

# Record-breaking current found deep in Southern Ocean

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MORE than 3 kilometres down in part of the freezing Southern Ocean, water is flowing at more than 700 metres per hour, making this the fastest-moving deep ocean current ever found.

The powerful current was discovered thanks to a 175-kilometre string of sensors on the eastern flank of the submerged Kerguelen plateau, some 3000 kilometres south-west of Australia (*Nature Geoscience*, [DOI: 10.1038/ngeo842](#)).

With a flow of more than 8 million cubic metres per second, the current transports 40 times as much water as the Amazon. It is likely to be an important component of the global ocean "conveyor belt", which pushes water from the ocean surface to its greatest depths and back again, and has a direct influence on global temperatures.

Deep ocean currents are now being monitored for signs of change. The measurements already suggest that deep Antarctic waters are warming and becoming less buoyant, perhaps because of climate change.