Intisari

Dinamika *Upwelling* di Laut Jawa pada Kondisi *El Niño* dan *La Niña* Periode 2003-2019

Penelitian ini bertujuan untuk mengetahui dinamika *upwelling* di Laut Jawa pada Monsun Tenggara dan Monsun Barat Laut, serta pengaruh *El Niño – Southern Oscillation* (ENSO) dan *Indian Ocean Dipole* (IOD) terhadap *upwelling*. Data yang digunakan adalah data citra suhu permukaan laut dan konsentrasi klorofil-a dari satelit Aqua MODIS periode tahun 2003-2019. Data angin dengan periode sama diperoleh dari ECMWF *reanalysis* v5 ERA-5 dengan resolusi spasial 0,25˚×0,25˚. Hasil penelitian menunjukkan bahwa anomali ENSO dan IOD memengaruhi intensitas *upwelling* di Laut Jawa dan diduga juga berdampak pada zona potensi penangkapan ikan di Laut Jawa.

Kata kunci: ENSO, IOD, Laut Jawa, MODIS, *upwelling*

Abstract

Upwelling Dynamics in the Java Sea During El Niño and La Niña Conditions of 2003-2019

This study aims to examine the dynamics of upwelling in the Java Sea during the Southeast and Northwest monsoons, as well as the influence of El Niño - Southern Oscillation (ENSO) and Indian Ocean Dipole (IOD) on the upwelling. Sea surface temperature and chlorophyll-a concentration data were obtained from the Aqua MODIS satellite with analysis period of 2003-2019. Wind data for the same time frame were collected from the ECMWF reanalysis v5 ERA-5 with a spatial resolution of 0,25˚×0,25˚. The results indicate that ENSO and IOD anomalies have an impact on the intensity of upwelling in the Java Sea and may possibly have an effect on possible fishing zones in the Java Sea.

Keywords: ENSO, IOD, Java Sea, MODIS, *upwelling*