Photogrammetric and Topometric Systems (TEP-213)

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Banner of images related to the activities of the research group.

The activity of the “Photogrammetric and Topometric Systems” research group focuses on the different disciplines encompassed under the denomination of Geomatics Engineering, which ranges from data capture and their processing and analysis for obtaining useful information to generating topographic and cartographic products and all matters relative to their dissemination through map and cartography servers. This activity is approached from a double perspective. On one hand, the basic one of developing new equipment, methodologies and products and services and, on the other, through their application to different spheres such as, for example, Historical and Natural Heritage, Natural Risks and Industry, among others.

The “Photogrammetric and Topometric Systems” group is integrated into the network of the Copernicus Academy Program and so has access to tools and information of the different R&D projects this initiative offers (observation of the Earth, waters and atmosphere, tracking of emergencies, security and the processing of images of the Sentinel programs).

Research lines:

- Photogrammetry and Remote Sensing Automation of photogrammetric processes Integration of information from different sensors (image, LiDAR, thermal, multispectral) 3D modeling Information extraction
- Topometry Capture and processing of mass information by means of laser scanner systems and extraction of information of interest from 3D point clouds
- Application of UAVs for capturing cartographic information Generation of products Integration of sensors
- Use of low-cost systems in Photogrammetry
- Applications of Photogrammetry and Topometry to the Environment, Natural Risks and Resources, Heritage Documentation and Industry
- Geostatistics applications for processing spatiotemporal data: estimation and simulation

For more information please visit the following link.