

AE IV&V Test Case: Baseline CAVE Maps

Rev. No.	Date	By	Description of Changes
0	18-apr-2008	S. Davison	Adapted from OB8.1 test case: SIT_Baseline_CAVE_Maps.doc

Test Case Identifier

Baseline CAVE Maps

Narrative

This test case demonstrates the capability of AWIPS to display various map backgrounds at various map scales.

Table 1 is not correct for CAVE. In general, CAVE allows more features for any given scale since a continuous zoom from any scale is possible.

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Step #	Action / Inputs	Expected Outputs	Pass(P)/ Fail(F) Pending (Pen)	DR #, Name, Description for failed step	Special Needs / Comments
1.	Left click on the desk top and select Start CAVE from the list.	The CAVE system launches			
2.	From the CAVE menu bar, click on the Maps menu, tear it off, and place it on the left side of the screen. TO8 Note: It does not appear that CAVE supports tearoff menus, so this step is NA. The tester will need to keep re-posting the Maps menu.	All map backgrounds are listed on the menu, with those not available at the current scale being greyed out.			
3.	Use the scale pull-down menu (left side of toolbar) and select N. Hemisphere to start. (Select the other scales as you repeat this step)	Map scale changes to selected. (The default option is CONUS.)			
4.	Load a product. Under the NCEP/Hydro menu > follow down to the HPC section > select the Temps & Weather sub-menu > and select the MSL Pressure Analysis and the Surface Fronts Analysis .	The two products are loaded. Note that the products are now in the product legend in the bottom right corner of the large pane.			
5.	Press and hold MB3 anywhere in the large pane and select Show Map Legends . NA for TO8. The MB3 context menu does not have this selection. (Possible DR for non-conformity with D2D?)	The product legend in the bottom right corner of the large pane is replaced by the map legend(s). This shows the maps (shape files) that have been loaded. Only the default maps are shown, that is, the maps that load automatically. The default map features for each scale are indicated by Table 1.			
6.	Press and hold MB3 anywhere in the large pane and select Show Product Legends .	The product legends are displayed again.			

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Step #	Action / Inputs	Expected Outputs	Pass(P)/ Fail(F) Pending (Pen)	DR #, Name, Description for failed step	Special Needs / Comments
	NA for TO8. The MB3 context menu does not have this selection. (Possible DR for non-conformity with D2D?)				
7.	From the Maps menu select the HiRes Topo Image . Most maps are <i>graphic shape</i> files, but some, including the HiRes Topo Image and the Warngen Tables, are <i>images</i> .	Map product selected is displayed in the main pane. NOTE: HiRes Topo Image shows up in the product legend in the bottom right corner of the large pane with the other products loaded in previous steps. These <i>images</i> are the only ones that will show up there.			
8.	Clear the main pane.	All the products in the product legend are cleared. This includes the HiRes Topo Image. The default map for that scale remains loaded.			
9.	Repeat steps 3-9 for all the scales .				
10.	Select N. Hemisphere from the scale pull-down menu.	Map scale changes to selected.			
11.	Load products into the CAVE main pane. From the Volume menu, select Browser .	The Volume Browser window opens.			
12.	In the Volume Browser select any GFS model from the Grid list in the source section.	Source shows up highlighted in the source selection list. Note: The number of models available on each scale will vary.			
13.	In the Volume Browser select the MSL Press field from the Basic list in the field section.	Field shows up highlighted in the field selection list; plane shows up highlighted in the plane selection list; product shows up			

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Step #	Action / Inputs	Expected Outputs	Pass(P)/ Fail(F) Pending (Pen)	DR #, Name, Description for failed step	Special Needs / Comments
		highlighted in the product selection list. MSL Pressure is only a surface parameter, so the surface plane will automatically be selected.			
14.	In the Volume Browser select the Load button at the bottom.	Product is loaded in the main pane as a graphic and the product is loaded to the product list (lower right of main pane). It defaults to the last frame.			
15.	Press and hold MB3 anywhere in the large pane and select Show Map Legends . NA for TO8	The product legend in the bottom right corner of the large pane is replaced by the map legends.			
16.	Verify that the default map features indicated in Table 1 appear in the Maps menu.	Compare with the mapping in Table 1.			
17.	From the Maps menu, select in turn all available map features <i>other than</i> the HiRes Topo Image , the Warngen Tables , the User Shape Files , or the defaults just toggled off.	The map features are overlaid on the large pane, and the map feature names are added to the list in the map legends.			
18.	Verify the available map features for the <i>current scale</i> , as indicated in Table 1. Note: Table 1 shows the map features that are available . This does not imply that there will be	Note that some map features may be available at a scale, but have nothing to plot for the particular localization (e.g., Profilers outside the Midwest, Buoys for inland stations, and Spotters if they have not been set up.)			

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Step #	Action / Inputs	Expected Outputs	Pass(P)/ Fail(F) Pending (Pen)	DR #, Name, Description for failed step	Special Needs / Comments
	displayable data within the scope of view, i.e., some map features can be selected but may not display anything.				
19.	Toggle the map features on and off by clicking MB1 on the names of the map features in the legend.	The map feature is toggled on or off.			
20.	Press and hold MB3 anywhere in the large pane and select Show Product Legends .	The map legends are replaced by product legends.			
21.	Clear the main pane.	Only the default map for that scale remains loaded.			
22.	Repeat steps 11-21 for the other Scales .	Verify that Map Features are as in Table 1.			
23.	To check OCONUS Map features, log into <i>tbw4</i> and repeat all the preceding steps.	Verify that Map Features are as in Table 2.			
24.	To check RFC Map features, log into <i>tldr</i> and repeat all the preceding steps that are applicable to an RFC.	Verify that Map Features are as in Table 3.			

Table 1 Map Products for CONUS WFOs The following products are *available* from the Maps menu at the specified scales:

N. Hemisphere	N. American	CONUS	Map Products (CONUS= <i>tbdw</i> , <i>tbw3</i>)	Regional	State(s)	WFO
Default	Default	X	States <i>or</i> State Boundaries	X	X	X

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N. Hemisphere	N. American	CONUS	Map Products (CONUS=tbw, tbw3)	Regional	State(s)	WFO
Default	X	X	Lat/Lon Ocean	X		
X	X	X	Dist Scale	X	X	X
X	X	X	HiRes Topo Image ('product')	X	X	X
	X	Default	State/County	Default	Default	X
	X	X	ARTCC areas	X	X	X
X	X	X	88Ds	X	X	X
	X	X	GFS Sounding Locs	X	X	X
	X	X	GOES Sounding Locs	X	X	X
	X	X	NAM Sounding Locs	X	X	X
X	X	X	RAOBs	X	X	
	X	X	METARs	X	X	X
X	X	X	Synoptic Sites	X	X	X
	X	X	Fixed Buoys	X	X	X
		X	NPN Profilers (Midwest only)	X	X	X
X	X	X	ACARS Airports	X	X	X
	X	X	TWEB routes	X	X	X
	X	X	CWAs	X	X	X
			Counties	X	X	Default
			Zones	X	X	X
			Marine Zones	X	X	X
			Marine Locations	X	X	X
	X	X	Interstates	X	X	X
			Cities	X	X	X
			County Names	X	X	X
			LDAD stns	X	X	X
			LDAD precip	X	X	X

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N. Hemisphere	N. American	CONUS	Map Products (CONUS=tbdw, tbw3)	Regional	State(s)	WFO
	X	X	Range rings	X	X	X
			Wrng Locs		X	X
			Warngen Tables ('product')		X	X
			Spotters Readout ('product')	X	X	X
			Spotters		X	X
			Drainage basins	X	X	X
			Lakes	X	X	X
	X	X	RFC boundaries	X	X	X
			Fire WX zones		X	X
			Fire WX stns		X	X
X	X	X	User Shape File	X	X	X
		X	FFMP Basins	X	X	X
X	X	X	Rivers (<i>OB8.1 and later</i>)	X	X	X

Table 2 Map Products for OCONUS WFOs The following products are *available* from the Maps menu at the specified scales:

N. Hemisphere	Marine	State	Map Products (OCONUS=tbw4)	Aleutian	Mainland	Local
Default	Default	X	States <i>or</i> State Boundaries	X	X	X
Default	X	X	Lat/Lon Ocean	X		
X	X	X	Dist Scale	X	X	X
X	X	X	HiRes Topo Image ('product')	X	X	X
	X	Default	State/County	Default	Default	X
	X	X	ARTCC areas	X	X	X
X	X	X	88Ds	X	X	X

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N. Hemisphere	Marine	State	Map Products (OCONUS=tbw4)	Aleutian	Mainland	Local
	X	X	GFS Sounding Locs	X	X	X
	X	X	GOES Sounding Locs	X	X	X
	X	X	NAM Sounding Locs	X	X	X
X	X	X	RAOBs	X	X	
	X	X	METARs	X	X	X
X	X	X	Synoptic Sites	X	X	X
	X	X	Fixed Buoys	X	X	X
		X	NPN Profilers (Midwest only)	X	X	X
X	X	X	ACARS Airports	X	X	X
	X	X	TWEB routes	X	X	X
	X	X	CWAs	X	X	X
			Counties	X	X	Default
			Zones	X	X	X
			Marine Zones	X	X	X
			Marine Locations	X	X	X
	X	X	Interstates	X	X	X
			Cities	X	X	X
			County Names	X	X	X
			LDAD stns	X	X	X
			LDAD precip	X	X	X
			Range rings		X	X
			Wrng Locs		X	X
			Warngen Tables ('product')	X	X	X
			Spotters Readout ('product')	X	X	X
			Spotters		X	X
			Drainage basins	X	X	X

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N. Hemisphere	Marine	State	Map Products (OCONUS=tbw4)	Aleutian	Mainland	Local
			Lakes	X	X	X
	X	X	RFC boundaries	X	X	X
			Fire WX Zones		X	X
			Fire WX stns		X	X
X	X	X	User Shape File	X	X	X
X	X	X	FFMP Basins	X	X	X
X	X	X	Rivers (<i>OB8.1 and later</i>)	X	X	X

Table 3 Map Products for RFCs The following products are *available* from the Maps menu at the specified scales:

N. Hemisphere	N. American	CONUS	Map Products (RFC= tldr)	Regional	RFC	WFO
Default	Default	X	States <i>or</i> State Boundaries	X	X	X
Default	X	X	Lat/Lon Ocean	X	X	
X	X	X	Dist Scale	X	X	X
X	X	X	HiRes Topo Image ('product')	X	X	X
	X	Default	State/County	Default	Default	X
X	X	X	88Ds	X	X	X
X	X	X	RAOBs	X	X	
	X	X	NAM Sounding Locs	X	X	X
	X	X	GOES Sounding Locs	X	X	X
	X	X	METARs	X	X	X
X	X	X	Synoptic Sites	X	X	X
	X	X	Fixed Buoys	X	X	X
		X	NPN Profilers (Midwest only)	X	X	X
	X	X	TWEB routes	X	X	X
	X	X	CWAs	X	X	X

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N. Hemisphere	N. American	CONUS	Map Products (RFC= tbd)	Regional	RFC	WFO
			Counties	X	X	Default
			Zones	X	X	X
	X	X	Interstates	X	X	X
			Cities	X	X	X
			County Names	X	X	X
			LDAD stns	X	X	X
			LDAD precip	X	X	X
			Range rings			X
			Spotters Readout ('product')	X	X	X
			Spotters			X
			Drainage basins	X	X	X
			Lakes	X	X	X
	X	X	RFC boundaries	X	X	X
	X	X	Fine-Scale Rivers	X	X	X
	X	X	Coarse-Scale Rivers	X	X	X
	X	X	River Fcst Grp Boundaries	X	X	X
			River Flow Directions			X
X	X	X	User Shape File	X	X	X