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Coupling between Free-surface Fluctuations, Velocity Fluctuations and Turbulent Reynolds Stresses during the Upstream Propagation of Positive Surges, Bores and Compression Waves

by

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DIGITAL APPENDIX. PHOTOGRAPHS OF UPSTREAM BORE PROPAGATION

The digital appendix was developed to illustrate photographic sequences of upstream bore propagation. The appendix documents two cases: a breaking bore (Fig. II-1) and an undular bore (Fig. II-2). In each case, the bore propagates from left to right and the time interval between each photograph is 0.12 s. The photographs were taken with a dSLR camera Pentax™ K-3.

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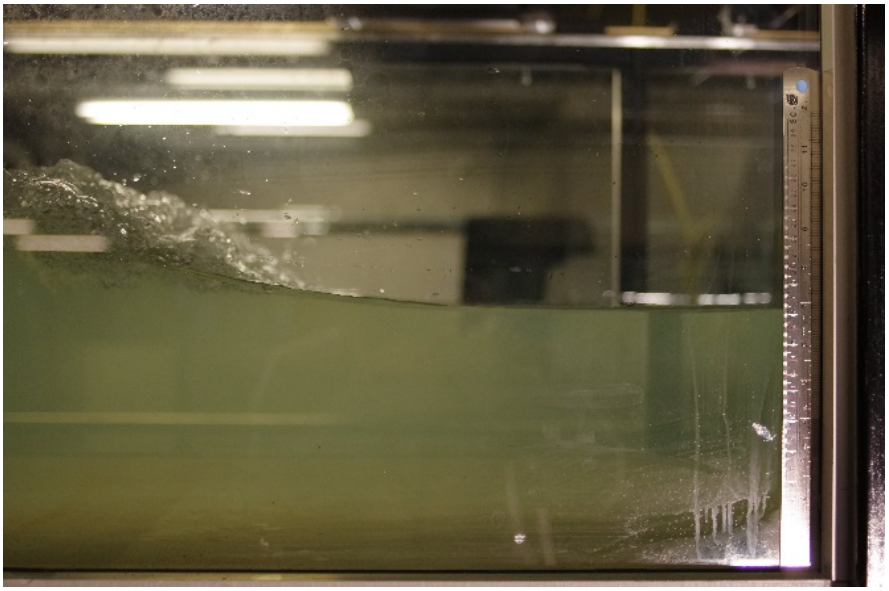
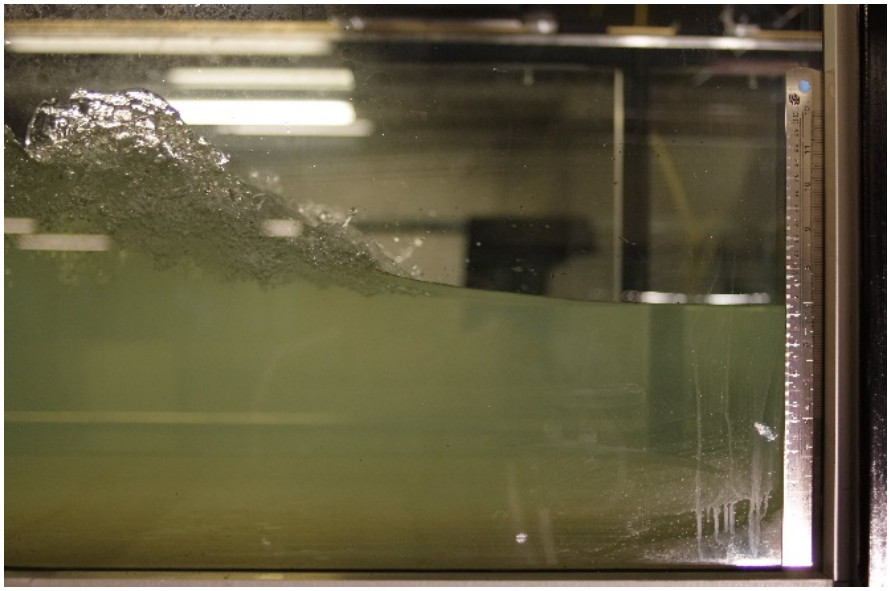
Fig. II-1 Breaking bore propagation from left to right, viewed from the side with a time interval of 0.12 s between photographs; Flow conditions: Q = 0.101 m^3/s, S_o = 0, Radial gate opening = fully-opened, h= 0 m, Fr_1 = 1.6

(i)



(ii)



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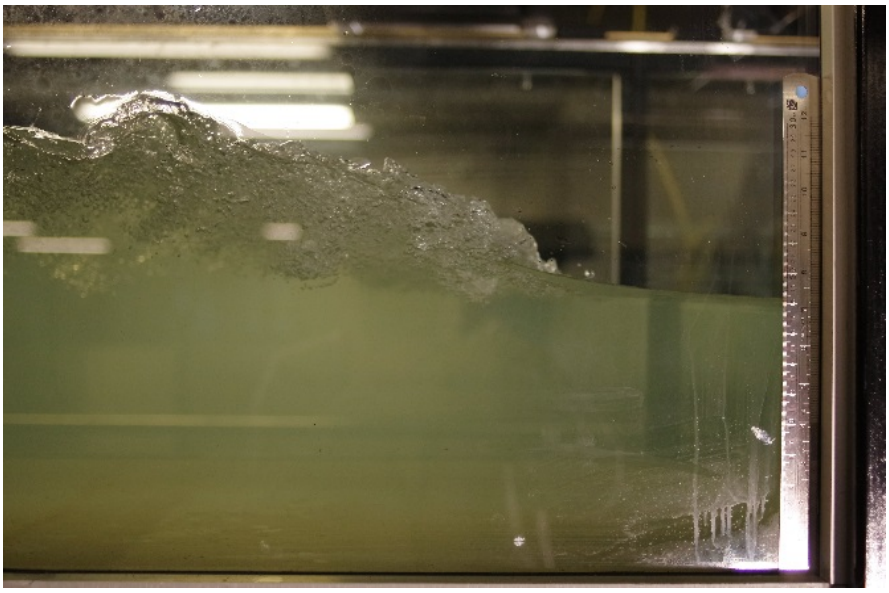
(iii)



(iv)

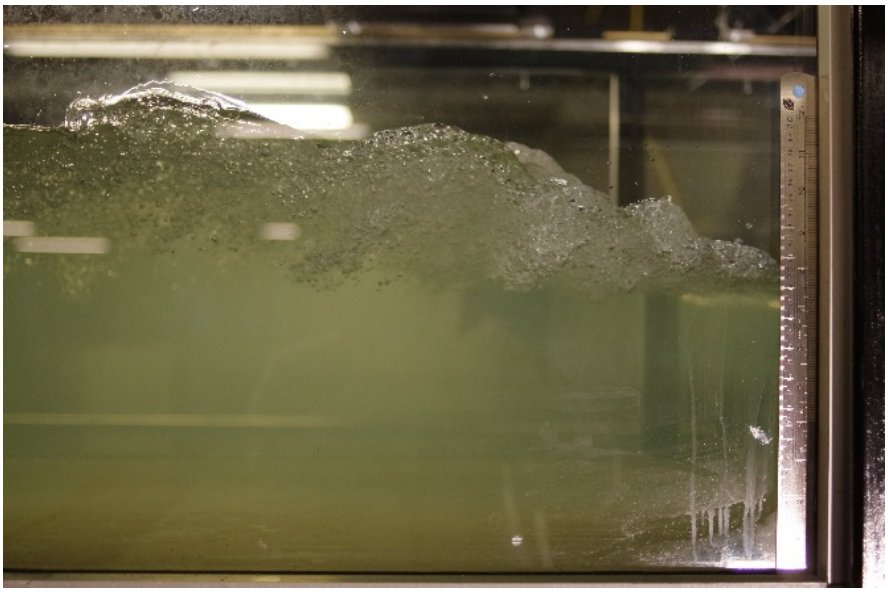


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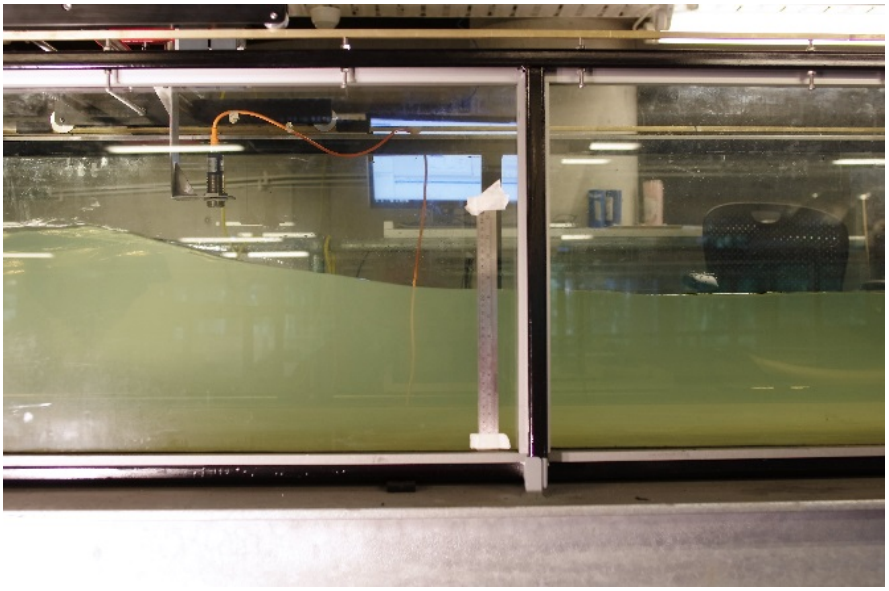
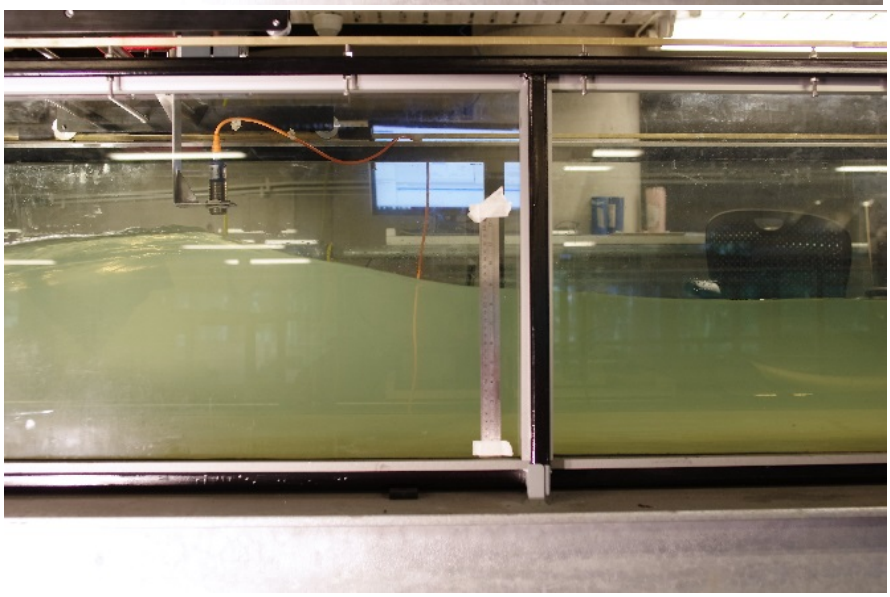
Fig. II-2 - Undular bore propagation from left to right, viewed from the side with a time interval of 0.12 s between photographs; Flow conditions: Q = 0.101 m^3/s, S_o = 0, Radial gate opening = 0.125 m, h = 0.071 m, Fr_1 = 1.2

(i)



(ii)



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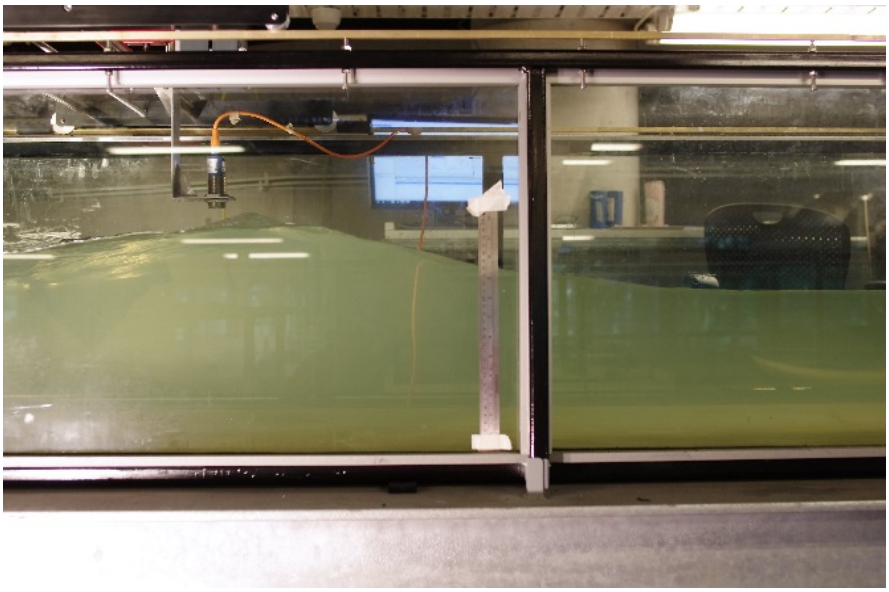
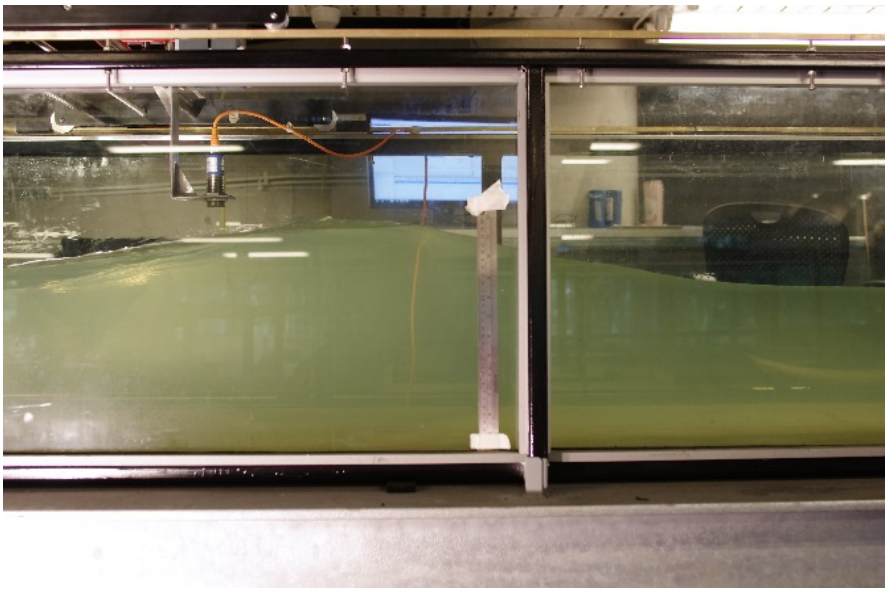
(iii)



(iv)