

Data Flow System

Document Title:

VISTA Infrared Camera Data Flow System FDR RID Responses

Document Number:

VIS-TRE-IOA-20000-0013

Issue:

0.4

Date:

2005-01-26

Document Prepared by:	VDFS Team	Signature and Date:	
Document Released by:	Malcolm Stewart (VDFS Manager)	Signature and Date:	
Document Released by:		Signature and Date:	

VISTA DATA FLOW	Infrared Camera PDR RID Responses	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
SYSTEM	T T T T T	Issue:	0.4
		Page:	2 of 104
		Author:	VDFS Team

Change Record

Issue	Date	Sections Affected	Remarks
0.4	2005-01-26	All	Sent to ESO

Notification List

ATC:	Malcolm Stewart
	Steven Beard
RAL:	Gavin Dalton
Cambridge:	Mike Irwin
	Will Sutherland
QMUL:	Jim Emerson
ESO:	Michele Peron

Contents

C	hange Recor	[.] d	2
Ν	otification L	ist	2
1	Introduct	ion	6
	1.1 Sco	pe	6
	1.2 Acro	onyms and Abbreviations	6
	1.3 App	licable Documents	6
	1.4 Refe	erence Documents	6
2	Review I	tems	7
	2.1 Rev	iew Items referring to the User Requirements URD [RD1]	7
	2.1.1	PBA-001 URD Sec 0:D:1618v2:PSB	8
	2.1.2	MPE-008 URDetc Sec 4.2.2:C:Rephrase VISTA Pipeline:PSB	9
	2.1.3	MPE-007 URD Sec 4.2.1:D:OB processing:PSB	.10
	2.1.4	WHU-022 URD Sec 4.3:D:Data Rate:WJS	.11
	2.1.5	WHU-001 URD Sec 5.4:C:OB Parent:JPE	.13
	2.2 Rev	iew Items referring to the Calibration Plan CP [RD2].	.14
	2.2.1	PBA-006 CP Sec 0:0:1618v2:PSB	.15
	2.2.2	AKA-003 CP Sec 1.3:Errors Breakdown:MJI	.16
	2.2.3	WHU-004 CP Sec 1.6:O:Confidence Map:MJI	.18
	2.2.4	FCO-007 CP Sec 3.2.2:O:Why flat-field HOWFS?:SMB	.19
	2.2.5	SCA- 001 CP Sec 4:D:Master/Mean:STH	.20
	2.2.6	WHU-05 CP Sec 4.3:C:Dark doesn't move telescope:SMB	.21
	2.2.7	WHU-06 CP Sec 4.3:D:trend:PSB	.22
	2.2.8	FCO008 CP Sec 4.4:O:Spectral energy in flats:MJI	.23
	2.2.9	MPE-013 CP Sec 4.6:C:Trend:PSB	.24
	2.2.10	SCA-002 CP Sec 4.6:O:Even no. of dome flats:JRL	.25
	2.2.11	WHU-07 CP Sec 4.7:D:Dusk and Dawn:MJI	.26
	2.2.12	WHU-08 CP Sec 4.9:O:Persistence:PSB	.27
	2.2.13	PBA-007 CP Sec 6:D:in Cal Plan but not DRLD:PSB	.28
	2.2.14	FCO-009 CP Sec 6.1.1:O:Spectral energy in flats:MJI	.29
	2.2.15	MPE-014 CP Sec 7.2:C:No QC0 filtering:PSB	.30
	2.2.16	WHU-09 CP Sec 7.3:O:QC table:PSB	.31
	2.2.17	AKA-002 CP Sec 8:O:DPR - Recipe table:PSB	.32
	2.2.18	FCO-010 CP Sec 8.3.1:C:Offset Pattern in Templates:SMB	.33
	2.2.19	WHU-10 CP Sec 10.2:O:ORIGFILE keyword:PSB	.34
	2.3 Rev	iew Items referring to the Data Reduction Specification DRS [RD3].	.35
	2.3.1	PBA-008 DRS Sec 0:D:1618v2 + ADs:PSB	.36
	2.3.2	MPE-005 DRS Sec 0:C:DO wording:PSB	.37
	2.3.3	MPE-001 DRS Sec 1.1:D:Rephrase:PSB	.38
	2.3.4	MPE-002 DRS Sec 1.3:D:1618 v2:PSB	.39
	2.3.5	SCA-003 DRS Sec 2:O:Colours:STH	.40
	2.3.6	WHU-002 DRS Sec 3.2:D:look for stability:JRL	.41
	2.3.7	SCA-004 DRS 3.3.3 Trending	.42
	2.3.8	MPE-004 DRS Sec 3.4:D:OB processing:MJI	.43
	2.3.9	MPE-003 DRS Sec 3.5:D:Prepared OB discrepancy:PSB	.45
	2.3.10	WHU-003 DRS Sec 4.1.1:O:scan of FITS headers:JRL	.46

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM		Issue:	0.4
		Page:	4 of 104
		Author:	VDFS Team

0 0 1 1		
2.3.11	SCA-005 DRS Sec 5:0:Typo:PSB	47
2.3.12	SCA-006 DRS Sec 5.1:C:Parameter passing:JRL	48
2.3.13	MPE-006 DRS Sec A:C:Tile compression:MJI	49
2.3.14	PBA-009 DRS Sec A:C:Image sections:JRL	50
2.3.15	PBA-010 DRS Sec A:C:Tables:PSB	51
2.3.16	PBA-011 DRS Sec A:C:CPL Errors:JRL	52
2.3.17	PBA-012 DRS Sec A:C:WCSLIB:PSB	53
2.4 Re	view Items referring to the Data Reduction Library Design DRLD []	RD4].
54		-
2.4.1	SCA-008 DRLD Sec 0:C:External Libraries:JRL	55
2.4.2	PBA-013 DRLD Sec 1.2:C:+AD:PSB	56
2.4.3	PBA-016 DRLD Sec 2 13:C:How generate catalogs:IRL	57
2.4.4	FCO-001 DRLD Sec 2.7:C.Persistence decay IRL	58
2.1.1	FCO-002 DRLD Sec 2.9. Criterisistence decay srd	59
2.4.5	PBA-017 DRLD Sec 3:C: Association Man: STH	60
2.4.0	MDE 010 DDI D See 4:D:DDD keywords:DSP	00 61
2.4.7	MDE 012 DDI D See 4.D.Dr K Keywolds.r SD	01 62
2.4.8	MPE-012 DRLD Sec 4:D:Processing table:JRL	02
2.4.9	PBA-018 DRLD Sec 4:D:Class keywords:JRL	63
2.4.10	WHU-011 DRLD Sec 4:0:DPR table:PSB	64
2.4.11	WHU-012 DRLD Sec 4.2:O:DRP keys:JRL	65
2.4.12	WHU-023 DRLD Sec 4.2:O:HOWFS data:SMB	66
2.4.13	MPE-009 DRLD Sec 5.1:O:File keywords:JRL	67
2.4.14	WHU-013 DRLD Sec 5.1:O:Fits key/time stamp:JRL	68
2.4.15	WHU-014 DRLD Sec 5.8:D:Persistence:JRL	69
2.4.16	FCO-003 DRLD Sec 5.9:C:Explain need for extracted standards	
table:JR	RL 70	
2.4.17	SCA-007 DRLD Sec 5.11:C:Floating:JRL	71
2.4.18	PBA-014 DRLD Sec 6.1.5:C:PRO/DRS keywords:JRL	72
2.4.19	FCO-004 DRLD Sec 6.3:C:FRINGE_RATIO QC Parameter:MJI	73
2.4.20	FCO-005 DRLD Sec 6.3.10:O:Negative fringe-scaling:JRL	74
2.4.21	FCO-006 DRLD Sec 6.5.10:O:Linearity Function error condition:	JRL
	75	
2 4 22	PBA-019 DRI D Sec 6 6 C Standard catalogues IRI	76
2.4.22	MPF-011 DRLD Sec 7:D:one-to-one RAW/Recine: IRL	77
2.1.25	PBA-015 DRI D Sec 7:D:Missing recipes: IRI	78
2.1.21	WHIL(115 DRID) Sec 7.1:C:Library reset frame IRI	79
2.7.25 2.4.26	WHU 016 DRLD Sec 7.1.C. Library reset frame. JRL	
2.4.20	WHU 020 DRLD Sec 7.14:C:Stondard data source: IBI	00 01
2.4.27	WILL 21 DDL D Sec 11.0.0DLCEIL E.DSD	01 00
2.4.28	who-21 DRLD Sec 11:0:0KIOFILE:PSD	02
2.5 Re	PDA 002 ETC G CON ETC : 6 2 CTU	83
2.5.1	PBA-002 ETC Sec 6:C:New ETC infra?:STH	84
2.5.2	FCO-11 ETC Sec 7.2:O:Observing Strategy Limited:STH	85
2.5.3	PBA-004 ETC Sec 8:C:Elapsed time:STH	86
2.5.4	PBA-003 ETC Sec B:C:Mockup discrepency:MJI	87
2.5.5	PBA-005 ETC Sec C:D:ISO-C/Perl:MJI	88
2.6 Re	view Items referring to the Survey Definition Tool SDT [RD6]	89
2.6.1	FCO-012 SDT Sec 0:O:Priorities among runs:MFO	90

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM		Issue:Page:Author:	0.4 5 of 104 VDFS Team

2.6.2	MPE-015 SDT Sec 0:D:Describe PAF files, GUI:MFO91
2.6.3	MPE-016 SDT Sec 0:C:Tool on line?:MFO92
2.6.4	FCO-013 SDT Sec 1.2:O:Cal tool functionality in OT:MFO94
2.6.5	FCO-014 SDT Sec 2:C:Survey Plan should spec strat/priorities:MFO
	95
2.6.6	FCO-015 SDT Sec 2:C:Does SDT calculate overheads?:MFO97
2.6.7	FCO-016 SDT Sec 2.1.3.2:C:Operator intervention:MFO98
2.6.8	FCO-017 SDT Sec 2.1.3.5:C:Where can user specify categ.:MFO99
2.6.9	AKA-001 SDT Sec 2.1.5:O:SDT - P2PP interaction:MFO100
2.6.10	FCO-018 SDT Sec 2.1.6:C:Guide Star PAF information:MFO102
2.6.11	FCO-020 SDT Sec 3.4:O:non-UK QC:MFO103

1 Introduction

1.1 Scope

This document presents the responses by the VISTA Infrared Camera Data-Flow System Team to the RIDs, RICs and RIOs generated by the VISTA IR Camera Data-Flow System Review Panel following their review of the Final Design Review (FDR) pack, comprising the VISTA DFS User-Requirements [RD1], Calibration Plan [RD2] Data-Reduction Specification [RD3], Data Reduction Library Design [RD4], Exposure Time Calculator [RD5], and Survey Definition Tool [RD6].

1.2 Acronyms and Abbreviations

ADxx	Applicable Document No xx
CASU	Cambridge Astronomical Survey Unit
IOA	Institute of Astronomy (Cambridge)
PDR	Preliminary Design Review
RDxx	Reference Document No xx
RIC	Review Item Clarification required
RID	Review Item Discrepancy
RIO	Review Item Observation
TBD	To Be Decided
TRE	Technical Report
VIRCAM	VISTA Infrared Camera
VISTA	Visible and Infrared Survey Telescope for Astronomy

1.3 Applicable Documents

[AD1] Data Flow for the VLT instruments requirements specification, VLT-SPE-ESO-19000-1618, issue 1.0, 1999-04-21.

[AD2] Data Flow for VLT/VLTI Instruments Deliverables Specification, VLT-SPE-ESO-19000-1618, issue 2.0, 2004-05-22

1.4 *Reference Documents*

- [RD1] VISTA Infra Red Camera DFS User Requirements, VIS-SPE-IOA-20000-00001, issue1.0, 2004-12-15.
- [RD2] VISTA Infra Red Camera DFS Calibration Plan, VIS-SPE-IOA-20000-00002, issue 1.0, 2004-12-15.
- [RD3] VISTA Infra Red Camera DFS Data-Reduction Specifications, VIS-SPE-IOA-20000-0003, issue 1.0, 2004-12-15
- [RD4] VISTA Data Reduction Library Design, VIS-SPE-IOA-20000-0010, issue 1.0, 2004-12-17
- [RD5] VISTA Infra Red Camera Exposure Time Calculator Specification, VIS-SPE-IOA-20000-0009, issue 1.0, 2005-01-10
- [RD6] VISTA Survey Definition and Progress Tools: Functional Specification, VIS-SPE-ATC-20500-0001, issue 1.0, Date: 2004-11-17

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM		Issue:	0.4
		Page:	7 of 104
		Author:	VDFS Team

2 Review Items

2.1 Review Items referring to the User Requirements URD [RD1].



Table 2-1 RIx Count for User Requirements

VISTA Infrared Camera PDR DATA FLOW RID Responses SYSTEM	Doc Number: Date: Issue: Page: Author:	VIS-TRE-IOA-20000-0013 2005-01-26 0.4 8 of 104 VDFS Team	-
--	--	--	---

2.1.1 PBA-001 URD Sec 0:D:1618v2:PSB

Roview Title.			V	Discronancy
		Roview Item	Δ	Clarification
FDR VISTA DFS				Observation
RI No:	PBA-001			
Review Item	Page 5 and Title page	age		
Document Title:	VISTA IR Camera	DFS User Requireme	ents	
Document No:	VIS-SPE-IOA-200	000-0001		
Document Originator:	Peter Bunclark			
Discrepancy/Clarification	on Required/Obser	vation:		
For consistency, all VISTA DFS documents should be upgraded to 1618/2.0 Action Recommended by Initiator: Update reference AD1 (page 5) to 1618/2.0, 2004-05-22 Rename document to "VISTA IR Camera DFS Impact"				
Date/Signature of Initia	tor: Pascal Balleste			
RI Classification: (to be	completed by Board	d Chairperson)	thdu	
Major Data/Signatura Chairna	Major Wilndrawn			4WII
Will do so. [We had understood that as these documents were originally designed with respect to 1618v1 it had been agreed that a complete rewrite to conform to v2.0 was not required, and indeed has not occurred. Thus we deliberately still referred to v1.0] However we note that, the User Requirements Document, (originally designed to adhere to 1618v1), does not seem to map well onto the v2 Impact Document. Rather, elements of the User Requirements in addition to the Survey Definition Tool provide the same information that would, under the new scheme, be in the Impact document.				
Date/Signature Actionee: PSB				
Board Disposition: RI Closed: RI Closed with Actions: Date/Signature Chairperson:				

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	F	Issue:	0.4
		Page:	9 of 104
		Author:	VDFS Team

2.1.2 MPE-008 URDetc Sec 4.2.2:C:Rephrase VISTA Pipeline...:PSB

Review Title:				Discrepancy
		Review Item	Χ	Clarification
FDK VISTA DFS				Observation
RI No:	MPE-008			

Review Item	Page 15, section 4.2.2.
Document Title:	DFS User Requirements and all documents
Document No:	VIS-SPE-IOA-20000-0001
Document Originator:	Peter Bunclark

Discrepancy/Clarification Required/Observation:

In the ESO terminology, the dataflow systems includes all applications supporting the end-toend operations model. It includes Phase I, P2PP, on-line archiving. ETC... Therefore the sentence "Therefore the dataflow system is responsible for ..." should be rephrase to "The VISTA pipeline is responsible for..." I have seen that "Data Flow System" is used in may places in the document while "VISTA

Withdrawn

pipeline" should have actually been used.

Action Recommended by Initiator:

Upgrade documentation

Date/Signature of Initiator: MPE

RI Classification:	: (to be completed by Board Chairperson)
Maior	Minor

Date/Signature Chairperson:

Actionee Corrective Action:

Will upgrade the documentation with the suggested change.

Date/Signature Actionee: PSB

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	F	Issue:	0.4
		Page:	10 of 104
		Author:	VDFS Team

2.1.3 MPE-007 URD Sec 4.2.1:D:OB processing:PSB

Review Title:			Χ	Discrepancy
FDR VISTA DFS		Review Item		Clarification
RI No:	MPE-007			Observation
Review Item	Page 15, section 4.2.1			
Document Title:	DFS User Require	ments		
Document No:	VIS-SPE-IOA-200	000-0001		
Document Originator:	Peter Bunclark			
Discrepancy/Clarification Required/Observation: The DFS pipeline does not know about Observation Blocks, see also MPE-004 Action Recommended by Initiator: Rephrase				
Date/Signature of Initia	tor: MPE			
RI Classification: (to be	completed by Boar	d Chairperson)		
Major	Minor		Withdra	awn
Date/Signature Chairpe	erson:			
Actionee Corrective Ac	tion:			
We will modify the text to remove the words "or observation block".				
Date/Signature Actionee: PSB				
Board Disposition: RI Closed: RI Closed with Actions:	:			
Date/Signature Chairpe	Date/Signature Chairperson:			

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM		Issue:	0.4
DIDIEM		Page:	11 of 104
		Author:	VDFS Team

2.1.4 WHU-022 URD Sec 4.3:D:Data Rate:WJS

Review Title: FDR VISTA DFS			Χ	Discrepancy
		Review Item	Clarification Observation	
RI No:	WHU-22			·
Review Item	Data rate, page 17	of 24		
Document Title:	User requirements			

Document Originator:Peter BunclarkDiscrepancy/Clarification Required/Observation:

The document states a daily raw data production rate of 0.4 Tbyte uncompressed.

VIS-SPE-IOA-2000-001

The assumption is 30% of : every 10sec 1 exposure 14h long.

Another estimate is the following:

Document No:

ISAAC generates 1Gbtye a night, including day-time calibrations. Here we used service mode nights, ISAAC alone at the telescope, mostly done imaging during the night. We scale this number by the number of pixel ratio (VISTA has 4 x 16 more pixels). The telescope diameter (4m versus 8m) and the pixel scale (3''/pix versus 1.5''/pixel) cancel out when scaling the number of photons per pixel. VISTA should therefore produce 64Gbyte a night. Taking in addition an operational factor into account (=2), since WFI survey programs are much more homogeneous (no deep imaging, better planning), we get 128Gbyte a night as the mean rate for VISTA, and maybe 3 times more for the maximum rates. This number is still three times smaller than the numbers given in the document.

The ISAAC pipeline generates (for nights with 1Gbyte raw data) 200Mbyte a day of science and calibration products, scaling this number by 64 (pixel) and 2 (operational), we expect about 13Gbyte pipeline products a day.

Action Recommended by Initiator:

For reasons of long-term planning for the ESO-archive the numbers average rate should be reviewed.

Date/Signature of Initia	tor: Wolfgang	Hummel.	2005-01-19
2 ave, Signavai e oi innia	core in oniganig	1101111019	1 000 01 17

RI Classification: (to be comp		
Major	Minor	Withdrawn
Date/Signature Chairperson:		

Actionee Corrective Action:

0.4 TB / night (uncompressed) is a high-end estimate for the long-term average, but is not impossible to happen.

A "typical" average day+night may be 13 hours at 1 frame per minute ~210 GB, somewhat higher than the 128 GB suggested but consistent.

However a shallow "Atlas", if attempted, may produce 1 frame per 20-30 sec, 400-600 GB per night, so a lot depends on what fraction (if any) this is scheduled.

A medium-depth survey with frequent microstepping could be similar.

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	F	Issue:	0.4
		Page:	12 of 104
		Author:	VDFS Team

Also, note the reduction factor from raw to processed frames will depend significantly on the choice of microstepping procedure.

Date/Signature Actionee: WJS

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	13 of 104
		Author:	VDFS Team

2.1.5 WHU-001 URD Sec 5.4:C:OB Parent:JPE

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	X	Clarification	
RI No:	WHU-01				
Review Item	Page 21 of 24				
Document Title:	VISTA IRCAM D	FS User Requiremen	ts		
Document No:	VIS-SPE-IOA-200	000-001			
Document Originator:	Peter Bunclark				
Discrepancy/Clarification	on Required/Obser	vation:			
item. Action Recommended b Please clarify	y Initiator:	5		, , , , , , , , , , , , , , , , , , ,	
Date/Signature of Initia	tor: WH 2005-01-1	8			
RI Classification: (to be	completed by Boar	d Chairperson)			
Major Minor Withdrawn					
Date/Signature Chairpe	erson:				
Actionee Corrective Act	tion:				
Don't understand the issu	e here. Want to cla	ify at FDR.			
Date/Signature Actionee: JPE					
Board Disposition:					
RI Closed:	RI Closed:				
RI Closed with Actions:	:				
Date/Signature Chairpe	erson:				

VISTA DATA FLOW	Infrared Camera PDR RID Responses	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
SYSTEM	KID Kesponses	Issue:	0.4
		Page:	14 of 104
		Author:	VDFS Team

2.2 Review Items referring to the Calibration Plan CP [RD2].

5	Discrepancies
4	Clarifications
10	Observations
19	Total

Table 2-2 RIx Count for CP

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	F	Issue:	0.4
		Page:	15 of 104
		Author:	VDFS Team

2.2.1 PBA-006 CP Sec 0:0:1618v2:PSB

Review Title:			Discrepancy	
FDR VISTA DFS		Review Item	Clarification	
RI No:	PBA-006		Observation	
Review Item	Reference AD1, pa	Reference AD1, page 5		
Document Title:	VISTA IR Camera	/ISTA IR Camera Calibration Plan		
Document No:	VIS-SPE-IOA-200	VIS-SPE-IOA-20000-0002		
Document Originator:	Peter Bunclark			
Discrepancy/Clarification For consistency, all VIST Action Recommended b Update reference AD1 (p	Discrepancy/Clarification Required/Observation: For consistency, all VISTA DFS documents should be upgraded to 1618/2.0 Action Recommended by Initiator: Update reference AD1 (page 5) to 1618/2.0, 2004-05-22			
Date/Signature of Initia	tor: Pascal Balleste	r		
RI Classification: (to be Major Date/Signature Chairpe	RI Classification: (to be completed by Board Chairperson)MajorMinorWithdrawnDate/Signature Chairperson:			
Actionee Corrective Act	ion:			
Yes. Please see response to MPE-002.				
Date/Signature Activities, FSD				
RI Closed: RI Closed with Actions: Date/Signature Chairperson:				

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	16 of 104
		Author:	VDFS Team

2.2.2 AKA-003 CP Sec 1.3:Errors Breakdown:MJI

	X	Discrepancy
Review Item		Clarification
		Observation
	Review Item	Review Item

RI No:	AKA-003 CP
Review Item	Error budget breakdown to achieve Science Requirements
Document Title:	VISTA DFS User Requirements / Calibration Plan
Document No:	VIS-SPE-IOA-20000-0001 / 0002
Document Originator:	P.Bunclark

Discrepancy/Clarification Required/Observation:

Sect 3 of the User Requirements defines the science requirements on the astrometric and photometric accuracies to be achieved by the DFS. Sect 4 defines the respective requirements on the DFS to achieve these accuracies.

I am missing here a breakdown of the acceptable errors in the different reduction steps to guarantee that the required accuracies can be achieved. For example, what flatfield accuracy is required, what accuracy is needed for dome, sky, object flats?

This relates also to the calibration plan which also does not provide details on the required quality of the defined calibrations (e.g. – just to pick an obvious one - no SNR requirements are given for twilight flats, and subsequently, how many filters can be done in the short twilight periods, ...).

Action Recommended by Initiator:

Add quantitative requirements on the calibration products, e.g. in the 'Purpose' section of the respective calibration plan items. Summarise how the quality of these products will assure the overall accuracies given in the science requirements.

Date/Signature of Initiator: 2005/01/23 Andreas Kaufer

RI Classification: (to be completed by Board Chairperson)				
Major	Minor	Withdrawn		
Date/Signature Chairperson:				

Actionee Corrective Action:

We were unsure in which document the section on error budgets should appear. We will add a section along the following lines to the calibration plan document.

The error budgets for the astrometric, photometric and flatfielding requirements have two generic components: systematic and random, that contribute to the overall errors.

We discuss each in turn and indicate how the requirements will be met by the stratgey adopted.

The astrometric calibration will be based on the 2MASS PSC. 2MASS astrometry is derived from direct calibration to TYCHO 2 and is in the ICRS system. [Note that his requires RADECSYS ='ICRS' in the FITS headers].

It is known to have average systematic errors better than ~100mas and rms errors better than ~100mas, for all point sources with S:N > ~10 DRS Sec We will be using 2MASS as the

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM	F	Issue:	0.4
		Page:	17 of 104
		Author:	VDFS Team

primary astrometry calibrator and in tests on similar mosaic instruments we have shown that our suggested ZPN distortion model, combined with a linear plate solution for each detector, achieves astrometric calibration at the 100mas or better level.

We also anticipate using 2MASS to monitor systematic variations in extinction for each camera exposure. Tests on WFCAM using 2MASS photometry suggest that this is achievable at the few % level per exposure, since even in high Galactic latitude fields there will be hundreds of unsaturated 2MASS stars per VISTA exposure. Offline nightly trend analysis of these measures combined with regular observations of secondary photometric standard fields, set up in the VISTA instrumental system, will enable calibration of most nights to the level of 1% to 2% global.

The error budget for photometry of astronomical sources requires photon noise to be the dominant noise source. For this to be the case, integration times should be chosen such that observations are sky noise limited, ie. Sky noise should be much greater than rms readout noise and dark current contributions. Clearly, this places a comparable requirement on the rms contribution from flatfielding. However, providing the master flats used for this are combined from multiple observations with at least a total of 100,000 detected electrons this is easily achievable. In practice a goal of 0.1% rms flatfield noise due to photon noise contribution is the aim.

More difficult problems to quantify are the systematics present in the various correction stages due to, for example, changing flatfield characteristics, reset anomalies, unexpected background variation and so on. The additive components of these will be dealt with using a background tracking algorithm which effectively monitors and removes background variations to the level of 0.1% of sky, prior to performing object photometry. This will be part of the catalogue generation software.

The final photometry correction stage is to use the illumination correction measurements to reduce the effects of uneven illumination e.g. scattered light in the flatfielding, to below the 2% level. This is a master calibration processing task that is proably best done at the database interface level or as a post-processing stage.

Date/Signature Actionee: MJI

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM		Issue:	0.4
		Page:	18 of 104
		Author:	VDFS Team

2.2.3 WHU-004 CP Sec 1.6:O:Confidence Map:MJI

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	v	Clarification	
RI No:	WHU-04		Λ	Observation	
Review Item	Page 7 of 58				
Document Title:	Calibration Plan				
Document No:	VIS-SPE-IOA-200	000-0002			
Document Originator:	Peter Bunclark				
Discrepancy/Clarification The confidence map is as	on Required/Obser	vation : luct image, not with a	a raw i	mage ?	
Action Recommended b	y Initiator:				
with an image -> with a s	science product ima	ge			
Date/Signature of Initia	tor: Wolfgang Hum	nmel, 2005-01-18			
RI Classification: (to be	completed by Board	d Chairperson)	lithdu		
Date/Signature Chairpe	rson:	v	illiui	awii	
Actionee Corrective Act	tion:				
Confidence maps are applicable to all images. For raw images in the same passband a single confidence map applies to all. For processed product images, each image has its own confidence map (see MPE-009).					
Board Disposition:					
RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

2.2.4 FCO-007 CP Sec 3.2.2:O:Why flat-field HOWFS?:SMB

Review Title:

FDR VISTA DFS

Review Item

Clarification
Observation

X

Discrepancy

RI No:	7					
Review Item						
Document Title:	VISTA Infra Red Camera Calibration Plan					
Document No:	VIS-SPE-IOA-2000	0-0002				
Document Originator:	Peter Bunclark					
Discrepancy/Clarification Requ	ired/Observation:					
Sect. 3.2.2, why is flat-fielding of	HOWFS data require	d?				
Action Recommended by Initiat Explain why HOWFS data need f	or: lat-fielding					
Date/Signature of Initiator: 20 J	anuary 2005, F. Com	erón				
RI Classification: (to be complet	ed by Board Chairper	son)				
Major N	linor	Withdrawn				
Date/Signature Chairperson:						
Actiones Connective Action:						
Actionee Corrective Action.						
The HOWFS needs to be flat-fielded because it uses a beam-splitter filter whose unique signature needs to be removed from the HOWFS data before it can be analysed. However, this flat-fielding is carried out within the HOWFS image analysis software (which is part of of the camera software) and not by the pipeline. The HOWFS flat-field template is mentioned because the calibration plan needs to list all the camera templates						
Date/Signature Actionee: SMB						
Board Disposition:						
RI Closed:						
RI Closed with Actions:						
Date/Signature Chairperson:	Date/Signature Chairperson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	20 of 104
		Author:	VDFS Team

2.2.5 SCA- 001 CP Sec 4:D:Master/Mean:STH

Review Title:			Χ	Discrepancy	
FDR VISTA DFS		Review Item		Clarification Observation	
RI No:	SCA-001		I		
Review Item	Page 15, figure 4-1	l			
Document Title:	VISTA Calibration	n Plan			
Document No:	VIS-SPE-IOA-200	000-0002			
Document Originator:					
Discrepancy/Clarification	on Required/Obser	vation:			
In order to follow the standards, please use the word <u>master</u> instead of <u>mean</u> when referring to a calibration product such as in figure 4-1, mean dark frame and mean flat field frame. They should be master dark frame and master flat field frame, respectively. Action Recommended by Initiator: Add changes throughout text, when appropriate.					
Date/Signature of Initia	tor: Sandra Castro				
RI Classification: (to be	completed by Board	d Chairperson)			
Major Date/Signature Chairne	Minor rson•	WI	thdra	iwn	
Actional Connective Act	ion.				
Intended to follow standards. However we need to discuss this terminology since, for example, a mean dome flat is not necessarily the same as a master dome flat. Date/Signature Actionee: STH					
Board Disposition:					
RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	21 of 104
		Author:	VDFS Team

2.2.6 WHU-05 CP Sec 4.3:C:Dark doesn't move telescope:SMB

Review Title:				Discrepancy			
FDR VISTA DFS		Review Item	X	Clarification			
RI No:	WHU-05			Observation			
Review Item	Page 17 of 58						
Document Title:	Calibration Plan						
Document No:	0002						
Document Originator:	Peter Bunclark						
Discrepancy/Clarificati	on Required/Obser	vation:					
telescope at all. Action Recommended by Please rephrase Date/Signature of Initia	Action Recommended by Initiator: Please rephrase						
RI Classification: (to be	completed by Boar	d Chairperson)					
Major Minor Withdrawn							
Date/Signature Chairpe	erson:						
Actionee Corrective Ac	tion:						
Agreed. The sentence will be rephrased to say, "The Dark template does not require the telescope".							
Board Disposition:							
RI Closed: RI Closed with Actions: Date/Signature Chairpe	erson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	F	Issue:	0.4
		Page:	22 of 104
		Author:	VDFS Team

2.2.7 WHU-06 CP Sec 4.3:D:trend:PSB

Review Title:			Χ	Discrepancy		
FDR VISTA DFS		Review Item		Clarification		
RI No:	WHU-06			Observation		
Review Item	Page 17 of 58, Dar	k Frames				
Document Title:	Calibration Plan					
Document No:	00002					
Document Originator:	Peter Bunclark					
Discrepancy/Clarification	on Required/Obser	vation:				
Pipeline Outputs						
Action Recommended b	y Initiator:					
Please omit 'stability trend'						
Dicional Classifications (talka	tor: Wongang Hun					
KI Classification: (to be Major	Minor	a Chairperson) W	lithdra	awn		
Date/Signature Chairperson:						
Actionee Corrective Act	tion:					
The wording was meant to imply a QC parameter with the potential for future use in trending outside the pipeline. The word trend will be deleted to ensure no confusion. Date/Signature Actionee: PSB						
Board Disposition:						
DI Closed.						
RI Closed with Actions.						
Date/Signature Chairperson:						

VISTA	VISTA Infrared Camera PDR		VIS-TRE-IOA-20000-0013
DATA FLOW	ATA FLOW RID Responses		2005-01-26
SYSIEM		Page:	23 of 104 VDES Team

2.2.8 FCO008 CP Sec 4.4:O:Spectral energy in flats:MJI

Review Title:				Discrepancy		
2.2.8.1.1.1.1 FDR VISTA DFS		Review Item	v	Clarification		
RI No:	8		Δ	Observation		
Review Item	0					
Document Title:	VISTA In	fra Red Camera Ca	libration	Plan		
Document No:	VIS-SPE-	IOA-20000-0002				
Document Originator:	Peter Bun	clark				
Discrepancy/Clarification Required/Observation: Sect. 4.4, while it is true that sky flats should have a colour closer to that of the night sky, dome flats may have a spectral energy distribution closer to that of some objects of interest and thus be more adequate for gain correction.						
Action Recommended by Initiator: None Date/Signature of Initiator: 20 January 2005, F. Comerón						
RI Classification: (to be complete	ed by Boar	d Chairperson)				
Major M	linor		Withdra	awn		
Date/Signature Chairperson:						
Actionee Corrective Action:						
We agree, but note that for batch processing an average gain/flatfield correction for typical objects is the usual method.						
Date/Signature Actionee: MJI	Date/Signature Actionee: MJI					
Board Disposition:						
RI Closed: RI Closed with Actions: Date/Signature Chairperson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM		Issue:	0.4
		Page:	24 of 104
		Author:	VDFS Team

2.2.9 MPE-013 CP Sec 4.6:C:Trend:PSB

Review Title:				Discrepancy		
FDR VISTA DFS		Review Item	X	Clarification		
RI No:	MPE-013			Observation		
Review Item	Page 19					
Document Title:	VISTA Calibration	n Plan				
Document No:	VIS-SPE-IOA-200	000-0002				
Document Originator:	Peter Bunclark					
Discrepancy/Clarification The pipeline recipes do n	on Required/Obser	vation : d analysis. They only §	genera	ate QC1 parameters		
which are used for trend a Action Recommended b	analysis after proces y Initiator:	ssing				
Rephrase. Date/Signature of Initia	tor: MPE					
RI Classification: (to be	completed by Board	d Chairperson)				
Major	Minor	Wi	ithdra	awn		
Date/Signature Chairpe	erson:					
Actionee Corrective Act	tion:					
An oversight, we will edit.						
Date/Signature Actionee: PSB						
Board Disposition:						
RI Closed:	KI Closed:					
KI Closed with Actions:	KI Closed with Actions:					
Date/Signature Unamperson;						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	25 of 104
		Author:	VDFS Team

2.2.10 SCA-002 CP Sec 4.6:O:Even no. of dome flats:JRL

Review Title:			Discrepancy		
FDR VISTA DFS		Review Item	Clarification X Observation		
RI No:	SCA-002				
Review Item	Page 19				
Document Title:	VISTA Calibration	n Plan			
Document No:	VIS-SPE-IOA-200	000-0002			
Document Originator:					
 Discrepancy/Clarification Required/Observation: Either here or in list of input files for the pipeline recipe, it might be appropriate to specify that an even number of dome flats should be used in order to measure the linearity of the detector. Action Recommended by Initiator: Date/Signature of Initiator: Sandra Castro 					
RI Classification: (to be Major	completed by Board	d Chairperson)	ithdrawn		
Date/Signature Chairpe	rson:	***			
Actionee Corrective Action: We don't understand the need for a restriction to an even number.					
Board Disposition:					
RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	26 of 104
		Author:	VDFS Team

2.2.11 WHU-07 CP Sec 4.7:D:Dusk and Dawn:MJI

Review Title: FDR VISTA DFS		Review Item	Χ	Discrepancy
				Clarification
				Observation
RI No:	WHU-07			
Review Item	Page 20 of 58			
Doorse and Titles	Calibratian Dlan			

Document Litle:	Calibration Plan
Document No:	VIS-SPE-IOA-200000-0002
Document Originator:	Peter Bunclark

Discrepancy/Clarification Required/Observation:

It is not possible to combine dusk and dawn flats, since they originate from different OBs, TPLs. There will also not always dusk AND dawn flats be available.

A possible workaround would be, that the dusk pipeline recipe requires the dusk raw stack plus a master dawn flat taken on the same operational day.

Action Recommended by Initiator:

Please correct and rephrase

Date/Signature of Initiator: WH 2005-01-18

RI Classification: (to be completed by Board Chairperson) Major Minor

Withdrawn

Date/Signature Chairperson:

Actionee Corrective Action:

This relates to our desire to maintain a regularly updated series of master (library, reference) flatfield calibration files by combining with new information from dusk and dawn flats when they are available.

We would prefer to have the master flats as needed and use these in the pipelines rather than relying on solely information from within an operational day.

Date/Signature Actionee: MJI

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM		Issue:	0.4
		Page:	27 of 104
		Author:	VDFS Team

2.2.12 WHU-08 CP Sec 4.9:O:Persistence:PSB

Review Title: FDR VISTA DFS		Review Item		Discrepancy	
				Clarification	
			Χ	Observation	
RI No:	WHU-08				
Review Item	Page 21 of 58				

Review Item	Page 21 of 58
Document Title:	Calibration plan
Document No:	VIS-SPE-IOA-20000-0002
Document Originator:	Peter Bunclark

Discrepancy/Clarification Required/Observation:

Is it true that persistence is measured and monitored but not corrected for? I guess in WFI, the probability of having bright objects within the FOV is quite high and jittering could contaminate the jitter box region ~30'' of all bright objects.

Does it makes sense to scale the first frame of the stack by the decay law and subtract if from the second third ..., scale the second frame by the decay law and subtract it from the third, fourth in a cascaded manner ?

Action Recommended by Initiator:

Please comment

Date/Signature of Initiator: Wolfgang Hummel 2005-01-18

8	0 0	
RI Classification: (to be compl	eted by Board Chairperson)	
Major	Minor	Withdrawn
Date/Signature Chairperson:		

Actionee Corrective Action:

Persistence across OBs will not be dealt with in the pipeline since we anticipate it will generally be a second order effect. Within a template the optimum way to deal with persistence will depend on its defining characteristics, which have yet to be completely determined.

The suggestion offered will be considered as a possible method of handling it.

Date/Signature Actionee: PSB

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	F	Issue:	0.4
		Page:	28 of 104
		Author:	VDFS Team

2.2.13 PBA-007 CP Sec 6:D:in Cal Plan but not DRLD:PSB

Review Title:			X	Discrepancy	
FDR VISTA DFS		Review Item		Clarification Observation	
RI No:	PBA-007	PBA-007			
Review Item	Page 27, 29, 37, 39	9, 40, 41			
Document Title:	VISTA IR Camera	Calibration Plan			
Document No:	VIS-SPE-IOA-200	000-0002			
Document Originator:	Peter Bunclark				
Discrepancy/Clarification	on Required/Obser	vation:			
The following recipes are listed in the Calibration Plan but not described in the Data Reduction Library document: Page 27: vircam_flat_combine Page 29: vircam_distortion_update Page 37, 39, 40, 41: vircam_microstep_interleave and vircam_jitter_combine Action Recommended by Initiator:					
Refer to the correct recipe	es or describe these	recipes in the DRL De	esign.		
RI Classification: (to be	completed by Board	d Chairperson)			
Major	Minor	Wi	thdra	awn	
Date/Signature Chairpe	erson:				
Actionee Corrective Act	tion:				
We will make them consistent (this was a failure to fully backport evolving design into older documents).					
Board Disposition:					
RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM		Issue:	0.4
		Page:	29 of 104
		Author:	VDFS Team

2.2.14 FCO-009 CP Sec 6.1.1:O:Spectral energy in flats:MJI

Review Title:

FDR VISTA DFS

Review Item

Discrepancy Clarification

V

			Λ	Observation			
RI No:	9						
Review Item							
Document Title:	VISTA In	fra Red Camera Calil	oration	Plan			
Document No:	VIS-SPE-	IOA-20000-0002					
Document Originator:	Peter Bun	elark					
Discrepancy/Clarification Requ	ired/Obser	vation:					
Sect. 6.1.1, the meaning of the ser	itence 'The	advantage over twili	ght fla	ts is the identical			
colour match between the sky obs	ervations a	nd the targets' is not	clear.	The colour variation			
in the gain correction depends on	the spectral	energy distribution	of the t	argets.			
Action Recommended by Initiator: Rephrase the sentence noted so that its meaning becomes clearer.Date/Signature of Initiator: 20 January 2005, F. Comerón							
		1.01.1					
RI Classification: (to be complet	ed by Board	d Chairperson)					
Major	Mino	r V	Vithdr	awn			
Date/Signature Chairperson:							
Actionee Corrective Action:							
We will rephrase this to: The advantage of dark sky flats over twilight flats is the better colour match to the average astronomical object. This minimises the sensitivity of the gain and flatfield correction to differential colour terms with respect to astronomical objects. Date/Signature Actionee: MJI Board Disposition:							
PI Closed.							

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	30 of 104
		Author:	VDFS Team

2.2.15 MPE-014 CP Sec 7.2:C:No QC0 filtering:PSB

Review Title:				Discrepancy				
FDR VISTA DFS		Review Item	X	Clarification Observation				
RI No:	MPE-014							
Review Item	view Item Page 31, section 7.2							
Document Title:	VISTA Calibration	n Plan						
Document No:	VIS-SPE-IOA-200	000-0002						
Document Originator:	Peter Bunclark							
There is not QC0 process instrument ws goes throu Action Recommended h	on Paranal which f gh the pipeline.	ilters the data. Every	file ge	enerated on the				
Rephrase. Date/Signature of Initia	tor: MPE							
RI Classification: (to be	completed by Boar	d Chairperson)	lithdu	0.WD				
Date/Signature Chairne	IVIIIIOF Prson·	v	unar	awn				
Actionee Corrective Act	tion:							
Will revise the statement								
Date/Signature Actione	e: PSB							
Board Disposition:								
RI Closed:								
RI Closed with Actions:	,							
Date/Signature Chairpe	erson:							

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	F	Issue:	0.4
		Page:	31 of 104
		Author:	VDFS Team

2.2.16 WHU-09 CP Sec 7.3:O:QC table:PSB

Review Title:				Discrepancy				
FDR VISTA DFS		Review Item		Clarification				
			X	Observation				
RI No:	WHU-09							
Review Item	Page 32 of 58	Page 32 of 58						
Document Title:	VISTA Infra Red	Camera Calibration Pl	an					
Document No:	VIS-SPE-IOA-200	000-0002						
Document Originator:	Peter Bunclark							
Discrepancy/Clarification	on Required/Obser	vation:						
Several points:								
a) Table, 4.2 description,	see WHU-01							
b) Generally, the descript	ion column could b	e a little bit more info	rmativ	ve, e.g. 4.6, could				
contain the statement that	t the QC parameters	are the coefficients of	f a po	lynomial fit.				
c) 4.10 How many QC pa	rameters are monito	ored for the cross-talk	matri	Х.				
d) 5.2 is a QC0 (constrair	nt set) and is not a p	roduct of the pipeline.						
e) this list does not match	the QC dictionary	(Appendix 10 of the D	DR Lil	orary Design)				
Date/Signature of Initia RI Classification: (to be Major	Date/Signature of Initiator: Wolfgang Hummel, 2005-01-18 RI Classification: (to be completed by Board Chairperson)							
Date/Signature Chairpe	erson:							
Actionee Corrective Action:								
The calibration plan QC list requires updating. The DRLD contains a more detailed discussion of the QC parameters. In general, the DRLD represents the evolved Library design, and in particular the QC dictionary is a definitive version of the current plans for QC parameters.								
Date/Signature Actionee: PSB								
Board Disposition:								
RI Closed:								
RI Closed: RI Closed with Actions:								

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	32 of 104
		Author:	VDFS Team

2.2.17 AKA-002 CP Sec 8:0:DPR - Recipe table:PSB

Review Title:				Discrepancy
EDD VISTA DES		Review Item		Clarification
FDR VISTA DFS			X	Observation
RI No:	AKA-001			

KI NO:	AKA-001
Review Item	DPR keywords – pipeline recipes, Sect.8
Document Title:	VISTA Calibration Plan
Document No:	VIS-SPE-IOA-20000-0002
Document Originator:	P.Bunclark

Discrepancy/Clarification Required/Observation:

The calibration plan provides an excellent level of detail, including the relation of which templates will trigger which pipeline recipe.

It would be an important addition to define in this stage the corresponding data product (DPR) keywords which are the interface between raw files produced by the templates and the pipeline recipes to be triggered.

Action Recommended by Initiator:

Add a table in Sect 8 which provides: TSF name -> DPR keywords DPR.CATG, DPR.TYPE, DPR.TECH -> pipeline recipe. (valid DPR keywords are defined in DICD)

Date/Signature of Initiator: 2005/01/23/01 Andreas Kaufer

0			
RI Classification: (to be con	npleted by Board Chairperson)		
Major	Minor	Withdrawn	
Date/Signature Chairperso	n:		
Actionee Corrective Action	:		

Such a table is provided in table 4-2 of the DRLD (currently with errors!). Should we just copy it into the Calibration Plan? (see MPE-011).

Date/Signature Actionee: PSB

Board Disposition:

VISTA DATA FLOW SVSTEM	Infrared Camera PDR RID Responses	Doc Number: Date: Issue:	VIS-TRE-IOA-20000-0013 2005-01-26 0.4
SISIEN		Page: Author:	33 of 104 VDFS Team

2.2.18 FCO-010 CP Sec 8.3.1:C:Offset Pattern in Templates:SMB

Review Title:					Discrepancy	
EDD VICTA DES		Review Item		X	Clarification	
					Observation	
RI No:	1()				
Review Item						
Document Title:	V	ISTA Infra Red Cam	nei	ra Calibra	ation Plan	
Document No:	V	IS-SPE-IOA-20000-	00	002		
Document Originator:	Pe	eter Bunclark				
Discrepancy/Clarification Requi	ire	d/Observation:				
Sect. 8.3.1, contrarily to what had including in the acquisition the inf templates. Has the guide star select offset pattern at acquisition is no l	be for tic	en discussed earlier t mation on offset patte on strategy been mod ger necessary?	the er ifi	ere 18 no n to follc ied so tha	provision now for ow in the observation at specification of the	
Action Recommended by Initiat This can be clarified during the FI Date/Signature of Initiator: 20 J	or: DR ani	: discussion. uary 2005. F. Comere	ór	1		
RI Classification: (to be complete	ed	by Board Chairperso	on))		
		, 1	,			
Major Minor Withdrawn						
Date/Signature Chairperson:						
Actionee Corrective Action: Yes it has. This is one of the major improvements we have made to the design since the PDR. The guide star selection strategy now allows guide stars to be selected in advance or while executing an observation template. The improvement has been made possible because there is some degree of flexibility in the interface between the VISTA IR camera and VISTA telescope software. We can discuss this further at the FDR. Date/Signature Actionee: SMB						
Board Disposition: RI Closed: RI Closed with Actions: Date/Signature Chairperson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	34 of 104
		Author:	VDFS Team

2.2.19 WHU-10 CP Sec 10.2:O:ORIGFILE keyword:PSB

Review Title:			Discrepancy
EDD VIETA DEC	Review Item		Clarification
FDR VISTA DFS		Χ	Observation

RI No:	WHU-10
Review Item	Page 54 of 58
Document Title:	VISTA calibration plan
Document No:	0002
Document Originator:	Peter Bunclark

Discrepancy/Clarification Required/Observation:

The ORIGFILE as a keyword not specific for a detector should go to the primary header. (typo only)

Action Recommended by Initiator:

Date/Signature of Initiator: Wolfgang Hummel, 2005-01-18

RI Classification: (to be completed by Board Chairperson)				
Major	Minor	Withdrawn		
Date/Signature Chairperson:				

Actionee Corrective Action:

Will fix in future FITS illustrations but we would be interested to know if it is acceptable to have top-level keywords such as ORIGFILE and EXPTIME in both the top level header _and_ in the IMAGE extensions. At the moment these keywords end up in both places because of the behaviour of the BOSS and IRACE software.

Date/Signature Actionee: PSB

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	35 of 104
		Author:	VDFS Team

2.3 Review Items referring to the Data Reduction Specification DRS [RD3].

7	Discrepancies
7	Clarifications
3	Observations
17	Total

Table 2-3 RIx Count for DRS

2.3.1 PBA-008 DRS Sec 0:D:1618v2 + ADs:PSB

Review Title:			X	Discrepancy	
FDR VISTA DFS		Review Item		Clarification	
RI No:	PBA-008				
Review Item	Page 5				
Document Title:	VISTA IR Data Re	VISTA IR Data Reduction Specifications			
Document No:	VIS-SPE-IOA-200	VIS-SPF-IOA-20000-0003			
Document Originator:	Peter Bunclark				
Discrepancy/Clarification	on Required/Obser	vation:			
For consistency, all VISTA DFS documents should be upgraded to 1618/2.0 Action Recommended by Initiator:					
Update reference AD1 (page 5) to 1618/2.0, 2004-05-22 Rename document to "VISTA IR Camera Data Reduction Library Specifications" Add as Applicable Documents: [AD4] Common Pipeline Library User Manual, VLT-MAN-ESO-19500-2720, issue 1.0, 2003-12-15 [AD5] Common Pipeline Library Reference, VLT-MAN-ESO-19500-2721, , issue 1.0, 2004-05-04					
Date/Signature of Initia	tor: Pascal Balleste	r			
RI Classification: (to be	completed by Board	d Chairperson)			
Major	Minor	W	ithdra	wn	
Date/Signature Chairpe	erson:				
Actionee Corrective Act	tion:				
Yes. See response to MPE-002. We note that the 1618 issue 1.0 DRS is fairly close in specification to a 1618 issue 2.0 DRLS.					
Date/Signature Actionee: PSB					
Board Disposition:					
DI Closed.					
RI Closed with Actions					
Date/Signature Chairpe	erson:				
VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013		
-----------	---------------------	-------------	------------------------		
DATA FLOW	RID Responses	Date:	2005-01-26		
SVSTFM	_F	Issue:	0.4		
		Page:	37 of 104		
		Author:	VDFS Team		

2.3.2 MPE-005 DRS Sec 0:C:DO wording:PSB

Review Title:

		Review Item	X	Clarification
FDK VISTA DFS				Observation
RI No:	MPE-005			
Review Item				

Г

Discronancy

Document Title:	VISTA Data Reduction Specifications
Document No:	VIS-SPE-IOA-20000-003
Document Originator:	Peter Bunclark

Discrepancy/Clarification Required/Observation:

Functionality for manipulating and grouping data files using information from the FITS headers will be provided by the DFS pipeline infrastructure (i.e. the Data Organizer) rather by than the FITS routines. Classification and grouping of data is typically done before a pipeline recipe is being called.

Action Recommended by Initiator:

Rephrase

Date/Signature of Initiator: MPE

RI Classification: (to be completed by Board Chairperson)

Major Minor Date/Signature Chairperson: Withdrawn

Actionee Corrective Action:

Will do so but which part (sec/page) of the DRS requires the rephrasing?

Date/Signature Actionee: PSB

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	38 of 104
		Author:	VDFS Team

2.3.3 MPE-001 DRS Sec 1.1:D:Rephrase:PSB

Review Title:			Χ	Discrepancy
FDR VISTA DFS		Review Item		Clarification
RI No:	MPE-001			Observation
Review Item	Page 5. section 1.1			
Document Title:	VISTA Data Redu	ction Specifications		
Document No:	VIS-SPE-IOA-200	000-003		
Document Originator:	Peter Bunclark			
Discrepancy/Clarification	on Required/Obser	vation:		
The sentence "The Data Flow System pipeline will provide a set of standard functions" should be "The Common Pipeline Library will provide …".				
Rephrase Date/Signature of Initia	tor: MPE			
RI Classification: (to be	completed by Board	d Chairperson)		
Major	Minor	Wi	ithdra	awn
Date/Signature Chairpe	rson:			
Actionee Corrective Act	ion:			
Will rephrase as requested.				
Date/Signature Actioned	e: PSB			
Board Disposition:				
RI Closed:				
KI Closed with Actions: Date/Signature Chairne	rson:			

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM		Issue:	0.4
		Page:	39 of 104
		Author:	VDFS Team

2.3.4 MPE-002 DRS Sec 1.3:D:1618 v2:PSB

Review Title:			Χ	Discrepancy	
FDR VISTA DFS		Review Item		Clarification Observation	
RI No:	MPE-002			Observation	
Review Item	Page 5, section 1.3	Page 5, section 1.3			
Document Title:	VISTA Data Redu	/ISTA Data Reduction Specifications			
Document No:	VIS-SPE-IOA-200	000-003			
Document Originator:	Peter Bunclark				
Discrepancy/Clarification Required/Observation: AD1 should be issue 2.0, 2004-05-22					
Upgrade document Date/Signature of Initiator: MPE					
DI Classification: (to be	completed by Poor	d Chairmargan)			
Maior	Minor	u Chanperson) W	ithdra	wn	
Date/Signature Chairpe	rson:				
Actionee Corrective Act	ion:				
Will change. [We had understood that as these documents were originally designed with respect to 1618v1 it had been agreed that a complete rewrite to conform to v2.0 was not required, and indeed has not occurred. Thus we deliberately still referred to v1.0]					
Date/Signature Actionee: PSB					
Board Disposition: RI Closed: RI Closed with Actions:					
Date/Signature Chairpe	rson:				

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	40 of 104
		Author:	VDFS Team

2.3.5 SCA-003 DRS Sec 2:O:Colours:STH

Review Title:				Discrepancy		
FDR VISTA DFS	FDR VISTA DFS		\$7	Clarification		
BI No:	SCA-003		X	Observation		
Rino. Review Item	Page 8 figure 2-1					
Document Title	VISTA Data Redu	ction Specifications				
Document No:	VIS-SPE-IOA-200	00-0003				
Document Originator		00 0005				
 Discrepancy/Clarification Required/Observation: The text in some coloured boxes is not very legible. Perhaps using lighter colours for the boxes will improve readability. Action Recommended by Initiator: Date/Signature of Initiator: Sandra Castro 						
RI Classification: (to be	completed by Boar	d Chairperson)				
Major Dete Size trans Chairma	Minor	W	ithdr	awn		
Date/Signature Chairpe	erson:					
Actionee Corrective Ac	tion:					
Noted – will try this.						
Date/Signature Actione	Date/Signature Actionee: STH					
Board Disposition:						
RI Closed:						
RI Closed with Actions:						
Date/Signature Chairpe	erson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM		Issue:	0.4
		Page:	41 of 104
		Author:	VDFS Team

2.3.6 WHU-002 DRS Sec 3.2:D:look for stability:JRL

Review Title:

FDR VISTA DFS

Review Item	Cla
	Obs

X Discrepancy Clarification Observation

	Observation			
RI No:	WHU-02			
Review Item	Page 9 of 19			
Document Title:	VISTA IR Cam DRS			
Document No:	VIS-SPE-IOA-20000-003			
Document Originator:	Peter Bunclark			
Discrepancy/Clarification Required/Observation:				
Vircam reset combine: 'look for stability'. Related to page 16 of 58 of the Calibration Pla				

Vircam_reset_combine: 'look for stability'. Related to page 16 of 58 of the Calibration Plan This statement is a little bit fuzzy. I see two possible interpretations:

- the reference frame is required to retrieve only its QC parameter and to perform trending within the recipe, comparing the new QC parameter against the QC parameter of the reference frame. This is model is not supported within the ESO DFO. The recipe should generate a QC parameter, that will be ingested in a database. Trending as a QC task works on the ingested QC parameters, but is not checked on the recipe level.
- In case the reference frame is required to reasons of data reduction or for reasons to calculate a QC parameter (e.g. to subtract a reference flat from the current flat to get rid of the fixed pattern noise and to monitor the pattern coherence). This makes sense and is part of operations of some instruments (e.g. UVES). The reference frame is a static entity of the DO calibDB on Paranal, it is not dynamically updated. The reference frame usually uses a different PRO.CATG than the product (e.g. REF_MASTER_FLAT versus MASTER_FLAT).

Action Recommended by Initiator:

Reference frames should be used as recipe input calibration where appropriate.

Date/Signature of Initiator: WH, 2005-01-18

0	,	
RI Classification: ((to be completed by Board Chairperson)	
Major	Minor	Withdrawn

Date/Signature Chairperson:

Actionee Corrective Action:

We agree this statement is somewhat vague. What we meant by this was after combining the reset frames, use a reference frame to assess the quality of the combined reset frames and produce QC parameters for later use via database. We will rephrase this.

- **Date/Signature Actionee: JRL**
- **Board Disposition:**
- **RI Closed**:

RI Closed with Actions:

Date/Signature Chairperson:

VISTA DATA FLOW SYSTEM	Infrared Camera PDR RID Responses	Doc Number: Date: Issue:	VIS-TRE-IOA-20000-0013 2005-01-26 0.4
		Page:	42 of 104
		Author:	VDFS Team

2.3.7 SCA-004 DRS 3.3.3 Trending

Review Title:			Χ	Discrepancy
FDR VISTA DFS		Review Item		Clarification
RI No:	SCA-004			Observation
Review Item	Page 9 Sub item 3.3 and throughout the text			
Document Title:	VISTA Data Redu	VISTA Data Reduction Specifications		
Document No:	VIS-SPE-IOA-200	000-0003		
Document Originator:				
Discrepancy/Clarification	on Required/Obser	vation:		
The pipeline does not do Action Recommended b	comparisons and/or y Initiator:	perform trend analysi	S.	
Modify text.				
Date/Signature of Initia	tor: Sandra Castro			
RI Classification: (to be	completed by Board	d Chairperson)		
Major	Minor	W	ithdra	awn
Date/Signature Chairpe	erson:			
Actionee Corrective Act	tion:			
We will remove any reference to trend analysis.				
Date/Signature Actionee: PSB				
Board Disposition:				
RI Closed:				
RI Closed with Actions:				
Date/Signature Chairperson:				

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	43 of 104
		Author:	VDFS Team

2.3.8 MPE-004 DRS Sec 3.4:D:OB processing:MJI

Review Title: FDR VISTA DFS			Χ	Discrepancy
		Review Item		Clarification Observation
RI No: MPE-004				
Review Item	Page 10,11,12			
Document Title:	VISTA Data Reduction Specifications			

VIS-SPE-IOA-20000-003

Discrepancy/Clarification Required/Observation:

The DFS pipeline only knows about templates, not about Observation Blocks that *it* is, it cannot not process files resulting from the execution of an Observation Block. We should discuss case by case whether a dedicated template should be created or whether some of the functionalities (i.e. computation of readout noise) can be integrated in existing template. The agreed upon modifications should be then reflected in all documents.

Action Recommended by Initiator:

Document No:

Document Originator:

Date/Signature of Initiator: MPE

RI Classification: (to be completed by Board Chairperson)

Major X Minor Withe

Withdrawn

Date/Signature Chairperson:

Actionee Corrective Action:

We agree there needs to be further discussion at FDR about the link between Template and OBs and the DFS.

Some obvious issues for us are:

How are files are grouped in the Data Organiser?

What are the allowed DPR keywords and do they cover the range of processing options we require?

Can the DFS pipeline use the archive to find suitable reference/master calibrations to use in its processing? If not, how are the night-time science observations calibrated using the day-time dome flats and twilight flats (which don't appear in the same template)?

If the DFS pipeline can use the archive, then much of our design still holds. For example, the "VIRCAM_detector_noise" Observation Block consists of a DARK template with two frames followed by a "domeflat" template with two frames. The pipeline processing is triggered by the completion of the "domeflat" template, not by the completion of the OB. The OB simply guarantees that the pipeline will find two suitable DARK frames ready and waiting in the archive.

We think our best strategy would be to integrate the functionality of the various templates where possible - for example, when a dome flat template completes, the pipeline attempts to generate both a combined dome flat and a linearity measurement. The contents of the

VISTA DATA FLOW	Infrared Camera PDR RID Responses	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
SYSTEM	*	Issue:	0.4
		Page:	44 of 104
		Author:	VDFS Team

template can be used to determine whether a particular processing step is feasible (e.g. don't try a linearity measurement if there are too few exposures). This strategy would also make the instrument more efficient, since the same observations are reused. It would also help resolve the issues raised in MPE-011 and PBA-018.

Date/Signature Actionee: MJI

Board Disposition:

			1
VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM	F	Issue:	0.4
		Page:	45 of 104
		Author:	VDFS Team

2.3.9 MPE-003 DRS Sec 3.5:D:Prepared OB discrepancy:PSB

Review Title:			Χ	Discrepancy
FDR VISTA DFS		Review Item		Clarification
RI No:	MPE-003			Observation
Review Item	Page 10, section 3.	5		
Document Title:	VISTA Data Redu	VISTA Data Reduction Specifications		
Document No:	VIS-SPE-IOA-200	000-003		
Document Originator:				
Discrepancy/Clarification	on Required/Obser	vation:		
There is an inconsistency between this document and the calibration plan: The prepared OB (see my comments about OB/ versus templates) should be VIRCAM_img_cal_detnoise as defined in the calibration plan. Action Recommended by Initiator: Upgrade documentation				
Date/Signature of Initia	tor: MPE			
RI Classification: (to be completed by Board Chairperson)MajorMinorWithdrawnDate/Signature Chairperson:				
Actionee Corrective Act	tion:			
Will correct.				
Date/Signature Actionee: PSB				
Board Disposition:				
RI Closed:				
RI Closed with Actions:				
Date/Signature Chairperson:				

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	46 of 104
		Author:	VDFS Team

WHU-003 DRS Sec 4.1.1:O:scan of FITS headers:JRL 2.3.10

Review Title:	Review Item		Discrepancy
EDD VIETA DEC			Clarification
Γυα γιστά υγο		Χ	Observation

RI No:	WHU-03
Review Item	Page 13 of 19
Document Title:	DRS
Document No:	VIS-SPE-IOA-20000-003
Document Originator:	Peter Bunclark

Discrepancy/Clarification Required/Observation:

Vircam_sky_flat_combine: 'scan of fits headers'

Action Recommended by Initiator:

It should be made clear if this is a list of all science/sky frames of the night, or if this is the usual list of raw science input frames for a science recipe (e.g. vircam_jitter_micro_process), meaning a stack of frames of the same template (all having the same TPL.START)

Date/Signature of Initiator: 2005-01-18 Wolfgang Hummel

RI Classification: (to be com	pleted by Board	Chairperson)
Major	Minor	Withdrawn
Date/Signature Chairperson	•	
Actionee Corrective Action:		
We will make clear that this a more generally applicable that	list derived from n that.	within a template, though the software is
Date/Signature Actionee: JR	L	
Board Disposition:		
RI Closed:		
RI Closed with Actions:		
Date/Signature Chairperson	:	

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	47 of 104
		Author:	VDFS Team

2.3.11 SCA-005 DRS Sec 5:0:Typo:PSB

Review Title:				Discrepancy			
FDR VISTA DFS		Review Item	V	Clarification			
RI No:	SCA-005		Α	Observation			
Review Item	Page 16	Page 16					
Document Title:	VISTA Data Redu	VISTA Data Reduction Specifications					
Document No:	VIS-SPE-IOA-200	000-0003					
Document Originator:							
 Discrepancy/Clarification Required/Observation: It must be a typo in last sentence of Item 5. "Error! Reference source not found" Action Recommended by Initiator: 							
Date/Signature of Initia	tor: Sandra Castro						
RI Classification: (to be	completed by Boar	d Chairperson)	Withdu	own			
Niajur Date/Signature Chairne			vv iului a	awii			
A ation of Commenting A at	4						
Actionee Corrective Action: Will fix							
Date/Signature Actionee:							
RI Closed: RI Closed with Actions: Date/Signature Chairpe	erson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	48 of 104
		Author:	VDFS Team

2.3.12 SCA-006 DRS Sec 5.1:C:Parameter passing:JRL

Review Title:				Discrepancy			
FDR VISTA DFS		Review Item	X	Clarification			
RI No:	SCA-006						
Review Item	Page 16 item 5.1						
Document Title:	VISTA Data Redu	ction Specifications					
Document No:	VIS-SPE-IOA-200	000-0003					
Document Originator:							
Discrepancy/Clarification	on Required/Obser	vation:					
How is the different infor distinct tasks? For examp Is it inside the same recip Action Recommended b	How is the different information going to be passed to the pipeline in order to perform distinct tasks? For example, sky unstable requires an extra step to be performed by the recipe. Is it inside the same recipe or by using some input parameter or something else? Action Recommended by Initiator:						
Date/Signature of Initia	tor: Sandra Castro						
RI Classification: (to be Major	completed by Board Minor	d Chairperson) W	ithdra	awn			
Date/Signature Chairpe	erson:						
Actionee Corrective Act	tion:						
The processing procedure will be determined by the template construction not triggered by sky conditions.							
Board Disposition:							
RI Closed: RI Closed with Actions: Date/Signature Chairpe	rson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	49 of 104
		Author:	VDFS Team

2.3.13 MPE-006 DRS Sec A:C:Tile compression:MJI

		•		
Review Title:		Review Item		Discrepancy
			Χ	Clarification
FDR VISTA DFS				Observation
RI No:	MPE-006			
Review Item	Page 19			
Document Title:	VISTA Data Redu	ction Specifications		
Document No:	VIS-SPE-IOA-200	000-003		
Document Originator	Peter Bunclark			

Discrepancy/Clarification Required/Observation:

We will support tile compression if it becomes a FITS standard and if ESO decides to use it. At which level of the system would you like to use tile compression? Would you like to created tile compressed raw frames or would you like only to create tile compressed pipeline products?

Action Recommended by Initiator:

Provide information

Date/Signature of Initiator: MPE

RI Classification: (to be completed by Board Chairperson)

Major Minor

Withdrawn

Date/Signature Chairperson:

Actionee Corrective Action:

We need to discuss this since from a pipeline point-of-view it doesn't matter if the data is Rice tile compressed. This is more of an operational issue e.g. data storage and shipping requirements, and i/o overheads while processing.

If ESO were to support tile compression we would like to use it as early as possible in the chain - i.e. in the raw data saved by the IRACE controller. This is on condition that existing tools, such as RTD, would still be able to read and display the data.

Date/Signature Actionee: MJI

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	50 of 104
		Author:	VDFS Team

2.3.14 PBA-009 DRS Sec A:C:Image sections:JRL

Review Title: FDR VISTA DFS				Discrepancy Clarification
		Review Item	Χ	
				Observation
RI No:	PBA-009			

Review Item	Appendix A, page 18
Document Title:	VISTA IR Data Reduction Specifications
Document No:	VIS-SPE-IOA-20000-0003
Document Originator:	Peter Bunclark

Discrepancy/Clarification Required/Observation:

Image and Image section access:

The proposed syntax for parsing filenames is applicable at a higher level than a software library, e.g. at the command line level if one wants to provide such a tool for pipeline access. In our opinion, this is not the right way to specify extensions in library functions, because this would force the reallocation and manipulation of the filename character string each time a given FITS extension needs to be accessed.

CPL has (like QFITS) the possibility to extract any given extension from a FITS file (as well as write it to disk) via variables specifying that extension (by number or name), thus accessing FITS extensions in CPL-based applications is no problem. Also, the functionality for extracting/inserting parts of CPL objects, e.g. images, once the whole object is loaded, is available as well. Optimizing access to subsets of extensions by combining the two tasks mentioned above in one function in a sophisticated way is an option which could be implemented in a reasonable time. However, one would need to get some more figures indicating that the subset access of FITS extension really is a bottleneck in pipeline processing before starting such CPL code modifications.

Furthermore, it is usually not required for instrument pipelines to extract specific extensions from a complex FITS file. At the VLT, software external to the pipeline splits up such multi-extension files and feeds the extracted extensions as plain table or image files to the pipeline recipes.

Action Recommended by Initiator:

Plan access by parameters rather than by string syntax.

Date/Signature of Initiator: Pascal Ballester and the CPL team

RI Classification:	(to be completed by Board Chairperson)
Major X	Minor

Date/Signature Chairperson:

Actionee Corrective Action:

Our only concern here was to ensure that there would be an efficient way to address and extract/write image sections or images in extensions. The suggested syntax was just an example of a method in common use. Efficient access to sections of images in extensions is required, for example, in the linearity correction and cross-talk correction.

Withdrawn

Date/Signature Actionee: JRL

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	51 of 104
		Author:	VDFS Team

2.3.15 PBA-010 DRS Sec A:C:Tables:PSB

Review Title:				Discrepancy		
FDR VISTA DFS		Review Item	Χ	Clarification		
RI No:	PBA-010			Observation		
Review Item	Appendix A. page	18				
Document Title:	VISTA IR Data Re	VISTA IR Data Reduction Specifications				
Document No:	VIS-SPE-IOA-200)00-0003				
Document Originator:	Peter Bunclark					
 Discrepancy/Clarification Required/Observation: Table subsets and selections: This functionality will be integrated in the Common Pipeline Library Action Recommended by Initiator: Date/Signature of Initiator: Pascal Ballester and the CPL team 						
RI Classification: (to be	completed by Boar	d Chairperson)	• 1 1			
Major Data/Signatura Chairna	Minor	W	ithdr	awn		
Date/Signature Chan pe						
Actionee Corrective Action: That is good						
Board Disposition.						
RI Closed: RI Closed with Actions: Date/Signature Chairperson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	F	Issue:	0.4
		Page:	52 of 104
		Author:	VDFS Team

2.3.16 PBA-011 DRS Sec A:C:CPL Errors:JRL

Review Title:

FDR VISTA DFS

Discrepancy Clarification Observation

Х

			Observation
RI No:	PBA-011		
Review Item	Appendix A, page	18	
Document Title:	VISTA IR Data R	eduction Specifications	
Document No:	VIS-SPE-IOA-200	000-0003	
Document Originator:	Peter Bunclark		
	D 1/01		

Review Item

Discrepancy/Clarification Required/Observation:

Error status passing:

CPL provides an error handling subsystem which processes all errors/warnings (also the ones originating in QFITS routines) in a consistent way. Checking an inherited status in each function and returning immediately if that's not o.k. (as is done in CFITSIO) results in a safe library but does not help the application programmer: grouping several CPL calls before checking the status would, in case of an error, not single out the individual routine causing that error. Checking on errors after each function call is, although maybe less convenient, the only safe approach in our opinion.

Action Recommended by Initiator:

Follow CPL conventions for error handling.

Date/Signature of Initiator: Pascal Ballester and the CPL team

RI Classification: (to be comp					
Major	Minor	Withdrawn			
Date/Signature Chairperson:	Date/Signature Chairperson:				

Actionee Corrective Action:

We will to adhere to CPL standards.

However we seem to disagree on the philosophy of error handling, and it would be useful to resolve this to avoid future confusion. For example we feel the statement here "...in case of error, not single out the individual routing causing the error." is incorrect, as in fact it will do exactly that.

Date/Signature Actionee: JRL

Board Disposition:

VISTA	Intrared Camera PDR	Doc Number:	VIS-1KE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM		Issue:	0.4
		Page:	53 of 104
		Author:	VDFS Team

2.3.17 PBA-012 DRS Sec A:C:WCSLIB:PSB

Review Title:

FDR VISTA DFS

Review Item

Discrepancy Clarification Observation

			Obsci vation
RI No:	PBA-012		
Review Item	Appendix A, page	19	
Document Title:	VISTA IR Data R	eduction Specifications	
Document No:	VIS-SPE-IOA-200)00-0003	
Document Originator:	Peter Bunclark		
	D 1/01		

Discrepancy/Clarification Required/Observation:

A WCS Interface

WCSLIB is an outside library which, we want to use as a "preferred" auxiliary library for CPL-based applications. That means that, for CPL release 2.0, we'll provide documentation about the integration of WCSLIB functions within CPL code which needs world coordinate system support. This documentation will describe code which has been actually tested with CPL-based pipelines, thus, it can readily serve as template code. A similar exercise has been done with the FFTW library which serves as our external library for intensive FFT tasks

Action Recommended by Initiator:

Date/Signature of Initiator: Pascal Ballester and the CPL team

Major	Minor	Withdrawn				
Date/Signature Chairperson:						
Actionee Correcti	ive Action:					
Thank you for acce	epting this request.					
Date/Signature A	ctionee: PSB					
Board Disposition	1:					
RI Closed:						
RI Closed with A	ctions:					

Date/Signature Chairperson:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	54 of 104
		Author:	VDFS Team

2.4 Review Items referring to the Data Reduction Library Design DRLD [RD4].

6	Discrepancies
12	Clarification
10	Observations
28	Total

Table 2-4 RIx Count for DRLD

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	55 of 104
		Author:	VDFS Team

2.4.1 SCA-008 DRLD Sec 0:C:External Libraries:JRL

Review Title:				Discrepancy
FDR VISTA DFS		Review Item	X	Clarification
RI No:	SCA-008			Observation
Review Item	No specific item			
Document Title:	VISTA Data Redu	ction Library Design		
Document No:	VIS-SPE-IOA-200	000-0010		
Document Originator:				
Discrepancy/Clarification	on Required/Obser	vation:		
Which external software	libraries do you plai	n to use in the pipeline	?	
Action Recommended b	y Initiator:			
Date/Signature of Initia	tor: Sandra Castro			
RI Classification: (to be	completed by Board	d Chairperson)		
Alajor Minor Withdrawn				
Date/Signature Chairpe	erson:			
Actionee Corrective Act	tion:			
We only require WCSLIB from Mark Calabretta. This now appears to be available within CPL (see also PBA-012).				
Date/Signature Actionee: JRL				
Board Disposition:				
RI Closed:				
RI Closed with Actions:				
Date/Signature Chairperson:				

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	56 of 104
		Author:	VDFS Team

2.4.2 PBA-013 DRLD Sec 1.2:C:+AD:PSB

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	X	Clarification	
RI No:	PBA-013			Observation	
Review Item	Page 7, Section 1.2	2			
Document Title:	VISTA IR Camera	Data Reduction Libr	ary De	esign	
Document No:	VIS-SPE-IOA-200	000-0010			
Document Originator:	Jim Lewis				
Discrepancy/Clarification	on Required/Obser	vation:			
CPL documentation shou	ld be listed in the A	pplicable Documents			
Action Recommended b	y Initiator:				
 [Add as Applicable Documents: [AD6] Common Pipeline Library User Manual, VLT-MAN-ESO-19500-2720, issue 1.0, 2003-12-15 [AD7] Common Pipeline Library Reference, VLT-MAN-ESO-19500-2721, issue 1.0, 2004-05-04 Date/Signature of Initiator: Pascal Ballester 					
Major	Minor	u Chanperson) W	ithdr:	awn	
Date/Signature Chairpe	erson:	•••	mui	u // 11	
Actionee Corrective Act	tion:				
We will add references as requested.					
Date/Signature Actionee: PSB					
Board Disposition:					
RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	F	Issue:	0.4
		Page:	57 of 104
		Author:	VDFS Team

2.4.3 PBA-016 DRLD Sec 2.13:C:How generate catalogs:JRL

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	X	Clarification	
RI No:	PBA-016			Observation	
Review Item	Page 19, Section 2				
Document Title:	VISTA IR Camera	a Data Reduction Li	brary D	Design	
Document No:	VIS-SPE-IOA-200	000-0010			
Document Originator:	Jim Lewis				
Which software or extern Action Recommended h Date/Signature of Initia	nal libraries will be u by Initiator: ntor: Pascal Balleste	used for the generation	on of c	atalogues?	
RI Classification: (to be Major	completed by Boar Minor	d Chairperson)	Withdr	awn	
Date/Signature Chairpe	erson:				
Actionee Corrective Ac	tion:				
Catalogue generation software will be supplied as part of the software deliverables (e.g. see section 6.9 in DRLD). Date/Signature Actionee: JRL					
Board Disposition:	Board Disposition:				
RI Closed: RI Closed with Actions: Date/Signature Chairpe	erson:				

МІСТ А	Infrared Comara DDD	Dog Number:	VIS THE IOA 20000 0013
V151 A	Imrareu Camera PDK	Doe Number.	VIS-TRE-IOA-20000-0015
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM	_F	Issue:	0.4
		Page:	58 of 104
		Author:	VDFS Team

2.4.4 FCO-001 DRLD Sec 2.7:C:Persistence decay:JRL

Review Title:				Discrepancy		
FDR VISTA DFS		Review Item	X	Clarification		
DINos	1			Observation		
KI NO: Doviow Itom	1					
Review Item Decument Title:	VISTA Data Paduation Library Design					
Document No:	VIS IA Data Reduction Library Design					
Document Ariginatory	VIS-SPE-IOA-20000-0010					
Document Originator.	JIII Lewis	•				
Discrepancy/Clarification Required/Observation : Sect. 2.7, is the persistence decay constant expected to depend on each detector?						
Action Recommended by Initia	tor:					
Note if tau is detector-dependent						
Date/Signature of Initiator: 20 J	January 200	5, F. Comerón				
RI Classification: (to be complet	ted by Boar	d Chairperson)				
Major N	linor	W	/ithdra	awn		
Date/Signature Chairperson:						
Actionee Corrective Action:						
The persistence parameters for ea This was implicitly assumed in se sentence to this effect.	ch detector ection 2.7, b	may indeed be differ ut we will make this	ent. clearer	by adding a		
Date/Signature Actionee: JRL						
Board Disposition:						
RI Closed:						
RI Closed with Actions:						
Date/Signature Chairperson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	r	Issue:	0.4
		Page:	59 of 104
		Author:	VDFS Team

2.4.5 FCO-002 DRLD Sec 2.9:O:equation 2-22 typo:MJI

Review Title:			Di	iscrepancy
		Review Item		arification
FDR VISTA DFS				hannation
DI No:	2		Δ	DServation
Review Item	2			
Document Title:	VISTA D	ata Reduction Library	Design	
Document No:	VIS-SPE-	IOA-20000-0010	Design	
Document Originator:	Jim Lewis			
 Discrepancy/Clarification Required/Observation: Sect. 2.9, there seems to be a typo in Eq. 2-22 (k_3,m without ^3) Action Recommended by Initiator: Edit to fix, if a typo Date/Signature of Initiator: 20 January 2005, F. Comerón 				
RI Classification: (to be complet	ed by Board	d Chairperson)		
Major M Date/Signature Chairperson:	linor	W	ithdrawn	
Actionee Corrective Action:				
Yes it is a typo, it is meant to read k_3 / k_1**3 Will be fixed. Date/Signature Actionee: MJI				
Board Disposition:				
RI Closed: RI Closed with Actions: Date/Signature Chairperson:				

VISTA DATA FLOW	Infrared Camera PDR RID Responses	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
SYSTEM	•	Issue: Page:	0.4 60 of 104
		Author:	VDFS Team

2.4.6 PBA-017 DRLD Sec 3:C:Association Map:STH

Review Title:				Discrepancy		
FDR VISTA DFS		Review Item	X	Clarification		
RI No:	PBA-017			Observation		
Review Item	Page 25					
Document Title:	VISTA IR Camera	a Data Reduction L	ibrary D	esign		
Document No:	VIS-SPE-IOA-200	VIS-SPE-IOA-20000-0010				
Document Originator:	Jim Lewis					
Discrepancy/Clarificati	on Required/Obser	rvation:				
The association map should also describe the processing of science data. Action Recommended by Initiator:						
Date/Signature of Initia RI Classification: (to be Major Date/Signature Chairpe	tor: Pascal Balleste completed by Boar Minor erson:	r d Chairperson)	Withdr	awn		
Actionee Corrective Ac	tion:					
 Will comply. However we are uncertain about the purpose of this request given what we have already provided, and would like to discuss at FDR. Date/Signature Actionee: STH Board Disposition: 						
RI Closed: RI Closed with Actions: Date/Signature Chairpe	erson:					

		-	
VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	F	Issue:	0.4
		Page:	61 of 104
		Author:	VDFS Team

2.4.7 MPE-010 DRLD Sec 4:D:DPR keywords:PSB

Review Title:			Χ	Discrepancy		
FDR VISTA DFS		Review Item		Clarification		
		Observation				
RI No:	MPE-010	MPE-010				
Review Item	Page 36, Table 4-1	Page 36, Table 4-1				
Document Title:	Data Reduction Li	brary Design				
Document No:	VIS-SPE-IOA-200	000-0010				
Document Originator:	Jim Lewis					
Discrepancy/Clarification	on Required/Obser	vation:				
The issue 3.0 of the DICI	B document (that wi	ll be released in the	spring)	lists possible values		
for the DPR keywords.						
In particular:						
"Reset Frame": DPR.CA	TG=TEST -> DPR	.CATG=CALIB				
"Twilight Flat": DPR.TY	TPE should be "FLA	AT,SKY"				
"Photometric", DPR.TY	PE should be "STD	,FLUX"				
In addition, the list of key	word values provid	led in Table 4-1 is no	ot consi	stent with the ones in		
Table 4-2.	• • • • • • • • • •			T 11 4 2		
(e.g. TWILIGHT, FLAT	is used in Table 4-1	while FLAT, SKY 1	s used 1	n Table 4-2)		
Action Recommended b	y Initiator:					
Upgrade documentation						
Date/Signature of Initia	tor: MPE					
RI Classification: (to be	completed by Board	d Chairperson)	¥7:41. J			
Niajor Data/Signatura Chairna	МППОГ	```	villara	awn		
Date/Signature Chairpe						
Actionee Corrective Act	tion:					
We would like to discuss	the "TWILIGHT" i	ssue but to help with	n this w	e would like to see a		
draft of issue 3.0 of the D	OICB document before	ore FDR to see what	possibl	e DPR keywords are		
available.						
At the moment we are	worried about the ur	iqueness of the com	binatio	ns e.g. FLAT, SKY		
might be dark sky flat in	a "blank" field, whi	ch is not the same as	a twili	ght flat.		
We will fix the inconsis	tencies when we hav	ve resolved the DPR	keywo	rd issues.		
We would also like to ag	gree on some DPR.	TECH and DPR. TYP	PE keyv	vords to identify the		
HOWFS data, as there is	nothing in the DICI) for a wavefront me	easurem	ient. Does HOWFS		
data needs to be DPR.CAIG=1ES1?						
Dete/Simpture Actionest DSD						
Date/Signature Actionee: PSB						
Doard Disposition:						
PI Closed:	DI Classic					
KI Ulosed: DI Closed with Actions:						
Date/Signature Chairne	rson					
Date/Signature Chairperson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	F	Issue:	0.4
		Page:	62 of 104
		Author:	VDFS Team

2.4.8 MPE-012 DRLD Sec 4:D:Processing table:JRL

Review Title:			Χ	Discrepancy	
FDR VISTA DFS		Review Item		Clarification	
RI No:	MPE-012			Observation	
Review Item	Page 39, table 3-2				
Document Title:	Data Reduction Li	brary Design			
Document No:	VIS-SPE-IOA-200	000-0010			
Document Originator:	Jim Lewis				
Discrepancy/Clarification	on Required/Obser	vation:			
Table is incomplete. I for probably because there is See also MPE-004. Action Recommended b	instance could not no template associa	find any reference to ated to this recipe.	vircar	n_badpix_mask,	
The table should be upgra reviewed. Date/Signature of Initia	aded. Relation betw	veen template- raw typ	e and	recipe should be	
RI Classification: (to be	completed by Board	d Chairperson)			
Major Minor Withdrawn					
Date/Signature Chairpe	erson:				
Actionee Corrective Act	tion:				
Agreed, we will add then	Agreed, we will add them.				
Date/Signature Actionee: JRL					
Board Disposition:					
RI Closed:					
RI Closed with Actions:	RI Closed with Actions:				
Date/Signature Chairperson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	63 of 104
		Author:	VDFS Team

2.4.9 PBA-018 DRLD Sec 4:D:Class keywords:JRL

Review Title:			X	Discrepancy
FDR VISTA DFS		Review Item		Clarification Observation
RI No:	PBA-018			Observation
Review Item	Page 39			
Document Title:	VISTA IR Camera	Data Reduction L	ibrary D	esign
Document No:	VIS-SPE-IOA-200	000-0010		
Document Originator:	Jim Lewis			
Discrepancy/Clarification	on Required/Obser	vation:		
Classification keywords. Action Recommended by Initiator: Use different keyword values or define a single data type				
Date/Signature of Initia RI Classification: (to be	tor: Pascal Balleste	r d Chairperson)		
Major Minor Withdrawn				
Date/Signature Chairpe	erson:			
Actionee Corrective Action: see MPE-011				
Date/Signature Actionee: JKL				
RI Closed: RI Closed with Actions:	reon.			

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	64 of 104
		Author:	VDFS Team

2.4.10 WHU-011 DRLD Sec 4:O:DPR table:PSB

Review Title: FDR VISTA DFS		Review Item	x	Discrepancy Clarification
RI No:	WHU-11		1	Observation
Review Item	Page 36 of 116			
Document Title:	Data Reduction Li	brary Design		
Document No:	VIS-SPE-IOA-200	000-0010		
Document Originator	Jim Lewis			

Discrepancy/Clarification Required/Observation:

Table 4.2

-Within the ESO-DFS DPR keys are used to classify frames and determine to which recipe the file/stack is submitted. DPR.CATG=TEST is for all pipeline environments configured as the ignore tag, hence TEST/BIAS/IMAGE should go to CALIB/BIAS/IMAGE

- TWILIGHT is not defined in DICD, hence use SKY,FLAT

- the linearity template and the illumination template are missing

-some frames of a science stack could contain SCIENCE/SKY/IMAGE

- the HOWFS frames that pass the DO and should be ignored by the DRS but will be ingested into the archive must have dedicated DPRs as well.

Action Recommended by Initiator:

Date/Signature of Initiator: Wolfgang Hummel, 2005-01-18

RI Classification: (to be completed by Board Chairperson)				
Major	Minor	Withdrawn		
Date/Signature Chairperson:				

Actionee Corrective Action:

Will fix the "TEST" error. Please see response to MPE-010 re "TWILIGHT". Linearity/illumination seem to be present. Need to discuss if the combination SCIENCE/SKY/IMAGE can occur. HOWFS (see response to MPE-010)

Date/Signature Actionee: PSB

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	65 of 104
		Author:	VDFS Team

2.4.11 WHU-012 DRLD Sec 4.2:O:DRP keys:JRL

Review Title:				Discrepancy
FDR VISTA DFS		Review Item	V	Clarification
RI No:	WHU-12 (was a d	uplicate 11)	Δ	Observation
Review Item	Page 39 of 116. Ta	Page 39 of 116 Table 4.2		
Document Title:	DR Library Design	DR Library Design		
Document No:	0010			
Document Originator:	Jim Lewis			
 See WHU-11 on DPR keys If the raw frames of the linearity template should go to a recipe different to the domeflat recipe they should be distinguished by the DPR keys. DICD maintains a list of approved DPR.TYPE keys. LINEARITY and DOME or SCREEN are maybe valid DPR.TYPE values. Action Recommended by Initiator: Please correct 				
RI Classification: (to be	completed by Boar	d Chairperson)	XX7°41 1	
Major Date/Signature Chairne	Ninor rson:		withdr	awn
Actionee Corrective Act	tion [.]			
We will distinguish between types with appropriate values (see response to MPE-010). Date/Signature Actionee: JRL				
Board Disposition:				
RI Closed: RI Closed with Actions: Date/Signature Chairperson:				

2.4.12 WHU-023 DRLD Sec 4.2:O:HOWFS data:SMB

Review Title:

FDR	VISTA	DFS
ΓDN	VIDIA	DIO

Review Item

Discrepancy Clarification Observation

Х

RI No:	WHU-23
Review Item	DPR keys, page 39 of 116
Document Title:	DPLD
Document No:	20000-0010
Document Originator:	Jim Lewis

Discrepancy/Clarification Required/Observation:

HOWFS data will pass the DO on the mountain, and have to be classified to be ignored, hence DPR.CATG=TEST or TECHNICAL is a natural choice for these frames. The DPR.TYPE and DPR.TECH could be specified as well for classification on the instrument workstation and for header completeness for ingesting them into the archive.

Action Recommended by Initiator:

It could be mentioned in the document, how HOWFS data are ignored by the pipeline infrastructure.

Date/Signature of Initiator: 2005-01-19, WH

RI Classification: (to be completed by Board Chairperson)

Major	Minor	Withdrawn
Date/Signature Chairperson	;	

Actionee Corrective Action:

This is a good point - although the HOWFS data are not processed by the library, we need to specify how they are recognised and ignored.

In its current design, the VISTA IR Camera software identifies HOWFS data by classifying it as DPR.CATG=OTHER. It can easily be classified as DPR.CATG=TEST if this is a more appropriate value. The pipeline software can ignore any data product not classified as CALIB or SCIENCE.

I would like to ask the panel for their advice on appropriate values for DPR.TYPE and DPR.TECH for HOWFS data, since this kind of data does not match with any of the values listed in Tables 4.8 and 4.9 of the "Data Interface Control Document". If the DICB are open to extensions to these lists, we could propose:

DPR.TECH=WFS (wavefront sensing), DPR.TYPE=CS (curvature sensor) If not, then DPR.TECH=IMAGE, DPR.TYPE=OTHER

would be the closest match, but not very descriptive.

Classification will be added to the data-frame catagories table.

Date/Signature Actionee: SMB

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	67 of 104
		Author:	VDFS Team

2.4.13 MPE-009 DRLD Sec 5.1:O:File keywords:JRL

Review Title:				Discrepancy
FDR VISTA DFS		Review Item	X	Clarification Observation
RI No:	MPE-009			
Review Item	Page 40, section 5.	1		
Document Title:	Data Reduction Li	brary Design		
Document No:	VIS-SPE-IOA-200	000-0010		
Document Originator:	Jim Lewis			
Uscrepancy/Clarification Required/Observation: We do not recommend to associate files using keywords (with file names?) in the headers as file names might change as the files are flowing through the system and are not unique. The files can probably be associated using the MJD_OBS keyword as index.				
Action Recommended by Initiator: Rephrase Date/Signature of Initiator: MPE				
RI Classification: (to be	completed by Board	d Chairperson)		
Major	Minor	W	ithdr	awn
Date/Signature Chairperson:				
Actionee Corrective Action: An interesting suggestion, but we think we need to keep the original filename association since an association via say the MJD-OBS information is not always possible. For example, for raw data files the same reference/master confidence map per pass-band will apply.				
Board Disposition: RI Closed: RI Closed with Actions: Date/Signature Chairpe	rson:			

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	68 of 104
		Author:	VDFS Team

2.4.14 WHU-013 DRLD Sec 5.1:O:Fits key/time stamp:JRL

Review Title:				Discrepancy
FDR VISTA DFS		Review Item	V	Clarification
RI No:	WHU-13			Observation
Review Item	Page 40 of 116			
Document Title:	DR Library Design	1		
Document No:	VIS-SPE-IOA-200	000-0010		
Document Originator:	Jim Lewis			
Discrepancy/Clarification	on Required/Obser	vation:		
primary header of the first raw frame of the stack is copied into all products of a recipe. The time stamp can be used to associate products. Action Recommended by Initiator: This is just a hint				
RI Classification: (to be	completed by Boar	d Chairperson)		
MajorMinorWithdrawnDate/Signature Chairperson:			awn	
Actionee Corrective Action:				
See reply to MPE-009 DRLD Sec 5.1- we don't understand how time stamp alone can be used to associate all the necessary products. Date/Signature Actionee: JRL				
Board Disposition:				
RI Closed: RI Closed with Actions: Date/Signature Chairperson:				

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	69 of 104
		Author:	VDFS Team

2.4.15 WHU-014 DRLD Sec 5.8:D:Persistence:JRL

Review Title:			Χ	Discrepancy
FDR VISTA DFS		Review Item		Clarification Observation
RI No:	WHU-14			
Review Item	Page 44 of 116, 5.	8 Persistence map		
Document Title:	DRLD			
Document No:	VIS-SPE-IOA-200	000-0010		
Document Originator:	Jim Lewis			
Discrepancy/Clarification A running list of all previ	on Required/Obser	vation : not available on Paran	al	
r running list of an provi				
For the pipeline running i	n Garching this list	is operationally not po	ossible	
Action Recommended b	y Initiator:			
Date/Signature of Initia	tor: W.Hummel, 20	005-01-18		
RI Classification: (to be	completed by Boar	d Chairperson)		
Major Minor Withdrawn			wn	
Date/Signature Chairpe	rson:			
Actionee Corrective Action:				
We agree that monitoring persistence across OBs and templates is impractical for the summit and Garching pipelines. We will rephrase this such that it is clear that these pipelines will only deal with persistence arising within a template (see also WHU-008).				
Board Disposition:				
RI Closed: RI Closed with Actions: Date/Signature Chairperson:				

2.4.16 FCO-003 DRLD Sec 5.9:C:Explain need for extracted standards table:JRL

Review Title:

Review Item

X Clarification

Discrepancy

FDR	VISTA	DFS

				Observation
RI No:	3			
Review Item				
Document Title:	VISTA Da	ata Reduction I	ibrary Desi	gn
Document No:	VIS-SPE-	IOA-20000-00	10	
Document Originator:	Jim Lewis			

Discrepancy/Clarification Required/Observation:

Sect. 5.9, 5.10: given that the extracted standards table is embedded in the matched standards table, is the first one really necessary?

Action Recommended by Initiator:

Describe the need for having both tables separately, if indeed justified

Date/Signature of Initiator: 20 January 2005, F. Comerón

RI Classification: (to be completed by Board Chairperson)

Major

Minor

Withdrawn

Date/Signature Chairperson:

Actionee Corrective Action:

The table is needed since it used as input to the matching algorithm and could provide cached standards rather than do another DB query.

Date/Signature Actionee: JRL

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	71 of 104
		Author:	VDFS Team

2.4.17 SCA-007 DRLD Sec 5.11:C:Floating:JRL

Review Title:				Discrepancy
FDR VISTA DFS		Review Item	Χ	Clarification
RI No:	SCA-007			Observation
Review Item	Page 46 Sub item :	5.11		
Document Title:	VISTA Data Redu	ction Library Design		
Document No:	VIS-SPE-IOA-200	000-0010		
Document Originator:				
Discrepancy/Clarification	on Required/Obser	vation:		
Are floating numbers also (classification)?	o going to be used fo	or columns 1 (No. rur	ning i	number) and 25
Action Recommended b	y Initiator:			
Date/Signature of Initia	tor: Sandra Castro			
RI Classification: (to be	completed by Board	d Chairperson)		
Major	Minor	W	ithdr	awn
Date/Signature Chairpe	erson:			
Actionee Corrective Act	tion:			
Yes. The rationale was to keep the i/o simple so the plan is to use floating nos. for all these parameters.				
Date/Signature Actionee: JRL				
Board Disposition:				
RI Closed:				
RI Closed with Actions:				
Date/Signature Chairpe	erson:			

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	72 of 104
		Author:	VDFS Team

2.4.18 PBA-014 DRLD Sec 6.1.5:C:PRO/DRS keywords:JRL

Review Title:				Discrepancy
FDD VICTA DEC		Review Item	X	Clarification
FDK VISTA DFS				Observation
DI No:	DBA 014			

NI NU.	1 DA-014
Review Item	Page 49, 50, 52 and following
Document Title:	VISTA IR Camera Data Reduction Library Design
Document No:	VIS-SPE-IOA-20000-0010
Document Originator:	Jim Lewis

Discrepancy/Clarification Required/Observation:

The usage of PRO keywords is now reserved to the exclusive list of keywords defined in the PRO dictionary. Data reduction specific keywords are written in a new section DRS.

Action Recommended by Initiator:

Date/Signature Chairperson:

Such keywords like PRO XTCOR should be renamed DRS XTCOR.

Date/Signature of Initiator: Pascal Ballester

RI Classification: (to be completed by Board Chairperson)			
Major	Minor	Withdrawn	
Date/Signature Chairperson:			
Actionee Corrective Action:			
This looks like a positive move and we look forward to seeing the new document as soon as possible.			
Date/Signature Actionee: JRL			
Board Disposition:			
RI Closed:			
RI Closed with Actions:			
VISTA DATA ELOW	Infrared Camera PDR BID Posponsos	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
--------------------	--------------------------------------	----------------------	--------------------------------------
SYSTEM	KID Responses	Issue:	0.4
		Page:	73 of 104
		Author:	VDFS Team

2.4.19 FCO-004 DRLD Sec 6.3:C:FRINGE_RATIO QC Parameter:MJI

Faramet						
Review Title:					Discrepancy	
EDD VISTA DES		Review Item	Χ	Clarification		
	5				Observation	
RI No:		4				
Review Item						
Document Title:		VISTA Data Reduction Library Design				
Document No:		VIS-SPE-	IOA-20000-0010			
Document Origin	nator:	Jim Lewis	5			
Discrepancy/Cla	rification Requ	ired/Obsei	rvation:			
Sect. 6.3, I could i the document (but average backgroun	not find the defi I may have ove nd?	nition of th erlooked it)	e FRINGE_RATIC . Is it related to the	QC1 pa fringe an	rameter elsewhere in nplitude over the	
Action Recommended by Initiator: Define FRINGE_RATIO, perhaps in Sect. 2.6						
Date/Signature of Initiator: 20 January 2005, F. Comerón RI Classification: (to be completed by Board Chairperson)						
Major	Ν	linor		Withdra	awn	
Date/Signature Chairperson:						
Actionee Corrective Action: It is defined in Appendix 10 QC1 parameters, but to clarify this we will add the following to section 2.6.						
The success, or otherwise, of fringe removal is monitored by the computed fringe map scale factor and also by a robust measure of the change (ratio) of the global background noise/variation after defringing. This is encoded in the FRINGE_RATIO QC1 parameter.						
Date/Signature Actionee: MJI						
Board Disposition:						
•						
RI Closed: RI Closed with Ac Date/Signature C	ctions: C hairperson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	74 of 104
		Author:	VDFS Team

2.4.20 FCO-005 DRLD Sec 6.3.10:O:Negative fringescaling:JRL

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	x	Clarification Observation	
RI No:	5				
Review Item					
Document Title:	VISTA D	ata Reduction Librar	y Desig	gn	
Document No:	VIS-SPE-	IOA-20000-0010			
Document Originator:	Jim Lewis				
Discrepancy/Clarification Required/Observation: Sect. 6.3.10: a negative fringe scaling factor should produce a non-fatal error condition Action Recommended by Initiator: Add negative fringe scaling factor as a non-fatal error condition (unless the fringe scale determination algorithm already precludes negative values) Date/Signature of Initiator: 20 January 2005, F. Comerón					
RI Classification: (to be complet	ed by Boar	d Chairperson)			
Major N	Iajor Minor Withdrawn				
Date/Signature Chairperson:					
Actionee Corrective Action:					
We agree, the fringe scale factor could be negative for valid reasons and should produce a non-fatal error condition. We will add this as an extra return condition.					
Date/Signature Actionee: JRL					
Board Disposition:					
RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

VISTA DATA FLOW	Infrared Camera PDR BID Responses	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
SYSTEM	KID Kesponses	Issue:	0.4
		Page:	75 of 104
		Author:	VDFS Team

2.4.21 FCO-006 DRLD Sec 6.5.10:O:Linearity Function error condition:JRL

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	v	Clarification	
RI No:	6		Λ	Observation	
Review Item					
Document Title:	VISTA D	ata Reduction Librar	y Desig	gn	
Document No:	VIS-SPE-	IOA-20000-0010			
Document Originator:	Jim Lewis	5			
Sect. 6.5.10, a positive second der error condition	ivative of t	he linearity function	may pi	oduce a non-fatal	
Action Recommended by Initiator: Add positive second derivative of the linearity function as a non-fatal error condition					
Date/Signature of Initiator: 20 J	anuary 200	5, F. Comerón			
RI Classification: (to be complete	ed by Boar	d Chairperson)			
Major M	Iajor Minor Withdrawn				
Date/Signature Chairperson:					
Actionee Corrective Action: We are unsure of the reason for singling out this type of error condition. If we fit up to a cubic or quartic polynomial, as planned, then the second derivative of the non-linearity function may validly be +ve, -ve or zero.					
Date/Signature Actionee: JRL					
Board Disposition: RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

			i i i i i i i i i i i i i i i i i i i
VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM	_F	Issue:	0.4
		Page:	76 of 104
		Author:	VDFS Team

2.4.22 PBA-019 DRLD Sec 6.6:C:Standard catalogues:JRL

Review Title:				Discrepancy
FDR VISTA DES		Review Item	х	Clarification
				Observation
RI No:	PBA-019			

Review Item	Page 56
Document Title:	VISTA IR Camera Data Reduction Library Design
Document No:	VIS-SPE-IOA-20000-0010
Document Originator:	Jim Lewis

Discrepancy/Clarification Required/Observation:

The recipe vircam_getstds implies an on-line access to standard star catalogues. We could have local copies of catalogues but the list and volume should be mentioned here (this is one item we wanted clarify since PDR and that remains to be addressed).

Action Recommended by Initiator:

Provide a list and size estimates of those catalogues for which local access would be needed.

Date/Signature of Initiator: Pascal Ballester

RI Classification: (to be completed by Board Chairperson) Major Minor

Withdrawn

Date/Signature Chairperson:

Actionee Corrective Action:

We would want access to local copies of the 2MASS point source catalogue. As an example, the FITS binary table version we use occupies 43 Gbytes of disk space. As the astrometry will be based on 2MASS we will want to use RADECSYS='ICRS' in the FITS headers.

Date/Signature Actionee: JRL

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	77 of 104
		Author:	VDFS Team

2.4.23 MPE-011 DRLD Sec 7:D:one-to-one RAW/Recipe:JRL

Review Title:			Χ	Discrepancy
FDD VISTA DES		Review Item		Clarification
FDR VISTA DES				Observation
DIN				

RI No:	MPE-011
Review Item	Page 78, section 7
Document Title:	Data Reduction Library Design
Document No:	VIS-SPE-IOA-20000-0010
Document Originator:	Jim Lewis

Discrepancy/Clarification Required/Observation:

They must be a one-to-one relation between raw data types and pipeline recipe. This is the only way the pipeline infrastructure can launch the appropriate recipe

For instance in table 3-2: The DPR.TYPE= FLAT, LAMP has two related recipes (dome_flat_combine and linearity_analysis) The DPR.TYPE = OBJECT has three related recipes.

Action Recommended by Initiator:

We need to discuss each case one by one. It might be that additional templates are needed, or that additional values for the DPR keywords are needed or that super-recipes must be added.

Date/Signature of Initiator: MPE

RI Classification: (to be compl		
Major X	Minor	Withdrawn
Date/Signature Chairperson:		

Actionee Corrective Action:

This has arisen from a misunderstanding on our part about how the appropriate processing recipes are triggered. It is related also to MPE-004 and MPE-010. We want to discuss this at FDR.

Date/Signature Actionee: JRL

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	78 of 104
		Author:	VDFS Team

2.4.24 PBA-015 DRLD Sec 7:D:Missing recipes:JRL

Review Title:			Χ	Discrepancy
FDR VISTA DFS		Review Item		Clarification
				Observation
RI No:	PBA-015			
Review Item	All			
Document Title:	VISTA IR Camera	Data Reduction Libra	ry De	esign
Document No:	VIS-SPE-IOA-200	000-0010		
Document Originator:	Jim Lewis			
Discrepancy/Clarification	on Required/Obser	vation:		
Several recipes listed in the DRL Specifications document are not described in the DRL Design, including vircam_offset_sky_combine, vircam_wcs_fit, vircam_distortion_update, vircam_gen_catalogue, vircam_photcal_fit, vircam_photcal_apply. The low level DRL functions vircam_stage1, vircam_converge are also not described Action Recommended by Initiator: Describe these recipes in the DRL Design				
Date/Signature of Initia	completed by Boar	[d Chairparson)		
Major	Minor	u Chanperson) Wi	thdre	awn
Date/Signature Chairperson:				
Action of Connecting Act				
Actionee Corrective Act	lion:			
Will fix. The DRS/DRLS has fallen behind the evolving DRL design.				
Date/Signature Actionee: JRL				
Board Disposition:				
RI Closed: RI Closed with Actions: Date/Signature Chairpe	rson:			

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	79 of 104
		Author:	VDFS Team

2.4.25 WHU-015 DRLD Sec 7.1:C:Library reset frame:JRL

Review Title:			Discrepancy
EDD VISTA DES	Review Item	Χ	Clarification
FDK VISTA DFS			Observation

RI No:	WHU-15
Review Item	Page 78 of 116, Library mean reset frame
Document Title:	DRLD
Document No:	VIS-SPE-IOA-20000-0010
Document Originator:	Jim Lewis

Discrepancy/Clarification Required/Observation:

With reference to WHU091, the meaning of the library mean reset frame is not clear.

Note that database connections should be avoided for the pipeline.

Note also that on Paranal, the only calibrations available for the pipeline during run-time are the calibrations in the DO-library (called calibDB), that are regularly updated by the QC group in Garching (around 6 times a year) and the new calibration products of the current night.

This partially applies to the vircam_dark_combine, vircam_badpix_mask

Action Recommended by Initiator:

If the library frame is used for trending, please take it out, if the library frame is used for data reduction or QC purpose (required to extract a quality characteristic of the current frames), then leave it in and call if reference reset frame.

Date/Signature of Initiator: Wolfgang Hummel 2005-01-18

RI Classification: (to be comp		
Major	Minor	Withdrawn
Date/Signature Chairperson:		

Actionee Corrective Action:

The intention is to use the library frame only as part of the data reduction and for generating QC information. We will rename it to reference reset frame.

Date/Signature Actionee: JRL

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM		Issue:	0.4
		Page:	80 of 104
		Author:	VDFS Team

2.4.26 WHU-016 DRLD Sec 7.6:O:darks/flats observing:JRL

Review Title:			Discrepancy
EDD VISTA DES	Review Item		Clarification
		X	Observation

RI No:	WHU-16
Review Item	Page 82 of 116, vircam_linearity analyse
Document Title:	DRLD
Document No:	VIS-SPE-IOA-20000-0010
Document Originator:	Jim Lewis

Discrepancy/Clarification Required/Observation:

Associating many dark frames of different DIT is a complex association rule. One could think about to take the darks in an alternating order with the linearity flats.

This applies to vircam_twflat_combine as well. Is there a reason, why the DIT is used instead of the natural variations of the sky flux variations during twilight to gain a high flux ratio in the stack?

Action Recommended by Initiator:

Date/Signature of Initiator: W.Hummel, 2005-01-18

RI Classification: (to be compl		
Major	Minor	Withdrawn
Date/Signature Chairperson:		

Actionee Corrective Action:

We want to simplify this given what we have learnt from WFCAM e.g. dark DITs,NDITS should be the same integration/exposure sequence as the frames being processed. Whether this is feasible via reference/master frames is an issue we would like to discuss.

Date/Signature Actionee: JRL

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	_F	Issue:	0.4
		Page:	81 of 104
		Author:	VDFS Team

2.4.27 WHU-020 DRLD Sec 7.14:C:Standard data source:JRL

Review Title:				Discrepancy		
FDR VISTA DFS		Review Item	X	Clarification		
RI No:	WHU-20		_	Observation		
Review Item	Page 91 of 116	Page 91 of 116				
Document Title:	Data Reduction Li	brary Design				
Document No:	VIS-SPE-IOA-200	000-0010				
Document Originator:	Jim Lewis					
 Discrepancy/Clarification Required/Observation: 'Astrometric Standard data', 'Photometric Standard Data', could you please specify the source of the data. Is it just a file of the library, or a database connection ? Do you expect performance losses for large catalogues ? Action Recommended by Initiator: Please comment 						
RI Classification: (to be	completed by Board	d Chairperson)				
Major	Major Minor Withdrawn					
Date/Signature Chairpe	erson:					
Actionee Corrective Act	tion:					
See reply to PBA-019						
Date/Signature Actionee: JRL						
Board Disposition: RI Closed: RI Closed with Actions:						
Date/Signature Chairpe	Date/Signature Chairperson:					

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM		Issue:	0.4
		Page:	82 of 104
		Author:	VDFS Team

2.4.28 WHU-21 DRLD Sec 11:0:ORIGFILE:PSB

Review Title:				Discrepancy
FDR VISTA DFS		Review Item	v	Clarification
RI No:	WHU-21		Λ	Observation
Review Item	Page 114 of 116			
Document Title:	DRLD			
Document No:	20000-0010			
Document Originator:	Jim Lewis			
The ORIGFILE keyword in the example fits header should be part of the primary header. Action Recommended by Initiator:				
Date/Signature of Initia				
RI Classification: (to be Major	completed by Board	d Chairperson)	Withdr	own
Date/Signature Chairne	Date/Signature Chairperson:			a w 11
Actional Corrective Act	tion			
See response to WHU-010 Date/Signature Actionee: PSB				
Board Disposition:				
RI Closed: RI Closed with Actions: Date/Signature Chairperson:				

VISTA DATA FLOW	Infrared Camera PDR RID Responses	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
SYSTEM		Issue: Page:	0.4 83 of 104
		Author:	VDFS Team

2.5 Review Items referring to the Exposure Time Calculator ETC [RD5].

1	Discrepancies
3	Clarification
1	Observations
5	Total

Table 2-5 RIx Count for ETC

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM		Issue:	0.4
		Page:	84 of 104
		Author:	VDFS Team

2.5.1 PBA-002 ETC Sec 6:C:New ETC infra?:STH

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	X	Clarification Observation	
RI No:	PBA-002				
Review Item	Page 10				
Document Title:	VISTA IR Camera	ETC Specification			
Document No:	VIS-SPE-IOA-200)00-0009			
Document Originator:	Simon Hodgkin				
Discrepancy/Clarification	on Required/Obser	vation:			
accessible by a remote co ISAAC ETC) already full the ETC infrastructure? Action Recommended b Date/Signature of Initia	accessible by a remote command-line call. Do you consider the current ETCs (e.g. ISAAC ETC) already fulfill this requirement or is there a new requirement on the ETC infrastructure? Action Recommended by Initiator:				
RI Classification: (to be	completed by Boar	d Chairperson)			
Major Minor Withdrawn					
Actionee Corrective Act	ion:				
Here we simply want to ensure that remote command line queries via the web interface are not ruled out.					
Board Disposition:					
Board Disposition: RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

2.5.2 FCO-11 ETC Sec 7.2:O:Observing Strategy Limited:STH

Review Title:

FDR VISTA DFS

Review Item Х

Discrepancy Clarification **Observation**

RI No:	11
Review Item	
Document Title:	VISTA Infra Red Camera ETC Specification
Document No:	VIS-SPE-IOA-20000-0009
Document Originator:	Simon Hodgkin

Discrepancy/Clarification Required/Observation:

Sect. 7.2: given that the ETC deals with single-tile, single-filter observations, the scope of the optimization of observing strategy via the ETC appears to be limited (e.g., one should calculate outside the ETC whether FTPJME would be more efficient than TFPJME). Also, computation of overheads within the ETC requires consistency between the overheads vielded by the ETC and by the execution time reports in P2PP.

Action Recommended by Initiator:

Given the limited possibilities offered to the user within the ETC to explore survey strategy efficiency, the calculation of overheads from within the ETC may not be fully necessary.

Date/Signature of Initiator: 20 January 2005, F. Comerón

RI Classification: (to be completed by Board Chairperson)

Major	Minor	Withdrawn
Date/Signature Chairper	rson:	
Actional Connective Act	on:	

Actionee Corrective Action:

We agree that the treatment of the survey strategy and the associated overheads within the ETC is limited. However, we think it is useful in its current form because: it alerts the user that there are several ways to observe with VISTA; the form shows how observations with VISTA will be made up from the various modes (tiles, microsteps, jitters etc); and it gives the user an indication of how efficient observing will be.

We plan to ensure that the results from the ETC are consistent with P2PP and the SDT. The SDT may interface directly with the ETC to use the ETC input to enable more detailed overhead computation for a wider range of different observing strategies. How to implement this is an issue we would like to discuss at FDR.

Date/Signature Actionee: STH

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	F	Issue:	0.4
		Page:	86 of 104
		Author:	VDFS Team

2.5.3 PBA-004 ETC Sec 8:C:Elapsed time:STH

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	X	Clarification	
RI No:	PB 4-00/			Observation	
Review Item	Page 17 Section 8	Page 17 Section 8			
Document Title:	VISTA IR Camera	ETC Specification			
Document No:	VIS-SPE-IOA-200	00-0009			
Document Originator:	ST Hodgkin				
Discrenancy/Clarificatio	n Required/Obser	vation [.]			
The calculation of elapsed time is certainly a VISTA DFS specific module that should be listed in Section 8. See also my next comment PBA-005 about providing ISO-C modules for the calculation part of the VISTA ETC prototype. Action Recommended by Initiator: - List calculation modules and provide ISO-C prototype code in an appendix.					
RI Classification: (to be	completed by Board	d Chairperson)			
Major	Major Minor Withdrawn				
Date/Signature Chairperson:					
Actionee Corrective Act	tion:				
We will note it so in section 8 of the ETC (see also PBA-005 response).					
Board Disposition:					
RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

VISTA DATA ELOW	Infrared Camera PDR	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
SYSTEM	KID Responses	Issue:	0.4
0101200		Page:	87 of 104
		Author:	VDFS Team

2.5.4 PBA-003 ETC Sec B:C:Mockup discrepency:MJI

Review Title:

FDR VISTA DFS		Review Item	X	Clarification Observation
RI No:	PBA-003			
Review Item	Page 20			
Document Title:	VISTA IR Camera	a ETC Specification		
Document No:	VIS-SPE-IOA-200)00-0009		
Document Originator:	S.T. Hodgkin			

Discrepancy

Discrepancy/Clarification Required/Observation:

In the "Observing Setup" section of the interface mock-up, selecting the "Observing Strategies" option removes the selection from both "Exposure Time" and "S/N" options. Should it not be independent from these options?

Action Recommended by Initiator:

Date/Signature of Initiator: PBA

RI Classification: (to be completed by Board Chairperson)				
Major	Minor	Withdrawn		
Date/Signature Chairperson:				

Actionee Corrective Action:

This was a deliberate choice to retain a simple to use conventional style ETC with the option of more detailed computation once an exposure time, S/N combination had been chosen. The observing strategy generally has minimal impact on the exposure time, S/N aspect, but may have a noticeable impact on observing efficiency.

Date/Signature Actionee: MJI

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	88 of 104
		Author:	VDFS Team

2.5.5 PBA-005 ETC Sec C:D:ISO-C/PerI:MJI

Review Title:			Χ	Discrepancy
FDR VISTA DFS		Review Item		Clarification Observation
RI No:	PBA-005			
Review Item	Appendix C			
Document Title:	VISTA IR Camera ETC Specification			
Document No:	VIS-SPE-IOA-20000-0009			
Document Originator:	S.T. Hodgkin			
Discrepancy/Clarification	on Required/Obser	vation:		

While we appreciate the effort made to provide already at this stage a working prototype of the VISTA ETC, it will be easier to reuse and refer to this prototype if the calculations are made in plain ISO-C. 1618/2.0 allows languages like Matlab, IDL for the pseudo-code section, and ISO-C for the modules.

Action Recommended by Initiator:

Encapsulate the calculation fuctions in ISO-C modules, reserving the usage of Perl in the prototype for reading input parameters and producing the output graphs.

Date/Signature of Initiator: Pascal Ballester				
RI Classification: (to	be completed by Board Cha	irperson)		
Major	Minor	Withdrawn		
Date/Signature Chai	rperson:			
Actionee Corrective	Action:			
We will convert the computational parts of the perl cgi script to ISO-C modules.				
Board Disposition:				
RI Closed: RI Closed with Actio Date/Signature Chai	ons: rperson:			

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	r	Issue:	0.4
		Page:	89 of 104
		Author:	VDFS Team

2.6 Review Items referring to the Survey Definition Tool SDT [RD6].

1	Discrepancies
6	Clarification
4	Observations
11	Total

Table 2-6 RIx Count for SDT

2.6.1 FCO-012 SDT Sec 0:O:Priorities among runs:MFO

Review Title:

FDR VISTA DFS

Review Item

Clarification

Discrepancy

X Obser

				Λ	Observation
RI No:	12				
Review Item					
Document Title:	VISTA Su	rvey Definitio	on and Pro	ogres	s Tool
Document No:	VIS-SPE-	ATC-20500-0	001		
Document Originator:	Martin Fol	ger			

Discrepancy/Clarification Required/Observation:

Generic comment: no specifications on allocation of priorities among runs are given

Action Recommended by Initiator:

Clarify if prioritization of OBs within surveys is important in planning and execution (most probably yes; certainly so for many surveys).

Date/Signature of Initiator: 20 January 2005, F. Comerón

RI Classification: (to be completed by Board Chairperson)

Major

Minor

Withdrawn

Date/Signature Chairperson:

Actionee Corrective Action:

See answer to FCO-014.

Date/Signature Actionee: 24 January 2005, Martin Folger

Board Disposition:

RI Closed:

RI Closed with Actions:

Date/Signature Chairperson:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	91 of 104
		Author:	VDFS Team

2.6.2 MPE-015 SDT Sec 0:D:Describe PAF files, GUI:MFO

Review Title:			Χ	Discrepancy
FDD VISTA DES		Review Item		Clarification
FDR VISIA DFS				Observation
DINA	MDE 015			

RI NO:	MFE-015
Review Item	
Document Title:	VISTA Survey Definition and Progress Tools: Functional
	Specification
Document No:	VIS-SPE-ATC-20500-0001
Document Originator:	Martin Folger

Discrepancy/Clarification Required/Observation:

The survey tool will create PAF files which can then be attached to OBs as parameter of a template. The contents of those PAF files should be described. We would also need to have a mockup of the GUI and a design of the application itself.

Action Recommended by Initiator:

Date/Signature of Initiator: MPE

RI Classification: (to be comp	leted by Board Chairperson)	
Major	Minor	Withdrawn
Date/Signature Chairperson:		

Actionee Corrective Action:

The PAF file format and the derivation of values from the template parameters should be discussed either at the FDR or in subsequent meetings. A mock-up and design (Rational Rose UML) can be provided (plus javadoc API documentation).

Date/Signature Actionee: 26 January 2005, Martin Folger

Board Disposition:

VISTA DATA FLOW	Infrared Camera PDR RID Responses	Doc Number: Date: Issue:	VIS-TRE-IOA-20000-0013 2005-01-26 0.4
SYSTEM		Page: Author:	92 of 104 VDFS Team

2.6.3 MPE-016 SDT Sec 0:C:Tool on line?:MFO

Review Title:

FDR VISTA DFS

Review Item

Discrepancy Clarification Observation

Х

				Observation
RI No:	MPE-016			
Review Item				
Document Title:	VISTA Survey Definition and Progress Tools			
Document No:	VIS-SPE-ATC-20	500-0001		
Document Originator:				

Discrepancy/Clarification Required/Observation:

Will the tool be used in the on-line environment?

Action Recommended by Initiator:

Date/Signature of Initiator: MPE

		_
RI Classification:	(to be completed by Board Chairperson)	

Major Minor Withdrawn
Date/Signature Chairperson:

Actionee Corrective Action:

The question can be interpreted in two ways:

Answer 1:

If guide/aO stars are to be selected from a SKYCAT-style online catalog then the SDT must run on a computer that has an internet connection. There are two offline-ways of getting guide stars but there both NOT RECOMMENDED:

(1) A user could install the complete USNO A2.0 locally on his computer (12 CDs). This methods is slow and NOT RECOMMENDED.

(2) SKYCAT catalogues can also reside as ASCII files on a local disk but to by knowledge this is only practical for tiny sets of stars (e.g. standard stars etc). So this would probably NOT WORK for the SDT.

Therefore, realistically, network access is required to run the SDT with guide/aO selection functionality switched on.

Answer 2:

The SDT itself is a Java application, i.e. a standalone program started by mouse click or on the command line (like P2PP). It does not run within a web page (as an applet or java web start).

Date/Signature Actionee: 26 January 2005, Martin Folger **Board Disposition:**

VISTA DATA FLOW SYSTEM	Infrared Camera PDR RID Responses	Doc Number: Date: Issue:	VIS-TRE-IOA-20000-0013 2005-01-26 0.4
0101201		Page:	93 of 104
		Author:	VDFS Team

VISTA DATA FLOW	Infrared Camera PDR RID Responses	Doc Number: Date:	VIS-TRE-IOA-20000-0013 2005-01-26
	KID Kesponses	Issue	0.4
SYSTEM		Page:	94 of 104
		Author:	VDFS Team

2.6.4 FCO-013 SDT Sec 1.2:O:Cal tool functionality in OT:MFO

Review Title:				Discrepancy		
FDR VISTA DFS		Review Item		Clarification		
	10		X	Observation		
RI No:	13					
Review Item	Review Item					
Document Title:	VISTA Si	VISTA Survey Definition and Progress Tool				
Document No:	VIS-SPE-	ATC-20500-0001				
Document Originator:	Martin Fo	lger				
Discrepancy/Clarification Requ Sect. 1.2, last item in the Section: scheduling software (OT) is not fo	ired/Obser incorporati preseen.	vation: on of calibration tool :	functio	onality in the		
Action Recommended by Initiat Should calibration tool functional the future.	tor: ity be need	ed in the OT, requirem	ients s	hould be provided in		
Date/Signature of Initiator: 20 J	anuary 200	5, F. Comerón				
RI Classification: (to be complet	ed by Boar	d Chairperson)				
Major N	Major Minor Withdrawn					
Date/Signature Chairperson:						
 Actionee Corrective Action: ESO staff can comment on whether it is thought that automated calibration rule "enforcing" via some computer program running alongside/inside the OT is required or not. From my discussions I got the impression that the current method of having the TO manually follow a provided calibration strategy is sufficient. VISTA project scientist/leader might want to comment on this as well. Date/Signature Actionee: 24 January 2005, Martin Folger 						
Board Disposition:						
RI Closed: RI Closed with Actions: Date/Signature Chairperson:						

VISTA	Infrared Camera PDR	Doc Number	VIS-TRE-IOA-20000-0013
		Date:	2005-01-26
DAIAFLOW	RID Responses	Laguar	0.4
SYSTEM		Issue:	0.4
		Page:	95 of 104
		Author:	VDFS Team

2.6.5 FCO-014 SDT Sec 2:C:Survey Plan should spec strat/priorities:MFO

Review Title:

FDR VISTA DFS		Review Item	Χ	Clarification Observation
RI No: 14				
Review Item				
Document Title: VIST.		rvey Definition and	Progre	ss Tool
Document No:	VIS-SPE-ATC-20500-0001			
Document Originator: Martin Fo		lger		

Discrepancy

Discrepancy/Clarification Required/Observation:

Sect. 2: survey plan probably should contain specifications on survey strategy, e.g. relative priorities among OBs.

Action Recommended by Initiator:

Allowing the user to specify internal priorities among OBs is planned in a future release of P2PP. The information on priorities may be generated in the Survey Definition tool and passed to the OBs.

Date/Signature of Initiator: 20 January 2005, F. Comerón

RI Classification: (to be completed by Board Chairperson)	
--	--

Major	Minor	Withdrawn
Date/Signature Chairperson:		

Actionee Corrective Action: How to assign priorities to OBs, in the SDT (or OT for whole surveys/queues)

In terms of OB priorities an OB can be thought of as having the following 5 attributes:

- a. It is part of a particular survey.
- b. It is typically linked to a particular survey area (contiguous area of sky).
- c. It has settings (filter, exposure time etc.)
- d. It is linked to a tile.
- e. It has a "number" E.g. if a tile should be observed 5 times with identical settings then there would be 5 OBs in the repository: number 1, 2, 3, 4, 5.
- OBs sharing attributes a, b, c, d, differing only in e (different "number") There should be no need to assign different priorities in this case. All the OBs are the same and should have the same priorities. There are only multiple copies to stack them together or to capture changes over time.
- OBs sharing attributes a, b, c, differing in d (different tile) OBs "looking" at different tiles in the same survey area with identical settings should probably not have different priorities.
- :OBs sharing attribute a, differing in c (different settings, filter, exposure time etc) Different priorities for different settings would probably have to be specified in the P2PP (or the part of the SDT replacing its "Create Parent OB" use, see Andreas Kaufer's RI below.)
- :OBs sharing attributes a, c, differing in b (different survey area) This is a borderline case. There might be a case of having some areas within the same survey with higher priorities. If this functionality were needed then an extra field for the (relative) survey area priority would have to be added to the SDT.
- OBs not sharing any attributes (different surveys) Different surveys can have different priorities. Assigning different priorities to OBs belonging to different surveys can probably be done at the OT level (?). There will be different queues for different surveys and these queues can be given different priorities (?).

Date/Signature Actionee: 24 January 2005, Martin Folger Board Disposition:

RI Closed:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW RID Responses SYSTEM		Issue:	0.4
		Page:	97 of 104
		Author:	VDFS Team

2.6.6 FCO-015 SDT Sec 2:C:Does SDT calculate overheads?:MFO

Review Title:				Discrepancy	
FDR VISTA DFS		Review Item	X	Clarification	
BI No:	15			Observation	
Ri 110. Review Item	15				
Document Title	VISTA Survey Definition and Progress Tool				
Document No:	VIS-SPF-	ATC-20500-0001	10510	53 1001	
Document Originator	Martin Fo	lger			
	iviartini i o	1501			
Discrepancy/Clarification Requ Sect. 2: Does the SDT include fur optimize survey strategy at this (e	ired/Obser actionality tearly) stage	rvation: to calculate overheads ?	, thus a	allowing the user to	
Action Recommended by Initiat Clarify whether or not the STD is	tor: supposed t	o include execution ti	me rep	ports	
Date/Signature of Initiator: 20 J	January 200	95, F. Comerón			
RI Classification: (to be complet	ed by Boar	d Chairperson)			
Major N	linor	W	ithdr a	iwn	
Date/Signature Chairperson:					
Actionee Corrective Action: The SDT could automatically display a figure based on Number of tiles times (OB duration + fixed overhead) Where fixed overhead is slew time etc and OB duration would be based on the output of the ETC. The result of the ETC would have to be input into the SDT by the user. Date/Signature Actionee: 24 January 2005, Martin Folger Board Disposition:					
RI Closed: RI Closed with Actions: Date/Signature Chairperson:					

VISTA DATA FLOW	Infrared Camera PDR RID Responses	Doc Number: Date: Issue:	VIS-TRE-IOA-20000-0013 2005-01-26 0.4
SISIEM		Page:	98 of 104
		Author:	VDFS Team

2.6.7 FCO-016 SDT Sec 2.1.3.2:C:Operator intervention:MFO

Review Title:				Discrepancy		
FDR VISTA DFS		Review Item	X	Clarification		
RI No:	16					
Review Item						
Document Title:	Document Title: VISTA Survey Definition and Progress Tool					
Document No: VIS-SPE-ATC-20500-0001						
Document Originator: Martin Folger						
Discrepancy/Clarification Requ	ired/Obser	rvation:				
Sect. 2.1.3.2: Is operation interven	ntion expec	ted for selection of gu	ide/aC) star (also while		
observing a tile when a change of	guide star	is needed?)				
Action Decommonded by Initiat	or					
Clarify this point in Sect 2132	.01.					
Date/Signature of Initiator: 20 J	anuary 200	95, F. Comerón				
RI Classification: (to be complet	ed by Boar	d Chairperson)				
	·					
Major N	linor	W	ithdra	awn		
Date/Signature Chairperson:						
 Actionee Corrective Action: The SDT adds a number of suitable guide/aO stars to the OB (PAF file), e.g. up to 5 guide stars, up to 5 aO stars for LOWFS 1 and up to 5 aO stars for LOWFS 2. (The maximum number, 5 in the example above, as well as a minimum number, can be specified in a configuration file.) Which of these 3x5 guide/aO stars are used during observing is determined by the control software and/or the TO: automatic selection is planned with the TO being alerted if there is a problem. The SDT shifts or skips according to rules specified and lets the user know whether it failed to find a guide/aO at some position. But the user can't really intervene if there simply is no guide/aO anywhere near the required position. (However that extreme case should never happen, see 2.1.3.3. i.) Date/Signature Actionee: 26 January 2005, Martin Folger 						
Board Disposition:						
RI Closed: RI Closed with Actions: Date/Signature Chairperson:						

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTFM	T T T T T	Issue:	0.4
		Page:	99 of 104
		Author:	VDFS Team

2.6.8 FCO-017 SDT Sec 2.1.3.5:C:Where can user specify categ.:MFO

Review Title:

FDR VISTA DFS

Review Item

Discrepancy Clarification Observation

Х

RI No:	17
Review Item	
Document Title:	VISTA Survey Definition and Progress Tool
Document No:	VIS-SPE-ATC-20500-0001
Document Originator:	Martin Folger

Discrepancy/Clarification Required/Observation:

Sect. 2.1.3.5: Regarding the sentence *The user can specify whether a survey falls into one of the following categories*: where is this intended to be specified?

Action Recommended by Initiator:

Clarify this point in Sect. 2.1.3.5

Date/Signature of Initiator: 20 January 2005, F. Comerón

RI Classification: (to be completed by Board Chairperson)

Major	Minor	Withdrawn
Date/Signature Chairperson:		
Actionee Corrective Action:		

The user selects the failure category in the SDT.

This failure category will then apply to a survey as a whole. There is a wider issue of where survey-wide information can be stored (the calibration strategy is another example for this). In the case of the failure category, lacking a location for survey-wide information, this could be made an attribute assigned to every OB generated as part of this survey. The OB template would have to contain a parameter for this.

Date/Signature Actionee: 24 January 2005, Martin Folger

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	_F	Issue:	0.4
		Page:	100 of 104
		Author:	VDFS Team

2.6.9 AKA-001 SDT Sec 2.1.5:O:SDT - P2PP interaction:MFO

Review Title:			Discrepancy
EDD VISTA DES	Review Item		Clarification
		X	Observation

RI No:	AKA-001
Review Item	Interaction p2pp – SDT: Sect. 2.1.5, 2.1.6, 2.1.7, 3.2
Document Title:	VISTA Survey Definition and Progress Tools
Document No:	VIS-SPE-ATC-20500-0001
Document Originator:	M.Folger

Discrepancy/Clarification Required/Observation:

The interaction of the SDT with P2PP appears to me too complicated and error-prone. In particular the creation and export of a 'parent' OB in p2pp and subsequent re-import in SDT seems un-necessary.

Action Recommended by Initiator:

Option 1

Since a p2pp installation is present while using the SDT, the respective acquisition and observation template signature (TSF) file can be directly read by the SDT.

The few keywords, which the user has to provide in the observation template could be set by the user in the SDT using the keyword information from the TSF. All acquisition keywords are probably to be filled by SDT anyway. SDT can then eventually produce the OBX files for import in p2pp.

Option 2

Alternatively, the file with the generated tiles could be attached in the usual way as a setup file to the parent OB in p2pp. P2pp could then on user-request expand this parent OB into the set of OBs according to the information passed by the tile setupfile.

I would consider the second option the proper way to go. The tile setup file is a clear interface to p2pp and the error-prone and cumbersome shuffling around of export/import files can be avoided.

The parent OB with the attached tile setup file can the also be checked into the OB repository and easily be used for the progress visualisation tool (Sect 3.2). This appears to be the best way to store the tile information in the repository database for further usage. **Date/Signature of Initiator:** 2005/01/23 Andreas Kaufer

0		
RI Classification: (to be com	pleted by Board C	hairperson)
Major	Minor	Withdrawn
Date/Signature Chairperson	:	
Actionee Corrective Action :		
Both suggestions sound reason	nable but might ne	ed more discussion to ensure that no
unforeseen knock-on effects h	ave been overlook	ed.
Option 2 in particular is quite	a departure from the	he current design. But given that the OB
generation/expansion part of t	he SDT is complet	ely separate from the rest of the SDT (and
not implemented yet) it would	not be too late to	shift to either design Option 1 or 2.
This should be discussed durin	ng the FDR or on t	he days following it.

Date/Signature Actionee: 24 January 2005, Martin Folger

Board Disposition:

RI Closed:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM	T T T T T	Issue:	0.4
		Page:	101 of 104
		Author:	VDFS Team

Date/Signature Chairperson:	

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SVSTEM		Issue:	0.4
BIBIEN		Page:	102 of 104
		Author:	VDFS Team

2.6.10 FCO-018 SDT Sec 2.1.6:C:Guide Star PAF information:MFO

Review Title: Discrepancy Clarification **Review Item** Х **FDR VISTA DFS** Observation **RI No:** 18 **Review Item Document Title:** VISTA Survey Definition and Progress Tool **Document No:** VIS-SPE-ATC-20500-0001 **Document Originator:** Martin Folger

Discrepancy/Clarification Required/Observation:

Sect. 2.1.6, which information should the PAF contain regarding guide/aO stars, and what is the location of this PAF? (presumably the acquisition template?)

Action Recommended by Initiator:

Discuss the content of the PAF. Section 8.3.1 of document VIS-SPE-IOA-20000-0002 (Calibration Plan) refers to the SDT concerning the origin of the guide star specifications.

Date/Signature of Initiator: 20 January 2005, F. Comerón

RI Classification: (to be completed by Board Chairperson)

Major	Minor	Withdrawn			
Date/Signature Chairperson:					
Actionee Corrective Action:	Actionee Corrective Action:				
To be decided (at the FDR or during t	he meetings following it).				
Date/Signature Actionee: 24 January 2005, Martin Folger					
Board Disposition:					
RI Closed:					
RI Closed with Actions:					
Date/Signature Chairperson:					

		-	
VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM	_F	Issue:	0.4
		Page:	103 of 104
		Author:	VDFS Team

2.6.11 FCO-020 SDT Sec 3.4:O:non-UK QC:MFO

Review Title:				Discrepancy	
FDR VISTA DFS	Revie	w Item		Clarification	
			Χ	Observation	
RI No:		20			
Review Item					
Document Title:		VISTA Survey Definition and Progress Tool			
Document No:		VIS-SPE-ATC-20500-0001			
Document Originator:		Martin Folg	er		

Discrepancy/Clarification Required/Observation:

Sect. 3.4: non-UK surveys may not be expected to have access to the higher QC level made available through the SDT, which applies only to data processed by the UK pipeline in Cambridge.

Action Recommended by Initiator:

Discuss whether the SDT contains functionality that is customized to a set of specific users.

Date/Signature of Initiator: 20 January 2005, F. Comerón

RI Classification: (to be completed by Board Chairperson)

Major Date/Signature Chairperson:	Minor	Withdrawn
Actionee Corrective Action:		
The SDT does not contain functionality regarding the QC. This would be part of the Progress		
Tool (derived from the SDT) an	nd it could be ensured that the	Progress Tool does not depend

on additional high-level QC information but would make use of it if it was there.

Date/Signature Actionee: 24 January 2005, Martin Folger

Board Disposition:

VISTA	Infrared Camera PDR	Doc Number:	VIS-TRE-IOA-20000-0013
DATA FLOW	RID Responses	Date:	2005-01-26
SYSTEM		Issue:	0.4
DIDIEM		Page:	104 of 104
		Author:	VDFS Team

END OF DOCUMENT

oOo