IAF EARTH OBSERVATION SYMPOSIUM (B1) Future Earth Observation Systems (2)

Author: Dr. Ming Li China Academy of Space Technology (CAST), China, liming_cast@sina.cn

PRESENT DEVELOPMENT STATUS OF REMOTE SENSING SATELLITES IN CHINA'S NATIONAL SPACE INFRASTRUCTURE

Abstract

The National High Resolution Earth Observation System (NHREOS) have been already successfully operational in orbit. The China national Space Infrastructure is a follow-on plan with a focus on remote sensing system, ratified by the State Council in 2015, and some satellites have been already launched and many of them were under the development, still some in RD phase.

According to the principle of multiple-function on one satellite, multiple satellites in one constellation and collaboration between constellations, series of land observation, ocean observation and atmosphere observation satellites have been planned and developed to have high, middle and low resolution for different application on different orbits and with different means of payloads to achieve a high ability for global synthetically observation.

This paper gives a detailed introduction about the present status of development of this infrastructure. Some typical satellites have been introduced in terms of its performance and configuration. With such an infrastructure, we can carry out the research on climate change, geophysics global surveying and mapping, water resources management, safety and emergency management etc., and its potential application can be found in different area, especially the international cooperation in the so called One Belt and One Road space information corridor.