Test Case Hazards Grids

for

Contract DG133W-05-CQ-1067

Advanced Weather Interactive Processing System (AWIPS)
Operations & Maintenance

AWP.TE.SWCTR/TO10-0006

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Change History

Revision	Date	Affected Pages	Explanation of Change
Draft	21 Nov. 2008	ALL	Initial Draft
1	13 Jan. 2009	ALL	Result of NWS comments and PDT
2	16 Jan. 2009	ALL	Result of PDT
3	6 Feb. 2009	3	Result of DT

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1.0 SCOPE

See TO10 Software Test Plan.

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2.0 APPLICABLE DOCUMENTS

2.1 Source Documents

- GHG Monitor

2.2 Reference Documents

- Software Test Plan for the Advanced Weather Interactive Processing System Project, Contract #DG133W-05-CQ-1067, January 2009.
- The Silver Spring NWS AWIPS 1 test bed application.
- Rational RequisitePro.

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3.0 TEST CASE DESCRIPTION

This test case demonstrates the capabilities in GFE that involve creating Hazards grids through the Make Hazard dialog, separating hazards and merging hazards.

3.1 Assumptions, Constraints, and Preconditions

- TO10 software has been installed successfully.
- CAVE and EDEX are running.
- Data has been ingested.
- No hazards are populated in the Grid Manager.
- Actions, Results, and Requirements highlighted in gray indicate requirements and/or capabilities to be included in the scope of future task orders. They are included here for purposes of continuity and traceability with the original AWIPS I test case documents.

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.

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4.0 TEST SCENARIO

Step #	Action	Result	Pass/Fail
1.	In CAVE, Mouse Button (MB) 1 click on the Perspectives icon and select 'Other'.	The Open Perspective dialog appears.	
2.	MB1 click 'GFE'. Then MB1 click 'OK'.	The Open Perspective dialog closes. The GFE Perspective loads in CAVE.	
MakeHazard			
3.	From the Main Menu, select 'Hazards' -> 'MakeHazard'.	The MakeHazard dialog box appears.	
4.	From the MakeHazard dialog box, select an available hazard from the hazard list. Then MB1 click and drag over the adjacent forecast zone map to select a forecast zone(s) for the hazard. Adjust the forecast start and end times (automatically set an hour apart) for the hazard at the column to the right. MB1 click 'Run' to save the selections.	The selections are made and 'saved' into the Grid Manager. The MakeHazard dialog remains open.	
5.	Repeat step 4 to create a second hazard. MB1 click 'Run/Dismiss' to save the selections.	The selections are made and 'saved' into the Grid Manager. The MakeHazard dialog closes.	
6.	From the Main Menu, MB1 click 'Hazards' -> 'MergeHazards' to merge the Hazards on the main display.	The Hazards merge.	
7.	From the Main Menu, MB1 click the 'Save Forecast' icon. The Save Forecast dialog box appears. MB1 click 'Save Forecast' to save changes made to the main display.	The changes are saved.	
8.	From the Main Menu, select 'Products' -> 'Formatter Launcher'.	The Formatter Launcher dialog box appears.	
9.	From the Formatter Launcher dialog box, select 'Products' -> 'Hazard' -> <the Hazard created above>. Set 'Formatting:' to 'Normal: O-Vtec'. Then MB1 click the 'Run Formatter' icon to run the Formatter Launcher. Verify that there is a message and that the VTEC code displays.	A message displays in the text area. The VTEC code is present.	
10.	Close the Formatter Launcher dialog.	The Formatter Launcher dialog closes.	
11.	In the Grid Manager, MB3 click and hold on a blank grid in the Hazards parm at a	The blank grid in the Grid Manager fills in with a gray grid (highlighted yellow since it is the selected grid). The grid is locked by the user	

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Step #	Action	Result	Pass/Fail
	time in the future. Then select 'Create From Scratch' from the popup menu.	as indicated by the green highlight.	
12.	MB1 click the Draw Edit Area tool on the tool bar. Then draw a shape on the grid in the Spatial Editor.	The Edit Areas tool is activated. An edit area is drawn in the Spatial Editor.	
13.	MB3 click and hold on the colorbar. In the popup menu, select 'Set Pickup Value…'.	The Define Discrete dialog appears.	
14.	Select a hazard from the dropdown menu. Then MB1 click the 'Assign Value' button.	The edit area is assigned the selected hazard.	
15.	Draw a second edit area in the Spatial Editor.	An edit area is drawn in the Spatial Editor.	
16.	In the Define Discrete dialog, select a different hazard. Then MB1 click the 'Assign Value' button.	The edit area is assigned the selected hazard.	
17.	Draw a third edit area in the Spatial Editor.	An edit area is drawn in the Spatial Editor.	
18.	In the Define Discrete dialog, select a different hazard. Then MB1 click the 'Assign Value' button.	The edit area is assigned the selected hazard.	
19.	Close the Define Discrete dialog.	The Define Discrete dialog closes.	
20.	Remove the edit area from the Spatial Editor by MB1 clicking the 'Clear Edit Area' button.	The edit area is removed from the display.	
21.	From the menu bar, MB1 click 'Hazards' -> 'SeparateHazards' to separate the Hazards on the main display.	The Hazards separate into individual parms, one for each hazard.	
22.	MB1 click on the Pencil Tool on the toolbar.	The Pencil Tool is activated.	
23.	Modify the separated hazards (not those in the main Hazards parm) by MB1 dragging the cursor from inside the hazard area elsewhere, and releasing MB1 after returning to the hazard area.	The hazards are modified.	
24.	From the menu bar, MB1 click 'Hazards' -> 'MergeHazards' to merge the Hazards on the main display.	The Hazards merge.	
25.	Verify all hazards merged successfully.	Verified.	
End of Test			

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5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR3123	The AWIPS system shall implement Text formatter and hazards products.	8-10

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