



Two years long field campaign YMC - A challenge to the complicated Maritime Continent weather and climate

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The Maritime Continent (MC), which spans from the eastern Indian Ocean to the western Pacific via the complicated land topography, hosts various weather and climate phenomena and plays a role of the heat engine for the global atmospheric circulation. However, most of our knowledge on them are qualitative and result in unrealistic simulation by numerical models. For example, most climate models are suffering from the systematic errors of precipitation with overestimate/underestimate over the land/ocean. Interaction between the local circulation due to the heating diurnal cycle and large-scale phenomena might be a key to understand them quantitatively. To cover the entire monsoon cycle, two-year long field campaign, Years of the Maritime Continent or YMC, is proposed. While long-term atmospheric and oceanic monitoring is done by or through the collaboration with the MC countries, several coordinated intensive observations using ship, aircraft, mooring, float, land-based are planned. Their main targets include convective diurnal cycle, aerosol-cloud interaction, the Madden-Julian oscillation, equatorially trapped waves, troposphere-stratosphere interaction, Indonesian through flow, coastal upwelling, and so on. In this presentation, current status will be reviewed.