

The progress of the Kuroshio large meander in and after 2017

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Office of Marine Prediction (OMP) at Japan Meteorological Agency (JMA) has been routinely operating an ocean data assimilation and prediction system for the western North Pacific (MOVE/MRI.COM-WNP) since March 2008. This system aims to represent ocean characteristics such as the Kuroshio/Oyashio current and meso-scale eddies. Using MOVE/MRI.COM-WNP, OMP provides ocean state information of major currents around Japan (Kuroshio/Oyashio/Tsushima-Warm-Current) and water temperatures in the western North Pacific mainly through the JMA website.

In August 2017, the Kuroshio developed a large meander (LM) for the first time in 12 years. A small meander that developed southeast of Japan's Kyushu Island in late March 2017 and propagated eastward to waters off the country's Tokai region in August is considered to have induced the Kuroshio LM. In August, MOVE/MRI.COM-WNP successfully forecasted the generation of the Kuroshio LM and JMA published a press release about the probability of the Kuroshio LM.

This presentation shows the progress of the Kuroshio LM in and after 2017 as contrasted with the past cases.

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