

## Change in water temperature distribution by turbulent mixing with a seamount model

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According to the report of Noriyuki Hibiya, a professor of the University of Tokyo Graduate School of Science Department of Earth and Planetary Science, tidal current produced by moon affects heat transportation caused by ocean deep current of the earth. This is the structure that turbulence produced by tidal current conducts heat of surface layer to deep layer and water of deep layer performs upwelling with buoyancy. At this researching, we reproduced tidal current by moving a original sea mount model in the water tank and observed change of temperature. About evaluation that reproduced the ocean deep current in the water tank modeling real sea, we judged from changing in water temperature distribution. This is based on thermal measurements using a high-speed response temperature probe which is established each points.

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