

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	03/11/03	all done, plus modifications to GANTT chart following comments from AGOC	40
1.2	interface control document between CASU and JAC in conjunction with JAC produce and sign off hard copy		MJI	03/11/03	nearing completion	99 50
1.3	interface control document between CASU and WFAU 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.	99 100
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 monitor progress		DWE	03/11/03	CASU will attend UKIDSS November meeting and present talks.	60 10
1.7	liaise with UKIDSS & JAC on survey planning 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 50
1.8	liaise with UKIDSS and JAC on survey progress DB get feedback from JAC for mirroring of current progress database		JRL	03/11/03	visited JAC to discuss mirroring of database	40 100
	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 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	40 50
2 ESO VISTA software interface deliverables and documentation		4.0				
2.1	VDFS user requirements document incorporate minor improvements prior to FDR		PSB	03/11/03	minor improvements added. Needs internal reviewing	50 50
2.2	data reduction specification document produce first real draft of DRS document		PSB	03/11/03	collecting CIRDR documentation for sources	20 10
2.3	calibration plan document incorporate draft plan for calibration fields		PSB	03/11/03	added full data-format specification and calibration fields	50 50
2.5	ICD ESO/VPO draft version of Data Interface dictionary - esp. FITS header specification		PSB	03/11/03	finalised draft DID and sent out to camera software engineer	70 100
	work on templates/Obs		PSB	03/11/03	no progress	0
2.8	liaise with VISTA IR camera development team check camera documentation for conflicts/issues		PSB	03/11/03	much interaction with SMB on camera software design documents for FDR	50 100
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			paused	75
		STH, JMI			
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		

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				50
	update docs as necessary and as a result of feedback	MJI	03/11/03		
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	0
	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	0
	choose secondary standard fields for VISTA	STH	03/11/03	secondary standards chosen as fields around primary standards	70
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				50
	improve algorithms to deal with pixellation	MJI			
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