



## Guest Investigator Final Report

**Project Title: tudy of the pre-eruptive and eruptive phase of filaments/prominences in EUV 17.5 nm using SWAP telescope on PROBA2**

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**Date of visit: From: 09/2011 to: 10/2011**

**Project Abstract:**

"The proposed study was aimed at studying the pre-eruptive and eruptive phase of solar filaments/prominences. Particularly, using the SWAP observations for understanding the trigger mechanism of the associated CME. A better knowledge of the properties of eruptive features in the lower corona will ultimately help us understand how equilibrium states in the corona result in CMEs. which leads to better space weather prediction. The project was intended to study the slow ascent phase of eruptive filaments in EUV prior to their eruptions as parts of CMEs and also understand the dynamics during eruption namely the role of twist and roll in accelerating the filaments. Dates of visit : Sept 25, 2011 to October 8, 2011"

**Primary ROB Contact(s): David Berghmanns**

**Which Instrument(s) was/were used: SWAP**

**Were other instruments used in collaboration with PROBA2?**

Yes

**(Optional) Description of collaboration:**

LASCO, STEREO; The LASCO and STEREO observations were used to study the associated CMEs with the eruptive events in SWAP.

**Was there a dedicated observing campaign performed or planned?**

Yes

**(Optional) Description of campaign:**

Dedicated observing campaign was planned initially with the Dutch Open Telescope and Helio Research but the visit was could be made only after the DOT observing time was over. HelioResearch was not operational during the time of visit because of bad weather.

**Brief Description of work performed during the visit:**

A major part of the visit was spent in getting acquainted with the EUV data, visualization and analysis of the EUV (SWAP) data. I prepared a list of SWAP events associated with eruptive filaments for the period 2010-2011. Complementary LASCO & STEREO observations were also analysed for selected events of May 2010 & August 2011.

*Future Plans:*

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*Has this work been published?*

Planned

*If so, Where? Reference/DOI? ADS Link?*

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*Please add below any other comments you might have:*