

Test Case SOA_PlugIns_1.0

for the

AWIPS

Contract

DG133W-05-CQ-1067

DCN: AWP.TE.SWCTR/TO8-0015

Prepared for:

U.S. Department of Commerce
NOAA/NWS Acquisition Management Division
SSMC2, Room 17364
1325 East-West Highway
Silver Spring, MD 20910

Prepared by:

Raytheon Company
STC Office
6825 Pine Street
Omaha, NE 68106

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Submitted By:

Test Engineer

Date

Approved By:

Program Manager

Date

Mission Assurance Quality

Date

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Revision History

Revision	Date	Affected Pages	Explanation of Change
1.0	5 December 07	ALL	Initial Release
2.0	14 January 08	4 - 12	Dry Run
3.0	19 January 08	3, 5-7, 9	PDT Redlines/NWS Comments
4.0	29 January 08	ALL	DT Redlines

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Table of Contents

1.0	SCOPE	1
2.0	APPLICABLE DOCUMENTS	2
2.1	Source Documents	2
2.2	Reference Documents	2
3.0	TEST CASE DESCRIPTION	3
3.1	Assumptions, Constraints and Preconditions	3
3.2	Recommended Hardware	3
3.3	Test Inputs	3
3.4	Test Outputs	3
4.0	TEST SCENARIO	4
5.0	REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM).....	11

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

1.0 SCOPE

See Software Test Plan.

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

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
- Existing AWIPS 1 test procedures
- The AWIPS D-2D User's Manual Build 8.1
- The VPN connection to the Silver Spring NWS AWIPS 1 test bed

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

3.0 TEST CASE DESCRIPTION

This test case primarily demonstrates the capability of Service Oriented Architecture (SOA) plug-ins. A combination of the Test Driver, CAVE's Volume Browser, and CAVE drop down menus will be used to display applicable data types for each of the plug-ins. This test case demonstrates the decoding, ingesting, storing and displaying of data and metadata by displaying the data spelled out in the requirements. More detailed testing of each plug-in is contained in specific T08 test cases, specifically Radar, Volume Browser, Workstation Cave, Text Display Edit, Performance, and Plot Model Maintenance.

3.1 Assumptions, Constraints and Preconditions

- TO8 software has been installed successfully
- CAVE, EDEX and pgAdmin III are running
- An internet connection is available
- Live data flow containing the data types to be tested
- The display of the data infers the decode, ingest and storage of the data
- Data decode, ingest, and storage validation accomplished during the Preliminary Delivery Test (PDT); results available in PDT report
- Localization previously set
- A TAF bulletin called "OMATAFOMA" has been created and stored in the text database
- A general bulletin called "OMAAFDOMA" has been created and stored in the text database
- A bulletin containing METAR observations called OMAMTROMA has been created and stored in the text database

3.2 Recommended Hardware

See Software Test Plan, Section 2.2.

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.

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

4.0 TEST SCENARIO

Step	Action	Result	Pass/Fail
1.	From the test workstation open CAVE.	CAVE successfully launches. The 5-D panel (4 smaller panels on the left and one larger main panel) displays.	
2.	Zoom so that a CONUS sized area displays centered on approximately Kansas City.	The main panel displays an area centered on the CONUS that includes some of Mexico and Canada.	
DISPLAY LIGHTNING			
3.	From the CAVE menu bar click Mouse Button (MB) 1 'Obs' and then 'Lightning' (located under Hazards).	A menu displays that contains the following 5 options: 1hr Lgtng Plot, 15min Lgtng Plot, 15min Pos/Neg Lgtng Plot, 5min Lgtng Plot, and 1min Lgtng Seq.	
4.	Select 1hr Lgtng Plot.	A lightning plot containing the previous 1 hour lightning strikes displays on the main panel.	
5.	Select 'Clear' from the menu bar.	The loaded lightning display is removed.	
6.	Select '15min Lgtng Plot'.	A lightning plot containing the previous 15 minutes of lightning strikes displays on the main panel.	
7.	Select 'Clear' from the menu bar.	The loaded lightning display is removed.	
8.	Select '15min Pos/Neg Lgtng Plot'.	A display of positive and negative strikes for the past 15 minutes displays.	
9.	Select 'Clear' from the menu bar.	The loaded lightning display is removed.	
10.	Select '5min Lgtng Plot'.	A lightning plot containing the previous 5 minutes of lightning strikes displays on the main panel. The DTG of the display should be within the past 5 minutes (depending on data receipt).	
11.	Select 'Clear' from the menu bar.	The loaded lightning display is removed.	
12.	Select '1min Lgtng Seq'.	Lightning strikes in one minute intervals for the past 5 minutes displays. The DTG for the display should be within the past 5 minutes (depending on data receipt).	
13.	Select 'Clear' from the menu bar.	The loaded lightning display is removed.	

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Step	Action	Result	Pass/Fail
DISPLAY SATELLITE			
14.	From the Satellite menu use MB1 and select 'IR Window'.	An IR image displays. IR satellite imagery can be displayed through the menu bar.	
15.	Select 'Clear' from the menu bar.	Satellite images are removed.	
16.	From the Satellite menu use MB1 and select 'Visible'.	A visible image displays. Visible satellite imagery can be displayed through the menu bar.	
17.	Select 'Clear' from the menu bar.	Satellite images are removed.	
18.	From the Satellite menu use MB1 and select 'Water Vapor'.	A water vapor image displays. Water vapor satellite imagery can be displayed through the menu bar.	
19.	Select 'Clear' from the menu bar.	Satellite images are removed.	
DISPLAY GRIB			
20.	Open the Volume Browser by MB1 'Volume', 'Browser'.	The Volume Browser display GUI appears.	
21.	Display parameters from the latest ECMWF model run by selecting 'ECMWF-HiRes' for the grid. For the Fields select temperature and height. For Planes select '500mb'. Load the selections. Note: Other available parameters can be substituted.	Contoured 500mb level temperature and height fields from the latest available ECMWF model run displays. ECMWF grib data can be displayed.	
22.	1. Select Clear from the menu bar. 2. In the Volume Browser select 'Edit', 'Clear All'.	1. Gridded display is removed from the main pane. 2. Volume Browser entries are removed.	
23.	Display parameters from the latest NAM model run by selecting an available NAM model for the grid. For the Fields select 'Forcing', 'Omega'. For Planes select '700mb'. Load the selection. Note: Other available parameters can be substituted.	Contoured 700mb level omega fields (vertical velocity) from the latest available NAM model run displays. NAM grib data can be displayed.	
24.	1. Select Clear from the tool bar. 2. In the Volume Browser select 'Edit', 'Clear All'.	1. Gridded display is removed from the main pane. 2. Volume Browser entries are removed.	
25.	Display parameters from the latest GFS model run by selecting 'GFS40' for the grid. For the Fields select 'Moist' and 'RH'. For Planes select 'Surface' (under Misc). Load	Contoured fields of surface RH from the latest available GFS-40 model run displays. GFS grib data can be displayed.	

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Step	Action	Result	Pass/Fail
	the selection. Note: Other available parameters can be substituted.		
26.	1. Select 'Clear' from the menu bar. 2. In the Volume Browser select 'Edit', 'Clear All'.	1. Gridded display is removed from the main pane. 2. Volume Browser entries are removed.	
27.	Display parameters from the latest RUC model run by selecting an available RUC model for the grid. For the Fields select Temperature and Height. For the Planes select '350mb'. Load the selection.	Contoured 350mb temperature and height contours from the latest available RUC model display. RUC grib data can be displayed.	
28.	1. Select 'Clear' from the menu bar. 2. In the Volume Browser select 'Edit', 'Clear All'.	1. Gridded display is removed from the main pane. 2. Volume Browser entries are removed.	
29.	Close the Volume Browser. Select 'Volume' from the menu bar.	A drop down menu labeled "Volume" appears. A listing of bundled (families) of grib model data displays.	
30.	From 'Volume' on the menu bar select 'ECMWF' located under Families.	A bundled set of ECMWF parameters displays. ECMWF grib data can be displayed from the Volume drop-down list.	
31.	Select 'Clear' from the menu bar.	Gridded display is removed from the main pane.	
32.	From 'Volume' select 'NAM40' located under Families.	A bundled set of NAM 40 parameters displays. NAM 40 grib data can be displayed from the Volume drop-down list.	
33.	Select 'Clear' from the menu bar.	Gridded display is removed from the main pane.	
34.	Select 'GFS40' located under Families.	A bundled set of GFS parameters displays. GFS grib data can be displayed from the Volume drop-down list.	
35.	Select 'Clear' from the menu bar.	Gridded display is removed from the main pane.	
36.	Select 'RUC' located under Families.	A bundled set of RUC-80 parameters displays. RUC grib data can be displayed from the Volume drop-down list.	
37.	Select 'Clear' from the menu bar.	Gridded display is removed from the main pane.	
DISPLAY RAOB			
38.	Select 'Upper Air' from the menu bar. Under the RAOB section select Omaha, NE (KOAX).	The latest RAOB for Omaha, NE, displays. A hodograph and 24 hour temperature change graph also appear (the	

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Step	Action	Result	Pass/Fail
		latter not active). Note: Derived parameters will not display.	
39.	Close the skew-T tab. Under 'Upper Air' select 'UA Plots', and '700hPa' located under RAOB.	A plot display over the US for 700hPa from the latest RAOB data appears.	DR #823
40.	Clear the display. Select the 'Points' icon from the menu bar. Approximately center point A over Chicago, IL.	A pre-determined set of points appear, normally lettered beginning with A. Point A is moved and centered over Chicago.	
41.	Open the Volume Browser by MB1 'Volume', 'Browser'.	The Volume Browser display GUI appears.	
42.	Select 'Sounding' from the Volume Browser tool bar.	Volume Browser is set to sounding mode.	
43.	From the volume browser select the following: Grid-GFS40; Sounding (under Thermo); Points-A. Select 'Load'.	A sounding based on gridded data for Point A displays. It contains a hodograph and 24-hr temperature change (both not active). Values for various parameters available in the data base also display. Finally, the asterisk in the map is centered over Chicago, where point A was moved.	
DISPLAY AIRCRAFT			
Since the display of aircraft data has not been incorporated into CAVE, a test driver will be used to demonstrate the aircraft plug-in exists.			
44.	Close the Skew-T display. Bring up the test driver in a web browser by going to: http://awips-int1:8080/uEngineWeb/ .	Test driver displays.	
45.	Select 'ASCII Data'. Open Request/Response Message. Edit the Request window entry to display the following script: include("PIREPRequest.js"); var dataRequest = new PIREPRequest(); dataRequest.setCount(10); dataRequest.enableAsciiResponse(); dataRequest.execute(); Select 'Request Product'.	The last 10 PIREP reports are returned. Aircraft plug-in exists and is operational.	

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_Plugins_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Step	Action	Result	Pass/Fail
46.	Rerun the above step with data from the following script: Include(“AIREPrequest.js”); var dataRequest = new AIREPRequest(); dataRequest.setCount(10); dataRequest.enableAsciiResponse(); dataRequest.execute();	The last 10 AIREP reports are returned. Aircraft plug-in exists and is operational.	
MDCRS plots will be delivered in TO 9. Therefore, the next two steps can not be executed.			
47.	Next, Under ‘Aircraft’ select ‘MDCRS plots’.	A display by flight levels in 5000 feet increments appears for available MDCRS plots.	
48.	Select ‘250-300 hft’.	A display of available MDCRS plots between FL 250 – 300 appear.	
DISPLAY MARITIME			
49.	Ensure a cleared, CONUS map is selected as the display area. From the menu bar select ‘Obs’. Under the Maritime category select ‘Fixed Buoys’.	The latest observations from fixed buoys displays.	
50.	Clear the display. Under ‘Obs’ select ‘Moving Maritime’.	The latest observations from ships and floating buoys displays.	
51.	Clear the display. Under ‘Obs’ select ‘MAROB’.	The latest MAROB data displays	
DISPLAY RADAR			
52.	Clear the display. From the tool bar select ‘Radar’, ‘kdv n’, ‘kdv n 4 Bit Products’, ‘kdv n 4 bit four panel’.	A listing of available four panel radar displays appears.	
53.	Select the 0.5/1.5/2.4/3.4 Z/SRM panels.	A four panel radar display appears in the main panel. The displays are for 0.5, 1.5, 2.4, and 3.4 tilts. Note: not all panels may load if data is not available. Another station may be selected.	
54.	Close the 4-panel display. Select ‘kmpx’ under Radar. Select ‘kmpx 4 Bit Products’, ‘Comp Ref 4bit (CZ),	A composite reflectivity radar image for Minneapolis displays.	
55.	Clear the display and repeat above step for ‘Storm Total Precip’. Note: STP may not be available, depending on the	A display of storm total precip displays.	

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Step	Action	Result	Pass/Fail
	weather occurring at the site.		
56.	Clear the display and select under Radar 'kfsd', 'kfsd Derived', 'Echo Tops (ET)'.	A display of the echo tops for Sioux Falls displays.	
57.	Clear the display and under the koax localization select 'koax 4 Bit Products', 'koax 4bit Reflectivity', '1.5 Refl'.	The latest radar image, 1.5 tilt, for koax localization displays.	
58.	Repeat for '2.4 Refl'.	The latest radar image, 2.4 tilt, for koax localization displays.	
59.	Repeat for '3.4 Refl'.	The latest radar image, 3.4 tilt, for koax localization displays.	
DISPLAY TAF and TEXT			
60.	From the menu bar select 'Tools', 'Text Window'.	A text display window opens.	
61.	In the AFOS Cmd: enter 'OMATAFOMA'. Return.	A terminal area forecast (TAF) for the selected station displays. AWIPS II contains a TAF plug-in that allows for the storage and retrieval of TAF data.	
62.	Clear the display. In the text window, AFOS Cmd: enter 'OMAAFDOMA'. Return.	A text bulletin displays. Text products can be displayed; a text plug-in exists.	
DISPLAY METAR			
63.	Clear the display. In the AFOS Cmd: enter 'OMAMTROMA'.	A series of raw metar observations for Nebraska displays. Raw METAR observations can be retrieved and displayed.	
64.	Close the text window. Ensure a "clear" map centered on the CONUS is displayed in the main panel. Select 'Obs' from the CAVE menu bar.	A drop down menu bar displays providing a list of observation types that can be displayed.	
65.	Select 'Surface Plot'.	The latest available decoded and ingested observations are displayed over the CONUS.	
66.	Clear the display. Under 'Obs', select 'Other Plots', 'Surface Synoptic Plots'. Note: Loop and/or zoom as necessary.	The latest available surface plots from synoptic formatted observations displays. CAVE contains a synoptic plug-in.	
67.	Open a pgAdmin III session. Select the int1 DB. Under metadata open 'Schemas', 'awips', 'Tables'.	A listing of the database tables displays.	

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Step	Action	Result	Pass/Fail
68.	Using MB3 click on 'obs'.	The DB Property and associated Value for obs displays.	
69.	Perform a SQL query by selecting the 'View the data in the selected object.' Icon located in the menu bar containing icons.	A display of the metadata stored in the observation database displays.	
70.	Examine the column headers. Look for the following headers: autostationtype, sealevelpress, mintemp24hr, maxtemp24hr, precip1hour, precip6hour, and presschange3hour.	These are all examples of columns that contain values found in the remarks section of METAR observations.	
71.	Scroll down through the columns. When remarks are reported, values will be found in these columns. Open the observation in the "message" column to confirm the value is found in the remarks section, RMK.	METAR remarks are decoded and stored in the AWIPS database.	
End of Test			

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
CAVE_TO8_18.22	CAVE shall display the Fixed Buoys plot product	49
CAVE_TO8_18.23	CAVE shall display the Moving Maritime plot product	50
CAVE_TO8_18.24	CAVE shall display the MAROB station plot product	51
ADE_TO8_024	AWIPS shall contain Plug-Ins that decode and store data and metadata	3-46 49-72
ADE_TO8_024.1	AWIPS shall contain a bin Lightning Plug-in	3-13
ADE_TO8_024.1.1	The bin-Lightning Plug-in shall decode lightning metadata	3-13
ADE_TO8_024.1.2	The bin-Lightning Plug-in shall store lightning metadata in the metadata repository	3-13
ADE_TO8_024.1.3	CAVE shall display lightning data	3-13
CAVE_TO8_016.1	CAVE shall display 1 hour binary lightning plots	4
CAVE_TO8_016.2	CAVE shall display 15 minute binary lightning plots	6
CAVE_TO8_016.3	CAVE shall display 15 minute positive/negative binary lightning plots	8
CAVE_TO8_016.4	CAVE shall display 5 minute binary lightning plots	10
CAVE_TO8_016.5	CAVE shall display 1 minute binary lightning sequence	12
ADE_TO8_024.2	AWIPS shall contain a GINI Satellite Plug-in	14-19
ADE_TO8_024.2.1	The GINI Satellite Plug-in shall decode GINI Satellite metadata	14-19
ADE_TO8_024.2.2	The GINI Satellite Plug-in shall store GINI Satellite metadata in the metadata repository	14-19
ADE_TO8_024.2.3	CAVE shall display GINI Satellite data	14-19
ADE_TO8_024.3	AWIPS shall contain a Grib Plug-in	20-37
ADE_TO8_024.3.1	The Grib Plug-in shall decode Grib metadata	20-37
ADE_TO8_024.3.2	The Grib Plug-in shall store Grib metadata in the metadata repository	20-37
ADE_TO8_024.3.3	CAVE shall display decoded Grib data	20-37
ADE_TO8_024.4	The Grib Plug-in shall decode grib data necessary for the correct operation of the AWIPS II system	20-37
ADE_TO8_024.4.1	The Grib Plug-in shall decode ECMWF data	20-37
ADE_TO8_024.4.2	The Grib Plug-in shall decode NAM data	20-37
ADE_TO8_024.4.3	The Grib Plug-in shall decode GFS data	20-37
ADE_TO8_024.4.4	The Grib Plug-in shall decode RUC data	20-37
ADE_TO8_024.5	AWIPS shall contain a RAOB (BUFR) Plug-in	38-43
ADE_TO8_024.5.1	The RAOB (BUFR) Plug-in shall decode RAOB metadata	38-43
ADE_TO8_024.5.2	The RAOB (BUFR) Plug-in shall store RAOB metadata in the metadata repository	38-43
ADE_TO8_024.5.3	CAVE shall display RAOB data	38-43
ADE_TO8_024.6	AWIPS shall contain a Text Plug-in	62
ADE_TO8_024.6.1	The Text Plug-in shall decode text data	62
ADE_TO8_024.7	AWIPS shall contain an Aircraft Plug-in	44-46

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Number	Description	Test Step(s)
ADE_TO8_024.7.1	The Aircraft Plug-in shall decode Aircraft metadata	44-46
ADE_TO8_024.7.1.1	The Aircraft Plug-in shall decode AIREP Aircraft metadata	44-46
ADE_TO8_024.7.1.2	The Aircraft Plug-in shall decode RECCO Aircraft metadata	47-48
ADE_TO8_024.7.1.3	The Aircraft Plug-in shall decode PIREP Aircraft metadata	44-46
ADE_TO8_024.7.2	The Aircraft Plug-in shall store Aircraft metadata in the metadata repository	44-46
ADE_TO8_024.7.2.1	The Aircraft Plug-in shall store AIREP Aircraft metadata in the metadata repository	44-46
ADE_TO8_024.7.2.2	The Aircraft Plug-in shall store RECCO Aircraft metadata in the metadata repository	47-48
ADE_TO8_024.7.2.3	The Aircraft Plug-in shall store PIREP Aircraft metadata in the metadata repository	44-46
ADE_TO8_024.7.3	CAVE shall display Aircraft data	44-46
ADE_TO8_024.7.3.1	CAVE shall display AIREP Aircraft data	44-46
ADE_TO8_024.7.3.2	CAVE shall display RECCO Aircraft data	47-48
ADE_TO8_024.7.3.3	CAVE shall display PIREP Aircraft data	44-46
ADE_TO8_024.8	AWIPS shall contain a Synoptic Plug-in	66
ADE_TO8_024.8.1	The Synoptic Plug-in shall decode Synoptic metadata	66
ADE_TO8_024.9	AWIPS shall contain a Maritime Plug-in	49-51
ADE_TO8_024.9.1	The Maritime Plug-in shall decode Maritime metadata	49-51
ADE_TO8_024.9.1.1	The Maritime Plug-in shall decode ship synoptic Maritime metadata	49-51
ADE_TO8_024.9.1.2	The Maritime Plug-in shall decode buoy synoptic Maritime metadata	49-51
ADE_TO8_024.9.1.3	The Maritime Plug-in shall decode CMAN synoptic Maritime metadata	49-51
ADE_TO8_024.9.1.4	The Maritime Plug-in shall decode MAROB Maritime metadata	49-51
ADE_TO8_024.9.2	The Maritime Plug-in shall store Maritime metadata in the metadata repository	49-51
ADE_TO8_024.9.2.1	The Maritime Plug-in shall store ship synoptic Maritime metadata in the metadata repository	49-51
ADE_TO8_024.9.2.2	The Maritime Plug-in shall store buoy synoptic Maritime metadata in the metadata repository	49-51
ADE_TO8_024.9.2.3	The Maritime Plug-in shall store CMAN synoptic Maritime metadata in the metadata repository	49-51
ADE_TO8_024.9.2.4	The Maritime Plug-in shall store MAROB Maritime metadata in the metadata repository	49-51
ADE_TO8_024.9.3	CAVE shall display Maritime data	49-51
ADE_TO8_024.9.3.1	CAVE shall display ship synoptic Maritime data	49-51
ADE_TO8_024.9.3.2	CAVE shall display buoy synoptic Maritime data	49-51
ADE_TO8_024.9.3.3	CAVE shall display CMAN synoptic Maritime data	49-51
ADE_TO8_024.9.3.4	CAVE shall display MAROB Maritime data	49-51

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

Number	Description	Test Step(s)
ADE_TO8_024.10	AWIPS shall contain a Radar Plug-in	52-59
ADE_TO8_024.10.1	The Radar Plug-in shall decode Radar metadata	52-59
ADE_TO8_024.10.2	The Radar Plug-in shall store Radar metadata in the metadata repository	52-59
ADE_TO8_024.10.3	CAVE shall display Radar data	52-59
ADE_TO8_024.11	AWIPS shall contain a TAF Plug-in	60-61
ADE_TO8_024.11.1	The TAF Plug-in shall decode TAF metadata	60-61
ADE_TO8_024.11.2	The TAF Plug-in shall store TAF metadata in the metadata repository	60-61
ADE_TO8_024.12	AWIPS shall contain a METAR Plug-in	63-65, 67-71
ADE_TO8_024.12.1	The METAR Plug-in shall decode METAR metadata	63-65, 67-71
ADE_TO8_024.12.2	The METAR Plug-in shall store METAR metadata in the metadata repository	63-65, 67-71
ADE_TO8_024.12.3	CAVE shall display METAR data	63-65, 67-71
AWIPS_T08_030.4	The AWIPS system shall ingest METAR (WMO FM-15) observation data	63-65, 67-71
AWIPS_T08_030.5	The AWIPS system shall ingest SPECI (WMO FM-16) observation data	63-65, 67-71
AWIPS_T08_030.6	Refine the ADE 1.0 Metar plug-in by extending decoding into the remarks	63-65, 67-71
AWIPS_T08_031.1	AWIPS shall ingest binary lightning data	3-13
AWIPS_T08_031.2	AWIPS shall decode binary lightning data	3-13
AWIPS_T08_031.3	AWIPS shall store binary lightning data	3-13

HARDCOPY UNCONTROLLED

Contract DG133W-05-CQ-1067; Test Case SOA_PlugIns_1.0

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.