This document includes some additional figures for the above paper:

- **Supplemental figure 1:** Regime composites of heat flux (10 and 20 K m s\(^{-1}\)) and baroclinicity (color), accompanied with the 1000-500 hPa thickness (100 m intervals from 4500 m) and thickness anomaly (color) regime composites.

- **Supplemental figure 2:** Upper panel: regime composites of aspect ratio (color) with heat flux (10 and 20 K m s\(^{-1}\)) in thick black contours; lower panel: regime composites of eddy tilt (color), with 250 hPa stream function anomaly (-6x10\(^6\), -2x10\(^6\), 2x10\(^6\) and 6x10\(^6\) m\(^2\) s\(^{-1}\)) in thick black contours (lower panel).

- **Supplemental figure 3:** Regime composites of PV (black contours, with interval of 1 PVU and the thick contour marking the 2 PVU contour), pressure (color) and horizontal wind (arrows) fields at the 315 K surface.

- **Supplemental figure 4:** Regime composites of the horizontal \(\mathbf{E}\)-vector components (color) and horizontal wind (arrows) at 250 hPa. Upper panel: zonal component; lower panel: meridional component with its divergence (thick black contours).

- **Supplemental figure 5:** Stream function anomaly composites for the jet regimes (upper panel) and heat flux terciles (lower panel) at the 250 hPa level (thick black contours) and at the 850 hPa level (color).
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