

## Characteristics in the upper ocean physical properties associated with 2018 Ningaloo Nina observed during R/V Hakuho-Maruh KH-18-6 cruise

\*Yukio Masumoto<sup>1</sup>, Iwao Ueki<sup>2</sup>, Kentaro Ando<sup>2</sup>, Takanori Horii<sup>2</sup>, Motoki Nagura<sup>2</sup>, Shuhei Matsugishi<sup>1</sup>, Shoichiro Kido<sup>1</sup>, Takuro Matsuta<sup>1</sup>

1. Graduate School of Science, The University of Tokyo, 2. Japan Agency for Marine-Earth Science and Technology

R/V Hakuho-maruh cruise, KH-18-6 Leg3, was conducted in December 2018 in a region between Indonesia and Australia. A relatively strong Ningaloo Nina took place during the cruise, showing negative sea surface temperature anomaly of the order of few degrees with strong southerly surface winds off northwest Australia. This presentation summarizes subsurface physical conditions observed during the cruise on a rare occasion, focusing on anomalies associated with the Ningaloo Nina and their relation with a large scale circulations and variations.

Keywords: Ningaloo Nina, Observation of physical conditions in the ocean, R/V Hakuho-Maruh observation cruise