

NOUS41 KWBC 161913  
PNSWSH

Technical Implementation Notice 11-08  
National Weather Service Headquarters Washington DC  
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To:           Subscribers:  
              -Family of Services  
              -NOAA Weather Wire Service  
              -Emergency Managers Weather Information Network  
              -NOAAPort  
              Other NWS Partners, Users and Employees

From:         Kevin Schrab  
              Chief, Observing Services Division  
              Office of Climate, Water and Weather Services

Subject: Third Quarter 2011 Dates for Termination of Automated  
Radiotheodolite Tracking (ART) and Radio Direction Finding Radiosondes  
(RDF) with Installation of Radiosonde Replacement Systems (RRS)

From April 25 through May 15, 2011, three Upper Air (UA) sites are  
scheduled to receive RRS Upgrades. Specific dates are as follows:

Station Name	WMO #	STN ID	Outage Dates
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Chuuk	91334	PTKK	April 25, 2011
Pohnpei	91348	PTPN	May 5, 2011
Majuro	91376	PMKJ	May 16, 2011

These UA sites may be out of service for as long as 10 days. When the NWS  
UA observations resume, the RRS will be gathering meteorological data from  
Global Positioning System (GPS) radiosondes.

The NWS describes the RRS release point location with the National  
Geodetic Survey (NGS) Online Positioning User Service (OPUS) solution.  
This is a datum combination that relies on North American Datum of 1983  
(NAD83) for latitude and longitude, whereas the release point elevation is  
based on North American Vertical Datum 1988 (NAVD88) with the GEOID03  
model. By contrast the GPS radiosonde flight information of latitude and  
longitude and altitude will rely on the world geodetic system of 1984  
(WGS84) standard.

Parts of the UA coded messages will be significantly longer with RRS  
conversion. NWS has coordinated with its partners on the longer length of  
these messages.

The format of the messages will be the same World Meteorological  
Organization (WMO) format for coded UA messages used with the MicroArt  
legacy system. The number of levels in the coded messages will be two to  
three times greater for the TTBB and TTDD. As a result, two categories of  
Advanced Weather Interactive Processing System (AWIPS) text products will  
increase in size: SGL and ABV. The number of levels in the TTAA, TTCC,

PPBB and PPDD parts will be relatively unchanged. These changes reflect updated coding practices and higher resolution level selection criteria. The maximum size limits of the parts of the coded messages are as follows:

TTAA: 15 Levels  
TTCC: 10 Levels  
TTBB: 135 Levels  
TTDD: 40 Levels  
PPBB: 40 Levels  
PPDD: 40 Levels

In addition, the 31313 message indicator associated with various parts of the message will be included with each part of the thermodynamic message parts.

For additional information on the message requirements, see WMO 306 Manual on Codes (International Codes): Volume I.1 Part A - Alphanumeric Codes and Volume II Regional Codes and National Coding Practices. Users can find information on the levels selection criteria used in NWS coding software online at:

<http://www.ua.nws.noaa.gov>

If you have questions or feedback, please contact:

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National Technical Implementation Notices are online at:

<https://www.weather.gov/notification/archive>

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