

Notes on AIPS++ and software test plans:

The ASAC liaisons for the Computing IPT are Lee Mundy (Maryland/BIMA, now the ASAC chair) and Leonardo Testi (SSR member, ASAC member). Lee and Leonardo will be watching developments in the computing IPT closely. In the next year, they will be interested in the software test plans & implementation/grades and AIPS++, especially the status of AIPS++ at CDR2 in June 04.

Software test plans:

- The committee seemed satisfied with the state and progress of the software test plans. No major comments, no concerns were brought up that I can remember.

AIPS++:

- The ASAC members were very impressed with the AIPS++ progress over the past year(s) that has culminated in such obvious improvements. (“Turned the corner” said one up-until-now skeptical ASAC member).
- They were confused about the relation between the prototype pipeline and the final framework and would like something written to describe this.
- They were confused about the internal re-organization at the level above Brian and Jim (who goes to Fred in case of disagreement – Brian? Darrel?) .
- My take on discussion at the ASAC about benchmarking:
 - o Continue with the current benchmark establishment of the 2 identified datasets. Publish results on the web and use them as a means to identify problem areas and priorities.
 - o Implement currently identified performance improvements in the calibrator, imager, and split function (to avoid fill). Improve filler only when ALMA data format has been identified.
 - o After this, proceed at a more relaxed pace to allow for other work (support testing, functionality improvements, ACS/CORBA framework change, user interface development).
 - o Expand benchmark to include mosaic processing and spectral line polarization. (multi-configuration exercised somewhere). Performance priorities balanced with other pressing issues.
 - o Do not make this a race to see which package can become faster. We will be at an acceptable performance level soon with the current benchmarks. Continue to identify bottlenecks or slow places and ‘beat them down’ to improve performance over time, yes, but there is no need to continually try to be faster than AIPS or GILDAS if those packages decide to put performance at a higher priority.
- Note: during presentation of the AIPS++IRAM Phase I/II results, it was *again* brought up that these comparisons did not address the question: how difficult will it be for outside users to implement new functionality in AIPS++. It appears that this will likely be an issue until a satisfactory plan/answer is presented.



