

## WATER CHARACTERISTIC IN THE SOUTH ANDAMAN SHELF SEA FROM OBSERVATIONS DURING 2014–2019

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**ABSTRACT:** Temperature and salinity are typically used to describe the characteristics of water masses in the ocean. In the South Andaman Shelf Sea (SASS), the Department of Marine and Coastal Resources in Thailand has regularly conducted measurements of these variables using Conductivity-Temperature-Depth (CTD) twice a year during pre- and post-Northeast Monsoon (NEM) seasons since 2014. In this paper, we analyzed the measured data to describe water characteristics in the SASS. Our analysis suggests that SASS waters are typically less dense during the pre-NEM season; a result which is largely attributed to low-salinity water. We propose that this effect is due mainly to local discharges along the west coasts of Thailand and Malaysia. At the peak of the NEM season, local rivers continue supplying fresh water to the coastal sea. This supply mixes with ambient waters and is transported northward. This fresh water particularly influences the southern SASS waters. As a result, salinity differences between the northern and southern SASS becomes larger during the post-NEM season. In addition to these general characteristics, observations also showed signs of coastal upwelling along the Thai coast in the vicinity of Phangnga, in 2014.

**Keywords:** South Andaman Sea, Shelf Sea, water characteristic, coastal upwelling

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