



# Educational Training Program of RCSSTEAP in 2016

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Executive Director of UN Regional Centre (RCSSTEAP) China

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**1** **Background**

**2** **Major Work in 2015**

**3** **Programs in 2016**

**4** **Way Forward**

# 2<sup>nd</sup> Governing Boarding Meeting



Held on November 27<sup>th</sup> ,2015 in Beijing

# Status of RCSSTEAP in 2015



联合国附属空间科技教育亚太区域中心

Regional Centre for Space Science and Technology Education in Asia and the Pacific(China)  
(Affiliated to the United Nations)



Algeria



Argentina



Bangladesh



Bolivia



Brazil



China



Indonesia



Pakistan



Peru



Venezuela

Ten Contracting Parties

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# RCSSTEAP Main Work in 2015

Jan.

- Signed cooperation agreement with Shenzhou Institute of China Academy of Space Technology

Apr.

- Training program on Satellite Navigation Technologies was held

Jun.

- "Painting Exhibition on China's Space Exploration in Vienna International Center

Jul.

- 25 postgraduates graduated and granted the Master's Degree on space technology applications

Aug.

- Recruited 42 postgraduates on space technology applications

Sept.

- Training programs on "Earth observation technologies for earthquake damage and loss assessment" and "Space law and policy" were held at Beihang University

Oct.

- "RCSSTEAP No.1" Micro-Satellite Project Initiative was officially launched

# International Experts in 2015



**Kclause Schilling**  
Professor  
German



**Niklas Hedeman**  
Doctor  
UNOOSA



**Armel Kerrest**  
Professor  
France



**Stephan Hobe**  
Professor  
Germany



**Renato Filjar**  
Professor  
Croatia



**Macabiau Christophe**  
Doctor  
France



**Zhao yun**  
Professor  
Hong kong



**Joanne abrynowicz**  
Professor  
U.S.A



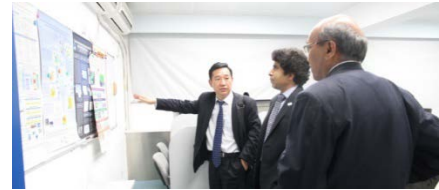
**Andrea arringdon**  
Doctor  
Canada



**Ling Keck Voon**  
Professor  
Singapore

# Guests from CSSTEAP in India Visit RCSSTEAP

September 15<sup>th</sup> ,2015



Regional Centre for Space Science and Technology Education in Asia and the Pacific (China)  
(Affiliated to the United Nations)



# Chinese Delegation Visit IIRS/CSSTEAP in India

January 4<sup>th</sup>-5<sup>th</sup>, 2016



联合国附属空间科学与技术教育亚太区域中心 (中国)  
Regional Centre for Space Science and Technology Education in Asia and the Pacific (China)  
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# 3.1 Degree Programs

## Postgraduate Degree Education Programs

- Global Navigation Satellite System (GNSS) -2016
- Remote Sensing and GIS (RS &GIS) -2016
- Space Law and Policy -2016

# 3.1 Degree Programs

## Training Procedures of **Master's program**

Phase I Course Study in China: 9 months (at Beihang University) (Leading to Course completion Certificate of Beihang University)				
Module I		Module II		Module III
Common Platform Courses		<ul style="list-style-type: none"><li>● Major courses</li><li>● Academic Lectures</li><li>● Professional visits</li></ul>		<ul style="list-style-type: none"><li>● Pilot Project</li></ul>
Phase II Thesis Research: 6-12 months (in China or home country) (Leading to Master's Degree in Engineering )				
Thesis Survey and Thesis Proposal	Midterm Assessment	Academic Activities	Thesis Research	Thesis Defense

The program will begin in September 2016.

# 3.1 Degree Programs

## Global Navigation Satellite System (GNSS)

Core Courses	Class Hrs.
GNSS Reference System	18
Principle of Global Navigation Satellite Systems	32
GNSS Navigation Signal	18
GNSS Receiver Principles and Design	32
GNSS/INS Integration Navigation	32
Global Satellite Navigation System Applications	18
Satellite Navigation Data Processing	32
GNSS Experiment	18
GNSS New Technologies	18

System level

User level

Applications level

Operational level

- Duration:  
9months + 1 year

09/2016 — 06/2018

# 3.1 Degree Programs

## Capacity Building in GNSS



BeiDou Satellite Navigation System  
Exhibition Hall ( Located at Beihang  
Aerospace Museum)



GNSS Smart Classroom



北斗 /GNSS simulator  
for test and evaluation

Experiment equipment

# 3.1 Degree Programs

## Remote Sensing and GIS (RS &GIS)

Core Courses	Class Hrs.
Remote Sensing Image Visual Interpretation	16
Geographic Information System: Theory and Application	48
Physical Principles of Remote Sensing	32
Introduction to Photogrammetry	18
Remote Sensing Image Processing and Software Application	48
Remote Sensing Test and validation Workshop	16
Case Studies in the Applications of RS & GIS	18
Geographic Information System: Design and Practice	32
Natural Disaster Remote Sensing	18

Duration:

9 months + 1 year

09/2016 — 06/2018

# 3.1 Degree Programs

## Capacity Building in RS&GIS



Ground Station for Remote Sensing  
Satellite Data Receiving



Remote Sensing & Geographic  
Information System Lab



Distance Education &  
Video Conference Lab



# 3.1 Degree Programs

- **Space Law and Policy -2016**

Core Courses	Class Hrs.
Basic concepts of international law and space law	32
National Space Policy	16
National Space Legislation	32
Legal Issues related to RS&GIS	16
Legal Issues related to Satellite Communication	16
Legal Issues related to GNSS	16
Space commercialization and the development of Space Law	16
Policy and Legal Issues on Peaceful Use of Outer Space	4
Soft Law and new trend of Space Law	4
UNPSA and related legal Issues	4
Hot Topics on Space Technology Applications	4

Duration:

9 + 6 months

09/2016 — 12/2017

# 3.1 Degree Programs

## Space Law and Policy

### Faculty and Academic Staff

- The experts will come from the related University and research institution, and the most famous space law research institution, including McGill University Institute of Air and Space Law, Cologne University Institute of Air and Space Law, Leiden University International Institute of Air and Space Law, etc.

# 3.1 Degree Programs

- **Scholarships**

We will offer 3 Chinese Government Scholarship quotas of our Post-graduate programs for UNCOPUS member states.

Please visit <http://www.rcssteap.org> for more details

and contact with us at

Ms. Guo Yuanyuan

Email: [gyy@buaa.edu.cn](mailto:gyy@buaa.edu.cn)

Tel: +86(10)82339734

## 3.2 Short Training Programs

Will focus on the following topics:

- Beidou/GNSS technology and applications
- RS-GIS application on disaster management
- Small Satellite Technology

Jointly organize with our partners APSCO, UNSPIDER Beijing Office, BeiDou Office, NDRCC, CAST, SAST, etc.

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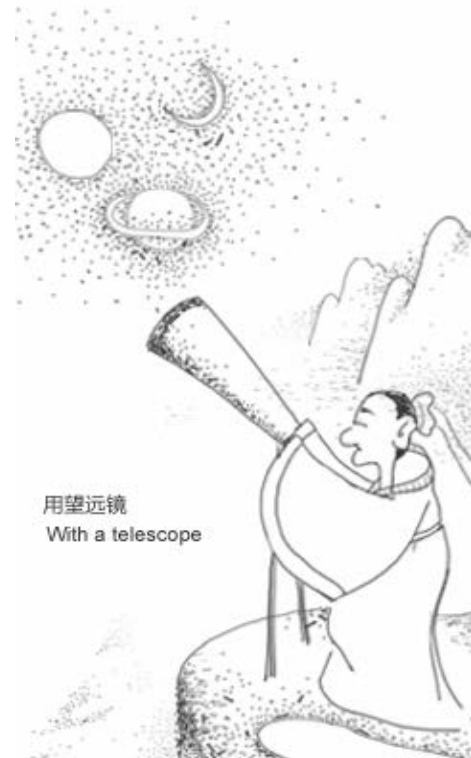
**4** Way Forward

# Way Forward

- To prompt students/faculty exchange and teaching resource sharing among the UN Regional Centres
- To deepen cooperation and development in education and research among our member countries to facilitate the “RCSSTEAP No.1 Small Satellite Project”
- To Build an online education environment for Space application education

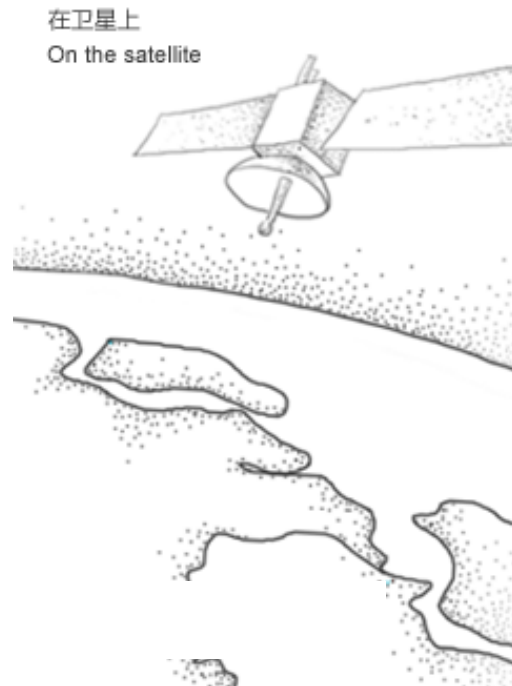
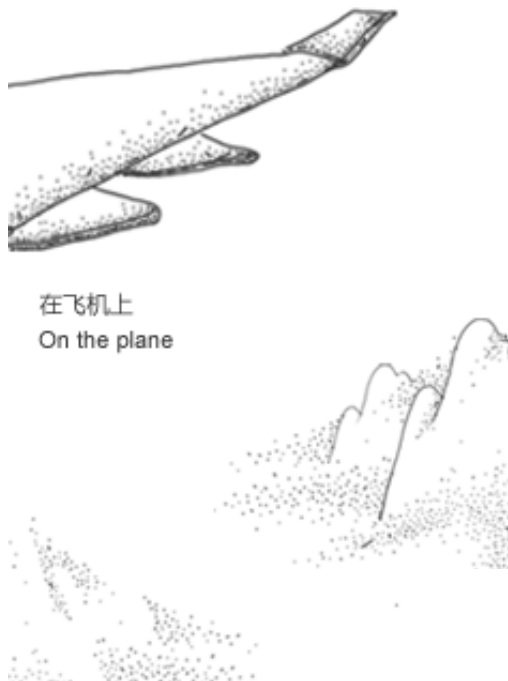
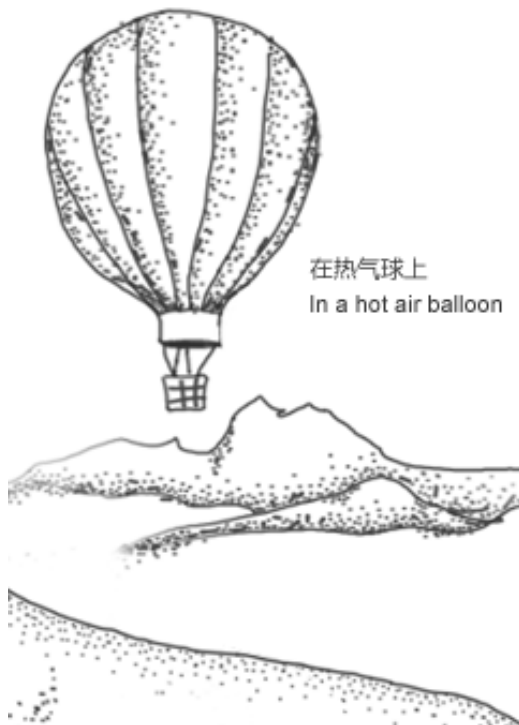
In ancient, people explore the earth by standing on the land

古人坐地观天



Nowadays, we can explore the earth from the Sky

## 我们登天察地







Flying with the wings of art

“飞翼”地球仪——艺术家的地球仪

58th COPUOS, China Delegation  
第58届联合国空间委员会中国代表团

# Thank you for your attention

联合国附属空间科学与技术教育亚太区域中心（中国）  
Regional Centre for Space Science and Technology Education in Asia and the Pacific(China)  
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