

# Coming down in flames: Fiery endings for spacecraft

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China's defunct Tiangong-1 space lab is expected to make a fiery plunge back to earth in the coming days

China's defunct Tiangong-1 space lab is expected to make a fiery re-entry into the earth's atmosphere in the coming days and disintegrate in

what Chinese authorities promise will be a "splendid" show.

The re-entry of the nearly eight-tonne Tiangong-1 poses little threat, officials and experts say, and much larger objects have plunged back to Earth—at the end of their missions or in accidents—without causing any serious damage on the surface.

Here are the biggest spacecraft that disintegrated as they crashed back to earth:

### Mir - 2001

Launched in 1986, the Mir [station](#) was once a proud symbol of Soviet success in [space](#), despite a series of high-profile accidents and technical problems.

But Russian authorities, strapped for cash after the collapse of the Soviet Union, chose to abandon the orbiting outpost in the late 1990s and devote their resources to the International Space Station.

The massive 140-tonne station was brought down by the Russian space agency over the Pacific Ocean between New Zealand and Chile, and its burning debris was seen streaking across the sky over Fiji.

### Salyut 7 - 1991

Salyut 7, launched in 1982, was the last orbiting laboratory under the Soviet Union's Salyut programme.

When the Mir [space station](#) was launched in 1986, Soviet space authorities boosted Salyut 7 to a higher orbit and abandoned it there.



Mir was the last space station launched by the Soviet Union, and was brought down in 2001 after 15 years in orbit

It was supposed to stay in orbit until 1994, but an unexpected increase in drag by the earth's atmosphere caused it to hurtle down in 1991.

The 40-tonne station broke up on re-entry and the parts that survived scattered over Argentina.

Skylab - 1979

Skylab was the first American space station, launched by NASA in 1973, and was crewed until 1974.

There were proposals to refurbish it later in the decade, but the lab's orbit began to decay and NASA had to prepare for its re-entry into the Earth's atmosphere with only partial control over where it would come down.



Jean-Loup Chretien (L) became the first Frenchman and Western European in space when he flew to Salyut 7 in 1982

The 85-tonne Skylab's eventual descent over Australia was a worldwide media event, with some newspapers offering thousands of dollars to people who recovered parts of the station that landed.

## Columbia - 2003

The disintegration of large spacecraft has not always been without tragedy.

In 2003, NASA's space shuttle Columbia broke apart during its re-entry into the atmosphere at the end of the STS-107 mission, killing all seven astronauts on board.



US space station Skylab's disintegration over Australia got worldwide media attention

Columbia's left wing was damaged by a piece of debris during launch,

leaving the shuttle unable to withstand the extreme temperatures generated by re-entry, and causing it to break apart.

The flaming debris from the 80-tonne craft was caught streaking across the sky over the southern US by local TV stations, with tens of thousands of the doomed shuttle's parts scattered over Texas and Louisiana.



The destruction of space shuttle Columbia scattered tens of thousands of pieces of debris across Texas and Louisiana

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