

NOUS41 KWBC 101405
PNSWSH

Service Change Notice 20-42
National Weather Service Headquarters Silver Spring MD
1005 AM EDT Fri Apr 10 2020

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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 June 16, 2020

On or around June 16, 2020, the NWS will change the public dissemination of NEXRAD Radar Level III products. Table 1 contains the products and WMO Headings that will begin dissemination from WSR-88D sites that scan at elevation angles below 0.5 degrees.

TABLE 1: NEW RADAR PRODUCT WMO HEADINGS AND RPCCDS FTP DIRECTORY NAMES

WMO HEADING	PRODUCT DESCRIPTION AND ELEVATION	RPCCDS FTP DIRECTORY
TTAAII NNN		DIRECTORY
SDUS5i NXQ	Base Reflectivity 256LVL 94/DR -0.5 to -0.1 deg	DS.p94rx
SDUS5i NYQ	Base Reflectivity 256LVL 94/DR 0.0 to 0.2 deg	DS.p94ry
SDUS5i NZQ	Base Reflectivity 256LVL 94/DR 0.3 to 0.4 deg	DS.p94rz
SDUS5i NXU	Base Velocity 256LVL 99/DV -0.5 to -0.1 deg	DS.p99vx
SDUS5i NYU	Base Velocity 256LVL 99/DV 0.0 to 0.2 deg	DS.p99vy
SDUS5i NZU	Base Velocity 256LVL 99/DV 0.3 to 0.4 deg	DS.p99vz
SDUS6i NXF	Power Removed Control 113/PRC -0.5 to -0.1 deg	DS.113fx
SDUS6i NYF	Power Removed Control 113/PRC 0.0 to 0.2 deg	DS.113fy
SDUS6i NZF	Power Removed Control 113/PRC 0.3 to 0.4 deg	DS.113fz
SDUS8i NXX	Differential Reflectivity 159/DZD -0.5 to -0.1 deg	DS.159xx
SDUS8i NYX	Differential Reflectivity 159/DZD 0.0 to 0.2 deg	DS.159xy
SDUS8i NZX	Differential Reflectivity 159/DZD 0.3 to 0.4 deg	DS.159xz
SDUS8i NXC	Correlation Coefficient 161/DCC -0.5 to -0.1 deg	DS.161cx
SDUS8i NYC	Correlation Coefficient 161/DCC 0.0 to 0.2 deg	DS.161cy
SDUS8i NZC	Correlation Coefficient 161/DCC 0.3 to 0.4 deg	DS.161cz
SDUS8i N XK	Specific Differential Phase 163/DKD -0.5 to -0.1deg	DS.163kx
SDUS8i NYK	Specific Differential Phase 163/DKD 0.0 to 0.2 deg	DS.163ky
SDUS8i NZK	Specific Differential Phase 163/DKD 0.3 to 0.4 deg	DS.163kz
SDUS8i NXH	Hydrometeor Classification165/DHC -0.5 to -0.1 deg	DS.165hx
SDUS8i NYH	Hydrometeor Classification165/DHC 0.0 to 0.2 deg	DS.165hy
SDUS8i NZH	Hydrometeor Classification165/DHC 0.3 to 0.4 deg	DS.165hz
SDUS8i NXM	Melting Layer 166/ML -0.5 to -0.1 deg	DS.166mx
SDUS8i NYM	Melting Layer 166/ML 0.0 to 0.2 deg	DS.166my
SDUS8i NZM	Melting Layer 166/ML 0.3 to 0.4 deg	DS.166mz

The TTAAII portion of the WMO Heading will be the same as the 0.5 degree products 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 product and increases numerically or alphabetically with increasing elevation angle. To accommodate the possibility of a future scan strategy containing more than one elevation scan below 0.5 degrees, the middle character of NNN product ID will be 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.

All of these products will be available for download from the RPCCDS FTP site <ftp://tgftp.nws.noaa.gov/SL.us008001/DF.of/DC.radar/> at the indicated directory names. Except for the PRC product, all products will be broadcast on NOAAPort.

These radar products will be disseminated from WSR-88D sites that scan at elevation angles below 0.5 degrees. Table 2 contains the list of lower elevation WSR-88D sites, WMO Headings indicating the originating area (I) and site (CCCC), the elevation angle and middle character of the NNN AWIPS ID group, and the year that the lower elevation angle scanning began. Sites with year 2020 will begin between August and November when WSR-88D Build 19.0 is installed.

Dissemination will begin from the first site, KLGX, on or around June 16, 2020. If no issues or impacts are observed or reported after one week, additional sites will be added.

TABLE 2: ORIGINATING AND RADAR SITE WMO HEADINGS OF LOWER ELEVATIONS

WMO HEADING	AWIPS ID	SITE LOCATION	ELEVATION	YEAR
TTAAII CCCC	NNNNXX	CITY AND STATE	ANGLE/N	BEGAN
SDUSi6 KSEW	nnnLGX	Langley Hill, WA	0.2/Y	2012
SDUSi5 KSLC	nnnICX	Cedar City, UT	0.2/Y	2018
SDUSi6 KMTR	nnnMUX	San Francisco, CA	0.0/Y	2018
SDUSi6 KMFR	nnnMAX	Medford, OR	-0.2/X	2018
SDUSi1 KBUF	nnnBUF	Buffalo, NY	0.3/Z	2018
SDUSi2 KGSP	nnnGSP	Greer, SC	0.2/Y	2019
SDUSi4 KJAN	nnnDGX	Jackson, MS	0.3/Z	2019
SDUSi3 KBIS	nnnMBX	Minot, ND	0.3/Z	2019
SDUSi4 KSHV	nnnSHV	Shreveport, LA	0.3/Z	2019
SDUSi2 KRAH	nnnRAX	Raleigh, NC	0.2/Y	2019
SDUSi1 KCLE	nnnCLE	Cleveland, OH	0.4/Z	2020
SDUSi5 KMSO	nnnMSX	Missoula, MT	-0.2/X	2020
SDUSi5 KREV	nnnRGX	Reno, NV	0.0/Y	2020
SDUSi5 KSLC	nnnMTX	Salt Lake City, UT	0.0/Y	2020
SDUSi2 KCHS	nnnCLX	Charleston, SC	0.3/Z	2020
SDUSi3 KDLH	nnnDLH	Duluth, MN	0.2/Y	2020
SDUSi5 KGJT	nnnGJX	Grand Junction, CO	-0.2/X	2020
SDUSi5 KFGZ	nnnFSX	Flagstaff, AZ	-0.2/X	2020

Sites will have an option with WSR-88D Build 19.0 to disable/enable scanning at elevation angles below 0.5 degrees. Base Tilt is the name given to Volume Coverage Patterns (VCP) 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 VCP Supplemental Data field. Depending on the Base Tilt status, the 0.5 degree or the lower elevation angle scan will be repeated when Supplemental Adaptive Intra-Volume Low Level Scan (SAILS) or Mid-Volume Rescan of Low-Level Elevations (MRLE) are enabled. A description of SAILS and MRLE is available at <https://roc.noaa.gov/WSR88D/NewRadarTechnology/NewTechDefault.aspx>.

See Service Change Notice 19-97 for additional information on Build 19.0 Beta test and these changes. Previous Service Change Notices pertaining to lower elevation scanning at WSR-88D sites includes: SCN 18-82 (Buffalo, NY), SCN 18-45 (Medford and San Francisco), and SCN 19-32 (Greer, Raleigh, Jackson, Minot, Shreveport). <https://www.weather.gov/notification/>

Please direct comments or report impacts from this change to:

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National Public Information Statements are online at:
<https://www.weather.gov/notification/>

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