

Interactive comment on “Removing spurious inertial instability signals from gravity wave temperature perturbations using spectral filtering methods” by Cornelia Strube et al.

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Dear authors,

This is not a review. I just noticed that on P3L63 you reference Šácha et al. (2016), but it should be either Šácha et al. (2015) or Šácha et al. (2014), which are observational studies.

Furthermore, I am really interested in your study and would like to ask some questions: 1) When using some simple form of vertical background separation (e.g. polynomial fit) is it possible to identify the potential presence of the inertial instability signal in the data

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from analysis of the vertical wavenumber power spectrum density of disturbances? I.e. as long as the spectrum slope follows the theoretical saturated GW spectrum, then we are on the safe side?

2) As you acknowledge in the paper, all GW types are highly sensitive to the background winds during their lifecycle, can you exclude the possibility that a portion of GW activity can be filtered out using the horizontal filtering? How do you expect GWs to interact with the inertial instability region?

Thank you very much for your interesting paper and looking forward to your reply,

Petr Šácha.

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