



Planetary wave activity in the Antarctic winter mesosphere during 2002 and 2003

P.J. Espy (1), R.E. Hibbins (1), D. Fritts (2), D. Riggin (2)

(1) The British Antarctic Survey, NERC, Cambridge, UK (pje@bas.ac.uk/+44-1223-221226),

(2) Colorado Research Associates, NorthWest Research Associates, 3380 Mitchell Lane, Boulder, CO 80301, USA.

Mesospheric wind observations from VHF and MF radars at several stations around Antarctica have been combined to give a picture of planetary wave activity during the winters of 2002 and 2003. The analyses indicate that during the dynamically active 2002 winter, there was unusual long-period wave activity in the mesosphere from April onwards. In addition, the wave character changed substantially near the stratospheric warming event in September. The characteristics of the mesospheric planetary waves will be presented, and the results for the two winter seasons contrasted.