

# kolam hangat di Samudera Pasifik dan pengaruhnya terhadap pertumbuhan siklon tropis = West Pacific warm pool and the impact to development of tropical cyclone

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## Abstrak

[<b>ABSTRAK</b><br>

Siklon tropis merupakan salah satu fenomena alam yang turut berperan dalam mengatur dinamika atmosfer dalam skala meso. Salah satu faktor yang turut berperan dalam pertumbuhan siklon tropis di lautan adalah suhu muka laut yang hangat, yaitu lebih dari 27oC. Diseluruh dunia terdapat 7 (tujuh) daerah pertumbuhan siklon tropis, salah satunya adalah di Samudera Pasifik barat laut. Di perairan ini juga diketahui adanya daerah perairan dengan suhu muka laut tinggi, yang disebut dengan daerah kolam hangat. Melalui data pengamatan suhu laut dan dengan menggunakan metode spasial dan statistik, penelitian ini mencaoba mengungkapkkan hubungan antara keberadaan kolam hangat dengan pertumbuhan siklon tropis di Samudera Pasifik barat laut. Dari hasil analisis diketahui bahwa ada korelasi yang cukup kuat antara variabel luasan kolam dengan variabel intensitas siklon tropis. Sementara pada variabel lainnya, yaitu antara kedalaman kolam hangat dan periode hidup siklon tropis, kedalaman kolam hangat dan intensitas siklon tropis serta luasan kolam hangat dan periode hidup siklon tropis tidak terlihat adanya korelasi yang signifikan.

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<b>Abstract</b><br>

Tropical cyclone is one of the natural phenomena that have an impact to the atmospheric dynamic in the meso scale. Warm sea surface temperature (27oC) is one of the important factor on the development of tropical cyclone. In all around the world there are 7 (seven) area of tropical cyclone development, one of them is in the Northwest Pacific Ocean. There is an area with the relatively high sea surface temperature in this ocean, the area so called Warm Pool. By using the sea surface temperature observation data and using the spatial and statistical method, this research is trying to reveal the correlation between the warm pool and the development of tropical cyclone in the Northwest Pacific Ocean. From the analysis founded that there is a significant correlation between the size of warm pool with the tropical cyclone intensity. On the other hand there is no significant correlation founded between the depth of warm pool with life time of tropical cyclone, depth of warm pool with tropical cyclone intensity and size of warm pool with life time of tropical cyclone.;Tropical cyclone is one of the natural phenomena that have an impact to the atmospheric dynamic in the meso scale. Warm sea surface temperature (27oC) is one of the important factor on the development of tropical cyclone. In all around the world there are 7 (seven) area of tropical cyclone development, one of them is in the

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