

## ***Interactive comment on “The Climatology of Brewer-Dobson Circulation and the Contribution of Gravity Waves” by Kaoru Sato and Soichiro Hirano***

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Dear Dr. Kaoru Sato,

thank you again for your response, I am looking forward to reading the revised version of the paper.

I am somewhat confused by the fact that JRA-55 uses only an orographic GW parameterization. The variable 'Gravity wave zonal acceleration' provided for JRA-55 has a large (eastward) drag in the summer hemisphere (see Fig. 1 showing GWD in color and zonal wind in contours, easterlies dashed). This is not seen in ERA-Interim, con-

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sistent with orographic gravity waves with near-zero phase speeds being filtered out by the summer stratospheric easterlies. Indeed the JRA-55 drag looks more consistent with that in MERRA, which includes non-orographic GWD. Perhaps I am missing something, but it might be helpful to shed light on this issue in the paper.

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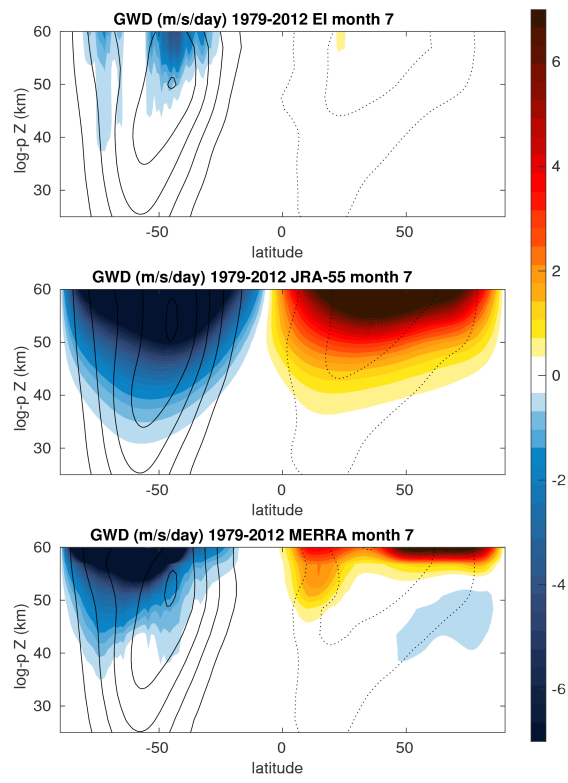


Fig. 1.