

Interactive comment on “Satellite Measurements of Stratospheric GravityWaves over the Andes/Drake Passage Region Using a 3D S-Transform Technique” by Corwin J. Wright et al.

Anonymous Referee #1

Received and published: 6 April 2017

When gravity waves interact with stratospheric winds and dissipate, usually their vertical wavelengths become shorter because they are Doppler shifted.

AIRS, however, can only detect waves with relatively long vertical wavelengths, and many waves will become invisible for AIRS well before they dissipate, or they might even not dissipate. This will be less the case for limb sounding satellite instruments that can also detect short vertical wavelengths.

Because of these difficulties, the interpretation of AIRS directional potential accelerations could be quite challenging.

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2017-128, 2017.

Printer-friendly version

Discussion paper

