

**TROPICAL STORM JEANNE ACROSS THE
U.S. VIRGIN ISLANDS AND PUERTO RICO**
National Weather Service
San Juan Forecast Office
Carolina , Puerto Rico

Tropical Storm Jeanne originated out of a tropical depression that formed just east of the Leeward Islands around 5 PM AST, Monday September 13, 2004. At that time, surface observations from the Lesser Antilles along with satellite images, showed a broad circulation within a strong tropical wave with sufficiently organized deep convection that prompted the upgrade into a tropical depression. The poorly defined center of the newly formed tropical depression, the eleventh of the season, was located near latitude 16.0 north longitude 60.4 west, about 70 miles to the east southeast of Guadeloupe, about 320 miles southeast of St. Croix, and about 400 miles southeast of San Juan. Its maximum sustained winds were near 30 mph with higher gusts. It was tracking west northwest near 12 mph, and a tropical storm warning was issued for the U.S. Virgin Islands and Puerto Rico, since the depression was expected to become a tropical storm early on Tuesday afternoon, before reaching St Croix; and then forecast to approach the island of Vieques in Puerto Rico on Tuesday evening. A tropical storm warning means that tropical storm conditions are imminent in a period of 24 hours or less.

The depression crossed the Leeward Islands during Monday night and by early Tuesday morning it continued to strengthen. At 11 am AST Tuesday September 14, tropical depression number 11 gained enough intensity and reached tropical storm status based on satellite intensity estimates and the radar images from Guadeloupe. It was named Tropical Storm Jeanne, the 10th of the 2004 season. At that time it was located near latitude 16.6 north and longitude 63.1 west, about 135 miles southeast of St Croix and about 235 miles southeast of San Juan. Its maximum sustained winds were near 40 mph with higher gusts. A reconnaissance aircraft was scheduled to investigate Tropical Storm Jeanne during the afternoon of the 14th. By 2 pm AST Tuesday, Jeanne's maximum sustained winds increased to near 50 mph, based on the aircraft report. It was located near latitude 16.7 north and longitude 63.5 west, about 100 miles southeast of St Croix, and about 210 miles southeast of San Juan. Tropical storm force winds extended outward up to 35 miles from the center. Jeanne continued to strengthen during the afternoon based on satellite, reconnaissance aircraft and San Juan Doppler radar data, and it was expected to attain hurricane strength within 24 hours. At 5 pm AST, a hurricane warning was issued for the U.S. Virgin Islands and Puerto Rico, when the storm was located near latitude 16.8 north and longitude 63.9 west, about 85 miles southeast of St. Croix and about 190 miles southeast of Ponce. The maximum sustained winds

were 60 mph with higher gusts, and there was the potential for Jeanne to become a hurricane on Wednesday. A hurricane warning means that hurricane conditions are imminent within a period of 24 hours or less. Jeanne's motion was west northwest near 10 mph which was expected to bring the center of the storm near St. Croix late that Tuesday night or Wednesday, and near Puerto Rico Wednesday afternoon. Tropical storm force winds now extended outward up to 40 miles from the center. Jeanne continued moving west northwest throughout Tuesday evening as it headed for the U.S. Virgin Islands and Puerto Rico. By 11 pm AST the center of Jeanne was located near latitude 17.2 north and longitude 64.5 west, about 40 miles south southeast of St. Croix and about 140 miles southeast of Ponce. Its maximum winds remained near 60 mph with higher gusts and extended outward from the center up to 40 miles.

By 2 am AST Wednesday September 15, the center of tropical storm Jeanne was estimated from the San Juan Doppler radar near latitude 17.2 north and longitude 64.8 west, about 35 miles south of St Croix and about 120 miles southeast of Ponce. Unofficial reports of sustained winds of 45 mph with gusts to 75 mph were received at the National Hurricane Center from an elevated location in St Croix. The wind sensor at the Henry Rolhsen Airport in St Croix at that same time was measuring sustained surface winds of 39 mph with gusts to 59 mph from the east northeast. Winds continued to increase over St. Croix and around 4 am AST Wednesday the wind sensor at the St Croix airport recorded sustained winds of 52 mph with gusts to 62 mph from the northeast. These were the highest wind values recorded for the storm at the St. Croix airport. By 5 am AST, Jeanne was slowly intensifying and passing just south of St. Croix. Its center was estimated from the San Juan Doppler radar near latitude 17.5 north and longitude 65.1 west, about 25 miles south of St Croix and about 95 miles southeast of San Juan. Its maximum sustained winds increased to near 65 mph with higher gusts. Another unofficial report of sustained winds of 58 mph with gusts to 88 mph was received at the National Hurricane Center from an elevated location in St. Croix. At this point the storm was at its closest to St. Croix.

By 8 am AST Wednesday morning, Jeanne was nearing hurricane strength when the center of the storm was estimated from the San Juan Doppler radar near latitude 17.6 north and longitude 65.4 west, about 70 miles southeast of San Juan and about 45 miles south southwest of St Croix. Its maximum sustained winds were near 70 mph with higher gusts and stronger winds in higher elevations. The forecast indicated that Jeanne could become a hurricane before passing over Puerto Rico. By 11 am AST the center of tropical storm Jeanne was approaching southeast Puerto Rico. It was located near latitude 17.8 north and longitude 65.8 west, about 45 miles south southeast of San Juan, about 49 miles southeast of Ponce and about 65 miles west of St. Croix. It was moving west northwest near 8

mph with maximum sustained winds of 70 mph with higher gusts. At this time, stronger winds, possibly sustained hurricane force, were expected over the higher terrain of Puerto Rico, and it was possible that Jeanne would become a hurricane before landfall. The tropical storm force winds now extended outward up to 60 miles from the center.

Jeanne ended up making landfall as a strong tropical storm over southeast Puerto Rico near Maunabo around noon time on the 15th. The Luis Munoz Marin International airport wind sensor in Carolina recorded sustained winds of 49 mph with a gust to 71 mph from the northeast around 134 pm AST. An unofficial report from a NWS spotter in Salinas indicated sustained winds of 63 mph with gust to 71 mph at 1140 am AST. By 2 pm the center of tropical storm Jeanne was located inland near latitude 18.1 north and longitude 66.1 west or about 25 miles south southwest of San Juan. San Juan Doppler radar fixes indicated that once the center of the storm made landfall along the southeast, it took a jog to the west across the municipalities of Arroyo, Patillas, Guayama and Salinas and then turned to the north northwest crossing the central interior and moving over Vega Baja around 4 pm. The NHC advisory indicated that Jeanne was moving west northwest near 8 mph and with this motion it was forecast to move over central and western Puerto Rico during the rest of Wednesday afternoon and evening. Its maximum sustained winds were near 70 mph with higher gusts. At 5 pm AST the hurricane warning for the U.S. Virgin Islands was downgraded to a tropical storm warning. Jeanne was then located about 25 miles west southwest of San Juan over Arecibo and Barceloneta. Its maximum sustained winds were near 70 mph with higher gusts. Tropical storm force winds extended outward up to 70 miles from the center. Jeanne was moving west northwest near 9 mph, and the center was forecast to move off the northwest coast of Puerto Rico into the Atlantic Ocean Wednesday night. Once the center of Jeanne reached the Atlantic Ocean, it had the potential to strengthen into a hurricane.

At 8 pm AST, the center of tropical storm Jeanne was located near latitude 18.5 north and longitude 67.0 west, over northwestern Puerto Rico near the municipality of Isabela. It was moving west skirting the northwest coast of Puerto Rico at 10 mph. Its maximum sustained winds were near 65 mph with higher gusts. As the center of the storm continued moving west and entered the Mona Passage, radar imagery showed the eastern half of the center somewhat elongated extending southward to the western municipality of Mayaguez.

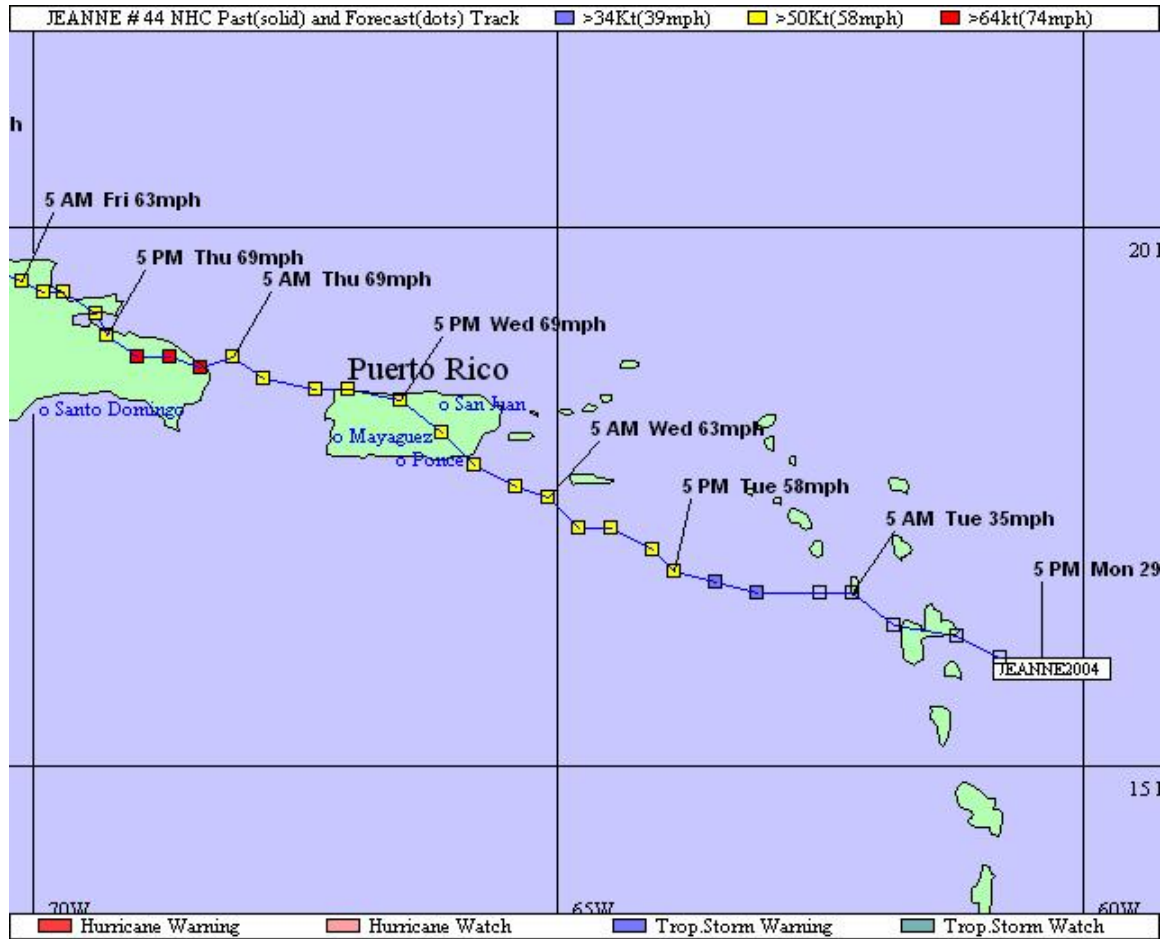
At 11 pm AST Wednesday the hurricane warning for Puerto Rico was downgraded to a tropical storm warning, and the tropical storm warning for the U.S. Virgin Islands was discontinued. At this time the center of the tropical storm was located over water near latitude 18.5 north and longitude 67.3 west, about 20 miles west of Isabela, Puerto Rico. Jeanne

was moving west northwest near 9 mph. Its maximum sustained winds were near 65 mph with higher gusts.

By 2 am AST Thursday September 16, Jeanne was nearing hurricane intensity when it was located in the Mona Passage. A tropical storm warning remained in effect for Puerto Rico. The center of tropical storm Jeanne was located near latitude 18.6 north and longitude 67.8 west, about 46 miles west of Aguadilla. It was moving west northwest near 9 mph. Its maximum sustained winds were near 70 mph with higher gusts. It was strengthening and likely to become a hurricane later on Thursday morning.

At 5 am AST Thursday the tropical storm warning was discontinued for Puerto Rico. The center of Jeanne was located near latitude 18.8 north and longitude 68.1 west, about 68 miles west northwest of Aguadilla. Its maximum sustained winds were near 70 mph with higher gusts, and it was moving west northwest near 9 mph.

Figure 2. Preliminary track showing the center of tropical storm Jeanne as it moved across the U.S. Virgin Islands and Puerto Rico.



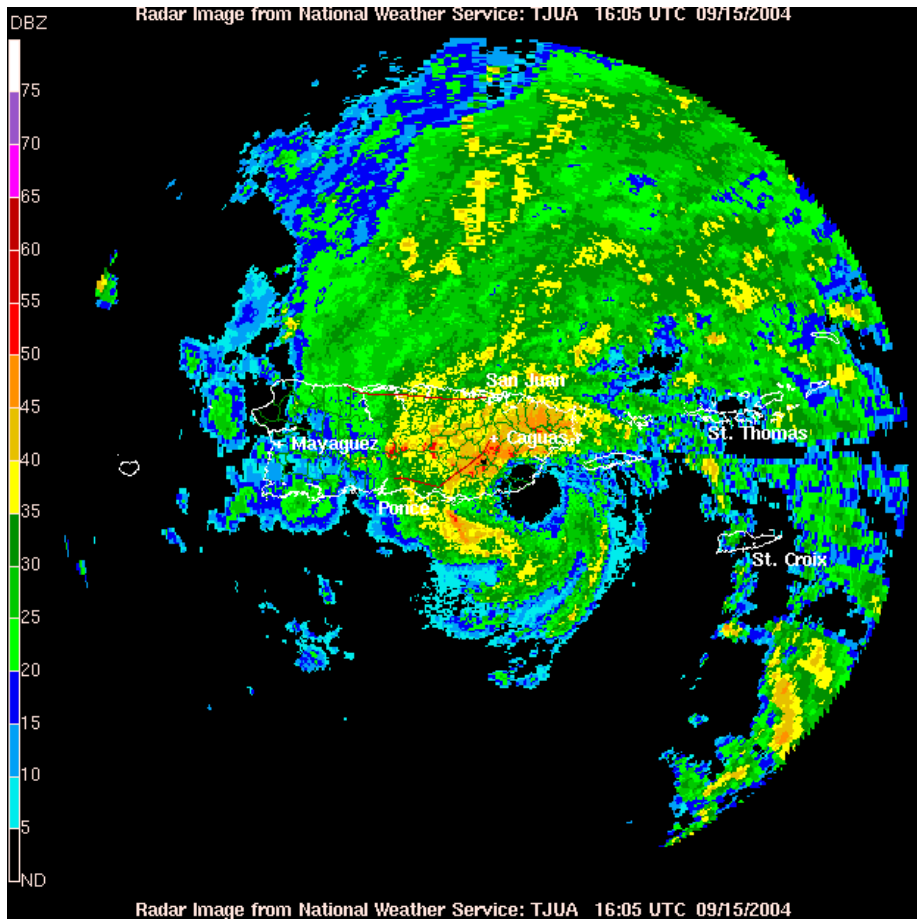


Figure 3. Radar image showing tropical storm Jeanne as it made landfall across southeast Puerto Rico on Wednesday September 15 around 12 noon.

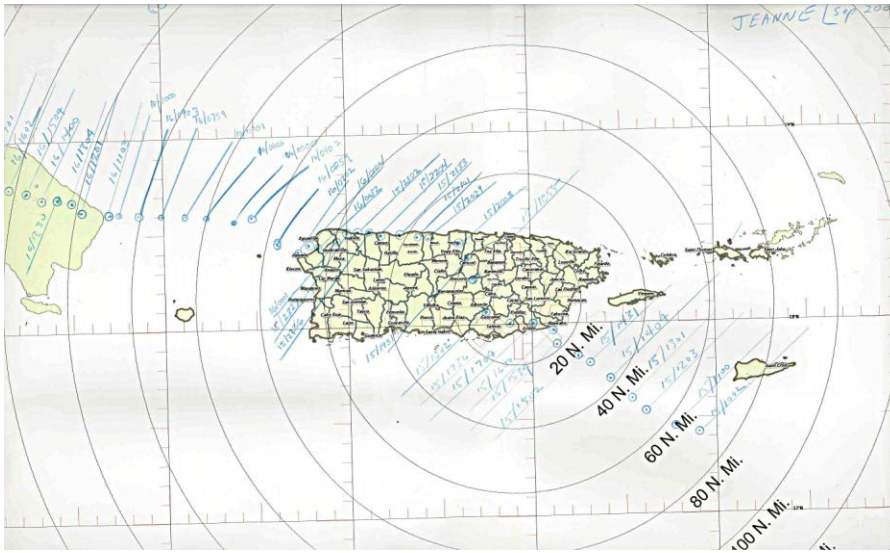
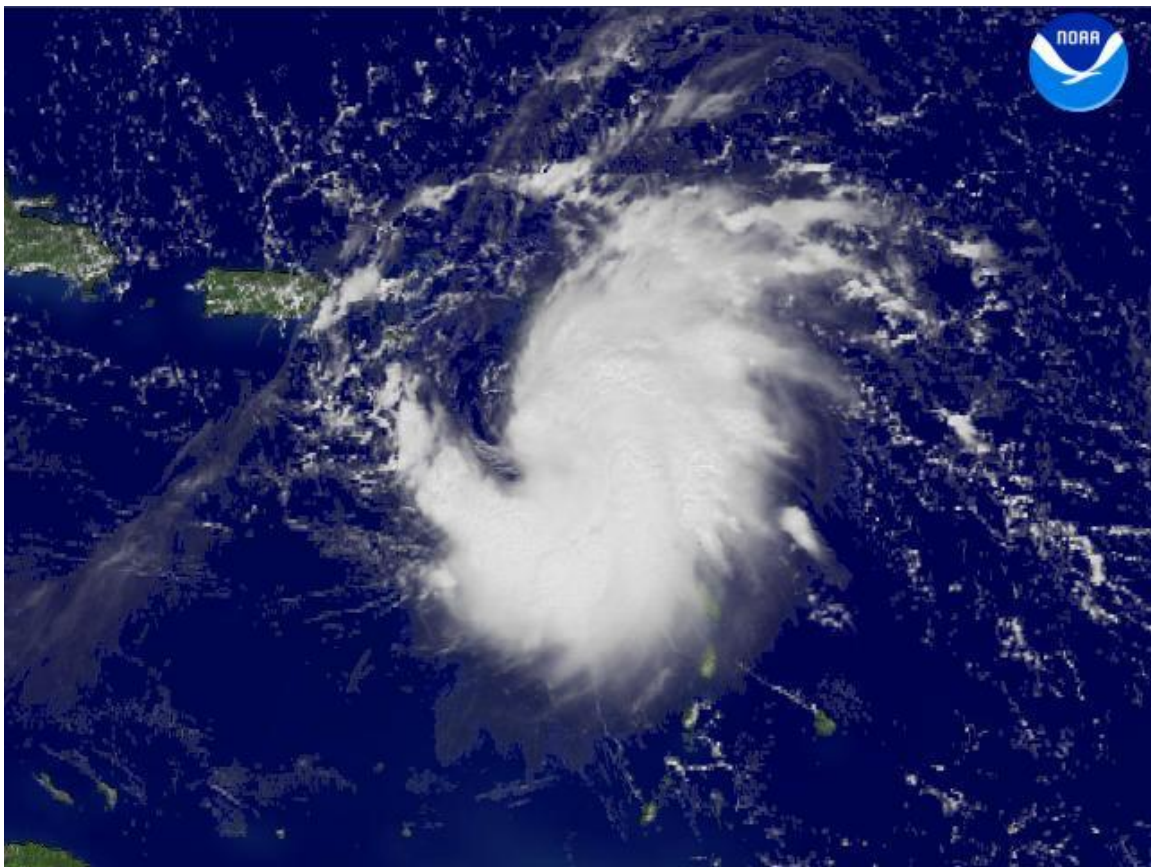


Fig. 4 Tropical Storm Jeanne Doppler radar fixes



**Fig. 4 Tropical Storm Jeanne imagery, 2004.09.14 at 1145 AM AST.
Centerpoint Latitude: 16:45:40N
Longitude: 62:47:50W.**

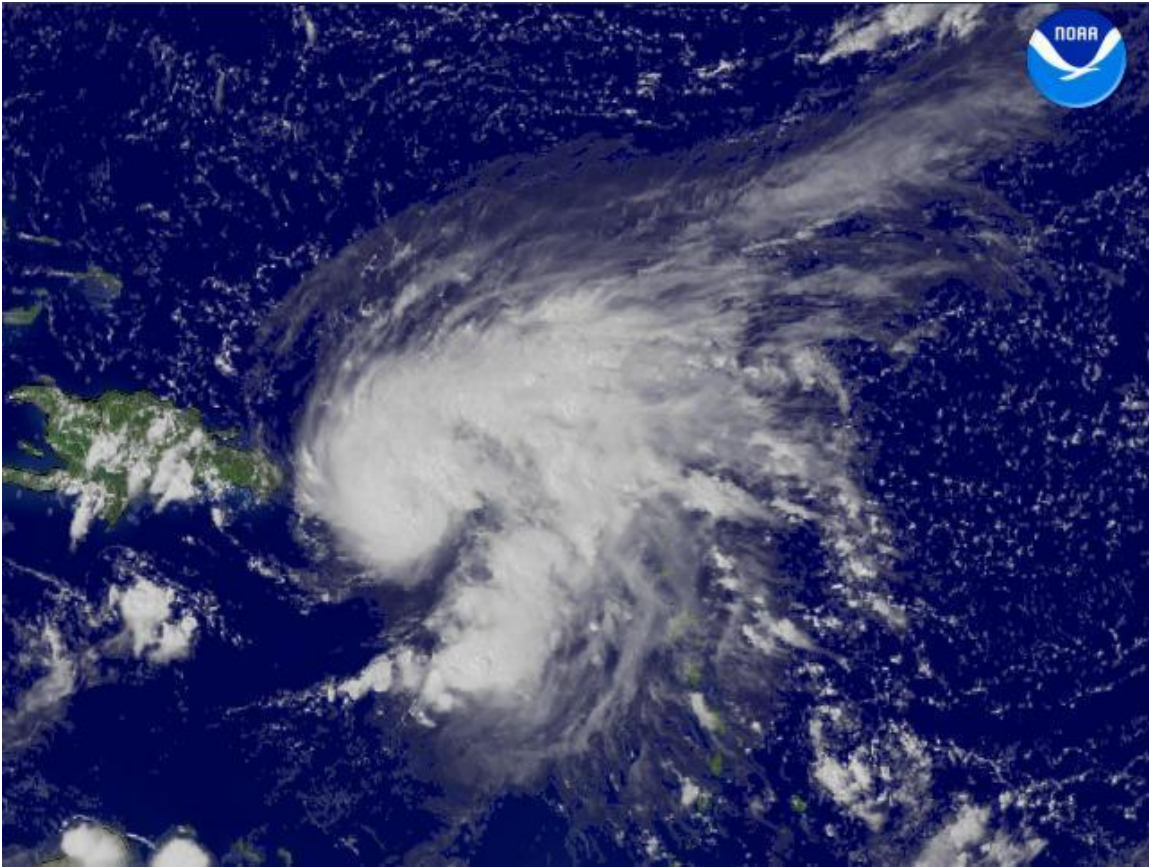


Fig. 5 Tropical Storm Jeanne imagery, 2004.09.15 at 215 PM AST.

All data contained within this report is considered preliminary and subject to revision. More information will be added to this summary as it becomes available.