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[JJ] Evening Poster | A (Atmospheric and Hydrospheric Sciences) | A-OS Ocean Sciences & Ocean Environment

## [A-OS15] Dynamics of oceanic and atmospheric waves, vortices, and circulations

convener: Ryo Furue (APL/JAMSTEC), Yuki Tanaka (Graduate School of Science, The University of Tokyo), Yukiharu Hisaki (琉球大学, 共同), Norihiko Sugimoto (Keio University, Department of Physics)

Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

Oceanic and atmospheric dynamics aims at abstracting general principles from observed phenomena and constructing a system of mathematical models, thereby leading to the understanding, prediction, and parameterization of those phenomena. It provides perspectives for the advancement of sciences in various areas such as wind waves, swells, internal waves, Rossby waves, equatorial waves, tides, eddies, meandering of jets and fronts, general circulation, boundary layers, and ocean-atmosphere coupled modes. It has also been and will continue to be benefited by new uses of ideas and methods from such theories as resonance, nonlinear interaction, spectral analysis, probability, statistics, and dynamical systems. In this session, we solicit presentations on observational, experimental, numerical, and theoretical studies of oceanic and atmospheric dynamics and on exploratory use of new ideas and methods. We also welcome presentations on new methods of data analysis and on interdisciplinary studies in fields such as climate and environment.

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## [AOS15-P01] A Marine-field Optical Particle Counter for Sea-Spray Measurements: Understanding the Relationship Between Surface Wave Breaking and Aerosol Generation

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Keywords: Sea spray measurement, Air-sea surface-wave boundary layer, Marine aerosol

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 2017, we have tested at 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).

<http://co2.hyarc.nagoya-u.ac.jp/labhp/member/aiki/>