| WP | CASU WP name /sub task / 03Q3 deliverable | V.I.F. | name | date | end of month report | % done |
|---|---|---|---|---|---|---|
| # | | | | | | |
| **1** | **Management and definition of project responsibilities** | **3.0** | | | | |
| **1.1** | **report to VISTA, UKIDSS, JAC, ATC, GSC** | | | | | |
| | provide fornightly meeting minutes, monthly reports on progress + quarterly review reports and planning | | MJI<br>STH | | | |
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| **1.2** | **interface control document between CASU and JAC** | | | | | |
| | in conjunction with JAC produce and sign off hard copy | | MJI | | | |
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| **1.3** | **interface control document between CASU and WFAU** | | | | | |
| | sign off Q2 ICD and finalise advanced processing product ICD | | MJI | | | |
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| **1.4** | **define data structures and FITS headers** | | | | | |
| | update example MEF headers in reponse to feedback from ATC, JAC, WFAU | | JRL | | | |
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| **1.5** | **define observing protocols** | | STH | | | |
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| **1.6** | **liaise with UKIDSS & JAC on observing strategy** | | | | | |
| | monitor progress | | DWE | | | |
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| **1.7** | **liaise with UKIDSS & JAC on survey planning** | | | | | |
| | monitor progress | | DWE | | | |
| | | | | | | |
| **1.8** | **liaise with UKIDSS and JAC on survey progress DB** | | | | | |
| | get feedback from JAC for mirroring of current progress database | | JRL | | | |
| | investigate use of Sybase Replication Server to perform the task | | JRL | | | |
| | deliver a working mirror copy of the OMP database | | JRL | | | |
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| **1.9** | **system documentation** | | | | | |
| | update and maintain web pages of system docs | | DWE | | | |
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| **2** | **ESO VISTA software interface deliverables and documentation** | **4.0** | | | | |
| **2.1** | **VDFS user requirements document** | | | | | |
| | inc. QC and JPE and other feedback produce first real draft | | PSB | | | |
| | | | | | | |
| **2.2** | **data reduction specification document** | | | | | |
| | produce first real draft of DRS document | | PSB | | | |
| | | | | | | |
| **2.3** | **calibration plan document** | | | | | |
| | produce first real draft of calibration document | | PSB | | | |
| | | | | | | |
| **2.5** | **ICD ESO/VPO** | | | | | |
| | draft version of Data Interface dictionary - esp. FITS header specification | | PSB | | | |
| **2.8** | **liaise with VISTA IR camera development team** | | | | | |

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| | check camera documentation for conflicts/issues | | PSB | | | |
| | attend camera software design review and present CASU pipeline plans | | PSB | | | |
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| **3** | **Pipeline infrastructure and pipeline progress monitoring tools** | **3.5** | | | | |
| **3.1** | **interactive tools for running pipeline** | | | | | |
| | write a set of executable scripts for individual reduction tasks | | JRL | | | |
| | deliver a set of scripts that can be run to access individual tasks within CIRDR | | JRL | | | |
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| **3.2** | **high level scripts to interrogate headers** | | | | | |
| | test and update using nights of CIRSI data | | STH | | | |
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| **3.3** | **automatic progression of results to web pages** | | | | | |
| | interrogate pipeline progress database and produce test web page summaries | | STH | | | |
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| **3.6** | **group documentation on pipeline infrastructure** | | | | | |
| | modify current documentation according to recommendations from stress tests. | | JRL | | | |
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| **4** | **Set up and manage raw science archive** | **0.0** | | | | |
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| **5** | **Set up and manage data processing system hardware** | **2.0** | | | | |
| **5.2** | **buy hardware and install** | | | | | |
| | tender for purchase and install data ingest server hardware/software | | MTB | | | |
| | with JAC conduct tests on Ultrium tapes as transport medium | | MTB | | | |
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| **6** | **Run standard pipeline** | **2.5** | | | | |
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| **7** | **Development work for summit pipeline** | **1.0** | | | | |
| **7.1** | **Interface test pipelines in ORAC-DR** | | | | | |
| | update and trial updated test pipelines | | JRL | | | |
| | | | | | | |
| **7.2** | **implement WFCAM pipeline at summit** | | | | | |
| | CVS deposit and trial test ORACDR pipeline at JAC | | JRL | | | |
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| **7.3** | **documentation for ORAC-DR interface** | | | | | |
| | continue to add to interface documentation as pipeline modules are written. These will appear in the CIRDR and ORACDR documentation sets | | JRL | | | |
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| **8** | **Development and testing of standard 2d processing** | **4.0** | | | | |
| **8.1** | **further development of standard pipeline** | | | | | |
| | process night(s) of CIRSI data with pseudo trial WFCAM pipeline | | JRL | | | |
| | rewrite routine for extraction of astrometric and photometric standards using 2MASS catalogue | | JRL | | | |
| | deliver report on flatfielding and sky subtraction strategies | | JRL | | | |
| | deliver new version of getstds | | JRL | | | |

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| | write updated wrapper for improved version of catalogue software | | JRL | | | |
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| **8.2** | **liaison with WFCAM development team** | | | | | |
| | assess engineering test data for reset anomaly, dark stability, cross-talk, image retention and linearity | | JRL | | | |
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| **8.3** | **partake in planning commissioning/characterisation observations** | | | | | |
| | together with ATC/JAC finish calibration plan | | STH | | | |
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| **8.6** | **documentation for 2D processing software** | | | | | |
| | drive test pipelines and update and deliver documentation as modules are written | | JRL | | | |
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| **8.7** | **Comparison between automated and manual data products** | | STH | | | |
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| **9** | **Development and testing of standard catalogue products** | **4.0** | | | | |
| **9.1** | **add in new measures requested** | | | | | |
| | Produce first version of catalogue software with all extra measures | | MJI | | | |
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| **9.2** | **refine astrometric calibration model** | | | | | |
| | produce report on optical distortion simulations | | MJI | | | |
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| **9.3** | **generate model simulations of expected data** | | | | | |
| | further development of simulations | | STH | | | |
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| **9.4** | **assess catalogue parameter reliability** | | | | | |
| | run prototype pipeline on simulations and compare derived parameters with model data, write report | | JMI | | | |
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| **9.5** | **intercomparison of catalogue products with other packages** | | | | | |
| | agree detailed trials using INT WFC data and report on catalogue extraction and classification software comparisons | | JMI | | | |
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| **9.7** | **documentation of catalogue software and products** | | | | | |
| | update, fold in more detail and stress test | | MJI | | | |
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| **10** | **Setup trial and run further processing pipeline** | **3.0** | | | | |
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| **11** | **Photometric standards and calibration** | **3.0** | | | | |
| **11.1** | **agree on primary standards** | | | | | |
| | investigate and report on narrow-band filter calibration options | | STH | | | |
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| **11.2** | **choose secondary standard fields** | | | | | |
| | incorporate feedback from working group on choice of secondary fields and update document | | STH | | | |
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| **12** | **Further development of DQC measures at summit and Cambr** | **2.0** | | | | |
| **12.3** | **implement 2mass for throughput measurement** | | | | | |
| | extend tests to night(s) of pseudo WFCAM pipeline processed CIRSI data | | JMI | | | |
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| **12.4** | **master calibration frames for detector monitoring** | | | | | |
| | assess and report if current methods work on engineering WFCAM data | | JRL | | | |
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| **13** | **Co-located list driven photometry** | **3.0** | | | | |
| **13.2** | **develop basic WCS-based list driven photometer** | | | | | |
| | investigate practicalities and implement agreed ICD for parameters | | MJI | | | |
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| **14** | **Stacking and mosaicing** | **4.0** | | | | |
| **14.1** | **develop benchmark simple stacking/mosaicing framework** | | | | | |
| | bug fix and update as necessary | | MJI | | | |
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| **14.2** | **NN algorithm with simple rejection** | | | | | |
| | bug fix and update as necessary | | MJI | | | |
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| **15** | **Continuum subtraction and basic difference imaging** | **4.0** | | | | |
| **15.1** | **write WCS-based difference imaging driver software** | | | | | |
| | bug fix and update as necessary | | MJI | | | |
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| **15.2** | **investigate and apply different interpolation methods** | | | | | |
| | compare different software packages for difference imaging and produce report | | DWE | | | |
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| **16** | **Interpolation techniques and PSF modeling** | **4.0** | | | | |
| **16.1** | **investigate alternative interpolation/PSF schemes** | | | | | |
| | finish review and write short report on alternatives | | DWE | | | |
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| **16.3** | **implications for deriving catalogues and parameters** | | | | | |
| | assess and write report on errors in catalogue parameters arising from using different interpolation schemes | | DWE | | | |
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| **16.4** | **oversampled PSF generation per detector** | | | | | |
| | write first pass PSF generator using optical test data | | DWE | | | |
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