

# Chinese space lab to fall back to Earth in March

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Chinese space laboratory Tiangong-1 is predicted to re-enter Earth's atmosphere in late April, but where or when it will reach the surface is hard to say.

"Debris comes into Earth's atmosphere all the time," said Jay Melosh, a professor of earth, atmospheric and planetary sciences at Purdue University. "With a spacecraft like this, most of the material burns up high in the atmosphere, but a few denser things might come down."

Tiangong-1 was the first operational component of the Tiangong program, a larger, modular [space](#) station intended to be in space by 2023. It was originally planned to be deorbited in 2013, but never came down. In March 2016, the China National Space Administration announced it had lost contact with the lab.

Tiangong-1 was launched from China's main launch facility at 43 degrees north, which means its orbit spans from 43 degrees north to 43 degrees south, or from the central United States down to the southern tip of Australia. It could come down anywhere between the two points but is more likely to land at either extreme because the station spends more time there.

"It's like a pendulum – it spends more time at the limits of its swing than when it's moving fast," Melosh said.

Pieces of an American space station called Skylab crashed into the

Indian Ocean and areas of western Australia in 1979. Due to significant uncertainty about where it would land, there wasn't any real preparation or cautionary behavior. No one was injured.

Researchers likely won't know when or where Tiangong-1 is coming down until a few days ahead of time.

"In terms of where it will land, a few hours of uncertainty spans a lot of territory," Melosh said. "That could be the difference between landing in Chile and the middle of the Pacific."

It's highly unlikely that debris from the crash will hit a person or significantly damage property, according to Aerospace, a research center for the United States Air Force.

Provided by Purdue University

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