

## 04Q4m3\_casu\_deliverables.xls

WP	CASU WP name /sub task / 04Q4m3 deliverable	V.I. F.	name	date	end of month report	%sub	% task
#							
<b>1 Management and definition of project responsibilities</b>		<b>3.0</b>					
1.1	report to VISTA, UKIDSS, JAC, ATC, GSC						87
	provide fortnightly meeting minutes, monthly reports on progress + quarterly review reports and planning, attend VDUC meetings		STH, MJJ	31-Oct-04	meetings held and minuted. monthly report written.	10	
			STH, MJJ	30-Nov-04	meetings held and minuted. monthly report written	50	
			STH, MJJ	31-Dec-04	monthly report written	100	
	finish and deliver ADASS paper		JRL	31-Oct-04	finished poster and attended ADASS (poster now on WWW pages)	100	
	prepare CASU grant bid (operations)		STH, MJJ	31-Oct-04	preparation well underway. to be submitted mid november	50	
			STH, MJJ	30-Nov-04	grant bid completed and submitted	100	
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				paused		
1.5a	define WFCAM observing protocols						87
	monitor and help update MSB guidelines		MJJ + STH	31-Oct-04	contact with Simon Dye and AA to discuss status of MSBs	10	
			MJJ, STH	30-Nov-04	held meeting with Simon Dye: included discussion on MSB preparation	50	
			MJJ, STH	31-Dec-04	no further progress - awaiting analysis of commissioning data	50	
	check first pass survey MSBs		STH	31-Oct-04	checked GPS MSBs in UKIRT OT. Began construction of GCS MSBs in consultation with NCH. MJJ sent textual summary of MSB designs to AA	10	
			STH	30-Nov-04	redesign of MSBs within OT. Can make no progress until SDT updated to reflect these changes	10	
			STH	31-Dec-04	no further progress	10	
1.5b	define VISTA observing protocols						
	help finish defining science and user requirements		MJJ + PSB	31-Oct-04	nothing further to add pending release of UKURD and feedback from UK community	0	
			MJJ + PSB	30-Nov-04	UKURD released, but no feedback yet - VDUC meeting would be useful to discuss this	0	
			MJJ + PSB	31-Dec-04	awaiting feedback + VDUC	0	
1.6a	liaise with UKIDSS&JAC on WFCAM obs strategy, surveys planning						87
	liaise and monitor progress		DWE	31-Oct-04	arranged meeting with Simon Dye. discussed sky brightness with JAC as well as commissioning plans.	10	
			STH	30-Nov-04	held meeting with Simon Dye to discuss commissioning and to keep CSV in touch with CASU activities	50	
			STH	31-Dec-04	JRL in contact with Simon Dye to arrange visit to Cambridge and WFCAM dataset for comparison tests	100	
1.6b	liaise with Project Scientist on VISTA observing strategy & survey planning						
	liaise and monitor progress		PSB	31-Oct-04	comments on SDT document fed to JMS and WJS. Awaiting next version.	10	
			PSB	30-Nov-04	reviewed last version of SDT	50	
			PSB	31-Dec-04	awaiting feedback from FDR	100	
1.7a	liaise with VDUC on VDFS products for WFCAM						87

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	liaise and monitor progress	STH + MJJ	31-Oct-04	nothing to report. meeting with simon dye will include discussion of science verification and pipeline strategy	10	
		STH + MJJ	30-Nov-04	held meeting with Simon Dye including discussion of pipeline and data products	50	
		STH + MJJ	31-Dec-04	JRL in short telecon with Naylor & Emerson	100	
<b>1.7b</b>	<b>liaise with VDUC on VDFS products for VISTA</b>					
	liaise and monitor progress	MJJ + STH	31-Oct-04	nothing to report	10	
		MJJ + STH	30-Nov-04	nothing to report	10	
		MJJ + STH	31-Dec-04	nothing to report	100	
<b>1.8a</b>	<b>liaise with UKIDSS and JAC on survey progress DB</b>					<b>87</b>
	create version 1 of OMP database mirror to be used with survey progress database, including user interface	JRL	31-Oct-04	no further development	0	
		JRL	30-Nov-04	no further progress	0	
		JRL	31-Dec-04	resumed. currently waiting for feedback from JAC on connectivity problem to main OMP database in Hawaii	50	
<b>1.9</b>	<b>system documentation</b>					<b>87</b>
	update and maintain web pages of system docs	DWE	31-Oct-04	documentation updated as necessary	10	
		DWE	30-Nov-04	documentation updated as necessary	50	
		DWE	31-Dec-04	documentation up to date	100	
<b>2 ESO VISTA software interface deliverables and documentation 4.0</b>						
<b>2.1</b>	<b>VDFS user requirements document</b>					<b>70</b>
	prepare for FDR	PSB	31-Oct-04	discussions over schedule for FDR held. date of FDR now moved to January.	0	
		PSB	30-Nov-04	paused	0	
	update document as appropriate	PSB	31-Oct-04	no further updates	0	
		PSB	30-Nov-04	incorporated feedback received so far on V1.0 draft, now includes failure strategy	50	
		PSB	31-Dec-04	V1.0 of URD submitted for FDR	100	
<b>2.2</b>	<b>data reduction specification document</b>					<b>70</b>
	prepare for FDR	PSB	31-Oct-04	FDR moved to January	0	
		PSB	30-Nov-04	paused	0	
	create new DRS document as required	PSB	31-Oct-04	new document is DRLD. Significant progress on this in the last month resulting in two drafts. 2nd draft is complete in structure and includes most of the details. now awaiting detailed comments from group, plus addition of figures from STH	10	
		PSB	30-Nov-04	incorporated feedback for several sections of DRLD	50	
		PSB	31-Dec-04	DRLD and DRS V1.0 submitted for FDR	100	
	assess CPL+QFITS work requirements	PSB	31-Oct-04	held discussions with Michele Peron and Carlo Izzo at ADASS. Now awaiting official response	10	
		PSB	30-Nov-04	awaiting official response	10	
		PSB	31-Dec-04	subsumed by design requirements within DRLD	100	
<b>2.3</b>	<b>calibration plan document</b>					<b>70</b>
	prepare for and attend FDR	PSB	31-Oct-04	FDR moved to January	0	
		PSB	30-Nov-04	paused	0	
	update doc as appropriate	PSB	31-Oct-04	no further progress	0	
		PSB	30-Nov-04	incorporated feedback received so far on V1.0 draft. Major revision to templates and updated FITS info	50	
		PSB	31-Dec-04	Cal Plan V1.0 submitted for FDR	100	

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<b>2.5</b>	<b>ICD ESO/VPO</b>					<b>60</b>
	update FITS header docs and DID/DIC and submit V0.5 for FDR	PSB	31-Oct-04	QC dictionary written and included in DRLD	50	
		PSB	30-Nov-04	QC dictionary update after critical feedback	50	
		PSB	31-Dec-04	still awaiting feedback on earlier submitted version of DID	50	
<b>2.7</b>	<b>Delivery software modules for exposure time calculator</b>					<b>0</b>
	prepare ETC doc for FDR	PSB	31-Oct-04	latest draft of ETC doc (0.3.3) circulated by STH for internal comment and input from JPE, JMS and WJS following initial comments from MJ1, DWE, JMS	50	
		STH	30-Nov-04	ETC v0.5 completed and sent off to ESO for comment	50	
		STH	31-Dec-04	ETC v0.9 submitted to ESO. Working version on <a href="http://www.ast.cam.ac.uk/vdfs/etc.html">www.ast.cam.ac.uk/vdfs/etc.html</a> . V1.0 to be completed imminently	50	
<b>2.8</b>	<b>liaise with VISTA IR camera development team</b>					<b>75</b>
	continue liaising with VISTA IR camera development team	PSB	31-Oct-04	held discussions with JMS and SB	10	
		PSB	30-Nov-04	held discussions with JMS and SB	50	
		PSB	31-Dec-04	held discussions with JMS and SB	100	
<b>2.9</b>	<b>Development of DQC measures</b>					
	specify what DQC measures will be needed for FDR	PSB	31-Oct-04	listed required parameters and added to DRLD. now need more detailed formulation of how to compute	10	
		PSB	30-Nov-04	formulated more detailed description of QC measures included in DRLD	50	
		PSB	31-Dec-04	DQC measures included in DRLD	100	
<b>3 Pipeline infrastructure and pipeline progress monitoring tools 3.5</b>						
<b>3.1</b>	<b>interactive tools for running pipeline</b>					<b>60</b>
	develop tools and document	JRL	31-Oct-04	more commissioning recipes and scripts written. tests of recipes with WFCAM first light images go well.	10	
		JRL	30-Nov-04	more recipes written and tuned at summit during commissioning.	50	
		JRL	31-Dec-04	a set of commissioning and science recipes exist. over the next two months these will be tuned and modified according to results of tests on the November 2004 commissioning data	50	
<b>3.2</b>	<b>high level scripts to interrogate headers</b>	STH, JMI		paused		<b>50</b>
<b>3.3</b>	<b>automatic progression of results to web pages</b>	STH, JMI		paused		<b>50</b>
<b>3.4</b>	<b>automatic checks to spot failure of pipeline</b>	JMI, STH		paused		<b>0</b>
<b>3.5</b>	<b>Tools for fixing problem datasets</b>	JRL, JMI		paused		
<b>3.6</b>	<b>group documentation on pipeline infrastructure</b>					<b>60</b>
	stress test documentation and update as necessary	JRL, JMI	31-Oct-04	no progress	0	
		JRL, JMI	30-Nov-04	no progress	0	
		JRL, JMI	31-Dec-04	no progress	0	
<b>3.7</b>	<b>Oversee reprocessing WFCAM data after bug fixes/improvements</b>			placeholder		
<b>4 Set up and manage raw science archive 0.0</b>						
<b>4.1</b>	<b>extend UKIRT archive to cope with WFCAM data</b>					<b>50</b>
	create version 1 of WFCAM raw data archive	JRL	31-Oct-04	table schema written. waiting to complete upgrade to sybase database devices before creating the new database	10	
		JRL	30-Nov-04	no further progress	10	
		JRL	31-Dec-04	no further progress	10	
<b>4.2</b>	<b>Ingest and verify WFCAM data</b>					
	ingest commissioning data	JRL	30-Nov-04	ingested WFCAM commissioning data for period 18/10-07/11	10	

		JRL	31-Dec-04	last tapes arrived just before christmas. first half of WFCAM commissioning data ingested (8/16 tapes). part of one tape (covering 3 nights) couldn't be read.	50	
<b>5 Set up and manage data processing system hardware</b>		<b>2.0</b>				
<b>5.1 Investigate alternatives (benchmarking, reliability etc)</b>				completed		<b>100</b>
<b>5.2 buy hardware and install</b>						<b>80</b>
purchase and install bulk storage devices		PSB, JMI		paused		
purchase and install spare ultrium device		PSB, JMI		paused		
<b>5.3 integrating and testing</b>						<b>70</b>
integrate and test bulk storage devices		PSB, JMI		paused		
integrate and test spare ultrium device		PSB, JMI		paused		
<b>5.4 Manage day-to-day maintenance and upgrades</b>						<b>50</b>
continue maintenance and upgrade programme		JMI, PSB	31-Oct-04	proceeding as needed	10	
		JMI, PSB	30-Nov-04	proceeding as required	50	
		JMI, PSB	31-Dec-04	proceeding as required	100	
<b>6 Run standard pipeline</b>		<b>2.5</b>				
<b>6.1 Update WFCAM master calibration frames</b>						
ingest and verify WFCAM on-sky test data		JRL, MJJ	31-Oct-04	awaiting receipt of WFCAM first light images		
		JRL, MJJ	30-Nov-04	have ingested first set of WFCAM commissioning images [all sdf]. verified small sample of individual detectors by direct transfer from summit pipeline	10	
		JRL, MJJ	31-Dec-04	verification in progress	50	
<b>6.2 Monitor detector performance WFCAM</b>				placeholder		
<b>6.3 Oversee standard processing WFCAM</b>				placeholder		
<b>6.4 Astrometric calibration WFCAM</b>				placeholder		
<b>6.5 Photometric Calibration WFCAM</b>				placeholder		
<b>6.6 Verify Science products and monitor DQC measures WFCAM</b>				placeholder		
<b>6.7 Monitor data product transfer to WFAU</b>				placeholder		
<b>6.8 Reprocess WFCAM data</b>				placeholder		
<b>7 Development work for summit pipeline</b>		<b>1.0</b>				
<b>7.1 Interface test pipelines in ORAC-DR</b>		JRL		completed		<b>100</b>
<b>7.2a implement WFCAM pipeline at summit</b>						<b>75</b>
demonstrate catalogue and non-catalogue DQCs		JRL	31-Oct-04	no further progress	0	
			30-Nov-04	investigated QC measures during commissioning	10	
			31-Dec-04	investigations continuing using comissioning data	50	
update & maintain + commissioning enhancements		JRL	31-Oct-04	pipeline recipes added for a variety of microstep and jitter schemes.	10	
			30-Nov-04	improvements and enhancements made during commissioning.	50	
			31-Dec-04	improvements and tuning will continue for next two months using comissioning data	50	
develop recipes for dealing with crosstalk, non-linearity, reset anomalies		JRL	31-Oct-04	no further progress	10	
		JRL	30-Nov-04	recipes for dealing with detector artefacts being developed with the help of on-sky data	50	

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		JRL	31-Dec-04	recipes under development	50	
<b>7.3a</b>	<b>documentation for ORAC-DR interface</b>					<b>60</b>
	update and deliver documentation as development proceeds	JRL	31-Oct-04	documentation added for primitives as they have been written	10	
		JRL	30-Nov-04	documentation added as recipes delivered	50	
		JRL	31-Dec-04	documentation up to date	100	
<b>7.4a</b>	<b>upgrade and maintain summit pipeline WFCAM</b>					
	upgrade and maintain	JRL	31-Oct-04	further upgrades waiting until end of first part of commissioning run	0	
		JRL	30-Nov-04	upgraded in situ during commissioning	50	
		JRL	31-Dec-04	upgrades continue to be made in the light of tests on commissioning data	50	
<b>8 Development and testing of standard 2d processing 4.0</b>						
<b>8.1a</b>	<b>further development of standard pipeline for WFCAM</b>					<b>80</b>
	finish implementing new version of imcore to include full param set	JRL	31-Oct-04	no further progress	0	
		JRL	30-Nov-04	no further progress	0	
		JRL	31-Dec-04	no further progress	0	
<b>8.2a</b>	<b>liaison with WFCAM development team</b>					<b>75</b>
	continue discussion on reset anomaly, crosstalk and linearity	JRL	31-Oct-04	pre-commissioning science-array test data received and analysed.	10	
		JRL	30-Nov-04	much discussion of these issues during commissioning and much data taken to enable characterization of detector 'features'	50	
		JRL	31-Dec-04	Commissioning data shows the extent of each of the effects. January and February 2004 will be used to investigate the source of each and methods to remove them.	50	
	assess science array test data for above problems and report	JRL	31-Oct-04	as above	10	
		JRL	30-Nov-04	test data now in hand and under investigation to enable comprehensive report	50	
		JRL	31-Dec-04	investigations still underway	50	
<b>8.2b</b>	<b>liaison with Project Scientist &amp; VISTA development team</b>					
	assess detector engineering test data	MJI	31-Oct-04	awaiting further engineering test data	0	
		MJI	30-Nov-04	have received VISTA detector test reports and in the process of compiling CASU engineering test wish list	10	
		MJI	31-Dec-04	finished current assessment & completed lab test wish list	100	
<b>8.3a</b>	<b>partake in planning WFCAM commissioning observations</b>					<b>80</b>
	continue liaising with ATC/JAC	STH	31-Oct-04	discussions held with JAC via telecon	10	
		STH	30-Nov-04	telecon with JAC on Nov 4th including discussion of commissioning. held meeting with Simon Dye. JRL then out to UKIRT.	50	
		STH	31-Dec-04	nothing further to report	100	
<b>8.3b</b>	<b>partake in planning VISTA commissioning observations</b>					
	liaise and discuss with camera PS and VISTA PS	STH	31-Oct-04	nothing to report	10	
		STH	30-Nov-04	nothing to report	50	
		STH	31-Dec-04	nothing to report	100	
<b>8.4a</b>	<b>Participate directly in commissioning WFCAM</b>					
	help with first phase of WFCAM on-sky commissioning	JRL	31-Oct-04	bug fixes and upgrades being issued in real time	10	
		JRL	30-Nov-04	visited UKIRT to participate directly	100	
<b>8.5</b>	<b>Tuning pipeline during commissioning and after</b>					
	use commissioning data to tune processing strategy	MJI	31-Oct-04	awaiting commissioning data	0	
		MJI	30-Nov-04	some tuning and refinement completed at JAC	50	
		MJI	31-Dec-04	tuning investigations in progress	50	
	assess the quality and stability of the master calibration data	JRL	31-Oct-04	awaiting commissioning data	0	

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		JRL	30-Nov-04	quality assessed. stability to be assessed back in Cambridge	50	
		JRL	31-Dec-04	on going	50	
<b>8.6</b>	<b>documentation for 2D processing software</b>					<b>50</b>
	updates docs as necessary	JRL	31-Oct-04	no progress	0	
		JRL	30-Nov-04	no progress	0	
		JRL	31-Dec-04	no progress	0	
<b>8.7</b>	<b>Comparison between automated and manual data products</b>					<b>75</b>
	compare FIRES with published results and write report	STH	31-Oct-04	MJI has compared imcore runs on FIRES reduced and CASU reduced datasets.	10	
		STH	30-Nov-04	no progress	10	
		STH	31-Dec-04	no progress	10	
	compare CSV reduced FIRES data with pipeline reduction	STH	31-Oct-04	meeting arranged with CSV	0	
		STH	30-Nov-04	Simon Dye has made no progress and does not plan to reduce this dataset. paused	0	
		STH	31-Dec-04	now superceded by arrival of WFCAM data	0	
<b>9 Development and testing of standard catalogue products 4.0</b>						
<b>9.1</b>	<b>add in new measures requested</b>					<b>60</b>
	finish testing and debugging new catalogue parameter measures	MJI	31-Oct-04	no progress	0	
		MJI	30-Nov-04	no progress	0	
		MJI	31-Dec-04	no progress	0	
<b>9.2</b>	<b>refine astrometric calibration model</b>	MJI		paused		<b>85</b>
<b>9.3</b>	<b>generate model simulations of expected data</b>	STH, JMI		paused		<b>80</b>
	refine simulations	DWE	31-Oct-04	more detailed simulations run due to improved accuracy of astrometric PSF fitting and updated interleaving report	100	
<b>9.4</b>	<b>assess catalogue parameter reliability</b>					<b>70</b>
	refine parameter error estimates and check for systematics in new params	MJI	31-Oct-04	no progress	0	
		MJI	30-Nov-04	no progress	0	
		MJI	31-Dec-04	no progress	0	
<b>9.5</b>	<b>intercomparison of catalogue products with other packages</b>	JMI		paused		<b>60</b>
<b>9.6</b>	<b>Completeness and error estimates</b>			stopped - subsumed into 9.4		
<b>9.7</b>	<b>documentation of catalogue software and products</b>					<b>55</b>
	update catalogue products documentation	MJI	31-Oct-04	no progress	0	
		MJI	30-Nov-04	more updates to docs (pods) made	50	
		MJI	31-Dec-04	further updates as required	100	
<b>10 Setup trial and run further processing pipeline 3.0</b>						
<b>10.1</b>	Manage and run further processing stages			placeholder		
<b>10.2</b>	<b>development and assessment of PSF options 1,2</b>					<b>50</b>
	produce robust version of code for PSF level 1	MJI	31-Oct-04	no progress	0	
		MJI	30-Nov-04	Level one code completed.	100	
	produce prototype for PSF level 2	MJI	31-Oct-04	no progress	0	
		MJI	30-Nov-04	level 2 ML code constructed, still needs debugging and incorporation	50	
		MJI	31-Dec-04	no further progress	50	
<b>10.3</b>	<b>develop 1D/2D PSF-deconvolved Sersic profile fits</b>			paused awaiting real WFCAM data		

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10.4	Develop LSBG/nebulosity detection/parameterisation			placeholder		
10.5	Full iterative profile fitting for stellar images			placeholder		
10.6	Develop and optimize Bayesian image classification			placeholder		
10.7	Modelling and simulations of further processing steps			placeholder		
<b>11 Photometric standards and calibration 3.0</b>						
11.1	agree on primary standards					90
	complete narrow band filter calibration plan and update document	STH	31-Oct-04	discussions with Paul Hirst and contacted Sandy Leggett	10	
		STH	30-Nov-04	no further progress	10	
		STH	31-Dec-04	no further rogress	10	
11.2	choose secondary standard fields					80
	refine/shorten list	STH	31-Oct-04	list updated to include more northern stars. next need to reject fields with too bright objects in WFCAM footprint	10	
		STH	30-Nov-04	folded WFCAM expected saturation level into target selection. list shortened	50	
		STH	31-Dec-04	SKL has obtained CGS4 spectra to aid WFCAM calilbration - specifically Y,Z and narrowband filters	50	
11.3	take part in commissioning observations WFCAM					25
	phase I on-sky characterisation	JRL	31-Oct-04	planned trip to Hawaii for November	10	
		JRL	30-Nov-04	took part in on-sky characterisation phase I	100	
11.7	assess extinction monitoring methods and develop measures					50
	simulate from night(s) data and estimate expected accuracy	STH	31-Oct-04	no progress	0	
		STH	30-Nov-04	no progress	0	
		STH	31-Dec-04	no progress	0	
<b>12 Further development of DQC measures at summit and Cambr 2.0</b>						
12.1	develop extra systematic noise measures					50
	trial when WFCAM data becomes available	MJI	31-Oct-04	awaiting WFCAM data	0	
		MJI	30-Nov-04	no progress - only just received data	0	
		MJI	31-Dec-04	made a start. will progress this with commissioning data over the next two months	10	
12.2	Refine current measures for WFCAM/VISTA data					20
	trial when WFCAM data becomes available	JRL	31-Oct-04	will progress this when WFCAM commissioning data becomes available	0	
		JRL	30-Nov-04	no progress - only just received data	0	
		JRL	31-Dec-04	made a start. will progress this with commissioning data over the next two months	10	
12.3	implement 2mass for throughput measurement					75
	implement local access version at summit	JMI	31-Oct-04	no progress	0	
		JMI	30-Nov-04	no progress	0	
		JMI	31-Dec-04	no progress	0	
12.4	master calibration frames for detector monitoring					35
	assess and report on science array test data	JRL	31-Oct-04	awaiting commissioning data	0	
		JRL	30-Nov-04	no progress - only just received data	0	
		JRL	31-Dec-04	made a start. will progress this with commissioning data over the next two	10	
<b>13 Co-located list driven photometry 3.0</b>						
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-Oct-04	no progress	0	

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		MJI	30-Nov-04	no progress	0	
		MJI	31-Dec-04	no progress	0	
13.3	externally driven WCS photometry and define parameter set					75
	extend to full 80 parameter set	MJI	31-Oct-04	no progress	0	
		MJI	30-Nov-04	no progress	0	
		MJI	31-Dec-04	no progress	0	
<b>14 Stacking and mosaicing 4.0</b>						
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 weighting and defect rejection					25
	refine and test current seeing weighting method on FIRES data	MJI	31-Oct-04	seeing weighting apparently gives 0.2 mag improvement in depth. tests continuing	50	
		MJI	30-Nov-04	no further progress	50	
		MJI	31-Dec-04	no further progress	50	
<b>15 Continuum subtraction and basic difference imaging 4.0</b>						
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-Oct-04	upgraded as needed	10	
		MJI	30-Nov-04	upgraded as needed	50	
		MJI	31-Dec-04	upgraded as needed	100	
15.4	transit event detection					0
	assess difference imaging method (continuum subtraction)	STH	31-Oct-04	no progress	0	
		STH	30-Nov-04	assessment ongoing - using INT WFC Orion observations	10	
		STH	31-Dec-04	progressing well with INT WFC an WASP datasets	50	
<b>16 Interpolation techniques and PSF modeling 4.0</b>						
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 development and testing of astrometric refinement code	DWE	31-Oct-04	alternative non-linear least squares module being debugged with astrometric PSF fitting. Slow algorithm 2-4 times more accurate than standard pipeline	10	
		DWE	30-Nov-04	astrometric refinement code effectively finished. Phase 2 report being written	50	
		DWE	31-Dec-04	phase 2 report written. awaiting internal review	50	
16.4	oversampled PSF generation per detector			finished		100
16.5	develop oversampled spatially varying PSF model					0
	finish initial development of spatially varying PSF model	DWE	31-Oct-04	no progress	0	
		DWE	30-Nov-04	programme written to analyse spatial variation of PSF using chi-squared from PSF fits. Tested on optical data. Awaiting real WFCAM data.	50	
			31-Dec-04	no progress pending useful data	50	
	final tuning on WFCAM on-sky data	DWE	31-Oct-04	no progress	0	
		DWE	30-Nov-04	paused	0	



			DWE	31-Dec-04	paused	0
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