Galileo Solar Space Telescope | GSST

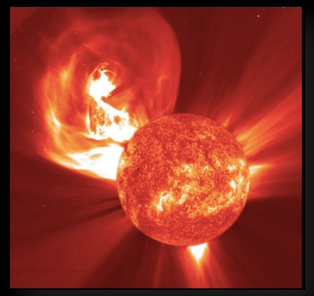
INPE/GSST Working Group

NASA/SDO/AIA Image

Understanding the Origin of Solar Activity and its Impact on Geospace.
Observations of the Solar Atmosphere, Magnetic Field and Irradiance

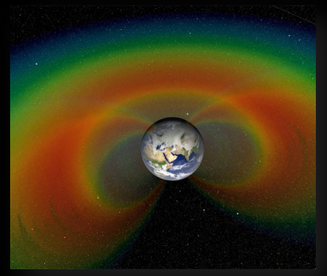
GSST - Scientific Objectives

INPE



1. Understanding the evolution of the magnetic structures of the outer layer of the Sun

2. Understanding the Sun's influence on Earth's Climate



3. Understanding the Sun's influence on the Geospace

Goals: To build a Visible and UV light imagers and magnetographs for solar observations.

1. Very accurate measurements of the solar magnetic field is of great interest for the solar and stellar physics community.
2. Technological challenge that may lead Brazil to learn and acquire new technological capabilities following a step-by-step strategy.
3. Through this mission, Brazil may become present in space and may join a leading effort in this whole field.
4. There is a need for collaboration with other countries to gain know-how and possibly for them to provide some of the hardware.

GSST – Satellite layout and Imaging payloads

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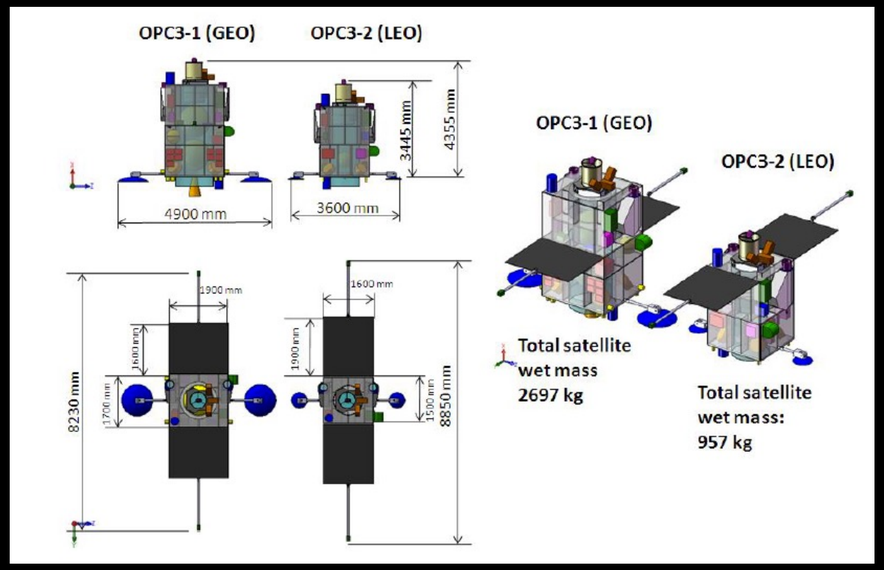
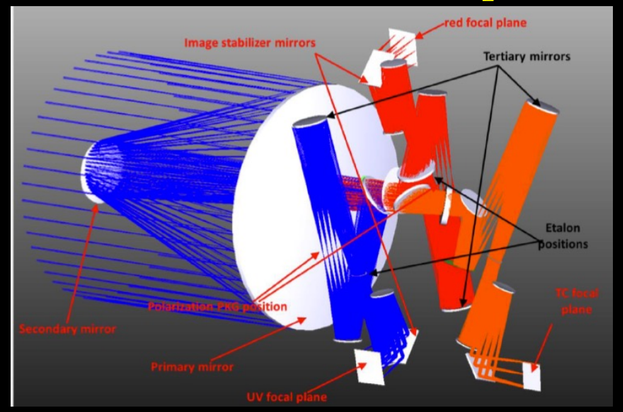
Satellite layout concepts analized



Preliminary Optical Design of the 500 mm HR Telescope



Service Module for LEO Concept Candidate: Multi Mission Platform (MMP)

Amazonia 1 Integrated with PSLV Launcher

Imaging payloads