

03Q4m1_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					40
	provide fortnightly meeting minutes, monthly reports on progress + quarterly review reports and planning	MJI + STH	03/11/03	all done, plus modifications to GANTT chart following comments from AGOC		
1.2	interface control document between CASU and JAC					99
	in conjunction with JAC produce and sign off hard copy	MJI	03/11/03	nearing completion		50
1.3	interface control document between CASU and WFAU					99
	sign off Q2 ICD and finalise advanced processing product ICD	MJI	03/11/03	a further iteration of the catalogue table format has been agreed together with the completion and agreement of the list driven photometry design and output format. These were the remaining items in the CASU-WFAU ICD. Version 3 has been issued and the document is ready to be signed off.		100
1.4	define data structures and FITS headers	JRL	03/11/03	version 1.1 of WFCAM FITS header document agreed after a few more iterations and document signed off.		100
1.5	define observing protocols	STH		paused		50
1.6	liaise with UKIDSS & JAC on observing strategy					60
	monitor progress	DWE	03/11/03	CASU will attend UKIDSS November meeting and present talks.		10
1.7	liaise with UKIDSS & JAC on survey planning					50
	monitor progress	DWE	03/11/03	CASU have sent comments to SJW concerning the proposed CSS and CFT roles. Discussion on pipeline acceptance has been initiated.		50
1.8	liaise with UKIDSS and JAC on survey progress DB					40
	get feedback from JAC for mirroring of current progress database	JRL	03/11/03	visited JAC to discuss mirroring of database		100
	investigate use of Sybase Replication Server to perform the task	JRL	03/11/03	replication server is too expensive and complex for the job, will use similar tool to JAC archive replication		100
	deliver a working mirror copy of the OMP database	JRL	03/11/03	OMP database is now being duplicated using a howegrown DB sync tool		100
1.9	system documentation					40
	update and maintain web pages of system docs	DWE	03/11/03	document WWW pages revamped in response to internal and external suggestions. Document numbering ongoing		50
	2 ESO VISTA software interface deliverables and documentation	4.0				
2.1	VDFS user requirements document					50
	incorporate minor improvements prior to FDR	PSB	03/11/03	minor improvements added. Needs internal reviewing		50
2.2	data reduction specification document					20
	produce first real draft of DRS document	PSB	03/11/03	collecting CIRDR documentation for sources		10
2.3	calibration plan document					50
	incorporate draft plan for calibration fields	PSB	03/11/03	added full data-format specification and calibration fields		50
2.5	ICD ESO/VPO					70
	draft version of Data Interface dictionary - esp. FITS header specification	PSB	03/11/03	finalised draft DID and sent out to camera software engineer		100
	PSB					
	work on templates/Obs		03/11/03	no progress		0
2.8	liaise with VISTA IR camera development team	PSB				50
	check camera documentation for conflicts/issues		03/11/03	much interaction with SMB on camera software design documents for FDR		100
	3 Pipeline infrastructure and pipeline progress monitoring tools	3.5 JRL				

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3.1	interactive tools for running pipeline			paused	75
		STH, JMI			
3.2	high level scripts to interrogate headers		STH, JMI	paused	75
3.3	automatic progression of results to web pages			paused	50
3.6	group documentation on pipeline infrastructure	JRL			40
	modify current documentation according to recommendations from stress tests.		03/11/03	no progress this month	0
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
	install and test data ingest server hardware/software	MTB	03/11/03	data ingest server PC had to be returned for new model since it didn't meet our specification. Still awaiting delivery of replacement PC	10
5.3	integrating and testing				0
	install and test pipeline software	MTB	03/11/03	unable to start	0
6 Run standard pipeline		2.5			
7 Development work for summit pipeline		1.0			
7.1	Interface test pipelines in ORAC-DR				100
	update and trial updated test pipelines	JRL	03/11/03	visited JAC and set up test pipelines in ORACDR for UFTI and dummy WFCAM. Now tested and running.	100
7.2	implement WFCAM pipeline at summit				60
	CVS deposit and trial test ORACDR pipeline at JAC	JRL	03/11/03	Latest version of test pipelines are deposited in CVS at CASU and JAC	50
	End-to-end comparative pipeline tests (ORACDR/CASU/Starlink)	JRL	03/11/03	Paused, awaiting real WFCAM data and further development of observing strategy which will allow us to write real recipes.	0
	Demonstrate catalogue and non-catalogue DQCs	JRL	03/11/03	Paused as above	0
7.3	documentation for ORAC-DR interface				60
	continue to add to interface documentation as pipeline modules are written. These will appear in the CIRDR and ORACDR documentation sets	JRL	03/11/03	Paused awaiting further development of pipeline in response to real data	0
8 Development and testing of standard 2d processing		4.0			
8.1	further development of standard pipeline				70
	deliver report on flatfielding and sky subtraction strategies	JRL	03/11/03	continuing using ESO ISAAC data	50
	write updated wrapper for improved version of catalogue software	JRL	03/11/03	awaiting improved version of catalogue software	0
8.2	liaison with WFCAM development team				20
	assess engineering test data for reset anomaly, dark stability, cross-talk, image retention and linearity	JRL	03/11/03	awaiting engineering data	0
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	03/11/03	no further work this month	0
8.7	Comparison between automated and manual data products				20
	pipeline process FIRES data	STH	03/11/03	preliminary reduction underway. Completed calibration frame tests	10
	pipeline process UFTI data	STH	03/11/03	not started	0
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	03/11/03		

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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	JMI	paused	70
9.5	intercomparison of catalogue products with other packages	JMI	paused	60
9.6	Completeness and error estimates	JMI	paused	50
9.7	documentation of catalogue software and products update docs as necessary and as a result of feedback	MJI	03/11/03	50
10	Setup trial and run further processing pipeline	3.0		
11	Photometric standards and calibration	3.0		
11.1	agree on primary standards			80
	investigate and report on narrow-band filter calibration options	STH	03/11/03	no progress
	extend primary standards to VISTA	STH	03/11/03	primary standard fields chosen for vista. CM diagrams and star counts for fields produced. Fields overlap WFCAM selection at equator plus overhead fields. Summary passed on to PSB for inclusion in calibration document
				100
11.2	choose secondary standard fields			80
	incorporate feedback from working group on choice of secondary fields and update document	STH	03/11/03	no progress
	choose secondary standard fields for VISTA	STH	03/11/03	secondary standards chosen as fields around primary standards
11.7	assess extinction monitoring methods and develop measures			10
	investigate UKIRT archive and write report	STH	03/11/03	initial results look promising but data sample too small. new data covering much larger timeframe has been obtained from Sandy Leggett.
				10
12	Further development of DQC measures at summit and Cambr	2.0		
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	03/11/03	no progress - awaiting engineering data
				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	03/11/03	major breakthrough in the design and implementation of the list-driven photometry WP was accomplished. Agreement of the list-driven design and output format reached with WFAU
				50
13.3	externally driven WCS photometry and define parameter set			50
	modify software to take external lists of positions and define parameter set	MJI	03/11/03	software has been generalised to cope with external lists, satisfies both V1 and V2 requirements
				50
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 improve algorithms to deal with pixellation	MJI		50
15	Continuum subtraction and basic difference imaging	4.0		
15.1	Simple WCS-based subtraction techniques	MJI	completed	100

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15.2	investigate and apply different interpolation methods	MJI		completed subject to minor bug fixes and software maintenance	75
15.3	develop adaptive kernel matching option				50
	improve CASU version and update difference imaging report	MJI	03/11/03	Further improvements to the image subtraction/difference imaging WP mean that the prototype CASU software outperforms the alternative adaptive kernel packages. This needs a final shakedown, code tidy and further tests before being released at the end of Q4	
	16 Interpolation techniques and PSF modeling		4.0		
16.1	investigate alternative interpolation/PSF schemes				50
	finish review and write short report on alternatives	DWE	03/11/03	close to completion on investigation of alternative interpolation schemes. Report started	50
16.2	implications for different stacking methods				10
	quantify effects of interpolation on stacked image quality	MJI	03/11/03	no progress	0
16.3	implications for deriving catalogues and parameters				50
	assess and write report on errors in catalogue parameters arising from using different interpolation and interleaving schemes	DWE	03/11/03	report on catalogue parameters underway	50
16.4	oversampled PSF generation per detector				10
	write first pass PSF generator using optical test data	DWE	03/11/03	meeting held to plan PSF fitting software. Identified DIVA project software as a basis	10