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## OBSERVATORIES OF SOLAR CORONA AND ACTIVE REGIONS (OSCAR)

**Abstract**

Coronal Mass Ejections (CMEs) and Corotating Interaction Regions (CIRs) are major sources of magnetic storms at Earth and therefore they are of great importance for space weather. The Observatories of Solar Corona and Active Regions (OSCAR) is a mission proposed to identify 3D structure of coronal loops, study the trigger mechanism of CME in the Active Regions (ARs) and their evolution and propagation processes in the inner heliosphere. It will also provide monitoring and forecasting of the geo-effective CMEs and the CIRs at 1 AU. Thus, OSCAR shall contribute in the advancement in the field of solar physics, improve the current CME prediction models and provide data for space weather forecasting. This will be achieved by utilising two spacecraft, with identical remote-sensing as well as in-situ instrumentation, located at the Earth orbit. The spacecraft will be separated with an angle of 68 to provide optimum stereoscopic view of the solar corona. The spacecraft are planned for launch in 2022-2025 for a nominal mission duration of 5 years