



Hurricane Maria 21.09.17 Analysis

Risk Services Division

21 September 2017

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Hurricane Maria September 21, 2017 (10am EST)

- **Hurricane Maria struck Puerto Rico as a Category 4 storm on Wednesday morning**
- **The entire island was affected with all residents reported being without power**
- **Flash flooding was reported in numerous areas as the La Plata river rose more than 11 ft (3.35m) above flood stage**
- **At least 10 fatalities are reported**

Summary

As of 8:00 a.m. AST (1200 UTC), the large eye of Hurricane Maria was located approximately 95 miles (150 km) north northwest of Punta Cana, Dominican Republic and approximately 190 miles (305 km) southeast of Grand Turk Island. Maria is moving toward the northwest (315°) at 9 mph (15 kmh) and this general motion is expected through tonight. A turn toward the north-northeast is forecast on Friday. On the forecast track, the eye of Hurricane Maria will pass offshore of the northeastern coast of the Dominican Republic sometime today then move near the Turks and Caicos Islands and the southeastern Bahamas tonight and Friday. Maria is currently a category 3 hurricane (Saffir-Simpson Hurricane Wind Scale) with maximum sustained winds of 115 mph (185 kmh) with some higher gusts. Some strengthening is possible over the next day. Hurricane-force winds extend outward up to 60 miles (95 km) from the center, and tropical-storm-force winds extend outward up to 150 miles (240 km).

Strong gusty winds are still occurring over portions of Puerto Rico but should gradually subside this morning. Tropical or hurricane conditions are continuing across portions of the warning areas in the Dominican Republic. Hurricane conditions are expected to begin in portions of the Turks and Caicos Islands and the southeastern Bahamas tonight, with tropical storm conditions beginning in these areas later today.

Water levels in Puerto Rico should continue to recede over the next few hours however, Maria is expected to produce additional rainfall accumulations of 4 to 8 inches through Saturday with isolated storm total amounts of 35 inches (88.9cm). Rainfall will continue to cause life-threatening flash floods and mudslides. Swells generated by Maria are still affecting the Leeward Islands, Puerto Rico and the Virgin Islands.



Watches and Warnings

Hurricane Warning: Portions of the Dominican Republic, Turks and Caicos Islands, Southeastern Bahamas

Tropical Storm Warning: Portions of the Dominican Republic

Hurricane Watch: Portions of the Dominican Republic

Tropical Storm Watch: Central Bahamas

Safety Procedures & Readiness

Hurricane Hazards

While hurricanes pose the greatest threat to life and property, tropical storms and depressions also can be devastating. The primary hazards from tropical cyclones (which include tropical depressions, tropical storms, and hurricanes) are storm surge flooding, inland flooding from heavy rains, destructive winds, tornadoes, and high surf and rip currents.

- Storm surge is the abnormal rise of water generated by a storm's winds. This hazard is historically the leading cause of hurricane related deaths in the United States. Storm surge and large battering waves can result in large loss of life and cause massive destruction along the coast.
- Storm surge can travel several miles inland, especially along bays, rivers, and estuaries.
- Flooding from heavy rains is the second leading cause of fatalities from landfalling tropical cyclones. Widespread torrential rains associated with these storms often cause flooding hundreds of miles inland. This flooding can persist for several days after a storm has dissipated
- Winds from a hurricane can destroy buildings and manufactured homes. Signs, roofing material, and other items left outside can become flying missiles during hurricanes.
- Tornadoes can accompany landfalling tropical cyclones. These tornadoes typically occur in rain bands well away from the center of the storm
- Dangerous waves produced by a tropical cyclone's strong winds can pose a significant hazard to coastal residents and mariners. These waves can cause deadly rip currents, significant beach erosion, and damage to structures along the coastline, even when the storm is more than a 1,000 miles offshore

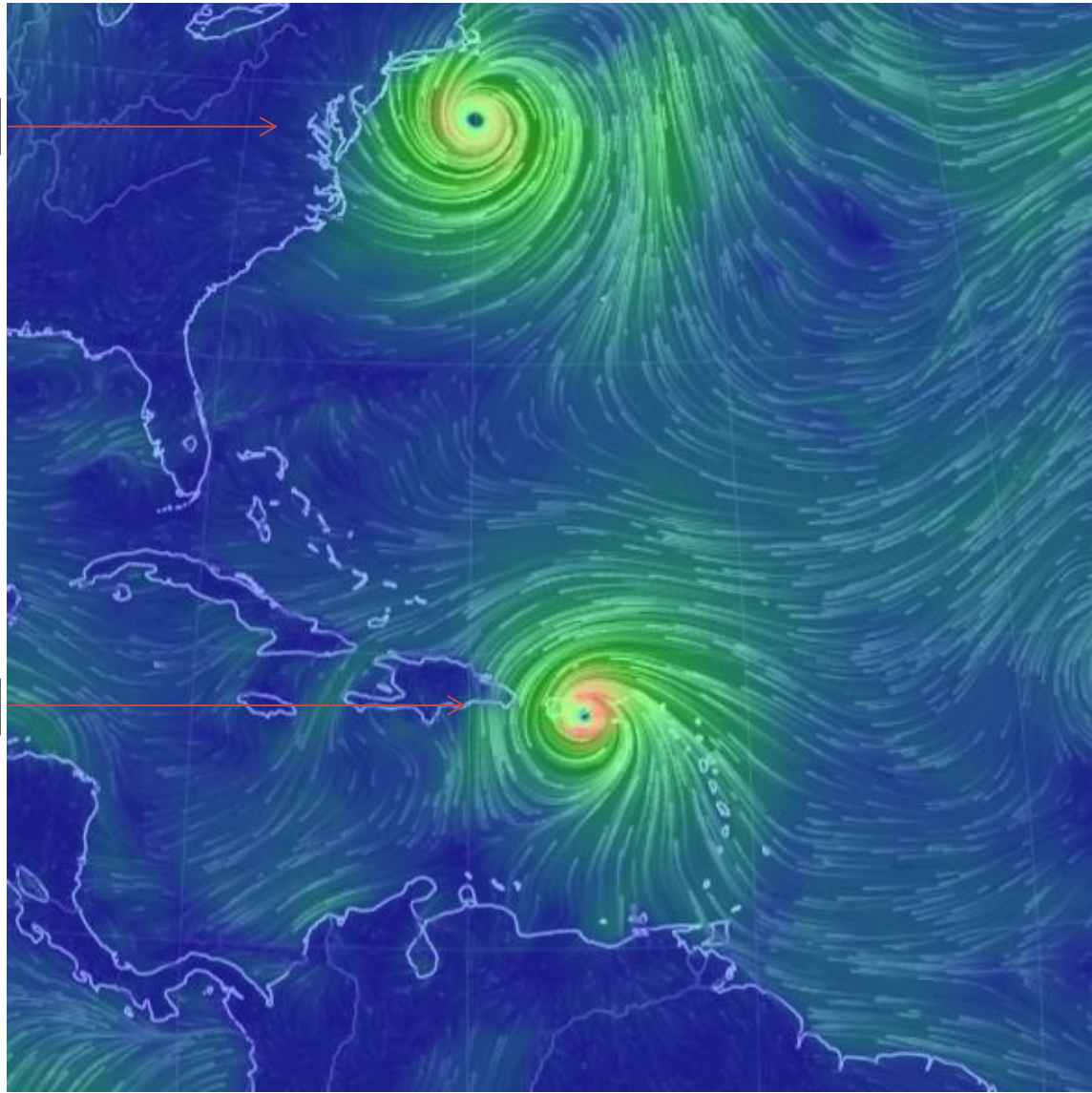
Hurricane Maria's path across Puerto Rico



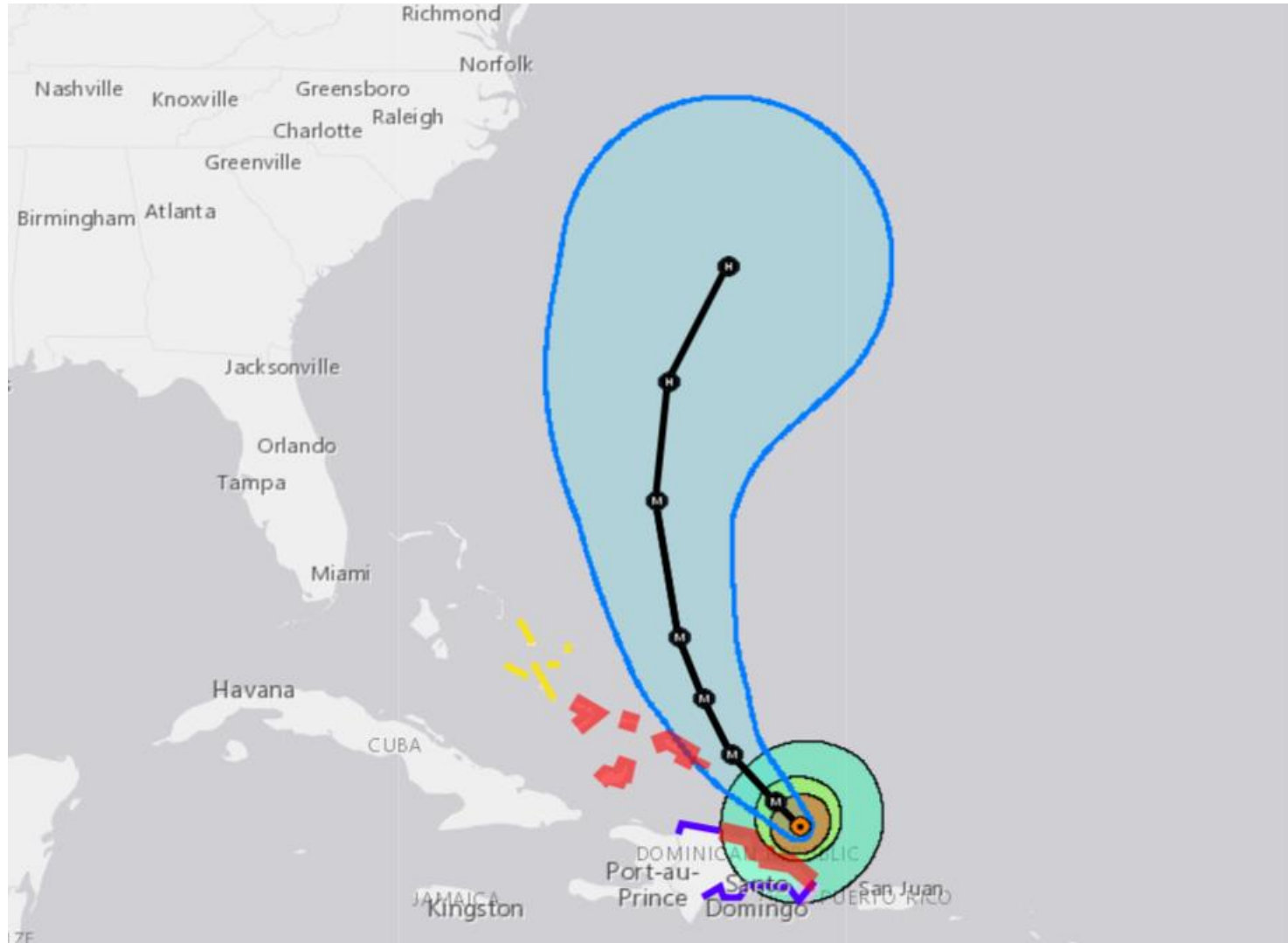
Current Condition

Tropical Storm Jose

Hurricane Maria



Forecast Track



H: Hurricane – wind speed between 74 mph and 110 mph
M: Major Hurricane – wind speed greater than 110mph

For Additional Information:

American Red Cross

<http://www.redcross.org/>

US Coast Guard Storm Center

<https://www.uscg.mil/news/stormcenter/>

US National Hurricane Center

www.nhc.noaa.gov

US Federal Emergency Management Agency

<http://www.ready.gov/hurricanes>

FEMA – Mobile App

<https://www.fema.gov/mobile-app>

Ready Gov

www.ready.gov

Listo Gov (Spanish)

www.listo.gov

Emergency Management Agencies

<https://www.fema.gov/emergency-management-agencies>

Caribbean Disaster Emergency Management Agency

http://www.cdema.org/index.php?option=com_wrapper&view=wrapper&Itemid=417

Smart Traveler Enrollment Program

<https://step.state.gov/>