

**SEA SURFACE HEIGHT ANALYSIS USING SGDR RETRACKING JASON 2
(CASE STUDY : COSTAL AREA OF SOUTHERN JAVA)**

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ABSTRACT

Indonesia is one of the biggest maritime country in the world, which has more than 70% of oceans. Therefore almost all activities will be greatly influenced by ocean conditions such as sea surface height (SSH).

Assessment of sea surface height (SSH) in Indonesia is very important to obtain spatial information about the condition of water especially coastal area.. This research used SGDR Jason-2 altimetry data every month on 2011 and also used offset center of gravity (OCOG) method to obtain SGDR retracking sea surface height at coastal area of southern Java.

The result of the research shows that the OCOG retracking sea surface heights on ascending(from sea to land) pass satellite track are greater than the descending pass (from land to sea). This is caused by reflections and noise from the mainland are relatively large. In addition, the results of plotting SSH OCOG is still noiser than SSH onboard but SSH OCOG has covering a wider area than the coastal SSH onboard.

Keywords: sea surface height, SGDR, Jason-2, OCOG.