

# **DETERMINATION OF GUIDING LIGHT HOUSE NO. 2277 IN PELABUHANRATU WITH DGPS LATITUDE AND LONGITUDE CORRECTION**

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## **ABSTRACT**

GPS has applicated for general information especially information about position such as sea and land mapping, geodesy, transportation and navigation.

Although it's recognised accurate, GPS has to be correted due to Selective Availability (S/A) which done by US Dept. of Defend to avoid high accuracy.

This correction can be eliminated with DGPS methods i.e. (1) DGPS with pseudorange correction and (2) DGPS with latitude and longitude correction.

The 1st method has high accuracy but the equipment is very expensive. While the 2nd method uses only 2 GPS and laptop which relatively cheaps then the 1st method. It should be take into aceourt that the correction has been influenced by weather condition.

In this study the lighthouse at pelabuhanratu accuracy was 11,8 m RMS and after conducted the method the accuracy become 4,3 m RMS.

Keyword: DGPS, position, lighthouse