



National Aeronautics and Space
Administration
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SSC Response to SUP-23 Report

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November 19-20, 2009

SUP 23 Actions



ISSUE: The schedule for populating the Heritage Archive is very tight. The SSC needs to insure there is enough time to properly vet all of the data.

RESPONSE: We agree this is an issue, particularly given the shrinking sizes of the ISTs. However, we realize this is a top priority, and we will allocate our resources to make sure it gets done.

SUP 23 Actions



ISSUE: Because there are more AORs and because many of them are highly constrained, scheduling of Spitzer observations is more difficult in the Warm Mission than during the cryogenic mission. The SSC should do more long-range planning to identify and hopefully avoid future train wrecks.

RESPONSE: Scheduling is harder now, for the cited reasons and for other reasons. We are planning to solicit more hours of unconstrained observations in Cycle-7 so that we can continue to support the highly constrained science programs. We are working with observers to modify their programs when we identify particularly difficult scheduling time periods. We are also considering creation of a pool of useful, but not urgent, IRAC calibration observations that could be used to fill in gaps in the schedule.

SUP 23 Actions



ISSUE: There are a very large number of documents that need to be created or updated in order to close out the cryogenic mission and to enable community usage of the Heritage Archive. The SUP believes it would be useful to have someone specifically in charge of keeping track of all these documents and insuring they are completed on time.

RESPONSE: We do have someone in charge of the documentation schedule.

SUP 23 Actions



ISSUE: The Spitzer Heritage Archive will exist within the context of other mission archives and the (presumably) growing virtual observatory archives, etc. The SSC and IRSA should develop the Heritage Archive so as to facilitate the overall astronomy archive usability.

RESPONSE: We agree. IRSA will provide program interfaces to the SHA which will enable VAO access (we are working with them on the requirements). We are also in discussion with VAO about which products are appropriate to serve via external services and which require more expert knowledge and should therefore come directly from SHA.

SUP 23 Actions



ISSUE: The current plan is for the Spitzer Heritage Archive (SHA) to be opened for public use prior to its having a complete set of the Spitzer data. The SUP worries that this could discourage users of the SHA and be counter-productive. One possibility is to clearly label this version as a “Beta release”.

RESPONSE: We think this is a good idea and plan to label the first release ‘beta’.

SUP 23 Actions



ISSUE: The SHA will allow the user to see and interact with single-filter images. For some purposes, viewing color images can also be beneficial. Can the SHA provide color images?

RESPONSE: This is on the desired list of features but isn't planned for version 1.

SUP 23 Actions



ISSUE: Can the SHA interface allow a user to put a cursor on an image and have that feed a request for available data in the archive at that position?

RESPONSE: This is on the desired list of features but isn't planned for version 1.



ISSUE: The SUP still believes that the SSC should make the actual pipeline code for each instrument available to the community. This does not mean providing code that will compile or providing any support for anyone trying to create a working pipeline elsewhere. The SUP is only requesting that the code be available as historical reference if someone ever wanted to be absolutely certain what our pipeline did.

RESPONSE: The IRS IST has created an off-line pipeline which will allow external users the ability to semi-interactively re-reduce IRS data using exactly the same algorithms as done in the SSC pipeline. The MIPS IST has such an off-line pipeline for 70 and 160 microns which is available now. They are working to complete the 24 micron version. IRAC does not have an off-line pipeline, but has made a tar-ball of the on-line pipeline code. All three ISTs are updating the pipeline description documents, which describe each module of the pipelines.

SUP 23 Actions



ISSUE: The current plan for creation of source lists is very conservative – many real sources will be omitted. As a compromise, the SUP suggests that the S/N threshold be lowered, but that for these less certain sources we report only positions and not fluxes.

RESPONSE: The purpose of the high S/N threshold is to ensure extremely high reliability of the reported sources. Lowering it, even to provide only positions, would violate this principle. We are currently planning to report <10 sigma fluxes for sources which are >10 sigma in other bands.

SUP 23 Actions



ISSUE: Now that we are in the Warm Mission, should the SUP be merged with the IRSA User Panel? Or, should the SUP meet less often.

Response: Our recommendation is not to merge the Spitzer and IRSA user panels – we feel there is still a need for a separate Spitzer panel as long as Spitzer is operating. The IRSA user panel does include several Spitzer users, which should make that panel competent to review the SHA. We currently plan to reduce the frequency of face to face meetings of the SUP from twice per year to once per year, with a telecon meeting at mid-year.

Data Workshops



ISSUE: The SSC should consider better/other ways to preserve the technical and scientific legacy of Spitzer. A conference? Review articles?

RESPONSE: We intend to ask for clarification of this request from the SUP (at our next meeting). We think we are already preserving Spitzer's technical legacy with the documentation we have created or are planning to create for the SHA, and that the scientific legacy is being preserved by journal papers and review articles and in addition by the annual Spitzer conferences and conference proceedings.