		T.					<u>aeı.xıs</u>			
	CASU WP name /sub_task / 05Q4m2 deliverables	Staff								Prog Textual Summary
#			05Q1	05Q2	05Q3	06Q1	06Q2	06Q3	06Q4	07Q1
1	Management and definition of project responsibilities									
1.1	report to VISTA, UKIDSS, JAC, ATC, GSC	all	17	25	34	52	61	70	79	85
	provide fortnightly meeting minutes, monthly reports on progress + quarterly review reports and planning. Produce draft functionality document for VDMT & VDUC. Have telecons as required with JAC									held minuted CASU meetings. Large urnout for ESO calibration meeting: presentations from many of the group.
1.2	interface control document between CASU and JAC	MJI	100	100	100	100	100	100	100	100 completed
1.3a	interface control document between CASU and WFAU (WFCAM)	MJI	100	100	100	100	100	100	100	100 completed
1.3b	interface control document between CASU and WFAU (VISTA)	PSB	0	0	0	0	10	30	50	55
1.00	liaise with WFAU, camera and telescope team for design of VISTA FITS headers for	I OD	0	- 0	U	- 0	10	- 50	30	
	input to ICD									Interacted with ATC, Cambridge CS & UKLight regarding networking
1.4a	define WFCAM data structures and FITS headers	MJI, JRL, PSB	100	100	100	100	100	100	100	100 completed
				<u> </u>						
1.4b	update proposed VISTA FITS headers as necessary	PSB	10	20	30	40	50	55	60	65
	monitor and update proposed VISTA FITS headers. give feedback on test FITS files. test conformance of output FITS files with ICD.									Discussed WCS FITS issues with ATC
1.5a	define WFCAM observing protocols	STH, DWE	55	60	70	75	75	90	100	100 completed
1.54	monitor and update MSB guidelines. monitor observing efficiency and report.	OTTI, DWL	33	00	70	73	73	30	100	100 completed
1.5b	define VISTA observing protocols	PSB	15	20	25	30	30	30	40	40
1.55	liaise with development team	I OB	13	20	20	- 50	30	- 30	70	*
	,	0711								discussion ongoing
1.6a	liaise with UKIDSS&JAC on WFCAM obs strategy, surveys planning	STH	40	50	60	70	70	80	90	90
	liaise and monitor progress									nothing to report, awaiting outcome of UKIRT board meeting
1.6b	liaise with Proj. Sci. on VISTA observing strategy & survey planning	PSB	17	25	34	52	61	70	79	85
	liaise and monitor progress									Held telecon re the VVV. Some planning of observations required to characterise potential dependency of flat-fields on rotator-position.
1.7a	liaise with VDUC on VDFS products for WFCAM	STH, MJI, JRL	50	55	60	70	75	80	90	95
-	liaise and monitor progress. finalise reports on results from WFCAM 05A SV data. Provide input for UKIDSS papers. Respond to issues raised re: data processing	, , , , ,								Input into DR2 paper.
1.8a	liaise with UKIDSS and JAC on survey progress DB (WFCAM)	JRL	50	50	55	60	65	65	75	80
	maintain OMP database mirror to be used with survey progress database, incl. simplified user interface and script to add MSB flags to processed data headers									Some progress, but fix stalled because of connectivity problems with JAC database
1.8b	liaise with VDUC and ESO on survey progress DB (VISTA)		0	0	0	0	0	10	20	20 clone of WFCAM system designed as first Vista DB
1.0		D)4/5 500 1:5			0.		0.1	7.0	7.0	05 11 1 1 1 1 1 1 1 1 1 1
1.9	system documentation	DWE,EGS,MR	17	25	34	52	61	70	79	85 Updated web and Plone pages as necessary
	update and maintain web pages of system docs. Setup and switch over to new plone system									
1.10	VST processing preparation	EGS, MJI	0	10	15	25	25	35	50	50
	help produce draft Survey Management Plan for ATLAS, VPHAS+									
2	ESO VISTA software interface deliverables and documentation									
2.1	DFS impact document	PSB	70	80	95	100	100	100	100	100 signed and sealed
2.2	Calibration Plan document	PSB	70	80	95	95	95	96	97	97
	update document in parallel with DRL development. Get c1.2 signed by PS, PI									minor corrections
2.3	Data Reduction Library Design document	PSB	70	80	95	95	95	96	97	97
	Date : Total diori Elorary Doorgii doddinont	. 55	, , 0	- 00	- 55		55	55	01	*-1

Afterwised ESO Calibration Workshop, Discussed various personner interface issues.						U	/reb_	uei.xi	3		
Lower Fifs Peter for each SDO-District of the Control of the Con		update document in parallel with DRL development									Brought up to date and tidied for v0.5 DRL release
Lower Fifs Peter for each SDO-District of the Control of the Con	2.5	ICD ESO/VPO	PSB	0	5	10	15	20	25	25	35
2.7 Delivery acquaint nation in CF. 6PYTS interviewment of the Circumstance module for programs and processes of exemplative of EF. Upoke ET to the celebrate death of the celebrate of the celeb		102 200 110	. 02								
2.7 Delivery software modules for exposure time calculation sets by treaspect demonstrate of EL Claude F1C and settle wherements data sets by treaspect demonstrated F1C (claude F1C and settle wherements data sets by treaspect demonstrated F1C (claude F1C and settle wherements data sets by treaspect demonstrated F1C (claude F1C and settle wherements data sets by treaspect of the Claude F1C and settle wherements data sets by treaspect f1C claude f1C and settle wherements data sets by the claude F1C and settle wherements data sets by the claud	2.6	Instrument specification and interface documents	PSB	0	6	6	10	20	40	60	60
spip UK-Sace demonstration of PTC Lipidos PTC with Earth or Anachomics data. De PSB		develop integration tests in CPL & QFITS environment									latest is V0.4 released to ESO
Deliver ETC calculation consists and informative set designation and set of ESC S S S S S S S S S	2.7	Delivery software modules for exposure time calculator	STH, PSB	20	60	90	95	96	96	97	97
Control Miles Was 17 Air Cameros Service Spream Feat Laure Service Rest suscessive Name August 1 Control Leave 1 Control Lea											nothing to report
operation of WinCold Man of CC amustor to assess WinCold system. Tiest successive strategies. But the process of the process	2.8		PSB	8	25	35	52	60	65	70	75
Separation Commanded in light of the cide follows Separation S		operation of VIRCAM and TCS simulator to assess VIRCAM system. Test successive									Preliminary analysis of first pictures from Paranal
Populine Infrastructure and pipeline progress monitoring tools JRL 68 75 75 75 75 75 75 75 7	2.9	Development of DQC measures	PSB	0	5	10	10	15	25	35	40
Standard		update QC measures as needed in light of test data									Investigated several issues wrt QC measures.
3.2 National Content of the Cont	3	Pipeline infrastructure and pipeline progress monitoring tools									
A	3.1	interactive tools for running pipeline	JRL	60	75	75	75	75	85	100	100 completed
3.4 a utomatic checks to soot failure of pipeline 3.4 a utomatic checks to soot failure of pipeline 3.5 a look for fixing proble datasets (WFCAM) 3.6 a look for fixing problem datasets (WFCAM data 3.6 b look for fixing problem datasets (VISTA) 3.7 a loversee reprocessing WFCAM data after bug fixes/improvements 3.8 a group documentation on pipeline infrastructure 3.7 a loversee reprocessing WFCAM data after bug fixes/improvements 4. a looked URIFT active to cope with WFCAM data 4. a looked URIFT active to cope with WFCAM data 4. a looked URIFT active to cope with WFCAM data 4. a looked URIFT active to cope with WFCAM data 4. a looked urifty WFCAM data 4. a lo	3.2	high level scripts to interrogate headers	MR, EGS	50	60	80	80	80	80	100	100 completed
3.5a Tools for fixing problem datasets (WFCAM) 3.6b Tools for fixing problem datasets (WFCAM) 3.7c Tools for fixing problem datasets (WFCAM) 3.7c Tools for fixing problem datasets (WFCAM) 3.8d Tools for fixing problem datasets (WFCAM) 4.8d Tools for fixing problem	3.3	automatic progression of results to web pages	MR	50	55	65	65	65	75	90	100 completed
Some continue developing tools to handle problems in WPCAM data Some continue developing tools for fixing problem datasets (VISTA)	3.4	automatic checks to spot failure of pipeline		0							100 completed
3.5b Tools for fixing problem datasets (VISTA)	3.5a		JRL	20	25	25	35	60	70	80	85
3.6 group documentation on pipeline infrastructure 3.7a Oversee reprocessing WFCAM data after bug fixes/improvements MR 0 30 45 55 65 70 75 75 monthing to reprocess 4. Set up and manager away Science after with the formation of the fixes o		continue developing tools to handle problems in WFCAM data									small bug fixes
3.7a Oversee reprocessing WFCAM data after bug fixes/improvements reprocess achieve data from 05A, 05B as necessary 4. Set up and manage raw science archive 4.1 extend UKIRT archive to cope with WFCAM data ransfers 4.2a Ingest and verify WFCAM and tata archive. Manage and monitor WFCAM-ESO raw data ransfers 4.2a Ingest and verify WFCAM data 1.2b Ingest and verify WFCAM data 4.2c Ingest and verify WFCAM data 2.c Ingest and verify VISTA data 3.c Set up and manage data processing system hardware 5.1 Investigate alternatives (benchmarking, reliability etc) 5.2	3.5b	Tools for fixing problem datasets (VISTA)		0	0	0	0	0	0	0	0 on hold
3.7a Oversee reprocessing WFCAM data after bug fixes/improvements reprocess achieve data from 05A, 05B as necessary 4. Set up and manage raw science archive 4.1 extend UKIRT archive to cope with WFCAM data ransfers 4.2a Ingest and verify WFCAM and tata archive. Manage and monitor WFCAM-ESO raw data ransfers 4.2a Ingest and verify WFCAM data 1.2b Ingest and verify WFCAM data 4.2c Ingest and verify WFCAM data 2.c Ingest and verify VISTA data 3.c Set up and manage data processing system hardware 5.1 Investigate alternatives (benchmarking, reliability etc) 5.2											
## Set up and manage raw science archive ## Set up and manage raw science archive ## A. Set up and manage raw science archive ## A. Set up and manage raw science archive ## A. Set up and manage raw science archive ## A. Set up and manage raw science archive ## A. Set up and manage raw science archive ## A. Set up and manage raw science archive to opps with VPCAM data ## A. B. Injeest and verify WPCAM data ## A. B. Injeest and verify VISTA data ## B.	3.6	group documentation on pipeline infrastructure	STH, JRL	60	60	65	65	65	80	100	100 completed
4. Set up and manage raw science archive 4.1 extend UKIRT archive to cope with WFCAM data manage WFCAM and starchive. Manage and monitor WFCAM-ESO raw data transfers 4.2a Ingest and verify WFCAM data MR, MJI 10 25 30 45 55 65 75 85 Lot of work to chase down problems with incomplete tapes sent from JAC. Now everything is under control, meaning we know exactly what we got and what is still missing. Simply but yet effective protocol to share such information with Brad (JAC) has been put in place using collaborative Google spreadsheets. 4.2b Ingest and verify VISTA data 5 Set up and manage data processing system hardware 5.1 Investigate alternatives (benchmarking, reliability etc) MJI, PSB, JMI, MJI 50 100 100 100 100 100 100 100 100 100	3.7a		MR	0	30	45	55	65	70	75	75
4.1 extend UKIRT archive to cope with WFCAM data manage WFCAM raw data archive. Manage and monitor WFCAM-ESO raw data transfers 1 lingest and verify WFCAM data 4.2a lingest and verify WFCAM data MR, MJI 10 25 30 45 55 65 75 86 10 Lot of work to chase down problems with incomplete tapes sent from JAC. Now everything is under control, meaning we know exactly what we got and what is still missing. Simply but yet effective protocol to share such information with Brad (JAC) has been put in place using collaborative Google spreadsheets. 4.2b Ingest and verify VISTA data 5 Set up and manage data processing system hardware 5 Investigate alternatives (benchmarking, reliability etc) MJI, PSB, JMI Manage day-to-day maintenance and upgrades continue maintenance and upgrades rown for further processing monitor need for extra hardware for further processing monitor need for extra hardware for further processing MJI MJI, JRL 0 9 18 36 45 54 63 69 New master falts and confidence maps created as required New master falts and confidence maps created as required		reprocess science data from 05A, 05B as necessary									nothing to reprocess
### ### ### ### ### ### ### ### ### ##	4	Set up and manage raw science archive									
transfers 4.2a Ingest and verify WFCAM data MR, MJI 10 25 30 45 56 75 85 Lot of work to chase down problems with incomplete tapes sent from JAC. Now everything is under control, meaning we know exactly what we got and what is still missing. Simply but yet effective protocol to share such information with Brad (JAC) has been put in place using collaborative Google spreadsheets. 4.2b Ingest and verify VISTA data 5 Set up and manage data processing system hardware 5.1 Investigate alternatives (benchmarking, reliability etc) MJ, PSB, JMI Manage day-to-day maintenance and upgrades PSB, JMI PSB, JMI Manage day-to-day maintenance and upgrades PSB, JMI MI Manage day-to-day maintenance and upgrades PSB, JMI MJ, MD M	4.1		JRL, MR	50	65	70	80	85	85	100	100 completed
Ingest and verify 06B Ingest and verify VISTA data Investigate alternatives (benchmarking, reliability etc) Investigate and testing Investigate and testing Investigation of to											
everything is under control, meaning we know exactly what we got and what is still missing. Simply but yet effective protocol to share such information with Brad (JAC) has been put in place using collaborative Google spreadsheets. 4.2b Ingest and verify VISTA data	4.2a		MR, MJI	10	25	30	45	55	65	75	85
Set up and manage data processing system hardware 5.1 Investigate alternatives (benchmarking, reliability etc) MJI, PSB, JMI 100 100 100 100 100 100 100 100 completed 5.2 buy hardware and install PSB, JMI, MJI 50 100 100 100 100 100 100 100 completed 5.3 integrating and testing PSB, JMI 17 25 34 52 61 70 70 80 continue maintenance and upgrades programme. Investigate new external bulk storage devices 5.4 Manage day-to-day maintenance and upgrades PSB, JMI 17 25 34 52 61 70 70 80 completed 5.5 Hardware additions for further processing system MJI 17 25 34 52 61 70 70 80 completed 5.6 Run standard pipeline 6.1a Update WFCAM master calibration frames 6.1b Update VISTA master calibration frames 6.1b Update VISTA master calibration frames 6.1c Update VISTA master calibration frames 6.1d Update VISTA master calibration frames 7.d Update VISTA master calibration frames 8.d Update VISTA master calibration frames 9.d Update VISTA master calibration frames		ingest and verify 06B									everything is under control, meaning we know exactly what we got and what is still missing. Simply but yet effective protocol to share such information with Brad (JAC) ha
5.1 Investigate alternatives (benchmarking, reliability etc) MJI, PSB, JMI 100 100 100 100 100 100 100 100 100 completed 5.2 buy hardware and install PSB, JMI, MJI 50 100 100 100 100 100 100 100 completed 5.3 integrating and testing PSB, JMI 50 100 100 100 100 100 100 100 completed 5.4 Manage day-to-day maintenance and upgrades PSB, JMI 17 25 34 52 61 70 70 80 continue maintenance and upgrade programme. Investigate new external bulk storage devices 5.5 Hardware additions for further processing system 0 0 0 5 10 15 20 30 Investigation of blade/thin server options. Further investigation of candidates systems for VISTA UK Pipeline 6 Run standard pipeline 6 Run standard pipeline 6 Continue updating and testing calibration frames MJI, JRL 0 9 18 36 45 54 63 69 New master flats and confidence maps created as required 6.1b Update VISTA master calibration frames 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4.2b	Ingest and verify VISTA data		0	0	0	0	0	0	0	0 on hold
buy hardware and install PSB, JMI, MJI No 100 100 100 100 100 100 100	5	,									
buy hardware and install PSB, JMI, MJI No 100 100 100 100 100 100 100	5.1	Investigate alternatives (benchmarking, reliability etc)	MJI, PSB, JMI	100	100	100	100	100	100	100	100 completed
Manage day-to-day maintenance and upgrades PSB, JMI 17 25 34 52 61 70 70 80 ongoing	5.2	buy hardware and install	PSB, JMI, MJI	50	100	100	100	100	100	100	100 completed
continue maintenance and upgrade programme. Investigate new external bulk storage devices 5.5 Hardware additions for further processing system 5.6 Hardware for extra hardware for further processing MJI MII MII MII MII MII MII MI	5.3	integrating and testing	PSB, JMI	50	100	100			100	100	100 completed
devices 5.5 Hardware additions for further processing system 0 0 0 5 10 15 20 30 monitor need for extra hardware for further processing MJI Invetigation of blade/thin server options. Further investigation of candidates systems for VISTA UK Pipeline 6.1a Update WFCAM master calibration frames Continue updating and testing calibration frames MJI, JRL 0 9 18 36 45 54 63 69 Continue updating and testing calibration frames 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5.4		PSB, JMI	17	25	34	52	61	70	70	80
monitor need for extra hardware for further processing MJI Invetigation of blade/thin server options. Further investigation of candidates systems for VISTA UK Pipeline Fun standard pipeline MJI, JRL O 9 18 36 45 45 45 46 54 63 69 Continue updating and testing calibration frames 6.1b Update VISTA master calibration frames O 0 0 0 0 0 0 0 0 0 0 0 0		devices									
6.1a Update WFCAM master calibration frames MJI, JRL 0 9 18 36 45 54 63 69 continue updating and testing calibration frames 0 0 0 0 0 0 0 0 0 0 n hold	5.5			0	0	0	5	10	15	20	**
6.1a Update WFCAM master calibration frames MJI, JRL 0 9 18 36 45 54 63 69 continue updating and testing calibration frames 0 0 0 0 0 0 0 0 0 n hold 6.1b Update VISTA master calibration frames 0 0 0 0 0 0 0 0 0 0 n hold			MJI								,
continue updating and testing calibration frames 6.1b Update VISTA master calibration frames 0 0 0 0 0 0 0 0 0 n hold	6										
6.1b Update VISTA master calibration frames 0 0 0 0 0 0 0 on hold	6.1a		MJI, JRL	0	9	18	36	45	54	63	
											New master flats and confidence maps created as required
6.2a Monitor detector performance WFCAM JRL, MR 0 9 18 36 45 54 63 69	6.1b	Update VISTA master calibration frames		0	0	0	0	0	0	0	0 on hold
6.2a Monitor detector performance WFCAM JRL, MR 0 9 18 36 45 54 63 69											
	6.2a	Monitor detector performance WFCAM	JRL, MR	0	9	18	36	45	54	63	69

					U	/ reb_	_del.xl	S		
	monitor with 05A and 05B data									monitored as part of QA checks
6.2b	Monitor detector performance VISTA		0	0	0	0	0	0	0	0 on hold
	·									
6.3a	oversee standard processing WFCAM	MR	0	9	18	36	45	54	63	69
	process 05B data									not much to process
6.3b	Oversee standard processing VISTA		0	0	0	0	0	0	0	0 on hold
0.05	evered standard processing view		Ĭ				Ĭ		"	o on nord
6.4a	Astrometric calibration WFCAM	MJI	0	9	18	36	45	54	63	69
0.44	(re)calibrate 05A and 05B data	IVIOI	- 0		10	30	73	J-	00	ongoing
6.4b	Astrometric calibration VISTA		0	0	0	0	0	0	0	0 on hold
0.40	AStrometric calibration vista		U	U	U	U	U	U	U	U OH HOIG
0.50	Dhatamatria Calibratian MECAM	STH	0		10	36	45	54	63	69
6.5a	Photometric Calibration WFCAM	S1H	U	9	18	36	45	54	63	**
	calibrate using 2mass and continue developing secondary standards system, Ces etc									implemented extinction correction and revised colour terms
<u> </u>	DI 4 4 4 0 11 4 1 1 1 1 1 1 1 1 1 1 1 1 1									
6.5b	Photometric Calibration VISTA		0	0	0	0	0	0	0	0 on hold
6.6a	Verify Science products and monitor DQC measures WFCAM	EGS, MJI	0	9	18	36	45	54	63	69
	assess 05A and 05B data									SV of products ongoing see http://apm15.ast.cam.ac.uk/casudocs/wfcam/science-
										verification. And SV report at
										http://www.ast.cam.ac.uk/~wfcam/docs/reports/sv/index.html.
6.6b	Verify Science products and monitor DQC measures VISTA		0	0	0	0	0	0	0	0 on hold
6.7	Monitor data product transfer to WFAU	MR, MJI	0	9	18	36	45	54	63	69
	continue data transfer to WFAU and monitor	, , , , , , ,	_							Nothing to transfer
										recting to transfer
6.8a	Reprocess WFCAM data	MR	0	9	18	36	45	54	63	69
0.00	reprocess if major bug fixes	IVII C			- 10	- 00	10	- 0.	00	Nothing to reprocess
	, ,									Nothing to reprocess
6.8b	Reprocess VISTA data		0	0	0	0	0	0	0	0 on hold
0.00	Treprocess vio in data		0			0	0		- 4	Olimbia
7	Development work for summit pipeline									
7.1a	Interface test pipelines in ORAC-DR	JRL	100	100	100	100	100	100	100	100 completed
		JRL	0							
7.1b	Interface test pipelines to VISTA summit DR	JKL	١	U	0	10	20	40	60	65 Resolved differing QC interface issues. Version 0.5 prepared.
7.00	implement WFCAM pipeline at summit	JRL	7.	00	00	400	400	100	100	100 completed
7.2a		-	75	80	90			100		100 completed
7.2b	Implement VISTA pipeline at summit	JRL	0	0	0	0	0	0	0	0 on hold
		IDI			-	400	100	400	100	400
7.3a	documentation for ORAC-DR interface	JRL	60	60				100		100 completed
7.3b	documentation for interface VISTA	JRL	0	0	0	0	10	30	50	55
										Documentation being written as modules and recipes are developed
7.4a	upgrade and maintain summit pipeline WFCAM	JRL	17	25	40	55		75		100 completed
7.4b	upgrade and maintain summit pipeline VISTA	JRL	0	0	0	0	0	0	0	0 on hold
8	Development and testing of standard 2d processing									
8.1a	further development of standard pipeline for WFCAM	JRL,DWE	80	80	85	90	95	96	97	97
	update and maintain as required. Assess persistance characteristics and develop trial									No further progress
	version									
8.1b	development of VISTA specific packages	JRL	0	0	30	45	55	60	70	75
	. · · · · · ·								_	•

in mid March: 1 2						U	/Feb_	<u>uei.xi</u>	S		
8.2b Issans with Project Schemist & VISTA development team saces any new decidence represents per dark and saces any new decidence represents per dark and saces any new decidence represents per CAM. Some parties in planning VISTA commissioning contentions STH 80 100 100 100 100 100 100 100 100 100		version 0.1 CPL recipes and modules. Release minor version updates as required prior to 0.5. Liaise with ESO on integrating and commissioning modules into pipeline									version 0.5 pipeline and v1.7 DRLD prepared and being tested prior to release to ESO in mid March.
8.2b Issans with Project Schemist & VISTA development team saces any new decidence represents per dark and saces any new decidence represents per dark and saces any new decidence represents per CAM. Some parties in planning VISTA commissioning contentions STH 80 100 100 100 100 100 100 100 100 100	8.2a	liaison with WFCAM development team	JRL	8	25	34	52	61	80	100	100 completed
Section Sect				8							
Sale partake in planning WFCAM commissioning observations STH 80 100											Many miscellaneous contacts
3.3 b particular planning VISTA commissioning observations STH 0 0 0 10 10 10 20 20 30	8.3a	partake in planning WFCAM commissioning observations	STH	80	100	100	100	100	100	100	•
sear and accoses with connect PS and VISTAN S (and out about covered commissioning VISTA) 8.4 B Participated directly in commissioning VISTA 8.7 Thing projectine during commissioning and after VISTA 8.5 Things projectine during commissioning and after VISTA 8.6 Commentation for 2D processing software VISTA 8.6 Commentation for additional 2D processing software VISTA 8.6 Commentation for additional 2D processing software VISTA 8.6 Commentation for additional 2D processing software VISTA 8.7 Comparison between automated and manual data products 8.6 Comparison between automated and manual data products 8.6 Comparison and testing of standard catalogue products 8.7 Things provided and manual data products 8.7 Things processor Wisk and a comparison model - VISTA specific 8.7 Things processor Wisk and a comparison model - VISTA specific 8.7 Things provided and manual data products 9. Things provided and manual data products 9. Thin	8.3b		STH	0		0	10			20	• .
8.48 Participate directly in commissioning with STA 8.59 Participate directly in commissioning with STA 8.58 Thirding pipeline during commissioning and after WFCAM 8.59 Intring pipeline during commissioning and after WFCAM 8.59 Thirding pipeline during commissioning and after WFCAM 8.50 Thirding pipeline during commissioning and after WFCAM 8.50 Thirding pipeline during commissioning and after WFCAM 8.50 Overland the season of the s			,								Some planning of determination of rotation-dependent flat effects.
1.5. a Tuning poleine during commissioning and after WFCAM MJI, STH, EGS 20 40 40 70 80 85 90 90 90 90 90 90 90 90 90 90 90 90 90	8.4a	Participate directly in commissioning WFCAM	STH	50	100	100	100	100	100	100	
1.5. a Tuning poleine during commissioning and after WFCAM MJI, STH, EGS 20 40 40 70 80 85 90 90 90 90 90 90 90 90 90 90 90 90 90	8.4b	Participate directly in commissioning VISTA	STH	0	0	0	0	0	0	0	0 on hold
s by Development and testing of standard catalogue products STH Standard Standard Catalogue products Mull Standard Standard Catalogue products Standard Catalogue products Mull Standard Standard Catalogue products Mull Standard Standard Sta			MJI, STH, EGS	20	40	40	70	80	85	90	90
8. di documentation for 2D processing software WFCAM JRL, MJI 50 50 50 70 80 85 95 95 documentation complete. Ist draft of technical paper written and circulated for UK review. Finalising the sky brightness analysis and writing the paper (some work was in preparation for the ESO workshop). 8.60 documentation for additional 2D processing software VISTA JRL 0 0 0 30 40 50 70 85 90 documentation complete. Ist draft of technical paper written and circulated for UK review. Finalising the sky brightness analysis and writing the paper (some work was in preparation for the ESO workshop). 8.67 Comparison between automated and manual data products 8.78 Comparison between automated and manual data products 9. Development and testing of standard datalogue products MJI 60 60 60 100 100 100 100 100 100 100 10											no further progress
documentation complete. 1st draft of technical paper written and circulated for UK review. Finalishing the sky brightness analysis and writing the paper (some work was in preparation for the ESO workshop). 8.8b. document withir response and module Cooler doubyear compatible format 8.7 Compation between subtracted and manual data products 8.8 September 1	8.5b	Tuning pipeline during commissioning and after VISTA	MJI, JRL, EGS	0	0	0	0	0	0	0	on hold
documentation complete. 1st draft of technical paper written and circulated for UK review. Finalishing the sky brightness analysis and writing the paper (some work was in preparation for the ESO workshop). 8.8b. document withir response and module Cooler doubyear compatible format 8.7 Compation between subtracted and manual data products 8.8 September 1	8 62	documentation for 2D processing software WECAM	JRI MJI	50	50	50	70	ຂ∩	25	95	95
document within recipe and module Cocke in davygen competible format 8.7 Comparison between automated and manual data products 8.8 Social processed WFCAM SV data in conjunction with CSV and Survey Heads 9. Development and testing of standard catalogue products 9.1 add in now measures requested 9.2 arefine astrometric calibration model 9.2 arefine astrometric calibration model 9.2 br. freine astrometric calibration model 9.2 br. freine astrometric recipilation of expected data 9.2 assess CASU processed WFCAM SV data in conjunction with CSV and Survey Heads 9.2 arefine astrometric calibration model 9.3 generate model simulations of expected data 9.4 assess catalogue parameter reliability 9.4 assess catalogue parameter reliability 9.5 Intercomparison of catalogue products with other packages 9.1 MII 0 100 100 100 100 100 100 100 100 100		update docs as necessary. Write data processing technical description paper									documentation complete. 1st draft of technical paper written and circulated for UK review. Finalising the sky brightness analysis and writing the paper (some work was in preparation for the ESO workshop).
8.7 Comparison between automated and manual data products assess CASU processed WFCAM SV data in conjunction with CSV and Survey Heads 9 Development and testing of standard catalogue products 9.1 add in new measures requested MFCAM SV data in conjunction with CSV and Survey Heads 9 9.2a refine astrometric calibration model MJI 85 85 85 89 90 90 90 95 refine astrometric calibration model - VISTA specific MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			JRL	0	0	30	40	50	70	85	90
Seeses CASU processed WFCAM SV date in conjunction with CSV and Survey Heads		, , , , , , , , , , , , , , , , , , , ,									documentation added as code is written
Development and testing of standard catalogue products Muli 60 60 10	8.7		STH	50	50	55	70	75	80	85	85
9.1 add in new measures requested MJI 60 60 100 100 100 100 100 100 completed monitor and time if needed MJI 85 85 85 90 90 90 95 refine astrometric calibration model NJI 85 85 85 90 90 90 95 refine astrometric calibration model VISTA specific MJI 0 0 0 0 0 0 0 0 0 no hold special calibration model VISTA specific MJI 0 100 100 100 100 100 100 100 0 no hold special calibration model VISTA specific MJI 0 100 100 100 100 100 100 100 0 no hold special calibration model VISTA specific MJI 0 100 100 100 100 100 100 100 0 no hold special calibration model VISTA specific MJI 0 100 100 100 100 100 100 100 0 no hold special calibration model VISTA specific MJI 0 100 100 100 100 100 100 100 0 completed special calibration model VISTA specific MJI 100 100 100 100 100 100 100 100 100 0 completed special calibration model VISTA specific MJI 100 100 100 100 100 100 100 100 100 0 completed special calibration model VISTA specific MJI 100 100 100 100 100 100 100 100 100 0 completed special calibration model vista model callbrate model vista model callbrate model vista		assess CASU processed WFCAM SV data in conjunction with CSV and Survey Heads									no further progress
9.2a refine astrometric calibration model 9.2a refine astrometric calibration model 9.2b refine astrometric calibration model - VISTA specific MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9	Development and testing of standard catalogue products									
9.2a refine astrometric calibration model refine astrometric calibration model - VISTA specific MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1		MJI	60	60	100	100	100	100	100	100 completed
9.2b refine astrometric calibration model - VISTA specific MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0											
9.2b refine astrometric calibration model - VISTA specific MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			MJI	85	85	85	90	90	90	95	
9.3 generate model simulations of expected data 9.4 assess catalogue parameter reliability 9.5 intercomparison of catalogue products with other packages 9.6 Completeness 9.7 documentation of catalogue products occumentation 9.7 documentation of catalogue products occumentation 9.8 under catalogue products occumentation 9.9 documentation of catalogue software and products 9.0 update catalogue products occumentation 9.1 documentation of catalogue software and products 9.2 design and report on completeness model, check completeness [9.6] and error estimates and parameter reliability [9.4] 9.7 documentation of catalogue software and products 9.8 design and report on completeness model, check completeness [9.6] and error estimates and parameter reliability [9.4] 9.7 documentation of catalogue software and products 9.8 design and report on completeness model, check completeness [9.6] and error estimates and parameter reliability [9.4] 9.7 documentation of catalogue software and products 9.8 design and report on completeness model, check completeness [9.6] and error estimates and parameter reliability [9.4] 9.4 documentation of catalogue software and products 9.5 design and report on completeness model, check completeness [9.6] and error estimates and parameter reliability [9.4] 9.7 documentation of catalogue software and products 9.8 documentation of catalogue software and products 9.9 documentation of catalogue software and products 9.0 documentation of catalogue software and products of catalogue s											·
9.4 assess catalogue parameter reliability 9.5 lintercomparison of catalogue products with other packages 9.6 Completeness 9.6 Completeness 9.7 documentation of completeness model, check completeness [9,6] and error estimates and parameter reliability [9,4] 9.7 documentation of catalogue software and products 9.8 update catalogue products documentation 9.9 documentation of catalogue software and products 9.7 documentation of catalogue software and products 9.8 Update catalogue products documentation 9.8 Event trial and run further processing pipeline 9.1 Manage and run further processing stages 9.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.2b	refine astrometric calibration model - VISTA specific	MJI	0	0	0	0	0	0	0	on hold
9.4 assess catalogue parameter reliability 9.5 lintercomparison of catalogue products with other packages 9.6 Completeness 9.6 Completeness 9.7 documentation of completeness model, check completeness [9,6] and error estimates and parameter reliability [9,4] 9.7 documentation of catalogue software and products 9.8 update catalogue products documentation 9.9 documentation of catalogue software and products 9.7 documentation of catalogue software and products 9.8 Update catalogue products documentation 9.8 Event trial and run further processing pipeline 9.1 Manage and run further processing stages 9.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0711	400	400	400	400	400	400	400	400
Intercomparison of catalogue products with other packages MJI 100		•									
9.6 Completeness design and report on completeness model, check completeness [9,6] and error estimates and parameter reliability [9,4] and evelope products documentation and products and event estimates and parameter reliability [9,4] and evelope methods for Sersic profile fitting and evelope methods for Sersic profile fitting and evelope event estimates and parameter reliability of nebulosity detection and evelope methods for Sersic profile fitting and evelope expenses and evelope to the evelope event estimates and parameter reliability of nebulosity detection and evelope event event estimates and parameter reliability event event estimates and parameter reliability event event estimates and parameter reliability of nebulosity detection and evelope event event estimates and products and event event estimates and products and event event estimates and products and event estimates and event estimates and products and event estimates and event estimates and products and event estimates and event estimates and products and event estimates and products and event estimates and event estimates and products and event estimates and event estima		,									
design and report on completeness model, check completeness [9,6] and error estimates and parameter reliability [9,4] 9.7 documentation of catalogue software and products update catalogue products documentation											100 completed
estimates and parameter reliability [9.4] 9.7 documentation of catalogue software and products update catalogue products documentation			MJI, EGS	0	10	40	40	40	40	40	
update catalogue products documentation draft of technical description written and Plone website updated to include more technical information. 10 Setup trial and run further processing pipeline 10.1 Manage and run further processing stages 0 0 0 0 0 0 0 0 0 0 still awaiting PSF v1,2 development completion 10.2 development and assessment of PSF options 1,2 DWE 60 65 75 85 85 90 95 run prototype code for PSF levels 1,2 on 05A data Started to draft paper 10.3 develop 1D/2D PSF-deconvolved Sersic profile fits MJI 0 0 0 0 0 0 0 0 0 prototype methods for Sersic profile fitting paused, awaiting implementation of PSF fitting 10.4 Develop LSBG/nebulosity detection/parameterisation MJI 0 0 0 0 0 0 0 paused, awaiting compelling scientific need and firmer requirements											no further progress
technical information. Setup trial and run further processing pipeline 10.1 Manage and run further processing stages 10.2 development and assessment of PSF options 1,2 DWE 60 65 75 85 85 90 95 run prototype code for PSF levels 1,2 on 05A data 10.3 develop 1D/2D PSF-deconvolved Sersic profile fits prototype methods for Sersic profile fitting 10.4 Develop LSBG/nebulosity detection Develop LSBG/nebulosity detection MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			MJI	55	55	60	70	75	80	85	
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development and assessment of PSF options 1,2 Trun prototype code for PSF levels 1,2 on 05A data DWE 60 65 75 85 85 90 95 Trun prototype code for PSF levels 1,2 on 05A data Started to draft paper DWE 60 65 75 85 85 90 95 Trun prototype code for PSF levels 1,2 on 05A data Started to draft paper DWE 60 65 75 85 85 90 95 Trun prototype methods for Sersic profile fitts MJI 0 0 0 0 0 0 Trun prototype methods for Sersic profile fitting Develop LSBG/nebulosity detection/parameterisation MJI 0 0 0 0 0 0 Trun prototype methods for Sersic profile fitting Develop LSBG/nebulosity detection/parameterisation MJI 0 0 0 0 0 0 Trun prototype methods for Sersic profile fitting Develop LSBG/nebulosity detection/parameterisation MJI 0 0 0 0 0 0 0 Trun prototype methods for PSF levels 1,2 on 05A data Develop LSBG/nebulosity detection/parameterisation MJI 0 0 0 0 0 0 0 Trun prototype methods for PSF levels 1,2 on 05A data Develop LSBG/nebulosity detection/parameterisation MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0											
run prototype code for PSF levels 1,2 on 05A data 10.3 develop 1D/2D PSF-deconvolved Sersic profile fits MJI 0 0 0 0 0 0 0 prototype methods for Sersic profile fitting	10.1	Manage and run further processing stages		0	0	0	0	0	0	0	0 still awaiting PSF v1,2 development completion
run prototype code for PSF levels 1,2 on 05A data 10.3 develop 1D/2D PSF-deconvolved Sersic profile fits MJI 0 0 0 0 0 0 0 prototype methods for Sersic profile fitting	10.2	development and assessment of PSF ontions 1.2	DWE	60	65	75	85	85	90	95	
prototype methods for Sersic profile fitting 10.4 Develop LSBG/nebulosity detection/parameterisation MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0											Started to draft paper
prototype methods for Sersic profile fitting 10.4 Develop LSBG/nebulosity detection/parameterisation MJI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10.3	develop 1D/2D PSF-deconvolved Sersic profile fits	MJI	0	0	0	0	0	0	0	
investigate feasibility of nebulosity detection paused, awaiting compelling scientific need and firmer requirements		prototype methods for Sersic profile fitting									paused, awaiting implementation of PSF fitting
parassa, arranang sempening sempening sempening sempening	10.4	Develop LSBG/nebulosity detection/parameterisation	MJI	0	0	0	0	0	0	0	
10.5 Full iterative profile fitting for stellar images 0 0 0 0 0 0 paused, awaiting results from 10.2		investigate feasibility of nebulosity detection									paused, awaiting compelling scientific need and firmer requirements
	10.5	Full iterative profile fitting for stellar images		0	0	0	0	0	0	0	paused, awaiting results from 10.2

10.6 Develop and optimize Bayesian image classi trial Bayesian classification schemes 10.7 Modeling and simulations of further processin 11 Photometric standards and calibration 11.1 Agree on primary standards (WFCAM + VISTAM 11.2 Choose secondary standards (WFCAM + VISTAM 11.3 take part in commissioning observations WFCAM 11.3 take part in commissioning observations WFCAM 11.3 take part in commissioning observations VISTAM 11.4 Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commissioning terms relative to 2MASS and UKIRT FS. Write paper 11.4b Reduce data, compute zero points and colou 11.5 Update, maintain and extend secondary stan 11.6 Investigate photometric calibration field systems stack 2MASS residuals and assess	g steps A) STH TA) STH CAM STH TA STH Tequations WFCAM STH	H H H	90 80 10	100	30 0 100 80		100	100	100	no further progress 100 completed
10.7 Modeling and simulations of further processing 11 Photometric standards and calibration 11.1 Agree on primary standards (WFCAM + VIST 11.2 Choose secondary standards (WFCAM + VIST 11.3 take part in commissioning observations WF 11.3b take part in commissioning observations VIST 11.4a Reduce data, compute zero points and colous compute WFCAM photometric zeropoints from commissioning terms relative to 2MASS and UKIRT FS. Write paper 11.4b Reduce data, compute zero points and colous 11.5 Update, maintain and extend secondary stant 11.6 Investigate photometric calibration field systems.	A) STH. TA) STH. CAM STH. TA STH. Tequations WFCAM STH.	H H H	80	100	100			100	100	
11 Photometric standards and calibration 11.1 Agree on primary standards (WFCAM + VIS 11.2 Choose secondary standards (WFCAM + VIS 11.3a take part in commissioning observations WF 11.3b take part in commissioning observations VIS 11.4a Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commissioning observations VIS 11.4b Reduce data, compute zero points and colou compute WFCAM photometric zeropoints and colou compute WFCAM photometric zeropoints and colou compute vision of the vis	A) STH. TA) STH. CAM STH. TA STH. Tequations WFCAM STH.	H H H	80	100	100			100	100	100 completed
11.1 Agree on primary standards (WFCAM + VIS- 11.2 Choose secondary standards (WFCAM + VIS- 11.3a take part in commissioning observations WF- 11.3b take part in commissioning observations VIS- 11.4a Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commissioning observations VIS- 11.4b Reduce data, compute zero points and colous terms relative to 2MASS and UKIRT FS. Write paper 11.4b Reduce data, compute zero points and colous Update, maintain and extend secondary standards Investigate photometric calibration field systems.	TA) STH CAM STH TA STH requations WFCAM STH	H H H	80	80		100				
11.2 Choose secondary standards (WFCAM + VIS 11.3a take part in commissioning observations WF 11.3b take part in commissioning observations VIS 11.4a Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commissioning observations VIS 11.4a Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commissioning terms relative to 2MASS and UKIRT FS. Write paper 11.4b Reduce data, compute zero points and colou 11.5 Update, maintain and extend secondary stan 11.6 Investigate photometric calibration field systematics.	TA) STH CAM STH TA STH requations WFCAM STH	H H H	80	80		100				
11.2 Choose secondary standards (WFCAM + VIS 11.3a take part in commissioning observations WF 11.3b take part in commissioning observations VIS 11.4a Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commissioning observations VIS 11.4a Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commissioning terms relative to 2MASS and UKIRT FS. Write paper 11.4b Reduce data, compute zero points and colou 11.5 Update, maintain and extend secondary stan 11.6 Investigate photometric calibration field systems.	TA) STH CAM STH TA STH requations WFCAM STH	H H	10				100	100	100	100 completed
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take part in commissioning observations VIS Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commiss terms relative to 2MASS and UKIRT FS. Write paper Reduce data, compute zero points and colou Update, maintain and extend secondary stan	TA STH requations WFCAM STH			100	100	100	100	100	100	100 phase II on-sky characterisation - completed
Reduce data, compute zero points and colou compute WFCAM photometric zeropoints from commiss terms relative to 2MASS and UKIRT FS. Write paper Reduce data, compute zero points and colou Update, maintain and extend secondary stan Investigate photometric calibration field systems.	equations WFCAM STF		0	0	0	0	0	0	0	0 on hold
compute WFCAM photometric zeropoints from commiss terms relative to 2MASS and UKIRT FS. Write paper 11.4b Reduce data, compute zero points and colou 11.5 Update, maintain and extend secondary stan 11.6 Investigate photometric calibration field syste		H	15	25	60	80	85	90	95	95
terms relative to 2MASS and UKIRT FS. Write paper 11.4b Reduce data, compute zero points and colou 11.5 Update, maintain and extend secondary stan 11.6 Investigate photometric calibration field syste	,	••	1							Calibration agreed and implemented for DR2. Final tweaking for DR3 calibration unc
11.5 Update, maintain and extend secondary stan11.6 Investigate photometric calibration field syste										review. Paper in preparation.
11.5 Update, maintain and extend secondary stan11.6 Investigate photometric calibration field syste	eguations VISTA STF	Н	0	0	0	0	0	0	0	0 on hold
11.6 Investigate photometric calibration field syste	•		0	0	0	0	0	50	100	100 complete
	-		0	0	30	60	60	60	60	60
	matics VII Crawii Vie ir		-	-	- 00	- 00	- 00	- 00	- 00	no further progress
5.001 2.177 100 100.000.00										no further progress
11.7 assess extinction monitoring methods and de	velop measures STH	Ή	50	50	60	70	90	90	100	100 complete
12 Further development of DQC measures at										
12.1 develop extra systematic noise measures	MJI	I	50	75	80	80	80	80	80	81
finished for WFCAM; awaiting VISTA test files	11101	•								no progress
12.2 Refine current measures for WFCAM/VISTA	lata JRI	L, MJI	20	25	40	65	70	75	75	80
continue monitoring the DQC assessment by visually ch		L, 11101			- 10	- 00				continuing as new data arrive
12.3 implement 2mass for throughput measureme		I	75	100	100	100	100	100	100	100 implemented local access version at summit - completed
12.4 master calibration frames for detector monitor		L, MR	35	40	60	80	80	80	80	80
continue monitoring using 05A and 05B WFCAM data	ing SixL	L, IVIIX	33	70	00	- 00	00	00	- 00	no further work
13 Co-located list driven photometry										IIO Iditilei Wolk
	IMI	11	100	100	100	100	100	100	100	100 completed
0 0			100	100	100	100	100	100	100	
13.2 develop basic WCS-based list driven photom			90	90	95	97	100	100	100	100 completed
13.3 externally driven WCS photometry and define extend to full 80 parameter set	parameter set MJI	II .	75	75	95	100	100	100	100	100 completed
1										
14 Stacking and mosaicing			100	400	400	100	400	100	100	
14.1 develop benchmark simple stacking/mosaicin	•		100	100	100	100	100	100	100	100 completed
14.2 NN algorithm with simple rejection	MJI		100	100	100	100	100	100	100	100 completed
14.3 More sophisticated rejection dealing with pixi			100	100	100	100	100	100	100	100 completed
14.4 Stacking with optimum weighting and defect		ll e	25	25	25	35	35	35	35	
refine using WFCAM deep survey data and optical data options for WFCAM deeps surveys	Irial different interpolation									
14.5 Advanced stacking/image restoration for vari	able PSF MJI	J.	0	0	0	10	15	15	15	
investigate alternatives as part of UK design review										
15 Continuum subtraction and basic differen										
										·
							- 1			100 completed
15.3 develop adaptive kernel matching option	MJI	I	80	80	80	85	85	85	90	
continue debugging and enhancements to adaptive ken	el package									development complete for the time being
15.4 time series photometry	STH	Ή	20	20	50	70	70	75	80	80
test with WFCAM photometry										no further progress
16 Interpolation techniques and PSF modeling										
16.1 investigate alternative interpolation/PSF sche	mes DW	VE	100	100	100	100	100	100	100	100 completed
16.2 implications for different stacking methods	DW	VE	20	25	30	100	100	100	100	100 completed - further dev in 14.4
16.3 implications for deriving catalogues and para	meters DW	VE	70	75	80	85	90	95	95	95
finish testing of astrometric refinement code										no further progress
	DW	VE	100	100	100	100	100	100	100	100 completed
16.4 oversampled PSF generation per detector	עעטן									
 15.1 Simple WCS-based subtraction techniques 15.2 investigate and apply different interpolation n 15.3 develop adaptive kernel matching option continue debugging and enhancements to adaptive kern 15.4 time series photometry test with WFCAM photometry 16 Interpolation techniques and PSF modelin 16.1 investigate alternative interpolation/PSF scheme 16.2 implications for different stacking methods 	ethods MJI ethods MJI el package STH g mes DW DW	H VE VE	20 100 20	20 100 25	50 100 30	70 100 100	70 100 100	75 100 100	80 100 100	80 no further progress 100 completed 100 completed - further dev in 14.4

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Γ	asess if spatially varying PSF model required, test on 05B data	