

Nur'utami M. N. and T. Hayasaka, 2022: Interannual variability of the Indonesian rainfall and air–sea interaction over the Indo–Pacific associated with Interdecadal Pacific Oscillation phases in the dry season. *J. Meteor. Soc. Japan*, **100**, 77-97.

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Plain Language Summary: The Indo-Pacific climate modes have important impacts on Indonesian climate. While the influences of the canonical El Niño–Southern Oscillation (ENSO), ENSO Modoki, and Indian Ocean Dipole (IOD) on Indonesian rainfall are statistically significant, their modulation due to the Interdecadal Pacific Oscillation (IPO) has not been understood. It is found that IOD influences are enhanced during the negative phase of IPO. On the other hand, we found no evidence that the IPO modulates the Indonesian rainfall responses to canonical ENSO and ENSO Modoki.

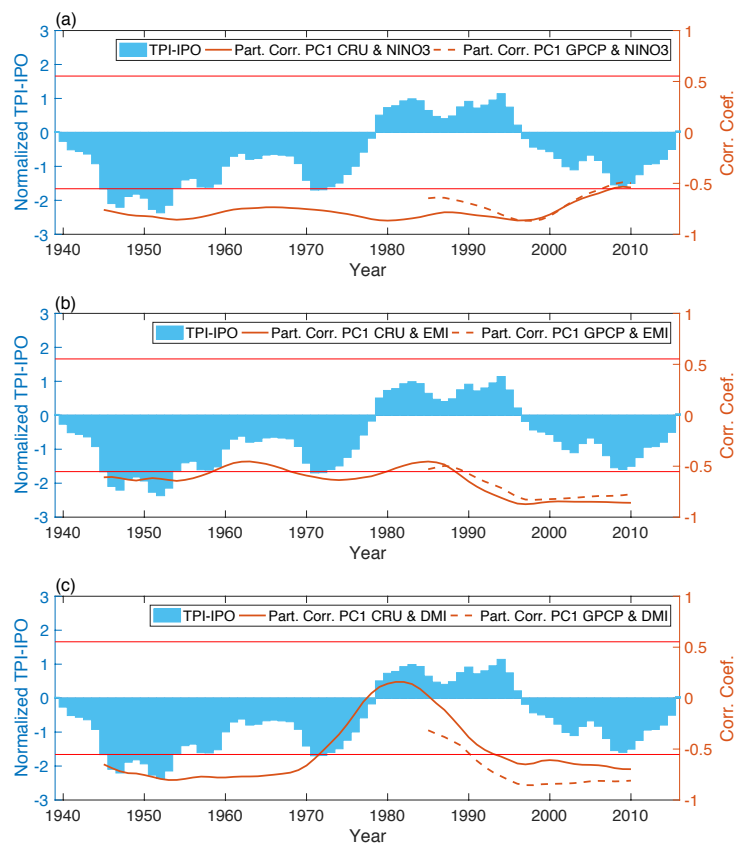


Figure 1 Time series of 9–year running mean TPI–IPO (light blue bars) and the 13–year sliding partial correlation coefficient of PC1 of the CRU data (solid orange line) and PC1 of the GPCP data (orange dashed line) with (a) NINO3, (b) EMI, and (c) DMI. The horizontal solid red lines denote significant correlations at the 95% confidence level.

- Canonical ENSO, ENSO Modoki, and IOD have interesting spatially different impacts on Indonesian rainfall variability.
- The response of Indonesian rainfall to ENSO Modoki is more significant than that for canonical ENSO in recent years.
- The modulation of IOD influences due to IPO is proposed; that is, the impact of IOD is weak during the positive IPO and strong during the negative IPO.