

Test Case AvnFPS METAR and MOS Decoders

**for the
AWIPS
Contract
DG133W-05-CQ-1067**

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Revision History

Revision	Date	Affected Pages	Explanation of Change
1.0	27 June 2008	ALL	Initial Draft
2.0	8 August 2008	7, 8	Redlines per PDT
3.0	4 September 2008	8	Redlines per DT

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1.0 SCOPE

See Software Test Plan.

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2.0 APPLICABLE DOCUMENTS

2.1 Source Documents

- None

2.2 Reference Documents

- Legacy NWS Test Case: Baseline_AvnFPS_MOSDecoders_OB8.1.
- Software Test Plan for the Advanced Weather Information Processing System Project, Contract #DG133W-05-CQ-1067, August 2008.
- The Silver Spring NWS AWIPS 1 test bed application.
- Rational RequisitePro.

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3.0 TEST CASE DESCRIPTION

This test case verifies that the data source of Metar and MOS decoders display and function correctly. It also verifies that the MOS/LAMP categories' balloon message shows the 'actual' values of visibility when the cursor hovers over one of the VIS values.

3.1 Assumptions, Constraints and Preconditions

- TO9 software has been installed successfully
- CAVE, EDEX and pgAdmin III are running
- Data has been ingested
- Actions, Results, and Requirements highlighted in yellow 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 Software Test Plan.

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 TO9 test cases.

3.4 Test Outputs

The AvnFPS Monitor dialog is displayed and the results outlined in section 4.0 are met. The AvnFPS GUIs to be tested include:

- AvnFPS Menu
- AvnFPS Monitor
- AvnFPS TAF Editor

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4.0 TEST SCENARIO

Step #	Action	Result	Pass/Fail
1.	In CAVE, select 'CAVE' -> 'New' -> 'Aviation' -> 'AvnFPS Menu...'	The AvnFPS Menu window displays.	
2.	From the AvnFPS Menu, select a forecaster's name and Mouse Button (MB) 1 click on the 'TAFs' button.	The AvnFPS Monitor displays.	
3.	MB1 click a TAF site ID button to display the AvnFPS TAF Editor in the Viewer mode.	The AvnFPS TAF Editor GUI displays in the Viewer tab with the latest TAF appearing the text window on top.	DR #1339
4.	Verify the bottom text window has tabs associated with it (Metars, GFS-MOS, TAF/GFSLAMP, GFSLAMP, ETA-MOS, NGM-MOS, NAM-WRF-profile, and Grids). Check the Metar decoder by selecting the 'Metars' tab.	One or more METARs appear in the text window. Note: Depending on the configuration at the WFO, a subset of guidance may be visible.	
5.	Toggle the 'Flight Categories', 'Headers', and 'Decoded' check boxes. Verify observations appear in different formats. Note: Certain combinations have no effect: E.g., toggling the 'Headers' button while the 'Decoded' button is active. The 'Flight Categories' option only works when the 'Decoded' radio button is active as well.	The check boxes are checked and unchecked. The operations are performed as buttons are toggled on and off.	
6.	Near the center of the GUI, right of center, is a field labeled 'Flight Categories:' followed by colored indicators labeled 'VFR', 'MVFR', 'IFR', 'LIFR'. Hover the cursor over the colored labels.	The Flight Categories field is present. A balloon message displays the ceiling and visibility criteria for each category.	
7.	Select the GFS-MOS tab and select the 'All' check box.	Additional TAFs for the other sites may display in the text window. The message "Table display for all sites is not supported" may display in the status bar.	
8.	De-select the 'All' check box.	The GFS MOS guidance for selected site displays along with the items that are set to the currently monitored product(s).	
9.	Toggle on the 'Probabilities' check box.	The probability of individual ceiling and visibility categories displays.	
10.	Select any radio button (table, long, or short) in the Format section.	The GFS-MOS guidance displays according to the selected format radio button.	

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Step #	Action	Result	Pass/Fail
11.	Toggle the 'Flight Categories' check box on and off.	Depending on the site you've selected and the present forecast, either certain columns (when in raw mode) or rows (when 'long' or 'short' are selected) result in highlighted entries reflecting various flight categories.	
12.	Select the 'table' radio button in the Format section and hover the cursor over one of the VIS values.	A balloon message displays the 'actual' values of visibility.	
13.	Repeat step 12 for the CIG and QPF06 lines.	A balloon message displays the 'actual' values accordingly.	
14.	Select the probability checkbox and hover the cursor over the various cat# column entries.	A balloon message displays the 'actual' values accordingly.	
15.	Repeat steps 7 – 14 for ETA-MOS tab and NGM-MOS tab.	Refer to the Results column for the appropriate step.	
16.	Repeat steps 7 – 11 for NAM-WRF-profile. Note: NAM-WRF-profile tab displays data for Localized station only.	Verify there is no 'Probabilities' option. Note: Only TBW3 test platform shows the NAM-WRF-profile guidance.	
17.	Select the 'GFSLAMP' tab.	GFSLAMP guidance appears.	
18.	Select the 'table' radio button in the Format section and toggle off the 'Probabilities' check box.	Probabilities of conditional visibility (VIS) and ceilings (CVIS) lines display.	
19.	Hover the cursor to one of the VIS values.	A balloon message displays the 'actual' values of visibility.	
20.	Repeat step 19 for the CIG line.	A balloon message displays the 'actual' values of ceiling.	
21.	Select the 'Probability' check box and hover the cursor over the various cat# column entries.	A balloon message displays the 'actual' values accordingly.	
22.	MB1 click 'File' -> 'Close' in the AvnFPS TAF Editor window. MB1 click 'File' -> 'Quit' in the AvnFPS Monitor window. MB1 click 'X' in the AvnFPS Menu window.	The AvnFPS TAF Editor, AvnFPS Monitor, and AvnFPS Menu windows close.	
	End of test.		

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5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR2073.68	The TAF Editor's embedded Guidance Viewer Window shall allow the user the capability to view multiple forms of guidance each in separate perspectives.	7-17
SYSR2073.69	The TAF Editor's embedded Guidance Viewer Window shall allow the user the capability to view seven different data sources: Metars, GFS-MOS, ETA-MOS, NGM-MOS, GFSLAMP, NAM-WRF-Profile, and IFPS Grids.	7-17

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