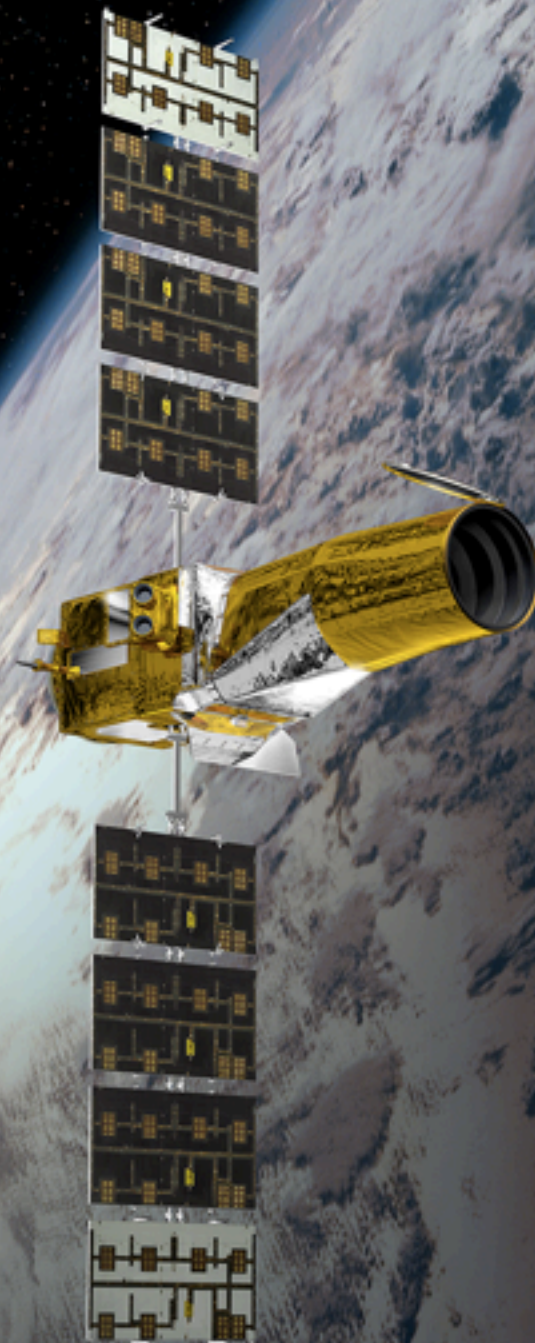


CoRoT Mission

CW11th at IAC



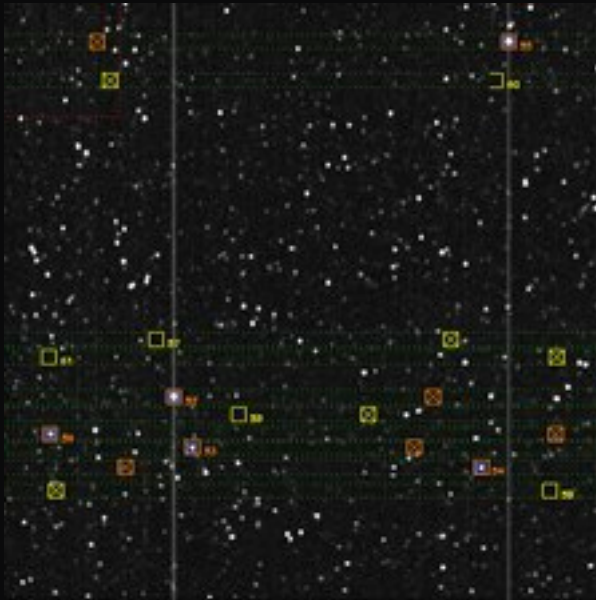
CoRoT in Short

Multi - Cooperation project
Launched Dec. 26, 2006
6 years of operations (Toulouse)
25 Runs achieved

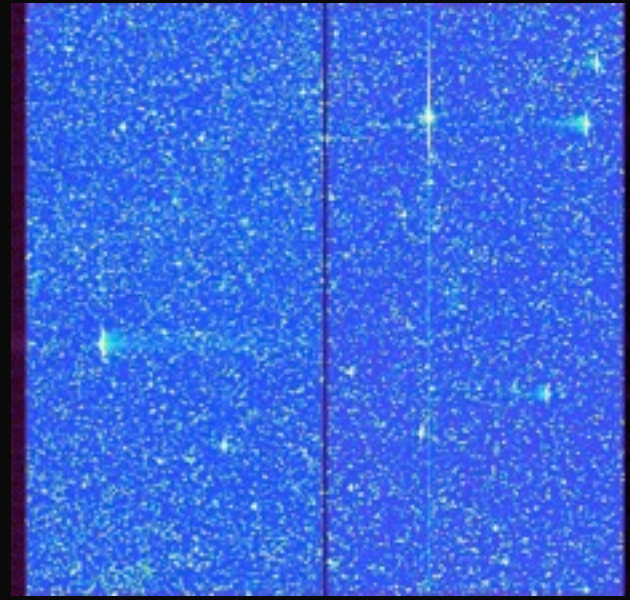
Chain n°1 stopped in March 2009
Chain n°2 stopped beg. of Nov. 2012



2007-2008 : a very exciting & challenging period
calibration & discovery of the instrument
the first runs
data production & reduction start



Seismology field : 5 x 2 stars
Bright stars $6 < m_v < 9$

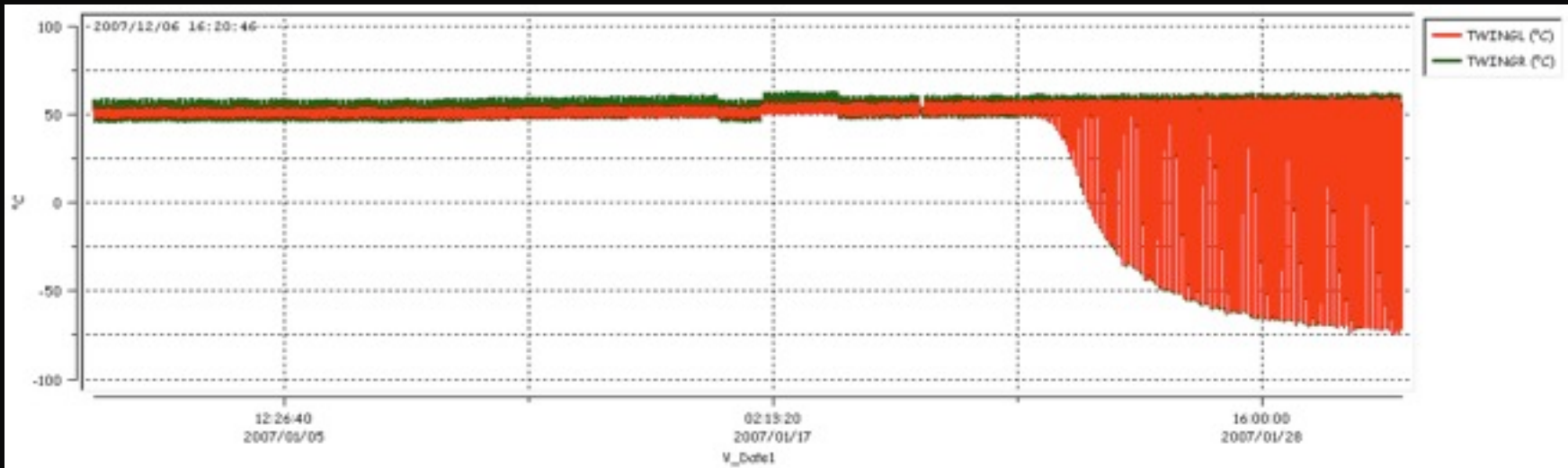


Exoplanet field : 2 x 5000 stars
Faint stars $12 < m_v < 16$

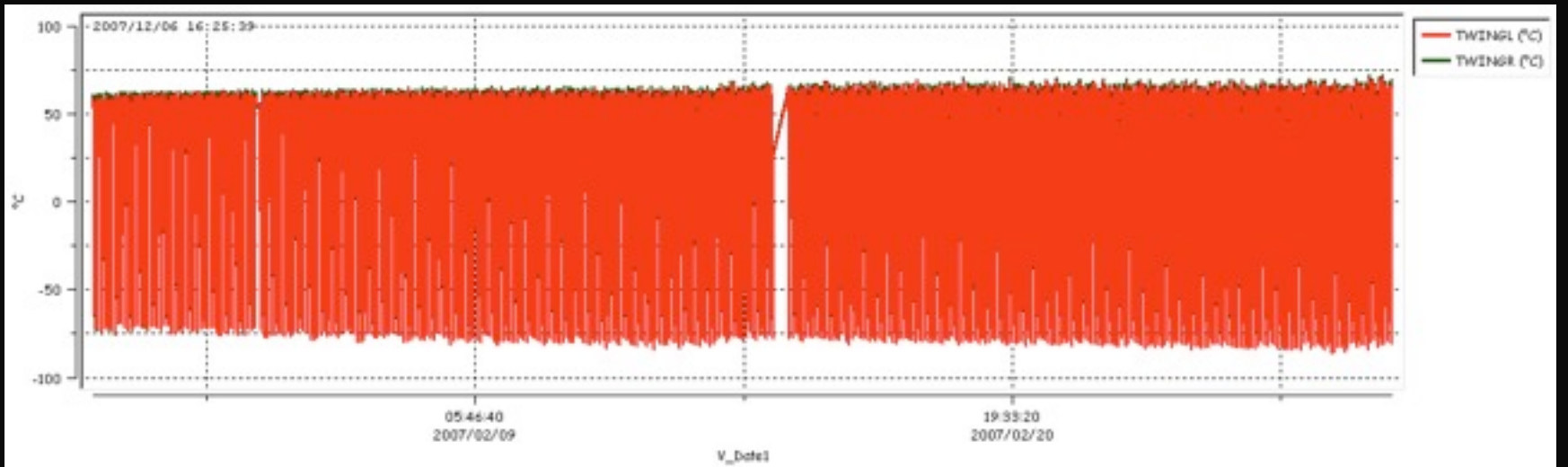
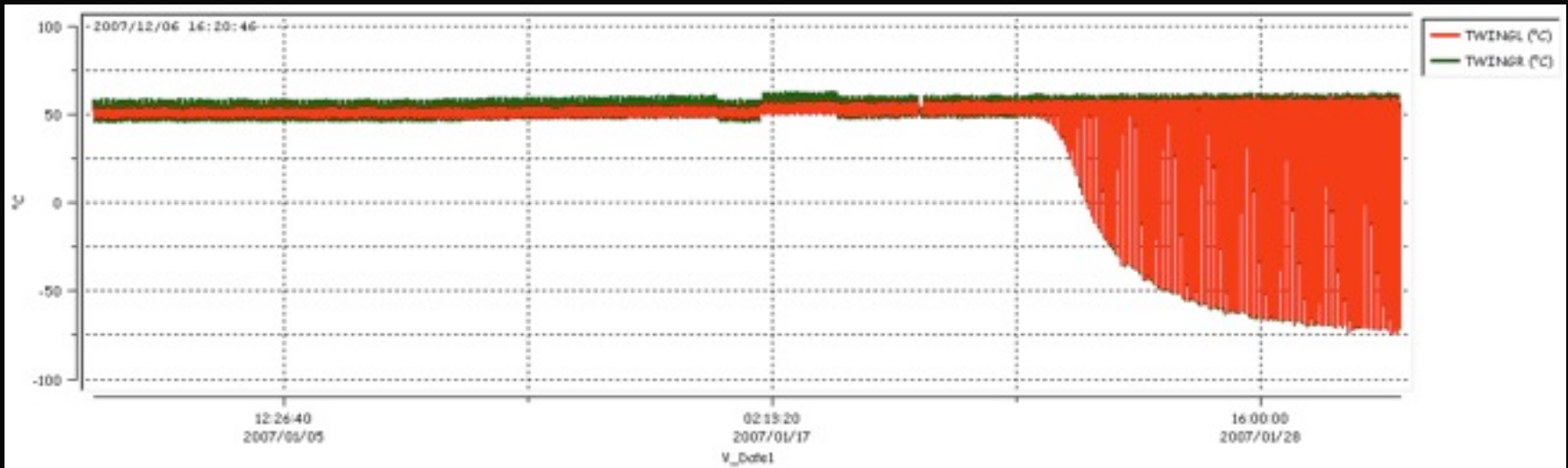


and the real «life» of the satellite in hostile environment ...

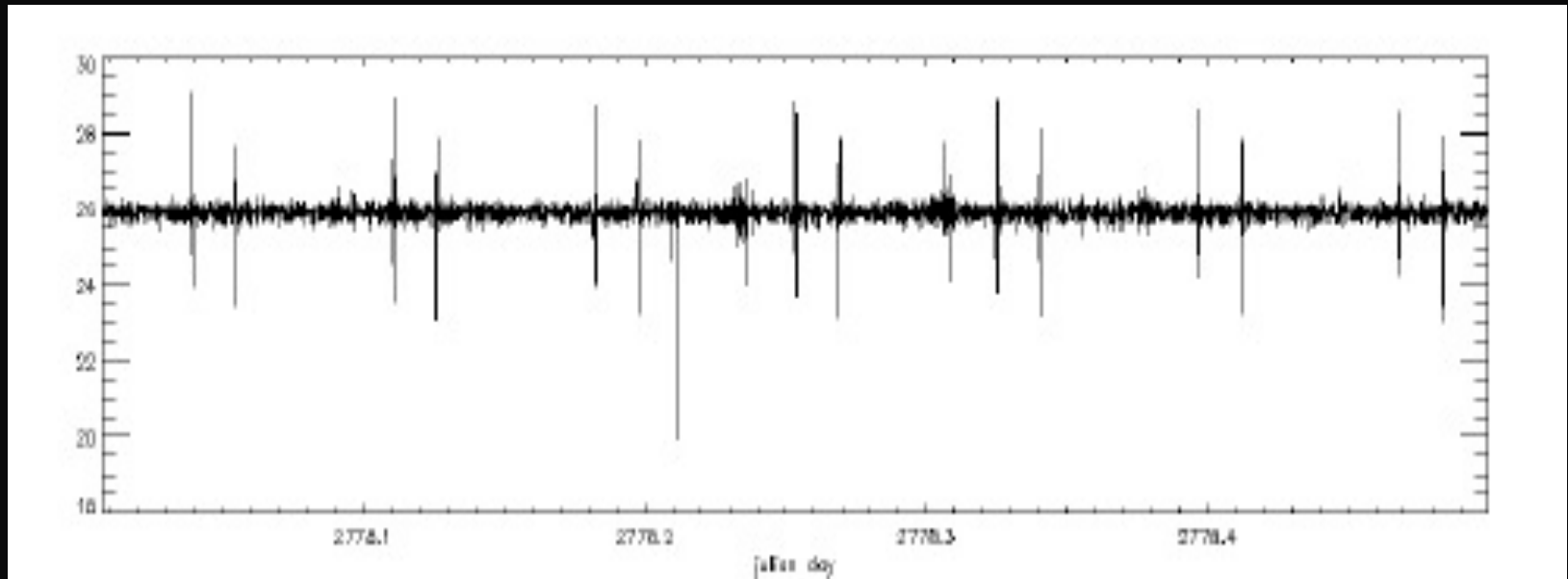
Days and nights



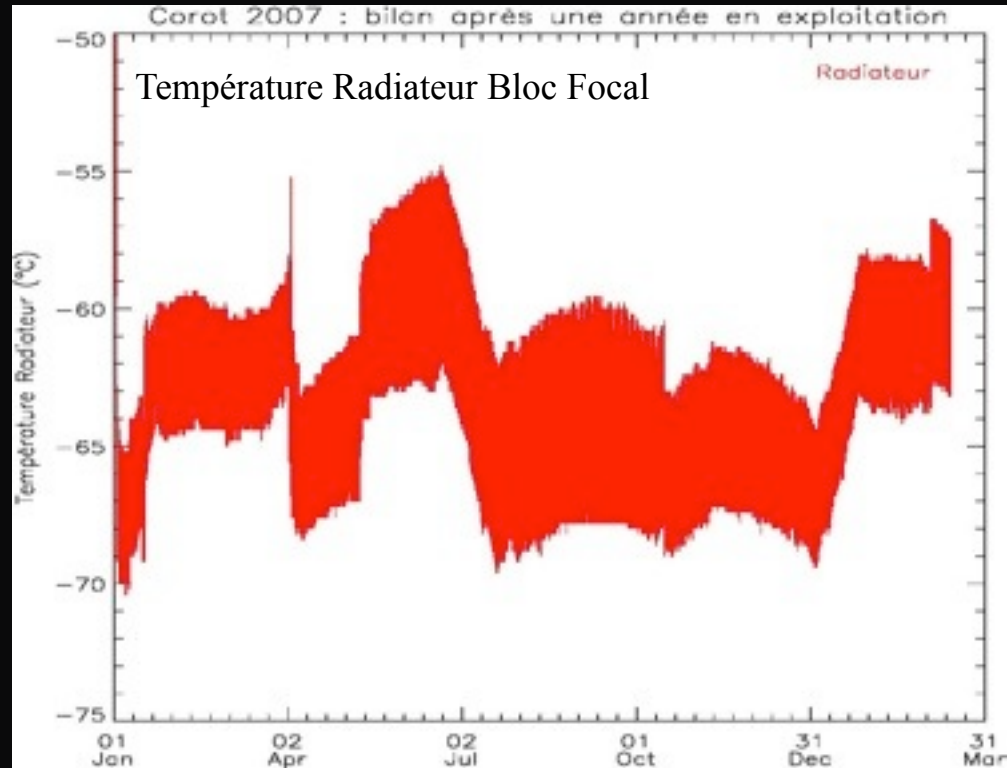
Days and nights

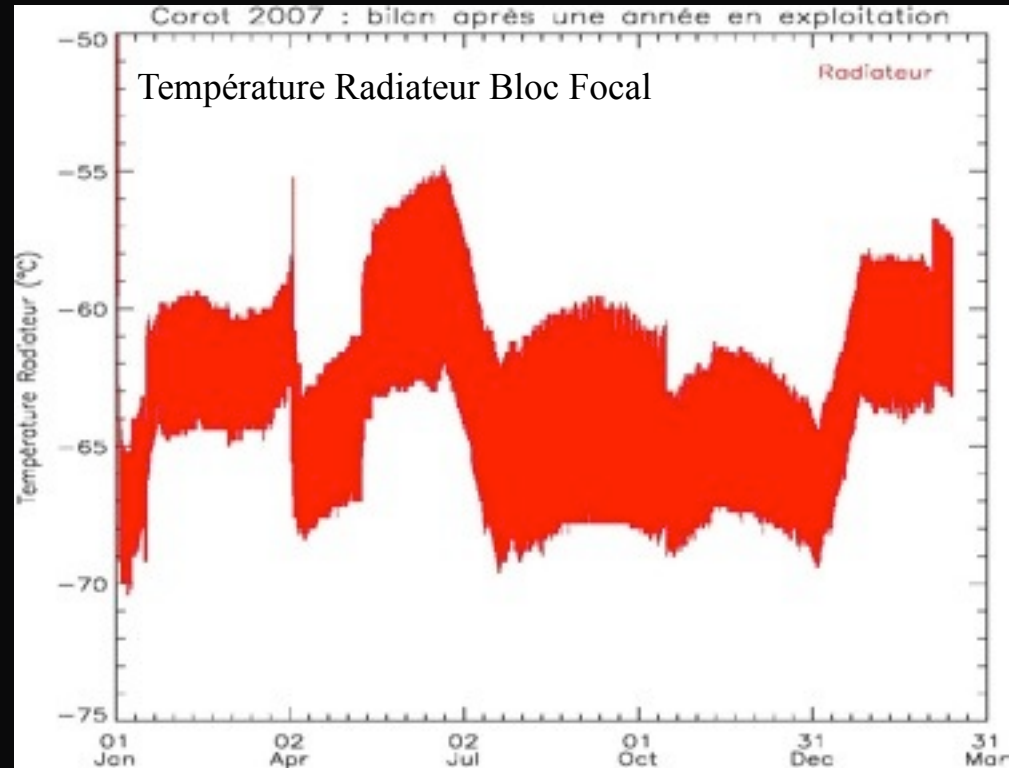


Days and nights



Température Radiateur Bloc Focal





IRa01 : 18/01/07 - 02/04/07

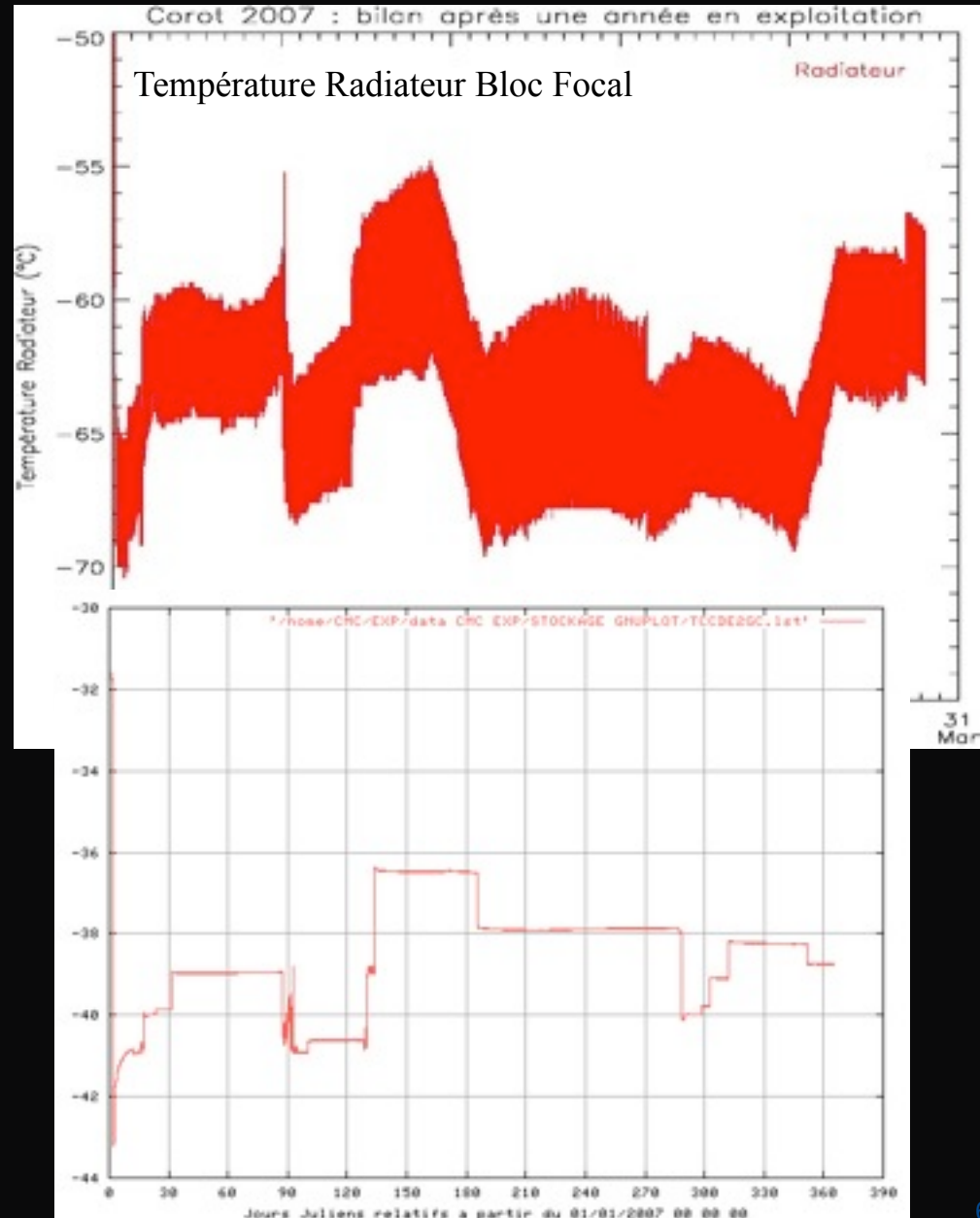
SRc01 : 07/04/07 - 09/05/07

LRc01 : 09/05/07 - 15/10/07

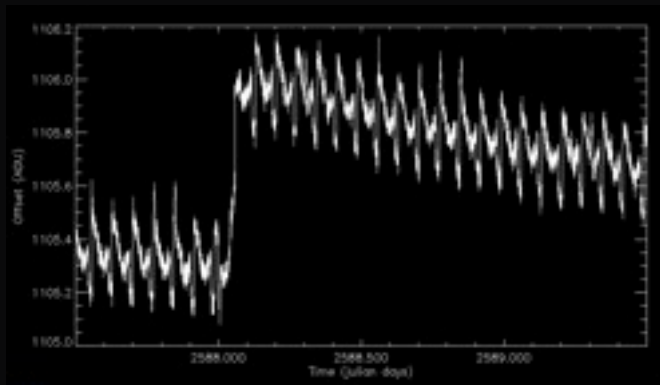
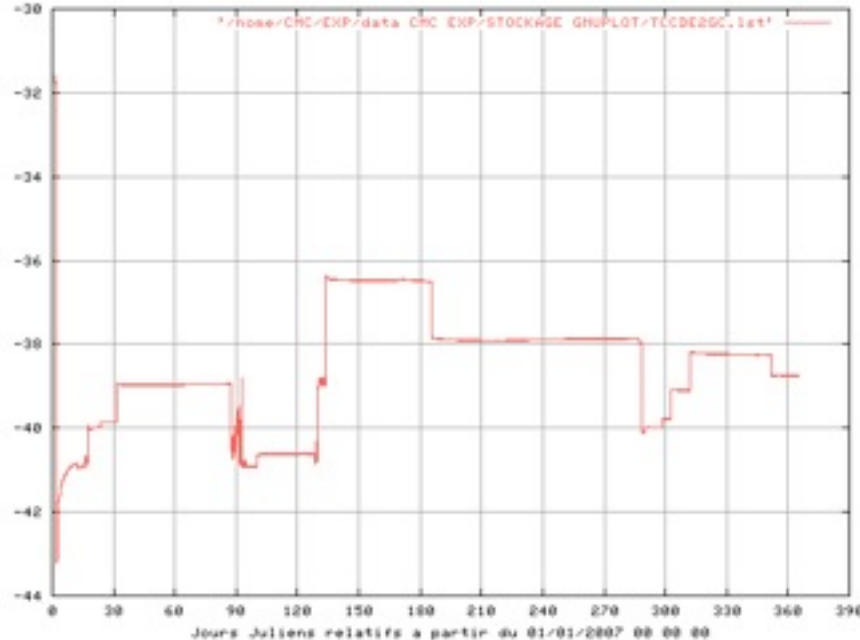
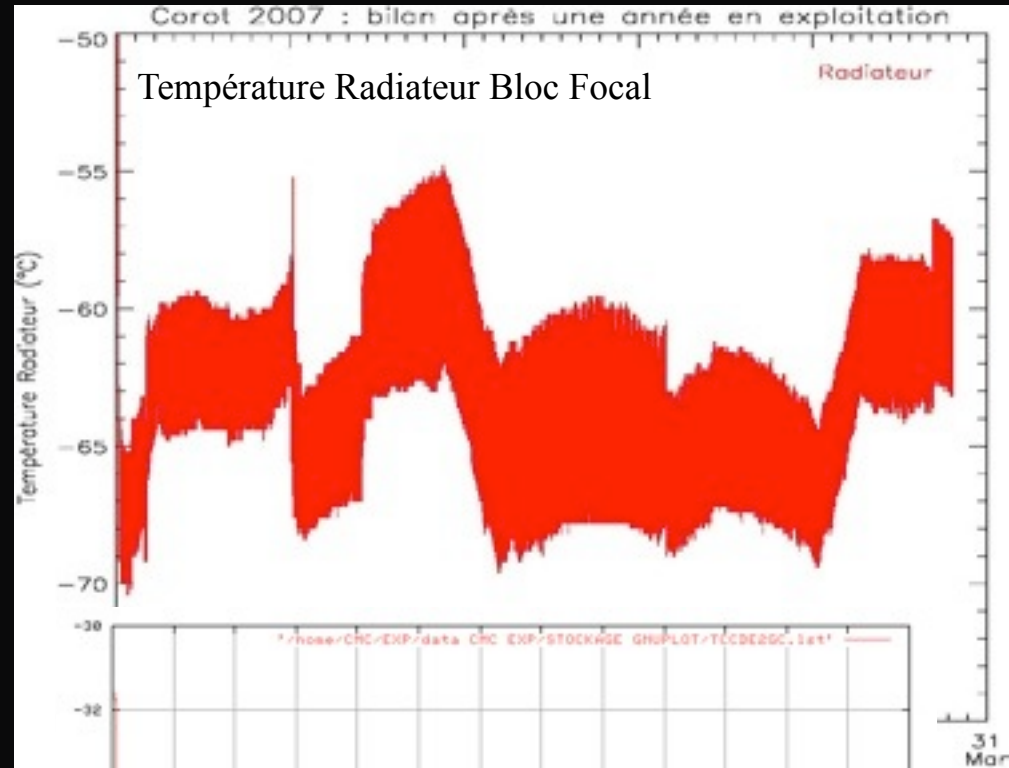
LRa01 : 15/10/07 - 03/03/08

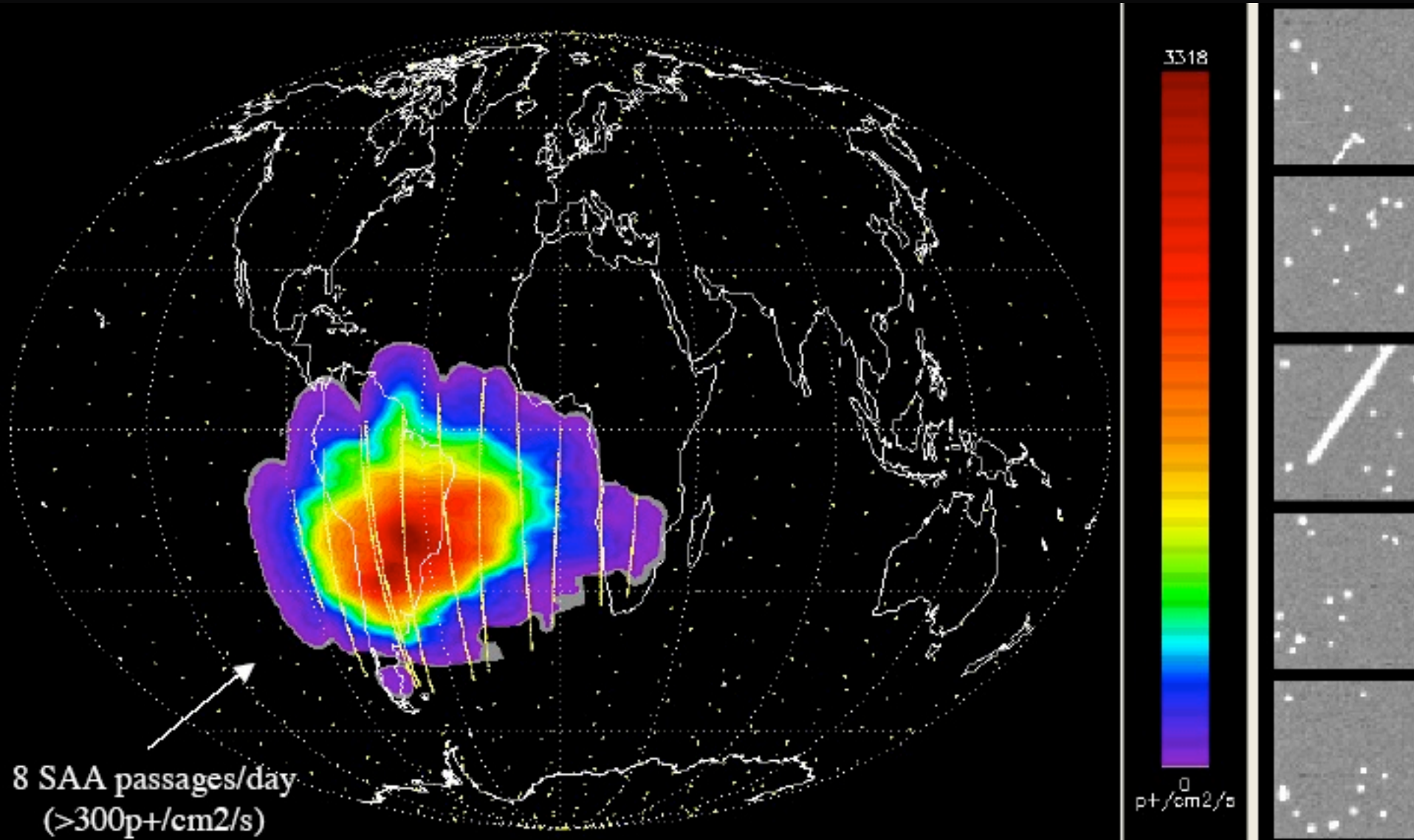
SRa01 : 03/03/08 -

IRa01 : 18/01/07 - 02/04/07
 SRc01 : 07/04/07 - 09/05/07
 LRc01 : 09/05/07 - 15/10/07
 LRa01 : 15/10/07 - 03/03/08
 SRa01 : 03/03/08 -

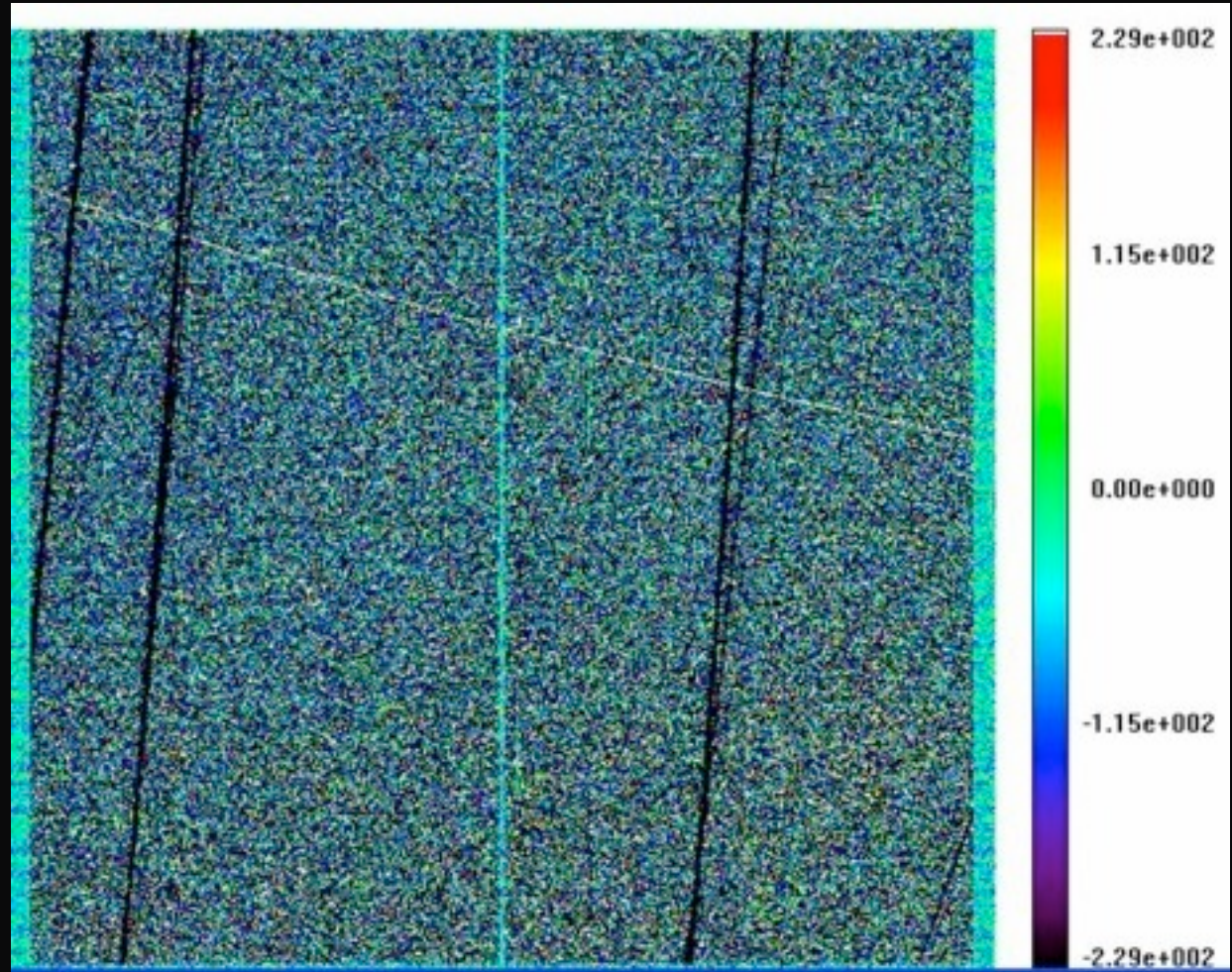
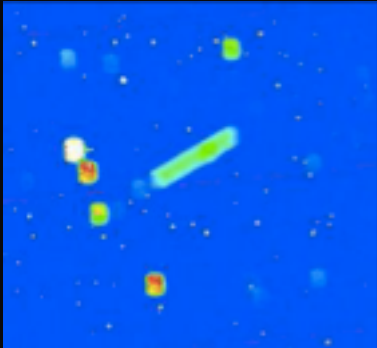


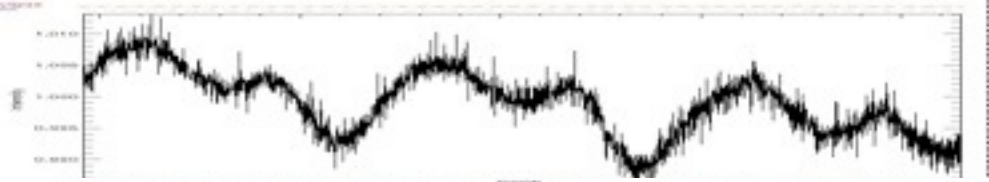
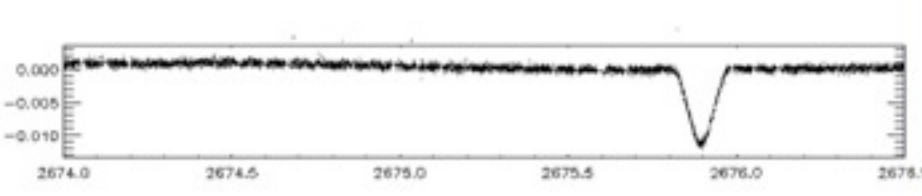
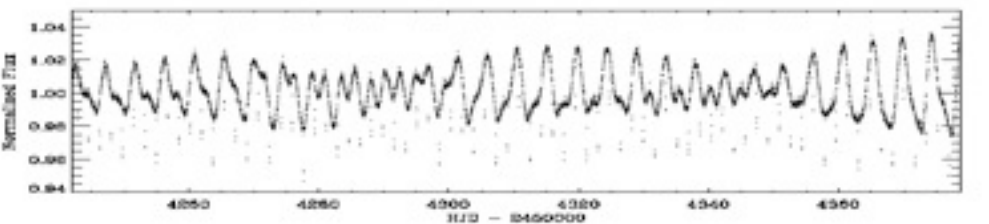
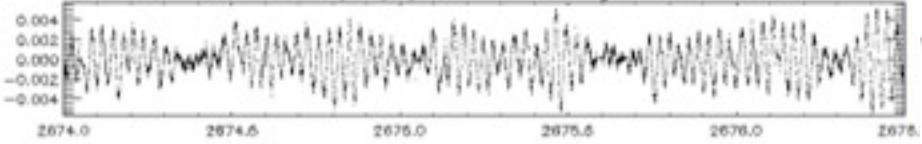
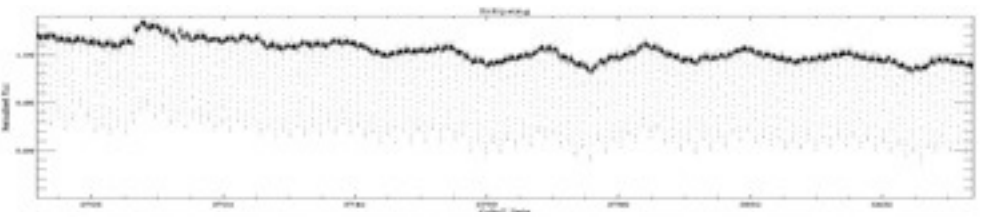
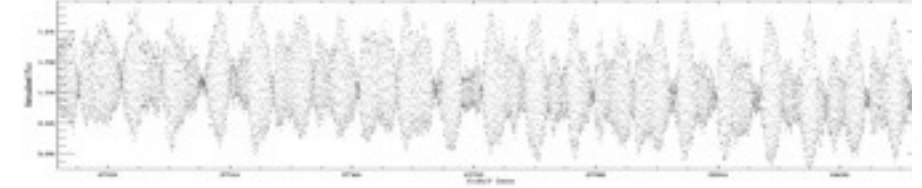
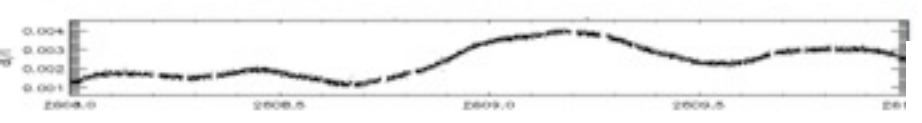
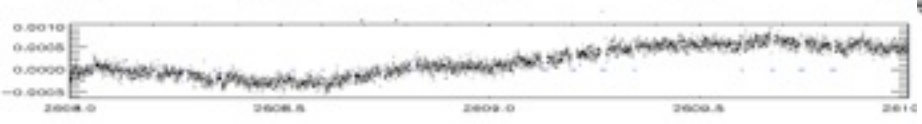
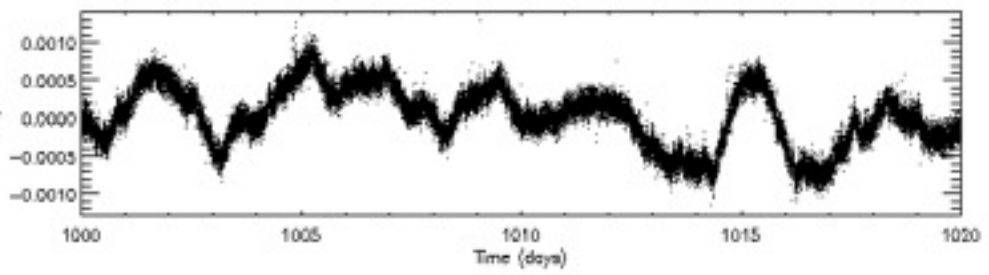
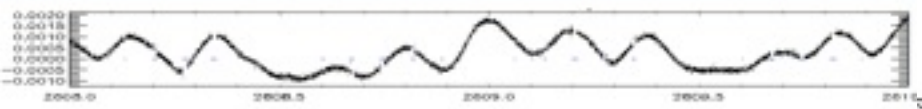
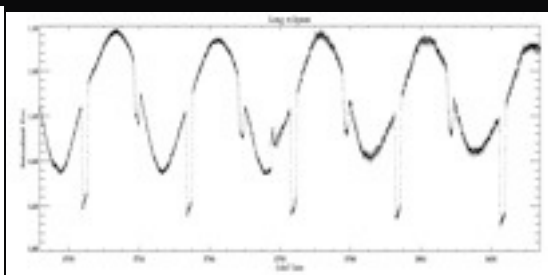
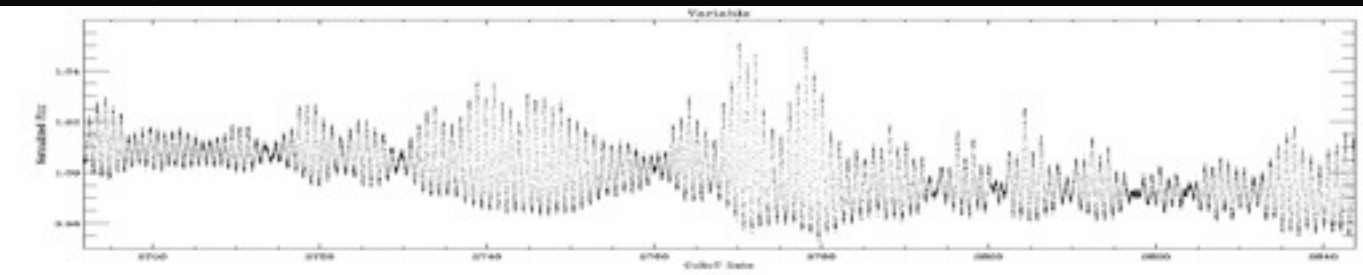
IRa01 : 18/01/07 - 02/04/07
 SRc01 : 07/04/07 - 09/05/07
 LRc01 : 09/05/07 - 15/10/07
 LRa01 : 15/10/07 - 03/03/08
 SRa01 : 03/03/08 -



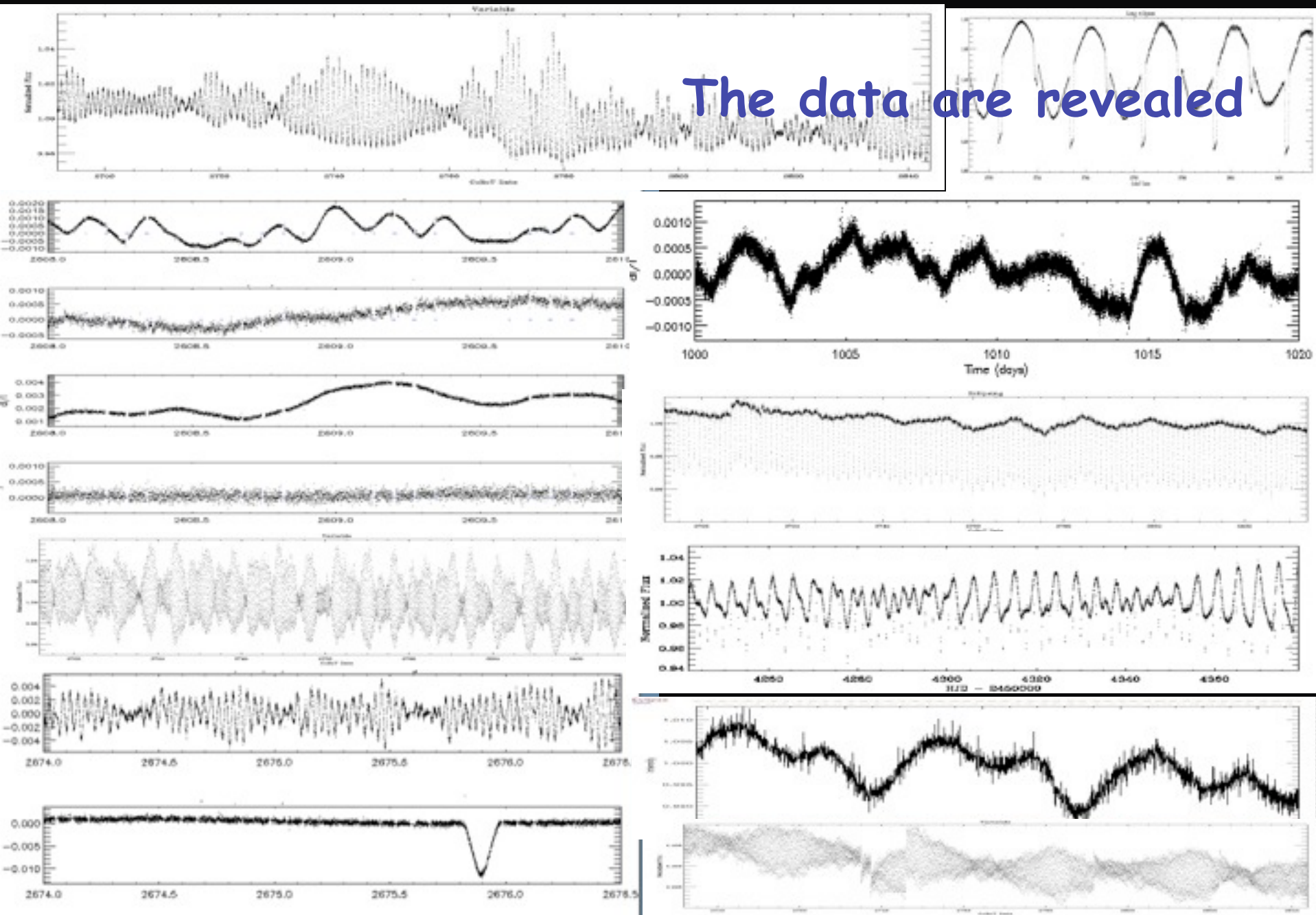


Some "intruders" in the data

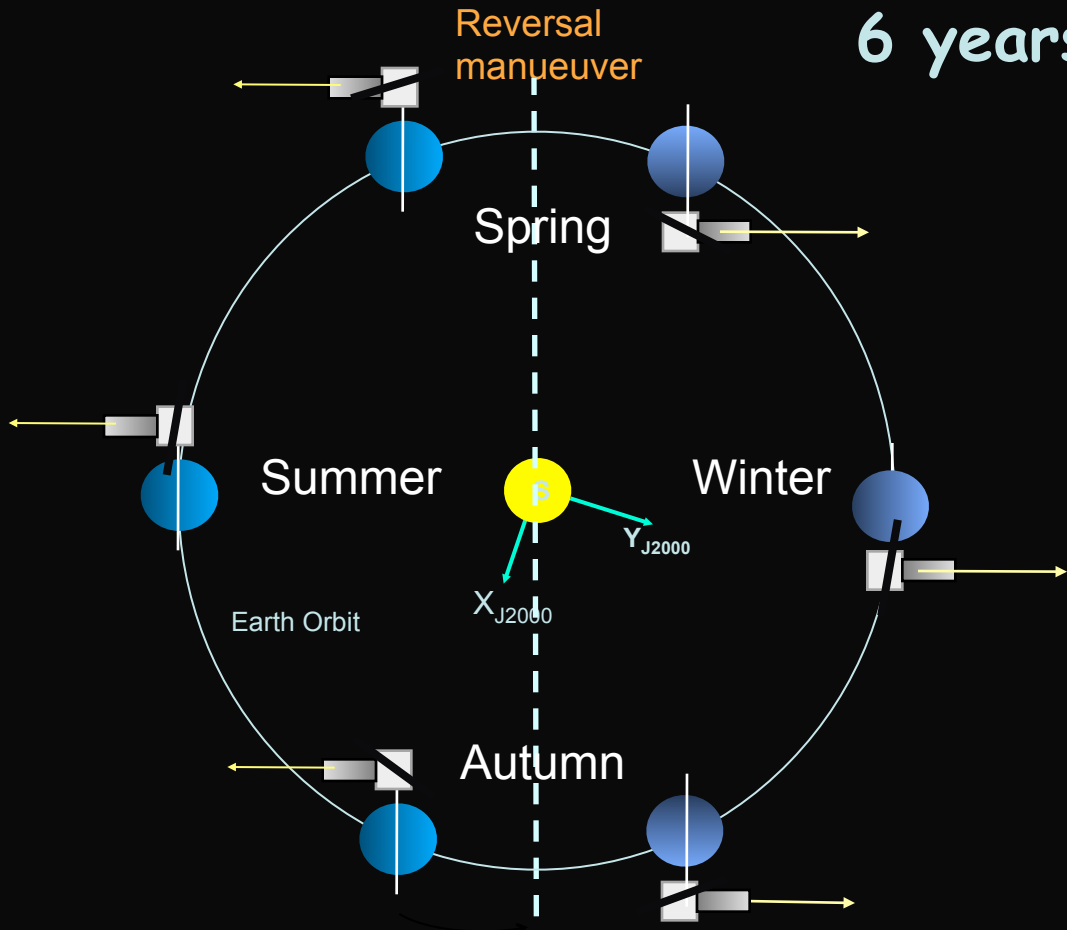


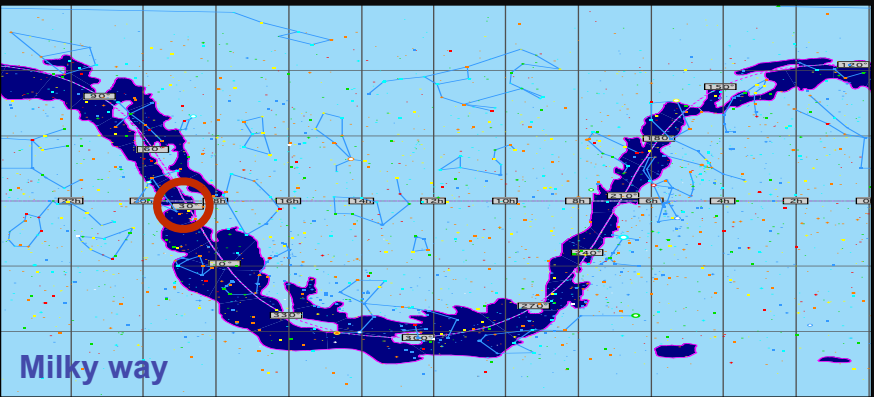
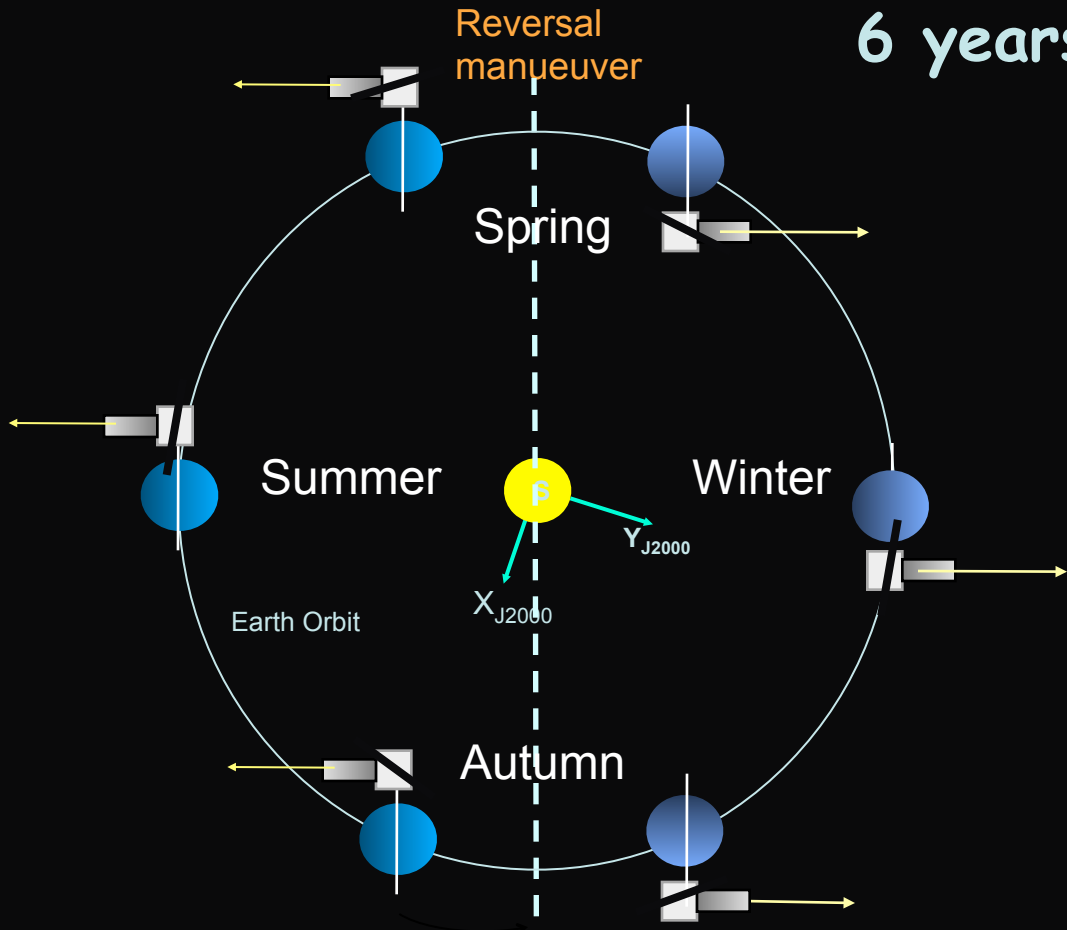


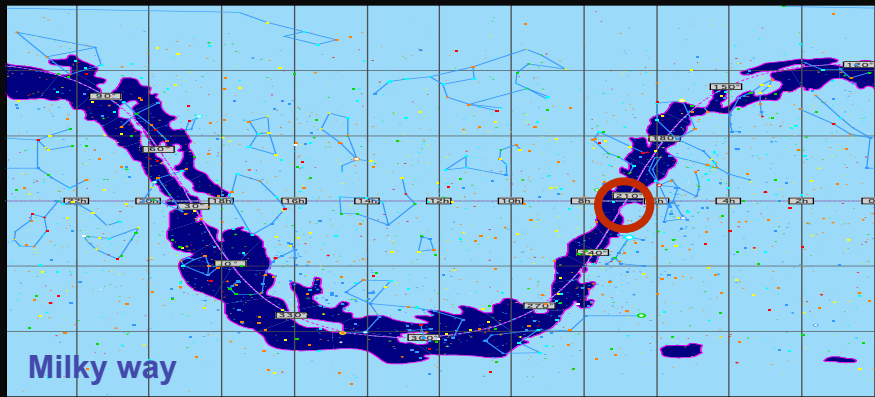
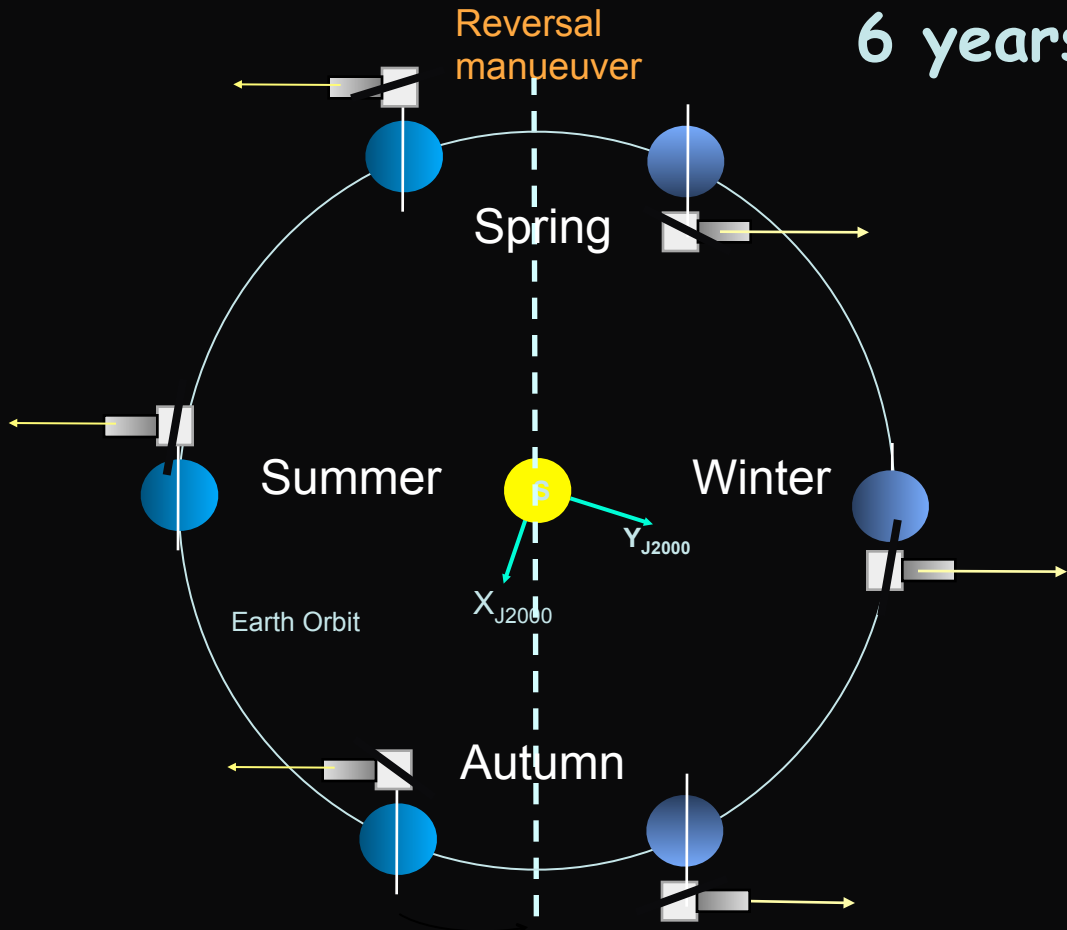
The data are revealed



6 years of operations







Moving the eyes : ex. Anticentre Observations

-> April 2008

SRa01
26/24

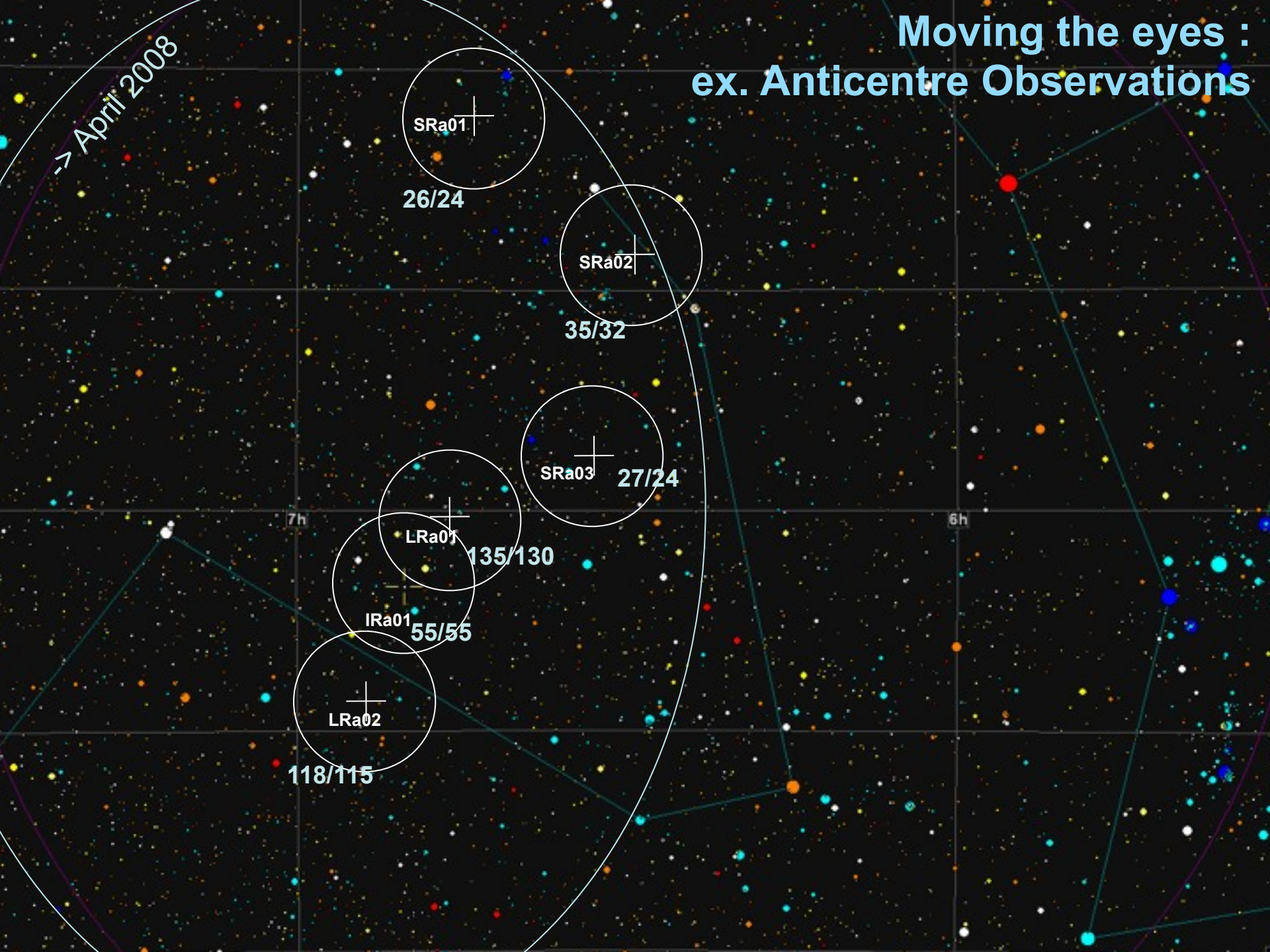
SRa02
35/32

SRa03
27/24

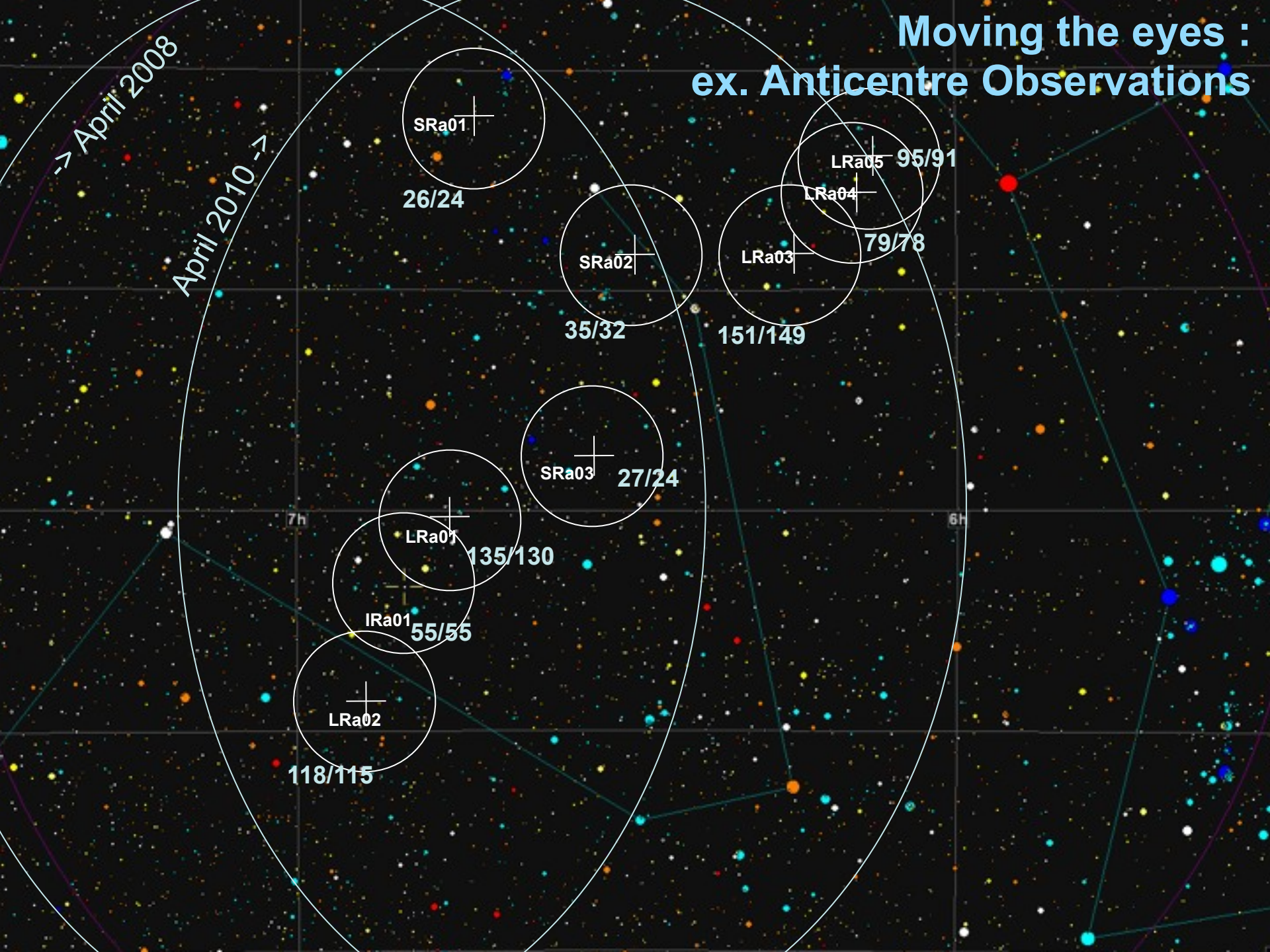
LRa01
135/130

IRa01
55/55

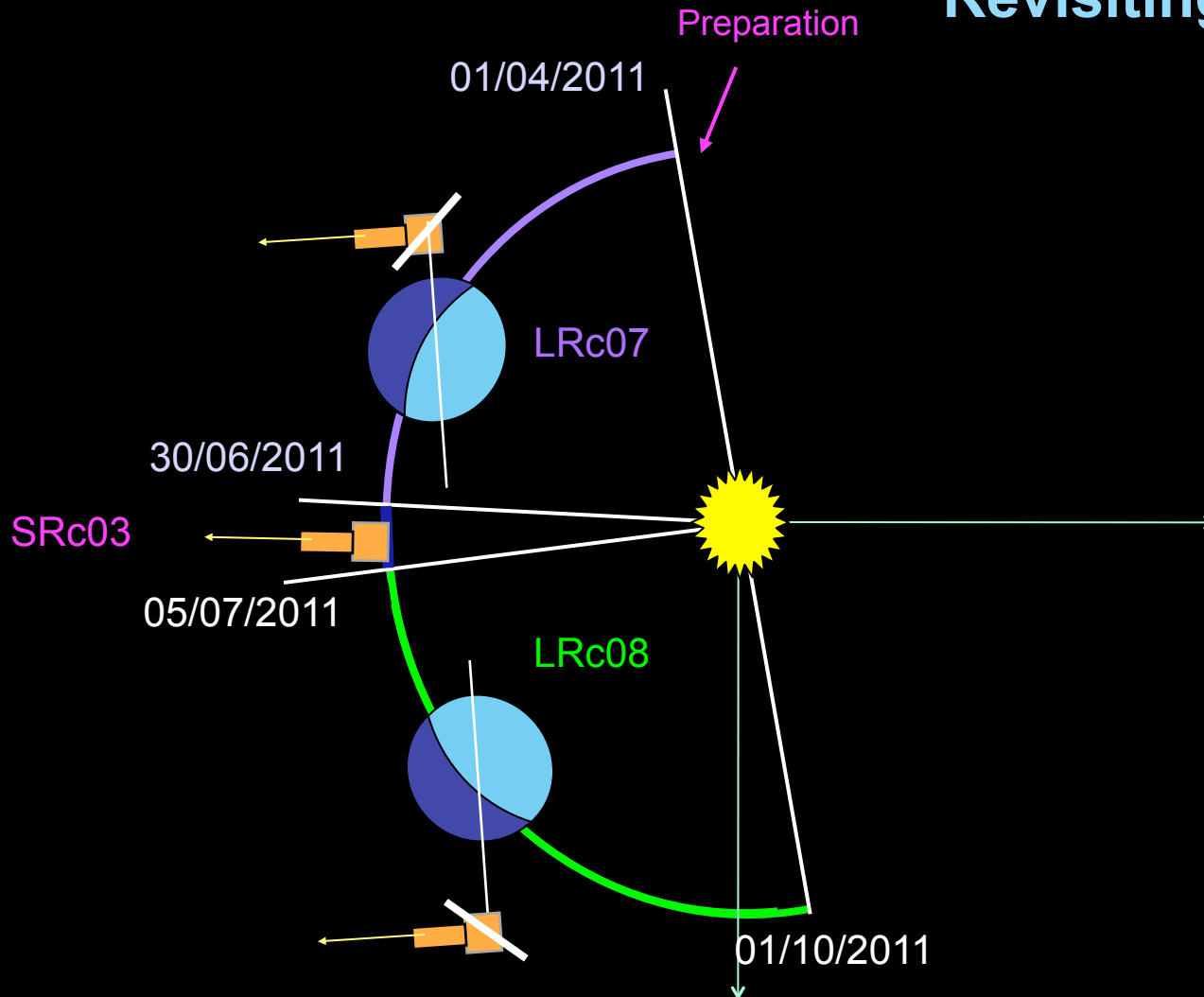
LRa02
118/115



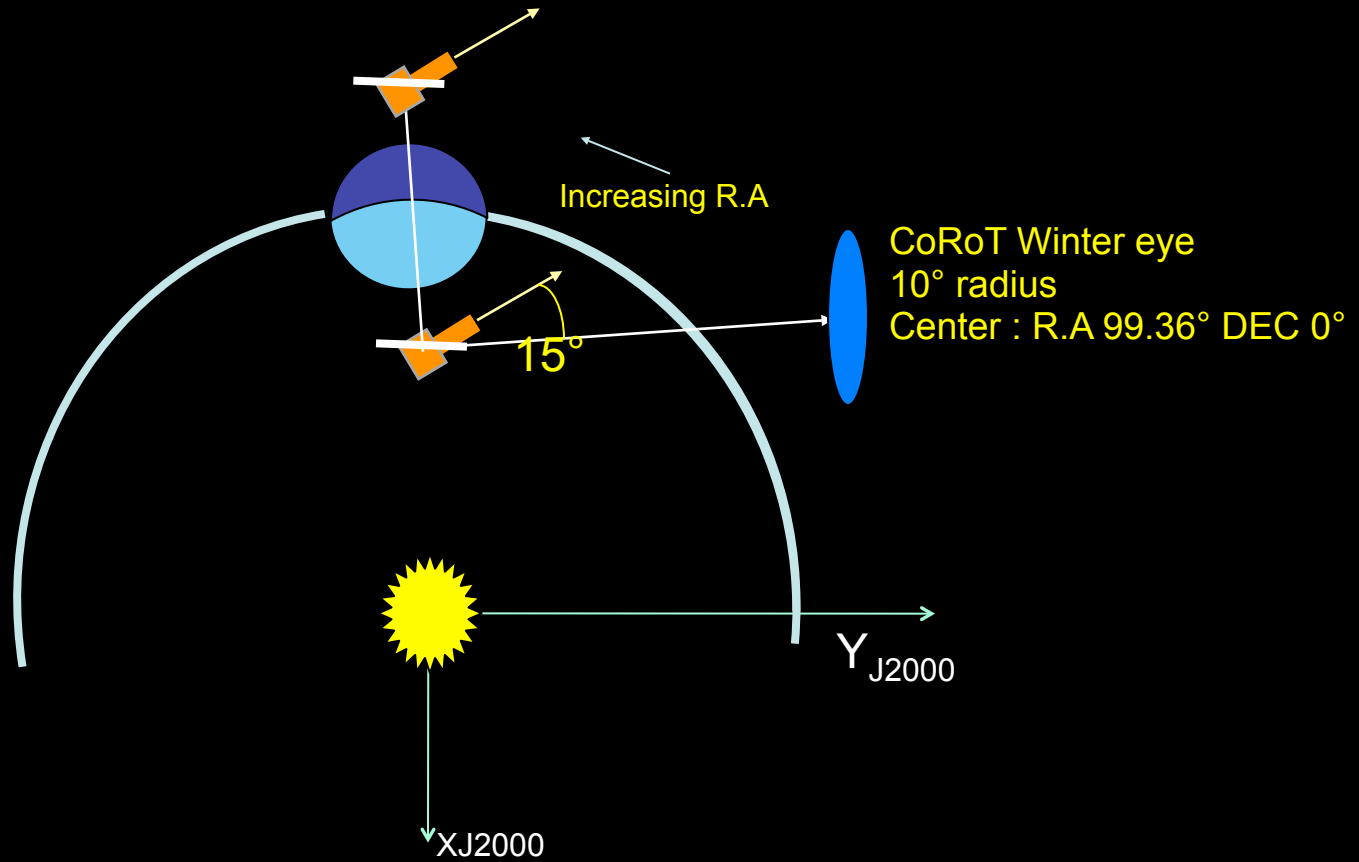
Moving the eyes : ex. Anticentre Observations



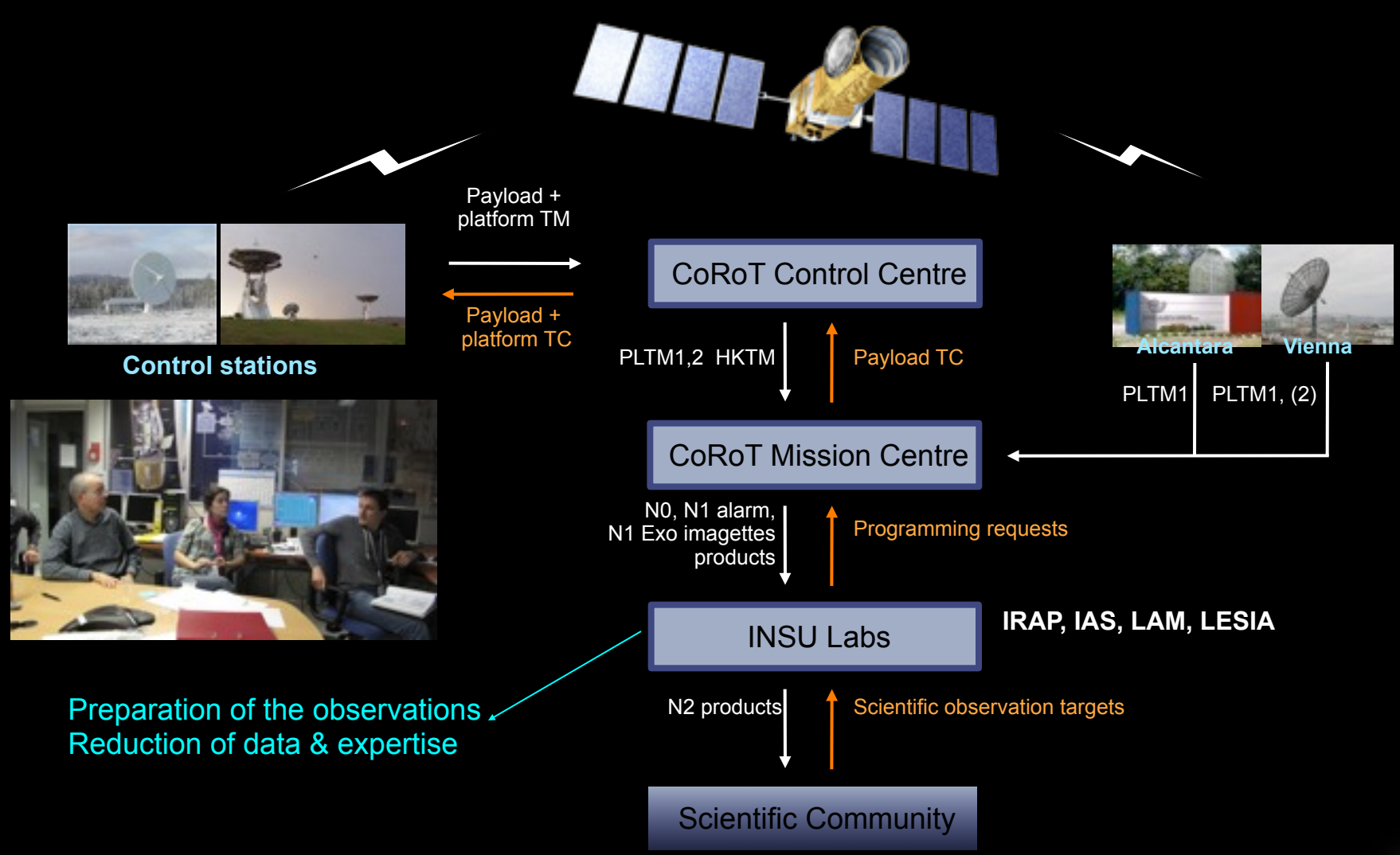
Some extras : Revisiting Corot 9b



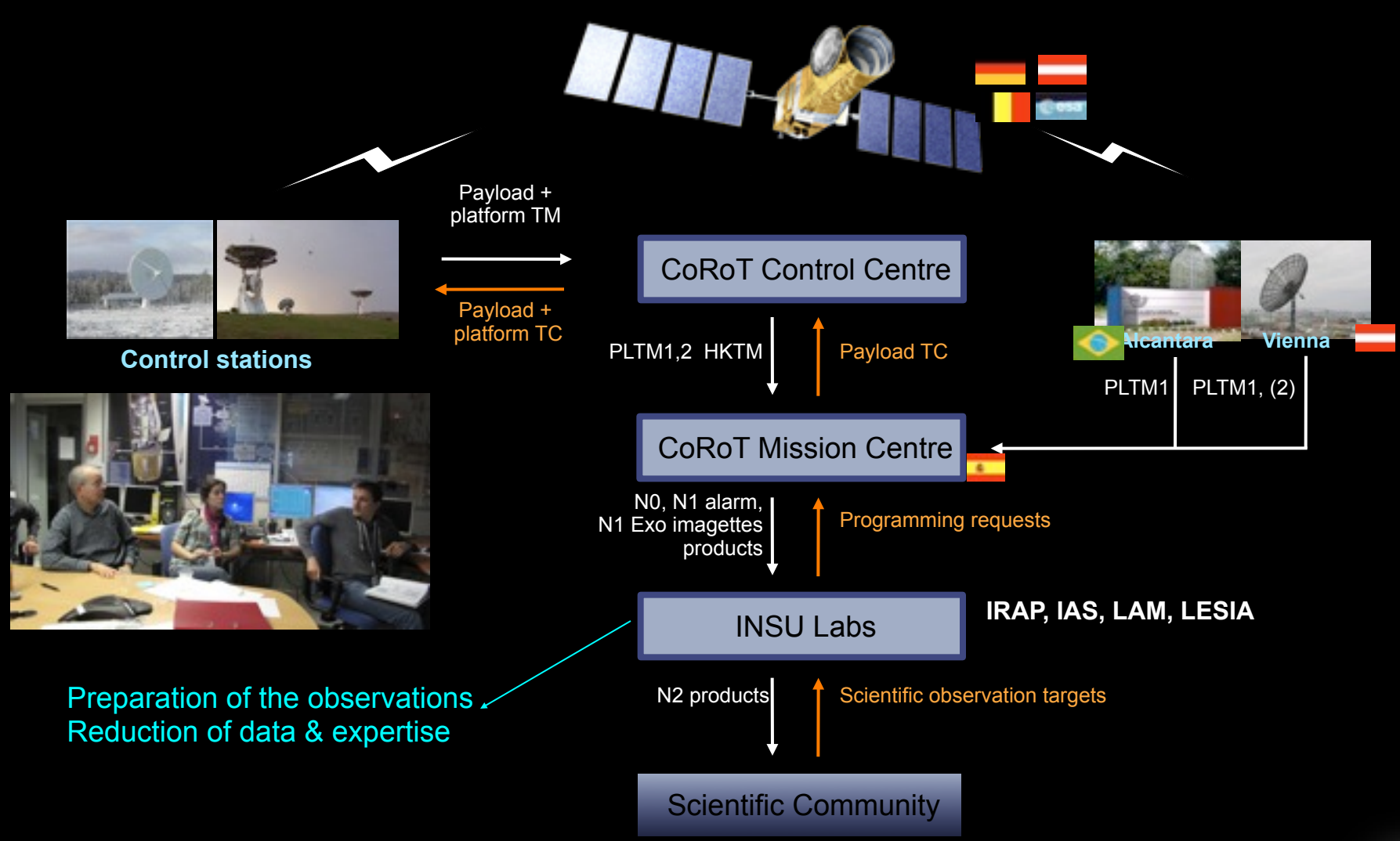
Enlarging CoRoT eyes



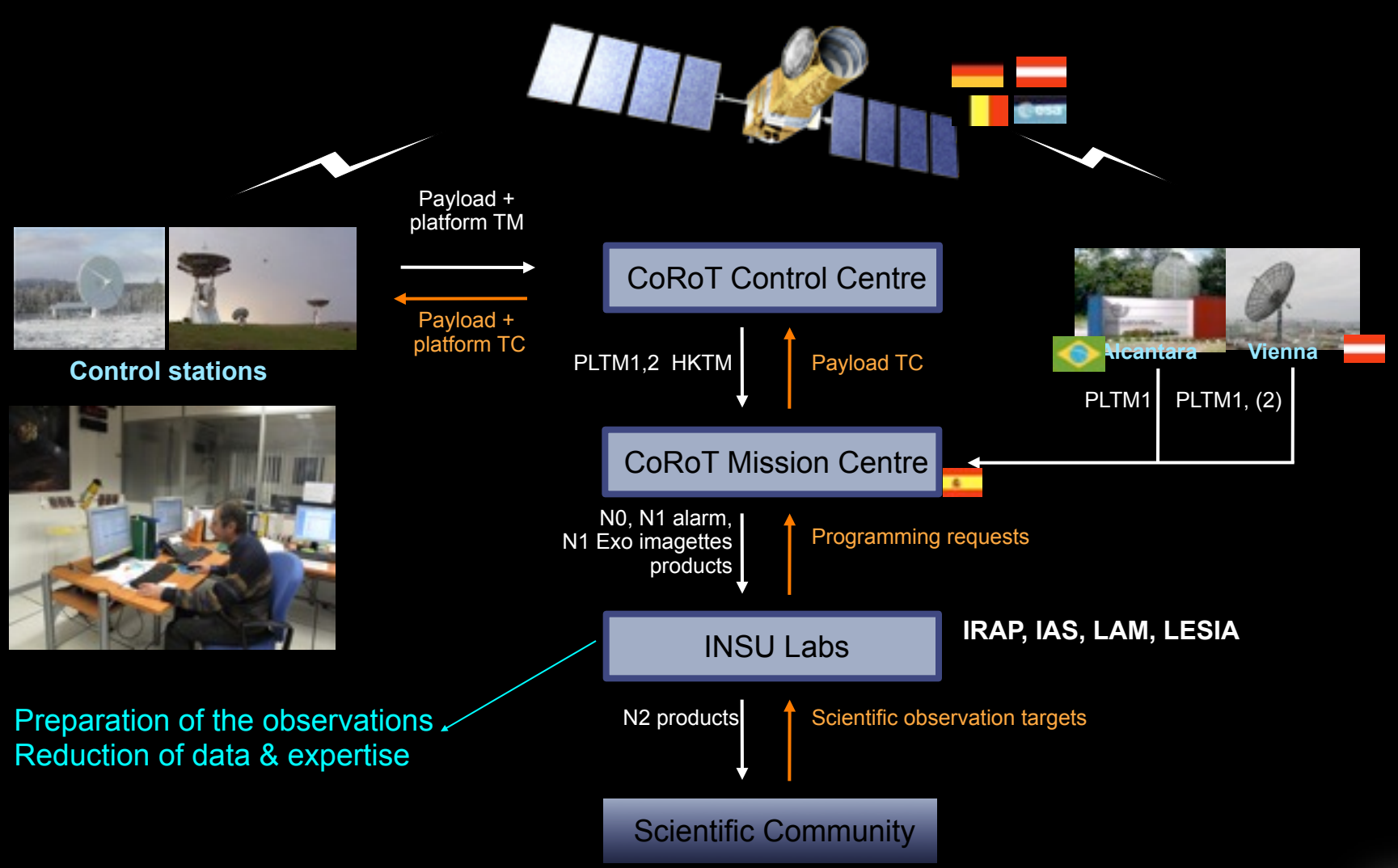
Behind the data : CoRoT System & Technical organisation



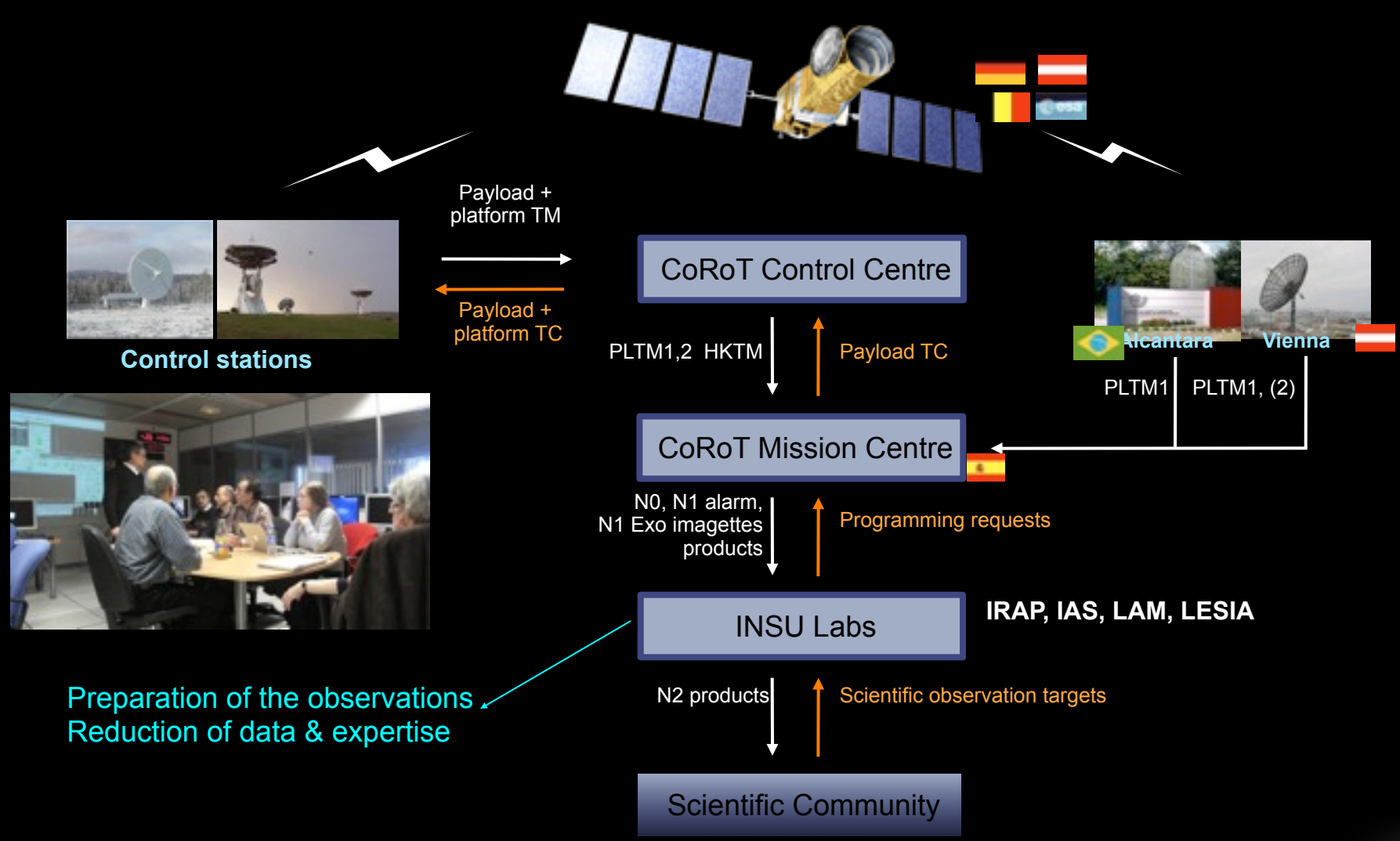
Behind the data : CoRoT System & Technical organisation



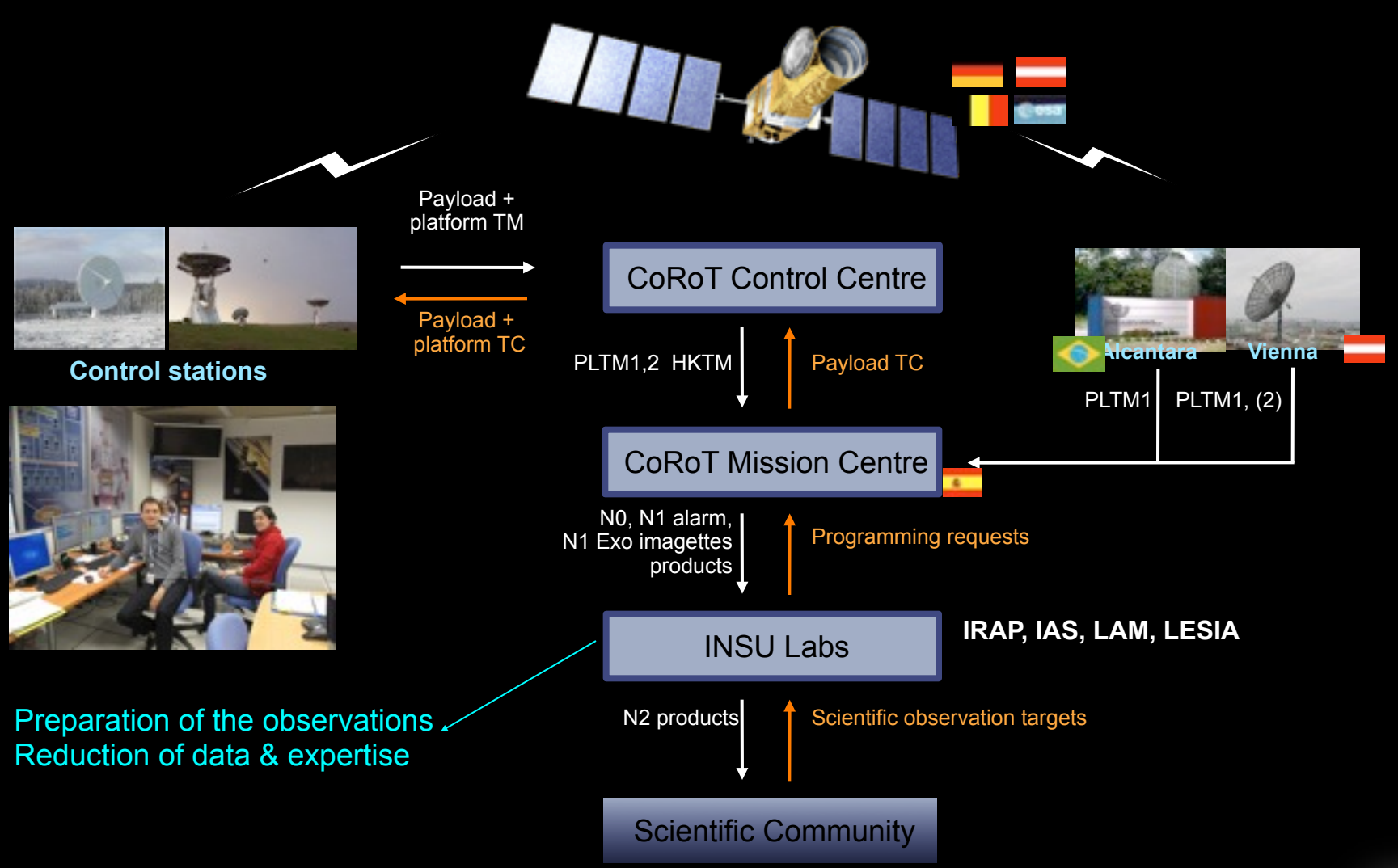
Behind the data : CoRoT System & Technical organisation



Behind the data : CoRoT System & Technical organisation



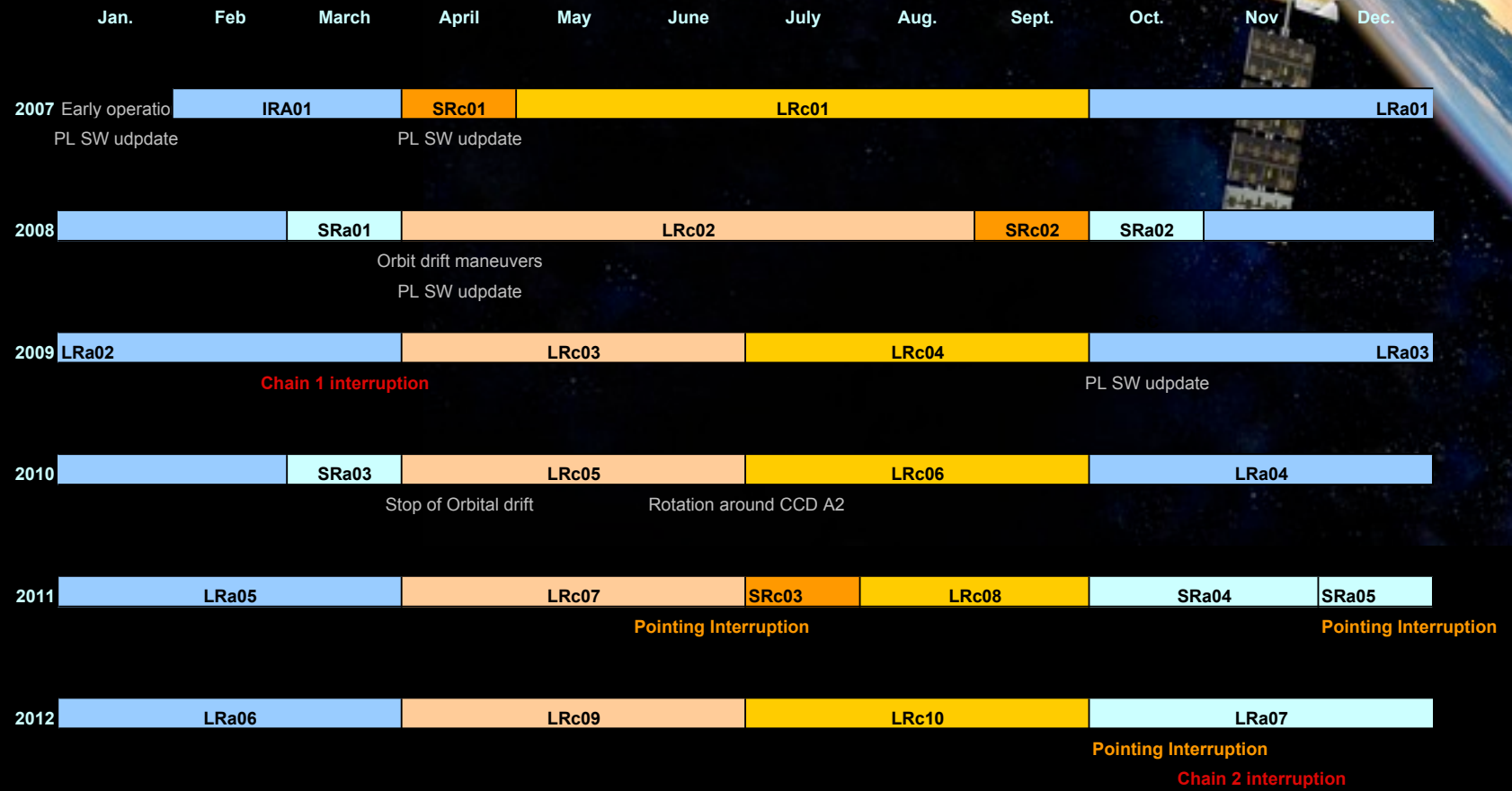
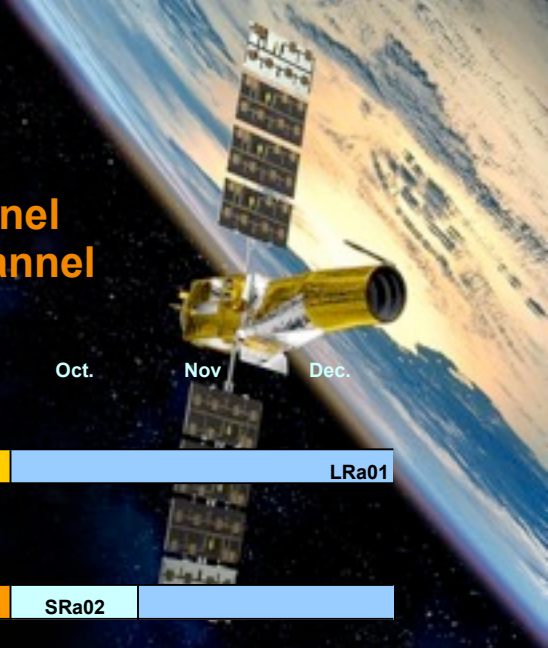
Behind the data : CoRoT System & Technical organisation



Preparation of the observations
Reduction of data & expertise

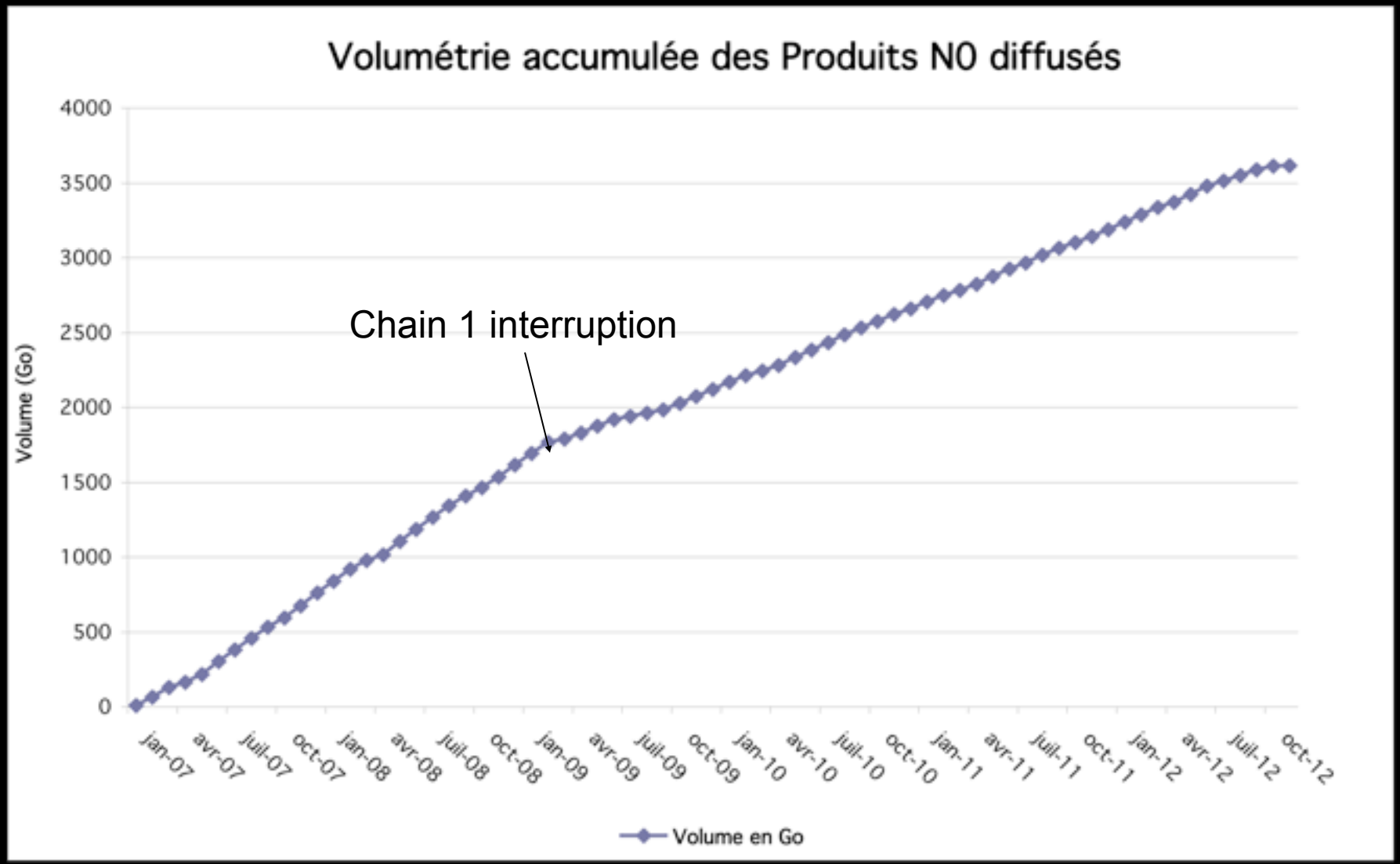


25 Scientific Runs completed
165 stellar observations on Seismology channel
172000 stellar observations on Exoplanet channel



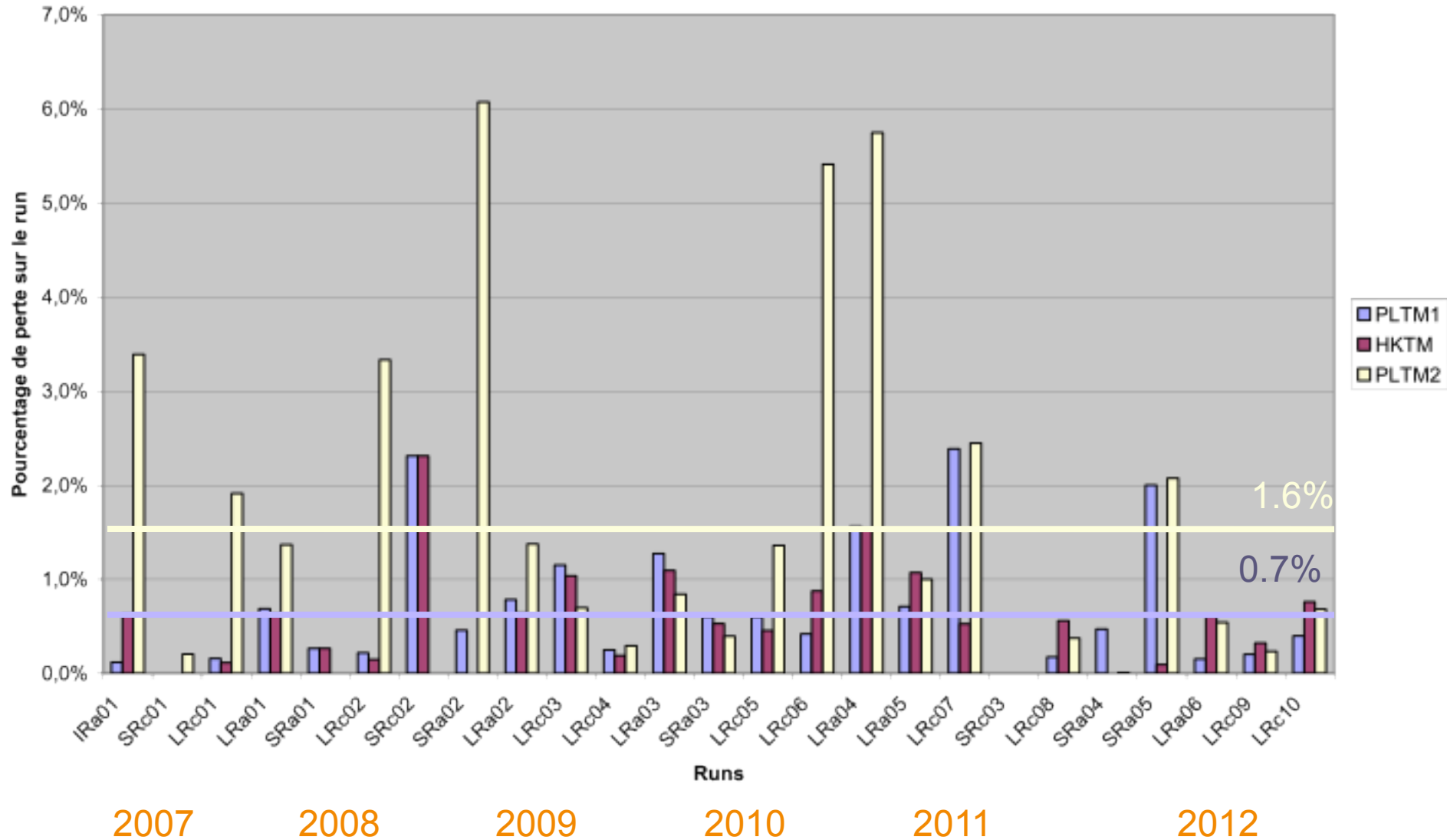
A continuous process of improvement : preparation of the observations, operations, data production & reduction, data quality monitoring

Commissioning	22 days	1%	26 Runs, 2 drift maneuvers, 4 SW uploads, PF maintenance, DPU1&2 tests, techno acquisitions
Operations and mission standby	178 days	7.8%	
P/F Unavailability	0	0.0%	
P/L Unavailability	155 days	6.8%	Chains 1 & 2
Observations (EXO)	1919 days	84.4%	
<hr/>			
Total	2274 days	100.0%	



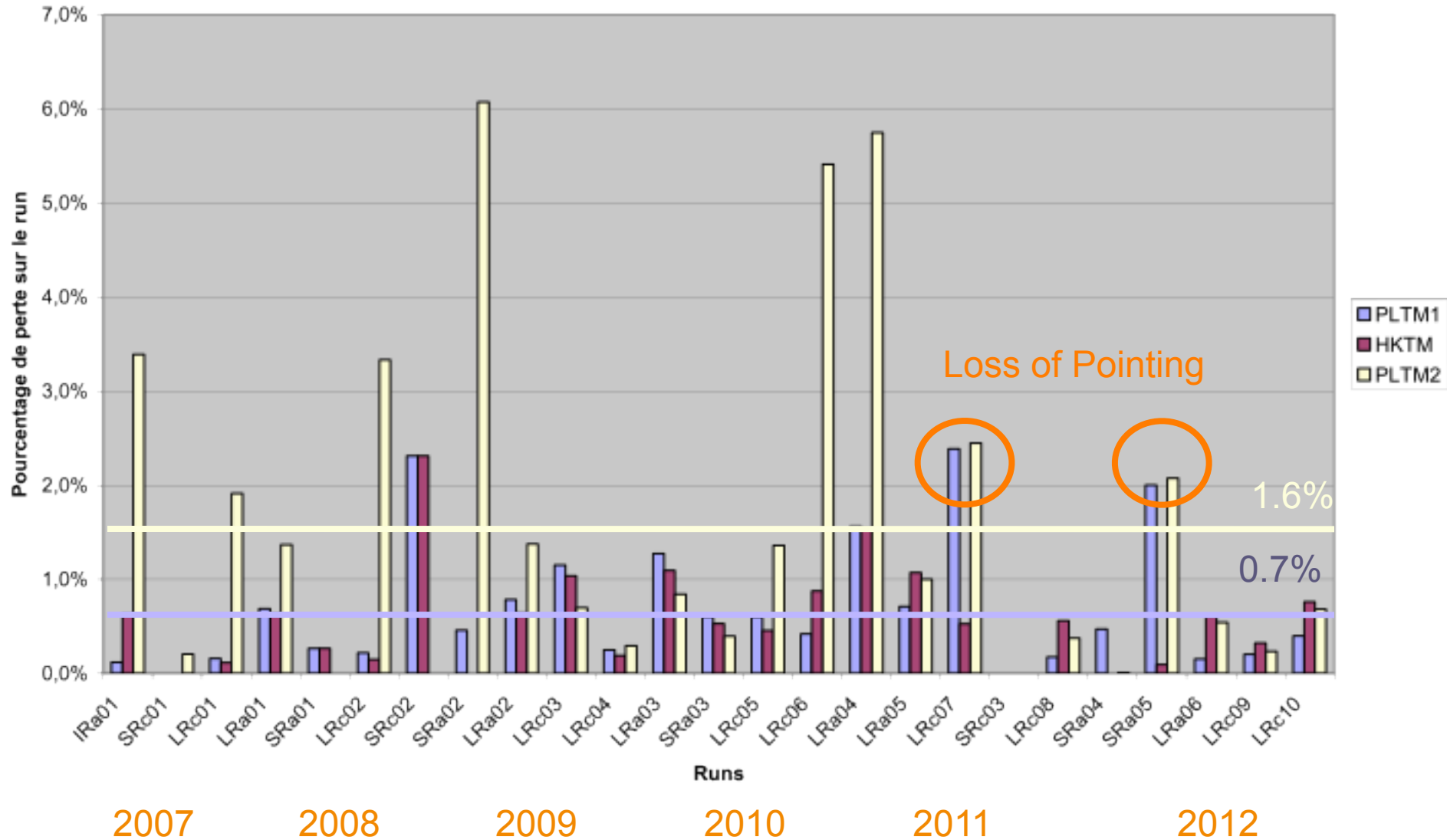
Data Loss

Run



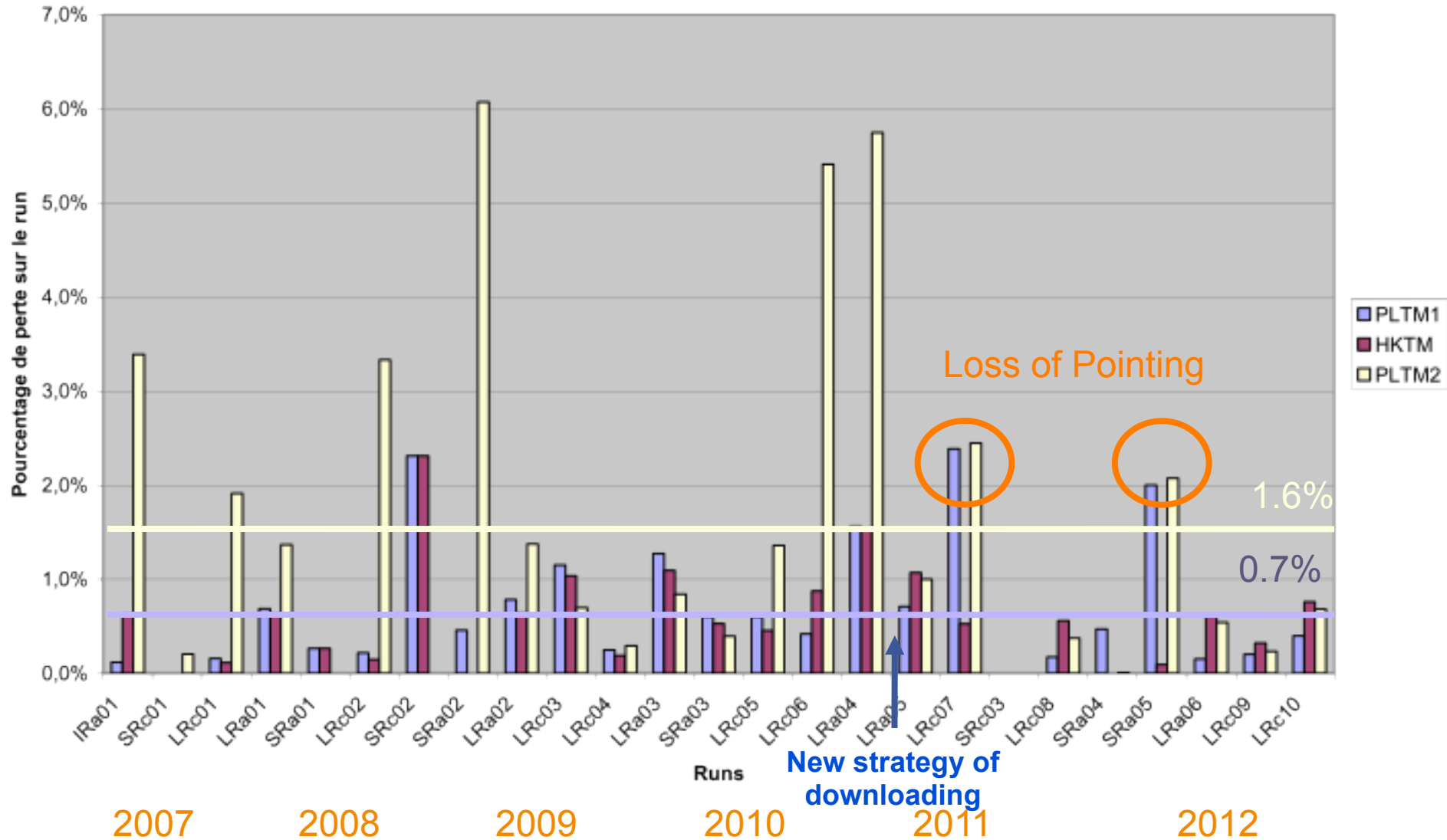
Data Loss

Run



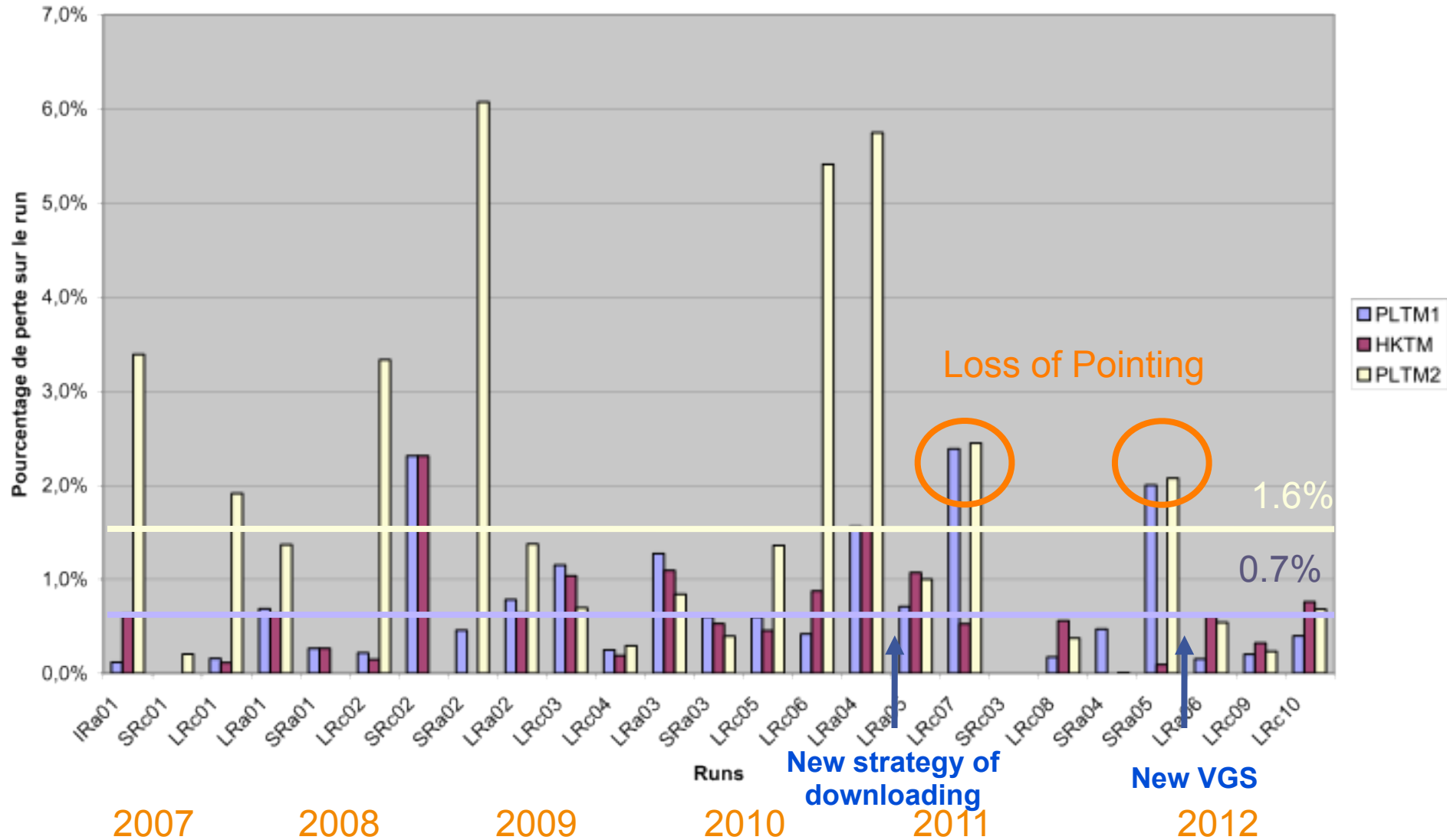
Data Loss

Run



Data Loss

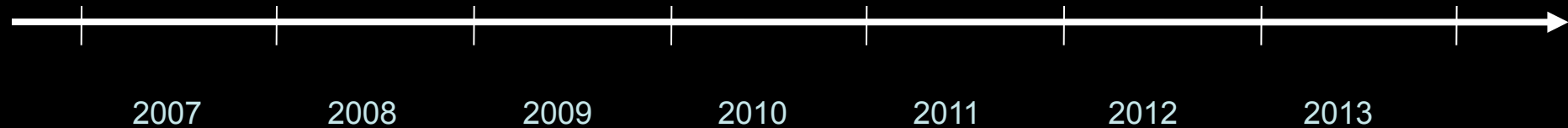
Run







A process of mngt of the project , annual review of exploitation





3 years Obs.



CoRoT 1 Period



A process of mngt of the project , annual review of exploitation





3 years Obs.



Scientific Proposals
for CoRoT 2

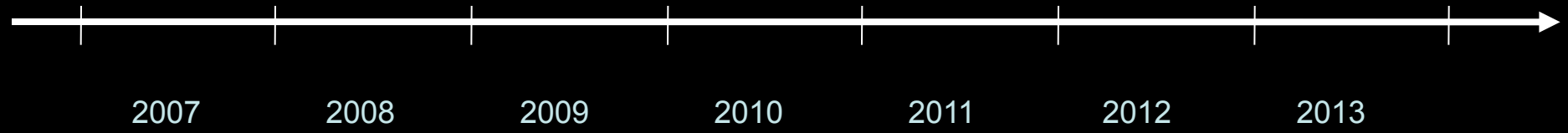


Decision for
1st extension

CoRoT 1 Period



A process of mngt of the project , annual review of exploitation





3 years Obs.



Scientific Proposals
for CoRoT 2



Decision for
1st extension

CoRoT 1 Period

CoRoT 2 : extension



A process of mngt of the project , annual review of exploitation



2007

2008

2009

2010

2011

2012

2013



3 years Obs.



5 years Tise



Scientific Proposals
for CoRoT 2

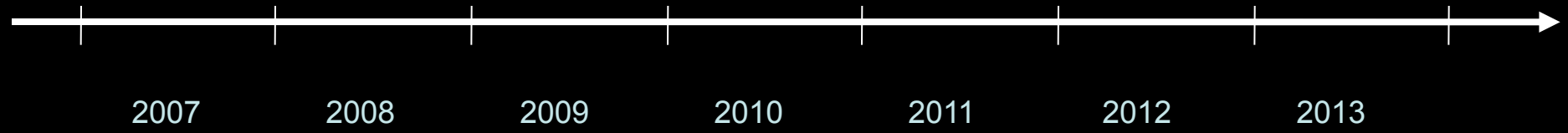


Decision for
1st extension

CoRoT 1 Period

CoRoT 2 : extension

A process of mngt of the project , annual review of exploitation





3 years Obs.



5 years Tlse



Scientific Proposals
for CoRoT 2



Decision for
1st extension

Scientific Proposals
for CoRoT 3



Decision for
2nd extension

CoRoT 1 Period

CoRoT 2 : extension



A process of mngt of the project , annual review of exploitation



2007

2008

2009

2010

2011

2012

2013



3 years Obs.



5 years Tise



Scientific Proposals
for CoRoT 2



Decision for
1st extension

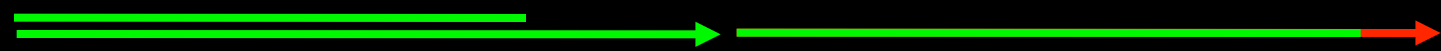
Scientific Proposals
for CoRoT 3



Decision for
2nd extension

CoRoT 1 Period

CoRoT 2 : extension



A process of mngt of the project , annual review of exploitation



2007

2008

2009

2010

2011

2012

2013



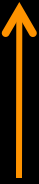
Chain 1
failure



Chain 2
failure



3 years Obs.



5 years Tlse



Exhibition
MAE



Scientific Proposals
for CoRoT 2



Decision for
1st extension

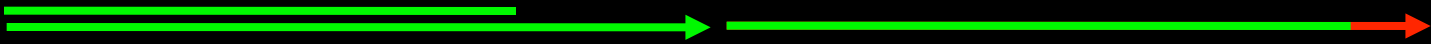
Scientific Proposals
for CoRoT 3



Decision for
2nd extension

CoRoT 1 Period

CoRoT 2 : extension



A process of mngt of the project , annual review of exploitation



2007

2008

2009

2010

2011

2012

2013



Chain 1
failure



Chain 2
failure

■ Based on TM delivered by the Proteus platform

At 20:19:11 UT :

- ◆ the DPU2 of the instrument stops to dialog on the **1553 link** data
- ◆ default ecartometry data words ('FFFF') are acquired on the **AS16 link**

■ Based on HK TM related to instrument

Between 20:18:54 and 20:19:26

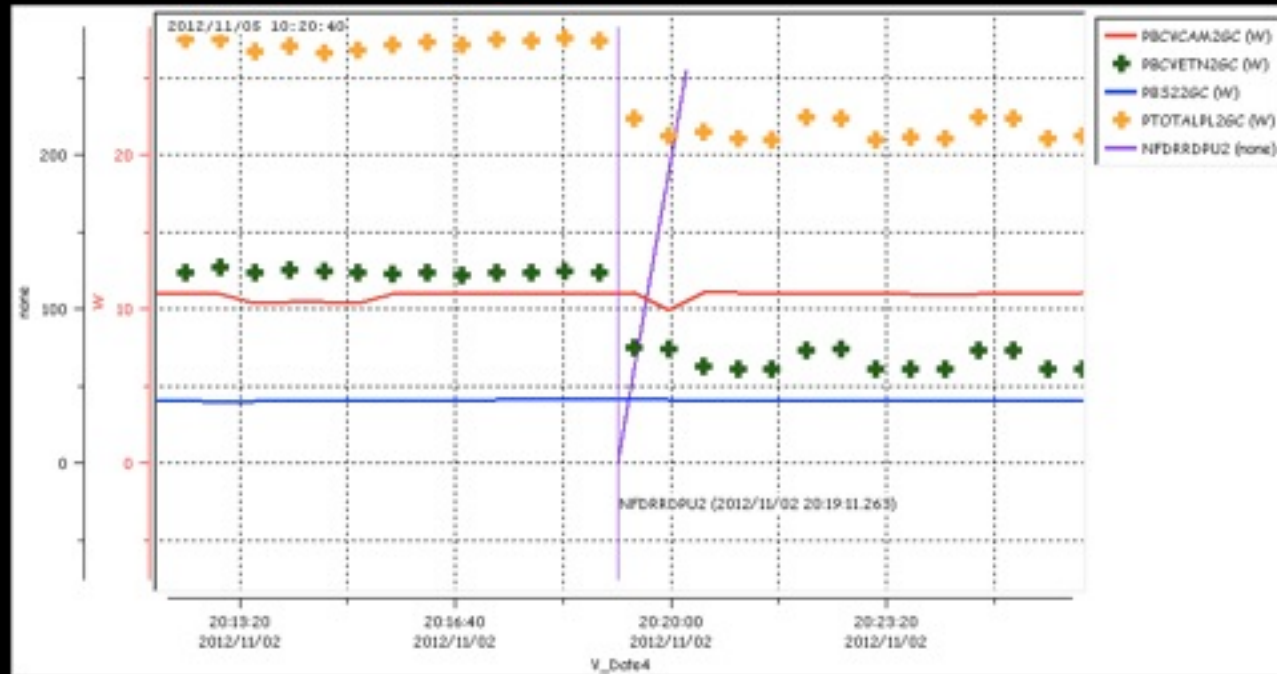
- ◆ Drop of **input power BCNETN2** equipment from 12.5W to ~6W

Between 20:19:09 and 20:19:17

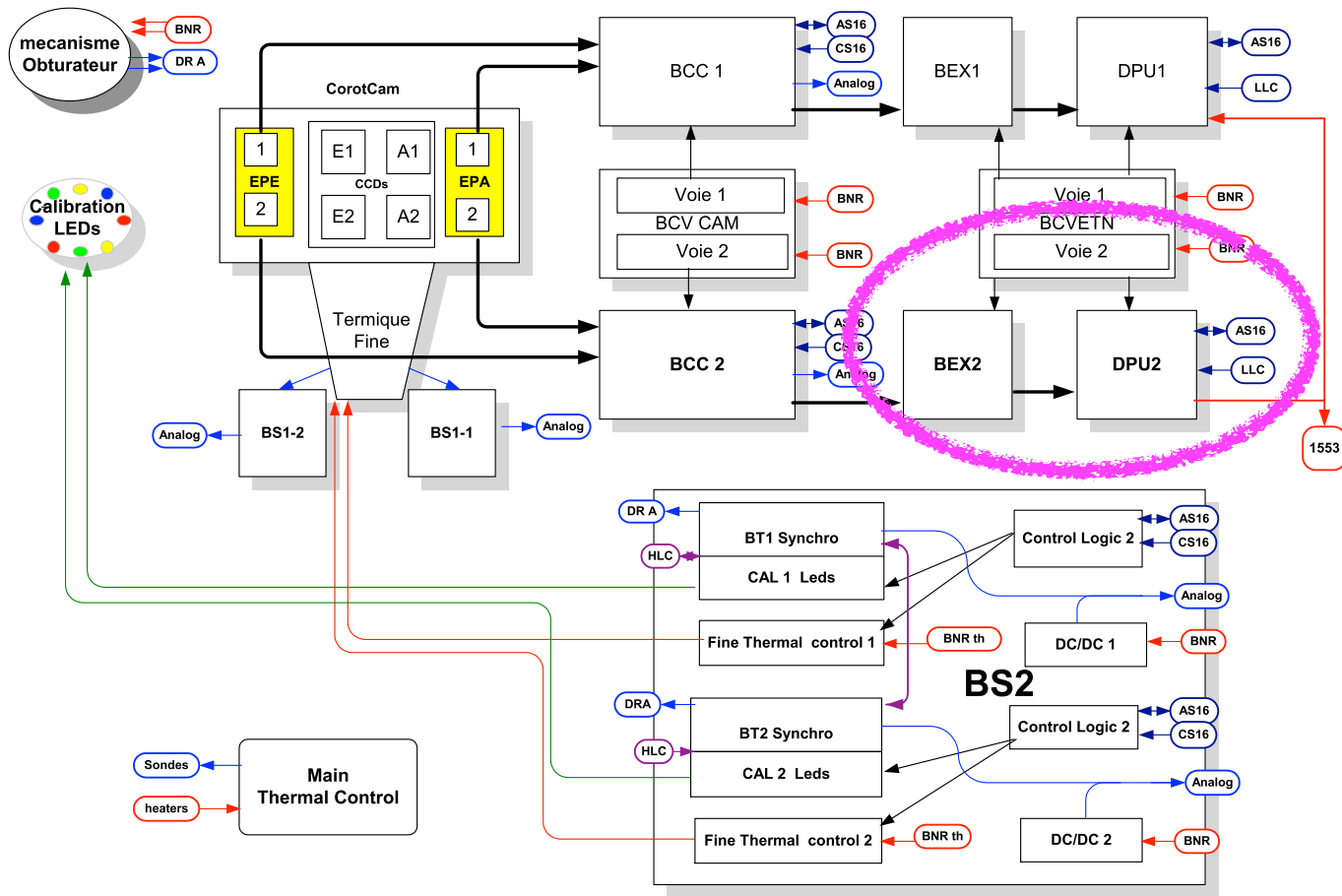
- ◆ drop of **V5BEX** from (5.2V to 3.1V)

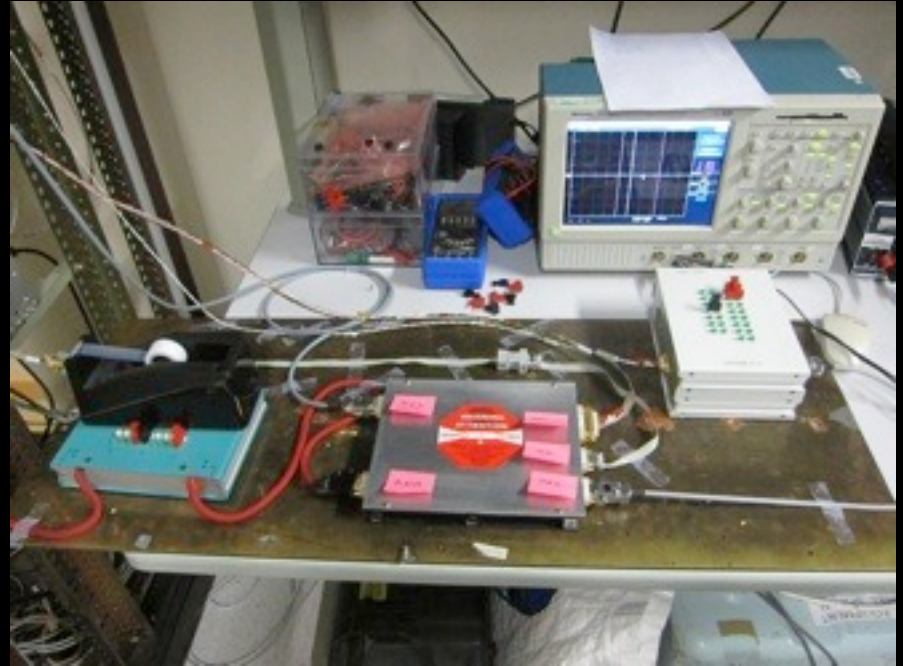


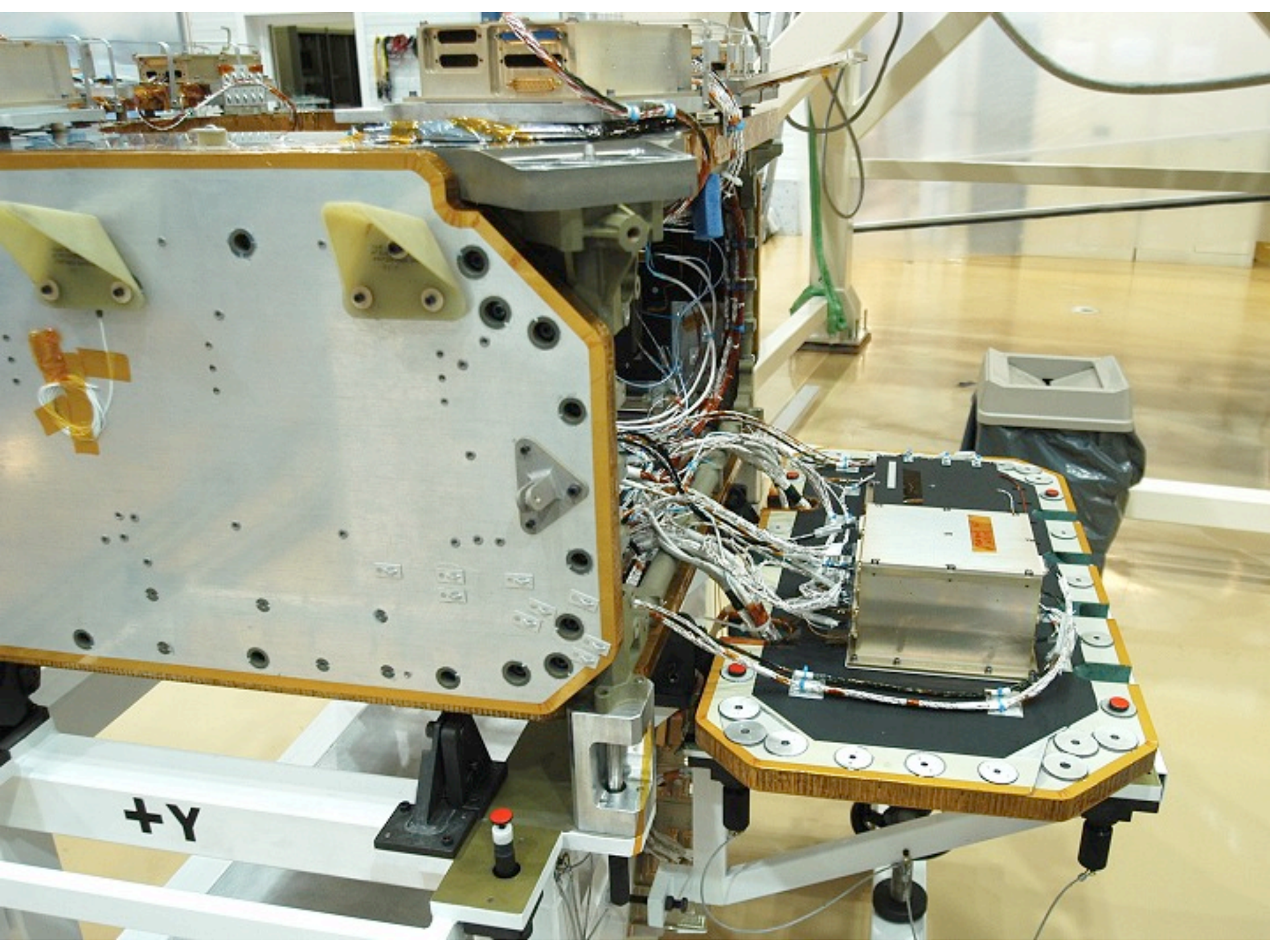
P BCVETN2, PBCVCAM2, PBS2



The instrument scheme









Many accomplishments during the 6 years
of operations and exploitations
thanks to the efforts and engagement of teams.
Whatever happens, CoRoT will still be there through
the scientific research and exploitation of data.

Gracias !

