Report progress of the Corot Mission

June 2007

Corot working groups for operational activities



CNES organisation for exploitation phase



Report progress of the Mission

- On Board status is OK
 - Payload and platform are nominal
- Funding is (nearly...) OK
 - In CNES/DF language, Corot exploitation was a « new » project...
 - So it tooks a long time (6 months...) to start it
 - But Step ③ Finally resolved since last Friday 8th 10:16 !
 - Contract between CNES and CNRS
 - Will be officially submitted next june 20th
 - Goal : next july, all these problems must only be bad memories

Mission Status : Ground segment Problems

- Ground segment and NO data processing is not OK enough...
 - Efficiency has to be improved asap
 - Two main sources of improvements
 - Antenas coverage
 - Loss of data ALC (4 passes since beginning of LRc01) -Loss of two passes in CNES network
 - Two recent actions raised :
 - CNES (DCT/OP) Internal Re-organization of entities which are in charge of the following of the COROT Network
 - Action for CNES to ask INPE if something (and what) can be done to improve communication in case of failure of ALC receiption

Mission Status : Ground segment Problems

- Improvement of N0 Data Processing at CNES (CMC)
 - Delivery of some N0 data are unfortunately delayed
- Status (today known probelms)
 - IRa01
 - About 7 h definitively lost on feb 15th
 - Due to an on-board memory overwritten
 - About 4 min definitively lost on march 22th
 - Due to a lost of ALC pass (astero_imagette)
 - 3 last days on run lost due to a bad ground database operation
 - But data fully recovered (only) last friday 8th

Mission Status : Ground segment Problems

Status :

- SRc01
 - About 32 s of wrong datation on Apr 14th
 - Due to ground software SPR To be recovered soon
 - About 4 days of definitively corrupted data on apr 15th to 18th
 - Due to abnormal 0 in TM packets
 - About 16 min of wrong datation on Apr 16th
 - Due to spare data not well manager by CMC software To be recovered soon
 - About 10 sec of corrupted data at the end of the run
 - Due to abnormal 0 in TM packets investigation is on going
- LRc01
 - 4 ALC passes lost

Report progress of the Mission

- Why all these problems ?
 - Priority given to launch and not to the ground segment
 - Despite of that, the system worked rather well
 - But N0 processing and distribution not totally achieved and still under developpement
 - Data very complicated and architecture rather complicated (to be optimised)
- But the goal now is : all recoverable data of any run will have been delivered at the end of july (the latest)
 - Formal key point at CNES to status on these points
- Current improvements of the software will be achieved next autumn
 - Formal key point before the end of year