

Topics (T)

Earth Observing Missions and Systems to Address Climate Change and Its Impacts [3] (3C)

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SURVEYING THE MALDIVES AND THE LOWER LATITUDES (SMOLLSOT): A
LOW-INCLINATION EARTH OBSERVATION MISSION FOR CLIMATE RESILIENCE AND
MARITIME AWARENESS

Abstract

Due to factors such as its geographical location and the extremely flat topography of near sea-level atolls, the Maldives is a country that is particularly vulnerable to the effects of climate change. The SMOLLSOT mission is a low-inclination Earth Observation (EO) mission planned by the Maldives Space Research Organisation (MSRO) as part of its commitment to help the Maldives in the domains of environmental and climate resilience as well as maritime domain awareness using space technologies. The SMOLLSOT mission will exploit the high time-resolution afforded by a low-inclination orbit in order to provide the Maldives with essential and fully domestic capabilities to study coastal erosion, monitor vulnerable ecology and island land utilisation, as well as illegal fishing activities, amongst others.

This paper presents an overview of the planned mission and its applications, as well as its links to MSRO's activities and programmes supporting sustainable future environmental policy, capacity building, and maritime domain awareness.