WP	CASU WP name /sub task / 05Q1m3 deliverable	VIF	name	date	end of month report	%sub	% V3-V5 task
#							
1	**Management and definition of project responsibilities**	3.0					38
1.1	**report to VISTA, UKIDSS, JAC, ATC, GSC**						17
	provide fornightly meeting minutes, monthly reports on progress + quarterly review reports and planning, attend VDUC meetings, have regular telecons with JAC, attend ESO VDFS FDR		STH + MJI	31-Jan-05	held 2 telecons with JAC (last one included Simon Dye) and 2 CASU minuted meetings. MJI, PSB attended ESO VDFS FDR (STH, JRL via videocon)	10	
			STH + MJI	28-Feb-05	held 3 telecons with JAC (2 with Simon Dye) and a CASU meeting	50	
			STH + MJI	31-Mar-05	2 more JAC telecons n March and a group meeting	100	
	prepare for and attend grant review		STH + MJI	31-Jan-05	no progress	0	
			STH + MJI	28-Feb-05	talks prepared and presented by JRL, MJI and STH to PPARC review panel. MR and EG also in attendance.	100	
1.2	**interface control document between CASU and JAC**				completed		100
1.3	**interface control document between CASU and WFAU**				completed for WFCAM		50
	liaise with WFAU for design of VISTA + WFCAM ICDs		MJI	28-Feb-05	no progress	0	
			MJI	31-Mar-05	no progress on VISTA, lots of discussion re WFCAM	100	
1.4a	**define WFCAM data structures and FITS headers**				completed bar minor changes		99
	update				made many small changes to FITS header in light of real data	100	
1.4b	**update proposed VISTA FITS headers as necessary**						10
	update as a result of FDR				proposed headers updated	100	
1.5a	**define WFCAM observing protocols**						55
	monitor and help update MSB guidelines		MJI + STH	31-Jan-05	discussed MSB guidelines at last JAC telecon	10	
			MJI + STH	28-Jan-05	no further progress	10	
			MJI + STH	31-Mar-05	MSB guidelines completed pending revision following SV	100	
	check first pass survey MSBs		STH	31-Jan-05	nothing to report	10	
			STH	28-Feb-05	NCH has progressed GCS MSBs. STH in discussion with Phil Lucas over GPS MSBs	50	
			STH	31-Mar-05	All SV MSBs written and checked. Now awaiting testing during SV	100	
1.5b	**define VISTA observing protocols**						15
	help finish defining science and user requirements		MJI + PSB	31-Jan-05	PSB, MJI discussed VISTA observing protocols at FDR wrt potential science and user requirements	10	
			MJI + PSB	28-Feb-05	discussed new templates with SMB arising from FDR and new requirement for propagation of tile information through to FITS	50	
			MJI + PSB	31-Mar-05	requirements defined. Next plan to redefine observing templates	100	
1.6a	**liaise with UKIDSS&JAC on WFCAM obs strategy, surveys planning**						40
	liaise and monitor progress		DWE	31-Jan-05	liaising via JAC telecons	10	
			DWE	28-Feb-05	more discussion during JAC telecons	50	
			STH	31-Mar-05	held two JAC telecons. STH attended UKIDSS Scienec Verification meeting and presented pipeline status and photometric calibration plan. STH helped implement UKIDSS WIKI (see http://wiki.astrogrid.org/bin/view/UKIDSS/WebHome)	100	
1.6b	**liaise with Project Scientist on VISTA observing strategy & survey planning**						17
	liaise and monitor progress		PSB	31-Jan-05	discussions of observing strategy and survey planning took place at FDR	10	

Item	Description	Owner	Date	Progress	%	Summary %
		PSB	28-Feb-05	no further progress	10	
		PSB	31-Mar-05	Advised Martin Folger on FDR board disposition format. Discussed technicalities of pointing coodinates wrt SDT	100	
1.7a	**liaise with VDUC on VDFS products for WFCAM**					**50**
	liaise and monitor progress	STH + MJI	31-Jan-05	nothing to report	10	
		STH + MJI	28-Feb-05	VDUC meeting held in Edinburgh. Discussion included: status of the WFCAM pipelines, science archive and commissioning data analysis	50	
		STH + MJI	31-Mar-05	discussed data releases for WFCAM with TN	100	
	prepare report on results from WFCAM comissioning	JRL	31-Jan-05	version 0.5 of report on WFCAM commisioning -I released -II in preparation	10	
		JRL	28-Feb-05	WFCAM early commissioning report -I updates. reports -II and -III released and presented to VDUC		
		JRL	31-Mar-05	report on galaxy number counts and colours prepared and released	100	
	involve Simon Dye with commissioning analysis progress	JRL	31-Jan-05	SD spent 1 day with CASU and took WFCAM data home with him. Also involved SD in JAC telecons.	10	
		JRL	28-Feb-05	SD's involvement continued via JAC telecons and VDUC	50	
		JRL	31-Mar-05	plans for analysis of SV data discussed with Simon Dye and UKIDSS	100	
1.7b	**liaise with VDUC on VDFS products for VISTA**					**17**
	liaise and monitor progress	MJI + STH	31-Jan-05	nothing to report	10	
		MJI + STH	28-Feb-05	attended VDUC	50	
		MJI + STH	31-Mar-05	nothing to report	100	
	assess and prioritise work required for extra UK VDFS products	MJI + STH	31-Jan-05	no progress	0	
		MJI + STH	28-Feb-05	no progress	0	
		MJI + STH	31-Mar-05	no progress	0	
	prepare functional specification for UK review (see VDMT A0501-05)	MJI + STH	31-Jan-05	no progress	0	
		MJI + STH	28-Feb-05	no progress	0	
		MJI + STH	31-Mar-05	no progress	0	
1.8a	**liaise with UKIDSS and JAC on survey progress DB**					**50**
	maintain OMP database mirror to be used with survey progress database, including user interface	JRL	31-Jan-05	fixed problem with OMP database not updating with some JAC help. JRL provided SD with interface to CASU OMP database	10	
		JRL	28-Feb-05	no further progress	10	
		JRL	31-Mar-05	maintained	100	
1.8b	**liaise with VDUC and ESO on survey progress database**					**0**
1.9	**system documentation**					**17**
	update and maintain web pages of system docs	DWE	31-Jan-05	documentation updated as necessary	10	
		DWE	28-Feb-05	documents and www pages updated as necessary	50	
		DWE	31-Mar-05	documents and www pages updated as necessary	100	
2	**ESO VISTA software interface deliverables and documentation**	**4.0**				**31**
2.1	**VDFS user requirements document**					**70**
	respond to RIXs, update documents as appropriate	PSB	31-Jan-05	responded to RIXs and submitted to FDR	50	
		PSB	28-Feb-05	now renamed to VDFS Impact Document. FDR rix's drafted	50	
		PSB	31-Mar-05	updated as far as possible, awaiting official board disposition	50	
2.2	**data reduction specification document**					**70**
	respond to RIXs, update documents as appropriate	PSB	31-Jan-05	responded to RIXs and submitted to FDR	50	
		PSB	28-Feb-05	renamed to Data Reduction Library Specification document. Some RIX's drafted	50	
		PSB	31-Mar-05	drafted response to all RIXs, awaiting official board disposition	50	

#	Description	Owner	Date	Status	%	Total
2.3	**calibration plan document**					70
	respond to RIXs, update documents as appropriate	PSB	31-Jan-05	responded to RIXs and submitted to FDR	50	
		PSB	28-Feb-05	some RIX's drafted	50	
		PSB	31-Mar-05	drafted response to all RIXs, awaiting official board disposition	50	
2.4	**Specification of calibration procedures for ESO**			subsumed into 2.3		
2.5	**ICD ESO/VPO**					60
	update FITS header docs and DID/DIC and submit data dictionary files for FDR, update as necessary	PSB	31-Jan-05	data dictionary files updated and submitted for FDR	50	
		PSB	28-Feb-05	examined and tested IRACE output files from RAL. reported FITS header and data-type problems	50	
		PSB	31-Mar-05	update data dictionary as a result of FDR doc changes, awaiting feedback	50	
2.6	**Instrument specification and interface documents**					0
	Setup ESO software on Linux PC for integration tests in CPL and QFITS environment	PSB	31-Mar-05	all set up and functioning	100	
2.7	**Delivery software modules for exposure time calculator**					0
	submit V1.0 with calculation forms for FDR	STH	31-Jan-05	V1.0 of ETC document submitted with calculation forms	100	
	respond to RIXs, update document as appropriate	STH	31-Jan-05	responded to RIXs	50	
		STH	31-Mar-05	minor document updates drafted	50	
	debug and update ETC software modules	MJI	31-Jan-05	ETC updated and debugged. Modules will be converted to C	50	
		MJI	31-Mar-05	debugged and updated	100	
2.8	**liaise with VISTA IR camera development team**					8
	continue liaising with VISTA IR camera development team	PSB	31-Jan-05	very useful liaison at FDR	10	
		PSB	28-Feb-05	see 1.5b and 2.5	50	
		PSB	31-Mar-05	Fedback VIRCAM/TCS ICD doc. Fedback VIRCAM simulator tests	100	
2.9	**Development of DQC measures**					
	respond to RIXs, update QC measures as required	PSB	31-Jan-05	responded to RIXs and submitted to FDR	50	
		PSB	28-Feb-05	no progress	50	
		PSB	31-Mar-05	rationalised QC measure descriptions and updated FDR docs	50	
2.10	Development of DQC measures					0
3	**Pipeline infrastructure and pipeline progress monitoring tools**	**3.5**				**27**
3.1	interactive tools for running pipeline					60
	develop tools and document	JRL	31-Jan-05	continuing development in response to results of Phase I commissioning data	10	
		JRL	28-Feb-05	continuing development in response to results of November commissioning	50	
		JRL	31-Mar-05	development continues in the light of running pipelines	50	
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
3.5a	Tools for fixing problem datasets	JRL, JMI				20
	develop tools to handle problems in comm-I data	JRL	28-Feb-05	routines for shuffling headers written	10	
		MJI	31-Mar-05	assorted scripts written to get around foibles of comm-I data	50	
3.5b	Tools for fixing VISTA problem datasets			V4		0

3.6	**group documentation on pipeline infrastructure**					**60**
	stress test documentation and update as necessary	STH, JRL	31-Jan-05	no progress	0	
		STH, JRL	28-Feb-05	no progress	0	
		SYJ, JRL	31-Mar-05	MR is testing documentation and generating feedback	10	
3.7a	**Oversee reprocessing WFCAM data after bug fixes/improvements**			awaiting WFCAM science data		**0**
3.7b	**Oversee reprocessing VISTA data after bug fixes/improvements**			placeholder		**0**
4	**Set up and manage raw science archive**	**0.0**				**20**
4.1	**extend UKIRT archive to cope with WFCAM data**					**50**
	finish creating version 1 of WFCAM raw data archive	JRL	31-Jan-05	no progress	0	
		JRL	28-Feb-05	no progress	0	
		JRL	31-Mar-05	no progress	0	
4.2a	**Ingest and verify WFCAM data**					**10**
	ingest and verify Phase I commissioning data	JRL	31-Jan-05	much indigestion due to problems with FITS headers. MR is recreating some test MEFs with fixes to the HDU probems	50	
		JRL	28-Feb-05	best commissioning data now ingested. MR has set up data transfer to ESO	50	
		JRL	31-Mar-05	test of ESO data transfer finished succesfully. all half decent data has now been ingested and verified.	100	
	ingest and verify Phase II commissioning data	JRL	31-Jan-05	awaiting Phase II commissioning	0	
		JRL	28-Feb-05	awaiting Phase II commissioning	0	
		JRL	31-Mar-05	awaiting Phase II commissioning (imminent)	0	
4.2b	**ingest and verify VISTA data**			placeholder		**0**
5	**Set up and manage data processing system hardware**	**2.0**				**63**
5.1	**Investigate alternatives (benchmarking, reliability etc)**			completed		**100**
5.2	**buy hardware and install**					**50**
	purchase and install RAID disk storage and backup LTO tape unit	PSB, JMI	31-Jan-05	no progress - awaiting new offices	0	
		PSB	28-Feb-05	no progress - awaiting new offices	0	
		PSB	31-Mar-05	disk storage and backup LTO unit purchased and installed	100	
	move all computer kit back to APM building and re-install	PSB, JMI	31-Jan-05	organised installation of new network infrastructure	10	
		PSB, JMI	28-Feb-05	purchased and installed Gigabit switch with 2G trunk to LAN, ditto APC intelligent switched mains supplies foor pipeline racks.	10	
		PSB	31-Mar-05	all computer kit moved back into APM building and reinstalled.	100	
5.3	**integrating and testing**					**40**
	integrate and test entire VDFS system	PSB, JMI	31-Jan-05	no progress - awaiting move back to APM	0	
		PSB, JMI	28-Feb-05	no progress - awaiting move back to APM	0	
		PSB	31-Mar-05	entires system integrated and tested	100	
5.4	**Manage day-to-day maintenance and upgrades**					**17**
	continue maintenance and upgrade programme	JMI, PSB	31-Jan-05	system being maintained and upgrades up-to-date	10	
		JMI, PSB	28-Feb-05	continuing	50	
		PSB	31-Mar-05	continues apace	100	
5.5	**Hardware additions for further data processing system**			placeholder		**0**
6	**Run standard pipeline**	**2.5**				
6.1	**Update WFCAM master calibration frames**					

	ingest and verify WFCAM on-sky test data		JRL,MJI	31-Jan-05	comm-I data is being used for master calibration frame tests		10
			JRL,MJI	28-Feb-05	verification tests progressing well		50
			JRL,MJI	31-Mar-05	in progress, about 1/2 of WFCAM phase I comm science data has been pipeline processed	50	
6.2	**Monitor detector performance WFCAM**						
	begin monitoring with commissioning data		MJI	31-Mar-05	commissioning I detector performance being monitored	100	
6.3	**Oversee standard processing WFCAM**						
	oversee processing of commissioing data		MJI	31-Mar-05	being overseen	100	
6.4	**Astrometric calibration WFCAM**						
	calibrate commissioning data		MJI	31-Mar-05	monitoring begun with commissioning data, within spec	100	
6.5	**Photometric Calibration WFCAM**						
	calibrate commissioning data		MJI	31-Mar-05	preliminary calibration using 2MASS is in place	50	
6.6	**Verify Science products and monitor DQC measures WFCAM**						
	assess commissioning data		MJI	31-Mar-05	DQC measures being used to assess comm I on-sky data	50	
6.7	**Monitor data product transfer to WFAU**						
	begin transfer with commissioning data		MJI	31-Mar-05	being monitored	100	
6.8	**Reprocess WFCAM data**				awaiting WFCAM science data		
7	**Development work for summit pipeline**	**1.0**					**29**
7.1a	**Interface test pipelines in ORAC-DR**		JRL		completed		100
7.1b	**Interface test pipelines to VISTA summit DR**				placeholder		0
7.2a	**implement WFCAM pipeline at summit**						75
	demonstrate catalogue and non-catalogue DQCs		JRL	31-Jan-05	investigations continuing using Nov 2004 data	10	
			JRL	28-Feb-05	investigations continuing using Nov 2004 data	10	
			JRL	31-Mar-05	no progress	10	
	commissioning enhancements		JRL	31-Jan-05	nothing to report	0	
			JRL	28-Feb-05	nothing to report	0	
			JRL	31-Mar-05	no progress	0	
	develop recipes for dealing with crosstalk, non-linearity, reset anomalies and persistence when test data on these effects become available		JRL	31-Jan-05	making good progress with investigations into detector "features"	10	
			JRL	28-Feb-05	some progess made on detector anomalies - including dark behavious and reset anomaly	50	
			JRL	31-Mar-05	dark and reset anomalies characterised in phase I and II data. non-linearity measured in phase I data. persistance and cross-talk on hold until phase II data is available	50	
7.3a	**documentation for ORAC-DR interface**						60
	update and deliver documentation as development proceeds		JRL	31-Jan-05	documentation added to primitives as they have been written	10	
			JRL	31-Mar-05	ongoing	50	
7.3b	**Documentation for interface to VISTA**				placeholder		0
7.4a	**upgrade and maintain summit pipeline WFCAM**						
	upgrade and maintain		JRL	31-Jan-05	upgrades being added as data are analyzed	10	
			JRL	28-Feb-05	work done to speed up some algorithms	50	
			JRL	31-Mar-05	a lot more time spent on summit pipeline to improve speed during visit to JAC	50	

7.4b	upgrade and maintain summit pipeline VISTA			placeholder		0
8	**Development and testing of standard 2d processing**		**4.0**			**27**
8.1a	**further development of standard pipeline for WFCAM**					80
	finish implementing new version of imcore to include full param set	JRL	31-Jan-05	no further progress	0	
		JRL	28-Feb-05	80 column tables now generated. missing parameters filled with zeros	10	
		JRL	31-Mar-05	no further progress	10	
8.1b	**development of VISTA specific packages**					0
8.2a	**liaison with WFCAM development team**					8
	continue discussion on reset anomaly, crosstalk and linearity	JRL	31-Jan-05	have held a lot of dicussion of various "features" and characterisation using the WFCAM commissioning data	10	
		JRL	28-Feb-05	flatfielding and 2d effects are now better understood. Microstepping tests also performed	50	
		JRL	31-Mar-05	much discussion and progress during JRLs visit to JAC for comm II	50	
	assess science array test data for above problems and report	JRL	31-Jan-05	reset anomlay and linearity much better understood now. Commisioning reports in preparation (see version 0.5 of Phase I)	10	
		JRL	28-Feb-05	Commissioning report -I updated and reports -II and -II released to reflect progress. see: http://www.ast.cam.ac.uk/~wfcam/docs/reports/commissioning2/index.html (dark and reset anomaly correction), http://www.ast.cam.ac.uk/~wfcam/docs/reports/commissioning3/index.html (microstep offsets)	50	
		JRL	31-Mar-05	much assesssment of science data during pipeline processing	50	
8.2b	**liaison with Project Scientist & VISTA development team**					8
	assess any new detector engineering test data	MJI	31-Jan-05	no new data yet, but some progress on this following FDR	10	
		MJI	28-Feb-05	no progress	10	
		MJI	31-Mar-05	no progress	10	
8.3a	**partake in planning WFCAM commissioning observations**					80
	continue liaising with ATC/JAC	STH	31-Jan-05	planned visits to JAC by JRL and STH in March	10	
		STH	28-Feb-05	JRL has just set off for Hawaii to take part in commissioning phase 2. STH will visit JAC from March 15th and will take part in science verification, photometric calibration observations and will help with UKIDSS startup if required.	50	
		STH	31-Mar-05	JRL and STH visited JAC for start of comm II. STH has returned follwing delay due to focal plane tilt and is observing and reducing calibration and SV data	100	
8.3b	**partake in planning VISTA comissioning observations**					0
	liaise and discuss with camera PS and VISTA PS	STH	31-Jan-05	nothing to report	0	
		STH	28-Feb-05	nothing to report	0	
		STH	31-Mar-05	nothing to report	0	
8.4a	**Participate directly in commissioning WFCAM**					50
	take part in second stage of WFCAM on-sky commissioning	JRL, STH	31-Jan-05	provisional arrangements made for STH and JRL to take part in WFCAM comm-II	0	
		JRL, STH	28-Feb-05	plans firmed up	0	
		JRL, STH	31-Mar-05	JRL and STH visits to JAC to participate	50	
8.4b	**Participate directly in commissioning VISTA**			placeholder		0
8.5a	**Tuning pipeline during commissioning and after WFCAM**					20
	use commissioning data to tune processing strategy	MJI	31-Jan-05	WFCAM commissioning data is yielding interesting insights for tuning processing	10	
		MJI	28-Feb-05	experiments continuing with alternate processing strategies	50	
		MJI	31-Mar-05	using pipeline processing of comm I data to fo this, e.g. stability of darks	50	

	assess the quality and stability of the master calibration data	JRL	31-Jan-05	quality and stability assessment begun	10	
		JRL	28-Feb-05	investigations continue - darks and resets found to be pretty stable when taken in repeatable conditions (I.e. following same numbers of esets). awaiting phase-2 commissioning data to investigate long term trends	10	
		JRL	31-Mar-05	began investigations of comm II data whilst at JAC. EGS working on the pipeline products for QA	50	
8.5b	Tuning during pipeline commissioning and after VISTA			placeholder		0
8.6a	documentation for 2D processing software					50
	updates docs as necessary	JRL	31-Jan-05	no progress	0	
		JRL	28-Feb-05	no progress	0	
		JRL	31-Mar-05	no progress	0	
8.6b	documentation of additions to 2D processing software			placeholder		0
8.7	Comparison between automated and manual data products					50
	compare FIRES with published results and write report	STH	31-Jan-05	no progress	0	
		STH	28-Feb-05	no progress	0	
		STH	31-Mar-05	no progress	0	
	assess CASU processed WFCAM commissioning data in conjunction with CSV	STH	31-Jan-05	reported status of commissioning data to Simon Dye and supplied him with WFCAM fits files	10	
		STH	28-Feb-05	CASU and CSV reductions of commissioning phase-1 data reported and discussed at VDUC and JAC telecon	50	
		STH	31-Mar-05	awaiting comm II on-sky data and SV	50	
9	**Development and testing of standard catalogue products**	**4.0**				**53**
9.1	add in new measures requested					60
	finish testing and debugging new catalogue parameter measures	MJI	31-Jan-05	no progress	0	
		MJI	28-Feb-05	no progress	0	
		MJI	31-Mar-05	no progress	0	
9.2a	refine astrometric calibration model	MJI	31-Jan-05	refined using comm-I data - see report	50	85
	use comm data	MJI	28-Feb-05	no further progress	50	
		MJI	31-Mar-05	checking astrometry with pipeline processed comm I data	50	
9.2b	refine astrometric model - VISTA specific			placeholder		0
9.3	generate model simulations of expected data	STH, JMI		finished		100
9.4	assess catalogue parameter reliability					70
	refine parameter error estimates and check for systematics in new params, finish in coniunction with 9.1	MJI	31-Jan-05	no progress	0	
		MJI	28-Feb-05	no progress	0	
		MJI	31-Mar-05	no progress	0	
9.5	intercomparison of catalogue products with other packages	JMI		stopped - subsumed into 9.4		0
9.6	Completeness					
	design and report on completeness model	MJI	31-Jan-05	no progress	0	
		MJI	28-Feb-05	no progress	0	
		MJI	31-Mar-05	devised method for measuring completeness and discussed with TN	10	
9.7	documentation of catalogue software and products					55
	update catalogue products documentation	MJI	31-Jan-05	no progress	0	
		MJI	28-Feb-05	no progress	0	

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		MJI	31-Mar-05	no progress	0
10	**Setup trial and run further processing pipeline**	3.0			9
10.1	**Manage and run further processing stages**			placeholder (start in Q3)	0
10.2	**development and assessment of PSF options 1,2**				60
	produce prototype for PSF level 2	MJI	31-Jan-05	no progress	0
		MJI	28-Feb-05	no progress	0
		MJI	31-Mar-05	prototype written, now awaiting "good" WFCAM data	100
10.3	**develop 1D/2D PSF-deconvolved Sersic profile fits**			paused awaiting real WFCAM data (start in Q2)	0
10.4	**Develop LSBG/nebulosity detection/parameterisation**			placeholder (start in Q2)	0
10.5	**Full iterative profile fitting for stellar images**			paused	0
10.6	**Develop and optimize Bayesian image classification**			placeholder (start in Q2)	0
10.7	**Modelling and simulations of further processing steps**			placeholder (start in Q2)	0
11	**Photometric standards and calibration**	3.0			27
11.1	**agree on primary standards**				90
	complete narrow band filter calibration plan and update document	STH	31-Jan-05	no progress	0
		STH	28-Feb-05	discussions with Phil Lucas on narrow band plans and agreement reached on strategy. No narrow band flux standards yet defined. Document not yet updated	50
		STH	31-Mar-05	narrow band filter cal plan agreed and document updated. primary standards now defined	100
11.2	**choose secondary standard fields**				80
	refine/shorten list	STH	31-Jan-05	no progress	0
		STH	28-Feb-05	secondary standard list revised and sent to JAC for comment. Further refinement requested and completed. Document not yet updated.	50
		STH	31-Mar-05	seoncdary standard list now agreed and included in doc	100
11.3a	**take part in commissioning observations WFCAM**				10
	phase II on-sky characterisation	JRL, STH	31-Jan-05	march	0
		JRL, STH	28-Feb-05	STH is making detailed plan for photometric calibration observations	10
		JRL,STH	31-Mar-05	sth participating in comm II	50
11.3b	take part in commissioning observations VISTA			placeholder	0
11.4a	**Reduce data, compute zero points and colour equations WFCAM**				15
	compute ZPs from comissioning data	STH	31-Jan-05	2MASS used to generate first pass zeropoints	50
		STH	28-Feb-05	no further progress	50
		STH	31-Mar-05	no further progress	50
	measure colour terms relative to 2mass	STH	31-Jan-05	colour equations computed	50
		STH	28-Feb-05	no further progress	50
		STH	31-Mar-05	colour equations for z-band added	50
11.4b	**Reduce data, compute zero points and colour equations VISTA**			placeholder	0
11.5	**Update, maintain and extend secondary standards system**				0
	begin building secondary standard fields system	STH	31-Jan-05	no progress	0
		STH	28-Feb-05	no progress	0
		STH	31-Mar-05	no progress	0

11.6	**Investigate photometric calibration field systematics WFCAM+VISTA**				**0**
	investigate photometric calibration systematics - use 2MASS to check global systematics	STH	31-Jan-05	no progress	0
		STH	28-Feb-05	no progress	0
		STH	31-Mar-05	no progress	0
11.7	**assess extinction monitoring methods and develop measures**				**50**
	use 2MASS comparison to get first order estimate and assess expected accuracy	STH	31-Jan-05	2MASS succesfully used to monitor WFCAM extinction (See Commisioning phase I report)	50
		STH	28-Feb-05	no progress	50
		STH	31-Mar-05	tests on comm I data continue	50
12	**Further development of DQC measures at summit and Cambr**	**2.0**			**45**
12.1	**develop extra systematic noise measures**				**50**
	trial using WFCAM commissioning data	MJI	31-Jan-05	trialling begun using WFCAM commissioning data	10
		MJI	28-Feb-05	no further progress	10
		MJI	31-Mar-05	too much systematic noise in comm I data to be useful (e.g. curtaining on every frame). systematic noise remover written instead	50
12.2	**Refine current measures for WFCAM/VISTA data**				**20**
	trial using WFCAM commissioning data	JRL	31-Jan-05	trialling begun using WFCAM commissioning data	10
		JRL	28-Feb-05	paused - awaiting phase-2 commissioning	10
12.3	**implement 2mass for throughput measurement**				**75**
	implement local access version at summit	JRL	31-Jan-05	no progress	0
		JRL	28-Feb-05	no progress	0
		JRL	31-Mar-05	implemented	100
12.4	**master calibration frames for detector monitoring**				**35**
	assess and report using commissioning data	JRL	31-Jan-05	no progress	0
		JRL	28-Feb-05	flatfield investigations from phase-1 commissioning completed. Now need more data from Phase-2 to investigate night-to-night and longer term trends. plans for dark monitoring proposed to JAC	10
		JRL	31-Mar-05	flatfields appear stable over week periods as do darks, other systematics notwithstanding	50
13	**Co-located list driven photometry**	**3.0**			**88**
13.1	**test methods for master catalogue generation**			completed	100
13.2	**develop basic WCS-based list driven photometer**				**90**
	extend to full 80 parameter set	MJI	31-Jan-05	no progress	0
		MJI	28-Feb-05	no progress	0
		MJI	31-Mar-05	no progress	0
13.3	**externally driven WCS photometry and define parameter set**				**75**
	extend to full 80 parameter set	MJI	31-Jan-05	no progress	0
		MJI	28-Feb-05	no progress	0
		MJI	31-Mar-05	no progress	0
14	**Stacking and mosaicing**	**4.0**			**65**
14.1	**develop benchmark simple stacking/mosaicing framework**	MJI		completed	100
14.2	**NN algorithm with simple rejection**	MJI		completed	100
14.3	**More sophisticated rejection dealing with pixellation**	MJI		completed	100
14.4	**Stacking with optimum wighting and defect rejection**				**25**
	refine and test current seeing weighting method on FIRES data	MJI	31-Jan-05	no progress	0
		MJI	28-Feb-05	no progress	0

			MJI	31-Mar-05	no progress	0
14.5	**Advanced stacking/image restoration for variable PSF**					0
	TBD as part of UK design review		MJI	31-Jan-05	no progress	0
			MJI	28-Feb-05	no progress	0
			MJI	31-Mar-05	no progress	0
15	**Continuum subtraction and basic difference imaging**	4.0				75
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	31-Jan-05	no progress	0
			MJI	28-Feb-05	no progress	0
			MJI	31-Mar-05	lots of use and minor bugfixes. works well	100
15.4	**transit event detection**					20
	continue with WASP, INT WFC and APT datasets		STH	31-Jan-05	good progress with lightcurve generation tests for a variety of systems	10
			STH	28-Feb-05	lightcurve generation and systematic removals code refined	50
			STH	31-Mar-05	transit event detection methodology proven to work well	50
16	**Interpolation techniques and PSF modeling**	4.0				58
16.1	**investigate alternative interpolation/PSF schemes**				completed	100
16.2	**implications for different stacking methods**				paused awaiting stage II of WFCAM commissioning	20
16.3	**implications for deriving catalogues and parameters**					70
	finish development and testing of astrometric refinement code		DWE	31-Jan-05	Phase 2 report of PSF fitting released - see http://www.ast.cam.ac.uk/vdfs/docs/reports/psf2/	
			DWE	28-Feb-05	paused - awaiting Phase-2 commissioning data	0
16.4	**oversampled PSF generation per detector**				finished	100
16.5	**develop oversampled spatially varying PSF model**					0
	finish development of spatially varying PSF model		DWE	31-Jan-05	awaiting Phase-2 commissioning data	0
			DWE	28-Feb-05	awaiting Phase-2 commissioning data	0
	final tuning on WFCAM on-sky data		DWE	31-Jan-05	awaiting Phase-2 commissioning data	0
			DWE	28-Feb-05	awaiting Phase-2 commissioning data	0