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Technical Implementation Notice 12-13
National Weather Service Headquarters Washington DC
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From: Richard J. Vogt
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Subject: More Frequent Products from Select FAA Terminal Doppler Weather Radars during Hazardous Weather: Effective April 12, 2012

Effective April 12, 2012, at approximately 1500 Coordinated Universal Time (UTC), the NWS will begin more frequent dissemination of radar products generated by the NWS Supplemental Product Generator (SPG) from select Federal Aviation Administration (FAA) Terminal Doppler Weather Radars (TDWR) during hazardous weather. These products will be provided via the NWS Radar Product Central Data Collection Dissemination Service (RPCADS) and NOAAPort.

When certain thresholds of precipitation are met, the TDWR goes into hazardous weather mode, also known as Volume Coverage Pattern 80 (VCP 80). While the TDWR is in hazardous weather mode, the short-range lowest elevation scan is repeated every minute. In addition, most of the other short-range elevation scans and volume products are repeated every three minutes.

Beginning April 12, 2012, the lowest elevation scan reflectivity and velocity products (Table 2) and other short-range products (Table 3) will be provided on the RPCADS and NOAAPort every minute and every three minutes, respectively, from the 11 TDWRs listed in Table 1 below. Since the products (Table 2 and 3) are just more frequent issuances of currently available products, no new World Meteorological Organization (WMO) Headers, Advanced Weather Interactive Processing System (AWIPS) identifiers (IDs) or File Transfer Protocol (FTP) directories are needed.

Table 1: Participating TDWR Sites

| Associated WFO | TDWR ID | TDWR FAA Site Name |
|-----------------------|---------|-------------------------|
| ----- | ----- | ----- |
| Fort Worth, TX (KFWD) | TDAL | Dallas/Love Field (DAL) |
| Fort Worth, TX (KFWD) | TDFW | Dallas/Ft. Worth (DFW) |
| Greer, SC (KGSP) | TCLT | Charlotte, NC (CLT) |
| Wilmington, OH (KILN) | TCMH | Columbus, OH (CMH) |
| Wilmington, OH (KILN) | TCVG | Covington, KY (CVG) |
| Wilmington, OH (KILN) | TDAY | Dayton, OH (DAY) |

| | | |
|-------------------------------|------|---------------------------------|
| Chicago, IL (KLOT) | TMDW | Chicago Midway Airport (MDW) |
| Chicago, IL (KLOT) | TORD | Chicago O'Hare Airport (ORD) |
| Milwaukee/Sullivan, WI (KMKX) | TMKE | Milwaukee, WI (MKE) |
| Upton, NY (KOKX) | TEWR | Nweark, NJ (EWR) |
| Upton, NY (KOKX) | TJFK | New York City/JFK Airport (JFK) |

Table 2: Two Example TDWR Products That Will be Repeated Every Minute in Hazardous Weather Mode (VCP 80)

| WMO Header | AWIPS ID | Product ID | Product Name |
|-------------|----------|------------|-----------------------------------|
| ----- | ----- | ----- | ----- |
| SDUS55 KFWD | TR0DAL | 181 | REFLECTIVITY (Z) - BASE ELEVATION |
| SDUS55 KFWD | TV0DAL | 182 | VELOCITY (V) - BASE ELEVATION |

Table 3: Nine Example Products That Will be Repeated Every Three Minutes in Hazardous Weather Mode (VCP 80)

| WMO Header | AWIPS ID | Product ID | Product Name |
|-------------|----------|------------|------------------------------------|
| ----- | ----- | ----- | ----- |
| SDUS25 KFWD | TR2DAL | 181 | REFLECTIVITY (Z) - THIRD ELEVATION |
| SDUS75 KFWD | TV2DAL | 182 | VELOCITY (V) - THIRD ELEVATION |
| SDUS55 KFWD | NCRDAL | 37 | COMPOSITE REFLECTIVITY (CZ) |
| SDUS75 KFWD | NETDAL | 41 | ECHO TOPS (ET) |
| SDUS55 KFWD | NVLDAL | 57 | VERTICALLY INTEGRATED LIQUID (VIL) |
| SDUS35 KFWD | NSTDAL | 58 | STORM TRACKING INFORMATION (STI) |
| SDUS65 KFWD | NHIDAL | 59 | HAIL INDEX (HI) |
| SDUS65 KFWD | NTVDAL | 61 | TORNADIC VORTEX SIGNATURE (TVS) |
| SDUS35 KFWD | NMDDAL | 141 | MESOCYCLONE (MD) |

The three letter associated Weather Forecast Office (WFO) ID and the last three letters of the TDWR ID will take the place of "FWD" in the WMO Header and "DAL" in the AWIPS ID, respectively, for actual products as needed.

Currently, the communications throughput for a single site ranges from four to 17 kilobits per second (kbps). This change will increase that by a factor of 2.5, which would raise the maximum loading to 42 kbps.

As with other centrally collected TDWR products, the additional products will be archived at the National Climatic Data Center (NCDC). The inventory of the archived products will be contained along with other TDWR products under the NEXRAD Level III tab at:

<http://hurricane.ncdc.noaa.gov/pls/plhas/has.dsselect>

More information about how the NWS generates products from FAA's TDWR data can be found at:

<http://www.roc.noaa.gov/spg/>

If you have any questions about the technical content or generation of these products, please contact:

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If you have questions about the NOAAPort activation of these products, please contact:

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National Technical Implementation Notices are online at:

<https://www.weather.gov/notification/archive>

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