ASI DATA EXPLOITATION OF THE COSMO-SKYMED MISSION

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ABSTRACT

The data exploitation of the COSMO-SkyMed Mission allows the users to utilise innovative high resolution X-band data generated by the first European civilian radar constellation.

The Data Exploitation of the Mission is lead separately for the institutional and commercial user. The former is supported by ASI (Agenzia Spaziale Italiana/Italian Space Agency); the latter by e-GEOS [1].

ASI is conducting the data exploitation of the COSMO-SkyMed Mission promoting and funding projects with different scientific objectives and in a wide variety of applications.

For the scientific community the main program dedicated to the exploitation of the COSMO-SkyMed data is the Announcement of Opportunity (AO). The projects selected in the first COSMO-SkyMed AO are oriented towards a large range of thematic areas, the main ones are: land use/cover mapping, ocean and ice, landslide, hydrology, floods, coastal processes, seismology, topographic mapping. [2].

ASI is conducting several pilot projects focused on: fires (SIGRI), volcanic risk (SRV), seismic risk (SIGRIS and SISMA), nowcasting (PROSA), flooding (OPERA), landslide (MORFEO), oil spill (PRIMI), X- and L- band (SIASGE X + L) and coastal risk management and monitoring projects.

The aim of all the ASI projects exploiting the COSMO-SkyMed data is to give a chance to achieve innovative and valuable results using the data, products and services of the unique COSMO-SkyMed constellation.

References

[1] Battazza F., Coletta A., Covello F., Manoni G., Valentini G., 2009. Access, use and data exploitation of the COSMO-SkyMed System. In Proceedings of IGARSS 2009, Cape Town, South Africa, 13-17 July 2009, in press

[2] Battazza F., Bianco G., Coletta A., 2009. COSMO-SkyMed Mission: Status, System Access and Data Exploitation. Abstract for the 6th Conference on Image Information Mining at EUSC Torrejon air base, Madrid, Spain, November 3-5, 2009.