



## Strong tropical cyclones and Global Ocean Waves Analysis

The height of the oceans is an indication of the latent heat below the surface. This information is used by weather forecasters in complex models of the oceans and atmosphere. These can be used for seasonal forecasts of the weather in the months ahead and to predict the track of hurricanes, for example. From other side the height of the ocean must reply under tropical cyclone because it system with low pressure. Height of ocean under tropical cyclone must arise. For analysis we took mostly strong tropical cyclones above different oceans during last years. Our comparison based by pressure and maximal wind. The target is Sea surface wave maximum height. Also our comparison include salinity. We used data of Sea surface wave maximum height from Copernicus Marine Service data. The operational global ocean analysis and forecast system of Meteo-France with a resolution of 1/12 degree is providing daily analyses and 10 days forecasts for the global ocean sea surface waves. This product includes 3-hourly instantaneous fields of integrated wave parameters from the total spectrum (significant height, period, direction, Stokes drift,...etc), as well as the following partitions: the wind wave, the primary and secondary swell waves Than more strong tropical cyclone -more valuable the Sea surface wave maximum height.

*Liudmila Vanina-Dart , Tony Dart (ALT Supervision LTD)*