

Test Case Vectors_1.0

for the

AWIPS

Contract

DG133W-05-CQ-1067

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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, 4-5	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 2.1.6.3, 2.4.1, 2.4.4 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 contours for gridded data. This includes the ability to display contours and the gridded data simultaneously, or as a single product within the main panel. This test case also demonstrates the ability to adjust the density, line width, line style and line color of the contours.

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

Step	Action	Result	Pass/Fail
1.	Start CAVE.	CAVE starts.	
2.	Open the Volume Browser and select an available gridded product. Then click the 'Load' button.	The gridded product displays in the main pane as contours.	
3.	Using mouse button (MB) 3, click on the product IDs in the product legend and select 'Load as Image'.	The gridded product displays the gridded data as an image. The contours remain displayed on top of the image.	
4.	Click MB1 on the product ID in the product legend.	The contours are removed from the display. Only the gridded image remains.	
5.	Repeat the step #4.	The contours reappear in the CAVE display.	
6.	Click MB1 on the gridded image product ID in the product legend.	The gridded image is removed from the display. Only the contours remain.	
7.	Click MB1 on the gridded image product ID in the product legend.	The gridded image reappears in the CAVE display. Both the contours and image are displayed in CAVE.	
8.	Repeat step #2 for a second gridded product.	A second gridded product displays in the main pane as contours.	
9.	Click and hold MB3 on the second contoured product in the product legend.	A pop-up menu opens.	
10.	Release MB3 over 'Change Color...'	A color palette window opens.	
11.	Use the color palette to select a color.	The sample color changes to the selected color.	
12.	Press OK.	The color palette window closes and the product contours change to the selected color using the color palette.	
13.	Click and hold MB3 on one of the contoured product in the product legend.	A pop-up menu opens.	
14.	Hover over 'Line Width' and release MB3 on the width with a thicker setting (e.g., 3).	The width of the isopleths thickens in the main pane.	
15.	Click and hold MB3 on the contoured product in the product legend.	A pop-up menu opens.	
16.	Hover over 'Line Style' and release MB3 on a different style than is displayed.	The isopleths become the selected line type.	
17.	Click and hold MB3 on the contoured product in the product legend.	A pop-up menu opens.	
18.	Release MB3 on Blinking.	The product blinks on and off.	
19.	Repeat above two steps (Blinking).	The contours stop blinking.	
20.	With both the image and gridded contours visible, zoom into and out of the main display.	Several functions occur: (1) The density of isopleth lines increases as the user zooms-in; (2) The density of isopleth lines decreases as the user zooms-out; (3) County boundaries appear as the user zooms-in over a state; (4) County boundaries disappear as the user zooms-out over a state.	
21.	MB1 on the Clear button to clear the products in the main panel.	The main panel reverts to a blank map.	
	End of test.		

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5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
CAVE_TO8_007	CAVE shall display contours for gridded data; this includes toggling between contours and the gridded image within the main panel	2,4-8
CAVE_TO8_007.1	The user shall be able to display contours for gridded data parameters	2,8
CAVE_TO8_007.2	Users shall be able to adjust the density of contours	20
CAVE_TO8_007.4	Contoured graphic overlays of model data shall be displayable as an image	3
CAVE_TO8_007.5	The user shall have the option to overlay the contoured gridded data with the image created from the contoured gridded data	3,4-8
CAVE_TO8_007.7	The user shall be able to set the line width of a contour	14
CAVE_TO8_007.8	The user shall be able to set the line style of a contour	16
CAVE_TO8_007.9	The user shall be able to set the line color of a contour	10-12

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