



Introduction on the operational storm surge forecasting system in Korea Operational Oceanographic System (KOOS)

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During last more than 50 years, 258 typhoons passed and affected the Korean peninsula in terms of high winds, storm surges and extreme waves. In this study we explored the performance of the operational storm surge forecasting system in the Korea Operational Oceanographic System (KOOS) with 8 typhoons from 2010 to 2016.

The operation storm surge forecasting system for the typhoon in KOOS is based on 2D depth averaged model with tides and CE (U.S. Army Corps of Engineers) wind model. Two key parameters of CE wind model, the locations of typhoon center and its central atmospheric pressure are based from Korea Meteorological administrative (KMA)'s typhoon information provided from 1 day to 3 hour intervals with the approach of typhoon through the KMA's web-site.

For 8 typhoons cases, the overall errors, other performances and analysis such as peak time and surge duration are presented in each case. The most important factor in the storm surge errors in the operational forecasting system is the accuracy of typhoon passage prediction.