



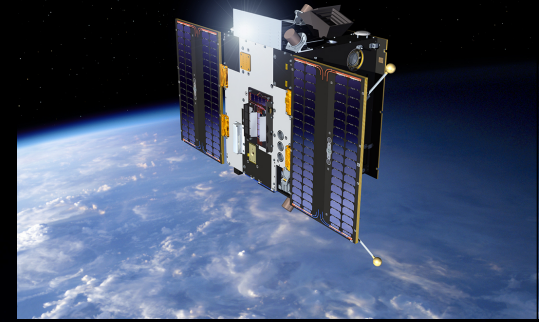
The PROBA2 Science Center
The PROBA2 Science Center

The PROBA2 Science Center

E. D'Huys and the P2SC team

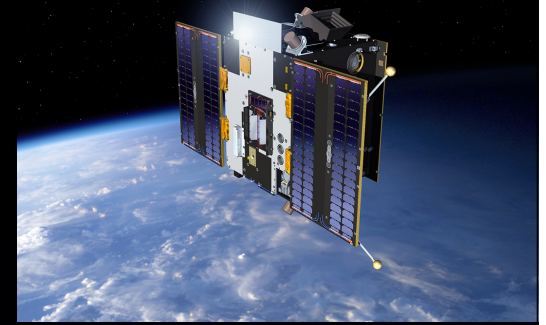
Royal Observatory of Belgium

P2SC



- Receives and stores the spacecraft telemetry from the Mission Operations Center in Redu
- Reformats this telemetry to SWAP and LYRA science products
- Distributes LYRA and SWAP science data
- Provides interfaces to monitor the processing of the data and to plan and command the activities of SWAP & LYRA

Telemetry & Data

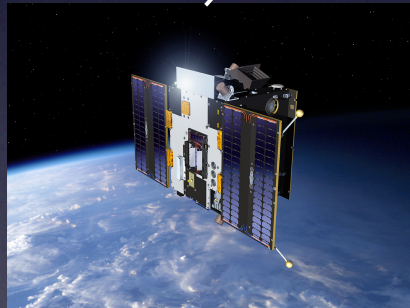


Svalbard



Telemetry

Data Packets



Proba 2

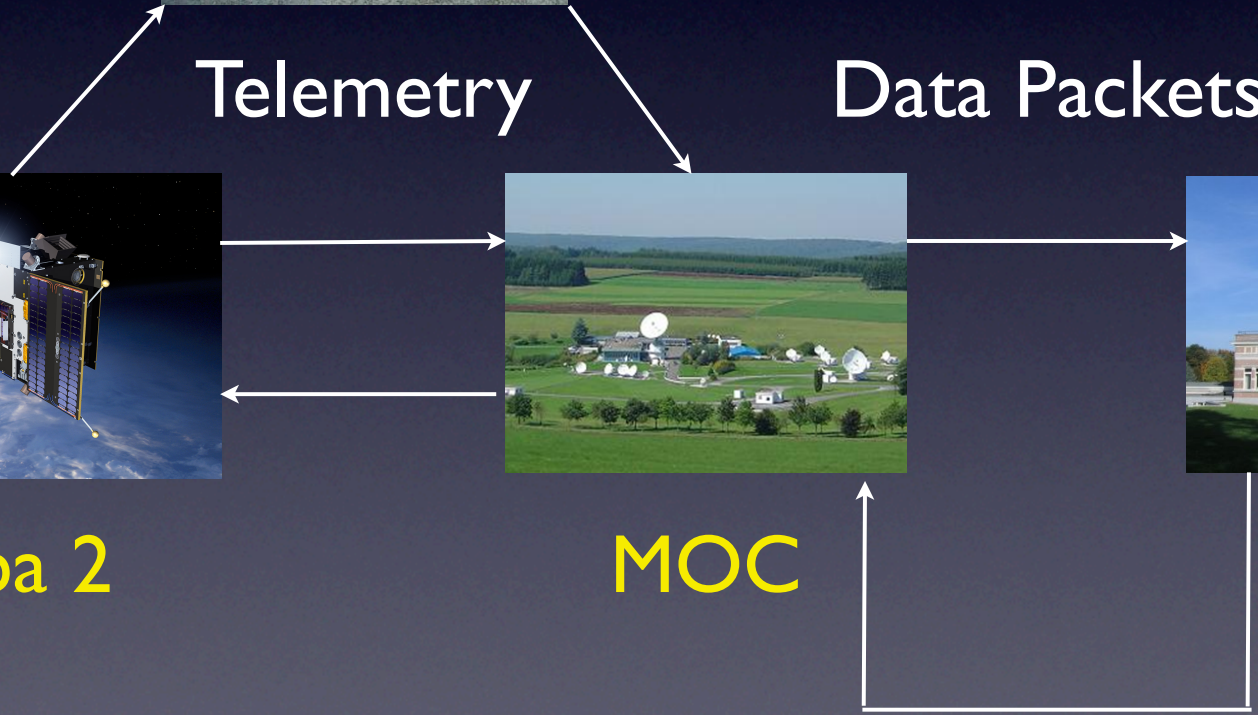


MOC

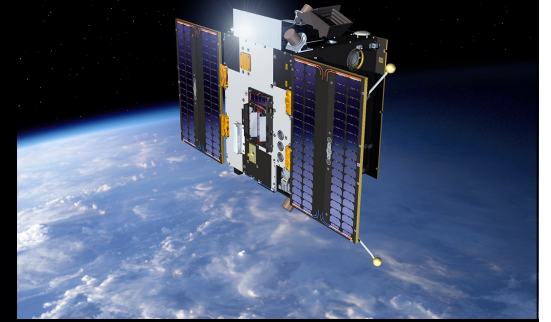


SOC

Commanding

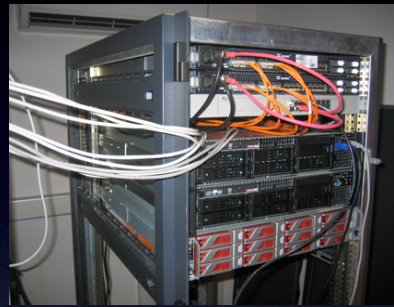
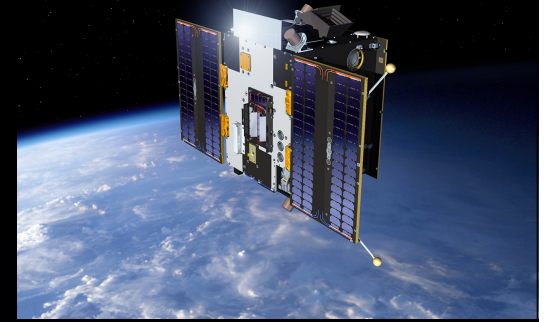


Telemetry & Data

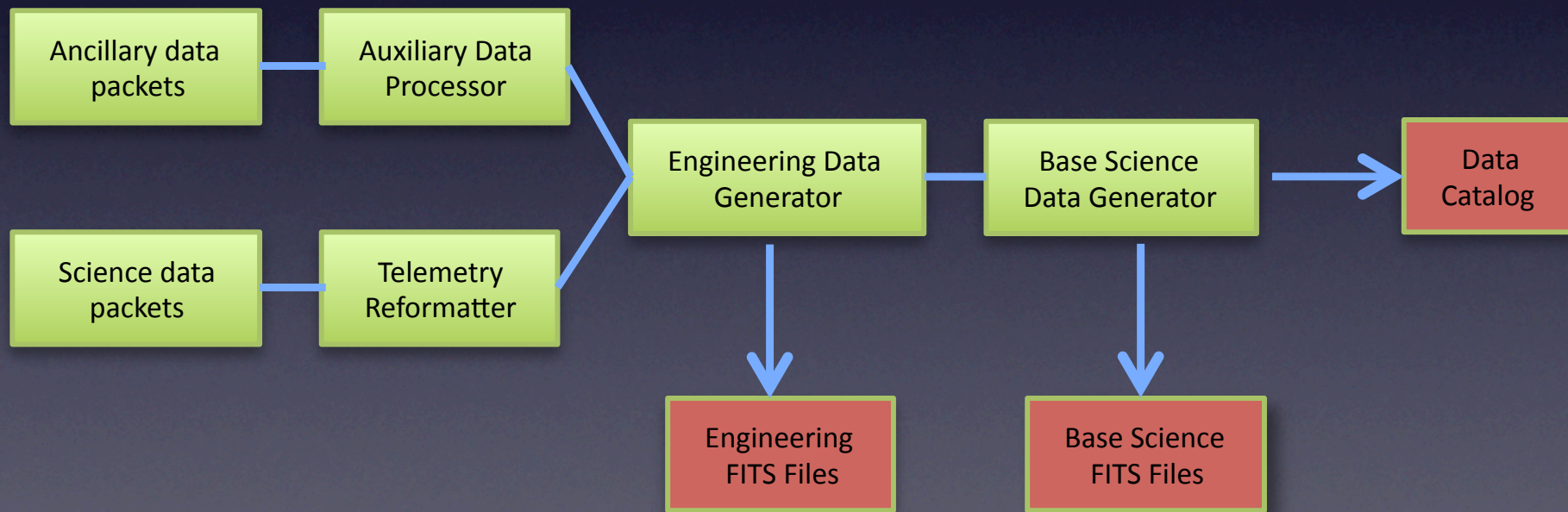


- ~9 passes per day, spread over 2 ground stations (upload and/or download)
- ~30 MB per pass
- Data reaches P2SC 30 min after last image before pass was taken
- Data is processed during 30 min and put online

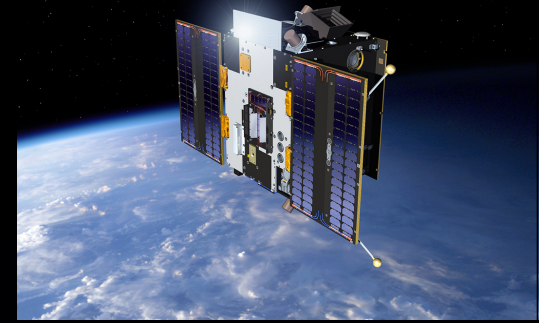
Data Processing



The P2SC ESX Servers at ROB




Data Distribution



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http://proba2.sidc.be/index.html/Data-download/ RSS Google

P2SC NICT NASA SW Viewer RWCWDC - Wiki Solar Weather Forecast SSA Solar-TERre...s web page SOTERIA - Wiki ROB STCE ESWW - Wiki SIDC Popular



Home About SWAP LYRA **Data** Community Meetings Outreach Gallery OK Last update: 11th of June 2010

Home page > Data

Data

SWAP & LYRA Data Distribution

Raw PROBA2 data will be received at ESA's ground station in Redu and transferred to the PROBA2 Science Center (P2SC) via ftp link. Once received by the P2SC, data will be automatically processed, calibrated, and prepared for public distribution. All data will be freely available to the public as soon as processing is complete and will be distributed on the web at this page.

PROBA2 has now begun its scientific mission and the data of SWAP and LYRA are freely available. Apart from the quicklook images, we are happy to announce the beta data release of the science data products.

For the time being we have online the following FITS files and quicklook PNG files in YYYY/MM/DD directories:

- SWAP raw images, i.e. level0 data, e.g. <http://proba2.oma.be/swap/data/eng/2010/05/01/>
- SWAP calibrated images, i.e. level1 data e.g. <http://proba2.oma.be/swap/data/bsd/2010/05/01/>
- SWAP quicklook data (png files), e.g. <http://proba2.sidc.be/swap/data/qlviewer/2010/05/01/>
- LYRA raw 'standard' time curves, i.e. level1 data, e.g. <http://proba2.oma.be/lyra/data/eng/2010/05/01/>
- LYRA 3-day quicklooks of the uncalibrated data from channels 17-50 nm and 1-20 nm
- LYRA daily quicklooks of uncalibrated data from all four channels averaged over 1 min, at
- LYRA daily quicklooks of data from all four channels averaged over 1 min and cross-calibrated with *SORCE/SOLSTICE* and *TIMED/SEE*

User manuals are still under construction but the first information can be found [here](#) for SWAP and [here](#) for LYRA.

In addition, a list of flares derived from LYRA data is available [here](#).

Home page | contact | Site Map | Sign In

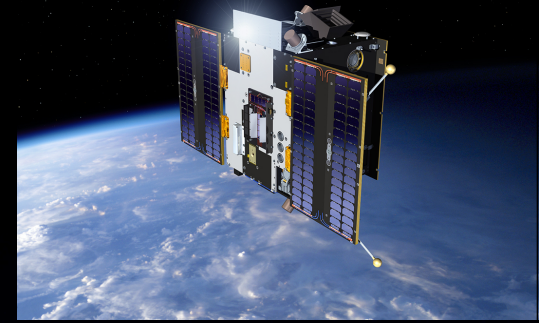
http://proba2.sidc.be

Commanding



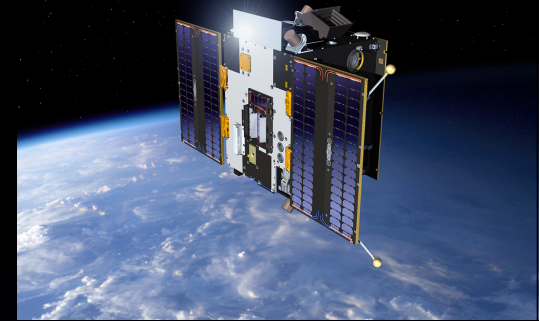
- The commanding of SWAP and LYRA is done from the P2SC and is highly automated.
- As there are several passes per day, last minute commanding is possible.
- Any request or ideas for observation campaigns can be sent to the operators:
swap_lyra@sidc.be

Operator Duties



- Commanding of LYRA & SWAP
- SWAP & LYRA Instrument Monitoring
- Pipeline Monitoring
- Space Weather Events
- Weekly Reports: http://proba2.sidc.be/P2SC_weekly_reports/
- Contact: +32(0)2 / 373 0 559 or swap_lyra@sidc.be

Planning Tool Interface



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SWAP Planning Tool Interface

Quicklook V... LMAT Interf... Ancillary Da... http://local... Planning To... OverviewLY... Log2010-M... /trunk/p2s... LYRA Visua... Index of /s... +

SWAP Sign out

Actions 30

- Show work_space
- Clean work_space
- Load timeline
- Commit timeline
- Load sequence
- Save sequence
- Launch los Writer
- Launch los Translator

swapworkdb

- Work_table
- Table_configuration

swapcomdb

- Commanding_table
- los_tracking_table
- Table_configuration
- Data_management
- Acquisition_configuration
- Table_acquisition

swapseqdb

- Work_table
- Table_configuration

pass_planning

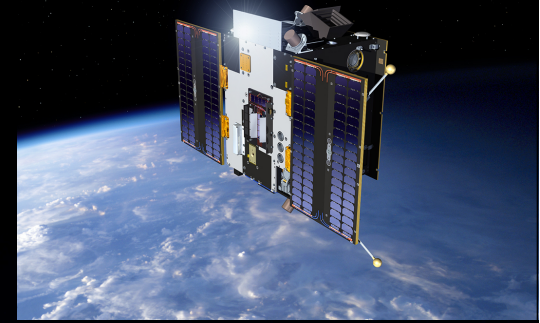
- Future scheduled U/D passes
- All passes

Database: swapworkdb Table: work_table

Action	rowid	time	timeaux	command	source	action
	1	1273599270	Tue May 11, 2010, 17:34:30	idle	swapcomdb	
	2	1273599360	Tue May 11, 2010, 17:36:00	table_configuration	swapcomdb	
	3	1273599380	Tue May 11, 2010, 17:36:20	table_acquisition	swapcomdb	
	4	1273600860	Tue May 11, 2010, 18:01:00	table_configuration	swapcomdb	
	5	1273600880	Tue May 11, 2010, 18:01:20	table_acquisition	swapcomdb	
	6	1273602480	Tue May 11, 2010, 18:28:00	acquisition_configuration	swapcomdb	
	7	1273602545	Tue May 11, 2010, 18:29:05	table_configuration	swapcomdb	
	8	1273602555	Tue May 11, 2010, 18:29:15	table_acquisition	swapcomdb	
	9	1273605360	Tue May 11, 2010, 19:16:00	idle	swapcomdb	
	10	1273605390	Tue May 11, 2010, 19:16:30	table_configuration	swapcomdb	
	11	1273605410	Tue May 11, 2010, 19:16:50	table_acquisition	swapcomdb	
	12	1273606860	Tue May 11, 2010, 19:41:00	table_configuration	swapcomdb	
	13	1273606880	Tue May 11, 2010, 19:41:20	table_acquisition	swapcomdb	
	14	1273608300	Tue May 11, 2010, 20:05:00	acquisition_configuration	swapcomdb	
	15	1273608310	Tue May 11, 2010, 20:05:10	table_configuration	swapcomdb	
	16	1273608365	Tue May 11, 2010, 20:06:05	table_acquisition	swapcomdb	

off

LMAT-UI



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LMAT Interface

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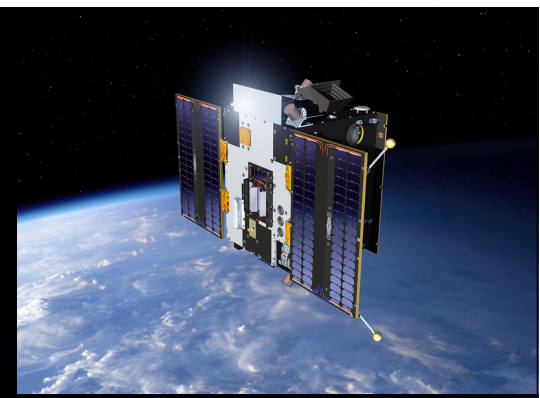
Database: **jobs.db** - Table: **jobs**

runID	originator	start_time	lastmsg_time	tool	status	args
26440	file detection	2010-05-18T20:25:02	2010-05-18T20:25:05	ADP	running	/p2sc/MOC/redu_to_p2sc/dropbox/LYRA_AD_1297_RED3_2010.05.18T19.3
26439	26438	2010-05-18T20:03:02	2010-05-18T20:03:18	PP_MAKEPLOT	stop	1274059767 1275893561
26438	crontab	2010-05-18T20:00:03	2010-05-18T20:00:14	PP_PROC	continue	
26437	26436	2010-05-18T19:56:02	2010-05-18T20:02:36	SWBSDG	continue	SWEDG SWTMR 2010-05-18T19:45:03Z 2010-05-18T19:46:04Z
26436	26435	2010-05-18T19:50:02	2010-05-18T19:55:13	SWEDG	continue	SWTMR 2010-05-18T19:45:03Z 2010-05-18T19:46:04Z
26435	file detection	2010-05-18T19:45:03	2010-05-18T19:46:04	SWTMR	continue	/p2sc/MOC/redu_to_p2sc/dropbox/BINSWAP_1297_RED3_2010.05.18T19.3
26434	file detection	2010-05-18T19:45:03	2010-05-18T20:00:51	LYTMR	continue	/p2sc/MOC/redu_to_p2sc/dropbox/BINLYRA_1297_RED3_2010.05.18T19.3
26433	file detection	2010-05-18T19:45:02	2010-05-18T19:45:05	ADP	not responding	/p2sc/MOC/redu_to_p2sc/dropbox/LYRA_AD_1297_RED3_2010.05.18T19.3
26432	file detection	2010-05-18T19:44:02	2010-05-18T19:44:04	Report_Parser	continue	/p2sc/MOC/redu_to_p2sc/dropbox/PSR_BIN_SWAP_1297.txt
26431	file detection	2010-05-18T19:43:03	2010-05-18T19:43:05	Report_Parser	continue	/p2sc/MOC/redu_to_p2sc/dropbox/TC_SWAP_Report_1297.log
26430	file detection	2010-05-18T19:43:01	2010-05-18T19:43:03	Report_Parser	continue	/p2sc/MOC/redu_to_p2sc/dropbox/TC_LYRA_Report_1297.log
26429	file detection	2010-05-18T19:42:01	2010-05-18T19:42:03	Report_Parser	continue	/p2sc/MOC/redu_to_p2sc/dropbox/PSR_BIN_LYRA_1297.txt
26428	file detection	2010-05-18T19:41:02	2010-05-18T19:41:04	Report_Parser	continue	/p2sc/MOC/redu_to_p2sc/dropbox/PSR_AD_LYRA_1297.txt
26427	file detection	2010-05-18T19:31:02	2010-05-18T19:31:03	EDP	continue	/p2sc/MOC/redu_to_p2sc/dropbox/LYRA_SWAP_2010_05_18_19_26_00_Ev
26426	file detection	2010-05-18T19:21:02	2010-05-18T19:21:03	Report_Parser	continue	/p2sc/MOC/redu_to_p2sc/dropbox/LYRA_SWAP_2010_05_18_19_17_42_D
26425	26424	2010-05-18T19:16:02	2010-05-18T19:16:05	LYBSDG	continue	Processing succeeded
26424	crontab	2010-05-18T19:12:36	2010-05-18T19:15:17	LYEDG	continue	2010-05-18
26423	26422	2010-05-18T19:01:01	2010-05-18T19:01:12	PP_MAKEPLOT	stop	1274059767 1275893561
26422	crontab	2010-05-18T19:00:01	2010-05-18T19:00:10	PP_PROC	continue	
26421	26412	2010-05-18T18:26:07	2010-05-18T18:27:39	SWQLK	stop	ADP 2010-05-18T18:06:02Z 2010-05-18T18:08:05Z
26420	26416	2010-05-18T18:26:03	2010-05-18T18:26:05	SWBSDG	stop	SWEDG ADP 2010-05-18T18:06:02Z 2010-05-18T18:08:05Z

Jobs

- LMAT 422
- IOSwriter
- IOSsender
- Report_Parser 63
- ADP 175 756
- LYTMR 81 51
- LYEDG 85
- LYBSDG
- SWTMR 561 731
- SWEDG 9 2804
- SWBSDG 3321
- DCVC 16 131077
- PP_PROC 5 1
- PP_MAKEPLOT 4
- EDP
- TLE 1
- CT_MOC
- CT_TEMP
- SWQLK 1
- LYQLK 1

Ancillary Data Browser



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Ancillary Data Browser

Quicklook V... LMAT Interf... Ancillary Da... http://local... SWAP Plann... OverviewLY... Log2010-M... /trunk/p2s... Visualizatio... Index of /s...

Ancillary Data Browser

Select database: auxDB.db

Enter start date/time: 2010-05-17T00:00:00Z End date/time: 2010-05-18T20:36:40Z Whole data range Maximal number of lines: 10

Choose multiple keywords: EETIME2NEXT_PRE ESP TEMP1 CAL ESP TEMP2 CAL ESP TEMP3 CAL GDC_ATTEROFLG_I IIU TEMP Skip LYRA data Skip SWAP data Multiple graphs

Scaling y-axis (single plot only): y_min = y_max = Get data

IIU TEMP, LP TEMP CAL, RP TEMP CAL vs TIME

time (17 May 10 - 18 May 10)

TIME	IIU TEMP
2010-05-17T00:04:22.000Z	25.901093
2010-05-17T00:08:32.000Z	26.145294
2010-05-17T00:12:42.000Z	26.145294

Ancillary Parameters

25 Mar 2009

Wiki




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http://localhost:4043/p2ops_wiki/wiki

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- [HowTo](#)
- [Events](#)
- [UserManuals](#)

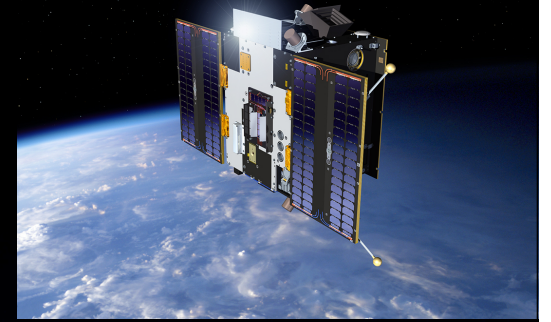
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