

Interactive comment on "Residual Mean Circulation and Temperature Changes during the Evolution of Stratospheric Sudden Warming Revealed in MERRA" by Byeong-Gwon Song and Hye-Yeong Chun

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Dear authors,

I would like to ask you to extend your analysis range in Fig. 4a to approx. 30°N to capture the possible GWD anomalies "above Japan" (see the EA/NP hotspot in Šácha et al. (2015) and its possible implications in Šácha et al. (2016)). However, this hotspot is dominant in the vertical range between 30hPa and 10hPa, which is below your analysis range. Please consider as well to supplement your existing analysis (10hPa-1hPa, where the Scandinavia hotspot is dominant) with two additional plots of

C1

GWD anomalies between e.g. 30hPa and 10hPa.

Best wishes, Petr Šácha.

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Šácha, P., Lilienthal, F., Jacobi, C., and Pišoft, P.: Influence of the spatial distribution of gravity wave activity on the middle atmospheric circulation and transport, Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2016-548, in review, 2016.

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