

04Q1m2_casu_deliverables.xls

WP	CASU WP name /sub task / 04Q1 deliverable	V.I. F.	name	date	end of month report	%Sub	% task
#							
	1 Management and definition of project responsibilities		3.0				
	1.1 report to VISTA, UKIDSS, JAC, ATC, GSC						50
	provide fortnightly meeting minutes, monthly reports on progress + quarterly review reports and planning		MJI + STH	31/01/04	reported minutes from CASU meetings. prepared documents for VDMT monthly meeting	10	
			MJI + STH	29/02/04	reported minutes from CASU meetings. prepared documents for VDMT monthly meeting	50	
	prepare for and attend PPRP meeting in Feb		MJI + STH	31/01/04	prepared for PPRP meeting	50	
			MJI + STH	29/02/04	MJI gave presentation to PPRP	100	
	define CASU programme for e-skill bid		MJI + STH	31/01/04	CASU e-science II programme defined	100	
	1.2 interface control document between CASU and JAC				completed		100
	1.3 interface control document between CASU and WFAU				completed		100
	1.4 define data structures and FITS headers				completed		100
	1.5 define observing protocols						70
	define sensible range of suggested MSBs in conjunction with UKIDSS and JAC		MJI + STH	31/01/04	MSB guidelines drawn up and sent to UKIDSS CSS for comment	50	
			MJI + STH	29/02/04	iterated on MSB guidelines with JAC and CSS	50	
	1.6 liaise with UKIDSS & JAC on observing strategy & survey planning						75
	monitor progress		DWE	31/01/04	nothing to report	10	
			DWE	29/02/04	generated plots showing SDSS DR2 & 3 coverage w.r.t UKIDSS surveys. This has been posted on the UKIDSS www pages	50	
	1.7 liaise with UKIDSS & JAC on VDFS products						50
	monitor progress		DWE	31/01/04	STH attended meeting with Casali & Warren and asked SJW to read JRL's report on UFTI processing and send feedback. STH suggested to SJW that a meeting be arranged in february to discuss processing issues.	10	
			DWE	29/02/04	see JRL's reports on processing issues	50	
	1.8 liaise with UKIDSS and JAC on survey progress DB		JRL		paused		50
	1.9 system documentation						50
	update and maintain web pages of system docs		DWE	31/01/04	script for generating document www pagees completed. awaiting internal review and feedback before pages go live. Document numbering now almost complete.	50	
			DWE	29/02/04	document numbering completed and web page live	50	
	write wrapper for WFCAM fits header for ESO		JRL	31/01/04	no progress this month	0	
			JRL	29/02/04	draft sent to ESO, awaiting reply	50	
	2 ESO VISTA software interface deliverables and documentation		4.0				
	2.1 VDFS user requirements document						70
	update & prepare for PDR		PSB	31/01/04	WJS is collaborating in expanding/updating science requirements	10	
			PSB	29/02/04	Gave feedback to WJS on UK-VDFS first draft. Will incorporate parts of 2nd draft	50	
	2.2 data reduction specification document						30
	update & prepare for PDR		PSB	31/01/04	made a small amount of progress	10	
			PSB	29/02/04	no progress	10	

2.3 calibration plan document					60
update & prepare for PDR	PSB	31/01/04	no progress	0	
	PSB	29/02/04	studying FLAMES calibration plan document	10	
report on QFITS & CPL -v- CASU module & CFITSIO	PSB	31/01/04	JRL has extracted the CFITSIO functionality used in CIRDR and we have produced a comparison with QFITS/CPL for discussion at the next CASU meeting. This will lead to a section in the DRS	50	
	PSB	29/02/04	short report completed and presented to CASU meeting. More detailed report to be presented at VISTA camera-pipeline meeting and incorporated into PDR documentation	50	
2.5 ICD ESO/VPO					60
update draft version of Data Interface dictionary - especially FITS header specification	PSB	31/01/04	corrected HIREARCH keywords, generated full VISTA dummy FITS file, reviewed HOWFS DID	50	
	PSB	29/02/04	no progress	50	
work on templates/Obs	PSB	31/01/04	template/obs: installed P2PP for training	10	
	PSB	29/02/04	studying P2PP OB generation, especially IMPEX	50	
use ISAAC example for translating pipeline DID keywords to ESO style	PSB	31/01/04	no progress	0	
	PSB	29/02/04	Examined ISAAC keywords for sequencing and their appropriateness for VISTA	10	
2.8 liaise with VISTA IR camera development team	PSB	31/01/04	Obtained access to ATC ESO W/S, ESO CMM. Reviewed data transfer issues with SMB	50	50
	PSB	29/02/04	Iterating towards camera PDR dates. Liasing on timestamps issue	50	
3 Pipeline infrastructure and pipeline progress monitoring tools	3.5				
3.1 interactive tools for running pipeline	JRL		paused		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
3.6 group documentation on pipeline infrastructure					55
modify current documentation according to recommendations from stress tests.	JRL	31/01/04	no progress	0	
	JRL	29/02/04	no progress	0	
4 Set up and manage raw science archive	0.0				
5 Set up and manage data processing system hardware	2.0				
5.2 buy hardware and install	MTB		paused		70
5.3 integrating and testing					50
finish installing and testing pipeline and toolkit on data ingest server	MTB	31/01/04	installed, undergoing testing	50	
	MTB	29/02/04	finished testing	100	
5.4 Manage day-to-day maintenance and upgrades					20
upgrade remaining development PCs to Debian Linux OS	MTB	31/01/04	all of the data development PCs have been successfully changed over to Debian Linux OS	100	
6 Run standard pipeline	2.5				
7 Development work for summit pipeline	1.0				
7.1 Interface test pipelines in ORAC-DR	JRL		completed		100
7.2 implement WFCAM pipeline at summit					75

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End-to-end comparative pipeline tests (ORACDR/CASU/Starlink)	JRL	31/01/04	End-to-end comparative test completed between the two ORACDR UFTI pipelines (Standard and CASU). Results written up and posted to documentation www pages.	100	
Demonstrate catalogue and non-catalogue DQCs	JRL	31/01/04	DQC estimates demonstrated in comparative test document. No more can be done with this now until we have real data	50	
	JRL	29/02/04	paused pending arrival of engineering data	50	
7.3 documentation for ORAC-DR interface	JRL	31/01/04	paused		60
continue to add to interface documentation as pipeline modules are written. These will appear in the CIRDR and ORACDR documentation sets					
8 Development and testing of standard 2d processing 4.0					
8.1 further development of standard pipeline					80
finish & deliver report on flatfielding and sky subtraction strategies	JRL	31/01/04	FIRES data is now fully reduced and a report is underway. two nights of the UFTI service data were reduced using twilight (sunrise) flats. Results have been written up and posted in public WFCAM doc area.	50	
	JRL	29/02/04	sky subtraction paper written and posted in public WFCAM doc area	100	
write updated wrapper for improved version of catalogue software	JRL	31/01/04	no progress this month	0	
	JRL	29/02/04	updated catalogue generation routine nearly complete	50	
finish incorporating extra parameter measures	JRL	31/01/04	no progress this month	0	
	JRL	29/02/04	started	10	
8.2 liaison with WFCAM development team					30
assess engineering test data for reset anomaly, dark stability, cross-talk, image retention and linearity	JRL	31/01/04	STH attended meeting with Casali and Warren to discuss status of camera and plans for characterisation in the lab, and commissioning on the telescope. Report from this meeting discussed in CASU meeting and minuted. No test data yet, but agreement reached that CASU will have access to these frames as they appear in the near future.	10	
	JRL	29/02/04	paused pending test data	10	
8.3 partake in planning commissioning/characterisation observations	STH	31/01/04	paused		80
8.6 documentation for 2D processing software					50
updates docs as necessary and as a result of feedback	JRL	31/01/04	no progress this month	0	
	JRL	29/02/04	no progress this month	0	
8.7 Comparison between automated and manual data products					75
finish pipeline processing of FIRES data	STH	31/01/04	as 8.1, pipeline processing finished	100	
pipeline process UFTI data as it comes	STH	31/01/04	UFTI data processed up to date. No more service observations planned	100	
9 Development and testing of standard catalogue products 4.0					
9.1 add in new measures requested					60
test and debug new catalogue parameter measures	MJI	31/01/04	all of the new flux measures have been tested and debugged	50	
	MJI	29/02/04	parameter error analysis begun	50	
9.2 refine astrometric calibration model	MJI		paused		80
9.3 generate model simulations of expected data	STH, JMI		paused		80
9.4 assess catalogue parameter reliability					70
refine parameter error estimates and check for systematics in new parameters	JMI		no progress	0	
	MJI	29/02/04	see 9.1	10	
9.5 intercomparison of catalogue products with other packages	JMI		paused		60

9.6	Completeness and error estimates					50
	refine parameter error estimates and check for systematics	JMI		no progress		0
		MJI	29/02/04	see 9.1		10
9.7	documentation of catalogue software and products					55
	update catalogue products documentation	MJI		no updates this month		0
		MJI	29/02/04	no progress		0
10	Setup trial and run further processing pipeline					3.0
10.2	development and assessment of PSF options 1,2					30
	produce prototype PSF fitting code level 1	MJI	31/01/04	awaiting oversampled PSF generator		0
		MJI	29/02/04	prototype code written		10
11	Photometric standards and calibration					3.0
11.1	agree on primary standards					90
	complete narrow band filter calibration plan and update document	STH	31/01/04	no progress		0
		STH	29/02/04	no progress		
11.2	choose secondary standard fields					80
	incorporate feedback from working group on choice of secondary fields and update document	STH	31/01/04	no progress		0
		STH	29/02/04	some feedback from WJS being incorporated		10
	complete choice of secondary standard fields for VISTA and update photometry document	STH	31/01/04	no progress		0
		STH	29/02/04	visual inspection and construction of finding charts for all standard fields nearing completion		50
11.7	assess extinction monitoring methods and develop measures					50
	complete investigation of UKIRT archive and write report	STH	31/01/04	no progress		0
		STH	29/02/04	analysis of data underway		50
	prepare for calibration WG meeting and present report	STH	29/02/04	no progress		0
12	Further development of DQC measures at summit and Cambr					2.0
12.1	develop extra systematic noise measures					50
	linked with detector characterisation	MJI	31/01/04	no progress, awaiting WFCAM data		0
		MJI	29/02/04	no progress, awaiting WFCAM data		0
12.2	Refine current measures for WFCAM/VISTA data					20
	linked with detector characterisation	JRL	31/01/04	paused, awaiting engineering data		0
		JRL	29/02/04	paused, awaiting engineering data		0
12.3	implement 2mass for throughput measurement					75
		JMI		paused		
12.4	master calibration frames for detector monitoring					35
	assess and report if current methods work on engineering WFCAM data	JRL	31/01/04	still paused, no engineering data		0
		JRL	29/02/04	still paused, no engineering data		0
13	Co-located list driven photometry					3.0
13.2	develop basic WCS-based list driven photometer					90
	investigate practicalities and implement agreed ICD for parameters	MJI	31/01/04	code for generating the default CASU 32 parameter set has been written and tested	50	
		MJI	29/02/04	no further progress	50	
13.3	externally driven WCS photometry and define parameter set					65
	refine, test and debug list-driven parameter estimator	MJI	31/01/04	code for external list-driven photometry progressed to same stage as 13.2	50	
		MJI	29/02/04	no further progress	50	

14 Stacking and mosaicing		4.0			
14.1	develop benchmark simple stacking/mosaicing framework	MJI		complete	100
14.2	NN algorithm with simple rejection	MJI		complete	100
14.3	More sophisticated rejection dealing with pixellation				50
	continue development of better spurion rejection allowing for pixellation	MJI	31/01/04	no progress this month	0
		MJI	29/02/04	no progress this month	0
15 Continuum subtraction and basic difference imaging		4.0			
15.1	Simple WCS-based subtraction techniques	MJI		completed	100
15.2	investigate and apply different interpolation methods	MJI		completed	100
15.3	develop adaptive kernel matching option				60
	continue debugging and enhancements to adaptive kernel package	MJI	31/01/04	no progress this month	0
		MJI	29/02/04	no bugs found. more tests done	50
16 Interpolation techniques and PSF modeling		4.0			
16.1	investigate alternative interpolation/PSF schemes				70
	investigate PSF fitting algorithms and write report	DWE	31/01/04	first version of list driven PSF photometry code completed. Currently undergoing initial tests.	50
		DWE	29/02/04	tests on simulated data complete	50
16.2	implications for different stacking methods				20
	quantify effects of interpolation on stacked image quality	MJI	31/01/04	no progress this month	0
		MJI	29/02/04	no progress this month	0
16.3	implications for deriving catalogues and parameters				70
	test profile fitting parameters and write report	DWE	31/01/04	no progress, awaiting 16.1	0
		DWE	29/02/04	no progress, awaiting 16.1	0
16.4	oversampled PSF generation per detector				10
	write first pass PSF generator using optical test data	DWE	31/01/04	first-pass PSF generator written. Testing.	50
		DWE	29/02/04	tests on simulated data complete	50