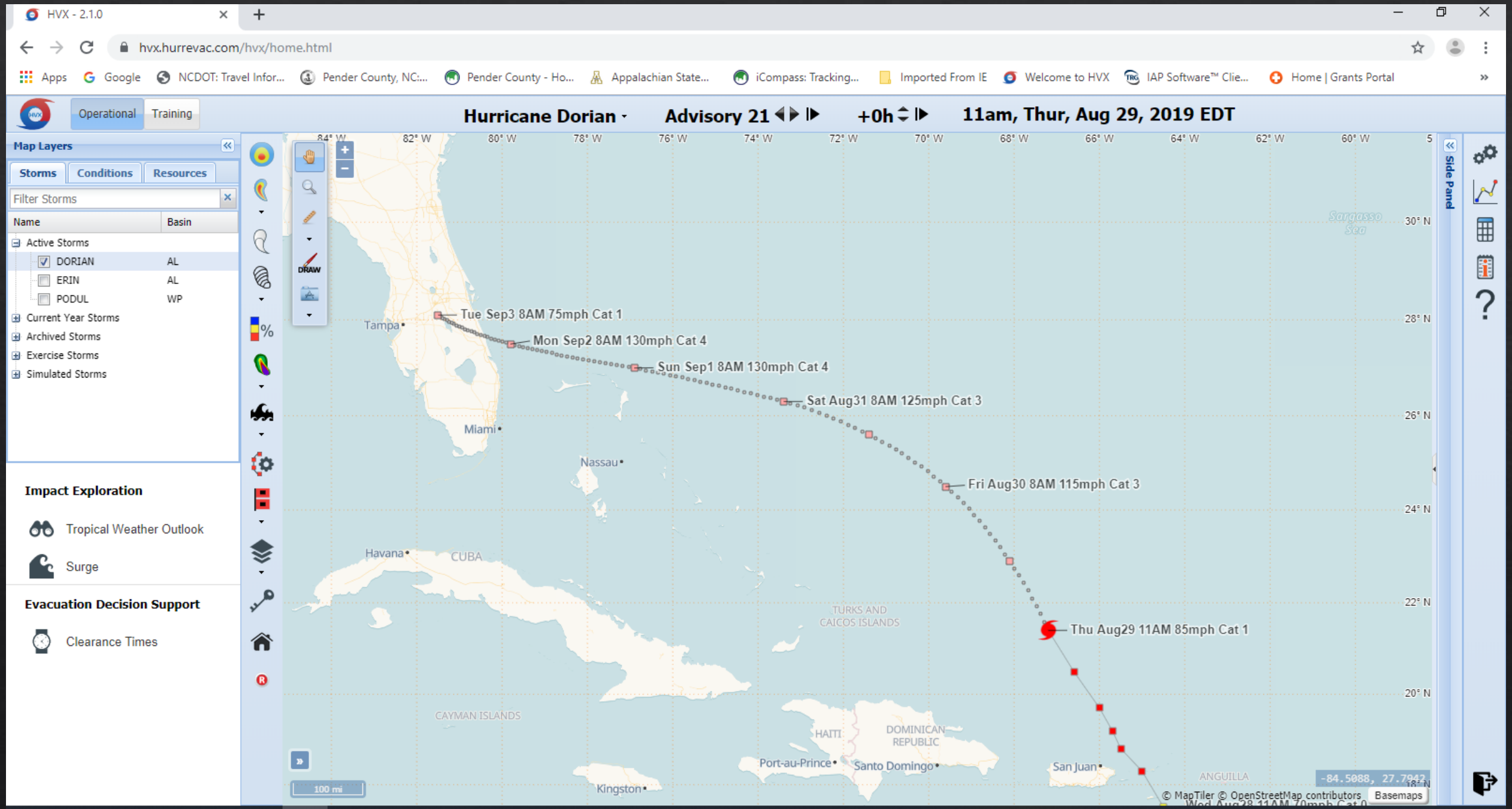
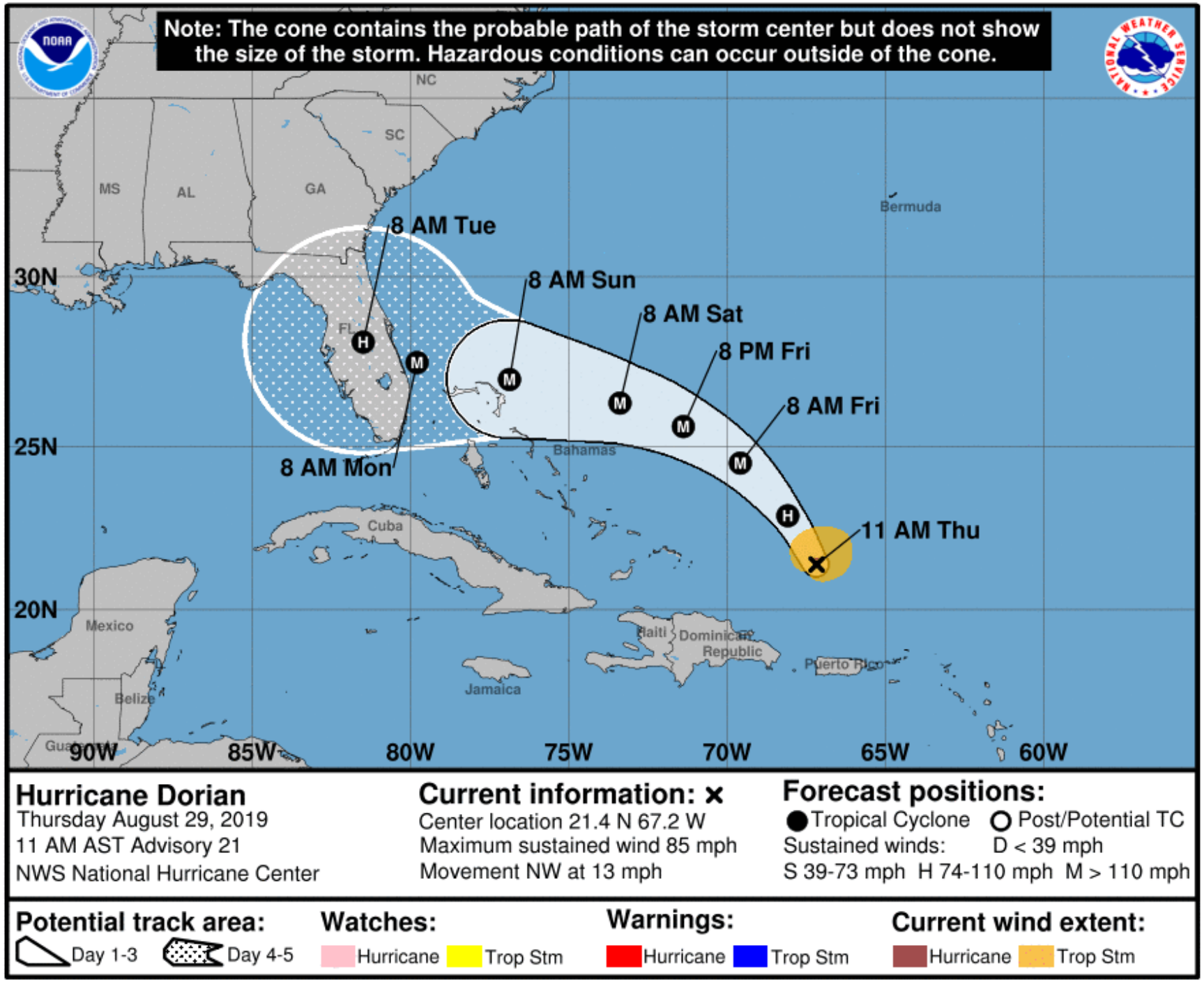
Pender County 2019 Tropical Update

August 27,2019

Hurricane Dorian

The New Hurevac HVX




Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.
NC
SC
MS
AL
GA
FL
Bermuda
Bahamas
Cuba
Haiti
Dominican Republic
Puerto Rico
Jamaica
Mexico
Belize
8 AM Tue
8 AM Sun
8 AM Sat
8 PM Fri
8 AM Fri
8 AM Mon
11 AM Thu
30N
25N
20N
90W
85W
80W
75W
70W
65W
60W
Hurricane Dorian
Thursday August 29, 2019
11 AM AST Advisory 21
NWS National Hurricane Center
Current information: ×
Center location 21.4 N 67.2 W
Maximum sustained wind 85 mph
Movement NW at 13 mph
Forecast positions:
Tropical Cyclone
Post/Potential TC
Sustained winds:
D < 39 mph
S 39-73 mph H 74-110 mph M > 110 mph
Potential track area:
Day 1-3
Day 4-5
Watches:
Hurricane
Trop Stm
Warnings:
Hurricane
Trop Stm
Current wind extent:
Hurricane
Trop Stm

Hurricane Dorian Discussion Number 21
NWS National Hurricane Center Miami FL AL052019
1100 AM AST Thu Aug 29 2019

The small eye of Dorian has appeared intermittently in infrared satellite imagery this morning. Recent reports from a NOAA P-3 aircraft indicate that there is now a double eyewall structure, with a small inner eye only 5 n mi in diameter and a larger 25-n mi diameter outer eyewall. The minimum pressure has fallen to around 986 mb. The concentric eyewall structure is likely why the aircraft has not found any stronger winds yet in the storm, despite the decrease in central pressure. The initial intensity remains 75 kt for this advisory.

Continued

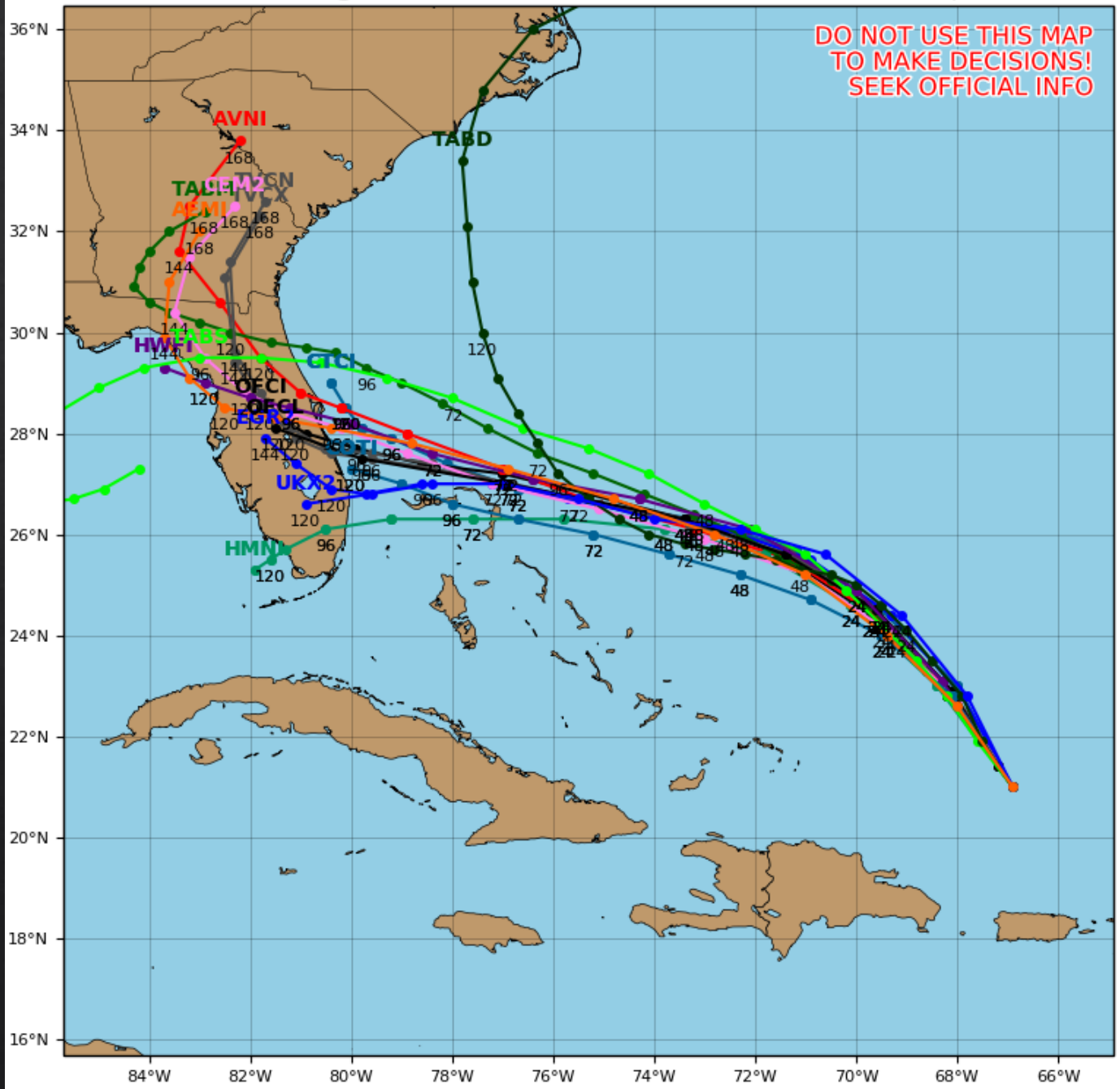
Aircraft and satellite fixes show that Dorian is moving northwestward, or 325 degrees at 11 kt. Dorian is forecast to continue moving northwestward during the next 24-36 hours between an upper-level low that will be dropping southwestward across the Florida Straits and a mid-level ridge to the northeast of the hurricane. After that time, a ridge is forecast to build to the north of Dorian, which should cause the track to bend back toward the west-northwest. The track guidance becomes more divergent beyond 72 hours, primarily due to model differences in the strength of the ridge and whether a weakness develops in the ridge late in the period. The new NHC track forecast is virtually unchanged from the previous advisory, and lies very close to the multi-model consensus. It should be noted that the ECMWF, UKMET, and HFIP corrected consensus models remain south of the official forecast. The spread of the deterministic models and the various ensemble guidance is still considerable at days 4 and 5, and it is too soon to specify where along the Florida east coast the greatest impacts could occur.

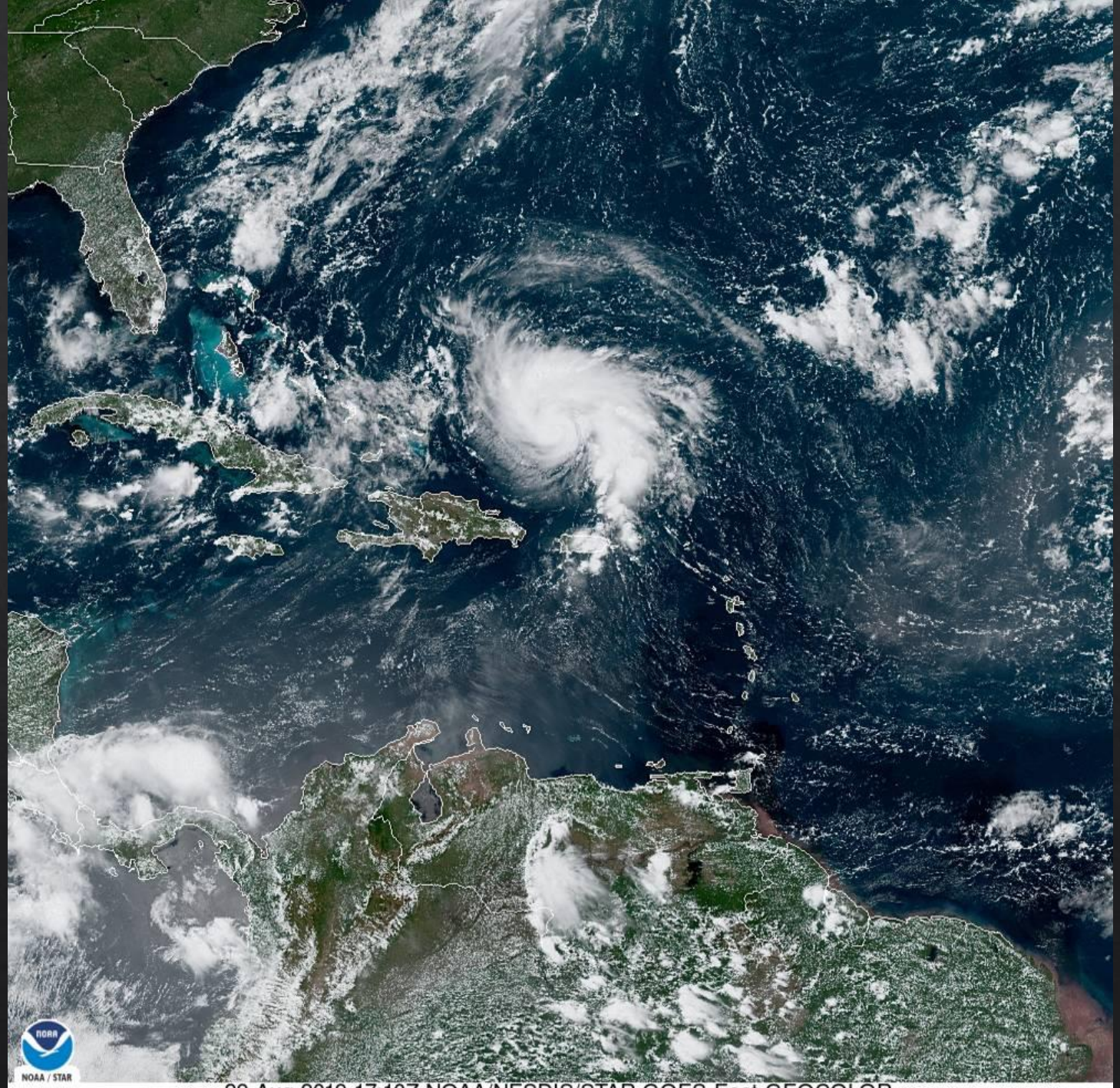
Environmental conditions consisting of warm waters and low vertical wind shear along the path of the hurricane should allow for at least steady intensification during the next 2 to 3 days. With the small inner core and favorable conditions, rapid strengthening also remains a possibility, although not likely in the very short term given the concentric eyewall structure. The updated NHC intensity forecast calls for Dorian to become a major hurricane on Friday, and shows a slightly higher peak intensity than the previous forecast. The official forecast is at the upper end of the guidance, in best agreement with the HCCA and HWRF models.

Hurricane DORIAN Model Track Guidance

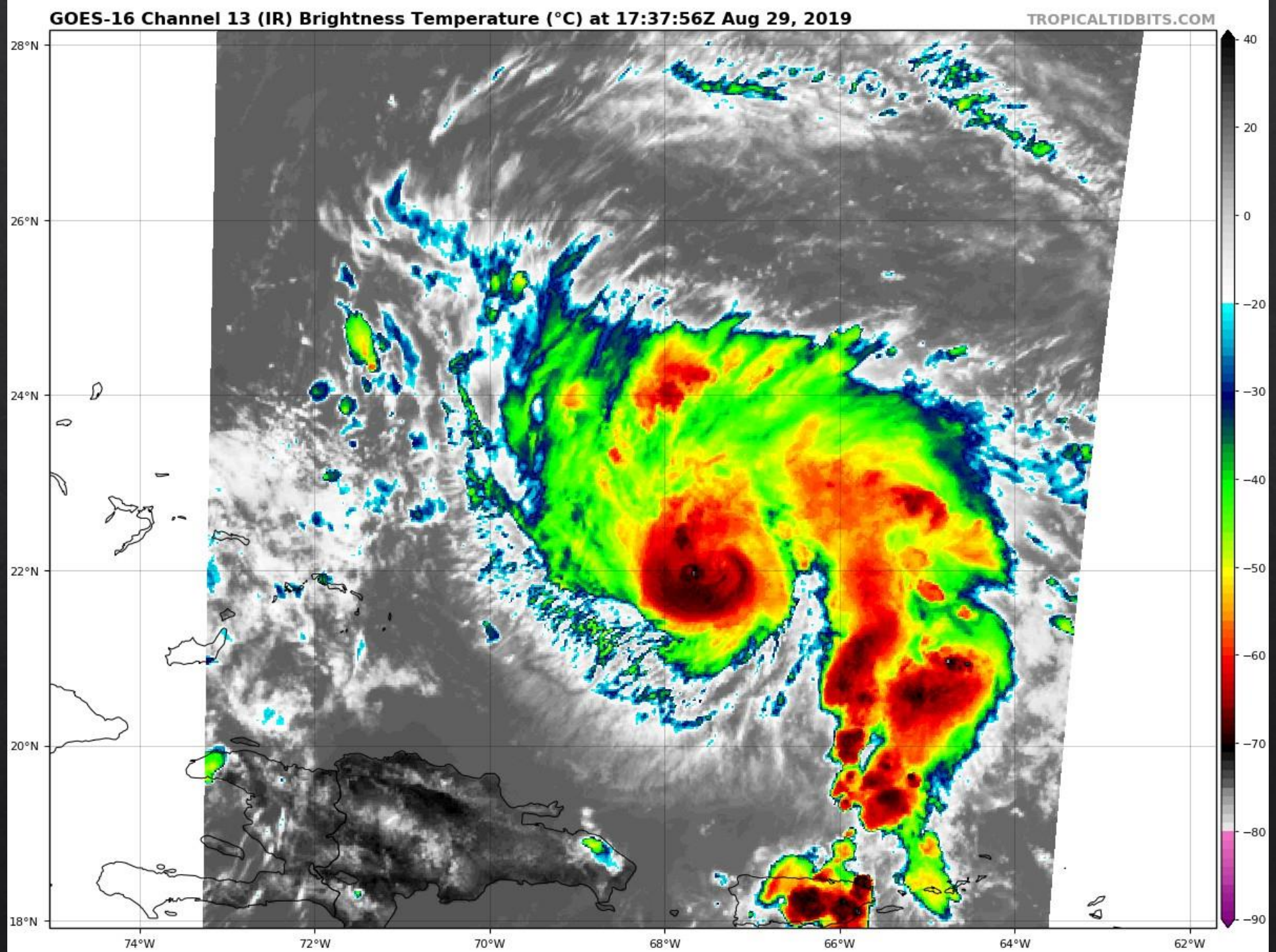
Initialized at 12z Aug 29 2019

Levi Cowan - tropicaltidbits.com





29 Aug 2019 17:10Z NOAA/NESDIS/STAR GOES-East GEOCOLOR


GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 17:37:56Z Aug 29, 2019
TROPICALTIDBITS.COM
28°N
26°N
24°N
22°N
20°N
18°N
74°W
72°W
70°W
68°W
66°W
64°W
62°W
40
20
0
−20
−30
−40
−50
−60
−70
−80
−90