

Latest: SpaceX: ice buildup may have led rocket to tip over (Update)

January 18 2016



This undated artist rendering provided by NASA shows the Jason-3 satellite. The latest in a series of U.S.-European satellites designed to detect ocean events like El Nino is scheduled for launch Sunday, Jan. 17, from California. If successful, the Jason 3 satellite will continue more than two decades of sea level measurements. (NASA via AP)

The latest on the launch of an ocean-monitoring satellite from California (all times local):

10 p.m.

Elon Musk has posted a video on his Instagram account of the moment SpaceX's Falcon 9 rocket landed on a floating ocean barge, toppled over and exploded into pieces.

The rocket made the hard landing Sunday after launching from Vandenberg Air Force Base, northwest of Los Angeles, and successfully delivering an ocean-monitoring satellite into orbit.

Musk tweeted that the lockout collet on one of the rocket's four legs didn't latch, causing it to tip over after landing. He said the "root cause may have been ice buildup due to condensation from heavy fog at liftoff."

The failed landing was a setback for the Hawthorne, California, company's plan to reduce launch costs by reusing rockets rather than having them fall into the ocean.

2:15 p.m.

SpaceX says its Falcon 9 rocket toppled over upon landing on a floating ocean barge because one of its support legs didn't lock as planned.

The California company said on Twitter Sunday that data now show that the rocket's first stage landed softly within 1.3 meters of the center of the 300-by-170 foot landing pad.

Founder Elon Musk tweeted that the rocket's speed at touchdown was OK, "but a leg lockout didn't latch, so it tipped over after landing." Officials previously said the support leg broke.

The rocket successfully delivered an ocean-monitoring satellite into orbit after launching from Vandenberg Air Force Base, northwest of Los Angeles.

SpaceX hopes to reduce launch costs by reusing rockets rather than having them fall into the ocean.

NASA says the U.S.-European Jason-3 satellite is in orbit and "ready for science operations."

11:45 a.m.

The first stage of a SpaceX rocket that delivered an ocean-monitoring satellite into orbit made a hard landing on an ocean barge and broke a support leg.

SpaceX announcers said the Falcon 9 was not upright after reaching the 300-by-170 foot landing pad west of San Diego on Sunday morning. No further details were immediately available.

The rocket launched as planned at 10:42 a.m. from Vandenberg Air Force Base, northwest of Los Angeles, sending its second stage and a Jason-3 satellite into orbit.

The failed landing is a blow to the California-based company's plan to reduce launch costs by reusing rockets rather than having them fall into the ocean.

The mission of Jason-3 is to continue an unbroken record of more than two decades of sea level measurements from orbit.

11 a.m.

An ocean-monitoring satellite that launched from the California coast has separated from its SpaceX rocket and been sent toward orbit.

With the Falcon 9 rocket's second stage and the Jason-3 satellite continuing toward orbit, SpaceX will now try to land its first stage on a floating barge in the Pacific Ocean.

Liftoff occurred as planned at 10:42 a.m. Sunday from Vandenberg Air Force Base, northwest of Los Angeles.

The mission of the Jason-3 satellite is to continue an unbroken record of more than two decades of sea level measurements from orbit.

California-based SpaceX hopes to reduce launch costs by reusing rockets rather than having them fall into the ocean.

10:45 a.m.

A U.S.-European satellite designed to detect and measure ocean phenomena has launched aboard a SpaceX rocket under mostly cloudy skies from the California coast.

Liftoff occurred as planned at 10:42 a.m. Sunday from Vandenberg Air Force Base, northwest of Los Angeles.

After sending the Jason-3 satellite into orbit the Falcon 9 rocket will attempt to land its discarded first stage on a floating barge in the Pacific

Ocean.

The mission of Jason-3 is to continue an unbroken record of more than two decades of sea level measurements from orbit.

Like its predecessors, Jason-3 is equipped with radar altimeter to bounce microwave energy off the ocean and a GPS system to identify the satellite's precise location.

The cost of the mission, including five years of operation, was put at \$180 million.

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