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Supplement of

A high-resolution tropopause folding dataset over China from 2014–2023

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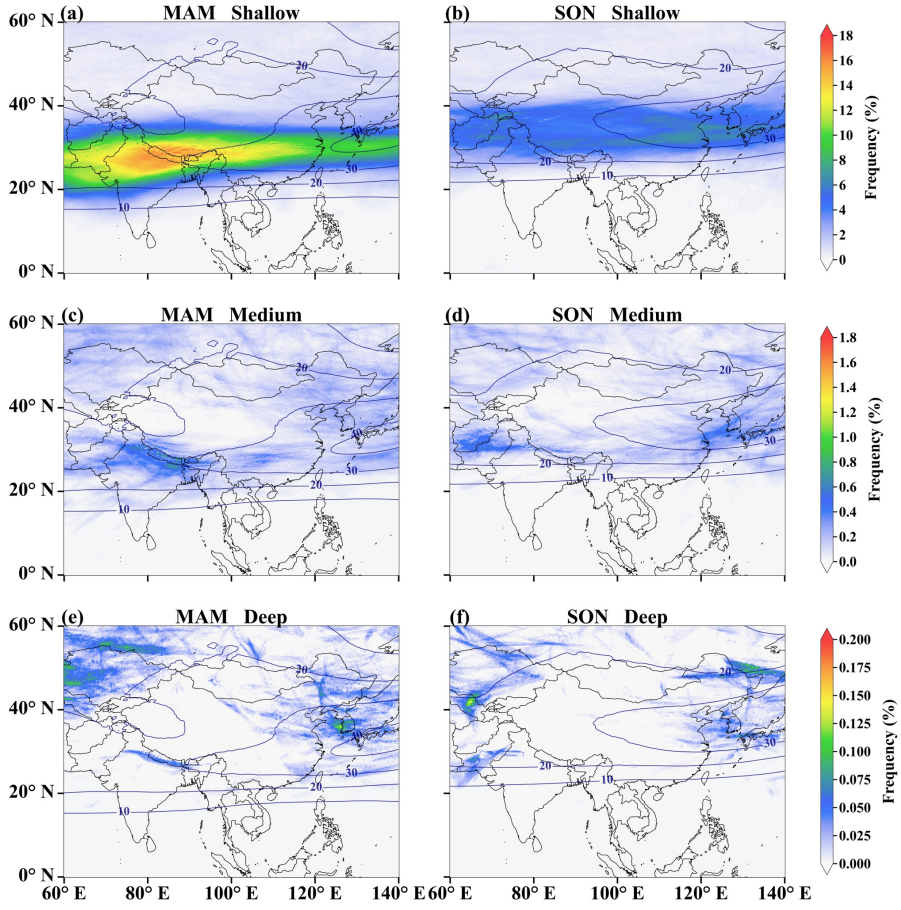

Figure S1. Seasonal averaged frequencies (%) of (a, b) shallow, (c, d) medium, and (e, f) deep tropopause folds for spring (left) and autumn (right) from 2014–2023. Contour lines show 250 hPa wind speed (m s^{-1}) from the ERA5 dataset.

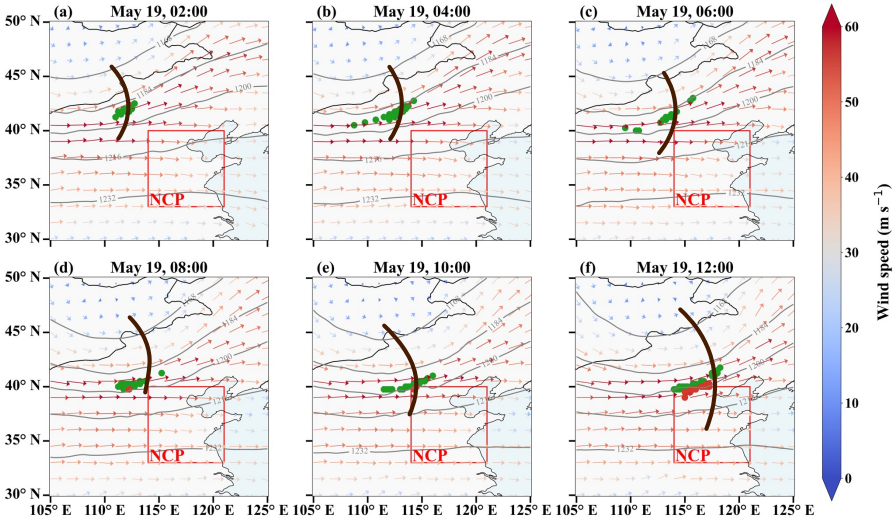

Figure S2. Spatiotemporal evolution of medium and deep tropopause folds over the North China Plain (NCP) on May 19, 2019 (BJT), shown at 2-hour intervals. Colors indicate fold type (green: medium, red: deep). Wind vectors (arrows) show 200 hPa wind speed and direction, scaled by color and length. Brown lines represent the upper-level trough, and the red box delineates the NCP. Gray solid lines indicate contours of the 200 hPa geopotential height (unit: dagpm)

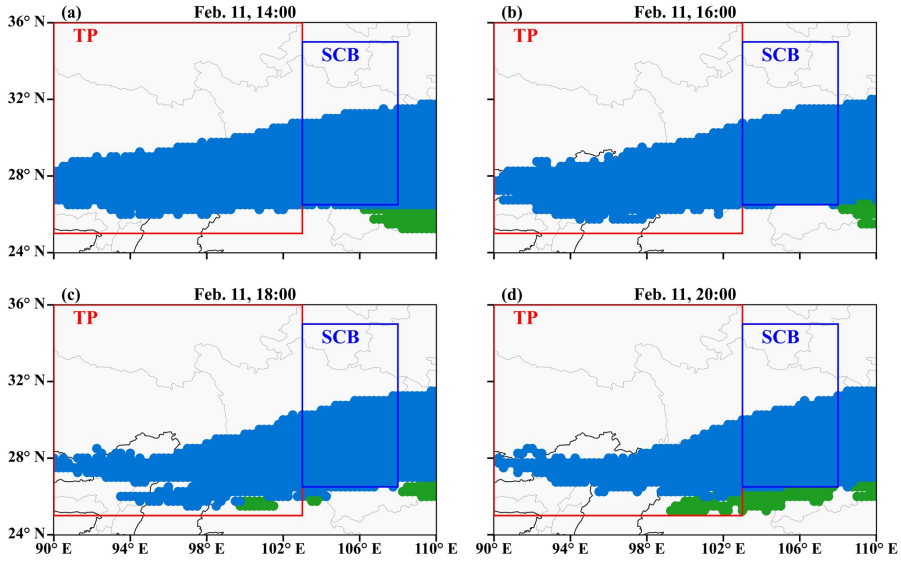

Figure S3. Distribution of shallow (blue), medium (green), and deep (red) tropopause folds over the Sichuan Basin (SCB) and Tibetan Plateau (TP) on Feb. 11, 2016. (a–d) 14:00, 16:00, 18:00, and 20:00 BJT. The SCB and TP are outlined by blue and red boxes, respectively.