

عنوان مقاله:

Experimental Investigation of Turbulence Specifications of Turbidity Currents

محل انتشار:

دوماهنامه مکانیک سیالات کاربردی، دوره 3، شماره 1 (سال: 1391)

تعداد صفحات اصل مقاله: 11

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خلاصه مقاله:

The present study investigates the turbulence characteristic of turbidity current experimentally. The three-dimensional Acoustic-Doppler Velocimeter (ADV) was used to measure the instantaneous velocity and characteristics of the turbulent flow. The experiments were conducted in a three-dimensional channel for different discharge flows, concentrations, and bed slopes. Results are expressed at various distances from the inlet, for all flow rates, slopes and concentrations as the distribution of turbulence energy, Reynolds stress and the turbulent intensity. It was concluded that the maximum turbulence intensity happens in both the interface and near the wall. Also, it was observed that the turbulence intensity reaches its minimum where maximum velocity occurs.

کلمات کلیدی:

Turbidity currents, Laboratory experiment, Turbulence, ADV

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