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PNSWSH

Service Change Notice 24-09
National Weather Service Headquarters Silver Spring MD
1120 AM EST Wed Jan 24 2024

To: Subscribers:
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 -Emergency Managers Weather Information Network
 -NOAAPort
 Other NWS Partners, Users and Employees

From: Terrance J. Clark, Director
 WSR-88D Radar Operations Center

Subject: Change to NEXRAD Level III Product Dissemination on or around
March 4, 2024

WSR-88D Build 22.1 includes adding supplemental low elevation angles at additional sites and consequently the following change to Level III product dissemination will occur as sites install this software release starting around March 4, 2024. This includes a supplemental low elevation angle at the relocated and renamed New Orleans, LA WSR-88D radar (i.e., KLIX/Slidell will become KHDC/Hammond around March 31, 2024 per Public Information Statement (PNS) 23-58).

Table 1 contains the products and World Meteorological Organization (WMO) Headings that are disseminated from WSR-88D sites that scan at elevation angles below 0.5 degrees.

Table 1: Radar Product WMO Headings and RPCCDS FTP Directory Names

| WMO Heading | Product Description and Elevation | RPCCDS FTP Directory |
|-------------|--|----------------------|
| TTAAII NNN | | |
| ----- | ----- | ----- |
| SDUS6i NXQ | Base Reflectivity .54nm X 1deg 94/DR -0.2DEG | DS.p94rx |
| SDUS6i NYQ | Base Reflectivity .54nm X 1deg 94/DR 0.0-0.2DEG | DS.p94ry |
| SDUS6i NZQ | Base Reflectivity .54nm X 1deg 94/DR 0.3-0.4DEG | DS.p94rz |
| SDUS5i NXB | Base Reflectivity .13nm X .5deg 153/SDR -0.2DEG | n/a |
| SDUS5i NYB | Base Reflectivity .13nm X .5deg 153/SDR 0.0-0.2DEG | n/a |
| SDUS5i NZB | Base Reflectivity .13nm X .5deg 153/SDR 0.3-0.4DEG | n/a |
| SDUS6i NXU | Base Velocity .13nm X 1deg 99/DV -0.2DEG | DS.p99vx |
| SDUS6i NYU | Base Velocity .13nm X 1deg 99/DV 0.0-0.2DEG | DS.p99vy |
| SDUS6i NZU | Base Velocity .13nm X 1deg 99/DV 0.3-0.4DEG | DS.p99vz |
| SDUS5i NXG | Base Velocity .13nm X .5deg 154/SDV -0.2DEG | n/a |
| SDUS5i NYG | Base Velocity .13nm X .5deg 154/SDV 0.0-0.2DEG | n/a |
| SDUS5i NZG | Base Velocity .13nm X .5deg 154/SDV 0.3-0.4DEG | n/a |
| SDUS6i NXF | Power Removed Control 113/PRC -0.2DEG | DS.113fx |
| SDUS6i NYF | Power Removed Control 113/PRC 0.0-0.2DEG | DS.113fy |
| SDUS6i NZF | Power Removed Control 113/PRC 0.3-0.4DEG | DS.113fz |
| SDUS8i NXX | Differential Reflectivity 159/DZD -0.2DEG | DS.159xx |

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SDUS8i NYX Differential Reflectivity 159/DZD 0.0-0.2DEG      DS.159xy
SDUS8i NZX Differential Reflectivity 159/DZD 0.3-0.4DEG      DS.159xz
SDUS8i NXC Correlation Coefficient 161/DCC -0.2DEG          DS.161cx
SDUS8i NYC Correlation Coefficient 161/DCC 0.0-0.2DEG      DS.161cy
SDUS8i NZC Correlation Coefficient 161/DCC 0.3-0.4DEG      DS.161cz
SDUS8i NXK Specific Differential Phase 163/DKD -0.2DEG       DS.163kx
SDUS8i NYK Specific Differential Phase 163/DKD 0.0-0.2DEG   DS.163ky
SDUS8i NZK Specific Differential Phase 163/DKD 0.3-0.4DEG   DS.163kz
SDUS8i NXH Hydrometeor Classification165/DHC -0.2DEG        DS.165hx
SDUS8i NYH Hydrometeor Classification165/DHC 0.0-0.2DEG     DS.165hy
SDUS8i NZH Hydrometeor Classification165/DHC 0.3-0.4DEG     DS.165hz
SDUS8i NXM Melting Layer 166/ML -0.2DEG                     DS.166mx
SDUS8i NYM Melting Layer 166/ML 0.0-0.2DEG                  DS.166my
SDUS8i NZM Melting Layer 166/ML 0.3-0.4DEG                  DS.166mz

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Note: The abbreviation DEG is used to denote degrees elevation angle, while deg denotes degrees azimuth angle resolution.

The TTAII portion of the WMO Heading is the same as the 0.5 DEG product with the same descriptive name. The NNN part of the WMO heading for WSR-88D elevation-based products all follow a scheme where the middle character is 0 for the 0.5 degree elevation product and it increases numerically or alphabetically with increasing elevation angle. To accommodate the possibility of a future scan strategy containing more than one elevation angle below 0.5 degrees, the middle character of NNN product ID is X, Y, or Z. That is, X for elevation angles -0.1 and below, Y for 0.0 through 0.2 deg, and Z for elevation angles 0.3 and 0.4 deg.

These products will be available via NOAAPort and from the RPCCDS FTP site <https://tgftp.nws.noaa.gov/SL.us008001/DF.of/DC.radar/> at the indicated directory names. Exceptions are that super-res reflectivity and velocity products (153/SDR, 154/SDV) are only disseminated on NOAAPort and SDUS6i products are only disseminated on RPCCDS.

Table 2 contains the list of lower elevation WSR-88D sites added with Build 22.1, WMO Headings indicating the originating area (I) and site (CCCC), the elevation angle and middle character of the NNN Advanced Weather Interactive Processing System (AWIPS) ID group, and the year that the lower elevation angle scan will begin.

Table 2: Originating and Radar Site WMO Headings of Lower Elevations

| WMO Heading | AWIPS ID | Site Location | Elevation | Begin |
|-------------|----------|----------------|-----------|-------|
| TTAII CCCC | NNNNXX | City and State | Angle/N | Year |
| ----- | ----- | ----- | ----- | ----- |
| SDUSi4 KBMX | nnnBMX | Birmingham, AL | 0.4/Z | 2024 |
| SDUSi4 KMOB | nnnMOB | Mobile, AL | 0.2/Y | 2024 |
| SDUSi4 KLIX | nnnHDC | Hammond, LA | 0.3/Z | 2024 |

Low elevation product dissemination began in 2020 at other sites. See Service Change Notice (SCN) 20-42 and SCN 23-96 for information on those sites.

Since WSR-88D Build 19.0, sites have the option to disable/enable scanning at elevation angles below 0.5 degrees. Base Tilt is the name given to VCPs that include the additional lower elevation cut. When Base Tilt is enabled, the additional lower elevation cut is scanned, and the General Status Message will have Bit 7 set in the Volume Coverage Pattern (VCP) Supplemental Data field. Depending on the Base Tilt status, the 0.5 degree or the lower elevation angle scan will be repeated when SAILS or MRLE are enabled. A description of SAILS and MRLE is available at:

<https://www.roc.noaa.gov/WSR88D/NewRadarTechnology/NewTechDefault.aspx>

Please direct comments or report impacts from this change to:

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National Service Change Notices are online at:

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

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