Name: Om Tripathi
o.p.tripathi@reading.ac.uk
University of Reading
Department of Meteorology University of Reading
UK
Country: UK
Title: The Stratospheric Network for the Assessment of Predictability (SNAP)
Additional authors: (1)A. J. Charlton-Perez, (2)Mark Baldwin, (3)Martin Charron, (4)Steven Eckermann, (5)Edwin Gerber, (6)Yuhiji Kuroda, (7)David Jackson, (8)Andrea Lang, (9)Greg Roff, (10)Seok-Woo Son
Additional Affiliations: (1)University of Reading, Reading, UK (2) University of Exeter, Exeter, UK (3) Environment Canada, Canada (4) Naval Research Laboratory, Washington, USA (5) New York University, New York, New York, USA (6) Meteorological Research Institute, Japan (7) Met Office, Exeter, UK (8) University at Albany, SUNY, Albany, New York, USA (9) Bureau of Meteorology, Australia (10)Seoul National University, Seoul, South Korea
Abstract:
During winter and spring the stratosphere is a dynamically exciting place, with intense and dramatic stratospheric major warming events occurring typically in two out of every three years in the Northern hemisphere and minor warming events occurring more frequently still. It is not surprising, therefore, that there has long been interest in understanding what role the stratosphere plays in tropospheric weather and climate. One particular aspect of this problem, is the idea that an enhanced representation of the stratosphere in models used for forecasting tropospheric weather on short to medium ranges might enhance the tropospheric skill in those models.

In this presentation, we describe a new emerging activity of SPARC designed to address issues of coupled stratosphere-troposphere predictability, SNAP. SNAP will seek to answer several outstanding questions about stratospheric predictability and its tropospheric impact, including:
* Are stratosphere-troposphere coupling effects important throughout the winter season or only when major stratospheric dynamical events occur?
* How far in advance can major stratospheric dynamical eventsbe predicted and usefully add skill to tropospheric forecasts?
* Which stratospheric processes, both resolved and unresolved need to be captured by models to gain optimal stratospheric predictability?

We plan to answer these questions by conducting an international intercomparison of stratospheric forecasts. The presentation will describe this experiment, progress to date and how you can get involved in the network by analysing the results and/or participating in future SNAP workshops.

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