2.5 FRESH WATER FLUX ESTIMATED BY SHIPBOARD C-BAND POLARIMETRIC RADAR AND ITS POSSIBLE IMPACT TO THE OCEANIC STRATIFICATION OBSERVED IN THE MARITIME CONTINENT

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To investigate the air-land-sea interaction in the Maritime Continent (the world's largest archipelago bridging tropical Indian Ocean and tropical western Pacific), we deployed our research vessel "Mirai" which equipped C-band polarimetric radar as a part of the project "Years of the Maritime Continent (YMC)". Two field campaigns in YMC had carried out in boreal winter in 2015 and 2017. During each field campaign, "Mirai" stayed one station near the west coast of Sumatra Island to obtain time series.

The data from polarimetric radar is converted to the rainrate (i.e. fresh water flux) by utilizing the data from land-based and shipboard disdrometers. The estimated fresh water flux is compared to the oceanic parameters such as salinity and temperature which is observed at "Mirai" and unmanned platforms (surface mooring and wave glider) to discuss possible impact of the fresh water flux to the near-surface oceanic stratification.