

## From deep water circulation to the World's environment

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Professor Hibiya Toshiyuki, from the Department of Earth and Planetary Science, Graduate School of Science, The University of Tokyo, reports on thermohaline circulation which is a part of the deep sea circulation transporting heat from surface layers to the deep.

This makes a livable environment for us, and it is affected by tidal water flow from the moon.

Tidal flow effects the seamount at the bottom of the sea, and turbulent water flow occurs in the oceans.

For four years, we have confirmed whether the process which causes the tidal current is caused by this moon is correct or not, so we focused on the turbulence generated in the ocean by the tidal current.

We modelled seamounts and the sea using plastic plates, gypsum, heaters, high-speed response temperature probes, ornamental aquariums, ice, salt, ink, and flushing to analyze temperature changes and visible flows, which I have been experimenting with.

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