(2020-04-23) RCS telecon #21

Goals

ROC RCS telecon

Date

23 avr. 2020 at 2pm

Attendees

- Xavier Bonnin
- Jean-Yves Brochot
- Thomas Chust
- Erik Johansson
- Bruno Katra
- Matthieu Kretzchmar
- Rodrigue Piberne
- Quynh Nhu Nguyen
- David Pisa
- Jan Soucek
- · Antonio Vecchio

Agenda

- RPW L1/HK CDF processing status overview (Xavier)
 RPW L1R/L2 CDF data processing status overview (Quynh Nhu, Teams)
- Summary plots delivery and implementation at LESIA (All)
 SPICE implementation (All)
- 5. Calibration files (status, catalog file)
- 6. Next telecon
- 7. AOB

Discussion items

Item	Notes	Action-items
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1.a

- RPW L1/HK data processing status
 - Bias L1 CURRENT CDFs have been shared (see https://rpw.lesia.obspm.fr/roc/data /private/solo/rpw/data/BIA/)
 - Samples of Bias L1 SWEEP CDFs Verification with Bias team in progress

 - Automated L1/HK CDF production is on-going
 Provision of SPICE kernels by the SOC via GFTS is now automated (and regular). See https://rpw.lesia.obspm.fr/roc/data/private/solo/soc/spice/
 - o Adding in metadata SPICE kernels used to process L0/L1/HK Epoch times is ongoing (for L1/HK CDF they will provide as entries of the "Parents" global attribute)
 - First L1 CDF for SBM mode should be available next week in the ROC Web site
 To be done: QUALITY_BITMASK/QUALITY_FLAG, SOOP/OBS_ID
- L1 CDF anomaly status
 - Debugging TNR L1 CDF is on-going (https://gitlab.obspm.fr/ROC/RCS /THR_CALBAR/-/issues/45)
 - Origin of issue https://gitlab.obspm.fr/ROC/RCS/TDS_CALBA/-/issues/26 identified, but need to implement post-processing (not planned before cruise phase)
 - Is issue https://gitlab.obspm.fr/ROC/RCS/LFR_CALBUT/-/issues/33 can be closed ?
 Is issue https://gitlab.obspm.fr/ROC/RCS/LFR_CALBUT/-/issues/31 can be closed ?

 - No new for https://gitlab.obspm.fr/ROC/RCS/LFR_CALBUT/-/issues/32
- Older L0/L1/HK CDFs ready to be moved into "former_versions" subdir (done next week)
- SOLO HK parameter
 - EDDS XML format files available "as is" in https://rpw.lesia.obspm.fr/roc/data/private /solo/rpw/data/SOLO HK/2020/
 - O Description of current HK data retrieved given in SOLO HK Parameter data (in progress)

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RPW L1R/L2 data processing status at LESIA

See 200423_ROC_Telecon21_NQN.pdf

- · Anomaly report
 - SCM SURV-CWF L2 data: problem with SAMPLING_RATE (to be fixed in SCMCAL 0.11.0)
 - o Anomaly reported by LFR concerning BP1 L2 skeletons V06 RCS teams must only commit/push CDF skeleton tables (ASCII) in the "rcs" branch of the DataPool Git repo.
- Proposal for RCS update at LESIA and L1R/L2 generation cadence?
 - o RCS update every TBD weeks or months? After each delivery?
 - o It is discussed to not share (even with Cols) L1/L2 CDFs which are not at least well time-stamped (to be discussed at the next ROB telecon)
 - ° The "GO" to (re)generate first L2 to be delivered to the CDAG at ESAC will be discussed on next ROB telecon
- Teams need to be able to look at "failed" L1R/L2 CDF processing. Xavier and Quynh Nhu will put "failed" L1R/L2 CDF in specific directories accessible to the teams (same for log

 Action Quynh Nhu: Implement "failed" L1R/L2 CDF prod. in the ROC pipeline



A ROCDATPRO-119

- Jira project doesn't exist or you don't have permission to view it.
- Action Xavier: Provide to the Teams a first list of the L1/L1R/L2 CDF points of automated checking implemented or to be implemented in the pipeline



A ROCDATPRO-120

- Jira project doesn't exist or you don't have permission to view it.
- Action Xavier: Discuss at the ROB telecon about the data sharing (shared only time-stamped)



A ROCDATPRO-121

- Jira project doesn't exist or you don't have permission to view it.

3.

- · Implementation in two steps:
- 1. Teams drop their summary plot files in the dedicated 'summary_plots' folder in the SFTP at LESIA. Then ROC team moves the files into the ROC Web site (https://rpw.lesia. obspm.fr/roc/data/private/solo/rpw/data/SummaryPlots/)
- 2. ROC will progressively get the programs (from Gitlab as RCS software) to create the summary plots at LESIA.
- In the ROC Web site, organize summary plots as daily folders as for L1/L2 daily CDF
- · Conventions:
 - File naming : see mail sent on April 18, 2020 at 18:30 by X.Bonnin "[roc.rcs] RPW summary plots -- proposal for file naming convention and delivery to LESIA'
 - Descriptor field can differ from parent CDFs use to generate the plots. The only condition is to be unique and be explicit enough
 - Use PNG as file format for quicklook
- Summary plots can be implemented as a feature in the RCS software or in separete program. However the RCS teams must ensure that program uses to generate summary plots can be run independently of the L1R/L2 CDF production (in nominal, the ROC plans to generate L1R/L2 CDF first, then run the production of the related summary plots)

Action RCS teams: Provide before the next telecon to Xavier the list of summary plots expected to be generated



A ROCDATPRO-123

- Jira project doesn't exist or you don't have permission to view it.

(the list will be add to RPW Data Products)

4.	 Proposed implementation: For IDL (SCMCAL and TDS_CALBA): - An instance of SPICE/ICY N00066 has been already installed on the roc2-dev.obspm.fr and roc.obspm.fr servers in /usr/local /spice/icy folder. (N.B. feel free to use it on your own for RCS dev/test) Before each run of the RCS by the ROC pipeline, the variable \$IDL_DLM_PATH will be automatically set to point towards the /usr/local/spice/icy/lib path containing the icy. dlm and icy.so files For Python (LFR_CALBUT): - It is highly recommended to the LFR team to use the spiceypy module (https://spiceypy.readthedocs.io/en/master/) for any SPICE computation. Please be sure to apply the version 2.2.0 working with CSPICE N00066 spiceypy will be installed by the ROC when deploying the LFR_CALBUT virtual environment on the roc servers. As for other Python dependencies, it will be done using the requirements.txt file (for you it means just add the line "spiceypy == 2.2.0" to the config/calbut_requirements.txt file) We have noticed that BICAS (Matlab) and THR_CALBAR (IDL) are not concerned by SPICE implementation for now. Two additional environment variables SPICE_MK_PRED_PATH and SPICE_MK_FLOWN_PATH pointing towards "predictived" and "as-flown" metakernels 	
5.	 To be delivered to ROC in "cal" folder in sftp-lesia Should now converge on naming convention solo_CAL_rpw-*.cdf To be implemented> calibration catalog files (JSON instead of XML ?) 	Action RCS Team: To be applied new calibration table file naming convention for the future file delivery ROCDATPRO-124 - Jira project doesn't exist or you don't have permission to view it. Action Xavier: To send before the next RCS telecon an update proposal for the calibration catalog files ROCDATPRO-125 - Jira project doesn't exist or you don't have permission to view it.
6.	Next RCS telecon planned on June 4 at 2pm	
7.		

Action items

Open issues

Closed issues

Attached items

• 200423_ROC_Telecon21_NQN.pdf