VDFS-WSA VDMT Report: 2007 November-December: Narrative

1. General

UKIDSS Data Release 3 (*sans* GPS) was published on December 6. The LAS and GPS each contain in excess of 30 million sources, the DXS 1.2 million sources and the UDS 96 thousand. The UDS deep mosaic frames now include cross-talk error-bit flagging, developed last quarter, and data in H as well as J and K. The DXS and UDS now have Neighbour tables between the source tables containing deep object detections, and the detection tables, allowing search for variable objects. The suite of cross-matched external surveys now includes the x-ray source catalogue from 2XMM.

Several staff attended and contributed to the "Science from UKIDSS" workshop at ESO in December. NCH gave an overview of the WFCAM Science Archive and a paper on the GCS status, complementary data and plans. NJC gave a paper on Galaxy Photometry; ETWS on Curating the Data in the WSA; and LGR on Data Analysis Tools. NCH compiled an unofficial wish-list of VDFS enhancements arising from discussion with individual users and discussion at the end of the workshop and this be fed into planning our programme for Q1 and Q2 of 2008.

The Plate Library was cleared to allow the roof to be repaired and the space to be reconfigured to provide more office space, so NCH, RSC and MAR packed up and moved offices. JB resigned to take up a post elsewhere in the University, and the opportunity was taken to revise his job description in light of our experience of operating the WSA before initiating the recruitment process for his successor. Closing date January 31.

The paper by Hambly et al. describing the WFCAM Science Archive has been accepted for publication by MNRAS and is available on astro-ph as: arXiv:0711.3593v1.

2. Hardware
We took the opportunity of a scheduled power outage in C1 to re-arrange the servers in the racks in a more rational way and the racks to get more benefit from the air-conditioning; and JB continued moving data from the servers to the NAS boxes to reduce cross-mounts and network traffic. The cause of the slow rate of data transfer from CASU has just been tracked down to the data stripes in the RAID setup, which seriously impacts write speed, and this is being fixed. We tendered for, and ordered, a 48-TB NAS unit .

3. Software
NJC has worked on a classifier for variable stars and developed his generalised synoptic survey data model. RSC and ETWS have made numerous improvements to the software to smooth production of data releases

4. Operations
Work in the last two months has concentrated on production of DR3.

5. Tables
Progress and project status are summarized in the usual Quarterly Summary and EVA tables circulated with this report.

PMW (2008 Jan 21)