

# **3\_5\_Panel\_Display\_1.0**

## **For the Advanced Weather Information Processing System Project**

for the

AWIPS

Contract

DG133W-05-CQ-1067

DCN: AWP.TE.SWCTR/TO8-0025

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## Revision History

Revision	Date	Affected Pages	Explanation of Change
1.0	5 December 07	ALL	Initial Release
2.0	17 January 08	iii, 7-9	PDT Redlines/NWS Comments
3.0	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 2.1.1 and 2.1.3 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 illustrates the display of data with CAVE using the 3 and 5 panel displays. This includes toggling between the main pane and the small panes and the resizing of the panes.

#### **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 opens the 5-panel display, with 4 small panes on the left and 1 main pane.	
2.	Verify different map scales are displayed in the large and small panes.	The main pane and the small panes display different scale maps.	
3.	With the frames set to 12, select a product that can be looped in time and updated automatically such as radar or satellite. Note the time on the latest frame/image and record the product description and time. Record the Product Description: _____ Record the time of the latest image: _____	CAVE displays the product in the main pane.	
4.	With the selected product in the main pane, click MB1 on the 'Loop' button.	The product loops chronologically through the 12 frames (provided enough data to populate all 12 frames has been ingested).	
5.	Hover the mouse over the first (top) small pane and click MB3.	The product swaps from the main pane into the small pane. A blank map displays in the main pane.	
6.	Verify the product swapped to the small pane remains looping through the 12 frames.	The product continues to loop in the small pane through the 12 frames.	
7.	Select a different product that can be looped in time and updated, such as another radar tilt or a different channel satellite image. Note the time on the latest frame/image and record the product description and time. Record the Product Description: _____ Record the time of the latest image: _____	CAVE displays the product in the main pane.	
8.	Click MB1 on the 'Three Pane Layout' button.	A new perspective tab appears. CAVE displays a 3-panel display with the displayed images in tact.	
9.	Hold down MB1 on the horizontal border separating the small 2 panes, and drag it down several inches.	The image and map in the top pane enlarges while the map in the lower pane shrinks in size.	
10.	Hold down MB1 on the vertical border separating the 2 small panes and the main pane, and drag it to the right several inches.	The size of the two small panes enlarges while the map in the main pane shrinks in size.	
11.	Using MB1, click on the 'D2D 5 Pane' tab.	CAVE displays the 5-panel display.	
12.	Using the product displayed in the main pane, click MB1 on the 'Loop' button.	The product displayed in the mane pane loops chronologically.	
13.	After a period of time has passed (depends on the product), in the main pane, verify that a new image appears at the end of the loop. Compare to the time recorded in step 7.	Upon arrival of the product, the main pane is updated. The updated image is in chronological order.	
14.	With the cursor hovered over the top small pane, click MB3.	The product in the small pane swaps with the displayed product in the main pane.	
15.	In the small pane, verify that a new image appears at the end of the loop, comparing to the time recorded in step 3.	The loop updated in the small pane.	
16.	With the cursor over the image in the main pane, zoom in on the main pane.	The image enlarges as the user zooms into the main pane.	
17.	With the cursor over the image in the main pane, zoom out of the main pane.	The image grows smaller as the user zooms out of the main pane.	
18.	Within the main pane, hold down MB1 and drag the cursor around the image.	The window pans across the image within the main pane.	
19.	With the cursor over the image in the small pane, zoom in on the small pane.	The image enlarges as the user zooms into the small pane.	

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20.	With the cursor over the image in the small pane, zoom out of the small pane.	The image grows smaller as the user zooms out of the small pane.	
21.	Within the small pane, hold down MB1 and drag the cursor around the image.	The window pans across the image within the small pane.	
22.	Clear all panes within CAVE.	All panes in CAVE are cleared.	
	End of test.		

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

<b>Number</b>	<b>Description</b>	<b>Test Step(s)</b>
CAVE_TO8_009	CAVE shall contain a GUI on which display data	ALL
CAVE_TO8_009.1	CAVE shall allow the user to display data in the large pane	3,7
CAVE_TO8_009.2	CAVE shall allow the user to display data in the small panes	5
CAVE_TO8_009.2.1	The data in the large pane shall update automatically	7,13
CAVE_TO8_009.2.2	The data in the small panes shall update automatically	3-5,15
CAVE_TO8_009.3	CAVE shall contain a 5-panel display	1
CAVE_TO8_009.4	CAVE shall contain a 3-panel display	8
CAVE_TO8_009.5	CAVE shall allow the user to change the size of the panes using MB1	9,10
CAVE_TO8_009.5.1	The map inside the resized panes shall resize so that the entire original map remains visible	9,10
CAVE_TO8_009.6	CAVE shall allow the user to swap the small pane to be viewed in the large pane	14
CAVE_TO8_009.6.1	The small panes shall display data as displayed in the large pane prior to the swap	5,14
CAVE_TO8_009.6.2	CAVE shall loop data in the small panes when an activated loop from the main pane is swapped into a small pane	6
CAVE_TO8_009.6.3	CAVE shall allow the user to zoom into the small panes	19
CAVE_TO8_009.6.4	CAVE shall allow the user to zoom out of the small panes	20
CAVE_TO8_009.6.5	CAVE shall allow the user to pan within the small panes	21
CAVE_TO8_009.6.6	CAVE shall allow the user to zoom into the main pane	16
CAVE_TO8_009.6.7	CAVE shall allow the user to zoom out of the main pane	17
CAVE_TO8_009.6.8	CAVE shall allow the user to pan within the main pane	18

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