Supporting Information for Modulation of the Semi-Annual Oscillation by Stratospheric Sudden Warmings as Seen in the High-Altitude JAWARA Re-analyses

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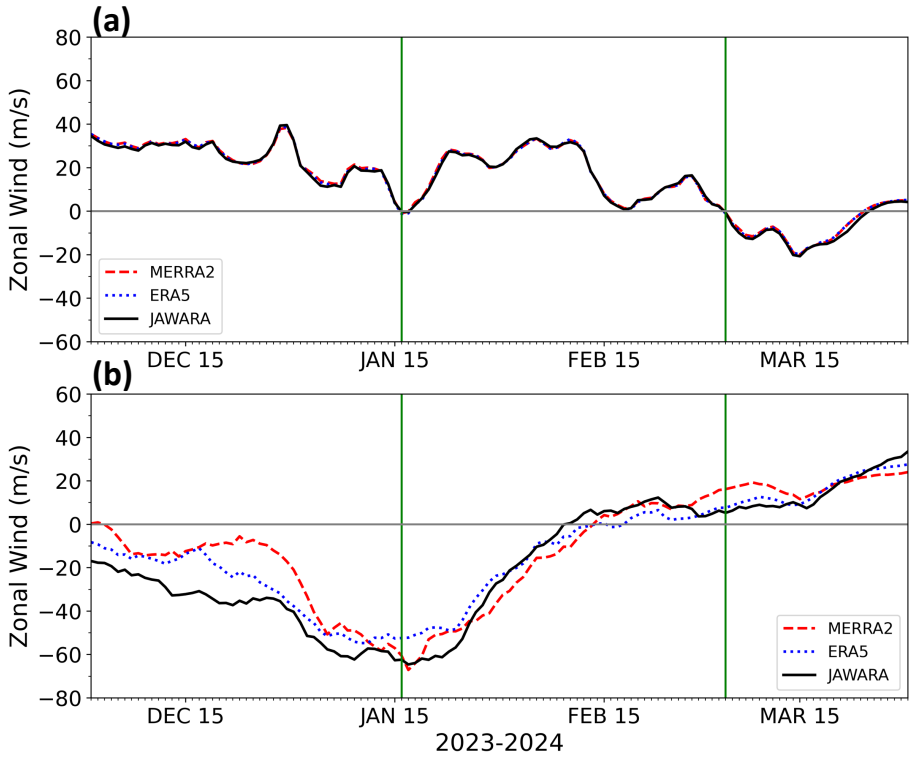

Figure S1. Time evolution of 2023/24 winter zonal-mean zonal wind at 10 hPa 60°N (a) and 50 km over 5°S-5°N (b). The red dashed, blue dotted, black solid lines represent MERRA2, ERA5, and JAWARA, respectively.

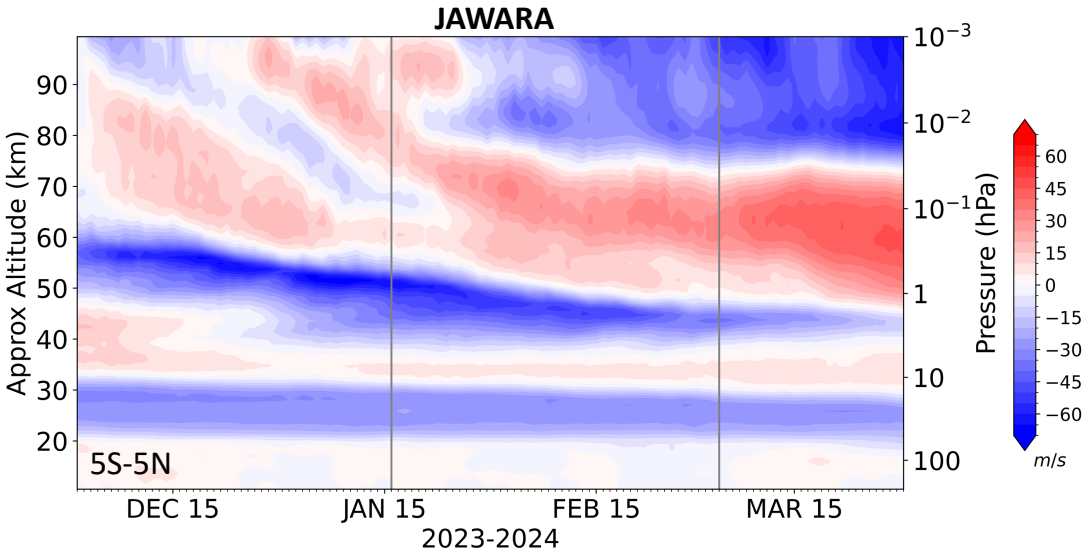

Figure S2. Time-height cross-section of zonal-mean zonal wind over 5°S-5°N during the winter 2023/24.

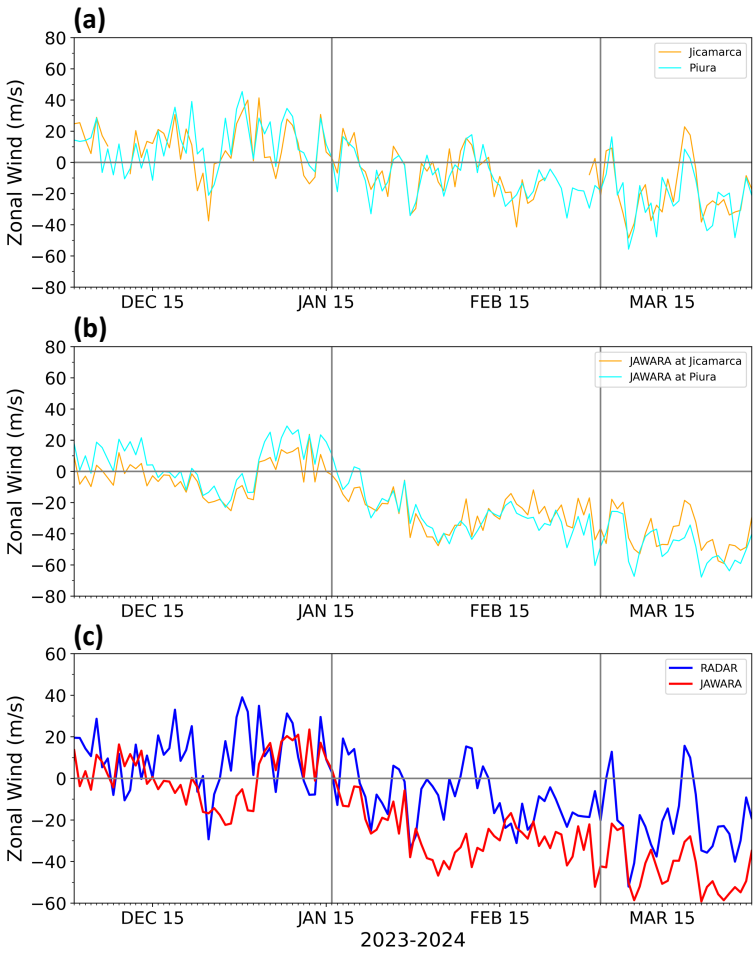

Figure S3. Time evolution of 2023/24 winter zonal wind at about 85 km in meteor radar and JAWARA. (a) Meteor radar zonal wind at Jicamarca (orange; 11.9°S 78.6°W) and Piura (cyan; 5.17°S 80.6°W), (b) JAWARA zonal wind sampled at these two meteor radar stations. Meteor radar zonal wind and JAWARA zonal wind averaged over these two stations (c). Latitudes and longitudes of the radar sites are indicated in parentheses.