

# **Satellite observations and coupling of the whole atmosphere**

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This talk will give an overview of coupling processes in the whole atmosphere revealed by nearly four decades of satellite observations. Key processes that link climate variability in the troposphere and stratosphere will be highlighted, including two-way coupling in global circulation and chemical behavior. The observational data record allows characterization of interannual variability and recent decadal trends, although the record is still relatively short regarding the influence of low frequency climate fluctuations. Some outstanding questions from comparing models and observations will be highlighted.

Key words: stratosphere-troposphere coupling, decadal variability