عنوان مقاله:

AN EXPLORATORY ANALYSIS OF FACTORS AFFECTING SEDIMENT ERODIBILITY

محل انتشار:

دوازدهمین همایش بین المللی سواحل، بنادر و سازه های دریایی (سال: 1395)

تعداد صفحات اصل مقاله: 2

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خلاصه مقاله:

Erosion is one of the most significant coastal and estuarine processes which may lead drastic geomorphological changes, dispersing contaminants and fine grain material in to the water column and surrounding areas, and resultant probable habitat loss and environmental problems. The prediction of sediment erosion is an important issue while dealing with estuarine dynamics. The erosion resistance of sediments is characterized by introducing critical shear stress and erodibility. These two parameters, as the major sediment erosion properties, are dependent on many parameters which should be identified through an exploratory analysis of factors affecting sediment erodibility. Although understanding of erosion especially in cohesive sediments is not thoroughly obtained, for gaining a better understanding of erosion and analysis of erodibility data, paying attention to some parameters affecting on erosion is inevitable; parameters such as: sediment grain size, clay content, organic content, tidal fluctuations, Atterberg limits, water content, plastic index, etc. Many researchers have tried to correlate sediment erodibility with these sediment properties, including Winterwerp et al. (2012), Jacobs et al. (2011), Van Prooijen and Winterwerp (2010), Winterwerp and van Kesteren (2004), and Parchure and Mehta (1985); however, the relations they have suggested for correlating sediment erodibility and other sediment properties are highly dependent on location and sediment origin. Hence, erosion like many other natural processes depends on many factors which makes it a complicated problem. This issue makes ordinary statistical methods less effective to interpret and analyze such data. Moreover, it is so probable .that there would be a gap in our measured dataset which will influence on the statistical analysis results

کلمات کلیدی: