Weather discussion email list

From:	Weather discussion email list
Sent:	Monday, September 2, 2019 9:57 AM
To:	MAP@LISTSERV.ALBANY.EDU
Subject:	Re: Forecast uncertainty in TC Dorian's turn to the north

Lance,

The southern extent of the eastern Great Lake to West Virginia trough has shown a very weak shear-like axis press very slowly south and SE from Central NC to northern Louisiana as per https://weather.cod.edu/satrad/?parms=continental-conus-08-24-1-100-1&checked=map&colorbar=undefined . Until this southern extent gets closer and it does not look like it will till tonight or Tuesday morning, a very slow drift (west) is likely with Dorian. Only saving grace for the FL East Coast compared to what has been going on in the northern Bahamas is its slow movement, slow enough to wait for the effects of the southern extent of the upper trough. Others may have a different take on this and I suggest looking at CIRA's Advected Layered PW loop at: http://cat.cira.colostate.edu/sport/layered/advected/LPW_alt.htm for any more ideas.
Just my take,

Sheldon Kusselson
Retired NOAA/NESDIS

On Sun, Sep 1, 2019 at 1:49 PM Dan Lindsey - NOAA Federal <0000006a2d176238-dmarc-request@listserv.albany.edu> wrote:

> MAP,
>
> Here's GOES-16's latest closeup - this starts with 30-sec imagery then switches to 1-min imagery. It's a VIS/IR "sandwich".
>
> http://rammb.cira.colostate.edu/templates/loop_directory.asp?data_folder=dev/lindsey/loops/1sep19_sandwich&loop_speed_ms=40
>
> Unfortunately I fear this is going to be devastating for the Bahamas, particularly the town of Marsh Harbour, population over 6000.
>
> Dan
>
> On Sun, Sep 1, 2019 at 11:30 AM Neil Stuart - NOAA Federal <00000087a1803eea-dmarc-request@listserv.albany.edu> wrote:
>
> > Lance and everyone,
> >
> > The storm is making landfall on Great Abaco now (around 1 PM EDT) and attached is a small GOES-16 Mesoscale Sector Visible Satellite Loop with Earth Networks lightning data overlayed. It is 5 minute lightning data with 1 minute update. I don't even want to imagine the destruction going on there right now. The in-cloud and cloud-to-ground lightning has been around the eyewall for many hours.
> >
> > Neil

On Sun, Sep 1, 2019 at 10:17 AM Bosart, Lance F <lbosart@albany.edu> wrote:

> Hi all,
>
> A speculative post…..
>
> A simple subjective d(prog)/dt analysis of the 500-hPa geopotential heights, vorticity, and vertical motion from Alicia Bentley's website of the deterministic GFS forecasts verifying 0600 and 1200 UTC 2 Sep 2019 suggests that uncertainty on the forecast northward turn of TC Dorian *may* be related to uncertainty of the forecast southern extension of a trough across the MidAtlantic region (see the below links).
>
> A few takeaways….
>
> 1. The GFS didn't really "see" Dorian until the 6–7 day forecasts when the storm developed in the extreme northeastern Gulf of Mexico.
>
> 2. The GFS correctly shifted Dorian to east of Florida in the 5–6 day forecasts.
>
> 3. The GFS forecast Dorian to turn to the north farther east of Florida in the 3–4 day forecasts in conjunction with a SSW extension of the southern portion of a MidAtlantic trough.
>
> 4. Need to understand to what extent forecast uncertainty in the southern extension of the aforementioned MidAtlantic trough is related to forecast uncertainty with the western CONUS ridge and weak disturbances moving around the northern periphery of this ridge across Canada.
>
> Forecasts verifying 0600 UTC 2 Sep 2019:
> http://www.atmos.albany.edu/student/abentley/realtime/dprogdt.php?domain=northamer&variable=rel_vort
>
> Forecasts verifying 1200 UTC 2 Sep 2019:
> http://www.atmos.albany.edu/student/abentley/realtime/dprogdt.php?domain=northamer&variable=rel_vort
>
> Thoughts?
>
> Lance

--
Neil A. Stuart, Meteorologist
National Weather Service

Albany, NY (weather.gov/aly)
https://www.facebook.com/NWSAlbany
https://twitter.com/NWSAlbany
Ask me how to be a Weather Ready Nation Ambassador

--
Daniel T. Lindsey, Ph.D.
Research Meteorologist
NOAA/NESDIS Senior Scientific Adviser for GOES-R
Fort Collins, CO 80523
970-491-8773
http://rammb.cira.colostate.edu/resources/personnel/lindsey_dan.asp

---

To unsubscribe from the MAP list, click the following link and send the email generated:
MAP-SIGNOFF-REQUEST@LISTSERV.ALBANY.EDU

To unsubscribe from the MAP list, click the following link and send the email generated:
MAP-SIGNOFF-REQUEST@LISTSERV.ALBANY.EDU