

# Long Term Archiving COROT MISSION

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# What will CNES do ?



## CNES is in charge of the long term archiving

- Role of the CNES as a national agency to archive data produced by french instrument
- The long term archiving is to be considered as an archive for several decades
- Different from the mission archive that will be used until the end of the project and after by the scientific community
- Acces time to data may be long (store on tapes)
- The possible selection criteria are simple
- Will be performed by a specific CNES entity called SERAD
- Dominique Delmas is in charge on the long term archiving for Corot
- A more detailed presentation of the SERAD and on the way data will be archived will be done at the next Scientific Committee
- Next slides give a quick overview

# Long Term Archiving



The following data will be archived at CNES :

## Scientific N0 data

- Generated by CNES from the RAW data
- FITS format

## Scientific N1 data

- To be processed and generated by Lesia
- FITS format

## Auxiliary data

- Used to generate N2 data from N1
- Must be extracted from Corot Data Bases (BDP and BDE)
- ASCII format

## Other auxiliary data ?

## Enough documentation to understand the archived data

## Software (source code) to go from N1 to N2

With what is archived, we should be able to regenerate N2 data

# Archiving is ongoing...



## Gather together on one hard disk all the Corot data to archive

- **N0 products** – ~ 350 GB

- ◆ Creation of compressed files per corot\_id, product type and run
- ◆ Archiving files in a given folder hierarchy

- **N0 auxiliary data** (Product Data Base) – 14,4 GB

- ◆ 20 N0 house keeping parameters from BDP (given by Sylviane)
- ◆ 1 file per parameter and per RUN

- **N1 auxiliary data** (Product Data Base) – 64,8 GB

- ◆ 101 N1 house keeping parameters from BDP (given by Sylviane)
- ◆ 1 file per parameter and per day

- **Calibration Data Base** (BDE) – 460 MB

- ◆ 42 tables archived in 42 compressed ASCII files
- ◆ 5 secondary tables containing BLOB data

# Archiving is ongoing...



## Documentation

Documentation currently saved in the project database will be archived in the CNES corporate memory (will not be accessible by non CNES people)

We need to select adequate documents to be archived on the long term archiving site.

By now we have :

- **GMV-COROT\_C1-ICD-002**

- ◆ Title : COROT N0 products description COROT\_C1
- ◆ Author : JIMENEZ Javier
- ◆ Version 1.11 du 05/03/2008

- **COR.LESIA.06.008**

- ◆ Title : Description of the N1 Products Generated at the Mission Control Center (CMC)
- ◆ Author : SAMADI Réza
- ◆ Version 1.4.1 du 10/04/2008

- **COR.LESIA.04.80**

- ◆ Title : Base de Données Etalonnage – Document de Spécification
- ◆ Author : CHAINTREUIL Sylviane, BOURREC Elodie, CUVILO Josiane, BAGLIN Annie
- ◆ Version 2 **obsolète** du 24/02/2005

# What's next ?



## Before end of 2013

- Develop a prototype of the Corot archive in SERAD
- Define the folder hierarchy for the archiving
- Ingest data from the hard disk into the archive
- Open the N0 Corot archive on the SERAD website

## 2014 – beginning of 2015

- N1 reprocessing by Lesia
- Once reprocessing is done, N1 delivery to CNES
- Additional auxiliary data delivery to CNES if needed
- Preparation and delivery of source code (algorithm, software) used for the production of N2 from N1
- Update (if needed) and delivery of the adequate documentation (mission description, instrument description, N1 description, N2 generation software description...)
- Final update of the Corot archive (metadata, archived data...)
- Open the N1 Corot archive on the SERAD website