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ACPD 6, S2351–S2352, 2006

> Interactive Comment

## *Interactive comment on* "Observations of lunar tides in the mesosphere and lower thermosphere at Arctic and middle latitudes" *by* D. J. Sandford et al.

## D. J. Sandford et al.

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The author is very grateful to the referees for their comments, their insight has improved the manuscript and changes will be made accordingly in the final version.

Comments from Referee #1 regarding the double peak in the spectrum: This point was perplexing to us too. However, we believe the double peak to be an artifact of the Fourier analysis caused by the yearly modulation in the amplitude of the tide.

The referee also suggests that the frequency which should be observed is the average of the two frequencies (i.e. 12.412 hours, rather than the 12.420 hours). However in this study we followed the work of Malin and Schlapp (1980), where the period of the lunar tide is calculated from the position of the New Moon, rather than assuming it to

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be 12.420 hours. This method has also been used extensively by Stening et al. (1997, 2001 and 2003).

Again we thank the referees for their time and effort.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 4643, 2006.

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