



CENTRE NATIONAL D'ÉTUDES SPATIALES

29th Scientific Committee IAS, 2008/10/02

COROT : MISSION STATUS

Mission Status

■ Mission :

- ◆ 645 days in space
- ◆ 6 Runs completed
- ◆ 573/555 days of Observation Sismo/Exo
- ◆ N1 Alarm production transferred from LESIA to CNES : 2008/07/16
- ◆ Decision to produce N1 Alarm (Exo) also during Short Runs

■ Satellite : **Nominal**

■ Instrument

- ◆ **Nominal but**
- ◆ **Rough Ecartometry data still to be monitored**
 - Faulty behavior observed during LRc02 on DPU1 (ID 8158)
 - No impact on mission (AOCS pilot = DPU2)
 - Various configurations tested but no evidence of anomaly in HW/SW found

■ Ground segment

- ◆ **Corot Control Center : Nominal**
- ◆ **Corot Mission Center : Nominal**
- ◆ **Ground stations : Nominal but**
 - TM loss details given further

■ Next Project Review of exploitation : 12&13th March, 2009

Status of previous Run : LRc02

■ Pointing : r.a. 279.66 °, dec. 6.40°, roll 16.72°

■ A2 CCD = Attitude driver of the satellite

■ Specific Operations

- ◆ Rough ecartometry mode analysis
- ◆ => Science data stopped on A1&E1
 - 2008/05/06 : 1h44'
 - 2008/05/21 : 2h02'
 - 2008/09/07 : 8h30'

■ N1 Alarm data delivered each week in July & August

■ Exo Oversampling Updates :

- ◆ 2008/04/16 (Initial list of 2 x 500 stars)
- ◆ 2008/04/18 (update)
- ◆ 2008/06/05 (update)
- ◆ 2008/07/23 (update)

■ Scientific Services & Processing

	Start	Stop	Duration
A	2008/04/1	2008/09/0	149
1 A	1 2008/04/1	7 2008/09/0	days 150
2 E1	1 2008/04/1	8 2008/09/0	145
E2	5 2008/04/1	7 2008/09/0	146
	5	7	

■ TM Loss

- ◆ ALC Passes lost => Astero imagettes lost
 - 2008/05/23 (11h)
 - 2008/05/26 (11h)
 - From 06/13 to 06/17 (10 passes lost)
- ◆ TTCET passes lost => Astero + Exo LC
 - 2008/08/19 (7h) – 1 pass lost

Status of Current Run : SRc02

■ **Pointing** : r.a. 284.10 °, dec. -2.86°, roll -14.64° ■ **Scientific Services & Processing**

■ **CCD temp: Warm case**

■ **A1 CCD = Attitude driver of the satellite**

■ **Operations**

- ◆ **CCD temperature adjusted 5 times**
- ◆ **2008/09/15 :**
 - Reload of oversampling windows BKGD + Offset (N1-N2 Processing of Exo data earlier than 2008/09/15 - 09:08:27 TU questioned)
- ◆ **2008/09/17 : One Astero Large Window of A2 repositionned (1 pixel)**

■ **Exo Oversampling Updates :**

- ◆ **2008/09/17 (Initial list of 2 x 500 stars)**

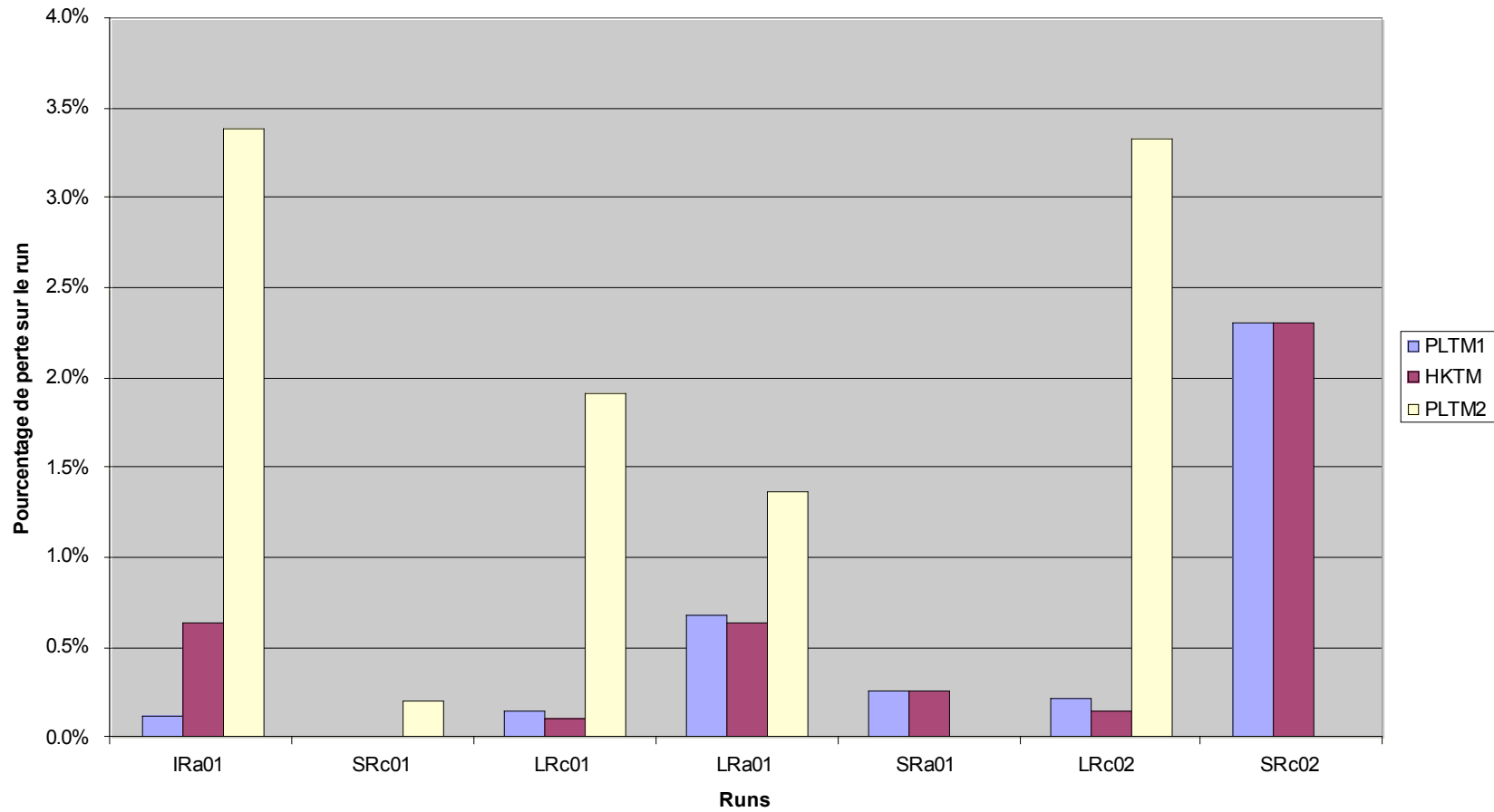
	Start	Stop (expected)	Duration (expected)
A	2008/09/0	2008/10/0	27 days
1	9	6	
A	2008/09/0	2008/10/0	27
2	9	6	
E1	2008/09/1	2008/10/0	24
	2	6	
E2	2008/09/1	2008/10/0	24
	2	6	

■ **TM Loss**

- ◆ **2008/09/28 & 29 :**
 - **3 AUS +1 KRN passes Lost**
 - **14 h of data (LC, HK) lost**

TM Loss by Run

Pourcentage des pertes de chaque type de TM par Run



Next Runs (1/2)

■ SRa02

- ◆ Corotsky Bloc : 1579.10

- ◆ Pointing :
 - ◆ r.a. 97.55 °, dec. 5.66°, roll - 25.36°
 - ◆ => CCD Warm Case

- ◆ Start of Observation : **2008/10/11**

- ◆ Stop of Observation :
 - Option 1 : 2008/11/03
=> **23 days** of Obs
 - Option 2 : 2008/11/17
=> **37 days**

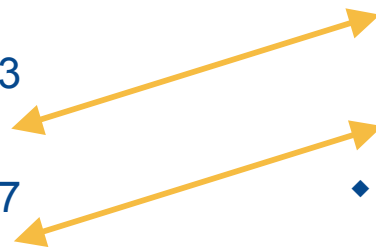
■ LRa02

- ◆ Corotsky Bloc : 1338

- ◆ Pointing :
 - ◆ r.a. 103.56 °, dec. -4.38°, roll 3.90°

- ◆ Start of Observation :
 - Option 1 : 2008/11/08
=> **146 days** of Obs
 - Option 2 : 2008/11/22
=> **132 days**

- ◆ Stop of Observation :
 - At the latest : **2008/04/03**



Next Runs (2/2)

