NATIONAL HURRICANE CENTER TROPICAL CYCLONE REPORT[1]

TROPICAL STORM ANDREA

(AL012025)

23–24 June 2025

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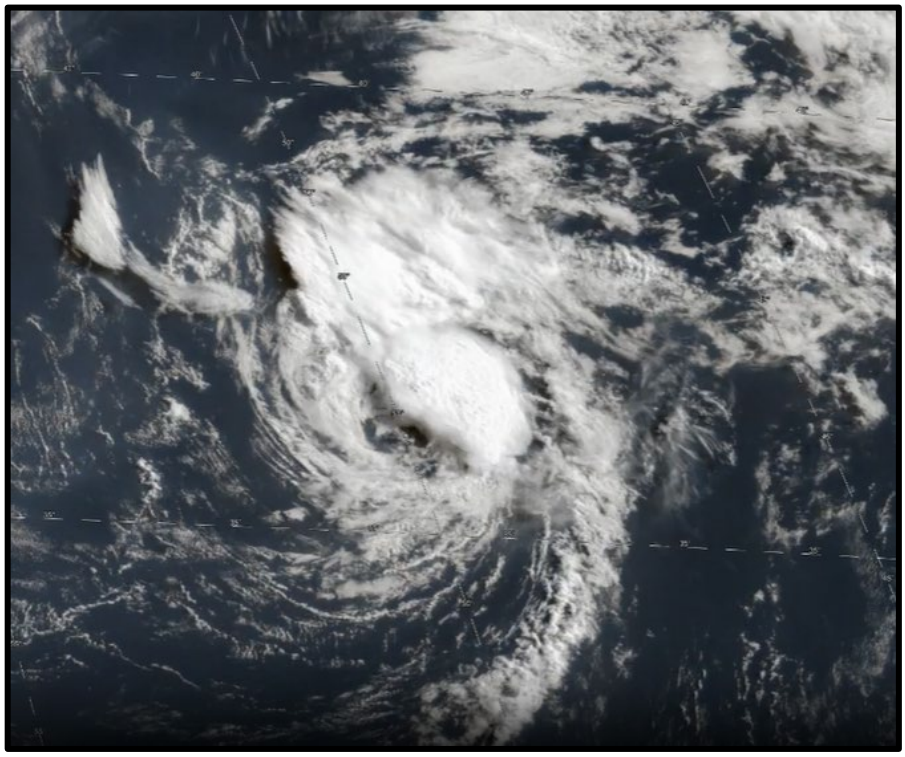
National Hurricane Center
12 August 2025



GOES-19 GEOCOLOR SATELLITE IMAGE OF TROPICAL STORM ANDREA AT 1200 UTC 24 JUNE. IMAGE COURTESY OF NOAA/NESDIS/STAR.

Andrea was a short-lived tropical storm over the central Atlantic that did not affect land.

[1] This is an abbreviated Tropical Cyclone Report since there were no coastal watches or warnings issued and no direct fatalities reported in association with Andrea.

Tropical Storm Andrea

23–24 JUNE 2025

BEST TRACK

The "best track[2]" positions and intensities for Tropical Storm Andrea are listed in Table 1. The best track chart of Andrea's path is given in Fig. 1, with the wind and pressure histories along with available observations[3] shown in Figs. 2 and 3, respectively.

There were no land-based or ship reports of winds of tropical storm force associated with Andrea.

Origin

Andrea had non-tropical origins. An area of low pressure developed along a decaying stationary front around 0000 UTC 22 June about 400 n mi east-southeast of Bermuda. Deep convection gradually organized near the well-defined center of circulation, and the system became a tropical depression by 0600 UTC 23 June when it was located about 425 n mi east of Bermuda.

Peak Intensity and Minimum Pressure

Andrea's peak intensity of 35 kt from 1200 UTC 23 June to 1200 UTC 24 June was supported by several ASCAT passes during that time period that all showed maximum winds of around 35 kt.

The estimated minimum central pressure of 1014 mb is based on the Knaff-Zehr-Courtney pressure-wind relationship. It should be noted that Andrea was a small system surrounded by high environmental pressure, which resulted in its relatively high central pressure.

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[2] 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.

[3] Observations 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. 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 Andrea.

CASUALTY AND DAMAGE STATISTICS

There were no reports of damage or casualties associated with Andrea.

FORECAST AND WARNING VERIFICATION

Table 2 provides the number of hours in advance of formation with the first NHC Tropical Weather Outlook (TWO) forecast in each likelihood category. Figure 2 shows composites of 7-day TWO genesis areas for each category prior to the formation of Andrea. The small size of the system, its limited time over warm water, low to moderate wind shear conditions, and its non-tropical origins made predicting the genesis of Andrea challenging. It should be noted that the post-analyzed best track shows genesis 30 h sooner than what was done in real time. A review of satellite data suggests that the system developed and maintained just enough organized deep convection to justify the earlier formation time.

No verification statistics are shown for Andrea since there were no verifying official forecasts.

There were no coastal watches or warnings issued for Andrea.

Table 1. Best track for Tropical Storm Andrea, 23–24 June 2025.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
22 / 0000	30.0	57.6	1017	20	low
22 / 0600	30.5	57.6	1017	20	"
22 / 1200	31.0	57.6	1017	25	"
22 / 1800	31.5	57.4	1017	25	"
23 / 0000	32.0	57.0	1016	30	"
23 / 0600	32.6	56.3	1015	30	tropical depression
23 / 1200	33.2	55.2	1014	35	tropical storm
23 / 1800	33.9	54.2	1014	35	"
24 / 0000	34.6	53.0	1014	35	"
24 / 0600	35.4	51.5	1014	35	"
24 / 1200	36.3	49.8	1014	35	"
24 / 1800	37.3	48.2	1014	35	low
25 / 0000	38.2	46.6	1015	30	"
25 / 0600	38.8	44.7	1015	30	"
25 / 1200	39.3	42.2	1015	30	"
25 / 1800					dissipated
23 / 1200	33.2	55.2	1014	35	maximum wind and minimum pressure

Table 2. 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%)	18	18
Medium (40%-60%)	6	6
High (>60%)	0	0

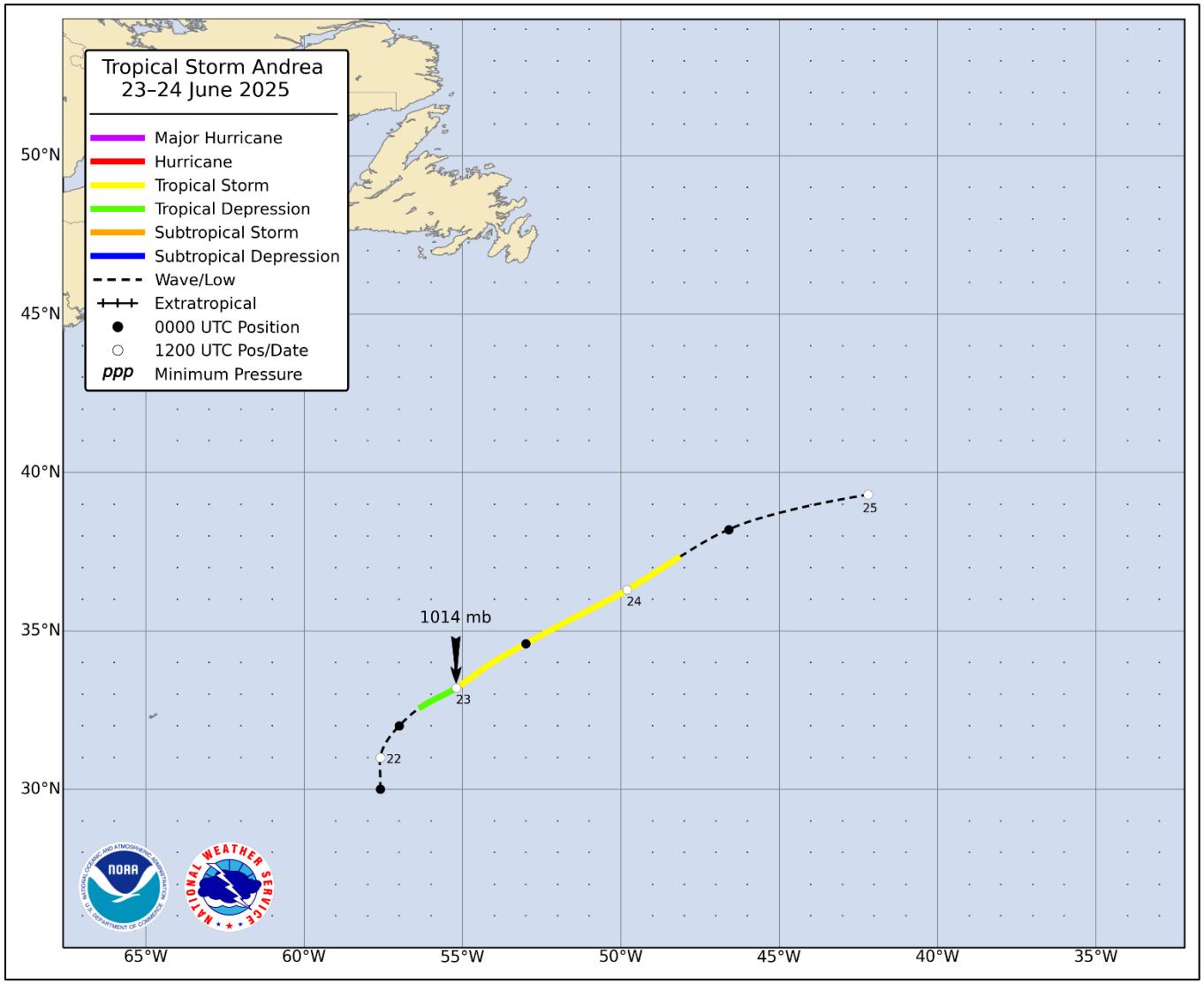

Figure 1. Best track positions for Tropical Storm Andrea, 23–24 June 2025.

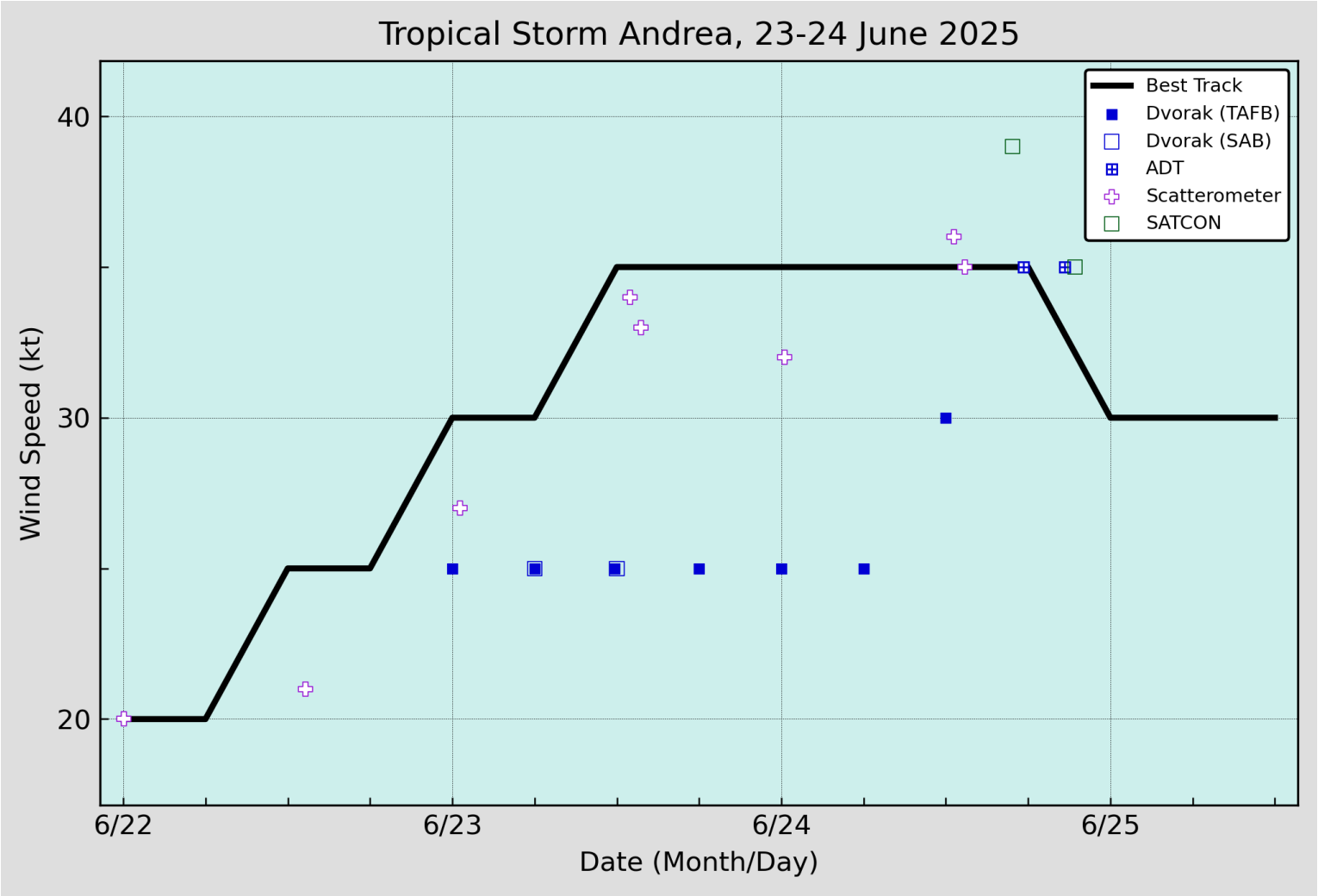

Figure 2. Selected wind observations and best track maximum sustained surface wind speed curve for Tropical Storm Andrea, 23–24 June 2025. Advanced Dvorak Technique estimates represent the Current Intensity at the nominal observation time. SATCON intensity estimates are from the Cooperative Institute for Meteorological Satellite Studies. Dashed vertical lines correspond to 0000 UTC.

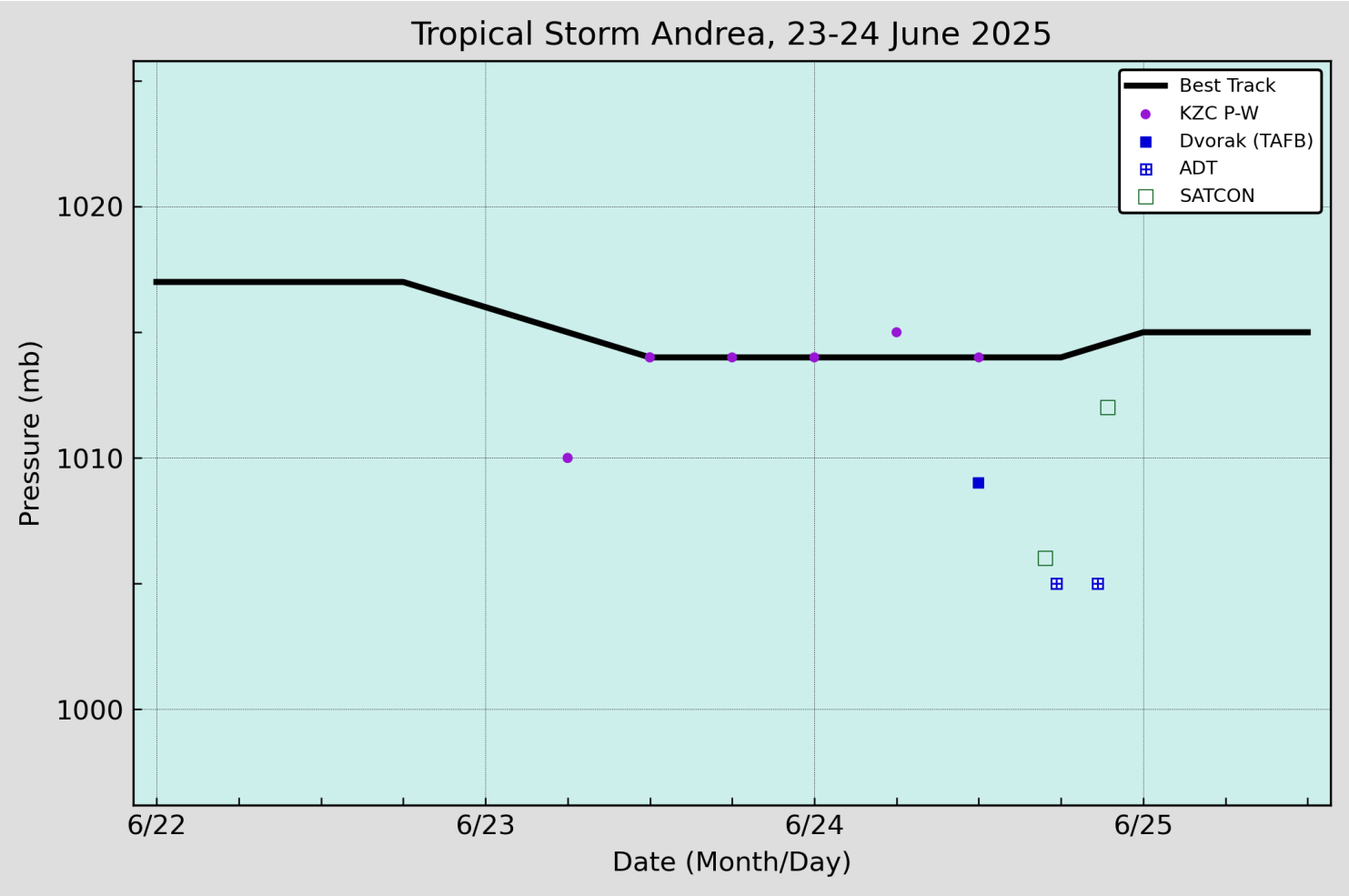

Figure 3. Selected pressure observations and best track minimum central pressure curve for Tropical Storm Andrea, 23–24 June 2025. Advanced Dvorak Technique estimates represent the Current Intensity at the nominal observation time. SATCON intensity estimates are from the Cooperative Institute for Meteorological 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.

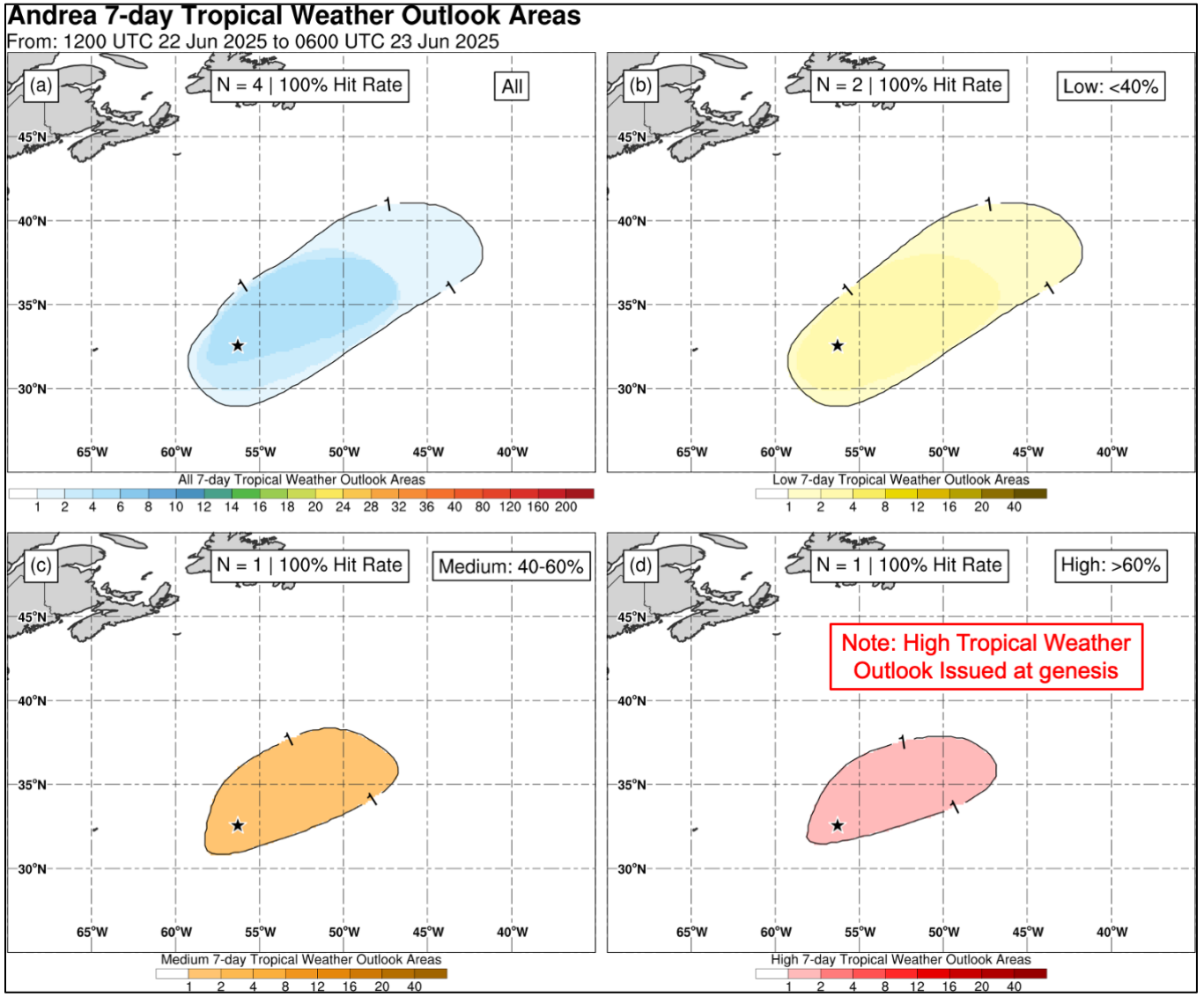

Figure 4. Composites of 7-day tropical cyclone genesis areas depicted in NHC's Tropical Weather Outlooks prior to the formation of Andrea for (a) all probabilistic genesis categories, (b) the low (<40%) category, (c) medium (40–60%) category, and (d) high (>60%) category. The location of genesis is indicated by the black star.