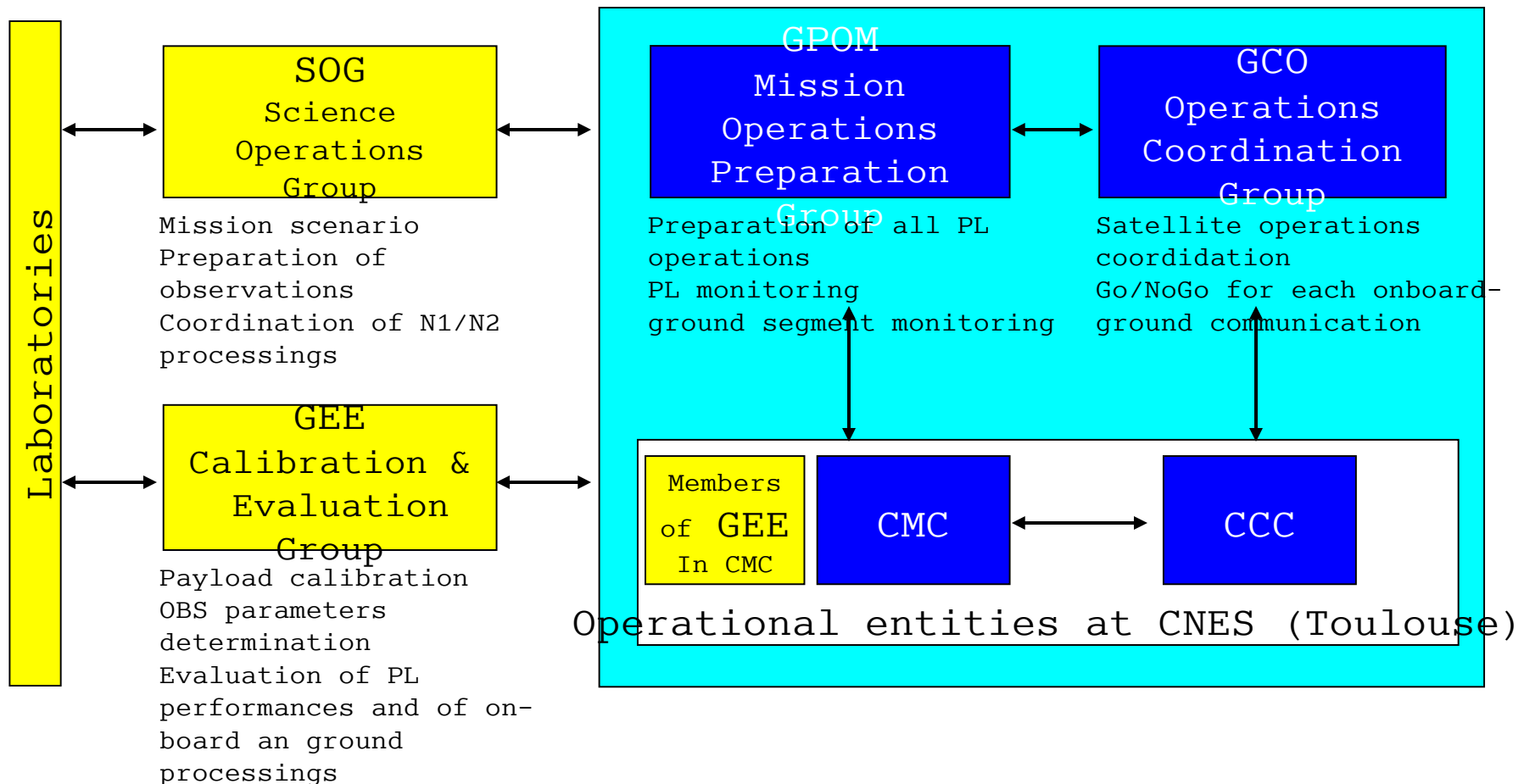




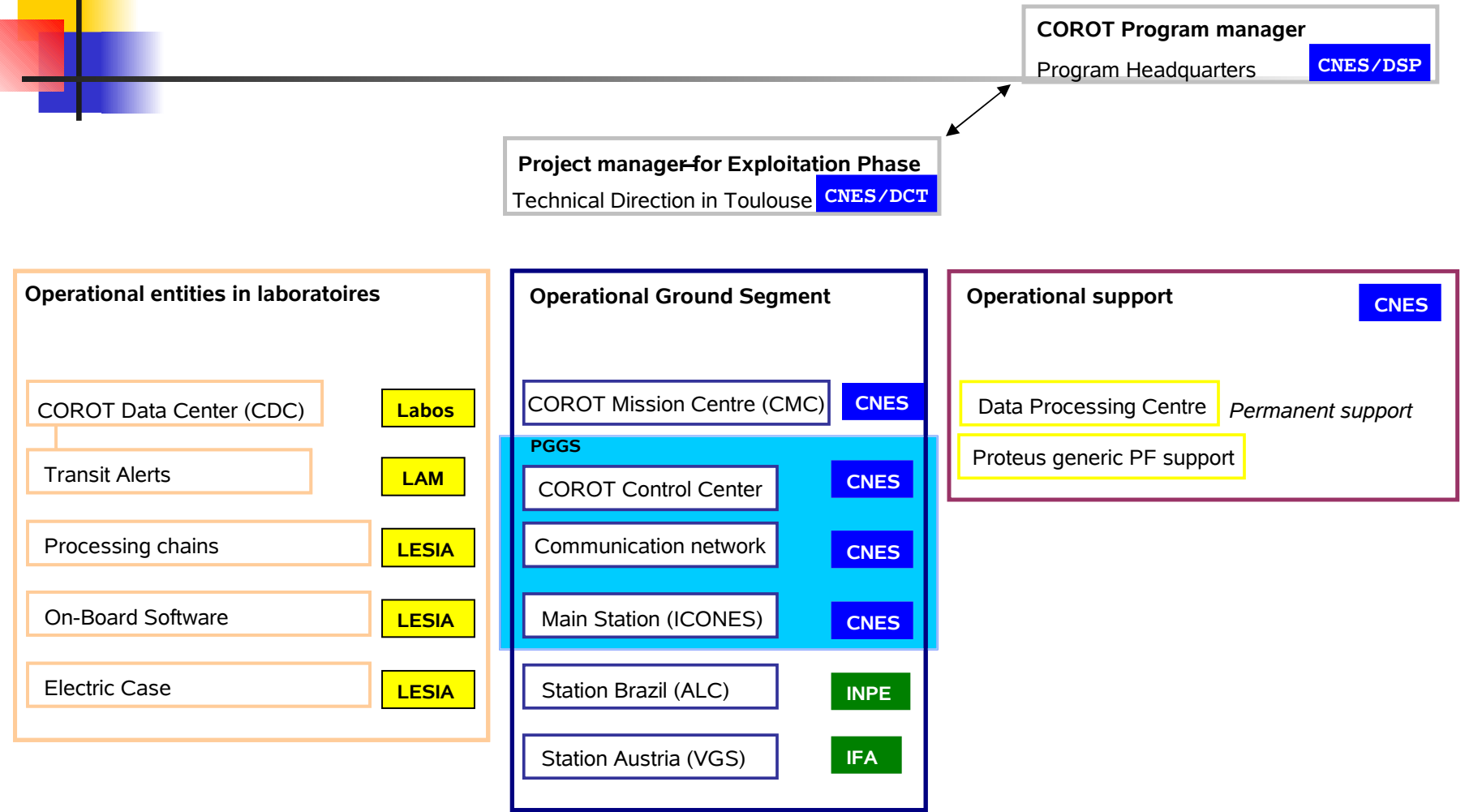
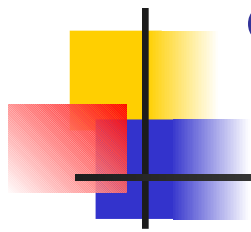
Report progress of the
Corot Mission

June 2007

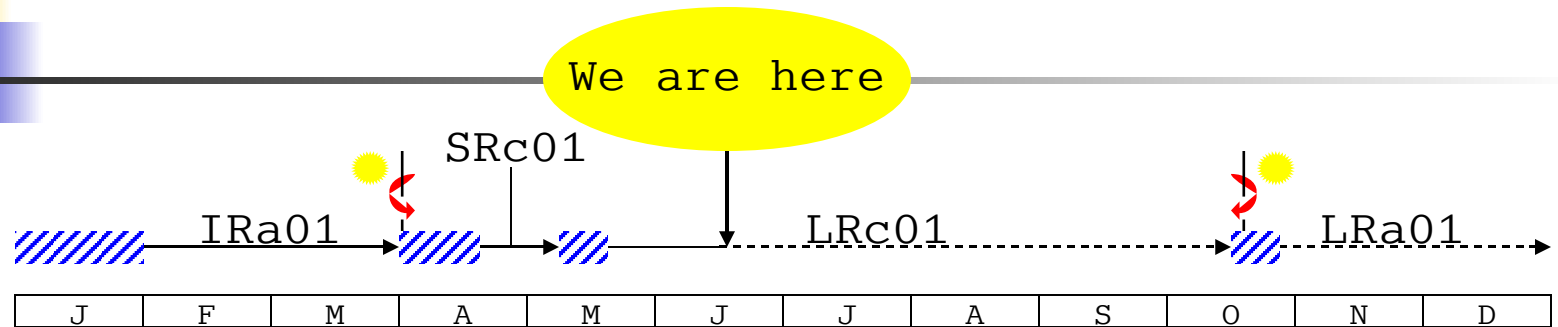
Corot working groups for operational activities



CNES organisation for exploitation phase

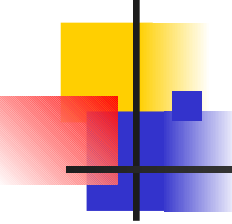


Report progress of the Mission



- On Board status is **OK**
 - Payload and platform are nominal
- Funding is (nearly...) **OK**
- Ground segment and NO data processing is not yet completely **OK...**
 - Improvements are on going

Ground segment Improvements (1/2)



Two main sources of improvements

- Antenas coverage
 - Loss of PLTM2 (imagerettes astero) on ALC (1 pass definitively lost in IR01 and 1 at the beginning of LRc01)
 - These losses are acceptable regards to the specification (85%)
 - Delay to recover some passes, and lack of information
 - Action raised for CNES to ask INPE if something (and what) can be done to improve communication in case of failure of ALC reception

Ground segment Improvements (2/2)

- Loss of two passes in CNES network
 - 1 pass lost on 20th may (LRc01) on Kiruna (KRN) :
2,5h PLTM1 and 1,5h of HKTM (due to maintenance)
 - 1 pass lost on 22nd may (LRC01) on Aussaguel (AUS) : 2h of PLTM and HKTM1 lost (due to failure - TBC)
 - Nethertheless this is also compliant with system specifications (90% on one year) but we want to minimize the risk
 - Action raised for CNES (DCT/OP) to proceed to an internal Re-organization of entities which are in charge of the following of the COROT Network (New organisation will be available next september)

Delivery status of N0 data run by run

(today known problems)

(2/2)

■ 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

Delivery status of NO data run by run

(today known problems)

(2/2)

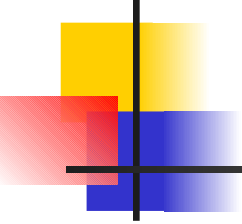
SRc01

- 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 (PLTM2) - 1 pass lost
- 1 KRN, 1 AUS (maintenance)

Conclusion

- 
- Why all these problems ?
 - Priority given to launch and not to the ground segment
 - Despite of that, the system worked rather well
 - But NO 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