2018-06-14/15 Meeting#004

14 Jun 201815 Jun 2018

@ Bologna, Italy

Attendees

- Sebastien Besse
- Guido De Marchi
- Ernst Hauber
- Sonia Fornasier
- Paolo Tortora
- Jan Soucek
- Elliot Sefton-Nash
- Francesca Altieri
- Antonio Garcia Munoz
- <u>Tanya Lim</u> (webex)
- Members of Bologna university involved in Radio Science Experiments

Discussion items

Item	Time	Notes
Thursday		
Welcome and Logistics	9:00	Paolo
#1 PSA News, Updates and Statistics	9:30	Sebastien
<u>Sebastien Besse</u> presented a status of the last statistics. The content has not evolved from the last discussion and the interpretation is always difficult.		

Item	Time	Notes
PSA-2018-UG-Bologna,pptx		
The PSA-UG inquired about the archiving of non-ESA instruments, such as MASCOT on Hayabusa II.		
#2 Assessment of ASPERA data	10:00	Jan
The assessment from the PSA-UG shows that there is clearly an effort needed to improve the MEX and VEX datasets. Some additional effort would be needed for VEX to improve in particular the accessibility of the metadata (in computer readable format). There is a concern that calibration is not easily enabled within the archive, this will not help to produce great science from independent scientists. There is a need to push at instrument level for improving the content of the archive. Financial support is likely needed. MEX: Improvement is needed VEX: Missing calibration and improvement is needed For both projects something around 1.5FTE is estimated Jan Soucek and Elliot Sefton-Nash to start drafting a letter of recommendation similarly to the one done for Radio Science. A place holder is available here: ASPERA recommendation		
#3 ExoMars TGO and Rover status	11:00	Tanya
2016 Status and archiving (including PSA-UG recommendations for thumbprints, this applies mainly to CaSSIS) Tanya Lim mentioned that most of the archive activities are nominal. There are some issues with the compression algorithm with CASSIS (solved by now), and the ESAC SOC will support the creation of raw browse products.		
Plans for "real-time" data releases (mostly PanCam, but perhaps also CLUPI etc): How will this be organised/funded, who is responsible (instrument teams? ESA? National Space Agencies?). The PSA-UG considers this an important issue, as ExoMars 2020 will be competing with		

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NASA"s 2020 rover for public attention, and NASA is extremely good at PR - ESA (and inter/national instrument teams) need to be well prepared to "be seen" in the eyes of the media and public. (Note that there will also be a Chinese rover in 2020, according to Chinese representatives).		
Tanya Lim mentioned that the ROCC will publish daily images, delivery to the PSA will be once per month.		
Data from the surface platform would be very useful for the rover, but ESAC is not supporting the SP archive (which will be hosted by IKI).		
#4 Update on SSO research "improved MEX MARSIS data processing"	12:00	Eliott
Elliot Sefton-Nash presented an update of the on-going EXPRO contract to create additional MARSIS products and products geometrically corrected.		
20180614_MARSISstatus_dist.pdf		
#5 Update on BepiColombo Status	12:30	Sebastien
Sebastien Besse presented the status of the BepiColombo mission and the on-going activities regarding the archive.		
Lunch on site		
#6 Mars Legacy Archive status	14:30	Ernst
Sebastien Besse mentioned that the PSA was almost ready in forwarding the relevant document to the MEX IDS.		
The User-Group mentioned that they could help reviewing the documents.		
Sebastien Besse to send the documents to the User-Group.		
#7 Upward Status	15:00	Sebastien
The User-Group would like to help in assessing the prioritisation of the various datasets delivered to the PSA.		
The PSA latest assessment is that numerous datasets are not XML compliant, which is a critical issue for PDS4 compliance. In general, the User-Group recommends that those datasets go into the PSA. If there is a "User Document", PSA-UG could help to review it.		

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	ncesca Altieri mentioned that a special issue with UPWARDS olications is on its way.		
still fror req will	wever, the question on how to "fix" the dataset for ingestion in the PSA is open and should be discussed internally at PSA. One lesson learned in UPWARDS is that more interaction between teams and PSA is uired, and that preparation of data for archiving has to start early (as it take time, and there will be errors to fix). It was also mentioned that for the data sets there are no peer-reviewed papers available.		
	PSA to provide a clear list of datasets delivered to the User-Group for assessment		
	a more generic level, the PSA need to define few actions that are done parallel with the ESA long term archive strategy.		
1.	What to archive ?		
2.	What if there is no proof of peer-review available?		
3.	How to prioritise ?		
4.	Another open question: What happens if data are not yet archived when a EU-funded projects has ended. Who takes action? Would that incur costs on ESA-PSA side?		
#8	PlanMap Status	16:00	Franscesca
T .	e User-Group agreed that PSA should provide those products to the		
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Que 1. 2. 3.	nmunity. The PSA is considered the best place to host such data. estions that have been discussed: Can PSA handle geospatial data? a. Short answer is yes. Can PSA provide support? a. Very limited support only. When to deliver? a. As soon as possible, test cases should be delivered. Archiving of HRE Lunar data from Luna 25 (PiLOT-D) and Luna 26	17h00	Eliott

Item	Time	Notes
20180614_PROSPNeeds_dist.pdf		
#10 Rosetta Legacy archive Status	18h00	Sebastien
Sebastien Besse gave an overview of the status of the Rosetta archive.		
The User-Group was pleased with the high level science products being prepared and delivered. Additionally, it was also flagged that data from the CIVA and ROMAP instrument on the Lander are still not available.		
Adjourn		
Guido De Marchi to provide the caption The PSA-UG meeting was held in Bologna, at Palazzina della Viola, built in the 15th century. The UG members are standing in front of a fresco painted in 1550 by Prospero Fontana and depicting a scene from the "History of Constantine and Pope Sylvester". In this scene, Emperor Constantine intends to kill the children with his chariot, but their mothers manage to dissuade him.		
Dinner		
Friday		

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#11 ESA's Long Term Strategy	9:00	Guido
Guido De Marchi presented the current process ongoing at ESA to define and update the long term strategy of the archives.		
The User-Group provided feedback that is now captured by Guido De Marchi in the revision of the ESA's Long Term Strategy for archives document.		
#12 Radio Science	11:00	Paolo
Lessons learned: "good practices" from a PDS archive of a past mission (NASA's Messenger to Mercury)		
Paolo Tortora and members of his group (Marco Zannoni) presented the fundamentals not be forgotten when preparing and archiving Radio Science data. This is directly applicable to BepiColombo and JUICE. NASA's Messenger radio science archive on PDS was used as a case study of an excellent archive (complete, clear, searchable, usable).		
One strong advice from this work is that data archiving should be an essential part of the national funding from agencies. It is recommended that the SSEWG should discuss this, and SSAC and SPC should take action.		
PSA UG Messengedio Science.pdf		
#13 Request from SSEWG	11:30	Ernst
Question from the SSEWG Exploitation of the archived data beyond the present pool of MEX data users, the interface of the archive should allow the users to explore and/or visualize the data products as intuitively as possible with as little a priori working knowledge of the data. An example raised during the discussion was that data on a planet could be selectable by the user from a map of the latter, instead of having to input time and geographic coordinates (which a first time user might not know or not yet be familiar with). Response from the User-Group PSA-UG agreed with the comment and the importance of the visualization by maps. Functionality exists in prototype form. Significant effort to add the metadata missing for all instruments is on-going. Some of this effort is		

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accomplished through an EXPRO contract which would provide geometry for instruments onboard the MEX mission and Rosetta mission by end of the year. The feature "Map view" is highlighted in the PSA Roadmap for late 2019, obtaining the geometrical parameters is the first step towards visualising data on maps in the PSA by the end of next year.		
#14 PSA Strategy and Roadmap	12:00	Sebastien
Sebastien Besse discussed with the User-Group some ideas on the future development routes for the PSA.		
For instance DOIs were discussed together with the difficulty to cite numerous products. This is a fundamental difference with Astronomy archives. Sebastien Besse mentioned that PSA is also now working with EXPRO contracts in a more systematic way. The User-Group offers advice to PSA in prioritising contracts that benefit more then one mission.		
Some questions:		
How about a part of PSA that hosts data that do not meet all formal requirements?		
What kind of ground calibration data sets should be archived? (as for now, this is decided on a case-by-case approach)		
Ideas for cross-archive functionality (PSA with Astronomy and/or Heliophysic) was positively viewed as a way to enhance science exploitation of datasets (e.g., cross-archive searches).		
#13 AOB		
Next meeting proposed dates are 17 Jan 2019 18 Jan 2019 . Need to be consolidated		
Lunch on site		
Adjourn		