







Summer School

SENTINEL FOR WATER RESOURCES

Italian Remote Sensing Association -AIT, Italian National Research Council - CNR-IREA, joint to European EARSeL organized a Summer School on Earth System Monitoring to promote the exploitation of Earth Observation (EO) across disciplines, with a specific focus on Water Resources. The School has also included lectures covering an overview of the ESA Sentinel missions (official by ESA). Earth System Modelling, Data Assimilation, as well as hands-on data processing exercises, using SNAP tool.

Venue: CNR-IREA Stazione Sperimentale Eugenio Zilioli on Garda lake, Sirmione (Brescia), Italy *Date*: from September 18th to September 22nd, 2017.

Scientific Coordinator: Mario A. Gomarasca, CNR-IREA Researcher and AIT Scientific Board Secretariat: Italian Remote Sensing Association (AIT)

Topics: Copernicus, Sentinel 1, Sentinel 2 and Sentinel 3 missions with focus on water resources, water quality measurements and analysis and operational applications. Main topics included: emergency mapping (flood event and Harvey hurricane cases study), water quality and "in situ" works, ocean color radiometry, biogeochemical modeling, hydrological cycle and related parameters.

Participants: The school was open to Early Career Scientists, such as Ph.D. students, young post-doctoral scientists, specialized in Earth Science disciplines, wishing to expand and improve their knowledge and skills for water applications. Participation number was limited due to the operational needs: after a selection based on CVs and motivation letters, 15 students of 10 different countries have been selected.

Lecturers: Gomarasca Mario Angelo AIT - CNR IREA Milano, Boccardo Piero AIT Chairman, Politecnico, ITHACA, Torino, Giulio Tonolo Fabio AIT, ITHACA Torino, De Carolis Giacomo, Giardino Claudia, Bresciani Mariano, Cazzaniga Ilaria CNR IREA Milano, Italy

Programme: in addition to five days of lessons, exercises and specific SW use, a boat excursion in Southern of Lake Garda was organized to collect 'in situ' data through water samplers and radiometric measurements. This collection has been carried out on Thursday 21st, exploiting the simultaneous acquisition of Sentinel-2. A scientific visit to the Sun photometer station of the AERONET network - Catullo Grotte site (Verona) – was additionally organized.



Summer School Participants