

04Q1_casu_deliverables.xls

WP #	CASU WP name /sub task / 03Q4 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 fortnightly meeting minutes, monthly reports on progress + quarterly review reports and planning		MJI + STH			
	prepare for and attend PPRP meeting in Feb		MJI + STH			
	define CASU programme for e-skill bid		MJI + STH			
1.2	interface control document between CASU and JAC				completed	100
1.3	interface control document between CASU and WFAU				completed	100
1.4	define data structures and FITS headers				completed	50
1.5	define observing protocols					50
	define sensible range of suggested MSBs in conjunction with UKIDSS and JAC		MJI + STH			
1.6	liaise with UKIDSS & JAC on observing strategy & survey planning					60
	monitor progress		DWE			
1.7	liaise with UKIDSS & JAC on VDFS products					50
	monitor progress		DWE			
1.8	liaise with UKIDSS and JAC on survey progress DB					50
1.9	system documentation					50
	update and maintain web pages of system docs		DWE			
	write wrapper for WFCAM fits header for ESO		JRL			
2	ESO VISTA software interface deliverables and documentation	4.0				
2.1	VDFS user requirements document					50
	update & prepare for PDR		PSB			
2.2	data reduction specification document					50
	update & prepare for PDR		PSB			
2.3	calibration plan document					50
	update & prepare for PDR		PSB			
	report on QDITS & CPL -v- CASU module & CFITSIO		PSB			
2.5	ICD ESO/VPO					50
	update draft version of Data Interface dictionary - especially FITS header specification		PSB			
	work on templates/Obs		PSB			
	use ISAAC example for translating pipeline DID keywords to ESO style		PSB			
2.8	liaise with VISTA IR camera development team					50
3	Pipeline infrastructure and pipeline progress monitoring tools	3.5				
3.1	interactive tools for running pipeline		JRL		paused	75
3.2	high level scripts to interrogate headers		STH, JMI		paused	75
3.3	automatic progression of results to web pages		STH, JMI		paused	50

3.6	group documentation on pipeline infrastructure				40
	modify current documentation according to recommendations from stress tests.	JRL			
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			paused	50
5.3	integrating and testing				50
	finish installing and testing pipeline and toolkit on data ingest server	MTB			
5.4	Manage day-to-day maintenance and upgrades				0
	upgrade remaining development PCs to Debian Linux OS	MTB			
6	Run standard pipeline	2.5			
7	Development work for summit pipeline	1.0			
7.1	Interface test pipelines in ORAC-DR			completed	100
7.2	implement WFCAM pipeline at summit				65
	End-to-end comparative pipeline tests (ORACDR/CASU/Starlink)	JRL			
	Demonstrate catalogue and non-catalogue DQCs	JRL			
7.3	documentation for ORAC-DR interface	JRL			60
	continue to add to interface documentation as pipeline modules are written. These will appear in the CIRDR and ORACDR documentation sets				
8	Development and testing of standard 2d processing	4.0			
8.1	further development of standard pipeline				75
	finish & deliver report on flatfielding and sky subtraction strategies	JRL			
	write updated wrapper for improved version of catalogue software	JRL			
	finish incorporating extra parameter measures	JRL			
8.2	liaison with WFCAM development team				25
	assess engineering test data for reset anomaly, dark stability, cross-talk, image retention and linearity	JRL			
8.3	partake in planning commissioning/characterisation observations	STH		paused	80
8.6	documentation for 2D processing software				50
	updates docs as necessary and as a result of feedback	JRL			
8.7	Comparison between automated and manual data products				50
	finish pipeline processing of FIRES data	STH			
	pipeline process UFTI data as it comes	STH			
9	Development and testing of standard catalogue products	4.0			
9.1	add in new measures requested				50
	test and debug new catalogue parameter measures	MJI			
9.2	refine astrometric calibration model	MJI		paused	75
9.3	generate model simulations of expected data	STH, JMI		paused	80
9.4	assess catalogue parameter reliability				70
	refine parameter error estimates and check for systematics in new parameters	JMI			
9.5	intercomparison of catalogue products with other packages	JMI		paused	60

9.6	Completeness and error estimates				50
	refine parameter error estimates and check for systematics	JMI			
9.7	documentation of catalogue software and products				50
	update catalogue products documentation	MJI			
10	Setup trial and run further processing pipeline	3.0			
10.2	development and assessment of PSF options 1,2				0
	produce prototype PSF fitting code level 1	MJI			
11	Photometric standards and calibration	3.0			
11.1	agree on primary standards				90
	complete narrow band filter calibration plan and update document	STH			
11.2	choose secondary standard fields				80
	incorporate feedback from working group on choice of secondary fields and update document	STH			
	complete choice of secondary standard fields for VISTA and update photometry document	STH			
11.7	assess extinction monitoring methods and develop measures				50
	complete investigation of UKIRT archive and write report	STH			
	prepare for calibration WG meeting and present report	STH			
12	Further development of DQC measures at summit and Cambr	2.0			
12.1	develop extra systematic noise measures				30
	linked with detector characterisation	MJI			
12.2	Refine current measures for WFCAM/VISTA data				30
	linked with detector characterisation	JRL			
12.3	implement 2mass for throughput measurement	JMI		paused	75
12.4	master calibration frames for detector monitoring				35
	assess and report if current methods work on engineering WFCAM data	JRL			
13	Co-located list driven photometry	3.0			
13.2	develop basic WCS-based list driven photometer				70
	investigate practicalities and implement agreed ICD for parameters	MJI			
13.3	externally driven WCS photometry and define parameter set				50
	refine, test and debug list-driven parameter estimator	MJI			
14	Stacking and mosaicing	4.0			
14.1	develop benchmark simple stacking/mosaicing framework	MJI		complete	100
14.2	NN algorithm with simple rejection	MJI		complete	100
14.3	More sophisticated rejection dealing with pixellation				50
	continue development of better spurion rejection allowing for pixellation	MJI			
15	Continuum subtraction and basic difference imaging	4.0			
15.1	Simple WCS-based subtraction techniques	MJI		completed	100
15.2	investigate and apply different interpolation methods	MJI		completed	100
15.3	develop adaptive kernel matching option				60
	continue debugging and enhancements to adaptive kernel package	MJI			

16 Interpolation techniques and PSF modeling		4.0			
16.1	investigate alternative interpolation/PSF schemes				50
	investigate PSF fitting algorithms and write report	DWE			
16.2	implications for different stacking methods				10
	quantify effects of interpolation on stacked image quality	MJI			
16.3	implications for deriving catalogues and parameters				50
	test profile fitting parameters and write report	DWE			
16.4	oversampled PSF generation per detector				10
	write first pass PSF generator using optical test data	DWE			