Map,

Upon verification, a sub-930 hPa MSLP in the North Pacific is actually a rare event compared to the North Atlantic as seen in a few long-term, reanalysis based climatology studies. October 26/27, 1977 and October 29, 1989 (ET TY Forrest) are two examples that come to mind immediately.

Using the new JRA-55 reanalysis (1958-2013), I simply plotted up the lowest MSLP in the basin for every 6-hour period from 1958-2013. I've attached the plots for NATL, NPAC, and Southern Hemisphere. It's easy to see the extreme outliers dangling down from the rest of the population. Not a surprise that the S Hemi is littered with examples of sub-930 and sub-920 hPa lows due to lower background environment pressure.

In my experience, the MERRA reanalysis runs "hot" with lower surface pressures with extreme extratropical cyclones while the NCEP CFSR, ERA-Interim and JRA-55 are more conservative.

Recent NWP guidance suggests a sub-920 hPa low in the Bering Sea. I'd hesitate to compare the reanalysis products at T359 or T382 to ECMWF T1279 or GFS T1534 but I'd still get excited about a 918 hPa analysis come Saturday. Helps to have a 200-knot jet stream with its right-rear to a Typhoon.

18z GFS (T574 surface pressure): 918 hPa
18z GFS (T1534 0.25° grid): 917 hPa
12z ECMWF (T1279 0.125° grid): 916 hPa.

Cheers,

RYAN

p.s. if you would like courtesy academic access to the full-resolution ECMWF / EPS and parallel GFS products on my (paywalled) maps website, please feel free to send along a separate note.

From: Weather discussion email list <MAP@listserv.albany.edu> on behalf of David Roth - NOAA Federal <david.roth@NOAA.GOV>
Sent: Monday, November 3, 2014 12:05 PM
To: MAP@listserv.albany.edu
Subject: Re: Forecast ET of STY Nuri and explosive reintensification as an EC

I'm wondering if this another case of guidance overdeepening of an extratropical cyclone 4+ days into the future. If you recall, there were GFS and ECMWF model runs 84+ hours out showing central pressures of ~919 hPa at landfall for Sandy a couple years ago. 946 hPa verified. If the guidance can remain consistent with their depth for another few days, it would be a surprise. :)

The system that came through the Carolinas the other day was forecast to cross through there with H5 heights of <534 decameters on occasional GFS and EC runs about 84 hours out into the future. I heard what verfied was in the low 540s.

DR

On Mon, Nov 3, 2014 at 7:58 AM, Bosart, Lance F <lbosart@albany.edu> wrote:

Hi all,

The deterministic GFS has consistent and insistent that STY Nuri will undergo ET and explosively reintensify as an EC. Latest 0600 UTC 3 Nov 2014 GFS run deepens the EC to 919 hPa with 100+ kt westerly winds at 925 hPa south of the cyclone center in the 120 h forecast verifying 0600 UTC 8 Nov.

See: (http://www.tropicaltidbits.com/analysis/models/gfs/2014110306/gfs_mslp_uv850_wpac.html) (Levi Cowan's Tropical Tidbits page)

The forecast STY Nuri-jet interaction and reconfiguration is also impressive. STY Nuri begins the ET process in the equatorward entrance region of an anticyclonically curved jet that strengthens to > 100 m/s and then deepens spectacularly in the poleward exit region of an upstream jet that develops rapidly above the surge of arctic air that arrives from the west.

See: (http://www.atmos.albany.edu/student/kgriffin/maps/mslp/mslp_npac_loop.html) (Kyle Griffin's GFS model diagnostics page)

Anyone care to speculate what, if anything, will happen downstream?

Switching gears and back to getting ready for the start of the AMS Severe Local Storms Conference in MSN…..

Lance

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

--
==========
David Mark Roth
Weather Forecaster

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: