

Test Report for SED Components Year 1 Release Candidate

Summary

Recommend all components for release, while noting exceptions called out in the individual sections below. Results submitted by Brian Thomas, Pat Norris, Raffaele D'Abrusco, and Randy Thompson.

Platforms

The majority of testing was performed using Mac OSX 10.6.x and Red Hat 5.x. Not all flavors of Linux were tested.

Components

Smoketest:

Although not officially in the test structure for this release (i.e. no Test Plan in place), basic functionality was tested and successfully executed as expected on both 32- and 64-bit platforms. Documentation is available online and in README file.

Specview:

Tested successfully with the following exceptions –

Test case 2 - Compliant FITS & VOTable files can be imported although large files (e.g., > 20,000 points) and files containing NaN values (BR-96), can cause specview/iris to freeze.

Test case 3 – Minor compliance issues with both VOTable (BR-99) and FITS output files (BR-77) are being addressed.

SED Importer:

Tested successfully with the following exceptions –

Test case 4 – As mentioned above, there are minor compliance issues with VOTable (BR-99) and FITS (BR-77) output files but this does not effect compatibility with Iris.

SED Lib:

Pass with the following issues pending clarification:

- 1) Location and make up of the distribution package needs clarification.
- 2) Test case 4_1 - functionality is now present in the SED Importer.
- 3) API functionality testing is (partially) covered in other test cases (4.4, and 5); confirmation on proper requirements coverage from SED engineers pending.

SED Service:

Out of compliance for VOTable and minimum SSAP specs, noted in VAOPD- 204, 205, 206, and 207, and recommended for early Year 2 consideration. As the service does function well with Iris, these defects are not considered blockers.

Sherpa-SAMP:

Tested successfully with the following exceptions:

TestCase1 - The Sherpa-SAMP component is hidden to the users, so there is no specific public documentation.

TestCase3 - The component works well, but, as duly noticed in the test plan document, this is a lot of testing which must be done manually, so only a small region of the grid has been explored.

Sherpa:

Tested successfully with the following comments –

TestCase1 - Not every model was tested extensively, but the ones tested are ok. (Note several models with inconsistent results were removed in an earlier release.)

TestCase2.1 - Again, not all models were tested, but fitting with the tested models passed.

TestCase2.2 - This appears to refer to a later stage of the project, and is not yet able to be tested.

TestCase2.3 – A limited number of models and datasets were tested, but the consistency of the results of the fit was good.

Iris:

Tested successfully with the following exceptions -

Test case 3.1 - Output files are written as one segment and bug report #77 describes a minor FITS compliance problem.

Test case 3.22 - ASCII files must be converted using SedImporter before fitting with Iris.

Test case 3.23 - Registry cone search feature was removed but target searches of NED library and model fitting options were confirmed. A log of session is saved.

Test case 3.24 - Fit parameters are saved in the log file, but the fitted curve is not.

Test case 4.1 - Passed for Aladin and TOPCAT. DS9 testing deferred to year 2.

Test case 4.4 - Mouse hover inspection was not implemented due to difficulty to implement in crowded fields. However metadata can be displayed via a right mouse click which seems an acceptable substitute.

Test case 6.1 - Single aperture corrections were a year 1 requirement rescheduled for year 2.

Test case 7.1 - Saving user sessions is a year 2 or later requirement. A session log is currently generated, and a more detailed report is planned for year 2. In year 3 an editable script will be produced.

Test case 9 - Searches by target name are currently possible using SedImporter. General data discovery is not possible within current version of Iris.

Summary of Issues/Bugs

BR-99 Minor compliance issues with output VOTable files
Major; recently filed

BR-98 Issues with fitting after “killing” IRIS on a Mac
Major; recently filed

BR-97 Warning message when trying to broadcast a SED from the SED Importer to IRIS when IRIS is not running

Minor; recently filed

BR-96 SED file containing NaN values causes Iris tool to freeze

Major; recently filed, NaN's should be allowed in data but not metadata

BR-95 Displaying SED Errors does not deactivate the "Fit" button

Major; recently filed, Ivo has a fix for this

BR-94 Switching to Fit SED visualization window automatically restores title of the plot

Trivial; remains open in release 1.0, complicated to fix

BR-91 Iris SED tool not interrogating NED correctly

Major; submitted by Joe Lazio, pending more discussion on supporting 1-point SEDs.

BR-88 Some apparently unrelated user actions cause Iris to redraw or refresh the plot window

Major; less redrawing in release 1.0, but remains open

BR-87 APPLY button in Edit window serves no purpose

Major; remains open in release 1.0

BR-77 FITS verifier issues minor errors on SED products

Minor; fewer errors in release 1.0, but remains open

BR-44 Coplotting does not work after fitting

Major; remains open in release 1.0

BR-37 Errors not plotted in Iris for spectrum

Major; remains open in release 1.0

Recommendation

The functionality of the SED Tool Set performed acceptably under testing to receive recommendation for release, with the agreement that the issues uncovered and entered into the JIRA tracking system are addressed in a future release, and documentation will be updated accordingly.