

NOUS41 KWBC 191304 CCA  
PNSWSH

TECHNICAL IMPLEMENTATION NOTICE 10-23  
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC  
905 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/

CORRECTED TO CHANGE TIN NUMBER FROM 10-22 TO 10-23.

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:

[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 NAX DIFFERENTIAL REFLECTIVITY 159/DZD 0.9DEG	DS.159XA
3	SDUS8I N1X DIFFERENTIAL REFLECTIVITY 159/DZD 1.5DEG	DS.159X1
4	SDUS8I NBX DIFFERENTIAL REFLECTIVITY 159/DZD 1.8DEG	DS.159XB
5	SDUS8I N2X DIFFERENTIAL REFLECTIVITY 159/DZD 2.4DEG	DS.159X2
6	SDUS8I N3X DIFFERENTIAL REFLECTIVITY 159/DZD 3.4DEG	DS.159X3
7	SDUS8I N0C CORRELATION COEFFICIENT 161/DCC 0.5DEG	DS.161C0
8	SDUS8I NAC CORRELATION COEFFICIENT 161/DCC 0.9DEG	DS.161CA
9	SDUS8I N1C CORRELATION COEFFICIENT 161/DCC 1.5DEG	DS.161C1
10	SDUS8I NBC CORRELATION COEFFICIENT 161/DCC 1.8DEG	DS.161CB
11	SDUS8I N2C CORRELATION COEFFICIENT 161/DCC 2.4DEG	DS.161C2
12	SDUS8I N3C CORRELATION COEFFICIENT 161/DCC 3.4DEG	DS.161C3
13	SDUS8I N0K SPECIFIC DIFFERENTIAL PHASE 163/DKD 0.5DEG	DS.163K0

14 SDUS8I NAK 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:

<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>

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:

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

NATIONAL PUBLIC INFORMATION STATEMENTS ARE ONLINE AT:

<http://www.weather.gov/os/notif.htm>

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