VIRTIS for Venus Express RIR Data Package

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DOCUMENT CHANGE RECORD

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All	1				

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1 SCOPE

This Data Package is a collection of documents to be used for the VIRTIS Recurrent Instrument Review in the frame of Venus Express mission.

2 APPLICABILITY

VIRTIS for Venus Express Recurrent Instrument Review.

3 APPLICABLE DOCUMENTS

AD1 VEX.TN.0144/T/ASTR is. 2 Organisation Plan for Payload ICDR's and RIR's

4 ACRONYMS

ICDR Instrument Critical Design Review
RIR Recurrent Instrument Review
VIRTIS Visible InfraRed Thermal Imaging Spectrometer

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5 DATA PACKAGE CONTENT

The Data Package is organized following the Documentation Requirement List reported in AD1 and it is composed by the documents listed in Table 1.

Document	Title	Filename
Management Plan		
/	Experiment Management Plan	VVX Mgt Plan vol7.pdf
Design		
Payload System		
Design Description		
VVX-GAF-RP-001 is 1	VIRTIS Instrument Description	VVX-GAF-RP-001 is 1.pdf
P/L Performance Budgets		
VVX-GAF-BD-002 is 1 /	VIRTIS Performance Budget VIRTIS-H: an infrared spectrometer for the ROSETTA mission – Calibration results	VVX-GAF-BD-002 is 1.pdf Spie version finale.pdf
P/L Resources Budgets		
VVX-GAF-BD-001 is 1	VIRTIS Mass, Power And Data Rate Budget	VVX-GAF-BD-001 is 1.pdf
PID-A Compliance Matrix		
RTXXXX VVX-GAF-TN-xxxx VIR-DES-TN-1792 is 1.0 /	VIRTIS/VEX Electrical Interface Req. (MEX-MMT-SP-0007 is. 02 rev. 01) Compliance Matrix VIRTIS for VENUS EXPRESS "Add header 1355" doc Compliance matrix VIRTIS-H PID-A Compliance Matrix PID-A List of Non-Compliance (PA Part)	compliance to annex a eids 2 1.pdf compliance to add_header_1355.pdf VH_Compliance_Matrix.pdf PID-A List of Non-Compliance (PA part).pdf
PID-B		
See Rosetta VIRTIS EID-B		
Drawings and Diagrams		
Assembly Drawings		
/	Top Level Drawings	Top Level Drawings.pdf + linked files
Interface Drawings		
/	Interface Drawings	Interface Drawings.pdf + linked files

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Document	Title	Filename
Interface Circuit Diagrams		
/	Top Level Electrical and Interface Circuit Diagrams	Top Level Electrical and Interface Circuit Diagrams.pdf + linked files
Mathematical Models		
Structural Model		
VIR-GAL-TN-055 is 1 /	VIRTIS OM Red FEM Model Description Mathematical Model	Femred.pdf Redfem.doc
Simplified Thermal Model		
/ /	VIRTIS (C/C unit) VIRTIS Reduced Thermal Model	ITMM.pdf virtred.dck
Instrument Data Base (all TC's and TM's)		
/	RSDB	RSDB_VIRTIS_2002_10_03.xls
Analyses		
Performance Analyses		
See P/L Performance Budgets session		
Mechanical / Dynamic / Structural		
VIR-GAL-TN-094 Is 1 VIR-AN-KT-001 Is 2	VIRTIS OM Structural Improvement for Stiffness Increase ME Structure Analysis (Dimensioning)	Struc OM.pdf VIR-AN-KT-001 iss 2 ME Struct An - Dimensioning.pdf
Thermal (incl. validation and all predictions)		
VIR-GAL-TN-071 is 2 VIR-KAY-AN-002 is 4	VIRTIS OM Thermal Analysis ME thermal analysis	VIR-GAL-TN-071 is 2.pdf VIR-KAY-AN-002 iss 4.pdf
Electrical (incl. EMC)		
See Frequency Control Plan in Section 2.9 of EID-B		
Manuals		
System AIT Manual (for AIT use)		
VIR-DLR-MA-006 Is 2.2 VIR-IAS-TS-02 is 1d /	VIRTIS On-Board Software User Manual for V3.6x and V3.54 (FM level) ROSETTA – VIRTIS PFM Ground Operation Plan - System Level Tests Specifications and Procedures VIRTIS Handling Procedures	SW_User_Manual_Issue2_2_V361.pdf vir-ias-ts-02-is1draft_bench test.pdf Handling procedures files
GSE User Manuals (for AIT use)		
VIR-TCS-MA-051 is 1	VIRTIS EGSE Software User Manual	SUM_MA_051_1.pdf

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Document	Title	Filename
User Manual (for ESOC in-flight operations)		
RO-VIR-UM-001 Is 2d	VIRTIS PFM Experiment User Manual	VIRTIS_User_Manual_issue2_working_copy_1.pdf + linked zipped files
Product Assurance		
Product Assurance Plan		
VIR-GAL-PL-007 is 3	Product Assurance Plan for VIRTIS Program	VIR-GAL-PL-007 is 3 (PA Plan).pdf
Contamination Control / Planetary Protection Plans		
VIR-GAL-PL-092 is 2	Cleanliness and Contamination Control Plan for VIRTIS Instrument	VIR-GAL-PL-092 is 2 (CCC Plan).pdf
Material and Processes Lists		
VIR-GAL-LI-0081 VIR-GAL-LI-0082	DML for VIRTIS Instrument DPL for VIRTIS Instrument	VIR-GAL-LI-0081 (DML).pdf VIR-GAL-LI-0082 (DPL).pdf
Parts		
Procurement Specifications		
	Procurement Specifications List	Procurement Specifications List.doc
Declared Part List		
VIR-GAL-LI-069	DCL for VIRTIS Instrument	VIR-GAL-LI-069 (DCL).pdf
Requests for Parts Approval		
Requests for Parts Approval Not Issued		
Dependability		
FMECA		
VIR-GAL-TN-070 is. 2	VIRTIS FMECA	FMECA20is2.pdf
Electrical Parts Stress Analysis and WCA		
PSA and WCA Not Applicable		
Dependability Critical Items List		
VIR-GAL-LI-068 is. 1	CIL for VIRTIS Program	CIL.pdf
Hazard Analysis / Verification Document		
Hazard Analysis Not Applicable		
Configuration		
As Designed Configuration		

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Document	Title	Filename
CIDL for Hardware and Software		
/	Hardware As Built Configuration List	Hardware As Built Configuration List.pdf + linked files
VIR-DLR-LI-030 is 3.2	VIRTIS ME Software Configuration Status List - FM	SW_Config_List.pdf
VIR-DLR-LI-012 is 1.0	VIRTIS ME PROM SW Configuration Status List – QM/FM	PROM_SW_Config_List.pdf
VIR-DLR-LI-023 is 3.6	VIRTIS ME EEPROM Software Release Notes (last release: V3.61)	EEPROM_SW_Release_Notes_SW_V361.pdf
VIR-DLR-LI-027 is 3.3	VIRTIS ME EEPROM Software Configuration Status List - FM	EEPROM_SW_Config_List.pdf
Engineering Change Request Status List		
	List of ECRs	ECR_LIST.pdf
Request For Waiver Status List		
	List of RFWs	Waivers_list.pdf
As Built Configuration		
Non Conformance Report Status List		
	List of NCRs	NCR_PFM_LIST.pdf
Assembly, Integration and Verifications		
Verification		
Design Development and Verif Plan		
See vol. 4 of EID-B		
PID-A Verification Control Document		
VIR-GAL-LI-088 is 1	VIRTIS FM Verification Matrix	VIR-GAL-LI-088 is 1.pdf
Qualification status		
VVX-GAF-TN-001 is 1	VIRTIS for VEx PEM-M Radiat. Analysis	VVX-GAF-TN-001 is 1.pdf
VIR-GAL-LI-083 is 5	VIRTIS QSL	VIR-GAL-LI-083 is 5.pdf
VIR-DES-TR-1771 Is 1.0	SCA Irradiations Test report	SCA-irradiations-Test Report.pdf
VIR-DES-PL-1430 is 1.0	PEM-H / FM QSL	ph_06_1430_qualif_status_list.pdf
VIR-KAY-LI-025 is 3.1	VIRTIS ME QSL	LI-025 ME FM QSL- iss 3_1.pdf
/	Behaviour of a Raytheon IRFPA (438x270) under high energy protons	SDW2002-paper.pdf
Assembly, Integration and Tests		
Test specifications (all tests)		
No Test Specification issued		

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Document	Title	Filename
Test procedures (all tests)		
VIR-GAL-TP-104 is. 2	Electrical and Functional Test Procedure	VIR-GAL-TP-104-is_2.pdf
VIR-GAL-TP-106 is. 2	PEM-M Vibration Test Procedure	VIR-GAL-TP-106-is_2.pdf
VIR-GAL-TP-107 is. 2	Inter-Unit Harness Test Procedure	VIR-GAL-TP-107-is_2.pdf
VIR-GAL-TP-109 is. 1	VIRTIS EMC Test Procedure	VIR-GAL-TP-109-is_1.pdf
VIR-GAL-TP-113 is. 2	Reduced Electrical Test Procedure	VIR-GAL-TP-113-is_2.pdf
VIR-GAL-TP-114 is. 1	VIRTIS FM/FS Electrical Test Procedure	VIR-GAL-TP-114-is_1.pdf
VIR-GAL-TP-115 is. 1	Optics Module Vibration Test Procedure	VIR-GAL-TP-115-is_1.pdf
VIR-GAL-TP-116 is. 1	OM FM Coalignments Test Procedure	VIR-GAL-TP-116-is_1.pdf
VIR-GAL-TP-117 is. 1	VIRTIS FM Thermal Vacuum Test Procedure	VIR-GAL-TP-117-is_1.pdf

Table 1 - VIRTIS for Venus Express RIR Data Package

Note: In the electronic copy of the Data Package, also the ROSETTA-VIRTIS EID-B and Acceptance Data Package are included.

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