WP #	CASU WP name /sub task / 03Q4 deliverable	V.I. F.	name	date	end of month report	%sub
1	**Management and definition of project responsibilities**	**3.0**				
1.1	**report to VISTA, UKIDSS, JAC, ATC, GSC**					
	provide fornightly 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-sciII bid		MJI + STH			
1.2	**interface control document between CASU and JAC**				completed	
1.3	**interface control document between CASU and WFAU**				completed	
1.4	**define data structures and FITS headers**				completed	
1.5	**define observing protocols**					
	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**					
	monitor progress		DWE			
1.7	**liaise with UKIDSS & JAC on VDFS products**					
	monitor progress		DWE			
1.8	**liaise with UKIDSS and JAC on survey progress DB**					
1.9	**system documentation**					
	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**					
	update & prepare for PDR		PSB			
2.2	**data reduction specification document**					
	update & prepare for PDR		PSB			
2.3	**calibration plan document**					
	update & prepare for PDR		PSB			
	report on QDITS & CPL -v- CASU module & CFITSIO		PSB			
2.5	**ICD ESO/VPO**					
	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**					
3	**Pipeline infrastructure and pipeline progress monitoring tools**	**3.5**				
3.1	**interactive tools for running pipeline**		JRL		paused	
3.2	**high level scripts to interrogate headers**		STH, JMI		paused	
3.3	**automatic progression of results to web pages**		STH, JMI		paused	

3.6	group documentation on pipeline infrastructure			
	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
5.3	integrating and testing			
	finish installing and testing pipeline and toolkit on data ingest server	MTB		
5.4	Manage day-to-day maintenance and upgrades			
	upgrade remaining dvelopment 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
7.2	implement WFCAM pipeline at summit			
	End-to-end comparitive pipeline tests (ORACDR/CASU/Starlink)	JRL		
	Demonstrate catalogue and non-catalogue DQCs	JRL		
7.3	documentation for ORAC-DR interface	JRL		
	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			
	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			
	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
8.6	documentation for 2D processing software			
	updates docs as necessary and as a result of feedback	JRL		
8.7	Comparison between automated and manual data products			
	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			
	test and debug new catalogue parameter measures	MJI		
9.2	refine astrometric calibration model	MJI		paused
9.3	generate model simulations of expected data	STH, JMI		paused
9.4	assess catalogue parameter reliability			
	refine parameter error estimates and check for systematics in new parameters	JMI		

9.5	intercomparison of catalogue products with other packages		JMI		paused
9.6	Completeness and error estimates				
	refine parameter error estimates and check for systematics		JMI		
9.7	documentation of catalogue software and products				
	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				
	produce prototype PSF fitting code level 1		MJI		
11	Photometric standards and calibration	3.0			
11.1	agree on primary standards				
	complete narrow band filter calibration plan and update document		STH		
11.2	choose secondary standard fields				
	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				
	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				
	linked with detector characterisation		MJI		
12.2	Refine current measures for WFCAM/VISTA data				
	linked with detector characterisation		JRL		
12.3	implement 2mass for throughput measurement		JMI		paused
12.4	master calibration frames for detector monitoring				
	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				
	investigate practicalities and implement agreed ICD for parameters		MJI		
13.3	externally driven WCS photometry and define parameter set				
	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
14.2	NN algorithm with simple rejection		MJI		complete
14.3	More sophisticated rejection dealing with pixellation				
	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
15.2	investigate and apply different interpolation methods		MJI		completed

15.3	**develop adaptive kernel matching option**				
	continue debugging and enhancements to adaptive kernel package		MJI		
16	**Interpolation techniques and PSF modeling**	**4.0**			
16.1	**investigate alternative interpolation/PSF schemes**				
	investigate PSF fitting algorithms and write report		DWE		
16.2	**implications for different stacking methods**				
	quantify effects of interpolation on stacked image quality		MJI		
16.3	**implications for deriving catalogues and parameters**				
	test profile fitting parameters and write report		DWE		
16.4	**oversampled PSF generation per detector**				
	write first pass PSF generator using optical test data		DWE		