

IAA Study Group Status Report

Responsible Commission: COMMISSION 4

Study Number: SG 4.20

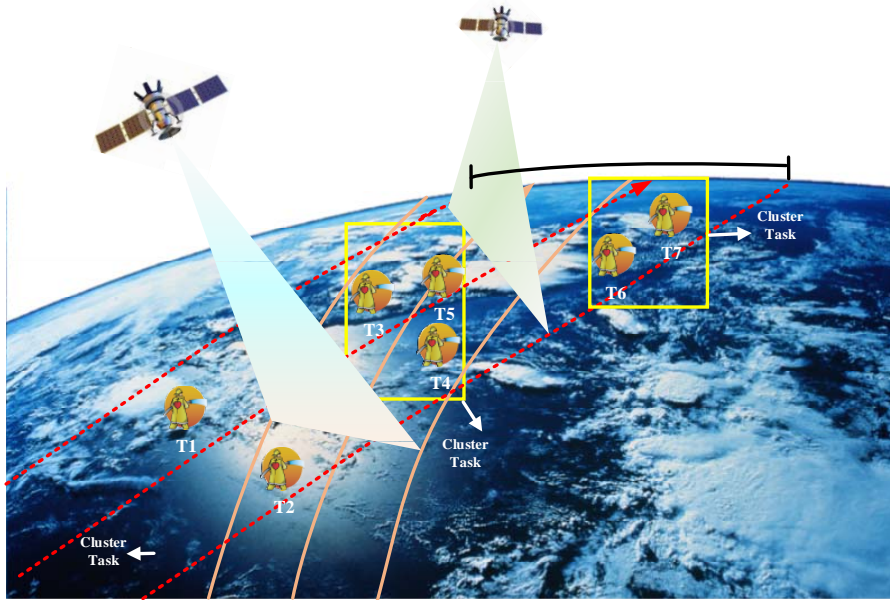
Study Title: International Cooperation on Remote
Sensing in Earthquake Emergency Response

October, 2015

Guidelines

- Background
- Introduction
- Difference from Charter
- Progress

Background

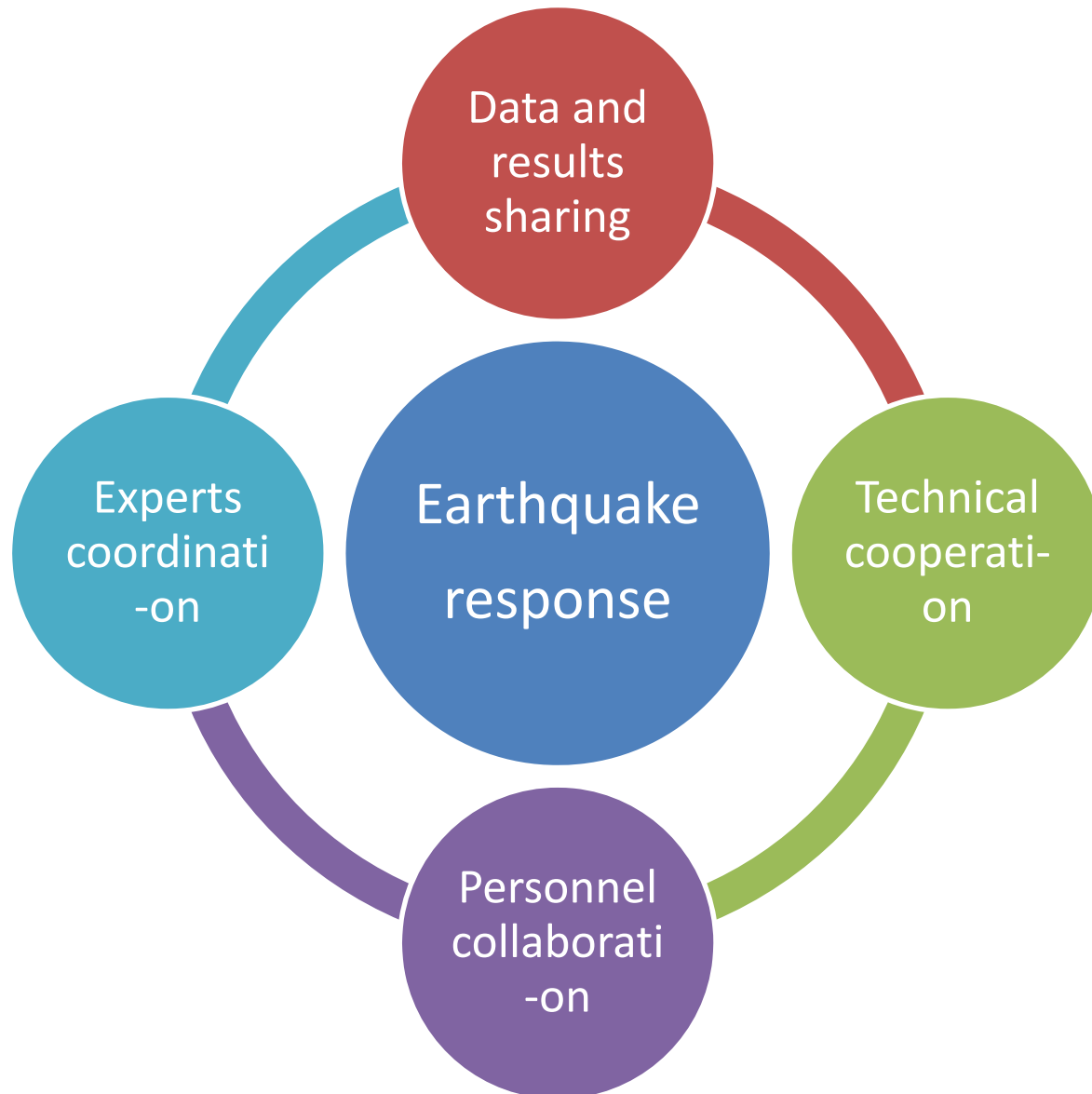


Remote Sensing is significant in Earthquake Emergency:

- **Where**
- **Extent**
- **Response**



Background



Besides the RS data sharing, it is same important that experts all over the world can be efficiently gathered after a devastating earthquake.

Forming an IAA Study Group on April 2015:

International Cooperation on Remote Sensing in Earthquake Emergency Response, which can enables better coordinated in:

- **Experts**
- **RS images**
- **Technology**
- **Experience**

Introduction

- **Short Study Description**

An effective coordination policy will be proposed, in which 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.

Introduction

- **Overall Goal**

Propose solutions to :

- form an international collaborative mechanism;
- and to exchange remote sensing products of seismic disaster

for earthquake emergency response

Introduction

- **Intermediate Goals**

1. Innovation of RS in theory and technology;
2. Enhance international communication both young experts and professional team;
3. Enhance international exchange of remote sensing products and expertise.

Introduction

- **Members**

Chair(s): Bao Weimin (China), **Co-Chair(s):** Jean-Michel Contant (France) ,
Jan-Peter Muller (UK)

Other Members

Australia: Ge Linlin

China: Gu Xingfa, Zhang Jingfa, Shen Xuhui, Wang Xiaoqing, Shan Xinjian,
Zhu Jianjun, Liao Jingjuan, Xu Jing, Wang Zhigang

HongKong: Lin Hui

Italy: Paolo Ganba

UK: Jan-Peter Muller, Li Zhenhong

USA: Lu Zhong

Introduction

Timeline: Move up the final report time line from April 2018 to April 2017.

CONTENT	DEADLINE
Draft outline of report	December 2015
Review outline and make assignments	May 2016
First draft of report	December 2016
Final report	April 2017

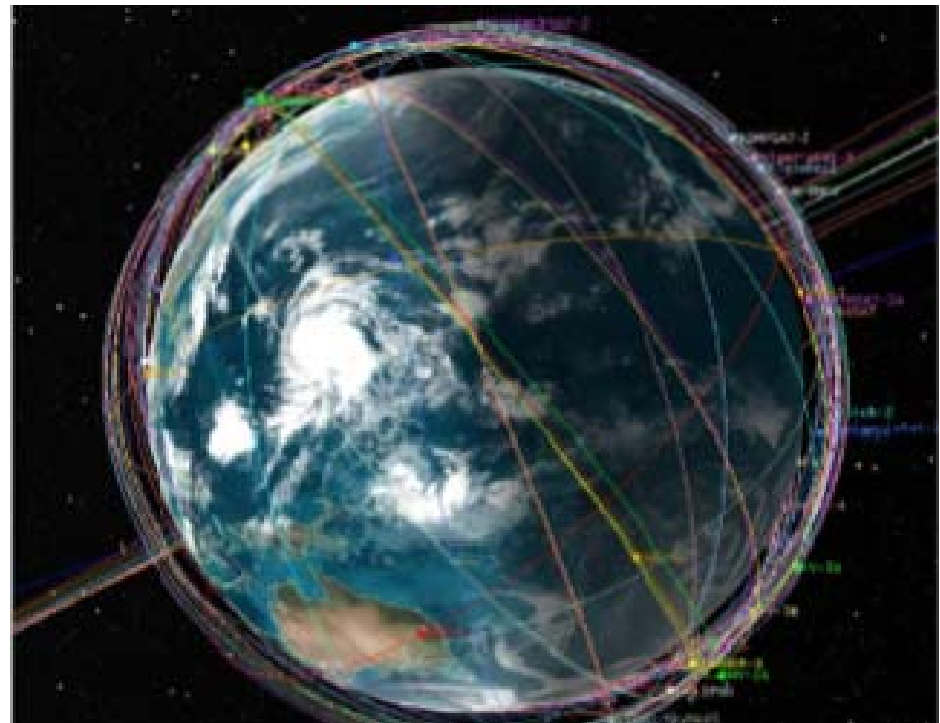
Difference from Charter

There are hundreds of man-made satellites in the space.

Application	amount	Percent
Meteorology	53	5%
Earth Observation	53	5%
Remote Sensing	53	5%
Reconnaissance	21	2%
Spy	48	5%
Space science	41	4%
Communication	585	58%
Navigation	90	9%
others	72	7%
Total	1016	

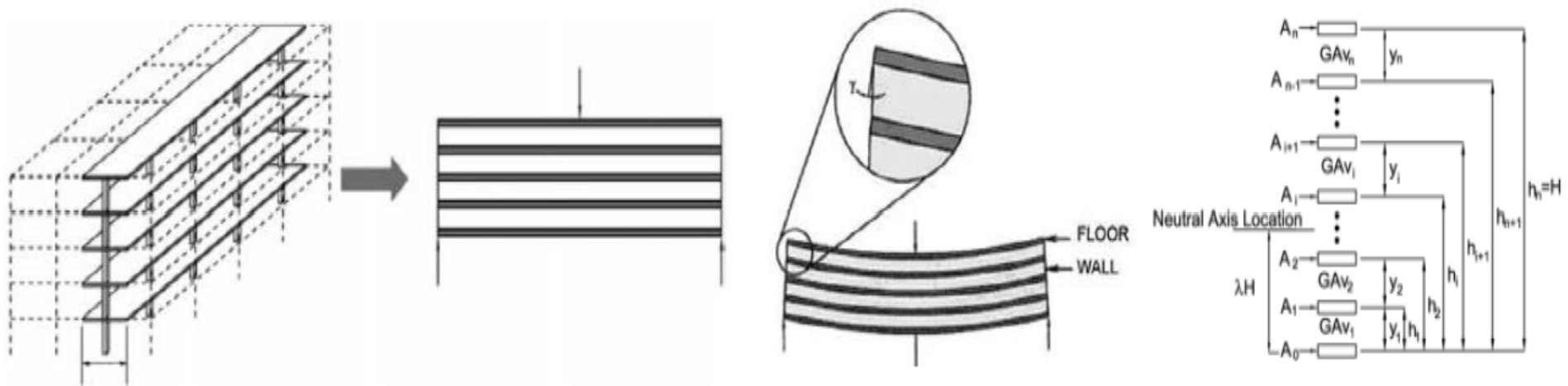
International Charter Space and Major Disaster:

- Intergovernmental
- Focus on data sharing
- Time consuming



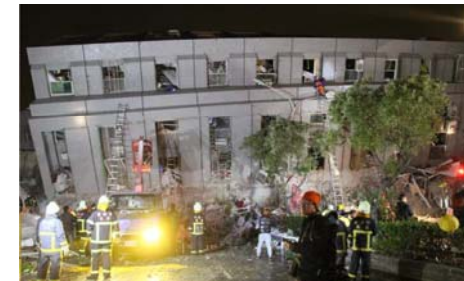
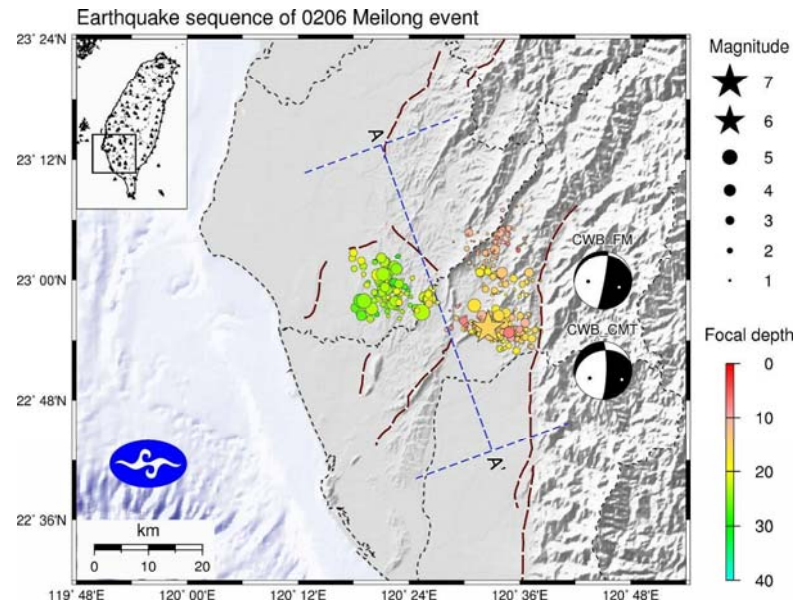
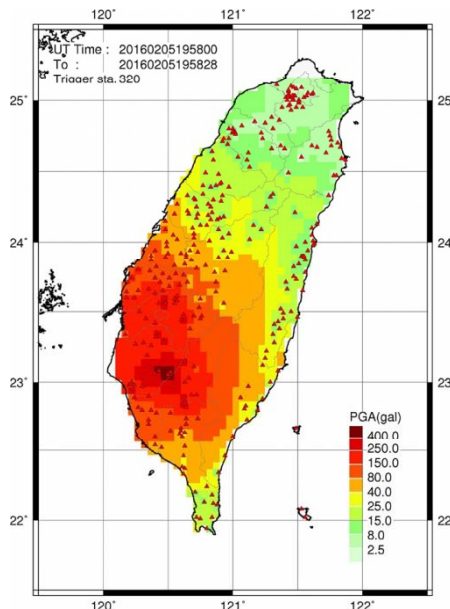
Progress in the past six mouths

- 1. Discussed with experts of IUSS (Istituto Universitario di Studi Superiori of Pavia, Italy) about seismic risk assessment of buildings for earthquake emergency response.



Progress in the past six months

- 2. Discussed with experts of Taiwan University about the Gaoxiong earthquake occurred on Feb. 6th., 2016, including remote sensing application earthquake rescue, technical and personnel cooperation.



Progress in the past six mouths

- 3. Summarized the application of remote sensing in all aspects of earthquake emergency response, including pre-seismic remote sensing background images, road map of earthquake zone, damage assessment and so on.
- 4. Held a panel meeting about the new technique of remote sensing and its application on earthquake emergency response.

Progress in the past six mouths

- 5. The outline of the final report about the team work has been initially completed.
 - The necessity of international cooperation on remote sensing for earthquake emergency response
 - The overall framework of international cooperation
 - Technical coordination
 - Personnel collaboration
 - Sharing achievements
 - Discussion and conclusion

**Thank you for you attention
and welcome to join us!!!**