WP #	CASU WP name /sub task / 04Q3 deliverable	V.I.F.	name	date	end of month report	%sub	% task
1	**Management and definition of project responsibilities**	**3.0**					
1.1	**report to VISTA, UKIDSS, JAC, ATC, GSC**						**87**
	provide fornightly meeting minutes, monthly reports on progress + quarterly review reports and planning, attend VDUC meetings		STH, MJI				
	finish and deliver ADASS paper		JRL				
	prepare CASU grant bid (operations)		STH, MJI				
1.2	**interface control document between CASU and JAC**				completed		**100**
1.3	**interface control document between CASU and WFAU**				completed		**100**
1.4a	**define WFCAM data structures and FITS headers**				completed		**100**
1.4b	**update proposed VISTA FITS headers as necessary**						
1.5a	**define WFCAM observing protocols**						**87**
	monitor and help update MSB guidelines		MJI + STH				
	check first pass survey MSBs						
1.5b	**define VISTA observing protocols**						
	help finish defining science and user requirements		MJI + PSB				
1.6a	**liaise with UKIDSS&JAC on WFCAM obs strategy, surveys planning**						**87**
	liaise and monitor progress		DWE				
1.6b	**liaise with Project Scientist on VISTA observing strategy & survey planning**						
	liaise and monitor progress		PSB				
1.7a	**liaise with VDUC on VDFS products for WFCAM**						**87**
	liaise and monitor progress		STH + MJI				
1.7b	**liaise with VDUC on VDFS products for VISTA**						
	liaise and monitor progress		MJI + STH				
1.8a	**liaise with UKIDSS and JAC on survey progress DB**		JRL		paused		**87**
	create version 1 of OMP database mirror to be used with survey progress database, including user interface						
1.9	**system documentation**						**87**
	update and maintain web pages of system docs		DWE				
2	**ESO VISTA software interface deliverables and documentation**	**4.0**					
2.1	**VDFS user requirements document**						**70**
	prepare for and attend FDR		PSB				
	update document as appropriate		PSB				
2.2	**data reduction specification document**						**70**
	prepare for and attend FDR		PSB				
	create new DRS document as required		PSB				
	assess CPL+QFITS work requirements						
2.3	**calibration plan document**						**70**
	prepare for and attend FDR		PSB				
	update doc as appropriate		PSB				

2.5	**ICD ESO/VPO**						**60**
	update FITS header docs and DID/DIC and submit V0.5 for FDR		PSB				
2.7	**Delivery software modules for exposure time calculator**						**0**
	prepare for and FDR		PSB				
2.9	**liaise with VISTA IR camera development team**						**75**
	continue liaising with VISTA IR camera development team		PSB				
2.10	Development of DQC measures						
	specify what DQC measures will be needed for FDR		PSB				
3	**Pipeline infrastructure and pipeline progress monitoring tools**	**3.5**					
3.1	**interactive tools for running pipeline**						**60**
	develop tools and document		JRL				
3.2	**high level scripts to interrogate headers**		STH, JMI		paused		**50**
3.3	**automatic progression of results to web pages**		STH, JMI		paused		**50**
3.4	**automatic checks to spot failure of pipeline**		JMI, STH		paused		**0**
3.5	Tools for fixing problem datasets		JRL, JMI		paused		
3.6	**group documentation on pipeline infrastructure**						**60**
	stress test documentation and update as necessary		JRL, JMI				
4	**Set up and manage raw science archive**	**0.0**					
4.1	**extend UKIRT archive to cope with WFCAM data**						**50**
	create version 1 of WFCAM raw data archive		JRL				
5	**Set up and manage data processing system hardware**	**2.0**					
5.2	**buy hardware and install**						**80**
	purchase and install bulk storage devices		PSB, JMI		paused		
	purchase and install spare ultrium device		PSB, JMI		paused		
5.3	**integrating and testing**						**70**
	integrate and test bulk storage devices		PSB, JMI		paused		
	integrate and test spare ultrium device		PSB, JMI		paused		
5.4	**Manage day-to-day maintenance and upgrades**						**50**
	continue maintenance and upgrade programme		JMI, PSB				
6	**Run standard pipeline**	**2.5**					
6.1	**Update WFCAM master calibration frames**						
	ingest and verify WFCAM on-sky test data			JRL, MJI			
7	**Development work for summit pipeline**	**1.0**					
7.1	**Interface test pipelines in ORAC-DR**		JRL		completed		**100**
7.2a	**implement WFCAM pipeline at summit**						**75**
	demonstrate catalogue and non-catalogue DQCs		JRL				
	update & maintain + commissioning enhancements						
	develop recipes for dealing with crosstalk, non-linearity, reset anomalies						
7.3a	**documentation for ORAC-DR interface**						**60**

	update and deliver documentation as development proceeds		JRL				
7.4a	**upgrade and maintain summit pipeline WFCAM**						
	upgrade and maintain		JRL				
8	**Development and testing of standard 2d processing**	**4.0**					
8.1a	**further development of standard pipeline for WFCAM**						**80**
	finish implementing new version of imcore to include full param set		JRL				
8.2a	**liaison with WFCAM development team**						**75**
	continue discussion on reset anomaly, crosstalk and linearity		JRL				
	assess science array test data for above problems and report		JRL				
8.2b	**liaison with Project Scientist & VISTA development team**						
	assess detector engineering test data		MJI				
8.3a	**partake in planning WFCAM commissioning observations**						**80**
	continue liaising with ATC/JAC		STH				
8.3b	**partake in planning VISTA comissioning observations**						
	liaise and discuss with camera PS and VISTA PS		STH				
8.4a	Participate directly in commissioning WFCAM						
	help with first phase of WFCAM on-sky commissioning		JRL				
8.5	**Tuning pipeline during commissioning and after**						
	optimize and stress-test pipeline using IPHAS data		JMI				
8.6	**documentation for 2D processing software**						**50**
	updates docs as necessary		JRL				
8.7	**Comparison between automated and manual data products**						**75**
	compare FIRES with published results and write report		STH				
	compare CSV reduced FIRES data with pipeline reduction		STH				
9	**Development and testing of standard catalogue products**	**4.0**					
9.1	**add in new measures requested**						**60**
	finish testing and debugging new catalogue parameter measures		MJI				
9.2	**refine astrometric calibration model**		MJI		paused		**85**
9.3	**generate model simulations of expected data**		STH, JMI		paused		**80**
9.4	**assess catalogue parameter reliability**						**70**
	refine parameter error estimates and check for systematics in new params		MJI				
9.5	**intercomparison of catalogue products with other packages**		JMI		paused		**60**
9.6	**Completeness and error estimates**				stopped - subsumed into 9.4		
9.7	**documentation of catalogue software and products**						**55**
	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**						**50**
	produce robust version of code for PSF level 1		MJI				
	produce prototype for PSF level 2		MJI				

10.3	**develop 1D/2D PSF-deconvolved Sersic profile fits**				paused awaiting real WFCAM data		
11	**Photometric standards and calibration**	**3.0**					
11.1	**agree on primary standards**						**90**
	complete narrow band filter calibration plan and update document		STH				
11.2	**choose secondary standard fields**						**80**
	refine/shorten list		STH				
11.3	Take part in commissioning observations WFCAM		JRL				
	phase I on-sky characterisation						
11.7	**assess extinction monitoring methods and develop measures**						**50**
	simulate from night(s) data and estimate expected accuracy		STH				
12	**Further development of DQC measures at summit and Cambr**	**2.0**					
12.1	**develop extra systematic noise measures**						**50**
	trial when WFCAM data becomes available		MJI				
12.2	**Refine current measures for WFCAM/VISTA data**		JRL				**20**
	trial when WFCAM data becomes available						
12.3	**implement 2mass for throughput measurement**		JMI				**75**
	implement local access version at summit						
12.4	**master calibration frames for detector monitoring**						**35**
	assess and report on science array test data		JRL				
13	**Co-located list driven photometry**	**3.0**					
13.2	**develop basic WCS-based list driven photometer**						**90**
	extend to full 80 parameter set		MJI				
13.3	**externally driven WCS photometry and define parameter set**						**75**
	extend to full 80 parameter set		MJI				
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**		MJI		complete		**100**
14.4	**Stacking with optimum wighting and defect rejection**						**25**
	refine and test current seeing weighting method on FIRES data		MJI				
15	**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		**100**
15.3	**develop adaptive kernel matching option**						**80**
	continue debugging and enhancements to adaptive kernel package		MJI				
15.4	**transit event detection**						**0**
	assess difference imaging method (continuum subtraction)		STH				
16	**Interpolation techniques and PSF modeling**	**4.0**					
16.1	**investigate alternative interpolation/PSF schemes**				completed		**100**

16.2	**implications for different stacking methods**				paused awaiting real WFCAM data		**20**
16.3	**implications for deriving catalogues and parameters**						**70**
	finish devtest of astrometric refinement code		DWE				
16.4	**oversampled PSF generation per detector**				finished		**100**
16.5	**develop oversampled spatially varying PSF model**						**0**
	measure spatial variation in optical/IR datasets		DWE				
	design empirical model describing same		DWE				