

Institute of Remote Sensing and Digital Earth Chinese Academy of Sciences

RADI: A New Platform for Remote Sensing and Digital Earth Study

——IRDR Host updates at the 13th IRDR SC meeting

November 13-15, 2014



RADI General Information: History



1979 Institute of Remote Sensing Applications (IRSA), CAS
2007 Center for Earth Observation and Digital Earth (CEODE), CAS
2012 Institute of Remote Sensing and Digital Earth (RADI), CAS



Strategic Planning



Exploring leading technologies in Earth observation, geospatial information science, and the mechanisms for acquiring and distributing remote sensing information; Constructing and operating major Earth observation infrastructures and the spaceborne-airborne-ground Earth observation technology system; Enhancing RADI's capacity for providing resourceenvironmental spatial information at the regional and global levels by creating a Digital Earth science platform.

Make innovative contributions to meet the national strategic needs and to promote the development of disciplinary, thus building RADI into a comprehensive, world-class research institute.

Organizational Structure



Center



Human Resources



At present, RADI has a total staff of some 700 with an average age of 37.1, including 104 research professors and 191 associate professor researchers. Among them, 43.98% are doctoral graduates.

Talent Program	Number	Since 2011
CAS Member	4	1
Thousand Talents Program	2	1
National Science Foundation for Distinguished Young Scholars	1	1
NSFC Young Scientists Fund	2	2
Hundred, Thousand and Ten Thousand Talent Project (state-level)	2	0
Hundred Talents Program	17	9
CAS "Key Technical Talent Program"	5	4
CAS Visiting Professorship Program	10	7
Overseas Innovation Team	1	1
Domestic innovative partnership group for interdisciplinary research	1	1

www.radi.cas.cn

CAS-TWAS Centre of Excellence on Space Technology for Disaster Mitigation(SDIM)



Established in 2013, CAS-TWAS CoE SDIM aims to enhance scientific and research capacities for **disaster mitigation** in **developing countries** through the use of the most advanced **space technologies.** The centre is **hosted at RADI, CAS.**



Updates: CropWatch System CropWatch

Monitoring the food security using remote sensing



Aaize	Rice	Soybean
States	China	United States
	India	Brazil
	Indonesia	Argentina
tina	Bangladesh	China
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		CropWatch bulletin
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http://www.cropwatch.com.cn

Updates: SatSee Technology



Earth observation is a powerful technology for disaster mitigation



Earth Observation Missions (1962-2012)



Very few developing countries launched satellites

For disaster quick response and management, developing countries are seeking to increase their level of Earth observation data sharing.

High cost of the construction of

a new satellite ground station



Updates: SatSee Technology



Low-cost "virtual ground station" for disaster mitigation

2Mbits internet connection

two computers and a large monitor or TV screen

Distributing real time quick-look imagery of high resolution satellite

Help developing countries with no Satellite



RADI's three stations receive data from satellites **covering 70% of Asia**.

SatSee System



Installed in Kirghizstan and Cambodia Preparing for Mongolia

Updates: Monitoring of the Australian Bushfire in 2013



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In a letter to CAS President Bai Chunli, Australian Ambassador in Beijing expresses his gratitude, on behalf of the Australian Government and the Australian community, for the assistance CAS provided during the bushfire emergency in the State of New South Wales.

He speaks highly of the courtesy, professionalism and expertise demonstrated by RADI people.





www.radi.cas.cn

Activities and Conferences

Searching for missing MH370 during March to April 2014;





- Emergency response to MS 6.5 Ludian earthquake(Yunan, China, 3 Aug. 2014);
- Emergency response to MS 6.6 Jing-gu earthquake(Yunan, China, 7 Oct. 2014);





House damage in Ludian Earthquake in Yunnan Province (2014.8.3)





Sino-Nepal Joint Research Center for Geography Officially Opens



The Geography Center was supported by Ministry of Science and Technology of China and joint built by IMHE and TU. Based on global climate change, the GeographyCenter takes the south and north slope of the Himalayas as research areas, emphatically carry out the geography research of mountain hazards, mountain ecology and environment monitoring and mountain development.



Opening Ceremony of Sino-Nepal Joint Research Center for Geography on April 28, 2014(by Tribhuvan University)



Opening Ceremony of Sino-Nepal Joint Research Center for Geography on September 18, 2014(by IMHE)

Updates: "Big Earth Observation Data for Climate Change Research" gets UN award

- The RADI-led project "Big Earth Observation Data for Climate Change Research" was selected among the "Projects to Watch" in 2014

 – these are projects with particularly innovative uses of big data in emerging topics and geographic regions.
- Among the seven "Projects to Watch" in this competition, the RADI project was the only one from China.

UNITED NATIONS BIG DATA CLIMATE CLIMATE CHALLENGE SUMMIT 2014 WINNERS

Updates: International symposium and training workshops

- October 13-19, 2014: Asia-Pacific Remote Sensing Symposium 2014 Opens in Beijing
- 2nd International Symposium on Earth Observation for Arid and Semi-arid Environments (ISEO2014) and Roundtable of Silk Road Economic Belt Convene in Kyrgyzstan in September, 2014
- 3 training workshops were hosted by RADI, including one specially on disaster research.





CAS Reform



www.radi.cas.cn

The Chinese Academy of Sciences (CAS) is making unprecedented structural reforms to foster collaboration and turbocharge research. The reform will focus on four categories as below:

a)The first category is Centres of excellence on basic science;

b)A second category will target areas with underdeveloped commercial potential, including microsatellites, marine information technology and drug development.

c)A third category will establish collaborations around largescale facilities:

d)The fourth category will be devoted to initiatives that assist local development and sustainability.



a)In 2013, the Ministry of Finance of China and Chinese Academy of Sciences released the new regulation on International travels, requiring that all travels shall report the travel plans in advance before the travel.

b)Meanwhile, it is encouraged that priority shall be given to the China airlines when buying international air tickets.

RADI will coordinate with relevant departments to ensure that IPO will fulfill its commitment and function in the international community in such context.

Thanks!



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