



Multi Station observations of MLT dynamics using a meteor radar network

Gunter Stober (1), Sven Wilhelm (1), Christoph Jacobi (2), and Jorge L. Chau (1)

(1) Institute of Atmospheric Physics (IAP), Radar Soundings and Sounding Rockets, Kuehlungsborn, Germany (stober@iap-kborn.de), (2) Institute for Meteorology, University Leipzig, Leipzig

Recently we installed a meteor radar network consisting of active passive meteor radars to infer MLT dynamics based on the MMARIA (Multi-Station multi-frequency Agile Radar for Investigation of the Atmosphere) concept. At present the system consists of a meteor radar at Juliusruh (54.6°N , 13.5°E) and one system at Collm (51.1°N , 13°E) as well as a receive only station in Kuehlungsborn (54°N , 11.8°E). There is a significant spatial overlap of the observation volumes, which permits to retrieve the horizontally resolved wind field. Here we present first measurements and wind comparisons of the network inferring the horizontal variability of the wind field. We present an initial analysis of the winter wave activity including planetary waves, tides and gravity waves.