

# **Special Session Call for Papers**

on

## **Access, quality, processing and applications of satellite imagery**

at the

### **International Conference on Personal Satellite Services 2010 (PSATS'10)**

[www.psats.eu](http://www.psats.eu)

#### **Special Session Co-Chairs**

**Dr. Giuseppe Conti (Fondazione Graphitech, Italy)**

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Remote sensing of the Earth surface based on satellite imagery is a few decades old traditional tool for the knowledge of our planet.

Nevertheless, the attention to satellite imagery paid by the technical and scientific community grew higher since 1999 when the first optical high resolution sensor (Ikonos-II) was launched and began to operate acquiring panchromatic imagery at 1 meter resolution level. In the last decade several other optical high (1 to 2.5 meter resolution) and very high (below 1 meter) resolution sensors were deployed, and now panchromatic imagery at 0.41 meter resolution are available for civil users (Geoeye-I). At the international level a number of initiatives make extensive use of satellite images, including GMES (Global Monitoring for Environment and Security), EIONET (European Environment Information and Observation Network), SEIS (Shared Environmental Information System), GEOSS (Global Earth Observation System of Systems).

Now this kind of imagery are quite well known to a broad non-expert community too, since they are widely used in virtual globe software (for example Google Earth, NASA WorldWind, Microsoft Virtual Earth).

Moreover, the capability of some sensors to acquire stereopair and triplet image opened the way to 3D modeling of the Earth surface. Finally, the recent deployment of RADAR sensors with high geometrical resolution capability (TerraSAR-X, Cosmo-SkyMed) opened new perspectives for already known processing techniques (radargrammetry). Overall, on the one hand, the continuously increasing geometrical resolution claimed for more and more refined quality assessment and processing algorithm, what largely contributed to bridge the gap between the traditional remote sensing and the photogrammetric processing techniques; on the other, it opened wide field of important applications for the mass market services.

It is evident that such a fast growth requires new approaches that can maximize the advantages of what otherwise could become a potential information overload.

This special session of the PSAT 2010 Conference will explore the relevant topics listed below, with a particular attention to the most recent available data and related access policies, processing techniques and derived products, considering their impacts both for scientific, technical and non-expert communities. The session welcomes also will also showcase best practices and case studies across a wide spectrum of application domain ranging from

emergency management and response, to land use/cover analysis and planning, environmental control, to name but a few.

In this respect, the session will aim to represent a meeting point for researchers from academia, industry and public organizations devoted to land management interested into present potentialities and future development of satellite imagery related techniques and applications.

➤ **Technical topics:**

1. Quality assessment of satellite imagery
2. Web-based access and processing of satellite imagery
3. Geometric and radiometric processing of satellite imagery
4. GRID computing and satellite image processing
5. Applications and best practices in the use of satellite imaging
6. Interpretation and processing of satellite imagery for emergency, land use planning etc.

For paper submissions, please visit <http://www.psats.eu/submission.shtml>

Submission Deadline: **30-Oct-2009**

Notification: 30-Nov-2009

Camera Ready: 15-Dec-2009