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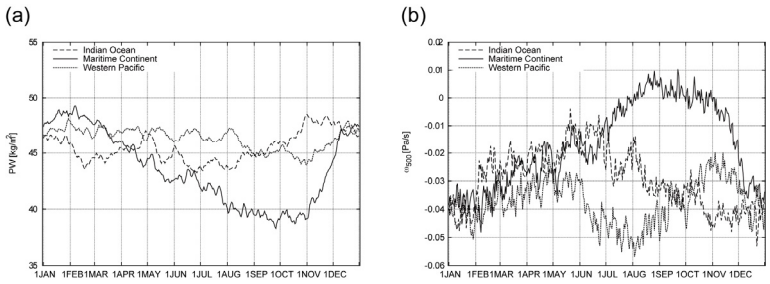

Figure 4. Annual variations of the area averaged (a) precipitable water (kg m^{-2}) and (b) ω_{500} (Pa s^{-1}) for the Indian Ocean (80˚E–100˚E, 5˚S–5˚N), the southeastern Maritime Continent (120˚E–140˚E, 10˚S–0˚) and the western Pacific (150˚E–170˚E, 5˚S–5˚N).

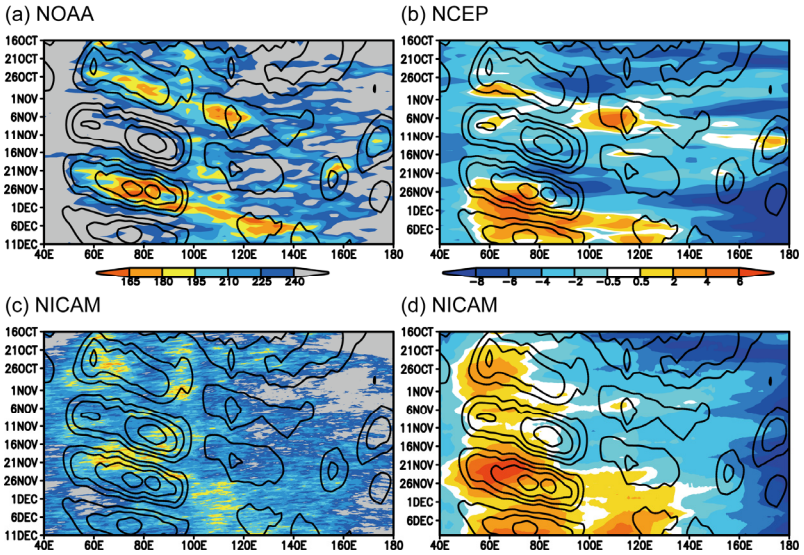

Figure 5. Lontigude-time cross-sections of (a, c) OLR (W m^{-2}) and (b, d) zonal wind (m s^{-1}) averaged between 10°S and 10°N. (a) The NOAA Interpolated OLR, (b) the NCEP/NCAR reanalysis, and (c, d) the ensemble mean of the control hindcasts. The 30–90 day filtered contours of the NOAA Interpolated OLR are superimposed.

- The ensemble hindcast initialized during 12–16 October 2011 is performed using a global cloud-system-resolving model with a horizontal mesh size of 14 km.
- Not only the first but also the second MJO event observed during the CINDY2011/DYNAMO period emerges in the ensemble mean, although the signal of the second MJO is unsatisfactory in each member.
- Data analyses indicate that an MJO favorable environment, in which SST of the southeastern Maritime Continent is higher enough than that of the Indian Ocean, is established in late November to early December.
- We provide a perspective that a certain type of the MJO can be regarded as a transition process, responding to the eastward shift of the region of large-scale positive buoyancy production following the warmer SST.