Modelling water wave overwash of a thin floating plate

Electronic Supplementary Material

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Example of overwash with mean depth 0.81 mm

Movie of test using 20 mm thick PP plate forced by a wave with steepness $kA = 0.08$ and length $\lambda = 0.56$ m.
Example of overwash with mean depth 2.75 mm

Movie of test using 10 mm thick PP plate forced by a wave with steepness $kA = 0.08$ and length $\lambda = 1.56$ m.
Test uses a 10 mm thick PVC plate forced by a wave of steepness $kA = 0.08$ and length $\lambda = 1.00$ m
Test uses a 10 mm thick PP plate forced by a wave of steepness $kA = 0.10$ and length $\lambda = 0.56$ m.
Comparison of model and experiment for PP

Overwash mean depth and standard deviation at the plate’s centre for PP plates. Blue circles denote theoretical model predictions. Red squares denote values extracted from experimental data.
Test uses a 20 mm thick PVC plate forced by a wave of steepness $kA = 0.15$ and length $\lambda = 1.56$ m