		03Q	4m2_casu	_deliverabl	les.xls	
NΡ	CASU WP name /sub_task / 03Q4 deliverable	V.I.F.	name	date	end of month report	% dor
:	1 Management and definition of project responsibilities	3.0				
	1 report to VISTA, UKIDSS, JAC, ATC, GSC					4
	provide fornightly meeting minutes, monthly reports on progress + quarterly review		MJI + STH	03/11/03	all done, plus modifications to GANTT chart following comments from AGOC	
	reports and planning					
			MJI + STH	30/11/03	submitted monthly report, held CASU meetings and reported minutes	
1.	2 interface control document between CASU and JAC					1
	in conjunction with JAC produce and sign off hard copy		MJI	03/11/03	nearing completion	-
			MJI	30/11/03	this document has been signed off by all concerned parties	1
1.	3 interface control document between CASU and WFAU					1
	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.	
			MJI	30/11/03	document completed and signed off	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	
1.	4 define data structures and FITS neaders		JKL	03/11/03	iterations and document signed off.	1
1.	5 define observing protocols		STH		paused	
			STH	30/11/03	some discussion at UKIDSS meting	
1.	.6 liaise with UKIDSS & JAC on observing strategy					
	monitor progress		DWE	03/11/03	CASU will attend UKIDSS November meeting and present talks.	
			DWE	30/11/03	CASU attended UKIDSS meeting. Presentations by MJI (overview), JRL (2d processing) STH (photometric calibration). Agreement reached that SJW + CASU will produce HOWTO document for generating MSBs. This will be circulated to survey heads. MSBs will be vetted by CASU. Timeframe awaiting UKIDSS meeting minutes. On-sky characterisation plan has been iterated over once.	
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 CSV roles. Discussion on pipeline acceptance has been initiated.	
			DWE	30/11/03	WFCAM pipeline acceptance now likely to be overseen by VDUC (terms of reference document submitted to PPARC by JPE).	
1.	8 liaise with UKIDSS and JAC on survey progress DB			00/11/00	visited 1400 to discuss minuting of databases and finalized methodalams.	1
	get feedback from JAC for mirroring of current progress database		JRL	03/11/03	visited JAC to discuss mirroring of database and finalised methodology	1
	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	1
1.	deliver a working mirror copy of the OMP database		JRL	03/11/03	OMP database is now being duplicated using a homegrown DB sync tool	1
				00/11/00	Civil addabase is now being duplicated using a nonegrown bb sylle (00)	
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	
			DWE	30/11/03	STH has built document database and automatic WWW page generation script. This will go live by the end of the quarter after internal/external review. UKIDSS talks placed on WWW pages and summaries sent to SJW	
	2 ESO VISTA software interface deliverables and documentation	4.0				
	1 VDFS user requirements document	4.0				
	incorporate minor improvements prior to FDR		PSB	03/11/03	minor improvements added. Needs internal reviewing	
			PSB	30/11/03	internal review completed, no serious additions requested	1
2.	2 data reduction specification document Simon Hodgkin		Pa			

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produce first real draft of DRS document	PSB	03/11/03	collecting CIRDR documentation for sources	1
	PSB	30/11/03	orgranised ESO VDFS meeting (December). Need additional information on CPL, environment etc before further progress can be made	5
2.3 calibration plan document				5
incorporate draft plan for calibration fields	PSB	03/11/03	added full data-format specification and calibration fields	50
	PSB	30/11/03	first pass photometric calibration fields incorporated	100
2.5 ICD ESO/VPO				50
draft version of Data Interface dictionary - esp. FITS header specification	PSB	03/11/03	finalised draft DID, sent out to camera software engineer and deposited in	50
	PSB	30/11/03	FDR documentation store investigating ESO tcl tools to ensure exact compatibility	50
work on templates/Obs	PSB	03/11/03	no progress	C
	PSB	30/11/03	have begun working on this	10
2.8 liaise with VISTA IR camera development team				50
check camera documentation for conflicts/issues	PSB	03/11/03	much interaction with SMB on camera software design documents for FDR	50
	PSB	30/11/03	organised presence at camera FDR, currently reviewing relevant FDR docs	50
3 Pipeline infrastructure and pipeline progress monitoring tools	3.5 JRL			
3.1 interactive tools for running pipeline			paused	75
	STH, JMI			
3.2 high level scripts to interrogate headers	0711 1141		paused	75
2.2 sutemptic prograssion of results to use pages	STH, JMI		naurad	50
3.3 automatic progression of results to web pages			paused	50
3.6 group documentation on pipeline infrastructure				40
modify current documentation according to recommendations from stress tests.	JRL	03/11/03	no progress this month	C
	JRL	30/11/03	made a few minor mods and updates	10
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 delivary of replacement PC	10
	МТВ	30/11/03	hardware for data ingest server PC now fully rack mounted, installed and tested. 24 port Gbit switch installed and tested and apm1, apm3 and apm6 on Gbit connections. Value Gbit PCI cards for sun servers, cass36 and cass38 identified and tested, these servers will be upgraded shortly to Gbit connectivity.	50
5.3 integrating and testing install and test pipeline software	МТВ	03/11/03	unable to start	0
	MTB	30/11/03	extra software infrastructure (perl, cfitsio, pgplot etc) for pipeline installed. Pipeline and toolkit software will be installed and tested shortly.	50
6 Run standard pipeline	2.5			
7 Development work for summit pipeline 7.1 Interface test pipelines in ORAC-DR	1.0			100
update and trial updated test pipelines	JRL	03/11/03	visited JAC and set up test pipeliines 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 50
	JRL	30/11/03	no further development this month	50

	STH, JMI		paused	
.2 refine astrometric calibration model	MJI		paused	
Produce first version of catalogue software with all extra measures	MJI MJI	03/11/03	FITS header and table structure written	
.1 add in new measures requested		00/41/20		
	4.0			
			summary of UFTI findings at UKIDSS meeting - especially relevant is illumination dependent dark artefacts rendng UFTI twilight flats of little use. However UFTI data shows strong and variable fringing which is useful for testing defringing algorithms.	
pipeline process UFTI data	STH STH	03/11/03 30/11/03	not started more UFTI service data acquired and under investigation. JRL presented	
	0711	02/14/02		
	STH	30/11/03	significant progress made by JRL and MJI on FIRES dataset - dry run of pipeline tuning. various flatfielding and (iterative) sky subtraction methods investigated. data found to be entirely free from fringes. working towards generation of individual and stacked data products for distribution to Subaru colleagues and community at large. JRL persented talk at UKIDSS meeting.	
7 Comparison between automated and manual data products pipeline process FIRES data	STH	03/11/03	preliminary reduction underway. Completed calibration frame tests	
upuates upts as netessary and as a result of needback	JRL	30/11/03	no further work this month	
.6 documentation for 2D processing software updates docs as necessary and as a result of feedback	JRL	03/11/03	no further work this month	
.3 partake in planning commissioning/characterisation observations	STH		paused	
retention and linearity	JRL	30/11/03	awaiting engineering data but investigated several of these aspects using ISAAC data as a stop gap	
assess engineering test data for reset anomaly, dark stability, cross-talk, image	JRL	03/11/03	awaiting engineering data	
2 liaison with WFCAM development team				
	JRL	30/11/03	as last month	
write updated wrapper for improved version of catalogue software	JRL	03/11/03	awaiting improved version of catalogue software	
			questions using ISAAC (FIRES) and UFTI (service) data. presented talk to UKIDSS meeting	
deliver report on flatfielding and sky subtraction strategies	JRL JRL	03/11/03	continuing using ESO ISAAC data have made real progress on alternative sky subtraction and fringe removal	
1 further development of standard pipeline		00/11/200		
8 Development and testing of standard 2d processing	4.0			
	JRL	30/11/03	still paused awaiting real data	
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	
3 documentation for ORAC-DR interface				
	JRL	30/11/03	paused pending development of observing strategy and real WFCAM data	
Demonstrate catalogue and non-catalogue DQCs	JRL	03/11/03	Paused as above	
	JRL	30/11/03	strategy which will allow us to write real recipes. paused pending development of observing strategy and real WFCAM data	
	JRL	03/11/03	Paused, awaiting real WFCAM data and further development of observing	

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9.4 access satalegue parameter reliability	JMI		naurad	7
9.4 assess catalogue parameter reliability	JIVII		paused	1
9.5 intercomparison of catalogue products with other packages	JMI		paused	6
9.6 Completeness and error estimates	JMI		paused	5
9.7 documentation of catalogue software and products update docs as necessary and as a result of feedback	MJI	03/11/03		5
update docs as necessary and as a result of feedback	MJI	30/11/03	no progress	
10 Setup trial and run further processing pipeline	3.0			
	3.0			
11 Photometric standards and calibration	3.0	1		
1.1 agree on primary standards investigate and report on narrow-band filter calibration options	STH	03/11/03	no progress	ę
	STH	30/11/03	some preliminary investigation and consulting with experts.	1
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	10
11.2 choose secondary standard fields	OTU	02/11/02		8
incorporate feedback from working group on choice of secondary fields and update document	STH	03/11/03	no progress	
	STH	30/11/03	still awaiting feedback from WG. arranged meeting with chair next week. document vet to be updated	
choose secondary standard fields for VISTA	STH	03/11/03	secondary standards chosen as fields around primary standards	Ę
	STH	30/11/03	began more detailed analysis of secondary standard fields to reject those unsuitable. current sample is of order 90 (combined WFCAM + VISTA)	Ę
				1
I.7 assess extinction monitoring methods and develop measures investigate UKIRT archive and write report	STH	03/11/03	initial results look promising but data sample too small. new data covering	
	STH	30/11/03	much larger timeframe has been obtained from Sandy Leggett. acquired a dataset spanning several years. early results indicate that nightly monitoring of extincion is appropriate at MKO and agreement reached with	1
			JAC that hourly sampling of standards required.	5
12 Further development of DQC measures at summit and Cambr	2.0			
2.3 implement 2mass for throughput measurement	JMI		paused	7
2.4 master calibration frames for detector monitoring				3
assess and report if current methods work on engineering WFCAM data	JRL	03/11/03	no progress - awaiting engineering data	
	JRL	30/11/03	no progress - awaiting engineering data	
13 Co-located list driven photometry	3.0			
3.2 develop basic WCS-based list driven photometer				5
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	Ę
	MJI	30/11/03	FITS header and table structure written	5
13.3 externally driven WCS photometry and define parameter set				5
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	Ę
	MJI	30/11/03	no progress this month	5
14 Stacking and mosaicing	4.0			
14. develop benchmark simple stacking/mosaicing framework	MJI		complete	10

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14.2	2 NN algorithm with simple rejection	MJI		complete	100
					50
14.3	B More sophisticated rejection dealing with pixellation		0.0111100		50
	improve algorithms to deal with pixellation	MJI	03/11/03	no progress	0
		MJI	30/11/03	tried out some simple methods and incorporated the most promising	10
1	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 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	
		MJI	30/11/03	Updated version of difference imaging report released, more tests on method carried out	50
10	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
		DWE	30/11/03	Report completed and internally reviewed	100
				http://www.ast.cam.ac.uk/~wfcam/docs/reports/interpol	
16.2	implications for different stacking methods				10
	quantify effects of interpolation on stacked image quality	MJI	03/11/03	no progress	0
		MJI	30/11/03	no progress	0
					50
16.3	implications for deriving catalogues and parameters		0.0111100		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
		DWE	30/11/03	analysis completed and findings written to interpolation report (as 16.1)	50
				http://www.ast.cam.ac.uk/~wfcam/docs/reports/interpol	
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	10
10.1		DWE	30/11/03	a basis started writing programme to measure PSF from simulated WFCAM data	10