



## **Simulations of on-board calibration procedures for the SWIFT instrument**

**P. Rahnama** (1), I. McDade (1), A. Scott (2), Y. Rochon (3)

(1) York University, Canada, (2) EMS Technologies Canada Ltd, (3) Meteorological Service of Canada. Contact: rahnama@stpl.cress.yorku.ca

The Stratospheric Wind Interferometer For Transport studies (SWIFT) is a satellite instrument designed to measure stratospheric winds, ozone concentration, and potentially atmospheric temperature and pressure to improve our knowledge of the dynamics of the stratosphere, global distribution and global transport of ozone. The wind and ozone densities are to be extracted from the SWIFT measurements with target accuracies of  $3 \text{ ms}^{-1}$  and 5–10% respectively over most of the stratospheric altitude range.

The instrument is currently under phase B study by the Canadian Space Agency (CSA) as the main payload for a Canadian small satellite scheduled for launch in 2009.

The SWIFT instrument is an imaging, field-widened Michelson interferometer and the measurement technique is known as Doppler Imaging Michelson Interferometry.

This paper describes simulations of on-board calibration and instrument parameter monitoring procedures for the SWIFT instrument.