

NOUS41 KWBC 191215
PNSWSH

TECHNICAL IMPLEMENTATION NOTICE 10-22
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
745 AM EDT WED MAY 19 2010

TO: SUBSCRIBERS
-FAMILY OF SERVICES
-NOAA WEATHER WIRE SERVICE
-EMERGENCY MANAGERS WEATHER INFORMATION NETWORK
-SATELLITE BROADCAST NETWORK /SBN NOAAPORT/
-OTHER NWS USES...PARTNERS AND EMPLOYEES

FROM: RICHARD J. VOGT
DIRECTOR... WSR-88D RADAR OPERATIONS CENTER

SUBJECT: ADDITION OF DUAL POLARIZATION WSR-88D PRODUCTS TO SBN
/NOAAPORT AND RPCCDS: EFFECTIVE WITH WSR-88D DUAL
POLARIZATION /NOVEMBER 2010 BETA TEST/

EFFECTIVE WEDNESDAY NOVEMBER 17 2010...AT APPROXIMATELY 1500
COORDINATED UNIVERSAL TIME /UTC/...THE NWS WILL BEGIN
DISSEMINATING RADAR PRODUCTS LISTED IN TABLE 1 VIA THE RADAR
PRODUCT CENTRAL COLLECTION DISSEMINATION SERVICE /RPCCDS/
AND SBN/NOAAPORT. OTHER BETA TEST SITES WILL BE ADDED AS THEY
ARE MODIFIED. DURING THIS TEST PERIOD... NWS WILL EVALUATE
COMMUNICATIONS LOADING FOR IMPACTS AND DECIDE WHETHER TO
DISSEMINATE DUAL POLARIZATION PRODUCTS FROM ADDITIONAL SITES
MODIFIED DURING FULL SCALE DEPLOYMENT.

REFERENCE PUBLIC INFORMATION STATEMENT SOLICITING COMMENTS
/USE LOWERCASE/:

[HTTP://WWW.WEATHER.GOV/OS/NOTIFICATION/PNS10DUAL_POL88D.TXT](http://www.weather.gov/os/notification/pns10dual_pol88d.txt)

TABLE 1: WMO HEADINGS FOR WSR-88D RADAR PRODUCT ADDITIONS

#	TTUSII NNN PRODUCT DESCRIPTION	DIRECTORY
1	SDUS8I N0X DIFFERENTIAL REFLECTIVITY 159/DZD 0.5DEG	DS.159X0
2	SDUS8I N1X DIFFERENTIAL REFLECTIVITY 159/DZD 0.9DEG	DS.159XA
3	SDUS8I N2X DIFFERENTIAL REFLECTIVITY 159/DZD 1.5DEG	DS.159X1
4	SDUS8I N3X DIFFERENTIAL REFLECTIVITY 159/DZD 1.8DEG	DS.159XB
5	SDUS8I N4X DIFFERENTIAL REFLECTIVITY 159/DZD 2.4DEG	DS.159X2
6	SDUS8I N5X DIFFERENTIAL REFLECTIVITY 159/DZD 3.4DEG	DS.159X3
7	SDUS8I N0C CORRELATION COEFFICIENT 161/DCC 0.5DEG	DS.161C0
8	SDUS8I N1C CORRELATION COEFFICIENT 161/DCC 0.9DEG	DS.161CA
9	SDUS8I N2C CORRELATION COEFFICIENT 161/DCC 1.5DEG	DS.161C1
10	SDUS8I N3C CORRELATION COEFFICIENT 161/DCC 1.8DEG	DS.161CB
11	SDUS8I N4C CORRELATION COEFFICIENT 161/DCC 2.4DEG	DS.161C2
12	SDUS8I N5C CORRELATION COEFFICIENT 161/DCC 3.4DEG	DS.161C3
13	SDUS8I N0K SPECIFIC DIFFERENTIAL PHASE 163/DKD 0.5DEG	DS.163K0
14	SDUS8I N1K SPECIFIC DIFFERENTIAL PHASE 163/DKD 0.9DEG	DS.163KA

15 SDUS8I N1K SPECIFIC DIFFERENTIAL PHASE 163/DKD 1.5DEG DS.163K1
 16 SDUS8I NBK SPECIFIC DIFFERENTIAL PHASE 163/DKD 1.8DEG DS.163KB
 17 SDUS8I N2K SPECIFIC DIFFERENTIAL PHASE 163/DKD 2.4DEG DS.163K2
 18 SDUS8I N3K SPECIFIC DIFFERENTIAL PHASE 163/DKD 3.4DEG DS.163K3
 19 SDUS8I N0H HYDROMETEOR CLASSIFICATION 165/DHC 0.5DEG DS.165H0
 20 SDUS8I NAH HYDROMETEOR CLASSIFICATION 165/DHC 0.9DEG DS.165HA
 21 SDUS8I N1H HYDROMETEOR CLASSIFICATION 165/DHC 1.5DEG DS.165H1
 22 SDUS8I NBH HYDROMETEOR CLASSIFICATION 165/DHC 1.8DEG DS.165HB
 23 SDUS8I N2H HYDROMETEOR CLASSIFICATION 165/DHC 2.4DEG DS.165H2
 24 SDUS8I N3H HYDROMETEOR CLASSIFICATION 165/DHC 3.4DEG DS.165H3
 25 SDUS8I N0M MELTING LAYER 166/ML 0.5DEG DS.166M0
 26 SDUS8I NAM MELTING LAYER 166/ML 0.9DEG DS.166MA
 27 SDUS8I N1M MELTING LAYER 166/ML 1.5DEG DS.166M1
 28 SDUS8I NBM MELTING LAYER 166/ML 1.8DEG DS.166MB
 29 SDUS8I N2M MELTING LAYER 166/ML 2.4DEG DS.166M2
 30 SDUS8I N3M MELTING LAYER 166/ML 3.4DEG DS.166M3
 31 SDUS8I DPR INSTANTANEOUS PRECIPITATION RATE 176/DPR DS.176PR
 32 SDUS8I HHC HYBRID SCAN HYDROMETEOR CLASSIFIC. 177/HHC DS.177HH
 33 SDUS8I OHA ONE HOUR ACCUMULATION 169/OHA DS.169OH
 34 SDUS8I DAA DIGITAL ACCUMULATION ARRAY 170/DAA DS.170AA
 35 SDUS3I PTA STORM TOTAL ACCUMULATION 171/STA DS.171ST
 36 SDUS8I DTA DIGITAL STORM TOTAL ACCUMULATION 172/DSA DS.172DT
 37 SDUS8I DU3 3 HOUR ACCUMULATION 173/DUA DS.173U1
 38 SDUS8I DU6 24 HOUR ACCUMULATION 173/DUA DS.173U3
 39 SDUS8I DOD DIGITAL ONE HOUR DIFFERENCE 175/DOD DS.174OD
 40 SDUS8I DSD DIGITAL STORM TOTAL DIFFERENCE 175/DSD DS.175SD

IF THE ADDITION OF THESE PRODUCTS CAUSES AN OPERATIONAL IMPACT TO NOAAPORT OR RPCCDS... THE FALLBACK PLAN IS TO DISTRIBUTE DUAL POLARIZATION PRODUCTS ONLY VIA NOAAPORT OR RPCCDS... WHICH WOULD BE DONE BY FILTERING SDUS8I PRODUCTS FROM DISSEMINATION. THIS PLAN REQUIRES EXCLUSIVE USE OF SDUS8I FOR DUAL POLARIZATION. CURRENTLY THE DIGITAL PRECIPITATION ARRAY PRODUCT /DPA/ HAS THE FOLLOWING HEADING: SDUS8I. CONSEQUENTLY THE PRODUCT IN TABLE 2 WILL BE CHANGED NATIONALLY TO SDUS5I BEFORE BEGINNING DISSEMINATION OF DUAL POLARIZATION PRODUCTS.

TABLE 2: REASSIGNED WMO HEADINGS FOR WSR-88D AND TDWR SPG PRODUCT

TTUSII NNN PRODUCT DESCRIPTION	DIRECTORY
SDUS5I DPA HOURLY DIGITAL PRECIPITATION ARRAY 81/DPA	DS.81DPR

WHEN FULLY IMPLEMENTED THE NOAAPORT AND RPCCDS COMMUNICATIONS THROUGHPUT OF WSR-88D PRODUCTS WILL INCREASE BY A FACTOR OF 2.8 ABOVE LEVELS REACHED WHEN HIGHER RESOLUTION BASE PRODUCTS WERE ADDED IN EARLY 2010 VIA TECHNICAL IMPLEMENTATION NOTICE 09-41. FOR EACH WSR-88D... THE AVERAGE HOURLY PRODUCT VOLUME VIA RPCCDS WILL BE APPROXIMATELY 14.5 MEGABYTES /MB/ AND THE AVERAGE DAILY VOLUME WILL BE 345.8 MB. WHEN FULLY IMPLEMENTED THE AVERAGE DAILY VOLUME FOR ALL WSR-88D RADARS WILL BE 53.9 GIGABYTES /GB/. WORSTCASE HOURLY THROUGHPUT IS ESTIMATED TO REACH 48 MB FOR A SINGLE RADAR AND 4.2 GB FOR ALL 200 RADARS /155 WSR-88D AND 45 TDWR/. ON NOAAPORT PRODUCTS ARE FURTHER COMPRESSED AND THEREFORE THROUGHPUT WILL BE REDUCED SOMEWHAT.

ON THE TELECOMMUNICATIONS OPERATIONS CENTER /TOC/ FTP SERVER...
RADAR PRODUCTS WILL BE PLACED IN THE PRODUCT NAMED SUBDIRECTORY
LISTED IN TABLE 1 BELOW THE FOLLOWING DIRECTORY /USE LOWERCASE/:

[FTP://TGFTP.NWS.NOAA.GOV/SL.US008001/DF.OF/DC.RADAR/](ftp://TGFTP.NWS.NOAA.GOV/SL.US008001/DF.OF/DC.RADAR/)

NWS HAS ESTABLISHED THE FOLLOWING WEBSITE TO PROVIDE PLANS AND
STATUS FOR THE DUAL POLARIZATION PROJECT... ADDITIONAL
INFORMATION AND FOR PREVIEWING SAMPLE PRODUCTS:

[HTTP://WWW.ROC.NOAA.GOV/WSR88D/DUALPOL/DEFAULT.ASPX](http://WWW.ROC.NOAA.GOV/WSR88D/DUALPOL/DEFAULT.ASPX)

THE CONTENT AND FORMATS OF THE DUAL POLARIZATION PRODUCTS ARE
DESCRIBED IN THE DRAFT PRODUCT SPECIFICATION INTERFACE CONTROL
DOCUMENT /ICD/ AND THE DRAFT ICD FOR RPG TO CLASS 1 USER...
AVAILABLE AT THE DUAL POL WEB SITE ABOVE.

IF YOU HAVE QUESTIONS OR COMMENTS... PLEASE CONTACT:

TIM CRUM
WSR-88D RADAR OPERATIONS CENTER
1200 WESTHEIMER DRIVE
NORMAN... OK 73069
TIM.D.CRUM@NOAA.GOV

OR

MIKE ISTOK
NWS... OFFICE OF SCIENCE AND TECHNOLOGY
SILVER SPRING... MARYLAND
MICHAEL.ISTOK@NOAA.GOV

IF YOU HAVE QUESTIONS ABOUT THE NOAA PORT ACTIVATION OR DATA FLOW
OF THESE PRODUCTS... PLEASE CONTACT:

BRIAN GOCKEL
NWS... OFFICE OF SCIENCE AND TECHNOLOGY
SILVER SPRING... MARYLAND
BRIAN.GOCKEL@NOAA.GOV

THE CENTRALLY COLLECTED WSR-88D PRODUCTS WILL BE ARCHIVED AT THE
NATIONAL CLIMATIC DATA CENTER /NCDC/ AND WILL BE AVAILABLE FOR
DOWNLOAD FROM /USE LOWERCASE/:

[HTTP://HURRICANE.NCDC.NOAA.GOV/PLS/PLHAS/HAS.DSSELECT](http://HURRICANE.NCDC.NOAA.GOV/PLS/PLHAS/HAS.DSSELECT)

NATIONAL PUBLIC INFORMATION STATEMENTS ARE ONLINE AT /USE
LOWERCASE/:

[HTTP://WWW.WEATHER.GOV/OS/NOTIF.HTM](http://WWW.WEATHER.GOV/OS/NOTIF.HTM)

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