

**Diurnal wind variations observed by an MF radar at Syowa Antarctic Station**

# Yoshihiro Tomikawa[1]; Masaki Tsutsumi[1]

[1] NIPR

A continuous MF (medium frequency) radar observation has been performed since 1999 at Syowa Station (69S, 39.6E) in Antarctica. This observation covers nearly one solar cycle including a drastic stratospheric warming event in September 2002. The MF radar measures zonal and meridional winds in the upper mesosphere and lower thermosphere (i.e., MLT region) with good temporal (about 30 min) and height (about 4 km) resolutions. It enables us to investigate diurnal and semidiurnal tidal disturbances in the MLT region. This study shows seasonal and interannual variations of amplitude and phase of the diurnal and semidiurnal tides as well as their height dependence in the Antarctic MLT region.