WSR-88D Program Software Changes
That May Impact
Radar Product Central Collection Dissemination Service (RPCCDS) Users

Updated 20 July 2004

PURPOSE:

This summary is intended to assist RPCCDS users plan for WSR-88D changes which may impact data format, data frequency, or data quality. While many changes are made to the WSR-88D Radar Product Generator (RPG) software issued during the 6-month software releases, only a small subset may affect RPCCDS users. The changes made in each RPG software release are listed at: http://www.roc.noaa.gov/ssb/cm/software/.

CURRENT:

Build 6: The beta test of Build 6 software at field sites has begun. See the list of test sites and software installation dates (subject to change) below. The software will begin to be released to field sites at the end of September 2004.

Wichita .... July 20, 2004.
Little Rock .... July 27, 2004.
Sacramento .... August 10, 2004.
Reno .... August 16, 2004.
Beale AFB .... August 12, 2004
King Salmon, AK .... August 4, 2004

1. Implement a snow accumulation algorithm. This algorithm will have hourly- accumulation products like those of the legacy precipitation products. The snow algorithm will use the Enhanced Preprocessing (EPRE) algorithm that was implemented in Build 5. At this time the snow accumulation products are not scheduled to be added to the RPCCDS product list.

2. The format of all floating-point data is changing from Concurrent Computer Corp. format to the ANSI/IEEE-754 standard format for floating point data. The Calibration Constant is the only floating point data provided in Level III products. The Calibration Constant is contained in Level III Reflectivity Products (e.g., R, CR, RCS, LRM, DHR) in the Product Description Block at halfwords 51, 52.

PLANNED CHANGES:

Build 7: The beta test of Build 7 software is scheduled to begin the last week of November 2004 at the Norman, OK WFO. In January 2005, the beta test will continue at additional sites (to be determined later). The software will begin to be released to field sites at the end of February 2005 when the Open RDA field deployments are scheduled to begin.

The primary changes in RPG Build 7 are to implement the interface to the Open RDA to support deployment of the Open RDA beginning in late February 2005. The ORDA deployment is scheduled to last approximately 15 months. Though no new RPCCDS products will appear in Build 7 due to the Open RDA, there should be improvements in radar data quality due to the newer science and capabilities of

clutter detection and cancellation and other data quality features the Open RDA will provide.

POSSIBLE/TARGET CHANGES:

Possible Change In Default Precipitation VCP. Volume Coverage Pattern 21 has always served as the default VCP. The NEXRAD agencies may change the default precipitation VCP to VCP12. However, this change will not be made until at least 2005. Users of the RPCCDS will be informed in advance of a change in the default precipitation VCP.

ADDITIONAL INFORMATION:

Changes made to the WSR-88D software are in response to NEXRAD agency approved requirements. The list of changes are approved about 11 months before the software is released to the field. Thus, software contents beyond Build 7 is a projection/target, subject to final approval and change.

The Radar Operations Center (ROC) has a URL (http://www.roc.noaa.gov/ops/ssm.asp) for users to obtain:

(1) A list of sites and which RPG software build the site is using, and
(2) A list of sites and which volume coverage pattern the site is using, during the last automated hourly ROC call to the RPG.

Warning Decision Training Branch training materials prepared for WSR-88D NEXRAD agency operators can be found in the Tech Updates section at the following URL: http://www.wdtb.noaa.gov/. While many of the changes discussed are not available on the RPCCDS, the training material provides information on new capabilities provided to NEXRAD Agency WSR-88D users.

There are no product or data format changes for Level II or Level III in Build 6.

Please send suggestions, comments and questions on the materials in this summary to Tim.D.Crum@noaa.gov.