03Q3m1_casu_deliverables

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 STH	31/07/03	continued maintainance of management spreadsheets and documents	
1.2	**interface control document between CASU and JAC**					**50**
	in conjunction with JAC produce and sign off hard copy		MJI	31/07/03	no progress	0
1.3	**interface control document between CASU and WFAU**					**50**
	sign off Q2 ICD and finalise advanced processing product ICD		MJI	31/07/03	no progress	0
1.4	**define data structures and FITS headers**					**50**
	update example MEF headers in reponse to feedback from ATC, JAC, WFAU		JRL	31/07/03	comments on headers from NCH being incorporated in minor revision of MEF headers	50
1.5	**define observing protocols**		STH		placeholder	
1.6	**liaise with UKIDSS & JAC on observing strategy**					**50**
	monitor progress		DWE	31/07/03	no contact	0
1.7	**liaise with UKIDSS & JAC on survey planning**					**50**
	monitor progress		DWE	31/07/03	no contact	0
1.8	**liaise with UKIDSS and JAC on survey progress DB**					**50**
	get feedback from JAC for mirroring of current progress database		JRL	31/07/03	no feedback yet from JAC	0
	investigate use of Sybase Replication Server to perform the task		JRL	31/07/03	can't progress	0
	deliver a working mirror copy of the OMP database		JRL	31/07/03	can't progress	0
1.9	**system documentation**					**50**
	update and maintain web pages of system docs		DWE	31/07/03	updated as necessary	50
2	**ESO VISTA software interface deliverables and documentation**	**4.0**				
2.1	**VDFS user requirements document**					**50**
	inc. QC and JPE and other feedback produce first real draft		PSB	31/07/03	first draft produced. Needs internal reviewing	50
2.2	**data reduction specification document**					**10**
	produce first real draft of DRS document		PSB	31/07/03	skeleton of first draft completed	10
2.3	**calibration plan document**					**10**
	produce first real draft of calibration document		PSB	31/07/03	merged input from JRL, sourced ESO reference documents	50
2.5	**ICD ESO/VPO**					**10**
	draft version of Data Interface dictionary - esp. FITS header specification		PSB	31/07/03	researched formats required by ESO, collected source docs	10
2.8	**liaise with VISTA IR camera development team**					**10**
	check camera documentation for conflicts/issues		PSB	31/07/03	reviewed camera-control doc	10
	attend camera software design review and present CASU pipeline plans		PSB	31/07/03	no progress	0

3	**Pipeline infrastructure and pipeline progress monitoring tools**	**3.5**				
3.1	**interactive tools for running pipeline**					**50**
	write a set of executable scripts for individual reduction tasks		JRL	31/07/03	some instrument specific routines remain to be done	50
	deliver a set of scripts that can be run to access individual tasks within CIRDR		JRL	31/07/03	generic routines finished and documented	100
3.2	**high level scripts to interrogate headers**					**50**
	test and update using nights of CIRSI data		STH + JMI	31/07/03	no progress - awaiting the generation of a night's worth of data	0
3.3	**automatic progression of results to web pages**					**10**
	interrogate pipeline progress database and produce test web page summaries		STH + JMI	31/07/03	infrastructure in place and test WWW pages generated - need whole night of test data to progress and refine	50
3.6	**group documentation on pipeline infrastructure**					**50**
	modify current documentation according to recommendations from stress tests.		JRL	31/07/03	incorporated feedback from JMI, more thorough revision will be put in place Aug/Sep	50
4	**Set up and manage raw science archive**	**0.0**				
5	**Set up and manage data processing system hardware**	**2.0**				
5.2	**buy hardware and install**					**50**
	tender for purchase and install data ingest server hardware/software		MTB		investigated alternative suppliers for data ingest server but awaiting test results on LTO-1/2's before proceeding	10
	conduct tests on Ultrium tapes as transport medium		MTB		awaiting results	10
6	**Run standard pipeline**	**2.5**				
7	**Development work for summit pipeline**	**1.0**				
7.1	**Interface test pipelines in ORAC-DR**					**50**
	update and trial updated test pipelines		JRL	31/07/03	no feedback from JAC on current implementation so no revisions have been made, the next stage of the pipeline development is well underway	50
7.2	**implement WFCAM pipeline at summit**					**10**
	CVS deposit and trial test ORACDR pipeline at JAC		JRL	31/07/03	awaiting completion of 7.1	0
7.3	**documentation for ORAC-DR interface**					**50**
	continue to add to interface documentation as pipeline modules are written. These will appear in the CIRDR and ORACDR documentation sets		JRL	31/07/03	in progress	50
8	**Development and testing of standard 2d processing**	**4.0**				
8.1	**further development of standard pipeline**					**50**
	process night(s) of CIRSI data with pseudo trial WFCAM pipeline		JRL	31/07/03	part of a night processed. Now creating complete night(s) of data with WFCAM headers and CIRSI images	50
	rewrite routine for extraction of astrometric and photometric standards using 2MASS catalogue		JRL	31/07/03	JMI has written an efficient extraction procedure for 2MASS will incorporate	50
	deliver report on flatfielding and sky subtraction strategies		JRL	31/07/03	not started	0
	write updated wrapper for improved version of catalogue software		JRL	31/07/03	awaiting latest version of catalogue generation from MJI	0

8.2	**liaison with WFCAM development team**					**10**
	assess engineering test data for reset anomaly, dark stability, cross-talk, image retention and linearity		JRL	31/07/03	no feedback from ATC, awaiting new test data	0
8.3	**partake in planning commissioning/characterisation observations**					**50**
	together with ATC/JAC finish calibration plan		STH	31/07/03	in discussion with Sandy Leggett (ATC) - she will shortly furnish me with several nights worth of calibration photometry to refine calibration plan and examine nightly behaviour	10
8.6	**documentation for 2D processing software**					**50**
	drive test pipelines and update and deliver documentation as modules are written		JRL	31/07/03	revised documentation tree to fix inter-doc linking errors, added tree for standalone script documentation (3.1)	50
8.7	**Comparison between automated and manual data products**					**10**
	acquire suitable pre-WFCAM test datasets		STH	31/07/03	obtained FIRES (VLT ISAAC) raw data and calibration frames, contacted Steve Warren with proposals for data sets.	50
	pipeline process datasets		STH	31/07/03	no progress yet	
9	**Development and testing of standard catalogue products**	**4.0**				
9.1	**add in new measures requested**					**10**
	Produce first version of catalogue software with all extra measures		MJI	31/07/03	finished mods for FITS header changes	10
9.2	**refine astrometric calibration model**					**10**
	produce report on optical distortion simulations		MJI	31/07/03	updated plots using more recent distortion data	50
9.3	**generate model simulations of expected data**					**50**
	further development of simulations		STH + JMI	31/07/03	thorough investigations of Skymaker and ARTDATA completed. Skymaker used to generate detailed simulations of stellar fields, simulations include microstepping tests. galaxy generation still under investigation	50
9.4	**assess catalogue parameter reliability**					**50**
	run prototype pipeline on simulations and compare derived parameters with model data, write report		JMI	31/07/03	preliminary report written, includes input--output comparison	50
					www.ast.cam.ac.uk/~wfcam/internal/reports/simul/	
9.5	**intercomparison of catalogue products with other packages**					**10**
	agree detailed trials using INT WFC data and report on catalogue extraction and classification software comparisons		JMI	31/07/03	sextractor vs imcore comparisons made using simulations.	10
9.6	**Completeness and error estimates**					**50**
	report on completeness and error estimates as a function of seeing and sky brightness		JMI	31/07/03	simulations modified to incorporate seeing variations, sky brightness changes, and source density. Results included in report (9.4)	50
					www.ast.cam.ac.uk/~wfcam/internal/reports/simul/	
9.7	**documentation of catalogue software and products**					**50**
	update, fold in more detail and stress test		MJI	31/07/03	no progress	0

10	**Setup trial and run further processing pipeline**	**3.0**				
11	**Photometric standards and calibration**	**3.0**				
11.1	**agree on primary standards**					**50**
	investigate and report on narrow-band filter calibration options		STH	31/07/03	no progress.	
11.2	**choose secondary standard fields**					
	incorporate feedback from working group on choice of secondary fields and update document		STH	31/07/03	updated document following ROE meeting, used 2MASS dataset to refine choice of standard fields, now awaiting results of discussion with Sandy Leggett and analysis of UFTI data.	
12	**Further development of DQC measures at summit and Cambr**	**2.0**				
12.3	**implement 2mass for throughput measurement**					**50**
	extend tests to night(s) of pseudo WFCAM pipeline processed CIRSI data		JMI	31/07/03	awaiting data (8.1)	0
12.4	**master calibration frames for detector monitoring**					**10**
	assess and report if current methods work on engineering WFCAM data		JRL	31/07/03	awaiting engineering data from ATC	0
13	**Co-located list driven photometry**	**3.0**				
13.2	**develop basic WCS-based list driven photometer**					**50**
	investigate practicalities and implement agreed ICD for parameters		MJI	31/07/03	using INT WFC data to assess practical implementation methods	10
14	**Stacking and mosaicing**	**4.0**				
14.1	**develop benchmark simple stacking/mosaicing framework**					**100**
	bug fix and update as necessary		MJI	31/07/03	updated and fixed the odd bugs	50
14.2	**NN algorithm with simple rejection**					**100**
	bug fix and update as necessary		MJI	31/07/03	updated and fixed the odd bugs	50
15	**Continuum subtraction and basic difference imaging**	**4.0**				
15.1	**write WCS-based difference imaging driver software**					**50**
	bug fix and update as necessary		MJI	31/07/03	updated and being used in package intercomparisons	50
15.2	**investigate and apply different interpolation methods**					**50**
	compare different software packages for difference imaging and produce report		DWE	31/07/03	JMI has made progress on the report. Initial tests have been carried out on the three software packages under consideration using two datasets	50
					www.ast.cam.ac.uk/~wfcam/internal/reports/subtract	
16	**Interpolation techniques and PSF modeling**	**4.0**				
16.1	**investigate alternative interpolation/PSF schemes**					**10**
	finish review and write short report on alternatives		DWE	31/07/03	evaluating Swarp for use in interpolation tests	10
16.3	**implications for deriving catalogues and parameters**					**10**
	assess and write report on errors in catalogue parameters arising from using different interpolation schemes		DWE	31/07/03	no progress	0
16.4	**oversampled PSF generation per detector**					**10**

	write first pass PSF generator using optical test data		DWE	31/07/03	no progress	0