

# The PICARD Mission

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# The PICARD satellite



- The PICARD mission was named after the French astronomer of the XVII<sup>th</sup> century Jean Picard (1620-1682) who achieved the first accurate measurements of the solar diameter.
- These measurements were especially important as they were made during a period when the solar activity was minimum characterized by a sun nearly without sunspots between 1645 and 1710.

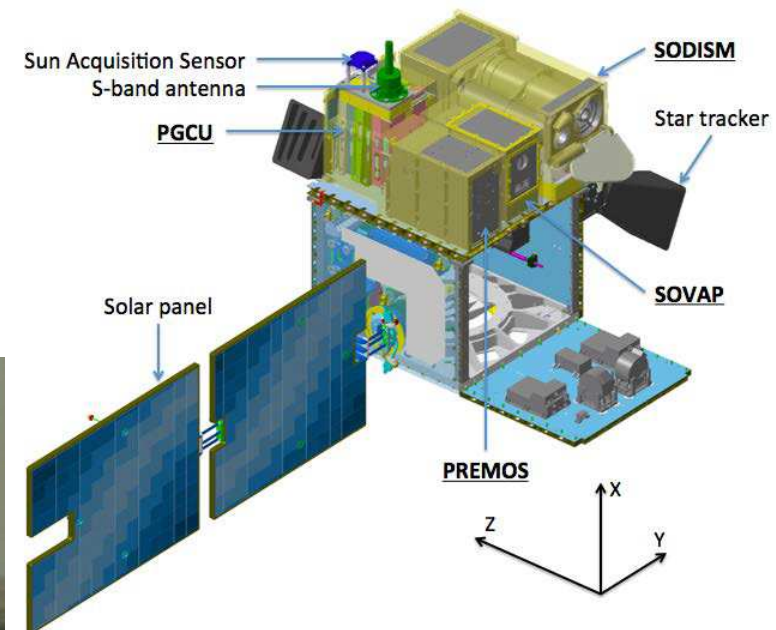
- **PICARD is a space mission, which was successfully launched on 15 June 2010,**
- **PICARD Payload uses the MYRIADE family platform, developed by CNES and design for a total mass of about 120 kg**

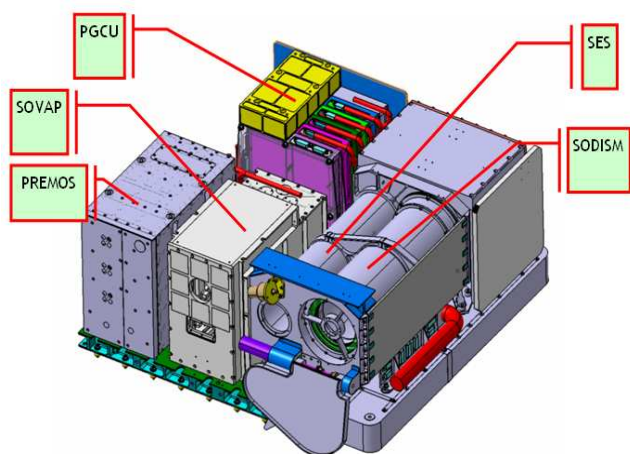
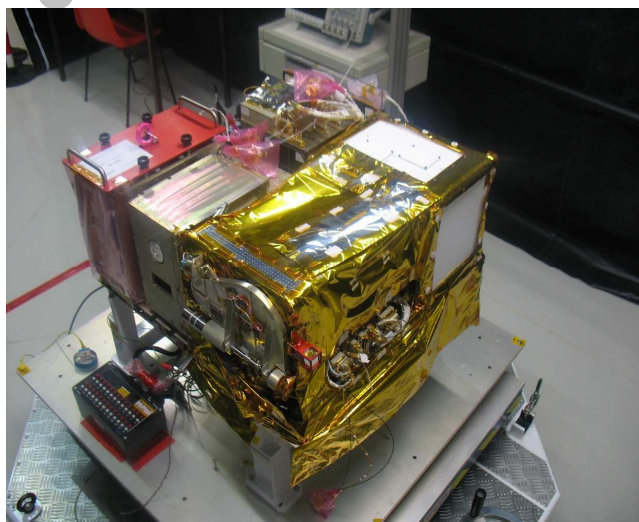
## • Orbit:

- Sun Synchronous Orbit
- Ascending node: 06h00
- Altitude: 735 km
- Inclination: 98.29

## • Mission duration : 2 years

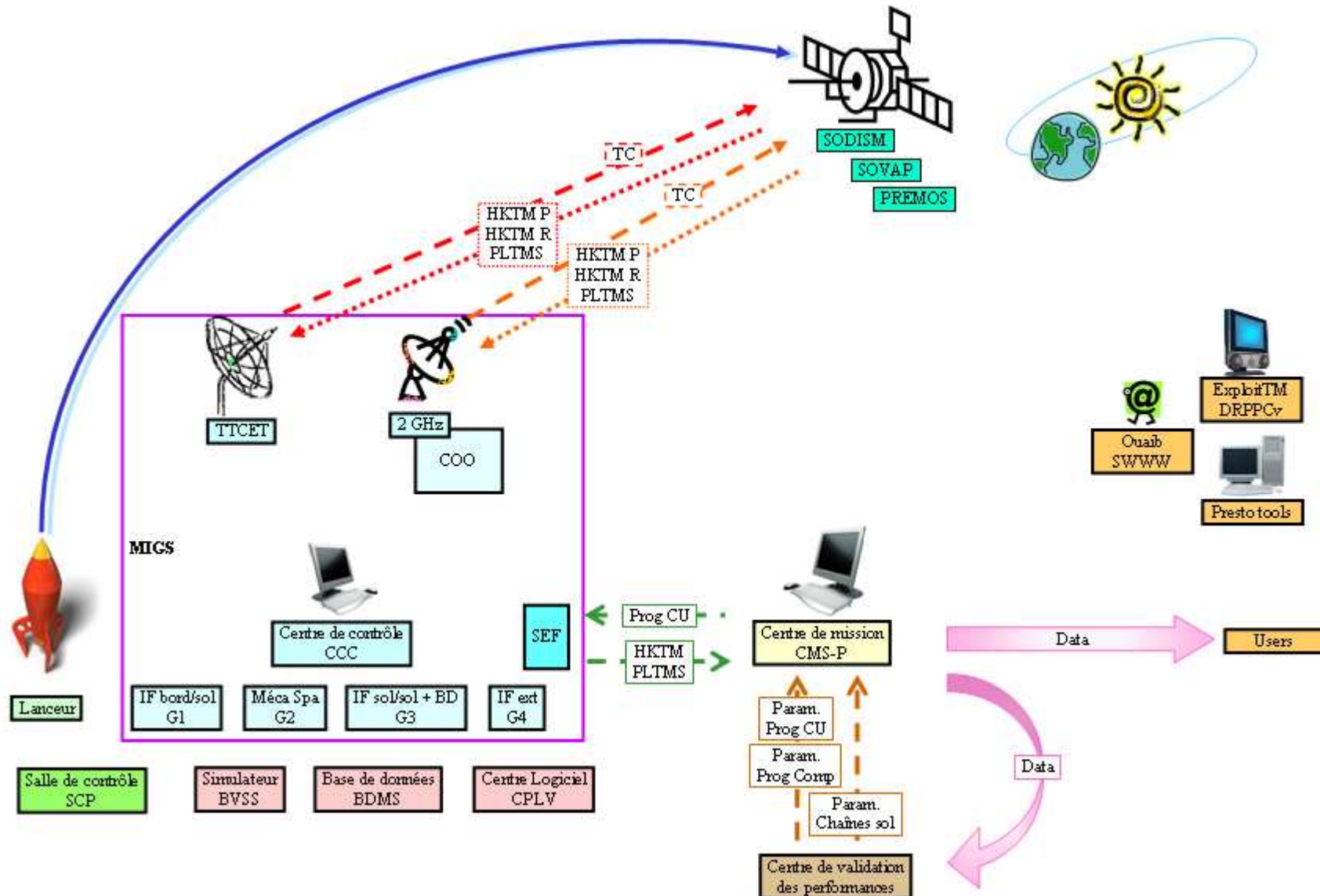
- Extensions possible







# The PICARD ground segment



# The PICARD project milestones (1)



- Launch date : 15/06/2010
- End of Commissioning phase : 14/09/2010
- Opening of the SOVAP right shutter : 18 November 2010
- SODISM Working Group : 28/01/2011
- Report of the SODISM Working Group : 26/03/2012
  - To investigate the reasons of the SODISM functioning
- SODISM Commission of inquiry : 2 April 2012
- Report of the SODISM Commission of inquiry : 2 July 2012
  - Feedback on the payload development project,
- 2<sup>nd</sup> PICARD scientific workshop : 10 April 2012
- Call to Scientific Guest Investigations : June - September 2012

# The PICARD project milestones (2)



- REDEM (Mission Extension Review) Steering Committee : 9 November 2012 : The PICARD mission is not extended
- End of the “nominal” PICARD mission (after calibration operations) : 31 march 2013
- Call for technological operations : 1 February 2013
- Selection of the technological operations : 8 March 2013
- End of the technological operations : end of March 2014
- “Authorization” to pursue the acquisitions of the payload during the technological operations (till end of March 2014)
  - Strong operational constraints (ex : reduced TM, constraints on the payload acquisitions; etc..)
  - Modification of the “routine” phase – no helioseismology acquisitions.
- End of the PICARD mission : end of March 2014
  - “End of Life” operations by the CNES Command Control Centre,
  - The PICARD satellite will be considered as a space“debris”.

# The PICARD project milestones (3)



- Migration of the PICARD data from the Mission Centre (CMSP) to the MEDOC Solar thematic Centre.
  - Definition on the Data/Products to archive
  - Objective : 2<sup>nd</sup> semester of 2014
  
- PICARD data available to the scientific community
  - <http://picso.busoc.be>
  - Search tool on the data basis.
  
- “The sun and the climate : contribution of the PICARD mission”, Symposium in 2014
  
- <http://smc.cnes.fr/PICARD>

# “Activities” of smsc web site in August

