

## **Stratospheric contributions to sub-seasonal prediction**

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*Abstract:*

The stratosphere had long been seen as driven by the troposphere, but with no downward influence. This notion has changed since dynamical downward coupling from the stratosphere has been detected. Only recently, however, has it become clear that this coupling can be used for extended range prediction of surface anomalies and extremes. A growing range of surface extremes such as storms, cold spells, and even wildfires have been found to be linked to stratospheric variability. This talk will give an overview of stratospheric downward coupling and its impacts, with a focus on the extended range predictability of surface extreme events.