

## SOLAR-C mission: Post-Hinode Satellite for Solar Observations

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Hinode is equipped with advanced instruments dedicated to observing the sun with three different wavelengths and all the instruments have been providing unique data with high

spatial resolution and excellent performance that has never been achieved by the former spacecrafts. As a result, solar physics researches are now much activated with the Hinode observations.

We, Japanese solar physicists and its related researchers, have discussed future directions of our researches and have started to study a post-Hinode mission, so-called SOLAR-C.

This paper reports on the mission concept of SOLAR-C and its current study status. Two plans (plan A and B) are currently investigated in parallel. Plan A is to perform out-of-ecliptic

magnetic and helioseismic observations of solar polar region to investigate the internal structure and dynamo mechanism of the Sun, whereas plan B is to perform higher resolution observations to investigate heating and dynamics of solar atmosphere with UV-enhanced Hinode SOT plus advanced spectroscopic capabilities.

Feasibility studies from both scientific and technical viewpoints are under going by JAXA SOLAR-C Working Group, which was officially approved on December 2007 by ISAS space science

steering committee. Based on various kinds of scientific and technical feasibility studies, the WG will choose one plan from the two different plans as the baseline SOLAR-C mission within a year. Comments from space weather researchers are very much appreciated

to polish the mission concept.