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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
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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		
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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

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 Classification	165/DHC	-0.2DEG	DS.165hx
SDUS8i	NYH	Hydrometeor Classification	165/DHC	0.0-0.2DEG	DS.165hy
SDUS8i	NZH	Hydrometeor Classification	165/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

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

The TTAAII 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
TTAAII CCCC	NNNNXX	City and State	Angle/N	Year
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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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