عنوان مقاله:

(Detecting shoreline change employing remote sensing images (Case study : Beris Port – east of Chabahar, Iran

محل انتشار:

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خلاصه مقاله:

Coastal areas are one of the most crucial and important area in each country. They are also one the most dynamics area, which undergo significant changes in relatively short periods. Protecting coastlines from erosion and/or sedimentation thus, is one of the most important duties in each country. In this study, shoreline change in the Beris Port – east of Chabahar, Iran, was investigated using remote sensing technique and DSAS tools. Beris Port is located ۸۵ km east of Chabahar, on the Makran coast. Landsat ۸ and ۵ satellite images were used to detect shoreline change, due to the port's construction date, satellite imagery of ۱۹۸۸, ۱۹۹۰, ۲۰۱۴ and ۲۰۱۹ was used. Using the NSM, SCE, EPR and LRR statistical indexes of the DSAS tool, erosion and accretion rates were calculated in for the area. According to the LRR index, the lowest shoreline change rate is -۱.۵۱ m/year and is detected to be to the east of port. The highest rate of shoreline change is ۷.۴۴ m/year at the port. According the results, the main reason for this high rate of change is the location of the port, which is in the area perpendicular to its neighborhood coastal area, which causes to trap the current in this area to increase its dynamic activities. Shortly speaking, it was found that the accretion is dominant in port Beris and east of the port is the zone with least amount of accretion.

کلمات کلیدی:

Beris port, DSAS, Remote Sensing, Shoreline change