



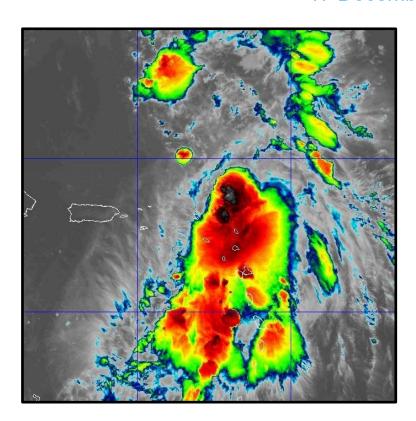
NATIONAL HURRICANE CENTER TROPICAL CYCLONE REPORT

TROPICAL STORM JERRY

(AL102025)

7–11 October 2025

John P. Cangialosi National Hurricane Center 17 December 2025



GOES-19 INFRARED SATELLITE IMAGE OF TROPICAL STORM JERRY AT 1250 UTC 10 OCTOBER WHEN IT WAS LOCATED NEAR THE NORTHERN LEEWARD ISLANDS. IMAGE COURTESY OF NOAA/NESDIS/STAR.

Jerry was a tropical storm that produced significant flooding across portions of the Leeward Islands. Heavy rainfall from Jerry and associated flooding resulted in one direct fatality in Guadeloupe.



Tropical Storm Jerry

7-11 OCTOBER 2025

SYNOPTIC HISTORY

The precursor to Jerry was a tropical wave that moved off the west coast of Africa on 3 October. The wave progressed rapidly westward across the eastern and central tropical Atlantic during the next few days, accompanied by intermittent bursts of deep convection. This thunderstorm activity gradually became more organized, and a well-defined surface circulation developed by 0600 UTC 7 October about 1100 n mi east of the Windward Islands, marking the system's formation into a tropical cyclone. Because the system was already estimated to be producing 35-kt winds at the time of genesis, it is designated as a tropical storm at the time of formation. The "best track" chart of Jerry's path is given in Fig. 1, with the wind and pressure histories shown in Figs. 2 and 3, respectively. The best track positions and intensities are listed in Table 1¹

Jerry moved swiftly west-northwestward after genesis, tracking along the south to southwest side of a subtropical ridge. The storm's rapid forward motion, combined with moderate-to-strong wind shear and intrusions of dry air, kept the cyclone asymmetric and slowed its intensification. Jerry reached a peak intensity of 55 kt around 1200 UTC 8 October when it was located about 550 n mi east-southeast of the Leeward Islands. Satellite imagery at that time showed a notably lopsided structure, with the center partially exposed along the northwestern edge of the primary convective mass (not shown).

Jerry maintained its peak intensity for nearly a day while it moved toward the Leeward Islands. The storm slowed down and turned northwestward when it reached the southwestern periphery of the ridge on 9 October, and it began to weaken. Jerry made its closest approach to the northern Leeward Islands around 0000 UTC 10 October when it was located about 25 n mi east of Barbuda (cover image). Due to the cyclone's asymmetry, most of the strong winds and heavy rainfall remained offshore during the time of Jerry's closest approach, though heavy rains and tropical-storm-force winds spread across the region later that day when it moved north of the area.

By late 10 October, Jerry turned northward while positioned about 150 n mi north-northeast of the British Virgin Islands, and it continued to gradually weaken. The system opened up into a trough shortly after 1200 UTC 11 October over the southwestern Atlantic a few hundred n mi north-northeast of Puerto Rico. Jerry's remnants turned northeastward over the next few days, and a new well-defined low formed on 14 October when it was located over the subtropical

¹ A digital record of the complete best track, including wind radii, can be found on line at ftp://ftp.nhc.noaa.gov/atcf. Data for the current year's storms are located in the *btk* directory, while previous years' data are located in the *archive* directory.



central Atlantic. However, the low's shower activity never became sufficiently organized for the system to be reclassified as a tropical cyclone, and the low merged with a frontal system a couple of days later.

METEOROLOGICAL STATISTICS

Observations in Jerry (Figs. 2 and 3) include subjective satellite-based Dvorak technique intensity estimates from the Tropical Analysis and Forecast Branch (TAFB) and the Satellite Analysis Branch (SAB), objective Advanced Dvorak Technique (ADT) estimates and Satellite Consensus (SATCON) estimates from the Cooperative Institute for Meteorological Satellite Studies/University of Wisconsin-Madison. Observations also include flight-level and dropwindsonde observations from seven flights of the 53rd Weather Reconnaissance Squadron of the U.S. Air Force Reserve Command and NOAA's Aircraft Operations Center (flight paths and center fixes are shown in Fig. 4). Data and imagery from NOAA polar-orbiting satellites including the Advanced Microwave Sounding Unit (AMSU), the NASA Global Precipitation Mission (GPM), the European Space Agency's Advanced Scatterometer (ASCAT), the Defense Meteorological Satellite Program (DMSP) satellites, and the Time-Resolved Observations of Precipitation structure and storm Intensity with a Constellation of Smallsats (TROPICS) satellites, among others, were also useful in constructing the best track of Jerry.

One ship (8J9EX) reported 40-kt winds and a minimum pressure of 1008.8 mb over the far northeastern Caribbean on 10 October as Jerry passed to its east. Selected surface observations from land stations and data buoys are given in Table 2.

Winds and Pressure

Jerry's peak intensity of 55 kt from 1200 UTC 8 October to 0600 UTC 9 October is based on a blend of aircraft, satellite, and surface data. An ASCAT pass at 1201 UTC 8 October indicated a reliable peak wind vector of 51 kt, although this value is likely an underestimate of the true intensity due to undersampling associated with the instrument's coarse resolution. Air Force Hurricane Hunter data near 0000 UTC 9 October included a peak 850-mb flight-level wind of 66 kt, which typically reduces to about 53 kt at the surface, and a dropsonde that measured a 500-m mean boundary layer wind of 71 kt, corresponding to roughly 57 kt at the surface. In addition, NOAA buoy 41010, which Jerry passed just to the south of around 1800 UTC 8 October, reported a peak sustained wind of 47 kt and a gust to 56 kt.

The minimum pressure of 1000 mb at 1800 UTC 8 October and 0000 UTC 9 October is based primarily on aircraft observations and is supported by nearby buoy data. Buoy 41010 reported a minimum pressure of 1003.2 mb while experiencing 35-kt winds as the center passed by.

Tropical-storm-force winds occurred across portions of the Leeward Islands, especially in gusts. The strongest winds were observed after the center passed, generally within the southeastern quadrant of the circulation. The highest wind observation was from a slightly



elevated station on Guadeloupe, which recorded a peak sustained wind of 46 kt. The lowest pressure reported on land was 1006.6 mb at the same location (Table 2).

Storm Surge²

No significant storm surge was reported in association with Tropical Storm Jerry. However, the system did generate rough surf and rip currents along portions of the Lesser Antilles, the Virgin Islands, Puerto Rico, and Hispaniola on 9 and 10 October.

Rainfall and Flooding

Jerry produced a broad swath of heavy rainfall across the Leeward Islands as it passed near and just east of the island chain. Although the system's most intense rainfall likely occurred over the open ocean on its eastern side, bands of heavy rain swept across portions of the Leeward Islands on 9–10 October. Widespread totals of 4–7 inches (100–175 mm) were common, with a maximum of 8.35 inches (212 mm) measured in Antigua. Farther south and west, the Windward and Virgin Islands experienced lower rainfall amounts.

CASUALTY AND DAMAGE STATISTICS

There was one confirmed direct fatality³ associated with Tropical Storm Jerry. In Guadeloupe, a man drowned in his vehicle after it was overtaken by rapidly rising floodwaters near Le Moule. A tugboat also ran aground in the area, and its seven occupants were safely rescued. Power outages and widespread flooding occurred across Guadeloupe, resulting in numerous road closures. Similar impacts were reported across nearby islands, where significant flash flooding caused widespread water damage to homes and businesses. In Antigua, reports indicated considerable flooding and roof damage at the Meteorological Service building. No official estimate of monetary losses is available at the time of this report.

² Several terms are used to describe water levels due to a storm. **Storm surge** is defined as the abnormal rise of water generated by a storm, over and above the predicted astronomical tide, and is expressed in terms of height above normal tide levels. Because storm surge represents the deviation from normal water levels, it is not referenced to a vertical datum. **Storm tide** is defined as the water level due to the combination of storm surge and the astronomical tide, and is expressed in terms of height above a vertical datum, i.e. the North American Vertical Datum of 1988 (NAVD88) or Mean Lower Low Water (MLLW). **Inundation** is the total water level that occurs on normally dry ground as a result of the storm tide, and is expressed in terms of height above ground level. At the coast, normally dry land is roughly defined as areas higher than the normal high tide line, or Mean Higher High Water (MHHW).

³ Deaths occurring as a direct result of the forces of the tropical cyclone are referred to as "direct" deaths. These would include those persons who drowned in storm surge, rough seas, rip currents, and freshwater floods. Direct deaths also include casualties resulting from lightning and wind-related events (e.g., collapsing structures). Deaths occurring from such factors as heart attacks, house fires, electrocutions from downed power lines, vehicle accidents on wet roads, etc., are considered "indirect" deaths.



FORECAST AND WARNING CRITIQUE

The genesis of Jerry was generally well anticipated (Table 3). The disturbance that eventually became Jerry first appeared in the 7-day NHC Tropical Weather Outlook (TWO) 126 hours before formation, with a low (<40%) probability of development. The chance was raised to the medium (40–60%) category 90 hours prior and to the high category 42 hours before formation. In the 2-day TWO, a low chance of development was first indicated 60 hours before genesis, increasing to medium at 42 hours and high at 12 hours before formation. Figure 5 shows the composite 7-day TWO genesis areas for each probability category leading up to Jerry's development. All of the TWO ellipses correctly encompassed the location where genesis occurred.

A verification of the NHC official track forecasts for Jerry is presented in Table 4a. The official track forecast errors were comparable to the mean official errors from the previous 5-year period from 12–36 hours, but were notably smaller than the corresponding means beyond those forecast hours. The official forecasts also exhibited a slight right-of-track bias in several predictions (Fig. 6). A homogeneous comparison of the official track errors with selected guidance models is provided in Table 4b. Among the guidance models, the Google DeepMind (GDMI) ensemble mean performed best from 12 to 48 hours and was the only model to produce lower errors than NHC during that period. At 60 and 72 hours, however, the COAMPS-TC (CTCI) model yielded the most accurate forecasts, showing the unusual characteristic of having smaller errors at longer lead times than at shorter ones.

A verification of NHC's official intensity forecasts for Jerry is shown in Table 5a. The official intensity forecast errors were lower than the mean official errors from the previous 5-year period at 12 and 24 hours, but exceeded the means at all subsequent forecast times. In fact, the NHC errors were nearly three times larger than the means from 60 to 96 hours. These large errors reflected a pronounced high bias in the early forecasts, when environmental conditions initially appeared favorable for strengthening (Fig. 7). Over time, however, it became evident that mid-level wind shear and dry air did not diminish as expected, leading to reduced peak intensities in later forecast cycles. A homogeneous comparison of the official intensity errors with selected guidance models is given in Table 5b. Although several models outperformed the NHC forecasts, most also exhibited large errors and high biases. Notably, the CTCI and HWRF (HWFI) models had very large 72-hour errors of 47 kt and 58 kt, respectively. In contrast, DSHP, LGEM, HAFS-B (HFBI), ECMWF (EMXI), and GDMI models performed relatively well, generally keeping Jerry on the weaker side.

Watches and warnings associated with Jerry are given in Table 6.

IMPACT-BASED DECISION SUPPORT (IDSS)

NHC began formal communication with U.S. emergency managers on 7 October when Jerry formed east of the Windward Islands. Four decision support briefings were provided to



emergency managers and coordinated through the FEMA Hurricane Liaison Team embedded at NHC. These briefings included video-teleconferences with FEMA HQ and FEMA Region 2. Briefing support continued through 8 October as Jerry moved northward, away from the Caribbean. The Tropical Analysis and Forecast Branch at NHC provided five briefings to the U.S. Coast Guard Southeast District in support of their life-saving mission from 7 to 9 October.

ACKNOWLEDGEMENTS

Data in Table 2 were compiled from reports issued by the National Data Buoy Center, Météo France, and the Antigua and Barbuda Meteorological Service. Michael Spagnolo and Dr. Chris Landsea provided the input for the IDSS section. Dr. Lisa Bucci contributed the recon, track, and intensity verification figures, and Dr. Philippe Papin provided the track map and genesis verification figure.



Table 1. Best track for Tropical Storm Jerry, 7–11 October 2025.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
07 / 0600	11.0	41.3	1007	35	tropical storm
07 / 1200	11.4	43.6	1006	40	"
07 / 1800	11.9	45.7	1005	40	"
08 / 0000	12.4	47.9	1004	45	"
08 / 0600	12.9	49.9	1003	45	"
08 / 1200	13.6	51.9	1002	55	"
08 / 1800	14.3	53.8	1000	55	"
09 / 0000	15.0	55.5	1000	55	"
09 / 0600	15.4	57.2	1001	55	"
09 / 1200	16.0	58.6	1002	50	n .
09 / 1800	16.7	60.0	1004	50	"
10 / 0000	17.6	61.1	1006	50	"
10 / 0600	18.6	62.2	1006	50	"
10 / 1200	19.7	63.1	1006	50	"
10 / 1800	20.9	63.6	1006	50	"
11 / 0000	22.4	63.7	1006	50	"
11 / 0600	23.9	63.7	1006	45	"
11 / 1200	25.2	63.3	1006	45	"
11 / 1800					dissipated
08 / 1800	14.3	53.8	1000	55	maximum wind and minimum pressure



Table 2. Selected surface observations for Tropical Storm Jerry, 7–11 October 2025.

	Minimum Sea Level Pressure		Maximum Surface Wind Speed			<u>.</u>	Starra		
Location	Date/ time (UTC)	Press. (mb)	Date/ time (UTC) ^a	Sustained (kt) ^b	Gust (kt)	Storm surge (ft) ^c	Storm tide (ft) ^d	Estimated Inundation (ft) ^e	Total rain (in)
Antigua									
Antigua/Coolidge (78862)	09/2100	1007.6	10/0500	17	32				
Crabbs			10/0848	38					
V.C. Bird International									8.35
Barbuda									
Hannah Thomas Hospital			10/0959	36					
Sir McChesney George									4.40
Martinique									
Lamentin	09/2100	1008.9	10/0100	23	42				2.95
Trinite Caravelle	09/2100	1008.8	10/0100	30	45				2.08
Trois-Ilets Golf									5.07
Guadeloupe									
Le Raizet	09/2100	1007.2	10/0700	20	53				6.39
La Desirade Meteo	09/2000	1006.6	10/0600	46	58				5.57
Grand-Bourig Les Basses	09/2100	1008.3	10/0700	23	38				3.04
Le Moule Laureal			10/0700	17	34				7.80
St. Barthelemy									
St. Barthelemy Meteo	10/0800	1008.1	10/1300	32	48				
St. Barthelemy Airport	10/0800	1008.0	10/1200	19	34				
NOAA Buoys									
Buoy 41040	08/1640	1003.2	08/1730	47	56				

^a Date/time is for sustained wind when both sustained and gust are listed.

^b Except as noted, sustained wind averaging periods for C-MAN and land-based reports are 2 min; buoy averaging periods are 8 min.

^c Storm surge is water height above normal astronomical tide level.

d For most locations, storm tide is water height above the North American Vertical Datum of 1988 (NAVD88). Storm tide is water height above Mean Lower Low Water (MLLW) for NOS stations in Puerto Rico, the U.S. Virgin Islands, and Barbados.

Estimated inundation is the maximum height of water above ground. For some USGS storm tide pressure sensors, inundation is estimated by subtracting the elevation of the sensor from the recorded storm tide. For other USGS storm tide sensors and USGS high-water marks, inundation is estimated by subtracting the elevation of the land derived from a Digital Elevation Model (DEM) from the recorded and measured storm tide. For NOS tide gauges, the height of the water above Mean Higher High Water (MHHW) is used as a proxy for inundation.



Table 3. Number of hours in advance of formation associated with the first NHC Tropical Weather Outlook forecast in the indicated likelihood category. Note that the timings for the "Low" category do not include forecasts of a 0% chance of genesis.

	Hours Before Genesis						
	48-Hour Outlook	168-Hour Outlook					
Low (<40%)	60	126					
Medium (40%-60%)	42	90					
High (>60%)	12	42					



Table 4a. NHC official (OFCL) and climatology-persistence skill baseline (OCD5) track forecast errors (n mi) for Tropical Storm Jerry. Mean errors for the previous 5-yr period are shown for comparison. Official errors that are smaller than the 5-yr means are shown in boldface type.

		Forecast Period (h)						
	12	24	36	48	60	72	96	120
OFCL	27.5	38.9	45.4	54.3	51.9	49.4	48.3	
OCD5	43.6	91.9	142.3	189.7	236.3	313.7	462.3	
Forecasts	15	13	11	9	7	5	1	
OFCL (2020-24)	23.0	34.3	45.8	58.7	73.5	89.8	128.7	185.4
OCD5 (2020-24)	45.1	95.7	150.9	203.1	252.7	295.4	366.2	426.6

Table 4b. Homogeneous comparison of selected track forecast guidance models (in n mi) for Jerry. Errors smaller than the NHC official forecast are shown in boldface type. The number of official forecasts shown here will generally be smaller than that shown in Table 4a due to the homogeneity requirement.

ModeLID		Forecast Period (h)						
Model ID	12	24	36	48	60	72	96	120
OFCL	26.0	39.0	45.6	54.3	51.9	49.4	48.3	
OCD5	41.6	90.0	133.8	189.7	236.3	313.7	462.3	
GFSI	37.7	72.4	92.9	108.9	94.9	93.7	137.5	
EMXI	35.8	64.4	95.8	114.1	134.7	166.2	224.1	
HWFI	51.6	95.0	99.0	101.1	83.8	98.6	209.0	
HMNI	42.2	79.4	88.8	120.4	155.6	221.0	419.4	
HFAI	53.9	96.5	88.1	121.3	131.0	153.4	402.8	
HFBI	47.0	75.5	85.7	105.0	83.4	111.8	392.6	
CMCI	40.9	74.3	105.1	130.4	171.0	179.1	180.9	
CTCI	39.4	73.7	73.8	60.8	40.4	30.5	138.0	
AEMI	27.7	49.6	72.5	92.8	105.1	83.3	81.5	
HCCA	25.7	42.7	48.2	62.3	59.2	66.6	65.3	
TVCA	36.4	63.0	64.0	63.8	51.5	51.8	163.5	
FSSE	30.1	54.4	68.4	85.3	92.3	102.6	60.0	
GFEX	29.0	49.6	73.2	93.5	106.8	117.1	66.2	
GDMI	22.0	28.6	39.2	49.8	57.2	83.5	61.0	
Forecasts	12	12	10	9	7	5	1	



Table 5a. NHC official (OFCL) and climatology-persistence skill baseline (OCD5) intensity forecast errors (kt) for Jerry. Mean errors for the previous 5-yr period are shown for comparison. Official errors that are smaller than the 5-yr means are shown in boldface type.

		Forecast Period (h)							
	12	24	36	48	60	72	96	120	
OFCL	4.3	6.2	13.2	21.1	26.4	31.0	35.0		
OCD5	5.7	7.2	13.6	19.6	28.3	33.0	42.0		
Forecasts	15	13	11	9	7	5	1		
OFCL (2020-24)	5.1	7.3	8.6	10.0	10.5	10.9	12.4	13.6	
OCD5 (2020-24)	6.8	10.6	13.8	16.5	17.9	19.2	21.4	19.9	

Table 5b. Homogeneous comparison of selected intensity forecast guidance models (in kt) for Jerry. Errors smaller than the NHC official forecast are shown in boldface type. The number of official forecasts shown here will generally be smaller than that shown in Table 5a due to the homogeneity requirement.

MadalID		Forecast Period (h)						
Model ID	12	24	36	48	60	72	96	120
OFCL	5.0	6.7	13.5	21.1	26.4	31.0	35.0	
OCD5	6.2	7.6	14.0	19.6	28.3	33.0	42.0	
HWFI	6.5	10.3	24.8	37.2	48.1	57.8	70.0	
HMNI	3.1	6.2	11.0	11.4	7.9	3.4	7.0	
HFAI	5.1	7.5	10.6	14.0	16.1	20.8	37.0	
HFBI	5.7	6.3	11.5	17.1	11.0	10.6	41.0	
CTCI	5.4	6.1	13.9	24.2	36.6	46.8	38.0	
HCCA	5.5	6.4	13.2	19.6	21.6	26.2	33.0	
IVCN	5.0	4.2	9.7	15.4	18.0	22.0	33.0	
FSSE	4.8	6.7	12.7	18.4	22.4	28.0	49.0	
DSHP	6.2	4.6	6.4	8.6	8.9	11.2	22.0	
LGEM	6.6	4.3	4.3	7.0	7.1	7.0	28.0	
GDMI	4.9	5.0	5.4	7.1	8.9	7.4	2.0	
GFSI	3.8	3.4	4.1	8.6	14.3	21.0	44.0	
EMXI	4.9	5.5	8.1	11.9	12.3	10.8	8.0	
Forecasts	12	12	10	9	7	5	1	



Table 6. Watch and warning summary for Tropical Storm Jerry, 7–11 October.

Date/Time (UTC)	Action	Location		
07 / 2100	Tropical Storm Watch issued	Barbuda and Anguilla		
07 / 2100	Tropical Storm Watch issued	St. Barthelemy and St. Martin		
07 / 2100	Tropical Storm Watch issued	Sint Maarten		
08 / 0000	Tropical Storm Watch issued	Antigua, St. Kitts, Nevis, Montserrat		
08 / 0300	Tropical Storm Watch issued	Guadeloupe and adjacent islands		
08 / 0300	Tropical Storm Watch issued	Saba and St. Eustatius		
09 / 1500	Tropical Storm Warning issued	Barbuda		
09 / 1800	Tropical Storm Warning issued	Anguilla		
09 / 1800	Tropical Storm Warning issued	St. Barthelemy and St. Martin		
09 / 1800	Tropical Storm Warning issued	Sint Maarten		
09 / 1920	Tropical Storm Warning issued	Guadeloupe and adjacent islands		
10 / 0900	Tropical Storm Warning discontinued	Barbuda and Anguilla		
10 / 0900	Tropical Storm Watch discontinued	Antigua, St. Kitts, Nevis, Montserrat		
10 / 0935	Tropical Storm Watch discontinued	Saba and St. Eustatius		
10 / 1200	Tropical Storm Warning discontinued	Guadeloupe and adjacent islands		
10 / 1500	Tropical Storm Warning discontinued	Sint Maarten		
10 / 1500	Tropical Storm Warning discontinued	St. Barthelemy and St. Martin		



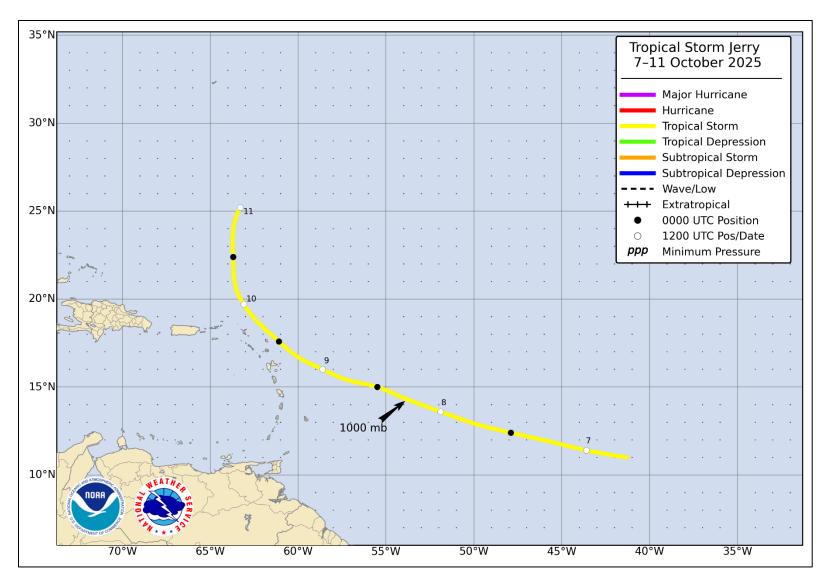
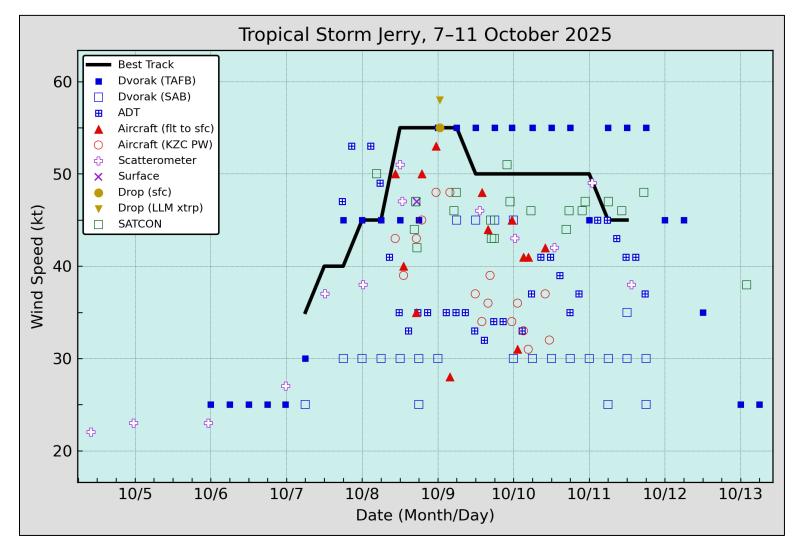


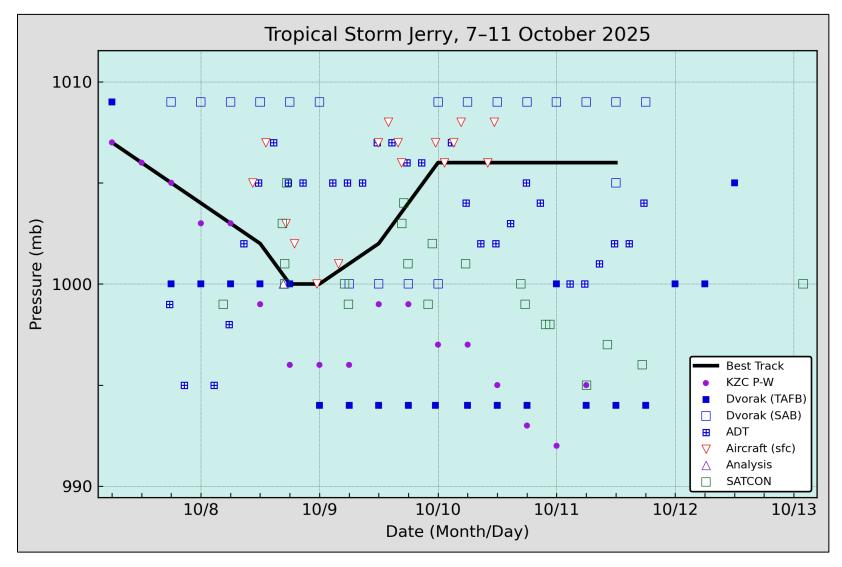
Figure 1. Best track positions for Tropical Storm Jerry, 7–11 October.





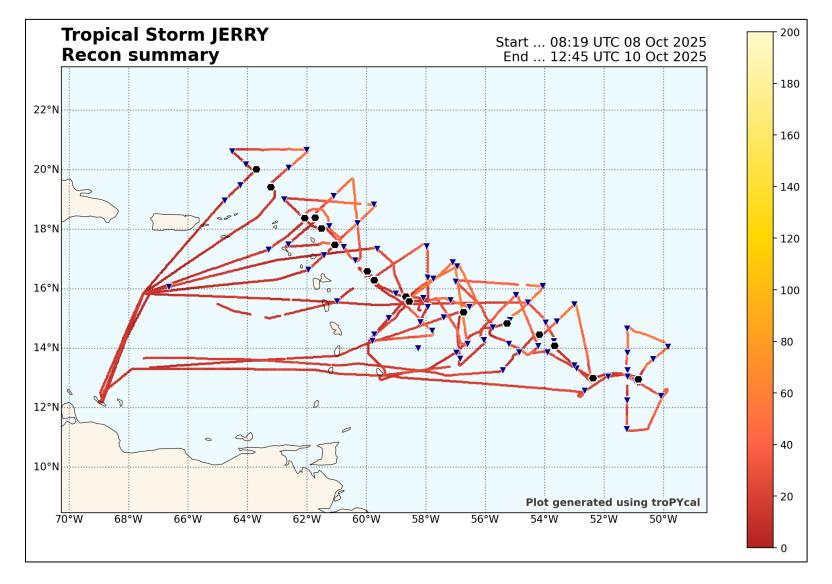
Selected wind observations and best track maximum sustained surface wind speed curve for Tropical Storm Jerry, 7–11 October. Aircraft observations have been adjusted for elevation using 80% adjustment factor for observations from 850 mb. Dropwindsonde observations include actual 10 m winds (sfc), as well as surface estimates derived from the mean wind over the lowest 150 m of the wind sounding (LLM). Advanced Dvorak Technique estimates represent the Current Intensity at the nominal observation time. SATCON intensity estimates are from the Cooperative Institute for Meteorological Satellite Studies. Dashed vertical lines correspond to 0000 UTC.





Selected pressure observations and best track minimum central pressure curve for Tropical Storm Jerry, 7–11 October. Advanced Dvorak Technique estimates represent the Current Intensity at the nominal observation time. SATCON intensity estimates are from the Cooperative Institute for Meteorological Satellite Studies. KZC P-W refers to pressure estimates derived using the Knaff-Zehr-Courtney pressure-wind relationship. Dashed vertical lines correspond to 0000 UTC.





Air Force Reserve and NOAA Hurricane Hunter aircraft flight tracks (red) from reconnaissance missions into Jerry. The black markers denote center fixes, and the blue triangles indicate dropsonde locations. The color coding of the flight tracks is based on the observed flight-level wind speed with the color legend to the right of the map representing the color associated with the various wind speeds in knots.



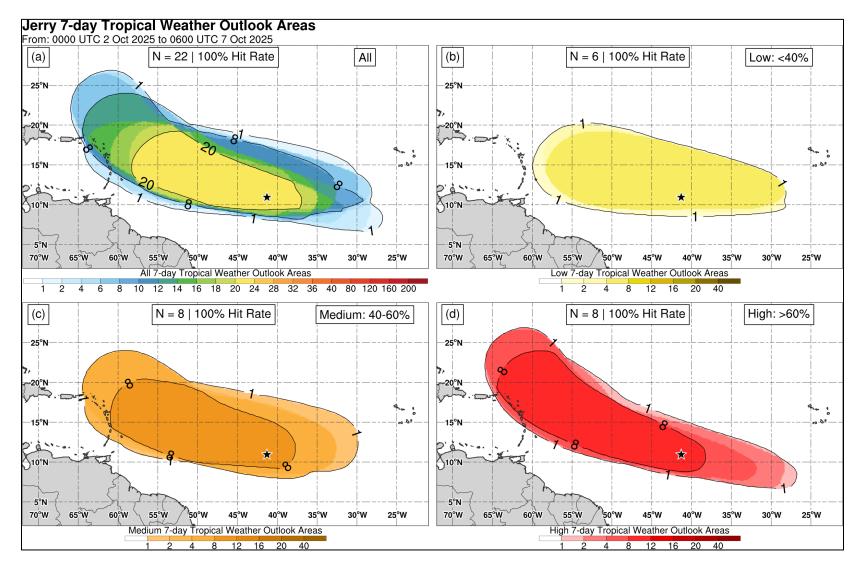


Figure 5. Composites of 7-day tropical cyclone genesis areas depicted in NHC's Tropical Weather Outlooks prior to the formation of Jerry for (a) all probabilistic genesis categories, (b) the low (<40%) category, (c) medium (40–60%) category, and (d) high (>60%) category. The location of genesis is indicated by the black star.



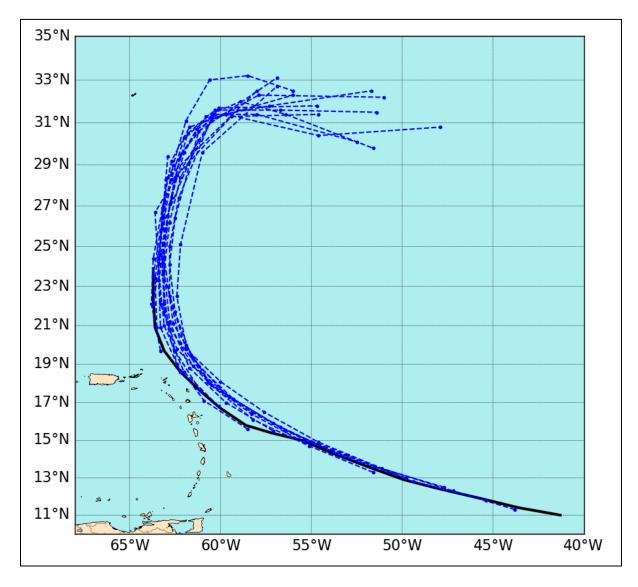


Figure 6. Official track forecasts (dashed lines, with 0, 12, 24, 36, 48, 60, 72, 96, and 120 h positions indicated) for Tropical Storm Jerry, 7–11 October. The best track is given by the black line.



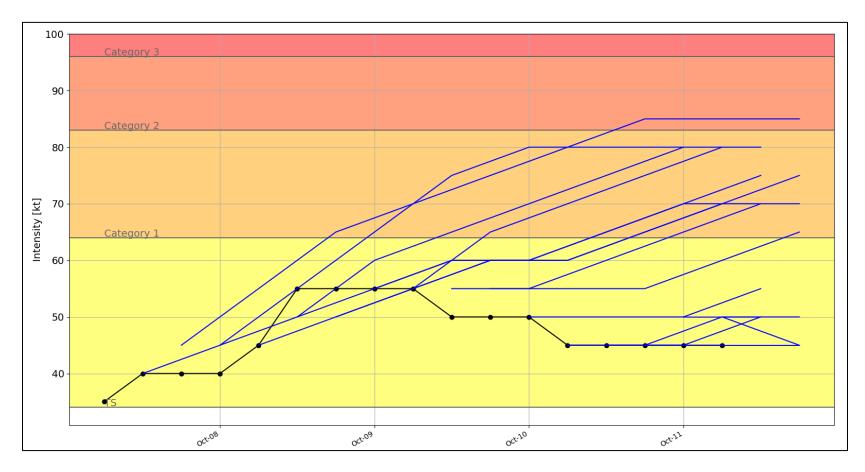


Figure 7. Official intensity forecasts (blue lines) for Tropical Storm Jerry, 7–11 October. The best track is given by the black line with positions given at 6 h interval.