

AE IV&V Test Case TO8_9002

Revision History

Rev. No.	Date	By	Description of Changes
0	4/18/08	Mike Rega	Initial version

1. TEST CASE IDENTIFIER

TO8_9002

2. NARRATIVE

Use various CAVE geographic polygons in WarnGen to test the accuracy of county portions and cities placed in short duration warning products.

3. REFERENCES (Optional)

None

4. FEATURES TO BE TESTED

Test the WarnGen logic used to specify counties and cities in the various sections of short duration warning products.

5. SETUP INSTRUCTIONS

Step	Setup Procedure	Result
1.	Localization required for desired WFO	Local geography is available to WarnGen

6. ACCEPTANCE CRITERIA

Step(s)	Criteria	Result
13.	Expected result required for success	
15.	Expected result required for success	
16.	Expected result required for success	
17.	Expected result required for success	

7. TESTING PROCEDURE

Step	Procedure	Expected Result	Actual Result
1.	Start CAVE, zoom to CWA scale	County boundaries display	
2.	Start the text workstation (in TO8, use 'CAVE' menu, 'New' option, select 'Text Workstation')	Text workstation windows display	
3.	From the "maps" menu, plot CWA boundaries, use MB3 on the CWA product label to change color	CWA boundaries are displayed using the chosen color	
4.	From the 'maps' menu, plot the county names and cities	County names and cities are displayed on CAVE	
5.	Load a radar reflectivity image (optional)	The radar image appears on CAVE	
6.	Launch WarnGen	WarnGen GUI appears, 'drag me to storm' point appears on CAVE	
7.	Select the SVR product type, single storm cell, duration 30 minutes	GUI indicates the SVR selection	
8.	Pick a geographic area in the central part of a county and note the priorities of various WarnGen cities. Find a variety of category one, two and three cities. I don't know yet how to determine this configuration in AWIPS II.	For now, assume that the priorities are the same as in AWIPS I. File /awips/fixa/data/CitiesInfo.txt, last field in each record has '1' for most important cities, '2' secondary importance, '3' least important.	
9.	Use MB1 to move 'drag me to storm' so that the current storm location lies directly over a category one city.	'drag me to storm' moves to specified location and default warning polygon with four vertices appears	
10.	Move back in time by one or more frames, use MB1 to adjust the future storm track so passes toward another category one city.	The storm track and polygon changes to the desired direction and speed	
11.	Return to the latest frame	'Drag me to storm' point moves to latest location	
12.	Use MB1 to adjust the polygon vertices so only the two category one cities chosen above are within the polygon.	Polygon should change as desired, storm track remains the same.	
13.	Use the 'distance speed' and 'time of arrival/lead time' tools (under the 'tools' menu) to determine the direction, speed and time of the storm at the two locations.	In AWIPS II, the tools don't seem to be working correctly. I need to check if there are TTRs written or practice more with the tools.	
14.	Record the lat/lon coordinates of the current storm location and each of the polygon	When MB1 is used to move the mouse, the lat/lon	

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Step	Procedure	Expected Result	Actual Result
	vertices. Use MB3 and select 'lat/lon readout' to find the values.	coordinate displays on CAVE.	
15.	Use 'create text' to create the work version of the product (in TO8, WarnGen will reset, TTRs 19, 59, 102 document this error)	The work version of the product should pop up in a new text editor window.	
16.	Verify the following items in the work version of the SVR: <ul style="list-style-type: none"> - 1st bullet has correct county name and portion (central), correct city should be mentioned - 2nd bullet has correct time and storm location 'over' (or 'near') the city, correct time, storm speed and direction - 4th bullet contains correct city and time of storm arrival - LAT...LON line has all correct coordinates of polygon - TIME...MOT...LOC contains correct storm time, direction, speed, lat/lon 	All geographic items are correct.	
17.	Repeats steps 6 through 16 for various geographic scenarios – some suggested scenarios follow	All geographic items are correct	
18.	Vary the storm duration, direction and speed	All geographic items are correct	
19.	Select areas near the edges of counties to verify that the correct counties are listed and the correct portions wording in first bullet (northern, extreme, etc)	All geographic items are correct	
20.	Place the storm between cities and verify that category one cities are chosen in preference to category two or three cities	All geographic items are correct	
21.	Place the storm in an area with many cities and verify the proper selection of category one cities in preference to lesser cities	All geographic items are correct	
22.	Place the storm in an area with only category two and three cities and verify the proper selection of cities	All geographic items are correct	
23.	Place the storm far away from any cities and verify the correct distance from cities and use of 'rural areas' wording	All geographic items are correct	
24.	Repeat steps 6 through 23 for the TOR product	All geographic items are correct	
	End of test		