

Impacts of the South China Sea Throughflow on the tropical Pacific

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Impacts of the South China Sea throughflow (SCSTF) on the tropical Pacific are investigated using the University of Tokyo coupled general circulation model. It is found that the period of ENSO becomes longer when the SCSTF is blocked. Since no large difference is seen in the phase speed of Kelvin waves when vertical mode decomposition is conducted, the difference is not due to the change in stratification of the equatorial Pacific. Rather, it is more related to the larger discharge of heat through the Indonesian Throughflow.

Keywords: South China Sea, El Nino/Southern Oscillation, Coupled general circulation model, Indonesian Throughflow