

A Marine-field Optical Particle Counter for Sea-Spray Measurements: Understanding the Relationship Between Surface Wave Breaking and Aerosol Generation

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For understanding the phase relationship between the breaking of wind waves and the generation of marine-aerosol at the sea surface, we use an experimental optical particle counter for sea spray (OPC-SS) which is able to measure particle concentrations at a rate of 10 Hz in 8 size bins between 0.3 and 30 micro-meters. The OPC-SS is also equipped with triaxial accelerometer at a rate of 10 Hz for measuring the movement of a buoy. In this year, we are planning to test the OPC-SS at the Shiramaha Oceanographic Observatory Tower (Kyoto Univ.) and also in the Otsuchi Bay in front of the International Coastal Research Center (the Univ. of Tokyo).

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