

**Changes to tropical cyclone information boxes on the Unified Surface Analysis
NWS NCEP/HPC NHC OPC and WFO Honolulu**

Effective July 15, 2013 at 1200 UTC

Current policy and outstanding issues

The current policy with regard to the placement of tropical cyclone boxes on the Unified Surface Analysis (USA) states that the surface analysts shall wait until the release of the latest tropical cyclone advisory before transmitting the USA which is usually three hours after the time of the synoptic analysis. For example for the 1200 UTC surface analysis, the analyst would wait until the release of the 1500 UTC tropical cyclone forecast to incorporate that information and release the surface analysis. The analysts would then depict the tropical cyclone information in a text box similar to the one indicated below.

HURCN XXXX 12.6N 96.3W 1500 UTC NHC PSN MOVG 285 DEG 12 KT MAX WIND 90 KT G 105 KT

There are several outstanding issues with the current policy on labeling of tropical cyclones. They are as follows:

- The primary issue is one of safety. Users could utilize the information from the analysis rather than get the more complete and current information from the NHC forecast advisory.
- The Lat/Lon position is same as the plotted cyclone position. The information is redundant.
- Drop the **MOVG XX DEG XX KT** because the movement is given by drawing the 24 hour forecast position on the chart. An arrow is drawn from the present position to the 24 hour forecast position.
- The tropical cyclone information depicted is the status of the tropical cyclone at H + three (3) hours after synoptic and is therefore unrepresentative of the tropical cyclone at the synoptic time in terms of location and status. In addition waiting for the release of the tropical cyclone advisory information at H + 3:00 results in the USA being transmitted late.

- The tropical cyclone text box contains too much information, information which can be obtained from the latest tropical cyclone advisory. The great amount of detail within the tropical cyclone text box results in text boxes that are very large. Text boxes are often so large they obscure other synoptic scale features and key observations on the surface analysis. In the event there is a change in the tropical cyclone's intensity status between synoptic and advisory time, the text box contains an extra line of information depicting the trend (upgraded or downgraded) in the intensity.

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HURCN XXXX  
26.6N 66.3W 0900 UTC TPC PSN  
MOVG 330 DEG 7 KT  
MAX WIND 65 KT G 80 KT  
UPGRADED AT 0900 UTC
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Proposed change

To improve services to our users and to address the outstanding issues described above, the NCEP centers and WFO Honolulu propose to simplify the tropical cyclone text boxes to indicate the name of the cyclone and the maximum sustained winds and gusts valid at the synoptic time if there are intermediate advisories issued and from the previous advisory for routine advisory issuance. An example is indicated below.

```
T.S. BERYL  
MAX WIND 45 KT G 55 KT  
SEE LATEST ADVISORY
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Forecast 24-hour positions from the previous advisory will remain plotted on the analysis with the appropriate tropical cyclone (tropical storm or hurricane) symbol indicated. The forecast XX (unknown value) for central pressure will no longer be included.

Benefits of the proposed change

- Enhance safety by encouraging users to seek more detailed information found within the tropical cyclone advisories
- Tropical cyclone information is valid at synoptic time and consistent in terms of intensity and location at the synoptic time.

- Smaller text boxes reduce potential for clutter and obscuration of other synoptic features and key observations.
- Unified Surface Analysis available earlier and reduced instances of late transmission due to not having to include the H + 3:00 tropical cyclone advisory information on the map.
- Removing XX for forecast central pressure results in less confusion for our users, many whom have questioned what the XX represents.