

China's Satellite Data Network Extends to the South China Sea

Sanya Satellite Data Receiving Station hosted by the Institute of Remote Sensing and Digital Earth (RADI) under the Chinese Academy of Sciences (CAS) was inaugurated and formally put into operation on the afternoon of May 24, enabling China to directly obtain land observing satellite data about the South China Sea.

Located at Sanya in southern China's island province of Hainan, the station has maintained steady experimental operation since 2010, undertaking data receiving from a dozen Chinese and foreign satellites including the Environment and Disaster Monitoring Satellite of China, CBERS, ZY-3, SJ-9, and GF-1. The station, together with two other satellite data receiving stations of RADI in Miyun and Kashi, can receive satellite data covering 70% of Asia.

The Sanya Research Center based at Sanya Ground Station was also launched in the afternoon. The center will "base itself on Hainan, with its service being devoted to South China, covering the South China Sea and reaching out to Southeast Asia", said Prof. GUO Huadong, Director of RADI. Focusing mainly on the acquisition and application of spatial information in tropical and sub-tropical regions, the center aims at facilitating the construction of Hainan as an "international tourism island". The center supports economic and social development in southern China, contributes to resource exploration and marine rights protection in the South China Sea, and reaches out to Southeast Asia for research on resources, environment, and global changes. By doing so, it hopes to support the sustainable development of the whole region, and meet the strategic demands of China.

The center is currently pursuing five main tasks. The

first is to build another four satellite antennas in addition to the existing two by 2015 to expand the center's capacity for aerial remote sensing data transmission and ground receiving. Second, the center seeks to enhance its capacity for scientific and technological innovation in the aerospace field. The research center will drive forward integrated research on islands and rifts in the South China Sea and conduct long-term, systematic, integrated mapping and monitoring of such islands and rifts. The third task is to integrate systems of ecological and environmental protection, remote sensing exploration of seabed resources (such as oil and natural gas hydrate), and tracking and monitoring of ocean resources such as shoals. Fourth, the center aims to provide international spatial information on rivers to support decision making and information services. Lastly, the fifth task is to research the interaction of ocean, land, and air in the monsoon region to explore the mechanisms behind floods and droughts.

On the same day, CAS and the Academy of Sciences for the Developing World (TWAS) named the Sanya Sub-center a CAS-TWAS Center of Excellence on Space Technology for Disaster Mitigation. The sub-center aims to provide space-based disaster relief research, training, and education for Southeast Asian countries, especially the Association of Southeast Asian Nations (ASEAN) members. The Sanya Sub-center will help ASEAN members improve their capabilities for using space technology for natural disasters such as floods and storm surges, therefore boosting their capability for disaster mitigation. (Adopted from a report of the 2nd Issue of RADI Newsletter)

