



Monitoring of Costal landforms Changes in North of Persian Gulf (Asaluyeh Region), Iran

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Abstract: Recently develops of civil activities in coastal areas in Iran have destroyed important parts of geomorphologic landforms in beaches and have created considerable changes in beach line. Northern coast of Persian Gulf has many oil and gas reservoirs and relation with free oceans. So, it has intense geomorphologic changes more than other areas. In this coastal part, Asaluyeh area has an important role because of development of oil installations. In this research, we have compared 1990's TM image, 2006's IRS image and field observations from sedimentation and erosion in Persian Gulf's coastal line. Also, we use 2000's IKONOS image because of higher resolution for designing of its landforms. Finally, we use high and low position technique in ArcGIS Software for detection of changes in coastal landforms. On the basis of these results, the rate of sedimentation is about 50%. Sedimentation is often as sedimentary noses behind of coastal buildings with progressive part in water for example jetties and wave breaks. With detail investigations, we can see that 85% of geomorphologic landforms in Asaluyeh area have changed because of creation of industrial installations in coastal lines. There are only some changeless parts of estuaries and marches in eastern part because of trees and environmental protected areas. Some sedimentary landforms such as deltas and flood plains have destroyed and depositional tails and marches have created in Asaluyeh coastal line.

Key words: *Geomorphologic changes; change detection; high-low position; Asaluyeh; Iran's coastal line.*

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