

## 03Q4\_casu\_deliverables.xls

WP #	CASU WP name /sub task / 03Q4 deliverable	V.I.F.	name	date	end of month report	% done
<b>1</b>	<b>Management and definition of project responsibilities</b>	<b>3.0</b>				
<b>1.1</b>	<b>report to VISTA, UKIDSS, JAC, ATC, GSC</b>					
	provide fortnightly meeting minutes, monthly reports on progress + quarterly review reports and planning		MJI + STH			
<b>1.2</b>	<b>interface control document between CASU and JAC</b>					<b>50</b>
	in conjunction with JAC produce and sign off hard copy		MJI			
<b>1.3</b>	<b>interface control document between CASU and WFAU</b>					<b>50</b>
	sign off Q2 ICD and finalise advanced processing product ICD		MJI			
<b>1.4</b>	<b>define data structures and FITS headers</b>		JRL		paused	<b>50</b>
<b>1.5</b>	<b>define observing protocols</b>		STH		paused	<b>50</b>
<b>1.6</b>	<b>liaise with UKIDSS &amp; JAC on observing strategy</b>					<b>50</b>
	monitor progress		DWE			
<b>1.7</b>	<b>liaise with UKIDSS &amp; JAC on survey planning</b>					<b>50</b>
	monitor progress		DWE			
<b>1.8</b>	<b>liaise with UKIDSS and JAC on survey progress DB</b>					<b>50</b>
	get feedback from JAC for mirroring of current progress database		JRL			
	investigate use of Sybase Replication Server to perform the task		JRL			
	deliver a working mirror copy of the OMP database		JRL			
<b>1.9</b>	<b>system documentation</b>					<b>50</b>
	update and maintain web pages of system docs		DWE			
<b>2</b>	<b>ESO VISTA software interface deliverables and documentation</b>	<b>4.0</b>				
<b>2.1</b>	<b>VDFS user requirements document</b>					<b>50</b>
	incorporate minor improvements prior to FDR		PSB			
<b>2.2</b>	<b>data reduction specification document</b>					<b>50</b>
	produce first real draft of DRS document		PSB			
<b>2.3</b>	<b>calibration plan document</b>					<b>50</b>
	incorporate draft plan for calibration fields		PSB			
<b>2.5</b>	<b>ICD ESO/VPO</b>					<b>50</b>
	draft version of Data Interface dictionary - esp. FITS header specification		PSB			
	work on templates/Obs		PSB			
<b>2.8</b>	<b>liaise with VISTA IR camera development team</b>					<b>50</b>
	check camera documentation for conflicts/issues		PSB			
<b>3</b>	<b>Pipeline infrastructure and pipeline progress monitoring tools</b>	<b>3.5</b>				
<b>3.1</b>	<b>interactive tools for running pipeline</b>		JRL		paused	<b>50</b>
<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>3.6</b>	<b>group documentation on pipeline infrastructure</b>					<b>50</b>
	modify current documentation according to recommendations from stress tests.		JRL			
<b>4</b>	<b>Set up and manage raw science archive</b>	<b>0.0</b>				

<b>5 Set up and manage data processing system hardware</b>						<b>2.0</b>					
<b>5.2 buy hardware and install</b>											<b>50</b>
install and test data ingest server hardware/software			MTB								
<b>5.3 integrating and testing</b>											<b>0</b>
install and test pipeline software			MTB								
<b>6 Run standard pipeline</b>						<b>2.5</b>					
<b>7 Development work for summit pipeline</b>						<b>1.0</b>					
<b>7.1 Interface test pipelines in ORAC-DR</b>											<b>50</b>
update and trial updated test pipelines			JRL								
<b>7.2 implement WFCAM pipeline at summit</b>											<b>10</b>
CVS deposit and trial test ORACDR pipeline at JAC			JRL								
End-to-end comparative pipeline tests (ORACDR/CASU/Starlink)			JRL								
Demonstrate catalogue and non-catalogue DQCs			JRL								
<b>7.3 documentation for ORAC-DR interface</b>			JRL								<b>50</b>
continue to add to interface documentation as pipeline modules are written. These will appear in the CIRDR and ORACDR documentation sets											
<b>8 Development and testing of standard 2d processing</b>						<b>4.0</b>					
<b>8.1 further development of standard pipeline</b>											<b>50</b>
deliver report on flatfielding and sky subtraction strategies			JRL								
write updated wrapper for improved version of catalogue software			JRL								
<b>8.2 liaison with WFCAM development team</b>											<b>10</b>
assess engineering test data for reset anomaly, dark stability, cross-talk, image retention and linearity			JRL								
<b>8.3 partake in planning commissioning/characterisation observations</b>			STH					paused			<b>50</b>
<b>8.6 documentation for 2D processing software</b>											<b>50</b>
updates docs as necessary and as a result of feedback			JRL								
<b>8.7 Comparison between automated and manual data products</b>											<b>50</b>
pipeline process FIRES data			STH								
pipeline process UFTI data			STH								
<b>9 Development and testing of standard catalogue products</b>						<b>4.0</b>					
<b>9.1 add in new measures requested</b>											<b>10</b>
Produce first version of catalogue software with all extra measures			MJI								
<b>9.2 refine astrometric calibration model</b>			MJI					paused			<b>50</b>
<b>9.3 generate model simulations of expected data</b>			STH, JMI					paused			<b>50</b>
<b>9.4 assess catalogue parameter reliability</b>			JMI					paused			<b>50</b>
<b>9.5 intercomparison of catalogue products with other packages</b>			JMI					paused			<b>50</b>
<b>9.6 Completeness and error estimates</b>			JMI					paused			<b>50</b>
<b>9.7 documentation of catalogue software and products</b>											<b>50</b>
update docs as necessary and as a result of feedback			MJI								
<b>10 Setup trial and run further processing pipeline</b>						<b>3.0</b>					

<b>11 Photometric standards and calibration</b>		<b>3.0</b>		
<b>11.1 agree on primary standards</b>				<b>50</b>
investigate and report on narrow-band filter calibration options	STH			
extend primary standards to VISTA	STH			
<b>11.2 choose secondary standard fields</b>				<b>50</b>
incorporate feedback from working group on choice of secondary fields and update document	STH			
choose secondary standard fields for VISTA	STH			
<b>11.7 assess extinction monitoring methods and develop measures</b>				<b>0</b>
investigate UKIRT archive and write report	STH			
<b>12 Further development of DQC measures at summit and Cambr</b>		<b>2.0</b>		
<b>12.3 implement 2mass for throughput measurement</b>	JMI		paused	<b>50</b>
<b>12.4 master calibration frames for detector monitoring</b>				<b>10</b>
assess and report if current methods work on engineering WFCAM data	JRL			
<b>13 Co-located list driven photometry</b>		<b>3.0</b>		
<b>13.2 develop basic WCS-based list driven photometer</b>				<b>50</b>
investigate practicalities and implement agreed ICD for parameters	MJI			
<b>13.4 externally driven WCS photometry and define parameter set</b>				<b>0</b>
modify software to take external lists of positions and define parameter set	MJI			
<b>14 Stacking and mosaicing</b>		<b>4.0</b>		
<b>14.1 develop benchmark simple stacking/mosaicing framework</b>	MJI		complete	<b>100</b>
<b>14.2 NN algorithm with simple rejection</b>	MJI		complete	<b>100</b>
<b>14.3 More sophisticated rejection dealing with pixellation</b>				<b>0</b>
improve algorithms to deal with pixellation	MJI			
<b>15 Continuum subtraction and basic difference imaging</b>		<b>4.0</b>		
<b>15.1 Simple WCS-based subtraction techniques</b>	MJI		paused	<b>50</b>
<b>15.2 investigate and apply different interpolation methods</b>	MJI		paused	<b>50</b>
<b>15.3 develop adaptive kernel matching option</b>				<b>10</b>
improve CASU version and update difference imaging report	MJI			
<b>16 Interpolation techniques and PSF modeling</b>		<b>4.0</b>		
<b>16.1 investigate alternative interpolation/PSF schemes</b>				<b>50</b>
finish review and write short report on alternatives	DWE			
<b>16.2 implications for different stacking methods</b>				<b>0</b>
quantify effects of interpolation on stacked image quality	MJI			
<b>16.3 implications for deriving catalogues and parameters</b>				<b>50</b>
assess and write report on errors in catalogue parameters arising from using different interpolation and interleaving schemes	DWE			
<b>16.4 oversampled PSF generation per detector</b>				<b>10</b>
write first pass PSF generator using optical test data	DWE			