**Interactive comment on** “A tropospheric pathway of the stratospheric quasi-biennial oscillation (QBO) impact on the boreal winter polar vortex” by Koji Yamazaki et al.

Paul Pukite

puk@umn.edu

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The solar influence is likely not the 11 year sunspot cycle, but the annual and semi-annual cycle. That is obvious because the semi-annual oscillation (SAO) at altitudes above the QBO are obviously semi-annual.