

# *Supplement of*

## **Case-to-Case Variability in the Tropospheric Response to Sudden Stratospheric Warmings Revealed by Ensemble Re-Forecasts**

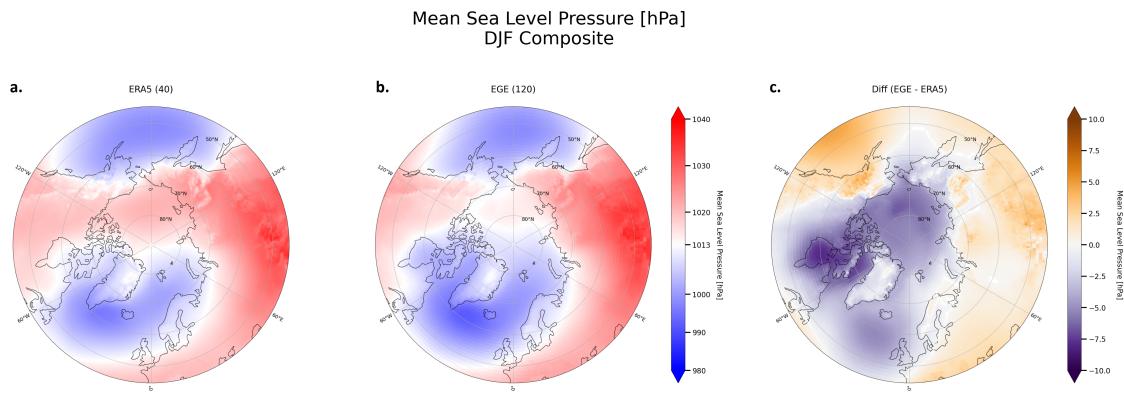
Sheena Loeffel<sup>1</sup>, Philip Rupp<sup>2</sup>, Selina Kiefer<sup>3</sup>, Joaquim G. Pinto<sup>3</sup>, Thomas Birner<sup>2,1</sup>, and Hella Garny<sup>1,2</sup>

<sup>1</sup>Deutsches Zentrum für Luft- und Raumfahrt (DLR), Institut für Physik der Atmosphäre, Oberpfaffenhofen, Germany

<sup>2</sup>Meteorological Institute Munich, Ludwig-Maximilians-University, Munich, Germany

<sup>3</sup>Institute of Meteorology and Climate Research Troposphere Research (IMK-TRO), Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany

**Correspondence:** Sheena Loeffel (sheena.loeffel@dlr.de)



**Figure S 1.** Mean sea level pressure composites over DJF of (a.) ERA5 for the years 1980-2019, (b.) EGE, and the difference as ERA5 subtracted from EGE (c.). Stereographic projection shows latitudes north of 45°N, centred on 90°N with 10° graticule.