

The Influence of Waves on Momentum Fluxes in Typhoons

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As part of the *Impact of Typhoons on the Ocean in the Pacific* (ITOP) campaign, two deep-sea moorings were deployed in the Philippine Sea. Each mooring consisted of an Air-Sea Interaction Spar (ASIS) buoy tethered to an Extreme Air-Sea Interaction (EASI) buoy, which was anchored to the seabed. Complete atmospheric and oceanographic instrumentation recorded the dynamics of the marine boundary layer during the 2010 Pacific typhoon season. Through exposure to three major typhoons: Fanapi, Megi, and Chaba, and tropical storm Dianmu, the buoys were subjected to wind gusts above 40m/s, sustained wind speeds over 27m/s and significant wave heights up to 10m. The momentum fluxes recorded during these storms will be discussed with respect to surface characteristics, including wave height, wave age, wave steepness, directional spread, and wind speed. Results will be compared to those attained through previous studies.