International Training Course on Building Efficiency of UAV Image Processing for ASEAN Countries

Type: Course  
Location: Sri Racha, Thailand  
Date: 21 Aug 2017 to 25 Aug 2017  
Duration of event: 5 Days  
Programme Area: Satellite Imagery and Analysis, Unmanned Aerial Vehicle  
Specific Target Audience: No  
Website: http://artsa.gistda.or.th/uav2017/  
Price: No Fee  
Event Focal Point Email: Khaled.MASHFIQ@unitar.org  
Event Focal Point Contact Number: +66970705376

BACKGROUND

An unmanned aerial vehicle (UAV), commonly known as a drone, is an aircraft without a human pilot on board. Compared to manned aircraft, UAVs are often preferred for missions too “dull, dirty or dangerous” for humans. They originated mostly in military applications, although their use is expanding in commercial, scientific, recreational, agricultural, and other applications, such as policing and surveillance, product deliveries, aerial photography, agriculture and drone racing. Civilian drones now vastly outnumber military drones, with estimates of over a million sold by 2015.

Recent developments in UAV platforms, sensors, and image processing techniques have resulted in an increasing uptake of this technology in the remote sensing science community. UAVs are repaid, efficient and flexible acquisition systems. They represent a valid alternative or a complementary solution to satellite or airborne sensor especially for extremely high resolution acquisitions on small or inaccessible areas.

EVENT OBJECTIVES

This course will increase and improve personnel capability in the ASEAN countries to apply benefits of UAV technology for country development and also respond the urgent situations such as disaster. Now UAV is emerging as a key tool for future applications.

LEARNING OBJECTIVES

To provide principles knowledge and concepts of UAV image processing
To provide hardware and software integration and image processing techniques, to obtain a broad view of UAV applications for mapping, inventory of natural resources, disaster, and to perform networking with other participants from ASEAN.

**CONTENT AND STRUCTURE**

This course will introduce the main principle of UAV, flight control, data capture, image processing and data interpretation through a set of practical case studies. The course will strengthen current knowledge of UAV for remote sensing science and also address applications of UAV technology.

**METHODOLOGY**

The course is designed in a way to have a balanced approach between theoretical and practical teaching methods consisting in Power Point presentations, live demos, videos, interactive sessions and UAV lab and field exercises to enable participants to gain maximum knowledge on the subject as well as different applications.

**TARGETED AUDIENCE**

This training course is open to young scientists and professionals who are working in a variety of image processing and who wish to expand, improve and adaptation their knowledge and skills in UAV technology. Participation is limited to a maximum of 20 participants.

Conditions: Early and mid-career scientists, and policy makers from ASEAN countries with background of geoinformatics. Satellite-based information or UAV applications are advantage and skills of fluent English communication are required.