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

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GAOFEN-2 MISSION INTRODUCTION AND CHARACTERISTICS

Abstract

GAOFEN-2, the China's ever built highest resolution and widest swath civilian imaging satellite, was successfully launched on 19th Aug. 2014 by Long March IV B from Taiyuan Satellite Launch Center. GAOFEN-2 satellite was the 2nd mission of China High Resolution Earth Observation System(CHEOS), the main goal of GAOFEN(Chinese spelling characters for high-resolution) series satellite of CHEOS is to provide high accuracy geographical mapping, land and resource surveying, environment change monitoring, near real time observation for disaster prevention and mitigation, as well as for precision agriculture and forest application. The satellite project was initiated in Apr. 2010, its design employs the CAST CS-L3000A bus with 2 PAN/MS cameras, which is capable of collecting images with a ground sampling distance of 0.81 meter in panchromatic, and 3.24 meter in multispectral. Following the general assemble at the end of 2012, GAOFEN-2 satellite passed a series of ground testing process, including electric inspection, mechanical test, thermal vacuum examination, camera optics lab calibration, and interface coupling test with launch vehicle, etc. After an accomplishment of half year on-orbit test in Feb. 2015, GAOFEN-2 satellite has begun to serve its customers. The success of GAOFEN-2 satellite mission will promote CHEOS services, boom social and economic benefits for China and One Belt and One Road (BAR) countries in a longtime, and suite for other countries' commercial and civilian applications.