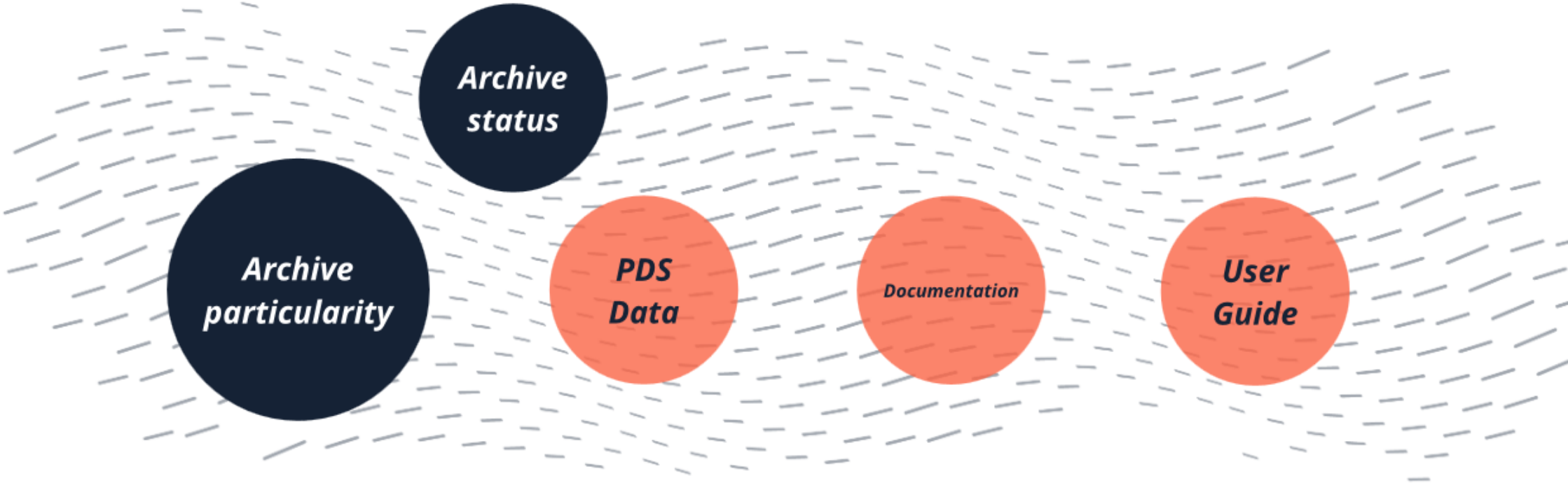
ROSINA ARCHIVE - SWT#48

Thierry Sémon UoB



Archive particularity

3 instruments (~2 detectors each)
big amount of data
lots of documentation

3 instruments

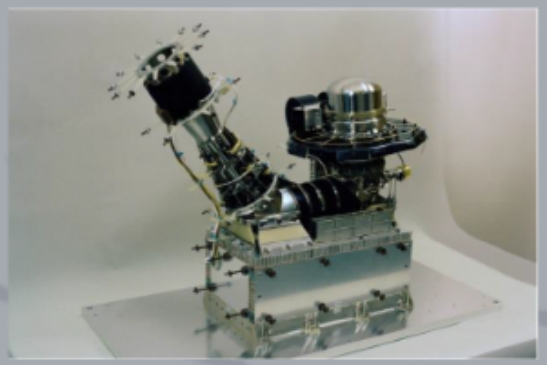
3 instruments

ROSINA_USER_MAN_V4.PDF

COPS

AD3_INST_OP_COPS.PDF

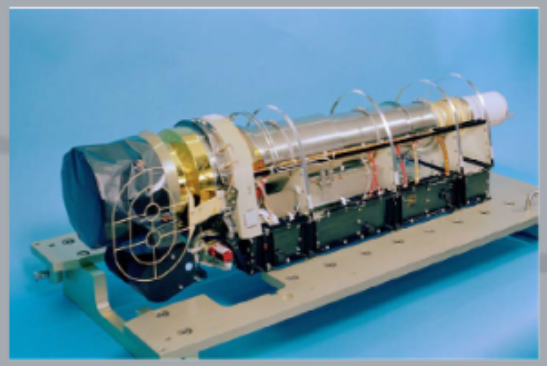
COPS_MODE_DESC.ASC



DFMS

AD1_INST_OP_DFMS.PDF

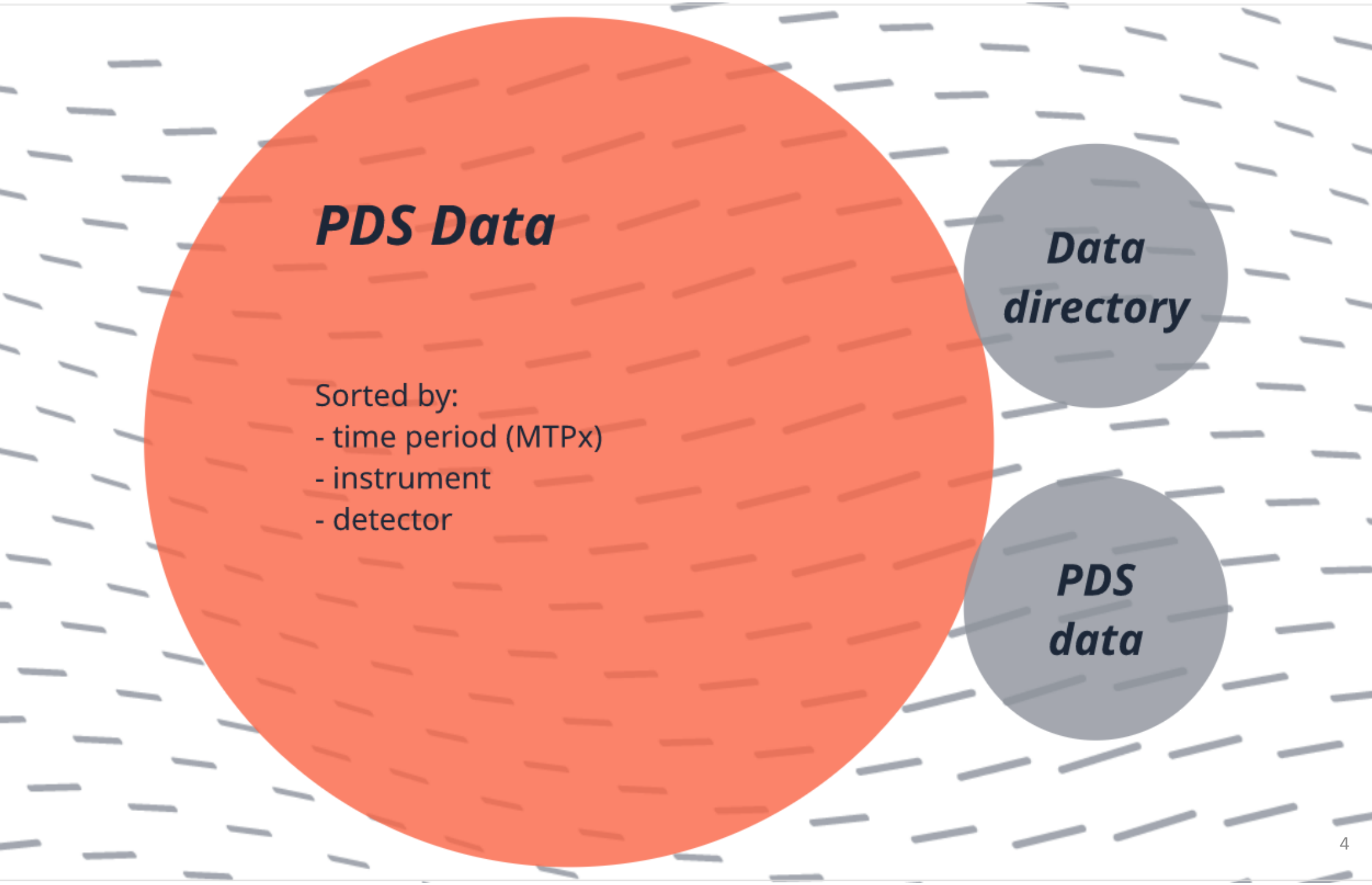
DFMS_MODE_DESC.ASC



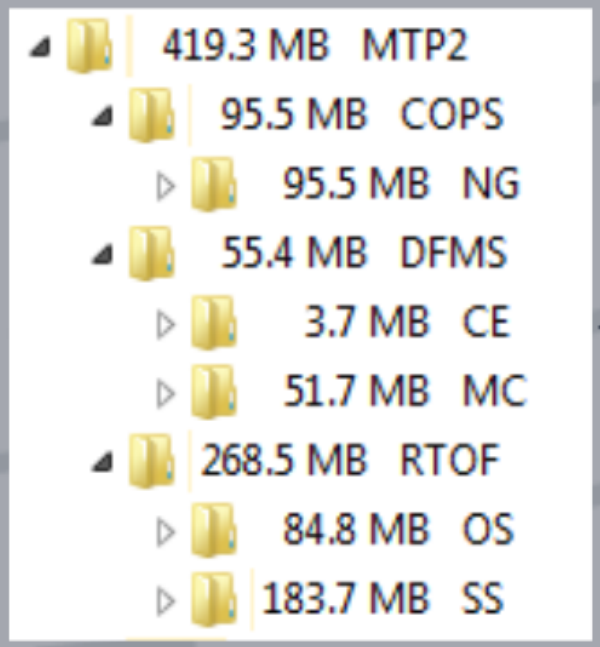
RTOF

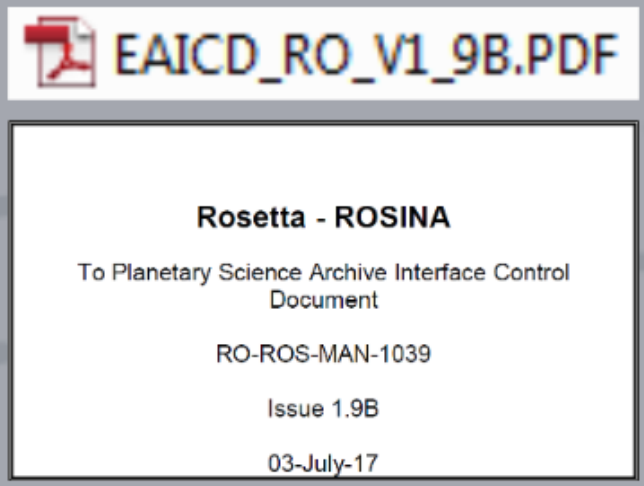
AD2_INST_OP_RTOF.PDF

RTOF_MODE_DESC.ASC


PDS Data
Sorted by:
- time period (MTPx)
- instrument
- detector
Data directory
PDS data

Data directory





PDS data

Instrument	Mode number	Description	Zoom	Masses
DFMS	200	Gas, MCP, LoEM, LR, survey	1	13-136
DFMS	201	Gas, MCP, LoEM, LR, background, cover	1	13-136
DFMS	202	Gas, MCP, LoEM, HR; survey	1	13-100
DFMS	203	Gas, MCP, LoEM, HR; background, cover	1	13-100
DFMS	205	Ion, MCP, LR, survey, MG = -10V	1	13-136
DFMS	207	Ion, MCP, HR, survey, MG = -10V	6.2	13-136
DFMS	209	Gas, MCP, electr. noise	6.2	SEL{2}
DFMS	210	Gas, MCP, MedEm, LR, survey	1	13-136
DFMS	211	Gas, MCP, MedEm, LR, background, cover	1	13-136
DFMS	212	Gas, MCP, MedEm, HR; survey	1	13-100
DFMS	213	Gas, MCP, MedEm, HR; background, cover	1	13-100
DFMS	215	Ion, MCP, LR, survey, MG = -5V	1	13-136
DFMS	217	Ion, MCP, HR, survey, MG = -5V	6.2	13-136
DFMS	219	Gas, CEM electr. noise	1	SEL{2}
DFMS	220	Gas, MCP, HiEM, LR, survey	1	13-136
DFMS	221	Gas, MCP, HiEM, LR, survey, cover	1	13-136
DFMS	222	Gas, MCP, HiEM, HR, survey	6.2	13-100
DFMS	223	Gas, MCP, HiEM, HR, background, cover	6.2	13-100
DFMS	225	Ion, MCP, LR, survey, MG = -50V	1	13-136
DFMS	227	Ion, MCP, HR, survey, MG = -50V	6.2	13-136
DFMS	229	Gas, FAR, electr. noise	1	SEL{2}
DFMS	230	Gas, MCP, LoEM, LR, survey	1	13-136
DFMS	231	Gas, MCP, LoEM, LR, background, cover	1	13-136
DFMS	233	Gas, MCP, LoEM, HR, background, cover	6.2	13-100

```
INSTRUMENT_MODE_DESC        =     "DFMS_MODE_DESC.ASC"
INSTRUMENT_TYPE             =     "MASS SPECTROMETER"
ETECTOR_ID                  =     DFMS
ETECTOR_DESC                =     "DOUBLE FOCUSING MASS SPECTROMETER"
HANNEL_ID                   =     MC
TART_TIME                   =     2014-04-25T00:36:19.381
TOP_TIME                    =     2014-04-25T00:36:39.381
```

documentation

PDS data - science

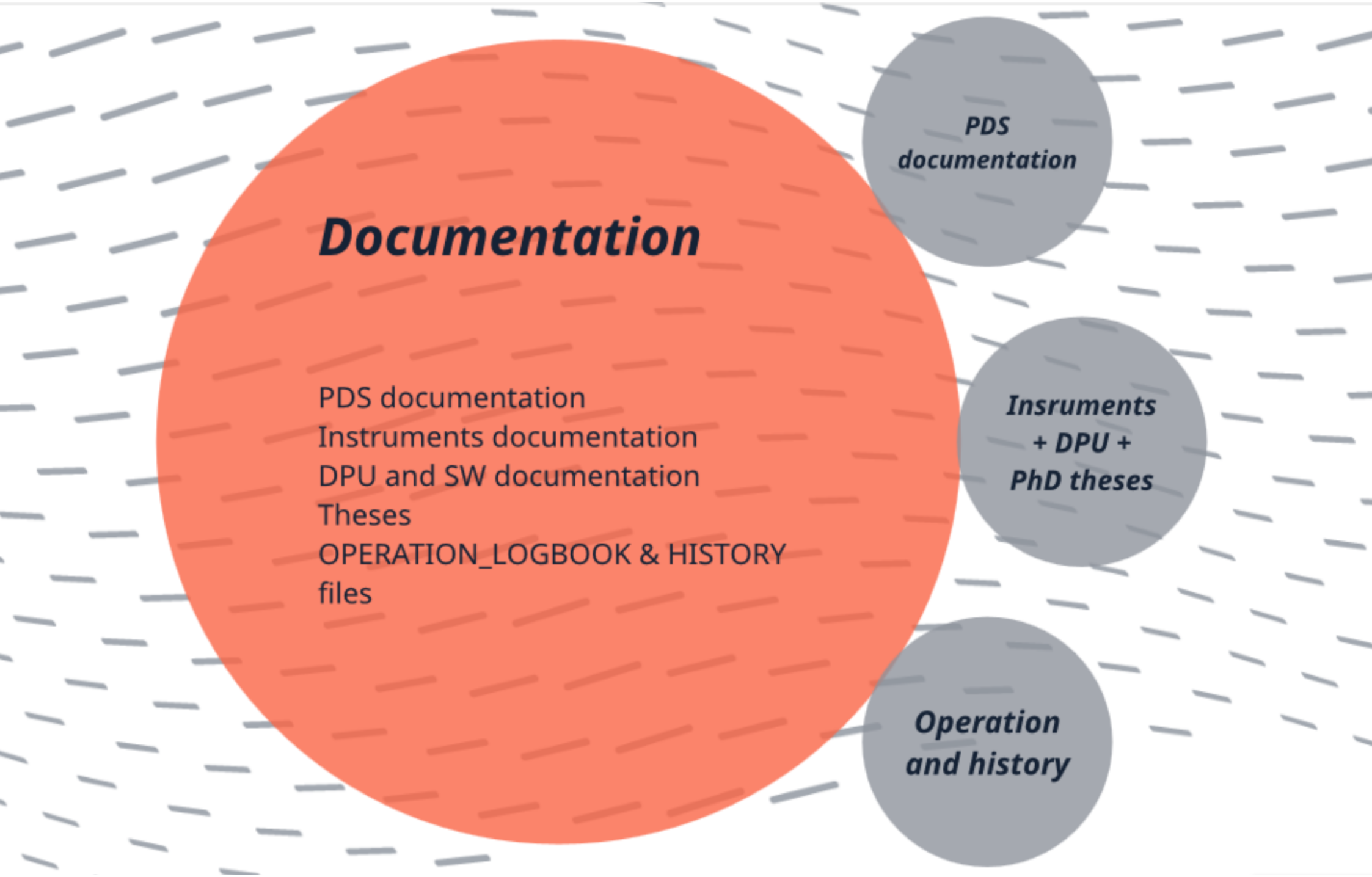
OSINA_DFMS_SCI_LAST_PACKET_S	"F_P			
OSINA_DFMS_SCI_PACKET_COUNT		0		
OSINA_DFMS_SCI_MASS		18		
OSINA_DFMS_SCI_MODE		520		
OSINA_DFMS_SCI_MG_FLAG	OFF			
OSINA_DFMS_SCI_ISB_FLAG	OK			
OSINA_DFMS_SCI_ISP_FLAG	OK			
OSINA_DFMS_SCI_IRP1_FLAG	OK			
OSINA_DFMS_SCI_IRP2_FLAG	OK			
OSINA_DFMS_SCI_ERP_FLAG	OK			
OSINA_DFMS_SCI_FIL1_BIAS_FLAG	OK			
OSINA_DFMS_SCI_FIL2_BIAS_FLAG	OK			
OSINA_DFMS_SCI_FIL1_EMI_FLAG	LOW			
OSINA_DFMS_SCI_FIL2_EMI_FLAG	OFF			
OSINA_DFMS_SCI_SLL_FLAG	OK			
OSINA_DFMS_SCI_SLR_FLAG	OK			
OSINA_DFMS_SCI_SES_FLAG	OK			
OSINA_DFMS_SCI_SEB_FLAG	OFF			
OSINA_DFMS_SCI_TLL_FLAG	OK			
OSINA_DFMS_SCI_TLR_FLAG	OK			
OSINA_DFMS_SCI_VACC_FLAG	HIGH			
OSINA_DFMS_SCI_FAR_REP_FLAG	OFF			
OSINA_DFMS_SCI_ETA_COARSE		201.8	V	
OSINA_DFMS_SCI_ESS1_FLAG	OK			
OSINA_DFMS_SCI_ESS2_FLAG	OK			
OSINA_DFMS_SCI_RQ_FLAG	OFF			
OSINA_DFMS_SCI_MP_FLAG	OK			

details

AD4_RN_HK_MONITORING.

commanding

OPERATION_LOGBOOK.P


Documentation
PDS documentation
Instruments documentation
DPU and SW documentation
Theses
OPERATION_LOGBOOK & HISTORY files
PDS documentation
Insruments + DPU + PhD theses
Operation and history

PDS documentation

- ROSINA planetary science archive interface control (EAICD)
- Structure of the PDS files in the ROSINA dataset
- Data handling process
- Instrument Calibrations (CODMAC L2 to L3)
- Data Product Design and Sample

Insruments + DPU + PhD theses

OSINA Users Manual and appendices:
AD1 (DFMS) / AD2 (RTOF) / AD3 (RTOF) **instruments doc**
AE (DPU) **software documentation** (Digital Processing Unit)
...
heses: **Sensitivity and fragmentation calibration** (DFMS/RTOF)

he **Data Process Documentation** (Software documentation) used
s reference to calibrate the DFMS and RTOF science data (L2 to L3
onversion)

Operation and history

OPERATION_LOGBOOK

OSINA Operation logbook (commanding timeline)

HISTORY_INST

nstrument history file (anomalies and parameter change) during
he whole mission

User Guide

- help the user to undestand our science data and the related documentation
- help the user to convert the raw data into calibrated data

User Guide purpose

ROSINA User's Guide

Table of content: