

## ***Interactive comment on “Global distributions of overlapping gravity waves in HIRDLS data” by C. J. Wright et al.***

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### Specific Comments

[1] Indeed, our period of data is too short for this and there is a good chance that the variability may be due to sources rather than the QBO. Alternatively, it may also be Doppler shifting of the waves due to the partial QBO phase change between these figures. The text has been revised accordingly.

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### Technical Comments

[1] The Fourier transform is carried out in longitude space, independently over each 2-degree latitude band. This has been clarified in the text.

[2] The choice of three-days is somewhat arbitrary and was chosen based on a perhaps over-cautious impression of SABER's daily profile measurement rate. We have now reanalysed the data over a shorter period (one year) using a one-day planetary wave and compared it to the three-day results for the same period, and they appear broadly equivalent. The three-day results have been left in the paper to avoid the need to reprocess the whole dataset and redraw the figures. We've also corrected the grammar of this statement (“fewer numbers of” should have been “smaller numbers of”).

[3] Latitudes and longitudes have been added to the right and top sides respectively of all ‘map’ figures.

[4] 8(c) has been changed to 8(b).

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