WP	CASU WP name /sub task / 03Q2 deliverable	name	date	end of month report	% done
#					
1	**management and definition of project responsibilities**				
1.1	report to VISTA, UKIDSS, JAC, ATC, GSC				
	provide monthly reports on progress	MJI	02/05/2003	STH+MJI produced spreadsheets of the costs of the deliverables and continued maintenance of the WP spreadsheets and Gantt charts. MJI - ongoing - and set up to do via the fortnightly meetings, minutes and monthly reports	
		MJI	03/06/2003	ongoing	
1.2	interface control document between CASU and JAC				50
		MJI	03/06/2003	no further progress, awaiting final JAC decision on hardware	
	finalise ICD with JAC after summit hardware review	MJI	02/05/2003	Discussed and agreed baseline transfer mechanism of data from JAC to CASU; and outline hardware setup for data acquisition and summit pipeline	
1.3	interface control document between CASU and WFAU				50
	complete file transfer specification and finalise ICD	MJI	02/05/2003		
		MJI	03/06/2003	no further progress	
1.4	define data structures and FITS headers				50
	produce final agreed FITS header specification document	JRL	02/05/2003	discussion with JAC task re grouping of observations into contiguous tiles	
		JRL	03/06/2003	Good progress on tile issue, PV keywords need amending	
	create example MEFs with agreed FITS headers and dummy WFCAM size data	JRL			
		JRL	03/06/2003	MEFs created with headers confirming to the most recent iteration of the header document. Using CIRSI data (so images 1/4 of WFCAM size)	
1.5	define observing protocols				50
	formalise agreement on allowed observing protocols	STH	02/05/2003	ongoing - progress with JRL and Paul Hirst on tile keyword propagation	
		STH	03/06/2003	ongoing - converging on tile issue	
1.6	liaise with UKIDSS & JAC on observing strategy				
	in consultation with UKIDSS, JAC, ATC produce draft observing plan	DWE	02/05/2003	discussed with SJW the responsibility division between the UKIDSS survey scientist and the manager: ongoing	
1.7	liaise with UKIDSS & JAC on survey planning				
	help update UKIDSS diagrams and produce equivalent for 2 year plan	DWE	02/05/2003	UKIDSS survey planning: altered UKIDSS survey coverage plotting programme so that user defined areas can be added. Equivalent 2yr plan plotting programme has been written. Coverage of DR1 for SDSS has been incorporated into these programmes. Plots have been placed on the web and sent to SJW	
1.8	liaise with UKIDSS and JAC on survey progress DB				10
	work with JAC to resolve connectivity issues	JRL	02/05/2003	solved connectivity problem with JAC's archive server. Working towards mirroring of comments and progress database.	

			03/06/2003	connectivity restores	
	create mirror copy of progress DB in Sybase	JRL			
		JRL	03/06/2003	have begun discourse with JAC personnel	
1.9	System documentation	DWE	02/05/2003	Updated www pages	50
2	**ESO VISTA software interface deliverables and documentation**				
2.1	VDFS user requirements document	PSB	02/05/2003	document structures in place, meeting arranged with WJS	10
	write first draft	PSB	03/06/2003	draft document for PDR being fleshed out	
2.2	data reduction specification document				
	write first draft	PSB	03/06/2003	very outline document started	0
2.3	calibration plan document				0
	write first draft	PSB	03/06/2003	Outline document being prepared, off-sky calibration being made compatible with AIT	
2.9	Liase with VISTA IR camera development team				
		PSB	03/06/2003	Liaised with camera team regarding ovrlap between pipeline and camera AIT requirements, brainstorming session with WJS about telescope/camera technical details	10
3	**pipeline infrastructure and pipeline progress monitoring tools**				
3.2	high level scripts to interrogate headers				50
	convert to work with expected WFCAM/VISTA data and modify output	STH	02/05/2003	basic INT procedures in place	
		STH	03/06/2003	ongoing	
3.6	group documentation on pipeline infrastructure				50
	stress test documentation and update as necessary	JRL			
	write general infrastructure document (programmers manual)	JRL			
4	**set up and manage raw science archive**				
5	**set up and manage data processing system hardware**				
5.1	investigate hardware alternatives				50
	write report on suggested hardware configuration for pipeline	MTB			
		MTB	03/06/2003	Outline plan in place for individual rack mounted PCs + associated RAID5 disk systems with server level PCs + ultrium ta[p store system and larger RAID5 disk systems	
6	**run standard pipeline**				
6.7	Monitor product data transfer to WFAU				0
	Initial tests	PSB	03/06/2003	Liaised with ROE EHS and Horst M. about network tuning and assisted in some testing	
7	**development work for summit pipeline**				
7.1	interface test pipelines in ORAC-DR				50

	deliver updated set of routines and recipes to CVS at JAC	JRL	02/05/2003	discussion with JAC re methods to aid in the synchronisation of pipeline modules between CASU and JAC. CVS software modules - CVS repository at JAC	
		JRL	03/06/2003	A version has been deposited, but not the latest, will be upgraded soon	
	fix inconsistencies in current ORAC-DR recipes as per recommendations	JRL			
		JRL	03/06/2003	no progress	
7.2	implement WFCAM pipeline at summit	JRL	02/05/2003	evaluating image compression schemes to speed up data flow	10
7.3	documentation for ORAC-DR interface				50
	deliver updated documentation as development proceeds	JRL			
8	**development and testing of standard 2d processing**				
8.1	further development of standard pipeline				50
	test alternative processing strategies, tabulate output changes	JRL	02/05/2003	ongoing investigation of optimal ways of removing instrumental signature with flats from various sources (sky, dome etc) and sky subtraction	
		JRL	03/06/2003	ongoing	
	convert existing prototype modules for crosstalk correction	JRL	02/05/2003	devised, wrote and tested general purpose pipeline module for correcting crosstalk	
		JRL	03/06/2003	Written and tested. Finished	
	devise persistence correction strategies	JRL	02/05/2003	ongoing work on general purpose pipeline module for persistance	
		JRL	03/06/2003	Written and tested. Finished	
8.2	liaison with WFCAM development team				
	assess engineering test data for above problems and report	STH			
		STH	03/06/2003	Updated report on first WFCAM device made available by ATC. Second device in Edinburgh, third expected this month	
8.3	partake in planning commissioning observations				50
	liaise with ATC/JAC and draw up draft plan emphasising calibration requirements	STH			
		STH	03/06/2003	Draft plan for photometric calibration plan written. Document being drafted for 2d calibration plan. Both to be presented in ROE 12-13 June	
8.6	documentation for 2D processing software				50
	stress test documentation and update as needed	JRL			
8.7	comparison between automated and manual data products				0
	in collaboration with SJW trial UFTI/CIRPASS data through pipeline, compare with manually reduced data, write report	STH			
		STH	03/06/2003	Not started	
9	**development and testing of standard catalogue products**				
9.1	add in new measures requested				0
	produce first version of catalogue software with extra measures	MJI			

		MJI	03/06/2003	No progres	
9.3	generate model simulations of expected data				0
	generate noisy (WFCAM/VISTA characteristics) images of simple objects (stars, ellipses) at the correct resolutions	STH			
		STH	03/06/2003	Not started	
	produce more detailed simulated UKIRT observations of high and low latitude fields	STH			
		STH	03/06/2003	Not started	
9.4	assess catalogue parameter reliability				0
	run prototype pipeline on simulations and compare derived parameters with model data, write report	DWE			
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	STH			
		STH	03/06/2003	Not started	
9.7	documentation of catalogue software and products				50
	produce draft document of above	MJI	03/06/2003	Documentation well underway	
	stress test documentation and amend as necessary	STH	03/06/2003	No progress	
10	**setup trial and run further processing pipeline**				
11	**photometric standards and calibration**				
11.1	agree on primary standards				50
	investigate requirements for VISTA+WFCAM and possible shortcomings e.g. colour range	STH	02/05/2003	Began document to take off from where NCH doc left off. Have arranged handover of this task with NCH and informed working group chair (Paul Hewett.	
		STH	03/06/2003	Draft document completed and ready for circulation. Will be presented in ROE on 12-13 June	
	in consultation produce draft list suitable for WFCAM and VISTA	STH	02/05/2003	draft list in preparation	
		STH	03/06/2003	Primary standards will be UKIRT FS and Persson standards for (YZ)JHK filters. Narrow band filter standards not cosen yet	
11.2	choose secondary standard fields				50
	find out which UKIDSS survey modes require these and in consultation with JAC+ATC propose secondary standard fields list	STH	02/05/2003	investigating 2MASS calib fields versus new fields using globular clusters. Discussion with Paul Hirst re viability of observing these pre-WFCAM using UFTI/UIST	
		STH	03/06/2003	narrowing down choice of secondary standard fields. Will be discussed at ROE June 12-13	
12	**further development of DQC measures at summit and Cambridge**				
12.3	implement 2mass for throughput measurement				50

	produce prototype 2mass NIR data calibrator test on CIRSI data	MJI	02/05/2003	has arranged the acquisition of the 2MASS data products. This is about 80Gb and will be supplied asap	
		MJI	03/06/2003	2MASS data acquired and read onto disk. Will be ingested into SYBASE and alternative efficient sorted file-based system as basis for calibration tests	
12.4	master calibration frames for detector monitoring				0
	assess and report if current methods work on engineering WFCAM data	JRL			
13	**co-located list driven photometry**				
13.1	test methods for master catalogue generation				50
	extend to include different wavebands, document	MJI	02/05/2003	devised a procedure for creating master catalogues for multi-band data and incorporated it in pipeline toolkit development software	
		MJI	03/06/2003	no change	
13.2	develop basic WCS-based list driven photometer				10
	extend above to WCS-based driven and deliver prototype to WFAU for evaluation	MJI	02/05/2003	design conceived	
		MJI	03/06/2003	no change	
14	**stacking and mosaicing**				
14.1	develop benchmark simple stacking/mosaicing framework				100
	improve to account for new WCS framework	MJI	02/05/2003	bug fixed and enhanced current version 1.0 stacking and mosaicing software. Propagating changes into release (i.e C) version of code. Dumped current (old) verson already distributed to WFAU into CVS	
		MJI	03/06/2003	Finished	
14.2	NN algorithm with simple rejection				50
	produce version updated with new WCS and deliver to WFAU	MJI			
		MJI	03/06/2003	Can't release until new WCS form can be read by standard image browsers, documentation needed	
15	**continuum subtraction and basic difference imaging**				
15.2	investigate and apply different interpolation methods		02/05/2003	MJI contacted Pierre Astier from the S.Ne Cosmology project about acquiring the S.Ne adaptive kernel matching code. This is in parallel with DWE's work with Ian Bond's code.	10
	write WCS-based difference imaging driver software	MJI			
	write software using 16.1 to compare effect on difference imaging produce preliminary report	MJI			
16	**interpolation techniques and PSF modeling**				
16.1	investigate alternative interpolation/PSF schemes				10
	finish review and write short report on alternatives	DWE			
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			
16.4	oversampled PSF generation per detector				10
	write first pass PSF generator using optical test data	DWE			