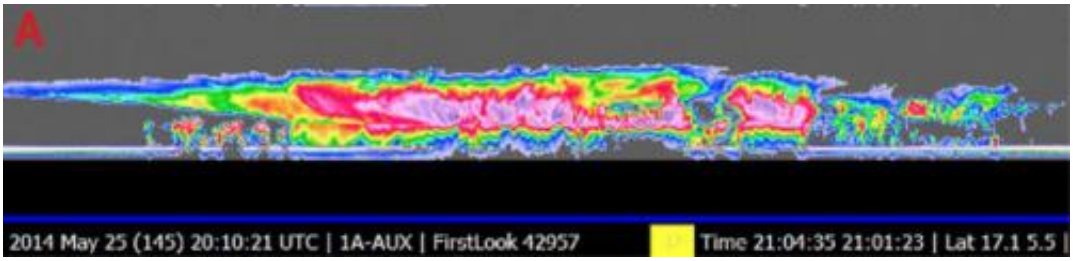
Tropical Storm Amanda gets bisected and animated by NASA's CloudSat

May 29 2014



NASA's CloudSat satellite flew over Hurricane Amanda on May 25, at 5 p.m. EDT and saw a deep area of moderate to heavy-moderate precipitation below the freezing level (where precipitation changes from frozen to liquid). Credit: Colorado State University

Tropical Storm Amanda continues to weaken in the eastern Pacific from dry air and wind shear. NASA's CloudSat satellite captured a view of the storm from the side revealing heavy precipitation when the storm was the most powerful May Eastern Pacific on record.

NASA's CloudSat satellite flew over Hurricane Amanda in the east Pacific on May 25, 2014 at 2100 UTC (5 p.m. EDT) and was about 40 km (24.8 miles) outside of the center of the storm. Hurricane Amanda contained estimated maximum winds of 130 knots (150 mph/240 kph) and minimum pressure of 935 millibars at the time of this overpass. CloudSat passed over the eastern section of the storm, after it reached peak intensity earlier in the day. On May 25 Hurricane Amanda had

become the strongest May hurricane on record for the Eastern Pacific basin.

CloudSat data showed a deep area of moderate to heavy-moderate precipitation below the freezing level (where precipitation changes from frozen to liquid). Cloudsat also showed a deep anvil cloud deck that extended northward with smaller cumulus clouds detectable beneath.

Four days later, Amanda quickly weakened as a result of dry air moving into the system and wind shear.

National Hurricane Center (NHC) forecaster Brennan noted at 5 a.m. EDT on May 29 in the NHC Discussion that "Amanda has come unglued during the past few hours, with the remaining deep convection now located more than 2 degrees to the northeast of the low-level center. This weakening appears to be due to the usually potent combination of vertical wind shear and mid/upper-level dry air advecting (moving) over the cyclone."

By 11 a.m. EDT (8 a.m. PDT) on May 29, the National Hurricane Center (NHC) reported that Amanda weakened to a depression. The center of Tropical Depression Amanda was located near latitude 16.3 north and longitude 110.0 west, about 455 miles (735 km) south of the southern tip of Baja California, Mexico. Because Amanda was so far from land, there were no warnings or watches in effect.

Amanda's maximum sustained winds have decreased to near 35 mph (55Kph) with higher gusts. The NHC discussion at 11 a.m. EDT noted that Amanda's center had become increasingly elongated and diffuse. The estimated minimum central pressure is 1006 millibars.

The depression was moving toward the east near 7 mph (11 kph) and NHC expects a slower eastward or east-northeastward motion during the

next day or so. The NHC expects Amanda to become a remnant low in about a day.

Provided by NASA's Goddard Space Flight Center