

# **Assessing the Accuracy of Surveying/Photogrammetric Methods to Identify Damages on Physical Models of Rubble Mound Breakwaters**

**Maria Henriques, Rute Lemos, Rui Captao, Ricardo Jonatas, Fortes Conceicao and Hugo Silva (Portugal)**

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## **SUMMARY**

During the design process of rubble mound breakwaters scale model, tests are required to study the hydraulic and structural behaviour of the proposed structure under predefined sea wave conditions. The main goal of such tests is to study the structure overtopping and infer on damage progression by quantifying displacements of the armour layer units.

To detect and measure these displacements different methodologies were tested: photogrammetry and 3D scan. All the methods were used to produce point clouds. Some points on the model of the breakwater and its surroundings were coordinated by surveying methods and used to assess the accuracy. This paper describes the methodologies used and the results achieved.

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