| 05Jun_del.xls | | | | | | | | | | | |
|-------------------|--|---------------|-----|-------|------|-----|-----|---|--|--|--|
| WP | CASU WP name /sub_task / 05Q2m3 deliverable | Staff | eso | Vers | | Pr | og | Textual Summary | | | |
| # | | | | | 05Q1 | Apr | May | Jun | | | |
| 1 | Management and definition of project responsibilities | | | | | | | | | | |
| 1.1 | report to VISTA, UKIDSS, JAC, ATC, GSC | all | | | 17 | 19 | 22 | 25 | | | |
| | meeting minutes, monthly reports, quarterly review/reports & planning, VDUC meetings, JAC telecons; prepare for and attend ESO VDFS FDR update meeting | | | | | | | Organized and attended ESO FDR+ meeting, distributed notes and actioned specific items to project members. held four CASU meetings. attended UKIRT board meeting. Held VDMT meetings in May, June. MJI attended VST Public Surveys PSP meeting at ESO. Telecons held with JAC in Apr, May, June. Reminded ESO about post-FDR doc review notes and actioned specific items to project members. | | | |
| 1.2 | interface control document between CASU and JAC | MJI | | V1 | 100 | 100 | 100 | 100 completed | | | |
| | | | | | | | | | | | |
| 1.3a | interface control document between CASU and WFAU (WFCAM) | MJI | | V1 | 100 | 100 | 100 | 100 completed | | | |
| | | | | | | | | | | | |
| 1.3b | interface control document between CASU and WEAU (VISTA) | | | V4 | 0 | 0 | 0 | 0 | | | |
| 1.00 | liase with WFAU for design of VISTA ICD | | | | Ũ | | 0 | no progress (contingent on other outstanding VISTA FITS header issues) | | | |
| 1.42 | define WECAM data structures and EITS beaders | MILIRI PSB | | V1 | 100 | 100 | 100 | 100 completed | | | |
| 1. 4 a | | | | vi | 100 | 100 | 100 | | | | |
| 1.16 | undete prepaged V/ISTA EITS begdere og pegegerry | DED | 02 | V/4 | 10 | 10 | 20 | 20 | | | |
| 1.40 | monitor and undate proposed VISTA FITS headers | FOD | 62 | V4 | 10 | 10 | 20 | 20 Decounted surrout state of FITS to DICD shair at FDD . Waiting for FSO feedback and | | | |
| | monitor and update proposed visity in is neaders | | | | | | | new issues of instrument/TCS dictionaries. | | | |
| 1.5a | define WFCAM observing protocols | STH | | V2 | 55 | 60 | 60 | 60 | | | |
| | monitor and update MSB guidelines | | | | | | | awaiting detailed analysis of first processing runs | | | |
| 1.5b | define VISTA observing protocols | PSB | e2 | V4 | 15 | 15 | 20 | 20 | | | |
| | liaise with development team | | | | | | | distributed updates to data types (in particular HOWFS) following FDR+ and instigated discussion on type of calibration observations. Reviewed current state of simulator output | | | |
| 1.6a | liaise with UKIDSS&JAC on WFCAM obs strategy, surveys planning | STH | | V2 | 40 | 50 | 50 | 50 | | | |
| | liaise and monitor progress | | | | | | | awaiting detailed analysis of first processing runs. CASU will attend UKIDSS SV meeting scheduled for 4th August (prob STH). | | | |
| 1.6b | liaise with Proj. Sci. on VISTA observing strategy & survey planning | PSB | e3 | V2-V3 | 17 | 19 | 22 | 25 | | | |
| | liaise and monitor progress | | | | | | | Informal discussions on status of detectors and project in general. Input to latest data- rate description. Discussions with ATC on FITS headers. | | | |
| 1.7a | liaise with VDUC on VDFS products for WFCAM | STH, MJI, JRL | | V2 | 50 | 55 | 55 | 55 | | | |
| | liaise and monitor progress. finalise reports on comm-I | | | | | | | reports on comm-I finished off. Reports on SV1 in progress | | | |
| 1.7b | liaise with VDUC on VDFS products for VISTA | MJI, STH | e2 | V4 | 17 | 19 | 22 | 25 | | | |
| | liaise and monitor progress. assess and prioritise work required for extra UK VDFS products. begin functional specification for UK review (see VDMT A0501-05) | | | | | | | MJI sent futher comments on UK URD to WJS & signed off | | | |
| 1.8a | liaise with UKIDSS and JAC on survey progress DB (WFCAM) | JRL | | V2 | 50 | 50 | 50 | 50 | | | |
| | maintain OMP database mirror to be used with survey progress database, incl. user interface | | | | | | | OMP database mirror updated on a regular basis. General tools for querying to be developed soon to help with duplicate MSB components & incomplete or bad MSBs | | | |
| 1.8b | liaise with VDUC and ESO on survey progress DB (VISTA) | | e3 | V3-V5 | 0 | 0 | 0 | 0 on hold | | | |
| | | | | | | | | | | | |
| 1.9 | system documentation | DWE, EGS. | | | 17 | 19 | 22 | 25 | | | |
| - | update and maintain web pages of system docs | ,] | | | | - | | updated and maintained WWW pages, trialled Plone | | | |
| 1.10 | VST processing preparation | EGS, MJI | | V3 | 0 | 0 | 10 | 10 | | | |
| | monitor, assess and respond to VST proposal feedback | , | 1 | | | | | held discussions with core and secondary programme Pis | | | |
| 2 | ESO VISTA software interface deliverables and documentation | · | | | | | | | | | |
| 2.1 | DFS impact document | PSB | | | 70 | 70 | 80 | 80 | | | |
| | | 1 | | | ~ | | | | | | |

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|------|--|----------|-------|-------|--------|----|----|---|
| | respond to RIX, update document | | | | | | | incorporated current data-rate info from JPE with minor improvements (inclusion of FITS header size). Presented to FDR+, waiting further ESO feedback. |
| 2.2 | Calibration Plan document | PSB | | 70 | 70 | 80 | 80 | |
| | respond to RIX, update document | | | | | | | presented to FDR+, incorp. some feedback, awaiting further ESO feedback |
| 2.3 | Data Reduction Library Design document | PSB | | 70 | 70 | 80 | 80 | |
| | respond to RIX, update document | | | _ | | | | presented to FDR+, incorp. some feedback, copy to chair of DICB, awaiting further ESO feedback |
| 2.4 | Data Reduction Library | | | | | | | subsumed into 2.3 |
| | | | | | | | | |
| 2.5 | | PSB | e2 | 0 | 5 | 5 | 5 |) |
| | update FITS header doc and DID/DIC and data dictionary files | | | | | | | waiting DSR proposal (ESO) full inst & TCS dics (ATC). Reminded ESO to send DSR |
| 2.6 | Instrument specification and interface documents | PSB | e2 | 0 | 0 | 6 | 6 | \$ |
| | develop integration tests in CPL & QFITSenvironment | | | | | | | short workshop on CPL at FDR+, new CPL issue and docs |
| 2.7 | Delivery software modules for exposure time calculator | STH, PSB | | 20 | 20 | 30 | 60 | |
| | update ETC doc. produce C versions of ETC software modules | | | | | | | finished translation of perl code into C, testing & debugging standalone programme |
| 2.8 | liaise with VISTA IR camera development team | PSB | e2-e5 | 8 | 19 | 25 | 25 | 5 |
| | continue liaising with VISAT IR camera development team | | | | | | | FITS issues (see above). test state of current camera software being run at RAL, discussed outstanding issues include, generation of first-guess WCS |
| 2.9 | Development of DOC measures | PSB | e3 | 0 | 5 | 5 | 5 | |
| | respond to RIXs, update QC measures as required | | | | - | - | - | no progress |
| 2.10 | Documents for software modules | PSB | e5 | 0 | 0 | 0 | C |) |
| 3 | Pipeline infrastructure and pipeline progress monitoring tools | - | | | - 1 | - | | |
| 3.1 | interactive tools for running pipeline | JRI | V1-V2 | 60 | 70 | 75 | 75 | 5 |
| | develop tools in light of comm-II and document | | | | | | | improvements to pipeline scripts to enable better control: restart & preview ability |
| 3.2 | high level scripts to interrogate headers | STH | V1,V3 | 50 | 50 | 55 | 60 | |
| | update header interrogation scripts and test | | | | | | | software running to enable DQC monitoring of processed data. MR prepared a new prototype system to monitor pipeline reduction progress based on XML output files from pipeline. development continuing. |
| 3.3 | automatic progression of results to web pages | MR | V2 | 50 | 50 | 50 | 55 | 5 |
| | prototype a web-based pipeline progress system | | | | | | | MR script enables flexible handling of XML files. Webpage records status of processing to date. |
| 3.4 | automatic checks to spot failure of pipeline | STH, MR | V2 | 0 | 0 | 20 | 20 | |
| | develop scripts to pick out problem datasets | | | | | | | many more error traps now in place following testing and retesting. automatic checking for incomplete images enabled |
| 3.5a | Tools for fixing problem datasets (WFCAM) | JRL | V2 | 20 | 25 | 25 | 25 | 5 |
| | develop tools to handle problems in comm-II data | | | | | | | developed tools for fixing headers with dodgy grouping parameters. |
| 3.5b | Tools for fixing problem datasets (VISTA) | | V4-V5 | 0 | 0 | 0 | 0 |) on hold |
| | | | | | | | | |
| 3.6 | group documentation on pipeline infrastructure | STH, JRL | V1-V2 | 60 | 60 | 60 | 60 | |
| | stress test documentation and update as necessary | | | | | | | minor document updates implemented |
| 3.7a | Oversee reprocessing WFCAM data after bug fixes/improvements | MR | V3-V5 | 0 | 30 | 30 | 30 | |
| | reprocess science data in comm-I | | | | | | | all comm-I data reprocessed and transferred to WFAU |
| 3.7b | Oversee reprocessing VISTA data after bug fixes/improvements | | V5 | 0 | 0 | 0 | 0 |) on hold |
| | | | | | | | - | |
| 4 | Set up and manage raw science archive | | | | | | | |
| 4 1 | extend UKIRT archive to cope with WECAM data | JRI MR | V2 | 50 | 55 | 65 | 65 | 5 |

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|------|--|---------------|----|-------|--------|-----|----|--|
| | finish creating version 1 of WFCAM raw data archive. initiate manage and monitor WFCAM - ESO raw data transfers | | | | | | | SV data spanning 1-16th April transferred to ESO. UKIRT WFCAM raw data archive now running and supplying data. still transfering data to ESO (done up to ~ 10th of May). For archive, full authentification now available and requests automatically filled. |
| 4.2a | Ingest and verify WFCAM data | MR, MJI | | 10 | 19 | 22 | 2 | 5 |
| | ingest and verify phase II commissioning and SV data | , | | | | | | all WFCAM data ingested and verified up to June 19th. Missing files retrieved. |
| 4.2b | Ingest and verify VISTA data | | | 0 | 0 | 0 | (| on hold |
| 5 | Set up and manage data processing system hardware | ' | | | | | | |
| 5.1 | Investigate alternatives (benchmarking, reliability etc) | MJI, PSB, JMI | | 100 | 100 | 100 | 10 | 0 completed |
| 5.2 | buy hardware and install | PSB, JMI, MJI | | 50 | 100 | 100 | 10 | 0 completed |
| 5.3 | integrating and testing | PSB, JMI | | 50 | 100 | 100 | 10 | 0 completed |
| 5.4 | Manage day-to-day maintenance and upgrades | PSB, JMI | | 17 | 19 | 22 | 2 | 5 |
| | continue maintenance and upgrade programme | | | | | | | rebuild of one failed raid array and system disk. |
| 5.5 | Hardware additions for further processing system | | | 0 | 0 | 0 | (| 0 |
| | scope need for extra hardware for further processing | MJI | | | | | | no need at present |
| 6 | Run standard pipeline | | | | | | | |
| 6.1a | Update WFCAM master calibration frames | MJI, JRL | | 0 | 3 | 6 | 9 | 9 |
| | ingest and verify WFCAM on-sky test data | | | | | | | first pass SV calibrations generated.master frame updates proceeding manually due to data taking problems |
| 6.1b | Update VISTA master calibration frames | | | 0 | 0 | 0 | (| 0 |
| | | | | | | | | |
| 6.2a | Monitor detector performance WFCAM | JRL | | 0 | 3 | 6 | 9 | 9 |
| | monitor with comm-I, comm-II and SV data | | | | | | | study of flats and darks started with promising results |
| 6.2b | Monitor detector performance VISTA | | | 0 | 0 | 0 | (| 0 |
| | | | | | | | | |
| 6.3a | Oversee standard processing WFCAM | MR | | 0 | 3 | 6 | | 9 |
| | oversee SV data | | | | | | | All data processed up to ~end of May |
| 6.3b | Oversee standard processing VISTA | | | 0 | 0 | 0 | (| 0 |
| | | | | | | | | |
| 6.4a | Astrometric calibration WFCAM | MJI | | 0 | 3 | 6 | 9 | 9 |
| | calibrate comm-I, comm-II & SV data | | | | | | | all data calibrated to 2mass to ~100mas |
| 6.4b | Astrometric calibration VISTA | | | 0 | 0 | 0 | (| 0 |
| | | | | | | | | |
| 6.5a | Photometric Calibration WFCAM | STH | | 0 | 3 | 6 | | 9 |
| | calibrate using 2mass, then with WFCAM system | | | | | | | all data calibrated to 2mass, assessment of UKIRT FS proceeding |
| 6.5b | Photometric Calibration VISTA | | | 0 | 0 | 0 | (| 0 |
| | | | | | | | | |
| 6.6a | Verify Science products and monitor DQC measures WFCAM | EGS, MJI | | 0 | 3 | 6 | 9 | 9 |
| | assess comm-I, comm-II and SV data | | | | | | | assessment of SV data ongoing |
| 6.6b | Verify Science products and monitor DQC measures VISTA | | | 0 | 0 | 0 | (| 0 |
| | | | | | | | | |
| 6.7 | Monitor data product transfer to WFAU | MR, MJI | | 0 | 3 | 6 | | 9 |
| | continue data transfer to WFAU and monitor | | | | | | | SV nights 1/4/05 and 7/4/05 transferred to WFAU as tests. 8/5/05 -> 10/5/05 transferred. |
| 6.8a | Reprocess WFCAM data | MR | | 0 | 3 | 6 | 9 | 9 |
| | reprocess if major bug fixes | | | | | | | reprocessing as required |
| 6.8b | Reprocess VISTA data | | | 0 | 0 | 0 | (| 0 |
| | | | | | | | | |
| 7 | Development work for summit pipeline | | | | | | | |
| 7.1a | Interface test pipelines in ORAC-DR | JRL | V1 | 100 | 100 | 100 | 10 | 0 completed |
| | | | | | | | | |

05Jun del.xls Interface test pipelines to VISTA summit DR e3 7.1b JRL V4 0 0 0 on hold 7.2a implement WFCAM pipeline at summit JRL V1-V2 75 75 80 80 demonstrate catalogue and non-cat DQCs; develop recipes for dealing with further work done on speeding up the summit pipeline. faster decurtaining routine is crosstalk, non-linearity, reset anomalies and persistence, tackle speed issues now available. Additions to the DQC logging made. sdf-> fits routine faster and more reliable. further work being done to improve the speed of the group processing stage. end-to-end tests being run on summit machine. Implement VISTA pipeline at summit JRL e3 V4 0 7.2b 0 0 0 on hold documentation for ORAC-DR interface JRL V1-V2 60 60 60 60 7.3a update and deliver documentation as development proceeds no further progress e3 V3-V4 0 7.3b documentation for interface VISTA JRL 0 0 0 on hold V2-V5 17 19 22 25 7.4a upgrade and maintain summit pipeline WFCAM JRL update & maintain, include commissioning enhancements bug fixes implemented as found - speed ups implemented in group processing JRL e5 V4-V5 0 0 0 7.4b upgrade and maintain summit pipeline VISTA 0 on hold Development and testing of standard 2d processing e1 V1-V2 80 8.1a further development of standard pipeline for WFCAM JRL 80 80 80 finish implementing new version of imcore to include full param set modifications made to accommodate comm-II data, new sky subtraction strategy developed, bug fixes in place. JRL e1 V3 8.1b development of VISTA specific packages 0 0 0 0 on hold V1-V2 8.2a liaison with WFCAM development team JRL 8 19 22 25 continue discussion on reset anomaly, crosstalk and linearity; assess science array discussion at telecon on nature of sky "crud" problem and possible fixes. test data for above problems and report 8.2b liaison with Project Scientist & VISTA development team M.II e1-e5 V3 8 19 22 25 assess any new detector engineering test data nothing to report partake in planning WFCAM commissioning observations STH V1-V2 100 WFCAM commissioning completed 8.3a 80 100 100 continue planning V3 8.3b partake in planning VISTA comissioning observations STH e3 0 0 0 0 liaise and discuss with camera PS and VISTA PS no progress 8.4a Participate directly in commissioning WFCAM STH V2 50 100 100 100 took part in second stage of WFCAM on-sky commissioning - completed complete observations 8.4b Participate directly in commissioing VISTA STH e5 V4 0 0 0 0 on hold 8.5a MJI, JRL, EGS V2 20 30 35 40 Tuning pipeline during commissioning and after WFCAM use commissioning data to tune processing strategy; assess the quality and stability dark and flatfield assessment made and report started. sky subtraction strategy of the master calibration data; asses the quality of science output investigated and modified. Tuning pipeline during commissioning and after VISTA MJI, JRL, EGS e5 V4-V5 0 0 0 0 on hold 8.5b 8.6a documentation for 2D processing software WFCAM JRL V1-V2 50 50 50 50 update docs as necessary no progress V3-V4 documentation for additional 2D processing software VISTA JRL e3 0 0 0 on hold 8.6b 0 8.7 Comparison between automated and manual data products STH e1 V1-V2 50 50 50 50 assess CASU processed WFCAM commissioning data in conjunction with CSV CSV & others given access to raw data via archive Development and testing of standard catalogue products Q MJI e1 V1-V3 60 60 60 60 9.1 add in new measures requested finish testing and debugging new catalogue parameter measures all parameters in place, but require verification of error estimates (9.4)

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|-----------------|---|---------|-----|----------|-----|-----|-----|-----|---|--|--|
| 9.2a | refine astrometric calibration model | MJI | e1 | V1-V2 | 85 | 85 | 85 | 85 | 5 | | |
| | assess astrometric properties of WFCAM comm-II and SV data | | | | | | | | ongoing | | |
| 9.2b | refine astrometric calibration model - VISTA specific | MJI | e2 | V4-V5 | 0 | 0 | 0 | 0 | | | |
| | | | | | | | | | on hold | | |
| 9.3 | generate model simulations of expected data | STH | | V1 | 100 | 100 | 100 | 100 | completed | | |
| | | | | | | | | | | | |
| 9.4 | assess catalogue parameter reliability | MJI | e1 | V1-V2 | 70 | 70 | 70 | 70 | | | |
| | refine parameter error estimates and check for systematics in new params, finish in | | | | | | | | error estimates being refined with WFCAM SV data | | |
| | conjunction with 9.1 | | | | | | | | | | |
| 9.5 | intercomparison of catalogue products with other packages | MJI | e1 | V1-V2 | 100 | 100 | 100 | 100 | completed | | |
| | | | | | | | | | | | |
| 9.6 | Completeness | MJL EGS | e2 | V1-V2 | 0 | 10 | 10 | 10 | | | |
| 0.0 | design and report on completeness model, check completeness [9.6] and error | | - | | | | | | no progress - note the limitations implied by the sensitivity variation in the detector | | |
| | estimates and parameter reliability [9.4] | | | | | | | | | | |
| 9.7 | documentation of catalogue software and products | MJI | e2 | V1-V2 | 55 | 55 | 55 | 55 | 5 | | |
| - | update catalogue products documentation | | | | | | | | | | |
| 10 | Setup trial and run further processing pipeline | 1 | | <u> </u> | | | | | | | |
| 10 1 | Manage and run further processing stages | | 1 | V3-V5 | 0 | 0 | 0 | 0 | placebolder (start in O3) | | |
| 10.1 | | | _ | | | | - 0 | | | | |
| 10.2 | development and assessment of DSE options 1.2 | DWE | e2 | V1-V2 | 60 | 60 | 60 | 65 | DSE determination code and DSE fitting code altered to work with real WECAM data | | |
| 10.2 | | | 02 | | 00 | 00 | 00 | 00 | and 80 column catalogues. Tested on real WECAM data | | |
| | develop and test prototype version of code for PSE level 2 | | - | | | | | | | | |
| 10.2 | develop 1D/2D DSE decenvelved Sereie profile fite | | 02 | 1/2-1/3 | 0 | | 0 | | | | |
| 10.5 | action TD/2D PSP-deconvolved Sersic profile fits | IVIJI | 62 | VZ-V3 | 0 | 0 | 0 | 0 | | | |
| 10.4 | Prototype includes for defait profile maining | | 02 | 1/2 1/4 | 0 | | 0 | 0 | | | |
| 10.4 | investigate feasibility of pebulosity detection | IVIJI | 63 | VZ-V4 | 0 | 0 | 0 | 0 | | | |
| 10.5 | | | - 2 | 1/2 1/4 | - | | | | no progress | | |
| 10.5 | Full iterative profile fitting for stellar images | | es | V3-V4 | 0 | 0 | 0 | 0 | | | |
| | | | _ | | | | | | on hold | | |
| 10.6 | Develop and optimize Bayesian image classification | MJI | _ | V3 | 0 | 0 | 0 | 10 | | | |
| | trial Bayesian classification schemes | | | | | | | | Bayesian method for combining independent classification developed | | |
| 10.7 | Modelling and simulations of further processing steps | | e5 | V2-V3 | 0 | 0 | 0 | 0 | | | |
| | simulate WFCAM data and ct with code developed in 10.2 | | | | | | | | no progress | | |
| <mark>11</mark> | Photometric standards and calibration | 1 | | | | | | | | | |
| 11.1 | Agree on primary standards (WFCAM + VISTA) | STH | e1 | V1-V2 | 90 | 100 | 100 | 100 | completed | | |
| | | | | | | | | | | | |
| 11.2 | Choose secondary standards (WFCAM + VISTA) | STH | e1 | V1-V2 | 80 | 80 | 80 | 80 | | | |
| | add in last few proposed standards and update doc | | | | | | | | no progress | | |
| 11.3a | take part in commissioning observations WFCAM | STH | | V2 | 10 | 100 | 100 | 100 | phase II on-sky characterisation - completed | | |
| 11.3b | take part in commissioning observations VISTA | STH | e5 | V4 | 0 | 0 | 0 | 0 | on hold | | |
| | | | | | | | | | | | |
| 11.4a | Reduce data, compute zero points and colour equations WFCAM | STH | | V2 | 15 | 20 | 20 | 25 | | | |
| | compute ZPs from commissioning data, update colour terms relative to 2mass | | | | | | | | analysis started on photometric data | | |
| 11.4b | Reduce data, compute zero points and colour equations VISTA | STH | e5 | V4-V5 | 0 | 0 | 0 | 0 |) on hold | | |
| | | | | | | | | | | | |
| 11.5 | Update, maintain and extend secondary standards system | STH | e5 | V2-V4 | 0 | 0 | 0 | 0 | | | |
| | begin building secondary standard fields system | | | | | | | | no progress | | |
| 11.6 | Investigate photometric calibration field systematics WFCAM+VISTA | STH | e5 | V2-V5 | 0 | 0 | 0 | 0 | | | |
| | investigate photometric calibration systematics | | | | | | | | no progress | | |
| 11.7 | assess extinction monitoring methods and develop measures | STH | e1 | V2-V5 | 50 | 50 | 50 | 50 | | | |
| | use 2MASS comparison to get first order estimate and assess expected accuracy | | | | | | | | 2MASS being routinely used to monitor extinction in frames; agrees with Skyprobe | | |

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|-----------------|--|----------|----|-------|-----|-----|-----|-----|--|--|--|
| 12 | Further development of DQC measures at summit and Cambr | | | | | | | | | | |
| 12.1 | develop extra systematic noise measures | MJI | e1 | V1-V2 | 50 | 75 | 75 | 75 | 5 | | |
| | trial with comm-II data, continue testing and monitoring systematic noise remover | | | | | | | | no progress | | |
| 12.2 | Refine current measures for WFCAM/VISTA data | JRL, MJI | e1 | V3 | 20 | 25 | 25 | 25 | 5 | | |
| | trial with comm-II data, monitor DQC assessment and random visual cehcks | | | | | | | | default measures being monitored and performance checked | | |
| 12.3 | implement 2mass for throughput measurement | JRL | e1 | V1-V2 | 75 | 100 | 100 | 100 | implemented local access version at summit - completed | | |
| 12.4 | master calibration frames for detector monitoring | JRL | e1 | V1-V2 | 35 | 40 | 40 | 40 | report underway | | |
| | assess and report using commissioning data | | | | | | | | | | |
| <mark>13</mark> | Co-located list driven photometry | | | | | | | | | | |
| 13.1 | test methods for master catalogue generation | MJI | | V1 | 100 | 100 | 100 | 100 | completed | | |
| 13.2 | develop basic WCS-based list driven photometer | MJI | e1 | V1-V2 | 90 | 90 | 90 | 90 | | | |
| | extend to full 80 parameter set | | | | | | | | no progress | | |
| 13.3 | externally driven WCS photometry and define parameter set | MJI | e1 | V2 | 75 | 75 | 75 | 75 | 5 | | |
| | extend to full 80 parameter set | | | | | | | | no progress | | |
| <mark>14</mark> | Stacking and mosaicing | | | | | | | | | | |
| 14.1 | develop benchmark simple stacking/mosaicing framework | MJI | | V1 | 100 | 100 | 100 | 100 | completed | | |
| 14.2 | NN algorithm with simple rejection | MJI | | V1 | 100 | 100 | 100 | 100 | completed | | |
| 14.3 | More sophisticated rejection dealing with pixellation | MJI | e1 | V1-V2 | 100 | 100 | 100 | 100 | completed | | |
| 14.4 | Stacking with optimum wighting and defect rejection | MJI | e1 | V2-V3 | 25 | 25 | 25 | 25 | | | |
| | refine and test current seeing weighting method on FIRES data | | | | | | | | no progress | | |
| 14.5 | Advanced stacking/image restoration for variable PSF | MJI | e2 | V3-V5 | 0 | 0 | 0 | C | | | |
| | TBD as part of UK design review | | | | | | | | no progress | | |
| <mark>15</mark> | Continuum subtraction and basic difference imaging | | | | | | | | | | |
| 15.1 | Simple WCS-based subtraction techniques | MJI | e1 | V1-V2 | 100 | 100 | 100 | 100 | completed | | |
| 15.2 | investigate and apply different interpolation methods | MJI | e1 | V1-V2 | 100 | 100 | 100 | 100 | completed | | |
| 15.3 | develop adaptive kernel matching option | MJI | e1 | V1-V2 | 80 | 80 | 80 | 80 | | | |
| | continue debugging and enhancements to adaptive kernel package | | | | | | | | small improvements made to algorithm and several bugs fixed | | |
| 15.4 | transient event detection | STH | e2 | V2-V3 | 20 | 20 | 20 | 20 | | | |
| | continue with WASP, INT WFC and APT datasets | | | | | | | | tests on several clusters carried out | | |
| <mark>16</mark> | Interpolation techniques and PSF modeling | | | | | | | | | | |
| 16.1 | investigate alternative interpolation/PSF schemes | DWE | | V1 | 100 | 100 | 100 | 100 | completed | | |
| 16.2 | implications for different stacking methods | DWE | e1 | V1-V2 | 20 | 20 | 20 | 25 | testing alternative interpolation schemes begun | | |
| | | | | | | | | | | | |
| 16.3 | implications for deriving catalogues and parameters | DWE | e1 | V1-V2 | 70 | 70 | 70 | 75 | | | |
| | tinish development and testing of astrometric refinement code | | | | | | | | testing begun with real data, astrometric accuracy assessed, report started | | |
| 16.4 | oversampled PSF generation per detector | DWE | e1 | V1-V5 | 100 | 100 | 100 | 100 | completed | | |
| 16.5 | develop oversampled spatially varying PSF model | DWE | e2 | V2-V5 | 20 | 20 | 20 | 25 | 5 | | |
| | finish development of spatially varying PSF model, final tuning on WFCAM on-sky data | | | | | | | | spatial variation of chi^2 from PSF fitting investigated. report started. no sign of variation in current WFCAM data. | | |