

The study of masan harber's coastal line change during 100years

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Masan harber was situated in S.Korean southern central coast. And it is contributing greatly in S.korea's economy development to international trading port of Heaven's blessing that possess natural, geographical situation. Also, because there are Masan free tax area and chanwon heavy industrial complex, sachon air industrial complex etc. on back, it is important permanency in our country. Specially, because inland transport routes such as southern highway, Guma highway and national road system are developed well, the importance is very high.

Masan harbor 1899.05.01 be that opened, the 1st and 2nd (central pier) was build 1938 ~ 1944 year, and the 3rd pier was 1973 ~ 1978 year. the 4th pier was 1974 ~ 1983 year, 5th pier was 1984 ~ 1988, 6th pier (west pier) was 1985 ~ 1992 year. it was developed over 100 years. But, it did great many harbor and bay development of last 100 years but research about coastline change and seashore reclamation is insufficient.

Therefore, this research executed research about coastline change of Masan bay of last 100 years, In this study, we analyzed aerial photographs and tide data for the past 100 years using digital aerial photo analysis and GIS techniques for each 3-year interval. We abstracted beach DEM (digital elevation model) and ortho aerial photographs, and conducted a space analysis. As a result, we were able to identify changes in the area As a result, we drew 10 years cycle coastline change of Masan bay. and we can detect bay coastal line change and calculate refill rate.

KEYWORDS: digital aerial photo analysis technique, GIS, ortho aerial photo, DEM (digital elevation model)