

1. Please add the equation for the upper limit of the vertical flux component in the 1st paragraph of section 3.1. Not all readers might have it ready in their mind, and so the manuscripts would increase in readability.

Based on the reviewer's comment, we added the equation with the following description to the first paragraph in section 3.1:

This follows from an estimate of the maximum momentum flux that can be propagated vertically without breaking for a given zonal wind profile. Assuming motions confined to the x - z plane, let \bar{u} represent the vertical profile of the mean wind in the x -direction, k the horizontal wavenumber, c the phase velocity, $\bar{\rho}$ the mean density profile and N the Brunt-Väisälä frequency. Under these assumptions, the upper limit on the momentum flux can be expressed as follows (Fritts 1984):

$$MF_{zx}^s = -\frac{1}{2}\bar{\rho} \frac{k}{N} (\bar{u} - c)^3,$$

which highlights the dependence of the maximum momentum flux on the background wind profile.

2. I am still not quite convinced about the authors response to my comment on l. 167 – 168. As long as not averaged zonally, meridional winds are as strong as the zonal winds in any eddies. In steady state the zonal mean meridional residual wind is not influenced by the meridional gravity-wave drag. I would recommend that the authors be careful about this, but would leave it to them whether they want to further adjust the text.

Thank you for pointing out the source of the confusion. To make the text more clear, we decided to remove the ambiguous sentences that are anyway not important for the overall conclusions of the paper - "The zonal mean meridional drag component is by a factor of more than two smaller than the zonal component. However, since the meridional wind is generally lower than the zonal wind, weaker meridional drag can have a relatively strong effect on the circulation."