

EARTH OBSERVATION SYMPOSIUM (B1)
International Cooperation in Earth Observation Missions (1)

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UNIQUE OFFERINGS OF THE ISS AS AN EARTH OBSERVING PLATFORM

Abstract

The International Space Station offers unique capabilities for earth remote sensing. An established Earth orbiting platform with abundant power, data and commanding infrastructure, the ISS has been in operation for twelve years as a crew occupied science laboratory and offers low cost and expedited concept-to-operation paths for new sensing technologies. Plug in modularity on external platforms equipped with structural, power and data interfaces standardizes and streamlines integration and minimizes risk and start up difficulties. Data dissemination is also standardized. Emerging sensor technologies and instruments tailored for sensing of regional dynamics may not be worthy of dedicated platforms and launch vehicles, but may well be worthy of ISS deployment, hitching a ride on one of a variety of government or commercial visiting vehicles. As global acceptance of the urgent need for understanding Climate Change continues to grow, the value of ISS, orbiting in Low Earth Orbit, in complementing airborne, geosynchronous and other platform remote sensing will also grow.