

AERONET-Ocean Color time series in Ariake Bay.

*yifei wu¹, Joji Ishizaka², Mengmeng Yang¹, Naoki Fujii³, Masahiro Hori⁴

1. Graduate School of Environmental Studies, Nagoya University, 2. Institute for Space-Earth Environmental Research, Nagoya University, 3. Graduate School of Agriculture, Saga University, 4. EORC, JAXA

The AERONET (**AE**rosol **RO**botic **NET**work) project is a federation of ground-based remote sensing aerosol networks established by **NASA** and **PHOTONS** and is greatly expanded by networks from national agencies, institutes, universities, individual scientists. AERONET –Ocean Color (AERONET-OC) provides the additional capability of measuring the radiance emerging from the sea. In April 2018, a new station of AERONET-OC has been set by JAXA for GCOM-C validation in Ariake Bay located in Kyusyu, Japan where the seaweed (Nori) culture very famous. Aerosol Optical Depth (AOD) and remote sensing reflectance (R_{rs}) is considered as the most important products of AERONET-OC since the estimation of chlorophyll-a concentration by ocean color satellite is usually not so accurate in coastal areas because of the inaccurate satellite remote sensing reflectance (R_{rs}) influenced by aerosol. This study is to make a brief description of the time series of the AERONET-OC data from April 2018 to April 2019. Local Chl-a and TSM estimated by using radiances measured by the AERONET-OC is going to use to explain the phytoplankton bloom connect with factors such as precipitation and river discharge in Ariake Bay.

Keywords: chlorophyll-a, remote sensing reflectance, AERONET-OC