

Influence of Pacific Western Boundary Current on the South China Sea Circulation and Indonesian Throughflow

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This presentation provides an overview of Pacific western boundary current and its downstream influence on the South China Sea circulation and Indonesian throughflow. Special attention will be paid to a previously undescribed circulation that connects the tropical western Pacific with Indian Ocean. As a direct response to the Pacific wind, water of the Pacific origin enters the South China Sea through the Luzon Strait, and from there part of the water continues southward into the Java Sea and returns to the Pacific through the Makassar Strait. This circulation contains a strong signal of El Nino and Southern Oscillation and appears to have a notable impact on the Indonesian throughflow heat transport.