

Release: Baseline	Test Case Creation Engineer: Amanda Wu / Will Leverenz
Title: Baseline D2D Images_M	Date Test Case Created: 01/26/2006
Test Case Execution Engineer:	Pass/Fail/Pending:
Test Platform: TBW3 (SWIT), TBW4, TBDR, TBDW (SIT)	Total Test Time:
Start Date:	Run Time for processes or reports:
Complete Date:	Database Instance and Version:
Logged in User's Role:	Location of Test Artifacts for this test case:
Notification Server Version:	CI:
Last Modified By: Scott Nicholson	Test Steps:
Date Modified: 04/5/09	

Test Case #: **D2D_Images**

Test Case Description

This test case demonstrates the capability of AWIPS II to allow the user to edit, save, and manipulate colors and display characteristics for satellite and radar products. This test case also demonstrates the capability of AWIPS II to replace images in the large pane, automatically update when new images are received, and change the color and display characteristics of map backgrounds.

- Requirements
 - Not Applicable.
- Data Input:
 - Not Applicable.
- Prerequisite Conditions:
 - The user must log on to a graphics workstation (LX) with valid username and password

Note: Actions, Results, and Requirements highlighted in gray will not be executed. Refer to the 'Comments' column for explanation(s).

Step #	Action / Inputs	Expected Outputs	Pass(P)/ Fail(F) Pending (Pen)	DR #, Name, Description for failed step	Special Needs / Comments
1.	On the right monitor, open a terminal. Type the following and press the Enter key: ./cave/cave.sh	CAVE launches.			The startup of CAVE is a variance.
2.	On the right monitor, from the Scale option, select CONUS .	The CONUS map scale displays in the large pane.			
3.	Ensure the Toggle image combination icon is toggled off.	The Toggle image combination icon is deselected.			
4.	From the Frames option, select 1 .	The selected frame displays.			
5.	Click on the Clear button.	The large pane clears.			
6.	From the Satellite menu, select IR Window .	The IR satellite product displays in the large pane.			
7.	Select the Image Properties icon in the toolbar.	The Image Properties window displays.			
8.	Select the Edit US IR Sat..... button.	The CIRA (IR Default) window displays.			
9.	In the middle of the Image Color Editor window, move the arrows using MB1 to define a range of values that you wish to color. Then change the position of the centroid in the color wheel in the bottom right area of the window (Lower Color section) to a desired color.	The color in the color swatch to the right of the color wheel changes, corresponding to the position of the centroid in the color wheel.			
10.	Click the Fill button to apply the color currently indicated in the color swatch to the current IR Satellite image.	The appropriate sections of the satellite image changes to the selected color.			

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11.	Click the Office Save As button.	The Save color table for office window displays.			
12.	In the Save color table for office window, type: office:testStep12<date> and click OK .	The new selected color table for the office is saved.			
13.	Repeat Step 9, choosing another portion of the color band and selecting colors from both color wheels (Upper and Lower color sections).	The selected color wheel changes.			
14.	Select Interpolate .	The color values chosen in the color wheels are interpolated across the selected portion of the color band, and the colors change to the those values in the satellite image.			
15.	Click the Save As... button.	The Save color table for <local user> window displays.			
16.	On the Save color table for <local user> command line, type: <local user>:testStep16<date> and click OK .	The new selected color table for the local user is saved.			
17.	Close the <i>Image Color Editor</i> window.	The window closes, leaving the Image Properties window open.			
18.	Click on the Clear button.	The large pane clears.			
19.	Under the File menu on the large pane, select History List .	The History List window displays.			

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20.	Select the <i>IR Window product</i> (most recent) from the History List and click Load .	The image is displayed with the customized color curve.			
21.	Close the History List window.	The window closes.			
22.	From the Image Properties window opened earlier, select any color curve from the top pull-down menu associated with the IR Satellite image.	The color curve selected is applied to the image.			
23.	Select another color curve .	The range of colors in the color curve is applied to the satellite image.			
24.	Close the Image Properties window.	The Image Properties window closes.			
25.	Click and hold MB3 anywhere in the large pane.	A pop-up menu appears.			Non-scheduled DR written. DR #704
26.	Select Show Map Legends from the pop-up menu.	The map legend replaces the product legend at the bottom right of the pane.			Non-scheduled DR written. DR #704
27.	Click and hold MB3 over the map legend (State/County Boundaries).	A States/Countries menu appears.			
28.	From Change Color , choose a color. Then click OK.	The map outline changes color accordingly.			
29.	Click and hold MB3 over the large pane.	A pop-up menu appears.			Non-scheduled DR written. DR #704

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30.	Select Show Product Legends .	The product legend replaces the map legend at the bottom right corner of the large pane.			Non-scheduled DR written. DR #704
31.	Click and hold MB3 over the product legend.	A pop-up menu appears			
32.	Select Edit Colors .	The Image Colors Editor appears.			
33.	Choose desired colors for the color curve as done in Steps 7-10.	The satellite image changes according to the selected colors.			
34.	Close the <i>Image Color Editor</i> , and clear the large pane by clicking the Clear button.	The Image Color Editor closes and the large pane clears.			
35.	From the Scale option, select WFO (<i>Local on tbw4</i>), then load an image from the Satellite menu. Make sure to note the default colors.	The selected image from the Satellite is loaded.			
36.	Select the Image Properties icon from the toolbar.	The Image Properties window displays.			
37.	Click on the Combine Next Image Load to enable the radio button.	The image is toggled on			Slice 5
38.	Under the Load Mode option (next to Scale), select Forced .	The load mode is now Forced.			Slice 5
39.	Load a .5 refl image from the kxxx Reflectivity cascading menu under the kxxx menu.	The images have combined.			Slice 5

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40.	Using the top slide bar in the Image Properties window, move from far left to right, stopping to view changes in the image.	One image is displayed on the screen at a time on either end of the slide bar.			Slice 5
41.	Move the slide bar to the middle.	The combined image is shown again.			Slice 5
42.	Select new color curves for each image from the selection lists for each product in the Image Properties window.	The color curves selected are applied to the images.			
43.	Close the Image Properties window, and clear the large pane by clicking the Clear button.	The Image Properties window closes and the large pane clears.			
44.	From the Satellite menu, select 4 panel .	A 4 panel satellite product is displayed in the large pane.			
45.	In one of the panels, press and hold MB3 , then select Show Map Legends .	The map legend (Count Boundaries) appears in the bottom right corner of this panel.			Non-scheduled DR written. DR #704
46.	Click and hold MB3 over the map legend.	A Reg Counties pop-up menu appears.			
47.	Select Set Color from this menu, and choose the color yellow .	The county borders and the map legend are now yellow.			
48.	Click MB3 over the map legend and select Change Color .	A Change Color window opens.			
49.	Move the centroid around the color wheel to choose a color and then click OK .	The Counties borders and the map legend are now the selected color.			
50.	Select the Image Properties icon on the menu bar.	An Image Properties window displays.			Slice 5

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51.	In one of the panels, press and hold MB3 , then select Control Color of this Image .	A large green “I” appears in the lower left of the selected panel.			Slice 5
52.	From the Image Properties window, select a color curve .	The image in the selected panel reflects the color curve selection.			Slice 5
53.	Close the Image Properties window and clear the large pane by clicking the Clear button. Click the ‘X’ on the 4 Panel Map tab to close the tab.	The Image Properties window closes and the large pane clears. The 4 Panel Map tab closes.			Slice 5 Variance: How 4 Panel displays are removed.
54.	Load the IR window product from the Satellite menu.	The IR window product is loaded.			Slice 5
55.	Click and hold MB3 over the product legend in the bottom right area of the large pane.	A pop-up menu displays.			Slice 5
56.	Select Change Blinking... from the pop-up menu.	The Reg IR Sat window displays.			Slice 5
57.	Move the arrows to define a range of values for blinking and click the Enable Range button.	The defined range blinks on the D2D.			Slice 5
58.	Select a new blink rate from the Blink Rate (seconds) : option menu. Try multiple selections.	The blink rate changes with each selection.			Slice 5
59.	Click on the Clear button.	The large pane clears.			
60.	From the Scale option, select CONUS from the drop down list.	The CONUS map displays on the large pane.			
61.	From the Satellite menu, select IR Window .	The IR product displays in the large pane.			

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62.	From the toolbar, select the Image Properties icon.	The Image Properties window displays.			
63.	From the top pull-down menu, select Office Customized > office > <name from step 12>	The saved color curved is applied to the image.			
64.	From the top pull-down menu, select the color curve you saved in Step 16 from the Customized by <local user> cascading menu.	The color curve selected is applied to the image.			
This ends part 1 of this test.					
65.	On the middle monitor, open a terminal. Type the following and press the Enter key: ./cave/cave.sh.	A second CAVE instance launches. The following steps will be on the middle monitor until specified otherwise.			
66.	From the Scale option, select Regional .	The map scale changes to Regional.			
67.	Click on the Frame pull-down list and select 6 from the list.	The frame count sets to 6.			
68.	From the Satellite menu, select IR Window .	The IR image displays in the large pane.			
69.	Click MB1 over << (first frame) button.	The satellite loop moves to the first frame of the loop. Write down the time stamp in the product legend: _____			
70.	Click MB1 over >> (last frame) button.	The satellite loop moves to the last frame in the loop. Write down the time stamp in the product legend: _____			

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71.	Click MB3 over the top small pane .	The top small pane and the large swap images.			
72.	From the Scale option, select WFO .	The map scale changes to WFO.			
73.	Click on the Frame pull-down list and select 6 from the list.	The frame count sets to 6.			
74.	From the kxxx menu, select Composite Refl (CZ) (where kxxx is a radar site).	The image displays in the large pane.			
75.	Repeat Steps 69 and 70.	Write down the time stamps in the product legend: _____ _____			
76.	Back on the right monitor, click Clear and turn off the Toggle Image Combination icon.	The following steps will be on the right monitor until specified otherwise.			
77.	From the Satellite menu, select Visible 11μ-13μ .	The image displays in the large pane.			The 11μ-13μ satellite product is to be delivered in Slice 3. The Visible satellite image was substituted.

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78.	From the Satellite menu, select Water Vapor .	The Water Vapor image displays in the large pane, replacing the previously displayed Visible 11μ-12μ satellite image.			<p>The 11μ-13μ satellite product is to be delivered in Slice 3. The Visible satellite image was substituted.</p> <p>Variance: AWIPS II allows users to display multiple (2+) images in layers.</p>
79.	MB3 click and hold on the Visible Satellite product ID in the product legend and select Unload from the popup menu.	The Visible Satellite image and product ID are removed from the display.			<p>Variance: Step added to remove the satellite image and to set the state of the AWIPS II display equal to what would be displayed if testing on the legacy system.</p>

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80.	Press and hold MB3 anywhere in the large pane.	A pop-up menu appears.			Non-scheduled DR written. DR #704
81.	From the pop-up menu, select Show Map Legends .	The product legend in the lower right area of the large pane is replaced by a map legend.			Non-scheduled DR written. DR #704
82.	Select and hold MB3 over State/County Boundaries in the bottom right area of the large pane.	A pop-up menu appears.			
83.	From the pop-up menu, select Set Color .	A cascading menu of colors appears.			Non-scheduled DR written. DR #1630
84.	From the cascading color menu, select the green color.	The map outlines in the large pane changes color to green.			Non-scheduled DR written. DR #1630
85.	Repeat the last 3 steps, this time select Change Color from the MB3 popup menu.	A Change Color window opens.			Variance: Change Color is its own menu item.

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86.	Select the HSB (hue, saturation, and brightness) radio button in the color chooser window for States/County Boundaries . Move the centroid around the color wheel using MB1 .	The Hue and Saturation slider bars move and the color swatch next to the color wheel changes colors as the centroid is moved around the color wheel.			Variance: The Change Color window in AWIPS II has the RGB and HSB values on one 'plane' (e.g., no radio buttons required).
87.	When a desired color is shown then click OK	The Change Color window closes and the map outlines in the large pane change to the color selected in the color swatch.			
88.	Click and hold MB3 anywhere in the large pane.	A pop-up menu appears.			Non-scheduled DR written. DR #704
89.	From the pop-up menu, select Show Product Legends .	The map legends in the bottom right area of the large pane are replaced by product legends.			Non-scheduled DR written. DR #704
90.	If closed, MB1 click the Image Properties toolbar button. From the color curve selection in the Image Properties window, select a color curve different from the current one.	Colors in the satellite image change according to the chosen color curve, but the colors of the map background and features are unchanged.			
91.	Close the Image Properties window.	The Image Properties window closes.			

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92.	Click MB3 over the product legend in the bottom right of the large pane and select Edit Colors .	An Image Colors Editor window displays.			
93.	There is a color band in the center of the <i>Image Colors Editor</i> . Move the arrow on top of the band to a position about one-third of the way across the band.	The arrow becomes filled with the color to which it now points.			
94.	Move the arrow below the color to a position one-third of the way from the right side of the band.	The arrow becomes filled with the color to which it now points.			
95.	Select the RGB (red/green/blue) radio button in the color chooser window and move the centroid in the Lower Color section to any color.	The Red, Green, and Blue slider bars move and the colors swatch next to the color wheel changes colors.			
96.	Click Fill next to the lower color wheel. Then close the Image Colors Editor window.	The part of the band between the two arrows changes to the color indicated in the color swatch, and the associated part of the image in the large pane assumes the same color. The colors of the map features remain unchanged.			
97.	On the middle monitor, enough time should have passed to receive an update. Step through the radar product one frame at a time by selecting the > (forward) button on the toolbar. Compare with step 75.	The frame count has not changed, but the frame that previously began the loop is no longer part of the loop, and the last frame of the loop has updated to the most recently available version of the product.			
98.	Click MB3 over the top small pane .	The top small pane and the large pane swap images.			

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99.	Step through the satellite product one frame at a time by selecting the > (forward) button on the toolbar. Compare with steps 69 and 70.	The frame count has not changed, but the frame that previously began the loop is no longer part of the loop, and the last frame of the loop has updated to the most recently available version of the product.			
100.	Swap each of the small panes with the large pane, clicking Clear in the large pane to remove any displayed products.	All products are removed.			
101.	For all D2D applications open, from the File menu, click Exit .	The D2D applications close.			

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