





China's Engagement in GEO & **GEOSS**

Dr. Li Jiahong, GEO China Secretariat









China's Engagement in GEO & GEOSS







- Chinese government has endorsed and released "The Belt and Road Strategic Plan", as the action plan following "the Belt and Road Initiative" last April.
- This Plan emphasizes the ecological environment, biodiversity and climate change cooperation in this region.
- It is necessary to promote the construction of sustainable development of the Belt and Road jointly with the Earth observation.







- Chinese government also endorsed "The Belt and Road"
 Spatial Information Corridor Construction and Application
 Plan in the Earth Observation field.
- This Plan strengthens the developments of the Earth Observation satellites and their applications, and the international cooperation for promoting sustainable development in this region.







- Released the Global Ecosystem and Environment Earth
 Observation: Annual Report from China (GEOARC) in 2016,
 focusing on sustainable development, to provide spatial
 information on ecological environment changes from 2005 to 2015.
- These remote sensing products can be downloaded on National Integrated Earth Observation Data Sharing Platform: http://www.Chinageoss.org.
- GEOARC will continue focusing on this special topic this year.















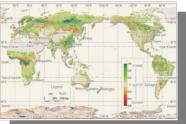


1.1 China proposed "the Silk Road Economic Belt and the twenty-first Century Maritime Silk Road Cooperation Initiative" in 2013.

Global Ecosystem and Environment Observation: Annual Report from China (GEOARC)

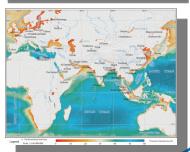
- An example of China's efforts on turning Earth observation data into knowledge
- Twelve reports have been released with focused themes since 2013
- Data Sharing: http://www.chinageoss.org/geoarc
- Total downloads of datasets > 10TB
- Total downloaded over 10,000 times

















1.2 China actively responds to Global Climate Change, and has taken the lead in signing the Paris Climate Agreement at the G20 Summit in Hangzhou 2016

- Chinese government successfully launched the Global Atmospheric Carbon Dioxide Monitoring Scientific Experiment Satellites (TANSAT) on December 22nd last year.
- Promoting TANSAT data sharing services for GEO & GEOSS
- Under the framework of GEO and GEOSS, China GEO will strengthen the cooperation to set a virtual satellite constellation for the joint observation.

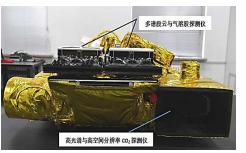


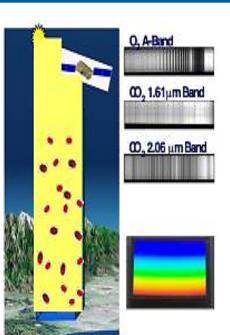




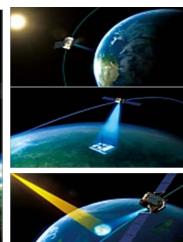
1.2 China actively responds to Global Climate Change, has taken the lead in signing the Paris Climate Agreement at the G20 Summit in Hangzhou 2016











TanSat (Launched on 22 Dec., 2016)





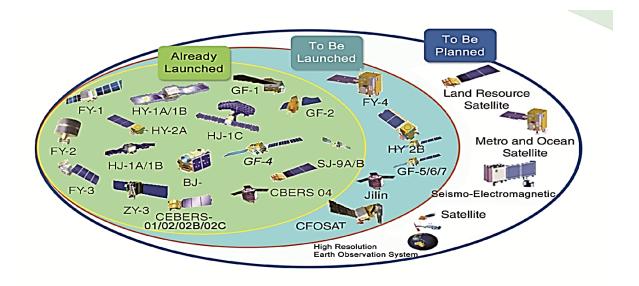


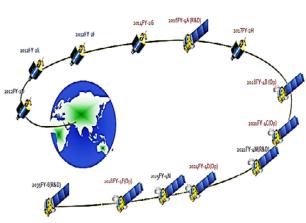
- Developments of land, ocean and meteorological satellite series.
- The construction of remote sensing satellite systems are composed of 7 constellations and 3 kinds of special satellites.
- It is expected to enhance the global remote sensing data receiving and global service capabilities.
- The plan will actively support GEO to promote the international cooperation and data sharing and services.

















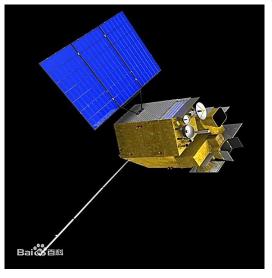
- the Chinese government has successfully launched FENGYUN
 4A meteorological satellite on 11 December last year.
- FY 4 satellite is equipped by:
 - multi-channel scanning imagery radiometer
 - atmospheric sounding interferometer
 - lightning imaging sensor
 - space environment monitoring instrument

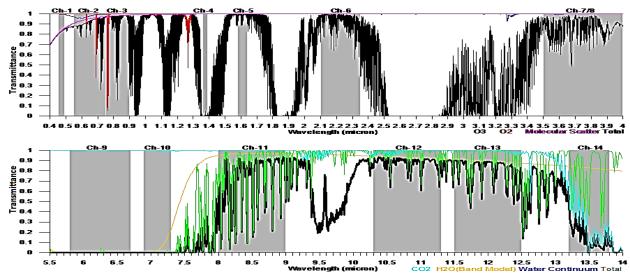


















1.3 Chinese government has endorsed and released National Civil Space Infrastructure for Medium and Longterm Development Plan (2015-2025) in 2015.

China has established a China Remote Sensing Satellite North
 Polar Ground Station in Sweden, which will greatly enhance the
 data receiving capabilities of Chinese satellites.











2. Engagement in GEO and GEOSS

2.1 As the leading ministry of the Coordination Group and GEO's Ambassador in China, MOST has brought the other 18 ministries, involved in GEO and GEOSS actively.

- Especially in last year, the Coordination Group has selected four co-leading ministries, to enhance China GEO to engage in GEO and GEOSS effectively.
 - China Meteorological Administration
 - National Administration of Surveying, Mapping and Geoinformation
 - Chinese Academy of Sciences
 - China National Space Administration







2. Engagement in GEO and GEOSS

2.2 As GEO Co-chair Country and the Ambassador in AO Region, China has implemented AOGEOSS Initiative, more countries will be involved GEO and GEOSS actively.

- To enhance cooperation with Japan, Australia, South Korea, India, Mongolia and other countries, as well as some international organizations, especially UNESCAP
- Jointly promote the implementation of AO GEOSS Initiative
- More deeply and effectively involved in GEO and GEOSS implementing plan(2016-2025).

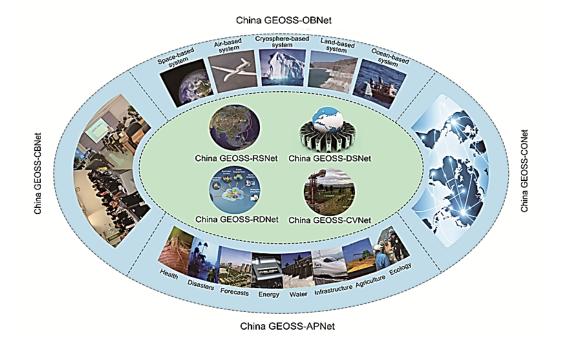


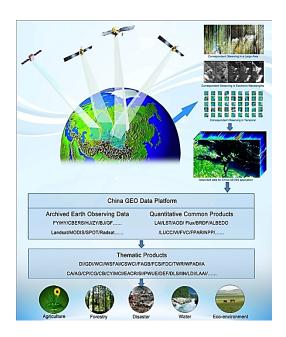




2. Engagement in GEO and GEOSS

2.3 China GEO has initiated China GEOSS Implementing Plan (2016 -2025) to guide the Chinese government to be involved in GEO and GEOSS in last year.











3.1 Asia-Oceania GEOSS (AO GEOSS) Initiative. The aim is to establish the comprehensive earth observation application systems in Asia-Oceania region.

Co-leads:

- China
- Australia
- Japan



Participants:

- Bangladesh
- India
- Korea
- Laos
- Mongolia
- Myanmar
- Nepal
- Pakistan

- UNEP-IEMP
- UNESCO-HIST
- WMO
- UNESCAP
- CEOS
- ICSU/Future Earth
- ICSU/IRDR
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3.1 Asia-Oceania GEOSS (AO GEOSS) Initiative. The aim is to establish the comprehensive earth observation application systems in Asia-Oceania region.

- This Initiative is co-led by China, Japan and Australia, with other 8 countries and 12 international organizations involved in.
- In this symposium we will discuss on the coordination mechanism and the road map of AO GEOSS together.
- China GEO will release one of the annual report through GEOARC, focusing on the ecological environment in this region by using remote sensing satellite.







3.2 Global Agricultural Monitoring (GEOGLAM) Flagship will contribute to generate reliable, accurate, timely and sustained crop monitoring information and yield forecasts.

- As one of the co-leading countries of GEOGLAM, China GEO will enhance the cooperation with United States, Europe Union and other countries, as well as some POs, especially FAO.
- As one of the three major global crop monitoring system in this flagship, **Chinese CropWatch** produces relevant, timely and accurate forecasts of global agricultural production.

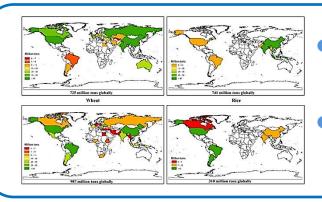




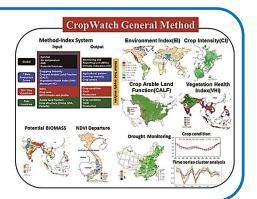


3.2 Global Agricultural Monitoring (GEOGLAM) Flagship will contribute to generate reliable, accurate, timely and sustained crop monitoring information and yield forecasts.

 China GEO has released one of the annual reports through GEOARC each year, focusing on global agricultural monitoring and yield forecasts by using CropWatch since 2014.



- CropWatch: one of the three major global crop monitoring systems
- Producing relevant, timely and accurate forecasts of agricultural production



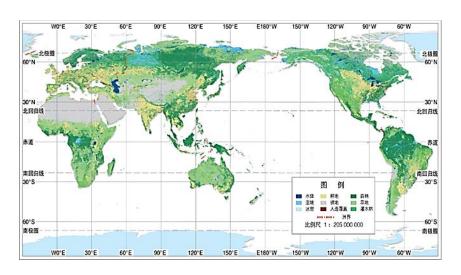


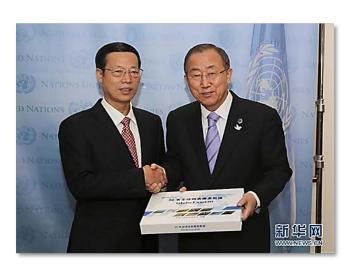




3.3 Land Cover and Land Cover Change Community Activity: accurate and up-to-date land cover and land cover change products are more important than ever.

China GEO will to update the Globe Land 30 from 2010 to 2015.











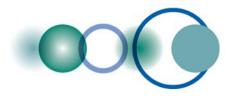
3.4 GEO Cold Regions Initiative (GEOCRI). The vision is to provide coordinated Earth observations and information services to facilitate well-informed decisions.

China GEO will promote the implementation of GEOCRI actively.









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Thank you!

