# IAA Study Group Status Report

**Responsible Commission:** COMMISSION 4

#### **Study Number and Title:**

SG 4.20 International Cooperation on Remote Sensing in Earthquake Emergency Response

#### Short Study Description (repeat from Study Group Proposal):

In recent years, earthquake emergency response experiences, such as Wenchuan and Haiti earthquakes, indicate that it is necessary to bring together different satellite resources, including remote sensing satellite, communication satellite and navigation satellite, to support the earthquake emergency rescue. It also highlights the importance of international cooperation on satellite resources, which can helps us to assign the distribution of earthquake emergency rescue resource, and to reduce the loss of life and property of the affected areas. An effective coordination policy will be established, which enables better coordinated remote sensing, communication and navigation satellite systems among different countries, so that technical capabilities will be better utilized and experts all over the world can be efficiently gathered after a devastating earthquake. The advantages will complement each other and provide emergency support for future strong earthquakes.

#### **Overall Goal:**

To coordinate the international remote sensing to make full use of international advanced technologies and experience, to provide a platform for international experts to contribute their wisdom in earthquakes, to form a collaborative satellite rapid response mechanism for earthquake emergency response.

#### **Progress in past six months:**

#### (1) APSCO data sharing platform training

In order to strengthen the international cooperation of space technology and applications in the country of The Belt and Road, to assist the relevant countries to carry out the application of satellite remote sensing data, to publicize the research achievements of satellite remote sensing in China, to popularizing domestic remote sensing data platform and software. The Asia Pacific Space Cooperation Organization (Asia-Pacific Space Cooperation Organization, APSCO) plans to arrange 7 training lectures in 2017. Train data sharing platform for Bangladesh, Iran, Mongolia, Pakistan, Peru, Thailand, Turkey and other member countries. Gong Lixia and Jiang Hongbo will give lectures on two aspects of "earthquake" and "landslide".





Turkey

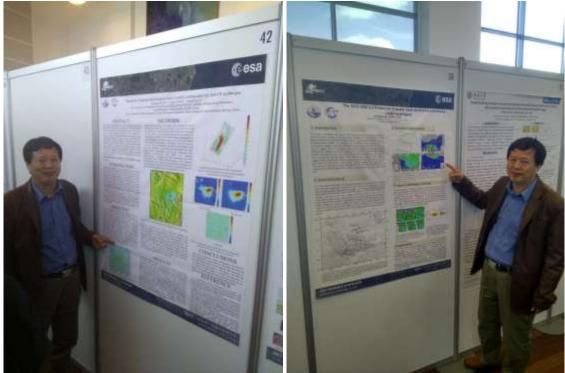


Mongolia

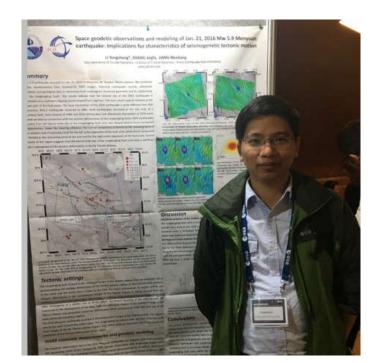
Thailand

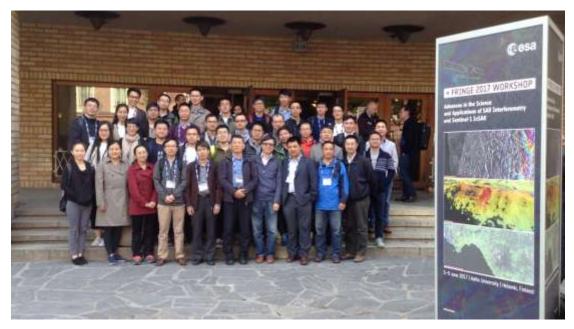
## (2) International Conference

Zhang Jingfa, the member of the research group, participated in the International Conference of the mid-term report of "dragon IV" and showed the team's latest research achievements.



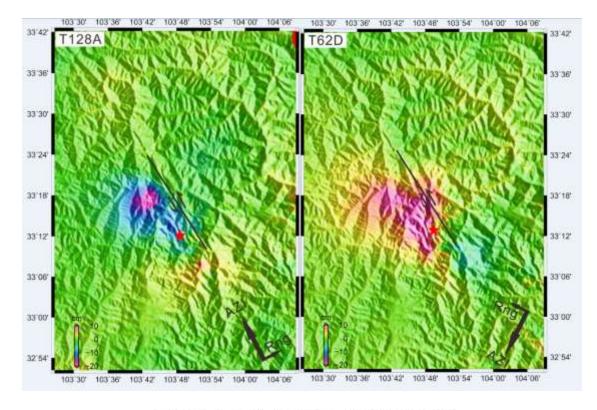
Li Yongsheng took part in the "Fringe2017 Workshop" (Advances in the Science and Application of SAR Interferometry and Sentinel-1 InSAR) and showed the posters with the title of "Space geodetic observations and modelling of Jan. 21, 2016 Mw 5.9 Menyuan earthquake: Implications for characteristics of seismogenetic tectonic motion"



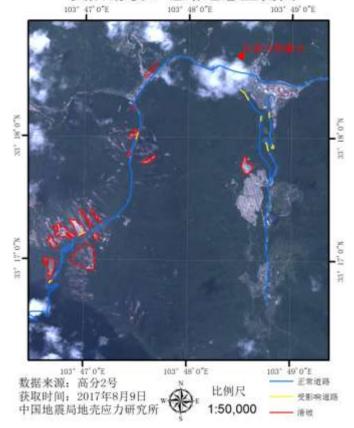


## (3) Earthquake emergency

After 8 August 2016 Jiuzhaigou earthquake, the remote sensing earthquake emergency w ork was carried out by using SAR and optical remote sensing image data obtained at Chin a and abroad. We had produced seismic coseismic deformation field product and optical i mage seismic emergency special product.



四川省九寨沟县达基寺塔藏乡及周边 灾后滑坡、道路遥感监测图



四川省九寨沟县地震震区省道301路段道路损毁震前震后遥感影像对比图



数据来调+高分2号 获取时间,2017年8月9日

比例尺: 1:10,000



中国地震局地壳应力研究所制

2017年8月8日四川九寨沟7,0级地震五花海、雏菊海、箭竹海地区 震后滑坡、道路遥感监测 可进行道路 捕毁道路 滑城体 12,506 ORDERAL PROPERTY AND REALIZY, SITURD 21

**Website Study Information update:** (please give any update regarding Study Group Membership, documents, Study Plan and Schedule):

Study Group Membership.

**Issues requiring resolution?** (recommend approach): None

**Product Deliveries on Schedule?** (If modified explain rationale): Yes.

**Study Team Member Changes?** (List any Study Team Members that you wish to discontinue, and provide names plus contact coordinates of any Members you wish to add on the second page of this Study Update form.) Note: Complete contact information including email, tel. and fax must be provided for all additions. Only Members with complete contact information will be listed and receive formal appointment letters from the IAA Secretariat.)

None.

## Name of person providing Study Group Status (Study Group Chair or Co-Chair):

Professor Jingfa ZHANG, Study Group Secretary

## **Status Report Date:**

Sep, 2017