

# Satellite landed, exact site not yet known: NASA

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FILE - In this file image provided by NASA this is the STS-48 onboard photo of the Upper Atmosphere Research Satellite (UARS) in the grasp of the RMS (Remote Manipulator System) during deployment, from the shuttle in September 1991. NASA's old research satellite is expected to come crashing down through the atmosphere Friday afternoon, Sept. 23, 2011 Eastern Time. The spacecraft will not be passing over North America then, the space agency said in a statement Wednesday evening. (AP Photo/NASA)

A decommissioned NASA satellite, the biggest piece of US space junk to fall in 30 years, has crash-landed but the precise location is not yet known, the US space agency said early Saturday.

NASA has repeatedly said there is only a "very remote" risk to the public from the 26 fragments of the Upper Atmosphere Research Satellite (UARS) which were expected to survive the fiery re-entry into the atmosphere.

The satellite fell back to Earth between 11:23 pm Friday and 1:09 am Saturday (0323-0509 GMT Saturday), but the precise re-entry time and location "are not yet known with certainty," NASA said.

"The Joint [Space Operations](#) Center at Vandenberg Air Force Base in California said the satellite penetrated the atmosphere over the Pacific Ocean," it later said, noting the landing site was still not confirmed.

On its Twitter feed, NASA said, "If debris fell on land (and that's still a BIG if), Canada is most likely area."

The two dozen parts of the UARS that may have survived re-entry could weigh anything from two to 350 pounds (1-158 kilograms), the space agency said, and the debris field is expected to span 500 miles (800 kilometers).

Earlier, Canada, Africa and Australia had all been named as possible sites for touchdown of debris from the tour-bus-sized UARS.

The tumbling motion of the satellite has made it difficult to narrow down the location. And given that the world is 70 percent water, an ocean landing was considered likely.

"In the entire 50 plus year history of the space program, no person has ever been injured by a piece of re-entering space debris," said Mark Matney, an orbital debris scientist at NASA.

"Keep in mind we have bits of debris re-entering the atmosphere every

single day."

On Friday, a NASA spokeswoman said the US Department of Defense and the space agency were busy tracking the debris and keeping all federal disaster agencies informed.

The [Federal Aviation Administration](#) issued a notice Thursday to pilots and flight crews of the potential hazard, and urged them to report any falling space debris and take note of its position and time.

On Friday, Italy's civil protection agency warned that the probability of a crash in its northern territory had risen from 0.6 to 1.5 percent, and urged residents to stay indoors, on lower floors, preferably near load-bearing walls.

[Orbital debris](#) experts say [space junk](#) of this size from broken-down satellites and spent rockets tends to fall back to Earth about once a year, though this is the biggest [NASA satellite](#) to fall in three decades.

NASA's 85-ton Skylab crashed into western Australia in 1979.

The surviving chunks of the UARS, which launched in 1991 and was decommissioned in 2005, will likely include titanium fuel tanks, beryllium housing and stainless steel batteries and wheel rims.

"No consideration ever was given to shooting it down," NASA spokeswoman Beth Dickey said.

The craft contains no fuel and so is not expected to explode on impact, and NASA also said on Twitter that talk of "flaming [space debris](#)" was a "myth."

"Pieces of UARS landing on Earth will not be very hot. Heating stops 20

miles up, cools after that," NASA said, adding that UARS contains nothing radioactive but its metal fragments could be sharp.

The [US space agency](#) has warned anyone who comes across what they believe may be UARS debris not to touch it but to contact authorities for assistance.

Space law professor Frans von der Dunk from the University of Nebraska-Lincoln told AFP that the United States will likely have to pay damages to any country where the debris falls.

"The damage to be compensated is essentially without limit," von der Dunk said, referring to the 1972 Liability Convention to which the United States is one of 80 state signatories.

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