



Special Issue

Latest developments, methodologies and applications based on UAV platforms

Guest Editors

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Information

Using small Unmanned Aerial Vehicles (UAV) as data acquisition platforms and autonomous or semi-autonomous measurement instruments has become attractive for many emerging applications. They represent a valid alternative or a complementary solution to traditional platforms especially for extremely high resolution acquisitions on small or inaccessible areas. Thanks to their timely, cheap and extremely rich data acquisition capacity with respect to other acquisition systems, UAVs are emerging as innovative and cost-effective devices to perform numerous urban and environmental tasks.

This Special Issue aims at collecting new developments and methodologies, best practices and applications of UAVs in Geomatics. We welcome submissions which provide the community with the most recent advancements on all aspects of UAV in Geomatics, including but not limited to:

- Data processing and Photogrammetry
- Navigation and position/orientation determination
- Data analysis (image classification, feature extraction, target detection, change detection, biophysical parameter estimation, etc.)
- Platforms and new sensors on board (multispectral, hyperspectral, thermal, lidar, SAR, gas or radioactivity sensors, etc.)
- Data fusion: integration of UAV imagery with satellite, aerial or terrestrial data, integration of heterogeneous data captured by UAVs
- On-line and real time processing / collaborative and fleet of UAVs applied to Geomatics
- On-board data storage and transmission
- UAV control, obstacle sense and avoidance
- Autonomous flight and exploration
- Applications (3D mapping, urban monitoring, precision farming, forestry, disaster prevention, assessment and monitoring, search and rescue, security, archaeology, industrial plant inspection, etc.)
- Any use of UAVs related to Geomatics

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This Special Issue will also feature selected papers from the **UAV-g 2017 conference**. Authors wishing to have their work considered for this issue, including those not able to present at the conference, should contact the guest editors.

