



The CryoSat-2 Payload Data Ground Segment and Data Processing

Bjoern Frommknecht (1), Loretta Mizzi (2), Stefano Badessi (1), and Tommaso Parrinello (1)

(1) European Space Agency, EOP-GP, Frascati, Italy (bjorn.frommknecht@esa.int), (2) Telespazio S.p.A, Rome, Italy

Selected as the first Earth Explorer Opportunity mission and following the launch failure of Cryosat-1 in 2005, the Cryosat-2 mission was launched on the 8th April 2010 and it is the first European ice mission dedicated to monitoring precise changes in the thickness of polar ice sheets and floating sea ice over a baseline 3-year period. The main CryoSat-2 mission objectives can be summarised in the determination of the regional and basin-scale trends in perennial Arctic sea ice thickness and mass, and in the determination of regional and total contributions to global sea level of the Antarctic and Greenland Ice. Therefore, the observations made over the life time of the mission will provide conclusive evidence as to whether there is a trend towards diminishing polar ice cover and consequently improve our understanding of the relationship between ice and global climate change. Scope of this paper is to describe the Cryosat-2 Ground Segment present configuration and its main function to satisfy the Cryosat-2 mission requirements. In particular, the paper will highlight the current status of the processing of the SIRAL instrument L1b and L2 products in terms of completeness and availability. Additional information will be also given on the PDGS current status and planned evolutions, including product and processor updates and associated reprocessing campaigns.