

# **Test Case Meteogram\_1.0**

**for the**

**AWIPS**

**Contract**

**DG133W-05-CQ-1067**

DCN: AWP.TE.SWCTR/TO8-0014

Prepared for:

U.S. Department of Commerce  
NOAA/NWS Acquisition Management Division  
SSMC2, Room 17364  
1325 East-West Highway  
Silver Spring, MD 20910

Prepared by:

Raytheon Company  
STC Office  
6825 Pine Street  
Omaha, NE 68106

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Submitted By:

\_\_\_\_\_

Test Engineer

\_\_\_\_\_

Date

Approved By:

\_\_\_\_\_

Program Manager

\_\_\_\_\_

Date

\_\_\_\_\_

Mission Assurance Quality

\_\_\_\_\_

Date

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## Revision History

Revision	Date	Affected Pages	Explanation of Change
1.0	5 December 07	ALL	Initial Release
2.0	29 January 08	ALL	DT Redlines

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## **1.0 SCOPE**

See Software Test Plan.

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## **2.0 APPLICABLE DOCUMENTS**

### **2.1 Source Documents**

- None

### **2.2 Reference Documents**

- Software Test Plan for the Advanced Weather Information Processing System Project, Contract #DG133W-05-CQ-1067, 4 December 2007
- Sections 3.1.2 and 3.1.3 of the AWIPS D-2D User's Manual Build 8.1
- Existing AWIPS 1 test procedures
- The VPN connection to the Silver Spring NWS AWIPS 1 test bed
- Release OB8.1 of the Weather Event Simulator (WES)

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### **3.0 TEST CASE DESCRIPTION**

This test case demonstrates the display of data on a meteogram display.

#### **3.1 Assumptions, Constraints and Preconditions**

- TO8 software has been installed successfully
- CAVE, EDEX and pgAdmin III are running
- Data has been ingested

#### **3.2 Recommended Hardware**

See Software Test Plan.

#### **3.3 Test Inputs**

Section 4.0 below contains the test procedures for this test case. Sections 2.2 – 2.9 of the Software Test Plan contain general test inputs applicable to all TO8 test cases.

#### **3.4 Test Outputs**

The images and data will be displayed in CAVE.

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**4.0 TEST SCENARIO**

<b>Step</b>	<b>Action</b>	<b>Result</b>	<b>Pass/Fail</b>
1.	Start CAVE.	CAVE loads.	
2.	Click mouse button (MB) 1 on 'Volume' in the menu bar and select 'Browser...' from the Volume dropdown menu.	The Volume Browser loads in CAVE.	
3.	Using MB1, click on the settings dropdown menu and select 'Time Series'.	The Volume Browser replaces the Loop option (Time) with a Point list.	
4.	From the Point dropdown menu, use MB1 to select 'Point A'.	'Point A' displays in the Points menu.	
5.	In the Volume Browser, select an available Grid product from the Sources and Fields sections. Then select the surface for the Plane.	The 'Times' and 'Product Selection List' sections display the model time and products respectively.	
6.	With the Grid product selected/highlighted, use MB1 to click on the 'Load' button.	The meteogram displays in CAVE.	DR #867
7.	Repeat step 6 for several other variables (E.g., Temperature and Relative Humidity).	Additional meteograms display in CAVE. Some data may be added to a chart if like variables are chosen for display.	DR #867
8.	Verify that one or more of the following meteorological elements are displayed on the meteogram: Visibility (in miles), cloud decks, surface temperature and dew point, and surface wind speed, gusts and present weather.	One or more of the meteorological elements are displayed on the meteogram in CAVE.	
9.	Click and hold MB3 on one of the products in the product list in the lower right corner of the CAVE display and hover the mouse over 'Change Color'. Then select a color other than the current color of the product.	The selected product changes to the selected color.	
10.	Zoom into the x-axis.	CAVE zooms into the x-axis, focusing on a fraction of the meteogram charts.	
11.	Zoom out of the x-axis.	The x-axis returns to its original state and all meteograms become visible.	
12.	Zoom into the y-axis.	CAVE zooms into the y-axis, focusing on a fraction of the meteogram charts.	
13.	Zoom out of the y-axis.	The y-axis returns to its original state and all meteograms become visible.	
14.	Close the Time Series tab. Clear the CAVE display.	CAVE returns to a blank map in the 'Map' tab.	
	End of test.		

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**5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)**

Number	Description	Test Step(s)
CAVE_TO8_008	CAVE shall provide the capability to display meteograms	6
CAVE_TO8_008.2	The Meteogram product shall display graphs for the available surface meteorological elements that may include one or more of the following: Visibility in miles; cloud decks; surface temperature and dew point; and surface wind speed, gusts and present weather	8
CAVE_TO8_008.3	Resources on the meteogram display shall be configurable	9
CAVE_TO8_008.3.1	CAVE shall allow the user to change the color of the meteogram resource	9
CAVE_TO8_008.8	CAVE shall allow the user to zoom in on the x-axis	10,11
CAVE_TO8_008.9	CAVE shall allow the user to zoom in on the y-axis	12,13
CAVE_TO8_008.10	CAVE shall allow the user to select/define the point/location for the meteogram	4
CAVE_TO8_008.11	Meteograms shall be derived from gridded model data	2-6

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