

Test Case Radar Graphics and Text Products

for

Contract DG133W-05-CQ-1067

**Advanced Weather Interactive Processing System (AWIPS)
Operations & Maintenance**

AWP.TE.SWCTR/TO10-0017

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Change History

Revision	Date	Affected Pages	Explanation of Change
Draft	21 Nov. 2008	ALL	Initial Draft
1	16 Jan. 2009	ALL	Result of NWS comments and PDT
2	6 Feb. 2009	3	Result of DT

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1.0 SCOPE

See TO10 Software Test Plan.

2.0 APPLICABLE DOCUMENTS

2.1 Source Documents

- None

2.2 Reference Documents

- TO10 Software Test Plan for the Advanced Weather Interactive Processing System Project, Contract #DG133W-05-CQ-1067, January 2009.
- The Silver Spring NWS AWIPS I test bed application.
- Rational RequisitePro.

3.0 TEST CASE DESCRIPTION

This test case demonstrates a subset of radar graphics products from the Graphics submenu. This test case also verifies the display of radar text products within the Text Workstation.

3.1 Assumptions, Constraints, and Preconditions

- TO10 software has been installed successfully.
- CAVE and EDEX are running.
- Canned radar data from the 11Jun08 event is available for ingest.
- Actions, Results, and Requirements highlighted in gray indicate requirements and/or capabilities to be included in the scope of future task orders.

3.2 Recommended Hardware

See TO10 Software Test Plan.

3.3 Test Inputs

Section 4.0 contains the test procedures for this test case. Sections 2.2 – 2.9 of the TO10 Software Test Plan contain general test inputs applicable to all TO10 test cases. Grayed out test step(s) indicate functionality not yet delivered.

3.4 Test Outputs

The results outlined in section 4.0 are met.

4.0 TEST SCENARIO

Step #	Action	Result	Pass/Fail
1.	Ingest canned data from 11Jun08 into the sbn/radar endpoint.	The radar data is ingested.	
2.	In CAVE, Mouse Button (MB) 1 click on the Time box at the bottom of the GUI.	The Set Time window opens.	
3.	MB1 click the 'Set Time' radio button and set the following: Year: 2008 Month: 6 Day: 12 Hour: 0 Then MB1 click the 'OK' button.	The Set Time window closes. The date/time box at the bottom of the screen changes to black and reflects the modified/saved time set in the Set Time window.	
4.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Storm Track (STI)'.	The 'Storm Track (STI)' product displays in CAVE.	
5.	Mouse Button (MB) 1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
6.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Hail Index (HI)'.	The 'Hail Index (HI)' product displays in CAVE.	
7.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
8.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Tornado Vortex Sig (TVS)'.	The 'Tornado Vortex Sig (TVS)' product displays in CAVE.	
9.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
10.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Latest TVS Rapid Update (TRU)'.	The 'Latest TVS Rapid Update (TRU)' product displays in CAVE.	
11.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
12.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'All Tilts TRU'.	The 'All Tilts TRU' product displays in CAVE.	
13.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
14.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Mesocyclone (MD)'.	The 'Mesocyclone (MD)' product displays in CAVE.	

Step #	Action	Result	Pass/Fail
15.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
16.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Legacy Mesocyclone (M)'.	The 'Legacy Mesocyclone (M)' product displays in CAVE.	
17.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
18.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Digital Mesocyclone (DMD)'.	The 'Digital Mesocyclone (DMD)' product displays in CAVE.	
19.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
20.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Latest Meso Rapid Update (MRU)'.	The 'Latest Meso Rapid Update (MRU)' product displays in CAVE.	
21.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
22.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'All Tilts MRU'.	The 'All Tilts MRU' product displays in CAVE.	
23.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
24.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Comb Att Table (1km CZ)'.	The 'Comb Att Table (1km CZ)' product displays in CAVE.	
25.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
26.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Comb Att Table (4km CZ)'.	The 'Comb Att Table (4km CZ)' product displays in CAVE.	
27.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
28.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Svr Wx Prob (SWP)'.	The 'Svr Wx Prop (SWP)' product displays in CAVE.	
29.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
30.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'VAD Wind Profile (VWP)'.	The 'VAD Wind Profile (VWP)' product displays in CAVE.	
31.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	

Step #	Action	Result	Pass/Fail
32.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'Vel Az Display (VAD)'.	The 'Vel Az Display (VAD)' product displays in CAVE.	
33.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
34.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'NEXRAD Unit Status'.	The 'NEXRAD Unit Status' product displays in CAVE.	
35.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
36.	Select 'koax' -> 'koax 4 Bit Products' -> 'koax 4bit Reflectivity' -> '0.5 Refl'.	The 0.5 Radar Reflectivity product displays in the main pane.	
37.	Select the Points toolbar button to display the points A-J in the main pane of the D-2D display.	The Points A-J display in the main pane.	
38.	Modify the location of Point A to a position on a reflectivity echo. (Ground clutter may be used if no precipitation is displayed.)	The position of Point A is modified.	
39.	From the menu bar on CAVE's D-2D display, select 'koax' -> 'koax Graphics' -> 'point A'.	The Cell Trends product for point A displays in CAVE.	
40.	MB1 click the 'Clear' button on the toolbar.	The main pane in the D2D Perspective clears to a blank map.	
41.	Open a text window by selecting 'Tools' -> 'Text Window...'	The Text Display Window opens.	
42.	In the 'AFOS Cmd:' text box, enter 'OMAMDPOAX' and press the Enter key.	The 'OMAMDPOAX' product displays in the Text Window.	
43.	MB1 click the 'Clear' button in the Text Window.	The Text Window clears.	
44.	In the 'AFOS Cmd:' text box, enter 'OMAOHPOAX' and press the Enter key.	The 'OMAOHPOAX' product displays in the Text Window.	
45.	MB1 click the 'Clear' button in the Text Window.	The Text Window clears.	
46.	In the 'AFOS Cmd:' text box, enter 'OMASTPOAX' and press the Enter key.	The 'OMASTPOAX' product displays in the Text Window.	
47.	MB1 click the 'Clear' button in the Text Window.	The Text Window clears.	
48.	In the 'AFOS Cmd:' text box, enter 'OMATVSOAX' and press the Enter key.	The 'OMATVSOAX' product displays in the Text Window.	
49.	MB1 click the 'Clear' button in the Text Window.	The Text Window clears.	
50.	In the 'AFOS Cmd:' text box, enter	The 'OMAVWPOAX' product displays in the	

Step #	Action	Result	Pass/Fail
	'OMAVWPOAX' and press the Enter key.	Text Window.	
51.	MB1 click the 'Clear' button in the Text Window.	The Text Window clears.	
52.	MB1 click on the Time box at the bottom of the GUI.	The Set Time window opens.	
53.	MB1 click the 'Set Time' radio button and select 'Use current real time'. Then MB1 click the 'OK' button.	The Set Time window closes. The date/time box at the bottom of the screen changes to gray and reflects the current time.	
End of Test			

5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR3120	The AWIPS system shall implement radar graphics and text products.	1-53