

# Satellite pieces may hit Earth on weekend

October 20 2011, By KIRSTEN GRIESHABER , Associated press

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Undated artist rendering provided by EADS Astrium shows the scientific satellite Rosat. The German Aerospace Center said the retired satellite is hurtling toward the atmosphere and pieces could crash into the earth during the weekend, the center confirmed Thursday, Oct. 20, 2011. (AP Photo/EADS Astrium)

(AP) -- Pieces of a retired German satellite hurtling toward the atmosphere may crash to earth this weekend, the German Aerospace Center said Thursday.

Scientists have now honed their initial estimate of when the [satellite](#) would hit from a span of four days to either Saturday or Sunday. As it nears, they will eventually be able to estimate impact within a window of about 10 hours.

Parts of the satellite, which is the size of a minivan, will burn up during re-entry but up to 30 fragments weighing a total of 1.87 tons (1.7 metric tons) could crash into the [Earth](#) with a speed of up to 280 mph (450 kph).

The satellite orbits the Earth every 90 minutes and scientists can only say that it could hit Earth anywhere along its path, between 53-degrees north and 53-degrees south - a vast swath of territory that includes much of the planet outside the poles.

Scientists are no longer able to communicate with the dead German satellite ROSAT, which was launched in 1990.

ROSAT was used for research on [black holes](#) and [neutron stars](#) and performed the first all-sky survey of X-ray sources with an imaging telescope.

It was initially intended to only be active for 18 months but due to its great scientific success it was retired more than eight years later, in 1999 when communications were lost.

Even if the control center still had contact with the satellite, it has no engines so they would not be able to change its [trajectory](#).

Scientists are now working on developing new technology that would allow for a controlled destruction of satellites in space, or the capture of satellites to prevent them from crashing into the Earth. But it will take many years for that technology to be implemented, the German Aerospace Center said.

As it stands, satellite debris hits the atmosphere almost every week, but most burns up upon re-entry and pieces rarely hit the Earth.

The largest single fragment of ROSAT that could hit into the Earth is the telescope's heat-resistant mirror.

The satellite will re-enter the atmosphere at a speed of 17,400 mph (28,000 kph).

**More information:** The German space agency on ROSAT:  
<http://bit.ly/papMAA>

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Citation: Satellite pieces may hit Earth on weekend (2011, October 20) retrieved 26 April 2024 from <https://phys.org/news/2011-10-satellite-pieces-earth-weekend.html>

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