IAF EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Data Management Systems (4)

Author: Dr. Maria Girolamo Daraio
Italian Space Agency (ASI), Italy

Dr. Deodato Tapete
ASI - Italian Space Agency, Italy
Dr. Laura Candela
ASI - Italian Space Agency, Italy
Mr. Alessandro Coletta
Italian Space Agency (ASI), Italy
Dr. Rocchina Guarini
Italian Space Agency (ASI), Italy
Mr. Ettore Lopinto
Italian Space Agency (ASI), Italy
Dr. MONICA PALANDRI
e-GEOS, Italy
Dr. Daniele Pellegrino
e-GEOS, Italy
Dr. Claudia Giardino
Consiglio Nazionale delle Ricerche (CNR), Italy
Dr. Angelo Amodio
Planetek Italia, Italy

RISK MANAGEMENT AND COASTAL MONITORING: COSTELAB, THE ITALIAN THEMATIC PLATFORM FOR COASTAL AND MARINE DOWNSTREAM APPLICATIONS

Abstract

Coastal areas are made more and more vulnerable due to economic overexploitation and pollution. The Italian Space Agency (ASI) supports the research and development of technologies aimed at the use of multi-mission EO data, in particular of the national COSMO-SkyMed Synthetic Aperture Radar and PRISMA hyperspectral missions, as well as Copernicus Sentinels, through the development of algorithms and processing methodologies in order to generate products and services for coastal risk management. In this context, ASI has promoted the development of the thematic platform costeLAB as a tool dedicated to monitoring, management and study of coastal areas (sea and land). This platform is being developed in the frame of the "Progetto Premiale Rischi Naturali Indotti dalle Attività Umana - COSTE", n. 2017-I-E.0, funded by the Italian Ministry of University and Research (MUR), coordinated by ASI and developed by e-GEOS and Planetek Italia with the participation of National Research Council of Italy (CNR), Meteorological Environmental Earth Observation (MEEO) and Geophysical Applications Processing (G.A.P.) s.r.l.. The aim of the project is to define, develop and run in a pre-operational context, an integrated system that exploits Earth Observation data to support the management of coastal areas environmental processes and risks. The platform is addressed to the institutional, scientific and industrial users and allows the study, experimenting and developing new downstream pre-operational services for the monitoring of the coastal area environment. This paper gives an overview of the costeLAB platform

with a focus on products and how they address specific user needs, in support to national policies and directives.