6%	0.3%	0.8%	0.5%	1.0%	0.1%	0.6%	0.0%	0.3%	0.2%	0.3%	0.0%
16	0.3%	0.3%	0.6%	0.6%	0.5%	0.5%	0.3%	0.3%	0.7%	0.5%	0.7%	0.4%	0.4%	0.6%	0.6%	0.4%	0.6%	0.1%	0.6%	0.1%	0.3%	0.0%
16.5	0.4%	0.5%	0.4%	0.5%	0.6%	0.5%	0.4%	0.4%	0.7%	0.3%	0.8%	0.3%	0.6%	0.0%	0.6%	0.2%	0.4%	0.3%	0.3%	0.1%	0.3%	0.5%

17	0.4%	0.6%	0.5%	0.5%	0.5%	0.3%	0.8%	0.7%	0.5%	0.4%	0.3%	0.5%	0.9%	0.4%	0.6%	0.1%	0.7%	0.2%	0.4%	0.0%	0.5%	0.1%
17.5	0.4%	0.8%	0.2%	0.5%	0.5%	0.4%	0.6%	0.4%	0.6%	0.3%	1.0%	0.3%	0.9%	0.4%	0.8%	0.2%	0.5%	0.1%	0.2%	0.2%	0.4%	0.4%
18	0.5%	0.5%	0.3%	0.5%	0.4%	0.4%	0.6%	0.5%	0.6%	0.4%	0.8%	0.3%	0.7%	0.2%	0.3%	0.2%	0.5%	0.2%	0.6%	0.2%	0.2%	0.1%
18.5	0.4%	0.5%	0.4%	0.6%	0.3%	0.4%	0.5%	0.3%	0.4%	0.1%	0.4%	0.2%	0.8%	0.0%	0.8%	0.1%	0.7%	0.2%	0.8%	0.0%	0.6%	0.0%
19	0.3%	0.4%	0.3%	0.3%	0.5%	0.3%	0.5%	0.2%	0.4%	0.3%	0.4%	0.1%	0.6%	0.0%	0.8%	0.2%	0.3%	0.2%	0.3%	0.2%	0.1%	0.0%
19.5	0.3%	0.4%	0.3%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.2%	0.5%	0.4%	0.8%	0.2%	0.3%	0.2%	0.7%	0.1%	0.5%	0.2%	0.2%	0.2%
>20	4.9%	17.1%	8.9%	12.6%	13.1%	9.4%	17.6%	6.8%	24.1%	4.1%	28.4%	3.9%	34.7%	2.0%	41.7%	1.9%	48.7%	1.5%	51.2%	0.6%	55.0%	0.6%

Filename	13S9_22		13S9_23		13S9_24		13S9_25		13S9_26		13S9_27		13S9_28		13S9_29		13S9_30	
y(mm)	73		77		81		85		89		93		103		108		113	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.08		1.13	
C	0.958		0.964		0.97		0.979		0.98		0.983		0.993		0.994		0.995	
Nab	688		639		505		399		349		287		135		122		111	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	0.7%	4.5%	1.1%	4.9%	0.6%	5.9%	1.5%	4.5%	0.6%	6.3%	2.1%	3.1%	1.5%	8.9%	4.9%	13.9%	2.7%	6.3%
0.5	2.6%	8.9%	3.1%	10.5%	2.6%	8.7%	3.0%	10.8%	2.6%	9.7%	2.8%	7.0%	3.7%	5.9%	3.3%	10.7%	0.9%	12.6%
1	3.9%	8.6%	3.8%	10.0%	4.2%	8.5%	3.3%	10.8%	3.4%	7.4%	2.1%	11.5%	0.0%	6.7%	2.5%	12.3%	1.8%	9.0%
1.5	3.3%	7.8%	4.5%	7.0%	2.8%	11.1%	4.3%	9.3%	3.4%	9.5%	1.7%	9.4%	2.2%	11.1%	0.8%	1.6%	1.8%	13.5%
2	3.1%	7.3%	2.3%	8.0%	2.0%	7.7%	2.0%	6.5%	2.6%	8.6%	2.1%	7.7%	1.5%	8.9%	3.3%	4.9%	2.7%	7.2%
2.5	3.1%	9.0%	2.7%	8.0%	2.6%	6.9%	2.5%	10.8%	2.9%	7.4%	2.8%	7.7%	2.2%	12.6%	0.8%	9.8%	2.7%	5.4%
3	2.0%	4.2%	1.6%	4.1%	1.0%	4.2%	2.8%	6.3%	0.9%	8.3%	2.1%	4.5%	2.2%	6.7%	2.5%	5.7%	0.0%	8.1%
3.5	0.9%	7.1%	1.3%	6.6%	1.4%	6.3%	1.5%	5.8%	0.9%	7.2%	1.0%	7.3%	0.7%	5.2%	0.0%	4.1%	0.9%	4.5%
4	1.0%	4.7%	2.5%	6.7%	1.8%	5.5%	1.0%	5.5%	2.0%	4.9%	0.0%	5.9%	0.7%	8.1%	0.0%	4.9%	1.8%	3.6%
4.5	0.9%	6.4%	1.4%	5.0%	1.0%	4.2%	1.3%	5.5%	2.0%	4.3%	1.0%	4.5%	0.7%	5.9%	0.8%	4.1%	0.0%	0.0%
5	1.3%	5.1%	0.6%	5.3%	1.8%	4.6%	0.3%	2.5%	1.1%	3.2%	1.0%	5.6%	0.0%	3.7%	0.0%	6.6%	0.0%	8.1%
5.5	0.9%	2.9%	1.4%	4.1%	1.2%	3.4%	0.8%	4.8%	0.9%	2.9%	0.3%	4.5%	1.5%	2.2%	0.8%	4.9%	0.0%	1.8%
6	0.4%	1.0%	0.8%	2.3%	0.6%	3.4%	1.0%	2.0%	0.3%	2.9%	0.3%	1.7%	0.0%	0.7%	0.0%	2.5%	1.8%	4.5%
6.5	1.6%	4.2%	0.3%	3.4%	0.8%	2.0%	0.8%	2.3%	0.0%	2.9%	0.7%	1.7%	0.0%	0.0%	0.0%	3.3%	0.9%	2.7%
7	1.3%	2.8%	0.6%	2.2%	1.0%	2.6%	0.8%	2.5%	0.9%	3.4%	0.3%	3.1%	0.7%	2.2%	0.8%	0.8%	0.0%	2.7%
7.5	1.3%	2.8%	0.5%	1.3%	1.6%	3.0%	0.8%	2.8%	0.6%	1.7%	1.4%	2.4%	0.0%	1.5%	0.0%	1.6%	0.9%	0.9%
8	0.3%	2.0%	0.5%	2.2%	0.2%	1.2%	0.8%	0.8%	0.6%	1.7%	0.7%	2.1%	2.2%	1.5%	0.0%	2.5%	0.0%	2.7%
8.5	1.0%	2.3%	1.1%	1.1%	0.4%	1.4%	0.5%	0.8%	0.0%	1.7%	0.3%	1.7%	0.0%	1.5%	0.0%	0.0%	0.9%	1.8%
9	0.3%	0.7%	0.2%	1.1%	0.4%	1.8%	0.5%	1.0%	0.6%	0.0%	0.3%	2.1%	0.7%	0.7%	0.8%	1.6%	0.0%	0.9%
9.5	0.4%	0.7%	0.0%	0.5%	0.4%	1.2%	0.5%	0.8%	0.3%	0.6%	0.3%	0.3%	0.0%	0.7%	0.0%	0.8%	0.9%	0.0%
10	0.7%	0.7%	0.3%	0.8%	0.8%	0.6%	0.3%	0.0%	0.0%	0.3%	0.7%	1.0%	0.0%	0.7%	0.0%	0.0%	0.9%	1.8%
10.5	0.6%	0.7%	0.3%	0.6%	0.8%	0.4%	0.0%	0.0%	0.3%	0.3%	0.0%	0.7%	0.7%	0.7%	0.0%	0.8%	0.9%	0.9%
11	0.4%	0.4%	0.6%	0.2%	1.2%	0.2%	1.0%	1.3%	0.3%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11.5	0.7%	0.7%	0.6%	0.5%	0.8%	0.2%	0.0%	0.3%	0.6%	0.3%	0.3%	0.7%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%
12	1.0%	0.4%	0.9%	0.3%	0.2%	1.0%	0.3%	0.3%	0.6%	0.9%	0.3%	0.3%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%
12.5	0.0%	0.4%	0.2%	0.5%	0.2%	0.6%	0.3%	0.0%	0.6%	0.3%	0.3%	0.3%	0.0%	0.0%	1.6%	0.8%	0.0%	0.0%
13	0.4%	0.3%	0.3%	0.3%	0.6%	0.6%	0.0%	0.5%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%
13.5	0.6%	0.4%	0.5%	0.9%	0.6%	0.2%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%
14	0.0%	0.3%	0.3%	0.5%	0.8%	0.2%	0.5%	0.3%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14.5	0.4%	0.3%	0.8%	0.2%	0.4%	0.4%	0.0%	0.0%	0.0%	1.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	0.4%	0.3%	0.3%	0.3%	0.4%	0.4%	0.5%	0.5%	0.0%	0.6%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.9%	0.0%
15.5	0.4%	0.0%	0.2%	0.0%	0.2%	0.0%	0.3%	0.5%	0.0%	0.3%	0.3%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.1%	0.0%	0.5%	0.3%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16.5	0.4%	0.1%	0.2%	0.0%	0.0%	0.2%	0.0%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.1%	0.1%	0.5%	0.2%	0.0%	0.4%	0.3%	0.0%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17.5	0.1%	0.0%	0.6%	0.0%	0.4%	0.0%	0.8%	0.0%	0.0%	0.0%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.6%	0.4%	0.5%	0.0%	0.4%	0.4%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%
18.5	0.4%	0.0%	0.2%	0.2%	0.6%	0.0%	0.5%	0.0%	0.6%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%
19	0.0%	0.1%	0.2%	0.0%	0.2%	0.0%	0.5%	0.0%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.3%	0.1%	0.2%	0.0%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>20	61.3%	0.7%	61.5%	0.0%	62.6%	0.4%	64.7%	0.3%	67.3%	0.3%	70.4%	0.0%	74.8%	0.0%	74.6%	0.0%	73.9%	0.0%

Run 1.3B, dcrest/h = 1.3, Configuration B, location 9

Filename	13S9_00		13S9_01		13S9_02		13S9_03		13S9_04		13S9_05		13S9_06		13S9_07		13S9_08		13S9_09		13S9_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.082		0.084		0.093		0.086		0.087		0.101		0.111		0.121		0.132		0.177		0.266	
Nab	2974		2953		3039		2738		2690		2984		3143		3316		3397		3933		4536	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	13.0%	8.2%	12.4%	7.3%	12.8%	6.9%	10.3%	6.4%	11.5%	5.1%	12.0%	6.7%	12.9%	7.0%	11.1%	7.1%	11.7%	7.4%	12.3%	8.9%	10.9%	10.4%
0.5	29.1%	8.6%	28.1%	8.3%	26.0%	8.6%	19.4%	5.8%	20.0%	5.3%	19.1%	6.3%	19.6%	6.1%	18.6%	7.3%	17.4%	6.0%	17.4%	8.0%	14.6%	9.6%
1	18.5%	5.4%	19.5%	4.4%	18.7%	4.6%	27.4%	6.2%	25.1%	5.0%	18.9%	4.8%	17.6%	5.1%	19.3%	4.6%	16.8%	5.5%	15.7%	6.1%	13.5%	7.0%
1.5	17.1%	4.9%	16.6%	4.2%	16.1%	5.2%	12.5%	2.9%	12.5%	3.4%	14.0%	3.7%	15.9%	4.7%	13.4%	3.9%	13.6%	3.5%	11.2%	4.5%	10.4%	5.5%
2	6.6%	2.7%	8.8%	4.7%	6.7%	2.6%	11.5%	3.7%	9.2%	2.9%	11.3%	3.9%	8.2%	2.8%	8.5%	3.8%	12.2%	4.6%	8.9%	4.3%	8.2%	4.1%
2.5	6.8%	3.5%	4.2%	2.3%	6.9%	3.0%	4.7%	2.4%	6.6%	2.9%	5.4%	3.0%	5.4%	2.8%	6.9%	2.8%	5.3%	3.7%	6.4%	2.8%	5.7%	3.7%
3	2.0%	2.2%	3.4%	3.7%	2.6%	2.3%	3.5%	2.2%	3.3%	2.0%	4.5%	2.5%	5.2%	3.1%	6.3%	2.9%	4.7%	2.8%	4.4%	2.8%	4.9%	2.6%
3.5	2.1%	2.5%	1.7%	1.9%	3.2%	2.4%	2.9%	2.4%	2.3%	2.5%	3.4%	2.0%	3.0%	2.1%	2.9%	2.4%	3.3%	2.1%	3.2%	2.8%	3.6%	2.8%
4	1.0%	1.8%	1.3%	2.2%	1.0%	2.5%	1.5%	1.2%	2.1%	2.5%	2.9%	2.7%	2.1%	2.2%	1.8%	1.6%	3.1%	3.1%	3.2%	1.9%	3.4%	2.8%
4.5	1.0%	1.8%	0.9%	1.6%	1.5%	2.1%	1.7%	1.6%	1.2%	1.7%	1.4%	1.9%	1.6%	1.9%	2.1%	2.1%	1.9%	2.1%	3.3%	2.8%	2.6%	2.5%
5	0.7%	1.6%	0.5%	1.6%	0.9%	2.2%	0.9%	1.6%	1.2%	2.3%	1.3%	1.4%	1.9%	2.6%	1.4%	1.7%	1.5%	1.9%	1.8%	2.0%	2.1%	2.4%
5.5	0.2%	1.0%	0.7%	1.9%	0.8%	1.2%	0.6%	2.0%	1.1%	2.0%	0.8%	1.3%	0.7%	1.5%	1.0%	1.8%	1.4%	1.9%	1.1%	1.7%	2.1%	2.4%
6	0.7%	1.8%	0.5%	1.6%	0.7%	1.4%	0.6%	1.6%	0.7%	1.3%	0.5%	1.2%	0.7%	1.6%	1.1%	2.6%	0.7%	1.4%	1.3%	1.9%	1.6%	1.9%
6.5	0.2%	1.1%	0.2%	1.3%	0.5%	1.4%	0.4%	1.0%	0.6%	1.8%	0.8%	2.1%	0.8%	1.2%	0.7%	1.7%	1.1%	2.2%	1.3%	1.7%	1.3%	1.6%
7	0.3%	1.6%	0.2%	1.6%	0.3%	1.5%	0.6%	1.8%	0.3%	1.5%	0.4%	1.2%	0.6%	1.6%	0.5%	1.5%	0.6%	1.5%	0.9%	1.5%	1.4%	1.7%
7.5	0.1%	1.0%	0.2%	1.0%	0.4%	1.1%	0.3%	1.2%	0.5%	1.4%	0.5%	1.2%	0.6%	1.4%	0.5%	1.5%	0.7%	1.4%	0.9%	1.8%	1.1%	1.6%
8	0.1%	1.5%	0.1%	1.8%	0.2%	1.6%	0.2%	1.8%	0.3%	1.3%	0.5%	1.2%	0.6%	1.7%	0.5%	1.5%	0.4%	1.0%	0.8%	1.3%	0.9%	1.5%
8.5	0.1%	1.2%	0.2%	1.3%	0.1%	1.2%	0.1%	1.3%	0.1%	1.3%	0.3%	1.8%	0.3%	1.5%	0.6%	1.5%	0.6%	1.7%	0.4%	1.6%	1.1%	1.4%
9	0.1%	1.3%	0.0%	0.6%	0.2%	1.1%	0.1%	1.4%	0.1%	0.7%	0.3%	1.3%	0.2%	1.2%	0.4%	1.6%	0.3%	1.1%	0.3%	1.3%	0.7%	1.1%
9.5	0.1%	1.2%	0.2%	1.0%	0.1%	1.1%	0.1%	0.8%	0.2%	1.4%	0.2%	1.1%	0.3%	1.2%	0.2%	1.1%	0.3%	1.1%	0.8%	1.3%	0.9%	0.9%
10	0.1%	0.7%	0.1%	0.9%	0.0%	0.9%	0.1%	0.8%	0.0%	0.7%	0.1%	0.9%	0.2%	1.4%	0.2%	1.2%	0.3%	1.1%	0.5%	1.1%	0.7%	1.1%
10.5	0.1%	1.0%	0.0%	1.2%	0.0%	1.2%	0.1%	1.5%	0.2%	1.0%	0.1%	1.5%	0.3%	0.9%	0.1%	0.8%	0.2%	1.1%	0.4%	1.5%	0.6%	1.2%
11	0.1%	0.9%	0.0%	1.1%	0.0%	0.8%	0.1%	0.9%	0.1%	1.2%	0.1%	1.0%	0.1%	0.9%	0.3%	0.7%	0.1%	1.0%	0.2%	1.1%	0.7%	1.0%
11.5	0.0%	0.8%	0.0%	0.8%	0.0%	1.4%	0.0%	0.8%	0.1%	1.0%	0.2%	0.7%	0.3%	1.2%	0.2%	0.8%	0.2%	1.1%	0.3%	1.1%	0.6%	0.9%
12	0.0%	1.0%	0.0%	1.1%	0.0%	0.8%	0.0%	1.0%	0.1%	0.9%	0.1%	0.8%	0.2%	1.0%	0.1%	1.1%	0.1%	0.9%	0.2%	1.2%	0.4%	1.1%
12.5	0.0%	0.8%	0.0%	0.7%	0.0%	1.0%	0.1%	1.0%	0.1%	1.1%	0.0%	1.0%	0.0%	1.0%	0.1%	1.1%	0.1%	0.7%	0.3%	0.9%	0.4%	0.9%
13	0.0%	1.0%	0.0%	0.7%	0.1%	0.8%	0.0%	1.2%	0.1%	0.7%	0.1%	1.0%	0.1%	0.8%	0.2%	0.8%	0.2%	1.1%	0.2%	0.8%	0.5%	0.9%
13.5	0.0%	1.0%	0.0%	1.0%	0.0%	0.8%	0.0%	0.8%	0.0%	1.2%	0.0%	0.5%	0.1%	1.0%	0.0%	0.8%	0.1%	0.8%	0.3%	1.0%	0.4%	1.0%
14	0.0%	1.1%	0.0%	0.5%	0.0%	1.2%	0.0%	1.1%	0.0%	1.0%	0.0%	0.9%	0.0%	0.8%	0.2%	0.8%	0.1%	1.1%	0.1%	0.8%	0.2%	0.7%
14.5	0.0%	0.3%	0.0%	0.7%	0.0%	0.8%	0.0%	0.5%	0.0%	0.7%	0.1%	1.1%	0.0%	0.6%	0.0%	0.9%	0.1%	1.0%	0.3%	1.2%	0.2%	0.6%
15	0.0%	0.7%	0.0%	0.9%	0.0%	1.1%	0.1%	0.8%	0.1%	0.9%	0.1%	1.0%	0.1%	1.0%	0.1%	1.2%	0.1%	1.0%	0.1%	0.8%	0.3%	0.9%
15.5	0.0%	0.5%	0.0%	0.6%	0.0%	0.9%	0.0%	0.9%	0.0%	0.6%	0.0%	0.9%	0.1%	0.8%	0.1%	0.8%	0.1%	0.6%	0.2%	0.7%	0.2%	0.6%
16	0.0%	0.8%	0.0%	0.9%	0.0%	0.9%	0.1%	0.8%	0.0%	0.7%	0.1%	0.5%	0.1%	0.9%	0.1%	0.7%	0.1%	0.6%	0.1%	0.6%	0.1%	0.5%
16.5	0.0%	0.4%	0.0%	0.7%	0.0%	0.6%	0.1%	1.0%	0.0%	1.2%	0.1%	0.9%	0.0%	0.8%	0.1%	0.5%	0.0%	0.7%	0.2%	0.7%	0.2%	0.7%
17	0.0%	0.8%	0.0%	0.7%	0.0%	0.9%	0.0%	0.8%	0.0%	0.9%	0.0%	0.7%	0.0%	0.8%	0.0%	0.5%	0.1%	1.0%	0.1%	0.5%	0.4%	1.0%
17.5	0.0%	0.7%	0.0%	0.8%	0.0%	0.6%	0.0%	0.8%	0.0%	0.5%	0.0%	0.8%	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.1%	0.6%	0.2%	0.6%
18	0.0%	0.7%	0.0%	0.6%	0.0%	0.8%	0.0%	0.5%	0.0%	0.8%	0.0%	0.4%	0.0%	0.6%	0.1%	0.9%	0.0%	0.6%	0.2%	0.8%	0.3%	0.6%
18.5	0.0%	0.5%	0.0%	1.0%	0.0%	0.8%	0.0%	0.6%	0.0%	0.6%	0.0%	0.7%	0.0%	0.8%	0.0%	0.7%	0.1%	0.6%	0.1%	0.6%	0.1%	0.5%
19	0.0%	0.5%	0.0%	0.7%	0.0%	0.6%	0.0%	0.5%	0.0%	0.6%	0.0%	0.3%	0.0%	0.6%	0.0%	0.8%	0.0%	0.5%	0.1%	0.7%	0.1%	0.6%
19.5	0.0%	0.8%	0.0%	0.5%	0.0%	0.6%	0.0%	0.7%	0.0%	0.6%	0.0%	1.0%	0.0%	0.5%	0.0%	0.5%	0.1%	0.8%	0.1%	0.9%	0.3%	0.6%
>20	0.0%	29.8%	0.0%	29.6%	0.0%	28.6%	0.0%	33.5%	0.0%	34.7%	0.1%	31.9%	0.1%	29.7%	0.2%	28.5%	0.3%	27.1%	0.8%	21.6%	1.9%	16.4%

Filename	13S9_11	13S9_12	13S9_13	13S9_14	13S9_15	13S9_16	13S9_17	13S9_18	13S9_19	13S9_20	13S9_21

y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.307		0.41		0.483		0.569		0.638		0.714		0.754		0.788		0.816		0.883		0.889	
Nab	4681		4810		4874		4756		4391		3673		3065		3032		2588		1869		1812	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	9.5%	11.3%	5.2%	8.2%	4.4%	9.0%	3.7%	9.0%	3.2%	9.9%	2.5%	9.0%	2.2%	7.7%	2.0%	8.2%	1.5%	6.2%	1.4%	5.6%	1.5%	5.1%
0.5	14.2%	10.0%	11.4%	12.4%	10.6%	12.8%	10.4%	12.7%	9.3%	12.6%	6.8%	12.8%	6.2%	10.4%	6.2%	11.5%	4.7%	10.0%	3.9%	10.8%	4.1%	10.5%
1	13.8%	6.9%	12.6%	9.0%	11.6%	9.1%	10.7%	9.3%	8.7%	9.3%	8.4%	9.0%	7.0%	9.9%	6.0%	10.2%	5.4%	8.7%	5.1%	11.2%	5.2%	10.2%
1.5	9.8%	5.7%	10.3%	6.3%	9.4%	7.3%	8.0%	7.4%	7.2%	7.5%	6.7%	7.9%	6.2%	7.3%	6.0%	7.9%	6.1%	8.7%	5.0%	9.4%	5.2%	8.8%
2	7.8%	5.3%	8.2%	4.9%	7.8%	5.9%	7.0%	6.7%	6.5%	6.1%	6.8%	6.1%	5.3%	6.5%	5.5%	6.7%	3.9%	6.8%	4.3%	8.0%	3.7%	8.3%
2.5	6.3%	4.1%	5.9%	4.7%	5.8%	4.7%	5.5%	4.9%	5.6%	5.5%	4.5%	5.4%	4.3%	5.3%	4.1%	5.6%	3.6%	5.9%	4.3%	6.7%	3.2%	7.5%
3	4.8%	3.0%	5.0%	3.7%	4.9%	3.7%	4.2%	4.6%	4.5%	4.9%	4.0%	4.4%	3.4%	4.9%	2.6%	3.8%	2.2%	3.9%	3.2%	4.5%	2.6%	6.0%
3.5	3.7%	3.1%	4.1%	3.6%	3.5%	3.3%	3.6%	4.3%	4.0%	3.9%	3.6%	4.2%	3.4%	4.8%	3.7%	5.5%	2.7%	4.9%	2.8%	5.6%	2.6%	6.0%
4	3.2%	2.5%	3.5%	3.0%	3.7%	3.3%	3.6%	3.4%	3.7%	3.5%	3.5%	3.4%	3.2%	4.3%	3.0%	4.0%	2.8%	4.5%	2.8%	5.5%	2.8%	5.2%
4.5	2.6%	2.6%	3.1%	2.7%	3.1%	2.6%	2.8%	2.7%	3.2%	3.3%	2.7%	3.4%	2.0%	3.7%	3.5%	4.0%	2.4%	4.1%	2.0%	3.6%	2.8%	4.0%
5	2.3%	1.9%	2.8%	2.4%	2.7%	2.2%	2.0%	2.1%	1.5%	1.6%	1.7%	2.0%	1.5%	2.4%	2.7%	3.2%	3.0%	4.2%	1.0%	2.0%	1.4%	2.9%
5.5	2.1%	1.9%	2.4%	2.0%	1.9%	2.1%	2.7%	2.3%	2.5%	2.6%	2.8%	2.6%	2.6%	2.6%	2.0%	3.0%	2.0%	3.1%	1.8%	3.0%	1.5%	3.5%
6	1.8%	1.8%	1.6%	1.8%	2.1%	2.1%	2.1%	2.2%	2.6%	2.4%	1.4%	2.5%	1.8%	2.6%	1.2%	1.6%	1.5%	2.5%	1.7%	3.0%	1.2%	2.5%
6.5	1.5%	1.9%	2.0%	2.2%	1.6%	1.9%	2.1%	1.8%	2.2%	1.9%	2.2%	2.2%	1.5%	2.3%	2.0%	2.4%	1.9%	2.2%	1.3%	2.8%	1.9%	2.0%
7	1.2%	2.2%	1.5%	1.6%	1.6%	1.6%	1.6%	1.6%	2.0%	2.0%	2.1%	2.4%	2.1%	2.2%	1.8%	2.0%	1.3%	2.7%	1.6%	1.7%	1.1%	2.3%
7.5	0.9%	1.3%	1.1%	1.4%	1.4%	1.5%	1.8%	1.4%	1.4%	1.3%	1.7%	1.7%	1.6%	1.7%	1.6%	1.9%	1.6%	2.5%	1.3%	2.0%	1.0%	1.9%
8	0.7%	1.4%	1.3%	1.3%	1.3%	1.5%	1.4%	1.4%	1.2%	1.6%	1.5%	1.6%	1.8%	1.9%	1.4%	1.5%	1.7%	1.7%	1.0%	1.5%	1.1%	1.3%
8.5	1.2%	1.4%	1.2%	1.3%	1.3%	1.3%	1.3%	1.2%	1.3%	1.3%	1.7%	1.4%	1.3%	1.4%	1.1%	1.6%	1.7%	1.9%	1.3%	1.4%	1.0%	1.4%
9	1.0%	1.1%	1.0%	1.2%	1.0%	1.0%	1.1%	1.1%	1.3%	1.2%	1.2%	1.6%	1.5%	1.4%	1.3%	1.2%	1.3%	1.9%	1.0%	1.1%	1.0%	1.2%
9.5	0.8%	1.1%	1.0%	1.2%	1.0%	1.0%	1.2%	1.2%	1.3%	1.1%	1.2%	1.0%	1.0%	1.5%	1.0%	0.7%	0.7%	1.0%	1.1%	0.6%	1.2%	1.5%
10	0.9%	1.4%	0.6%	1.0%	1.3%	1.1%	1.2%	0.9%	1.4%	0.9%	1.3%	1.1%	1.1%	0.7%	1.4%	1.1%	1.2%	1.3%	1.1%	1.3%	1.0%	0.6%
10.5	0.6%	0.7%	0.9%	1.0%	1.0%	0.6%	0.6%	0.7%	0.7%	0.6%	0.8%	1.0%	0.8%	0.8%	1.1%	1.1%	1.2%	1.2%	0.8%	0.5%	0.5%	0.7%
11	0.8%	0.9%	0.7%	1.4%	0.9%	0.9%	1.1%	0.9%	1.1%	0.7%	0.9%	1.1%	1.1%	1.0%	0.8%	0.9%	1.3%	0.8%	1.1%	0.7%	1.0%	0.3%
11.5	0.4%	0.7%	0.7%	1.0%	0.9%	0.9%	1.1%	1.0%	0.8%	0.8%	1.1%	0.8%	1.2%	1.1%	1.1%	0.8%	0.7%	0.9%	0.7%	0.5%	1.1%	0.7%
12	0.6%	0.8%	0.5%	0.8%	0.7%	0.8%	0.8%	1.1%	1.0%	0.6%	0.9%	0.7%	0.8%	0.9%	0.7%	1.1%	1.2%	1.1%	0.9%	0.9%	0.6%	0.5%
12.5	0.6%	0.8%	0.7%	0.7%	0.8%	0.9%	0.7%	0.8%	0.9%	0.8%	0.6%	0.6%	0.8%	0.7%	0.9%	0.3%	1.0%	0.3%	0.9%	0.6%	0.5%	0.8%
13	0.5%	1.0%	0.6%	0.5%	0.6%	0.7%	1.0%	0.6%	0.7%	0.7%	0.9%	0.5%	0.7%	0.7%	0.9%	0.7%	0.7%	0.7%	0.5%	0.3%	0.6%	0.6%
13.5	0.5%	1.0%	0.6%	0.7%	0.7%	0.8%	0.5%	0.7%	0.7%	0.5%	0.6%	0.5%	1.0%	0.7%	0.7%	0.7%	1.0%	0.6%	0.7%	0.7%	0.9%	0.3%
14	0.3%	1.0%	0.4%	0.7%	0.5%	0.8%	0.6%	0.7%	0.5%	0.5%	0.9%	0.6%	0.7%	0.8%	0.8%	0.8%	0.7%	0.5%	0.6%	0.6%	0.4%	0.3%
14.5	0.2%	0.5%	0.5%	0.5%	0.6%	0.6%	0.5%	0.5%	0.8%	0.7%	0.7%	0.5%	0.8%	0.6%	0.8%	0.6%	0.9%	0.3%	0.5%	0.3%	0.9%	0.6%
15	0.2%	0.6%	0.3%	0.5%	0.5%	0.6%	0.7%	0.6%	0.5%	0.5%	0.8%	0.4%	0.9%	0.2%	0.7%	0.2%	0.6%	0.3%	0.7%	0.4%	0.7%	0.1%
15.5	0.2%	0.7%	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%	0.8%	0.5%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.6%	0.4%	0.4%	0.4%	0.7%	0.3%
16	0.3%	0.5%	0.3%	0.7%	0.5%	0.6%	0.4%	0.3%	0.2%	0.3%	0.4%	0.4%	0.7%	0.3%	0.3%	0.2%	0.6%	0.4%	0.4%	0.2%	0.5%	0.2%
16.5	0.2%	0.7%	0.2%	0.6%	0.5%	0.4%	0.5%	0.5%	0.5%	0.4%	0.6%	0.5%	0.5%	0.6%	0.5%	0.3%	0.9%	0.3%	0.6%	0.3%	0.5%	0.2%
17	0.3%	0.7%	0.4%	0.4%	0.2%	0.5%	0.6%	0.4%	0.8%	0.4%	0.7%	0.5%	0.4%	0.2%	0.6%	0.5%	0.7%	0.2%	0.7%	0.1%	0.5%	0.2%
17.5	0.2%	0.7%	0.2%	0.3%	0.3%	0.3%	0.4%	0.3%	0.4%	0.5%	0.5%	0.4%	0.7%	0.5%	0.5%	0.3%	0.7%	0.4%	0.8%	0.3%	0.6%	0.3%
18	0.1%	0.6%	0.2%	0.6%	0.2%	0.6%	0.3%	0.4%	0.4%	0.4%	0.5%	0.4%	0.5%	0.2%	0.5%	0.3%	0.7%	0.2%	0.4%	0.1%	0.7%	0.3%
18.5	0.2%	0.4%	0.2%	0.5%	0.3%	0.5%	0.4%	0.3%	0.5%	0.4%	0.4%	0.2%	0.5%	0.2%	0.9%	0.2%	0.7%	0.2%	0.3%	0.2%	0.4%	0.1%
19	0.1%	0.6%	0.2%	0.4%	0.2%	0.4%	0.4%	0.3%	0.4%	0.3%	0.4%	0.2%	0.6%	0.3%	0.3%	0.1%	0.3%	0.3%	0.3%	0.1%	0.7%	0.1%
19.5	0.2%	0.5%	0.1%	0.5%	0.3%	0.2%	0.4%	0.2%	0.3%	0.2%	0.5%	0.3%	0.5%	0.1%	0.3%	0.1%	0.5%	0.2%	0.4%	0.2%	0.5%	0.1%
>20	3.2%	15.1%	5.8%	11.7%	7.7%	9.3%	10.5%	6.7%	13.4%	5.4%	19.0%	4.3%	25.5%	4.2%	27.0%	2.8%	31.6%	2.2%	39.0%	1.1%	40.5%	0.8%

Filename	13S9_22		13S9_23		13S9_24		13S9_25		13S9_26		13S9_27		13S9_28		13S9_29		13S9_30		13S9_31	
y(mm)	73		77		81		85		89		93		103		108		113		123	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.08		1.13		1.23	
C	0.91		0.917		0.94		0.941		0.958		0.963		0.976		0.979		0.984		0.994	
Nab	1462	1462	1356	1356	1019	1019	1021	1021	764	764	717	717	512	512	402	402	326	326	118	118
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.3%	5.3%	0.9%	4.9%	0.9%	5.6%	1.5%	5.4%	0.9%	6.0%	1.3%	5.6%	2.9%	7.4%	2.0%	8.0%	1.8%	5.5%	0%	4%
0.5	3.7%	9.8%	3.4%	9.1%	3.2%	9.5%	3.7%	10.2%	2.9%	11.8%	2.8%	11.9%	2.5%	11.9%	3.2%	11.2%	1.5%	9.5%	4%	10%
1	5.2%	9.2%	4.9%	10.3%	4.2%	9.9%	4.0%	9.8%	5.1%	9.4%	3.5%	11.3%	5.3%	12.1%	3.7%	10.2%	3.1%	11.7%	3%	9%
1.5	4.3%	9.6%	3.9%	8.2%	5.8%	10.1%	4.4%	9.1%	2.9%	9.0%	4.5%	8.4%	4.1%	12.1%	3.5%	8.0%	4.6%	11.7%	0%	9%
2	4.5%	8.3%	3.6%	8.0%	3.4%	8.4%	2.4%	8.4%	2.2%	8.1%	4.5%	8.6%	4.1%	8.8%	2.2%	8.5%	3.1%	9.2%	2%	6%
2.5	2.9%	7.3%	3.5%	7.2%	2.4%	7.4%	3.4%	7.4%	2.5%	7.2%	2.1%	8.8%	2.5%	6.8%	1.7%	6.7%	3.1%	11.0%	3%	13%
3	1.9%	6.7%	3.6%	7.8%	3.4%	6.7%	2.4%	6.1%	2.0%	6.2%	3.3%	7.1%	2.0%	5.9%	1.2%	7.0%	1.5%	6.4%	1%	9%
3.5	3.1%	6.0%	1.5%	5.5%	2.3%	5.2%	2.5%	5.8%	2.2%	6.3%	1.8%	7.3%	1.8%	2.9%	3.2%	6.2%	1.2%	6.4%	2%	1%
4	2.1%	4.5%	2.1%	5.4%	2.6%	5.1%	1.5%	5.4%	1.8%	4.8%	1.1%	4.7%	0.8%	5.1%	2.2%	4.0%	2.5%	5.8%	2%	9%
4.5	1.3%	3.9%	2.4%	4.8%	0.9%	2.9%	1.6%	4.3%	1.0%	5.8%	2.4%	3.2%	1.6%	5.3%	1.0%	4.7%	0.3%	3.4%	0%	3%
5	1.6%	2.3%	1.0%	2.7%	1.1%	2.5%	1.1%	4.4%	0.7%	2.9%	0.8%	2.2%	1.2%	4.3%	0.7%	2.2%	2.5%	1.5%	0%	4%
5.5	1.2%	3.3%	1.0%	2.7%	1.0%	2.8%	1.5%	3.1%	1.2%	3.8%	2.5%	3.8%	1.0%	3.3%	1.2%	3.5%	0.3%	4.3%	0%	4%
6	1.2%	3.3%	1.5%	2.5%	1.7%	3.7%	1.1%	3.0%	1.6%	3.3%	0.8%	3.3%	0.8%	2.7%	0.7%	2.5%	0.3%	2.5%	0%	3%
6.5	1.5%	2.3%	1.3%	2.1%	1.5%	2.6%	0.8%	3.0%	1.3%	2.0%	0.6%	1.8%	1.2%	3.1%	1.2%	3.2%	0.6%	2.1%	0%	3%
7	1.2%	2.1%	1.6%	2.8%	0.9%	2.6%	1.0%	2.3%	0.9%	2.1%	1.3%	1.1%	1.2%	2.3%	0.7%	2.2%	1.8%	1.2%	0%	2%
7.5	1.3%	2.1%	1.7%	2.0%	1.1%	2.3%	1.1%	1.5%	0.5%	1.7%	0.4%	2.6%	0.8%	1.2%	0.7%	1.5%	0.3%	1.2%	0%	2%
8	1.2%	1.7%	0.8%	1.8%	1.1%	1.6%	1.3%	1.6%	0.9%	1.3%	0.7%	1.3%	0.4%	0.4%	0.7%	2.0%	0.0%	0.6%	0%	0%
8.5	0.8%	1.4%	0.8%	1.9%	1.1%	1.7%	0.3%	1.2%	1.4%	1.0%	0.4%	0.6%	0.4%	0.2%	0.2%	1.2%	0.0%	0.3%	0%	3%
9	0.7%	1.9%	0.5%	1.1%	0.7%	1.3%	0.9%	0.8%	0.5%	0.8%	0.6%	1.3%	0.2%	0.2%	0.5%	0.7%	0.6%	0.6%	0%	0%
9.5	0.9%	1.0%	1.1%	1.3%	1.0%	1.0%	0.4%	1.2%	0.3%	1.4%	0.4%	1.0%	0.6%	0.4%	0.7%	0.7%	0.6%	0.3%	0%	2%
10	1.0%	1.2%	1.0%	1.2%	0.5%	1.1%	0.5%	1.1%	0.7%	0.8%	0.3%	1.0%	0.8%	0.6%	0.2%	1.5%	0.3%	1.5%	1%	2%
10.5	0.7%	0.8%	0.4%	0.4%	0.3%	0.5%	0.7%	0.8%	0.4%	0.3%	0.4%	0.1%	0.0%	0.4%	0.0%	0.5%	0.6%	0.3%	0%	0%
11	0.6%	0.7%	0.8%	0.8%	0.5%	0.6%	0.6%	1.1%	0.7%	0.7%	0.6%	0.6%	0.4%	0.0%	0.5%	0.7%	0.3%	0.3%	0%	0%
11.5	0.8%	0.5%	0.4%	0.5%	0.9%	1.1%	0.7%	0.4%	0.8%	0.1%	0.4%	0.1%	0.8%	0.0%	0.0%	0.2%	0.3%	0.0%	1%	0%
12	0.8%	0.5%	0.7%	0.6%	0.5%	0.4%	0.3%	0.2%	0.7%	0.4%	0.3%	0.4%	0.2%	1.2%	0.5%	0.7%	0.3%	0.0%	1%	1%
12.5	0.6%	0.7%	0.9%	0.3%	0.5%	0.4%	0.4%	0.2%	0.7%	0.5%	0.6%	0.3%	0.4%	0.2%	0.2%	0.5%	0.3%	0.9%	0%	0%
13	0.2%	0.5%	0.9%	0.5%	0.6%	0.4%	0.8%	0.1%	0.5%	0.1%	0.7%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.3%	2%	0%
13.5	0.5%	0.3%	1.1%	0.5%	0.4%	0.2%	0.6%	0.3%	0.4%	0.3%	0.3%	0.3%	0.2%	0.0%	0.5%	0.0%	0.0%	0.0%	1%	0%
14	0.8%	0.3%	0.5%	0.1%	0.3%	0.5%	0.4%	0.5%	0.3%	0.3%	0.6%	0.3%	0.6%	0.2%	0.5%	0.2%	0.0%	0.3%	0%	0%
14.5	0.7%	0.3%	0.4%	0.3%	0.5%	0.3%	0.2%	0.1%	0.3%	0.1%	0.3%	0.3%	0.0%	0.4%	0.5%	0.2%	0.3%	0.0%	0%	0%
15	0.8%	0.3%	0.4%	0.5%	0.5%	0.0%	0.5%	0.0%	0.0%	0.1%	0.3%	0.1%	0.4%	0.2%	0.0%	0.0%	0.3%	0.0%	0%	0%
15.5	0.4%	0.3%	0.7%	0.3%	0.3%	0.2%	0.3%	0.1%	0.7%	0.3%	0.6%	0.0%	0.2%	0.2%	0.0%	0.0%	0.6%	0.0%	0%	0%
16	0.5%	0.3%	0.4%	0.1%	0.2%	0.0%	0.5%	0.3%	0.3%	0.0%	0.1%	0.0%	0.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0%	0%
16.5	0.5%	0.1%	0.7%	0.1%	0.3%	0.2%	0.3%	0.1%	0.1%	0.1%	0.7%	0.0%	0.2%	0.0%	1.0%	0.0%	0.0%	0.0%	0%	0%
17	0.6%	0.1%	0.5%	0.3%	0.3%	0.3%	0.6%	0.2%	0.5%	0.1%	0.4%	0.0%	0.4%	0.0%	0.5%	0.0%	0.3%	0.3%	0%	0%
17.5	0.8%	0.1%	0.6%	0.0%	0.4%	0.1%	0.5%	0.0%	0.5%	0.1%	0.1%	0.1%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0%	0%
18	0.2%	0.1%	0.3%	0.1%	0.5%	0.1%	0.5%	0.0%	0.3%	0.0%	0.1%	0.0%	0.2%	0.0%	0.5%	0.0%	0.3%	0.0%	0%	0%
18.5	0.4%	0.1%	0.4%	0.4%	1.2%	0.4%	0.4%	0.0%	0.1%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.3%	0%	0%
19	0.3%	0.0%	0.4%	0.1%	0.1%	0.0%	0.4%	0.1%	0.4%	0.0%	0.4%	0.0%	0.2%	0.0%	0.5%	0.2%	0.0%	0.0%	0%	0%
19.5	0.3%	0.1%	0.3%	0.1%	0.5%	0.0%	0.5%	0.2%	0.3%	0.0%	0.8%	0.1%	0.4%	0.0%	0.2%	0.0%	0.0%	0.0%	0%	0%
>20	46.4%	0.8%	46.8%	0.4%	50.6%	0.5%	53.7%	0.3%	58.5%	0.7%	55.4%	0.3%	58.8%	0.0%	60.9%	0.2%	65.0%	0.0%	76%	0%

Run 1.3C, dcrest/h = 1.3, Configuration C, location 9

Filename	13S9_00		13S9_01		13S9_02		13S9_03		13S9_04		13S9_05		13S9_06		13S9_07		13S9_08		13S9_09		13S9_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.048		0.052		0.058		0.061		0.057		0.066		0.074		0.096		0.098		0.158		0.223	
Nab	1858		1884		1919		1954		1801		1996		2136		2505		2325		3137		3769	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	13.9%	5.2%	14.4%	6.0%	12.5%	4.9%	13.4%	4.7%	12.7%	4.3%	13.5%	5.2%	12.7%	5.7%	12.9%	5.8%	11.8%	5.5%	6.9%	4.9%	6.2%	6.9%
0.5	30.1%	7.3%	28.9%	8.1%	23.1%	5.2%	28.6%	5.9%	21.0%	4.8%	19.0%	4.9%	20.4%	4.2%	18.1%	5.7%	17.5%	5.5%	16.0%	8.0%	14.4%	10.3%
1	18.6%	4.1%	17.8%	3.2%	18.8%	4.1%	17.1%	3.3%	18.2%	3.6%	23.3%	4.4%	17.1%	3.9%	15.7%	4.8%	16.5%	4.5%	14.0%	6.1%	14.0%	7.2%
1.5	17.4%	3.9%	14.7%	3.9%	17.6%	4.3%	14.3%	3.7%	17.6%	3.9%	11.7%	3.1%	13.6%	3.4%	13.6%	3.5%	12.2%	3.6%	12.6%	4.8%	10.6%	4.9%
2	6.0%	3.0%	9.8%	3.2%	7.9%	2.2%	7.6%	2.9%	8.6%	2.1%	8.5%	2.9%	8.6%	2.4%	9.0%	2.8%	8.0%	2.7%	8.7%	3.3%	9.0%	4.3%
2.5	5.7%	2.4%	3.7%	2.0%	5.7%	2.4%	5.8%	2.9%	4.9%	1.7%	7.4%	2.5%	6.2%	2.7%	6.4%	2.7%	6.5%	2.7%	7.1%	3.6%	6.6%	3.8%
3	2.9%	2.0%	3.8%	2.3%	4.6%	2.4%	2.6%	1.6%	4.9%	2.5%	3.1%	2.0%	5.7%	3.5%	5.6%	2.9%	5.9%	2.4%	5.4%	2.8%	5.8%	2.8%
3.5	2.3%	2.0%	1.8%	1.5%	1.8%	2.3%	3.4%	2.4%	2.8%	1.2%	2.9%	1.9%	3.0%	1.2%	3.2%	2.0%	3.4%	1.7%	3.5%	2.9%	4.3%	2.5%

4	0.8%	0.9%	1.4%	1.4%	1.7%	1.3%	1.1%	1.3%	2.0%	1.6%	2.8%	2.3%	2.5%	2.6%	2.0%	2.1%	2.6%	1.8%	3.3%	2.0%	3.3%	2.5%
4.5	1.0%	1.2%	1.4%	1.9%	1.0%	1.1%	1.7%	2.0%	1.4%	1.1%	1.2%	1.2%	1.9%	1.5%	2.7%	1.5%	1.9%	1.5%	2.9%	2.5%	2.9%	2.5%
5	0.5%	1.1%	0.6%	1.0%	1.1%	1.6%	0.9%	1.7%	1.1%	1.3%	1.4%	1.6%	1.6%	1.1%	1.5%	1.6%	1.6%	1.2%	3.3%	2.0%	1.4%	1.4%
5.5	0.2%	1.0%	0.6%	1.6%	0.5%	0.9%	0.4%	0.9%	0.8%	1.5%	1.3%	2.0%	0.8%	1.7%	1.6%	1.2%	1.4%	1.6%	1.9%	1.5%	1.9%	2.1%
6	0.2%	1.3%	0.4%	1.3%	0.8%	1.1%	0.6%	1.2%	0.7%	0.9%	0.7%	1.2%	1.2%	1.1%	1.4%	2.0%	1.7%	2.5%	1.4%	1.9%	2.1%	1.8%
6.5	0.2%	1.0%	0.0%	1.0%	0.4%	1.5%	0.5%	1.4%	0.4%	1.5%	0.9%	1.8%	0.8%	1.2%	0.9%	1.1%	1.6%	1.2%	1.5%	1.3%	1.8%	1.9%
7	0.1%	1.4%	0.1%	1.7%	0.4%	1.1%	0.2%	1.1%	0.6%	0.9%	0.4%	0.7%	0.4%	0.5%	0.5%	1.5%	0.8%	1.5%	1.4%	1.6%	1.4%	1.9%
7.5	0.0%	0.8%	0.2%	0.8%	0.4%	0.8%	0.1%	1.2%	0.2%	0.8%	0.2%	1.2%	0.7%	0.9%	0.6%	1.4%	0.7%	0.9%	1.1%	1.0%	1.3%	1.4%
8	0.0%	0.8%	0.1%	1.3%	0.3%	1.5%	0.3%	1.1%	0.7%	1.2%	0.5%	1.0%	0.3%	1.0%	0.5%	1.1%	0.7%	1.4%	0.9%	1.2%	1.2%	1.4%
8.5	0.1%	1.1%	0.2%	0.7%	0.2%	0.8%	0.1%	1.0%	0.3%	0.9%	0.4%	0.8%	0.4%	1.4%	0.4%	1.1%	0.5%	0.8%	0.9%	1.2%	1.0%	1.2%
9	0.0%	1.0%	0.1%	0.7%	0.1%	0.8%	0.1%	1.3%	0.2%	0.7%	0.1%	0.4%	0.5%	1.3%	0.5%	1.5%	0.7%	1.4%	0.7%	1.3%	0.8%	1.1%
9.5	0.1%	0.8%	0.1%	0.9%	0.1%	0.7%	0.3%	1.2%	0.1%	0.6%	0.3%	1.3%	0.2%	1.0%	0.4%	0.9%	0.6%	1.1%	0.5%	1.1%	0.9%	1.0%
10	0.0%	0.3%	0.1%	0.5%	0.1%	0.9%	0.2%	0.8%	0.2%	1.2%	0.2%	0.6%	0.1%	1.1%	0.2%	1.2%	0.8%	0.9%	0.4%	1.1%	0.8%	1.1%
10.5	0.1%	1.3%	0.1%	1.0%	0.2%	0.5%	0.2%	1.1%	0.0%	0.7%	0.1%	0.8%	0.0%	0.9%	0.2%	0.9%	0.5%	1.1%	0.5%	0.9%	0.4%	0.8%
11	0.1%	0.8%	0.0%	0.6%	0.2%	0.9%	0.3%	0.7%	0.1%	0.4%	0.0%	0.9%	0.0%	1.1%	0.2%	0.8%	0.3%	0.9%	0.3%	0.9%	0.7%	1.1%
11.5	0.0%	1.0%	0.0%	0.5%	0.1%	0.8%	0.2%	1.0%	0.0%	1.1%	0.1%	1.1%	0.1%	0.9%	0.1%	0.6%	0.2%	0.9%	0.3%	0.8%	0.7%	1.0%
12	0.0%	0.4%	0.1%	0.6%	0.0%	0.6%	0.1%	0.6%	0.1%	0.4%	0.1%	0.6%	0.2%	0.8%	0.1%	1.2%	0.2%	0.7%	0.5%	1.2%	0.5%	0.8%
12.5	0.1%	1.1%	0.0%	0.9%	0.0%	1.0%	0.0%	1.0%	0.1%	0.9%	0.1%	1.2%	0.0%	0.6%	0.2%	0.8%	0.2%	0.9%	0.4%	0.7%	0.5%	0.9%
13	0.0%	0.6%	0.0%	0.7%	0.1%	0.6%	0.0%	0.6%	0.0%	0.8%	0.1%	0.9%	0.0%	0.7%	0.0%	0.8%	0.2%	0.9%	0.5%	1.2%	0.3%	1.0%
13.5	0.0%	0.9%	0.0%	0.7%	0.1%	0.7%	0.1%	0.6%	0.1%	0.8%	0.0%	1.0%	0.1%	0.7%	0.3%	1.0%	0.0%	0.6%	0.1%	0.8%	0.4%	0.7%
14	0.0%	0.6%	0.0%	0.6%	0.1%	0.9%	0.1%	1.0%	0.0%	0.8%	0.1%	0.6%	0.0%	0.6%	0.0%	0.8%	0.2%	1.2%	0.3%	0.8%	0.4%	0.9%
14.5	0.0%	0.9%	0.0%	0.4%	0.0%	0.8%	0.1%	0.9%	0.1%	1.1%	0.1%	0.6%	0.0%	0.7%	0.1%	0.7%	0.1%	0.8%	0.3%	0.7%	0.4%	0.8%
15	0.0%	0.5%	0.0%	0.6%	0.1%	1.1%	0.0%	0.7%	0.1%	0.8%	0.0%	0.9%	0.0%	0.9%	0.1%	1.0%	0.1%	0.7%	0.2%	0.9%	0.4%	0.7%
15.5	0.0%	0.5%	0.0%	0.5%	0.0%	0.7%	0.0%	0.4%	0.1%	0.4%	0.0%	1.1%	0.2%	0.6%	0.0%	0.7%	0.1%	0.9%	0.1%	0.8%	0.2%	0.9%
16	0.0%	0.5%	0.0%	0.6%	0.0%	0.5%	0.1%	0.5%	0.0%	0.5%	0.1%	0.7%	0.0%	0.2%	0.0%	0.7%	0.1%	0.6%	0.2%	0.8%	0.2%	0.3%
16.5	0.0%	0.6%	0.0%	0.5%	0.1%	1.3%	0.0%	0.4%	0.0%	0.9%	0.0%	1.1%	0.0%	0.5%	0.1%	0.6%	0.0%	0.7%	0.3%	0.9%	0.3%	0.8%
17	0.0%	0.6%	0.0%	0.7%	0.1%	0.8%	0.0%	1.0%	0.0%	0.8%	0.0%	0.6%	0.0%	0.7%	0.1%	0.7%	0.0%	0.8%	0.1%	0.8%	0.1%	0.6%
17.5	0.0%	0.9%	0.0%	0.7%	0.0%	0.8%	0.0%	0.4%	0.1%	0.4%	0.0%	0.4%	0.0%	0.7%	0.0%	0.6%	0.1%	0.6%	0.2%	0.4%	0.1%	0.5%
18	0.0%	0.5%	0.0%	0.5%	0.1%	1.1%	0.0%	1.0%	0.0%	0.7%	0.1%	0.8%	0.1%	1.1%	0.0%	1.1%	0.0%	0.6%	0.1%	0.6%	0.2%	0.4%
18.5	0.0%	0.8%	0.0%	0.8%	0.0%	0.6%	0.0%	0.9%	0.0%	0.7%	0.0%	0.4%	0.0%	0.8%	0.1%	0.8%	0.0%	0.7%	0.1%	0.7%	0.2%	0.5%
19	0.0%	0.4%	0.0%	0.2%	0.0%	0.4%	0.0%	0.6%	0.1%	0.5%	0.0%	0.6%	0.0%	0.4%	0.0%	0.8%	0.0%	0.4%	0.0%	0.4%	0.1%	0.5%
19.5	0.0%	0.5%	0.0%	0.4%	0.0%	0.3%	0.0%	1.0%	0.0%	0.7%	0.0%	0.4%	0.0%	0.4%	0.0%	0.5%	0.0%	0.6%	0.0%	0.6%	0.2%	0.6%
>20	0.0%	43.7%	0.0%	43.1%	0.0%	43.7%	0.0%	42.2%	0.0%	48.3%	0.1%	43.5%	0.1%	43.0%	0.2%	36.4%	0.2%	38.9%	1.4%	28.9%	2.1%	22.3%

Filename	13S9_11		13S9_12		13S9_13		13S9_14		13S9_15		13S9_16		13S9_17		13S9_18		13S9_19		13S9_20		13S9_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.316		0.43		0.536		0.667		0.743		0.809		0.853		0.885		0.906		0.932		0.939	
Nab	4182		4345		4331		3831		3320		2672		2111		1796		1455		1075		975	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	5.7%	7.5%	5.2%	9.0%	4.3%	8.7%	3.6%	10.0%	2.7%	10.0%	2.7%	7.9%	1.9%	7.4%	2.2%	7.0%	1.2%	5.0%	0.4%	4.9%	0.6%	2.9%
0.5	12.8%	10.9%	9.9%	12.1%	9.8%	12.2%	7.8%	13.1%	6.2%	13.5%	4.6%	12.0%	4.1%	10.4%	4.1%	11.1%	3.6%	10.0%	2.4%	10.0%	3.4%	9.7%
1	12.0%	7.7%	10.7%	8.0%	9.5%	9.6%	7.2%	9.9%	7.3%	8.9%	6.1%	9.8%	4.9%	9.1%	3.7%	9.5%	3.8%	9.3%	3.9%	7.6%	3.4%	8.9%
1.5	10.4%	5.5%	9.1%	6.2%	8.2%	7.3%	7.3%	7.8%	6.3%	7.7%	5.6%	8.6%	4.5%	9.2%	4.7%	7.9%	3.4%	8.0%	3.1%	8.7%	3.7%	7.9%
2	8.0%	4.3%	7.3%	4.9%	6.9%	5.7%	4.4%	3.8%	6.1%	6.5%	3.0%	4.5%	3.7%	7.0%	3.5%	7.5%	3.2%	7.6%	3.3%	6.8%	3.5%	9.0%
2.5	5.8%	4.5%	5.8%	4.9%	5.0%	4.6%	5.3%	5.5%	4.2%	5.0%	3.9%	5.8%	3.2%	6.2%	2.9%	7.2%	3.5%	6.3%	2.9%	6.0%	1.3%	6.6%
3	4.9%	3.3%	4.8%	3.4%	3.2%	2.7%	4.9%	4.1%	2.6%	2.7%	3.3%	6.0%	2.0%	3.7%	2.1%	4.3%	1.2%	4.9%	1.4%	5.4%	0.8%	6.1%
3.5	4.2%	3.1%	4.6%	3.3%	4.3%	3.8%	3.5%	3.9%	3.9%	4.3%	3.2%	4.4%	2.6%	4.5%	2.1%	5.5%	2.7%	6.3%	2.0%	7.1%	2.5%	6.3%
4	3.7%	2.4%	3.5%	2.8%	3.3%	3.9%	2.5%	2.9%	3.2%	4.6%	2.3%	3.1%	3.0%	4.4%	2.2%	4.7%	2.3%	6.0%	1.8%	6.0%	2.6%	5.5%
4.5	3.1%	2.5%	2.9%	2.3%	3.6%	2.8%	3.3%	3.2%	2.7%	3.8%	2.6%	3.8%	2.3%	3.4%	2.3%	4.0%	1.7%	4.9%	2.3%	5.1%	2.1%	4.7%
5	2.2%	1.7%	2.0%	2.1%	3.2%	2.5%	2.5%	3.0%	3.1%	3.2%	2.3%	3.6%	2.0%	3.6%	2.2%	3.7%	1.5%	3.4%	1.3%	5.0%	1.3%	5.8%
5.5	2.4%	2.6%	2.4%	2.6%	2.4%	2.1%	2.5%	2.7%	2.5%	2.4%	2.5%	2.9%	2.5%	3.4%	2.2%	3.1%	2.1%	2.7%	1.5%	3.6%	1.3%	3.6%
6	2.1%	2.0%	2.1%	2.1%	1.7%	1.5%	2.3%	2.6%	1.3%	1.4%	2.1%	3.1%	1.1%	2.1%	1.4%	1.0%	1.2%	2.0%	1.0%	2.1%	1.0%	2.1%
6.5	1.7%	1.7%	2.2%	1.9%	2.1%	2.2%	1.9%	1.1%	1.9%	2.1%	1.0%	1.5%	1.6%	3.0%	1.8%	3.2%	1.4%	2.3%	1.8%	2.1%	0.6%	2.4%
7	1.8%	1.5%	1.7%	1.8%	1.7%	1.9%	1.8%	2.0%	1.9%	2.2%	1.8%	1.8%	1.3%	2.5%	1.6%	2.5%	1.4%	2.4%	1.3%	2.2%	0.9%	2.2%
7.5	1.6%	1.5%	2.0%	1.3%	1.4%	1.4%	2.0%	1.8%	2.0%	1.5%	1.7%	1.9%	1.8%	2.4%	1.3%	2.3%	1.2%	2.6%	1.0%	2.0%	1.4%	2.3%
8	1.3%	1.3%	1.5%	1.4%	1.3%	1.5%	1.7%	1.3%	1.2%	1.4%	1.5%	1.7%	1.5%	1.4%	1.3%	1.6%	1.2%	1.5%	1.4%	1.7%	0.5%	1.5%
8.5	1.1%	1.3%	1.4%	1.2%	1.3%	1.2%	0.9%	0.9%	1.7%	1.5%	0.8%	1.1%	1.4%	1.9%	1.3%	1.3%	0.8%	2.3%	0.7%	2.6%	1.1%	1.8%
9	1.0%	1.2%	1.2%	1.1%	1.6%	1.3%	1.4%	1.6%	1.0%	1.3%	1.3%	1.4%	1.4%	1.3%	1.3%	1.6%	1.2%	1.4%	0.7%	1.3%	1.1%	1.7%
9.5	0.9%	1.4%	1.2%	1.1%	0.8%	0.6%	1.5%	1.2%	1.2%	0.7%	1.0%	0.9%	1.2%	0.7%	0.8%	0.7%	0.4%	0.9%	0.9%	1.0%	0.5%	0.5%
10	0.8%	1.2%	1.2%	1.0%	1.3%	1.0%	0.9%	0.9%	1.1%	1.2%	1.3%	1.4%	1.0%	0.9%	1.0%	0.7%	0.9%	1.3%	0.4%	1.0%	0.7%	1.5%
10.5	0.5%	0.8%	0.6%	0.9%	0.9%	0.9%	1.3%	0.9%	1.1%	0.9%	1.3%	0.8%	1.1%	0.9%	1.3%	0.8%	1.0%	0.9%	1.0%	1.1%	0.7%	1.4%
11	0.8%	1.1%	0.6%	1.0%	0.9%	0.9%	0.7%	0.6%	1.1%	0.7%	0.6%	0.8%	1.0%	1.2%	1.0%	0.8%	0.8%	1.0%	1.1%	0.5%	0.8%	0.6%
11.5	0.7%	1.0%	0.9%	1.0%	0.7%	1.1%	1.2%	0.8%	0.9%	1.1%	0.9%	0.6%	0.8%	0.7%	0.7%	1.2%	0.7%	0.8%	0.7%	1.3%	0.5%	0.5%
12	0.5%	0.8%	0.7%	0.8%	1.0%	0.9%	1.4%	0.9%	0.9%	0.8%	1.3%	0.7%	0.9%	1.1%	0.8%	0.4%	1.2%	0.6%	0.4%	0.7%	0.6%	0.3%
12.5	0.5%	0.8%	0.8%	0.7%	0.7%	0.5%	0.9%	0.4%	0.7%	0.5%	1.2%	1.0%	0.6%	0.2%	0.5%	0.4%	0.5%	0.2%	0.3%	0.1%	0.1%	0.3%
13	0.5%	0.9%	0.5%	0.8%	0.8%	0.6%	0.5%	0.6%	0.8%	0.5%	0.6%	0.4%	0.8%	0.7%	0.9%	0.7%	0.8%	0.4%	0.7%	0.6%	0.5%	0.5%
13.5	0.4%	0.6%	0.6%	0.8%	0.5%	0.8%	0.6%	0.6%	0.7%	0.5%	1.0%	0.7%	0.9%	0.5%	0.7%	0.4%	0.8%	0.3%	0.5%	0.3%	0.6%	0.3%
14	0.4%	0.7%	0.7%	0.6%	0.9%	0.8%	0.8%	0.6%	0.6%	0.5%	1.2%	0.7%	0.7%	0.3%	0.8%	0.6%	0.8%	0.7%	0.6%	0.3%	0.5%	0.3%
14.5	0.4%	0.7%	0.6%	0.9%	0.6%	0.6%	0.7%	0.9%	0.7%	0.7%	0.4%	0.1%	0.7%	0.4%	0.7%	0.4%	0.7%	0.5%	0.7%	0.4%	0.2%	0.1%
15	0.5%	0.8%	0.4%	0.6%	0.6%	0.4%	0.9%	0.5%	0.6%	0.5%	0.9%	0.5%	0.9%	0.7%	0.6%	0.3%	0.7%	0.3%	0.5%	0.5%	0.6%	0.2%
15.5	0.4%	0.6%	0.5%	0.6%	0.4%	0.4%	0.4%	0.3%	0.5%	0.3%	0.4%	0.4%	0.4%	0.2%	0.2%	0.3%	0.5%	0.1%	0.3%	0.0%	0.2%	0.0%
16	0.3%	0.5%	0.3%	0.5%	0.4%	0.5%	0.5%	0.6%	0.5%	0.4%	1.1%	0.2%	0.7%	0.4%	0.6%	0.2%	0.4%	0.5%	0.9%	0.2%	0.3%	0.4%
16.5	0.5%	0.6%	0.3%	0.7%	0.4%	0.6%	0.5%	0.6%	0.7%	0.4%	1.0%	0.7%	0.5%	0.3%	0.6%	0.3%	0.3%	0.1%	0.8%	0.3%	0.4%	0.1%
17	0.4%	0.5%	0.5%	0.7%	0.4%	0.4%	0.7%	0.4%	0.9%	0.2%	0.7%	0.3%	0.9%	0.2%	0.8%	0.2%	0.6%	0.3%	0.4%	0.2%	0.5%	0.1%
17.5	0.3%	0.6%	0.3%	0.7%	0.5%	0.3%	0.4%	0.2%	0.8%	0.2%	0.3%	0.3%	0.6%	0.3%	0.6%	0.1%	0.9%	0.1%	0.5%	0.0%	0.7%	0.5%
18	0.3%	0.7%	0.4%	0.3%	0.5%	0.6%	0.5%	0.2%	0.6%	0.2%	0.7%	0.5%	0.7%	0.2%	0.7%	0.1%	0.7%	0.2%	0.5%	0.0%	0.8%	0.0%
18.5	0.4%	0.6%	0.6%	0.4%	0.6%	0.4%	0.6%	0.4%	0.6%	0.3%	0.6%	0.3%	0.8%	0.2%	0.7%	0.1%	0.5%	0.2%	0.6%	0.0%	0.9%	0.1%
19	0.2%	0.6%	0.3%	0.4%	0.3%	0.2%	0.5%	0.5%	0.2%	0.2%	0.6%	0.2%	0.3%	0.2%	0.2%	0.1%	0.5%	0.1%	0.3%	0.1%	0.3%	0.2%
19.5	0.3%	0.5%	0.2%	0.5%	0.3%	0.3%	0.5%	0.3%	0.7%	0.2%	0.7%	0.3%	0.5%	0.1%	0.9%	0.3%	0.4%	0.1%	0.8%	0.1%	0.8%	0.1%
>20	4.3%	17.3%	7.5%	12.6%	11.6%	9.7%	17.3%	6.6%	22.2%	4.8%	29.6%	3.3%	37.1%	2.6%	40.6%	1.9%	47.2%	1.2%	53.2%	0.9%	55.1%	0.7%

Filename	13S9_22		13S9_23		13S9_24		13S9_25		13S9_26		13S9_27		13S9_28		13S9_29		13S9_30	
y(mm)	73		77		81		85		89		93		103		113		123	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23	
C	0.955		0.964		0.972		0.976		0.979		0.985		0.992		0.996		0.998	
Nab	737		627		484		431		391		271		154		92		46	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	0.8%	3.7%	0.6%	5.4%	0.8%	5.2%	1.9%	5.1%	1.3%	5.1%	1.8%	5.2%	0.6%	2.6%	1.1%	6.5%	2.2%	6.5%
0.5	2.6%	8.7%	2.2%	10.7%	2.5%	9.5%	2.8%	9.5%	3.1%	7.7%	1.5%	9.2%	1.3%	9.7%	1.1%	9.8%	8.7%	8.7%
1	3.0%	9.0%	3.7%	9.4%	3.7%	11.2%	4.2%	9.5%	3.8%	12.8%	4.1%	7.0%	3.9%	7.1%	6.5%	6.5%	4.3%	10.9%
1.5	3.3%	10.2%	1.9%	8.6%	3.7%	9.5%	3.2%	10.4%	2.3%	9.5%	3.0%	11.1%	2.6%	9.1%	4.3%	14.1%	2.2%	13.0%
2	2.8%	8.3%	1.9%	7.5%	2.5%	9.7%	2.1%	7.9%	1.8%	8.2%	2.2%	10.0%	1.3%	10.4%	2.2%	8.7%	2.2%	6.5%
2.5	2.8%	7.6%	1.1%	9.3%	2.7%	4.1%	2.3%	8.4%	2.3%	7.2%	0.7%	8.1%	0.0%	7.1%	0.0%	8.7%	0.0%	13.0%
3	0.5%	3.9%	0.8%	3.7%	0.8%	5.6%	2.3%	7.0%	1.5%	3.1%	0.7%	6.3%	1.3%	9.7%	2.2%	5.4%	2.2%	6.5%
3.5	1.8%	5.8%	1.6%	6.4%	1.2%	7.0%	2.8%	7.7%	2.0%	9.7%	1.5%	7.0%	1.9%	10.4%	1.1%	7.6%	0.0%	4.3%
4	2.0%	4.7%	1.6%	8.8%	0.6%	3.3%	1.2%	5.3%	1.0%	5.4%	1.5%	3.0%	0.6%	5.2%	1.1%	6.5%	0.0%	0.0%
4.5	1.8%	6.1%	2.4%	4.1%	2.1%	5.6%	0.7%	4.9%	1.3%	7.2%	1.5%	5.9%	0.0%	5.2%	1.1%	4.3%	0.0%	2.2%
5	1.9%	4.7%	2.4%	3.0%	0.8%	4.8%	0.5%	2.1%	1.0%	4.3%	1.1%	3.0%	0.6%	1.9%	0.0%	3.3%	0.0%	6.5%
5.5	1.5%	5.3%	1.3%	2.2%	1.0%	3.1%	1.4%	2.3%	1.8%	2.8%	0.4%	3.0%	0.6%	3.9%	2.2%	2.2%	0.0%	4.3%
6	0.3%	1.9%	1.3%	1.6%	0.6%	2.1%	1.2%	4.4%	0.8%	1.5%	0.4%	3.0%	0.0%	1.9%	0.0%	2.2%	0.0%	2.2%
6.5	1.6%	2.8%	0.8%	2.7%	1.0%	3.1%	1.4%	1.9%	0.3%	2.8%	0.7%	4.8%	0.6%	3.2%	1.1%	2.2%	2.2%	4.3%
7	0.5%	2.6%	1.0%	3.2%	0.8%	2.1%	0.2%	1.6%	0.3%	1.8%	1.1%	1.1%	0.0%	1.3%	1.1%	2.2%	0.0%	2.2%
7.5	0.9%	2.6%	1.1%	2.4%	1.0%	1.7%	0.0%	2.3%	0.5%	1.8%	0.0%	1.8%	0.6%	1.9%	0.0%	1.1%	0.0%	0.0%
8	0.4%	1.6%	1.1%	1.8%	0.4%	2.1%	0.5%	1.2%	0.0%	1.5%	0.4%	2.6%	0.0%	0.6%	0.0%	1.1%	0.0%	0.0%
8.5	0.7%	0.9%	0.5%	1.0%	0.8%	2.1%	0.7%	2.3%	0.3%	1.0%	0.4%	1.5%	0.6%	1.3%	0.0%	1.1%	0.0%	0.0%
9	0.1%	1.4%	0.5%	0.8%	1.2%	2.1%	0.0%	1.2%	1.0%	1.3%	0.4%	0.7%	0.6%	0.6%	0.0%	1.1%	0.0%	0.0%
9.5	0.4%	0.7%	0.3%	0.3%	0.2%	0.4%	1.2%	0.2%	0.3%	1.0%	0.4%	0.7%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%
10	0.8%	0.7%	0.5%	0.8%	0.6%	0.8%	0.0%	0.5%	0.3%	1.0%	0.4%	0.7%	0.0%	0.6%	0.0%	2.2%	2.2%	2.2%
10.5	0.7%	1.2%	1.4%	0.3%	0.4%	0.8%	0.2%	0.2%	0.5%	0.3%	0.0%	1.5%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%
11	0.3%	0.4%	0.5%	0.3%	0.4%	0.2%	0.2%	0.7%	0.3%	0.8%	0.4%	0.0%	0.6%	1.3%	0.0%	0.0%	0.0%	0.0%
11.5	0.5%	0.8%	0.5%	0.3%	0.0%	0.4%	0.5%	0.0%	0.3%	0.5%	0.7%	0.4%	0.0%	0.6%	1.1%	0.0%	0.0%	0.0%
12	0.4%	0.3%	0.5%	0.3%	0.0%	0.4%	0.2%	0.2%	0.8%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%

12.5	0.5%	0.3%	0.8%	0.5%	0.6%	0.6%	0.9%	0.5%	0.3%	0.0%	0.0%	0.4%	0.0%	0.0%	1.1%	1.1%	0.0%	0.0%
13	0.7%	0.7%	0.5%	1.1%	0.0%	0.2%	0.2%	0.5%	0.0%	0.5%	0.0%	0.4%	0.0%	0.6%	0.0%	0.0%	0.0%	4.3%
13.5	0.4%	0.3%	0.5%	0.6%	0.8%	0.2%	0.2%	0.5%	0.5%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14	0.3%	0.1%	0.2%	0.0%	0.4%	0.0%	0.0%	0.2%	0.0%	0.0%	0.4%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%
14.5	0.7%	0.3%	0.3%	0.3%	0.2%	0.6%	0.2%	0.2%	0.3%	0.3%	0.3%	0.0%	0.4%	0.0%	0.6%	1.1%	0.0%	0.0%
15	0.5%	0.3%	0.5%	0.2%	0.4%	0.4%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15.5	0.4%	0.3%	0.3%	0.3%	0.4%	0.0%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.4%	0.1%	0.6%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
16.5	0.8%	0.0%	0.2%	0.2%	0.0%	0.2%	0.2%	0.0%	1.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.1%	0.1%	0.3%	0.3%	0.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17.5	0.4%	0.1%	0.5%	0.2%	0.6%	0.0%	0.2%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.5%	0.0%	0.5%	0.0%	0.4%	0.2%	0.2%	0.0%	0.0%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18.5	0.4%	0.0%	1.0%	0.0%	0.2%	0.2%	0.5%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.3%	0.3%	0.0%	0.2%	0.2%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>20	60.5%	0.8%	61.9%	0.6%	64.7%	0.4%	64.0%	0.2%	67.3%	0.3%	71.2%	0.4%	79.9%	0.0%	69.6%	0.0%	69.6%	0.0%

Run 1.3A, dcrest/h = 1.3, Configuration A, location 91

Filename	13S91_00		13S91_01		13S91_02		13S91_03		13S91_04		13S91_05		13S91_06		13S91_07		13S91_08		13S91_09		13S91_10	
y(mm)	-29		-24		-19		-14		-9		-4		1		6		9		12		15	
y/h	-0.29		-0.24		-0.19		-0.14		-0.09		-0.04		0.01		0.06		0.09		0.12		0.15	
C	0.017		0.017		0.033		0.046		0.061		0.073		0.086		0.078		0.072		0.083		0.094	
Nab	126		126		213		336		604		1082		1717		1981		2082		2305		2432	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	11.9%	5.6%	7.1%	5.6%	12.7%	3.8%	11.0%	6.8%	12.9%	4.3%	16.2%	6.7%	13.9%	5.6%	18.1%	4.9%	11.7%	4.5%	12.4%	3.8%	10.9%	4.2%
0.5	8.7%	1.6%	9.5%	1.6%	9.4%	4.2%	7.4%	2.1%	14.1%	5.0%	20.1%	5.9%	24.1%	6.6%	23.7%	4.9%	27.0%	5.6%	24.7%	6.2%	25.5%	6.0%
1	14.3%	3.2%	6.3%	0.8%	13.1%	1.9%	7.7%	2.4%	14.2%	3.3%	14.6%	4.3%	14.8%	4.4%	21.3%	5.6%	21.0%	3.7%	21.1%	4.2%	17.6%	3.7%
1.5	9.5%	2.4%	11.1%	4.0%	8.9%	1.9%	6.8%	1.5%	10.4%	3.5%	15.2%	4.6%	14.7%	3.4%	11.0%	3.4%	14.1%	3.6%	11.7%	2.6%	14.5%	4.1%
2	7.9%	0.0%	4.0%	0.8%	8.9%	3.8%	7.1%	1.8%	7.6%	2.6%	9.1%	3.1%	6.8%	2.6%	6.7%	3.2%	7.9%	2.4%	10.2%	3.5%	9.1%	3.3%
2.5	8.7%	1.6%	12.7%	1.6%	9.4%	0.5%	5.1%	2.1%	6.6%	1.7%	5.2%	2.7%	5.6%	3.2%	4.7%	3.4%	4.6%	3.1%	5.2%	3.2%	4.2%	2.1%
3	11.1%	0.0%	6.3%	0.8%	5.6%	1.9%	7.7%	3.6%	6.8%	1.2%	4.3%	3.4%	4.7%	2.8%	3.4%	1.8%	3.0%	1.8%	3.3%	2.9%	4.1%	2.9%
3.5	6.3%	0.8%	6.3%	2.4%	5.6%	0.9%	5.7%	1.8%	4.3%	1.3%	4.1%	2.8%	3.4%	1.9%	2.7%	2.5%	2.9%	2.0%	2.0%	1.5%	1.8%	1.4%
4	5.6%	0.0%	4.0%	0.8%	3.8%	1.4%	7.1%	0.3%	2.8%	4.0%	1.3%	2.3%	1.7%	2.4%	1.4%	2.1%	1.1%	1.8%	1.9%	1.9%	2.5%	1.8%
4.5	2.4%	1.6%	7.9%	0.0%	3.8%	0.0%	5.1%	1.2%	2.6%	1.5%	2.0%	1.6%	1.6%	1.7%	0.9%	2.0%	1.3%	1.8%	1.2%	2.1%	1.6%	1.9%
5	2.4%	1.6%	0.8%	0.0%	4.2%	2.3%	3.0%	0.3%	4.5%	2.0%	1.4%	1.0%	1.6%	1.8%	0.9%	1.8%	0.8%	2.0%	1.3%	2.1%	1.0%	1.6%
5.5	1.6%	0.8%	4.0%	0.0%	2.3%	1.9%	3.0%	0.3%	1.3%	1.5%	0.9%	1.5%	0.9%	2.1%	1.1%	1.6%	0.7%	1.2%	0.5%	1.2%	1.1%	2.0%
6	2.4%	0.8%	4.0%	0.0%	2.3%	1.9%	2.1%	0.9%	1.5%	2.5%	1.1%	1.4%	1.3%	1.6%	0.8%	1.8%	0.5%	1.6%	0.6%	1.6%	0.8%	1.8%
6.5	0.8%	0.8%	2.4%	0.0%	0.9%	0.9%	2.7%	2.1%	1.7%	0.7%	0.6%	1.0%	0.7%	1.8%	0.3%	1.3%	0.5%	1.1%	0.5%	1.4%	0.5%	1.1%
7	1.6%	0.8%	0.8%	0.8%	1.4%	1.4%	2.4%	0.9%	1.3%	0.5%	0.6%	0.8%	0.3%	1.0%	0.4%	1.1%	0.4%	1.0%	0.4%	1.1%	0.7%	2.4%
7.5	0.8%	0.0%	2.4%	0.8%	0.9%	0.5%	1.5%	1.8%	1.3%	1.2%	0.7%	1.8%	0.6%	1.5%	0.2%	1.8%	0.4%	1.4%	0.5%	1.0%	0.7%	1.0%
8	0.8%	0.8%	0.8%	1.6%	0.9%	0.5%	2.7%	1.5%	0.7%	0.7%	0.3%	0.6%	0.3%	1.0%	0.5%	1.0%	0.4%	0.9%	0.7%	1.4%	0.4%	1.4%
8.5	0.0%	2.4%	0.8%	0.0%	0.9%	2.3%	1.2%	0.0%	0.7%	1.0%	0.1%	0.8%	0.5%	1.5%	0.5%	1.3%	0.3%	1.3%	0.3%	1.3%	0.2%	1.6%
9	1.6%	1.6%	3.2%	0.0%	0.0%	0.5%	1.5%	0.3%	0.7%	1.2%	0.2%	1.2%	0.3%	1.2%	0.2%	1.1%	0.2%	0.9%	0.2%	1.5%	0.2%	1.0%
9.5	0.0%	0.0%	1.6%	0.0%	0.5%	0.5%	0.6%	0.9%	0.0%	0.3%	0.2%	0.6%	0.2%	1.1%	0.1%	1.4%	0.2%	1.1%	0.2%	1.0%	0.3%	1.5%
10	0.0%	0.8%	0.0%	0.0%	0.5%	1.4%	0.9%	0.9%	0.2%	0.5%	0.0%	1.0%	0.1%	0.7%	0.1%	1.1%	0.1%	1.2%	0.3%	1.6%	0.2%	0.8%
10.5	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.9%	1.2%	0.3%	1.2%	0.3%	0.8%	0.1%	0.9%	0.2%	1.1%	0.2%	1.0%	0.2%	1.1%	0.1%	1.4%
11	0.8%	0.8%	0.0%	3.2%	0.0%	1.4%	0.0%	1.5%	0.0%	0.7%	0.0%	0.9%	0.4%	1.0%	0.1%	1.3%	0.1%	1.2%	0.1%	1.2%	0.2%	1.3%
11.5	0.0%	0.0%	1.6%	2.4%	0.9%	1.9%	0.6%	0.0%	0.2%	0.3%	0.0%	0.7%	0.1%	1.2%	0.1%	1.1%	0.0%	1.2%	0.1%	1.0%	0.1%	1.0%
12	0.0%	0.8%	0.0%	0.0%	0.0%	0.5%	0.0%	1.5%	0.5%	0.2%	0.2%	0.3%	0.0%	0.9%	0.3%	0.8%	0.0%	0.4%	0.0%	1.2%	0.3%	1.1%
12.5	0.8%	1.6%	0.8%	0.8%	0.0%	0.0%	0.6%	0.6%	0.3%	0.5%	0.2%	0.6%	0.1%	1.0%	0.1%	0.6%	0.0%	1.1%	0.2%	1.0%	0.2%	0.9%
13	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.3%	0.2%	0.7%	0.1%	0.8%	0.0%	0.7%	0.1%	0.5%	0.0%	1.1%	0.1%	1.3%	0.2%	0.7%
13.5	0.0%	0.0%	0.8%	0.0%	0.0%	0.9%	0.3%	0.3%	0.0%	1.2%	0.0%	0.9%	0.1%	0.8%	0.1%	0.8%	0.1%	1.2%	0.0%	0.6%	0.0%	1.2%
14	0.0%	0.8%	0.8%	1.6%	0.0%	0.9%	0.0%	0.3%	0.5%	0.7%	0.0%	0.6%	0.1%	0.9%	0.2%	1.1%	0.0%	0.8%	0.1%	1.2%	0.2%	1.1%
14.5	0.0%	0.8%	0.0%	0.0%	0.0%	0.5%	0.6%	0.6%	0.5%	0.3%	0.0%	1.1%	0.1%	0.3%	0.1%	0.9%	0.0%	0.8%	0.0%	0.8%	0.1%	0.8%
15	0.0%	1.6%	0.0%	0.0%	0.5%	0.5%	0.3%	0.6%	0.0%	0.5%	0.0%	0.9%	0.1%	0.9%	0.0%	0.9%	0.0%	1.1%	0.0%	1.6%	0.1%	1.0%
15.5	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.3%	0.2%	0.2%	0.3%	0.6%	0.1%	1.0%	0.0%	1.1%	0.0%	0.8%	0.0%	0.5%	0.2%	0.5%
16	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.3%	0.2%	0.5%	0.0%	0.6%	0.0%	0.9%	0.0%	0.9%	0.0%	0.6%	0.0%	0.9%	0.0%	0.9%
16.5	0.0%	0.8%	0.0%	0.8%	0.0%	0.5%	0.0%	0.0%	0.3%	0.5%	0.0%	0.7%	0.1%	0.3%	0.0%	0.9%	0.0%	0.4%	0.0%	0.9%	0.0%	0.7%
17	0.0%	0.8%	0.0%	0.0%	0.0%	0.9%	0.3%	0.6%	0.2%	0.7%	0.0%	0.6%	0.1%	0.9%	0.1%	1.1%	0.0%	1.2%	0.0%	1.2%	0.0%	0.9%
17.5	0.0%	0.8%	0.0%	0.0%	0.5%	0.0%	0.0%	0.3%	0.0%	0.5%	0.2%	0.4%	0.2%	1.0%	0.0%	1.0%	0.0%	0.8%	0.0%	0.3%	0.1%	0.7%
18	0.0%	0.8%	0.0%	0.0%	0.0%	0.5%	0.0%	0.6%	0.0%	0.3%	0.3%	0.8%	0.2%	0.7%	0.0%	0.7%	0.0%	1.2%	0.0%	0.7%	0.0%	0.7%
18.5	0.0%	0.8%	0.0%	0.0%	0.0%	0.5%	0.3%	0.9%	0.0%	0.7%	0.1%	0.6%	0.1%	0.8%	0.0%	0.7%	0.0%	0.9%	0.0%	0.6%	0.0%	0.9%
19	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.6%	0.3%	0.0%	0.8%	0.0%	0.6%	0.1%	0.5%	0.0%	0.4%	0.0%	0.7%	0.0%	0.4%	0.0%	0.7%
19.5	0.0%	0.8%	0.0%	0.0%	0.0%	0.9%	0.9%	0.3%	0.0%	0.5%	0.0%	0.6%	0.1%	0.9%	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.0%	0.7%
>20	0.0%	61.1%	0.0%	68.3%	0.0%	53.1%	2.1%	56.0%	0.5%	48.8%	0.3%	37.5%	0.3%	34.4%	0.2%	34.8%	0.1%	39.1%	0.2%	35.2%	0.3%	35.2%

Filename	13S91_11		13S91_12		13S91_13		13S91_14		13S91_15		13S91_16		13S91_17		13S91_18		13S91_19		13S91_20		13S91_21	
y(mm)	18		21		24		27		30		33		37		41		45		49		53	
y/h	0.18		0.21		0.24		0.27		0.3		0.33		0.37		0.41		0.45		0.49		0.53	
C	0.103		0.128		0.133		0.149		0.153		0.178		0.23		0.299		0.407		0.519		0.626	
Nab	2506		2657		2601		2883		2760		3093		3512		3703		4142		4280		4004	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	10.3%	4.6%	10.0%	4.4%	9.4%	3.7%	9.1%	5.2%	9.5%	4.2%	9.4%	4.0%	8.0%	5.4%	4.6%	3.4%	4.0%	3.5%	3.3%	4.7%	2.7%	4.6%
0.5	24.6%	5.7%	16.9%	4.1%	15.7%	4.8%	16.6%	5.4%	14.7%	5.1%	14.5%	5.8%	13.0%	6.1%	10.1%	6.5%	10.4%	8.0%	7.7%	9.4%	8.2%	9.5%
1	16.2%	3.8%	21.8%	6.0%	17.0%	3.9%	14.3%	3.7%	13.7%	4.7%	13.4%	5.4%	12.0%	4.8%	11.2%	6.7%	9.8%	7.9%	9.7%	8.0%	9.5%	9.4%
1.5	16.3%	4.2%	10.8%	3.7%	15.1%	4.8%	15.1%	5.1%	11.4%	3.8%	11.4%	3.8%	11.1%	4.8%	10.6%	5.0%	8.6%	6.5%	7.9%	7.1%	7.8%	7.9%
2	8.5%	3.3%	9.6%	3.8%	8.2%	3.1%	8.3%	3.2%	9.3%	3.1%	9.0%	4.0%	7.5%	4.6%	8.1%	5.4%	7.4%	5.3%	7.4%	5.7%	6.2%	6.8%
2.5	4.7%	2.7%	5.8%	2.6%	5.7%	2.9%	6.1%	3.1%	6.6%	3.1%	6.7%	3.3%	6.9%	4.2%	6.6%	3.8%	6.8%	4.6%	5.7%	5.9%	5.2%	5.5%
3	4.1%	3.0%	4.4%	2.6%	6.1%	3.3%	5.7%	2.9%	6.8%	3.2%	5.8%	2.9%	5.4%	3.2%	5.0%	4.1%	5.0%	4.1%	5.2%	4.5%	4.1%	5.7%
3.5	2.2%	2.3%	2.9%	2.0%	3.4%	1.5%	3.3%	2.0%	3.7%	2.5%	3.7%	2.2%	4.8%	3.6%	3.6%	2.8%	4.9%	4.1%	4.5%	4.4%	4.3%	4.7%
4	2.2%	2.4%	3.0%	2.7%	2.3%	2.1%	2.5%	2.3%	2.8%	2.0%	2.8%	2.3%	3.3%	2.7%	3.8%	3.0%	4.2%	3.6%	3.7%	3.7%	3.2%	3.8%
4.5	2.0%	1.4%	1.4%	1.9%	1.6%	1.5%	2.6%	1.6%	2.6%	1.8%	2.8%	2.0%	2.9%	2.6%	3.7%	2.4%	3.3%	2.9%	3.0%	3.1%	2.8%	3.7%
5	0.7%	1.8%	2.0%	2.1%	2.5%	2.1%	2.3%	2.3%	1.9%	1.8%	2.2%	1.8%	2.8%	2.1%	2.5%	2.5%	2.0%	2.2%	2.1%	2.1%	1.7%	2.4%
5.5	0.9%	2.4%	1.3%	1.3%	1.4%	1.8%	1.5%	1.7%	1.8%	1.7%	1.7%	2.1%	2.0%	1.9%	2.7%	2.7%	2.4%	2.8%	2.1%	2.3%	2.9%	2.8%
6	1.0%	1.8%	1.2%	2.0%	1.1%	1.7%	1.5%	1.4%	1.6%	2.4%	2.1%	2.4%	2.0%	1.9%	2.2%	2.3%	2.3%	2.3%	2.2%	2.5%	2.3%	2.4%
6.5	0.6%	1.4%	0.6%	1.5%	0.8%	1.5%	2.0%	1.5%	1.4%	1.4%	1.1%	1.7%	2.1%	2.0%	2.2%	2.4%	2.0%	2.0%	2.8%	2.1%	1.8%	2.1%
7	0.6%	1.8%	1.1%	1.8%	0.7%	1.9%	0.8%	1.1%	1.2%	1.2%	1.2%	1.5%	1.1%	1.6%	1.8%	1.8%	1.7%	2.6%	1.8%	2.3%	1.7%	2.0%
7.5	0.6%	1.0%	0.4%	1.3%	0.8%	1.4%	0.6%	1.6%	1.0%	1.4%	1.2%	1.2%	1.2%	1.9%	1.4%	1.6%	1.4%	2.0%	1.8%	2.2%	1.6%	1.9%
8	0.5%	2.0%	0.7%	1.8%	1.0%	1.5%	0.9%	2.1%	0.9%	1.6%	0.8%	1.7%	1.0%	1.3%	1.3%	1.9%	1.6%	1.6%	1.4%	1.9%	1.6%	1.5%
8.5	0.4%	1.1%	0.6%	0.9%	0.5%	1.3%	0.5%	1.2%	0.8%	1.6%	0.8%	1.3%	1.2%	1.6%	1.0%	1.6%	1.3%	1.4%	1.4%	1.4%	1.1%	1.7%
9	0.4%	0.9%	0.6%	1.5%	0.5%	1.2%	0.6%	1.0%	0.6%	1.4%	1.3%	1.5%	1.1%	1.4%	1.1%	1.7%	1.2%	1.6%	1.2%	1.6%	1.2%	1.2%
9.5	0.7%	1.0%	0.3%	1.0%	0.6%	1.2%	0.6%	1.2%	0.5%	1.0%	0.7%	1.2%	0.7%	1.3%	1.1%	1.2%	1.2%	1.3%	1.4%	1.3%	1.2%	1.6%
10	0.3%	1.1%	0.5%	1.4%	0.5%	1.3%	0.7%	1.5%	0.5%	1.1%	0.4%	1.3%	0.6%	1.2%	1.2%	1.3%	1.3%	1.1%	1.1%	1.4%	1.3%	1.5%
10.5	0.2%	1.0%	0.5%	1.0%	0.3%	0.9%	0.5%	1.1%	0.4%	1.1%	0.7%	1.6%	0.4%	1.4%	1.0%	1.2%	0.5%	0.6%	0.6%	0.8%	0.9%	0.7%
11	0.2%	1.2%	0.3%	1.6%	0.4%	1.2%	0.3%	1.4%	0.6%	1.1%	0.5%	0.9%	0.4%	1.1%	0.6%	1.4%	1.0%	1.3%	0.8%	1.2%	1.1%	1.0%
11.5	0.1%	1.4%	0.2%	1.0%	0.5%	1.3%	0.4%	1.2%	0.3%	1.2%	0.5%	0.7%	0.6%	0.9%	0.7%	1.2%	0.9%	1.1%	0.9%	0.9%	0.9%	0.9%
12	0.1%	1.7%	0.5%	1.0%	0.1%	0.6%	0.3%	1.1%	0.7%	1.4%	0.7%	1.5%	0.5%	0.8%	0.5%	0.9%	0.8%	0.8%	0.9%	0.8%	1.1%	0.7%
12.5	0.2%	0.5%	0.3%	0.6%	0.2%	0.9%	0.2%	1.2%	0.4%	0.9%	0.3%	1.1%	0.6%	0.9%	0.8%	1.2%	0.8%	0.8%	0.7%	1.0%	1.1%	0.9%
13	0.1%	1.0%	0.1%	1.3%	0.4%	0.8%	0.3%	0.8%	0.3%	0.8%	0.3%	1.1%	0.3%	1.1%	0.7%	0.9%	0.6%	1.0%	0.6%	0.9%	0.7%	1.0%
13.5	0.2%	1.0%	0.1%	0.7%	0.3%	1.3%	0.2%	1.1%	0.1%	1.0%	0.3%	0.8%	0.6%	1.2%	0.7%	1.1%	0.6%	0.7%	0.7%	0.9%	0.6%	0.6%
14	0.1%	0.5%	0.3%	0.8%	0.2%	0.8%	0.2%	0.8%	0.1%	0.9%	0.3%	0.9%	0.3%	0.9%	0.8%	0.8%	0.5%	0.9%	0.7%	0.5%	0.6%	0.6%
14.5	0.1%	0.8%	0.2%	0.9%	0.2%	0.9%	0.1%	0.8%	0.4%	1.2%	0.2%	1.3%	0.4%	1.1%	0.5%	0.9%	0.3%	0.8%	0.6%	0.7%	0.5%	0.4%
15	0.1%	1.1%	0.2%	0.9%	0.2%	1.1%	0.1%	1.2%	0.2%	1.4%	0.4%	1.3%	0.3%	0.7%	0.6%	0.6%	0.5%	0.9%	0.3%	0.7%	0.3%	0.4%
15.5	0.0%	0.8%	0.1%	0.9%	0.1%	1.1%	0.2%	0.7%	0.3%	0.9%	0.3%	0.8%	0.4%	0.9%	0.6%	0.5%	0.5%	0.9%	0.7%	0.5%	0.6%	0.6%
16	0.1%	0.8%	0.2%	1.1%	0.1%	1.0%	0.1%	0.7%	0.4%	0.6%	0.3%	0.8%	0.2%	0.5%	0.4%	0.5%	0.5%	0.6%	0.3%	0.3%	0.4%	0.2%
16.5	0.0%	0.9%	0.0%	0.6%	0.2%	0.9%	0.2%	1.1%	0.1%	0.7%	0.3%	1.0%	0.2%	0.8%	0.2%	0.9%	0.5%	0.7%	0.6%	0.5%	0.4%	0.5%
17	0.0%	0.9%	0.2%	1.1%	0.1%	1.1%	0.0%	0.9%	0.1%	0.5%	0.2%	0.7%	0.3%	0.6%	0.4%	0.9%	0.4%	0.7%	0.5%	0.8%	0.5%	0.4%
17.5	0.0%	0.8%	0.1%	1.0%	0.2%	0.8%	0.2%	0.8%	0.1%	0.8%	0.2%	0.7%	0.2%	0.7%	0.2%	0.4%	0.5%	0.5%	0.4%	0.4%	0.4%	0.3%
18	0.0%	0.6%	0.2%	0.8%	0.0%	0.5%	0.1%	0.8%	0.3%	1.0%	0.2%	1.2%	0.3%	0.5%	0.4%	0.7%	0.4%	0.6%	0.4%	0.4%	0.4%	0.4%
18.5	0.0%	0.8%	0.0%	0.6%	0.1%	0.7%	0.1%	1.0%	0.1%	0.7%	0.1%	0.7%	0.1%	0.7%	0.1%	0.7%	0.3%	0.6%	0.4%	0.4%	0.5%	0.6%

19	0.0%	0.7%	0.1%	0.9%	0.0%	0.6%	0.0%	0.5%	0.1%	0.6%	0.1%	0.7%	0.2%	0.6%	0.2%	0.7%	0.4%	0.4%	0.4%	0.5%	0.5%	0.4%
19.5	0.1%	0.3%	0.0%	0.5%	0.1%	0.7%	0.1%	0.6%	0.1%	0.7%	0.1%	1.0%	0.2%	0.6%	0.2%	0.7%	0.3%	0.3%	0.4%	0.4%	0.3%	0.2%
>20	0.5%	33.6%	0.8%	32.4%	1.4%	34.2%	1.2%	31.0%	1.6%	32.5%	1.4%	27.7%	2.6%	23.9%	4.4%	19.6%	7.1%	14.5%	11.4%	9.7%	15.3%	6.3%

Filename	13S91_22		13S91_23		13S91_24		13S91_25		13S91_26		13S91_27		13S91_28		13S91_29		13S91_30		13S91_31		13S91_32	
y(mm)	57		61		65		69		73		77		81		85		89		93		103	
y/h	0.57		0.61		0.65		0.69		0.73		0.77		0.81		0.85		0.89		0.93		1.03	
C	0.735		0.822		0.888		0.919		0.947		0.959		0.968		0.975		0.98		0.986		0.99	
Nab	3367		2631		1885		1352		929		733		573		400		361		277		181	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	2.4%	5.6%	2.6%	6.5%	2.1%	6.1%	2.1%	6.3%	1.2%	5.2%	0.5%	4.9%	1.6%	4.9%	1.0%	4.3%	1.4%	4.4%	1%	5%	1%	3%
0.5	7.3%	11.2%	6.3%	10.6%	4.6%	12.5%	5.0%	10.7%	3.9%	13.2%	2.6%	10.1%	3.8%	10.6%	2.3%	8.5%	2.2%	11.4%	3%	10%	3%	12%
1	6.9%	10.1%	7.3%	11.6%	5.5%	10.9%	4.9%	10.4%	4.4%	9.4%	4.6%	10.6%	3.3%	9.6%	4.0%	9.0%	3.6%	7.8%	5%	10%	3%	12%
1.5	6.6%	8.1%	6.3%	8.0%	4.9%	9.4%	4.1%	9.7%	3.4%	9.7%	4.6%	9.7%	4.5%	10.3%	3.0%	6.8%	2.8%	8.0%	1%	8%	4%	5%
2	5.6%	7.3%	2.7%	4.9%	4.6%	7.9%	4.1%	7.4%	3.0%	4.5%	2.6%	9.4%	1.4%	5.1%	4.8%	8.3%	0.8%	6.4%	1%	9%	2%	7%
2.5	5.9%	6.3%	5.1%	7.5%	3.8%	7.5%	2.4%	7.0%	4.1%	8.2%	2.5%	7.4%	1.9%	6.8%	3.3%	7.5%	3.9%	8.6%	3%	9%	2%	6%
3	3.7%	3.6%	3.9%	6.2%	2.6%	3.8%	2.3%	4.1%	2.8%	7.0%	1.8%	4.4%	1.7%	8.7%	1.0%	5.0%	0.8%	5.3%	2%	5%	1%	6%
3.5	3.3%	4.8%	2.9%	5.0%	2.5%	5.4%	2.8%	5.3%	1.3%	5.5%	1.8%	5.0%	2.6%	6.1%	2.0%	6.0%	1.9%	8.9%	1%	8%	1%	11%
4	2.9%	4.2%	2.0%	2.9%	2.1%	4.6%	2.5%	4.3%	1.4%	4.3%	1.4%	5.3%	0.9%	4.4%	0.8%	5.5%	1.7%	5.0%	2%	6%	2%	5%
4.5	3.1%	4.1%	2.5%	4.6%	3.1%	3.8%	1.6%	4.4%	1.5%	4.7%	1.8%	5.3%	1.2%	4.4%	1.8%	4.8%	1.9%	5.8%	0%	5%	1%	8%
5	2.3%	3.1%	3.0%	3.5%	1.8%	3.0%	2.5%	3.8%	1.1%	3.6%	1.2%	4.8%	1.4%	4.0%	1.5%	6.8%	1.4%	3.9%	1%	4%	0%	3%
5.5	2.7%	3.0%	1.8%	3.0%	2.0%	2.6%	1.8%	3.7%	1.9%	2.9%	1.0%	3.0%	0.9%	3.5%	0.8%	3.8%	1.4%	4.2%	1%	3%	1%	4%
6	1.0%	1.5%	1.6%	2.5%	0.8%	2.1%	1.0%	1.4%	0.9%	2.8%	1.4%	1.6%	0.3%	2.8%	0.0%	3.3%	0.8%	1.9%	0%	2%	0%	3%
6.5	1.6%	2.5%	1.2%	1.3%	1.4%	2.3%	1.4%	3.0%	0.9%	1.3%	1.1%	2.7%	0.2%	1.9%	0.5%	2.8%	0.3%	2.8%	0%	3%	1%	2%
7	1.6%	1.9%	1.7%	2.6%	1.3%	2.5%	0.7%	2.5%	1.2%	2.3%	1.0%	2.0%	0.5%	4.2%	0.8%	2.3%	1.1%	3.3%	0%	4%	1%	3%
7.5	1.5%	1.7%	1.4%	1.8%	1.4%	1.5%	1.0%	1.8%	0.8%	2.0%	1.1%	2.3%	0.7%	3.0%	0.5%	1.5%	0.0%	2.2%	0%	2%	1%	2%
8	1.5%	1.9%	1.3%	1.7%	1.3%	1.4%	0.8%	2.0%	1.2%	1.8%	0.8%	1.1%	1.2%	0.9%	0.8%	2.3%	0.3%	0.3%	0%	2%	0%	2%
8.5	1.3%	1.6%	0.6%	1.1%	1.0%	1.1%	1.1%	1.7%	0.2%	1.3%	1.1%	1.8%	0.7%	1.2%	0.8%	1.3%	0.3%	0.6%	0%	1%	1%	1%
9	1.5%	1.1%	1.1%	1.4%	1.6%	0.8%	0.6%	1.3%	1.1%	1.5%	0.4%	1.0%	0.2%	1.6%	0.5%	2.3%	0.6%	1.1%	0%	1%	2%	2%
9.5	1.0%	0.5%	1.0%	1.3%	0.5%	1.1%	0.4%	0.7%	0.6%	1.2%	0.4%	1.0%	0.9%	1.4%	0.3%	0.5%	0.6%	1.4%	0%	0%	0%	1%
10	1.2%	1.5%	1.2%	1.6%	0.8%	1.5%	0.9%	1.3%	0.3%	0.8%	0.8%	0.8%	0.3%	0.7%	0.3%	0.5%	0.3%	1.1%	0%	1%	0%	2%
10.5	1.1%	1.1%	1.3%	1.1%	1.1%	1.2%	0.4%	1.0%	0.5%	0.8%	1.1%	1.2%	0.9%	1.2%	0.3%	1.3%	0.3%	1.4%	0%	0%	0%	1%
11	1.0%	0.8%	0.7%	0.5%	0.9%	0.6%	0.8%	0.8%	1.1%	0.4%	0.8%	0.5%	0.2%	0.3%	0.3%	0.5%	0.0%	0.0%	0%	0%	1%	0%
11.5	1.0%	0.9%	0.9%	0.8%	0.9%	0.7%	0.7%	0.4%	0.2%	0.9%	0.4%	0.4%	1.0%	0.2%	0.3%	0.5%	0.8%	0.0%	0%	0%	1%	0%
12	0.6%	0.9%	1.2%	0.6%	0.5%	0.5%	0.5%	0.5%	1.0%	0.3%	0.7%	0.5%	0.0%	0.3%	0.3%	1.0%	0.0%	0.6%	0%	0%	0%	0%
12.5	0.6%	0.7%	0.8%	0.4%	0.5%	0.4%	0.4%	0.3%	0.9%	0.3%	0.7%	0.5%	0.2%	0.2%	0.0%	1.0%	0.6%	0.3%	0%	0%	0%	0%
13	0.6%	0.6%	0.6%	0.3%	1.2%	0.4%	0.5%	0.3%	0.3%	0.1%	1.0%	0.1%	0.7%	0.0%	0.3%	0.0%	0.3%	0.0%	0%	0%	0%	0%
13.5	0.6%	0.8%	0.9%	0.7%	0.5%	0.9%	0.4%	0.4%	0.2%	0.5%	0.1%	0.4%	0.7%	0.0%	0.0%	0.5%	0.3%	0.6%	1%	0%	0%	0%
14	0.8%	0.5%	0.7%	0.4%	0.5%	0.5%	0.3%	0.2%	0.3%	0.2%	0.1%	0.4%	0.3%	0.2%	0.0%	0.5%	0.8%	0.6%	0%	0%	0%	0%
14.5	0.6%	0.7%	0.7%	0.4%	0.8%	0.2%	0.5%	0.4%	0.5%	0.1%	0.1%	0.3%	0.9%	0.0%	0.0%	0.5%	0.3%	0.0%	0%	0%	0%	0%
15	0.7%	0.5%	0.7%	0.3%	0.5%	0.1%	1.0%	0.2%	0.9%	0.3%	0.1%	0.4%	0.5%	0.0%	0.0%	0.3%	0.0%	0.6%	0%	0%	1%	0%
15.5	0.4%	0.3%	0.5%	0.1%	0.5%	0.2%	0.1%	0.3%	0.4%	0.3%	0.0%	0.0%	0.5%	0.0%	0.0%	0.3%	0.0%	0.0%	0%	0%	1%	0%
16	0.7%	0.3%	0.4%	0.4%	0.4%	0.2%	0.7%	0.1%	0.2%	0.1%	0.1%	0.1%	0.2%	0.0%	0.3%	0.0%	0.3%	0.3%	0%	0%	2%	1%
16.5	0.6%	0.4%	0.7%	0.5%	0.3%	0.2%	0.1%	0.1%	0.3%	0.3%	0.0%	0.1%	0.2%	0.0%	0.5%	0.0%	0.8%	0.3%	1%	0%	0%	1%
17	0.6%	0.3%	0.6%	0.2%	0.4%	0.3%	0.7%	0.0%	0.4%	0.1%	0.5%	0.0%	0.2%	0.2%	0.3%	0.3%	0.8%	0.6%	0%	0%	0%	0%
17.5	0.7%	0.3%	0.2%	0.2%	0.8%	0.2%	0.4%	0.3%	0.4%	0.2%	0.3%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.3%	0%	0%	1%	0%
18	0.5%	0.2%	0.6%	0.2%	0.4%	0.1%	0.3%	0.2%	0.3%	0.2%	0.4%	0.0%	0.3%	0.2%	0.3%	0.0%	0.0%	0.0%	0%	0%	0%	0%
18.5	0.4%	0.3%	0.5%	0.1%	0.2%	0.0%	0.2%	0.2%	0.4%	0.2%	0.3%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.3%	0%	0%	0%	0%
19	0.4%	0.3%	0.8%	0.2%	0.4%	0.0%	0.1%	0.0%	0.5%	0.2%	0.4%	0.1%	0.2%	0.0%	0.3%	0.0%	0.3%	0.0%	0%	0%	0%	0%
19.5	0.4%	0.3%	0.5%	0.2%	0.6%	0.1%	0.6%	0.3%	0.4%	0.1%	0.3%	0.1%	0.7%	0.0%	0.3%	0.0%	0.3%	0.0%	0%	0%	0%	0%
>20	22.7%	4.3%	29.1%	2.9%	38.6%	1.6%	47.0%	1.0%	53.2%	1.0%	57.8%	0.1%	61.6%	0.7%	65.5%	0.8%	65.7%	0.0%	72%	0%	70%	0%

Filename	13S91_33	
y(mm)	108	
y/h	1.08	
C	0.991	
Nab	166	
Min	f(a)	f(w)
0	1.2%	7.2%
0.5	2.4%	4.8%
1	1.2%	10.2%
1.5	3.6%	9.6%
2	1.8%	6.6%
2.5	0.0%	10.8%
3	1.2%	4.2%
3.5	2.4%	7.2%
4	1.8%	4.2%
4.5	0.0%	6.6%
5	1.2%	6.6%
5.5	0.6%	3.0%
6	0.6%	1.8%
6.5	0.6%	2.4%
7	0.6%	3.6%
7.5	0.0%	1.2%
8	0.0%	3.0%
8.5	0.6%	0.0%
9	1.2%	1.2%
9.5	0.0%	0.0%
10	0.0%	0.6%
10.5	0.0%	0.6%
11	0.0%	1.2%
11.5	0.6%	0.0%
12	0.6%	0.6%
12.5	0.0%	0.6%
13	0.0%	0.0%
13.5	0.0%	0.0%
14	0.0%	0.0%
14.5	0.0%	0.6%
15	0.0%	0.0%
15.5	0.0%	0.0%
16	0.0%	0.6%
16.5	0.0%	0.0%
17	0.0%	0.0%
17.5	0.0%	0.0%
18	0.0%	0.0%
18.5	0.0%	0.0%
19	0.0%	0.0%
19.5	0.0%	0.0%
>20	76.5%	0.0%

Run 1.3B, dcrest/h = 1.3, Configuration B, location 91

Filename	13S91_34		13S91_00		13S91_01		13S91_02		13S91_03		13S91_04		13S91_05		13S91_06		13S91_07		13S91_08		13S91_09	
y(mm)	118		108		103		93		89		85		81		77		73		69		65	
y/h	1.18		1.08		1.03		0.93		0.89		0.85		0.81		0.77		0.73		0.69		0.65	
C	0.993		0.986		0.985		0.976		0.962		0.967		0.944		0.943		0.926		0.898		0.844	
Nab	149	149	282	282	292	292	502	502	741	741	624	624	1011	1011	1056	1056	1394	1394	1891	1891	2701	2701
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	4.7%	12.1%	1.8%	8.2%	1.4%	6.8%	1.0%	5.8%	1.2%	5.4%	1.0%	6.3%	1.6%	6.6%	1.4%	7.1%	2.2%	7.8%	1.5%	8.1%	2.8%	7.9%

0.5	2.7%	8.7%	2.5%	9.6%	3.1%	12.3%	3.6%	11.0%	3.4%	12.3%	3.4%	12.5%	4.1%	11.3%	4.0%	11.3%	4.6%	13.3%	6.5%	13.1%	6.0%	15.0%
1	1.3%	12.1%	3.2%	11.3%	4.1%	12.7%	4.2%	15.1%	3.0%	10.9%	3.5%	11.5%	4.8%	12.5%	5.2%	11.3%	5.8%	10.7%	6.8%	11.2%	6.7%	11.8%
1.5	4.7%	10.1%	2.8%	8.2%	3.4%	8.2%	4.0%	9.2%	4.3%	10.7%	5.0%	9.6%	5.1%	8.6%	5.6%	10.9%	4.9%	10.0%	6.1%	9.5%	6.8%	8.5%
2	4.0%	8.1%	2.5%	9.9%	3.8%	8.9%	4.4%	9.6%	2.2%	9.4%	3.0%	8.3%	3.7%	7.6%	4.2%	7.1%	3.9%	8.2%	4.8%	8.4%	5.7%	7.6%
2.5	0.7%	8.1%	2.1%	8.2%	2.4%	8.6%	4.2%	6.0%	2.6%	7.7%	3.2%	8.2%	4.4%	8.5%	4.0%	7.4%	4.4%	6.5%	3.4%	7.1%	4.5%	6.1%
3	4.7%	4.0%	1.4%	7.8%	2.1%	5.5%	2.0%	8.4%	1.6%	5.4%	2.7%	5.9%	1.8%	3.3%	3.6%	5.1%	2.4%	4.7%	2.1%	4.5%	2.8%	3.8%
3.5	0.7%	3.4%	1.8%	7.4%	0.7%	5.8%	2.6%	4.0%	1.5%	5.8%	2.2%	5.1%	2.4%	5.4%	1.8%	5.3%	2.0%	5.6%	3.1%	4.7%	3.3%	4.5%
4	1.3%	7.4%	1.4%	3.2%	1.7%	4.1%	2.4%	5.0%	2.6%	5.3%	1.9%	4.8%	2.0%	6.0%	2.5%	5.1%	1.7%	4.3%	2.6%	4.3%	2.9%	4.6%
4.5	0.7%	3.4%	1.8%	3.5%	2.1%	4.5%	1.2%	4.2%	2.2%	4.9%	2.2%	3.2%	1.8%	4.5%	1.5%	5.0%	2.4%	4.0%	2.3%	4.2%	2.9%	3.5%
5	1.3%	4.0%	0.0%	1.8%	0.3%	4.1%	2.0%	4.2%	1.5%	1.6%	1.0%	2.7%	1.6%	3.6%	0.9%	2.7%	1.9%	3.7%	1.5%	2.6%	2.6%	3.8%
5.5	0.7%	4.0%	1.4%	3.9%	1.7%	2.4%	0.6%	3.6%	1.2%	3.6%	1.6%	2.6%	1.2%	3.5%	1.0%	3.1%	1.6%	2.9%	2.1%	2.7%	1.9%	2.9%
6	0.7%	2.0%	1.4%	2.5%	1.0%	1.7%	0.6%	1.8%	0.9%	2.3%	1.1%	3.7%	0.7%	1.7%	1.1%	2.2%	0.6%	1.3%	0.8%	1.1%	1.3%	1.3%
6.5	0.0%	2.0%	0.4%	2.1%	1.4%	2.7%	0.2%	1.4%	0.9%	2.8%	0.6%	1.6%	1.4%	2.4%	1.0%	3.2%	1.5%	2.7%	1.5%	2.7%	1.7%	2.0%
7	1.3%	1.3%	1.8%	2.1%	1.0%	2.7%	1.0%	2.6%	1.1%	2.2%	1.6%	2.2%	0.8%	2.0%	1.0%	1.8%	1.6%	2.2%	1.2%	1.6%	2.1%	1.7%
7.5	0.7%	1.3%	0.7%	2.8%	1.4%	2.4%	0.8%	2.2%	0.9%	1.5%	1.6%	1.8%	0.7%	1.3%	0.9%	1.6%	1.2%	1.1%	1.5%	1.5%	1.6%	1.8%
8	0.0%	1.3%	0.7%	1.1%	0.7%	0.7%	0.4%	0.8%	0.3%	1.3%	0.3%	1.4%	1.2%	1.2%	1.2%	1.6%	0.8%	1.4%	1.2%	1.6%	1.1%	1.1%
8.5	0.0%	0.7%	0.4%	0.4%	0.0%	0.7%	0.6%	1.2%	0.8%	0.8%	0.3%	1.1%	0.8%	1.7%	0.9%	1.1%	1.4%	0.9%	1.2%	2.0%	1.3%	1.1%
9	0.0%	1.3%	0.0%	0.7%	0.0%	0.7%	0.4%	1.2%	1.3%	0.9%	0.3%	1.0%	0.8%	1.0%	0.7%	0.6%	1.2%	1.1%	1.2%	0.7%	0.9%	1.1%
9.5	0.0%	0.7%	0.7%	0.4%	0.0%	0.0%	0.8%	0.2%	0.9%	0.1%	0.5%	1.1%	0.6%	0.5%	0.7%	0.7%	0.7%	0.2%	0.6%	0.3%	0.6%	0.9%
10	0.0%	0.0%	0.0%	0.7%	0.3%	0.7%	0.6%	0.4%	0.7%	1.5%	0.3%	0.8%	0.5%	0.6%	0.9%	0.5%	0.9%	0.8%	0.5%	0.9%	0.9%	0.9%
10.5	0.0%	0.7%	0.0%	0.0%	0.3%	0.0%	0.2%	0.4%	0.4%	0.1%	0.2%	0.3%	1.1%	0.8%	0.1%	0.4%	0.9%	0.6%	0.7%	1.0%	1.2%	0.9%
11	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.8%	0.6%	0.3%	0.1%	0.5%	0.6%	0.5%	1.0%	0.8%	0.6%	0.7%	0.8%	0.5%	1.2%	0.6%	0.7%
11.5	0.0%	0.7%	0.0%	0.0%	0.7%	0.3%	0.4%	0.4%	0.4%	0.4%	0.6%	0.3%	0.7%	0.8%	0.8%	0.7%	0.5%	0.9%	0.8%	0.5%	0.6%	0.6%
12	0.0%	0.0%	0.4%	0.4%	0.0%	0.0%	0.2%	0.2%	0.5%	0.3%	0.2%	0.5%	0.5%	0.2%	0.2%	0.3%	0.7%	0.6%	0.8%	0.5%	0.7%	0.4%
12.5	0.0%	0.0%	0.4%	0.4%	0.0%	0.0%	0.6%	0.2%	0.4%	0.3%	0.3%	0.2%	0.6%	0.3%	0.4%	0.5%	0.4%	0.5%	0.3%	0.1%	0.4%	0.3%
13	0.0%	0.7%	0.4%	0.0%	0.3%	0.0%	0.2%	0.0%	0.1%	0.5%	0.3%	0.2%	0.4%	0.4%	0.5%	0.4%	0.5%	0.4%	0.7%	0.4%	0.6%	0.5%
13.5	0.0%	0.7%	0.0%	0.4%	0.3%	1.0%	0.4%	0.0%	0.7%	0.1%	0.6%	0.5%	0.6%	0.2%	0.5%	0.0%	0.7%	0.5%	0.4%	0.7%	0.5%	0.6%
14	0.0%	0.0%	0.0%	0.4%	0.3%	0.3%	0.2%	0.2%	0.5%	0.3%	0.3%	0.3%	0.4%	0.1%	0.3%	0.2%	0.4%	0.4%	0.5%	0.2%	0.7%	0.3%
14.5	0.7%	0.7%	0.0%	0.4%	0.0%	0.0%	0.6%	0.2%	0.3%	0.0%	0.2%	0.2%	0.5%	0.1%	0.5%	0.3%	0.6%	0.0%	0.4%	0.3%	0.7%	0.5%
15	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.2%	0.8%	0.2%	0.5%	0.3%	0.5%	0.2%	0.5%	0.2%	0.4%	0.3%
15.5	0.7%	0.0%	0.4%	0.4%	0.0%	0.3%	0.4%	0.0%	0.5%	0.3%	0.2%	0.3%	0.2%	0.4%	0.3%	0.1%	0.2%	0.1%	0.5%	0.3%	0.4%	0.3%
16	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.2%	0.2%	0.7%	0.1%	0.2%	0.1%	0.7%	0.2%	0.8%	0.3%
16.5	0.7%	0.0%	0.0%	0.0%	0.7%	0.3%	0.4%	0.0%	0.4%	0.3%	0.3%	0.0%	0.3%	0.0%	0.1%	0.3%	0.5%	0.1%	0.7%	0.2%	0.5%	0.3%
17	0.7%	0.0%	0.0%	0.0%	0.7%	0.0%	0.4%	0.0%	0.3%	0.1%	0.0%	0.3%	1.1%	0.3%	0.8%	0.0%	0.6%	0.1%	0.4%	0.0%	0.5%	0.2%
17.5	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.2%	0.0%	0.4%	0.2%	0.6%	0.1%	0.1%	0.2%	0.5%	0.2%	0.5%	0.1%
18	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.2%	0.0%	0.8%	0.2%	0.6%	0.0%	0.6%	0.0%	0.6%	0.2%
18.5	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%	0.0%	0.4%	0.0%	0.1%	0.0%	0.4%	0.1%	0.2%	0.1%	0.4%	0.1%
19	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	0.1%	0.1%	0.5%	0.0%	0.2%	0.1%	0.5%	0.2%	0.4%	0.0%	0.4%	0.1%	0.3%	0.0%
19.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.6%	0.2%	0.3%	0.0%	0.6%	0.2%	0.6%	0.1%
>20	64.4%	0.0%	68.8%	0.0%	63.0%	0.7%	56.8%	0.0%	58.6%	0.3%	56.7%	0.5%	48.8%	1.1%	47.2%	0.6%	42.6%	0.7%	37.2%	0.8%	28.7%	1.7%

Filename	13S91_10		13S91_11		13S91_12		13S91_13		13S91_14		13S91_15		13S91_16		13S91_17		13S91_18		13S91_19		13S91_20	
y(mm)	61		57		53		49		45		41		37		33		30		27		24	
y/h	0.61		0.57		0.53		0.49		0.45		0.41		0.37		0.33		0.3		0.27		0.24	
C	0.797		0.714		0.621		0.542		0.426		0.356		0.282		0.23		0.188		0.176		0.157	
Nab	3257		4009		4493		4918		4845		4773		4470		4207		3693		3708		3536	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	2.6%	8.1%	3.1%	7.8%	3.1%	7.0%	3.4%	6.3%	3.7%	5.8%	3.9%	5.7%	7.7%	6.6%	8.5%	6.1%	8.9%	6.1%	10.1%	5.7%	10.6%	5.5%
0.5	7.5%	14.2%	7.7%	12.0%	8.2%	11.5%	9.7%	11.5%	10.4%	9.7%	11.2%	9.0%	13.3%	7.7%	14.4%	6.7%	14.7%	5.5%	16.1%	6.0%	16.5%	6.0%
1	7.5%	10.1%	8.4%	10.9%	10.2%	10.3%	10.7%	8.5%	11.4%	8.4%	12.8%	7.3%	14.5%	6.3%	15.2%	5.7%	15.6%	5.0%	15.5%	5.2%	16.2%	5.8%
1.5	7.1%	9.1%	7.7%	8.0%	8.7%	8.0%	9.5%	7.3%	10.4%	6.6%	11.4%	6.4%	11.1%	5.6%	11.6%	5.4%	13.4%	4.1%	12.3%	4.0%	12.8%	3.6%
2	5.4%	6.9%	6.1%	7.6%	7.3%	6.7%	8.0%	7.0%	8.5%	6.2%	8.6%	5.4%	7.7%	4.9%	9.0%	4.6%	7.9%	3.9%	9.3%	4.2%	8.9%	3.4%
2.5	4.2%	6.2%	6.1%	6.9%	6.2%	5.7%	6.5%	6.2%	7.0%	4.9%	6.6%	4.9%	6.4%	4.3%	6.0%	4.5%	7.8%	3.7%	6.4%	3.2%	7.2%	3.1%
3	3.7%	5.3%	4.5%	5.0%	5.0%	5.1%	4.6%	5.1%	5.7%	4.3%	5.1%	3.9%	5.0%	3.7%	5.1%	3.4%	6.2%	3.8%	6.6%	4.4%	6.2%	3.7%
3.5	3.7%	4.7%	4.1%	4.1%	4.1%	4.2%	3.7%	4.2%	4.4%	3.4%	4.5%	4.1%	4.9%	3.0%	4.0%	3.5%	3.5%	2.4%	3.5%	2.7%	3.2%	2.8%
4	2.9%	3.5%	3.1%	3.5%	3.2%	3.8%	3.6%	3.8%	3.8%	3.9%	3.2%	3.7%	3.6%	3.0%	3.6%	3.0%	3.0%	2.4%	2.5%	2.3%	3.0%	2.5%
4.5	3.0%	3.6%	2.7%	3.0%	2.9%	3.2%	3.0%	2.5%	3.1%	2.6%	3.0%	3.4%	3.0%	2.8%	2.2%	2.6%	2.8%	2.5%	2.1%	2.2%	2.2%	2.4%
5	1.8%	2.1%	2.3%	3.1%	2.1%	1.8%	1.7%	1.8%	1.7%	1.8%	2.5%	2.1%	2.3%	2.1%	2.2%	2.4%	1.3%	2.4%	1.9%	2.4%	1.7%	2.0%
5.5	2.2%	3.4%	2.2%	2.5%	2.4%	2.1%	2.6%	2.9%	2.2%	2.6%	2.4%	2.0%	1.9%	2.4%	2.1%	1.8%	1.8%	2.3%	1.7%	2.0%	1.3%	1.7%
6	2.0%	2.3%	2.0%	2.6%	2.0%	2.7%	2.2%	2.2%	2.1%	2.4%	1.9%	2.1%	1.9%	2.4%	1.7%	1.9%	1.5%	2.5%	1.5%	2.3%	1.4%	2.0%
6.5	2.1%	2.1%	1.8%	1.9%	1.8%	2.0%	1.7%	2.3%	1.8%	2.1%	1.7%	1.8%	1.4%	2.2%	1.6%	2.2%	0.9%	1.8%	1.2%	2.2%	1.0%	1.7%
7	1.6%	2.4%	1.8%	1.8%	1.6%	1.7%	1.8%	1.8%	1.6%	1.7%	1.9%	1.8%	1.2%	1.7%	1.3%	1.4%	1.1%	1.4%	0.8%	1.7%	0.7%	1.6%
7.5	1.6%	1.8%	1.5%	1.3%	1.6%	2.0%	1.6%	2.0%	1.5%	1.9%	1.5%	1.7%	1.0%	1.9%	0.9%	1.6%	0.9%	1.7%	0.9%	1.3%	0.6%	1.6%
8	1.5%	1.2%	1.7%	1.8%	1.4%	1.5%	1.5%	1.4%	1.2%	1.7%	1.3%	1.5%	1.2%	1.7%	1.0%	1.5%	0.8%	1.6%	0.7%	1.6%	0.5%	1.2%
8.5	1.7%	1.1%	1.6%	1.3%	1.3%	1.4%	1.5%	1.5%	1.2%	1.5%	0.9%	1.4%	0.7%	1.5%	0.7%	1.4%	0.6%	1.3%	0.4%	1.0%	0.7%	1.3%
9	1.4%	0.7%	1.3%	1.0%	1.3%	1.5%	0.8%	1.4%	1.1%	1.4%	1.3%	1.3%	0.7%	1.3%	0.7%	1.5%	0.7%	2.2%	0.8%	1.8%	0.4%	1.7%
9.5	1.4%	1.2%	0.9%	1.0%	1.0%	1.2%	1.1%	1.4%	0.8%	1.2%	0.8%	1.3%	0.9%	1.1%	0.6%	1.2%	0.5%	1.0%	0.5%	1.4%	0.7%	1.1%
10	1.0%	1.2%	1.1%	0.6%	1.1%	1.1%	1.2%	1.3%	0.8%	1.2%	0.8%	1.3%	0.7%	1.1%	0.5%	1.3%	0.4%	1.1%	0.6%	1.3%	0.5%	1.2%
10.5	0.7%	0.3%	1.1%	0.9%	0.8%	0.6%	0.6%	0.7%	0.8%	0.7%	0.9%	1.1%	0.7%	1.2%	0.5%	1.3%	0.6%	1.2%	0.2%	0.9%	0.3%	1.4%
11	0.8%	0.4%	1.0%	0.6%	0.8%	1.1%	0.8%	1.1%	0.8%	1.2%	0.8%	1.1%	0.6%	1.0%	0.5%	1.2%	0.7%	1.5%	0.3%	0.8%	0.3%	1.2%
11.5	1.0%	0.6%	0.8%	0.5%	1.0%	0.9%	0.7%	0.9%	0.8%	1.2%	0.7%	1.2%	0.5%	1.4%	0.4%	1.0%	0.1%	1.2%	0.3%	1.2%	0.3%	1.2%
12	0.8%	0.8%	0.8%	0.5%	0.8%	0.8%	0.7%	0.9%	0.8%	0.9%	0.7%	1.2%	0.5%	1.1%	0.4%	1.2%	0.4%	1.2%	0.4%	1.2%	0.2%	1.8%
12.5	0.6%	0.6%	0.8%	0.7%	0.7%	0.9%	0.6%	0.7%	0.7%	1.0%	0.7%	1.2%	0.5%	1.0%	0.5%	0.8%	0.3%	1.3%	0.2%	1.0%	0.2%	1.3%
13	0.9%	0.6%	0.8%	0.7%	0.6%	0.6%	0.7%	0.8%	0.6%	1.0%	0.5%	1.0%	0.4%	0.9%	0.3%	1.1%	0.2%	1.0%	0.3%	1.2%	0.3%	1.0%
13.5	0.4%	0.4%	0.6%	0.6%	0.8%	0.6%	0.6%	0.6%	0.6%	1.0%	0.5%	0.7%	0.4%	1.2%	0.4%	1.2%	0.3%	1.0%	0.2%	0.9%	0.3%	1.2%
14	0.7%	0.5%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.9%	0.3%	0.6%	0.5%	0.8%	0.3%	0.8%	0.2%	1.1%	0.3%	0.9%	0.2%	0.7%
14.5	0.6%	0.5%	0.7%	0.2%	0.5%	0.4%	0.5%	0.5%	0.4%	0.9%	0.7%	0.9%	0.3%	0.6%	0.3%	1.0%	0.2%	1.3%	0.0%	1.0%	0.1%	1.2%
15	0.4%	0.4%	0.5%	0.7%	0.5%	0.6%	0.8%	0.7%	0.6%	0.8%	0.2%	0.8%	0.3%	0.8%	0.3%	0.9%	0.2%	0.9%	0.2%	1.1%	0.1%	0.9%
15.5	0.5%	0.2%	0.9%	0.4%	0.5%	0.3%	0.6%	0.6%	0.5%	0.5%	0.2%	0.7%	0.3%	0.6%	0.2%	0.7%	0.2%	0.9%	0.1%	1.1%	0.1%	0.7%
16	0.3%	0.2%	0.4%	0.3%	0.4%	0.4%	0.4%	0.4%	0.3%	0.3%	0.4%	0.8%	0.2%	0.9%	0.3%	1.0%	0.1%	0.8%	0.2%	0.8%	0.0%	0.8%
16.5	0.5%	0.2%	0.6%	0.3%	0.6%	0.4%	0.6%	0.5%	0.3%	0.6%	0.4%	0.7%	0.2%	0.7%	0.2%	0.7%	0.2%	0.7%	0.1%	0.9%	0.1%	1.2%
17	0.8%	0.3%	0.5%	0.4%	0.4%	0.4%	0.5%	0.5%	0.4%	0.6%	0.2%	0.7%	0.2%	0.8%	0.2%	0.9%	0.1%	0.8%	0.2%	0.5%	0.1%	0.7%
17.5	0.6%	0.2%	0.4%	0.1%	0.4%	0.4%	0.5%	0.3%	0.4%	0.6%	0.1%	0.5%	0.3%	0.6%	0.3%	0.9%	0.2%	0.7%	0.1%	0.8%	0.0%	0.8%
18	0.4%	0.2%	0.4%	0.4%	0.4%	0.5%	0.5%	0.3%	0.3%	0.7%	0.3%	0.5%	0.1%	0.7%	0.1%	0.5%	0.2%	1.2%	0.2%	1.0%	0.1%	1.1%
18.5	0.5%	0.2%	0.4%	0.3%	0.4%	0.4%	0.2%	0.3%	0.2%	0.6%	0.3%	0.4%	0.1%	0.6%	0.1%	0.7%	0.0%	0.4%	0.1%	0.6%	0.1%	0.6%
19	0.3%	0.2%	0.5%	0.2%	0.4%	0.2%	0.4%	0.4%	0.3%	0.6%	0.2%	0.5%	0.2%	0.5%	0.1%	0.9%	0.0%	0.5%	0.1%	0.3%	0.1%	0.9%
19.5	0.4%	0.2%	0.4%	0.2%	0.4%	0.2%	0.2%	0.3%	0.4%	0.4%	0.2%	0.4%	0.3%	0.6%	0.1%	0.5%	0.1%	0.7%	0.0%	0.5%	0.0%	0.5%
>20	23.2%	1.8%	16.0%	3.2%	12.6%	5.2%	9.0%	6.8%	6.1%	10.3%	4.2%	12.9%	2.6%	16.8%	1.4%	19.3%	1.1%	23.0%	0.8%	24.5%	0.7%	25.1%

Filename	13S91_21		13S91_22		13S91_23		13S91_24		13S91_25		13S91_26		13S91_27		13S91_28		13S91_29		13S91_30		13S91_31	
y(mm)	21		18		15		12		9		6		1		-4		-9		-14		-19	
y/h	0.21		0.18		0.15		0.12		0.09		0.06		0.01		-0.04		-0.09		-0.14		-0.19	
C	0.138		0.125		0.101		0.122		0.107		0.11		0.146		0.148		0.18		0.185		0.186	
Nab	3334		3249		2932		3287		3172		3168		3364		2471		2022		1609		1375	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	9.0%	5.2%	10.1%	6.0%	8.9%	4.4%	11.5%	6.1%	13.1%	5.2%	18.2%	8.4%	15.6%	9.2%	10.0%	8.5%	11.1%	9.7%	8.1%	6.3%	4.7%	2.8%
0.5	17.3%	6.3%	17.3%	6.1%	24.0%	6.9%	25.7%	7.5%	26.7%	7.3%	24.7%	7.8%	26.6%	9.9%	18.2%	8.8%	13.2%	5.8%	10.9%	6.5%	2.8%	1.6%
1	19.4%	5.3%	22.9%	6.1%	18.6%	3.6%	17.1%	4.4%	21.2%	6.1%	19.8%	5.1%	19.6%	6.7%	15.6%	6.5%	10.8%	5.8%	8.9%	5.0%	3.1%	1.7%
1.5	17.1%	4.6%	13.0%	3.6%	17.8%	4.5%	14.5%	5.2%	10.3%	3.1%	13.1%	4.3%	11.5%	5.9%	12.4%	5.2%	9.6%	4.0%	10.3%	4.8%	3.9%	2.3%
2	8.4%	3.1%	11.4%	4.3%	10.7%	4.2%	9.9%	4.5%	9.6%	4.0%	7.4%	3.0%	8.1%	4.3%	10.2%	4.1%	10.0%	4.9%	8.5%	3.3%	2.8%	0.9%
2.5	6.1%	3.4%	5.8%	2.7%	4.9%	2.1%	4.8%	2.6%	4.9%	3.2%	4.5%	3.4%	5.1%	3.2%	7.3%	3.6%	6.1%	3.1%	7.8%	4.0%	3.1%	1.3%
3	5.5%	3.7%	5.2%	3.1%	4.1%	2.4%	3.7%	4.4%	3.1%	2.3%	3.2%	2.5%	2.8%	2.8%	5.4%	3.0%	6.3%	2.6%	5.3%	3.1%	3.5%	2.3%
3.5	3.0%	2.2%	2.7%	1.8%	2.7%	1.8%	2.1%	2.1%	2.5%	3.1%	2.3%	2.2%	1.9%	2.6%	4.9%	2.9%	5.3%	2.4%	5.7%	2.5%	2.3%	1.7%
4	1.7%	2.2%	2.1%	2.4%	2.3%	2.4%	1.9%	2.4%	1.9%	2.4%	1.3%	2.4%	2.0%	2.9%	3.1%	2.0%	4.3%	3.7%	4.4%	2.2%	2.3%	1.2%
4.5	1.9%	1.8%	1.2%	1.8%	1.4%	2.3%	1.7%	2.8%	1.3%	1.5%	1.0%	1.7%	1.2%	2.3%	2.5%	2.2%	3.7%	2.8%	4.6%	2.1%	4.1%	2.3%
5	1.5%	2.2%	1.5%	2.5%	0.6%	2.0%	0.9%	1.4%	1.1%	1.9%	0.8%	2.2%	1.0%	2.0%	1.3%	1.7%	2.8%	2.4%	3.0%	2.4%	2.0%	1.2%
5.5	1.1%	1.9%	1.0%	1.7%	0.7%	1.9%	0.7%	1.7%	0.7%	2.4%	0.7%	2.3%	0.7%	2.4%	1.6%	1.4%	2.5%	1.9%	2.6%	1.0%	2.4%	1.0%
6	1.0%	1.8%	1.0%	1.9%	0.5%	2.0%	0.8%	1.9%	0.4%	1.6%	0.5%	1.6%	0.5%	1.3%	1.6%	1.8%	2.6%	1.7%	2.8%	1.9%	3.4%	2.3%
6.5	1.0%	2.1%	0.7%	1.1%	0.3%	1.3%	0.6%	1.2%	0.3%	1.5%	0.3%	1.6%	0.5%	1.9%	0.9%	1.7%	1.2%	1.6%	2.3%	2.0%	2.5%	0.9%
7	0.3%	1.5%	0.4%	1.7%	0.3%	1.5%	0.9%	1.5%	0.4%	1.9%	0.2%	1.6%	0.5%	1.5%	0.8%	1.8%	1.4%	1.5%	2.4%	2.2%	3.4%	1.2%
7.5	0.6%	1.2%	0.3%	1.3%	0.3%	1.1%	0.4%	0.9%	0.2%	1.0%	0.3%	1.7%	0.3%	1.5%	0.7%	1.5%	0.9%	1.2%	0.5%	1.5%	3.6%	2.0%
8	0.6%	1.4%	0.6%	2.1%	0.2%	1.6%	0.3%	1.5%	0.4%	2.0%	0.2%	1.4%	0.2%	1.6%	0.8%	1.4%	1.0%	1.3%	1.3%	1.1%	2.1%	0.7%
8.5	0.5%	1.4%	0.4%	1.0%	0.4%	1.5%	0.4%	1.6%	0.3%	1.8%	0.2%	1.6%	0.4%	1.7%	0.4%	0.9%	1.0%	1.1%	1.3%	1.0%	2.3%	1.4%

9	0.5%	1.2%	0.2%	1.7%	0.0%	1.0%	0.3%	0.9%	0.1%	1.0%	0.2%	1.5%	0.1%	1.4%	0.4%	1.3%	0.7%	0.9%	0.9%	0.9%	3.3%	1.0%
9.5	0.3%	1.2%	0.2%	1.3%	0.1%	1.2%	0.3%	1.6%	0.1%	1.3%	0.1%	1.2%	0.1%	1.4%	0.2%	1.2%	0.3%	1.2%	1.1%	1.2%	1.9%	1.0%
10	0.4%	1.7%	0.3%	1.4%	0.1%	1.4%	0.1%	0.9%	0.2%	1.2%	0.2%	1.3%	0.1%	1.1%	0.3%	0.9%	0.2%	1.1%	0.6%	1.2%	1.4%	0.4%
10.5	0.4%	1.3%	0.3%	1.0%	0.1%	1.4%	0.2%	1.2%	0.1%	1.3%	0.2%	1.1%	0.1%	1.2%	0.2%	0.8%	0.2%	1.5%	0.9%	1.2%	3.4%	1.7%
11	0.1%	1.1%	0.2%	1.2%	0.2%	1.3%	0.1%	1.2%	0.1%	0.8%	0.1%	1.0%	0.1%	1.1%	0.2%	0.8%	0.4%	0.9%	0.4%	1.0%	1.7%	0.9%
11.5	0.2%	1.2%	0.1%	0.8%	0.1%	1.3%	0.1%	1.1%	0.1%	1.1%	0.2%	0.9%	0.1%	1.2%	0.2%	1.1%	0.3%	0.9%	0.8%	1.2%	1.5%	0.5%
12	0.1%	0.9%	0.1%	1.1%	0.1%	1.6%	0.2%	1.1%	0.1%	1.5%	0.1%	0.7%	0.2%	1.0%	0.1%	0.8%	0.4%	0.9%	0.5%	0.6%	1.5%	1.1%
12.5	0.1%	1.1%	0.1%	0.9%	0.0%	1.4%	0.2%	1.0%	0.0%	0.8%	0.0%	1.2%	0.0%	0.9%	0.1%	0.9%	0.1%	1.1%	0.5%	0.9%	1.6%	0.8%
13	0.1%	1.0%	0.1%	1.4%	0.0%	0.9%	0.1%	0.8%	0.0%	1.6%	0.0%	1.3%	0.1%	1.2%	0.0%	0.5%	0.3%	0.7%	0.3%	0.7%	1.2%	0.7%
13.5	0.2%	0.8%	0.0%	0.9%	0.1%	1.2%	0.1%	1.1%	0.1%	0.9%	0.1%	1.0%	0.1%	0.8%	0.0%	1.0%	0.4%	0.5%	0.2%	0.6%	1.5%	0.7%
14	0.1%	1.0%	0.1%	1.1%	0.0%	0.8%	0.1%	0.9%	0.1%	0.8%	0.0%	1.1%	0.0%	1.2%	0.0%	0.8%	0.0%	0.8%	0.2%	1.0%	0.7%	0.6%
14.5	0.2%	0.8%	0.1%	0.8%	0.0%	1.1%	0.0%	0.8%	0.1%	1.1%	0.0%	0.7%	0.1%	0.8%	0.1%	0.9%	0.2%	0.9%	0.2%	0.6%	1.2%	0.7%
15	0.1%	0.8%	0.0%	1.1%	0.0%	1.2%	0.1%	0.7%	0.1%	1.3%	0.0%	0.7%	0.0%	0.7%	0.2%	1.0%	0.1%	1.0%	0.1%	1.1%	1.5%	0.9%
15.5	0.1%	0.9%	0.1%	0.7%	0.1%	1.1%	0.0%	0.8%	0.0%	0.7%	0.0%	0.8%	0.1%	0.8%	0.0%	1.1%	0.1%	0.7%	0.1%	0.6%	1.2%	1.2%
16	0.1%	0.7%	0.1%	0.9%	0.0%	0.9%	0.0%	0.6%	0.1%	0.9%	0.0%	1.3%	0.0%	0.5%	0.0%	0.7%	0.1%	0.3%	0.1%	0.9%	0.9%	0.6%
16.5	0.1%	0.7%	0.1%	0.6%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.0%	1.0%	0.0%	0.7%	0.0%	0.6%	0.0%	0.6%	0.2%	0.6%	1.5%	0.7%
17	0.1%	0.8%	0.1%	1.4%	0.0%	0.6%	0.0%	0.8%	0.0%	0.6%	0.0%	0.6%	0.0%	0.5%	0.0%	0.5%	0.1%	0.8%	0.2%	0.9%	0.8%	0.3%
17.5	0.0%	0.7%	0.0%	0.7%	0.0%	1.0%	0.1%	0.9%	0.0%	0.9%	0.0%	0.9%	0.0%	0.9%	0.0%	0.8%	0.2%	0.3%	0.1%	0.7%	0.6%	0.4%
18	0.1%	1.0%	0.0%	1.0%	0.0%	1.0%	0.1%	0.8%	0.1%	1.1%	0.0%	0.8%	0.0%	0.8%	0.0%	0.7%	0.1%	0.4%	0.0%	0.6%	0.8%	0.7%
18.5	0.0%	0.8%	0.0%	0.8%	0.1%	0.9%	0.0%	0.7%	0.0%	0.8%	0.0%	0.7%	0.0%	0.7%	0.0%	0.6%	0.1%	0.5%	0.1%	1.1%	0.6%	0.8%
19	0.0%	0.5%	0.0%	0.6%	0.0%	0.8%	0.0%	0.6%	0.0%	0.9%	0.0%	0.8%	0.0%	0.5%	0.0%	0.5%	0.1%	1.1%	0.1%	0.5%	0.9%	0.5%
19.5	0.1%	0.7%	0.0%	0.6%	0.0%	0.5%	0.0%	0.5%	0.0%	0.7%	0.0%	0.7%	0.0%	0.4%	0.1%	0.4%	0.2%	0.8%	0.1%	0.8%	1.0%	0.7%
>20	0.5%	27.3%	0.2%	26.6%	0.1%	29.3%	0.3%	26.4%	0.2%	25.9%	0.1%	24.0%	0.2%	16.3%	0.1%	22.9%	1.0%	24.2%	1.8%	28.4%	14.7%	54.3%

Filename	13S91_32		13S91_33	
y(mm)	-24		-29	
y/h	-0.24		-0.29	
C	0.19		0.162	
Nab	1209		1177	
Min	f(a)	f(w)	f(a)	f(w)
0	9.0%	5.5%	0.0%	0.0%
0.5	6.5%	3.7%	0.0%	0.0%
1	7.9%	4.0%	3.0%	2.0%
1.5	8.7%	3.5%	0.0%	0.0%
2	6.9%	3.9%	0.0%	0.0%
2.5	7.0%	2.6%	1.3%	0.7%
3	7.0%	4.2%	0.0%	0.0%
3.5	5.2%	1.9%	0.6%	1.0%
4	4.1%	2.5%	0.0%	0.0%
4.5	4.5%	2.0%	0.0%	0.0%
5	3.3%	2.4%	1.5%	0.6%
5.5	3.2%	1.7%	0.0%	0.0%
6	2.6%	2.5%	0.8%	0.3%
6.5	1.9%	2.2%	0.0%	0.0%
7	1.9%	1.7%	0.0%	0.0%
7.5	2.8%	2.6%	1.3%	0.6%
8	1.8%	1.2%	0.0%	0.0%
8.5	1.4%	1.5%	0.0%	0.0%
9	2.2%	1.5%	1.5%	0.5%
9.5	0.9%	1.7%	0.0%	0.0%
10	0.7%	1.2%	1.0%	0.6%
10.5	1.3%	1.2%	0.0%	0.0%
11	0.8%	1.0%	0.0%	0.0%
11.5	0.4%	1.4%	1.8%	0.4%
12	0.4%	1.2%	0.0%	0.0%
12.5	0.1%	0.9%	1.5%	0.9%
13	0.3%	0.7%	0.0%	0.0%
13.5	0.7%	0.7%	0.0%	0.0%
14	0.7%	1.0%	1.5%	0.8%
14.5	0.3%	1.0%	0.0%	0.0%
15	0.1%	0.6%	1.4%	0.7%
15.5	0.4%	0.8%	0.0%	0.0%
16	0.2%	0.5%	0.0%	0.0%
16.5	0.4%	1.3%	0.9%	0.3%
17	0.0%	0.7%	0.0%	0.0%
17.5	0.2%	0.6%	0.0%	0.0%
18	0.3%	0.9%	0.7%	0.8%
18.5	0.2%	0.4%	0.0%	0.0%
19	0.5%	1.1%	0.9%	0.4%
19.5	0.4%	0.4%	0.0%	0.0%
>20	2.4%	29.8%	80.1%	89.1%

Run 1.3C, dcrest/h = 1.3, Configuration C, location 91

Filename	13S91_00		13S91_01		13S91_02		13S91_03		13S91_04		13S91_05		13S91_06		13S91_07		13S91_08		13S91_09		13S91_10	
y(mm)	108		103		93		89		85		81		77		73		69		65		61	
y/h	1.08		1.03		0.93		0.89		0.85		0.81		0.77		0.73		0.69		0.65		0.61	
C	0.993		0.992		0.986		0.985		0.978		0.975		0.965		0.958		0.941		0.914		0.874	
Nab	142	142	150	150	247	247	292	292	368	368	488	488	615	615	758	758	1076	1076	1477	1477	2068	2068
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.4%	7.7%	1.3%	4.0%	1.2%	3.6%	0.7%	4.1%	1.4%	5.7%	0.8%	7.4%	2.0%	4.9%	1.7%	6.1%	1.5%	5.5%	2.0%	5.8%	2.3%	7.2%
0.5	4.9%	9.2%	1.3%	10.0%	1.6%	10.9%	1.4%	11.3%	2.2%	9.0%	2.5%	10.0%	2.8%	10.2%	2.9%	11.1%	4.9%	12.4%	4.8%	12.2%	4.4%	11.6%
1	2.1%	6.3%	0.7%	12.7%	3.6%	7.3%	2.1%	5.5%	3.3%	8.7%	3.1%	11.5%	3.6%	11.1%	4.4%	11.7%	4.2%	12.1%	5.0%	11.6%	5.1%	10.4%
1.5	1.4%	8.5%	0.7%	10.0%	3.6%	7.7%	3.8%	9.9%	1.6%	6.0%	2.7%	8.4%	3.4%	10.2%	4.2%	8.0%	4.9%	9.5%	3.9%	8.8%	4.8%	9.5%
2	0.0%	8.5%	0.0%	8.7%	4.5%	9.7%	1.7%	10.3%	3.0%	7.9%	4.1%	9.8%	1.6%	5.5%	1.3%	5.5%	2.5%	8.0%	2.5%	6.2%	3.5%	6.0%
2.5	0.7%	13.4%	2.0%	8.0%	2.8%	4.5%	3.1%	7.9%	2.7%	8.7%	4.3%	7.4%	3.3%	6.2%	2.2%	8.3%	3.3%	9.4%	4.1%	7.1%	3.7%	6.4%
3	2.1%	5.6%	0.7%	2.7%	0.8%	4.0%	1.7%	5.1%	0.5%	3.3%	1.0%	4.5%	2.9%	6.5%	2.2%	8.4%	2.0%	3.3%	3.1%	4.7%	3.4%	6.0%
3.5	0.0%	5.6%	1.3%	5.3%	1.2%	7.3%	2.1%	7.5%	1.1%	6.5%	1.4%	4.5%	1.5%	4.9%	2.6%	4.9%	1.5%	6.2%	2.8%	6.6%	3.0%	5.7%
4	0.0%	7.0%	2.7%	3.3%	0.4%	9.3%	3.4%	8.9%	1.6%	6.3%	1.0%	4.1%	1.0%	4.1%	2.1%	3.4%	2.3%	4.8%	1.6%	3.5%	2.1%	3.5%
4.5	0.0%	2.8%	2.0%	9.3%	0.8%	6.1%	1.7%	6.2%	0.8%	5.2%	2.7%	7.0%	0.8%	6.7%	0.8%	4.7%	2.2%	3.4%	1.8%	3.7%	2.6%	3.9%
5	0.7%	3.5%	0.7%	5.3%	0.8%	5.7%	2.1%	4.5%	0.8%	3.0%	0.8%	4.1%	1.5%	4.9%	1.7%	3.7%	1.7%	3.6%	2.0%	3.3%	2.8%	3.1%
5.5	2.1%	4.9%	0.7%	4.0%	0.4%	2.0%	0.3%	4.1%	1.1%	3.3%	1.6%	4.3%	1.5%	2.6%	1.3%	2.9%	1.3%	2.5%	1.6%	3.5%	1.8%	2.9%
6	0.0%	4.9%	0.7%	2.7%	0.4%	2.8%	0.3%	0.0%	1.1%	3.8%	0.4%	2.0%	1.3%	3.7%	0.9%	2.6%	0.8%	2.0%	1.8%	3.6%	1.5%	2.6%
6.5	0.0%	2.1%	0.7%	0.7%	0.0%	5.7%	1.4%	1.7%	0.5%	2.4%	0.4%	2.0%	0.3%	2.6%	0.7%	2.5%	1.1%	2.3%	0.9%	2.0%	1.1%	1.7%
7	0.7%	0.7%	2.0%	1.3%	0.0%	2.0%	0.0%	2.1%	0.8%	3.5%	0.8%	2.3%	1.3%	2.1%	0.5%	2.5%	0.7%	1.8%	1.1%	2.4%	1.8%	2.8%
7.5	2.1%	2.1%	0.7%	2.0%	0.4%	2.0%	0.7%	3.1%	0.5%	1.9%	0.6%	1.2%	0.7%	2.3%	0.8%	1.3%	0.3%	2.0%	1.2%	1.4%	1.4%	1.8%
8	0.0%	0.0%	0.0%	1.3%	0.0%	1.6%	0.7%	1.7%	0.5%	2.4%	0.2%	1.4%	0.3%	1.8%	0.8%	2.5%	0.9%	1.7%	1.1%	1.9%	1.6%	1.4%
8.5	0.0%	0.7%	0.7%	1.3%	0.0%	2.0%	0.0%	0.3%	0.5%	0.5%	0.2%	0.0%	0.7%	1.5%	0.9%	1.1%	1.1%	1.1%	1.2%	0.9%	0.9%	1.0%
9	0.0%	0.7%	0.0%	1.3%	0.0%	1.6%	0.3%	1.4%	0.0%	1.4%	0.4%	1.6%	0.3%	1.5%	0.8%	1.3%	1.0%	1.1%	1.1%	1.1%	0.8%	1.6%
9.5	0.0%	0.7%	0.0%	0.0%	0.8%	0.0%	0.3%	0.3%	0.3%	1.6%	0.2%	1.2%	1.1%	1.3%	0.7%	0.9%	0.7%	0.7%	0.8%	0.9%	1.5%	1.3%
10	0.0%	1.4%	0.0%	0.7%	0.0%	0.8%	0.0%	1.0%	0.3%	1.4%	0.0%	0.6%	0.5%	1.0%	0.5%	0.4%	0.9%	0.9%	0.6%	1.2%	1.4%	1.0%
10.5	0.0%	0.7%	0.0%	0.7%	0.4%	0.0%	0.7%	1.4%	0.5%	0.3%	0.2%	0.4%	0.3%	0.2%	1.1%	1.2%	0.6%	0.8%	0.5%	0.5%	1.0%	0.7%
11	0.0%	0.0%	0.0%	0.7%	0.4%	0.4%	0.3%	0.3%	0.0%	0.0%	0.2%	0.4%	0.3%	0.5%	0.3%	0.7%	1.0%	0.1%	0.3%	0.6%	0.5%	0.7%
11.5	0.0%	0.0%	0.0%	2.0%	0.0%	0.8%	0.0%	0.0%	0.3%	0.3%	0.2%	0.4%	0.3%	0.5%	0.1%	0.4%	0.7%	0.7%	0.8%	1.2%	1.0%	0.6%
12	0.0%	0.7%	0.0%	0.0%	0.0%	0.4%	0.3%	0.3%	0.0%	0.5%	0.4%	0.2%	0.5%	0.2%	0.4%	0.5%	0.7%	0.2%	0.7%	0.3%	0.7%	0.7%
12.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.2%	0.2%	0.2%	0.3%	0.9%	0.4%	0.6%	0.3%	0.7%	0.9%	0.3%	0.7%
13	0.0%	0.7%	0.0%	0.7%	0.0%	0.0%	0.0%	0.3%	1.1%	1.6%	0.6%	0.4%	0.3%	0.2%	0.4%	0.3%	0.7%	0.4%	0.5%	0.3%	0.6%	0.6%
13.5	0.0%	0.0%	0.7%	0.0%	0.8%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.4%	0.3%	0.4%	0.3%	0.4%	0.4%	1.1%	0.5%
14	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.5%	0.4%	0.0%	0.8%	0.2%	0.4%	0.0%	0.5%	0.3%	0.7%	0.3%	0.5%	0.4%
14.5	0.7%	0.0%	0.0%	0.7%	0.4%	0.0%	0.3%	0.3%	0.8%	0.5%	1.0%	0.0%	1.3%	0.3%	0.9%	0.1%	0.7%	0.2%	0.5%	0.5%	0.7%	0.2%
15	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.2%	0.3%	0.2%	0.7%	0.3%	0.4%	0.4%	0.6%	0.3%	0.3%	0.3%
15.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.2%	0.2%	0.3%	0.3%	0.0%	0.0%	0.4%	0.4%	0.3%	0.1%	0.6%	0.3%
16	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.7%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.2%	0.4%	0.1%	0.5%	0.0%	0.5%	0.1%	0.5%	0.1%

16.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.5%	0.0%	0.3%	0.0%	0.5%	0.3%	0.4%	0.1%	0.7%	0.1%
17	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.4%	0.1%	0.3%	0.3%	0.3%	0.1%	0.3%	0.3%
17.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.4%	0.0%	0.0%	0.2%	0.0%	0.0%	0.9%	0.0%	0.7%	0.2%	0.3%	0.1%
18	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.3%	0.0%	0.0%	0.3%	0.2%	0.2%	0.2%	0.0%	0.3%	0.3%	0.3%	0.2%	0.4%	0.1%	0.7%	0.3%
18.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.5%	0.3%	0.4%	0.2%	0.5%	0.0%	0.1%	0.0%	0.7%	0.2%	0.5%	0.1%	0.6%	0.1%
19	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.5%	0.1%	0.0%	0.3%	0.2%	0.1%	0.4%	0.2%
19.5	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.3%	0.0%	0.3%	0.3%	0.4%	0.2%	0.3%	0.3%	0.1%	0.1%	0.5%	0.0%	0.4%	0.1%	0.5%	0.1%
>20	79.6%	0.7%	78.0%	0.0%	71.7%	0.0%	67.1%	0.0%	70.7%	0.5%	64.5%	0.8%	60.3%	0.7%	57.9%	0.9%	49.7%	0.6%	45.5%	1.4%	37.1%	1.5%

Filename	13S91_11		13S91_12		13S91_13		13S91_14		13S91_15		13S91_16		13S91_17		13S91_18		13S91_19		13S91_20		13S91_21	
y(mm)	57		53		49		45		41		37		33		30		27		24		21	
y/h	0.57		0.53		0.49		0.45		0.41		0.37		0.33		0.3		0.27		0.24		0.21	
C	0.811		0.74		0.606		0.492		0.363		0.247		0.191		0.16		0.141		0.109		0.105	
Nab	2795		3515		4245		4385		4024		3254		3135		2846		2657		2377		2277	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	3.1%	5.8%	3.2%	6.0%	3.3%	5.4%	3.9%	5.7%	4.0%	3.6%	0.0%	0.0%	5.2%	3.0%	8.6%	4.0%	9.9%	3.2%	11.8%	3.2%	10.5%	4.0%
0.5	6.3%	12.4%	7.2%	11.9%	8.7%	11.5%	7.7%	9.5%	10.1%	8.0%	0.0%	0.0%	13.2%	6.1%	16.1%	4.9%	16.0%	4.6%	16.9%	4.3%	16.6%	3.9%
1	5.6%	11.3%	7.2%	10.0%	7.5%	9.1%	10.3%	8.5%	10.3%	7.3%	0.0%	0.0%	12.4%	5.5%	14.3%	4.6%	15.3%	4.3%	15.6%	4.4%	15.8%	4.1%
1.5	6.8%	8.5%	6.6%	9.1%	7.3%	8.3%	8.4%	7.0%	9.4%	6.1%	1.9%	1.2%	11.9%	4.1%	9.8%	4.5%	11.4%	3.5%	12.6%	2.9%	16.9%	4.0%
2	3.1%	4.7%	3.6%	4.8%	6.5%	6.8%	6.9%	5.7%	7.3%	5.2%	0.0%	0.0%	8.6%	4.2%	9.1%	3.0%	8.3%	3.5%	10.6%	3.7%	8.1%	2.1%
2.5	4.9%	6.3%	5.5%	6.4%	5.3%	5.6%	5.9%	5.4%	5.9%	4.2%	0.0%	0.0%	7.5%	4.0%	6.1%	2.8%	6.5%	2.7%	5.6%	2.4%	5.6%	2.5%
3	3.6%	5.7%	4.8%	5.7%	4.8%	4.6%	5.4%	3.9%	5.1%	4.0%	2.7%	2.0%	5.5%	3.1%	4.9%	2.4%	6.0%	3.4%	3.8%	2.4%	5.3%	3.3%
3.5	3.6%	5.2%	3.9%	5.2%	4.4%	4.3%	4.0%	3.6%	4.4%	3.7%	0.0%	0.0%	4.2%	2.5%	3.4%	2.4%	3.0%	2.6%	3.6%	1.9%	3.7%	2.1%
4	2.1%	3.3%	2.2%	2.5%	3.8%	3.6%	3.7%	3.6%	3.8%	3.3%	0.0%	0.0%	4.1%	2.5%	3.2%	1.9%	3.2%	2.4%	3.6%	2.6%	2.2%	1.7%
4.5	3.0%	3.8%	3.3%	4.2%	3.0%	3.5%	3.2%	2.8%	3.3%	3.1%	3.8%	2.0%	3.1%	1.7%	3.4%	2.9%	2.4%	1.8%	1.8%	1.3%	1.4%	0.9%
5	2.2%	3.3%	2.6%	3.2%	2.0%	1.7%	2.1%	1.7%	2.1%	1.7%	0.0%	0.0%	2.2%	2.2%	2.2%	1.9%	2.2%	2.0%	1.5%	1.4%	2.0%	2.2%
5.5	2.3%	2.9%	2.6%	2.8%	2.8%	2.8%	2.4%	3.1%	2.4%	2.4%	0.0%	0.0%	2.5%	1.6%	2.1%	1.9%	1.4%	1.8%	1.6%	1.6%	1.2%	2.0%
6	2.0%	2.6%	2.3%	2.6%	2.3%	2.7%	2.4%	2.7%	2.6%	2.3%	4.0%	1.7%	1.9%	2.2%	1.9%	1.9%	1.8%	1.6%	1.3%	1.5%	0.8%	1.5%
6.5	1.2%	1.6%	1.5%	1.4%	2.2%	1.9%	1.7%	2.5%	2.0%	2.2%	0.0%	0.0%	1.5%	2.0%	1.3%	1.6%	1.3%	1.6%	1.1%	1.2%	1.4%	1.7%
7	1.7%	2.1%	2.0%	1.9%	2.0%	1.9%	2.0%	2.3%	1.9%	1.8%	0.0%	0.0%	1.7%	1.6%	1.4%	1.7%	0.9%	1.4%	0.8%	1.4%	1.0%	1.3%
7.5	1.4%	2.0%	1.5%	2.2%	1.8%	2.2%	1.8%	1.8%	2.1%	1.8%	4.6%	2.0%	1.4%	1.3%	1.2%	1.5%	1.1%	1.2%	0.8%	0.9%	1.0%	1.4%
8	1.3%	1.6%	1.5%	1.8%	1.6%	1.8%	1.8%	1.8%	1.5%	2.0%	0.0%	0.0%	1.0%	1.6%	0.9%	1.5%	0.7%	1.4%	0.5%	1.2%	0.9%	1.1%
8.5	1.3%	1.1%	0.8%	1.0%	1.4%	1.4%	1.4%	1.4%	1.3%	1.5%	0.0%	0.0%	0.9%	1.5%	0.6%	1.5%	0.8%	1.0%	0.7%	1.9%	0.4%	1.1%
9	0.8%	1.5%	1.1%	1.2%	1.5%	0.9%	1.2%	1.5%	1.5%	1.5%	4.3%	1.9%	0.9%	1.4%	0.8%	1.8%	1.0%	1.8%	0.7%	0.9%	0.7%	1.0%
9.5	1.3%	1.4%	1.4%	1.4%	1.5%	1.1%	0.8%	1.3%	1.2%	1.3%	0.0%	0.0%	0.5%	1.1%	1.5%	1.4%	0.6%	1.2%	0.3%	1.2%	0.4%	1.1%
10	0.8%	1.0%	1.2%	0.9%	1.2%	1.1%	1.2%	1.1%	1.1%	1.1%	0.0%	0.0%	0.8%	1.5%	0.8%	0.9%	0.8%	1.3%	0.5%	1.3%	0.6%	1.4%
10.5	1.1%	1.2%	1.0%	1.3%	0.6%	0.8%	0.8%	0.7%	0.7%	1.0%	4.6%	2.0%	0.6%	0.9%	0.9%	0.8%	0.3%	1.0%	0.6%	1.5%	0.1%	0.9%
11	0.8%	0.7%	0.5%	0.5%	1.1%	0.9%	0.9%	1.0%	1.0%	1.2%	0.0%	0.0%	0.6%	1.2%	0.3%	1.3%	0.3%	0.9%	0.4%	1.1%	0.2%	0.5%
11.5	1.3%	0.8%	0.8%	1.0%	0.9%	0.8%	0.9%	1.1%	0.9%	1.2%	0.0%	0.0%	0.5%	1.1%	0.5%	0.9%	0.5%	1.1%	0.4%	1.3%	0.3%	1.7%
12	0.7%	0.5%	1.0%	0.6%	0.8%	0.6%	0.9%	0.7%	1.1%	1.0%	3.6%	1.7%	0.6%	1.1%	0.3%	1.4%	0.3%	1.1%	0.1%	1.1%	0.2%	0.7%
12.5	0.9%	0.9%	0.7%	0.7%	1.0%	0.7%	0.8%	1.3%	0.7%	1.0%	0.0%	0.0%	0.7%	0.8%	0.3%	0.7%	0.3%	1.1%	0.3%	0.8%	0.1%	0.8%
13	0.5%	0.5%	0.9%	0.6%	0.7%	0.8%	0.8%	0.8%	0.6%	1.0%	0.0%	0.0%	0.7%	1.1%	0.4%	1.0%	0.2%	0.8%	0.3%	1.4%	0.3%	0.6%
13.5	0.9%	0.8%	0.6%	1.0%	0.8%	0.8%	0.7%	1.0%	0.4%	0.9%	3.9%	1.5%	0.3%	1.0%	0.5%	1.3%	0.5%	0.9%	0.0%	0.8%	0.2%	1.1%
14	0.4%	0.6%	0.9%	0.8%	0.5%	0.6%	0.8%	0.9%	0.8%	0.9%	0.0%	0.0%	0.4%	0.7%	0.1%	0.8%	0.2%	1.0%	0.2%	1.0%	0.2%	0.7%
14.5	0.6%	0.4%	0.5%	0.5%	0.5%	0.5%	0.8%	0.7%	0.5%	1.0%	0.0%	0.0%	0.4%	0.6%	0.3%	1.1%	0.1%	0.8%	0.1%	0.8%	0.0%	0.7%
15	0.8%	0.3%	0.6%	0.3%	0.7%	0.7%	0.6%	0.7%	0.6%	0.8%	3.3%	1.6%	0.2%	0.8%	0.0%	0.8%	0.3%	1.4%	0.1%	0.8%	0.1%	1.5%
15.5	0.6%	0.2%	0.4%	0.3%	0.5%	0.5%	0.6%	0.5%	0.5%	0.8%	0.0%	0.0%	0.2%	1.0%	0.1%	1.1%	0.3%	0.6%	0.3%	0.8%	0.1%	0.9%
16	1.0%	0.5%	0.5%	0.4%	0.4%	0.3%	0.5%	0.4%	0.1%	0.5%	0.0%	0.0%	0.3%	1.1%	0.2%	0.7%	0.1%	0.9%	0.1%	0.8%	0.1%	1.0%
16.5	0.6%	0.5%	0.6%	0.3%	0.5%	0.6%	0.5%	0.4%	0.6%	0.6%	0.0%	0.0%	0.3%	1.1%	0.1%	0.8%	0.2%	0.8%	0.2%	0.6%	0.2%	0.5%
17	0.5%	0.3%	0.7%	0.3%	0.5%	0.6%	0.5%	0.6%	0.4%	0.7%	3.3%	1.7%	0.3%	0.7%	0.3%	0.6%	0.0%	0.7%	0.1%	1.1%	0.0%	0.6%
17.5	0.3%	0.3%	0.5%	0.2%	0.5%	0.6%	0.4%	0.5%	0.4%	0.5%	0.0%	0.0%	0.2%	0.4%	0.1%	0.8%	0.2%	0.7%	0.0%	0.8%	0.0%	1.3%
18	0.6%	0.5%	0.5%	0.5%	0.7%	0.3%	0.5%	0.7%	0.3%	0.6%	0.0%	0.0%	0.3%	0.7%	0.1%	0.8%	0.1%	0.8%	0.0%	0.7%	0.0%	0.4%
18.5	0.6%	0.2%	0.4%	0.1%	0.4%	0.3%	0.6%	0.4%	0.2%	0.5%	2.6%	1.4%	0.2%	0.7%	0.0%	0.7%	0.1%	0.8%	0.0%	0.8%	0.1%	0.9%
19	0.5%	0.2%	0.8%	0.2%	0.4%	0.4%	0.5%	0.4%	0.4%	0.7%	0.0%	0.0%	0.2%	0.8%	0.1%	0.7%	0.3%	0.7%	0.2%	0.7%	0.1%	0.4%
19.5	0.4%	0.1%	0.5%	0.4%	0.3%	0.3%	0.4%	0.3%	0.4%	0.5%	0.0%	0.0%	0.2%	0.5%	0.2%	0.8%	0.0%	0.6%	0.1%	0.8%	0.0%	0.8%
>20	28.6%	2.4%	21.7%	3.7%	13.5%	6.3%	9.5%	9.8%	5.8%	16.4%	57.2%	79.4%	2.0%	28.9%	1.5%	31.7%	1.4%	34.9%	0.7%	38.8%	1.0%	39.6%

Filename	13S91_22		13S91_23		13S91_24		13S91_25		13S91_26		13S91_27		13S91_28		13S91_29		13S91_30		13S91_31		13S91_32	
y(mm)	18		15		12		9		6		1		-4		-9		-14		-19		-24	
y/h	0.18		0.15		0.12		0.09		0.06		0.01		-0.04		-0.09		-0.14		-0.19		-0.24	
C	0.088		0.086		0.071		0.063		0.061		0.058		0.063		0.049		0.049		0.037		0.026	
Nab	2195		2267		1998		1954		1958		1703		1343		768		429		281		208	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	11.6%	3.9%	13.4%	4.3%	10.6%	4.2%	13.7%	4.4%	14.5%	3.7%	19.1%	5.5%	17.1%	6.6%	22.4%	6.6%	20.7%	6.5%	0.0%	0.0%	8.2%	4.8%
0.5	18.5%	4.6%	20.5%	3.9%	26.5%	5.3%	28.4%	4.7%	29.5%	4.9%	30.1%	6.3%	28.1%	6.0%	22.3%	5.6%	17.7%	4.0%	0.0%	0.0%	10.6%	1.4%
1	21.2%	3.7%	20.8%	4.4%	22.9%	3.9%	20.5%	4.6%	21.7%	3.9%	19.7%	4.1%	18.1%	4.1%	16.7%	4.3%	11.9%	3.3%	1.4%	0.7%	9.1%	1.0%
1.5	11.3%	3.2%	11.1%	3.5%	11.0%	3.0%	12.9%	2.6%	12.0%	3.7%	11.4%	3.2%	12.7%	4.5%	11.3%	2.2%	13.5%	2.8%	0.0%	0.0%	9.6%	1.4%
2	10.4%	3.2%	9.9%	3.4%	8.6%	3.1%	8.6%	3.4%	7.2%	2.7%	6.7%	3.7%	7.0%	3.2%	8.3%	2.1%	7.0%	1.9%	0.0%	0.0%	11.1%	0.5%
2.5	5.4%	2.0%	5.1%	2.9%	6.5%	2.7%	3.1%	1.8%	3.9%	1.9%	4.0%	2.9%	4.1%	2.1%	4.6%	2.7%	6.3%	2.8%	0.0%	1.1%	8.7%	1.0%
3	4.0%	2.1%	4.1%	2.0%	2.8%	1.8%	3.4%	1.9%	3.5%	2.2%	1.9%	1.7%	2.7%	1.7%	3.6%	2.7%	7.7%	1.9%	0.0%	0.0%	6.3%	0.5%
3.5	3.9%	3.0%	3.0%	2.4%	2.2%	2.1%	1.9%	1.8%	2.0%	2.0%	2.1%	2.0%	2.2%	1.6%	2.9%	2.5%	3.5%	1.6%	0.7%	0.0%	5.3%	1.0%
4	2.0%	1.6%	1.5%	1.9%	1.9%	1.9%	1.7%	1.7%	1.0%	2.5%	1.6%	1.5%	2.2%	1.9%	1.7%	1.3%	1.9%	1.9%	0.0%	0.0%	4.3%	1.4%
4.5	1.9%	2.5%	1.9%	1.9%	0.8%	1.5%	1.5%	1.9%	1.0%	1.9%	0.6%	1.8%	1.4%	2.6%	1.7%	1.2%	1.9%	1.4%	0.0%	0.0%	3.4%	0.5%
5	1.7%	1.6%	1.3%	1.8%	1.0%	1.9%	0.4%	1.3%	0.6%	1.4%	0.6%	2.0%	0.8%	1.5%	0.8%	1.0%	1.2%	0.7%	1.4%	0.0%	6.3%	1.0%
5.5	0.9%	1.7%	0.8%	1.8%	1.0%	1.7%	0.7%	1.8%	0.4%	2.0%	0.5%	1.0%	0.7%	1.9%	0.5%	1.0%	0.7%	1.2%	0.0%	0.0%	5.3%	0.0%
6	0.6%	1.2%	0.6%	0.7%	0.6%	1.0%	0.6%	1.4%	0.4%	1.5%	0.4%	1.6%	0.4%	1.6%	0.5%	1.6%	0.5%	0.7%	0.7%	0.7%	1.0%	1.0%
6.5	1.0%	0.9%	1.1%	0.7%	0.6%	1.5%	0.6%	1.2%	0.2%	1.4%	0.2%	1.8%	0.5%	1.3%	0.4%	0.7%	0.9%	0.5%	0.0%	0.0%	1.9%	0.5%
7	1.0%	1.4%	0.4%	1.6%	0.6%	1.5%	0.1%	1.3%	0.1%	1.4%	0.3%	1.7%	0.2%	1.5%	0.3%	0.8%	0.2%	1.4%	0.0%	0.0%	2.4%	1.0%
7.5	0.6%	0.7%	0.6%	0.9%	0.3%	0.4%	0.3%	0.5%	0.4%	1.5%	0.1%	1.3%	0.1%	1.0%	0.3%	1.0%	0.7%	1.2%	1.1%	0.7%	1.0%	0.0%
8	0.5%	1.4%	0.5%	2.0%	0.4%	1.1%	0.1%	1.3%	0.4%	0.8%	0.4%	0.9%	0.3%	0.7%	0.4%	0.8%	0.5%	1.2%	0.0%	0.0%	1.4%	0.0%
8.5	0.5%	1.2%	0.1%	1.2%	0.3%	1.7%	0.2%	2.2%	0.2%	1.2%	0.1%	1.2%	0.1%	1.3%	0.1%	1.2%	0.5%	1.4%	0.0%	0.0%	1.9%	0.5%
9	0.3%	1.7%	0.3%	1.5%	0.1%	0.9%	0.1%	1.5%	0.1%	1.3%	0.1%	1.2%	0.1%	1.2%	0.3%	1.0%	0.2%	0.7%	1.8%	0.4%	0.0%	1.0%
9.5	0.2%	1.6%	0.2%	1.1%	0.2%	1.5%	0.2%	1.4%	0.3%	1.0%	0.1%	1.8%	0.0%	1.1%	0.0%	0.7%	0.2%	1.4%	0.0%	0.0%	0.0%	1.0%
10	0.4%	0.9%	0.2%	0.7%	0.3%	1.0%	0.4%	1.5%	0.2%	1.0%	0.1%	1.2%	0.4%	1.1%	0.1%	1.7%	0.0%	1.2%	1.4%	0.0%	0.0%	0.5%
10.5	0.2%	1.1%	0.4%	1.1%	0.2%	1.7%	0.1%	0.8%	0.2%	0.8%	0.0%	0.6%	0.0%	0.5%	0.0%	0.4%	0.2%	1.2%	0.0%	0.0%	0.0%	0.5%
11	0.1%	0.8%	0.3%	0.9%	0.1%	0.9%	0.1%	1.3%	0.0%	1.1%	0.1%	0.6%	0.1%	1.1%	0.1%	0.4%	0.5%	0.5%	0.0%	0.0%	0.5%	1.0%
11.5	0.1%	1.2%	0.2%	1.3%	0.1%	1.0%	0.0%	1.0%	0.1%	1.4%	0.1%	0.8%	0.1%	0.9%	0.1%	1.7%	0.2%	1.2%	2.1%	1.1%	0.0%	0.0%
12	0.2%	0.6%	0.2%	0.8%	0.3%	0.9%	0.0%	0.8%	0.0%	1.2%	0.0%	1.1%	0.0%	0.8%	0.1%	0.5%	0.0%	1.2%	0.0%	0.0%	0.0%	1.0%
12.5	0.3%	1.5%	0.2%	1.1%	0.2%	0.9%	0.0%	0.9%	0.1%	0.9%	0.0%	0.6%	0.1%	1.0%	0.1%	0.7%	0.0%	0.9%	2.5%	0.4%	0.5%	0.5%
13	0.2%	0.7%	0.1%	0.6%	0.1%	0.8%	0.1%	0.6%	0.0%	0.6%	0.0%	1.2%	0.0%	0.6%	0.0%	0.5%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%
13.5	0.1%	0.8%	0.1%	0.9%	0.0%	1.0%	0.0%	0.8%	0.0%	0.5%	0.0%	0.4%	0.1%	1.0%	0.0%	0.9%	0.0%	1.2%	0.0%	0.0%	0.0%	0.5%
14	0.1%	0.8%	0.1%	1.0%	0.0%	0.7%	0.0%	0.3%	0.0%	1.1%	0.0%	0.8%	0.1%	0.7%	0.0%	0.9%	0.2%	0.2%	1.4%	0.4%	0.5%	0.5%
14.5	0.0%	0.7%	0.0%	0.6%	0.1%	0.5%	0.2%	1.0%	0.1%	0.9%	0.0%	1.1%	0.0%	1.0%	0.0%	1.2%	0.5%	1.4%	0.0%	0.0%	0.0%	0.0%
15	0.0%	1.1%	0.0%	1.0%	0.2%	1.0%	0.0%	0.7%	0.0%	1.1%	0.0%	0.6%	0.1%	0.6%	0.0%	0.9%	0.2%	0.7%	0.7%	0.7%	0.0%	0.5%
15.5	0.1%	0.6%	0.2%	0.9%	0.1%	0.7%	0.0%	0.6%	0.1%	0.6%	0.0%	0.8%	0.0%	0.6%	0.0%	0.8%	0.0%	0.7%	0.0%	0.0%	0.5%	0.5%
16	0.0%	0.8%	0.1%	1.0%	0.1%	0.8%	0.1%	0.8%	0.0%	0.6%	0.0%	0.8%	0.0%	0.7%	0.0%	0.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.5%
16.5	0.0%	1.2%	0.0%	0.8%	0.0%	1.4%	0.1%	0.8%	0.1%	0.6%	0.0%	1.1%	0.1%	1.1%	0.0%	0.7%	0.0%	0.0%	1.1%	0.7%	0.0%	1.0%
17	0.0%	0.5%	0.0%	0.6%	0.0%	0.5%	0.0%	1.2%	0.0%	0.8%	0.0%	0.8%	0.0%	0.4%	0.0%	0.4%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%
17.5	0.1%	0.9%	0.0%	0.7%	0.0%	0.9%	0.0%	0.4%	0.0%	0.7%	0.0%	0.9%	0.0%	1.1%	0.0%	0.4%	0.0%	0.7%	0.0%	0.0%	0.0%	1.0%
18	0.0%	0.5%	0.1%	0.5%	0.1%	1.0%	0.0%	0.5%	0.0%	0.4%	0.0%	0.7%	0.0%	0.7%	0.3%	0.7%	0.0%	0.7%	2.8%	0.4%	0.0%	0.5%
18.5	0.0%	0.7%	0.0%	0.6%	0.0%	0.4%	0.1%	0.8%	0.0%	0.9%	0.0%	0.6%	0.1%	0.5%	0.0%	0.9%	0.0%	0.7%	0.0%	0.0%	0.0%	1.4%
19	0.1%	0.7%	0.0%	0.4%	0.0%	0.6%	0.1%	0.9%	0.0%	0.5%	0.0%	0.7%	0.0%	1.0%	0.0%	0.7%	0.0%	0.5%	1.8%	0.4%	0.0%	1.0%
19.5	0.1%	0.5%	0.0%	0.8%	0.0%	0.6%	0.0%	0.8%	0.0%	0.9%	0.0%	0.4%	0.0%	0.7%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>20	0.3%	40.4%	0.3%	39.6%	0.3%	41.0%	0.2%	40.8%	0.1%	40.4%	0.1%	37.0%	0.1%	36.3%	0.1%	43.9%	0.5%	46.6%	79.0%	92.2%	0.5%	69.7%

Filename	13S91_33	
y(mm)	0	
y/h	0	
C	0.02	
Nab	156	
Min	f(a)	f(w)
0	0.0%	0.0%
0.5	0.0%	0.0%

1	1.3%	0.0%
1.5	0.0%	0.0%
2	0.0%	0.0%
2.5	0.6%	0.0%
3	0.0%	0.0%
3.5	0.0%	0.0%
4	0.0%	0.0%
4.5	0.0%	0.0%
5	1.3%	0.0%
5.5	0.0%	0.0%
6	0.0%	0.6%
6.5	0.0%	0.0%
7	0.0%	0.0%
7.5	0.6%	0.0%
8	0.0%	0.0%
8.5	0.0%	0.0%
9	1.9%	0.0%
9.5	0.0%	0.0%
10	1.3%	0.0%
10.5	0.0%	0.0%
11	0.0%	0.0%
11.5	3.2%	0.0%
12	0.0%	0.0%
12.5	1.3%	0.0%
13	0.0%	0.0%
13.5	0.0%	0.0%
14	0.6%	0.0%
14.5	0.0%	0.0%
15	0.6%	0.0%
15.5	0.0%	0.0%
16	0.0%	0.0%
16.5	2.6%	0.0%
17	0.0%	0.0%
17.5	0.0%	0.0%
18	0.6%	0.0%
18.5	0.0%	0.0%
19	0.6%	0.0%
19.5	0.0%	0.0%
>20	83.3%	98.7%

Run 1.3S, dcrest/h = 1.3, no roughness, location 10

Filename	13S10_00		13S10_01		13S10_02		13S10_03		13S10_04		13S10_05		13S10_06		13S10_07		13S10_08		13S10_09		13S10_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.089		0.085		0.09		0.09		0.102		0.107		0.116		0.121		0.13		0.155		0.218	
Nab	3497		3092		3170		3170		3441		3550		3738		3786		3837		4212		4984	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	13.8%	9.2%	11.5%	7.6%	12.6%	6.3%	11.5%	6.3%	12.3%	5.6%	11.8%	6.8%	12.7%	6.9%	11.4%	6.8%	11.9%	8.1%	11.8%	8.8%	11.0%	10.5%
0.5	22.8%	8.0%	28.6%	8.5%	19.8%	6.1%	28.3%	8.5%	19.7%	6.4%	18.5%	5.9%	20.9%	6.8%	19.5%	6.1%	18.2%	7.1%	18.2%	7.9%	16.3%	9.6%
1	29.2%	7.4%	25.5%	6.2%	27.4%	7.4%	18.8%	3.7%	20.1%	4.8%	20.5%	5.5%	19.8%	5.5%	20.6%	5.6%	19.9%	5.0%	17.0%	5.3%	17.8%	6.5%
1.5	12.8%	4.7%	12.2%	3.8%	13.0%	4.0%	17.8%	5.0%	19.9%	5.1%	15.3%	3.7%	13.7%	4.3%	13.8%	4.6%	13.9%	4.1%	13.7%	4.3%	13.4%	5.6%
2	7.1%	3.3%	9.5%	3.9%	10.7%	4.1%	7.5%	2.9%	8.3%	2.8%	13.0%	4.8%	9.5%	3.4%	10.6%	3.8%	10.5%	3.3%	9.9%	3.6%	8.4%	4.1%
2.5	6.0%	4.0%	5.1%	3.5%	5.2%	2.9%	5.9%	3.5%	5.0%	2.9%	6.5%	3.0%	6.5%	2.8%	6.5%	3.2%	5.8%	3.3%	7.3%	3.0%	6.8%	3.2%
3	2.4%	2.3%	2.5%	2.5%	4.0%	3.4%	2.9%	2.3%	4.7%	3.5%	3.7%	2.6%	3.7%	2.3%	3.9%	2.9%	5.6%	3.9%	4.1%	2.8%	4.2%	2.7%
3.5	1.4%	2.3%	1.1%	1.7%	2.1%	2.2%	2.2%	3.2%	2.2%	2.2%	2.7%	2.2%	2.8%	2.5%	2.7%	3.0%	3.0%	2.2%	3.5%	3.2%	3.6%	2.8%
4	1.6%	2.6%	1.1%	2.2%	1.4%	2.6%	1.2%	1.8%	1.5%	2.4%	2.5%	2.4%	2.2%	2.5%	2.0%	2.0%	2.3%	2.2%	3.0%	2.1%	2.7%	2.9%
4.5	0.5%	1.3%	0.8%	2.4%	1.1%	1.6%	1.1%	2.6%	1.5%	2.2%	1.1%	2.3%	1.7%	3.0%	2.1%	2.5%	1.5%	1.9%	2.1%	3.2%	2.2%	2.4%
5	0.5%	1.4%	0.6%	1.4%	0.6%	2.1%	0.7%	2.1%	1.2%	1.9%	0.9%	2.4%	0.9%	2.1%	1.0%	2.3%	1.2%	1.8%	1.5%	2.1%	1.7%	2.3%
5.5	0.4%	1.9%	0.3%	1.6%	0.5%	1.7%	0.4%	1.2%	0.7%	1.4%	0.7%	1.7%	0.9%	1.6%	1.0%	1.6%	1.1%	2.1%	1.2%	1.8%	1.2%	2.2%
6	0.4%	1.4%	0.2%	1.5%	0.3%	1.9%	0.4%	1.8%	0.6%	1.5%	0.6%	1.8%	0.9%	2.2%	1.0%	1.4%	0.9%	2.4%	0.9%	1.7%	1.5%	1.7%
6.5	0.2%	1.7%	0.2%	1.0%	0.3%	1.6%	0.2%	1.3%	0.5%	2.1%	0.4%	1.6%	0.7%	1.4%	0.8%	1.7%	0.4%	1.5%	0.9%	1.5%	1.2%	1.8%
7	0.1%	1.1%	0.1%	1.6%	0.3%	1.5%	0.2%	1.8%	0.4%	1.6%	0.7%	1.1%	0.4%	1.5%	0.5%	1.3%	0.5%	1.5%	0.8%	2.1%	0.9%	1.6%
7.5	0.2%	1.0%	0.1%	1.0%	0.1%	0.9%	0.0%	1.1%	0.2%	1.3%	0.1%	1.3%	0.5%	1.5%	0.4%	1.6%	0.5%	1.5%	0.5%	1.2%	0.8%	1.6%
8	0.1%	1.5%	0.1%	1.6%	0.2%	1.5%	0.3%	1.2%	0.3%	1.6%	0.2%	1.2%	0.3%	1.3%	0.3%	1.3%	0.5%	1.2%	0.4%	1.6%	0.6%	1.7%
8.5	0.1%	1.0%	0.0%	1.4%	0.0%	1.3%	0.1%	1.0%	0.2%	1.3%	0.3%	1.6%	0.3%	1.4%	0.3%	1.1%	0.3%	1.3%	0.4%	1.6%	0.5%	1.2%
9	0.0%	1.0%	0.1%	1.3%	0.0%	1.4%	0.1%	1.2%	0.1%	1.4%	0.1%	1.3%	0.2%	1.3%	0.2%	1.7%	0.2%	1.7%	0.2%	1.3%	0.5%	1.2%
9.5	0.1%	1.7%	0.0%	1.3%	0.1%	1.1%	0.1%	1.3%	0.1%	1.3%	0.0%	1.3%	0.3%	1.5%	0.2%	1.8%	0.2%	1.1%	0.4%	1.6%	0.5%	1.2%
10	0.0%	0.8%	0.1%	1.4%	0.1%	1.2%	0.0%	1.2%	0.1%	1.5%	0.1%	1.5%	0.3%	1.3%	0.2%	0.8%	0.2%	1.4%	0.2%	1.2%	0.4%	1.5%
10.5	0.0%	1.1%	0.0%	1.2%	0.1%	1.0%	0.1%	1.4%	0.0%	1.2%	0.0%	1.7%	0.1%	1.1%	0.2%	1.2%	0.3%	1.1%	0.2%	1.1%	0.4%	1.2%
11	0.0%	1.2%	0.0%	1.1%	0.0%	1.0%	0.0%	1.0%	0.0%	1.0%	0.1%	1.1%	0.1%	1.1%	0.1%	1.2%	0.2%	1.0%	0.2%	1.0%	0.3%	1.3%
11.5	0.0%	0.7%	0.0%	0.6%	0.0%	0.7%	0.0%	1.4%	0.1%	1.8%	0.1%	1.0%	0.1%	1.4%	0.1%	1.1%	0.1%	1.1%	0.1%	1.1%	0.2%	1.1%
12	0.0%	0.7%	0.0%	1.1%	0.1%	1.3%	0.0%	0.9%	0.0%	1.0%	0.0%	0.9%	0.1%	0.9%	0.1%	1.1%	0.2%	1.3%	0.1%	1.0%	0.3%	1.1%
12.5	0.1%	1.1%	0.0%	1.2%	0.0%	1.0%	0.0%	0.9%	0.0%	0.9%	0.1%	0.9%	0.1%	0.7%	0.1%	0.6%	0.1%	0.9%	0.2%	0.9%	0.2%	0.9%
13	0.0%	1.0%	0.0%	1.4%	0.1%	0.9%	0.0%	0.8%	0.0%	0.9%	0.0%	1.1%	0.1%	1.1%	0.1%	0.7%	0.0%	1.1%	0.1%	0.9%	0.1%	0.8%
13.5	0.0%	0.7%	0.0%	0.6%	0.0%	0.8%	0.0%	1.2%	0.0%	1.2%	0.1%	0.8%	0.1%	0.9%	0.0%	1.0%	0.1%	0.7%	0.2%	0.9%	0.3%	1.2%
14	0.0%	0.5%	0.0%	1.0%	0.0%	1.0%	0.0%	1.2%	0.0%	0.8%	0.0%	0.8%	0.0%	0.8%	0.0%	1.0%	0.0%	1.0%	0.1%	1.0%	0.2%	0.9%
14.5	0.0%	0.9%	0.0%	0.7%	0.0%	0.9%	0.0%	0.8%	0.0%	0.8%	0.0%	1.2%	0.1%	1.3%	0.0%	1.3%	0.0%	1.0%	0.0%	1.4%	0.1%	0.8%
15	0.0%	0.9%	0.0%	0.7%	0.0%	0.8%	0.0%	0.9%	0.0%	1.2%	0.0%	1.0%	0.1%	1.0%	0.0%	1.2%	0.1%	0.9%	0.1%	0.8%	0.2%	0.7%
15.5	0.0%	0.7%	0.0%	0.6%	0.0%	0.5%	0.0%	0.9%	0.0%	0.9%	0.0%	1.0%	0.0%	0.9%	0.0%	0.6%	0.0%	0.9%	0.0%	0.7%	0.1%	0.6%
16	0.0%	0.4%	0.0%	0.9%	0.0%	0.9%	0.0%	1.1%	0.0%	0.9%	0.0%	0.7%	0.0%	0.9%	0.1%	1.0%	0.1%	0.8%	0.0%	1.0%	0.1%	0.6%
16.5	0.0%	0.7%	0.0%	0.8%	0.0%	0.7%	0.0%	0.7%	0.0%	1.0%	0.1%	0.8%	0.0%	0.7%	0.0%	0.6%	0.0%	0.6%	0.0%	0.6%	0.1%	0.9%
17	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.0%	0.7%	0.0%	0.6%	0.0%	1.0%	0.0%	0.5%	0.0%	0.9%	0.0%	1.0%	0.0%	0.7%	0.1%	0.8%
17.5	0.0%	0.8%	0.0%	0.5%	0.0%	0.6%	0.0%	0.6%	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.0%	0.8%	0.0%	0.4%	0.0%	0.8%	0.0%	0.6%
18	0.0%	0.5%	0.0%	0.7%	0.0%	0.8%	0.0%	0.6%	0.0%	0.9%	0.0%	0.7%	0.0%	0.5%	0.0%	1.0%	0.0%	0.9%	0.1%	0.6%	0.1%	0.3%
18.5	0.0%	0.5%	0.0%	0.6%	0.0%	0.5%	0.0%	0.6%	0.0%	1.1%	0.0%	0.8%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.0%	0.7%	0.1%	0.5%
19	0.0%	0.6%	0.0%	0.6%	0.0%	0.4%	0.0%	0.9%	0.0%	0.8%	0.0%	0.6%	0.0%	0.6%	0.0%	0.6%	0.0%	0.8%	0.0%	0.7%	0.1%	0.8%
19.5	0.0%	0.3%	0.0%	0.4%	0.0%	0.8%	0.0%	0.6%	0.0%	0.6%	0.0%	0.8%	0.0%	0.9%	0.0%	0.9%	0.1%	0.4%	0.0%	0.6%	0.1%	0.4%
>20	0.0%	26.3%	0.0%	27.3%	0.1%	27.7%	0.0%	28.1%	0.0%	26.9%	0.0%	26.5%	0.1%	26.2%	0.1%	25.4%	0.1%	25.0%	0.4%	21.6%	0.9%	16.2%

Filename	13S10_11		13S10_12		13S10_13		13S10_14		13S10_15		13S10_16		13S10_17		13S10_18		13S10_19		13S10_20		13S10_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.283		0.327		0.392		0.512		0.648		0.735		0.817		0.848		0.893		0.922		0.943	
Nab	5747		5601		5666		5561		5105		4358		3397		2639		2059		1476		1119	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	6.4%	8.8%	5.9%	9.8%	4.9%	9.9%	4.7%	11.0%	4.3%	12.8%	3.8%	12.4%	2.7%	12.6%	2.4%	10.4%	2.3%	10.9%	1.9%	8.4%	1.3%	7.2%
0.5	16.2%	11.7%	14.4%	12.2%	12.2%	14.0%	11.2%	14.9%	10.7%	15.7%	9.3%	16.6%	6.7%	16.2%	7.0%	15.8%	5.3%	15.0%	5.4%	15.5%	4.8%	12.9%
1	17.1%	8.1%	15.2%	8.9%	14.6%	9.6%	12.4%	10.6%	10.5%	11.0%	10.3%	11.5%	9.2%	11.7%	7.8%	11.3%	7.1%	11.1%	6.8%	9.9%	7.1%	11.1%
1.5	12.8%	6.5%	12.0%	7.1%	11.7%	6.8%	10.6%	7.3%	10.6%	7.6%	8.8%	8.1%	8.7%	9.3%	7.1%	9.7%	7.6%	9.4%	6.4%	10.1%	7.2%	9.7%
2	9.4%	5.0%	9.3%	5.2%	9.2%	5.7%	9.3%	5.7%	8.6%	6.8%	7.2%	6.6%	7.0%	7.8%	5.2%	6.6%	6.2%	7.1%	5.1%	7.0%	5.6%	7.8%
2.5	7.1%	4.1%	7.3%	4.7%	7.6%	4.1%	6.6%	4.7%	6.4%	5.0%	5.8%	5.6%	5.9%	5.3%	5.8%	5.2%	4.0%	6.8%	3.3%	7.6%	3.9%	7.5%
3	5.2%	3.8%	5.0%	3.4%	5.2%	3.5%	5.4%	4.0%	4.9%	4.5%	3.0%	2.9%	3.3%	3.0%	2.6%	3.0%	2.3%	3.5%	3.5%	5.4%	2.4%	5.2%
3.5	4.2%	3.8%	4.2%	3.0%	4.3%	3.4%	4.1%	3.3%	3.8%	3.5%	3.8%	3.8%	3.9%	4.2%	3.6%	4.1%	3.2%	4.2%	3.1%	3.7%	2.1%	5.8%
4	3.2%	3.1%	3.4%	3.1%	3.7%	2.9%	3.2%	3.2%	2.9%	2.8%	3.2%	3.6%	3.4%	3.2%	3.0%	4.6%	3.1%	4.9%	3.4%	4.7%	2.1%	5.2%
4.5	1.9%	2.6%	2.5%	2.8%	2.5%	2.7%	3.0%	3.1%	2.8%	2.8%	2.7%	3.2%	2.6%	2.5%	2.8%	3.1%	2.4%	4.1%	2.6%	3.1%	2.8%	4.3%
5	1.3%	1.4%	2.0%	2.0%	2.3%	2.2%	2.5%	2.3%	1.5%	1.7%	2.4%	2.7%	2.9%	2.5%	2.0%	2.7%	2.4%	3.0%	1.2%	2.5%	1.3%	3.2%
5.5	1.5%	2.0%	1.9%	1.9%	1.9%	2.0%	2.3%	2.2%	2.0%	2.0%	2.2%	2.3%	1.7%	2.8%	2.1%	2.6%	2.3%	2.2%	1.2%	2.7%	1.3%	3.5%
6	1.5%	2.1%	1.6%	1.7%	2.1%	1.8%	1.6%	2.1%	1.9%	1.7%	0.9%	1.3%	1.2%	1.5%	0.9%	1.3%	1.2%	1.4%	2.1%	2.9%	1.2%	1.1%

6.5	1.1%	1.7%	1.3%	2.0%	1.4%	1.6%	1.6%	1.3%	2.1%	1.9%	1.4%	1.6%	1.8%	1.7%	1.7%	2.2%	1.9%	2.0%	0.9%	2.2%	0.9%	2.1%
7	1.0%	1.9%	1.2%	1.6%	1.4%	1.6%	1.5%	1.5%	1.5%	1.6%	1.8%	1.6%	2.1%	1.7%	1.9%	1.4%	1.3%	2.1%	1.1%	2.4%	1.3%	2.1%
7.5	1.0%	1.6%	1.1%	1.7%	0.9%	1.5%	1.3%	1.2%	1.2%	1.3%	1.2%	1.3%	1.5%	1.3%	1.1%	1.7%	0.8%	1.4%	1.2%	1.4%	0.4%	1.5%
8	0.7%	1.5%	1.0%	1.2%	0.9%	1.5%	1.3%	1.4%	1.2%	1.3%	1.5%	1.1%	1.1%	1.2%	1.2%	1.3%	1.7%	1.6%	0.9%	1.4%	0.5%	1.1%
8.5	0.7%	1.3%	0.9%	1.0%	1.0%	1.1%	1.1%	0.9%	1.1%	0.9%	1.2%	1.1%	1.3%	1.1%	1.5%	1.1%	1.3%	1.0%	1.0%	1.1%	1.1%	1.3%
9	0.6%	1.1%	0.8%	1.3%	0.9%	1.2%	0.9%	1.2%	0.9%	1.0%	1.2%	1.2%	0.9%	1.0%	0.9%	1.3%	1.2%	0.9%	1.1%	1.3%	0.8%	0.4%
9.5	0.6%	1.0%	0.5%	1.2%	0.9%	1.0%	0.7%	1.1%	1.0%	0.9%	0.7%	0.4%	0.4%	0.4%	0.7%	0.5%	0.6%	0.3%	0.8%	0.5%	0.1%	0.4%
10	0.4%	1.2%	0.6%	1.0%	0.6%	0.8%	0.6%	0.8%	0.7%	1.1%	0.8%	0.7%	1.1%	0.9%	1.0%	1.0%	0.6%	0.5%	0.9%	0.9%	0.5%	0.8%
10.5	0.4%	0.8%	0.7%	0.8%	0.5%	0.9%	0.6%	0.8%	0.5%	0.6%	0.8%	1.0%	0.7%	0.6%	1.1%	0.6%	1.5%	0.5%	0.7%	0.3%	1.4%	0.8%
11	0.5%	1.1%	0.4%	0.7%	0.4%	0.8%	0.6%	0.8%	0.7%	0.6%	0.9%	0.7%	0.8%	0.9%	1.3%	0.7%	0.9%	0.6%	0.5%	0.7%	0.4%	0.6%
11.5	0.5%	1.0%	0.6%	0.8%	0.5%	0.8%	0.7%	0.7%	0.7%	0.8%	1.0%	0.8%	0.6%	0.5%	1.0%	0.6%	0.7%	0.4%	0.4%	0.5%	0.7%	0.9%
12	0.3%	0.9%	0.4%	0.8%	0.5%	0.9%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	1.1%	0.6%	0.8%	0.6%	0.9%	0.4%	0.7%	0.5%	0.4%	0.4%
12.5	0.3%	1.1%	0.4%	0.9%	0.3%	0.8%	0.7%	0.9%	0.5%	0.7%	0.5%	0.3%	0.5%	0.2%	0.8%	0.1%	0.5%	0.3%	0.6%	0.4%	0.4%	0.4%
13	0.3%	0.8%	0.3%	0.6%	0.5%	0.8%	0.7%	0.4%	0.5%	0.5%	0.9%	0.6%	0.6%	0.4%	0.8%	0.5%	0.4%	0.5%	0.8%	0.3%	0.3%	0.3%
13.5	0.2%	0.8%	0.2%	0.7%	0.2%	0.7%	0.5%	0.4%	0.5%	0.4%	0.8%	0.5%	0.9%	0.6%	0.6%	0.5%	0.6%	0.3%	0.5%	0.3%	0.2%	0.3%
14	0.2%	1.0%	0.3%	0.7%	0.4%	0.7%	0.4%	0.6%	0.4%	0.6%	0.6%	0.5%	0.7%	0.3%	0.6%	0.3%	0.4%	0.2%	0.5%	0.2%	0.6%	0.3%
14.5	0.3%	0.7%	0.2%	0.7%	0.3%	0.6%	0.2%	0.4%	0.5%	0.4%	0.6%	0.2%	0.5%	0.3%	0.8%	0.5%	0.4%	0.2%	0.6%	0.1%	0.8%	0.4%
15	0.3%	0.7%	0.2%	0.5%	0.3%	0.7%	0.4%	0.5%	0.5%	0.4%	0.6%	0.3%	0.5%	0.1%	0.5%	0.3%	0.4%	0.3%	0.4%	0.1%	0.5%	0.2%
15.5	0.2%	0.6%	0.2%	0.7%	0.2%	0.4%	0.2%	0.4%	0.5%	0.4%	0.4%	0.3%	0.4%	0.0%	0.5%	0.2%	0.3%	0.2%	0.3%	0.1%	0.4%	0.1%
16	0.1%	0.5%	0.2%	0.4%	0.4%	0.6%	0.5%	0.4%	0.3%	0.2%	0.8%	0.3%	0.5%	0.3%	0.5%	0.4%	0.8%	0.2%	0.3%	0.0%	0.4%	0.4%
16.5	0.1%	0.6%	0.1%	0.6%	0.2%	0.4%	0.3%	0.4%	0.4%	0.3%	0.4%	0.3%	0.5%	0.4%	0.3%	0.5%	0.7%	0.3%	0.5%	0.1%	0.6%	0.1%
17	0.2%	0.7%	0.1%	0.8%	0.2%	0.4%	0.3%	0.3%	0.3%	0.4%	0.6%	0.3%	0.3%	0.3%	0.7%	0.2%	0.3%	0.1%	0.4%	0.0%	0.2%	0.3%
17.5	0.1%	0.5%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%	0.2%	0.4%	0.2%	0.3%	0.1%	0.5%	0.2%	0.5%	0.1%	0.4%	0.1%	0.5%	0.1%
18	0.1%	0.5%	0.2%	0.6%	0.2%	0.5%	0.3%	0.4%	0.2%	0.2%	0.4%	0.2%	0.5%	0.1%	0.2%	0.5%	0.4%	0.2%	0.8%	0.2%	0.2%	0.0%
18.5	0.1%	0.5%	0.1%	0.4%	0.3%	0.5%	0.1%	0.2%	0.3%	0.2%	0.4%	0.1%	0.4%	0.2%	0.6%	0.3%	0.3%	0.1%	0.1%	0.1%	0.3%	0.0%
19	0.1%	0.6%	0.1%	0.4%	0.2%	0.5%	0.3%	0.3%	0.3%	0.3%	0.2%	0.0%	0.2%	0.1%	0.2%	0.0%	0.1%	0.0%	0.5%	0.0%	0.5%	0.0%
19.5	0.1%	0.5%	0.1%	0.4%	0.1%	0.3%	0.2%	0.3%	0.2%	0.2%	0.3%	0.3%	0.3%	0.1%	0.2%	0.2%	0.4%	0.0%	0.1%	0.1%	0.4%	0.1%
>20	1.7%	11.8%	2.7%	11.6%	3.8%	9.5%	6.3%	7.1%	11.1%	4.0%	15.2%	3.0%	20.4%	1.9%	25.9%	1.7%	30.4%	1.2%	36.5%	1.0%	41.7%	0.1%

Filename	13S10_22		13S10_23		13S10_24		13S10_25		13S10_26		13S10_27		13S10_28		13S10_29		13S10_30	
y(mm)	73		77		81		85		89		93		103		113		123	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23	
C	0.961		0.963		0.973		0.98		0.982		0.987		0.99		0.994		0.996	
Nab	785		739		518		409		375		274		198		143		82	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	0.9%	8.0%	1.6%	6.0%	1.0%	7.1%	2.2%	8.8%	1.1%	7.5%	1.5%	6.2%	1.0%	5.1%	1.4%	9.1%	2.4%	8.5%
0.5	2.7%	12.9%	3.4%	11.6%	3.5%	13.1%	5.1%	10.5%	3.5%	12.0%	4.4%	13.5%	3.0%	12.1%	2.1%	15.4%	0.0%	15.9%
1	5.2%	11.2%	5.3%	11.2%	3.5%	9.3%	6.6%	10.0%	4.0%	10.9%	5.1%	12.0%	2.5%	7.1%	4.9%	11.2%	2.4%	14.6%
1.5	6.9%	9.4%	4.7%	9.2%	4.6%	9.7%	3.7%	7.8%	3.5%	11.2%	4.4%	11.3%	3.0%	15.2%	6.3%	9.8%	11.0%	11.0%
2	4.8%	7.0%	4.3%	9.9%	5.6%	8.7%	2.7%	12.2%	2.1%	5.1%	4.0%	7.3%	6.1%	10.6%	2.8%	10.5%	4.9%	8.5%
2.5	3.1%	7.4%	4.6%	8.7%	4.6%	6.6%	3.9%	8.3%	3.2%	8.8%	4.4%	7.7%	4.0%	6.1%	3.5%	7.7%	1.2%	3.7%
3	3.3%	6.6%	2.3%	6.8%	1.7%	6.0%	1.0%	2.7%	1.1%	5.3%	1.1%	6.6%	2.5%	5.6%	3.5%	7.0%	4.9%	1.2%
3.5	3.2%	6.0%	3.0%	5.4%	2.5%	6.2%	1.7%	6.4%	2.9%	6.4%	2.2%	4.4%	1.5%	7.1%	0.7%	4.9%	4.9%	8.5%
4	1.7%	5.7%	1.8%	4.6%	2.7%	5.0%	2.0%	5.9%	3.5%	6.1%	1.1%	3.6%	1.0%	5.1%	4.2%	5.6%	6.1%	1.2%
4.5	1.0%	3.6%	2.3%	4.5%	2.7%	4.8%	1.2%	4.6%	2.7%	4.8%	0.0%	5.1%	1.0%	4.0%	2.8%	1.4%	0.0%	1.2%
5	0.8%	2.2%	0.7%	3.4%	1.0%	1.9%	0.5%	4.4%	1.9%	2.7%	1.1%	2.6%	0.5%	3.0%	0.0%	2.1%	0.0%	7.3%
5.5	1.5%	3.2%	1.4%	2.7%	1.7%	3.5%	0.7%	2.7%	1.1%	1.9%	0.4%	2.9%	0.0%	2.5%	0.7%	1.4%	0.0%	2.4%
6	1.0%	2.5%	1.4%	2.0%	1.2%	2.5%	0.5%	0.5%	1.3%	2.7%	0.4%	3.6%	0.5%	2.0%	0.7%	4.2%	0.0%	2.4%
6.5	1.1%	2.4%	0.7%	3.0%	0.2%	3.5%	0.5%	2.7%	0.8%	2.7%	0.7%	2.2%	0.5%	4.5%	0.7%	1.4%	0.0%	1.2%
7	1.4%	1.9%	1.1%	1.9%	0.6%	3.5%	1.2%	2.0%	0.5%	2.1%	0.4%	2.6%	0.0%	1.5%	0.0%	1.4%	0.0%	1.2%
7.5	0.4%	1.7%	0.7%	0.5%	0.8%	1.4%	0.7%	2.0%	1.1%	3.2%	0.7%	1.5%	0.0%	1.5%	0.7%	2.8%	0.0%	2.4%
8	1.0%	1.1%	0.5%	1.6%	1.0%	0.8%	0.7%	1.2%	0.8%	1.1%	0.4%	0.4%	0.5%	0.5%	0.7%	0.0%	0.0%	2.4%
8.5	0.8%	0.9%	0.9%	1.1%	0.4%	0.8%	0.0%	0.2%	0.8%	1.3%	1.1%	0.4%	0.0%	1.5%	0.0%	0.7%	0.0%	2.4%
9	0.6%	0.8%	0.4%	1.5%	0.8%	1.0%	0.5%	1.5%	0.8%	0.8%	0.0%	0.0%	1.0%	0.0%	0.0%	0.7%	0.0%	1.2%
9.5	0.4%	0.6%	0.5%	1.1%	0.4%	1.0%	0.0%	1.0%	0.5%	0.5%	1.1%	1.5%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%
10	0.5%	0.3%	0.9%	0.3%	0.4%	0.4%	0.2%	0.5%	0.3%	0.0%	0.4%	0.4%	0.0%	1.0%	0.7%	0.0%	0.0%	0.0%
10.5	0.4%	0.3%	0.4%	0.0%	0.2%	0.2%	0.2%	1.2%	0.3%	0.5%	0.0%	0.7%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%
11	0.4%	1.0%	0.4%	0.3%	0.2%	0.0%	0.5%	0.2%	0.5%	0.0%	0.0%	0.7%	1.0%	0.0%	0.0%	0.0%	0.0%	1.2%
11.5	0.1%	0.1%	0.0%	0.5%	0.2%	0.0%	0.7%	0.0%	0.0%	0.3%	0.4%	1.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
12	0.8%	0.5%	0.1%	0.7%	1.0%	0.6%	0.2%	0.0%	0.5%	0.0%	0.0%	0.4%	0.0%	1.0%	0.7%	0.0%	0.0%	0.0%
12.5	0.5%	0.6%	0.7%	0.0%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.7%	0.0%	0.0%
13	0.5%	0.0%	0.3%	0.3%	0.2%	0.0%	0.0%	0.2%	0.0%	0.3%	0.4%	0.0%	0.5%	0.5%	0.7%	0.0%	0.0%	0.0%
13.5	0.1%	0.4%	0.0%	0.1%	0.2%	0.0%	0.2%	0.2%	0.5%	0.0%	0.4%	0.0%	0.5%	0.0%	0.0%	0.7%	1.2%	0.0%
14	0.4%	0.3%	0.3%	0.3%	0.4%	0.6%	0.0%	0.5%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14.5	0.3%	0.3%	0.5%	0.4%	0.4%	0.2%	0.5%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	0.4%	0.3%	0.4%	0.0%	0.6%	0.0%	0.5%	0.2%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15.5	0.1%	0.1%	0.4%	0.0%	0.4%	0.0%	0.5%	0.2%	0.3%	0.3%	0.0%	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.1%	0.1%	0.4%	0.1%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
16.5	0.6%	0.0%	0.1%	0.0%	0.4%	0.0%	0.2%	0.5%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.0%	0.1%	0.7%	0.0%	0.0%	0.2%	0.2%	0.2%	0.3%	0.0%	0.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
17.5	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.1%	0.0%	0.1%	0.0%	0.2%	0.0%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18.5	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.5%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%
19	0.3%	0.0%	0.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.5%	0.0%	0.3%	0.1%	0.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%
>20	51.1%	0.4%	50.7%	0.1%	53.9%	1.0%	58.4%	0.0%	58.1%	0.0%	62.4%	0.0%	64.1%	0.0%	59.4%	0.7%	58.5%	0.0%

Run 1.3A, dcrest/h = 1.3, Configuration A, location 10

Filename	13S10_00		13S10_01		13S10_02		13S10_03		13S10_04		13S10_05		13S10_06		13S10_07		13S10_08		13S10_09		13S10_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.088		0.094		0.096		0.095		0.098		0.114		0.122		0.167		0.184		0.232		0.332	
Nab	2920		3038		2976		2927		2869		3191		3157		3811		3896		4092		4888	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	11.6%	6.9%	12.1%	7.9%	10.7%	6.8%	11.1%	6.6%	11.0%	6.5%	11.8%	7.6%	11.0%	5.5%	11.4%	9.1%	11.1%	8.6%	6.0%	6.9%	5.4%	7.5%
0.5	26.1%	8.8%	26.3%	7.9%	19.1%	6.3%	18.7%	5.5%	18.6%	5.6%	17.9%	6.3%	17.7%	6.1%	17.0%	7.4%	16.6%	7.0%	13.0%	9.0%	12.2%	10.8%
1	23.8%	5.5%	18.0%	4.2%	26.4%	6.6%	25.8%	5.7%	23.3%	5.5%	17.1%	4.8%	17.6%	4.9%	16.2%	5.6%	15.4%	5.5%	14.4%	6.6%	14.4%	7.1%
1.5	12.7%	3.6%	16.8%	5.0%	12.8%	3.5%	12.6%	3.0%	13.0%	3.0%	14.1%	4.0%	13.5%	4.1%	12.3%	3.9%	11.6%	4.8%	12.7%	5.4%	11.2%	6.6%
2	9.1%	3.7%	7.9%	2.9%	10.7%	4.2%	10.9%	3.8%	9.1%	3.3%	13.1%	4.5%	12.5%	4.5%	8.7%	3.9%	8.5%	4.2%	9.8%	4.4%	8.9%	4.5%
2.5	5.7%	3.8%	6.0%	3.4%	5.0%	2.5%	5.6%	2.6%	7.5%	3.7%	5.8%	2.6%	5.4%	2.6%	6.6%	3.3%	6.1%	3.6%	7.1%	3.6%	6.0%	4.3%
3	2.8%	2.3%	3.0%	2.2%	3.6%	2.1%	3.5%	2.4%	4.1%	2.3%	4.1%	2.3%	4.0%	2.6%	5.0%	2.9%	5.2%	3.5%	5.3%	3.2%	5.2%	3.8%
3.5	2.3%	2.7%	2.9%	2.4%	3.2%	2.6%	2.9%	2.8%	2.3%	2.0%	2.8%	1.8%	3.0%	2.2%	3.8%	2.3%	3.9%	2.1%	4.2%	2.7%	3.8%	3.4%
4	1.6%	2.7%	1.7%	1.7%	1.4%	1.4%	1.8%	2.0%	3.1%	2.1%	3.2%	2.0%	3.2%	2.3%	2.4%	2.2%	2.7%	2.3%	3.1%	2.6%	3.6%	2.9%
4.5	1.0%	1.8%	1.2%	1.8%	1.5%	2.1%	1.7%	1.9%	1.4%	2.0%	1.5%	1.8%	1.8%	1.5%	2.7%	2.7%	2.9%	2.3%	2.9%	2.4%	3.2%	3.2%
5	1.1%	1.5%	0.9%	2.4%	1.3%	1.3%	0.7%	1.5%	1.3%	1.8%	1.5%	1.9%	2.3%	2.1%	1.7%	1.8%	1.9%	2.2%	2.3%	2.4%	1.7%	1.4%
5.5	0.4%	1.2%	0.5%	1.1%	0.8%	1.4%	1.4%	1.4%	1.0%	1.6%	1.1%	1.5%	1.0%	1.5%	1.7%	1.5%	1.7%	1.9%	2.0%	1.7%	2.3%	2.1%
6	0.4%	1.2%	0.5%	2.0%	0.6%	1.2%	0.7%	1.0%	0.6%	1.3%	0.8%	1.2%	0.9%	1.4%	1.4%	1.6%	0.9%	1.9%	1.6%	1.6%	2.1%	2.4%
6.5	0.4%	1.4%	0.4%	1.4%	0.3%	1.6%	0.4%	1.4%	0.7%	1.8%	0.9%	2.0%	1.0%	1.7%	1.1%	1.7%	1.1%	1.5%	1.3%	1.8%	1.5%	2.3%
7	0.1%	1.3%	0.2%	1.7%	0.3%	1.2%	0.3%	2.0%	0.5%	1.6%	1.0%	1.7%	0.7%	1.6%	0.7%	1.7%	1.2%	1.9%	1.1%	1.7%	1.7%	2.0%
7.5	0.1%	1.1%	0.3%	1.2%	0.4%	1.2%	0.2%	1.4%	0.4%	1.4%	0.4%	1.2%	0.3%	1.6%	0.8%	1.4%	0.9%	1.3%	1.1%	1.2%	1.5%	1.6%
8	0.1%	1.6%	0.3%	1.7%	0.3%	1.4%	0.1%	1.5%	0.4%	2.1%	0.5%	1.3%	0.4%	1.2%	0.7%	1.1%	0.9%	1.2%	1.2%	1.2%	1.1%	1.5%
8.5	0.3%	1.1%	0.1%	1.4%	0.3%	0.9%	0.1%	1.0%	0.2%	0.8%	0.2%	1.5%	0.5%	1.5%	0.7%	1.4%	0.7%	1.6%	0.7%	1.0%	0.9%	1.6%
9	0.1%	0.7%	0.2%	1.4%	0.2%	1.7%	0.4%	1.4%	0.2%	1.2%	0.3%	1.4%	0.3%	1.3%	0.6%	1.2%	0.8%	1.2%	1.0%	1.5%	1.0%	1.0%
9.5	0.1%	1.1%	0.2%	0.8%	0.2%	1.1%	0.2%	1.0%	0.2%	1.3%	0.3%	1.2%	0.3%	0.8%	0.5%	1.8%	0.6%	1.3%	0.9%	1.1%	1.2%	1.0%
10	0.0%	1.1%	0.0%	1.3%	0.1%	0.7%	0.2%	1.0%	0.3%	0.7%	0.1%	1.3%	0.3%	1.2%	0.4%	0.8%	0.5%	0.9%	1.0%	1.2%	0.6%	1.5%
10.5	0.0%	0.9%	0.1%	1.0%	0.0%	1.1%	0.1%	1.7%	0.1%	1.0%	0.1%	1.1%	0.4%	1.5%	0.7%	1.2%	0.3%	1.3%	0.4%	1.1%	0.5%	0.6%
11	0.0%	0.8%	0.1%	0.8%	0.1%	1.1%	0.1%	0.9%	0.2%	1.2%	0.1%	1.2%	0.2%	1.3%	0.2%	1.0%	0.5%	1.2%	0.7%	0.9%	0.7%	1.1%
11.5	0.0%	0.9%	0.0%	0.9%	0.1%	1.3%	0.0%	1.2%	0.0%	0.8%	0.2%	1.3%	0.2%	1.4%	0.3%	1.4%	0.4%	1.1%	0.3%	1.0%	0.6%	1.1%
12	0.0%	0.8%	0.0%	0.8%	0.0%	1.0%	0.1%	1.1%	0.1%	0.8%	0.2%	0.6%	0.1%	0.9%	0.2%	1.4%	0.2%	0.9%	0.5%	1.1%	0.4%	0.9%
12.5	0.0%	0.7%	0.0%	1.2%	0.2%	1.3%	0.1%	1.1%	0.1%	1.2%	0.1%	1.1%	0.2%	1.4%	0.2%	0.9%	0.3%	0.9%	0.2%	0.9%	0.7%	0.8%
13	0.0%	1.4%	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.1%	0.8%	0.1%	1.0%	0.1%	1.1%	0.2%	0.9%	0.5%	0.9%	0.4%	1.0%	0.4%	0.8%

13.5	0.0%	1.0%	0.0%	1.1%	0.1%	1.0%	0.0%	0.9%	0.1%	0.7%	0.1%	0.8%	0.0%	1.0%	0.2%	1.0%	0.2%	1.4%	0.3%	0.9%	0.3%	0.8%
14	0.0%	0.9%	0.0%	1.0%	0.0%	1.0%	0.0%	1.2%	0.0%	0.8%	0.2%	1.0%	0.1%	1.0%	0.1%	0.7%	0.3%	0.6%	0.3%	0.8%	0.5%	0.7%
14.5	0.0%	0.9%	0.0%	0.8%	0.0%	0.9%	0.0%	0.7%	0.0%	0.9%	0.0%	0.8%	0.1%	0.6%	0.2%	1.2%	0.2%	0.7%	0.2%	0.8%	0.4%	1.0%
15	0.0%	1.0%	0.0%	0.9%	0.0%	1.0%	0.1%	1.1%	0.1%	1.1%	0.0%	0.9%	0.1%	1.2%	0.2%	1.0%	0.2%	0.9%	0.3%	0.8%	0.4%	0.8%
15.5	0.0%	0.7%	0.0%	0.6%	0.0%	0.8%	0.0%	0.9%	0.0%	0.7%	0.0%	0.5%	0.1%	0.5%	0.1%	1.1%	0.2%	0.8%	0.3%	0.7%	0.3%	0.6%
16	0.0%	1.0%	0.0%	0.8%	0.1%	0.6%	0.0%	1.2%	0.0%	0.9%	0.0%	0.6%	0.1%	0.8%	0.1%	1.0%	0.2%	0.8%	0.2%	0.8%	0.1%	0.6%
16.5	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.0%	0.8%	0.0%	0.8%	0.0%	0.8%	0.0%	0.7%	0.1%	0.6%	0.1%	0.6%	0.0%	0.8%	0.3%	0.6%
17	0.0%	0.5%	0.0%	0.9%	0.0%	0.7%	0.0%	0.3%	0.0%	0.6%	0.1%	1.0%	0.0%	1.1%	0.1%	0.4%	0.1%	0.8%	0.2%	0.7%	0.4%	0.8%
17.5	0.0%	0.9%	0.0%	0.7%	0.0%	0.7%	0.0%	1.0%	0.0%	0.7%	0.0%	0.5%	0.0%	0.7%	0.1%	0.4%	0.1%	0.7%	0.0%	0.4%	0.2%	0.7%
18	0.0%	0.8%	0.0%	0.7%	0.0%	0.8%	0.0%	0.9%	0.0%	0.7%	0.0%	0.7%	0.0%	0.9%	0.0%	0.8%	0.1%	0.8%	0.1%	0.4%	0.3%	0.5%
18.5	0.0%	0.4%	0.0%	0.7%	0.0%	1.0%	0.0%	0.8%	0.1%	0.6%	0.0%	0.8%	0.0%	0.6%	0.1%	0.6%	0.1%	0.7%	0.0%	0.7%	0.3%	0.6%
19	0.0%	0.5%	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.0%	1.0%	0.0%	0.7%	0.0%	0.6%	0.1%	0.8%	0.1%	0.6%	0.2%	0.6%	0.1%	0.3%
19.5	0.0%	0.8%	0.0%	0.6%	0.0%	0.4%	0.0%	0.6%	0.0%	0.6%	0.0%	1.1%	0.1%	0.8%	0.1%	0.8%	0.1%	0.7%	0.2%	0.5%	0.2%	0.5%
>20	0.0%	29.5%	0.0%	29.0%	0.1%	31.2%	0.0%	31.1%	0.1%	32.6%	0.2%	29.6%	0.3%	29.7%	0.6%	23.5%	0.8%	22.7%	2.1%	21.8%	3.5%	14.0%

Filename	13S10_11		13S10_12		13S10_13		13S10_14		13S10_15		13S10_16		13S10_17		13S10_18		13S10_19		13S10_20		13S10_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.405		0.5		0.587		0.682		0.744		0.8		0.839		0.864		0.899		0.921		0.938	
Nab	4714		4606		4344		3692		3288		2787		2394		2098		1592		1358		1131	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	4.1%	8.5%	4.0%	8.6%	3.8%	8.4%	3.4%	8.4%	2.6%	7.8%	2.2%	7.4%	1.8%	6.1%	1.4%	6.4%	1.4%	7.2%	1.8%	5.7%	1.1%	5.6%
0.5	11.3%	10.8%	9.9%	11.3%	9.0%	11.9%	7.3%	12.1%	6.2%	11.7%	6.0%	11.7%	4.8%	9.2%	4.9%	12.4%	3.6%	9.8%	4.9%	10.6%	2.4%	10.9%
1	11.9%	7.8%	11.4%	8.4%	10.0%	8.5%	7.7%	9.5%	7.7%	9.6%	7.0%	10.9%	6.2%	10.4%	5.8%	9.1%	4.2%	8.8%	5.3%	8.9%	5.1%	10.8%
1.5	10.1%	6.8%	9.6%	7.4%	8.1%	7.1%	7.4%	7.2%	6.8%	8.0%	5.9%	7.4%	5.8%	8.9%	5.3%	8.2%	4.6%	9.5%	3.5%	9.5%	4.2%	9.1%
2	8.3%	5.8%	7.3%	6.1%	6.2%	6.2%	5.1%	6.6%	5.5%	5.7%	3.6%	4.3%	3.3%	5.0%	2.9%	5.9%	4.5%	7.4%	2.5%	5.7%	3.5%	7.8%
2.5	6.8%	4.1%	6.4%	5.1%	5.7%	5.1%	5.6%	5.4%	4.6%	5.8%	4.5%	6.3%	3.7%	7.3%	3.8%	6.8%	3.6%	6.5%	3.1%	7.9%	3.6%	8.8%
3	5.2%	4.1%	4.8%	4.0%	3.2%	3.6%	3.1%	2.6%	3.2%	3.7%	3.6%	5.6%	4.0%	6.3%	4.0%	5.3%	1.5%	3.6%	3.0%	6.6%	2.2%	4.0%
3.5	4.7%	3.8%	4.1%	3.5%	4.5%	4.0%	4.1%	4.1%	3.7%	4.4%	3.5%	4.2%	2.9%	5.6%	3.6%	5.0%	3.2%	6.1%	2.7%	7.4%	3.1%	5.5%
4	3.6%	3.0%	3.0%	2.9%	3.9%	3.3%	3.4%	3.7%	3.2%	3.9%	1.8%	3.0%	1.6%	3.3%	1.6%	3.1%	2.3%	4.5%	1.5%	3.5%	2.2%	6.8%
4.5	2.7%	2.7%	2.9%	2.4%	3.1%	3.1%	3.1%	3.3%	2.8%	3.5%	2.9%	3.6%	2.6%	4.4%	2.2%	5.1%	2.1%	4.5%	2.7%	4.7%	2.3%	3.9%
5	1.4%	1.6%	1.7%	1.9%	2.8%	2.3%	2.8%	3.4%	2.1%	2.8%	2.6%	3.1%	2.7%	3.5%	2.2%	4.0%	1.6%	4.1%	1.8%	3.5%	2.1%	3.5%
5.5	2.0%	2.2%	2.6%	2.5%	2.6%	2.9%	2.3%	2.6%	2.1%	3.2%	2.5%	3.4%	2.4%	2.9%	1.5%	3.4%	2.1%	3.5%	1.4%	4.3%	2.0%	3.4%
6	2.3%	2.1%	2.3%	2.4%	1.4%	1.5%	1.7%	1.7%	1.5%	1.9%	2.3%	2.7%	2.0%	3.3%	2.4%	2.9%	1.3%	2.3%	1.8%	3.2%	0.9%	2.1%
6.5	1.9%	1.9%	1.9%	1.8%	1.7%	2.2%	1.5%	2.4%	1.9%	2.3%	1.2%	1.8%	1.0%	2.2%	1.0%	1.6%	1.5%	3.1%	0.4%	1.3%	1.1%	2.5%
7	2.0%	2.0%	1.6%	1.6%	1.6%	1.6%	1.5%	2.2%	1.9%	2.1%	2.0%	2.5%	1.7%	2.3%	2.1%	2.2%	1.6%	2.1%	1.3%	2.0%	0.9%	3.1%
7.5	1.6%	1.7%	1.7%	1.9%	1.6%	1.6%	1.7%	1.8%	1.7%	1.7%	1.3%	1.9%	1.5%	2.0%	1.2%	2.2%	1.2%	2.5%	1.0%	1.3%	1.1%	1.3%
8	1.5%	1.6%	1.6%	1.7%	1.6%	1.8%	1.6%	1.6%	1.8%	1.4%	1.6%	2.2%	1.5%	1.6%	1.6%	1.7%	1.8%	1.6%	1.3%	1.8%	0.9%	1.9%
8.5	1.3%	1.3%	1.6%	1.5%	1.4%	1.2%	1.4%	1.4%	1.6%	2.0%	0.8%	1.0%	0.8%	0.9%	0.9%	1.1%	0.9%	0.9%	0.5%	1.3%	0.6%	1.4%
9	1.1%	1.1%	0.8%	1.0%	1.1%	1.5%	1.5%	1.4%	1.2%	1.5%	1.5%	1.5%	1.0%	1.4%	1.3%	1.4%	1.3%	1.1%	1.3%	1.5%	0.6%	1.3%
9.5	1.2%	1.2%	0.8%	1.1%	0.8%	0.8%	0.9%	1.3%	0.9%	1.0%	1.2%	1.4%	1.3%	1.4%	1.8%	0.8%	1.1%	0.8%	0.7%	1.3%	0.4%	0.6%
10	0.8%	1.1%	0.9%	1.1%	1.4%	1.4%	1.1%	0.9%	1.1%	1.2%	1.0%	1.2%	1.4%	1.1%	1.0%	1.1%	0.9%	1.3%	0.9%	1.0%	0.7%	1.0%
10.5	0.6%	0.8%	0.7%	0.9%	1.2%	1.2%	0.9%	0.8%	1.2%	0.9%	1.0%	1.0%	1.2%	1.1%	0.9%	0.9%	0.7%	0.8%	0.7%	0.9%	0.6%	0.5%
11	0.8%	1.0%	1.0%	0.8%	0.8%	1.2%	1.1%	0.6%	0.9%	1.2%	0.8%	0.7%	0.9%	0.6%	0.7%	0.5%	0.8%	1.1%	0.3%	0.7%	0.7%	0.1%
11.5	0.7%	0.8%	0.9%	1.0%	0.8%	1.0%	1.1%	0.9%	1.0%	1.1%	0.7%	0.8%	1.0%	0.7%	0.6%	0.9%	1.2%	0.5%	0.7%	0.6%	0.6%	0.5%
12	0.5%	0.8%	0.9%	0.7%	0.8%	1.2%	1.2%	0.9%	0.9%	0.9%	0.7%	1.0%	1.1%	0.7%	0.7%	1.0%	0.8%	0.6%	0.7%	0.8%	0.5%	0.5%
12.5	0.5%	0.7%	0.5%	1.2%	0.6%	0.5%	0.6%	0.5%	0.5%	0.6%	1.3%	0.7%	0.8%	0.8%	1.0%	0.5%	0.3%	0.5%	1.1%	0.4%	0.5%	0.3%
13	0.6%	0.7%	0.7%	0.8%	0.8%	0.9%	0.9%	0.7%	1.2%	0.9%	0.6%	0.4%	0.8%	0.6%	0.4%	0.8%	0.6%	0.5%	0.4%	0.4%	0.4%	0.4%
13.5	0.4%	0.8%	0.4%	1.0%	0.6%	0.8%	0.7%	0.6%	0.8%	0.6%	0.5%	0.8%	0.8%	0.7%	0.7%	0.5%	1.2%	0.8%	0.3%	0.4%	0.7%	0.3%
14	0.5%	0.6%	0.4%	0.5%	0.5%	0.7%	0.8%	0.8%	0.5%	0.7%	0.9%	0.6%	1.0%	0.5%	0.7%	0.6%	0.6%	0.5%	0.4%	0.5%	1.0%	0.4%
14.5	0.5%	0.9%	0.4%	0.6%	0.8%	0.7%	0.8%	0.6%	0.7%	0.4%	0.6%	0.4%	0.6%	0.4%	0.8%	0.2%	0.6%	0.4%	0.3%	0.1%	0.4%	0.1%
15	0.3%	0.8%	0.4%	0.5%	0.7%	0.5%	0.7%	0.7%	0.9%	0.4%	0.8%	0.4%	0.7%	0.7%	0.7%	0.2%	0.6%	0.2%	0.6%	0.1%	0.6%	0.2%
15.5	0.5%	0.5%	0.7%	0.5%	0.4%	0.5%	0.4%	0.5%	0.4%	0.2%	0.6%	0.3%	0.5%	0.3%	0.6%	0.2%	0.3%	0.1%	0.7%	0.1%	0.4%	0.0%
16	0.2%	0.4%	0.3%	0.4%	0.6%	0.5%	0.8%	0.5%	0.5%	0.4%	0.5%	0.6%	0.7%	0.3%	0.4%	0.5%	0.3%	0.4%	0.8%	0.0%	0.5%	0.1%
16.5	0.3%	0.7%	0.2%	0.5%	0.6%	0.6%	0.6%	0.4%	0.5%	0.4%	1.0%	0.5%	0.5%	0.2%	0.7%	0.4%	0.6%	0.1%	0.4%	0.2%	0.4%	0.3%
17	0.5%	0.5%	0.5%	0.5%	0.6%	0.4%	0.6%	0.4%	0.7%	0.4%	0.5%	0.4%	0.6%	0.2%	0.6%	0.3%	0.5%	0.1%	0.5%	0.1%	0.5%	0.3%
17.5	0.2%	0.5%	0.4%	0.4%	0.3%	0.6%	0.6%	0.4%	0.6%	0.4%	0.5%	0.3%	0.4%	0.1%	0.4%	0.1%	0.6%	0.3%	0.3%	0.1%	0.5%	0.2%
18	0.4%	0.4%	0.5%	0.5%	0.4%	0.5%	0.7%	0.4%	0.5%	0.5%	0.6%	0.3%	0.5%	0.2%	0.3%	0.1%	0.3%	0.1%	0.8%	0.1%	0.4%	0.0%
18.5	0.3%	0.4%	0.4%	0.5%	0.4%	0.4%	0.5%	0.2%	0.5%	0.3%	0.5%	0.3%	0.4%	0.3%	0.3%	0.1%	0.8%	0.4%	0.4%	0.1%	0.7%	0.1%
19	0.3%	0.4%	0.3%	0.5%	0.2%	0.1%	0.3%	0.3%	0.4%	0.1%	0.5%	0.2%	0.5%	0.3%	0.3%	0.3%	0.1%	0.1%	0.3%	0.1%	0.3%	0.1%
19.5	0.4%	0.4%	0.2%	0.4%	0.2%	0.3%	0.4%	0.3%	0.5%	0.3%	0.4%	0.1%	0.4%	0.1%	0.3%	0.1%	0.3%	0.2%	0.3%	0.1%	0.6%	0.0%
>20	5.9%	12.8%	9.0%	9.8%	13.0%	7.5%	18.6%	5.9%	22.7%	4.0%	27.9%	3.2%	32.2%	2.2%	36.4%	2.0%	42.8%	1.3%	46.5%	0.8%	48.5%	0.4%

Filename	13S10_22		13S10_23		13S10_24		13S10_25		13S10_26		13S10_27		13S10_28		13S10_29	
y(mm)	73		77		81		85		89		93		103		108	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.08	
C	0.95		0.96		0.97		0.975		0.979		0.986		0.992		0.994	
Nab	912		758		571		514		396		294		181		119	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.4%	5.9%	1.3%	5.3%	0.9%	7.5%	1.4%	7.0%	2.3%	6.3%	1.7%	8.5%	1.7%	6.6%	1.7%	7.6%
0.5	2.6%	11.4%	2.9%	11.7%	4.2%	9.1%	3.5%	13.4%	2.3%	9.3%	3.4%	12.6%	5.0%	13.3%	3.4%	12.6%
1	4.1%	8.9%	4.5%	8.8%	4.2%	11.7%	2.9%	13.0%	5.6%	8.3%	2.0%	11.6%	2.8%	13.8%	4.2%	9.2%
1.5	3.8%	7.9%	4.9%	10.6%	4.6%	8.4%	3.9%	9.3%	2.0%	10.6%	3.1%	8.8%	3.3%	8.3%	3.4%	14.3%
2	4.2%	8.8%	2.5%	5.4%	3.5%	7.4%	3.5%	7.8%	4.3%	11.4%	3.1%	9.5%	1.1%	3.9%	5.0%	5.0%
2.5	3.5%	7.3%	3.2%	7.7%	2.8%	7.5%	2.9%	7.4%	3.3%	7.1%	2.0%	8.8%	1.7%	8.8%	0.0%	7.6%
3	1.9%	6.3%	2.4%	8.0%	2.3%	5.3%	2.3%	3.9%	1.3%	5.6%	2.7%	4.8%	5.5%	6.6%	0.8%	2.5%
3.5	2.5%	7.6%	1.7%	7.1%	1.9%	7.7%	2.7%	5.6%	1.3%	7.3%	1.4%	5.4%	1.7%	5.5%	0.8%	4.2%
4	2.4%	4.8%	1.1%	5.1%	1.4%	5.1%	2.3%	4.3%	1.0%	5.3%	1.0%	5.8%	2.2%	4.4%	1.7%	8.4%
4.5	2.1%	4.9%	2.4%	4.4%	0.5%	5.1%	1.0%	4.7%	1.5%	4.8%	2.0%	4.8%	0.6%	6.6%	0.8%	6.7%
5	0.9%	3.7%	1.7%	4.6%	0.9%	4.6%	0.6%	2.5%	0.5%	3.3%	0.3%	2.4%	0.0%	5.5%	1.7%	6.7%
5.5	1.1%	3.9%	1.2%	3.6%	1.6%	1.9%	1.4%	3.7%	1.0%	4.8%	1.0%	2.0%	1.7%	6.1%	0.0%	1.7%
6	1.3%	1.5%	1.1%	2.6%	0.4%	2.6%	1.0%	2.9%	0.3%	1.3%	1.0%	0.7%	0.6%	1.7%	0.0%	1.7%
6.5	1.4%	2.1%	0.5%	1.6%	0.7%	2.3%	0.4%	2.1%	1.0%	2.8%	0.7%	2.4%	0.0%	1.1%	1.7%	0.8%
7	0.7%	2.9%	1.3%	2.2%	1.1%	2.3%	1.4%	2.1%	0.5%	2.8%	2.4%	1.0%	0.6%	0.6%	0.8%	1.7%
7.5	0.5%	2.0%	0.8%	1.6%	0.4%	1.4%	1.6%	1.4%	0.5%	0.5%	0.0%	2.0%	0.6%	1.1%	0.0%	0.8%
8	1.2%	1.6%	0.7%	1.7%	0.0%	1.9%	0.4%	1.4%	0.5%	0.8%	0.3%	1.7%	1.1%	1.1%	0.0%	1.7%
8.5	0.9%	1.2%	0.3%	0.9%	1.2%	1.9%	0.2%	1.9%	0.5%	1.0%	0.3%	1.4%	0.0%	0.6%	0.0%	2.5%
9	0.5%	0.7%	0.8%	1.1%	0.7%	0.4%	0.8%	0.4%	0.5%	1.0%	0.3%	1.0%	0.0%	2.2%	0.0%	0.8%
9.5	0.5%	0.8%	0.8%	0.9%	0.4%	0.9%	0.4%	0.6%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.8%	0.0%
10	0.7%	0.8%	1.2%	0.3%	0.2%	0.5%	0.4%	0.6%	0.0%	1.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%
10.5	0.8%	0.4%	0.7%	0.4%	0.4%	0.5%	0.8%	0.6%	0.8%	0.5%	0.0%	0.7%	0.0%	0.0%	0.0%	0.8%
11	0.8%	0.9%	0.3%	0.7%	0.5%	0.9%	0.0%	0.0%	0.0%	0.3%	0.0%	1.0%	0.0%	0.6%	0.0%	0.0%
11.5	0.4%	0.2%	0.3%	0.7%	0.5%	0.5%	0.2%	0.2%	0.0%	0.8%	1.0%	0.3%	0.0%	1.1%	0.0%	0.8%
12	0.4%	0.5%	0.3%	0.8%	0.4%	0.5%	0.2%	0.4%	0.0%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
12.5	0.3%	0.2%	0.4%	0.4%	0.4%	0.4%	0.2%	0.4%	0.3%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%
13	1.0%	0.5%	0.4%	0.0%	0.2%	0.0%	0.2%	0.4%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.8%	0.0%
13.5	0.4%	0.3%	0.3%	0.3%	0.2%	0.2%	0.8%	0.6%	0.3%	0.3%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%
14	0.3%	0.2%	0.0%	0.3%	0.4%	0.2%	0.0%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14.5	0.3%	0.1%	0.1%	0.0%	0.2%	0.0%	0.0%	0.2%	0.5%	0.5%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%
15	0.2%	0.1%	0.5%	0.0%	0.2%	0.2%	0.2%	0.0%	0.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.8%	0.0%
15.5	0.0%	0.1%	0.3%	0.3%	0.2%	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.3%	0.1%	0.3%	0.3%	0.4%	0.2%	0.2%	0.2%	0.0%	0.0%	0.7%	0.3%	0.6%	0.0%	0.0%	0.0%
16.5	0.5%	0.0%	0.5%	0.1%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
17	0.1%	0.0%	0.3%	0.0%	0.2%	0.0%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%
17.5	0.1%	0.1%	0.7%	0.0%	0.4%	0.4%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.4%	0.2%	0.4%	0.1%	0.2%	0.0%	0.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18.5	0.4%	0.1%	0.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	0.0%	0.1%	0.7%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	0.6%	0.0%	0.0%	0.0%
19.5	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.4%	0.2%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>20	54.1%	0.4%	56.1%	0.4%	61.1%	0.4%	59.7%	0.2%	64.9%	0.3%	66.3%	0.3%	66.9%	0.0%	68.9%	0.0%

Run 1.3B, dcrest/h = 1.3, Configuration B, location 10

Filename	13S10_00		13S10_01		13S10_02		13S10_03		13S10_04		13S10_05		13S10_06		13S10_07		13S10_08		13S10_09		13S10_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.118		0.117		0.131		0.128		0.135		0.149		0.161		0.163		0.19		0.253		0.279	
Nab	4049		3736		4018		3952		4045		4075		4219		4236		4421		4833		4837	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	12.8%	11.1%	12.0%	9.0%	11.8%	9.0%	11.8%	7.7%	11.9%	8.1%	10.9%	8.4%	10.4%	7.6%	12.0%	8.3%	11.4%	9.2%	10.0%	10.3%	10.0%	11.5%
0.5	20.4%	9.5%	19.4%	7.9%	19.4%	7.9%	19.0%	7.2%	19.6%	8.8%	19.4%	7.6%	19.0%	8.0%	17.4%	7.8%	17.0%	7.6%	15.9%	9.1%	14.8%	9.7%
1	25.1%	8.2%	23.6%	8.2%	25.3%	8.0%	20.5%	5.5%	24.5%	7.0%	18.7%	5.8%	17.3%	6.1%	17.0%	5.9%	16.0%	6.5%	15.9%	6.9%	15.3%	6.7%
1.5	13.9%	4.3%	14.2%	4.4%	12.8%	4.6%	18.8%	5.1%	12.9%	4.4%	17.1%	5.3%	18.2%	6.1%	14.2%	4.5%	12.9%	4.9%	12.1%	5.3%	12.4%	6.6%
2	10.2%	4.8%	11.7%	4.7%	8.5%	3.9%	8.1%	4.0%	8.1%	3.7%	8.6%	4.1%	9.1%	3.6%	10.1%	4.4%	9.5%	3.9%	9.0%	4.4%	8.4%	4.5%
2.5	5.3%	3.0%	4.1%	2.8%	6.6%	3.9%	5.7%	3.0%	6.7%	4.5%	5.1%	3.3%	5.2%	3.2%	6.1%	3.7%	6.6%	3.5%	5.9%	3.7%	6.3%	3.6%
3	4.0%	3.2%	4.5%	3.4%	3.4%	2.3%	4.6%	3.4%	3.5%	2.5%	4.9%	3.8%	4.9%	3.5%	5.8%	4.3%	5.9%	3.8%	5.0%	3.4%	4.2%	3.3%
3.5	1.9%	2.4%	2.6%	2.0%	2.4%	2.3%	2.3%	2.4%	2.1%	2.3%	2.8%	2.4%	3.0%	2.7%	3.1%	2.6%	3.0%	2.9%	3.7%	3.5%	3.5%	2.7%
4	1.9%	2.6%	2.2%	2.6%	2.4%	2.7%	1.6%	2.2%	3.0%	2.7%	2.2%	2.2%	2.1%	2.7%	2.2%	2.4%	3.0%	2.2%	3.1%	2.7%	3.0%	2.8%
4.5	1.0%	1.8%	1.2%	1.5%	1.0%	1.6%	1.3%	2.0%	1.5%	2.1%	1.6%	2.0%	1.5%	2.4%	1.8%	2.3%	1.9%	1.9%	2.3%	2.5%	2.9%	3.1%
5	1.0%	2.0%	1.0%	2.3%	1.2%	2.0%	1.3%	2.9%	1.1%	1.9%	1.7%	3.1%	1.5%	2.5%	1.3%	2.1%	1.7%	2.2%	1.7%	2.2%	1.9%	2.4%
5.5	0.5%	1.3%	0.6%	1.7%	0.9%	2.0%	0.9%	1.6%	1.1%	2.6%	1.0%	2.1%	1.1%	2.1%	1.5%	1.7%	1.3%	2.0%	1.6%	2.2%	1.6%	2.0%
6	0.4%	1.7%	0.6%	2.0%	0.6%	1.6%	0.5%	1.5%	0.5%	1.2%	0.8%	1.6%	0.7%	1.5%	1.0%	1.8%	1.3%	2.2%	1.6%	2.3%	1.5%	2.1%
6.5	0.3%	1.2%	0.4%	1.4%	0.9%	2.0%	0.7%	2.0%	0.6%	1.9%	0.9%	1.9%	1.1%	2.3%	0.6%	1.8%	1.1%	1.7%	1.1%	1.6%	1.1%	1.6%
7	0.3%	1.3%	0.3%	1.7%	0.4%	1.3%	0.3%	1.5%	0.2%	1.3%	0.5%	1.5%	0.5%	1.4%	0.8%	1.3%	0.6%	1.8%	0.9%	1.4%	1.0%	1.2%
7.5	0.2%	1.4%	0.1%	1.5%	0.2%	1.4%	0.4%	1.4%	0.3%	1.0%	0.2%	1.3%	0.5%	1.1%	0.5%	1.7%	0.7%	1.8%	0.8%	1.7%	1.0%	1.9%
8	0.1%	1.5%	0.2%	1.4%	0.7%	1.8%	0.4%	1.8%	0.3%	1.6%	0.5%	1.7%	0.5%	1.8%	0.5%	1.3%	0.6%	1.5%	0.6%	1.4%	0.9%	1.2%
8.5	0.1%	1.0%	0.1%	1.4%	0.2%	1.0%	0.1%	1.3%	0.2%	1.0%	0.4%	1.0%	0.3%	1.4%	0.5%	1.3%	0.8%	1.5%	0.5%	1.2%	0.8%	1.1%
9	0.1%	1.3%	0.2%	1.0%	0.2%	1.0%	0.3%	1.1%	0.2%	1.5%	0.4%	1.3%	0.4%	1.1%	0.4%	1.8%	0.5%	1.5%	0.7%	1.3%	0.7%	1.2%
9.5	0.0%	1.2%	0.1%	0.6%	0.1%	1.7%	0.0%	1.0%	0.2%	1.7%	0.3%	1.1%	0.3%	1.0%	0.3%	1.0%	0.4%	1.1%	0.6%	1.3%	0.7%	1.7%
10	0.0%	1.4%	0.2%	1.0%	0.1%	0.9%	0.2%	1.4%	0.2%	1.3%	0.2%	1.4%	0.3%	1.4%	0.3%	1.2%	0.3%	1.3%	0.5%	1.0%	0.6%	1.0%
10.5	0.1%	0.7%	0.1%	0.9%	0.1%	0.8%	0.1%	1.2%	0.1%	1.0%	0.2%	1.0%	0.2%	1.0%	0.1%	1.0%	0.3%	1.2%	0.4%	1.2%	0.5%	0.9%
11	0.0%	1.1%	0.1%	0.8%	0.1%	1.4%	0.2%	1.0%	0.2%	1.4%	0.1%	1.0%	0.1%	1.3%	0.2%	1.0%	0.2%	1.2%	0.5%	1.0%	0.4%	0.7%
11.5	0.0%	0.5%	0.0%	0.7%	0.1%	1.0%	0.1%	1.2%	0.0%	1.1%	0.2%	1.0%	0.3%	1.4%	0.2%	1.1%	0.2%	1.3%	0.5%	1.1%	0.4%	1.0%
12	0.0%	0.9%	0.1%	1.0%	0.0%	0.8%	0.1%	1.2%	0.0%	0.8%	0.2%	1.0%	0.1%	0.8%	0.2%	1.3%	0.3%	1.4%	0.4%	1.3%	0.2%	1.0%
12.5	0.0%	0.7%	0.1%	0.9%	0.0%	1.1%	0.1%	0.9%	0.1%	1.4%	0.1%	0.7%	0.0%	0.9%	0.2%	0.8%	0.2%	0.8%	0.3%	0.9%	0.3%	0.9%
13	0.0%	0.8%	0.0%	1.0%	0.0%	0.6%	0.1%	0.9%	0.1%	0.9%	0.2%	0.8%	0.1%	0.9%	0.2%	1.0%	0.2%	1.0%	0.4%	1.0%	0.5%	0.8%
13.5	0.0%	0.8%	0.0%	0.7%	0.0%	1.2%	0.0%	0.7%	0.0%	0.9%	0.1%	1.1%	0.2%	1.1%	0.0%	1.0%	0.1%	0.9%	0.4%	1.1%	0.4%	0.9%
14	0.0%	0.8%	0.0%	0.8%	0.0%	0.7%	0.0%	0.8%	0.0%	0.7%	0.0%	0.9%	0.1%	0.8%	0.1%	1.2%	0.2%	0.7%	0.3%	0.8%	0.3%	0.8%
14.5	0.0%	0.7%	0.0%	0.8%	0.0%	0.8%	0.1%	0.9%	0.1%	0.7%	0.0%	0.9%	0.1%	0.8%	0.0%	0.8%	0.1%	1.0%	0.2%	0.7%	0.4%	1.0%
15	0.0%	0.7%	0.1%	1.0%	0.0%	0.7%	0.1%	1.2%	0.0%	0.9%	0.1%	0.9%	0.1%	1.1%	0.1%	0.9%	0.3%	0.9%	0.2%	0.5%	0.3%	0.5%
15.5	0.0%	0.5%	0.0%	0.5%	0.0%	0.7%	0.0%	1.0%	0.0%	0.9%	0.0%	0.7%	0.2%	0.5%	0.1%	0.7%	0.1%	0.7%	0.2%	0.7%	0.2%	0.7%
16	0.0%	0.9%	0.0%	1.0%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.0%	0.4%	0.0%	0.9%	0.1%	0.8%	0.1%	0.8%	0.1%	0.6%	0.3%	0.7%
16.5	0.0%	0.6%	0.0%	0.5%	0.0%	0.8%	0.0%	0.6%	0.0%	0.7%	0.1%	0.9%	0.1%	0.8%	0.1%	0.8%	0.1%	0.7%	0.3%	0.5%	0.2%	0.5%
17	0.0%	0.9%	0.0%	0.8%	0.0%	0.5%	0.0%	0.7%	0.0%	0.5%	0.1%	0.6%	0.1%	0.8%	0.0%	0.7%	0.1%	0.8%	0.1%	0.4%	0.2%	0.6%
17.5	0.0%	0.3%	0.0%	0.5%	0.0%	0.7%	0.0%	1.0%	0.0%	0.6%	0.0%	0.7%	0.0%	0.8%	0.0%	0.4%	0.0%	0.7%	0.1%	0.7%	0.3%	0.4%
18	0.0%	0.6%	0.0%	0.6%	0.0%	0.6%	0.1%	0.7%	0.0%	0.5%	0.0%	0.4%	0.0%	0.5%	0.0%	0.9%	0.1%	0.7%	0.1%	0.5%	0.1%	0.7%
18.5	0.0%	0.4%	0.0%	0.5%	0.0%	0.5%	0.1%	0.7%	0.0%	0.6%	0.1%	0.8%	0.1%	0.9%	0.1%	0.9%	0.0%	0.4%	0.1%	0.6%	0.1%	0.4%
19	0.0%	0.7%	0.0%	0.7%	0.0%	0.8%	0.0%	0.8%	0.0%	0.8%	0.0%	0.4%	0.0%	0.6%	0.0%	0.5%	0.0%	0.5%	0.1%	0.5%	0.0%	0.6%
19.5	0.0%	0.4%	0.0%	0.5%	0.0%	0.4%	0.0%	0.8%	0.0%	0.4%	0.0%	0.6%	0.0%	0.5%	0.1%	0.8%	0.1%	0.3%	0.0%	0.6%	0.1%	0.5%
>20	0.0%	21.0%	0.0%	22.8%	0.1%	22.2%	0.1%	22.8%	0.0%	21.4%	0.2%	22.4%	0.3%	20.1%	0.5%	20.4%	0.7%	18.7%	1.7%	16.2%	2.1%	14.6%

Filename	13S10_11		13S10_12		13S10_13		13S10_14		13S10_15		13S10_16		13S10_17		13S10_18		13S10_19		13S10_20		13S10_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.316		0.387		0.529		0.578		0.66		0.745		0.783		0.841		0.854		0.885		0.932	
Nab	4939		5090		5212		4970		4400		3731		3259		2552		2377		1977		1360	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	8.8%	11.5%	5.2%	8.0%	3.8%	10.1%	4.0%	9.9%	2.9%	9.8%	2.7%	8.8%	2.9%	8.8%	2.6%	8.3%	1.6%	7.5%	1.4%	6.9%	1.3%	7.6%
0.5	13.5%	10.5%	12.9%	11.6%	10.3%	13.4%	9.7%	13.4%	8.9%	13.0%	7.1%	13.3%	7.8%	13.7%	6.1%	14.3%	5.0%	12.7%	5.0%	12.2%	3.4%	13.3%
1	13.7%	6.9%	13.3%	9.0%	12.3%	9.8%	11.4%	9.9%	9.8%	10.2%	8.4%	12.1%	7.5%	10.7%	6.7%	10.5%	7.7%	10.8%	7.2%	9.6%	5.3%	11.5%
1.5	11.5%	5.6%	11.9%	7.9%	10.5%	7.0%	10.4%	7.4%	9.8%	7.2%	7.9%	8.5%	7.6%	8.0%	7.6%	7.9%	7.2%	9.0%	7.8%	9.2%	6.5%	9.6%
2	9.4%	4.7%	8.4%	5.1%	8.3%	6.0%	7.8%	6.1%	6.9%	6.6%	6.3%	6.1%	7.6%	6.6%	5.7%	7.1%	6.4%	6.9%	6.1%	8.1%	4.3%	8.8%
2.5	6.2%	3.9%	6.8%	4.8%	6.6%	4.7%	6.6%	4.8%	6.0%	5.3%	5.3%	5.6%	4.9%	6.0%	5.4%	6.1%	4.0%	6.6%	3.7%	6.2%	4.6%	7.7%
3	5.2%	3.9%	5.4%	4.1%	5.2%	4.1%	4.9%	4.4%	4.9%	5.0%	3.4%	3.1%	2.7%	3.4%	2.5%	4.0%	3.9%	5.6%	2.6%	7.2%	2.7%	4.6%
3.5	4.0%	3.0%	3.7%	3.4%	3.8%	3.9%	3.7%	3.9%	4.4%	3.9%	4.3%	3.8%	3.1%	4.1%	3.5%	4.8%	2.9%	4.5%	2.8%	5.7%	3.7%	5.6%
4	3.6%	3.0%	3.0%	2.7%	3.7%	3.3%	3.8%	3.2%	3.6%	3.5%	3.6%	4.2%	3.3%	3.7%	2.7%	4.4%	2.9%	3.7%	2.5%	4.5%	2.6%	4.5%
4.5	3.3%	3.6%	2.9%	2.4%	2.6%	3.2%	2.8%	3.0%	3.1%	3.2%	3.3%	3.3%	2.4%	3.7%	2.6%	4.2%	2.7%	3.4%	2.3%	4.2%	1.6%	3.8%
5	2.1%	2.2%	1.6%	1.6%	1.8%	1.8%	1.6%	1.6%	2.5%	2.6%	2.2%	2.8%	2.6%	3.5%	2.3%	3.3%	2.0%	2.5%	1.1%	2.4%	1.9%	3.2%
5.5	2.1%	2.2%	2.4%	2.1%	2.2%	2.1%	2.3%	2.5%	2.4%	2.5%	2.7%	3.0%	2.1%	3.3%	2.2%	2.5%	2.4%	2.8%	2.0%	3.0%	1.4%	2.6%
6	1.2%	2.0%	1.9%	1.8%	2.0%	2.2%	1.8%	1.6%	1.6%	2.2%	1.6%	1.8%	1.6%	1.9%	1.7%	1.8%	1.4%	2.1%	1.6%	2.4%	0.9%	1.9%
6.5	1.3%	1.5%	1.5%	1.8%	1.8%	1.9%	1.8%	2.3%	1.6%	2.3%	2.1%	2.1%	1.4%	2.5%	1.6%	1.9%	1.7%	2.1%	1.4%	2.1%	1.1%	1.6%
7	1.1%	1.6%	1.3%	2.0%	1.6%	1.7%	1.7%	2.0%	1.8%	1.8%	1.9%	2.1%	1.7%	2.0%	1.4%	2.0%	1.6%	2.4%	1.5%	2.5%	1.0%	2.0%
7.5	1.0%	1.7%	1.2%	1.5%	1.7%	1.4%	1.4%	1.9%	1.0%	1.5%	1.8%	1.6%	1.3%	1.8%	1.5%	1.7%	1.4%	2.1%	1.4%	1.9%	0.9%	1.9%
8	0.9%	1.1%	1.1%	1.7%	1.3%	1.6%	1.3%	1.4%	1.4%	1.4%	0.9%	1.6%	1.5%	1.5%	1.3%	1.6%	1.4%	1.9%	1.3%	1.5%	1.0%	1.4%
8.5	0.6%	1.3%	0.9%	1.3%	1.2%	1.0%	1.4%	1.3%	1.4%	1.2%	1.0%	1.4%	1.3%	1.6%	1.2%	1.6%	1.3%	1.3%	1.0%	0.9%	0.8%	1.1%
9	0.5%	1.1%	0.9%	1.6%	1.1%	1.3%	1.1%	1.4%	1.1%	1.1%	1.2%	1.0%	1.1%	1.2%	1.3%	1.1%	1.2%	1.1%	1.1%	1.0%	0.7%	0.8%
9.5	0.9%	1.7%	0.9%	1.1%	0.8%	1.2%	0.8%	1.2%	0.8%	1.0%	0.8%	0.6%	0.9%	0.9%	0.8%	0.7%	0.7%	1.0%	1.2%	1.1%	0.6%	0.7%
10	0.6%	1.1%	0.8%	1.0%	0.9%	1.1%	0.9%	1.1%	0.7%	1.0%	1.2%	1.0%	1.3%	1.3%	1.0%	0.9%	1.2%	0.9%	1.0%	0.7%	1.1%	0.9%
10.5	0.6%	1.0%	0.4%	0.5%	0.5%	0.4%	0.7%	0.8%	1.1%	1.0%	1.3%	1.1%	0.8%	0.8%	0.8%	0.9%	0.4%	0.8%	0.6%	0.2%	1.1%	1.1%
11	0.3%	1.0%	0.9%	0.8%	0.7%	0.9%	0.7%	1.0%	0.7%	0.8%	0.8%	0.7%	0.8%	0.6%	1.2%	0.4%	0.3%	1.0%	1.2%	0.5%	0.7%	0.4%
11.5	0.6%	0.8%	0.6%	0.9%	0.7%	0.8%	0.6%	0.9%	0.9%	0.6%	1.1%	0.9%	0.9%	0.4%	0.7%	0.7%	0.8%	0.8%	0.6%	0.6%	0.8%	0.4%
12	0.7%	0.9%	0.6%	0.9%	0.9%	0.8%	0.5%	0.9%	0.7%	0.7%	0.9%	0.8%	0.7%	0.6%	1.0%	0.5%	0.5%	0.5%	0.6%	0.6%	0.7%	0.4%
12.5	0.4%	0.7%	0.5%	0.9%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%	0.6%	0.2%	0.2%	0.3%	0.7%	0.5%	0.8%	0.4%	0.4%	0.2%
13	0.4%	0.6%	0.4%	0.8%	0.6%	0.5%	0.7%	0.7%	0.6%	0.5%	0.8%	0.9%	0.7%	0.7%	0.5%	0.5%	0.7%	0.5%	0.6%	0.9%	0.4%	0.6%
13.5	0.4%	0.9%	0.4%	0.8%	0.5%	0.6%	0.6%	0.7%	0.9%	0.6%	0.6%	0.4%	0.8%	0.6%	0.4%	0.6%	0.4%	0.4%	0.8%	0.5%	0.6%	0.1%
14	0.2%	0.8%	0.4%	0.6%	0.4%	0.7%	0.4%	0.5%	0.6%	0.6%	0.6%	0.5%	0.9%	0.3%	0.7%	0.5%	0.6%	0.4%	0.7%	0.6%	0.4%	0.1%
14.5	0.2%	0.8%	0.4%	0.8%	0.4%	0.5%	0.5%	0.5%	0.5%	0.4%	0.6%	0.5%	1.0%	0.3%	0.5%	0.7%	0.7%	0.5%	0.4%	0.2%	0.5%	0.3%
15	0.2%	0.6%	0.2%	0.5%	0.4%	0.7%	0.5%	0.3%	0.4%	0.3%	0.6%	0.5%	0.4%	0.3%	0.5%	0.2%	0.8%	0.4%	0.4%	0.1%	0.6%	0.1%
15.5	0.2%	0.6%	0.3%	0.7%	0.3%	0.6%	0.4%	0.3%	0.4%	0.4%	0.4%	0.2%	0.5%	0.3%	0.3%	0.1%	0.4%	0.4%	0.5%	0.4%	0.1%	0.1%
16	0.1%	0.5%	0.2%	0.4%	0.3%	0.3%	0.3%	0.3%	0.5%	0.3%	0.7%	0.3%	0.7%	0.2%	0.8%	0.1%	0.3%	0.2%	0.4%	0.2%	0.4%	0.0%
16.5	0.2%	0.7%	0.2%	0.4%	0.4%	0.5%	0.5%	0.4%	0.6%	0.4%	0.6%	0.3%	0.6%	0.2%	0.4%	0.2%	0.3%	0.3%	0.4%	0.2%	0.1%	0.0%
17	0.2%	0.5%	0.2%	0.6%	0.3%	0.5%	0.3%	0.4%	0.4%	0.4%	0.6%	0.2%	0.4%	0.3%	0.4%	0.4%	0.4%	0.1%	0.7%	0.1%	0.1%	0.1%
17.5	0.1%	0.6%	0.3%	0.6%	0.4%	0.4%	0.3%	0.5%	0.3%	0.1%	0.6%	0.2%	0.5%	0.2%	0.4%	0.3%	0.3%	0.2%	0.5%	0.3%	0.4%	0.0%
18	0.1%	0.4%	0.3%	0.6%	0.3%	0.2%	0.5%	0.3%	0.3%	0.3%	0.6%	0.2%	0.8%	0.2%	0.5%	0.3%	0.3%	0.2%	0.4%	0.1%	0.4%	0.1%
18.5	0.2%	0.5%	0.2%	0.5%	0.3%	0.3%	0.3%	0.3%	0.4%	0.2%	0.4%	0.2%	0.4%	0.2%	0.5%	0.3%	0.7%	0.3%	0.6%	0.3%	0.6%	0.0%
19	0.1%	0.4%	0.2%	0.4%	0.3%	0.2%	0.3%	0.4%	0.3%	0.2%	0.2%	0.2%	0.4%	0.2%	0.2%	0.1%	0.5%	0.1%	0.5%	0.1%	0.1%	0.1%
19.5	0.2%	0.5%	0.2%	0.4%	0.2%	0.5%	0.1%	0.1%	0.3%	0.3%	0.3%	0.2%	0.4%	0.2%	0.5%	0.1%	0.4%	0.1%	0.3%	0.1%	0.4%	0.1%
>20	3.0%	13.0%	5.0%	11.5%	8.0%	7.1%	9.9%	5.9%	13.1%	4.8%	18.0%	3.4%	21.1%	3.1%	27.9%	2.2%	29.6%	1.3%	33.3%	0.8%	43.2%	0.6%

Filename	13S10_22		13S10_23		13S10_24		13S10_25		13S10_26		13S10_27		13S10_28		13S10_29		13S10_30	
y(mm)	73		77		81		85		89		93		103		113		123	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23	
C	0.943		0.95		0.964		0.968		0.976		0.981		0.989		0.991		0.995	
Nab	1072		1010		684		634		477		395		238		197		107	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.4%	5.3%	1.0%	4.3%	1.3%	5.7%	1.4%	5.7%	1.7%	6.9%	2.3%	5.3%	2.1%	7.1%	1.0%	8.1%	0.9%	6.5%
0.5	4.1%	11.0%	4.6%	13.0%	2.3%	12.1%	4.4%	12.3%	2.7%	11.5%	2.8%	12.2%	3.8%	10.9%	3.0%	11.7%	2.8%	11.2%
1	4.9%	13.3%	4.2%	13.2%	4.7%	9.5%	6.3%	11.2%	4.6%	11.7%	5.8%	11.1%	2.9%	10.5%	7.1%	10.7%	5.6%	11.2%
1.5	4.6%	9.7%	4.9%	10.4%	5.1%	9.5%	5.7%	10.3%	6.3%	10.7%	5.3%	10.9%	5.0%	11.3%	5.6%	11.7%	0.9%	7.5%
2	4.5%	8.3%	5.6%	7.5%	3.4%	8.9%	3.5%	7.3%	3.1%	7.3%	3.5%	6.6%	2.9%	7.6%	4.1%	5.6%	0.9%	6.5%
2.5	3.9%	6.2%	4.1%	7.4%	2.6%	7.9%	6.0%	8.4%	3.6%	8.2%	4.6%	11.1%	1.7%	7.6%	0.0%	11.2%	2.8%	7.5%
3	1.9%	4.6%	2.7%	6.8%	1.5%	5.4%	1.7%	4.4%	2.9%	6.7%	2.3%	5.1%	3.4%	10.9%	1.0%	5.1%	0.9%	11.2%
3.5	2.5%	6.7%	2.5%	5.4%	1.9%	5.3%	2.1%	6.8%	1.7%	5.9%	1.0%	5.8%	2.9%	4.6%	1.5%	4.6%	2.8%	5.6%
4	3.0%	5.1%	1.6%	6.4%	2.5%	5.6%	1.7%	5.7%	1.3%	4.6%	1.5%	5.8%	2.5%	5.0%	2.5%	4.6%	2.8%	5.6%

4.5	2.1%	5.3%	2.6%	3.8%	1.8%	5.7%	1.1%	3.3%	2.1%	3.4%	1.0%	4.8%	1.3%	3.8%	0.0%	4.6%	0.9%	2.8%
5	2.1%	3.9%	1.8%	2.5%	1.6%	3.8%	1.7%	2.8%	0.6%	2.7%	0.8%	1.8%	1.3%	3.4%	2.0%	4.6%	0.9%	5.6%
5.5	1.8%	2.7%	1.4%	2.6%	2.5%	3.4%	1.1%	3.0%	1.5%	3.4%	0.3%	2.8%	0.0%	3.4%	0.5%	3.6%	0.9%	2.8%
6	1.2%	1.7%	1.7%	3.4%	1.3%	1.8%	0.6%	3.8%	1.0%	4.0%	0.8%	2.5%	0.8%	2.9%	0.5%	1.5%	0.0%	4.7%
6.5	1.6%	2.2%	1.3%	2.4%	1.9%	1.5%	1.1%	4.3%	0.6%	1.9%	0.8%	2.8%	1.3%	2.1%	0.5%	2.5%	0.0%	0.9%
7	0.7%	1.3%	1.3%	1.5%	0.4%	2.9%	0.6%	1.1%	0.8%	1.5%	1.3%	3.8%	0.8%	0.8%	0.0%	2.0%	0.9%	0.9%
7.5	1.2%	1.4%	1.0%	2.3%	0.3%	1.3%	0.9%	1.1%	0.8%	1.3%	0.8%	1.0%	0.4%	0.8%	1.0%	2.5%	0.0%	0.9%
8	0.7%	1.9%	0.5%	1.1%	1.3%	1.5%	0.6%	1.6%	0.4%	1.0%	0.5%	1.5%	0.4%	1.3%	0.5%	2.0%	0.9%	0.9%
8.5	0.4%	1.4%	0.9%	1.7%	0.9%	1.6%	0.2%	1.1%	0.6%	1.3%	0.0%	0.8%	0.0%	1.3%	0.5%	1.0%	0.0%	1.9%
9	0.8%	1.0%	1.0%	0.3%	0.6%	0.9%	0.5%	0.9%	0.6%	0.4%	0.5%	0.3%	0.8%	0.4%	1.5%	0.5%	0.0%	0.0%
9.5	0.5%	0.6%	0.4%	0.5%	0.6%	0.6%	0.5%	0.5%	0.4%	0.4%	0.0%	1.3%	0.0%	0.4%	0.0%	0.5%	0.0%	0.9%
10	0.4%	0.8%	0.7%	0.8%	0.6%	0.6%	0.5%	0.8%	0.4%	1.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
10.5	0.6%	0.4%	0.7%	0.3%	0.4%	0.9%	0.5%	0.3%	0.2%	0.6%	0.3%	0.5%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%
11	0.7%	0.6%	0.2%	0.5%	0.9%	0.1%	0.2%	0.5%	0.2%	0.2%	0.8%	0.0%	0.4%	0.4%	0.0%	0.0%	0.9%	0.0%
11.5	0.5%	0.9%	0.7%	0.1%	0.0%	0.3%	0.3%	0.5%	0.2%	0.4%	0.3%	0.0%	0.4%	0.8%	0.0%	0.0%	0.9%	0.0%
12	0.2%	0.5%	0.4%	0.2%	0.4%	0.4%	0.8%	0.3%	0.2%	0.2%	0.5%	0.5%	0.8%	0.4%	0.0%	0.0%	0.0%	0.9%
12.5	0.6%	0.4%	0.7%	0.6%	0.1%	0.3%	0.0%	0.0%	0.4%	0.4%	0.5%	0.0%	0.0%	0.4%	0.5%	0.0%	0.0%	0.0%
13	0.3%	0.2%	1.0%	0.1%	0.6%	0.3%	0.3%	0.3%	0.2%	0.0%	0.0%	0.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.9%
13.5	0.8%	0.2%	0.6%	0.0%	0.1%	0.1%	0.2%	0.2%	0.4%	0.4%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14	0.8%	0.2%	0.3%	0.1%	0.3%	0.3%	0.2%	0.3%	0.0%	0.2%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.9%	0.0%
14.5	0.5%	0.2%	0.4%	0.2%	0.0%	0.1%	0.3%	0.2%	0.2%	0.0%	0.3%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
15	0.3%	0.4%	1.0%	0.0%	0.3%	0.3%	0.2%	0.2%	0.6%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
15.5	0.3%	0.3%	0.3%	0.0%	0.7%	0.1%	0.0%	0.2%	0.2%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.1%	0.2%	0.6%	0.0%	0.6%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%
16.5	0.8%	0.2%	0.3%	0.0%	0.4%	0.1%	0.3%	0.0%	0.4%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.5%	0.9%	0.0%
17	0.5%	0.0%	0.0%	0.1%	0.6%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
17.5	0.6%	0.2%	0.4%	0.1%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.2%	0.0%	0.3%	0.0%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%
18.5	0.4%	0.2%	0.1%	0.0%	0.1%	0.1%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	0.6%	0.2%	0.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.2%	0.0%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%
>20	46.9%	0.4%	45.7%	0.4%	54.4%	0.3%	53.0%	0.8%	57.9%	0.6%	59.2%	0.0%	60.5%	0.0%	64.0%	0.5%	69.2%	0.9%

Run 1.3C, dcrest/h = 1.3, Configuration C, location 10

Filename	13S10_00		13S10_01		13S10_02		13S10_03		13S10_04		13S10_05		13S10_06		13S10_07		13S10_08		13S10_09		13S10_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.078		0.087		0.084		0.089		0.098		0.098		0.126		0.159		0.213		0.291		0.373	
Nab	2669		2887		2654		2735		2966		2744		3171		3659		4132		4736		4725	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	12.1%	6.5%	13.3%	6.7%	11.6%	5.8%	12.5%	6.7%	12.9%	6.8%	13.0%	5.9%	13.4%	6.9%	7.2%	5.9%	6.2%	6.8%	6.5%	8.0%	4.9%	8.8%
0.5	29.5%	8.7%	20.6%	5.7%	19.7%	5.6%	19.6%	4.9%	20.6%	5.8%	19.6%	5.8%	17.8%	6.4%	16.6%	7.8%	15.6%	9.3%	12.8%	10.6%	12.9%	11.3%
1	18.0%	4.5%	25.4%	6.8%	24.4%	6.9%	19.2%	4.8%	19.0%	4.2%	17.2%	4.0%	16.5%	4.5%	17.2%	6.2%	15.4%	7.0%	14.7%	7.8%	12.6%	8.0%
1.5	15.8%	4.8%	12.6%	3.4%	13.7%	3.2%	14.1%	3.6%	13.2%	3.4%	12.3%	3.8%	12.0%	3.6%	12.2%	4.3%	12.9%	5.8%	12.2%	6.4%	10.4%	6.6%
2	8.0%	3.7%	8.3%	3.3%	10.3%	3.9%	9.1%	3.3%	8.7%	3.0%	11.6%	4.0%	9.1%	3.2%	9.8%	4.1%	9.0%	3.5%	8.8%	5.0%	7.9%	5.5%
2.5	4.4%	2.3%	6.2%	3.3%	5.4%	2.1%	6.1%	2.7%	5.4%	2.8%	5.9%	2.8%	5.9%	3.4%	6.3%	3.4%	6.1%	3.5%	6.2%	4.0%	6.3%	4.5%
3	4.0%	2.3%	3.2%	2.3%	3.7%	1.9%	4.3%	2.4%	6.0%	3.1%	3.7%	2.0%	4.2%	2.3%	5.5%	2.8%	4.7%	3.6%	5.1%	3.6%	5.3%	4.0%
3.5	2.0%	1.5%	2.5%	2.5%	3.0%	2.6%	3.4%	2.1%	3.4%	2.1%	3.4%	1.7%	3.6%	3.1%	4.1%	2.2%	4.2%	2.4%	4.3%	3.0%	4.0%	2.7%
4	1.7%	2.5%	2.1%	2.1%	1.7%	1.5%	2.5%	2.3%	2.2%	1.8%	2.3%	2.9%	2.6%	1.8%	3.2%	2.2%	3.6%	2.7%	3.6%	3.2%	3.5%	2.6%
4.5	1.4%	2.2%	1.1%	1.5%	1.4%	1.9%	2.4%	2.2%	1.9%	2.3%	1.8%	1.9%	2.5%	1.9%	2.5%	2.2%	2.5%	2.4%	2.6%	2.6%	3.2%	2.6%
5	0.4%	1.4%	0.5%	1.8%	0.8%	1.5%	1.3%	2.0%	1.1%	1.9%	1.6%	1.5%	1.8%	2.2%	1.9%	2.0%	2.4%	2.2%	1.6%	1.4%	2.0%	1.7%
5.5	0.5%	1.7%	1.2%	1.6%	1.0%	1.2%	0.7%	1.2%	0.9%	1.4%	1.2%	1.2%	1.5%	2.0%	1.7%	2.1%	2.0%	1.4%	2.4%	2.1%	2.3%	1.9%
6	0.7%	1.2%	0.5%	1.4%	0.5%	1.4%	0.6%	1.4%	0.9%	1.9%	1.0%	1.4%	1.1%	1.9%	1.8%	2.0%	1.4%	1.6%	1.9%	2.0%	1.8%	2.0%
6.5	0.2%	1.1%	0.5%	1.4%	0.4%	1.4%	0.6%	1.6%	0.4%	1.6%	1.2%	1.7%	1.2%	1.7%	0.8%	1.7%	1.6%	1.6%	1.5%	1.5%	1.7%	1.8%
7	0.3%	1.3%	0.2%	1.0%	0.5%	1.7%	0.5%	1.3%	0.4%	1.6%	0.5%	1.3%	0.8%	1.2%	1.2%	1.3%	1.0%	1.8%	1.5%	1.6%	1.6%	1.7%
7.5	0.2%	0.7%	0.3%	1.2%	0.5%	1.3%	0.3%	0.9%	0.2%	1.3%	0.4%	1.3%	0.7%	1.3%	0.7%	1.7%	1.2%	1.4%	1.1%	1.4%	1.2%	1.5%
8	0.1%	1.1%	0.3%	1.8%	0.3%	1.4%	0.3%	1.1%	0.3%	1.4%	0.5%	0.9%	0.7%	1.4%	0.7%	1.4%	1.0%	1.4%	1.1%	1.3%	1.2%	1.4%
8.5	0.0%	1.2%	0.1%	1.1%	0.2%	0.9%	0.4%	1.2%	0.3%	1.0%	0.5%	1.3%	0.5%	1.5%	0.6%	1.4%	0.6%	1.6%	0.9%	1.2%	1.1%	1.4%
9	0.1%	0.7%	0.3%	1.1%	0.2%	1.5%	0.3%	1.1%	0.4%	1.2%	0.3%	1.9%	0.6%	1.3%	0.4%	1.1%	0.8%	1.3%	0.8%	1.3%	1.1%	1.1%
9.5	0.1%	1.2%	0.2%	1.5%	0.0%	0.6%	0.1%	1.5%	0.2%	1.3%	0.3%	1.1%	0.3%	1.2%	0.8%	1.3%	0.8%	1.2%	0.6%	1.1%	0.8%	1.1%
10	0.1%	1.0%	0.0%	0.9%	0.1%	1.0%	0.2%	0.8%	0.2%	1.1%	0.3%	1.2%	0.4%	1.2%	0.5%	0.9%	0.4%	1.4%	0.8%	0.8%	0.8%	1.1%
10.5	0.0%	1.3%	0.2%	1.1%	0.0%	1.1%	0.2%	0.8%	0.3%	0.7%	0.2%	1.7%	0.4%	1.0%	0.4%	1.3%	0.5%	1.4%	0.4%	0.7%	0.4%	0.9%
11	0.0%	0.9%	0.1%	1.2%	0.1%	0.9%	0.0%	0.8%	0.2%	1.0%	0.1%	0.9%	0.3%	1.1%	0.5%	1.0%	0.5%	1.3%	0.5%	1.2%	0.8%	1.1%
11.5	0.2%	1.0%	0.2%	0.7%	0.0%	1.3%	0.2%	1.1%	0.1%	0.7%	0.1%	1.0%	0.2%	1.2%	0.3%	0.8%	0.5%	0.9%	0.6%	0.7%	0.8%	1.1%
12	0.0%	1.1%	0.0%	1.1%	0.1%	1.1%	0.1%	0.7%	0.1%	0.7%	0.1%	1.2%	0.2%	0.9%	0.3%	0.8%	0.5%	0.9%	0.4%	0.9%	0.6%	1.0%
12.5	0.0%	1.2%	0.0%	1.4%	0.1%	1.1%	0.0%	0.7%	0.2%	0.9%	0.0%	1.1%	0.3%	0.5%	0.2%	1.2%	0.4%	1.1%	0.5%	1.0%	0.6%	0.9%
13	0.0%	0.6%	0.0%	0.8%	0.0%	0.9%	0.0%	0.8%	0.1%	1.1%	0.2%	1.2%	0.1%	0.9%	0.2%	0.8%	0.3%	0.9%	0.3%	1.0%	0.5%	0.8%
13.5	0.0%	1.2%	0.0%	0.9%	0.0%	0.6%	0.0%	0.7%	0.1%	0.9%	0.1%	0.7%	0.1%	1.1%	0.2%	0.8%	0.3%	0.9%	0.3%	0.9%	0.4%	0.7%
14	0.0%	0.5%	0.0%	0.9%	0.0%	1.3%	0.1%	0.9%	0.1%	0.9%	0.1%	0.9%	0.2%	1.1%	0.2%	0.6%	0.3%	1.0%	0.4%	0.8%	0.5%	0.5%
14.5	0.0%	0.4%	0.0%	0.7%	0.0%	0.9%	0.0%	1.2%	0.1%	0.9%	0.1%	0.8%	0.2%	0.8%	0.1%	0.7%	0.2%	0.7%	0.3%	0.8%	0.3%	0.7%
15	0.0%	0.9%	0.0%	1.0%	0.0%	1.0%	0.1%	1.0%	0.0%	0.8%	0.0%	0.8%	0.1%	0.6%	0.1%	0.8%	0.2%	0.7%	0.3%	1.0%	0.3%	0.5%
15.5	0.0%	0.5%	0.0%	0.5%	0.1%	0.5%	0.1%	0.9%	0.0%	0.8%	0.0%	0.6%	0.0%	0.9%	0.1%	0.8%	0.2%	0.8%	0.3%	0.5%	0.5%	0.8%
16	0.0%	0.7%	0.0%	0.8%	0.0%	0.5%	0.0%	0.6%	0.0%	0.6%	0.1%	0.6%	0.0%	1.0%	0.0%	0.6%	0.2%	0.6%	0.3%	0.3%	0.4%	0.3%
16.5	0.0%	0.6%	0.0%	0.8%	0.0%	1.0%	0.0%	0.8%	0.0%	0.8%	0.1%	0.7%	0.0%	0.5%	0.1%	0.8%	0.3%	0.8%	0.2%	0.5%	0.2%	0.7%
17	0.0%	0.9%	0.0%	0.6%	0.0%	0.9%	0.0%	0.8%	0.0%	0.6%	0.1%	1.1%	0.1%	1.2%	0.1%	0.7%	0.3%	0.6%	0.3%	0.9%	0.5%	0.4%
17.5	0.0%	1.0%	0.0%	0.6%	0.0%	0.8%	0.0%	0.7%	0.0%	0.5%	0.0%	0.5%	0.1%	0.8%	0.1%	0.4%	0.1%	0.4%	0.3%	0.7%	0.3%	0.6%
18	0.0%	0.5%	0.0%	0.8%	0.0%	0.4%	0.0%	0.7%	0.0%	0.7%	0.0%	0.8%	0.0%	0.7%	0.0%	0.7%	0.1%	0.9%	0.3%	0.6%	0.1%	0.5%
18.5	0.0%	0.7%	0.0%	0.5%	0.0%	0.5%	0.0%	0.8%	0.1%	0.9%	0.0%	0.6%	0.0%	0.8%	0.1%	0.7%	0.1%	0.6%	0.2%	0.5%	0.2%	0.4%
19	0.0%	0.7%	0.0%	0.7%	0.0%	0.7%	0.0%	0.7%	0.0%	0.7%	0.0%	0.6%	0.1%	0.6%	0.1%	0.6%	0.1%	0.6%	0.2%	0.6%	0.3%	0.5%
19.5	0.0%	0.5%	0.0%	0.5%	0.0%	0.4%	0.0%	0.8%	0.0%	0.6%	0.0%	0.8%	0.1%	0.6%	0.1%	0.5%	0.1%	0.6%	0.1%	0.5%	0.1%	0.6%
>20	0.0%	32.9%	0.0%	32.2%	0.1%	34.7%	0.0%	35.2%	0.1%	33.9%	0.1%	33.8%	0.5%	29.7%	0.8%	27.0%	1.4%	20.7%	3.0%	15.8%	5.2%	13.3%

Filename	13S10_11		13S10_12		13S10_13		13S10_14		13S10_15		13S10_16		13S10_17		13S10_18		13S10_19		13S10_20		13S10_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.456		0.584		0.662		0.732		0.792		0.841		0.862		0.891		0.916		0.933		0.95	
Nab	4769		4617		4123		3557		3084		2550		2125		1765		1428		1194		878	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	4.7%	9.1%	4.3%	9.6%	3.7%	9.7%	2.4%	8.7%	1.9%	9.0%	2.0%	7.6%	2.2%	6.2%	1.0%	6.5%	1.3%	6.3%	1.5%	5.8%	1.5%	5.5%
0.5	10.7%	11.9%	9.7%	13.8%	7.8%	12.7%	7.3%	12.4%	6.4%	12.5%	5.6%	12.3%	5.0%	11.1%	4.3%	10.4%	3.4%	10.4%	3.5%	12.1%	3.2%	11.2%
1	11.4%	9.5%	10.5%	9.3%	9.1%	9.8%	7.7%	9.6%	8.1%	9.7%	6.6%	10.0%	5.5%	10.1%	5.4%	10.8%	3.6%	10.6%	5.9%	11.4%	4.3%	10.8%
1.5	9.4%	6.2%	8.4%	7.1%	8.3%	7.6%	7.0%	7.6%	6.5%	7.7%	5.9%	8.2%	5.2%	8.3%	5.1%	9.2%	4.7%	8.3%	4.4%	8.4%	4.6%	9.0%
2	7.5%	5.4%	7.1%	5.5%	6.3%	6.0%	4.5%	4.2%	4.1%	5.0%	2.9%	4.8%	2.8%	4.8%	3.1%	5.4%	2.9%	5.5%	1.9%	5.4%	3.9%	8.7%
2.5	5.9%	4.2%	5.3%	5.0%	5.4%	5.4%	4.7%	6.4%	5.0%	6.8%	4.7%	8.2%	4.4%	7.4%	4.2%	8.0%	3.6%	7.0%	4.3%	6.8%	2.3%	7.9%
3	5.0%	4.6%	3.8%	3.2%	3.3%	3.3%	4.4%	4.8%	4.3%	5.2%	3.4%	5.8%	2.6%	6.2%	2.8%	5.9%	4.0%	7.5%	3.4%	6.3%	1.7%	4.2%
3.5	4.6%	3.2%	4.1%	3.5%	4.5%	4.6%	4.0%	4.4%	3.7%	4.8%	2.7%	5.6%	2.9%	5.9%	2.2%	5.8%	2.5%	5.7%	2.8%	5.8%	2.2%	5.6%
4	3.8%	2.7%	3.1%	3.4%	3.3%	3.2%	2.1%	3.0%	2.0%	2.6%	1.8%	3.1%	2.1%	3.2%	1.6%	3.3%	1.5%	3.2%	1.5%	4.5%	2.5%	5.5%
4.5	3.1%	2.7%	2.9%	3.1%	3.1%	3.1%	2.9%	4.2%	2.9%	3.7%	2.3%	3.7%	2.4%	4.7%	2.3%	3.9%	2.0%	5.5%	1.8%	5.2%	1.8%	4.8%
5	1.9%	1.6%	3.1%	2.9%	2.5%	3.1%	2.8%	3.4%	2.6%	2.8%	2.6%	3.5%	2.4%	3.5%	2.2%	4.4%	2.3%	4.0%	1.3%	4.1%	1.5%	3.2%
5.5	2.4%	2.4%	2.3%	2.9%	2.4%	2.4%	1.7%	3.2%	2.5%	3.1%	1.9%	2.9%	2.1%	3.8%	1.9%	3.1%	1.5%	4.3%	1.8%	3.2%	1.6%	3.4%
6	2.0%	2.2%	1.6%	1.4%	1.6%	1.3%	2.1%	2.2%	1.9%	2.4%	2.3%	2.9%	2.0%	2.4%	1.9%	2.1%	2.2%	2.9%	2.4%	3.4%	0.6%	2.2%
6.5	2.0%	2.2%	2.0%	1.9%	1.9%	1.9%	1.5%	1.5%	1.4%	2.1%	1.3%	1.6%	1.1%	1.4%	0.9%	1.4%	0.8%	1.7%	0.8%	1.3%	1.9%	2.3%
7	1.4%	1.7%	1.8%	1.8%	1.8%	2.1%	1.9%	2.2%	1.8%	2.3%	1.6%	1.9%	1.4%	2.3%	1.4%	2.4%	1.4%	2.0%	0.8%	2.3%	0.8%	3.2%
7.5	1.5%	1.4%	1.3%	1.7%	1.5%	1.8%	1.9%	1.9%	1.5%	2.0%	1.3%	2.1%	1.1%	2.3%	1.4%	1.6%	1.2%	1.4%	0.9%	2.1%	0.8%	1.3%
8	1.6%	1.5%	1.4%	1.0%	1.7%	1.5%	1.6%	1.9%	1.3%	1.7%	1.5%	1.7%	1.5%	2.3%	1.3%	2.0%	1.1%	1.3%	0.8%	1.7%	0.9%	0.8%
8.5	1.4%	1.4%	1.2%	1.3%	1.2%	1.2%	0.8%	0.8%	0.9%	0.7%	1.0%	1.0%	0.9%	0.8%	0.6%	1.2%	0.5%	0.6%	0.8%	0.9%	0.7%	1.3%
9	1.3%	1.2%	1.3%	1.3%	1.2%	1.0%	1.6%	1.5%	1.3%	1.4%	1.0%	1.3%	0.9%	1.8%	1.0%	1.2%	1.3%	1.1%	0.5%	1.2%	0.7%	1.1%
9.5	1.2%	1.3%	0.7%	0.6%	0.9%	0.8%	1.4%	1.3%	1.0%	1.3%	1.5%	1.2%	1.2%	1.5%	1.0%	1.3%	1.1%	1.1%	0.6%	0.8%	0.3%	0.6%

10	0.8%	1.1%	0.9%	1.2%	1.4%	1.1%	1.3%	1.2%	0.8%	1.1%	0.9%	0.8%	1.1%	0.9%	0.8%	0.9%	1.2%	1.2%	0.8%	1.2%	0.6%	1.1%
10.5	0.7%	0.6%	1.1%	1.5%	1.0%	1.1%	0.8%	0.7%	1.0%	1.2%	0.9%	1.0%	1.0%	1.1%	1.0%	1.0%	1.2%	1.2%	0.3%	0.8%	0.7%	0.5%
11	1.0%	1.0%	0.9%	0.9%	0.8%	1.1%	0.4%	0.4%	0.6%	0.8%	0.6%	0.3%	0.6%	0.5%	0.8%	0.3%	0.8%	0.7%	0.4%	0.6%	0.5%	1.0%
11.5	0.8%	0.8%	0.8%	0.9%	0.9%	0.7%	1.1%	0.7%	1.0%	0.7%	0.8%	0.9%	1.1%	0.6%	0.8%	0.7%	0.7%	0.5%	0.5%	0.6%	0.1%	0.7%
12	0.7%	1.1%	0.7%	0.7%	1.1%	0.8%	1.3%	0.7%	0.8%	0.8%	1.6%	0.6%	1.0%	0.8%	0.8%	0.5%	1.0%	0.9%	0.5%	0.5%	0.3%	0.5%
12.5	0.6%	0.8%	0.5%	0.5%	0.4%	0.4%	0.8%	1.0%	0.7%	0.7%	0.9%	0.6%	1.0%	0.7%	0.5%	0.7%	0.5%	0.8%	1.0%	0.3%	0.6%	0.1%
13	0.7%	0.8%	0.6%	0.7%	0.8%	0.8%	0.7%	0.5%	0.4%	0.6%	0.5%	0.4%	0.3%	0.7%	0.5%	0.3%	0.5%	0.5%	0.7%	0.1%	0.2%	0.1%
13.5	0.5%	0.8%	0.8%	0.5%	0.9%	0.7%	0.9%	0.6%	0.9%	0.5%	0.6%	0.6%	0.6%	0.5%	0.6%	0.7%	0.6%	0.6%	0.5%	0.4%	0.7%	0.5%
14	0.4%	0.8%	0.8%	0.7%	0.7%	0.3%	0.7%	0.6%	0.6%	0.6%	1.1%	0.5%	0.9%	0.2%	0.8%	0.3%	0.3%	0.4%	0.5%	0.3%	0.2%	0.8%
14.5	0.5%	0.7%	0.5%	0.5%	0.7%	0.5%	1.0%	0.7%	0.8%	0.4%	0.9%	0.3%	0.7%	0.5%	1.0%	0.3%	0.7%	0.3%	0.3%	0.1%	0.1%	0.5%
15	0.3%	0.5%	0.6%	0.6%	0.6%	0.7%	0.5%	0.2%	0.9%	0.7%	1.0%	0.5%	0.7%	0.2%	0.8%	0.4%	0.6%	0.4%	0.5%	0.5%	0.5%	0.2%
15.5	0.5%	0.5%	0.4%	0.3%	0.3%	0.3%	0.5%	0.3%	0.4%	0.1%	0.6%	0.4%	0.3%	0.2%	0.3%	0.1%	0.2%	0.1%	0.4%	0.2%	0.3%	0.0%
16	0.4%	0.4%	0.5%	0.6%	0.5%	0.4%	0.7%	0.4%	0.8%	0.3%	0.5%	0.1%	0.5%	0.3%	0.3%	0.5%	0.8%	0.3%	0.8%	0.3%	0.5%	0.2%
16.5	0.4%	0.7%	0.8%	0.5%	0.6%	0.4%	0.5%	0.4%	0.4%	0.7%	0.7%	0.4%	0.7%	0.1%	0.7%	0.3%	0.4%	0.1%	0.2%	0.2%	0.2%	0.2%
17	0.4%	0.5%	0.6%	0.4%	0.6%	0.4%	0.6%	0.5%	0.7%	0.2%	0.6%	0.2%	0.4%	0.2%	0.6%	0.2%	0.1%	0.4%	0.3%	0.2%	0.2%	0.0%
17.5	0.4%	0.5%	0.3%	0.5%	0.4%	0.2%	0.4%	0.3%	0.5%	0.1%	0.3%	0.3%	0.4%	0.0%	0.6%	0.3%	0.3%	0.1%	0.0%	0.2%	0.7%	0.2%
18	0.4%	0.4%	0.5%	0.3%	0.3%	0.4%	0.5%	0.3%	0.7%	0.2%	0.5%	0.3%	0.8%	0.3%	0.8%	0.0%	0.8%	0.0%	0.4%	0.1%	0.7%	0.1%
18.5	0.3%	0.4%	0.3%	0.5%	0.6%	0.6%	0.6%	0.3%	0.3%	0.5%	0.2%	0.1%	0.4%	0.2%	0.6%	0.1%	0.6%	0.1%	0.5%	0.2%	0.3%	0.2%
19	0.3%	0.4%	0.3%	0.1%	0.3%	0.2%	0.4%	0.1%	0.3%	0.2%	0.6%	0.2%	0.6%	0.0%	0.5%	0.2%	0.3%	0.1%	0.3%	0.0%	0.0%	0.1%
19.5	0.3%	0.4%	0.4%	0.4%	0.2%	0.4%	0.5%	0.3%	0.7%	0.4%	0.4%	0.2%	0.6%	0.0%	0.6%	0.3%	0.4%	0.1%	0.6%	0.1%	0.2%	0.1%
>20	6.9%	10.0%	11.7%	7.1%	15.4%	5.7%	21.2%	4.2%	25.6%	2.5%	31.5%	1.9%	36.5%	1.9%	41.1%	1.5%	45.0%	0.8%	48.4%	0.8%	54.7%	0.5%

Filename	13S10_22		13S10_23		13S10_24		13S10_25		13S10_26		13S10_27		13S10_28		13S10_29	
y(mm)	73		77		81		85		89		93		103		113	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13	
C	0.958		0.967		0.972		0.982		0.981		0.986		0.992		0.995	
Nab	777		664		534		367		372		283		173		119	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.7%	5.1%	0.5%	5.1%	1.3%	6.2%	2.2%	3.8%	1.9%	7.3%	1.4%	4.6%	0.6%	4.0%	0.0%	5.9%
0.5	3.0%	10.3%	2.9%	10.5%	4.1%	9.6%	1.6%	10.9%	3.0%	9.7%	2.8%	10.6%	2.9%	13.9%	2.5%	9.2%
1	3.3%	12.2%	4.7%	13.1%	3.9%	10.5%	3.5%	12.8%	4.0%	9.9%	2.1%	9.9%	1.2%	12.1%	1.7%	5.9%
1.5	4.0%	9.8%	1.8%	7.2%	3.4%	9.6%	3.3%	10.1%	2.7%	5.9%	2.8%	9.9%	1.7%	11.6%	3.4%	10.1%
2	2.3%	4.4%	3.5%	7.7%	2.6%	5.4%	2.5%	7.9%	3.2%	12.6%	2.8%	8.8%	2.3%	8.1%	1.7%	11.8%
2.5	3.5%	6.8%	4.7%	9.3%	3.7%	10.5%	2.7%	7.1%	3.2%	4.8%	2.8%	9.9%	2.9%	6.4%	1.7%	4.2%
3	1.8%	7.5%	1.7%	4.5%	2.2%	7.7%	1.4%	9.0%	1.6%	5.1%	2.5%	9.2%	1.7%	6.4%	3.4%	10.1%
3.5	1.7%	7.2%	2.3%	7.8%	1.9%	6.0%	2.7%	4.9%	1.3%	6.7%	1.8%	5.3%	3.5%	4.0%	2.5%	5.9%
4	1.3%	2.8%	2.4%	6.2%	1.5%	4.1%	0.5%	3.8%	1.6%	6.2%	1.1%	3.2%	1.2%	5.2%	0.8%	5.9%
4.5	2.7%	6.6%	1.5%	3.9%	1.1%	4.7%	1.4%	2.7%	1.6%	5.9%	0.0%	3.9%	2.3%	4.6%	1.7%	7.6%
5	2.2%	3.2%	0.8%	3.3%	0.7%	2.8%	0.8%	5.2%	0.0%	4.0%	0.4%	3.5%	0.0%	3.5%	0.8%	7.6%
5.5	1.9%	3.5%	1.2%	4.2%	0.9%	2.8%	1.1%	4.9%	0.8%	3.5%	1.1%	4.2%	0.6%	4.6%	0.8%	2.5%
6	1.9%	3.2%	0.6%	2.7%	0.6%	2.6%	0.8%	2.2%	0.5%	1.6%	2.1%	2.8%	1.2%	2.9%	0.8%	3.4%
6.5	0.5%	2.1%	0.6%	1.7%	0.6%	2.2%	0.5%	1.4%	0.0%	1.9%	0.0%	1.1%	0.6%	4.0%	0.8%	1.7%
7	1.0%	2.2%	0.8%	2.6%	1.3%	1.7%	0.5%	3.0%	0.3%	1.6%	1.1%	1.1%	0.6%	0.6%	0.8%	1.7%
7.5	0.9%	2.2%	0.5%	1.7%	0.9%	1.5%	0.8%	1.6%	0.0%	2.4%	0.4%	1.8%	0.6%	3.5%	0.0%	1.7%
8	0.8%	1.7%	0.5%	1.4%	0.9%	2.8%	0.8%	0.8%	0.3%	1.9%	0.7%	1.4%	0.0%	1.2%	0.0%	0.8%
8.5	0.3%	1.0%	1.1%	0.8%	0.4%	0.6%	0.3%	1.4%	0.5%	1.1%	0.0%	1.1%	0.0%	0.6%	1.7%	0.0%
9	1.0%	1.3%	0.2%	0.9%	0.6%	0.9%	0.3%	1.1%	0.3%	1.6%	0.0%	2.1%	0.0%	1.2%	0.8%	0.8%
9.5	0.3%	1.2%	1.2%	1.1%	0.0%	0.7%	1.4%	1.4%	0.3%	1.1%	0.0%	0.4%	0.6%	0.6%	0.0%	0.8%
10	1.0%	0.4%	0.5%	0.5%	0.2%	1.9%	0.5%	0.0%	0.3%	1.1%	0.0%	0.4%	0.0%	0.6%	0.0%	0.0%
10.5	0.3%	0.6%	0.3%	0.0%	0.4%	0.7%	0.3%	0.8%	0.3%	1.1%	0.4%	0.4%	0.0%	0.0%	0.8%	0.8%
11	0.4%	0.1%	0.5%	1.4%	0.4%	0.2%	0.3%	0.5%	0.3%	0.0%	0.4%	0.4%	0.6%	0.0%	0.0%	0.0%
11.5	0.4%	0.5%	0.6%	0.3%	0.7%	1.3%	0.0%	0.3%	0.5%	0.0%	0.4%	0.4%	0.0%	0.0%	0.8%	0.0%
12	0.3%	0.5%	0.6%	0.0%	0.9%	0.6%	0.3%	0.3%	0.3%	0.3%	0.0%	0.7%	0.6%	0.0%	0.0%	0.0%
12.5	0.5%	0.6%	0.8%	0.6%	0.7%	0.4%	0.5%	0.3%	0.3%	0.3%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%
13	0.4%	0.6%	0.3%	0.3%	0.2%	0.2%	0.3%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13.5	0.5%	0.3%	0.2%	0.2%	0.7%	0.4%	0.3%	0.3%	0.3%	0.0%	0.4%	0.7%	0.0%	0.0%	0.0%	0.0%
14	0.3%	0.1%	0.3%	0.3%	0.4%	0.2%	0.0%	0.3%	0.0%	0.5%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%
14.5	0.5%	0.3%	0.5%	0.2%	0.0%	0.2%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
15	0.5%	0.1%	0.8%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
15.5	0.1%	0.3%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.1%	0.3%	0.2%	0.2%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16.5	0.1%	0.0%	0.8%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.4%	0.0%	0.2%	0.0%	0.6%	0.0%	0.5%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17.5	0.0%	0.0%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%
18	0.4%	0.0%	0.5%	0.0%	0.2%	0.2%	0.3%	0.3%	0.5%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%
18.5	0.5%	0.4%	0.3%	0.2%	0.4%	0.0%	0.3%	0.3%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
19	0.4%	0.1%	0.0%	0.0%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.3%	0.1%	0.2%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%
>20	56.4%	0.3%	59.0%	0.0%	59.0%	0.2%	66.2%	0.0%	69.1%	0.0%	71.7%	0.4%	71.1%	0.0%	70.6%	0.0%

Run 1.5S, dcrest/h = 1.5, no roughness, location 9

Filename	15S9_00		15S9_01		15S9_02		15S9_03		15S9_04		15S9_05		15S9_06		15S9_07		15S9_08		15S9_09		15S9_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.067		0.07		0.079		0.096		0.079		0.081		0.11		0.083		0.077		0.123		0.15	
Nab	2755		2542		2578		2766		2580		2451		2697		2284		2100		2715		3020	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	17.3%	9.3%	15.1%	9.1%	14.3%	7.6%	13.8%	9.8%	17.1%	7.6%	15.0%	6.2%	11.5%	6.9%	14.9%	6.5%	14.2%	5.2%	13.6%	7.3%	7.5%	5.4%
0.5	34.1%	10.3%	30.6%	9.8%	22.9%	7.4%	21.5%	7.8%	21.4%	6.7%	21.4%	6.1%	17.8%	6.5%	20.1%	7.2%	20.6%	4.8%	17.9%	6.0%	16.7%	7.5%
1	17.9%	5.0%	18.7%	4.6%	24.7%	6.4%	22.3%	7.2%	18.6%	4.1%	18.0%	4.9%	22.2%	6.6%	15.6%	4.0%	16.5%	4.3%	14.5%	5.1%	15.3%	6.6%
1.5	13.3%	5.3%	13.3%	4.3%	11.1%	4.0%	11.3%	3.9%	12.4%	3.4%	12.0%	3.2%	11.3%	3.9%	13.1%	3.5%	12.6%	2.7%	10.8%	4.2%	11.7%	4.6%
2	6.4%	4.5%	6.8%	3.2%	7.7%	2.3%	9.8%	4.0%	11.2%	4.1%	10.5%	3.5%	10.6%	4.1%	8.5%	3.3%	8.2%	3.2%	7.9%	3.8%	8.5%	3.2%
2.5	3.3%	2.4%	5.3%	3.5%	5.9%	3.5%	4.5%	2.3%	4.6%	2.5%	3.9%	2.7%	4.6%	2.0%	5.7%	2.4%	6.6%	2.5%	5.6%	3.1%	6.1%	3.0%
3	2.4%	2.6%	2.6%	1.9%	2.8%	1.7%	3.2%	2.0%	3.2%	2.2%	3.8%	2.1%	3.3%	2.5%	5.0%	2.7%	3.2%	1.8%	4.4%	2.8%	5.2%	3.1%
3.5	1.4%	1.4%	2.4%	2.4%	2.0%	1.7%	3.1%	2.5%	2.2%	2.0%	3.1%	1.8%	3.7%	2.7%	3.0%	1.9%	3.2%	1.7%	4.0%	2.8%	4.3%	2.7%
4	1.1%	1.8%	1.0%	1.3%	1.9%	2.5%	1.4%	1.5%	1.8%	2.2%	2.9%	2.3%	2.1%	1.7%	2.7%	2.3%	2.3%	2.1%	2.7%	2.3%	3.4%	2.2%
4.5	0.5%	2.2%	0.9%	1.9%	1.0%	1.6%	1.7%	1.8%	0.9%	1.5%	1.6%	1.9%	2.4%	2.2%	1.5%	1.5%	2.7%	2.0%	2.2%	1.7%	2.5%	2.4%
5	0.6%	1.1%	0.7%	1.9%	0.9%	1.8%	0.8%	1.6%	1.4%	1.6%	1.5%	1.5%	1.5%	1.3%	1.1%	0.9%	1.0%	1.4%	2.0%	1.9%	1.8%	1.0%
5.5	0.5%	1.5%	0.3%	1.1%	1.3%	1.9%	1.1%	2.0%	0.9%	1.3%	0.9%	1.3%	1.1%	2.0%	1.1%	1.1%	1.1%	1.7%	1.8%	1.4%	2.1%	1.7%
6	0.3%	1.4%	0.5%	1.8%	0.5%	1.5%	0.9%	1.4%	0.6%	1.1%	1.0%	1.2%	0.9%	1.4%	1.2%	1.5%	1.0%	1.0%	1.7%	2.0%	1.7%	1.5%
6.5	0.1%	1.3%	0.0%	0.8%	0.3%	1.7%	0.6%	1.4%	0.7%	1.5%	0.8%	1.8%	0.8%	1.0%	1.0%	1.0%	0.8%	1.1%	1.3%	1.4%	1.5%	1.5%
7	0.1%	1.2%	0.4%	1.2%	0.3%	1.2%	0.6%	1.1%	0.3%	1.3%	0.4%	1.3%	0.9%	1.6%	0.7%	1.0%	0.8%	1.2%	0.9%	0.9%	1.1%	1.2%
7.5	0.1%	0.7%	0.2%	1.0%	0.4%	0.8%	0.4%	0.9%	0.3%	0.9%	0.5%	0.8%	0.7%	0.9%	0.4%	1.4%	0.3%	1.1%	1.0%	0.8%	1.3%	1.4%
8	0.2%	1.4%	0.2%	0.9%	0.3%	1.6%	0.4%	1.1%	0.3%	1.5%	0.4%	1.1%	0.7%	1.1%	0.6%	0.8%	0.9%	1.1%	0.8%	1.1%	0.6%	1.0%
8.5	0.0%	1.2%	0.1%	1.0%	0.3%	0.9%	0.1%	0.7%	0.4%	1.3%	0.7%	1.7%	0.6%	1.5%	0.6%	1.1%	0.7%	0.9%	0.8%	1.2%	0.8%	1.0%
9	0.1%	0.8%	0.1%	1.1%	0.1%	0.7%	0.1%	1.3%	0.2%	0.9%	0.4%	1.2%	0.4%	1.2%	0.3%	1.2%	0.4%	0.8%	0.4%	1.2%	0.8%	1.1%
9.5	0.1%	1.0%	0.2%	1.4%	0.2%	1.3%	0.2%	0.9%	0.1%	0.9%	0.1%	0.8%	0.4%	0.9%	0.3%	1.0%	0.3%	1.4%	0.4%	1.0%	0.6%	1.3%
10	0.0%	0.7%	0.0%	0.8%	0.2%	0.9%	0.2%	0.4%	0.2%	1.1%	0.2%	1.2%	0.1%	0.7%	0.3%	1.1%	0.3%	0.9%	0.4%	1.2%	0.9%	1.5%
10.5	0.0%	0.8%	0.1%	1.0%	0.0%	0.7%	0.3%	1.0%	0.3%	1.1%	0.2%	1.0%	0.2%	1.3%	0.4%	0.6%	0.1%	1.3%	0.2%	1.0%	0.7%	0.5%
11	0.0%	1.1%	0.1%	0.7%	0.1%	1.0%	0.0%	1.0%	0.1%	0.9%	0.1%	0.9%	0.1%	0.9%	0.5%	0.6%	0.1%	0.8%	0.4%	0.7%	0.6%	1.3%
11.5	0.0%	0.5%	0.0%	0.8%	0.0%	0.8%	0.2%	1.3%	0.1%	1.3%	0.0%	1.2%	0.3%	0.9%	0.2%	1.1%	0.4%	0.9%	0.6%	0.8%	0.4%	0.8%
12	0.0%	0.9%	0.0%	0.7%	0.0%	0.8%	0.0%	1.0%	0.1%	0.8%	0.1%	0.8%	0.1%	0.7%	0.2%	0.9%	0.1%	1.4%	0.2%	1.0%	0.5%	0.7%
12.5	0.0%	0.8%	0.0%	1.1%	0.0%	1.1%	0.0%	1.1%	0.1%	0.7%	0.2%	0.6%	0.2%	1.1%	0.1%	0.8%	0.1%	0.7%	0.4%	1.0%	0.2%	0.6%
13	0.0%	0.5%	0.0%	0.5%	0.2%	0.5%	0.1%	0.6%	0.0%	1.4%	0.1%	1.0%	0.1%	0.7%	0.1%	0.7%	0.2%	1.0%	0.3%	0.9%	0.2%	0.9%
13.5	0.0%	0.6%	0.0%	0.6%	0.0%	1.2%	0.1%	0.7%	0.1%	1.0%	0.0%	0.6%	0.1%	0.8%	0.1%	0.8%	0.1%	1.1%	0.3%	1.0%	0.3%	1.2%
14	0.0%	0.7%	0.0%	0.8%	0.0%	0.6%	0.1%	0.8%	0.0%	0.7%	0.0%	1.0%	0.3%	1.1%	0.1%	0.8%	0.0%	0.6%	0.2%	0.5%	0.2%	1.0%
14.5	0.0%	0.7%	0.0%	0.3%	0.0%	0.6%	0.1%	0.6%	0.0%	0.9%	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.0%	0.9%	0.1%	0.7%	0.2%	0.7%
15	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.0%	0.8%	0.0%	1.0%	0.0%	1.1%	0.1%	0.9%	0.1%	1.0%	0.0%	1.0%	0.3%	0.9%	0.3%	1.0%
15.5	0.0%	0.5%	0.0%	0.7%	0.0%	0.5%	0.0%	0.4%	0.0%	0.4%	0.0%	0.8%	0.0%	1.1%	0.0%	0.5%	0.0%	0.7%	0.1%	0.5%	0.1%	0.9%
16	0.0%	0.8%	0.0%	0.5%	0.0%	0.5%	0.1%	0.7%	0.0%	0.5%	0.0%	1.0%	0.1%	0.8%	0.1%	0.7%	0.1%	0.3%	0.3%	0.8%	0.1%	0.5%
16.5	0.0%	0.7%	0.0%	0.5%	0.0%	0.7%	0.0%	0.7%	0.0%	0.6%	0.0%	0.7%	0.1%	0.8%	0.0%	0.5%	0.0%	0.7%	0.1%	0.8%	0.1%	0.6%

17	0.0%	0.4%	0.0%	0.6%	0.1%	0.5%	0.1%	0.5%	0.0%	0.7%	0.0%	0.5%	0.0%	0.6%	0.1%	0.5%	0.1%	0.6%	0.1%	0.4%	0.2%	0.4%
17.5	0.0%	0.6%	0.0%	0.6%	0.0%	0.4%	0.1%	0.8%	0.0%	0.7%	0.0%	0.4%	0.0%	0.8%	0.0%	0.7%	0.0%	0.8%	0.1%	0.9%	0.2%	0.7%
18	0.0%	0.4%	0.0%	0.9%	0.0%	0.7%	0.1%	0.6%	0.0%	0.5%	0.0%	0.7%	0.0%	0.6%	0.1%	0.8%	0.0%	0.7%	0.1%	0.6%	0.3%	0.7%
18.5	0.0%	0.8%	0.0%	0.5%	0.0%	0.5%	0.0%	0.4%	0.0%	0.5%	0.0%	0.7%	0.0%	0.8%	0.0%	0.5%	0.0%	0.4%	0.0%	0.6%	0.1%	0.5%
19	0.0%	0.8%	0.0%	0.5%	0.0%	0.6%	0.0%	0.5%	0.1%	0.9%	0.0%	0.6%	0.1%	0.5%	0.0%	0.7%	0.1%	0.8%	0.1%	0.4%	0.1%	0.4%
19.5	0.0%	0.5%	0.0%	0.5%	0.0%	0.8%	0.0%	0.4%	0.1%	1.0%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.0%	1.0%	0.1%	0.5%	0.1%	0.5%
>20	0.0%	30.1%	0.0%	32.5%	0.2%	33.7%	0.3%	30.4%	0.1%	34.8%	0.2%	36.8%	0.3%	31.1%	0.2%	38.9%	0.3%	41.5%	0.7%	32.8%	1.2%	31.0%

Filename	15S9_11		15S9_12		15S9_13		15S9_14		15S9_15		15S9_16		15S9_17		15S9_18		15S9_19		15S9_20		15S9_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.197		0.219		0.294		0.373		0.446		0.539		0.62		0.678		0.748		0.794		0.833	
Nab	3425		3474		3647		3763		4123		3628		3456		3204		2910		2571		2192	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	7.1%	6.5%	6.5%	7.1%	5.7%	6.4%	5.0%	6.6%	5.1%	8.4%	3.3%	6.3%	3.2%	6.5%	2.5%	6.3%	1.9%	6.0%	1.9%	5.5%	2.1%	5.1%
0.5	15.4%	8.9%	14.2%	9.0%	12.1%	10.1%	10.2%	9.5%	10.9%	11.3%	8.3%	10.4%	7.0%	9.4%	6.1%	9.7%	5.1%	10.5%	5.7%	10.2%	4.2%	9.3%
1	14.2%	6.6%	13.3%	5.6%	12.3%	7.2%	10.6%	7.9%	10.4%	8.2%	8.7%	7.8%	6.9%	8.8%	7.1%	7.9%	5.8%	8.6%	5.2%	8.5%	4.3%	9.4%
1.5	11.9%	5.5%	10.9%	5.5%	9.5%	6.4%	9.5%	6.4%	8.0%	6.4%	4.7%	5.0%	4.1%	4.8%	4.1%	5.4%	3.8%	5.3%	3.6%	5.9%	3.4%	6.2%
2	7.6%	4.1%	7.8%	4.0%	7.2%	5.0%	4.9%	3.5%	6.8%	5.5%	6.1%	5.6%	4.9%	6.5%	4.7%	6.5%	4.7%	6.9%	4.5%	7.3%	3.7%	7.0%
2.5	6.4%	3.5%	6.4%	3.9%	6.3%	3.7%	5.6%	4.5%	5.6%	5.0%	5.3%	5.4%	5.5%	5.8%	4.8%	4.8%	3.7%	5.9%	3.7%	6.4%	3.9%	6.6%
3	4.8%	2.8%	5.4%	3.1%	3.2%	2.4%	4.2%	3.8%	3.0%	2.1%	2.6%	3.2%	2.9%	3.4%	2.7%	3.5%	2.7%	3.9%	2.6%	4.2%	2.1%	4.2%
3.5	3.4%	2.5%	4.3%	3.4%	4.5%	2.8%	4.6%	3.3%	4.3%	3.1%	4.6%	4.0%	3.8%	3.8%	3.3%	5.1%	3.4%	4.7%	3.3%	4.8%	3.2%	5.6%
4	3.4%	2.9%	3.3%	2.4%	3.9%	2.8%	1.9%	1.9%	3.7%	3.1%	3.5%	3.2%	3.0%	4.1%	3.1%	4.8%	3.8%	4.2%	2.7%	5.2%	2.7%	5.2%
4.5	2.4%	2.4%	3.6%	2.1%	3.3%	2.5%	3.2%	3.3%	2.9%	2.6%	3.5%	3.6%	3.1%	3.9%	2.8%	3.2%	3.4%	3.5%	2.5%	4.8%	1.8%	4.0%
5	1.8%	1.1%	1.8%	1.3%	2.5%	2.4%	2.8%	2.6%	2.8%	2.5%	2.1%	2.0%	2.1%	1.6%	1.3%	2.1%	1.3%	2.5%	1.6%	2.4%	1.2%	3.0%
5.5	1.8%	1.8%	2.0%	1.8%	2.3%	1.8%	2.6%	2.0%	2.4%	2.3%	2.7%	2.5%	2.6%	3.0%	2.3%	3.3%	2.5%	4.1%	2.8%	3.3%	2.2%	4.4%
6	1.9%	1.8%	1.7%	1.8%	1.4%	1.3%	2.4%	2.3%	1.9%	1.5%	2.2%	2.5%	2.2%	2.8%	2.8%	2.8%	2.7%	2.9%	2.1%	2.8%	1.8%	2.7%
6.5	1.8%	1.6%	1.5%	1.7%	1.7%	1.4%	1.6%	1.0%	2.1%	1.9%	1.5%	1.5%	1.5%	1.7%	1.5%	2.1%	1.2%	2.0%	1.4%	1.6%	1.2%	1.5%
7	1.5%	1.4%	1.7%	1.7%	1.6%	1.9%	2.4%	1.6%	1.8%	2.2%	2.0%	2.3%	2.4%	2.1%	2.1%	1.8%	1.9%	3.2%	1.9%	2.0%	2.0%	2.1%
7.5	1.4%	1.5%	1.1%	1.8%	1.7%	1.5%	1.7%	1.7%	1.4%	1.8%	2.1%	2.0%	1.7%	1.2%	2.2%	1.7%	1.7%	2.2%	1.8%	1.9%	1.8%	2.6%
8	1.2%	1.6%	1.6%	1.1%	1.2%	1.3%	1.8%	1.6%	1.5%	1.5%	1.5%	1.8%	1.5%	2.0%	1.8%	2.0%	2.0%	1.9%	1.2%	1.5%	1.6%	1.9%
8.5	1.4%	0.9%	1.1%	1.3%	1.5%	1.5%	0.9%	1.0%	1.8%	1.3%	1.2%	1.1%	1.4%	1.1%	1.0%	1.0%	1.2%	1.0%	1.3%	1.1%	1.0%	1.6%
9	0.8%	1.3%	1.0%	1.2%	1.2%	1.4%	1.1%	1.4%	1.2%	1.3%	1.2%	1.5%	1.5%	1.9%	1.8%	1.2%	1.9%	1.4%	1.1%	1.7%	1.2%	1.4%
9.5	1.1%	1.4%	0.7%	1.4%	0.9%	0.8%	1.4%	1.5%	0.6%	1.1%	1.4%	1.3%	1.4%	1.3%	1.6%	1.8%	1.2%	1.3%	1.6%	1.4%	1.0%	1.2%
10	0.6%	1.2%	0.5%	1.1%	1.3%	1.1%	1.4%	1.1%	0.9%	1.1%	1.0%	0.8%	1.3%	1.3%	1.1%	1.1%	0.9%	0.8%	0.8%	1.1%	1.0%	0.8%
10.5	0.6%	0.8%	0.6%	0.8%	1.1%	0.9%	1.3%	0.7%	0.8%	1.2%	1.4%	1.7%	1.4%	1.2%	1.2%	1.2%	1.0%	1.4%	1.1%	1.1%	1.6%	1.4%
11	0.5%	1.1%	0.6%	1.2%	0.8%	0.8%	0.7%	0.8%	1.0%	1.0%	1.3%	1.2%	1.1%	1.3%	1.1%	1.1%	1.0%	0.9%	1.2%	1.1%	1.2%	0.9%
11.5	0.7%	0.9%	0.4%	1.0%	0.7%	0.8%	0.8%	1.3%	0.9%	1.1%	1.3%	1.0%	1.6%	1.2%	0.9%	1.1%	1.3%	1.1%	1.2%	1.2%	1.3%	0.6%
12	0.5%	1.0%	0.6%	0.8%	0.6%	1.0%	0.8%	0.5%	0.6%	0.7%	0.7%	0.7%	0.6%	0.7%	0.6%	0.7%	0.8%	0.8%	0.5%	0.6%	0.5%	0.6%
12.5	0.3%	1.0%	0.7%	0.8%	0.4%	0.3%	0.9%	0.9%	0.5%	0.6%	1.0%	0.8%	0.9%	1.1%	1.2%	1.2%	1.1%	0.9%	0.8%	0.8%	0.9%	0.8%
13	0.4%	0.9%	0.6%	1.0%	0.4%	0.8%	0.7%	0.6%	0.9%	0.6%	1.3%	0.9%	1.2%	0.6%	0.7%	0.8%	1.2%	1.1%	1.0%	0.9%	1.0%	0.7%
13.5	0.4%	0.9%	0.4%	0.8%	0.7%	0.6%	0.7%	0.9%	0.9%	0.7%	0.7%	0.6%	0.4%	0.5%	0.6%	0.6%	0.6%	0.4%	0.5%	0.5%	0.6%	0.6%
14	0.4%	0.6%	0.3%	0.7%	0.7%	0.8%	0.7%	0.6%	0.5%	0.6%	0.7%	0.7%	0.8%	0.5%	0.8%	0.8%	0.7%	0.5%	0.9%	1.1%	0.7%	0.5%
14.5	0.4%	0.8%	0.4%	0.7%	0.5%	0.8%	0.8%	0.7%	0.6%	0.8%	0.7%	0.7%	1.0%	0.8%	1.1%	0.9%	0.9%	0.7%	0.7%	0.6%	0.6%	0.6%
15	0.4%	0.5%	0.2%	0.8%	0.5%	0.7%	0.6%	0.5%	0.7%	0.5%	0.7%	0.7%	1.2%	0.7%	0.5%	1.0%	0.9%	0.7%	0.9%	0.5%	0.5%	0.4%
15.5	0.2%	0.8%	0.1%	0.5%	0.3%	0.5%	0.4%	0.6%	0.4%	0.4%	0.5%	0.6%	0.5%	0.4%	0.7%	0.4%	0.6%	0.2%	0.3%	0.8%	0.7%	0.4%
16	0.1%	0.4%	0.3%	0.4%	0.6%	0.8%	0.6%	0.7%	0.4%	0.6%	0.8%	0.4%	0.7%	0.5%	0.7%	0.6%	0.9%	0.5%	1.1%	0.5%	0.9%	0.6%
16.5	0.1%	0.7%	0.2%	0.7%	0.5%	0.8%	0.5%	0.5%	0.6%	0.4%	0.7%	0.4%	0.9%	0.7%	0.4%	0.3%	0.7%	0.4%	0.9%	0.4%	0.9%	0.5%
17	0.1%	0.6%	0.3%	0.8%	0.4%	0.6%	0.5%	0.5%	0.6%	0.5%	0.3%	0.5%	0.4%	0.4%	0.7%	0.4%	0.5%	0.3%	0.7%	0.3%	0.3%	0.4%
17.5	0.2%	0.6%	0.3%	0.6%	0.3%	0.5%	0.4%	0.5%	0.6%	0.4%	0.5%	0.5%	0.7%	0.5%	0.9%	0.4%	0.7%	0.4%	0.8%	0.4%	0.7%	0.7%
18	0.3%	0.6%	0.2%	0.7%	0.2%	0.5%	0.5%	0.6%	0.5%	0.6%	0.6%	0.4%	0.8%	0.5%	0.7%	0.6%	0.7%	0.6%	0.7%	0.6%	1.1%	0.3%
18.5	0.2%	0.6%	0.1%	0.6%	0.2%	0.6%	0.5%	0.6%	0.5%	0.4%	0.4%	0.6%	0.5%	0.6%	0.8%	0.4%	0.6%	0.4%	0.8%	0.2%	0.7%	0.1%
19	0.1%	0.4%	0.3%	0.4%	0.2%	0.3%	0.4%	0.4%	0.3%	0.3%	0.3%	0.2%	0.3%	0.3%	0.4%	0.4%	0.4%	0.1%	0.6%	0.2%	0.4%	0.1%
19.5	0.1%	0.7%	0.3%	0.6%	0.3%	0.5%	0.4%	0.5%	0.5%	0.5%	0.6%	0.5%	0.5%	0.4%	0.7%	0.5%	0.9%	0.2%	0.6%	0.5%	0.8%	0.0%
>20	2.1%	24.9%	2.8%	23.9%	5.3%	21.5%	8.1%	18.8%	9.0%	13.9%	16.0%	13.3%	20.3%	10.1%	24.3%	8.3%	27.6%	5.7%	31.4%	4.1%	36.8%	4.0%

Filename	15S9_22		15S9_23		15S9_24		15S9_25		15S9_26		15S9_27		15S9_28		15S9_29		15S9_30		15S9_31	
y(mm)	73		77		81		85		89		93		103		113		123		133	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23		1.33	
C	0.864		0.87		0.911		0.902		0.934		0.946		0.969		0.979		0.988		0.994	
Nab	1821		1743		1226		1446		943		806		568		375		196		123	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	2.4%	4.2%	1.3%	4.3%	1.4%	4.7%	1.5%	4.4%	1.4%	3.7%	1.1%	3.8%	1.2%	3.5%	1.6%	2.7%	3.6%	4.1%	1.6%	7.3%
0.5	3.4%	9.2%	3.7%	8.4%	3.3%	6.9%	2.9%	9.6%	3.2%	8.1%	4.1%	6.9%	3.3%	9.7%	2.7%	9.6%	1.5%	10.2%	3.3%	15.4%
1	3.6%	8.6%	4.6%	8.5%	4.0%	9.5%	3.9%	9.1%	3.5%	8.1%	2.9%	10.4%	3.3%	11.1%	2.9%	10.1%	1.5%	6.1%	2.4%	12.2%
1.5	2.9%	5.2%	3.4%	8.4%	3.3%	8.0%	3.7%	9.3%	3.5%	8.4%	4.0%	7.7%	1.2%	6.3%	2.9%	8.0%	4.1%	7.1%	4.1%	10.6%
2	3.4%	6.9%	2.4%	4.6%	2.3%	4.0%	2.4%	5.5%	1.3%	5.0%	3.1%	8.2%	2.8%	9.3%	2.7%	8.8%	3.1%	7.1%	0.0%	7.3%
2.5	2.7%	6.3%	2.4%	6.7%	3.6%	8.0%	3.6%	7.1%	1.7%	7.4%	1.7%	7.4%	2.5%	8.3%	2.4%	8.8%	0.5%	11.2%	2.4%	8.9%
3	1.9%	4.7%	3.0%	6.4%	2.2%	6.1%	2.8%	6.7%	2.1%	5.9%	1.0%	3.7%	2.3%	5.1%	1.6%	5.3%	0.5%	8.2%	0.0%	3.3%
3.5	3.2%	7.5%	2.5%	6.3%	2.2%	5.1%	2.9%	5.4%	3.2%	6.7%	2.1%	7.1%	1.8%	6.0%	1.3%	7.2%	0.5%	6.6%	2.4%	5.7%
4	2.6%	4.9%	1.1%	4.0%	1.5%	3.5%	1.2%	3.3%	1.3%	3.4%	2.2%	5.7%	2.5%	5.1%	1.6%	5.3%	1.5%	5.1%	0.0%	4.1%
4.5	2.3%	5.1%	2.3%	5.1%	1.8%	5.0%	1.8%	4.1%	1.6%	5.1%	1.0%	5.7%	0.9%	6.0%	1.3%	4.3%	2.0%	4.1%	0.8%	4.9%
5	1.8%	2.4%	1.7%	4.5%	2.0%	5.0%	1.1%	4.5%	1.9%	5.3%	1.6%	5.0%	0.5%	3.9%	1.9%	3.2%	0.5%	4.1%	0.8%	2.4%
5.5	1.9%	3.8%	2.1%	3.7%	1.3%	3.8%	2.1%	3.8%	2.2%	3.9%	1.7%	4.0%	1.2%	5.3%	0.5%	4.5%	1.0%	3.6%	0.8%	0.8%
6	2.2%	3.6%	1.6%	2.6%	1.1%	4.0%	1.7%	2.8%	1.7%	2.9%	1.0%	1.7%	0.9%	3.2%	0.8%	2.9%	0.5%	1.0%	0.0%	3.3%
6.5	0.9%	2.1%	1.3%	2.0%	0.7%	1.8%	0.8%	1.5%	0.7%	2.1%	1.9%	2.5%	0.7%	1.9%	1.1%	1.9%	0.0%	2.6%	0.8%	1.6%
7	1.3%	2.1%	1.8%	2.1%	1.5%	2.6%	1.8%	2.8%	1.3%	2.7%	0.7%	2.5%	0.7%	2.6%	0.3%	4.3%	0.0%	3.1%	0.8%	1.6%
7.5	1.6%	2.5%	1.3%	2.2%	1.2%	2.8%	1.4%	2.1%	1.2%	2.7%	0.6%	2.4%	1.9%	1.4%	1.1%	2.1%	0.0%	2.6%	0.0%	1.6%
8	1.4%	2.1%	1.5%	2.0%	0.7%	1.9%	1.5%	2.1%	1.1%	1.4%	1.1%	1.5%	1.1%	1.8%	0.8%	1.1%	0.0%	1.5%	0.0%	2.4%
8.5	0.8%	1.2%	1.0%	1.7%	1.4%	1.1%	0.8%	1.3%	0.7%	1.2%	0.7%	1.7%	0.4%	1.2%	0.5%	0.8%	0.5%	0.5%	0.8%	0.0%
9	1.1%	2.1%	0.9%	1.3%	1.4%	1.6%	0.8%	1.2%	1.2%	1.7%	0.6%	1.4%	0.4%	1.1%	0.5%	1.6%	0.5%	2.6%	0.0%	0.8%
9.5	1.0%	1.4%	1.4%	1.4%	1.1%	1.6%	1.1%	1.5%	1.0%	1.2%	0.4%	0.4%	0.5%	0.9%	0.5%	0.8%	0.0%	1.0%	0.0%	0.0%
10	0.4%	0.8%	1.1%	1.3%	0.5%	1.5%	0.9%	1.5%	0.6%	2.3%	0.5%	1.2%	0.5%	0.9%	0.3%	1.1%	0.5%	2.0%	0.0%	0.0%
10.5	1.3%	1.0%	1.2%	1.3%	0.5%	0.7%	1.5%	1.2%	0.8%	1.2%	0.2%	0.9%	0.2%	0.5%	0.8%	1.1%	0.0%	0.0%	1.6%	0.0%
11	1.0%	1.0%	0.6%	0.6%	0.6%	0.9%	0.6%	0.6%	0.2%	0.8%	0.6%	1.1%	0.5%	1.2%	0.3%	0.5%	0.5%	0.5%	0.0%	0.0%
11.5	0.9%	1.3%	0.8%	0.9%	0.4%	0.9%	0.6%	0.9%	1.2%	1.7%	0.5%	0.7%	0.7%	0.9%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%
12	0.5%	0.3%	0.7%	0.9%	0.8%	0.8%	0.8%	0.9%	0.6%	0.6%	0.5%	0.6%	0.2%	0.4%	0.3%	0.3%	0.5%	1.0%	0.8%	0.8%
12.5	0.7%	0.5%	1.1%	0.7%	0.9%	0.6%	1.1%	0.8%	0.3%	1.6%	0.4%	0.4%	0.0%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
13	1.1%	0.7%	1.1%	0.4%	0.3%	0.7%	0.5%	0.1%	0.4%	0.3%	0.9%	0.6%	0.5%	0.4%	1.3%	0.8%	0.5%	0.5%	0.0%	0.8%
13.5	0.3%	0.3%	0.8%	0.7%	0.7%	0.9%	0.7%	0.7%	0.5%	0.6%	0.4%	0.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.5%	0.8%	0.8%
14	1.0%	0.9%	0.7%	0.3%	0.6%	0.6%	0.6%	1.0%	0.4%	0.4%	0.2%	0.9%	0.5%	0.5%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%
14.5	1.0%	0.6%	0.9%	0.5%	0.4%	0.4%	0.5%	0.3%	0.3%	0.4%	0.4%	0.5%	0.0%	0.2%	0.8%	0.5%	0.0%	0.5%	0.0%	0.0%
15	1.0%	0.6%	0.7%	0.4%	0.2%	0.4%	0.6%	0.3%	0.6%	0.5%	0.6%	0.1%	0.2%	0.0%	0.8%	0.0%	0.5%	0.5%	0.0%	0.0%
15.5	0.6%	0.3%	0.6%	0.5%	0.5%	0.3%	0.4%	0.3%	0.1%	0.2%	0.0%	0.1%	0.5%	0.2%	0.0%	0.3%	0.5%	0.0%	0.0%	0.0%
16	0.8%	0.4%	0.7%	0.2%	0.7%	0.3%	0.5%	0.1%	0.3%	0.1%	0.4%	0.4%	0.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
16.5	0.4%	0.4%	0.5%	0.3%	0.4%	0.3%	0.6%	0.2%	0.6%	0.1%	0.2%	0.2%	0.7%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%
17	0.3%	0.4%	0.5%	0.6%	0.4%	0.2%	0.5%	0.3%	0.5%	0.1%	0.5%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.8%
17.5	0.5%	0.3%	0.3%	0.2%	0.0%	0.5%	0.1%	0.0%	0.7%	0.0%	0.0%	0.1%	0.5%	0.2%	0.3%	0.0%	0.5%	0.5%	0.0%	0.0%
18	0.8%	0.2%	0.9%	0.3%	0.4%	0.3%	1.0%	0.1%	0.5%	0.2%	0.9%	0.1%	0.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%
18.5	0.9%	0.2%	1.0%	0.2%	0.5%	0.3%	0.8%	0.1%	0.3%	0.2%	0.6%	0.2%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
19	0.2%	0.2%	0.7%	0.3%	0.3%	0.0%	0.4%	0.1%	0.3%	0.2%	0.1%	0.0%	0.5%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
19.5	0.5%	0.3%	0.5%	0.2%	0.7%	0.2%	0.6%	0.4%	0.5%	0.1%	0.6%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>20	43.1%	3.2%	43.4%	2.9%	51.7%	2.0%	47.0%	1.7%	54.0%	1.4%	57.6%	1.4%	62.5%	0.4%	64.3%	0.0%	72.4%	1.0%	74.0%	1.6%

Run 1.5A, dcrest/h = 1.5, Configuration A, location 9

Filename	15S9_00		15S9_01		15S9_02		15S9_03		15S9_04		15S9_05		15S9_06		15S9_07		15S9_08		15S9_09		15S9_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.039		0.042		0.042		0.044		0.045		0.041		0.051		0.049		0.067		0.112		0.14	
Nab	1483		1477		1390		1440		1385		1233		1423		1255		1504		2187		2175	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)

0	15.4%	5.9%	14.4%	5.4%	14.6%	4.7%	14.0%	5.5%	12.5%	5.3%	13.6%	4.5%	16.7%	6.2%	15.0%	3.3%	13.4%	5.1%	8.9%	4.9%	5.9%	5.4%
0.5	30.3%	6.3%	29.2%	7.4%	22.9%	6.0%	21.4%	4.7%	22.3%	5.7%	20.2%	4.1%	17.9%	4.5%	19.5%	3.6%	16.6%	5.1%	15.2%	8.4%	12.7%	7.6%
1	19.7%	3.0%	17.9%	4.4%	19.9%	3.6%	24.9%	3.9%	18.3%	3.2%	18.4%	4.1%	16.4%	3.9%	15.1%	4.1%	14.4%	4.7%	15.3%	5.2%	11.9%	5.3%
1.5	13.2%	4.5%	15.3%	3.9%	14.9%	4.0%	10.8%	2.7%	16.0%	3.8%	13.6%	2.8%	15.0%	3.5%	11.0%	2.1%	11.2%	3.7%	10.2%	3.2%	10.3%	4.6%
2	8.4%	3.0%	8.4%	2.2%	8.3%	2.4%	10.2%	2.1%	6.9%	2.9%	8.6%	1.7%	6.5%	1.8%	7.8%	2.2%	8.4%	1.7%	7.5%	3.1%	9.0%	4.3%
2.5	4.0%	2.0%	3.7%	1.6%	4.4%	1.7%	4.2%	2.1%	6.1%	1.7%	5.7%	2.4%	5.8%	2.3%	5.5%	2.7%	5.7%	3.1%	6.7%	2.9%	6.9%	3.3%
3	2.8%	2.4%	2.8%	2.4%	4.2%	1.9%	3.0%	1.4%	5.3%	1.9%	4.1%	1.8%	4.8%	2.0%	5.5%	1.4%	4.3%	1.9%	3.3%	1.5%	6.0%	2.7%
3.5	1.4%	1.3%	2.1%	1.2%	2.2%	1.4%	3.0%	2.2%	2.3%	1.2%	3.2%	1.3%	3.1%	1.5%	3.3%	1.4%	4.3%	1.6%	4.5%	2.6%	3.8%	2.3%
4	1.1%	1.1%	2.1%	1.4%	1.9%	1.1%	1.7%	1.3%	1.7%	1.4%	2.6%	1.1%	2.4%	1.1%	2.8%	1.7%	2.4%	1.6%	4.0%	2.4%	3.7%	2.3%
4.5	0.8%	1.4%	0.8%	1.2%	0.6%	1.9%	2.1%	1.6%	1.0%	1.4%	1.9%	1.1%	1.7%	1.0%	2.6%	1.5%	3.4%	1.8%	3.1%	2.2%	3.2%	1.7%
5	0.3%	1.1%	0.7%	1.2%	1.0%	1.4%	0.3%	0.9%	1.7%	0.8%	1.0%	1.2%	1.5%	2.3%	1.8%	1.8%	2.2%	1.1%	2.0%	1.9%	3.0%	1.7%
5.5	0.7%	1.1%	0.5%	1.2%	1.0%	1.4%	0.7%	1.4%	1.3%	1.2%	0.9%	1.2%	0.9%	1.0%	1.4%	1.2%	1.7%	1.4%	2.0%	1.7%	2.6%	1.4%
6	0.3%	1.1%	0.3%	0.9%	1.2%	1.4%	0.8%	1.0%	0.9%	1.3%	0.8%	1.1%	1.1%	1.6%	0.8%	1.2%	1.3%	1.0%	1.6%	1.3%	1.9%	1.8%
6.5	0.3%	0.7%	0.2%	0.9%	0.6%	0.9%	0.3%	1.0%	1.0%	1.2%	0.6%	0.6%	1.7%	1.5%	1.0%	0.9%	1.5%	0.7%	2.1%	1.7%	1.7%	1.1%
7	0.2%	0.8%	0.5%	1.1%	0.5%	0.6%	0.6%	1.2%	0.6%	0.7%	0.9%	0.6%	0.7%	1.4%	1.0%	1.4%	1.5%	1.2%	1.2%	1.4%	1.4%	1.2%
7.5	0.1%	0.9%	0.3%	0.2%	0.5%	0.7%	0.3%	0.5%	0.1%	0.9%	0.9%	1.2%	0.7%	0.8%	0.4%	0.9%	1.0%	0.9%	1.3%	1.5%	1.7%	1.5%
8	0.4%	1.3%	0.1%	0.7%	0.3%	1.1%	0.4%	1.6%	0.4%	0.9%	0.8%	0.6%	0.6%	0.7%	0.5%	0.6%	1.3%	0.9%	1.5%	1.0%	1.4%	1.0%
8.5	0.1%	1.6%	0.1%	0.9%	0.1%	1.0%	0.1%	0.6%	0.1%	1.2%	0.8%	0.8%	0.1%	1.1%	0.6%	0.7%	0.4%	1.3%	0.9%	1.0%	1.2%	0.9%
9	0.1%	0.7%	0.0%	0.7%	0.0%	0.8%	0.3%	1.0%	0.1%	0.9%	0.2%	0.9%	0.4%	0.8%	0.7%	0.4%	0.7%	0.8%	1.0%	1.3%	1.0%	0.5%
9.5	0.0%	1.0%	0.1%	1.0%	0.1%	0.9%	0.3%	0.8%	0.2%	0.6%	0.1%	1.0%	0.5%	0.8%	0.5%	0.9%	0.8%	1.2%	0.4%	0.7%	0.7%	1.1%
10	0.0%	0.7%	0.0%	0.7%	0.1%	0.6%	0.1%	1.3%	0.4%	0.6%	0.0%	0.6%	0.1%	0.8%	0.4%	0.8%	0.3%	0.9%	0.9%	1.1%	0.6%	0.7%
10.5	0.0%	0.8%	0.1%	0.4%	0.0%	0.3%	0.0%	0.8%	0.0%	0.6%	0.2%	0.9%	0.3%	0.6%	0.3%	0.5%	0.4%	0.6%	0.9%	1.1%	0.8%	0.9%
11	0.0%	0.8%	0.0%	0.4%	0.1%	0.7%	0.0%	0.7%	0.1%	1.0%	0.2%	0.4%	0.2%	0.2%	0.5%	0.5%	0.3%	0.9%	0.5%	0.6%	0.8%	0.8%
11.5	0.0%	0.7%	0.1%	0.4%	0.0%	0.9%	0.0%	1.0%	0.1%	1.1%	0.1%	0.6%	0.1%	1.1%	0.1%	0.8%	0.3%	0.8%	0.5%	1.4%	0.6%	0.9%
12	0.0%	0.6%	0.0%	0.6%	0.1%	0.4%	0.2%	0.5%	0.1%	0.4%	0.2%	1.0%	0.0%	0.5%	0.2%	0.8%	0.1%	0.3%	0.2%	0.6%	0.4%	0.6%
12.5	0.0%	0.9%	0.1%	1.2%	0.1%	0.5%	0.1%	0.8%	0.0%	0.5%	0.1%	1.1%	0.1%	0.6%	0.1%	0.6%	0.2%	0.5%	0.4%	0.4%	0.4%	1.1%
13	0.0%	0.7%	0.0%	0.5%	0.0%	0.5%	0.0%	0.5%	0.1%	0.5%	0.1%	0.6%	0.1%	0.5%	0.2%	0.5%	0.0%	0.9%	0.2%	0.6%	0.5%	1.0%
13.5	0.0%	0.4%	0.0%	0.3%	0.1%	0.7%	0.0%	0.1%	0.0%	0.7%	0.0%	0.5%	0.1%	0.8%	0.0%	0.6%	0.1%	0.5%	0.4%	0.7%	0.4%	0.8%
14	0.0%	0.5%	0.0%	0.3%	0.0%	0.2%	0.0%	0.8%	0.0%	0.4%	0.0%	0.7%	0.1%	0.7%	0.2%	0.6%	0.3%	0.6%	0.5%	0.8%	0.3%	0.5%
14.5	0.0%	0.6%	0.0%	1.2%	0.0%	0.6%	0.0%	0.6%	0.0%	0.6%	0.0%	0.6%	0.1%	0.8%	0.1%	0.6%	0.1%	0.9%	0.1%	0.7%	0.4%	0.9%
15	0.0%	0.8%	0.0%	0.7%	0.1%	0.7%	0.0%	0.8%	0.0%	0.6%	0.1%	0.4%	0.2%	0.3%	0.2%	0.6%	0.1%	0.6%	0.4%	0.6%	0.2%	0.6%
15.5	0.1%	0.4%	0.0%	0.4%	0.0%	0.3%	0.1%	0.8%	0.1%	0.5%	0.1%	0.5%	0.0%	0.8%	0.0%	0.8%	0.0%	0.6%	0.2%	0.2%	0.5%	0.6%
16	0.0%	0.9%	0.1%	0.8%	0.0%	0.6%	0.1%	0.9%	0.0%	0.7%	0.0%	0.8%	0.0%	0.4%	0.0%	0.1%	0.1%	0.4%	0.3%	0.6%	0.3%	0.5%
16.5	0.0%	0.3%	0.0%	0.7%	0.1%	0.6%	0.1%	0.8%	0.0%	0.4%	0.0%	0.8%	0.0%	0.6%	0.1%	0.7%	0.1%	0.3%	0.2%	0.5%	0.1%	0.6%
17	0.0%	0.7%	0.0%	0.8%	0.0%	0.4%	0.1%	0.6%	0.0%	0.6%	0.1%	0.6%	0.1%	0.8%	0.0%	1.0%	0.0%	0.5%	0.1%	0.8%	0.1%	0.5%
17.5	0.0%	0.7%	0.0%	0.2%	0.0%	0.4%	0.0%	0.6%	0.0%	0.4%	0.0%	0.7%	0.0%	0.6%	0.1%	0.5%	0.1%	0.5%	0.1%	0.3%	0.1%	0.5%
18	0.1%	0.4%	0.0%	0.5%	0.0%	0.3%	0.0%	0.7%	0.1%	0.4%	0.0%	0.6%	0.0%	0.4%	0.1%	0.8%	0.1%	0.5%	0.2%	0.3%	0.3%	0.7%
18.5	0.0%	0.7%	0.1%	0.7%	0.1%	0.6%	0.0%	0.6%	0.0%	0.7%	0.0%	0.2%	0.1%	0.7%	0.0%	0.4%	0.0%	0.7%	0.2%	0.7%	0.2%	0.6%
19	0.0%	0.4%	0.0%	0.9%	0.0%	0.4%	0.0%	0.4%	0.1%	0.4%	0.0%	0.5%	0.0%	0.4%	0.2%	0.3%	0.1%	0.5%	0.0%	0.2%	0.2%	0.6%
19.5	0.0%	0.5%	0.0%	0.3%	0.0%	0.3%	0.0%	0.1%	0.0%	0.1%	0.0%	0.6%	0.0%	0.4%	0.0%	0.4%	0.2%	1.1%	0.2%	0.5%	0.2%	0.6%
>20	0.0%	46.2%	0.1%	47.9%	0.1%	50.6%	0.0%	49.2%	0.1%	50.5%	0.1%	53.0%	0.0%	48.3%	0.5%	54.3%	0.6%	46.6%	1.3%	37.3%	2.7%	34.2%

Filename	15S9_11		15S9_12		15S9_13		15S9_14		15S9_15		15S9_16		15S9_17		15S9_18		15S9_19		15S9_20		15S9_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.226		0.336		0.442		0.552		0.649		0.732		0.803		0.842		0.875		0.898		0.929	
Nab	2742		3216		3278		3282		2916		2681		2267		1919		1674		1367		1000	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	5.6%	6.6%	4.6%	6.5%	3.8%	7.3%	3.3%	6.2%	2.7%	6.1%	1.9%	5.9%	2.1%	4.6%	1.7%	4.8%	1.4%	4.2%	1.2%	3.5%	1.1%	3.2%
0.5	12.0%	8.0%	10.0%	9.4%	8.0%	8.8%	7.3%	9.7%	6.8%	9.1%	5.6%	9.6%	4.8%	9.3%	2.9%	9.0%	3.3%	8.4%	2.8%	7.0%	2.8%	7.2%
1	11.2%	7.1%	9.8%	6.7%	7.7%	7.6%	7.6%	7.9%	5.9%	8.0%	5.4%	8.0%	4.4%	8.4%	3.5%	7.3%	2.9%	7.3%	1.9%	5.5%	2.4%	7.9%
1.5	8.5%	5.3%	8.0%	6.1%	4.6%	4.0%	6.0%	6.8%	3.6%	4.4%	3.6%	4.7%	2.8%	5.6%	2.4%	5.2%	1.8%	5.4%	2.6%	8.6%	1.3%	5.1%
2	7.4%	4.0%	4.9%	3.2%	5.6%	5.7%	3.6%	4.1%	5.3%	6.3%	4.3%	6.2%	3.3%	6.8%	3.0%	6.8%	3.6%	8.4%	2.6%	6.7%	1.8%	8.8%
2.5	5.9%	3.5%	5.8%	4.3%	5.7%	4.3%	4.6%	4.8%	4.1%	5.1%	3.5%	5.7%	3.7%	6.4%	3.0%	6.3%	2.4%	6.6%	1.5%	4.0%	1.9%	5.1%
3	4.0%	1.8%	5.7%	4.1%	3.3%	3.0%	4.0%	4.7%	2.4%	2.7%	2.3%	3.6%	2.3%	3.7%	1.6%	4.3%	1.3%	4.6%	1.9%	7.0%	1.6%	4.5%
3.5	4.5%	2.8%	4.5%	3.6%	3.8%	3.5%	4.5%	3.6%	3.5%	4.6%	3.6%	5.0%	2.9%	5.8%	2.6%	5.5%	2.6%	6.8%	1.8%	7.1%	2.1%	6.4%
4	4.2%	2.7%	2.4%	2.0%	3.7%	3.4%	2.1%	2.6%	2.9%	4.4%	2.9%	3.8%	2.1%	4.8%	3.5%	5.1%	1.7%	4.9%	1.4%	3.5%	1.6%	7.0%
4.5	3.7%	2.2%	3.3%	2.7%	3.3%	3.1%	3.1%	2.8%	2.6%	3.7%	2.3%	3.5%	2.2%	4.2%	1.9%	4.6%	2.1%	4.5%	1.7%	6.2%	1.0%	6.2%
5	3.2%	2.0%	3.0%	2.5%	2.4%	2.1%	2.6%	3.0%	2.4%	2.0%	2.1%	2.1%	2.0%	2.2%	1.5%	2.3%	1.6%	2.6%	1.5%	5.4%	1.0%	3.1%
5.5	2.4%	1.6%	2.2%	2.1%	3.1%	2.9%	2.7%	2.7%	2.2%	2.7%	2.8%	3.5%	1.7%	2.8%	2.2%	3.9%	2.0%	5.1%	0.8%	2.5%	2.1%	3.7%
6	1.4%	1.3%	2.5%	2.1%	2.6%	2.3%	2.5%	2.6%	2.7%	2.1%	2.1%	3.8%	1.9%	3.4%	1.6%	3.1%	2.0%	3.2%	1.8%	2.9%	1.1%	4.5%
6.5	2.0%	1.7%	1.9%	1.0%	2.4%	1.2%	1.8%	1.6%	1.4%	1.7%	1.2%	2.0%	1.3%	2.0%	1.1%	1.6%	1.0%	1.5%	1.3%	3.1%	0.8%	2.4%
7	1.7%	1.8%	2.4%	1.7%	2.0%	1.5%	2.2%	2.1%	2.1%	2.4%	2.3%	2.0%	1.8%	2.0%	1.8%	2.7%	2.0%	2.4%	0.9%	2.0%	1.6%	3.7%
7.5	1.5%	1.5%	1.6%	1.6%	1.9%	1.8%	2.5%	1.4%	1.4%	1.3%	1.4%	2.0%	1.5%	2.8%	1.5%	2.1%	1.6%	2.3%	1.4%	2.6%	0.5%	1.6%
8	1.6%	1.0%	1.9%	1.0%	1.9%	1.5%	1.9%	1.6%	2.2%	1.9%	1.8%	1.9%	1.6%	2.4%	1.1%	2.8%	1.4%	1.9%	1.2%	2.0%	1.0%	2.5%
8.5	1.4%	1.4%	1.0%	0.8%	1.3%	1.0%	1.0%	0.6%	1.1%	1.1%	1.0%	1.0%	0.7%	1.3%	1.1%	1.5%	0.9%	1.3%	0.8%	1.2%	0.5%	1.3%
9	0.7%	1.2%	1.6%	1.2%	1.8%	1.2%	1.6%	1.2%	1.4%	1.6%	1.8%	1.7%	1.5%	1.5%	1.6%	2.0%	1.2%	2.0%	1.2%	2.0%	0.8%	2.0%
9.5	0.7%	0.4%	1.4%	1.2%	1.7%	1.2%	1.0%	1.2%	1.5%	1.8%	1.2%	1.9%	1.5%	1.3%	1.8%	1.5%	1.7%	1.9%	0.9%	1.5%	0.6%	1.4%
10	1.1%	0.9%	1.0%	1.1%	0.8%	0.9%	1.4%	1.2%	1.2%	0.9%	1.1%	0.9%	1.1%	0.8%	1.1%	1.4%	0.7%	1.0%	1.1%	1.4%	0.4%	0.8%
10.5	1.0%	0.9%	1.2%	0.9%	1.3%	1.2%	1.2%	1.0%	1.5%	1.5%	1.6%	1.5%	1.4%	1.3%	1.1%	1.0%	1.3%	0.9%	1.4%	1.2%	1.0%	1.6%
11	0.8%	0.5%	0.7%	0.8%	1.2%	1.3%	0.6%	0.7%	1.2%	1.2%	0.9%	1.1%	1.0%	1.5%	1.3%	1.4%	1.1%	1.5%	0.7%	0.8%	1.1%	0.5%
11.5	0.9%	0.8%	0.6%	1.1%	1.0%	0.9%	1.2%	0.9%	1.3%	1.2%	1.2%	0.9%	1.1%	0.9%	1.1%	1.2%	1.3%	1.8%	0.8%	1.5%	0.6%	1.1%
12	0.9%	1.2%	0.8%	0.7%	0.5%	0.6%	1.0%	1.4%	0.7%	0.9%	0.7%	0.5%	0.8%	0.3%	0.6%	0.4%	0.8%	0.3%	1.0%	1.3%	0.4%	0.7%
12.5	0.3%	0.7%	0.9%	0.9%	1.5%	0.9%	1.0%	0.8%	1.0%	1.0%	1.4%	1.0%	1.1%	0.9%	0.8%	0.8%	0.9%	0.7%	0.4%	1.0%	0.7%	0.7%
13	0.5%	0.9%	0.5%	0.6%	1.3%	0.9%	0.6%	0.7%	0.9%	0.8%	1.2%	1.0%	1.1%	1.0%	1.1%	0.8%	0.9%	0.9%	0.8%	1.2%	0.8%	0.5%
13.5	0.8%	0.7%	0.7%	0.9%	0.5%	0.5%	0.7%	0.8%	0.6%	0.9%	0.9%	0.5%	0.6%	0.6%	0.6%	0.7%	0.8%	0.6%	0.6%	0.7%	0.6%	0.2%
14	0.7%	0.5%	0.8%	0.7%	0.7%	0.9%	0.9%	0.7%	0.8%	0.9%	1.2%	1.0%	0.8%	0.8%	0.9%	0.8%	0.8%	0.6%	0.3%	0.1%	0.6%	0.9%
14.5	0.7%	0.4%	0.6%	0.9%	1.1%	0.8%	0.7%	0.9%	1.1%	0.8%	0.8%	0.8%	0.8%	0.7%	0.8%	0.8%	0.8%	0.5%	0.6%	0.3%	0.5%	0.8%
15	0.6%	0.8%	0.5%	0.4%	0.9%	0.8%	0.7%	0.6%	1.1%	0.5%	0.7%	0.7%	0.8%	0.8%	0.9%	0.8%	0.7%	0.7%	0.5%	0.4%	0.3%	0.7%
15.5	0.1%	0.7%	0.4%	0.5%	0.5%	0.5%	0.7%	0.3%	0.7%	0.5%	0.4%	0.3%	0.7%	0.3%	0.5%	0.6%	0.1%	0.2%	0.4%	0.3%	0.6%	0.7%
16	0.4%	0.5%	0.7%	0.5%	0.7%	0.7%	0.9%	0.6%	1.0%	0.5%	0.7%	0.5%	1.0%	0.4%	0.9%	0.3%	0.8%	0.4%	1.0%	0.3%	0.4%	0.4%
16.5	0.3%	0.5%	0.4%	0.7%	0.7%	0.7%	0.8%	0.7%	0.8%	0.5%	0.7%	0.6%	1.1%	0.7%	0.8%	0.4%	0.5%	0.3%	0.8%	0.4%	0.7%	0.1%
17	0.5%	0.4%	0.4%	0.7%	0.3%	0.5%	0.6%	0.7%	0.8%	0.4%	0.7%	0.3%	0.4%	0.3%	0.7%	0.5%	0.5%	0.2%	0.3%	0.1%	0.2%	0.4%
17.5	0.5%	0.9%	0.4%	0.5%	0.5%	0.5%	0.3%	0.5%	0.6%	0.7%	0.8%	0.7%	0.7%	0.9%	0.5%	0.4%	0.8%	0.5%	0.4%	0.4%	0.2%	0.0%
18	0.3%	0.6%	0.4%	0.4%	0.7%	0.6%	0.7%	0.6%	0.6%	0.7%	0.9%	0.5%	0.6%	0.4%	0.5%	0.4%	0.8%	0.2%	0.4%	0.1%	0.4%	0.1%
18.5	0.2%	0.5%	0.4%	0.6%	0.5%	0.4%	0.5%	0.4%	0.7%	0.5%	0.7%	0.4%	0.8%	0.2%	0.6%	0.4%	0.8%	0.4%	0.6%	0.4%	0.7%	0.3%
19	0.1%	0.3%	0.6%	0.5%	0.3%	0.2%	0.5%	0.5%	0.4%	0.3%	0.6%	0.3%	0.4%	0.3%	0.8%	0.2%	0.2%	0.1%	1.1%	0.3%	0.4%	0.2%
19.5	0.1%	0.5%	0.3%	0.3%	0.5%	0.4%	0.6%	0.5%	0.5%	0.5%	0.7%	0.6%	0.4%	0.3%	0.9%	0.4%	0.5%	0.2%	0.3%	0.3%	0.6%	0.0%
>20	5.3%	28.6%	9.2%	22.3%	13.8%	18.7%	18.6%	14.1%	24.3%	12.0%	29.2%	7.7%	37.2%	5.2%	41.7%	4.0%	46.4%	2.9%	55.2%	2.8%	61.0%	1.6%

Filename	15S9_22		15S9_23		15S9_24		15S9_25		15S9_26		15S9_27		15S9_28	
y(mm)	73		77		81		85		89		93		103	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03	
C	0.942		0.95		0.959		0.974		0.982		0.986		0.988	
Nab	808		760		650		402		338		265		193	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	0.9%	3.6%	1.4%	3.9%	1.2%	2.8%	0.7%	3.2%	0.6%	4.7%	1.9%	4.9%	1.6%	3.6%
0.5	2.1%	6.9%	2.1%	6.1%	2.0%	9.2%	3.0%	8.5%	1.8%	8.6%	3.4%	6.8%	2.1%	6.7%
1	2.1%	7.3%	0.8%	5.8%	2.2%	8.0%	3.0%	8.2%	0.9%	8.6%	1.1%	10.6%	1.6%	9.8%
1.5	2.0%	8.8%	2.0%	8.3%	2.3%	5.1%	0.7%	3.5%	0.3%	4.4%	1.1%	8.3%	0.5%	6.2%
2	1.6%	5.0%	1.8%	10.3%	1.7%	8.5%	0.5%	9.0%	1.5%	10.9%	0.0%	11.3%	3.6%	4.7%
2.5	1.7%	5.4%	1.6%	6.4%	2.2%	7.2%	0.7%	9.2%	1.8%	8.6%	4.9%	8.3%	1.0%	10.4%
3	1.2%	5.7%	2.6%	7.0%	1.7%	5.5%	0.2%	4.5%	0.6%	5.6%	0.0%	6.8%	0.5%	6.2%
3.5	1.4%	7.3%	1.4%	7.4%	1.7%	6.9%	0.2%	6.0%	1.8%	7.4%	1.9%	5.3%	1.0%	9.3%
4	1.1%	3.7%	0.4%	3.8%	2.6%	6.8%	1.7%	5.5%	1.8%	5.9%	2.3%	5.7%	0.5%	6.2%
4.5	0.9%	5.3%	1.2%	6.1%	1.4%	5.5%	1.7%	7.7%	2.1%	6.5%	1.5%	4.9%	0.0%	3.6%
5	1.4%	4.6%	1.1%	4.5%	0.5%	2.6%	0.2%	3.2%	2.1%	4.4%	0.0%	4.2%	0.0%	5.2%
5.5	1.4%	5.0%	0.8%	3.0%	1.1%	5.4%	0.2%	4.0%	0.9%	5.3%	0.8%	4.9%	1.0%	2.6%
6	0.9%	4.5%	0.9%	3.2%	0.9%	4.6%	0.5%	4.7%	0.9%	3.0%	0.4%	1.5%	0.5%	4.1%
6.5	0.6%	2.6%	1.7%	3.2%	0.5%	3.1%	1.0%	1.7%	0.9%	1.2%	0.8%	4.9%	0.0%	2.1%
7	1.1%	3.1%	0.8%	1.3%	0.8%	2.8%	0.5%	3.0%	0.0%	3.6%	0.4%	2.6%	0.0%	2.1%
7.5	1.0%	1.7%	1.2%	1.7%	0.8%	2.6%	1.5%	2.7%	0.6%	2.4%	0.4%	1.1%	1.6%	2.6%
8	1.1%	2.2%	0.3%	2.4%	0.8%	1.8%	0.7%	2.7%	0.9%	1.8%	0.8%	0.8%	0.0%	1.0%

8.5	0.7%	1.4%	0.8%	1.3%	0.6%	0.8%	0.2%	0.7%	0.6%	0.6%	0.4%	1.9%	1.0%	1.0%
9	0.5%	2.1%	1.1%	1.8%	1.1%	1.2%	0.7%	2.0%	0.3%	0.3%	0.0%	0.4%	0.5%	2.1%
9.5	1.7%	1.4%	0.3%	0.5%	0.6%	1.1%	0.5%	1.5%	0.3%	1.2%	1.1%	0.4%	0.0%	1.0%
10	0.9%	1.2%	0.7%	1.8%	0.8%	0.9%	0.0%	0.5%	0.0%	0.3%	0.4%	0.4%	0.0%	1.6%
10.5	1.1%	1.7%	1.4%	1.6%	0.8%	0.9%	1.0%	1.0%	0.9%	0.9%	0.8%	1.1%	0.0%	1.6%
11	0.4%	1.2%	0.8%	0.4%	0.5%	1.1%	0.2%	1.0%	0.0%	0.6%	0.8%	0.0%	0.0%	0.0%
11.5	1.1%	0.4%	0.4%	0.9%	0.5%	0.6%	0.0%	1.0%	0.3%	1.2%	0.0%	0.8%	1.0%	0.5%
12	0.6%	1.0%	0.5%	0.8%	0.2%	0.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.5%	0.5%
12.5	0.6%	0.5%	0.3%	0.4%	0.3%	0.9%	0.2%	0.5%	1.5%	0.0%	0.0%	0.8%	0.5%	0.0%
13	0.1%	0.5%	0.5%	0.7%	0.2%	0.2%	0.0%	0.5%	0.3%	0.0%	0.4%	0.0%	1.0%	0.5%
13.5	0.5%	0.5%	0.3%	0.8%	0.2%	0.6%	0.2%	0.5%	0.3%	0.0%	0.0%	0.4%	0.0%	0.0%
14	0.5%	0.4%	0.4%	0.3%	0.5%	0.0%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%
14.5	0.9%	0.2%	0.5%	0.7%	0.9%	0.0%	0.0%	0.2%	0.3%	0.3%	0.4%	0.0%	0.0%	0.0%
15	0.5%	0.7%	0.7%	0.3%	0.2%	0.3%	0.2%	0.2%	0.0%	0.0%	0.8%	0.0%	0.5%	1.0%
15.5	0.1%	0.5%	0.0%	0.1%	0.5%	0.2%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.6%	0.4%	0.4%	0.1%	0.9%	0.0%	0.2%	0.0%	0.6%	0.0%	0.4%	0.0%	0.0%	0.0%
16.5	0.5%	0.2%	0.7%	0.1%	0.3%	0.3%	0.7%	0.0%	0.3%	0.3%	0.0%	0.4%	0.5%	1.0%
17	0.6%	0.1%	0.4%	0.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.5%	0.0%
17.5	0.2%	0.1%	0.4%	0.1%	0.0%	0.2%	0.0%	0.0%	0.6%	0.0%	0.8%	0.0%	0.0%	0.5%
18	0.5%	0.2%	0.4%	0.3%	0.3%	0.5%	0.0%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.5%
18.5	0.6%	0.5%	0.8%	0.3%	0.3%	0.3%	0.0%	0.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
19	0.6%	0.0%	0.7%	0.0%	0.2%	0.2%	0.7%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
19.5	0.2%	0.1%	0.3%	0.1%	0.2%	0.2%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.5%
>20	63.1%	1.7%	65.1%	1.8%	65.7%	0.8%	75.9%	1.2%	73.1%	0.3%	71.3%	0.4%	76.7%	0.0%

Run 1.5B, dcrest/h = 1.5, Configuration B, location 9

Filename	15S9_00		15S9_01		15S9_02		15S9_03		15S9_04		15S9_05		15S9_06		15S9_07		15S9_08		15S9_09		15S9_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.048		0.057		0.06		0.062		0.065		0.062		0.069		0.061		0.084		0.087		0.146	
Nab	1927		2070		2059		2076		2072		1927		1955		1837		2231		2226		2796	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	15.4%	6.8%	14.2%	7.1%	13.6%	6.1%	13.8%	5.3%	15.3%	5.8%	13.2%	5.1%	12.3%	5.8%	14.3%	4.6%	13.2%	6.6%	13.0%	5.4%	7.4%	5.8%
0.5	33.1%	8.1%	29.6%	7.5%	23.0%	5.4%	21.3%	6.0%	20.2%	3.7%	19.3%	4.6%	19.9%	5.1%	19.3%	4.9%	20.6%	5.8%	19.0%	5.8%	15.9%	7.0%
1	18.9%	4.1%	23.8%	5.0%	24.1%	5.2%	24.9%	5.1%	24.2%	4.3%	18.7%	4.5%	19.0%	3.2%	19.2%	3.3%	15.6%	3.9%	17.3%	4.6%	15.7%	6.3%
1.5	13.7%	3.9%	10.9%	3.0%	13.6%	3.2%	12.1%	3.5%	11.0%	3.1%	17.7%	4.2%	12.5%	3.8%	12.5%	3.0%	12.3%	3.5%	10.8%	3.6%	11.6%	4.4%
2	7.7%	3.0%	8.1%	3.6%	9.5%	3.4%	10.1%	3.9%	9.8%	3.6%	7.5%	1.9%	10.8%	3.2%	11.3%	3.9%	8.5%	2.7%	8.8%	3.0%	9.2%	3.5%
2.5	3.1%	1.9%	4.5%	2.6%	3.4%	1.6%	4.1%	2.3%	4.0%	2.2%	6.1%	1.7%	6.0%	2.6%	4.7%	2.3%	6.3%	2.6%	6.8%	2.5%	5.8%	3.0%
3	3.1%	1.8%	2.3%	2.6%	3.8%	2.2%	4.4%	2.1%	3.5%	2.0%	5.5%	2.2%	3.3%	1.8%	4.6%	2.0%	3.9%	2.1%	4.3%	2.3%	5.1%	3.1%
3.5	1.1%	1.3%	1.4%	1.6%	1.6%	1.9%	2.3%	1.4%	3.4%	2.6%	1.7%	2.1%	3.2%	1.8%	2.4%	1.7%	3.6%	1.7%	3.0%	2.5%	4.1%	2.1%
4	1.5%	1.6%	1.4%	1.5%	2.3%	1.8%	1.3%	2.1%	1.1%	1.6%	1.8%	1.6%	2.7%	1.6%	2.3%	1.7%	2.9%	1.8%	2.4%	1.2%	3.0%	1.9%
4.5	0.6%	1.7%	1.1%	1.8%	0.5%	1.4%	1.4%	1.1%	1.8%	1.8%	1.4%	1.6%	1.9%	1.3%	1.2%	1.5%	2.6%	2.1%	3.1%	1.8%	3.0%	1.9%
5	0.3%	1.0%	0.8%	2.2%	0.9%	2.0%	0.9%	1.4%	1.2%	2.1%	1.5%	1.9%	1.1%	1.2%	1.6%	1.1%	1.5%	0.9%	1.3%	1.3%	1.7%	1.8%
5.5	0.6%	1.8%	0.5%	0.7%	0.6%	1.1%	0.7%	1.0%	0.9%	1.3%	1.5%	1.4%	0.8%	1.1%	1.1%	1.1%	1.2%	1.9%	1.7%	1.4%	1.7%	1.7%
6	0.3%	1.2%	0.2%	1.1%	1.0%	1.4%	0.3%	1.3%	0.3%	0.7%	0.6%	1.1%	0.8%	1.2%	1.2%	1.1%	1.3%	1.4%	1.1%	1.0%	1.4%	1.9%
6.5	0.1%	1.0%	0.2%	1.3%	0.5%	0.6%	0.1%	1.1%	0.5%	1.1%	0.5%	1.1%	1.2%	1.4%	1.2%	1.4%	1.0%	1.3%	0.9%	1.5%	1.1%	1.3%
7	0.1%	2.0%	0.2%	1.4%	0.2%	1.3%	0.4%	1.7%	0.5%	1.4%	0.5%	1.1%	0.5%	1.0%	0.2%	0.7%	0.8%	1.5%	0.6%	1.2%	1.1%	1.1%
7.5	0.3%	1.2%	0.0%	0.8%	0.4%	1.1%	0.3%	1.2%	0.2%	1.3%	0.3%	0.8%	0.7%	1.3%	0.4%	1.1%	0.4%	1.0%	0.4%	1.1%	1.1%	1.2%
8	0.1%	0.8%	0.1%	1.3%	0.3%	1.6%	0.2%	1.4%	0.4%	1.0%	0.4%	1.2%	0.3%	1.1%	0.2%	0.8%	0.5%	1.4%	0.8%	1.0%	1.0%	1.3%
8.5	0.1%	1.0%	0.2%	1.2%	0.0%	1.2%	0.3%	0.9%	0.1%	0.7%	0.3%	0.8%	0.6%	1.6%	0.3%	1.2%	0.7%	1.3%	0.6%	1.3%	0.9%	1.3%
9	0.0%	0.7%	0.1%	1.2%	0.2%	1.4%	0.1%	1.5%	0.2%	1.0%	0.4%	0.8%	0.5%	0.6%	0.2%	1.3%	0.5%	1.2%	0.4%	0.7%	1.0%	1.1%
9.5	0.1%	1.1%	0.0%	0.9%	0.1%	1.1%	0.1%	0.7%	0.0%	1.3%	0.2%	0.8%	0.2%	0.9%	0.2%	0.9%	0.4%	1.0%	0.5%	1.4%	0.5%	1.0%
10	0.1%	0.9%	0.0%	1.0%	0.0%	0.7%	0.1%	0.8%	0.3%	1.0%	0.2%	1.7%	0.2%	1.0%	0.2%	0.5%	0.3%	0.8%	0.2%	0.9%	0.7%	1.5%
10.5	0.0%	0.9%	0.1%	0.8%	0.0%	0.6%	0.1%	0.8%	0.0%	0.9%	0.1%	1.0%	0.4%	1.1%	0.1%	1.4%	0.2%	0.9%	0.1%	1.1%	0.6%	0.8%
11	0.0%	0.9%	0.0%	0.9%	0.0%	0.9%	0.0%	1.0%	0.2%	1.0%	0.2%	1.0%	0.1%	1.0%	0.2%	0.7%	0.1%	0.9%	0.3%	1.0%	0.7%	0.9%
11.5	0.0%	0.4%	0.0%	0.5%	0.1%	0.7%	0.0%	0.8%	0.0%	0.9%	0.1%	0.7%	0.1%	0.9%	0.1%	0.7%	0.0%	0.5%	0.1%	0.8%	0.6%	0.9%
12	0.0%	1.1%	0.0%	0.8%	0.0%	1.2%	0.0%	1.1%	0.0%	0.8%	0.0%	0.6%	0.1%	0.9%	0.1%	0.8%	0.2%	0.9%	0.2%	0.8%	0.5%	1.1%
12.5	0.0%	0.7%	0.0%	0.7%	0.1%	0.8%	0.0%	0.7%	0.1%	1.0%	0.1%	1.0%	0.0%	0.6%	0.2%	1.0%	0.1%	0.8%	0.4%	0.9%	0.4%	0.9%
13	0.1%	0.8%	0.0%	1.0%	0.0%	1.0%	0.0%	1.1%	0.0%	1.1%	0.0%	0.7%	0.1%	0.8%	0.1%	0.5%	0.1%	0.7%	0.2%	0.6%	0.3%	0.7%
13.5	0.0%	0.6%	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.1%	1.0%	0.1%	1.1%	0.2%	0.6%	0.1%	0.5%	0.2%	1.0%	0.1%	0.9%	0.3%	0.7%
14	0.0%	0.7%	0.0%	1.0%	0.0%	1.3%	0.0%	1.2%	0.0%	1.1%	0.0%	0.9%	0.1%	0.7%	0.1%	1.0%	0.2%	1.0%	0.1%	0.8%	0.3%	0.7%
14.5	0.0%	0.4%	0.0%	1.0%	0.0%	1.0%	0.0%	0.4%	0.0%	0.7%	0.0%	0.7%	0.1%	0.5%	0.1%	0.7%	0.1%	1.1%	0.2%	1.0%	0.2%	0.7%
15	0.0%	0.9%	0.1%	0.4%	0.0%	1.0%	0.0%	1.0%	0.0%	0.8%	0.0%	0.7%	0.1%	0.7%	0.0%	0.7%	0.1%	0.6%	0.0%	1.0%	0.3%	0.9%
15.5	0.0%	0.8%	0.0%	0.5%	0.0%	0.6%	0.0%	0.3%	0.0%	0.6%	0.1%	0.6%	0.1%	0.6%	0.1%	0.8%	0.1%	0.4%	0.2%	1.0%	0.2%	0.8%
16	0.0%	0.5%	0.0%	0.9%	0.0%	1.0%	0.0%	0.6%	0.0%	0.7%	0.0%	0.8%	0.0%	0.6%	0.1%	1.1%	0.0%	0.6%	0.0%	0.8%	0.2%	0.7%
16.5	0.0%	0.5%	0.0%	0.9%	0.0%	0.7%	0.0%	0.7%	0.0%	0.5%	0.1%	1.0%	0.0%	0.6%	0.0%	0.6%	0.0%	0.7%	0.1%	0.6%	0.1%	0.6%
17	0.0%	0.7%	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.0%	0.7%	0.1%	0.4%	0.1%	1.0%	0.0%	0.7%	0.0%	0.4%	0.0%	0.4%	0.1%	0.8%
17.5	0.0%	0.8%	0.0%	0.8%	0.0%	0.6%	0.0%	0.4%	0.0%	0.8%	0.0%	0.5%	0.1%	0.5%	0.0%	0.8%	0.0%	0.6%	0.0%	0.7%	0.0%	0.5%
18	0.0%	0.6%	0.0%	0.8%	0.0%	0.6%	0.0%	0.7%	0.1%	0.6%	0.0%	0.5%	0.0%	0.4%	0.0%	0.5%	0.0%	0.6%	0.0%	0.5%	0.3%	0.8%
18.5	0.0%	0.9%	0.0%	0.7%	0.0%	0.4%	0.0%	0.4%	0.0%	0.8%	0.0%	0.5%	0.1%	0.5%	0.0%	0.5%	0.0%	0.6%	0.0%	0.6%	0.1%	0.8%
19	0.0%	0.4%	0.0%	0.7%	0.0%	1.0%	0.0%	0.9%	0.0%	0.6%	0.0%	0.3%	0.1%	0.7%	0.0%	0.4%	0.0%	0.5%	0.0%	0.8%	0.1%	0.6%
19.5	0.0%	0.5%	0.0%	0.4%	0.0%	0.3%	0.0%	0.4%	0.0%	0.5%	0.0%	0.5%	0.1%	0.9%	0.1%	0.4%	0.0%	0.9%	0.1%	1.2%	0.1%	0.5%
>20	0.0%	39.9%	0.0%	36.3%	0.0%	39.3%	0.0%	39.8%	0.1%	41.4%	0.1%	44.1%	0.1%	43.6%	0.1%	46.2%	0.4%	39.6%	0.4%	39.0%	1.5%	31.4%

Filename	15S9_11		15S9_12		15S9_13		15S9_14		15S9_15		15S9_16		15S9_17		15S9_18		15S9_19		15S9_20		15S9_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.171		0.255		0.366		0.427		0.496		0.597		0.651		0.692		0.764		0.799		0.839	
Nab	3017		3445		3880		3814		3921		3813		3491		3096		2699		2416		2204	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	7.1%	5.6%	5.8%	6.2%	4.6%	6.8%	4.6%	7.2%	4.3%	6.8%	3.6%	7.8%	2.8%	7.6%	0.0%	0.0%	1.9%	5.8%	1.5%	4.3%	1.3%	4.9%
0.5	14.7%	7.8%	13.3%	9.9%	10.9%	10.4%	11.1%	10.3%	8.8%	10.2%	8.0%	11.3%	7.3%	10.6%	0.0%	0.0%	4.6%	9.0%	4.2%	9.4%	4.1%	8.8%
1	15.3%	6.3%	12.3%	6.5%	11.1%	7.6%	9.3%	7.7%	9.6%	8.7%	8.0%	9.1%	7.1%	8.4%	0.0%	0.0%	4.6%	8.4%	4.4%	8.3%	4.1%	8.6%
1.5	10.4%	5.6%	10.1%	6.6%	9.6%	6.5%	8.5%	6.0%	7.8%	6.8%	7.3%	7.4%	6.7%	6.7%	1.2%	2.4%	4.1%	7.6%	4.3%	7.4%	3.5%	7.8%
2	8.5%	3.6%	7.4%	4.1%	6.5%	5.3%	4.1%	3.6%	3.5%	3.4%	5.2%	5.7%	4.6%	6.4%	0.0%	0.0%	2.3%	4.3%	3.8%	6.3%	2.7%	5.5%
2.5	6.4%	3.5%	6.5%	4.1%	5.7%	3.9%	5.5%	4.6%	4.8%	5.0%	5.0%	4.9%	4.0%	5.7%	0.0%	0.0%	3.8%	6.2%	3.0%	6.7%	3.6%	6.6%
3	5.2%	2.9%	4.5%	3.1%	3.0%	2.6%	4.8%	3.9%	5.0%	5.2%	2.8%	2.9%	2.9%	3.1%	1.5%	3.1%	3.3%	5.9%	1.7%	3.8%	3.1%	6.9%
3.5	4.0%	2.7%	3.9%	2.8%	4.6%	3.9%	3.9%	3.2%	4.2%	4.1%	3.7%	3.7%	3.8%	4.2%	0.0%	0.0%	3.4%	4.7%	2.8%	5.3%	2.5%	5.7%
4	3.4%	2.0%	3.3%	2.4%	4.1%	3.0%	2.4%	2.0%	2.5%	2.7%	3.6%	3.6%	3.2%	3.6%	0.0%	0.0%	2.4%	3.4%	2.7%	4.6%	1.9%	2.7%
4.5	2.6%	2.0%	3.3%	2.4%	3.3%	2.7%	3.9%	3.7%	3.2%	3.0%	3.4%	3.8%	3.0%	3.6%	1.6%	2.8%	2.9%	4.1%	2.4%	4.3%	2.8%	5.9%
5	2.3%	1.9%	2.4%	1.9%	2.9%	2.1%	2.8%	2.9%	2.9%	2.7%	3.1%	2.6%	2.5%	3.0%	0.0%	0.0%	2.3%	3.9%	2.4%	3.7%	1.9%	3.2%
5.5	2.2%	1.7%	2.2%	1.7%	2.4%	2.2%	3.1%	1.8%	2.8%	2.5%	2.7%	2.8%	2.4%	2.2%	0.0%	0.0%	2.8%	3.1%	1.9%	2.6%	2.1%	4.0%
6	1.8%	1.5%	2.2%	1.4%	1.6%	1.2%	2.3%	2.1%	2.7%	2.1%	1.4%	1.6%	1.5%	1.8%	1.7%	2.7%	2.3%	2.7%	1.2%	1.8%	1.6%	3.4%
6.5	1.4%	1.1%	1.5%	1.6%	2.2%	1.7%	1.3%	1.7%	1.4%	1.2%	1.8%	1.6%	2.2%	2.5%	0.0%	0.0%	1.4%	1.7%	2.3%	3.0%	1.5%	1.8%
7	1.1%	1.9%	1.8%	2.0%	1.9%	1.9%	2.1%	1.7%	2.0%	1.7%	1.8%	1.8%	2.4%	1.9%	0.0%	0.0%	2.2%	2.8%	1.8%	2.4%	1.4%	2.5%
7.5	1.3%	1.5%	1.8%	1.6%	1.7%	1.5%	1.8%	1.7%	1.8%	1.8%	1.8%	1.7%	2.1%	2.0%	1.9%	2.9%	2.2%	2.0%	1.4%	1.7%	1.4%	2.0%
8	1.1%	1.7%	1.5%	1.6%	1.1%	1.9%	2.0%	1.7%	1.7%	1.4%	1.7%	1.7%	1.6%	1.5%	0.0%	0.0%	1.5%	2.1%	1.5%	2.2%	1.6%	1.8%
8.5	1.0%	1.3%	1.3%	1.0%	1.2%	1.3%	0.9%	0.9%	1.1%	0.9%	1.4%	1.4%	2.0%	1.6%	0.0%	0.0%	1.1%	1.1%	1.9%	2.2%	1.0%	1.4%
9	0.7%	1.3%	0.8%	1.1%	1.4%	1.3%	1.6%	1.2%	1.4%	1.5%	1.4%	1.3%	1.7%	1.1%	2.2%	2.8%	1.6%	1.4%	1.4%	1.5%	1.5%	1.7%
9.5	0.4%	1.3%	1.0%	1.4%	0.6%	0.8%	1.2%	1.3%	1.3%	1.4%	0.9%	0.9%	1.0%	0.7%	0.0%	0.0%	1.4%	1.4%	1.0%	1.5%	1.1%	1.6%
10	0.8%	0.8%	1.2%	1.2%	1.1%	1.2%	1.2%	0.9%	1.3%	1.4%	1.3%	1.2%	1.3%	1.4%	0.0%	0.0%	1.3%	1.5%	1.3%	1.1%	1.1%	1.4%
10.5	0.6%	1.1%	0.7%	0.7%	1.3%	0.8%	0.9%	1.2%	1.3%	1.0%	1.2%	1.4%	1.3%	1.1%	1.7%	3.2%	1.2%	1.2%	1.2%	1.2%	1.4%	1.1%
11	0.7%	1.2%	0.7%	1.0%	1.1%	1.0%	0.7%	0.8%	0.7%	0.8%	1.3%	0.8%	1.2%	1.1%	0.0%	0.0%	0.7%	0.9%	1.6%	1.2%	1.0%	0.5%
11.5	0.4%	0.9%	0.6%	0.9%	0.8%	0.9%	0.8%	1.4%	1.5%	1.0%	1.0%	0.8%	1.1%	0.9%	0.0%	0.0%	1.1%	1.4%	1.2%	1.0%	1.0%	1.0%
12	0.6%	0.7%	0.8%	0.9%	0.9%	1.0%	0.7%	1.1%	1.0%	1.3%	1.1%	1.0%	0.8%	1.0%	2.5%	2.8%	1.0%	0.9%	1.1%	0.7%	0.9%	0.6%
12.5	0.5%	1.2%	0.6%	1.0%	0.5%	0.6%	0.9%	0.9%	1.1%	1.0%	0.4%	0.6%	0.9%	0.6%	0.0%	0.0%	0.9%	0.5%	0.6%	0.5%	1.0%	1.0%
13	0.5%	1.1%	0.6%	1.0%	0.8%	0.7%	0.4%	0.4%	0.4%	0.6%	1.0%	0.8%	0.9%	0.7%	0.0%	0.0%	0.9%	0.8%	1.1%	0.6%	0.9%	0.5%
13.5	0.5%	0.9%	0.3%	0.8%	0.9%	1.0%	0.8%	0.7%	0.9%	0.5%	1.0%	0.7%	0.8%	0.9%	2.5%	2.5%	1.0%	0.7%	0.7%	1.1%	1.2%	0.8%
14	0.4%	0.7%	0.6%	0.6%	0.5%	1.0%	0.8%	1.0%	1.1%	0.7%	0.7%	0.8%	1.1%	0.9%	0.0%	0.0%	1.2%	0.7%	1.0%	0.9%	0.5%	0.5%
14.5	0.3%	0.6%	0.2%	0.8%	0.4%	0.8%	0.6%	0.8%	0.7%	0.4%	0.7%	0.5%	0.7%	0.6%	0.0%	0.0%	1.0%	0.5%	0.6%	0.6%	0.6%	0.4%

15	0.2%	0.6%	0.4%	0.7%	0.7%	0.7%	0.6%	0.7%	0.8%	0.6%	0.9%	0.4%	0.9%	0.5%	1.7%	2.4%	0.9%	0.7%	1.1%	0.9%	1.4%	0.4%
15.5	0.2%	0.7%	0.4%	0.4%	0.4%	0.5%	0.3%	0.4%	0.6%	0.4%	0.6%	0.2%	0.4%	0.3%	0.0%	0.0%	0.7%	0.2%	0.4%	0.2%	0.9%	0.2%
16	0.2%	0.8%	0.3%	0.8%	0.8%	0.6%	0.5%	0.7%	0.6%	0.8%	0.7%	0.6%	0.9%	0.5%	0.0%	0.0%	0.7%	0.5%	1.1%	0.5%	1.0%	0.3%
16.5	0.2%	0.6%	0.4%	0.6%	0.5%	0.6%	0.5%	0.6%	0.5%	0.5%	0.7%	0.9%	0.6%	0.6%	0.0%	0.0%	0.6%	0.6%	0.6%	0.7%	0.7%	0.3%
17	0.2%	0.4%	0.2%	0.7%	0.3%	0.5%	0.4%	0.4%	0.4%	0.5%	0.9%	0.5%	0.6%	0.6%	1.4%	1.9%	1.0%	0.2%	0.8%	0.7%	0.5%	0.3%
17.5	0.2%	0.3%	0.0%	0.5%	0.4%	0.5%	0.2%	0.4%	0.4%	0.4%	0.6%	0.4%	0.6%	0.5%	0.0%	0.0%	0.5%	0.3%	0.7%	0.4%	0.7%	0.3%
18	0.1%	0.6%	0.3%	0.6%	0.3%	0.7%	0.6%	0.6%	0.4%	0.6%	0.6%	0.4%	0.7%	0.6%	0.0%	0.0%	0.8%	0.4%	0.9%	0.2%	0.7%	0.3%
18.5	0.3%	0.6%	0.4%	0.7%	0.3%	0.5%	0.6%	0.4%	0.5%	0.5%	0.7%	0.4%	0.6%	0.5%	1.6%	2.5%	0.4%	0.4%	0.7%	0.3%	0.6%	0.2%
19	0.1%	0.5%	0.2%	0.5%	0.3%	0.3%	0.4%	0.5%	0.5%	0.5%	0.3%	0.2%	0.2%	0.3%	0.0%	0.0%	0.5%	0.3%	0.7%	0.2%	0.7%	0.4%
19.5	0.0%	0.7%	0.3%	0.7%	0.4%	0.7%	0.4%	0.7%	0.6%	0.7%	0.5%	0.4%	0.6%	0.3%	0.0%	0.0%	0.5%	0.4%	0.4%	0.2%	0.7%	0.1%
>20	2.1%	28.0%	3.8%	21.8%	7.0%	17.0%	10.1%	16.3%	12.0%	12.8%	15.5%	9.6%	19.3%	7.9%	78.6%	67.9%	31.0%	5.3%	34.6%	4.0%	38.0%	2.6%

Filename	15S9_22		15S9_23		15S9_24		15S9_25		15S9_26		15S9_27		15S9_28		15S9_29		15S9_30		15S9_31	
y(mm)	73		77		81		85		89		93		103		113		123		133	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23		1.33	
C	0.856		0.878		0.89		0.916		0.935		0.954		0.959		0.974		0.985		0.99	
Nab	1952		1780		1585		1312		1159		786		755		453		267		207	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.4%	5.3%	1.6%	3.5%	1.5%	3.9%	1.3%	4.3%	0.9%	6.0%	1.0%	5.1%	1.3%	6.5%	0.9%	4.2%	0.7%	6.0%	2.4%	10.1%
0.5	3.2%	8.4%	3.4%	9.9%	4.2%	9.1%	4.0%	7.9%	3.8%	8.7%	3.7%	10.9%	2.0%	10.1%	3.8%	8.4%	1.5%	9.7%	1.4%	12.1%
1	4.4%	8.8%	3.1%	10.3%	3.2%	8.7%	3.8%	8.6%	3.8%	10.8%	3.1%	10.6%	3.8%	11.0%	3.8%	12.4%	0.7%	10.5%	2.9%	12.1%
1.5	4.4%	9.0%	3.5%	8.0%	3.0%	8.1%	2.8%	11.0%	3.4%	8.8%	3.6%	10.2%	2.0%	11.3%	1.1%	10.4%	3.4%	6.4%	3.4%	8.7%
2	1.8%	5.0%	2.7%	6.3%	2.8%	6.9%	1.8%	5.8%	1.7%	7.1%	3.6%	8.8%	2.3%	4.8%	2.0%	4.9%	3.0%	10.5%	1.9%	9.7%
2.5	3.7%	6.3%	3.4%	7.0%	3.0%	6.9%	2.8%	7.0%	3.1%	8.7%	2.7%	6.0%	1.9%	7.2%	3.5%	8.2%	2.2%	9.4%	2.4%	7.2%
3	2.3%	6.4%	2.9%	6.2%	1.5%	5.0%	2.2%	7.6%	3.2%	6.8%	1.0%	3.3%	2.3%	5.6%	1.8%	7.7%	0.7%	6.7%	1.0%	5.3%
3.5	2.0%	5.1%	2.9%	5.6%	2.9%	6.9%	2.5%	5.5%	2.0%	6.0%	1.9%	6.5%	1.6%	6.4%	1.5%	4.6%	1.5%	3.7%	1.0%	6.3%
4	1.8%	3.7%	1.7%	3.3%	2.0%	4.3%	0.8%	4.0%	0.9%	3.7%	1.8%	4.7%	1.9%	3.2%	0.9%	4.6%	0.7%	3.4%	1.0%	5.8%
4.5	2.5%	5.0%	1.9%	3.7%	1.7%	4.7%	1.6%	4.5%	3.0%	4.9%	1.0%	3.1%	1.2%	4.2%	1.8%	4.9%	1.1%	5.2%	0.5%	3.4%
5	2.6%	3.5%	2.2%	3.4%	1.4%	3.5%	1.9%	4.6%	1.5%	4.2%	1.0%	3.9%	1.2%	5.3%	0.9%	4.2%	1.1%	2.6%	1.0%	1.0%
5.5	1.6%	3.6%	1.9%	3.3%	2.1%	4.2%	1.1%	2.8%	1.6%	4.1%	1.1%	4.6%	0.9%	4.0%	0.7%	4.6%	0.4%	4.1%	1.0%	3.9%
6	2.5%	3.4%	1.7%	4.0%	1.3%	2.5%	1.8%	4.0%	1.0%	2.5%	0.5%	2.7%	1.5%	4.0%	1.1%	1.3%	0.7%	4.5%	0.5%	2.4%
6.5	1.2%	1.8%	0.8%	2.0%	1.7%	3.5%	0.8%	2.1%	0.4%	2.1%	1.0%	2.7%	0.8%	1.6%	0.4%	1.5%	0.7%	4.5%	1.0%	2.9%
7	2.0%	2.0%	1.1%	2.9%	1.4%	3.3%	1.1%	3.2%	1.4%	1.8%	1.3%	2.7%	0.9%	2.5%	0.7%	2.2%	0.0%	1.9%	0.5%	2.4%
7.5	1.7%	2.2%	1.1%	3.1%	1.3%	2.3%	1.0%	2.1%	0.9%	2.2%	1.8%	1.9%	1.7%	2.0%	0.9%	2.0%	0.7%	1.1%	1.0%	0.0%
8	1.2%	2.2%	1.4%	1.6%	1.0%	1.6%	1.4%	1.6%	1.4%	2.3%	0.8%	1.7%	0.9%	1.5%	0.7%	2.9%	1.1%	0.7%	0.0%	1.4%
8.5	1.0%	0.9%	0.7%	1.0%	1.4%	1.7%	1.0%	0.9%	0.5%	0.7%	0.8%	0.9%	0.4%	0.4%	0.0%	1.5%	1.5%	1.5%	1.4%	0.5%
9	1.7%	2.0%	1.3%	1.3%	1.5%	1.2%	1.2%	2.1%	0.7%	0.9%	1.1%	1.1%	1.1%	1.2%	1.5%	1.3%	0.4%	1.5%	0.5%	1.4%
9.5	1.0%	1.5%	0.8%	1.3%	0.8%	0.5%	1.1%	1.2%	0.8%	0.9%	0.4%	0.9%	1.2%	1.3%	0.9%	0.7%	1.1%	1.1%	0.5%	0.0%
10	1.5%	1.4%	1.4%	1.2%	1.3%	0.8%	1.1%	1.3%	0.5%	1.1%	0.8%	1.1%	0.5%	1.1%	0.2%	1.1%	0.0%	0.0%	0.0%	0.0%
10.5	1.2%	1.0%	1.0%	1.1%	0.9%	1.2%	0.9%	0.8%	0.7%	0.7%	0.9%	0.9%	0.1%	0.7%	0.4%	0.7%	0.4%	0.4%	0.0%	0.5%
11	1.0%	0.7%	1.0%	1.1%	1.0%	1.3%	0.5%	0.6%	0.2%	0.6%	0.4%	0.5%	0.5%	0.3%	0.2%	0.2%	0.4%	0.7%	0.0%	0.0%
11.5	0.6%	0.8%	1.1%	1.0%	0.8%	0.4%	0.8%	0.5%	1.1%	0.6%	0.5%	1.1%	1.2%	0.4%	0.0%	0.9%	0.4%	0.0%	0.5%	0.0%
12	1.2%	0.6%	1.3%	0.8%	0.8%	0.7%	0.7%	0.6%	0.6%	0.3%	0.4%	0.8%	0.8%	0.4%	0.0%	0.9%	0.4%	0.4%	0.0%	0.0%
12.5	1.2%	0.7%	0.8%	0.6%	0.5%	0.3%	0.6%	0.4%	0.8%	0.1%	0.3%	0.4%	0.9%	0.4%	0.2%	0.4%	0.4%	0.4%	0.0%	0.5%
13	0.6%	0.5%	1.0%	0.4%	1.2%	0.8%	0.2%	0.3%	0.5%	0.4%	0.5%	0.4%	0.5%	0.4%	0.0%	0.4%	0.4%	0.7%	0.5%	0.0%
13.5	1.1%	0.4%	0.7%	0.7%	0.6%	0.3%	1.1%	0.6%	0.6%	0.3%	1.0%	0.1%	0.1%	0.5%	0.2%	0.2%	0.4%	0.0%	0.5%	0.0%
14	0.9%	0.6%	1.0%	0.7%	1.3%	0.4%	0.6%	0.5%	0.9%	0.1%	0.6%	0.3%	0.8%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.5%
14.5	1.0%	0.7%	0.4%	0.2%	0.9%	0.5%	0.8%	0.6%	0.5%	0.2%	0.4%	0.3%	0.5%	0.4%	0.2%	0.0%	0.7%	0.0%	0.5%	0.0%
15	0.7%	0.6%	0.8%	0.4%	0.8%	0.4%	0.7%	0.2%	0.5%	0.4%	0.8%	0.0%	0.1%	0.0%	0.2%	0.4%	0.0%	0.4%	0.0%	0.0%
15.5	0.5%	0.6%	0.4%	0.2%	0.7%	0.2%	0.5%	0.1%	0.5%	0.1%	0.3%	0.0%	0.1%	0.3%	0.7%	0.0%	0.0%	0.0%	0.5%	0.0%
16	0.8%	0.6%	0.7%	0.7%	0.5%	0.3%	0.7%	0.3%	0.6%	0.3%	0.4%	0.1%	0.5%	0.1%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%
16.5	0.9%	0.5%	0.8%	0.2%	0.8%	0.3%	0.7%	0.5%	1.2%	0.3%	0.6%	0.3%	0.1%	0.1%	0.7%	0.2%	0.0%	0.0%	0.0%	0.5%
17	0.7%	0.1%	0.4%	0.3%	0.7%	0.3%	0.5%	0.1%	0.7%	0.0%	0.8%	0.1%	0.5%	0.0%	0.4%	0.4%	0.0%	0.0%	1.0%	0.0%
17.5	0.5%	0.2%	0.3%	0.2%	0.4%	0.3%	0.2%	0.1%	0.4%	0.1%	0.4%	0.3%	0.3%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.7%	0.5%	0.6%	0.3%	0.4%	0.5%	0.3%	0.2%	0.4%	0.3%	0.4%	0.1%	0.5%	0.0%	0.2%	0.0%	0.4%	0.0%	0.0%	0.5%
18.5	0.9%	0.1%	0.4%	0.1%	0.6%	0.1%	0.3%	0.0%	0.4%	0.1%	0.6%	0.1%	0.4%	0.0%	0.0%	0.2%	0.4%	0.0%	1.4%	0.0%
19	0.6%	0.2%	0.5%	0.3%	0.2%	0.2%	0.5%	0.0%	0.3%	0.2%	0.3%	0.3%	0.5%	0.3%	0.4%	0.0%	0.4%	0.7%	0.0%	0.0%
19.5	0.8%	0.2%	0.6%	0.1%	0.4%	0.3%	0.6%	0.0%	0.4%	0.0%	0.5%	0.3%	0.4%	0.1%	0.9%	0.0%	0.4%	0.4%	0.0%	0.0%
>20	38.9%	2.9%	44.0%	1.7%	45.4%	1.7%	51.4%	1.4%	51.8%	0.6%	56.0%	0.4%	59.3%	0.3%	65.3%	0.2%	70.8%	0.4%	69.1%	0.5%

Run 1.5C, dcrest/h = 1.5, Configuration C, location 9

Filename	15S9_00		15S9_01		15S9_02		15S9_03		15S9_04		15S9_05		15S9_06		15S9_07		15S9_08		15S9_09		15S9_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.025		0.024		0.023		0.022		0.026		0.03		0.033		0.035		0.046		0.063		0.097	
Nab	1008		897		806		724		863		936		1042		908		1145		1362		1786	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	17.6%	3.6%	14.9%	4.3%	15.4%	4.0%	15.5%	3.6%	17.7%	3.9%	17.4%	4.5%	17.4%	5.0%	15.0%	4.5%	16.3%	3.5%	9.5%	3.2%	6.4%	4.6%
0.5	33.3%	6.2%	32.6%	5.0%	23.4%	3.8%	23.6%	4.1%	21.8%	3.2%	21.7%	3.4%	21.7%	3.2%	19.2%	3.2%	17.8%	4.5%	16.1%	5.9%	16.0%	7.3%
1	16.7%	3.7%	23.3%	4.2%	19.1%	2.5%	22.7%	3.2%	16.2%	2.4%	16.5%	3.2%	17.7%	2.1%	12.8%	2.5%	14.8%	3.8%	15.7%	4.6%	13.9%	5.7%
1.5	13.6%	2.5%	12.3%	3.5%	17.0%	1.5%	10.9%	1.7%	15.9%	3.7%	11.3%	2.1%	9.8%	3.0%	12.9%	1.2%	10.3%	2.4%	10.7%	4.0%	10.4%	4.4%
2	6.7%	2.1%	6.0%	2.6%	6.9%	1.7%	9.1%	1.5%	6.8%	1.6%	11.1%	2.5%	9.3%	1.9%	8.5%	2.1%	7.2%	2.0%	7.2%	2.5%	7.4%	2.6%
2.5	3.3%	1.6%	2.9%	1.1%	4.7%	2.1%	2.9%	1.2%	5.3%	1.7%	5.4%	1.9%	4.9%	1.5%	4.8%	1.2%	6.6%	2.3%	6.2%	1.7%	7.1%	2.8%
3	2.8%	1.8%	2.7%	1.8%	4.3%	1.6%	2.8%	0.7%	4.3%	2.2%	3.5%	1.9%	6.0%	1.9%	5.1%	1.9%	4.4%	2.3%	5.1%	2.3%	3.4%	1.3%
3.5	1.4%	1.0%	1.0%	1.1%	2.5%	0.7%	3.6%	1.0%	2.2%	1.3%	3.4%	1.9%	2.3%	0.9%	3.6%	1.2%	4.0%	2.0%	4.3%	1.2%	5.1%	2.4%
4	1.4%	0.8%	1.0%	2.2%	1.2%	0.9%	1.2%	0.7%	2.0%	0.5%	1.7%	1.5%	2.0%	1.2%	2.9%	0.4%	2.3%	1.3%	4.3%	2.1%	4.4%	2.0%
4.5	1.0%	0.7%	0.7%	0.8%	0.9%	1.6%	2.1%	1.5%	1.5%	0.8%	0.5%	1.1%	2.0%	1.5%	3.5%	1.3%	2.4%	1.9%	3.0%	1.5%	3.1%	2.1%
5	0.5%	0.9%	0.7%	0.4%	0.7%	0.5%	0.8%	1.1%	1.0%	1.0%	1.6%	0.7%	1.0%	0.8%	2.0%	1.1%	2.2%	1.6%	2.2%	1.5%	2.9%	1.3%
5.5	0.6%	1.1%	0.1%	1.1%	0.2%	0.6%	1.0%	1.1%	0.8%	1.2%	1.0%	1.2%	0.2%	0.9%	1.2%	1.5%	1.4%	0.9%	2.1%	1.7%	2.1%	1.3%
6	0.3%	1.0%	0.1%	0.7%	0.2%	1.4%	0.4%	0.7%	1.2%	0.7%	0.3%	0.6%	1.6%	0.6%	1.3%	0.2%	1.2%	0.9%	1.5%	1.3%	1.3%	1.3%
6.5	0.1%	1.2%	0.2%	1.0%	0.5%	1.0%	0.4%	1.1%	0.8%	1.0%	0.7%	0.9%	0.5%	1.0%	1.0%	1.3%	1.8%	0.9%	1.5%	1.5%	1.4%	1.3%
7	0.1%	1.2%	0.3%	1.1%	0.2%	0.5%	0.4%	0.6%	0.3%	0.7%	0.5%	0.3%	0.1%	1.3%	1.1%	0.6%	0.9%	0.8%	1.1%	1.0%	1.3%	1.1%
7.5	0.1%	0.6%	0.1%	0.8%	0.5%	0.9%	0.3%	0.6%	0.3%	0.6%	0.3%	0.7%	0.8%	0.5%	0.9%	0.8%	1.0%	0.8%	1.0%	1.0%	1.6%	0.6%
8	0.3%	0.9%	0.1%	0.9%	0.7%	0.7%	0.0%	1.1%	0.2%	0.9%	0.5%	0.5%	0.4%	0.5%	0.8%	0.8%	0.9%	1.0%	1.2%	0.9%	1.4%	1.1%
8.5	0.1%	1.1%	0.6%	0.7%	0.1%	0.4%	0.1%	0.6%	0.2%	0.6%	0.1%	0.6%	0.3%	0.6%	0.6%	0.4%	0.4%	0.6%	0.5%	0.4%	1.3%	1.2%
9	0.1%	0.7%	0.0%	0.7%	0.0%	0.4%	0.1%	0.8%	0.1%	0.5%	0.1%	0.5%	0.7%	1.1%	0.4%	0.4%	0.4%	0.6%	0.9%	0.4%	0.5%	1.1%
9.5	0.0%	1.1%	0.1%	0.4%	0.1%	0.5%	0.6%	0.6%	0.2%	0.8%	0.4%	0.2%	0.4%	0.6%	0.3%	1.1%	0.3%	1.0%	0.7%	0.7%	0.7%	0.6%
10	0.0%	0.7%	0.0%	0.6%	0.6%	0.9%	0.4%	1.1%	0.1%	0.8%	0.1%	1.0%	0.0%	0.5%	0.2%	0.3%	0.2%	1.0%	0.4%	0.7%	0.5%	0.8%
10.5	0.0%	0.4%	0.1%	0.8%	0.0%	0.5%	0.3%	0.4%	0.1%	0.0%	0.2%	0.6%	0.3%	1.0%	0.2%	0.3%	0.3%	0.9%	0.6%	1.0%	0.9%	0.9%
11	0.1%	0.6%	0.0%	0.4%	0.0%	0.6%	0.0%	0.1%	0.2%	0.3%	0.0%	0.3%	0.3%	0.7%	0.1%	0.2%	0.3%	0.3%	0.7%	1.2%	0.3%	0.8%
11.5	0.0%	0.7%	0.0%	0.6%	0.0%	0.6%	0.1%	0.4%	0.2%	0.6%	0.0%	0.4%	0.0%	0.7%	0.1%	0.9%	0.1%	0.3%	0.4%	0.6%	0.7%	0.6%
12	0.0%	0.7%	0.1%	0.6%	0.0%	0.4%	0.3%	0.8%	0.0%	0.5%	0.1%	0.3%	0.1%	0.4%	0.1%	0.6%	0.3%	0.4%	0.5%	0.8%	0.4%	0.5%
12.5	0.0%	0.9%	0.0%	0.7%	0.0%	0.1%	0.1%	0.6%	0.1%	0.3%	0.3%	0.7%	0.1%	0.3%	0.4%	0.6%	0.0%	0.4%	0.2%	0.8%	0.4%	0.3%
13	0.0%	0.6%	0.0%	0.4%	0.1%	0.2%	0.1%	0.6%	0.0%	0.7%	0.0%	0.7%	0.1%	0.9%	0.3%	0.7%	0.3%	0.8%	0.2%	0.6%	0.5%	0.4%
13.5	0.0%	0.8%	0.0%	0.3%	0.0%	0.7%	0.0%	0.3%	0.0%	1.0%	0.2%	0.1%	0.0%	0.6%	0.1%	0.7%	0.3%	0.6%	0.2%	0.5%	0.3%	0.7%
14	0.0%	0.2%	0.1%	1.0%	0.0%	0.5%	0.0%	0.4%	0.0%	0.7%	0.1%	0.4%	0.0%	0.3%	0.0%	0.6%	0.2%	0.4%	0.5%	0.2%	0.2%	0.9%
14.5	0.0%	0.3%	0.0%	0.3%	0.0%	0.1%	0.0%	0.1%	0.0%	0.8%	0.0%	0.5%	0.0%	0.6%	0.0%	0.9%	0.2%	0.3%	0.0%	1.3%	0.4%	0.7%
15	0.0%	0.3%	0.0%	0.1%	0.0%	0.7%	0.0%	1.1%	0.0%	0.5%	0.1%	0.6%	0.0%	0.7%	0.1%	0.8%	0.1%	0.3%	0.1%	0.2%	0.4%	0.6%
15.5	0.0%	0.3%	0.0%	0.4%	0.0%	0.4%	0.0%	0.3%	0.0%	0.3%	0.1%	0.7%	0.1%	0.2%	0.1%	0.2%	0.0%	0.3%	0.1%	0.4%	0.1%	0.3%
16	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.1%	0.4%	0.0%	0.6%	0.0%	1.0%	0.0%	0.9%	0.1%	0.3%	0.2%	0.4%	0.1%	0.2%	0.2%	0.7%
16.5	0.0%	0.8%	0.0%	0.8%	0.0%	0.5%	0.0%	1.1%	0.1%	0.0%	0.0%	0.3%	0.1%	0.7%	0.2%	0.4%	0.1%	0.3%	0.1%	0.5%	0.1%	0.3%
17	0.0%	0.9%	0.0%	0.6%	0.0%	0.6%	0.0%	0.1%	0.0%	0.5%	0.2%	0.4%	0.0%	0.2%	0.0%	0.9%	0.0%	0.3%	0.1%	0.5%	0.2%	0.3%
17.5	0.0%	0.3%	0.0%	0.6%	0.0%	0.2%	0.0%	0.4%	0.0%	0.5%	0.0%	0.1%	0.1%	0.5%	0.0%	0.4%	0.0%	0.3%	0.1%	0.2%	0.2%	1.0%
18	0.0%	0.5%	0.0%	0.6%	0.0%	0.7%	0.0%	0.1%	0.0%	0.3%	0.0%	0.6%	0.0%	0.5%	0.0%	0.3%	0.0%	0.6%	0.1%	0.4%	0.1%	0.6%
18.5	0.0%	0.5%	0.0%	0.2%	0.0%	0.6%	0.0%	0.7%	0.0%	0.2%	0.0%	0.1%	0.0%	0.6%	0.0%	0.3%	0.3%	0.3%	0.0%	0.4%	0.2%	0.9%
19	0.0%	0.7%	0.0%	0.7%	0.0%	0.5%	0.0%	0.6%	0.0%	0.1%	0.0%	0.1%	0.0%	0.4%	0.0%	0.1%	0.1%	0.7%	0.1%	0.3%	0.2%	0.3%
19.5	0.0%	0.4%	0.0%	0.3%	0.0%	0.1%	0.0%	0.1%	0.0%	0.5%	0.0%	0.6%	0.0%	0.6%	0.0%	1.0%	0.0%	1.4%	0.1%	0.3%	0.3%	0.3%
>20	0.0%	55.7%	0.0%	55.3%	0.1%	63.4%	0.0%	62.7%	0.0%	61.2%	0.2%	59.5%	0.0%	59.1%	0.0%	61.6%	0.3%	54.5%	0.7%	49.2%	1.6%	41.9%

Filename	15S9_11	15S9_12	15S9_13	15S9_14	15S9_15	15S9_16	15S9_17	15S9_18	15S9_19	15S9_20	15S9_21
y(mm)	36	39	42	45	48	51	54	57	61	65	69

y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.153		0.25		0.355		0.464		0.587		0.704		0.759		0.819		0.869		0.897		0.926	
Nab	2322		2837		3231		3364		3217		2705		2427		2086		1631		1358		1060	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	7.7%	4.9%	5.7%	6.2%	5.0%	6.5%	4.0%	7.4%	3.5%	6.2%	2.8%	6.2%	2.1%	6.3%	1.6%	4.4%	1.7%	4.5%	1.0%	3.8%	0.7%	3.6%
0.5	12.1%	8.4%	11.8%	9.3%	9.7%	10.1%	8.7%	11.2%	6.5%	10.0%	5.7%	9.6%	5.2%	9.5%	3.4%	8.6%	3.7%	8.0%	1.5%	7.6%	2.7%	9.3%
1	10.7%	4.5%	9.4%	7.4%	8.8%	7.3%	8.1%	7.6%	5.2%	5.9%	5.7%	8.1%	2.5%	5.6%	3.1%	4.7%	2.1%	5.5%	2.1%	6.8%	1.1%	5.1%
1.5	9.0%	5.5%	4.7%	3.8%	4.8%	3.4%	4.9%	4.8%	6.0%	7.0%	4.1%	4.6%	3.8%	7.3%	3.9%	8.4%	3.1%	6.3%	2.2%	8.5%	2.5%	7.6%
2	6.2%	2.1%	6.8%	4.8%	6.0%	5.1%	6.4%	5.6%	5.3%	6.5%	4.5%	6.8%	2.5%	4.2%	3.8%	8.0%	3.0%	6.6%	2.7%	6.2%	3.0%	6.1%
2.5	7.1%	3.1%	7.0%	3.6%	6.4%	4.6%	5.8%	4.5%	2.8%	3.9%	3.9%	6.3%	3.1%	5.4%	2.7%	4.2%	1.8%	4.9%	1.6%	4.4%	2.2%	4.9%
3	6.3%	3.0%	3.6%	2.3%	3.9%	2.8%	3.3%	2.5%	4.1%	4.4%	2.8%	3.8%	3.3%	5.6%	3.0%	5.5%	2.3%	7.4%	2.4%	6.2%	2.5%	5.8%
3.5	4.9%	3.0%	5.1%	2.9%	4.5%	4.1%	4.5%	3.6%	4.2%	4.4%	3.1%	4.8%	1.7%	3.0%	2.8%	5.8%	2.1%	5.6%	1.8%	6.0%	1.7%	6.6%
4	2.9%	1.2%	3.7%	2.9%	3.4%	3.2%	3.4%	3.0%	2.5%	2.5%	3.2%	4.1%	3.0%	5.2%	2.0%	2.8%	1.7%	3.0%	1.6%	3.5%	1.2%	4.6%
4.5	3.5%	2.6%	4.2%	1.9%	3.5%	2.6%	3.0%	3.2%	3.2%	3.5%	2.8%	2.7%	1.5%	2.6%	2.5%	4.0%	2.3%	5.8%	2.6%	5.2%	1.4%	7.1%
5	3.4%	1.7%	2.6%	1.7%	2.0%	1.4%	2.0%	1.5%	3.0%	2.7%	1.7%	2.6%	2.1%	3.3%	2.1%	4.9%	1.8%	4.0%	1.8%	3.8%	2.0%	4.3%
5.5	2.3%	2.3%	2.7%	2.1%	2.7%	2.1%	2.7%	2.1%	2.3%	1.8%	2.8%	2.6%	2.5%	2.9%	1.0%	2.9%	1.5%	2.0%	1.2%	3.8%	0.7%	2.8%
6	2.5%	1.3%	2.2%	1.7%	2.4%	2.3%	2.8%	2.7%	2.2%	2.9%	2.1%	2.4%	2.1%	2.4%	2.1%	3.5%	1.4%	3.8%	1.5%	3.7%	1.0%	3.3%
6.5	1.3%	1.1%	1.3%	0.8%	1.8%	1.6%	1.2%	1.3%	1.9%	1.7%	1.6%	1.2%	2.2%	2.8%	2.2%	2.6%	1.7%	3.4%	1.7%	4.4%	1.5%	2.9%
7	1.8%	1.6%	1.9%	1.7%	2.3%	1.8%	1.9%	1.6%	1.6%	1.0%	2.4%	2.3%	1.5%	1.5%	1.0%	1.8%	1.4%	2.1%	1.0%	2.1%	1.1%	2.2%
7.5	2.0%	1.2%	1.9%	1.4%	1.7%	1.4%	1.9%	1.8%	2.2%	1.8%	2.0%	1.8%	1.5%	2.1%	1.2%	1.9%	1.1%	3.1%	1.6%	2.4%	1.9%	3.2%
8	1.3%	1.5%	2.2%	1.7%	1.8%	1.4%	1.8%	1.5%	1.8%	2.0%	1.6%	1.7%	1.3%	1.7%	1.5%	2.1%	1.7%	2.2%	1.1%	2.1%	0.9%	2.5%
8.5	0.9%	0.9%	1.2%	0.7%	0.8%	0.9%	1.1%	0.9%	1.1%	1.0%	1.3%	1.2%	2.0%	2.1%	0.9%	1.5%	0.9%	1.6%	0.9%	1.3%	0.4%	1.2%
9	1.2%	1.1%	1.4%	1.6%	1.8%	1.4%	1.3%	1.3%	1.7%	1.6%	1.7%	2.0%	1.9%	1.5%	1.0%	1.8%	0.9%	1.7%	1.3%	2.1%	1.1%	2.9%
9.5	1.2%	1.0%	1.4%	1.7%	1.6%	1.1%	1.3%	1.2%	1.2%	0.6%	1.6%	1.6%	1.0%	1.6%	1.1%	1.0%	0.6%	0.9%	0.8%	0.9%	0.8%	0.8%
10	1.1%	1.2%	0.8%	0.6%	1.1%	0.8%	1.1%	0.9%	1.3%	1.4%	1.0%	1.0%	1.0%	1.6%	1.2%	1.5%	1.5%	1.5%	0.6%	1.0%	1.2%	1.7%
10.5	0.7%	0.9%	1.3%	0.9%	1.4%	1.1%	1.5%	1.4%	1.5%	1.3%	1.1%	1.2%	1.2%	1.0%	1.0%	1.3%	1.0%	1.4%	0.9%	1.6%	1.1%	1.4%
11	0.4%	0.8%	1.1%	1.1%	1.2%	0.6%	1.1%	1.0%	0.9%	0.9%	0.9%	1.4%	1.4%	1.3%	0.8%	0.9%	0.9%	1.0%	0.8%	0.4%	0.8%	0.8%
11.5	0.7%	0.5%	1.0%	0.9%	1.2%	1.2%	1.6%	0.7%	1.3%	1.0%	0.8%	1.2%	1.1%	1.1%	1.2%	1.3%	1.5%	0.7%	1.0%	1.0%	0.8%	0.9%
12	0.3%	1.0%	0.7%	0.9%	0.7%	0.7%	0.6%	0.3%	1.3%	1.2%	0.6%	0.4%	1.0%	1.0%	0.9%	1.1%	0.9%	1.3%	1.1%	1.5%	0.8%	0.8%
12.5	0.8%	0.6%	0.8%	0.6%	0.9%	0.7%	1.1%	0.8%	0.6%	0.6%	1.0%	1.0%	1.2%	1.1%	0.8%	0.4%	0.7%	0.6%	0.4%	0.5%	0.7%	0.3%
13	0.2%	0.5%	0.9%	0.5%	1.2%	1.0%	1.0%	1.0%	0.9%	1.3%	1.0%	0.7%	0.7%	0.9%	0.9%	1.0%	0.7%	0.6%	0.8%	1.5%	0.7%	1.1%
13.5	0.5%	0.9%	0.6%	0.6%	0.5%	0.6%	0.8%	0.8%	0.8%	1.0%	0.7%	0.5%	0.9%	0.7%	0.8%	0.7%	0.9%	0.6%	0.6%	0.4%	0.4%	0.7%
14	0.5%	0.9%	0.8%	0.5%	1.1%	0.6%	0.5%	0.8%	0.5%	0.4%	0.9%	0.7%	0.6%	0.5%	0.8%	0.5%	0.4%	0.6%	0.8%	0.4%	0.3%	0.3%
14.5	0.6%	0.5%	0.6%	0.7%	0.6%	0.7%	0.8%	0.6%	1.0%	0.6%	1.2%	0.9%	0.7%	0.5%	1.2%	0.6%	0.6%	0.6%	1.0%	0.7%	0.6%	0.6%
15	0.3%	0.7%	0.7%	0.9%	0.7%	0.7%	0.7%	0.6%	0.6%	0.8%	0.7%	1.0%	0.9%	1.0%	1.0%	0.9%	0.4%	0.4%	1.0%	0.2%	1.2%	0.3%
15.5	0.3%	0.5%	0.6%	0.5%	0.6%	0.4%	0.3%	0.3%	0.5%	0.4%	0.4%	0.6%	1.0%	0.5%	0.5%	0.3%	0.4%	0.4%	0.4%	0.4%	0.5%	0.1%
16	0.7%	0.7%	0.5%	0.7%	0.6%	0.5%	0.7%	0.9%	0.8%	0.5%	0.8%	0.6%	0.9%	0.5%	0.8%	0.8%	0.5%	0.4%	0.7%	0.6%	0.5%	0.8%
16.5	0.3%	0.7%	0.8%	0.5%	0.6%	0.7%	0.8%	0.6%	0.9%	0.5%	0.9%	0.5%	0.5%	0.6%	0.7%	0.3%	0.4%	0.7%	1.2%	0.7%	0.5%	0.6%
17	0.1%	0.5%	0.2%	0.5%	0.4%	0.4%	0.6%	0.2%	0.4%	0.4%	0.9%	0.2%	0.9%	0.5%	0.4%	0.3%	0.7%	0.4%	0.6%	0.1%	0.4%	0.2%
17.5	0.1%	0.5%	0.5%	0.7%	0.6%	0.6%	0.8%	0.4%	0.8%	0.8%	0.7%	0.8%	0.5%	0.4%	1.1%	0.4%	0.9%	0.3%	0.8%	0.3%	0.8%	0.3%
18	0.3%	0.5%	0.5%	0.6%	0.6%	0.6%	0.4%	0.3%	0.2%	0.3%	0.4%	0.4%	0.6%	0.1%	0.3%	0.3%	0.4%	0.6%	0.4%	0.2%	0.6%	0.2%
18.5	0.2%	0.6%	0.3%	0.5%	0.4%	0.3%	0.4%	0.5%	0.7%	0.4%	0.7%	0.4%	0.7%	0.9%	0.9%	0.5%	0.9%	0.2%	0.5%	0.5%	0.3%	0.1%
19	0.2%	0.6%	0.3%	0.3%	0.2%	0.2%	0.3%	0.4%	0.8%	0.5%	0.7%	0.2%	0.5%	0.5%	0.8%	0.5%	0.3%	0.2%	0.7%	0.7%	0.6%	0.1%
19.5	0.2%	0.6%	0.3%	0.6%	0.3%	0.6%	0.7%	0.7%	0.4%	0.2%	0.5%	0.2%	1.0%	0.4%	0.4%	0.3%	0.3%	0.2%	0.3%	0.4%	0.5%	0.1%
>20	3.1%	34.1%	5.9%	26.8%	10.0%	21.7%	14.0%	17.6%	21.5%	13.9%	26.8%	9.8%	36.1%	8.6%	40.8%	5.6%	48.5%	4.9%	52.8%	2.3%	56.5%	1.8%

Filename	15S9_22		15S9_23		15S9_24		15S9_25		15S9_26		15S9_27		15S9_28		15S9_29		15S9_30	
y(mm)	73		77		81		85		89		93		103		113		123	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23	
C	0.946		0.954		0.965		0.968		0.979		0.981		0.993		0.995		0.996	
Nab	788		629		563		506		338		329		139		111		59	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	0.6%	3.8%	0.6%	3.2%	0.7%	4.1%	0.4%	2.6%	0.9%	3.6%	1.2%	3.3%	2.2%	5.0%	1.8%	9.9%	0.0%	3.4%
0.5	2.4%	6.6%	1.9%	7.5%	2.5%	9.2%	2.0%	9.3%	1.2%	6.5%	0.6%	9.7%	1.4%	6.5%	0.9%	9.9%	1.7%	0.0%
1	1.4%	4.4%	2.1%	4.9%	1.2%	6.6%	1.4%	6.3%	1.8%	4.4%	1.8%	8.5%	2.9%	12.2%	0.9%	6.3%	0.0%	3.4%
1.5	1.9%	6.9%	2.7%	6.8%	2.3%	8.3%	1.8%	8.7%	1.5%	8.6%	0.9%	7.9%	0.7%	7.9%	1.8%	11.7%	1.7%	10.2%
2	1.0%	9.0%	1.3%	8.9%	2.3%	9.9%	2.8%	9.3%	1.5%	10.9%	1.2%	10.6%	1.4%	9.4%	2.7%	8.1%	1.7%	8.5%
2.5	1.0%	6.3%	1.3%	4.0%	1.1%	3.7%	1.0%	4.5%	0.9%	4.4%	1.2%	5.5%	2.9%	8.6%	0.9%	6.3%	1.7%	6.8%
3	2.4%	7.0%	1.1%	5.9%	1.4%	7.8%	1.4%	8.9%	2.1%	7.1%	1.5%	7.3%	1.4%	8.6%	0.9%	5.4%	0.0%	16.9%
3.5	1.5%	7.2%	1.0%	4.9%	2.0%	7.1%	1.8%	7.5%	1.5%	5.3%	2.1%	7.0%	0.7%	5.0%	1.8%	9.9%	0.0%	11.9%
4	1.5%	3.2%	1.0%	4.0%	0.5%	2.8%	0.4%	5.1%	0.3%	3.8%	0.9%	4.6%	0.0%	3.6%	0.0%	3.6%	0.0%	6.8%
4.5	2.0%	4.2%	1.4%	6.0%	0.5%	4.8%	1.6%	4.7%	1.8%	9.2%	1.5%	6.4%	0.0%	7.2%	0.0%	7.2%	1.7%	1.7%
5	1.3%	6.9%	2.2%	7.0%	0.9%	5.3%	1.2%	3.2%	0.6%	4.1%	0.9%	5.2%	1.4%	5.0%	1.8%	2.7%	0.0%	1.7%
5.5	0.8%	1.8%	0.3%	3.8%	0.5%	2.8%	0.8%	3.8%	0.3%	3.3%	0.9%	1.5%	0.0%	5.0%	0.0%	0.9%	0.0%	5.1%
6	1.6%	5.3%	0.6%	3.3%	1.1%	4.4%	0.8%	3.6%	1.5%	2.7%	0.9%	4.0%	1.4%	0.7%	0.0%	2.7%	0.0%	3.4%
6.5	0.9%	4.2%	1.9%	3.3%	0.7%	3.2%	1.4%	2.2%	0.0%	4.4%	0.3%	2.7%	0.7%	0.7%	0.0%	2.7%	0.0%	1.7%
7	0.5%	1.9%	0.5%	3.0%	0.5%	1.8%	0.8%	1.8%	0.6%	4.1%	0.6%	2.1%	0.7%	2.9%	0.0%	1.8%	1.7%	1.7%
7.5	1.1%	2.2%	1.0%	2.7%	1.4%	2.0%	0.4%	3.6%	0.3%	1.8%	0.9%	1.5%	0.7%	2.9%	0.9%	1.8%	0.0%	1.7%
8	0.8%	2.0%	1.1%	2.4%	1.4%	1.8%	1.0%	1.2%	0.3%	4.7%	0.3%	1.8%	0.0%	0.7%	0.0%	0.0%	0.0%	1.7%
8.5	0.4%	2.2%	0.6%	1.7%	0.4%	1.1%	0.4%	1.0%	0.6%	1.8%	0.6%	0.9%	0.0%	1.4%	0.0%	0.9%	0.0%	1.7%
9	1.0%	1.9%	1.1%	1.4%	1.6%	2.1%	0.6%	2.8%	0.3%	1.5%	0.6%	0.9%	0.7%	1.4%	0.0%	0.0%	0.0%	3.4%
9.5	0.4%	1.1%	0.8%	1.4%	0.9%	0.9%	0.4%	1.4%	0.0%	0.6%	0.9%	0.9%	0.7%	0.7%	0.9%	0.9%	0.0%	0.0%
10	0.3%	1.8%	0.5%	1.4%	1.1%	2.5%	0.6%	0.8%	0.6%	0.9%	0.0%	0.9%	0.0%	1.4%	0.0%	0.9%	0.0%	0.0%
10.5	1.1%	0.9%	0.5%	1.7%	0.2%	0.9%	0.2%	0.6%	1.2%	0.6%	0.3%	0.6%	0.7%	0.7%	0.0%	1.8%	0.0%	0.0%
11	0.6%	0.8%	0.8%	0.3%	0.4%	0.5%	0.2%	0.6%	0.3%	0.3%	0.6%	0.6%	0.7%	0.0%	0.0%	0.0%	0.0%	1.7%
11.5	0.8%	0.9%	0.6%	1.7%	0.0%	0.7%	0.0%	0.6%	0.6%	0.6%	0.3%	0.0%	0.7%	0.0%	0.9%	0.9%	1.7%	0.0%
12	0.4%	0.9%	1.3%	1.0%	0.2%	0.5%	0.0%	0.6%	0.3%	0.6%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
12.5	0.5%	0.4%	0.8%	0.5%	0.9%	0.2%	0.4%	0.8%	1.2%	0.6%	0.3%	0.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
13	0.5%	0.5%	0.2%	0.5%	0.9%	0.2%	0.0%	0.4%	0.9%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%
13.5	1.1%	0.9%	0.0%	0.8%	0.0%	0.4%	0.4%	0.8%	0.9%	0.6%	0.6%	0.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
14	0.1%	0.5%	0.5%	0.2%	0.2%	0.5%	0.6%	0.4%	0.6%	0.0%	0.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14.5	0.8%	0.6%	0.3%	0.3%	0.4%	0.5%	0.2%	0.6%	0.6%	0.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	0.5%	0.5%	0.3%	0.8%	0.0%	0.4%	0.2%	0.2%	0.0%	0.6%	0.9%	0.0%	0.7%	0.7%	1.8%	0.0%	0.0%	1.7%
15.5	0.3%	0.3%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.6%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.6%	0.4%	0.2%	0.6%	0.4%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16.5	0.0%	0.3%	0.6%	0.2%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.7%	0.0%	0.0%	0.9%	0.0%	0.0%
17	0.4%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17.5	0.6%	0.0%	0.3%	0.3%	0.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%
18	0.0%	0.0%	0.6%	0.3%	0.5%	0.0%	0.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18.5	0.9%	0.1%	0.6%	0.3%	0.9%	0.4%	0.2%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.7%	0.0%	0.0%	0.0%	1.7%
19	0.6%	0.6%	0.6%	0.3%	0.2%	0.0%	0.6%	0.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%
19.5	0.3%	0.3%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%
>20	64.7%	1.1%	66.1%	2.1%	68.6%	1.2%	72.7%	1.6%	72.5%	0.6%	73.3%	1.5%	73.4%	0.0%	79.3%	0.0%	84.7%	0.0%

Run 1.5A, dcrest/h = 1.5, Configuration A, location 91

Filename	15S91_00		15S91_01		15S91_02		15S91_03		15S91_04		15S91_05		15S91_06		15S91_07		15S91_08		15S91_09		15S91_10	
y(mm)	-29		-24		-19		-14		-9		-4		1		6		9		12		15	
y/h	-0.29		-0.24		-0.19		-0.14		-0.09		-0.04		0.01		0.06		0.09		0.12		0.15	
C	0.019		0.017		0.021		0.021		0.023		0.027		0.034		0.037		0.03		0.035		0.033	
Nab	163		105		142		194		272		492		856		1186		989		1185		1081	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	9.2%	3.1%	11.4%	3.8%	1.4%	0.7%	13.4%	5.7%	13.6%	1.1%	25.0%	3.3%	17.9%	3.7%	24.0%	4.4%	14.7%	2.7%	16.1%	3.6%	16.2%	3.8%
0.5	11.0%	0.6%	13.3%	1.0%	2.8%	0.7%	9.3%	2.6%	11.4%	2.2%	27.8%	5.1%	26.4%	4.6%	27.9%	5.1%	27.2%	3.3%	29.9%	5.4%	30.1%	4.4%
1	14.7%	2.5%	9.5%	1.9%	1.4%	0.7%	8.8%	2.6%	13.2%	2.6%	16.7%	3.3%	18.0%	3.5%	19.0%	2.4%	22.2%	3.1%	16.6%	2.5%	17.1%	1.7%
1.5	13.5%	1.8%	8.6%	2.9%	0.7%	0.7%	5.7%	3.1%	11.0%	1.1%	9.3%	3.0%	11.9%	2.9%	8.0%	2.4%	13.4%	2.9%	13.8%	3.0%	13.0%	2.3%
2	10.4%	2.5%	14.3%	1.9%	2.8%	0.0%	8.2%	0.0%	11.0%	0.4%	7.7%	1.6%	6.1%	1.5%	5.8%	2.4%	6.8%	2.0%	7.3%	2.1%	7.7%	1.7%
2.5	13.5%	0.6%	5.7%	0.0%	2.1%	0.7%	4.6%	1.0%	8.1%	1.8%	3.0%	2.0%	5.7%	2.5%	6.2%	2.2%	5.3%	2.0%	4.0%	1.8%	3.0%	1.0%
3	4.9%	4.3%	6.7%	1.0%	0.7%	0.7%	7.7%	1.5%	6.3%	1.5%	2.6%	1.0%	3.9%	1.9%	1.5%	1.6%	2.0%	1.5%	3.0%	1.9%	4.1%	1.9%
3.5	8.0%	0.6%	3.8%	1.9%	1.4%	1.4%	7.2%	1.0%	2.2%	0.4%	1.8%	1.6%	2.0%	1.1%	1.8%	1.7%	1.9%	1.1%	1.7%	1.2%	1.4%	0.9%
4	3.1%	1.8%	5.7%	1.0%	1.4%	0.0%	5.2%	0.5%	2.9%	0.4%	1.4%	1.0%	1.4%	1.5%	1.0%	1.3%	2.0%	2.2%	1.9%	0.9%	1.5%	1.1%
4.5	3.1%	0.6%	4.8%	1.0%	0.7%	0.0%	3.6%	0.0%	4.0%	0.4%	1.6%	1.2%	1.2%	0.9%	1.1%	1.2%	0.9%	1.3%	1.9%	1.1%	0.9%	1.5%

5	1.8%	0.0%	1.9%	0.0%	1.4%	0.7%	4.1%	0.5%	2.2%	0.7%	0.2%	0.6%	1.2%	1.6%	0.5%	1.0%	1.1%	1.1%	0.5%	1.3%	1.2%	0.7%
5.5	1.8%	1.8%	1.0%	1.9%	2.1%	0.0%	3.1%	0.0%	4.0%	1.5%	1.0%	1.0%	1.2%	1.3%	0.2%	1.2%	0.3%	1.0%	0.9%	0.8%	0.6%	1.8%
6	1.2%	0.6%	1.0%	1.0%	0.7%	0.0%	2.1%	0.0%	1.1%	1.1%	0.4%	1.0%	0.7%	0.6%	0.8%	1.3%	0.2%	0.8%	0.7%	1.2%	0.4%	0.7%
6.5	1.2%	1.2%	2.9%	1.0%	1.4%	0.0%	2.6%	0.5%	1.8%	0.0%	0.0%	0.6%	0.5%	1.4%	0.3%	0.7%	0.4%	0.9%	0.0%	0.6%	0.5%	0.6%
7	0.6%	1.8%	1.9%	1.0%	2.8%	0.0%	0.5%	0.5%	2.6%	0.4%	0.2%	2.6%	0.2%	0.5%	0.3%	1.1%	0.3%	1.4%	0.3%	1.0%	0.2%	1.0%
7.5	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.5%	1.0%	0.7%	0.7%	0.4%	1.0%	0.6%	0.9%	0.3%	0.9%	0.3%	1.2%	0.2%	0.6%	0.2%	0.8%
8	0.6%	0.0%	0.0%	1.0%	4.9%	0.7%	1.5%	0.0%	1.1%	0.4%	0.0%	0.6%	0.1%	1.1%	0.3%	1.0%	0.1%	0.3%	0.2%	1.3%	0.2%	0.8%
8.5	0.0%	1.2%	1.0%	1.0%	1.4%	0.0%	3.6%	0.5%	0.4%	1.5%	0.0%	0.4%	0.1%	1.2%	0.3%	1.2%	0.1%	1.1%	0.3%	0.9%	0.2%	0.8%
9	0.6%	0.0%	1.0%	1.0%	0.7%	0.7%	0.0%	0.5%	0.4%	1.8%	0.0%	1.0%	0.2%	0.6%	0.2%	1.3%	0.0%	0.5%	0.0%	0.3%	0.1%	0.3%
9.5	0.0%	1.2%	1.9%	1.0%	1.4%	0.7%	1.5%	0.0%	0.4%	1.5%	0.2%	1.2%	0.0%	0.8%	0.3%	1.2%	0.1%	0.7%	0.1%	1.2%	0.3%	0.6%
10	0.6%	0.6%	0.0%	0.0%	2.1%	0.7%	1.0%	0.0%	0.4%	0.0%	0.0%	0.8%	0.0%	1.1%	0.1%	0.9%	0.1%	0.8%	0.2%	0.6%	0.2%	1.0%
10.5	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	1.5%	1.0%	0.0%	0.4%	0.0%	1.0%	0.1%	0.1%	0.0%	0.9%	0.0%	0.5%	0.2%	0.9%	0.5%	1.0%
11	0.0%	2.5%	0.0%	0.0%	1.4%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	1.1%	0.0%	1.0%	0.1%	0.8%	0.1%	0.7%	0.0%	0.7%
11.5	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.6%	0.0%	0.6%	0.2%	0.5%	0.0%	0.6%	0.1%	0.3%
12	0.0%	0.6%	0.0%	1.0%	4.2%	0.0%	0.0%	0.5%	0.0%	0.4%	0.0%	0.6%	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.1%	0.4%	0.1%	0.6%
12.5	0.0%	0.0%	1.0%	1.0%	2.1%	0.0%	0.0%	0.5%	0.0%	0.0%	0.2%	0.4%	0.1%	0.9%	0.0%	0.8%	0.0%	0.6%	0.1%	0.3%	0.1%	0.7%
13	0.0%	0.0%	0.0%	1.0%	0.7%	0.0%	0.5%	0.0%	0.0%	0.4%	0.0%	1.0%	0.1%	0.2%	0.0%	0.4%	0.0%	0.7%	0.1%	0.4%	0.1%	0.6%
13.5	0.0%	0.6%	1.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.2%	0.4%	0.5%	0.0%	0.9%	0.0%	0.7%	0.0%	1.3%	0.1%	0.5%
14	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.5%	0.5%	0.0%	0.4%	0.2%	0.6%	0.0%	0.8%	0.0%	1.0%	0.0%	0.5%	0.0%	0.8%	0.0%	0.5%
14.5	0.0%	1.2%	0.0%	1.0%	1.4%	0.0%	0.5%	0.5%	0.0%	0.4%	0.0%	0.4%	0.0%	0.7%	0.0%	0.7%	0.0%	0.5%	0.0%	1.0%	0.1%	0.6%
15	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	1.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.7%	0.0%	0.8%	0.1%	0.6%
15.5	0.0%	0.0%	0.0%	0.0%	1.4%	1.4%	0.0%	0.5%	0.0%	1.8%	0.0%	0.6%	0.0%	0.6%	0.0%	0.8%	0.0%	0.7%	0.1%	0.4%	0.0%	0.6%
16	0.0%	0.6%	1.0%	1.0%	4.2%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.4%	0.0%	0.5%	0.0%	1.5%	0.0%	1.1%	0.0%	0.6%
16.5	0.0%	0.6%	0.0%	0.0%	3.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.4%	0.1%	0.8%	0.1%	0.3%	0.0%	0.9%	0.0%	0.6%
17	0.0%	1.2%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.6%	0.0%	0.5%	0.0%	0.8%	0.1%	0.6%	0.0%	0.5%	0.0%	1.0%
17.5	0.0%	0.0%	0.0%	1.0%	1.4%	1.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.6%	0.1%	0.6%	0.0%	0.5%	0.0%	0.4%	0.0%	0.4%
18	0.0%	0.6%	0.0%	0.0%	0.7%	0.7%	0.5%	0.5%	0.0%	0.0%	0.0%	0.4%	0.0%	0.5%	0.0%	0.6%	0.0%	0.7%	0.0%	0.6%	0.0%	0.7%
18.5	0.0%	0.6%	0.0%	1.0%	0.7%	0.0%	0.0%	0.5%	0.4%	0.0%	0.0%	0.6%	0.0%	0.5%	0.0%	0.6%	0.0%	0.5%	0.0%	1.0%	0.0%	0.6%
19	0.0%	0.6%	0.0%	1.0%	0.7%	0.7%	0.0%	0.0%	0.0%	0.4%	0.0%	0.2%	0.0%	0.6%	0.0%	0.9%	0.0%	0.8%	0.0%	0.3%	0.0%	0.7%
19.5	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.2%	0.0%	0.7%	0.0%	0.3%	0.0%	0.2%	0.0%	0.6%	0.0%	0.1%
>20	0.0%	62.0%	1.0%	66.7%	32.4%	85.2%	0.0%	72.2%	0.0%	72.4%	0.0%	54.9%	0.1%	54.9%	0.0%	49.9%	0.0%	55.5%	0.1%	53.7%	0.1%	58.8%

Filename	15S91_11		15S91_12		15S91_13		15S91_14		15S91_15		15S91_16		15S91_17		15S91_18		15S91_19		15S91_20		15S91_21	
y(mm)	18		21		24		27		30		33		37		41		45		49		53	
y/h	0.18		0.21		0.24		0.27		0.3		0.33		0.37		0.41		0.45		0.49		0.53	
C	0.039		0.049		0.058		0.058		0.073		0.074		0.151		0.182		0.247		0.347		0.464	
Nab	1111		1352		1385		1237		1387		1311		2060		2458		2875		3311		3375	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	13.3%	3.5%	14.1%	3.1%	14.9%	3.7%	11.1%	3.3%	12.0%	2.9%	11.6%	4.0%	5.1%	2.7%	4.9%	2.8%	4.1%	3.2%	4.3%	2.6%	2.6%	2.9%
0.5	29.3%	4.8%	21.0%	4.2%	19.4%	3.5%	19.6%	3.8%	16.1%	3.3%	14.1%	3.9%	11.9%	4.8%	12.7%	5.5%	10.9%	5.7%	8.3%	6.0%	7.1%	7.1%
1	17.3%	2.6%	23.0%	3.0%	14.2%	3.5%	14.1%	3.5%	12.3%	3.2%	14.3%	3.3%	11.7%	4.1%	11.6%	4.0%	9.8%	5.4%	8.5%	5.9%	8.2%	6.8%
1.5	13.5%	2.5%	9.7%	2.6%	12.6%	2.3%	13.1%	3.2%	9.9%	2.8%	9.2%	2.4%	8.3%	3.6%	9.1%	4.6%	5.6%	3.2%	5.3%	4.0%	4.7%	4.5%
2	8.1%	1.8%	8.8%	2.4%	9.7%	2.6%	7.0%	2.0%	9.0%	2.4%	7.7%	2.3%	7.6%	3.6%	5.5%	2.6%	6.7%	4.3%	6.9%	5.0%	6.2%	5.7%
2.5	3.1%	1.6%	4.4%	1.4%	5.1%	2.2%	5.9%	2.2%	7.0%	2.2%	6.6%	2.4%	5.2%	2.5%	7.1%	3.3%	6.9%	3.8%	6.4%	4.7%	5.6%	5.5%
3	4.0%	2.3%	3.1%	1.3%	3.0%	1.9%	6.0%	2.5%	4.6%	2.0%	4.0%	2.1%	3.7%	1.4%	5.7%	3.2%	3.6%	2.1%	3.5%	2.7%	3.6%	2.8%
3.5	1.9%	1.1%	3.5%	1.7%	2.5%	1.4%	3.5%	1.1%	3.7%	1.6%	3.7%	1.7%	4.8%	2.6%	3.8%	2.4%	4.9%	3.1%	4.4%	4.0%	4.0%	4.2%
4	2.1%	1.3%	2.1%	1.5%	3.3%	1.8%	2.6%	1.7%	2.7%	1.4%	2.5%	1.9%	4.3%	2.0%	2.4%	1.1%	4.9%	2.9%	4.4%	3.6%	4.4%	3.7%
4.5	1.4%	1.3%	2.3%	1.7%	2.0%	1.2%	2.1%	1.8%	2.3%	1.4%	3.4%	2.1%	3.6%	2.5%	3.6%	2.0%	3.5%	2.8%	3.7%	3.0%	3.1%	3.3%
5	0.5%	0.8%	0.5%	0.8%	1.4%	1.4%	2.5%	1.6%	2.1%	0.9%	1.9%	1.2%	3.1%	2.0%	2.9%	2.2%	2.6%	1.9%	2.1%	2.1%	1.8%	2.0%
5.5	1.1%	0.6%	0.8%	1.2%	1.1%	1.4%	1.0%	1.1%	2.5%	1.3%	2.5%	1.4%	3.4%	2.3%	2.5%	2.5%	3.6%	2.4%	3.3%	2.1%	2.9%	3.4%
6	0.4%	1.0%	1.0%	1.1%	1.5%	0.9%	2.2%	0.9%	1.6%	0.6%	1.8%	0.8%	1.7%	1.3%	2.6%	2.1%	2.8%	2.6%	2.9%	2.5%	2.7%	2.4%
6.5	0.2%	0.9%	0.6%	1.2%	1.4%	1.5%	1.1%	1.9%	1.6%	1.5%	2.1%	0.8%	2.0%	1.7%	1.3%	1.2%	1.7%	1.3%	1.6%	1.4%	1.5%	2.1%
7	0.4%	1.4%	0.7%	1.0%	1.3%	0.8%	0.9%	0.6%	1.2%	1.2%	1.4%	1.1%	2.0%	1.8%	2.3%	1.3%	2.0%	2.1%	1.9%	2.3%	1.9%	1.9%
7.5	0.5%	0.9%	0.6%	0.4%	0.6%	0.5%	1.0%	0.5%	1.2%	0.9%	2.0%	1.1%	1.6%	1.1%	1.7%	1.7%	1.9%	1.7%	1.8%	2.2%	2.7%	2.1%
8	0.4%	1.1%	0.6%	1.0%	0.7%	0.7%	0.9%	0.9%	1.2%	1.2%	1.1%	0.8%	1.7%	1.5%	1.7%	1.5%	1.9%	1.8%	1.6%	1.8%	1.7%	1.9%
8.5	0.4%	0.9%	0.1%	1.0%	0.4%	1.2%	0.6%	0.8%	0.9%	1.0%	1.2%	0.9%	1.6%	1.5%	0.9%	0.7%	1.5%	1.0%	1.4%	1.0%	1.0%	1.2%
9	0.2%	0.5%	0.4%	1.4%	0.4%	0.6%	0.4%	0.6%	0.7%	0.9%	0.8%	0.8%	1.2%	1.2%	1.3%	1.6%	1.1%	1.7%	1.9%	1.9%	1.6%	1.9%
9.5	0.1%	1.4%	0.4%	0.6%	0.4%	1.2%	0.4%	0.3%	0.6%	1.1%	0.8%	0.9%	1.3%	0.8%	1.1%	1.5%	1.3%	1.0%	1.6%	1.2%	1.7%	1.2%
10	0.1%	0.8%	0.1%	0.5%	0.2%	0.6%	0.2%	0.8%	0.6%	0.8%	0.5%	1.1%	1.4%	1.1%	1.3%	1.4%	0.8%	1.0%	1.3%	1.1%	0.9%	1.1%
10.5	0.3%	0.8%	0.4%	0.9%	0.5%	0.9%	0.5%	0.6%	0.7%	0.9%	0.8%	0.6%	1.1%	0.9%	0.9%	1.3%	1.2%	1.4%	1.1%	1.2%	1.8%	1.5%
11	0.1%	1.2%	0.0%	0.6%	0.4%	0.4%	0.3%	0.6%	0.3%	1.1%	0.5%	0.6%	0.6%	1.1%	0.6%	0.5%	1.0%	1.2%	0.9%	1.4%	1.4%	1.6%
11.5	0.1%	0.9%	0.2%	0.5%	0.2%	0.5%	0.2%	0.7%	0.4%	0.6%	0.5%	0.3%	0.6%	1.5%	0.9%	1.2%	0.9%	1.4%	1.3%	1.4%	1.0%	1.3%
12	0.2%	0.7%	0.1%	0.5%	0.1%	0.5%	0.2%	0.8%	0.3%	0.8%	0.7%	0.6%	0.6%	0.7%	0.9%	0.9%	0.6%	0.8%	0.5%	0.6%	0.7%	0.9%
12.5	0.1%	0.5%	0.2%	1.1%	0.2%	0.9%	0.1%	0.3%	0.4%	0.4%	0.5%	1.1%	0.4%	0.7%	0.9%	1.0%	1.1%	0.8%	0.8%	1.2%	1.1%	1.2%
13	0.0%	0.6%	0.1%	0.3%	0.4%	1.7%	0.3%	0.6%	0.4%	1.2%	0.4%	0.6%	0.7%	0.9%	0.5%	0.7%	1.2%	1.2%	1.1%	1.0%	1.2%	0.7%
13.5	0.2%	0.6%	0.0%	0.7%	0.1%	0.5%	0.3%	1.1%	0.4%	1.1%	0.3%	0.8%	0.7%	0.9%	0.6%	0.7%	0.7%	0.4%	0.6%	0.7%	0.6%	0.5%
14	0.1%	0.6%	0.2%	0.7%	0.2%	0.6%	0.1%	0.2%	0.2%	0.4%	0.3%	0.7%	0.4%	0.9%	0.9%	1.0%	0.9%	1.5%	0.8%	1.0%	0.9%	0.8%
14.5	0.1%	1.0%	0.1%	0.7%	0.1%	0.5%	0.2%	0.9%	0.0%	0.7%	0.5%	0.8%	0.2%	0.6%	0.6%	0.8%	0.4%	0.9%	1.1%	1.0%	0.9%	0.6%
15	0.1%	0.5%	0.0%	0.7%	0.1%	1.4%	0.3%	0.6%	0.4%	0.6%	0.0%	0.5%	0.4%	0.5%	0.4%	1.1%	0.6%	0.9%	0.8%	0.8%	0.6%	0.8%
15.5	0.1%	0.8%	0.1%	0.4%	0.1%	0.9%	0.2%	0.6%	0.2%	0.7%	0.3%	0.6%	0.3%	0.4%	0.3%	0.4%	0.3%	0.7%	0.4%	0.5%	0.5%	0.6%
16	0.1%	0.6%	0.0%	0.7%	0.1%	0.6%	0.1%	0.5%	0.1%	0.4%	0.2%	0.8%	0.5%	0.5%	0.3%	0.7%	0.5%	0.7%	0.7%	0.8%	0.7%	0.7%
16.5	0.0%	0.7%	0.1%	1.2%	0.1%	0.4%	0.2%	0.6%	0.2%	0.6%	0.2%	0.6%	0.6%	0.4%	0.4%	1.0%	0.5%	0.9%	0.7%	0.8%	1.0%	0.9%
17	0.0%	0.6%	0.0%	0.2%	0.1%	0.4%	0.0%	0.4%	0.3%	0.3%	0.2%	0.5%	0.2%	0.4%	0.2%	1.0%	0.4%	0.6%	0.4%	0.7%	0.6%	0.5%
17.5	0.1%	0.3%	0.1%	0.7%	0.2%	0.9%	0.2%	0.7%	0.0%	0.3%	0.0%	0.6%	0.2%	0.8%	0.2%	0.7%	0.5%	1.0%	0.5%	0.8%	0.9%	0.4%
18	0.1%	0.5%	0.0%	0.6%	0.1%	0.5%	0.0%	0.6%	0.1%	0.6%	0.1%	0.2%	0.4%	0.5%	0.4%	0.3%	0.4%	0.7%	0.6%	0.9%	0.8%	0.5%
18.5	0.1%	0.5%	0.1%	0.7%	0.0%	0.6%	0.1%	1.3%	0.0%	0.5%	0.1%	0.2%	0.2%	0.8%	0.2%	0.4%	0.4%	0.6%	0.6%	0.5%	0.5%	0.7%
19	0.0%	0.5%	0.0%	0.8%	0.0%	0.6%	0.0%	0.7%	0.1%	0.5%	0.1%	0.3%	0.1%	0.4%	0.5%	1.0%	0.2%	0.3%	0.4%	0.4%	0.6%	0.4%
19.5	0.1%	0.1%	0.0%	0.7%	0.0%	0.5%	0.2%	0.4%	0.3%	0.5%	0.1%	0.6%	0.3%	0.7%	0.4%	0.7%	0.4%	0.4%	0.3%	0.7%	0.5%	0.5%
>20	0.3%	54.8%	0.3%	54.0%	0.5%	51.6%	0.6%	52.5%	1.6%	52.8%	1.3%	51.9%	3.8%	40.6%	3.7%	35.0%	5.8%	28.6%	9.2%	22.5%	13.8%	16.8%

Filename	15S91_22		15S91_23		15S91_24		15S91_25		15S91_26		15S91_27		15S91_28		15S91_29		15S91_30		15S91_31		15S91_32	
y(mm)	57		61		65		69		73		77		81		85		89		93		103	
y/h	0.57		0.61		0.65		0.69		0.73		0.77		0.81		0.85		0.89		0.93		1.03	
C	0.599		0.717		0.824		0.884		0.912		0.949		0.963		0.962		0.978		0.978		0.989	
Nab	3409		2913		2241		1636		1290		862		639		630		360		357		174	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	2.8%	3.8%	2.4%	4.3%	2.4%	4.6%	1.5%	4.8%	1.6%	5.3%	1.5%	5.9%	1.7%	5.6%	1.0%	3.5%	1.1%	6.9%	0.3%	3.4%	1.1%	3.4%
0.5	6.8%	8.7%	5.8%	8.5%	3.6%	9.4%	4.4%	9.7%	3.6%	9.9%	2.7%	7.9%	2.5%	9.5%	2.2%	7.8%	1.4%	7.5%	1.4%	10.6%	2.9%	6.3%
1	6.1%	7.3%	3.5%	5.4%	4.0%	6.1%	3.0%	7.2%	2.9%	5.8%	2.6%	7.0%	1.7%	5.9%	0.8%	7.1%	1.4%	5.3%	0.8%	5.9%	1.7%	8.6%
1.5	4.3%	4.2%	5.4%	8.8%	4.6%	7.7%	4.0%	8.8%	3.3%	7.7%	2.6%	8.2%	2.0%	9.7%	1.9%	8.1%	1.1%	8.1%	1.7%	7.3%	0.6%	8.0%
2	5.8%	7.4%	4.6%	6.5%	3.7%	7.4%	4.0%	6.9%	2.7%	9.1%	2.4%	9.5%	0.9%	9.7%	3.0%	8.9%	1.4%	10.0%	2.0%	5.9%	0.6%	4.6%
2.5	4.6%	5.6%	2.7%	4.3%	2.7%	5.2%	1.6%	5.0%	1.8%	6.1%	0.8%	5.7%	1.1%	5.5%	1.3%	6.0%	2.2%	3.3%	1.1%	5.3%	1.1%	10.3%
3	2.5%	3.4%	4.1%	6.1%	2.7%	6.8%	2.4%	7.5%	2.2%	6.4%	2.2%	6.4%	1.7%	6.9%	0.6%	7.0%	1.4%	6.7%	0.6%	8.1%	1.1%	6.9%
3.5	3.5%	4.6%	4.3%	5.4%	3.0%	6.2%	2.4%	6.4%	1.9%	5.5%	2.1%	7.1%	0.9%	7.7%	1.3%	6.8%	1.1%	5.8%	0.3%	7.3%	1.1%	5.7%
4	4.2%	3.9%	2.2%	3.1%	2.5%	3.6%	1.3%	3.5%	1.2%	3.6%	2.0%	4.3%	1.4%	2.5%	1.1%	4.4%	0.3%	3.6%	1.4%	5.3%	0.6%	2.3%
4.5	3.5%	3.6%	3.0%	3.8%	2.6%	4.4%	1.8%	3.9%	2.0%	3.8%	0.9%	5.6%	2.0%	4.7%	1.9%	4.6%	1.9%	6.1%	0.3%	7.3%	1.1%	6.9%
5	1.8%	1.9%	2.8%	3.4%	2.1%	4.4%	1.9%	3.9%	1.6%	4.7%	1.2%	4.6%	1.3%	3.9%	1.7%	6.7%	0.8%	4.4%	1.1%	4.8%	2.3%	5.7%
5.5	3.4%	3.1%	1.5%	2.0%	1.6%	2.6%	1.0%	2.6%	1.3%	2.6%	1.6%	2.9%	0.6%	3.1%	0.8%	3.3%	0.0%	2.8%	0.6%	4.8%	1.1%	6.3%
6	2.5%	2.4%	2.2%	3.1%	1.8%	2.9%	1.7%	3.1%	1.2%	3.7%	0.7%	3.0%	1.4%	3.9%	0.8%	3.7%	0.3%	3.6%	0.8%	2.2%	0.0%	2.3%
6.5	1.5%	1.6%	2.1%	2.8%	1.8%	2.4%	2.0%	2.6%	1.2%	2.8%	1.3%	2.7%	0.9%	4.2%	1.0%	4.8%	1.1%	3.9%	1.1%	3.9%	0.0%	2.9%
7	2.6%	3.2%	1.3%	1.8%	0.9%	1.6%	1.0%	1.5%	0.3%	1.6%	0.8%	1.9%	0.8%	2.0%	0.6%	2.1%	0.3%	1.7%	0.3%	1.4%	0.6%	2.3%
7.5	1.9%	2.4%	1.6%	2.4%	1.4%	2.1%	1.3%	2.3%	1.3%	2.1%	0.9%	2.7%	0.8%	2.3%	0.0%	2.9%	0.3%	3.3%	0.0%	2.2%	0.0%	2.3%
8	2.1%	1.8%	1.8%	2.4%	1.9%	2.3%	1.4%	1.8%	0.8%	2.1%	1.3%	1.7%	0.8%	1.6%	0.3%	2.1%	0.8%	1.4%	0.3%	2.2%	0.0%	3.4%
8.5	1.0%	1.2%	1.4%	1.3%	1.2%	1.0%	1.0%	1.5%	0.9%	1.3%	0.9%	1.3%	0.9%	1.3%	0.5%	0.8%	0.3%	1.4%	1.1%	0.6%	0.0%	2.3%
9	1.5%	1.9%	1.5%	1.3%	1.3%	1.2%	1.2%	2.3%	1.2%	1.9%	0.9%	1.6%	1.3%	2.0%	0.5%	1.1%	0.6%	2.2%	0.6%	0.6%	0.6%	0.6%
9.5	1.6%	1.5%	1.1%	1.1%	0.9%	1.0%	1.0%	0.9%	0.6%	1.0%	0.5%	1.5%	0.5%	0.5%	0.6%	1.0%	0.0%	1.1%	0.3%	0.6%	0.6%	1.7%
10	0.7%	0.9%	1.4%	1.7%	1.2%	1.6%	0.7%	1.6%	0.9%	1.2%	0.8%	1.3%	0.8%	0.8%	0.2%	0.8%	0.0%	2.2%	0.6%	0.8%	0.0%	1.7%
10.5	1.0%	1.4%	1.5%	1.0%	1.2%	1.4%	1.1%	1.1%	1.2%	1.2%	0.7%	0.6%	0.2%	0.3%	0.2%	1.0%	1.1%	1.4%	0.6%	0.6%	0.0%	0.0%
11	1.3%	1.3%	0.9%	0.8%	0.5%	0.8%	0.5%	0.3%	0.6%	0.6%	0.5%	0.9%	0.2%	0.3%	0.3%	1.0%	0.3%	0.3%	0.0%	0.3%	0.0%	1.1%
11.5	1.2%	1.1%	1.1%	1.2%	1.2%	0.8%	0.8%	1.0%	1.1%	1.6%	0.3%	0.5%	0.5%	0.6%	0.5%	0.5%	0.0%	0.3%	0.3%	1.7%	0.6%	1.1%
12	0.6%	0.9%	1.0%	1.0%	0.9%	1.0%	0.9%	0.6%	0.8%	0.8%	0.3%	0.5%	0.6%	0.5%	0.5%	0.5%	0.3%	1.1%	0.0%	0.8%	0.0%	0.6%
12.5	1.0%	0.9%	0.7%	0.7%	0.4%	0.8%	0.6%	0.6%	0.3%	0.5%	0.1%	0.6%	0.3%	0.0%	0.2%	0.0%	0.3%	0.8%	0.6%	0.3%	0.6%	0.0%
13	1.4%	0.8%	1.0%	1.1%	1.0%	0.8%	0.8%	1.0%	0.5%	0.5%	0.6%	0.6%	0.6%	0.5%	0.3%	0.8%	0.6%	0.6%	0.3%	0.6%	0.0%	0.0%

13.5	0.6%	0.5%	0.8%	0.8%	0.9%	0.8%	0.7%	0.8%	0.9%	0.6%	0.6%	0.3%	0.3%	0.3%	1.0%	0.2%	0.0%	0.6%	0.6%	0.8%	0.0%	0.0%
14	0.7%	0.9%	0.4%	0.5%	0.7%	0.4%	0.4%	0.3%	0.2%	0.2%	0.3%	0.0%	0.2%	0.2%	0.3%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%
14.5	1.2%	1.3%	1.0%	1.0%	0.7%	0.8%	0.5%	0.6%	1.1%	0.4%	0.9%	0.8%	0.2%	0.3%	0.3%	0.5%	0.0%	1.4%	0.3%	0.6%	0.6%	0.0%
15	1.1%	0.7%	0.9%	0.7%	1.0%	0.6%	0.8%	0.7%	0.6%	0.3%	0.2%	0.1%	0.3%	0.3%	0.2%	0.3%	0.8%	0.6%	0.6%	0.3%	0.0%	0.0%
15.5	0.7%	0.5%	0.8%	0.5%	0.5%	0.2%	0.9%	0.4%	0.3%	0.3%	0.0%	0.3%	0.0%	0.8%	0.5%	0.3%	0.6%	0.0%	0.6%	0.6%	0.6%	0.0%
16	0.6%	0.9%	0.5%	0.7%	0.9%	0.5%	0.6%	0.6%	0.4%	0.5%	0.2%	0.2%	0.2%	0.8%	0.3%	0.3%	0.0%	0.3%	1.1%	0.3%	0.6%	0.6%
16.5	0.8%	0.7%	0.7%	0.5%	0.5%	0.5%	0.7%	0.1%	0.6%	0.9%	0.8%	0.2%	0.0%	0.3%	0.2%	0.2%	0.3%	0.0%	0.0%	0.3%	0.6%	0.0%
17	0.6%	0.4%	0.5%	0.4%	0.5%	0.2%	0.5%	0.2%	0.5%	0.3%	0.1%	0.0%	0.2%	0.2%	0.0%	0.0%	0.3%	0.3%	0.3%	0.0%	0.6%	0.0%
17.5	0.7%	0.5%	1.0%	0.3%	1.0%	0.3%	0.9%	0.1%	0.7%	0.0%	0.5%	0.1%	0.3%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%
18	0.6%	0.7%	0.4%	0.4%	0.5%	0.1%	0.4%	0.1%	0.3%	0.1%	0.3%	0.1%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.6%	0.3%	0.0%	0.0%
18.5	0.7%	0.4%	0.4%	0.3%	0.8%	0.5%	1.2%	0.1%	0.8%	0.4%	0.6%	0.2%	0.5%	0.0%	0.3%	0.0%	0.8%	0.0%	0.3%	0.6%	0.0%	0.6%
19	0.4%	0.3%	0.7%	0.4%	0.4%	0.2%	0.6%	0.2%	0.6%	0.3%	0.5%	0.1%	0.2%	0.2%	0.3%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.5%	0.6%	0.5%	0.3%	0.4%	0.3%	0.2%	0.1%	0.6%	0.2%	0.3%	0.1%	0.2%	0.2%	0.5%	0.0%	0.3%	0.0%	0.3%	0.0%	0.6%	0.0%
>20	19.6%	10.7%	28.5%	8.1%	38.0%	4.4%	46.2%	3.4%	53.3%	2.0%	61.1%	0.8%	68.7%	0.8%	71.6%	1.1%	75.0%	0.6%	76.5%	1.1%	77.0%	0.6%

Filename	15S91_33		15S91_34	
y(mm)	108		113	
y/h	1.08		1.13	
C	0.989		0.993	
Nab	162		118	
Min	f(a)	f(w)	f(a)	f(w)
0	1.2%	6.2%	0.8%	5.1%
0.5	1.9%	6.2%	0.8%	6.8%
1	1.2%	10.5%	0.0%	9.3%
1.5	0.0%	3.7%	2.5%	4.2%
2	1.2%	4.9%	0.0%	4.2%
2.5	0.0%	6.2%	0.0%	8.5%
3	0.6%	3.7%	0.8%	8.5%
3.5	0.0%	4.9%	3.4%	8.5%
4	0.6%	8.6%	0.0%	3.4%
4.5	0.6%	4.3%	0.8%	4.2%
5	0.6%	4.9%	0.0%	6.8%
5.5	0.6%	3.7%	0.8%	5.1%
6	0.0%	4.9%	0.0%	2.5%
6.5	1.2%	3.1%	0.8%	0.8%
7	0.0%	3.7%	0.0%	5.1%
7.5	0.0%	1.9%	0.8%	2.5%
8	0.0%	1.2%	0.8%	3.4%
8.5	0.0%	1.2%	0.0%	0.8%
9	0.0%	2.5%	0.0%	2.5%
9.5	0.6%	3.1%	0.0%	1.7%
10	0.6%	0.6%	0.8%	0.8%
10.5	0.0%	3.1%	0.0%	0.8%
11	0.0%	0.6%	0.0%	0.0%
11.5	0.0%	0.6%	0.0%	0.8%
12	0.0%	0.0%	0.0%	0.0%
12.5	0.0%	0.6%	0.0%	0.0%
13	0.6%	0.0%	0.0%	0.0%
13.5	0.0%	1.2%	0.8%	0.0%
14	0.0%	0.0%	0.0%	0.0%
14.5	0.0%	0.6%	0.0%	0.8%
15	0.0%	0.0%	0.0%	0.0%
15.5	0.0%	0.0%	0.0%	0.0%
16	0.6%	0.0%	0.0%	0.0%
16.5	0.0%	0.0%	0.0%	0.0%
17	0.0%	0.0%	0.0%	0.8%
17.5	0.0%	0.6%	0.0%	0.0%
18	0.0%	0.0%	0.0%	0.0%
18.5	0.0%	0.0%	0.8%	0.0%
19	0.0%	0.0%	0.0%	0.0%
19.5	0.0%	0.0%	0.0%	0.0%
>20	86.4%	1.9%	83.1%	0.8%

Run 1.5B, dcrest/h = 1.5, Configuration B, location 91

Filename	15S91_00		15S91_01		15S91_02		15S91_03		15S91_04		15S91_05		15S91_06		15S91_07		15S91_08		15S91_09		15S91_10	
y(mm)	113		108		103		93		89		85		81		77		73		69		65	
y/h	1.13		1.08		1.03		0.93		0.89		0.85		0.81		0.77		0.73		0.69		0.65	
C	0.973		0.97		0.965		0.95		0.936		0.928		0.921		0.899		0.883		0.842		0.777	
Nab	455		510		626		882		1029		1154		1259		1589		1906		2303		2962	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.3%	6.6%	1.2%	5.3%	1.4%	5.1%	1.1%	4.9%	1.3%	4.7%	0.9%	4.7%	1.3%	4.8%	1.1%	5.2%	2.4%	5.9%	1.4%	5.7%	2.4%	5.9%
0.5	4.6%	6.6%	2.9%	9.4%	1.6%	12.1%	2.9%	11.9%	2.6%	8.3%	2.6%	10.0%	2.9%	10.6%	4.8%	10.6%	3.5%	11.4%	5.9%	10.9%	7.5%	12.5%
1	1.8%	9.0%	3.3%	9.0%	3.5%	9.7%	3.5%	9.1%	3.2%	9.9%	3.1%	12.0%	3.6%	10.9%	5.3%	10.5%	4.8%	10.3%	5.5%	10.5%	6.6%	9.2%
1.5	2.0%	6.4%	2.9%	9.4%	4.5%	10.5%	3.3%	9.8%	1.6%	6.1%	2.0%	6.2%	3.4%	8.9%	3.7%	9.4%	3.4%	5.9%	3.1%	6.5%	6.0%	8.8%
2	3.1%	7.5%	3.3%	9.6%	1.9%	5.3%	1.6%	7.5%	3.2%	9.3%	2.9%	8.8%	2.1%	5.1%	2.3%	5.7%	3.9%	8.5%	4.4%	7.8%	3.5%	4.6%
2.5	2.2%	7.5%	2.0%	6.7%	2.1%	8.8%	2.6%	7.4%	2.8%	8.5%	3.3%	7.3%	3.2%	7.5%	3.5%	7.4%	2.6%	7.5%	3.8%	7.2%	4.4%	6.5%
3	1.3%	6.4%	1.0%	2.9%	2.4%	8.5%	3.9%	6.2%	1.2%	3.8%	1.3%	3.3%	2.5%	6.2%	3.4%	6.3%	1.9%	5.6%	2.0%	3.7%	3.8%	6.5%
3.5	1.3%	7.0%	1.0%	5.9%	3.8%	4.6%	2.2%	5.6%	1.8%	5.8%	1.5%	5.9%	2.4%	6.3%	2.9%	5.4%	2.8%	5.5%	3.7%	4.5%	3.8%	4.9%
4	0.7%	4.2%	1.8%	4.3%	0.8%	2.9%	1.4%	4.4%	1.5%	6.1%	1.7%	5.4%	1.6%	4.4%	1.8%	3.0%	2.5%	5.5%	2.5%	5.1%	2.3%	2.8%
4.5	1.1%	6.2%	1.2%	6.9%	1.4%	4.3%	2.2%	4.2%	1.7%	5.3%	1.0%	3.6%	1.9%	4.2%	1.6%	4.2%	1.9%	5.0%	2.1%	4.2%	3.4%	4.1%
5	0.2%	3.3%	0.4%	5.1%	1.9%	3.8%	1.4%	5.0%	1.5%	3.1%	1.0%	3.1%	1.8%	4.1%	1.6%	4.3%	1.5%	2.0%	2.0%	2.6%	2.2%	2.9%
5.5	0.4%	5.5%	1.2%	3.5%	1.0%	2.1%	0.9%	3.5%	1.3%	4.2%	1.2%	4.0%	1.4%	3.3%	0.9%	2.9%	2.5%	2.9%	2.3%	3.1%	2.0%	2.9%
6	1.3%	4.4%	0.8%	2.4%	0.6%	3.4%	1.1%	2.8%	1.6%	3.4%	1.6%	3.6%	1.5%	2.7%	2.1%	3.2%	1.6%	3.3%	2.3%	3.1%	2.1%	2.7%
6.5	0.7%	1.3%	0.8%	2.9%	0.5%	1.4%	1.1%	1.8%	1.2%	2.1%	1.1%	1.8%	0.9%	1.7%	1.3%	1.3%	1.0%	1.5%	1.3%	1.9%	1.1%	1.2%
7	1.1%	1.5%	2.5%	2.7%	0.6%	3.0%	0.6%	1.5%	1.3%	2.4%	0.6%	3.1%	1.0%	2.6%	1.4%	2.5%	1.9%	2.2%	1.2%	2.4%	2.2%	2.4%
7.5	0.2%	2.9%	0.8%	1.6%	0.8%	1.8%	0.7%	2.5%	0.9%	1.8%	1.9%	1.2%	1.3%	2.2%	1.6%	2.0%	1.2%	1.8%	1.8%	2.6%	1.4%	1.8%
8	0.2%	1.5%	1.0%	1.4%	0.8%	1.8%	0.6%	1.4%	1.7%	2.0%	1.3%	2.3%	0.9%	1.0%	1.3%	1.4%	2.0%	1.7%	1.3%	1.7%	1.5%	1.6%
8.5	0.0%	1.1%	0.2%	0.8%	0.3%	0.8%	0.3%	0.7%	0.6%	0.7%	1.0%	1.0%	0.7%	1.0%	0.5%	1.4%	0.8%	0.7%	0.9%	1.1%	1.1%	1.2%
9	0.2%	1.1%	1.2%	1.8%	1.0%	1.9%	1.2%	0.9%	0.6%	1.7%	0.7%	1.6%	0.6%	1.7%	1.0%	1.3%	1.5%	1.5%	1.3%	1.3%	1.4%	1.2%
9.5	0.9%	0.7%	0.4%	1.2%	0.8%	1.1%	1.1%	1.2%	1.0%	1.1%	1.7%	1.2%	0.9%	0.7%	1.3%	1.4%	1.1%	1.4%	1.6%	1.4%	1.2%	1.3%
10	0.7%	0.7%	1.0%	0.8%	0.5%	1.0%	0.7%	1.4%	0.4%	0.3%	0.5%	1.0%	0.6%	0.8%	1.0%	1.4%	0.8%	0.6%	0.7%	0.8%	0.9%	0.9%
10.5	0.9%	0.9%	0.2%	0.8%	0.5%	0.0%	0.7%	0.3%	1.0%	1.0%	0.3%	0.8%	0.6%	1.2%	1.2%	0.7%	1.2%	1.0%	1.3%	1.4%	1.4%	0.9%
11	0.4%	0.9%	0.6%	0.4%	0.5%	0.8%	0.3%	0.6%	0.4%	0.9%	0.8%	1.0%	0.9%	0.6%	0.6%	0.6%	1.3%	0.8%	1.6%	0.8%	0.5%	0.6%
11.5	0.9%	1.1%	0.4%	0.8%	0.5%	0.6%	0.8%	0.8%	0.9%	1.3%	0.6%	0.6%	0.6%	0.6%	1.4%	0.4%	1.5%	1.0%	1.0%	1.3%	1.1%	0.8%
12	0.2%	0.4%	0.2%	0.8%	1.1%	0.5%	0.9%	0.5%	0.3%	0.5%	0.1%	0.3%	1.3%	0.5%	0.8%	0.5%	0.5%	0.4%	0.7%	0.3%	1.0%	0.8%
12.5	0.0%	0.7%	0.0%	0.4%	0.3%	0.6%	0.5%	0.6%	0.9%	0.7%	0.8%	0.9%	1.0%	0.8%	0.6%	0.6%	1.1%	0.6%	1.0%	0.8%	0.6%	0.9%
13	0.9%	0.9%	0.2%	0.6%	0.2%	0.0%	0.1%	0.2%	0.6%	0.2%	0.7%	0.4%	0.2%	0.5%	0.5%	0.4%	1.2%	0.4%	0.8%	0.4%	0.4%	0.6%
13.5	0.2%	0.2%	0.6%	0.4%	0.0%	0.5%	0.3%	0.6%	0.1%	0.6%	0.5%	0.3%	0.5%	0.8%	0.6%	0.5%	0.4%	0.3%	0.7%	0.4%	0.8%	0.6%
14	0.4%	0.7%	0.0%	0.6%	0.5%	0.2%	0.2%	0.5%	0.6%	0.3%	0.7%	0.3%	0.7%	0.2%	0.6%	0.9%	0.4%	0.5%	0.7%	0.5%	0.9%	0.3%
14.5	0.2%	0.7%	0.0%	0.0%	0.0%	0.3%	0.3%	0.1%	1.1%	0.6%	1.0%	0.3%	0.6%	0.6%	1.1%	0.3%	0.6%	0.5%	0.9%	0.4%	0.9%	0.7%
15	0.2%	0.2%	0.0%	0.0%	0.3%	0.0%	0.5%	0.3%	0.5%	0.4%	0.8%	0.4%	0.2%	0.2%	1.2%	0.2%	0.8%	0.3%	0.8%	0.2%	0.8%	0.5%
15.5	0.0%	0.4%	0.6%	0.4%	0.6%	0.2%	0.5%	0.2%	0.9%	0.3%	0.5%	0.3%	0.6%	0.2%	0.4%	0.4%	0.3%	0.1%	0.4%	0.4%	0.5%	0.3%
16	0.4%	0.2%	0.4%	0.0%	0.5%	0.3%	0.2%	0.2%	0.6%	0.7%	0.8%	0.1%	0.4%	0.2%	0.9%	0.3%	0.5%	0.3%	0.7%	0.0%	0.7%	0.6%
16.5	0.9%	0.0%	0.6%	0.0%	0.5%	0.3%	0.3%	0.1%	0.5%	0.1%	1.0%	0.3%	0.5%	0.2%	0.4%	0.4%	0.7%	0.2%	0.7%	0.3%	0.7%	0.4%
17	0.0%	0.7%	0.2%	0.0%	0.8%	0.3%	0.3%	0.0%	0.1%	0.2%	0.8%	0.2%	0.7%	0.1%	0.4%	0.4%	0.4%	0.0%	0.4%	0.3%	0.7%	0.3%
17.5	0.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	0.1%	0.6%	0.0%	0.5%	0.3%	0.2%	0.0%	0.4%	0.3%	0.5%	0.4%	0.6%	0.3%	0.5%	0.3%
18	0.4%	0.2%	0.2%	0.0%	0.8%	0.3%	0.2%	0.0%	0.9%	0.2%	0.8%	0.3%	0.6%	0.2%	0.3%	0.2%	0.6%	0.3%	0.8%	0.2%	0.5%	0.2%

18.5	0.4%	0.0%	0.4%	0.2%	0.8%	0.2%	0.6%	0.0%	0.5%	0.2%	0.5%	0.2%	0.5%	0.3%	0.6%	0.1%	0.6%	0.4%	0.3%	0.2%	0.8%	0.5%
19	0.2%	0.0%	0.4%	0.2%	0.0%	0.0%	0.1%	0.1%	0.4%	0.0%	0.5%	0.0%	0.6%	0.1%	0.4%	0.1%	0.3%	0.2%	0.3%	0.0%	0.5%	0.2%
19.5	0.7%	0.0%	0.0%	0.2%	0.6%	0.0%	0.3%	0.1%	0.8%	0.1%	0.9%	0.3%	0.4%	0.2%	0.6%	0.4%	0.5%	0.1%	0.9%	0.5%	0.6%	0.4%
>20	66.6%	0.4%	63.9%	0.6%	58.5%	0.8%	57.7%	1.0%	55.9%	1.2%	54.2%	1.6%	52.6%	1.7%	42.4%	1.4%	41.1%	1.8%	34.2%	3.0%	25.3%	4.1%

Filename	15S91_11		15S91_12		15S91_13		15S91_14		15S91_15		15S91_16		15S91_17		15S91_18		15S91_19		15S91_20		15S91_21	
y(mm)	61		57		53		49		45		41		37		33		30		27		24	
y/h	0.61		0.57		0.53		0.49		0.45		0.41		0.37		0.33		0.3		0.27		0.24	
C	0.699		0.634		0.546		0.4		0.325		0.248		0.223		0.148		0.135		0.123		0.082	
Nab	3528		3899		4107		3881		4028		3597		3359		2824		2749		2576		2151	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	2.8%	6.5%	3.2%	6.6%	4.0%	5.5%	3.7%	4.4%	4.2%	3.9%	5.7%	3.6%	5.4%	3.8%	5.8%	3.3%	7.1%	3.5%	11.3%	4.2%	12.3%	4.7%
0.5	7.4%	11.6%	8.2%	11.0%	8.3%	10.0%	9.5%	9.5%	10.8%	8.9%	13.2%	7.4%	12.6%	7.1%	14.4%	5.7%	15.7%	6.1%	17.1%	5.4%	18.3%	5.3%
1	6.8%	9.6%	8.2%	8.7%	8.9%	8.6%	10.1%	5.8%	11.2%	6.9%	12.4%	6.1%	13.4%	5.4%	15.7%	4.4%	15.8%	4.3%	15.5%	4.2%	22.6%	5.0%
1.5	6.6%	7.2%	4.7%	4.9%	7.3%	7.8%	7.8%	6.0%	9.6%	6.4%	11.0%	5.8%	10.9%	4.7%	12.6%	4.5%	12.2%	3.9%	11.3%	3.3%	11.9%	3.1%
2	4.5%	3.7%	6.5%	6.3%	4.1%	4.0%	6.5%	5.0%	7.6%	4.9%	7.4%	4.4%	7.9%	4.0%	8.7%	3.5%	9.2%	3.5%	8.9%	3.8%	11.1%	3.8%
2.5	4.4%	6.0%	5.4%	6.2%	6.8%	5.9%	6.3%	4.9%	6.6%	4.5%	6.5%	4.5%	6.5%	3.7%	6.7%	2.9%	6.3%	3.4%	5.5%	2.1%	4.8%	2.4%
3	4.3%	4.7%	3.7%	3.3%	4.7%	5.0%	5.8%	4.2%	3.9%	3.0%	3.4%	2.5%	5.2%	3.3%	5.6%	3.0%	5.5%	2.9%	4.9%	3.2%	3.6%	1.9%
3.5	3.6%	5.4%	4.0%	5.0%	4.1%	4.2%	4.6%	4.3%	4.8%	3.4%	4.2%	3.2%	4.1%	3.3%	4.4%	2.3%	4.3%	2.3%	3.8%	2.1%	3.3%	2.9%
4	2.0%	2.7%	3.7%	4.2%	2.3%	2.5%	3.7%	3.1%	3.5%	3.1%	3.8%	2.9%	3.3%	2.5%	3.4%	2.2%	2.7%	1.9%	3.1%	1.7%	2.0%	1.5%
4.5	2.8%	3.3%	3.4%	3.9%	3.4%	3.3%	3.6%	2.9%	3.6%	3.1%	3.5%	2.5%	3.1%	2.1%	3.3%	2.0%	2.8%	2.5%	2.5%	2.6%	2.0%	1.9%
5	2.5%	3.6%	1.9%	2.2%	2.9%	2.9%	1.6%	1.8%	3.0%	2.4%	3.1%	1.9%	1.5%	1.8%	2.2%	1.9%	2.4%	2.1%	2.1%	1.8%	0.7%	1.0%
5.5	2.8%	3.3%	2.6%	3.1%	3.2%	2.9%	2.7%	2.1%	2.8%	2.2%	2.1%	2.2%	2.9%	2.4%	2.4%	1.8%	2.0%	1.8%	1.4%	1.9%	1.7%	1.8%
6	2.3%	3.0%	2.3%	2.2%	2.6%	2.4%	2.6%	2.5%	1.2%	1.7%	1.6%	1.3%	2.3%	2.2%	1.6%	1.4%	1.4%	1.7%	1.9%	1.6%	0.5%	1.1%
6.5	1.5%	1.4%	1.4%	1.5%	1.8%	1.5%	1.7%	2.0%	2.1%	2.1%	2.1%	1.7%	2.4%	2.1%	1.1%	1.4%	1.0%	1.4%	1.0%	1.6%	0.6%	1.1%
7	1.7%	2.2%	1.8%	2.2%	2.1%	2.2%	1.9%	2.1%	2.0%	2.0%	1.6%	1.8%	1.6%	2.1%	1.2%	1.7%	1.2%	2.0%	0.7%	1.3%	0.8%	1.7%
7.5	1.2%	2.0%	1.7%	2.4%	2.3%	1.8%	1.2%	1.6%	1.7%	2.1%	1.9%	2.1%	1.4%	2.2%	0.7%	1.6%	1.1%	1.2%	0.8%	1.2%	0.3%	1.0%
8	2.1%	1.8%	1.6%	1.4%	1.7%	1.2%	1.9%	1.5%	1.9%	1.8%	1.4%	1.4%	0.9%	1.8%	1.3%	1.4%	1.0%	1.3%	0.7%	1.2%	0.4%	1.3%
8.5	0.9%	1.3%	1.1%	1.0%	0.8%	1.2%	1.6%	1.7%	1.3%	1.7%	1.3%	1.4%	1.2%	1.5%	0.9%	0.9%	1.1%	1.4%	0.5%	1.2%	0.3%	1.1%
9	1.3%	1.5%	1.6%	1.6%	1.6%	1.5%	1.3%	1.5%	1.3%	1.4%	0.9%	1.6%	0.8%	1.1%	0.5%	1.7%	0.5%	1.2%	0.5%	1.3%	0.4%	1.4%
9.5	1.5%	1.1%	1.4%	1.4%	1.0%	1.6%	1.4%	1.2%	1.0%	0.9%	0.7%	1.1%	0.7%	1.4%	0.6%	1.2%	0.4%	1.1%	0.7%	1.8%	0.2%	0.7%
10	1.3%	1.3%	0.9%	0.7%	1.3%	1.2%	1.1%	1.5%	1.0%	1.2%	0.7%	1.3%	0.9%	1.4%	0.8%	1.0%	0.4%	1.0%	0.6%	0.6%	0.1%	0.7%
10.5	1.2%	1.0%	1.0%	1.4%	0.8%	1.3%	0.5%	0.6%	0.9%	1.2%	0.8%	1.1%	0.7%	0.5%	0.5%	1.1%	0.6%	1.2%	0.5%	1.1%	0.2%	1.2%
11	0.6%	0.7%	1.2%	1.2%	0.9%	0.7%	1.1%	1.2%	1.1%	1.1%	0.8%	1.0%	0.8%	1.2%	0.3%	1.2%	0.4%	1.2%	0.4%	1.4%	0.2%	1.3%
11.5	0.9%	1.1%	1.1%	1.1%	0.9%	1.2%	0.9%	1.2%	0.6%	1.0%	0.7%	1.2%	0.6%	0.9%	0.5%	1.2%	0.4%	1.1%	0.3%	1.2%	0.2%	0.9%
12	1.1%	1.0%	0.9%	0.6%	0.9%	1.0%	1.0%	0.8%	0.8%	0.9%	0.4%	0.8%	0.7%	1.3%	0.4%	1.1%	0.3%	1.1%	0.6%	0.8%	0.2%	0.7%
12.5	1.1%	1.1%	0.9%	1.4%	0.7%	1.1%	1.1%	1.1%	0.5%	0.7%	0.3%	0.6%	0.8%	1.0%	0.2%	1.0%	0.4%	0.7%	0.3%	1.1%	0.0%	0.9%
13	0.7%	0.6%	1.3%	0.7%	0.7%	0.6%	0.7%	1.2%	0.8%	0.8%	0.6%	1.3%	0.4%	0.8%	0.3%	1.2%	0.3%	0.5%	0.1%	1.0%	0.0%	0.7%
13.5	0.7%	0.9%	0.5%	0.4%	0.9%	0.6%	0.7%	0.9%	0.6%	0.8%	0.6%	0.8%	0.4%	0.6%	0.4%	0.9%	0.3%	0.7%	0.3%	0.7%	0.1%	0.8%
14	1.0%	0.8%	0.8%	0.7%	0.9%	0.9%	0.6%	0.7%	0.3%	0.8%	0.4%	0.9%	0.7%	0.6%	0.2%	0.7%	0.4%	0.7%	0.1%	1.0%	0.2%	0.8%
14.5	0.7%	0.8%	0.7%	0.7%	0.7%	0.6%	0.8%	0.7%	0.6%	0.8%	0.4%	0.6%	0.4%	0.8%	0.3%	0.9%	0.1%	0.6%	0.1%	1.5%	0.0%	1.0%
15	0.5%	0.6%	0.6%	0.7%	0.3%	0.5%	0.4%	0.6%	0.3%	0.7%	0.4%	0.8%	0.4%	0.9%	0.2%	0.6%	0.3%	0.8%	0.1%	0.7%	0.0%	1.4%
15.5	0.5%	0.3%	0.6%	0.3%	0.5%	0.4%	0.5%	0.6%	0.3%	0.6%	0.3%	0.7%	0.3%	0.9%	0.3%	0.6%	0.2%	1.1%	0.2%	0.7%	0.0%	0.5%
16	0.9%	0.5%	0.6%	0.8%	0.6%	0.5%	0.3%	0.4%	0.4%	0.7%	0.5%	0.9%	0.4%	0.7%	0.1%	1.1%	0.2%	1.0%	0.2%	0.9%	0.0%	0.4%
16.5	0.9%	0.4%	0.7%	0.7%	0.6%	0.8%	0.7%	0.6%	0.3%	0.7%	0.3%	0.7%	0.2%	0.8%	0.2%	1.0%	0.1%	0.9%	0.2%	0.9%	0.0%	0.7%
17	0.8%	0.4%	0.4%	0.3%	0.7%	0.6%	0.4%	0.8%	0.3%	0.8%	0.3%	0.9%	0.3%	0.5%	0.1%	0.7%	0.1%	0.3%	0.2%	0.6%	0.1%	0.8%
17.5	0.4%	0.3%	0.7%	0.5%	0.1%	0.2%	0.6%	0.8%	0.4%	0.5%	0.4%	0.8%	0.2%	0.7%	0.0%	0.7%	0.1%	0.4%	0.1%	0.5%	0.0%	0.9%
18	0.7%	0.2%	0.6%	0.2%	0.5%	0.6%	0.4%	0.7%	0.3%	0.6%	0.3%	0.6%	0.2%	0.7%	0.2%	0.8%	0.2%	0.7%	0.2%	0.5%	0.0%	0.7%
18.5	0.7%	0.5%	0.4%	0.2%	0.3%	0.5%	0.3%	0.6%	0.4%	0.7%	0.4%	0.6%	0.3%	0.5%	0.2%	0.7%	0.1%	0.7%	0.1%	0.7%	0.1%	0.8%
19	0.5%	0.2%	0.3%	0.2%	0.5%	0.4%	0.4%	0.7%	0.2%	0.4%	0.2%	0.4%	0.1%	0.7%	0.1%	0.5%	0.2%	0.5%	0.1%	0.9%	0.0%	0.2%
19.5	0.4%	0.3%	0.7%	0.4%	0.4%	0.4%	0.3%	0.6%	0.3%	0.6%	0.3%	0.6%	0.2%	0.7%	0.1%	0.6%	0.0%	0.6%	0.1%	0.8%	0.0%	0.7%
>20	21.2%	5.2%	16.6%	7.7%	13.1%	9.9%	7.8%	15.5%	5.2%	17.9%	3.4%	23.8%	2.9%	25.5%	1.3%	33.5%	1.1%	34.5%	1.0%	35.1%	0.5%	39.2%

Filename	15S91_22		15S91_23		15S91_24		15S91_25		15S91_26		15S91_27		15S91_28		15S91_29		15S91_30		15S91_31		15S91_32	
y(mm)	21		18		15		12		9		6		1		-4		-9		-14		-19	
y/h	0.21		0.18		0.15		0.12		0.09		0.06		0.01		-0.04		-0.09		-0.14		-0.19	
C	0.085		0.084		0.07		0.07		0.067		0.079		0.1		0.12		0.127		0.161		0.127	
Nab	2332		2281		2189		2256		2266		2434		2554		2102		1586		1525		1150	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	12.9%	4.8%	12.8%	4.5%	13.9%	5.3%	13.3%	5.5%	16.1%	5.3%	15.3%	5.6%	18.0%	8.5%	14.0%	9.0%	11.6%	7.7%	7.5%	5.4%	8.3%	4.2%
0.5	21.7%	4.5%	19.6%	5.6%	19.3%	4.8%	31.1%	6.4%	30.7%	7.1%	27.7%	7.1%	27.4%	9.4%	19.3%	8.1%	15.8%	6.8%	7.3%	4.7%	9.5%	4.0%
1	17.6%	4.3%	24.4%	5.1%	24.7%	5.3%	16.4%	3.4%	16.6%	3.7%	20.8%	5.4%	19.8%	6.2%	15.9%	6.5%	12.5%	5.1%	9.0%	3.6%	8.0%	2.9%
1.5	15.7%	4.4%	11.4%	3.1%	13.1%	3.3%	14.4%	3.6%	14.7%	3.7%	9.4%	2.7%	9.3%	3.5%	11.7%	3.9%	10.8%	3.5%	7.4%	3.5%	9.7%	2.8%
2	7.1%	2.5%	7.4%	2.4%	9.2%	3.1%	7.7%	3.3%	6.1%	2.2%	8.8%	3.4%	7.8%	4.1%	11.0%	5.0%	8.4%	3.3%	5.8%	2.7%	7.8%	2.5%
2.5	5.5%	1.8%	5.7%	3.4%	4.6%	1.7%	3.9%	2.4%	4.2%	3.3%	4.6%	3.3%	5.9%	3.4%	5.7%	2.7%	9.2%	3.1%	6.4%	2.8%	7.1%	3.2%
3	4.7%	2.2%	3.8%	2.2%	3.1%	1.4%	3.6%	2.5%	2.7%	2.2%	3.2%	2.8%	2.9%	2.7%	5.2%	2.2%	5.2%	2.5%	5.7%	2.2%	5.4%	2.5%
3.5	2.7%	1.8%	2.6%	1.8%	3.2%	2.1%	1.9%	2.3%	2.2%	2.2%	1.9%	1.5%	1.5%	1.8%	3.5%	2.1%	4.9%	3.0%	5.6%	3.0%	6.2%	2.3%
4	2.1%	2.0%	2.4%	2.4%	1.8%	1.5%	1.5%	1.7%	1.3%	1.8%	1.8%	1.8%	1.8%	2.9%	2.9%	3.3%	3.8%	2.1%	5.1%	1.9%	7.2%	2.8%
4.5	1.5%	1.1%	1.4%	2.0%	1.7%	1.6%	1.3%	1.8%	1.4%	1.8%	1.2%	1.6%	0.8%	2.5%	1.7%	1.5%	3.7%	2.0%	5.0%	2.0%	4.3%	1.9%
5	1.4%	1.5%	1.2%	1.9%	1.2%	1.3%	0.8%	0.9%	0.6%	1.6%	1.0%	1.6%	0.6%	1.4%	1.9%	1.8%	2.7%	2.8%	4.0%	1.8%	3.7%	1.6%
5.5	0.7%	1.5%	0.9%	1.3%	0.5%	1.8%	0.8%	1.5%	0.4%	0.9%	0.6%	1.0%	0.4%	1.3%	1.5%	1.8%	1.7%	1.6%	3.2%	2.4%	2.4%	2.0%
6	0.4%	1.5%	0.7%	1.2%	0.6%	1.3%	0.5%	1.6%	0.4%	1.5%	0.7%	1.8%	0.7%	1.8%	1.3%	1.4%	1.5%	2.1%	3.5%	1.2%	2.3%	1.8%
6.5	0.8%	1.7%	0.7%	1.7%	0.5%	1.4%	0.1%	1.1%	0.4%	1.1%	0.3%	1.6%	0.5%	1.4%	1.0%	1.1%	1.4%	1.1%	3.0%	1.6%	1.7%	1.4%
7	0.4%	0.9%	0.6%	1.3%	0.5%	1.3%	0.5%	1.8%	0.2%	1.6%	0.5%	1.2%	0.5%	1.1%	0.5%	1.0%	1.0%	1.5%	2.2%	1.7%	1.6%	1.5%
7.5	0.3%	1.2%	0.4%	0.7%	0.5%	1.0%	0.4%	1.0%	0.2%	1.4%	0.2%	1.0%	0.3%	1.6%	0.5%	1.4%	0.8%	0.8%	2.8%	0.7%	1.8%	1.9%
8	0.9%	1.5%	0.2%	1.3%	0.3%	2.0%	0.2%	1.3%	0.4%	1.5%	0.2%	1.4%	0.2%	1.5%	0.3%	1.6%	0.4%	1.3%	1.4%	1.2%	1.2%	1.1%
8.5	0.4%	1.0%	0.4%	0.9%	0.0%	1.0%	0.4%	1.2%	0.1%	1.2%	0.3%	1.1%	0.2%	0.9%	0.4%	1.5%	0.5%	1.4%	1.6%	0.8%	1.4%	1.7%
9	0.4%	0.9%	0.2%	1.1%	0.1%	1.3%	0.2%	0.8%	0.1%	1.2%	0.1%	1.6%	0.2%	1.2%	0.3%	1.0%	0.4%	1.5%	1.3%	0.9%	1.0%	1.3%
9.5	0.3%	1.3%	0.3%	1.3%	0.0%	0.8%	0.1%	0.8%	0.0%	1.5%	0.2%	1.0%	0.2%	1.0%	0.4%	1.0%	0.4%	1.3%	1.4%	1.0%	0.8%	0.9%
10	0.3%	1.3%	0.3%	0.7%	0.1%	0.7%	0.0%	1.2%	0.1%	0.8%	0.2%	1.0%	0.2%	0.8%	0.0%	0.7%	0.6%	0.7%	0.8%	1.0%	0.5%	0.8%
10.5	0.3%	0.6%	0.2%	1.1%	0.0%	1.8%	0.1%	1.2%	0.1%	1.5%	0.2%	1.6%	0.1%	0.8%	0.1%	1.0%	0.3%	0.8%	0.7%	0.9%	0.5%	0.9%
11	0.4%	1.2%	0.4%	1.4%	0.0%	1.0%	0.1%	1.4%	0.1%	1.0%	0.1%	1.0%	0.1%	1.3%	0.1%	0.9%	0.2%	0.8%	1.2%	1.0%	0.7%	1.0%
11.5	0.2%	1.5%	0.1%	0.7%	0.0%	1.3%	0.0%	0.9%	0.1%	1.1%	0.1%	0.7%	0.1%	1.2%	0.1%	0.7%	0.1%	0.6%	0.3%	0.7%	0.8%	1.0%
12	0.3%	1.1%	0.1%	0.7%	0.0%	1.0%	0.1%	1.4%	0.0%	0.6%	0.1%	0.8%	0.1%	0.7%	0.1%	0.7%	0.2%	0.8%	0.7%	1.0%	0.5%	1.0%
12.5	0.1%	0.9%	0.2%	1.1%	0.0%	1.0%	0.0%	1.0%	0.0%	0.6%	0.0%	1.0%	0.0%	0.7%	0.0%	0.7%	0.2%	1.1%	0.5%	1.2%	0.8%	0.9%
13	0.1%	0.8%	0.2%	0.8%	0.0%	0.8%	0.0%	0.9%	0.0%	0.8%	0.1%	1.2%	0.1%	1.1%	0.0%	0.5%	0.1%	0.8%	0.3%	1.2%	0.4%	1.0%
13.5	0.0%	0.9%	0.2%	1.1%	0.0%	0.4%	0.0%	0.8%	0.0%	0.8%	0.0%	0.9%	0.0%	1.1%	0.0%	1.0%	0.3%	1.0%	0.3%	1.0%	0.1%	0.8%
14	0.1%	0.9%	0.1%	0.4%	0.0%	0.8%	0.1%	0.5%	0.1%	1.0%	0.0%	0.8%	0.0%	0.9%	0.0%	0.6%	0.2%	0.7%	0.4%	1.3%	0.3%	1.0%
14.5	0.0%	0.7%	0.0%	0.8%	0.2%	0.9%	0.0%	0.9%	0.0%	0.6%	0.0%	0.9%	0.0%	1.0%	0.0%	1.1%	0.1%	0.9%	0.2%	0.7%	0.2%	0.6%
15	0.2%	0.8%	0.1%	0.7%	0.0%	1.3%	0.0%	1.0%	0.0%	0.7%	0.0%	0.7%	0.0%	1.1%	0.0%	0.9%	0.1%	1.3%	0.1%	0.7%	0.3%	0.9%
15.5	0.0%	0.9%	0.1%	1.1%	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.0%	0.7%	0.0%	0.8%	0.1%	0.5%	0.1%	0.7%	0.4%	0.9%	0.3%	1.0%
16	0.1%	0.6%	0.1%	1.0%	0.0%	0.8%	0.0%	0.9%	0.0%	0.8%	0.0%	0.7%	0.0%	0.9%	0.0%	1.1%	0.0%	0.9%	0.3%	0.4%	0.0%	1.0%
16.5	0.0%	0.7%	0.1%	0.7%	0.0%	1.1%	0.0%	0.9%	0.0%	1.1%	0.0%	1.1%	0.1%	0.6%	0.0%	0.8%	0.0%	0.4%	0.4%	0.9%	0.2%	1.2%
17	0.1%	1.1%	0.1%	1.0%	0.0%	0.5%	0.0%	0.6%	0.0%	1.1%	0.0%	0.7%	0.0%	0.7%	0.0%	0.7%	0.0%	0.6%	0.6%	0.5%	0.3%	1.0%
17.5	0.0%	0.6%	0.1%	0.6%	0.0%	1.0%	0.1%	0.6%	0.0%	0.5%	0.0%	0.5%	0.0%	0.7%	0.0%	0.6%	0.1%	0.4%	0.1%	0.7%	0.4%	0.9%
18	0.0%	0.6%	0.0%	0.7%	0.0%	0.5%	0.0%	0.7%	0.0%	0.6%	0.0%	0.7%	0.0%	0.5%	0.0%	0.4%	0.2%	0.7%	0.2%	0.8%	0.0%	0.5%
18.5	0.0%	0.8%	0.0%	0.7%	0.0%	0.8%	0.0%	0.7%	0.0%	1.0%	0.0%	0.8%	0.0%	0.5%	0.0%	0.6%	0.1%	0.7%	0.2%	0.4%	0.3%	0.3%
19	0.0%	0.7%	0.0%	0.9%	0.0%	0.5%	0.0%	0.8%	0.0%	0.4%	0.0%	0.8%	0.0%	0.5%	0.0%	0.9%	0.0%	0.6%	0.1%	0.8%	0.2%	1.0%
19.5	0.0%	0.7%	0.0%	0.4%	0.0%	0.7%	0.0%	0.4%	0.0%	0.5%	0.1%	0.5%	0.0%	0.6%	0.0%	0.6%	0.0%	0.9%	0.1%	0.5%	0.1%	0.6%
>20	0.3%	39.7%	0.3%	38.2%	0.2%	39.3%	0.1%	37.3%	0.3%	37.2%	0.1%	34.2%	0.1%	25.3%	0.2%	27.1%	0.5%	29.9%	3.1%	38.5%	1.4%	38.4%

Filename	15S91_33		15S91_34		15S91_35		15S91_36		15S91_37	
y(mm)	-24		-29		123		133		143	
y/h	-0.24		-0.29		1.23		1.33		1.43	
C	0.164		0.119		0.984		0.989		0.992	
Nab	1298		1117		307		234		164	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	0.0%	0.0%	0.0%	0.0%	0.7%	5.2%	1.3%	8.1%	1.8%	7.9%
0.5	0.0%	0.0%	0.0%	0.0%	2.9%	10.7%	1.3%	10.3%	1.2%	11.6%
1	0.0%	0.0%	0.0%	0.0%	2.0%	8.8%	2.6%	11.5%	3.7%	11.6%
1.5	2.4%	1.8%	2.1%	1.3%	1.6%	10.1%	3.4%	10.3%	3.7%	7.3%
2	0.0%	0.0%	0.0%	0.0%	1.3%	3.9%	0.9%	4.7%	1.2%	4.3%
2.5	0.0%	0.0%	0.0%	0.0%	1.6%	9.1%	1.3%	6.0%	1.8%	6.7%

3	1.3%	0.2%	1.7%	0.2%	1.3%	4.9%	2.1%	7.7%	0.0%	7.3%
3.5	0.0%	0.0%	0.0%	0.0%	0.3%	7.2%	1.3%	5.6%	1.8%	9.1%
4	0.0%	0.0%	0.0%	0.0%	1.0%	7.5%	0.9%	5.1%	0.6%	2.4%
4.5	1.3%	0.5%	2.7%	0.1%	0.3%	4.9%	2.6%	3.4%	0.0%	6.1%
5	0.0%	0.0%	0.0%	0.0%	1.3%	3.9%	0.4%	6.8%	0.6%	4.9%
5.5	0.0%	0.0%	0.0%	0.0%	1.3%	3.3%	0.0%	3.4%	0.0%	3.7%
6	1.5%	0.6%	1.3%	0.8%	1.0%	5.2%	0.0%	1.7%	1.2%	3.0%
6.5	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	2.1%	0.6%	0.6%
7	0.0%	0.0%	0.0%	0.0%	0.3%	2.0%	0.4%	3.8%	0.6%	1.8%
7.5	1.5%	0.7%	1.4%	0.4%	2.0%	2.6%	0.4%	2.1%	0.6%	1.8%
8	0.0%	0.0%	0.0%	0.0%	1.0%	1.6%	0.4%	1.7%	0.0%	1.2%
8.5	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.9%	0.0%	2.4%
9	1.3%	0.7%	1.3%	0.5%	0.3%	1.3%	0.0%	1.3%	0.6%	1.8%
9.5	0.0%	0.0%	0.0%	0.0%	0.7%	1.3%	0.0%	0.0%	0.0%	1.2%
10	0.0%	0.0%	0.0%	0.0%	0.7%	0.3%	0.4%	0.4%	0.0%	0.6%
10.5	1.6%	0.9%	2.0%	0.7%	1.0%	0.3%	0.0%	0.0%	0.0%	0.6%
11	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.4%	0.0%	0.0%	0.0%
11.5	0.0%	0.0%	0.0%	0.0%	0.7%	0.3%	0.4%	0.0%	0.0%	0.0%
12	1.8%	0.7%	1.8%	1.0%	0.3%	1.0%	0.0%	1.3%	0.0%	0.6%
12.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%
13	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
13.5	1.6%	0.6%	1.6%	0.5%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%
14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.6%
14.5	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.4%	0.0%	0.0%	0.0%
15	2.0%	0.6%	2.1%	0.9%	0.7%	0.0%	0.4%	0.0%	0.0%	0.0%
15.5	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.4%	0.0%	0.0%
16.5	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.9%	0.4%	0.0%	0.0%
17	1.4%	0.9%	1.8%	0.2%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
17.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
18	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
18.5	1.8%	0.5%	2.2%	0.5%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%
19	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%
>20	80.5%	91.2%	78.0%	92.7%	72.3%	0.0%	75.2%	0.0%	78.0%	0.0%

Run 1.5C, dcrest/h = 1.5, Configuration C, location 91

Filename	15S91_00		15S91_01		15S91_02		15S91_03		15S91_04		15S91_05		15S91_06		15S91_07		15S91_08		15S91_09		15S91_10	
y(mm)	113		103		93		89		85		81		77		73		69		65		61	
y/h	1.13		1.03		0.93		0.89		0.85		0.81		0.77		0.73		0.69		0.65		0.61	
C	0.995		0.991		0.989		0.983		0.973		0.965		0.962		0.938		0.917		0.884		0.82	
Nab	98		155		211		278		435		545		620		960		1268		1681		2319	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.0%	3.1%	0.0%	3.2%	0.9%	5.2%	1.1%	3.2%	1.8%	6.7%	0.6%	3.7%	0.8%	4.5%	0.9%	3.9%	1.5%	5.7%	1.5%	5.4%	2.4%	4.6%
0.5	2.0%	17.3%	1.3%	10.3%	1.4%	10.4%	0.7%	9.7%	1.6%	9.4%	2.6%	9.4%	3.2%	10.6%	3.9%	10.7%	3.6%	9.5%	4.0%	11.1%	4.6%	9.8%
1	0.0%	4.1%	1.3%	7.1%	1.4%	6.2%	1.4%	5.0%	1.1%	6.2%	1.8%	6.2%	1.8%	6.6%	1.4%	7.1%	2.8%	6.3%	2.9%	6.2%	3.4%	5.7%
1.5	0.0%	6.1%	3.2%	9.7%	1.4%	10.0%	1.8%	8.6%	2.8%	7.6%	2.8%	8.8%	2.7%	9.2%	2.4%	9.0%	3.9%	8.8%	3.3%	8.7%	5.0%	8.9%
2	0.0%	4.1%	0.6%	5.2%	1.9%	9.0%	0.4%	6.1%	0.7%	8.3%	1.5%	6.4%	2.7%	7.6%	2.8%	8.3%	2.4%	5.2%	3.5%	7.7%	3.8%	8.0%
2.5	1.0%	7.1%	0.6%	5.2%	0.0%	8.5%	0.7%	9.0%	0.2%	3.7%	1.5%	8.6%	0.5%	4.8%	1.6%	5.1%	2.5%	7.3%	2.1%	4.7%	2.2%	4.9%
3	1.0%	6.1%	0.6%	7.7%	0.5%	5.7%	1.1%	6.1%	1.1%	4.8%	2.2%	5.1%	2.3%	5.5%	2.0%	8.0%	3.1%	6.2%	2.8%	6.3%	3.7%	6.3%
3.5	1.0%	4.1%	0.6%	7.7%	1.4%	5.7%	1.4%	5.0%	1.1%	6.2%	0.6%	5.0%	1.1%	5.5%	1.5%	5.9%	1.5%	3.9%	2.4%	5.3%	2.6%	6.2%
4	1.0%	6.1%	0.0%	4.5%	1.4%	3.3%	1.4%	6.1%	1.4%	5.1%	1.5%	6.1%	0.6%	4.4%	0.8%	4.1%	1.9%	5.7%	1.6%	3.2%	1.6%	3.2%
4.5	0.0%	7.1%	0.0%	6.5%	0.5%	2.4%	0.4%	4.3%	0.7%	5.7%	0.4%	4.0%	1.1%	4.5%	0.9%	4.9%	1.1%	3.5%	2.4%	5.4%	3.0%	5.2%
5	2.0%	8.2%	0.6%	2.6%	0.5%	6.2%	0.7%	5.0%	0.9%	6.2%	0.6%	4.0%	1.0%	3.4%	1.5%	4.3%	1.1%	4.8%	2.3%	4.2%	2.4%	4.0%
5.5	0.0%	3.1%	0.0%	3.9%	0.0%	5.2%	0.7%	3.2%	0.7%	2.5%	1.8%	3.3%	0.6%	3.1%	0.7%	2.7%	1.2%	3.8%	1.5%	2.2%	1.4%	2.5%
6	1.0%	3.1%	0.0%	2.6%	1.4%	3.8%	0.4%	1.4%	0.9%	4.4%	0.7%	2.8%	0.3%	4.2%	0.5%	2.3%	0.6%	2.8%	2.3%	3.2%	2.1%	2.8%
6.5	1.0%	1.0%	0.0%	2.6%	0.0%	3.3%	1.1%	2.9%	0.9%	3.4%	0.6%	3.9%	0.6%	4.2%	1.9%	2.2%	1.3%	2.4%	2.1%	2.6%	2.0%	3.2%
7	0.0%	1.0%	0.0%	3.9%	0.0%	1.9%	1.1%	2.9%	0.7%	2.1%	0.7%	2.6%	0.3%	1.8%	0.7%	1.5%	1.4%	2.7%	0.4%	1.9%	0.7%	1.4%
7.5	0.0%	3.1%	1.3%	5.8%	0.5%	2.4%	0.7%	2.5%	0.9%	1.4%	0.2%	2.0%	0.8%	3.2%	0.8%	2.2%	2.0%	2.1%	1.0%	3.3%	2.0%	2.1%
8	0.0%	2.0%	1.9%	1.9%	0.5%	2.8%	0.0%	2.2%	1.1%	2.1%	0.7%	1.8%	1.1%	2.4%	2.2%	1.7%	1.0%	1.8%	1.4%	2.0%	1.3%	2.0%
8.5	0.0%	4.1%	0.0%	0.0%	0.0%	0.0%	0.7%	1.8%	0.9%	0.9%	0.6%	2.4%	0.6%	1.1%	0.5%	0.8%	1.1%	2.6%	1.2%	1.0%	1.2%	1.1%
9	0.0%	1.0%	0.6%	0.6%	0.9%	0.9%	0.4%	1.8%	0.7%	2.3%	0.7%	2.0%	0.5%	1.9%	1.5%	0.9%	0.9%	1.7%	1.0%	1.5%	0.9%	1.5%
9.5	0.0%	1.0%	0.0%	2.6%	0.0%	1.4%	0.0%	0.4%	0.7%	1.8%	0.6%	0.6%	0.3%	1.5%	1.1%	1.0%	0.5%	1.0%	0.8%	1.0%	0.8%	1.2%
10	1.0%	4.1%	1.3%	2.6%	0.9%	0.0%	0.0%	1.1%	1.1%	1.1%	0.6%	1.3%	0.3%	1.0%	1.1%	1.6%	1.2%	1.4%	1.4%	1.0%	1.2%	1.2%
10.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.7%	1.4%	0.2%	0.7%	0.4%	0.4%	1.0%	1.9%	0.5%	0.9%	0.6%	0.6%	1.2%	1.0%	1.0%	1.1%
11	0.0%	0.0%	0.0%	0.6%	0.0%	1.4%	0.4%	1.8%	0.2%	0.2%	0.7%	1.8%	0.2%	1.0%	0.4%	1.5%	0.7%	0.8%	0.5%	0.7%	0.8%	0.9%
11.5	0.0%	1.0%	0.0%	0.0%	0.9%	0.9%	0.0%	1.8%	0.9%	0.0%	0.9%	0.4%	1.3%	1.0%	0.6%	1.8%	0.8%	0.6%	1.0%	1.0%	1.3%	0.8%
12	0.0%	0.0%	0.6%	0.6%	0.0%	0.5%	0.0%	0.7%	0.0%	1.1%	0.4%	0.6%	0.2%	0.6%	1.1%	0.5%	0.9%	0.4%	1.0%	1.0%	0.8%	0.5%
12.5	1.0%	1.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.7%	0.5%	0.9%	0.2%	0.2%	0.5%	0.3%	0.3%	0.1%	0.7%	0.8%	0.4%	0.6%	0.6%	0.7%
13	0.0%	0.0%	0.0%	0.6%	0.5%	0.0%	1.1%	0.0%	0.2%	0.9%	0.2%	0.6%	0.8%	0.2%	0.8%	0.5%	1.0%	0.6%	0.8%	0.7%	1.0%	0.7%
13.5	0.0%	0.0%	0.0%	0.0%	0.9%	0.5%	0.7%	0.0%	0.9%	0.2%	0.6%	0.7%	0.3%	0.6%	0.4%	0.4%	0.4%	0.7%	0.7%	0.7%	1.1%	0.6%
14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.7%	0.0%	0.5%	0.4%	0.2%	0.2%	0.3%	0.6%	0.1%	0.3%	0.3%	0.6%	0.4%	0.6%	0.3%
14.5	0.0%	0.0%	1.3%	0.6%	0.0%	0.0%	0.0%	0.7%	0.5%	0.9%	0.6%	1.1%	0.3%	0.3%	0.6%	0.4%	0.9%	0.6%	0.5%	0.3%	0.9%	0.6%
15	1.0%	0.0%	0.0%	0.6%	0.0%	0.0%	1.1%	0.4%	0.2%	0.0%	0.6%	0.6%	0.6%	0.5%	0.6%	0.5%	0.5%	0.6%	1.2%	0.7%	0.6%	0.3%
15.5	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.2%	0.2%	0.5%	0.3%	0.8%	0.6%	0.2%	0.2%	0.5%	0.4%	0.3%	0.3%
16	0.0%	0.0%	0.6%	0.0%	0.5%	0.0%	0.4%	0.7%	0.7%	0.5%	0.4%	0.2%	0.3%	0.2%	0.8%	0.9%	0.9%	0.7%	0.5%	0.5%	0.8%	0.8%
16.5	0.0%	0.0%	0.6%	0.0%	0.5%	0.5%	0.0%	0.4%	0.9%	0.5%	0.2%	0.6%	0.6%	0.2%	0.7%	0.5%	0.8%	0.4%	0.9%	0.5%	0.7%	0.4%
17	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.2%	0.5%	0.4%	0.0%	0.2%	0.2%	0.4%	0.2%	0.3%	0.3%	0.3%	0.1%	0.5%	0.3%
17.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.2%	0.2%	0.0%	0.3%	0.0%	0.6%	0.4%	0.7%	0.3%	0.9%	0.2%	0.5%	0.2%
18	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.2%	0.2%	0.4%	0.4%	0.5%	0.2%	0.3%	0.2%	0.6%	0.3%
18.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.9%	0.6%	0.6%	0.0%	0.2%	0.1%	0.6%	0.1%	0.7%	0.2%	0.8%	0.1%
19	0.0%	0.0%	0.6%	0.0%	0.5%	0.0%	0.4%	0.7%	0.7%	0.0%	0.2%	0.0%	0.5%	0.0%	0.7%	0.2%	0.3%	0.5%	0.7%	0.2%	0.6%	0.3%
19.5	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.3%	0.0%	0.9%	0.1%	0.2%	0.1%	0.5%	0.0%
>20	83.7%	0.0%	80.0%	0.0%	78.7%	0.0%	77.7%	0.4%	70.1%	0.7%	69.2%	1.8%	67.6%	1.0%	57.8%	1.6%	51.5%	1.9%	45.0%	2.7%	37.3%	4.9%

Filename	15S91_11		15S91_12		15S91_13		15S91_14		15S91_15		15S91_16		15S91_17		15S91_18		15S91_19		15S91_20		15S91_21	
y(mm)	57		53		49		45		41		37		33		30		27		24		21	
y/h	0.57		0.53		0.49		0.45		0.41		0.37		0.33		0.3		0.27		0.24		0.21	
C	0.708		0.59		0.455		0.334		0.211		0.156		0.108		0.085		0.066		0.055		0.052	
Nab	3100		3506		3670		3332		2734		2457		1791		1577		1288		1180		1225	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	2.9%	5.7%	3.4%	4.4%	3.3%	3.4%	4.1%	3.5%	4.9%	2.8%	5.8%	3.0%	5.4%	2.1%	7.4%	2.7%	11.6%	2.4%	13.1%	3.8%	14.0%	2.7%
0.5	5.7%	8.7%	7.2%	8.5%	7.2%	8.3%	8.9%	7.0%	11.0%	5.2%	12.0%	4.9%	12.5%	4.5%	11.9%	4.7%	16.3%	4.0%	17.9%	4.1%	19.2%	3.3%
1	4.1%	6.1%	4.5%	6.1%	5.4%	5.0%	8.9%	5.8%	10.3%	5.4%	11.9%	6.0%	12.8%	4.6%	14.4%	4.2%	13.7%	3.4%	16.3%	2.6%	14.4%	2.8%
1.5	5.6%	8.6%	6.2%	8.1%	7.4%	7.1%	5.6%	3.6%	9.3%	4.5%	9.7%	4.2%	10.5%	3.8%	12.4%	2.3%	11.0%	2.2%	10.9%	2.0%	15.1%	2.9%
2	4.7%	7.2%	3.3%	4.2%	7.4%	5.7%	7.5%	5.3%	4.4%	2.9%	8.5%	3.9%	8.2%	4.0%	8.3%	3.0%	7.6%	2.4%	7.4%	1.9%	7.6%	1.7%
2.5	3.5%	3.8%	5.0%	6.0%	3.8%	3.4%	5.9%	4.7%	7.1%	4.6%	6.7%	3.3%	6.6%	3.0%	6.3%	2.0%	5.8%	2.6%	4.2%	1.7%	4.7%	1.7%
3	4.4%	5.0%	4.6%	5.4%	4.9%	4.8%	3.7%	3.6%	6.0%	3.4%	3.6%	1.5%	5.4%	2.4%	5.8%	2.4%	6.1%	2.2%	6.9%	2.1%	4.0%	2.5%
3.5	3.9%	5.4%	2.6%	2.9%	5.1%	4.2%	4.5%	3.1%	5.0%	2.4%	5.4%	2.5%	4.4%	2.7%	5.2%	2.0%	3.5%	1.2%	3.1%	1.9%	3.1%	1.4%
4	2.0%	3.0%	4.0%	3.8%	2.6%	2.6%	4.4%	3.6%	2.1%	2.1%	4.3%	2.4%	3.8%	1.6%	3.6%	2.0%	2.3%	1.5%	2.6%	1.3%	3.0%	1.6%
4.5	2.6%	3.7%	2.3%	2.7%	4.1%	3.7%	3.6%	3.1%	3.6%	3.3%	3.1%	2.5%	3.1%	2.2%	2.7%	1.1%	2.6%	0.9%	1.7%	1.3%	2.0%	1.2%
5	2.9%	3.5%	3.8%	3.3%	3.1%	3.4%	2.2%	1.7%	3.6%	1.9%	3.2%	2.0%	2.0%	1.1%	2.7%	1.9%	1.8%	1.0%	2.2%	1.1%	2.0%	1.2%
5.5	1.7%	1.9%	2.6%	2.8%	1.9%	1.7%	3.1%	2.5%	2.7%	2.1%	3.0%	1.6%	2.6%	1.8%	2.2%	1.2%	2.2%	1.3%	1.4%	0.9%	1.2%	0.7%
6	2.8%	3.1%	2.0%	2.1%	2.9%	2.9%	2.6%	2.4%	2.5%	2.2%	1.6%	1.1%	2.7%	1.3%	1.7%	1.3%	2.6%	1.4%	1.6%	1.2%	0.7%	0.8%
6.5	2.5%	2.6%	2.4%	2.6%	2.7%	2.8%	1.6%	1.4%	1.8%	1.0%	2.3%	1.8%	2.1%	1.4%	1.6%	1.3%	1.6%	1.3%	1.4%	0.7%	1.5%	0.8%
7	1.1%	1.6%	1.6%	1.8%	1.7%	1.5%	2.5%	2.1%	2.2%	1.8%	1.8%	1.6%	2.1%	1.2%	1.6%	1.3%	1.4%	1.4%	0.8%	0.7%	0.5%	0.5%
7.5	1.6%	2.4%	1.9%	2.3%	2.2%	2.0%	2.1%	2.1%	1.8%	1.9%	2.2%	1.4%	1.8%	1.6%	0.8%	1.1%	0.8%	1.0%	0.7%	1.4%	0.7%	0.8%
8	2.1%	2.2%	1.4%	1.3%	1.8%	2.1%	2.1%	1.7%	2.0%	1.4%	1.5%	1.7%	1.2%	1.0%	1.3%	1.0%	0.9%	0.6%	1.1%	0.8%	1.1%	1.1%
8.5	0.8%	1.3%	2.1%	2.1%	1.0%	1.2%	1.1%	1.0%	1.0%	1.2%	1.2%	1.4%	1.7%	0.9%	1.2%	0.8%	0.8%	0.6%	0.6%	1.4%	0.3%	0.8%
9	2.1%	1.6%	1.6%	1.9%	2.1%	1.5%	1.8%	1.6%	1.7%	1.2%	1.1%	1.3%	1.1%	0.8%	1.0%	0.9%	1.0%	1.1%	0.5%	1.2%	0.5%	1.3%
9.5	1.3%	1.0%	1.1%	1.3%	1.3%	1.3%	1.4%	1.6%	1.5%	1.4%	0.9%	0.9%	1.0%	0.9%	0.8%	0.9%	0.7%	0.9%	0.4%	0.7%	0.4%	0.6%

10	1.5%	1.5%	1.4%	1.5%	1.7%	1.3%	1.1%	0.8%	1.0%	1.0%	0.8%	0.8%	0.7%	1.2%	0.7%	1.0%	0.4%	0.9%	0.5%	1.1%	0.6%	1.1%
10.5	1.2%	1.2%	1.0%	1.0%	1.6%	0.8%	1.3%	1.0%	0.9%	1.1%	0.7%	1.1%	0.4%	0.5%	0.9%	0.6%	0.9%	0.5%	0.3%	0.7%	0.3%	0.5%
11	0.9%	0.7%	1.3%	1.6%	1.0%	0.9%	1.7%	1.2%	0.7%	1.0%	1.0%	0.8%	0.8%	0.9%	0.6%	1.0%	0.4%	0.9%	0.3%	0.7%	0.3%	0.4%
11.5	1.2%	1.1%	1.5%	1.1%	1.3%	1.3%	1.3%	1.1%	1.0%	1.0%	0.7%	0.9%	0.6%	0.8%	0.2%	0.6%	0.5%	1.0%	0.3%	0.6%	0.7%	0.8%
12	0.8%	1.0%	0.7%	0.5%	1.0%	0.8%	0.7%	1.0%	1.0%	1.1%	0.8%	0.7%	0.3%	1.0%	0.3%	0.9%	0.4%	1.3%	0.2%	0.6%	0.2%	0.8%
12.5	1.0%	0.6%	1.2%	0.9%	0.6%	0.8%	0.8%	0.8%	0.8%	1.1%	0.3%	1.0%	0.4%	0.7%	0.3%	0.6%	0.2%	0.6%	0.2%	0.6%	0.2%	0.5%
13	0.7%	0.9%	0.5%	0.7%	0.8%	1.0%	0.9%	1.3%	0.4%	0.7%	0.6%	1.1%	0.8%	0.8%	0.1%	0.8%	0.4%	0.8%	0.5%	0.3%	0.2%	0.7%
13.5	0.8%	0.9%	1.3%	0.9%	0.9%	0.9%	0.5%	0.6%	0.5%	0.6%	0.4%	1.0%	0.4%	0.6%	0.3%	0.8%	0.2%	0.9%	0.1%	0.4%	0.6%	0.7%
14	0.3%	0.4%	0.7%	0.6%	0.5%	0.5%	0.4%	0.9%	0.7%	0.9%	0.3%	0.8%	0.4%	0.3%	0.4%	0.7%	0.2%	0.9%	0.2%	0.8%	0.0%	0.7%
14.5	0.5%	0.6%	1.0%	0.5%	0.9%	0.9%	0.6%	0.8%	0.7%	0.7%	0.4%	0.7%	0.5%	1.1%	0.3%	0.6%	0.0%	0.5%	0.2%	0.8%	0.2%	0.7%
15	1.1%	0.7%	0.9%	0.9%	1.0%	0.6%	0.6%	0.8%	0.3%	0.9%	0.2%	0.7%	0.4%	0.6%	0.6%	0.7%	0.1%	0.7%	0.3%	0.6%	0.1%	0.3%
15.5	0.6%	0.4%	0.5%	0.3%	0.4%	0.6%	0.6%	0.5%	0.3%	0.7%	0.2%	0.4%	0.1%	0.6%	0.3%	1.0%	0.2%	0.6%	0.3%	0.7%	0.1%	0.8%
16	0.7%	0.6%	1.0%	0.8%	0.7%	0.9%	0.7%	0.9%	0.4%	0.8%	0.2%	0.5%	0.1%	0.8%	0.4%	0.5%	0.4%	0.3%	0.2%	0.8%	0.0%	0.6%
16.5	0.6%	0.5%	0.5%	0.5%	0.7%	0.6%	0.5%	0.7%	0.4%	1.1%	0.3%	0.7%	0.2%	0.8%	0.3%	0.4%	0.2%	0.4%	0.3%	0.7%	0.0%	0.3%
17	0.5%	0.4%	0.7%	0.5%	0.6%	0.5%	0.2%	0.5%	0.7%	0.8%	0.1%	0.7%	0.3%	0.7%	0.2%	0.8%	0.0%	0.5%	0.2%	0.6%	0.0%	0.5%
17.5	0.8%	0.6%	0.7%	0.5%	0.3%	0.8%	0.5%	0.8%	0.3%	0.4%	0.4%	0.7%	0.2%	0.2%	0.1%	0.4%	0.0%	0.8%	0.2%	0.8%	0.0%	0.6%
18	0.4%	0.4%	0.6%	0.4%	0.4%	0.4%	0.6%	0.5%	0.5%	0.6%	0.2%	1.1%	0.1%	0.7%	0.1%	0.2%	0.2%	1.1%	0.1%	0.4%	0.1%	0.3%
18.5	0.7%	0.3%	0.7%	0.7%	0.7%	0.8%	0.3%	0.7%	0.3%	0.6%	0.2%	0.5%	0.2%	0.7%	0.0%	0.8%	0.1%	0.7%	0.1%	0.3%	0.1%	1.1%
19	0.6%	0.6%	0.4%	0.5%	0.4%	0.3%	0.3%	0.5%	0.4%	0.4%	0.0%	0.4%	0.3%	0.6%	0.1%	1.0%	0.2%	0.6%	0.0%	0.4%	0.0%	0.7%
19.5	0.3%	0.2%	0.5%	0.3%	0.2%	0.5%	0.4%	0.7%	0.3%	0.6%	0.1%	0.6%	0.1%	0.5%	0.1%	0.3%	0.2%	0.6%	0.3%	0.5%	0.0%	0.5%
>20	26.5%	7.9%	19.4%	11.7%	12.3%	16.3%	8.7%	22.7%	4.1%	31.1%	2.4%	36.1%	1.4%	42.8%	1.1%	48.4%	0.9%	52.3%	0.8%	55.0%	0.4%	56.9%

Filename	15S91_22		15S91_23		15S91_24		15S91_25		15S91_26		15S91_27		15S91_28		15S91_29		15S91_30		15S91_31		15S91_32	
y(mm)	18		15		12		9		6		1		-4		-9		-14		-19		-24	
y/h	0.18		0.15		0.12		0.09		0.06		0.01		-0.04		-0.09		-0.14		-0.19		-0.24	
C	0.045		0.036		0.034		0.028		0.026		0.025		0.026		0.025		0.026		0.023		0.014	
Nab	1197		1085		1077		976		965		844		718		423		288		212		135	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	14.5%	2.8%	14.5%	2.9%	16.8%	2.7%	16.4%	2.7%	26.7%	4.1%	33.3%	5.3%	24.9%	3.6%	18.0%	2.1%	11.8%	4.2%	0.9%	0.0%	2.2%	0.7%
0.5	22.2%	2.5%	23.3%	3.0%	32.1%	4.6%	33.0%	4.4%	28.7%	3.7%	33.3%	4.4%	27.0%	4.9%	19.4%	3.8%	12.2%	2.1%	1.4%	1.4%	1.5%	0.0%
1	18.9%	4.6%	23.3%	3.2%	14.4%	2.8%	15.2%	1.6%	18.4%	2.0%	15.9%	2.0%	18.1%	3.3%	19.6%	2.4%	14.9%	2.8%	5.2%	0.9%	3.7%	0.0%
1.5	10.0%	2.3%	10.5%	2.5%	12.7%	2.7%	14.5%	2.8%	11.1%	2.4%	7.7%	2.0%	9.7%	2.5%	13.2%	1.2%	10.8%	2.1%	3.3%	0.0%	5.2%	0.0%
2	8.3%	2.1%	8.0%	2.4%	4.5%	1.6%	6.6%	2.2%	4.6%	1.7%	3.7%	1.7%	7.5%	2.4%	8.7%	1.2%	9.4%	1.7%	0.9%	0.5%	3.7%	0.7%
2.5	6.7%	2.1%	3.3%	1.9%	4.8%	2.1%	2.9%	1.2%	1.9%	1.1%	1.7%	1.2%	4.3%	1.3%	4.7%	0.7%	10.1%	2.4%	2.8%	1.9%	3.0%	0.7%
3	3.6%	1.0%	2.9%	1.7%	3.2%	1.6%	3.6%	1.5%	3.0%	1.6%	0.8%	2.5%	2.5%	1.7%	4.3%	1.2%	6.6%	1.4%	0.5%	0.9%	3.7%	0.0%
3.5	2.5%	1.8%	3.3%	1.2%	2.9%	1.8%	1.7%	0.7%	1.7%	1.0%	0.9%	2.0%	1.5%	0.7%	2.8%	0.7%	2.1%	0.7%	1.9%	0.0%	3.7%	0.7%
4	2.6%	1.6%	1.9%	1.1%	1.7%	1.6%	0.9%	1.5%	0.8%	1.0%	1.2%	1.8%	0.7%	1.9%	1.4%	2.1%	3.8%	1.7%	2.8%	1.4%	4.4%	2.2%
4.5	1.4%	1.0%	2.3%	1.2%	1.3%	1.5%	0.9%	0.6%	0.5%	1.6%	0.5%	1.3%	1.5%	1.3%	1.2%	0.9%	2.8%	1.0%	0.9%	0.5%	5.9%	0.7%
5	1.1%	0.8%	0.6%	0.6%	0.8%	1.6%	0.5%	0.9%	0.6%	0.6%	0.0%	0.9%	0.1%	0.8%	2.4%	0.9%	3.8%	0.7%	3.3%	0.5%	3.0%	0.0%
5.5	1.0%	1.7%	1.5%	0.8%	0.9%	1.2%	0.8%	0.8%	0.6%	1.0%	0.1%	0.7%	0.4%	1.4%	0.7%	1.4%	1.4%	2.1%	1.9%	0.0%	3.0%	0.0%
6	0.9%	0.8%	0.5%	0.9%	0.6%	1.1%	0.3%	0.8%	0.3%	1.0%	0.2%	1.2%	0.1%	1.7%	0.7%	0.9%	0.7%	1.0%	2.8%	0.0%	5.2%	0.7%
6.5	1.2%	1.3%	1.1%	0.7%	0.4%	0.6%	0.3%	1.0%	0.2%	0.8%	0.1%	1.7%	0.3%	0.7%	0.7%	0.5%	3.1%	0.0%	1.4%	0.5%	3.0%	0.0%
7	0.3%	1.3%	0.3%	0.5%	0.5%	1.1%	0.3%	0.5%	0.3%	0.7%	0.1%	0.9%	0.1%	0.7%	0.2%	0.9%	1.0%	0.7%	2.8%	0.5%	0.7%	0.7%
7.5	0.7%	1.0%	0.6%	1.0%	0.1%	0.6%	0.1%	0.7%	0.1%	0.6%	0.1%	0.7%	0.0%	0.0%	0.5%	0.9%	1.0%	1.4%	0.9%	0.0%	8.1%	0.7%
8	0.9%	1.2%	0.1%	0.9%	0.1%	0.7%	0.2%	0.3%	0.2%	1.2%	0.0%	0.9%	0.0%	0.8%	0.2%	1.9%	0.3%	0.0%	1.9%	0.5%	3.7%	0.0%
8.5	0.4%	0.9%	0.2%	0.7%	0.1%	0.6%	0.4%	0.6%	0.0%	0.8%	0.0%	0.5%	0.3%	1.1%	0.2%	1.4%	1.0%	0.0%	1.4%	0.5%	3.7%	2.2%
9	0.4%	0.3%	0.4%	1.3%	0.2%	1.0%	0.2%	0.6%	0.0%	1.2%	0.1%	0.6%	0.4%	0.1%	0.2%	0.7%	0.0%	1.4%	0.5%	0.0%	0.0%	0.0%
9.5	0.1%	1.7%	0.1%	0.7%	0.3%	0.7%	0.2%	0.9%	0.0%	1.3%	0.0%	0.8%	0.0%	0.4%	0.2%	0.7%	0.3%	0.3%	5.2%	0.0%	3.0%	0.7%
10	0.1%	0.7%	0.0%	1.0%	0.0%	0.6%	0.2%	0.7%	0.0%	0.7%	0.0%	1.1%	0.0%	1.1%	0.0%	0.2%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%
10.5	0.4%	0.6%	0.3%	0.8%	0.0%	0.6%	0.0%	0.6%	0.1%	0.5%	0.1%	0.8%	0.0%	0.1%	0.0%	0.2%	0.0%	0.7%	2.4%	0.0%	2.2%	0.7%
11	0.1%	1.0%	0.0%	0.7%	0.0%	0.6%	0.0%	0.4%	0.0%	1.0%	0.0%	0.9%	0.0%	0.7%	0.0%	0.2%	0.3%	1.4%	1.9%	0.5%	2.2%	0.0%
11.5	0.1%	1.0%	0.3%	0.5%	0.5%	0.4%	0.0%	0.2%	0.0%	0.8%	0.0%	0.6%	0.0%	0.6%	0.0%	0.9%	0.3%	0.7%	4.2%	0.0%	1.5%	0.0%
12	0.3%	0.3%	0.1%	0.3%	0.1%	0.6%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.1%	0.1%	0.0%	0.2%	0.0%	0.7%	0.5%	0.9%	4.4%	0.0%
12.5	0.2%	0.8%	0.2%	1.2%	0.0%	0.7%	0.0%	0.9%	0.0%	0.4%	0.0%	0.7%	0.0%	0.3%	0.0%	0.7%	0.0%	0.3%	2.4%	0.5%	0.7%	0.0%
13	0.2%	0.4%	0.0%	0.6%	0.4%	0.4%	0.2%	0.4%	0.0%	0.5%	0.0%	0.7%	0.0%	0.6%	0.0%	0.7%	0.7%	1.0%	0.5%	0.5%	1.5%	0.0%
13.5	0.0%	0.6%	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.0%	0.6%	0.0%	0.8%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	1.5%	0.0%
14	0.1%	0.5%	0.1%	0.7%	0.0%	0.6%	0.1%	1.2%	0.0%	0.5%	0.0%	1.2%	0.0%	0.7%	0.0%	0.7%	0.7%	0.3%	3.3%	1.4%	0.7%	0.0%
14.5	0.1%	0.3%	0.1%	0.5%	0.0%	0.6%	0.1%	1.1%	0.0%	1.1%	0.0%	0.2%	0.1%	0.7%	0.0%	0.7%	0.3%	0.3%	0.5%	0.0%	0.7%	0.0%
15	0.0%	0.6%	0.0%	1.0%	0.1%	0.6%	0.2%	1.0%	0.0%	0.8%	0.0%	0.7%	0.0%	0.4%	0.0%	0.7%	0.3%	0.3%	1.4%	0.0%	0.7%	0.0%
15.5	0.0%	0.7%	0.1%	0.3%	0.1%	0.3%	0.0%	0.6%	0.0%	0.8%	0.0%	0.9%	0.0%	0.6%	0.2%	0.7%	0.0%	0.3%	0.9%	0.5%	0.0%	0.7%
16	0.0%	0.5%	0.1%	1.0%	0.1%	0.6%	0.0%	0.7%	0.0%	0.4%	0.0%	0.7%	0.0%	0.3%	0.0%	0.5%	0.0%	0.0%	0.9%	0.5%	0.7%	0.0%
16.5	0.2%	0.7%	0.0%	0.6%	0.0%	0.6%	0.0%	0.6%	0.0%	0.4%	0.1%	0.8%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	2.8%	0.5%	1.5%	0.0%
17	0.0%	0.7%	0.0%	0.6%	0.0%	0.9%	0.0%	0.6%	0.0%	0.7%	0.0%	0.8%	0.0%	0.1%	0.0%	0.2%	0.0%	1.0%	0.5%	0.0%	1.5%	0.7%
17.5	0.0%	0.3%	0.1%	0.8%	0.1%	0.5%	0.0%	0.5%	0.0%	0.8%	0.0%	0.6%	0.0%	0.6%	0.2%	0.2%	0.0%	0.0%	0.5%	0.0%	0.7%	0.7%
18	0.2%	0.9%	0.0%	0.6%	0.1%	0.6%	0.0%	0.2%	0.0%	0.7%	0.0%	1.3%	0.0%	0.7%	0.0%	0.2%	0.0%	0.0%	2.4%	0.5%	0.0%	0.0%
18.5	0.0%	0.5%	0.0%	0.7%	0.0%	0.4%	0.0%	0.4%	0.0%	0.4%	0.0%	0.9%	0.0%	0.7%	0.0%	0.0%	0.0%	0.3%	0.5%	0.0%	0.0%	0.0%
19	0.1%	0.8%	0.0%	0.2%	0.1%	0.1%	0.0%	0.6%	0.0%	0.4%	0.0%	0.7%	0.0%	0.6%	0.0%	0.7%	0.0%	0.3%	0.9%	0.0%	0.7%	0.0%
19.5	0.0%	0.3%	0.0%	0.1%	0.0%	0.6%	0.0%	0.3%	0.0%	0.3%	0.0%	0.5%	0.0%	0.4%	0.0%	0.9%	0.0%	0.3%	0.9%	0.5%	0.7%	0.7%
>20	0.3%	55.1%	0.2%	57.5%	0.0%	56.5%	0.1%	60.6%	0.1%	57.2%	0.0%	50.8%	0.0%	57.9%	0.0%	64.1%	0.0%	63.5%	28.3%	83.0%	7.4%	84.4%

Filename	15S91_33	
y(mm)	-29	
y/h	-0.29	
C	0.012	
Nab	111	
Min	f(a)	f(w)
0	0.0%	0.0%
0.5	0.0%	0.0%
1	1.8%	0.9%
1.5	0.0%	0.0%
2	0.0%	0.0%
2.5	1.8%	0.0%
3	0.0%	0.0%
3.5	1.8%	0.0%
4	0.0%	0.0%
4.5	0.0%	0.0%
5	4.5%	0.0%
5.5	0.0%	0.0%
6	1.8%	0.0%
6.5	0.0%	0.0%
7	0.0%	0.0%
7.5	0.9%	0.0%
8	0.0%	0.0%
8.5	0.0%	0.0%
9	1.8%	0.0%
9.5	0.0%	0.0%
10	0.0%	0.0%
10.5	0.0%	0.0%
11	0.0%	0.0%
11.5	0.0%	0.0%
12	0.0%	0.0%
12.5	0.0%	0.0%
13	0.0%	0.0%
13.5	0.0%	0.0%
14	0.9%	0.0%
14.5	0.0%	0.0%
15	2.7%	0.0%
15.5	0.0%	0.0%
16	0.0%	0.0%
16.5	0.0%	0.0%
17	0.0%	0.0%
17.5	0.0%	0.0%
18	1.8%	0.0%

18.5	0.0%	0.0%
19	0.9%	0.0%
19.5	0.0%	0.0%
>20	79.3%	98.2%

Run 1.5S, dcrest/h = 1.5, no-roughness, location 10

Filename	15S10_00		15S10_01		15S10_02		15S10_03		15S10_04		15S10_05		15S10_06		15S10_07		15S10_08		15S10_09		15S10_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.065		0.07		0.074		0.069		0.079		0.086		0.086		0.086		0.096		0.114		0.133	
Nab	2770		2739		2779		2640		2893		2970		2939		2831		3096		3380		3360	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	15.7%	8.2%	14.1%	6.9%	12.5%	6.2%	13.8%	6.3%	15.0%	6.9%	14.3%	6.7%	8.5%	4.2%	14.2%	5.2%	12.9%	7.3%	12.8%	6.8%	7.2%	5.1%
0.5	26.0%	5.9%	23.3%	6.2%	30.1%	7.5%	22.9%	6.2%	23.6%	6.3%	21.0%	6.9%	21.8%	6.1%	21.1%	6.4%	20.2%	6.4%	20.5%	6.3%	18.0%	7.7%
1	21.9%	4.7%	22.5%	5.4%	21.3%	4.9%	28.7%	5.3%	20.4%	4.8%	20.6%	4.6%	19.0%	5.9%	19.0%	4.5%	19.8%	4.7%	18.1%	5.1%	17.5%	5.5%
1.5	14.2%	3.9%	15.0%	4.1%	15.5%	5.2%	12.6%	3.3%	13.9%	3.2%	13.3%	3.6%	16.0%	3.5%	13.2%	3.9%	14.7%	3.6%	13.4%	4.2%	14.6%	4.0%
2	8.8%	3.1%	8.9%	2.6%	7.1%	3.0%	6.7%	2.5%	8.0%	2.8%	9.9%	2.8%	10.6%	3.0%	9.3%	2.4%	9.4%	3.5%	8.6%	3.5%	9.4%	4.2%
2.5	4.5%	2.6%	5.0%	3.1%	5.6%	3.6%	5.9%	3.4%	5.5%	2.6%	5.5%	2.6%	6.7%	2.8%	6.4%	2.4%	6.0%	2.6%	5.8%	2.7%	6.8%	2.7%
3	3.8%	3.2%	4.4%	3.1%	2.1%	2.2%	2.4%	1.8%	3.3%	2.7%	4.0%	2.2%	3.7%	2.6%	4.0%	2.6%	3.8%	2.1%	4.6%	2.3%	5.5%	3.0%
3.5	1.4%	1.9%	1.7%	2.3%	1.7%	1.9%	1.4%	1.9%	2.2%	2.5%	2.5%	2.4%	3.4%	2.1%	2.9%	2.2%	2.8%	2.2%	2.6%	2.2%	3.8%	2.7%
4	0.8%	1.2%	1.5%	2.2%	0.9%	1.8%	1.5%	2.3%	1.8%	2.4%	1.7%	2.2%	2.1%	2.1%	1.9%	1.9%	2.1%	1.8%	2.5%	2.8%	2.5%	2.3%
4.5	0.7%	2.3%	0.8%	1.4%	0.7%	1.9%	0.8%	1.6%	1.2%	1.7%	1.3%	2.2%	1.7%	1.6%	1.8%	1.8%	2.2%	2.5%	2.0%	2.4%	2.2%	2.1%
5	0.5%	1.5%	0.5%	1.6%	0.5%	1.6%	1.0%	1.4%	1.0%	1.6%	1.3%	2.1%	1.4%	1.6%	1.2%	1.9%	1.0%	1.9%	1.7%	2.0%	1.3%	1.3%
5.5	0.2%	1.5%	0.7%	1.5%	0.4%	1.2%	0.8%	2.2%	0.6%	1.7%	0.7%	1.3%	1.0%	1.2%	1.2%	1.6%	0.6%	1.4%	1.3%	1.5%	1.7%	1.9%
6	0.3%	2.2%	0.4%	1.8%	0.4%	2.1%	0.3%	1.2%	0.7%	1.1%	0.6%	1.5%	0.9%	1.8%	0.6%	1.6%	0.6%	1.0%	1.2%	1.6%	1.3%	1.1%
6.5	0.3%	1.2%	0.3%	0.9%	0.1%	1.2%	0.3%	1.6%	0.6%	1.4%	0.6%	1.6%	0.6%	1.4%	0.7%	1.6%	0.8%	1.8%	0.7%	1.3%	1.1%	1.5%
7	0.1%	1.3%	0.1%	1.4%	0.4%	2.0%	0.2%	1.0%	0.6%	1.5%	0.6%	1.1%	0.5%	1.4%	0.4%	1.4%	0.6%	1.2%	0.7%	1.4%	0.7%	1.3%
7.5	0.1%	0.8%	0.2%	1.1%	0.1%	1.1%	0.3%	1.4%	0.3%	1.3%	0.3%	1.5%	0.3%	1.4%	0.4%	1.4%	0.3%	1.5%	0.2%	1.3%	0.6%	1.5%
8	0.1%	1.0%	0.0%	1.4%	0.3%	1.4%	0.0%	1.5%	0.3%	1.3%	0.3%	1.4%	0.3%	1.2%	0.3%	1.2%	0.3%	1.3%	0.4%	1.4%	0.6%	1.0%
8.5	0.1%	0.8%	0.1%	0.8%	0.0%	1.4%	0.0%	1.2%	0.2%	1.2%	0.3%	1.1%	0.5%	1.1%	0.4%	1.2%	0.2%	1.0%	0.6%	1.5%	0.5%	1.3%
9	0.1%	1.1%	0.2%	1.4%	0.0%	1.5%	0.0%	1.1%	0.1%	0.9%	0.3%	1.1%	0.2%	1.1%	0.1%	1.1%	0.3%	1.6%	0.3%	1.6%	0.4%	1.4%
9.5	0.0%	0.9%	0.0%	1.1%	0.0%	1.3%	0.0%	1.3%	0.1%	1.3%	0.1%	1.0%	0.1%	1.2%	0.1%	1.7%	0.4%	1.7%	0.1%	1.1%	0.4%	1.3%
10	0.1%	0.8%	0.0%	1.0%	0.1%	1.2%	0.1%	1.0%	0.0%	1.0%	0.0%	1.1%	0.1%	1.1%	0.1%	1.1%	0.1%	1.2%	0.3%	1.4%	0.3%	1.1%
10.5	0.1%	1.2%	0.0%	0.5%	0.0%	1.3%	0.1%	1.0%	0.2%	0.9%	0.1%	1.1%	0.1%	1.1%	0.1%	1.0%	0.1%	1.3%	0.2%	0.9%	0.2%	0.7%
11	0.1%	0.7%	0.1%	0.8%	0.0%	0.6%	0.0%	1.0%	0.0%	1.1%	0.1%	0.9%	0.1%	1.6%	0.0%	1.0%	0.1%	1.1%	0.3%	1.2%	0.5%	0.9%
11.5	0.0%	0.9%	0.0%	0.8%	0.0%	0.9%	0.0%	0.9%	0.0%	0.9%	0.1%	1.0%	0.1%	1.0%	0.1%	0.8%	0.1%	1.0%	0.1%	1.0%	0.2%	1.2%
12	0.0%	1.4%	0.0%	1.2%	0.0%	0.6%	0.0%	0.8%	0.1%	1.0%	0.1%	1.0%	0.0%	1.0%	0.1%	0.8%	0.0%	1.0%	0.3%	0.6%	0.2%	1.1%
12.5	0.0%	0.6%	0.0%	0.7%	0.0%	1.1%	0.0%	1.2%	0.1%	0.7%	0.0%	0.6%	0.0%	0.6%	0.1%	0.7%	0.1%	1.1%	0.1%	1.1%	0.2%	1.0%
13	0.0%	0.9%	0.0%	0.8%	0.0%	1.0%	0.0%	0.7%	0.1%	0.7%	0.0%	0.7%	0.0%	0.8%	0.1%	0.8%	0.1%	1.0%	0.1%	0.9%	0.1%	1.0%
13.5	0.0%	0.9%	0.0%	0.6%	0.0%	0.8%	0.0%	1.1%	0.1%	1.1%	0.1%	1.1%	0.0%	0.8%	0.0%	0.7%	0.0%	1.0%	0.1%	1.1%	0.3%	0.7%
14	0.0%	0.5%	0.0%	0.8%	0.0%	1.0%	0.0%	0.8%	0.0%	0.8%	0.0%	0.7%	0.0%	0.9%	0.0%	1.1%	0.0%	0.5%	0.1%	1.0%	0.1%	0.9%
14.5	0.0%	0.7%	0.0%	0.6%	0.0%	0.4%	0.0%	0.7%	0.1%	0.6%	0.0%	0.7%	0.0%	1.0%	0.0%	0.9%	0.0%	1.2%	0.0%	0.9%	0.1%	0.8%
15	0.0%	1.1%	0.0%	1.1%	0.0%	1.0%	0.0%	1.1%	0.0%	0.7%	0.0%	0.8%	0.1%	0.7%	0.0%	1.0%	0.0%	0.6%	0.0%	0.9%	0.2%	0.8%
15.5	0.0%	0.7%	0.0%	0.8%	0.0%	0.4%	0.0%	0.7%	0.0%	0.7%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.0%	0.8%	0.0%	1.0%	0.1%	0.8%
16	0.0%	0.8%	0.0%	0.6%	0.0%	0.7%	0.0%	0.5%	0.0%	0.4%	0.0%	0.8%	0.0%	1.0%	0.0%	0.8%	0.1%	0.8%	0.1%	0.7%	0.0%	0.6%
16.5	0.0%	0.6%	0.0%	0.7%	0.0%	0.5%	0.0%	0.9%	0.0%	0.6%	0.0%	0.6%	0.0%	1.3%	0.0%	0.8%	0.1%	0.5%	0.0%	0.8%	0.0%	0.8%
17	0.0%	0.8%	0.0%	0.8%	0.0%	0.8%	0.0%	0.7%	0.0%	0.7%	0.0%	1.0%	0.0%	0.9%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.1%	0.7%
17.5	0.0%	0.5%	0.0%	0.8%	0.0%	0.4%	0.0%	0.8%	0.0%	0.8%	0.0%	1.0%	0.0%	0.4%	0.0%	0.6%	0.0%	0.9%	0.0%	0.6%	0.1%	0.8%
18	0.0%	0.8%	0.0%	0.9%	0.0%	0.8%	0.0%	0.7%	0.0%	0.7%	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.0%	0.6%	0.0%	0.5%	0.1%	0.8%
18.5	0.0%	0.5%	0.0%	0.8%	0.0%	1.0%	0.0%	0.4%	0.0%	0.7%	0.0%	0.8%	0.0%	0.7%	0.0%	0.5%	0.0%	0.6%	0.0%	0.8%	0.0%	0.7%
19	0.0%	0.8%	0.0%	0.6%	0.0%	0.5%	0.0%	0.7%	0.0%	0.6%	0.0%	1.0%	0.0%	0.6%	0.0%	0.7%	0.0%	0.4%	0.0%	0.6%	0.1%	0.8%
19.5	0.0%	0.5%	0.0%	0.5%	0.0%	0.5%	0.0%	0.5%	0.0%	0.8%	0.0%	0.7%	0.0%	1.0%	0.0%	0.9%	0.0%	0.9%	0.0%	0.8%	0.1%	0.7%
>20	0.0%	35.2%	0.0%	34.1%	0.0%	31.6%	0.0%	35.5%	0.0%	35.3%	0.0%	33.0%	0.0%	34.8%	0.1%	35.9%	0.1%	31.7%	0.2%	29.3%	0.5%	30.2%

Filename	15S10_11		15S10_12		15S10_13		15S10_14		15S10_15		15S10_16		15S10_17		15S10_18		15S10_19		15S10_20		15S10_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.15		0.214		0.235		0.297		0.416		0.521		0.616		0.71		0.796		0.858		0.888	
Nab	3707		4281		4314		4727		4947		4685		4570		3849		2984		2243		1765	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	11.5%	8.3%	6.8%	6.5%	6.4%	6.8%	6.4%	8.5%	5.7%	9.7%	4.6%	10.2%	4.2%	11.8%	4.1%	11.4%	3.2%	10.7%	2.5%	9.0%	1.5%	7.5%
0.5	17.8%	7.2%	16.2%	9.4%	15.1%	10.2%	14.7%	10.8%	12.9%	13.1%	11.8%	13.6%	10.5%	13.7%	8.2%	14.0%	7.3%	15.0%	5.3%	14.6%	5.4%	12.5%
1	17.6%	5.8%	16.4%	6.2%	15.2%	6.7%	14.6%	7.7%	12.6%	9.1%	11.2%	9.2%	10.0%	9.5%	8.3%	9.6%	7.2%	10.4%	5.3%	10.3%	5.9%	9.5%
1.5	12.0%	4.5%	12.7%	6.1%	13.1%	5.5%	11.8%	5.7%	10.9%	6.2%	9.6%	7.7%	6.3%	5.3%	5.8%	6.1%	4.4%	5.7%	6.0%	8.2%	4.0%	5.4%
2	9.1%	3.2%	9.2%	4.9%	9.6%	4.4%	9.1%	5.0%	5.6%	4.0%	7.0%	5.4%	7.3%	6.5%	6.4%	7.0%	6.2%	7.0%	2.8%	4.4%	4.8%	7.9%
2.5	7.3%	3.4%	6.3%	3.8%	6.5%	4.3%	6.9%	4.5%	7.0%	4.6%	5.8%	4.4%	5.6%	5.4%	5.5%	5.4%	5.4%	5.6%	5.2%	6.5%	4.1%	6.7%
3	4.2%	3.0%	3.7%	2.5%	4.9%	3.1%	5.4%	3.5%	4.9%	4.1%	3.1%	2.5%	3.3%	3.4%	2.7%	3.3%	2.7%	3.2%	4.1%	6.0%	2.2%	4.5%
3.5	3.3%	2.5%	4.5%	2.5%	3.8%	2.8%	3.6%	3.3%	3.9%	3.2%	4.3%	3.7%	4.4%	3.9%	4.2%	4.4%	4.0%	5.5%	3.3%	4.7%	3.3%	5.9%
4	2.8%	2.6%	3.2%	2.9%	3.2%	2.6%	3.2%	2.5%	2.6%	1.8%	4.0%	3.1%	4.0%	3.2%	3.4%	3.7%	2.8%	3.9%	2.0%	2.7%	2.9%	4.4%
4.5	2.4%	2.0%	3.0%	2.6%	2.4%	2.2%	2.2%	2.3%	3.3%	3.0%	3.1%	3.1%	3.4%	3.4%	3.1%	3.1%	2.8%	2.9%	2.6%	4.1%	2.2%	3.4%
5	1.8%	1.8%	2.0%	2.1%	2.6%	2.5%	2.3%	2.2%	2.5%	2.4%	2.8%	2.3%	1.7%	1.5%	1.8%	2.1%	1.6%	2.3%	2.3%	3.4%	0.8%	2.1%
5.5	1.5%	1.7%	1.4%	2.3%	1.8%	2.1%	1.6%	2.1%	2.4%	2.3%	2.6%	2.2%	2.5%	2.6%	2.7%	3.2%	2.1%	2.8%	2.3%	2.4%	1.8%	3.5%
6	0.9%	2.0%	1.0%	1.5%	1.4%	1.6%	1.8%	2.1%	2.1%	2.0%	1.3%	1.4%	2.5%	2.0%	2.3%	1.9%	2.3%	2.1%	2.1%	2.5%	1.7%	2.9%
6.5	1.0%	1.7%	1.4%	1.8%	1.3%	1.6%	1.2%	1.7%	1.2%	1.1%	1.7%	1.9%	1.3%	1.5%	1.4%	1.5%	1.2%	1.0%	1.1%	1.4%	1.0%	1.5%
7	0.8%	1.8%	1.3%	1.8%	1.2%	1.4%	1.5%	1.5%	1.3%	2.0%	1.7%	1.5%	1.9%	1.9%	1.8%	1.9%	2.0%	1.4%	1.7%	1.6%	1.2%	2.3%
7.5	0.6%	1.4%	1.1%	1.8%	0.8%	1.7%	1.1%	1.3%	1.5%	1.6%	1.8%	1.2%	1.4%	1.3%	2.1%	1.4%	1.7%	1.7%	1.5%	1.9%	1.9%	3.0%
8	0.6%	1.6%	0.9%	1.4%	0.8%	1.4%	0.9%	1.4%	1.3%	1.4%	1.2%	1.1%	1.7%	1.7%	1.3%	1.4%	1.5%	1.6%	1.2%	1.6%	1.2%	1.8%
8.5	0.4%	1.4%	0.6%	1.5%	0.6%	1.3%	0.9%	1.7%	0.8%	0.6%	1.0%	1.2%	0.9%	1.0%	1.0%	0.9%	1.2%	0.8%	1.2%	0.7%	0.8%	1.3%
9	0.6%	1.4%	0.7%	1.4%	0.7%	1.1%	0.7%	1.0%	1.4%	1.2%	1.1%	1.3%	1.4%	1.4%	1.7%	1.1%	1.5%	1.3%	1.4%	1.2%	1.9%	1.5%
9.5	0.4%	1.2%	0.5%	1.0%	0.7%	1.1%	0.5%	1.1%	0.9%	1.3%	0.8%	0.7%	1.2%	1.2%	1.7%	1.4%	1.4%	1.2%	1.3%	1.4%	1.0%	1.1%
10	0.2%	1.2%	0.5%	0.9%	0.4%	1.0%	0.8%	1.2%	1.0%	1.2%	1.0%	1.2%	0.8%	0.7%	1.0%	0.5%	0.8%	0.8%	1.0%	0.7%	0.4%	0.8%
10.5	0.3%	0.8%	0.6%	1.2%	0.5%	1.0%	0.6%	0.8%	0.7%	1.0%	0.8%	1.2%	1.1%	1.1%	1.0%	0.6%	1.2%	1.1%	1.2%	1.1%	1.0%	0.7%
11	0.4%	0.5%	0.5%	1.1%	0.3%	0.8%	0.6%	1.1%	0.5%	0.5%	0.5%	0.9%	1.1%	1.0%	0.9%	1.1%	0.9%	0.9%	0.8%	0.4%	0.9%	1.2%
11.5	0.2%	1.3%	0.4%	1.0%	0.6%	0.8%	0.4%	1.0%	0.6%	1.0%	0.6%	1.0%	1.1%	0.8%	0.7%	1.1%	0.9%	0.6%	1.0%	0.9%	0.7%	1.2%
12	0.2%	0.8%	0.4%	0.9%	0.4%	1.2%	0.4%	1.0%	0.7%	0.8%	0.6%	1.0%	0.5%	0.7%	0.6%	0.3%	0.4%	0.4%	0.7%	0.8%	0.5%	0.4%
12.5	0.2%	0.9%	0.2%	0.8%	0.5%	1.0%	0.5%	0.9%	0.6%	0.8%	0.5%	0.6%	0.8%	0.6%	1.1%	0.9%	0.6%	0.6%	0.5%	0.6%	0.9%	0.5%
13	0.2%	1.1%	0.5%	0.7%	0.4%	0.7%	0.4%	1.0%	0.3%	0.6%	0.7%	0.7%	0.7%	0.5%	0.8%	0.6%	0.9%	0.4%	0.4%	0.3%	0.6%	0.6%
13.5	0.2%	1.1%	0.3%	0.9%	0.2%	0.6%	0.3%	0.9%	0.4%	0.8%	0.5%	0.9%	0.4%	0.5%	0.7%	0.3%	0.6%	0.5%	0.9%	0.5%	0.7%	0.3%
14	0.1%	0.9%	0.3%	0.8%	0.2%	0.7%	0.3%	0.8%	0.3%	0.5%	0.4%	0.7%	0.6%	0.6%	0.8%	0.6%	0.5%	0.7%	0.6%	0.4%	0.5%	0.5%
14.5	0.1%	1.0%	0.1%	1.1%	0.3%	1.0%	0.2%	0.5%	0.5%	0.7%	0.5%	0.8%	0.7%	0.7%	0.6%	0.4%	0.8%	0.2%	0.5%	0.3%	1.2%	0.4%
15	0.1%	1.0%	0.2%	0.8%	0.3%	0.9%	0.2%	0.8%	0.4%	0.6%	0.4%	0.6%	0.6%	0.5%	0.6%	0.4%	0.5%	0.5%	0.4%	0.1%	0.9%	0.6%
15.5	0.1%	0.8%	0.2%	0.5%	0.2%	0.8%	0.4%	0.7%	0.4%	0.2%	0.3%	0.3%	0.2%	0.3%	0.5%	0.3%	0.3%	0.2%	0.4%	0.4%	0.4%	0.5%
16	0.1%	0.8%	0.1%	0.7%	0.3%	0.7%	0.2%	0.6%	0.3%	0.6%	0.4%	0.6%	0.5%	0.4%	0.6%	0.4%	0.5%	0.5%	0.6%	0.4%	0.7%	0.3%
16.5	0.1%	0.5%	0.2%	0.7%	0.3%	0.5%	0.2%	0.5%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.5%	0.4%	0.6%	0.4%	0.7%	0.3%	0.7%	0.2%
17	0.1%	0.7%	0.1%	0.6%	0.1%	0.5%	0.2%	0.5%	0.4%	0.4%	0.3%	0.6%	0.4%	0.3%	0.3%	0.4%	0.6%	0.2%	0.8%	0.2%	0.3%	0.3%
17.5	0.1%	0.6%	0.2%	0.7%	0.1%	0.5%	0.0%	0.4%	0.3%	0.3%	0.4%	0.6%	0.6%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%	0.1%	0.7%	0.3%
18	0.1%	0.8%	0.1%	0.7%	0.1%	0.7%	0.2%	0.6%	0.2%	0.4%	0.4%	0.2%	0.3%	0.6%	0.5%	0.4%	0.7%	0.2%	0.5%	0.4%	0.7%	0.2%
18.5	0.1%	0.6%	0.1%	0.5%	0.2%	0.5%	0.2%	0.5%	0.3%	0.6%	0.3%	0.4%	0.3%	0.2%	0.4%	0.5%	0.4%	0.3%	0.4%	0.2%	0.2%	0.2%
19	0.1%	0.5%	0.0%	0.5%	0.2%	0.8%	0.3%	0.5%	0.3%	0.4%	0.3%	0.2%	0.2%	0.2%	0.4%	0.2%	0.7%	0.3%	0.6%	0.3%	0.3%	0.3%
19.5	0.1%	0.6%	0.2%	0.4%	0.1%	0.5%	0.1%	0.5%	0.3%	0.4%	0.5%	0.4%	0.4%	0.3%	0.5%	0.2%	0.4%	0.3%	0.4%	0.2%	0.2%	0.0%
>20	0.5%	25.1%	1.7%	20.6%	2.0%	20.4%	3.3%	15.5%	6.1%	12.6%	9.3%	8.8%	12.7%	7.1%	17.5%	5.1%	24.4%	4.1%	32.1%	2.5%	37.6%	1.8%

Filename	15S10_22	15S10_23	15S10_24	15S10_25	15S10_26	15S10_27	15S10_28	15S10_29	15S10_30
y(mm)	73	77	81	85	89	93	103	113	123
y/h	0.73	0.77	0.81	0.85	0.89	0.93	1.03	1.13	1.23

C	0.907		0.936		0.954		0.96		0.971		0.975		0.985		0.989		0.994	
Nab	1553		1133		829		723		562		484		265		211		120	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	2.0%	6.4%	1.7%	6.2%	1.4%	5.9%	1.5%	5.3%	1.8%	6.8%	1.2%	7.0%	0.4%	5.3%	2.8%	9.0%	3.3%	8.3%
0.5	4.9%	11.0%	4.0%	13.1%	4.0%	11.1%	4.0%	12.0%	2.3%	11.7%	1.9%	12.0%	1.5%	10.9%	3.8%	10.0%	1.7%	8.3%
1	5.0%	10.1%	6.6%	11.2%	3.9%	10.7%	6.1%	9.1%	4.4%	10.3%	4.1%	8.7%	3.8%	10.6%	1.9%	6.2%	2.5%	12.5%
1.5	2.8%	5.3%	5.0%	8.5%	3.4%	6.8%	4.0%	10.7%	3.4%	6.8%	2.3%	7.0%	2.6%	6.8%	5.7%	10.0%	0.8%	11.7%
2	4.1%	9.7%	2.6%	5.6%	4.6%	8.6%	3.5%	6.4%	5.3%	10.0%	3.7%	11.6%	1.9%	7.9%	0.5%	5.2%	0.8%	5.0%
2.5	4.3%	8.6%	3.6%	7.2%	3.4%	7.1%	2.9%	6.1%	2.0%	7.8%	2.5%	7.4%	2.3%	7.2%	1.4%	9.0%	2.5%	8.3%
3	1.6%	3.9%	3.5%	7.1%	2.2%	4.8%	3.3%	5.4%	1.2%	5.7%	2.1%	6.0%	1.1%	3.4%	2.4%	7.1%	1.7%	7.5%
3.5	2.4%	5.3%	2.4%	5.6%	3.1%	5.8%	2.4%	7.1%	3.6%	5.9%	2.5%	5.0%	1.1%	9.1%	0.5%	3.8%	1.7%	5.0%
4	3.0%	5.4%	1.6%	2.9%	2.8%	4.7%	0.8%	3.3%	3.0%	6.6%	1.9%	5.8%	1.1%	5.3%	0.5%	5.2%	0.8%	4.2%
4.5	3.0%	4.8%	1.9%	5.3%	1.8%	5.5%	1.0%	6.5%	0.5%	4.1%	1.7%	3.1%	1.1%	4.9%	0.5%	1.9%	0.0%	1.7%
5	1.6%	3.2%	1.7%	3.7%	0.6%	2.3%	1.4%	4.6%	0.9%	4.4%	1.4%	2.7%	0.0%	3.0%	1.4%	6.6%	0.8%	6.7%
5.5	2.4%	4.6%	1.6%	2.6%	1.4%	3.9%	1.8%	3.6%	1.4%	2.7%	2.7%	3.5%	0.8%	3.8%	0.9%	7.1%	0.8%	2.5%
6	1.4%	2.3%	2.3%	2.6%	0.8%	3.7%	1.2%	3.5%	1.1%	3.6%	0.6%	4.1%	1.5%	2.3%	0.5%	1.9%	0.8%	5.8%
6.5	0.8%	1.4%	0.9%	1.9%	1.2%	1.9%	0.4%	1.9%	1.1%	0.9%	0.6%	1.7%	0.8%	0.4%	0.9%	1.4%	0.0%	0.8%
7	1.9%	1.4%	1.0%	2.1%	0.8%	2.3%	1.4%	1.9%	0.7%	2.1%	1.0%	1.7%	0.8%	2.6%	0.0%	2.4%	0.8%	2.5%
7.5	1.4%	2.3%	1.1%	2.3%	1.3%	2.5%	0.6%	2.1%	0.7%	2.8%	0.2%	1.7%	0.0%	2.3%	0.5%	1.9%	0.8%	2.5%
8	1.8%	1.7%	0.8%	1.2%	0.8%	0.8%	1.1%	1.8%	0.5%	0.9%	0.6%	2.7%	0.4%	2.3%	0.0%	0.9%	0.0%	1.7%
8.5	0.8%	0.9%	0.4%	0.8%	0.2%	1.1%	0.6%	0.8%	0.4%	0.5%	0.8%	0.8%	0.8%	3.0%	0.9%	0.9%	0.0%	0.8%
9	0.8%	1.2%	0.8%	0.9%	0.8%	1.2%	0.6%	1.1%	1.2%	0.7%	0.6%	1.2%	0.4%	0.8%	0.0%	0.0%	0.0%	0.0%
9.5	1.1%	1.0%	0.9%	1.6%	0.4%	1.0%	0.6%	1.0%	0.0%	0.7%	0.0%	0.6%	0.8%	1.5%	0.5%	0.9%	0.8%	0.8%
10	0.8%	0.7%	1.2%	0.7%	0.4%	0.8%	0.6%	1.2%	0.4%	0.2%	0.6%	0.6%	0.0%	0.0%	0.0%	0.9%	0.0%	0.8%
10.5	1.2%	0.8%	1.0%	0.5%	0.1%	1.1%	1.0%	0.7%	0.9%	0.4%	0.6%	0.6%	1.5%	0.8%	0.0%	0.5%	0.0%	0.0%
11	1.2%	0.8%	0.4%	0.6%	0.5%	1.3%	0.3%	0.6%	1.1%	0.5%	0.2%	0.8%	0.8%	0.8%	0.5%	0.5%	0.0%	0.0%
11.5	1.0%	0.8%	0.6%	0.4%	0.8%	0.8%	0.8%	0.6%	0.9%	0.4%	0.4%	0.4%	0.4%	0.4%	0.0%	0.9%	0.0%	0.8%
12	0.3%	0.6%	0.9%	0.7%	0.6%	0.4%	0.3%	0.4%	0.5%	0.0%	0.8%	0.4%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%
12.5	1.0%	0.7%	0.4%	0.2%	0.6%	0.2%	0.4%	0.1%	0.0%	0.5%	0.2%	0.0%	0.4%	0.4%	0.0%	0.9%	0.0%	0.0%
13	0.4%	0.9%	0.3%	0.5%	0.2%	0.5%	0.1%	0.0%	0.0%	0.4%	0.2%	0.4%	0.4%	0.8%	0.5%	0.9%	0.0%	0.0%
13.5	0.8%	0.3%	0.3%	0.7%	0.4%	0.4%	0.7%	0.1%	0.2%	0.2%	0.2%	0.8%	0.0%	0.0%	0.0%	0.9%	0.8%	0.0%
14	1.0%	0.4%	0.8%	0.5%	0.5%	0.2%	0.6%	0.3%	0.9%	0.2%	0.6%	0.2%	0.0%	0.8%	0.0%	0.0%	0.8%	0.0%
14.5	0.6%	0.3%	0.8%	0.2%	0.1%	0.4%	0.1%	0.1%	0.2%	0.2%	0.2%	0.6%	0.2%	0.4%	0.8%	0.0%	0.5%	1.7%
15	0.6%	0.1%	0.5%	0.1%	0.2%	0.4%	0.4%	0.1%	0.5%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.5%	1.7%	0.0%
15.5	0.6%	0.1%	0.2%	0.3%	0.4%	0.4%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%
16	0.6%	0.5%	0.4%	0.1%	0.2%	0.4%	0.4%	0.0%	0.4%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%
16.5	0.3%	0.2%	0.5%	0.2%	0.4%	0.0%	0.3%	0.1%	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.4%	0.1%	0.7%	0.3%	0.2%	0.0%	0.1%	0.0%	0.2%	0.2%	1.0%	0.0%	0.0%	0.0%	0.9%	0.5%	0.8%	0.0%
17.5	0.3%	0.3%	0.2%	0.4%	0.4%	0.5%	0.4%	0.0%	0.2%	0.4%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.4%	0.1%	0.0%	0.0%	0.2%	0.1%	0.3%	0.0%	0.5%	0.2%	0.0%	0.2%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%
18.5	0.3%	0.0%	0.6%	0.2%	0.4%	0.1%	0.4%	0.3%	0.2%	0.2%	0.4%	0.2%	0.4%	0.4%	0.5%	0.0%	0.0%	0.0%
19	0.2%	0.1%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%
19.5	0.4%	0.1%	0.8%	0.1%	0.6%	0.0%	0.6%	0.1%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>20	40.4%	1.7%	44.6%	1.1%	53.1%	0.1%	53.0%	0.8%	56.4%	0.7%	59.3%	0.0%	71.3%	0.0%	70.6%	0.0%	71.7%	0.8%

Run 1.5A, dcrest/h = 1.5, Configuration A, location 10

Filename	15S10_00		15S10_01		15S10_02		15S10_03		15S10_04		15S10_05		15S10_06		15S10_07		15S10_08		15S10_09		15S10_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.045		0.051		0.048		0.054		0.064		0.06		0.07		0.077		0.1		0.128		0.169	
Nab	1671		1798		1637		1815		1970		1785		1950		1947		2326		2509		2888	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	14.9%	4.8%	13.4%	5.2%	12.2%	4.9%	14.4%	4.5%	15.1%	5.5%	12.4%	4.1%	13.4%	6.2%	12.7%	6.6%	6.6%	4.1%	6.9%	5.2%	6.3%	5.5%
0.5	30.3%	6.7%	30.5%	5.1%	30.4%	6.4%	22.4%	4.0%	20.2%	5.0%	22.5%	5.3%	19.4%	4.4%	17.8%	5.0%	18.9%	6.7%	15.7%	7.3%	14.8%	7.9%
1	18.1%	4.2%	17.5%	4.4%	18.7%	3.1%	18.6%	3.3%	18.9%	4.5%	17.4%	3.5%	17.7%	4.1%	17.2%	3.6%	15.8%	4.0%	15.8%	5.7%	14.2%	5.7%
1.5	16.1%	3.5%	16.7%	3.7%	14.8%	2.6%	16.9%	4.2%	12.0%	3.0%	15.6%	3.7%	13.0%	2.2%	11.8%	3.4%	12.3%	3.8%	12.2%	4.0%	11.3%	5.4%
2	7.4%	3.2%	8.3%	2.4%	7.1%	1.9%	6.9%	3.1%	11.1%	3.6%	7.5%	2.5%	10.0%	2.9%	7.9%	2.1%	8.9%	3.2%	7.7%	3.5%	8.4%	3.6%
2.5	3.5%	2.2%	3.7%	1.9%	4.4%	2.7%	4.8%	2.0%	4.5%	1.9%	5.6%	2.1%	4.3%	2.7%	6.1%	2.0%	7.0%	3.1%	6.6%	3.7%	6.9%	3.2%
3	3.4%	1.3%	3.2%	1.9%	3.0%	1.9%	4.5%	2.6%	3.9%	1.7%	4.7%	2.1%	4.7%	1.9%	4.9%	2.0%	5.2%	2.1%	4.8%	2.9%	5.1%	2.2%
3.5	1.7%	1.1%	1.2%	1.5%	3.0%	1.6%	2.5%	1.8%	2.8%	1.1%	2.9%	1.7%	3.5%	2.0%	3.3%	1.7%	4.0%	1.8%	3.5%	2.3%	3.6%	2.5%
4	1.2%	1.3%	1.2%	2.2%	0.8%	1.1%	2.0%	1.2%	2.3%	1.9%	2.6%	1.5%	3.1%	1.9%	2.7%	1.8%	2.9%	1.9%	3.3%	1.8%	3.3%	2.0%
4.5	1.1%	2.2%	1.2%	1.7%	1.3%	1.6%	1.1%	1.4%	1.7%	1.2%	1.3%	1.0%	2.0%	1.0%	3.3%	2.4%	2.9%	1.7%	2.4%	2.1%	2.9%	2.0%
5	0.7%	1.3%	0.5%	1.0%	1.2%	1.6%	1.5%	1.7%	1.1%	1.4%	1.3%	1.6%	1.3%	1.3%	2.0%	1.5%	2.1%	1.9%	1.6%	1.0%	1.7%	1.5%
5.5	0.2%	1.8%	0.6%	1.6%	0.4%	1.1%	0.9%	1.3%	1.1%	1.3%	1.3%	1.4%	1.3%	1.3%	1.5%	1.2%	1.8%	1.3%	2.1%	1.7%	2.3%	2.2%
6	0.2%	1.9%	0.5%	1.3%	0.7%	1.2%	1.0%	0.8%	0.8%	1.0%	0.7%	1.6%	0.6%	1.4%	1.2%	1.3%	1.4%	1.2%	1.8%	1.8%	2.1%	1.5%
6.5	0.3%	1.4%	0.2%	1.2%	0.2%	0.7%	0.5%	1.5%	0.7%	2.0%	0.6%	1.8%	0.8%	1.6%	1.0%	1.4%	1.3%	1.3%	1.6%	1.5%	1.4%	1.5%
7	0.2%	1.0%	0.1%	0.8%	0.2%	1.1%	0.3%	0.9%	0.4%	0.8%	0.8%	1.1%	0.8%	1.1%	1.1%	0.9%	1.3%	1.5%	1.2%	1.2%	1.4%	1.8%
7.5	0.1%	0.7%	0.1%	0.8%	0.5%	0.6%	0.5%	0.6%	0.4%	0.9%	0.4%	1.1%	0.7%	1.1%	0.6%	0.9%	1.0%	1.7%	1.2%	1.4%	1.5%	1.0%
8	0.1%	1.0%	0.2%	1.0%	0.3%	0.6%	0.3%	1.2%	0.4%	1.0%	0.4%	1.5%	0.5%	1.2%	0.7%	0.9%	0.5%	1.0%	1.0%	1.3%	1.5%	1.1%
8.5	0.1%	1.2%	0.1%	1.0%	0.1%	0.6%	0.2%	1.0%	0.6%	1.3%	0.2%	0.7%	0.5%	1.2%	0.6%	0.9%	0.7%	0.8%	0.6%	1.0%	0.9%	1.4%
9	0.1%	1.0%	0.2%	0.5%	0.2%	1.5%	0.2%	1.0%	0.5%	0.8%	0.2%	1.0%	0.4%	1.2%	0.5%	1.0%	0.6%	0.9%	1.1%	1.3%	0.6%	1.4%
9.5	0.1%	0.9%	0.1%	1.1%	0.1%	1.0%	0.1%	1.1%	0.2%	0.9%	0.3%	1.0%	0.3%	0.6%	0.3%	1.4%	0.2%	1.3%	0.9%	0.7%	1.1%	1.1%
10	0.0%	0.3%	0.1%	0.6%	0.0%	0.9%	0.2%	1.2%	0.3%	0.7%	0.2%	1.1%	0.2%	1.0%	0.5%	0.7%	0.7%	0.8%	1.0%	0.7%	0.8%	1.0%
10.5	0.0%	0.7%	0.1%	1.1%	0.1%	0.7%	0.1%	0.6%	0.3%	1.2%	0.1%	0.6%	0.4%	1.9%	0.2%	0.7%	0.5%	0.8%	0.4%	0.6%	0.3%	0.7%
11	0.0%	0.8%	0.1%	0.7%	0.0%	0.7%	0.1%	0.8%	0.2%	0.7%	0.2%	0.7%	0.1%	1.1%	0.3%	0.8%	0.3%	0.9%	0.9%	0.9%	0.3%	1.1%
11.5	0.0%	0.5%	0.0%	0.7%	0.0%	0.6%	0.0%	1.2%	0.1%	0.7%	0.2%	0.7%	0.1%	0.9%	0.3%	0.4%	0.5%	0.8%	0.8%	0.8%	0.7%	0.7%
12	0.0%	0.8%	0.2%	0.8%	0.0%	0.5%	0.0%	1.0%	0.1%	0.5%	0.1%	0.9%	0.1%	0.7%	0.2%	0.8%	0.2%	1.0%	0.6%	0.6%	0.5%	1.4%
12.5	0.0%	0.9%	0.0%	1.1%	0.1%	0.7%	0.1%	0.8%	0.1%	0.6%	0.1%	0.8%	0.2%	0.9%	0.2%	0.7%	0.2%	0.7%	0.2%	0.9%	0.5%	1.1%
13	0.0%	0.5%	0.0%	0.5%	0.1%	0.5%	0.1%	0.6%	0.3%	1.4%	0.0%	0.7%	0.2%	0.8%	0.3%	1.0%	0.1%	0.6%	0.3%	1.0%	0.5%	0.4%
13.5	0.1%	0.5%	0.0%	0.9%	0.0%	0.9%	0.0%	0.9%	0.1%	0.7%	0.3%	1.1%	0.1%	0.4%	0.1%	0.7%	0.0%	0.9%	0.6%	0.7%	0.3%	0.7%
14	0.0%	1.0%	0.1%	0.8%	0.0%	0.7%	0.0%	0.8%	0.0%	1.0%	0.1%	0.8%	0.1%	0.5%	0.1%	0.9%	0.2%	0.5%	0.3%	1.0%	0.2%	0.8%
14.5	0.1%	0.7%	0.0%	0.7%	0.0%	0.5%	0.0%	0.6%	0.1%	0.8%	0.0%	0.6%	0.1%	0.6%	0.1%	0.8%	0.0%	0.9%	0.3%	0.7%	0.3%	1.1%
15	0.0%	0.5%	0.1%	1.1%	0.0%	0.7%	0.0%	0.6%	0.0%	1.2%	0.0%	0.8%	0.2%	1.0%	0.2%	0.7%	0.3%	0.9%	0.2%	0.6%	0.4%	0.7%
15.5	0.0%	0.5%	0.0%	0.9%	0.0%	1.0%	0.0%	0.6%	0.0%	0.7%	0.0%	1.0%	0.1%	0.9%	0.0%	0.5%	0.1%	0.5%	0.1%	0.6%	0.2%	0.5%
16	0.0%	0.7%	0.0%	0.5%	0.0%	0.8%	0.0%	0.9%	0.0%	0.7%	0.0%	0.6%	0.1%	0.6%	0.1%	0.5%	0.1%	0.7%	0.1%	0.5%	0.1%	0.2%
16.5	0.0%	0.6%	0.0%	0.6%	0.0%	0.9%	0.0%	0.9%	0.0%	0.5%	0.1%	1.0%	0.0%	0.6%	0.1%	1.0%	0.1%	1.0%	0.2%	0.5%	0.3%	0.4%
17	0.0%	0.8%	0.0%	0.6%	0.0%	0.5%	0.0%	0.8%	0.0%	0.9%	0.0%	0.6%	0.1%	0.8%	0.1%	0.8%	0.0%	0.7%	0.2%	0.8%	0.2%	0.8%
17.5	0.1%	0.8%	0.0%	0.8%	0.0%	0.5%	0.0%	0.7%	0.0%	0.5%	0.0%	0.6%	0.0%	0.8%	0.1%	0.7%	0.0%	0.6%	0.2%	0.7%	0.1%	0.7%
18	0.0%	0.5%	0.0%	0.6%	0.0%	0.7%	0.0%	0.4%	0.1%	0.7%	0.0%	0.6%	0.0%	0.4%	0.0%	0.9%	0.1%	0.5%	0.2%	0.7%	0.3%	0.5%
18.5	0.0%	0.6%	0.0%	0.6%	0.0%	0.3%	0.0%	0.7%	0.0%	0.5%	0.0%	0.6%	0.1%	0.7%	0.0%	0.7%	0.1%	0.6%	0.2%	0.8%	0.1%	0.2%
19	0.0%	0.6%	0.0%	0.4%	0.0%	0.7%	0.0%	0.6%	0.0%	0.5%	0.1%	1.0%	0.0%	0.6%	0.0%	0.7%	0.1%	0.8%	0.2%	0.6%	0.2%	0.6%
19.5	0.0%	0.5%	0.0%	0.8%	0.0%	0.9%	0.0%	0.4%	0.1%	1.0%	0.0%	0.4%	0.0%	1.0%	0.1%	0.8%	0.0%	0.7%	0.2%	0.4%	0.2%	0.5%
>20	0.0%	44.8%	0.0%	45.1%	0.0%	48.3%	0.1%	46.0%	0.0%	44.0%	0.1%	44.6%	0.1%	42.4%	0.3%	42.9%	0.8%	39.8%	0.9%	34.6%	2.1%	31.3%

Filename	15S10_11		15S10_12		15S10_13		15S10_14		15S10_15		15S10_16		15S10_17		15S10_18		15S10_19		15S10_20		15S10_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.23		0.3		0.395		0.504		0.606		0.666		0.735		0.798		0.853		0.885		0.909	
Nab	3091		3295		3347		3421		3221		3056		2796		2259		1961		1569		1351	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	5.6%	5.4%	5.7%	4.9%	5.3%	4.5%	4.4%	4.7%	3.5%	4.4%	2.8%	3.9%	2.3%	4.4%	1.9%	4.3%	1.8%	4.3%	1.0%	4.5%	1.1%	4.2%
0.5	12.0%	9.0%	11.9%	8.3%	9.5%	7.7%	8.1%	8.8%	6.2%	8.8%	6.6%	8.0%	5.2%	8.7%	4.2%	8.1%	3.4%	8.7%	3.6%	9.2%	2.4%	8.1%
1	11.8%	6.3%	7.7%	5.0%	5.5%	4.9%	5.0%	5.0%	4.2%	5.7%	3.6%	6.0%	3.8%	5.8%	4.0%	5.0%	3.2%	6.1%	2.4%	5.4%	2.1%	5.4%
1.5	10.5%	4.9%	9.1%	5.9%	7.8%	6.6%	5.8%	7.4%	6.1%	7.5%	5.0%	7.3%	5.5%	7.3%	5.0%	7.3%	4.1%	8.7%	4.0%	7.3%	2.3%	8.8%
2	5.7%	3.1%	7.3%	5.3%	7.1%	4.9%	3.9%	3.5%	3.7%	3.5%	3.1%	4.6%	2.6%	4.6%	4.2%	6.8%	3.0%	6.5%	2.7%	8.0%	3.6%	7.5%
2.5	6.8%	3.8%	3.6%	2.8%	3.6%	2.7%	4.9%	5.1%	5.2%	5.8%	4.7%	6.0%	4.0%	6.9%	2.5%	4.4%	2.1%	4.0%	2.0%	5.3%	2.1%	5.5%
3	5.7%	3.1%	5.2%	3.4%	5.6%	4.2%	5.1%	4.3%	3.2%	3.8%	4.1%	5.6%	3.4%	5.9%	3.5%	6.2%	3.7%	7.2%	3.0%	7.1%	3.1%	7.7%
3.5	4.3%	2.7%	4.9%	3.6%	4.1%	4.5%	3.3%	2.5%	4.1%	4.9%	2.8%	3.3%	2.8%	3.8%	2.3%	5.9%	3.0%	6.5%	2.4%	5.9%	2.6%	5.6%
4	2.7%	1.9%	2.8%	1.9%	2.3%	2.2%	4.0%	3.7%	2.8%	2.4%	3.7%	4.9%	4.1%	3.6%	2.0%	3.7%	1.7%	3.3%	1.3%	3.3%	1.5%	4.0%
4.5	3.3%	2.6%	3.6%	2.7%	3.5%	3.4%	1.6%	2.2%	3.8%	3.2%	1.7%	2.9%	2.0%	2.8%	2.6%	4.4%	2.5%	4.8%	2.4%	5.2%	2.0%	5.2%
5	3.0%	2.0%	3.4%	2.5%	2.9%	2.8%	3.7%	3.3%	1.9%	2.9%	2.8%	3.4%	2.5%	4.8%	2.2%	4.0%	2.5%	4.2%	2.3%	3.7%	1.8%	3.9%

5.5	2.5%	2.0%	1.9%	1.4%	2.0%	1.6%	3.2%	2.6%	3.1%	3.3%	3.2%	3.6%	2.9%	2.8%	1.5%	2.2%	1.9%	2.4%	1.1%	2.3%	0.9%	2.8%
6	2.2%	1.6%	2.6%	1.9%	2.4%	2.4%	1.6%	1.8%	1.6%	2.1%	1.7%	2.0%	1.6%	2.3%	1.8%	3.2%	2.2%	3.2%	1.8%	3.3%	0.7%	5.0%
6.5	1.3%	1.1%	1.9%	1.7%	2.3%	2.2%	2.4%	2.2%	2.1%	2.5%	2.5%	2.2%	2.1%	2.9%	2.0%	3.1%	1.6%	2.5%	1.7%	2.7%	1.6%	2.8%
7	2.2%	2.0%	1.4%	1.3%	1.3%	1.3%	1.5%	1.4%	1.6%	1.7%	1.6%	1.8%	1.1%	1.9%	1.2%	1.6%	1.2%	1.8%	1.3%	1.8%	1.0%	2.2%
7.5	1.9%	1.7%	1.6%	1.5%	2.2%	1.8%	2.0%	2.2%	2.5%	2.7%	1.6%	1.9%	2.0%	2.0%	1.8%	2.2%	1.7%	2.5%	1.9%	3.1%	1.4%	3.3%
8	1.7%	1.6%	1.9%	1.3%	2.3%	1.8%	1.4%	1.4%	1.3%	1.3%	1.4%	1.4%	1.0%	1.6%	1.2%	1.7%	1.6%	2.5%	1.7%	2.8%	1.1%	2.1%
8.5	0.8%	0.9%	0.8%	0.8%	1.0%	1.2%	2.0%	1.9%	1.8%	2.1%	1.9%	2.4%	1.9%	1.9%	0.9%	1.2%	0.5%	1.6%	0.6%	2.2%	0.9%	1.0%
9	1.0%	1.5%	1.6%	1.8%	1.4%	1.2%	1.7%	1.6%	1.5%	1.2%	1.9%	2.0%	2.1%	1.5%	1.5%	1.9%	1.3%	1.7%	0.9%	1.8%	1.3%	1.8%
9.5	0.8%	0.7%	1.2%	1.1%	0.9%	1.1%	1.2%	0.6%	1.5%	1.7%	1.4%	1.1%	0.7%	1.1%	1.3%	1.4%	0.6%	1.7%	1.1%	0.7%	1.0%	0.7%
10	0.8%	1.0%	1.1%	1.3%	1.1%	1.5%	1.7%	1.2%	0.8%	1.3%	1.5%	1.6%	1.6%	1.5%	1.4%	1.7%	1.3%	1.6%	1.5%	1.0%	1.1%	1.1%
10.5	0.9%	0.6%	0.9%	1.2%	1.0%	1.2%	1.2%	0.9%	1.4%	1.5%	0.7%	0.7%	0.8%	1.1%	1.4%	1.4%	1.2%	1.2%	1.1%	0.8%	1.1%	1.2%
11	0.6%	1.0%	0.9%	0.8%	1.0%	0.8%	1.4%	1.3%	0.8%	1.1%	1.3%	1.2%	1.4%	1.4%	0.6%	0.8%	0.8%	0.8%	1.1%	1.1%	0.6%	0.7%
11.5	0.6%	0.9%	1.0%	1.4%	1.1%	1.4%	0.9%	1.6%	1.0%	1.2%	1.0%	1.4%	1.3%	1.7%	1.2%	1.2%	0.9%	1.4%	0.8%	1.5%	0.7%	0.8%
12	0.7%	1.2%	0.8%	1.2%	1.0%	1.1%	0.6%	0.6%	0.7%	0.9%	0.7%	0.9%	0.8%	1.1%	1.2%	1.5%	1.2%	1.0%	0.8%	1.1%	0.8%	0.9%
12.5	0.5%	0.9%	0.4%	0.8%	0.9%	0.6%	1.2%	1.2%	1.2%	1.2%	1.2%	0.9%	1.0%	1.0%	0.9%	0.5%	0.6%	0.6%	0.6%	0.3%	0.7%	0.4%
13	0.7%	0.3%	1.0%	1.1%	0.8%	1.0%	0.8%	0.9%	0.9%	0.7%	0.4%	0.6%	0.4%	0.5%	1.3%	1.2%	0.8%	1.1%	0.7%	1.0%	0.7%	1.2%
13.5	0.4%	0.8%	0.8%	1.2%	0.7%	0.8%	1.0%	1.3%	0.9%	0.7%	1.1%	1.3%	0.9%	1.0%	1.1%	1.0%	0.9%	0.6%	1.0%	0.8%	1.0%	0.9%
14	0.4%	0.9%	0.5%	0.5%	0.7%	0.8%	0.9%	0.7%	0.9%	1.0%	0.6%	0.6%	0.6%	0.5%	0.6%	0.4%	0.4%	0.6%	0.5%	0.5%	0.4%	0.4%
14.5	0.4%	0.7%	0.7%	1.2%	0.7%	1.2%	0.8%	0.9%	0.8%	0.7%	1.2%	0.9%	1.0%	1.0%	0.7%	0.6%	0.8%	0.6%	0.8%	0.3%	0.7%	0.5%
15	0.3%	0.8%	0.8%	0.7%	0.7%	0.9%	0.8%	0.7%	1.0%	1.0%	0.7%	0.7%	0.9%	0.5%	0.7%	0.8%	1.3%	0.6%	0.6%	0.3%	0.7%	0.6%
15.5	0.3%	0.4%	0.5%	0.5%	0.7%	0.7%	0.6%	0.6%	0.4%	0.6%	0.7%	0.6%	0.6%	0.4%	0.4%	0.3%	0.8%	0.2%	0.7%	0.3%	0.3%	0.3%
16	0.5%	0.6%	0.4%	0.9%	0.7%	0.5%	1.0%	1.1%	0.8%	0.4%	0.7%	0.4%	0.9%	0.5%	0.9%	0.8%	0.8%	0.5%	0.8%	0.4%	0.7%	0.3%
16.5	0.4%	0.7%	0.4%	0.6%	0.6%	0.7%	0.7%	0.4%	0.5%	0.4%	0.5%	0.6%	0.5%	0.3%	1.0%	0.7%	0.6%	0.3%	0.8%	0.3%	0.7%	0.3%
17	0.4%	0.7%	0.3%	0.5%	0.5%	0.7%	0.8%	0.8%	0.5%	0.9%	0.6%	0.9%	0.8%	0.6%	0.4%	0.5%	0.5%	0.3%	0.3%	0.3%	0.2%	0.4%
17.5	0.1%	0.4%	0.2%	0.8%	0.6%	0.5%	0.5%	0.8%	0.6%	0.5%	0.7%	0.5%	0.9%	0.6%	0.8%	0.6%	0.7%	0.3%	0.9%	0.4%	0.5%	0.1%
18	0.3%	0.6%	0.2%	0.4%	0.4%	0.4%	0.5%	0.3%	0.7%	0.7%	0.6%	0.3%	0.4%	0.4%	0.4%	0.4%	0.3%	0.2%	0.4%	0.3%	0.1%	0.4%
18.5	0.5%	0.7%	0.4%	0.9%	0.7%	0.4%	0.5%	0.5%	0.4%	0.5%	0.6%	0.6%	0.9%	0.4%	0.4%	0.5%	0.9%	0.2%	0.4%	0.1%	0.3%	0.1%
19	0.3%	0.5%	0.4%	0.5%	0.4%	0.5%	0.5%	0.5%	0.6%	0.5%	0.5%	0.5%	0.6%	0.4%	0.5%	0.4%	0.8%	0.3%	0.3%	0.1%	0.2%	0.0%
19.5	0.2%	0.5%	0.3%	0.3%	0.4%	0.5%	0.6%	0.6%	0.4%	0.3%	0.6%	0.7%	0.8%	0.3%	0.7%	0.3%	0.5%	0.2%	0.2%	0.3%	0.2%	0.2%
>20	4.8%	27.4%	8.0%	24.2%	12.0%	21.0%	16.2%	16.7%	22.8%	12.4%	25.9%	10.1%	29.2%	8.0%	35.8%	5.8%	40.6%	3.3%	46.6%	3.6%	53.5%	1.4%

Filename	15S10_22		15S10_23		15S10_24		15S10_25		15S10_26		15S10_27		15S10_28		15S10_29		15S10_30	
y(mm)	73		77		81		85		89		93		103		108		113	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.08		1.13	
C	0.929		0.942		0.959		0.961		0.969		0.98		0.988		0.988		0.993	
Nab	1110		947		665		667		546		392		251		198		136	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.1%	3.9%	1.8%	3.3%	0.8%	3.6%	0.6%	4.9%	1.6%	5.1%	1.3%	6.1%	0.8%	6.8%	1.5%	6.1%	2.2%	7.4%
0.5	3.5%	9.1%	2.7%	9.5%	2.9%	7.5%	2.2%	7.9%	4.0%	13.7%	3.8%	8.4%	2.8%	7.2%	1.5%	7.1%	2.2%	11.0%
1	2.5%	6.6%	1.9%	6.1%	1.5%	8.1%	2.1%	6.3%	4.6%	11.7%	1.0%	7.4%	2.0%	8.4%	1.5%	4.5%	0.7%	9.6%
1.5	3.5%	8.5%	3.4%	10.8%	2.0%	8.9%	2.5%	9.9%	1.8%	5.5%	2.0%	8.7%	4.0%	10.0%	5.1%	6.6%	1.5%	6.6%
2	3.6%	8.3%	3.0%	7.4%	1.7%	7.8%	1.3%	9.0%	2.7%	6.8%	0.8%	11.5%	0.8%	13.1%	2.5%	8.1%	1.5%	8.8%
2.5	1.0%	5.7%	1.7%	4.8%	0.8%	4.5%	2.2%	6.3%	1.5%	9.2%	0.5%	5.4%	1.2%	4.4%	2.0%	5.6%	2.9%	4.4%
3	2.0%	6.4%	1.7%	8.6%	1.5%	7.4%	2.2%	9.7%	1.5%	3.7%	1.3%	6.6%	2.4%	6.4%	1.0%	10.1%	2.2%	9.6%
3.5	2.1%	5.7%	1.5%	5.7%	1.8%	8.6%	1.5%	4.8%	1.6%	6.0%	1.5%	7.7%	0.8%	5.6%	2.5%	4.0%	0.0%	5.1%
4	1.0%	3.7%	1.2%	3.6%	1.4%	4.5%	0.9%	4.2%	1.5%	5.7%	0.5%	3.8%	2.4%	5.6%	0.0%	5.1%	0.7%	5.1%
4.5	1.8%	6.2%	2.1%	5.5%	1.5%	6.5%	1.5%	5.7%	1.1%	4.8%	1.8%	6.1%	0.4%	5.2%	1.0%	7.6%	0.7%	2.2%
5	1.5%	5.8%	1.3%	6.1%	1.4%	4.5%	1.0%	4.3%	0.5%	2.7%	0.3%	5.1%	1.6%	7.2%	1.0%	7.6%	0.0%	7.4%
5.5	1.4%	3.3%	1.5%	3.8%	0.9%	2.7%	0.6%	2.2%	1.1%	2.9%	1.3%	2.6%	0.8%	1.2%	0.0%	2.0%	0.7%	3.7%
6	2.3%	3.2%	1.1%	3.1%	1.2%	3.8%	0.6%	2.7%	0.4%	2.4%	2.3%	5.6%	1.6%	5.6%	0.5%	1.5%	0.7%	1.5%
6.5	1.1%	2.9%	1.3%	2.4%	1.5%	2.1%	1.6%	3.9%	0.4%	1.6%	0.0%	2.6%	0.8%	1.2%	0.0%	4.5%	0.0%	5.1%
7	0.7%	1.7%	0.7%	1.9%	0.2%	2.4%	0.3%	2.8%	1.1%	1.8%	0.5%	2.3%	0.4%	1.6%	0.0%	3.0%	0.0%	1.5%
7.5	1.1%	3.1%	0.8%	2.5%	0.5%	1.8%	0.9%	2.4%	1.3%	2.4%	1.0%	1.5%	0.0%	1.6%	0.5%	3.0%	0.0%	2.9%
8	0.8%	2.6%	0.6%	2.4%	1.2%	1.7%	0.6%	1.9%	0.4%	2.6%	0.5%	1.0%	0.0%	1.2%	0.5%	2.0%	2.2%	0.7%
8.5	0.9%	1.0%	0.7%	1.6%	0.3%	1.2%	0.6%	0.4%	0.7%	0.7%	0.3%	0.5%	0.8%	0.8%	0.0%	1.5%	0.7%	0.7%
9	0.9%	2.2%	0.4%	1.4%	0.8%	1.2%	0.4%	1.0%	0.5%	1.8%	0.8%	1.3%	0.8%	0.8%	0.0%	2.5%	0.0%	0.0%
9.5	0.5%	0.0%	1.2%	1.0%	0.5%	0.9%	1.3%	0.7%	0.7%	2.2%	0.3%	0.8%	0.0%	1.2%	0.0%	0.0%	0.7%	0.7%
10	1.3%	0.8%	0.7%	0.6%	1.1%	1.8%	0.9%	0.9%	0.5%	0.4%	0.3%	0.8%	0.8%	1.2%	0.0%	0.5%	0.0%	0.0%
10.5	1.0%	1.4%	0.5%	0.7%	1.2%	0.9%	0.6%	1.6%	0.7%	0.7%	0.0%	0.8%	0.4%	0.8%	0.5%	0.5%	0.0%	0.7%
11	0.3%	0.6%	0.5%	0.4%	0.2%	0.8%	0.4%	0.1%	0.2%	0.5%	0.3%	0.0%	0.0%	0.4%	0.0%	2.0%	0.0%	0.7%
11.5	0.9%	0.6%	1.0%	0.6%	0.6%	0.9%	0.1%	0.3%	0.5%	0.5%	0.0%	0.0%	0.4%	0.4%	0.0%	0.0%	0.0%	1.5%
12	0.8%	0.8%	0.6%	1.3%	0.3%	0.6%	0.6%	0.1%	0.4%	0.2%	0.3%	0.3%	0.4%	0.4%	0.5%	1.0%	0.0%	0.7%
12.5	0.3%	0.9%	0.5%	0.3%	0.3%	0.2%	0.4%	0.4%	0.2%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
13	0.4%	0.3%	1.0%	0.3%	1.4%	0.5%	0.3%	0.3%	0.4%	0.4%	1.3%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.7%
13.5	0.5%	0.3%	0.4%	0.4%	0.5%	0.6%	0.3%	0.3%	0.7%	0.2%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
14	0.4%	0.4%	0.5%	0.6%	0.8%	0.0%	0.3%	0.3%	0.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%
14.5	0.7%	0.2%	1.1%	0.3%	0.2%	0.5%	0.6%	0.6%	0.4%	0.2%	0.3%	0.3%	0.4%	1.2%	0.0%	0.0%	0.0%	0.0%
15	0.3%	0.3%	0.4%	0.1%	0.5%	0.2%	0.7%	0.1%	0.5%	0.5%	0.3%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
15.5	0.6%	0.4%	0.2%	0.2%	0.5%	0.3%	0.3%	0.3%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.5%	0.1%	0.4%	0.3%	0.5%	0.2%	0.1%	0.7%	0.4%	0.0%	0.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
16.5	0.7%	0.2%	0.7%	0.1%	0.3%	0.5%	0.3%	0.0%	0.0%	0.4%	0.3%	0.3%	0.0%	0.0%	0.0%	0.5%	0.7%	0.0%
17	0.8%	0.3%	0.1%	0.2%	0.6%	0.5%	0.7%	0.3%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17.5	0.8%	0.4%	0.4%	0.0%	0.3%	0.0%	0.4%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%
18	0.4%	0.3%	0.1%	0.4%	0.3%	0.5%	0.1%	0.0%	0.7%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
18.5	0.1%	0.3%	0.2%	0.4%	1.1%	0.2%	0.9%	0.6%	0.2%	0.2%	0.3%	0.3%	0.4%	0.0%	0.0%	0.0%	0.7%	0.0%
19	0.2%	0.2%	0.4%	0.1%	0.8%	0.3%	0.1%	0.1%	0.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%
19.5	0.2%	0.0%	0.2%	0.2%	0.5%	0.2%	0.0%	0.0%	0.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%
>20	55.4%	1.7%	59.1%	0.7%	64.5%	1.1%	65.8%	0.7%	62.5%	1.5%	73.2%	1.0%	70.9%	0.0%	74.7%	0.5%	76.5%	0.0%

Run 1.5B, dcrest/h = 1.5, Configuration B, location 10

Filename	15S10_00		15S10_01		15S10_02		15S10_03		15S10_04		15S10_05		15S10_06		15S10_07		15S10_08		15S10_09		15S10_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.09		0.093		0.1		0.099		0.104		0.112		0.115		0.123		0.144		0.141		0.189	
Nab	3050		3024		3174		3136		3173		3210		3199		3333		3719		3218		3727	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	13.8%	10.3%	13.2%	10.2%	13.6%	10.1%	12.9%	9.5%	12.3%	8.4%	12.4%	7.2%	11.9%	7.3%	12.6%	7.1%	7.6%	5.9%	12.0%	8.3%	6.4%	6.5%
0.5	27.9%	11.3%	22.1%	7.5%	20.7%	8.3%	21.5%	7.4%	19.5%	6.8%	21.2%	7.0%	19.7%	6.7%	18.8%	7.7%	18.6%	7.9%	17.8%	7.2%	16.5%	9.3%
1	18.6%	5.0%	24.1%	7.3%	23.0%	6.4%	23.2%	6.6%	21.2%	5.6%	17.9%	4.9%	18.5%	4.1%	18.7%	5.5%	18.0%	5.9%	16.5%	4.9%	15.3%	6.1%
1.5	15.7%	5.3%	12.6%	3.8%	13.3%	3.8%	12.0%	3.5%	17.0%	4.9%	15.5%	5.4%	12.8%	3.2%	12.8%	4.5%	14.0%	4.9%	11.2%	4.4%	12.3%	5.0%
2	7.5%	3.0%	9.4%	3.8%	10.6%	4.2%	8.3%	3.0%	8.3%	3.0%	7.4%	2.6%	12.1%	5.3%	9.0%	3.2%	9.2%	3.8%	8.5%	4.0%	8.3%	4.2%
2.5	5.6%	2.6%	5.1%	2.4%	4.5%	2.5%	6.7%	3.9%	5.1%	2.4%	5.4%	2.5%	5.2%	3.1%	5.5%	3.1%	6.1%	3.4%	6.5%	3.6%	6.5%	3.2%
3	2.8%	2.4%	3.7%	3.3%	4.1%	3.3%	3.9%	2.1%	4.4%	3.4%	5.8%	3.2%	4.1%	2.6%	4.0%	2.5%	4.4%	3.0%	4.1%	2.8%	5.7%	2.7%
3.5	2.2%	3.1%	2.0%	1.8%	2.2%	1.6%	2.3%	1.8%	2.0%	2.5%	2.5%	1.9%	3.0%	2.7%	3.3%	2.0%	3.9%	2.4%	3.6%	2.2%	3.8%	2.6%
4	1.2%	1.8%	1.9%	1.8%	1.7%	2.3%	2.3%	2.4%	1.7%	2.1%	2.0%	2.2%	3.2%	2.5%	2.6%	2.3%	2.4%	2.3%	2.8%	1.9%	3.6%	2.7%
4.5	0.7%	2.1%	1.3%	1.9%	1.2%	1.7%	1.1%	1.4%	1.4%	1.5%	2.4%	1.6%	1.5%	1.9%	2.9%	2.5%	2.4%	2.1%	1.8%	2.0%	2.5%	1.9%
5	0.9%	1.9%	0.5%	1.5%	1.2%	2.1%	0.9%	1.6%	1.9%	2.3%	1.1%	2.3%	1.4%	2.1%	1.4%	1.9%	1.7%	1.7%	1.7%	2.0%	2.1%	1.7%
5.5	0.4%	1.0%	0.7%	1.3%	0.7%	0.9%	1.2%	2.2%	1.1%	1.4%	1.0%	1.2%	0.9%	1.4%	0.9%	1.6%	1.7%	1.8%	2.1%	1.4%	2.4%	2.0%
6	0.6%	1.9%	0.8%	1.8%	0.4%	2.0%	0.6%	1.7%	0.5%	1.3%	0.8%	1.4%	0.7%	1.8%	1.0%	1.0%	1.3%	1.6%	1.3%	1.5%	1.1%	1.8%
6.5	0.1%	1.2%	0.4%	1.0%	0.5%	0.9%	0.7%	1.2%	0.6%	2.0%	0.6%	2.1%	0.6%	1.4%	1.1%	1.4%	1.2%	1.5%	1.2%	1.4%	1.3%	1.7%
7	0.3%	1.3%	0.4%	1.7%	0.3%	1.3%	0.3%	1.3%	0.6%	1.7%	0.5%	1.3%	0.3%	1.4%	0.5%	1.4%	0.9%	1.7%	0.6%	1.6%	1.4%	1.7%
7.5	0.3%	1.1%	0.4%	1.0%	0.2%	1.0%	0.2%	1.2%	0.2%	1.0%	0.4%	1.2%	0.5%	1.3%	0.7%	1.3%	0.8%	1.7%	1.0%	1.5%	1.0%	1.4%
8	0.2%	1.2%	0.4%	1.5%	0.2%	1.2%	0.2%	1.4%	0.5%	1.4%	0.3%	1.7%	0.3%	1.5%	0.5%	1.4%	0.8%	1.3%	0.7%	1.1%	0.9%	1.2%
8.5	0.1%	0.8%	0.1%	0.9%	0.3%	0.8%	0.2%	0.7%	0.2%	1.3%	0.3%	1.6%	0.7%	1.5%	0.5%	1.0%	0.7%	1.3%	0.9%	0.9%	0.7%	1.4%
9	0.3%	1.0%	0.1%	1.1%	0.3%	1.1%	0.2%	0.9%	0.3%	1.1%	0.4%	1.2%	0.1%	1.4%	0.3%	1.0%	0.5%	1.3%	0.7%	1.1%	1.0%	1.3%
9.5	0.1%	1.0%	0.1%	0.5%	0.1%	1.0%	0.2%	1.5%	0.1%	0.9%	0.4%	1.0%	0.3%	1.3%	0.4%	1.4%	0.5%	1.2%	0.5%	1.0%	0.7%	1.2%
10	0.1%	1.0%	0.1%	1.2%	0.1%	1.6%	0.2%	0.8%	0.2%	1.4%	0.1%	1.5%	0.3%	1.0%	0.3%	1.0%	0.3%	1.0%	0.3%	1.0%	0.6%	0.9%
10.5	0.1%	0.9%	0.0%	0.8%	0.1%	0.7%	0.1%	1.1%	0.1%	0.9%	0.1%	1.1%	0.3%	1.5%	0.3%	1.1%	0.3%	1.3%	0.4%	1.1%	0.5%	0.9%
11	0.0%	0.9%	0.1%	1.4%	0.0%	1.0%	0.1%	1.1%	0.1%	1.1%	0.1%	1.0%	0.2%	0.6%	0.3%	0.9%	0.5%	1.3%	0.3%	1.0%	0.5%	1.1%
11.5	0.1%	1.0%	0.0%	1.0%	0.0%	1.0%	0.0%	1.0%	0.0%	1.1%	0.1%	1.3%	0.3%	0.8%	0.1%	0.7%	0.2%	1.3%	0.4%	1.0%	0.3%	0.8%
12	0.0%	0.4%	0.0%	1.2%	0.0%	1.2%	0.1%	0.9%	0.1%	0.9%	0.1%	0.8%	0.1%	1.1%	0.2%	1.2%	0.2%	1.0%	0.3%	1.3%	0.4%	1.1%

12.5	0.1%	0.9%	0.0%	0.6%	0.1%	0.7%	0.1%	1.0%	0.0%	0.5%	0.0%	0.7%	0.0%	0.8%	0.2%	1.0%	0.2%	1.1%	0.3%	0.8%	0.3%	1.2%
13	0.1%	0.6%	0.0%	0.8%	0.1%	0.9%	0.1%	0.6%	0.1%	0.9%	0.1%	0.7%	0.0%	1.1%	0.1%	1.0%	0.3%	1.0%	0.2%	0.7%	0.4%	0.8%
13.5	0.0%	1.0%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.1%	1.0%	0.1%	1.0%	0.1%	0.8%	0.3%	1.1%	0.1%	0.8%	0.2%	1.5%	0.4%	0.9%
14	0.0%	0.5%	0.0%	0.9%	0.1%	0.9%	0.0%	1.0%	0.0%	0.6%	0.0%	1.0%	0.2%	0.5%	0.1%	0.7%	0.2%	0.9%	0.3%	0.7%	0.3%	0.8%
14.5	0.1%	0.3%	0.0%	0.8%	0.0%	0.6%	0.1%	0.9%	0.0%	0.6%	0.0%	0.7%	0.1%	0.8%	0.2%	1.2%	0.1%	0.6%	0.1%	0.9%	0.1%	0.8%
15	0.0%	0.7%	0.0%	0.8%	0.0%	0.8%	0.0%	0.8%	0.0%	1.1%	0.1%	1.0%	0.1%	0.9%	0.1%	0.6%	0.2%	0.9%	0.1%	0.7%	0.1%	0.6%
15.5	0.0%	0.5%	0.0%	0.7%	0.0%	0.6%	0.0%	0.5%	0.0%	0.8%	0.1%	0.8%	0.1%	0.9%	0.1%	0.8%	0.1%	0.8%	0.1%	0.8%	0.2%	0.9%
16	0.0%	0.7%	0.0%	0.8%	0.0%	0.6%	0.0%	0.8%	0.0%	0.6%	0.1%	0.9%	0.0%	0.8%	0.0%	0.8%	0.1%	0.8%	0.2%	0.6%	0.2%	0.8%
16.5	0.0%	0.4%	0.0%	0.5%	0.0%	0.7%	0.0%	0.7%	0.0%	0.6%	0.0%	1.0%	0.1%	0.7%	0.1%	1.1%	0.1%	0.8%	0.1%	0.7%	0.2%	0.8%
17	0.1%	0.3%	0.0%	0.6%	0.0%	0.8%	0.0%	0.4%	0.0%	0.6%	0.1%	0.9%	0.0%	0.9%	0.1%	0.8%	0.1%	0.8%	0.0%	0.6%	0.2%	0.6%
17.5	0.1%	0.4%	0.0%	0.5%	0.0%	0.4%	0.0%	0.8%	0.0%	0.5%	0.0%	0.6%	0.1%	0.4%	0.0%	0.7%	0.0%	0.4%	0.1%	0.4%	0.1%	0.5%
18	0.0%	1.0%	0.0%	0.6%	0.0%	0.6%	0.0%	0.8%	0.0%	0.7%	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.0%	0.7%	0.1%	0.7%	0.1%	0.7%
18.5	0.0%	0.5%	0.0%	0.3%	0.0%	0.5%	0.0%	0.4%	0.0%	0.7%	0.1%	0.7%	0.0%	0.4%	0.0%	0.6%	0.1%	0.6%	0.2%	0.6%	0.1%	0.6%
19	0.0%	0.6%	0.0%	0.5%	0.0%	0.9%	0.1%	0.7%	0.0%	0.6%	0.0%	0.7%	0.0%	0.6%	0.0%	0.6%	0.0%	0.7%	0.1%	0.7%	0.1%	0.3%
19.5	0.0%	0.5%	0.0%	0.4%	0.0%	0.6%	0.0%	0.8%	0.0%	0.5%	0.1%	0.4%	0.0%	0.5%	0.0%	0.8%	0.0%	0.3%	0.1%	0.5%	0.2%	0.7%
>20	0.0%	27.8%	0.1%	29.1%	0.2%	27.6%	0.1%	29.0%	0.3%	29.0%	0.2%	29.0%	0.3%	29.5%	0.1%	29.1%	0.2%	26.2%	0.6%	28.9%	1.3%	24.7%

Filename	15S10_11		15S10_12		15S10_13		15S10_14		15S10_15		15S10_16		15S10_17		15S10_18		15S10_19		15S10_20		15S10_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.231		0.282		0.378		0.439		0.492		0.579		0.704		0.704		0.768		0.846		0.861	
Nab	3956		4157		4460		4786		4486		4070		3524		3266		2902		2216		1956	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	5.5%	7.1%	6.3%	6.9%	4.7%	8.6%	4.5%	9.2%	4.2%	9.0%	4.0%	8.1%	3.7%	8.6%	3.2%	7.4%	2.2%	8.2%	2.2%	5.8%	1.8%	5.9%
0.5	14.8%	9.7%	13.7%	9.7%	13.3%	10.5%	11.8%	11.3%	10.7%	11.4%	8.9%	11.9%	6.8%	11.7%	8.0%	11.1%	6.1%	9.3%	5.4%	11.8%	4.1%	10.6%
1	14.4%	6.8%	13.6%	7.7%	12.0%	8.6%	11.4%	8.1%	10.1%	9.0%	9.5%	8.6%	8.8%	10.0%	7.9%	8.6%	7.4%	9.3%	6.1%	9.9%	6.2%	8.9%
1.5	12.5%	5.1%	10.7%	6.1%	10.0%	6.4%	9.1%	6.5%	8.9%	7.1%	8.0%	6.6%	4.4%	4.8%	7.2%	7.6%	5.7%	8.4%	4.1%	5.7%	5.7%	8.5%
2	9.5%	4.5%	8.3%	4.6%	7.7%	5.5%	7.7%	5.4%	5.5%	3.9%	6.8%	5.6%	5.7%	7.5%	5.9%	7.3%	3.5%	4.7%	5.3%	8.8%	3.2%	5.0%
2.5	6.9%	3.9%	6.3%	4.0%	6.4%	3.9%	6.2%	4.8%	6.4%	5.2%	5.9%	5.2%	5.7%	5.6%	4.7%	5.5%	5.1%	6.4%	4.3%	6.0%	4.2%	6.6%
3	5.0%	3.2%	5.1%	3.3%	3.3%	2.3%	3.3%	2.7%	5.3%	3.7%	3.3%	2.8%	3.0%	3.6%	2.6%	3.0%	4.3%	5.1%	2.3%	4.6%	3.5%	5.6%
3.5	3.3%	2.7%	4.5%	2.7%	4.0%	3.2%	4.7%	3.7%	3.9%	3.8%	4.4%	4.1%	3.8%	5.1%	4.3%	4.5%	3.4%	4.7%	3.2%	5.3%	3.9%	4.9%
4	3.3%	2.7%	3.3%	2.7%	3.8%	2.7%	3.8%	3.4%	2.9%	2.4%	3.3%	3.3%	3.4%	3.4%	3.3%	3.4%	2.1%	3.2%	2.8%	5.4%	1.9%	3.4%
4.5	3.2%	2.4%	3.5%	2.3%	2.8%	2.8%	3.3%	2.9%	3.4%	3.0%	2.8%	2.9%	3.1%	3.2%	2.9%	3.6%	2.8%	3.5%	2.1%	3.3%	2.6%	3.9%
5	2.1%	2.0%	1.5%	1.2%	2.5%	2.8%	2.5%	2.7%	2.7%	2.7%	2.8%	2.9%	1.9%	2.1%	2.3%	2.7%	2.2%	3.6%	1.4%	2.7%	2.0%	4.4%
5.5	1.9%	2.0%	2.1%	2.1%	2.1%	2.5%	2.3%	2.4%	2.6%	2.7%	2.4%	2.8%	3.1%	2.4%	2.1%	3.0%	2.1%	3.5%	2.4%	3.0%	1.6%	3.5%
6	1.4%	1.8%	1.7%	2.2%	1.4%	1.3%	1.6%	1.3%	2.4%	2.1%	1.2%	1.8%	2.1%	2.7%	1.7%	1.7%	2.4%	2.1%	2.3%	2.1%	1.1%	2.7%
6.5	1.7%	1.5%	1.5%	2.1%	1.9%	1.9%	2.5%	2.0%	1.4%	0.9%	2.0%	2.0%	1.2%	1.5%	1.7%	2.3%	1.4%	1.7%	1.4%	1.9%	1.2%	1.6%
7	1.1%	1.4%	1.8%	1.6%	1.7%	1.6%	1.8%	1.8%	1.8%	1.7%	1.8%	2.1%	2.0%	2.2%	2.0%	2.7%	2.0%	2.1%	1.7%	2.3%	1.8%	2.6%
7.5	1.0%	1.3%	1.2%	1.7%	1.4%	1.6%	1.8%	1.4%	1.7%	1.5%	1.6%	2.0%	1.8%	1.3%	1.7%	2.3%	1.3%	1.8%	1.8%	2.3%	1.2%	2.0%
8	1.3%	1.3%	1.1%	1.3%	1.4%	1.6%	1.3%	1.3%	1.7%	1.5%	1.4%	1.8%	1.9%	1.7%	1.8%	1.5%	1.7%	1.6%	1.6%	1.6%	1.1%	2.2%
8.5	0.7%	1.2%	1.0%	1.3%	1.2%	1.2%	1.2%	1.6%	1.1%	1.0%	1.6%	1.5%	1.1%	0.9%	1.4%	1.4%	1.3%	1.1%	0.7%	1.4%	0.7%	0.7%
9	0.8%	1.3%	0.9%	1.5%	0.9%	1.1%	1.4%	1.5%	1.2%	1.4%	1.3%	1.2%	1.2%	1.6%	1.1%	1.6%	1.8%	1.6%	1.4%	1.4%	1.4%	1.4%
9.5	1.1%	1.1%	0.6%	1.2%	0.8%	0.8%	0.8%	0.8%	1.4%	1.3%	1.0%	0.9%	0.9%	1.6%	0.8%	0.8%	1.1%	1.7%	1.2%	1.0%	0.8%	1.8%
10	0.6%	0.8%	0.7%	1.0%	1.1%	1.0%	1.0%	1.0%	1.2%	1.4%	1.2%	1.4%	0.9%	1.0%	1.3%	0.9%	1.4%	1.0%	0.8%	0.5%	0.9%	1.7%
10.5	0.5%	1.0%	0.5%	0.6%	0.7%	1.0%	0.7%	0.9%	0.8%	1.0%	1.2%	1.3%	1.5%	1.4%	1.1%	1.2%	0.9%	0.9%	1.3%	1.2%	1.2%	1.0%
11	0.6%	1.1%	0.6%	1.1%	0.8%	1.0%	0.9%	0.8%	0.5%	0.8%	0.9%	0.9%	1.1%	1.1%	0.8%	0.8%	0.7%	0.7%	1.0%	0.9%	0.5%	0.5%
11.5	0.6%	1.0%	0.7%	1.3%	1.0%	0.9%	0.8%	1.1%	0.8%	1.2%	1.0%	0.9%	0.9%	1.0%	0.7%	0.7%	0.8%	1.2%	0.6%	0.9%	1.1%	0.7%
12	0.5%	1.0%	0.4%	1.0%	0.8%	0.8%	0.6%	0.8%	0.9%	0.6%	0.7%	0.9%	0.7%	0.5%	0.8%	1.0%	1.2%	0.9%	0.6%	0.8%	0.8%	0.8%
12.5	0.4%	0.9%	0.5%	0.6%	0.4%	0.5%	0.7%	0.6%	0.9%	0.8%	0.5%	0.4%	0.9%	0.8%	0.4%	0.3%	1.1%	0.9%	0.8%	0.8%	1.1%	0.7%
13	0.2%	0.9%	0.5%	0.8%	0.6%	1.0%	0.4%	1.1%	0.5%	0.5%	0.7%	0.7%	0.8%	0.8%	1.0%	0.6%	0.6%	0.5%	0.9%	0.7%	0.7%	0.4%
13.5	0.2%	1.0%	0.3%	0.9%	0.5%	0.8%	0.4%	0.9%	0.7%	0.7%	0.7%	0.7%	0.6%	0.2%	0.7%	0.4%	1.1%	0.9%	0.7%	0.5%	0.5%	0.6%
14	0.4%	0.7%	0.3%	0.6%	0.5%	0.9%	0.7%	0.6%	0.6%	0.7%	0.7%	0.7%	0.5%	0.6%	0.7%	0.6%	0.8%	0.9%	0.8%	0.5%	0.6%	0.7%
14.5	0.4%	0.7%	0.4%	0.8%	0.7%	0.6%	0.4%	0.9%	0.6%	0.7%	0.4%	0.8%	0.6%	0.5%	0.5%	0.6%	0.7%	0.6%	0.5%	0.5%	1.3%	0.6%
15	0.3%	0.8%	0.5%	0.5%	0.6%	0.9%	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	1.0%	0.8%	0.8%	0.9%	0.6%	0.7%	0.9%	0.5%	0.8%	0.4%
15.5	0.2%	0.7%	0.2%	0.9%	0.2%	0.6%	0.3%	0.5%	0.3%	0.5%	0.3%	0.6%	0.4%	0.3%	0.5%	0.3%	0.2%	0.3%	0.6%	0.3%	0.3%	0.2%
16	0.1%	0.8%	0.1%	0.5%	0.4%	0.7%	0.3%	0.6%	0.4%	0.6%	0.5%	0.5%	0.7%	0.5%	0.7%	0.4%	0.8%	0.4%	0.6%	0.5%	0.6%	0.4%
16.5	0.2%	0.6%	0.3%	0.8%	0.4%	0.8%	0.4%	0.6%	0.4%	0.7%	0.4%	0.6%	0.5%	0.4%	0.4%	0.6%	0.8%	0.4%	0.9%	0.5%	0.7%	0.4%
17	0.1%	0.8%	0.3%	0.7%	0.4%	0.7%	0.5%	0.5%	0.2%	0.6%	0.4%	0.3%	0.6%	0.3%	0.3%	0.7%	0.6%	0.4%	0.3%	0.4%	0.8%	0.3%
17.5	0.1%	0.5%	0.3%	0.6%	0.3%	0.9%	0.4%	0.4%	0.4%	0.3%	0.4%	0.3%	0.5%	0.6%	0.7%	0.2%	0.4%	0.2%	0.8%	0.2%	0.2%	0.4%
18	0.1%	0.7%	0.2%	0.4%	0.3%	0.6%	0.3%	0.4%	0.3%	0.6%	0.6%	0.6%	0.4%	0.5%	0.5%	0.3%	0.8%	0.2%	0.9%	0.3%	0.6%	0.6%
18.5	0.2%	0.4%	0.2%	0.5%	0.2%	0.6%	0.3%	0.5%	0.3%	0.5%	0.4%	0.4%	0.7%	0.4%	0.4%	0.3%	0.8%	0.2%	0.3%	0.1%	0.4%	0.2%
19	0.1%	0.5%	0.2%	0.5%	0.1%	0.2%	0.2%	0.4%	0.4%	0.4%	0.2%	0.2%	0.3%	0.2%	0.2%	0.2%	0.5%	0.3%	0.5%	0.2%	0.5%	0.2%
19.5	0.2%	0.3%	0.2%	0.4%	0.3%	0.4%	0.2%	0.4%	0.2%	0.4%	0.3%	0.5%	0.5%	0.4%	0.6%	0.4%	0.2%	0.3%	0.5%	0.2%	0.5%	0.2%
>20	2.6%	21.8%	3.8%	19.5%	6.2%	14.3%	6.8%	11.6%	9.7%	11.1%	13.6%	8.5%	20.3%	6.2%	20.1%	6.4%	24.8%	4.7%	32.2%	3.2%	35.7%	2.6%

Filename	15S10_22		15S10_23		15S10_24		15S10_25		15S10_26		15S10_27		15S10_28		15S10_29		15S10_30	
y(mm)	73		77		81		85		89		93		103		113		123	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23	
C	0.889		0.924		0.938		0.948		0.957		0.963		0.976		0.987		0.992	
Nab	1668		1266		1073		881		741		663		429		231		150	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	1.2%	5.7%	1.4%	6.6%	1.6%	5.4%	0.6%	4.2%	0.8%	6.1%	1.5%	5.3%	0.9%	5.1%	2.2%	6.1%	1.3%	6.7%
0.5	5.2%	12.1%	3.7%	9.3%	3.6%	12.1%	5.0%	9.5%	3.6%	10.0%	3.0%	8.7%	3.5%	8.2%	3.0%	11.7%	2.7%	10.7%
1	6.5%	8.9%	4.6%	10.0%	3.6%	10.3%	4.2%	10.4%	4.2%	9.6%	4.2%	12.1%	2.3%	10.3%	1.7%	7.8%	2.7%	8.7%
1.5	5.8%	8.8%	2.4%	6.3%	2.6%	6.4%	3.1%	6.7%	3.9%	8.9%	3.2%	5.9%	1.9%	6.5%	2.6%	7.8%	4.7%	10.0%
2	3.5%	5.5%	3.9%	9.1%	3.9%	10.5%	2.0%	9.0%	2.3%	5.1%	3.9%	8.4%	2.8%	7.9%	2.2%	7.4%	0.7%	6.0%
2.5	3.7%	7.3%	2.4%	7.1%	3.0%	8.0%	2.7%	7.3%	3.2%	7.3%	2.6%	8.9%	1.4%	6.8%	2.6%	6.1%	0.0%	4.7%
3	3.2%	5.6%	2.9%	5.6%	2.3%	2.8%	1.1%	4.5%	1.9%	8.5%	2.1%	4.2%	1.4%	6.1%	1.3%	4.8%	0.7%	10.0%
3.5	3.5%	4.6%	2.8%	6.0%	2.3%	6.3%	1.1%	6.0%	2.4%	6.7%	2.4%	7.1%	2.3%	6.8%	2.2%	9.5%	2.0%	6.7%
4	1.6%	3.5%	2.0%	6.1%	2.1%	4.6%	2.0%	5.6%	1.2%	3.4%	2.3%	5.0%	0.9%	6.8%	1.3%	5.2%	0.7%	2.7%
4.5	2.2%	4.6%	2.1%	4.0%	2.0%	3.7%	1.6%	5.6%	0.7%	5.7%	1.8%	4.2%	0.9%	5.8%	2.2%	6.9%	0.7%	10.0%
5	1.7%	3.5%	2.3%	2.7%	0.9%	2.5%	0.5%	3.2%	2.2%	3.4%	0.8%	2.3%	0.2%	2.8%	0.0%	3.0%	0.7%	4.0%
5.5	2.0%	3.4%	1.1%	3.2%	1.1%	3.5%	1.0%	3.9%	1.9%	4.7%	1.5%	4.4%	0.5%	2.3%	0.0%	3.5%	0.7%	0.7%
6	1.4%	3.1%	2.0%	2.4%	1.7%	3.0%	0.9%	4.5%	1.8%	2.2%	1.1%	3.5%	1.4%	4.7%	0.0%	3.9%	0.7%	2.0%
6.5	0.8%	1.9%	0.6%	2.0%	1.1%	2.8%	0.5%	2.0%	1.1%	1.9%	1.4%	1.7%	0.5%	3.7%	0.0%	1.7%	0.0%	2.7%
7	1.6%	2.6%	1.2%	2.1%	1.5%	1.9%	1.1%	1.7%	1.3%	1.6%	0.3%	3.3%	0.9%	2.3%	0.4%	0.4%	0.7%	0.7%
7.5	1.0%	2.3%	0.7%	2.1%	1.3%	2.9%	0.7%	2.4%	1.1%	2.4%	0.5%	2.7%	1.4%	1.4%	0.0%	0.9%	0.0%	2.0%
8	0.9%	1.6%	0.9%	2.2%	1.5%	1.2%	1.0%	2.0%	1.1%	1.6%	1.2%	2.3%	0.7%	1.9%	0.0%	2.2%	0.0%	2.7%
8.5	1.1%	1.4%	0.9%	0.9%	0.7%	1.3%	0.6%	1.0%	0.7%	1.1%	0.5%	1.7%	0.9%	1.4%	0.4%	0.4%	0.7%	1.3%
9	1.0%	1.6%	1.0%	1.5%	1.3%	1.3%	1.0%	1.2%	0.9%	0.7%	1.2%	1.1%	0.5%	1.4%	0.0%	2.2%	0.0%	0.0%
9.5	1.1%	1.2%	0.7%	1.3%	0.6%	1.3%	0.3%	1.5%	0.8%	0.9%	0.6%	0.9%	0.7%	1.9%	0.0%	1.7%	0.0%	1.3%
10	1.0%	0.8%	0.4%	1.3%	0.5%	0.4%	0.3%	0.6%	0.5%	1.2%	0.2%	0.6%	0.5%	0.5%	0.0%	0.0%	0.0%	1.3%
10.5	0.9%	1.1%	0.7%	0.9%	0.6%	0.7%	1.0%	0.6%	0.7%	0.9%	0.3%	0.9%	0.2%	1.2%	0.0%	0.4%	0.0%	0.0%
11	0.5%	0.5%	1.2%	0.6%	0.7%	0.6%	1.0%	0.5%	0.5%	0.4%	0.6%	0.6%	0.0%	0.5%	0.4%	0.4%	0.0%	0.0%
11.5	1.4%	0.7%	0.8%	0.6%	0.9%	0.9%	0.2%	1.1%	0.4%	0.4%	1.1%	0.2%	0.0%	0.9%	0.0%	0.4%	0.0%	0.7%
12	1.3%	0.5%	0.9%	0.4%	0.2%	0.8%	0.3%	0.5%	0.9%	0.8%	0.8%	0.2%	0.0%	0.0%	0.0%	0.4%	0.0%	1.3%
12.5	0.9%	0.7%	0.9%	0.9%	0.3%	0.5%	0.9%	0.8%	0.1%	0.5%	0.3%	0.5%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%
13	0.4%	0.5%	0.9%	0.7%	0.7%	0.4%	0.9%	0.6%	0.3%	0.3%	0.5%	0.6%	0.7%	0.5%	0.4%	0.4%	0.0%	0.0%
13.5	0.4%	0.5%	0.2%	0.6%	0.5%	0.1%	0.6%	0.1%	0.1%	0.1%	0.9%	0.3%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%
14	0.5%	0.4%	0.6%	0.2%	0.3%	0.5%	0.2%	0.2%	0.3%	0.1%	0.2%	0.8%	0.0%	0.5%	0.0%	0.9%	0.0%	0.0%
14.5	0.8%	0.3%	0.7%	0.3%	0.6%	0.4%	1.0%	0.5%	0.3%	0.5%	0.3%	0.5%	0.7%	0.2%	0.4%	0.0%	0.0%	0.0%
15	0.2%	0.3%	0.7%	0.2%	0.3%	0.1%	1.1%	0.2%	0.7%	0.4%	0.6%	0.2%	0.2%	0.2%	0.0%	0.9%	0.7%	0.7%
15.5	0.2%	0.4%	0.5%	0.2%	0.4%	0.2%	0.3%	0.1%	0.3%	0.5%	0.2%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.6%	0.1%	0.2%	0.3%	0.6%	0.2%	0.8%	0.2%	0.0%	0.0%	0.2%	0.3%	0.7%	0.2%	0.4%	0.0%	0.7%	0.0%
16.5	0.7%	0.4%	0.6%	0.4%	0.5%	0.1%	0.9%	0.2%	0.4%	0.1%	0.2%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
17	0.4%	0.2%	0.8%	0.1%	0.2%	0.1%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%
17.5	0.5%	0.0%	0.3%	0.2%	0.6%	0.2%	0.5%	0.5%	0.1%	0.0%	0.3%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%
18	0.5%	0.1%	0.2%	0.0%	0.5%	0.1%	0.6%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
18.5	0.3%	0.2%	0.2%	0.2%	0.5%	0.2%	0.6%	0.2%	0.1%	0.1%	0.6%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%
19	0.8%	0.1%	0.3%	0.1%	0.6%	0.1%	0.2%	0.1%	0.3%	0.1%	0.5%	0.0%	0.5%	0.0%	0.4%	0.0%	0.0%	0.0%
19.5	0.4%	0.2%	1.0%	0.3%	0.4%	0.1%	0.6%	0.0%	0.3%	0.1%	0.2%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%
>20	38.3%	2.6%	48.2%	0.9%	51.8%	1.5%	56.4%	0.6%	55.5%	1.1%	56.3%	0.6%	68.1%	0.5%	72.7%	1.3%	77.3%	1.3%

Run 1.5C, dcrest/h = 1.5, Configuration C, location 10

Filename	15S10_00		15S10_01		15S10_02		15S10_03		15S10_04		15S10_05		15S10_06		15S10_07		15S10_08		15S10_09		15S10_10	
y(mm)	3		6		9		12		15		18		21		24		27		30		33	
y/h	0.03		0.06		0.09		0.12		0.15		0.18		0.21		0.24		0.27		0.3		0.33	
C	0.055		0.054		0.051		0.053		0.056		0.067		0.072		0.095		0.124		0.176		0.231	
Nab	2013		1875		1789		1740		1665		1920		1887		2239		2689		3141		3447	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	14.1%	6.7%	14.3%	6.1%	14.9%	5.1%	13.6%	4.4%	15.3%	4.6%	14.0%	5.3%	7.9%	3.2%	8.0%	3.8%	6.8%	5.1%	7.4%	6.5%	6.9%	6.6%
0.5	23.8%	5.1%	23.6%	5.0%	23.9%	4.7%	22.5%	4.3%	21.2%	4.4%	19.8%	5.4%	20.0%	5.8%	17.1%	6.8%	17.0%	6.6%	14.5%	9.3%	13.6%	9.0%
1	25.1%	5.1%	19.7%	3.8%	19.4%	3.6%	20.4%	2.9%	17.1%	3.4%	15.7%	3.4%	18.1%	4.0%	16.4%	4.7%	15.1%	5.2%	14.6%	5.6%	11.9%	6.5%
1.5	12.3%	2.4%	16.2%	4.0%	15.1%	3.4%	12.2%	3.4%	11.7%	2.6%	12.7%	2.3%	12.0%	3.3%	11.8%	3.4%	12.5%	4.4%	11.2%	4.9%	9.2%	5.3%
2	9.2%	3.7%	7.5%	2.0%	7.8%	2.5%	9.0%	2.6%	8.5%	2.2%	8.9%	2.9%	9.2%	2.9%	9.0%	3.4%	8.6%	3.7%	8.3%	4.0%	5.9%	2.9%
2.5	4.3%	2.0%	5.1%	1.9%	5.3%	2.0%	5.6%	2.3%	6.2%	1.9%	5.4%	2.8%	6.7%	2.9%	7.2%	2.4%	6.4%	2.8%	6.1%	2.9%	6.7%	3.7%
3	3.4%	2.7%	3.7%	2.0%	4.5%	2.3%	4.5%	1.9%	6.1%	1.6%	4.9%	1.8%	4.4%	2.4%	5.0%	2.0%	4.0%	1.9%	3.4%	2.2%	5.4%	3.2%
3.5	2.1%	1.6%	2.7%	1.1%	1.9%	1.2%	3.0%	1.1%	2.5%	1.5%	3.4%	1.2%	3.6%	1.8%	4.4%	2.1%	4.2%	2.7%	5.1%	2.0%	4.7%	3.0%
4	1.3%	2.1%	1.1%	1.0%	1.3%	1.2%	2.2%	1.0%	1.6%	1.9%	2.6%	1.7%	3.5%	1.5%	3.0%	1.5%	3.7%	2.8%	3.4%	2.3%	2.8%	1.7%
4.5	0.9%	1.5%	1.5%	1.3%	1.0%	1.6%	1.4%	1.6%	1.7%	1.4%	3.0%	2.1%	2.6%	1.8%	2.5%	1.3%	2.8%	2.4%	2.8%	2.0%	3.5%	2.5%
5	1.0%	1.9%	0.9%	1.7%	1.2%	1.6%	0.7%	1.6%	1.3%	1.2%	1.5%	2.0%	1.6%	1.3%	2.4%	1.9%	2.5%	2.0%	2.4%	1.6%	2.8%	2.4%
5.5	0.5%	0.6%	0.7%	0.9%	0.4%	1.2%	0.6%	1.5%	0.6%	1.1%	1.6%	1.2%	1.5%	1.4%	1.7%	1.4%	2.5%	2.2%	2.3%	1.8%	2.9%	1.8%
6	0.4%	1.4%	0.5%	1.0%	0.4%	0.8%	1.1%	1.1%	1.2%	1.9%	0.9%	0.6%	0.8%	0.9%	1.3%	1.4%	1.4%	0.9%	1.0%	1.0%	1.9%	1.6%
6.5	0.2%	0.8%	0.7%	1.3%	0.5%	1.6%	0.6%	0.8%	0.9%	1.1%	0.8%	1.0%	1.1%	1.2%	1.3%	1.6%	1.6%	1.6%	1.6%	1.4%	1.3%	1.4%
7	0.3%	0.9%	0.4%	1.2%	0.4%	1.0%	0.2%	1.4%	0.5%	1.1%	0.9%	1.3%	0.7%	0.8%	1.0%	1.2%	1.2%	1.3%	1.7%	1.6%	2.0%	1.5%
7.5	0.1%	0.9%	0.2%	0.8%	0.4%	0.6%	0.3%	0.9%	0.3%	0.8%	0.6%	0.8%	1.0%	1.0%	0.9%	1.3%	1.3%	1.2%	1.4%	1.4%	1.3%	1.9%
8	0.1%	1.1%	0.1%	1.0%	0.2%	1.3%	0.2%	0.7%	0.4%	1.0%	0.4%	1.1%	0.6%	0.8%	0.6%	0.8%	0.6%	1.3%	0.8%	1.6%	1.5%	1.7%
8.5	0.1%	0.9%	0.2%	1.1%	0.1%	0.6%	0.2%	1.0%	0.5%	0.8%	0.4%	1.0%	0.6%	0.9%	0.7%	1.3%	0.9%	1.6%	1.1%	1.3%	0.7%	1.1%
9	0.0%	1.4%	0.1%	0.6%	0.3%	1.1%	0.1%	1.5%	0.4%	1.3%	0.7%	1.1%	0.4%	0.9%	0.8%	1.2%	0.9%	1.5%	1.0%	1.4%	1.2%	1.3%
9.5	0.1%	1.0%	0.0%	0.9%	0.1%	0.7%	0.2%	1.2%	0.1%	1.0%	0.6%	1.6%	0.3%	0.7%	0.4%	1.0%	0.6%	0.6%	0.5%	0.6%	1.2%	1.2%
10	0.1%	1.0%	0.1%	1.1%	0.2%	1.0%	0.1%	1.1%	0.2%	0.8%	0.2%	0.8%	0.4%	1.0%	0.4%	0.8%	0.6%	1.0%	1.0%	1.4%	1.3%	1.1%
10.5	0.0%	0.9%	0.0%	0.9%	0.1%	0.7%	0.1%	0.9%	0.1%	0.8%	0.1%	0.9%	0.3%	1.0%	0.5%	0.8%	0.6%	0.8%	0.6%	1.0%	1.0%	1.0%
11	0.1%	0.8%	0.0%	0.8%	0.2%	1.2%	0.1%	0.5%	0.4%	0.6%	0.3%	0.8%	0.1%	1.1%	0.3%	1.0%	0.6%	0.8%	0.8%	1.1%	0.5%	0.8%
11.5	0.0%	0.8%	0.2%	1.1%	0.0%	0.7%	0.0%	0.7%	0.1%	0.8%	0.1%	1.1%	0.3%	0.5%	0.5%	0.7%	0.3%	1.0%	0.6%	0.9%	0.6%	1.0%
12	0.1%	0.8%	0.1%	0.7%	0.1%	0.7%	0.1%	0.9%	0.3%	1.0%	0.1%	1.1%	0.5%	0.8%	0.3%	1.1%	0.3%	1.1%	0.4%	1.4%	0.5%	1.0%
12.5	0.0%	0.7%	0.1%	0.6%	0.0%	1.0%	0.2%	0.9%	0.0%	0.8%	0.1%	0.9%	0.3%	1.2%	0.3%	0.7%	0.1%	0.4%	0.2%	0.7%	0.5%	1.0%
13	0.0%	0.7%	0.2%	0.4%	0.1%	0.8%	0.1%	0.7%	0.1%	0.8%	0.0%	1.0%	0.1%	1.1%	0.2%	0.7%	0.4%	0.7%	0.5%	0.8%	0.2%	0.6%
13.5	0.0%	0.9%	0.1%	1.2%	0.0%	0.8%	0.1%	0.4%	0.1%	0.7%	0.1%	0.7%	0.1%	0.7%	0.1%	0.7%	0.2%	0.8%	0.5%	0.5%	0.6%	0.8%
14	0.0%	1.0%	0.0%	0.6%	0.0%	0.4%	0.1%	0.6%	0.1%	0.7%	0.1%	0.8%	0.2%	0.5%	0.1%	0.7%	0.2%	1.0%	0.3%	1.0%	0.6%	0.7%
14.5	0.0%	0.8%	0.0%	0.5%	0.1%	0.8%	0.1%	0.7%	0.2%	0.6%	0.1%	0.7%	0.2%	0.5%	0.2%	0.8%	0.2%	0.3%	0.4%	0.7%	0.4%	1.0%
15	0.0%	0.7%	0.0%	0.7%	0.0%	0.8%	0.0%	0.9%	0.0%	0.9%	0.1%	0.3%	0.2%	0.6%	0.2%	0.6%	0.2%	0.6%	0.2%	0.6%	0.4%	0.8%
15.5	0.0%	0.4%	0.0%	1.1%	0.0%	0.8%	0.1%	0.6%	0.0%	0.5%	0.1%	0.8%	0.1%	0.6%	0.1%	0.6%	0.0%	0.4%	0.0%	0.4%	0.2%	0.6%
16	0.0%	0.6%	0.1%	0.7%	0.0%	0.9%	0.0%	0.2%	0.1%	0.4%	0.1%	0.8%	0.1%	0.7%	0.0%	0.9%	0.1%	0.7%	0.3%	0.9%	0.2%	0.6%
16.5	0.0%	0.6%	0.0%	0.9%	0.1%	0.8%	0.0%	0.6%	0.0%	0.5%	0.0%	0.6%	0.2%	0.7%	0.1%	0.7%	0.3%	0.6%	0.2%	0.6%	0.4%	0.7%
17	0.0%	0.7%	0.1%	0.7%	0.0%	0.5%	0.1%	0.5%	0.0%	0.8%	0.0%	0.8%	0.2%	0.6%	0.1%	0.7%	0.1%	0.7%	0.4%	0.8%	0.3%	0.7%
17.5	0.0%	0.6%	0.0%	0.7%	0.0%	0.4%	0.1%	0.7%	0.0%	0.6%	0.0%	0.4%	0.0%	0.4%	0.1%	0.3%	0.1%	0.9%	0.2%	0.6%	0.2%	0.3%
18	0.0%	0.9%	0.0%	0.6%	0.0%	0.8%	0.0%	0.7%	0.0%	0.8%	0.0%	0.6%	0.1%	0.6%	0.1%	0.8%	0.1%	0.7%	0.2%	0.6%	0.3%	0.7%
18.5	0.0%	0.2%	0.0%	1.0%	0.0%	1.2%	0.0%	0.6%	0.0%	0.7%	0.0%	0.5%	0.0%	0.7%	0.0%	0.8%	0.1%	0.4%	0.2%	0.9%	0.1%	0.6%
19	0.0%	0.6%	0.0%	0.7%	0.0%	0.6%	0.0%	0.3%	0.1%	0.5%	0.0%	0.7%	0.1%	0.7%	0.1%	0.3%	0.0%	0.3%	0.2%	0.5%	0.1%	0.6%
19.5	0.0%	0.6%	0.0%	0.7%	0.0%	0.7%	0.0%	0.4%	0.0%	0.7%	0.0%	0.9%	0.0%	0.4%	0.0%	0.5%	0.0%	0.7%	0.2%	0.6%	0.3%	0.6%
>20	0.0%	41.3%	0.1%	45.5%	0.0%	46.2%	0.2%	49.8%	0.2%	49.2%	0.0%	44.2%	0.3%	45.9%	0.3%	41.5%	0.7%	34.4%	2.1%	28.7%	3.6%	24.6%

Filename	15S10_11		15S10_12		15S10_13		15S10_14		15S10_15		15S10_16		15S10_17		15S10_18		15S10_19		15S10_20		15S10_21	
y(mm)	36		39		42		45		48		51		54		57		61		65		69	
y/h	0.36		0.39		0.42		0.45		0.48		0.51		0.54		0.57		0.61		0.65		0.69	
C	0.319		0.41		0.517		0.615		0.701		0.78		0.805		0.845		0.885		0.907		0.927	
Nab	3986		3936		3906		3651		3251		2633		2470		2058		1665		1431		1226	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	5.8%	7.7%	4.5%	7.2%	3.6%	7.3%	3.2%	7.6%	2.8%	6.6%	2.3%	6.4%	2.1%	4.9%	1.5%	4.9%	0.8%	4.6%	1.3%	4.6%	1.1%	6.4%
0.5	11.8%	9.9%	10.1%	10.4%	8.1%	12.3%	7.3%	11.6%	6.2%	11.7%	5.0%	9.9%	5.8%	9.7%	4.1%	10.1%	3.5%	9.7%	4.4%	8.2%	2.7%	10.4%
1	11.1%	8.1%	9.0%	8.4%	8.0%	7.8%	5.3%	5.8%	4.3%	5.4%	3.8%	5.7%	3.4%	7.3%	2.7%	6.0%	2.5%	5.8%	2.5%	6.4%	2.2%	6.5%
1.5	5.2%	3.8%	4.9%	4.4%	4.9%	4.7%	6.6%	7.8%	6.3%	8.1%	4.4%	8.3%	4.7%	8.1%	4.1%	8.8%	3.0%	8.7%	3.5%	8.6%	3.7%	8.9%
2	8.4%	4.8%	6.8%	6.0%	6.9%	5.8%	5.3%	6.1%	4.9%	6.5%	4.8%	6.5%	3.0%	5.7%	3.5%	7.5%	2.5%	5.8%	3.2%	9.2%	1.7%	6.6%
2.5	6.7%	4.6%	6.0%	4.5%	6.0%	5.1%	3.8%	3.6%	3.1%	3.2%	2.5%	4.4%	3.9%	7.3%	2.1%	4.1%	3.5%	6.7%	2.5%	4.4%	2.4%	6.8%
3	3.8%	2.3%	4.2%	2.6%	3.5%	2.9%	4.8%	4.7%	4.8%	5.4%	4.6%	5.9%	3.4%	5.5%	2.3%	6.9%	3.5%	6.6%	2.7%	8.2%	2.9%	6.9%
3.5	4.9%	3.3%	4.6%	3.7%	4.3%	4.1%	4.5%	4.6%	4.1%	4.7%	3.2%	5.4%	2.8%	2.9%	3.4%	5.4%	1.8%	4.4%	2.3%	6.6%	1.2%	3.7%
4	4.2%	3.5%	3.9%	3.2%	3.9%	3.8%	2.2%	2.6%	2.3%	2.9%	2.5%	3.3%	3.0%	5.5%	2.3%	2.9%	2.1%	5.0%	1.8%	3.6%	2.9%	7.0%
4.5	3.3%	2.3%	3.7%	2.7%	3.9%	3.4%	2.8%	3.5%	3.0%	4.2%	2.9%	4.4%	1.8%	3.0%	2.3%	4.7%	1.3%	2.8%	2.2%	5.4%	1.5%	3.3%
5	2.1%	1.6%	2.1%	1.8%	1.9%	1.7%	3.6%	2.8%	2.6%	3.4%	2.4%	2.8%	2.4%	4.0%	2.8%	3.9%	2.0%	5.2%	2.0%	4.9%	2.1%	4.1%
5.5	3.0%	2.4%	3.2%	2.6%	2.4%	2.5%	1.8%	1.6%	1.7%	1.7%	1.6%	2.2%	2.2%	3.4%	1.2%	2.2%	2.5%	4.8%	0.6%	2.4%	1.5%	3.7%
6	2.3%	2.1%	2.8%	2.5%	2.7%	2.2%	2.6%	2.7%	2.2%	2.7%	2.2%	2.8%	1.7%	1.9%	2.2%	3.5%	1.6%	2.5%	2.2%	3.6%	1.0%	2.3%
6.5	1.4%	1.1%	1.3%	1.3%	1.4%	1.3%	2.1%	2.1%	1.9%	2.8%	2.1%	3.2%	1.9%	2.4%	1.8%	3.5%	1.5%	3.4%	1.6%	2.9%	1.6%	2.9%
7	2.3%	1.8%	2.4%	1.6%	2.0%	2.2%	1.6%	1.4%	1.4%	1.4%	1.2%	1.3%	1.3%	1.5%	1.3%	1.3%	0.8%	1.5%	1.3%	1.8%	1.3%	1.6%
7.5	2.0%	1.2%	1.9%	1.3%	2.1%	2.2%	2.3%	1.6%	1.8%	2.1%	2.1%	2.2%	1.9%	2.5%	2.2%	3.1%	1.4%	2.9%	1.3%	1.5%	1.1%	1.9%
8	1.6%	1.4%	2.0%	1.4%	1.9%	1.4%	2.1%	1.8%	2.0%	2.2%	1.9%	2.0%	1.3%	1.3%	1.7%	2.4%	1.1%	1.0%	1.5%	2.3%	0.9%	2.0%
8.5	0.9%	0.8%	1.3%	0.6%	1.2%	1.1%	1.1%	1.0%	1.1%	1.1%	1.1%	1.2%	1.2%	2.2%	1.2%	1.4%	1.3%	1.7%	0.6%	1.1%	1.0%	2.0%
9	1.5%	1.2%	1.5%	1.4%	1.6%	1.3%	1.6%	1.4%	2.0%	1.9%	1.4%	1.6%	1.4%	1.5%	1.0%	1.5%	1.9%	2.1%	1.0%	2.2%	1.6%	1.4%
9.5	1.4%	1.1%	1.3%	1.2%	1.4%	1.3%	1.3%	1.1%	0.9%	0.9%	0.9%	0.9%	0.9%	1.0%	0.9%	0.8%	0.7%	1.0%	0.9%	0.8%	0.8%	1.0%
10	0.7%	1.0%	0.9%	1.2%	0.8%	1.0%	1.3%	1.2%	1.3%	1.3%	1.4%	1.8%	1.4%	1.3%	1.6%	1.5%	0.6%	1.3%	1.0%	1.5%	1.1%	1.0%
10.5	1.2%	1.3%	1.1%	1.1%	1.0%	0.8%	1.0%	1.0%	1.3%	1.0%	1.1%	1.3%	1.1%	0.9%	0.8%	1.1%	1.0%	0.8%	0.4%	1.0%	0.7%	0.6%
11	0.8%	1.0%	1.0%	1.0%	1.3%	0.9%	0.7%	0.8%	0.8%	0.6%	0.9%	0.9%	1.1%	1.3%	1.0%	0.7%	0.8%	0.7%	0.3%	0.6%	0.7%	1.0%
11.5	0.9%	1.1%	1.1%	1.2%	1.1%	0.7%	1.0%	1.0%	1.0%	1.3%	0.8%	1.3%	1.0%	1.0%	1.5%	1.0%	0.8%	1.1%	0.8%	0.6%	1.5%	1.1%
12	0.6%	0.7%	0.7%	0.7%	0.8%	0.7%	1.0%	1.2%	1.4%	0.9%	1.1%	0.8%	0.7%	0.6%	1.1%	0.9%	0.6%	0.5%	0.8%	0.8%	0.5%	0.8%
12.5	0.9%	1.2%	1.0%	1.0%	1.1%	0.9%	0.8%	0.7%	0.7%	0.6%	0.4%	0.8%	1.1%	0.9%	0.7%	0.6%	0.8%	0.9%	0.8%	0.5%	0.7%	0.8%
13	0.8%	0.7%	1.1%	0.9%	1.1%	0.8%	1.1%	0.8%	1.0%	0.9%	0.9%	1.2%	0.4%	0.6%	0.6%	0.6%	0.7%	0.3%	0.3%	0.6%	0.2%	0.5%
13.5	0.6%	0.5%	0.5%	0.6%	0.7%	0.5%	0.9%	1.0%	1.2%	1.1%	1.4%	0.7%	1.0%	0.9%	1.0%	0.6%	1.0%	0.4%	1.0%	0.8%	1.0%	0.5%
14	0.9%	1.1%	0.6%	0.8%	1.0%	0.7%	0.7%	0.4%	0.5%	0.4%	0.6%	0.3%	0.5%	0.4%	0.6%	0.4%	0.4%	0.6%	0.6%	0.6%	0.2%	0.3%
14.5	0.4%	0.8%	0.9%	0.7%	0.7%	0.7%	0.8%	0.9%	1.0%	1.0%	0.8%	0.6%	1.0%	0.6%	0.6%	0.4%	1.1%	0.8%	0.9%	0.4%	1.1%	0.5%
15	0.3%	0.8%	0.7%	0.7%	0.9%	0.9%	1.1%	0.7%	1.2%	1.0%	0.8%	0.6%	0.6%	0.5%	0.6%	0.5%	0.8%	0.7%	0.9%	0.3%	0.2%	0.6%
15.5	0.2%	0.5%	0.6%	0.5%	0.5%	0.2%	0.6%	0.5%	0.7%	0.5%	0.4%	0.2%	0.7%	0.2%	0.7%	0.3%	0.3%	0.4%	0.1%	0.3%	0.7%	0.3%
16	0.7%	0.7%	0.8%	0.7%	0.6%	0.4%	0.6%	0.6%	0.7%	0.6%	0.9%	0.6%	0.8%	0.6%	0.5%	0.5%	1.1%	0.4%	0.5%	0.6%	0.7%	0.2%
16.5	0.4%	0.8%	0.6%	0.4%	0.5%	0.4%	0.8%	0.6%	0.7%	0.5%	0.9%	0.5%	0.5%	0.4%	0.8%	0.6%	0.3%	0.2%	0.6%	0.4%	0.7%	0.3%
17	0.2%	0.3%	0.3%	0.6%	0.3%	0.4%	0.5%	0.4%	0.4%	0.2%	0.4%	0.4%	0.9%	0.5%	0.3%	0.2%	0.6%	0.4%	0.3%	0.1%	0.6%	0.6%
17.5	0.4%	0.8%	0.4%	0.6%	0.5%	0.7%	0.7%	0.6%	0.7%	0.5%	0.8%	0.8%	0.8%	0.5%	0.6%	0.4%	0.6%	0.5%	0.5%	0.1%	0.8%	0.2%
18	0.4%	0.7%	0.4%	0.5%	0.6%	0.5%	0.4%	0.5%	0.6%	0.2%	0.6%	0.4%	0.4%	0.2%	0.4%	0.3%	0.2%	0.3%	0.6%	0.2%	0.3%	0.1%
18.5	0.3%	0.6%	0.3%	0.6%	0.6%	0.5%	0.8%	0.3%	0.6%	0.4%	0.4%	0.4%	0.6%	0.4%	0.4%	0.2%	1.0%	0.5%	0.6%	0.0%	0.5%	0.2%
19	0.2%	0.4%	0.3%	0.3%	0.3%	0.2%	0.5%	0.6%	0.6%	0.5%	0.6%	0.3%	0.5%	0.3%	0.6%	0.3%	0.5%	0.1%	0.6%	0.2%	0.3%	0.2%
19.5	0.3%	0.5%	0.6%	0.4%	0.4%	0.4%	0.3%	0.3%	0.5%	0.4%	0.6%	0.2%	0.5%	0.3%	0.8%	0.1%	0.6%	0.2%	0.3%	0.1%	0.5%	0.3%
>20	5.3%	19.9%	8.7%	16.3%	13.4%	13.2%	18.4%	10.5%	23.5%	7.4%	31.0%	5.5%	34.3%	5.3%	39.7%	3.7%	46.6%	2.7%	48.3%	1.6%	52.0%	0.7%

Filename	15S10_22		15S10_23		15S10_24		15S10_25		15S10_26		15S10_27		15S10_28		15S10_29		15S10_30	
y(mm)	73		77		81		85		89		93		103		113		123	
y/h	0.73		0.77		0.81		0.85		0.89		0.93		1.03		1.13		1.23	
C	0.943		0.957		0.961		0.973		0.978		0.984		0.991		0.994		0.997	
Nab	935		795		685		518		444		323		197		124		64	
Min	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)	f(a)	f(w)
0	0.9%	3.5%	1.5%	4.8%	1.3%	4.5%	1.5%	6.6%	0.9%	5.0%	1.2%	6.5%	0.5%	5.1%	2.4%	5.6%	3.1%	6.3%
0.5	2.8%	8.8%	1.8%	12.6%	2.8%	7.2%	3.1%	10.8%	2.9%	10.6%	2.8%	9.3%	3.6%	11.2%	5.6%	8.9%	7.8%	10.9%
1	1.7%	6.8%	1.8%	6.8%	2.6%	5.4%	2.1%	6.9%	2.5%	6.3%	1.9%	7.1%	2.5%	5.6%	2.4%	8.1%	0.0%	7.8%
1.5	3.2%	6.7%	3.5%	7.4%	2.6%	12.3%	1.5%	9.1%	1.8%	11.9%	4.0%	9.3%	3.0%	13.2%	0.8%	11.3%	0.0%	17.2%
2	2.1%	6.3%	2.1%	6.9%	2.3%	4.8%	2.3%	9.1%	2.0%	5.2%	1.9%	6.8%	0.0%	8.1%	0.8%	4.8%	0.0%	12.5%
2.5	3.0%	9.2%	2.4%	8.8%	1.9%	9.8%	1.7%	6.0%	2.5%	9.0%	2.5%	8.4%	2.5%	6.6%	0.8%	6.5%	0.0%	1.6%
3	1.9%	6.3%	2.5%	6.0%	1.9%	9.5%	2.3%	7.3%	1.8%	9.5%	0.9%	6.2%	2.0%	8.1%	1.6%	8.9%	1.6%	4.7%
3.5	1.3%	5.9%	1.4%	5.9%	1.5%	4.1%	1.7%	7.3%	1.4%	3.8%	0.6%	7.1%	0.5%	5.1%	1.6%	4.8%	3.1%	9.4%

4	1.8%	7.9%	2.3%	5.0%	1.0%	7.6%	0.8%	3.7%	1.8%	5.6%	0.9%	6.8%	0.5%	7.1%	0.0%	4.8%	0.0%	1.6%
4.5	1.2%	4.1%	0.8%	3.5%	1.8%	3.6%	1.4%	4.4%	0.5%	2.7%	0.0%	5.3%	0.5%	3.6%	0.8%	6.5%	0.0%	1.6%
5	1.3%	4.9%	1.3%	6.3%	0.9%	5.3%	1.4%	4.4%	0.5%	6.1%	0.9%	5.6%	1.5%	3.0%	0.0%	2.4%	3.1%	6.3%
5.5	1.4%	4.7%	1.1%	4.0%	1.3%	5.5%	0.6%	2.5%	1.1%	5.0%	0.9%	2.5%	1.5%	4.1%	0.8%	5.6%	0.0%	3.1%
6	0.7%	2.7%	0.5%	2.9%	1.3%	0.7%	0.8%	4.1%	1.1%	2.3%	0.6%	2.8%	0.5%	2.5%	0.0%	1.6%	0.0%	3.1%
6.5	1.4%	2.8%	0.8%	2.9%	1.2%	2.9%	0.8%	4.2%	0.2%	3.8%	0.9%	3.4%	0.0%	4.6%	0.8%	4.0%	1.6%	3.1%
7	0.9%	1.2%	0.6%	2.1%	1.2%	1.8%	1.0%	1.0%	0.9%	1.1%	0.3%	1.2%	0.0%	1.5%	0.0%	0.8%	0.0%	3.1%
7.5	0.6%	2.6%	1.0%	2.6%	1.0%	2.5%	0.6%	1.0%	0.7%	2.5%	0.9%	1.9%	0.0%	2.0%	0.8%	3.2%	0.0%	1.6%
8	0.7%	1.6%	0.5%	2.1%	0.3%	0.6%	0.8%	1.9%	0.5%	1.4%	0.0%	1.2%	0.5%	0.5%	0.0%	2.4%	0.0%	0.0%
8.5	0.5%	2.0%	0.9%	0.8%	1.3%	1.8%	0.6%	0.8%	1.4%	1.6%	1.2%	2.2%	0.0%	1.0%	0.0%	0.8%	0.0%	1.6%
9	0.4%	1.7%	0.5%	0.9%	0.6%	1.6%	0.8%	1.0%	0.9%	1.6%	0.3%	1.2%	0.0%	3.0%	0.0%	3.2%	0.0%	1.6%
9.5	0.6%	0.5%	0.6%	1.1%	0.3%	0.3%	0.4%	0.6%	1.8%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10	0.6%	1.0%	0.6%	0.9%	0.3%	0.9%	0.2%	1.5%	0.5%	1.1%	0.3%	1.2%	0.0%	1.5%	0.0%	1.6%	0.0%	0.0%
10.5	0.7%	0.4%	0.4%	0.5%	0.3%	0.6%	0.2%	0.6%	0.5%	0.0%	0.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	0.6%	1.1%	0.4%	1.1%	1.0%	0.3%	0.4%	0.4%	0.2%	0.5%	0.0%	0.3%	0.5%	0.5%	0.0%	1.6%	0.0%	0.0%
11.5	1.0%	0.6%	0.6%	0.4%	0.3%	0.7%	0.8%	1.0%	0.9%	0.2%	0.6%	0.0%	0.0%	1.0%	0.8%	0.0%	0.0%	0.0%
12	0.4%	0.5%	0.5%	0.5%	0.1%	0.0%	1.0%	0.6%	0.2%	0.7%	0.0%	0.0%	0.0%	0.5%	1.6%	0.0%	0.0%	1.6%
12.5	1.0%	0.7%	0.1%	0.4%	0.3%	0.7%	0.0%	0.6%	0.2%	0.9%	0.6%	0.0%	0.5%	0.0%	0.0%	0.8%	1.6%	0.0%
13	0.6%	0.3%	0.1%	0.0%	0.4%	0.4%	0.4%	0.4%	0.5%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13.5	0.3%	0.4%	0.4%	0.3%	0.1%	0.6%	0.8%	0.2%	0.0%	0.2%	0.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
14	1.0%	0.5%	0.6%	0.3%	0.1%	0.4%	0.2%	0.0%	0.2%	0.2%	0.3%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%
14.5	0.6%	1.0%	0.3%	0.1%	0.4%	1.0%	0.2%	0.2%	0.2%	0.0%	0.3%	0.3%	0.5%	0.0%	0.0%	0.8%	0.0%	0.0%
15	0.7%	0.3%	0.4%	0.3%	0.9%	0.7%	0.6%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15.5	0.4%	0.4%	0.5%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%	0.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
16	0.7%	0.1%	0.6%	0.0%	0.4%	0.3%	0.2%	0.4%	0.5%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16.5	0.4%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	0.5%	0.0%	0.1%	0.0%	0.3%	0.4%	0.4%	0.0%	0.2%	0.0%	0.0%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
17.5	0.6%	0.4%	0.3%	0.0%	0.3%	0.0%	0.4%	0.4%	0.0%	0.0%	0.3%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.2%	0.3%	0.3%	0.3%	0.3%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18.5	0.5%	0.3%	0.3%	0.4%	0.7%	0.1%	0.0%	0.0%	0.7%	0.0%	0.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
19	0.4%	0.0%	0.4%	0.0%	0.1%	0.1%	0.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
19.5	0.2%	0.2%	0.3%	0.1%	0.7%	0.0%	0.2%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>20	59.4%	0.9%	64.7%	0.6%	63.2%	0.6%	67.4%	0.4%	67.1%	0.2%	72.1%	0.9%	74.1%	0.0%	75.8%	0.0%	75.0%	0.0%

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