

TROPICAL UPDATE 11 AM EDT Friday, July 6, 2018 Hurricane Beryl, Invest 96L (80%)

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office or visit the National Hurricane Center website at www.nhc.noaa.gov.

Atlantic Basin Satellite Image







Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





Steering Currents

0

KTS

100

20

15

10

Invest 96L is moving around the southwest edge of a high, but will be moving into an area of weak steering flow this weekend before merging with a front. Beryl is in deep east-to-west flow, and will continue on its westward or west-northwestward track for the next several days.

CIMSS ENV STEERING PRODUCT: 300-850 HPA LAYER (FOR TO MSLP RANGE: 950-969 HPA) 0900 UTC 06JUL18

Be

Current Water Vapor



96L has some dry air to its northeast, but it is in a relatively favorable location for further development. Beryl is moving into some significantly drier air, which will help to weaken it this weekend.

Current Wind Shear (shaded) and Shear Tendency (lines)

96L will be moving into an area of lower shear over the next day or two, which could aid in further development. Beryl is currently in a low-shear environment, which has aided in its intensification so far. However, it will be moving into a zone of higher wind shear this weekend, which will aid in its eventual degeneration.

Current Shear KTS -5 100 70à 0. s 30 20 Ber 10

Shear Tendency (KTS) Over Past 24 Hours

EAST 24 HOUR WIND SHEAR TENDENCY PRODU

0900 UTC

Increasing

06JUL18

Decreasing

UW-CIMSS

MeIDAS

1

Water Temperatures



Current Satellite – Hurricane Beryl



Beryl became the first hurricane of the 2018 Atlantic Hurricane Season at 5 AM EDT today. Maximum sustained winds are near 80 mph. Beryl is a very tiny hurricane, which can lead to rapid fluctuations in intensity, both up and down. Thus, the intensity forecast is more uncertain than normal. However, weakening is forecast once Beryl reaches the Caribbean, and it could dissipate when it reaches Hispaniola.



Hurricane BERYL Model Track Guidance

Initialized at 12z Jul 06 2018

TABM

168

168

AVNI

168

TAD

35°N

30°N

25°N

20°N

Levi Cowan - tropicaltidbits.com

DO NOT USE THIS MAP TO MAKE DECISIONS! SEEK OFFICIAL INFO

Beryl will pick up speed over the next couple days as it moves west-northwestward. However, these do not show the forecast degeneration into a strong open wave by Monday.



Hurricane BERYL Model Intensity Guidance

Initialized at 12z Jul 06 2018 Levi Cowan - tropicaltidbits.com Cat 2 85 -DSHP 75 65 ΑΕΜΙ Wind Speed (kt) EGR2 JKX2 55 CD5 IVCN 45 TS 35 VFI 25 15 60 108 120 132 144 156 168 180 192 204 216 228 240 12 24 36 48 72 84 96 0 Forecast Hour

Most forecast models show Beryl weakening into this weekend as it loses its organization. The statistical models, which do not account for atmospheric conditions, keep it as a hurricane. However, the dynamical models, which account for wind shear and dry air, weaken Beryl. Winds may still stay at tropical storm force even after degenerating into an open wave.

Saharan Air Layer



Saharan dust is looming on the north side of Beryl, but it is fending off the dust for now. As Beryl moves west-northwestward, it will move into an area with more dust, which will help weaken the hurricane this weekend.

Wind Shear Forecast – Monday AM



Mid-Level Moisture Forecast – Sun. PM

GFS MSLP (mb), 700-400 hPa Relative Humidity (%), and 700-400 hPa Wind (kt) Init: 06z Jul 06 2018 Forecast Hour: [78] valid at 12z Mon, Jul 09 2018

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Current Satellite – Invest 96L



Compared to yesterday, Invest 96L has become better organized and has more showers and thunderstorms near the center. It is currently in a favorable environment for further development, and a tropical depression could form at any time over the next couple days. It will stall near the North Carolina coast this weekend before merging with a front next week.









Invest 96L Model Intensity Guidance Initialized at 12z Jul 06 2018

Levi Cowan - tropicaltidbits.com



If Invest 96L develops, most models predict that it will stay as a tropical storm. As it merges with a front and loses its tropical characteristics, the winds could increase as it moves off to the northeast.

Summary

- Hurricane Beryl is located about 1,000 miles east of the Lesser Antilles, moving west at 15 mph.
- Beryl is currently a Category 1 Hurricane with maximum sustained winds of 80 mph.
- Additional strengthening is forecast for the next 24-36 hours, and Beryl could become a Category 2 Hurricane later today or Saturday.
- Beryl may maintain hurricane intensity as it approaches the Lesser Antilles, but it will begin weakening shortly after reaching the Caribbean.
- The forecast has been updated to show that Beryl may not degenerate into an open wave until it passes near or over Hispaniola on Tuesday.
- Heavy rains and gusty winds are possible for parts of Puerto Rico and Hispaniola Monday and Tuesday. However, exactly how much rain and wind greatly depend on track and future intensity.
- Beryl is a very small hurricane, and any impacts to Caribbean islands would greatly depend on its exact track
- Invest 96L off the coast of North Carolina could become a tropical depression at any time over the next couple of days.
- 96L will likely meander near the coast of North Carolina through the weekend before being whisked away by a front.
- If 96L develops, it will likely only reach tropical storm intensity before it merges with a front. However, there is still some uncertainty in that forecast.

Florida Outlook:

• Some moisture from Beryl may make it to South Florida by Thursday or Friday next week, slightly enhancing the afternoon showers and thunderstorms. However, uncertainty in this scenario is still very high and will need to be monitored.

Another briefing packet will be issued tomorrow morning with the next update from the National Hurricane Center. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>



TROPICAL UPDATE

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