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## Summary

This document presents workpackage progress by CASU during June 2004.

For further details of group activities over the past month and quarter see

<http://www.ast.cam.ac.uk/vdfs/diary.html>

For the minutes of all group meetings see

<http://www.ast.cam.ac.uk/vdfs/docs/minutes>

## Highlights

- The main part of the WFCAM data processing hardware has been purchased and rack mounted in a single standard 19" rack. Software has been installed and pipeline components tested. All 6 machines, the data ingest server, the data product server and the 4 data processing machines are twin Xeon processor 3GHz PCs each with a 3ware 1 Tbyte RAID array and 2 Gbytes of memory. They all have hot swappable fans, disks and twin redundant power supplies. The master processing software (/usr and /home) on the data ingest server is mirrored on the data product server (via rsync) every 24 hours, as a backup and spare.
- MSB design has progressed to a sensible (and acceptable) prototype solution for all the UKIDSS surveys. The current set of MSB designs will be processable with relatively simple stacking algorithms ie. no resampling. This will mean that the nightly MSB processing can be implemented using only the standard pipeline components, as originally planned.
- NCH, JPE and MJI gave presentations at the SPIE meeting in Glasgow. No new issues were raised at the meeting. MJI had a productive discussion over lunch with Tim Naylor, which among other things included VISTA UK user requirements.
- We have filled the post recently advertised to work on VDFS development. After receiving several promising applications (and several not so promising), two candidates clearly stood out above the others, and were shortlisted and interviewed. Both were unambiguously acceptable for the job. The candidate from ESO was offered, and accepted, the advertised post, and will start working on VDFS-related issues from January next year.

- Good progress on stacking and mosaicing algorithm development and trialling in conjunction with continuum subtraction software. The pixellation problem has been solved and the current weighting schemes give reliable and competitive results.
- The stage 1 (and elements of stage II) PSF estimation software is making good progress and now looks on track for release by the end of the year as originally planned.

**Lowlights:**

- Lack of a decent set of engineering test data is holding up development in several areas related to final progression of the standard pipeline processing.
- The related uncertainty in the detector and camera characteristics will inevitably lead to a knock-on effect around commissioning time, when we suspect most of the answers we need will have to be derived during commissioning.