

Experimental approach study of the interaction water-sediments in the swash zone by Ultrasonic Doppler Velocimetry (UDV)

Authors

Mustapha Kamel MIHOUBI, M Belorgey, M Movahedan, D Levacher, AK Shrivastava, A Kettab

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Description

Our interest in the morphodynamic study of the swash zone, regarded as a fragile and dynamic area of the beach, particularly unforeseeable of the littoral, owing to the fact that it constitutes a true border between the marine field and the continental field. The swash zone is, under the effect of the interaction of the wave and the sediments, characterized by various parameters, such as, cut particles, porosity and homogeneity of particles among others, deserve to be elucidated to include and to understand the principle of operation within this zone. Here we present the results measurements of the water-sediments interface experiment carried out in the channel of steady flow. Thereafter, the results are extrapolated to study the behaviour of velocity profile and the interaction of solid particles (sands) and water in the swash zone using Ultrasonic Doppler Velocimetry (UDV).