

# Japan considering new base on Antarctica

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File photo of a solar eclipse taken from the Dome Fuji Station, some 1,000 kilometres south of the Japanese observation base at Showa

Japan is looking at building a new base on Antarctica so scientists can study air trapped in ice a million years ago, in a bid to better understand climate change, an official said Monday.

Tokyo already has four stations on the frozen continent, two of which

are currently in use—the Syowa Station on the coast and the Dome Fuji Station inland.

Japanese research teams at Dome Fuji Station have sampled air captured in [ice](#) as long ago as 720,000 years, after drilling down 3,000 metres (1.86 miles).

At the proposed new base, scientists would be able to drill down to reach ice that formed 1 million years ago, beating the current sampling record held by a European team, which has looked at 800,000-year-old ice.

"The idea came up in a government panel discussion last week as an important possibility for the next six-year Antarctic project starting in 2016," the official at the science and technology ministry said.

"But it is still far from being determined, as it would have to be approved under the Antarctic Treaty," he said, adding the government also needs to study how feasible it would be to build a new base.

Under the international treaty, Antarctica does not belong to any single country, but dozens of member states—including the US, Russia, Japan, Australia and some European countries—agree to use it for scientific research.

They also agree to share scientific data and not to build military installations on the continent.

Scientists have studied air bubbles captured in the ice sheet in ancient periods as a way to learn about the elementary structure of the atmosphere.

By analysing the history of temperature and CO<sub>2</sub> transitions, they can better understand future [climate change](#).

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