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PUBLIC INFORMATION STATEMENT...COMMENT REQUEST
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
105 PM EST FRI MAR 2 2007

TO: FAMILY OF SERVICES /FOS/ SUBSCRIBERS...NOAA WEATHER
WIRE SERVICE /NWS/ SUBSCRIBERS...EMERGENCY MANAGERS
WEATHER INFORMATION NETWORK /EMWIN/ SUBSCRIBERS...
NOAAPORT SUBSCRIBERS...OTHER NATIONAL WEATHER SERVICE
/NWS/ CUSTOMERS AND PARTNERS...NWS EMPLOYEES

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

SUBJECT: SOLICITING COMMENTS BY MARCH 30 2007 ON MODIFICATIONS
TO WSR-88D LEVEL II DATA STREAM AND FORMAT: EFFECTIVE
WITH WSR-88D BUILD 10 /JANUARY 2008 BETA TEST/

STARTING IMMEDIATELY AND CONTINUING THROUGH MARCH 30 2007...THE
NWS IS SEEKING COMMENTS ON MODIFICATIONS TO WSR-88D LEVEL II
DATA STREAM AND FORMAT...EFFECTIVE WITH WSR-88D BUILD 10
/JANUARY 2008 BETA TEST/.

BACKGROUND:

THE NWS...USAF AND FAA WSR-88D SYSTEMS PRODUCE LEVEL II DATA...
THE HIGHEST RESOLUTION DIGITAL RADAR DATA AVAILABLE. THESE DATA
CONTAIN REFLECTIVITY...RADIAL VELOCITY AND SPECTRUM WIDTH DATA
FROM ALL RADAR SCANS. LEVEL II DATA ARE COLLECTED... DISTRIBUTED
AND ARCHIVED IN REAL TIME FROM 133 WSR-88D SYSTEMS VIA THE NWS
WSR-88D LEVEL II DATA COLLECTION AND DISTRIBUTION NETWORK.

PROPOSED CHANGES:

BEGINNING IN WSR-88D SOFTWARE BUILD 10 /BETA TEST AT
APPROXIMATELY SIX SITES BEGINS IN JANUARY 2008 AND DEPLOYMENT TO
ALL OPERATIONAL SITES BEGINS IN APRIL 2008/ THE DATA FORMAT AND
CONTENT OF THE LEVEL II DATA STREAM WILL CHANGE.

1. THE FORMAT OF THE DATA WILL CHANGE FROM MSG1 TO MSG31. THIS
FORMAT CHANGE IS REQUIRED TO HANDLE THE PLANNED ADDITIONS TO THE
WSR-88D LEVEL II DATA STREAM - SUPER RESOLUTION DATA... BUILD
10... AND DUAL POLARIZATION DATA... BUILD 11. THE LOCAL DATA
MANAGER METHOD OF DISTRIBUTING LEVEL II DATA VIA THE NWS WSR-88D
LEVEL II DATA COLLECTION AND DISTRIBUTION NETWORK WILL NOT
CHANGE.

2. THE DATA STREAM WILL INCREASE IN SIZE DUE TO THE PLANNED
CHANGE TO SUPER RESOLUTION RADAR DATA IN BUILD 10. SUPER
RESOLUTION DATA INCREASE THE AZIMUTH RESOLUTION FROM 1 DEGREE TO
0.5 DEGREE... THE REFLECTIVITY DATA RANGE RESOLUTION FROM 1 KM TO

0.25 KM... AND DOPPLER DATA RANGE FROM 230 KM TO 300 KM FOR SPLIT CUTS - GENERALLY SCANS AT 1.5 DEGREES OR LOWER ELEVATION. THE AMOUNT OF DATA COLLECTED AND TRANSMITTED DURING A VOLUME SCAN WILL INCREASE BY A FACTOR OF APPROXIMATELY 2.3.

IT IS POSSIBLE THAT NETWORK-WIDE TRANSMISSION OF SUPER RESOLUTION DATA WILL NOT BEGIN IMMEDIATELY AFTER BUILD 10 IS DEPLOYED. IN THIS CASE THE DATA WILL BE RECOMBINED BACK TO THE LEGACY DATA RESOLUTION. THE TIMING OF THE NETWORK-WIDE TRANSMISSION OF SUPER RESOLUTION DATA WILL BE CONTINGENT UPON THE AVAILABILITY OF FUNDS TO ACQUIRE THE REQUIRED COMMUNICATIONS BANDWIDTH INCREASE. THE FORMAT OF THE DATA WILL CHANGE TO MSG31 WITH THE DEPLOYMENT OF BUILD 10.

THE FOLLOWING TOOLS WILL BE MADE AVAILABLE TO LEVEL II USERS TO ASSIST THEIR TRANSITION TO THE NEW DATA FORMAT AND CONTENT. INFORMATION ON HOW TO ACCESS THE TOOLS AND OTHER RELATED INFORMATION WILL BE POSTED AND PERIODICALLY UPDATED ON THE LEVEL II WEBSITE AT /USE LOWER CASE LETTERS/:

[HTTP://WWW.ROC.NOAA.GOV/NWS_LEVEL_2](http://www.roc.noaa.gov/nws_level_2)

1. DRAFT INTERFACE CONTROL DOCUMENTS DESCRIBING THE NEW DATA FORMAT AND DATA STREAM WILL BE AVAILABLE BY 31 MARCH 2007.
2. SAMPLE ARCHIVE DATA SETS USING THE NEW FORMAT AND DATA STREAM WILL BE AVAILABLE BY 30 JUNE 2007.
3. SAMPLE REAL-TIME DATA STREAMS USING THE NEW FORMAT AND DATA STREAM WILL BE AVAILABLE BY 31 AUGUST 2007.
4. AN EARLY VERSION OF BUILD 10 SOFTWARE... EXECUTABLE AND SOURCE CODE... WILL BE AVAILABLE BY 31 AUGUST 2007 FROM THE NWS COMMON OPERATIONS AND DEVELOPMENT ENVIRONMENT...CODE WEBSITE /USE LOWER CASE LETTERS/:

[HTTP://WWW.WEATHER.GOV/CODE88D](http://www.weather.gov/code88d)

THE SOFTWARE WILL CONTAIN CODE TO READ SUPER RESOLUTION DATA AND TO RECOMBINE THE SUPER RESOLUTION DATA INTO LEGACY RESOLUTION DATA. THE RPG ALGORITHMS AND 4-BIT BASE PRODUCTS WILL USE RECOMBINED DATA.

WE ARE SOLICITING COMMENTS BY 30 MARCH 2007 ON THE PLANS TO CHANGE THE DATA FORMAT AND CONTENT ALONG WITH THE TOOLS TO BE MADE AVAILABLE. PLEASE SEND ANY COMMENTS ON THIS PLAN TO:

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

THIS NOTICE AND OTHER CURRENT NATIONAL PUBLIC INFORMATION

STATEMENTS ARE AVAILABLE ONLINE AT /USE LOWER CASE LETTERS/:

[HTTP://WWW.NWS.NOAA.GOV/OM/NOTIF.HTM](http://www.nws.noaa.gov/om/notif.htm)

THIS MESSAGE IS LISTED AT THE TOP OF THE PAGE . . . ABOVE THE
SERVICE CHANGE NOTICE AND TECHNICAL IMPLEMENTION NOTICE BOX.

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