



Semidiurnal tidal variability derived from a longitudinal chain of northern hemisphere SuperDARN radars

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Hourly mean meteor wind data from a longitudinal chain of 8 mid-latitude northern hemisphere SuperDARN radars have been used to extract the migrating and non-migrating components of the semidiurnal tide in the lower thermosphere meridional wind between 1995 and 2016. Unlike in the southern hemisphere, the semidiurnal tide is dominated by the migrating (W2) component, though small but significant W1 and W3 contributions to the semidiurnal tide are measured, especially around the equinoxes. Data analysis and validation will be presented, together with initial results on the inter-annual variability of the tidal components and their response to sudden stratospheric warmings for comparison with WACCM modelling.