

Looking Back at Patricia - Central pressure fell to 879 millibars (25.96 inches of mercury).

Just 30 hours after peaking in intensity as the most powerful tropical cyclone ever measured in the Western Hemisphere, former Hurricane Patricia degenerated into a weak remnant low over northeast Mexico.

On Oct. 23, Patricia became the most powerful tropical cyclone ever measured in the Western Hemisphere as its maximum sustained winds reached an unprecedented 200 mph (320 kph) and its central pressure fell to 879 millibars (25.96 inches of mercury). The lowest non-tornadic atmospheric pressure ever measured was **870 hPa** (25.69 inHg), set on 12 October 1979, during Typhoon Tip in the western Pacific Ocean. The measurement was based on an instrumental observation made from a reconnaissance aircraft.

(MORE: [Mexico Cleans Up After Passage of Patricia](#))



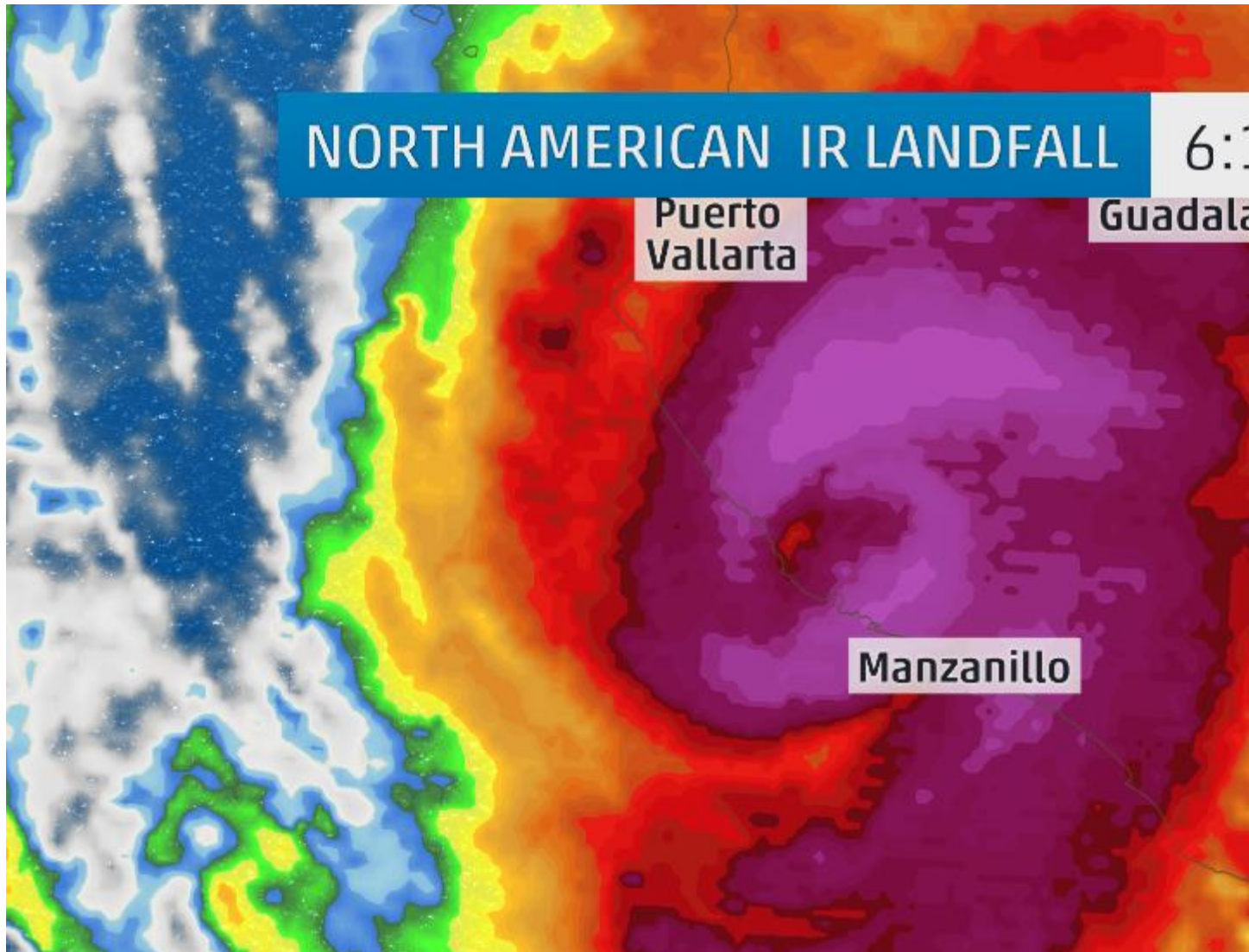
Patricia's Track History Oct. 20-24, 2015.

The eye of Hurricane Patricia made landfall on Oct. 23 at 6:15 p.m. CDT near Cuixmala in Jalisco state of southwest Mexico. Maximum sustained winds at landfall were estimated at 165 mph, still firmly within the Category 5 range on the Saffir-Simpson Hurricane Wind Scale.

An automated weather observation site in Cuixmala reported a 185-mph wind with a gust of 211 mph at the time of landfall, but NOAA cautioned that these measurements have not been evaluated for quality or calibration.

The landfall point was about 60 miles (96 km) northwest of Manzanillo, where tropical storm-force winds likely occurred.

But less than 24 hours later, at 4 p.m. CDT Oct. 24, the National Hurricane Center downgraded Patricia to a remnant low centered about 45 miles (70 km) southwest of Monterrey, Mexico.



[Enlarge](#)

Patricia's Landfall

An enhanced satellite image showing Category 5 Hurricane Patricia at landfall near Cuixmala, Mexico at 6:15 p.m. CDT, Oct. 23, 2015.

In addition to its unprecedented 200-mph (320-kph) sustained winds, Hurricane Patricia broke the record for lowest pressure in any hurricane on record. With a minimum central pressure of 880 millibars (25.99 inches of mercury) at the 4 a.m. CDT advisory Oct. 23, Patricia broke the record of 882 millibars set by Wilma in the Atlantic Basin almost exactly 10 years earlier. Around 1 p.m. CDT Oct. 23, the minimum central pressure reached its lowest point, 879 millibars (25.96 inches of mercury).

Data from an Air Force Hurricane Hunter airborne reconnaissance mission late on the night of Oct. 22 provided critical data demonstrating the extreme intensification of Hurricane Patricia in near-real time. A new NOAA reconnaissance aircraft reached the eye of Patricia early on the afternoon of Oct. 23 to gather additional direct measurements of the storm's intensity.

Unprecedented Among Pacific Hurricanes

Hurricane Patricia became the strongest Pacific hurricane on record shortly after midnight CDT early on Oct. 23. Air Force Hurricane Hunters had flown through the eye of Patricia and reported a sea-level pressure of 894 millibars as measured by a dropsonde inside the eye itself. Wind measurements suggested that the pressure measurement was not in the exact center of the eye and was probably not the absolute lowest pressure, prompting NHC to estimate the minimum central pressure at 892 millibars in its special 12:30 a.m. CDT advisory.

Tropical cyclone strength comparisons are typically based on minimum central pressure. At 892 millibars, Patricia shattered the Eastern Pacific basin's previous record of 902 millibars set by Hurricane Linda in 1997.

While a number of typhoons in the western North Pacific have been stronger, Patricia is now by far the strongest hurricane on record in any basin where the term "hurricane" applies to tropical cyclones – namely, the central and eastern North Pacific basins and the North Atlantic basin, which includes the North Atlantic Ocean itself plus the Gulf of Mexico and Caribbean Sea.

Rapid Weakening

Patricia's intensity decreased very quickly as the storm's center grinded across the rugged terrain of Mexico's interior.

The center of Patricia pushed inland on a track that spared Mexico's major cities from the worst damage, including the popular coastal resort cities of Manzanillo and Puerto Vallarta and the inland metropolis of Guadalajara, Mexico's second-largest city.

Rainfall was heavy enough to cause flooding and mudslides, including a slide in the state of Michoacán that took a section of roadway out with it, injuring two people whose vehicle fell into the slide.

Only one Category 5 hurricane had ever previously been known to make landfall on Mexico's Pacific coast. That hurricane followed a path similar to that of Hurricane Patricia and struck near Puerto Vallarta in late October 1959, causing some 1,800 deaths.

The good news is the core of strongest winds only occurred over a very small area near the center, with hurricane force winds that extended outward up to 30 miles from the center at landfall. Tropical storm force winds extended outward up to 175 miles at the time of landfall.

Patricia became the first Category 5 hurricane to pose an imminent threat to land in North America since Hurricane Felix approached Nicaragua in September 2007. Like Patricia, Felix ultimately stayed a Category 5 all the way to landfall.

Rapid Intensification and Rapid Weakening

Patricia rapidly organized and intensified as maximum sustained winds with the storm increased 115 mph in a 24-hour window from 85 mph at 4 a.m. CDT on Oct. 22 to 200 mph at 4 a.m. CDT Oct. 23.

During that same time, the minimum central pressure of Patricia also decreased 100 millibars, from 980 millibars to 880 millibars.

This places Patricia among the most rapidly intensifying tropical cyclones ever witnessed anywhere in the world since the advent of modern meteorology.

Patricia weakened even faster than it strengthened; by 4 a.m. CDT Oct. 24, its central pressure had risen 106 millibars in 24 hours, from 880 to 986. Its maximum sustained winds had dropped to 75 mph, a loss of 125 mph from 24 hours earlier.

From 4 p.m. CDT Oct. 23 (the last NHC advisory before landfall) to 4 p.m. CDT Oct. 24 (the final NHC advisory on Patricia), Patricia's maximum sustained winds plummeted from 190 mph to 30 mph, a loss of 160 mph. The minimum central pressure in that 24-hour period rose from 900 millibars to 1,004 millibars, a rise of 104 millibars.

Perhaps even more jarring is the fact that Patricia went from a Category 5 hurricane at 7 p.m. CDT Oct. 23 to a remnant low only 21 hours later.