

**Séminaire Vendredi 9 Novembre 11h00 / Seminar Friday November 9 11:00 AM**

**Conférencier/Lecturer:** Saroja Polavarapu

**Sujet/Subject:** Stratospheric Winter Weather

**Présentation/Presentation:** Anglais / English

**Lieu/Room:** Grande salle du premier étage CMC

**Résumé/Abstract:**

In this seminar, three topics are considered: (1) the impact of the stratosphere on the troposphere, (2) the coupling of the stratosphere with the mesosphere during a single stratospheric sudden warming event and (3) the potential for forecasting the mesosphere. First, we consider how knowledge of the stratosphere can potentially improve the skill of extended range forecasts. The coupling of the stratosphere and mesosphere during stratospheric sudden warming events is used to show that observations in the stratosphere can have an impact on the mesosphere through wave propagation during 6-hour forecasts. This means that the mesosphere can potentially be improved even without assimilating mesospheric observations. As weather forecast model lids move to the mesopause, it will be important to be able to exploit this upward propagation of information.