

Supplementary Figures for "Does high-latitude ionospheric electrodynamics exhibit hemispheric mirror symmetry?"

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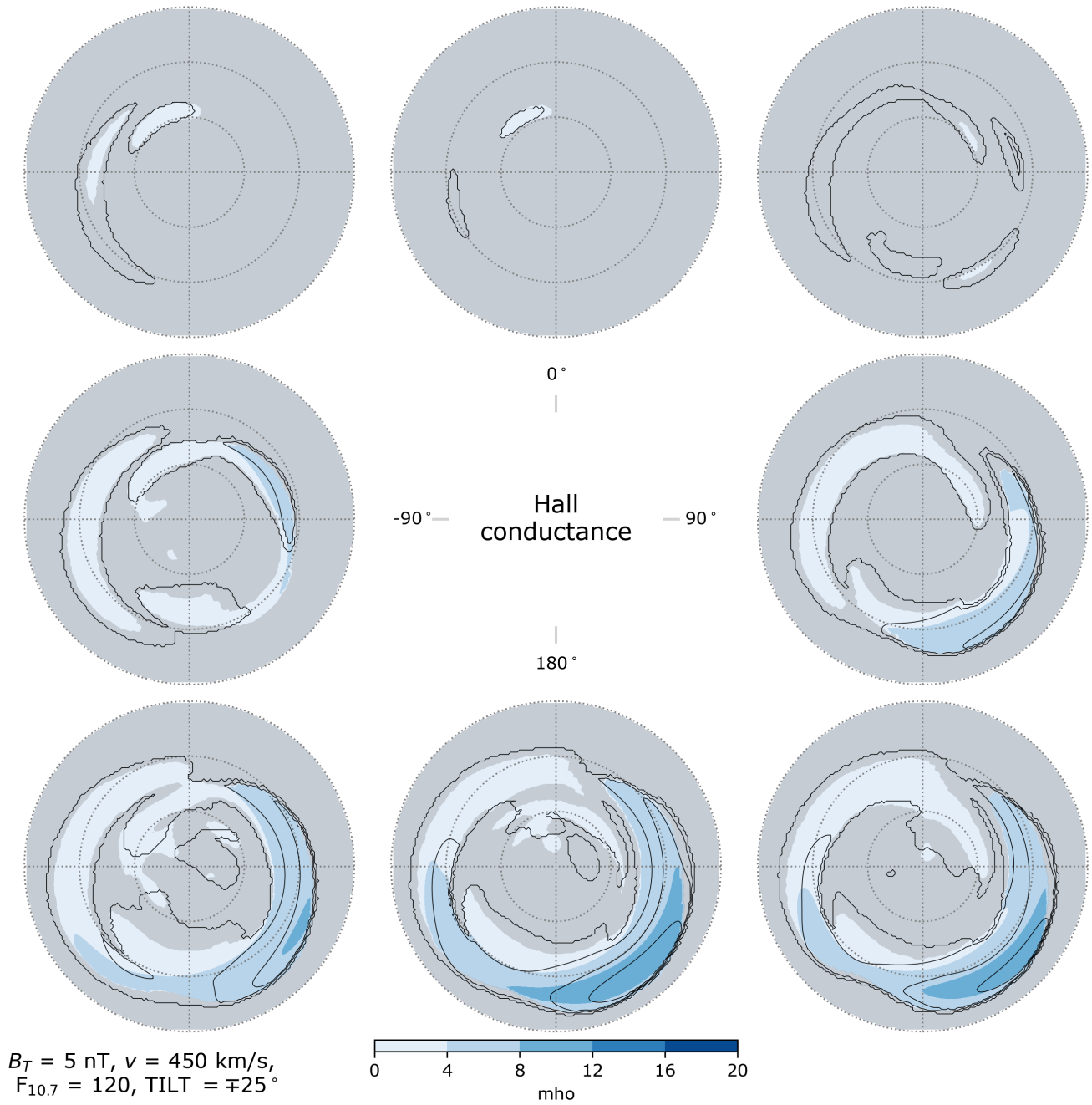


Figure S1. Hall conductance in the Southern Hemisphere (colored contours) and Northern Hemisphere (black contour lines) as a function of IMF clock angle for dipole tilt angle $\Psi = \pm 25^\circ$ (local winter), in the same layout as Figure 2 in the main text. Areas where the criteria (37) are not met in the Southern Hemisphere are indicated in gray.

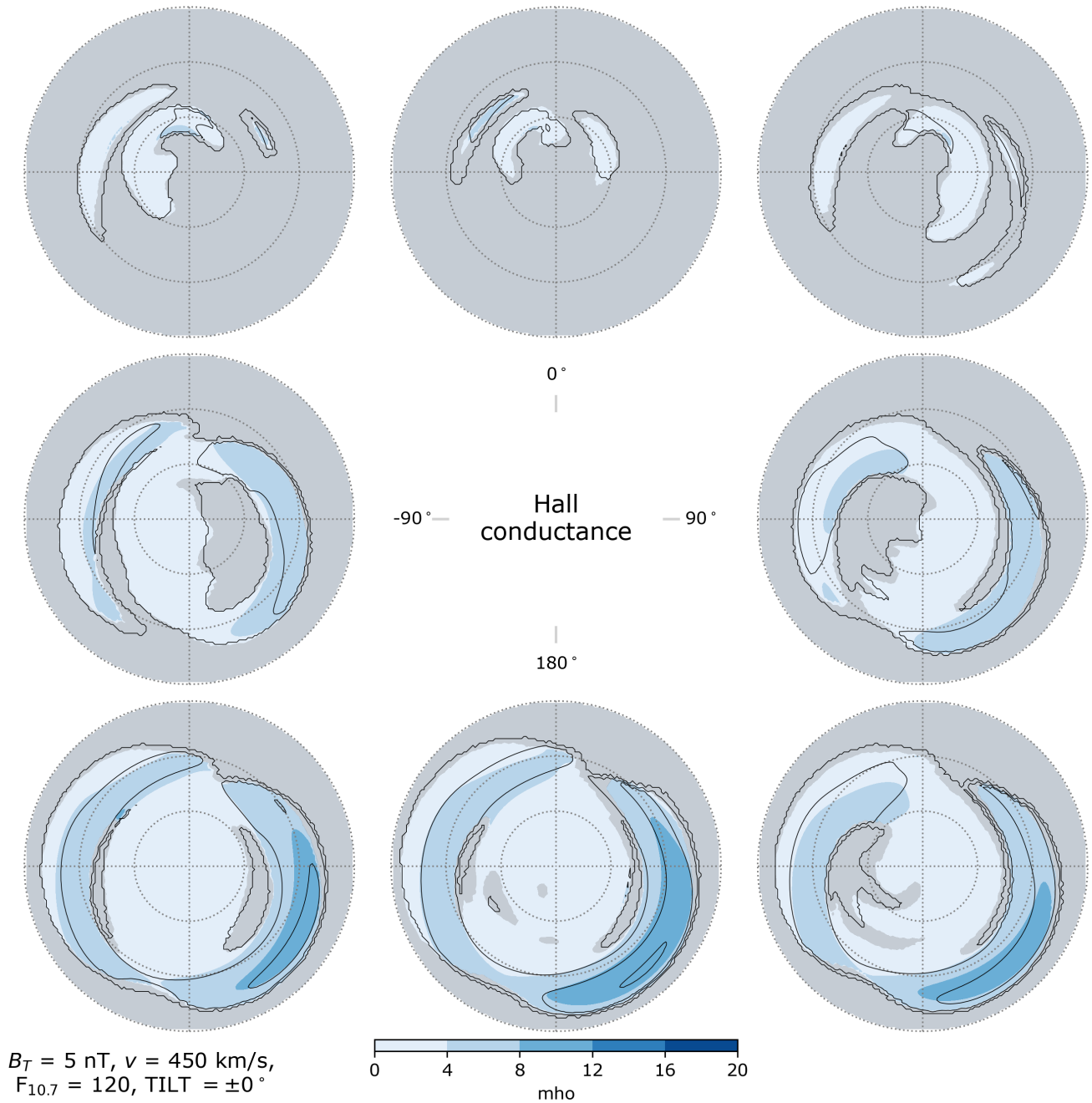


Figure S2. Hall conductance in the Southern Hemisphere (colored contours) and Northern Hemisphere (black contour lines) as a function of IMF clock angle for dipole tilt angle $\Psi = 0^\circ$ (equinox), in the same layout as Figure 2 in the main text. Areas where the criteria (37) are not met in the Southern Hemisphere are indicated in gray.

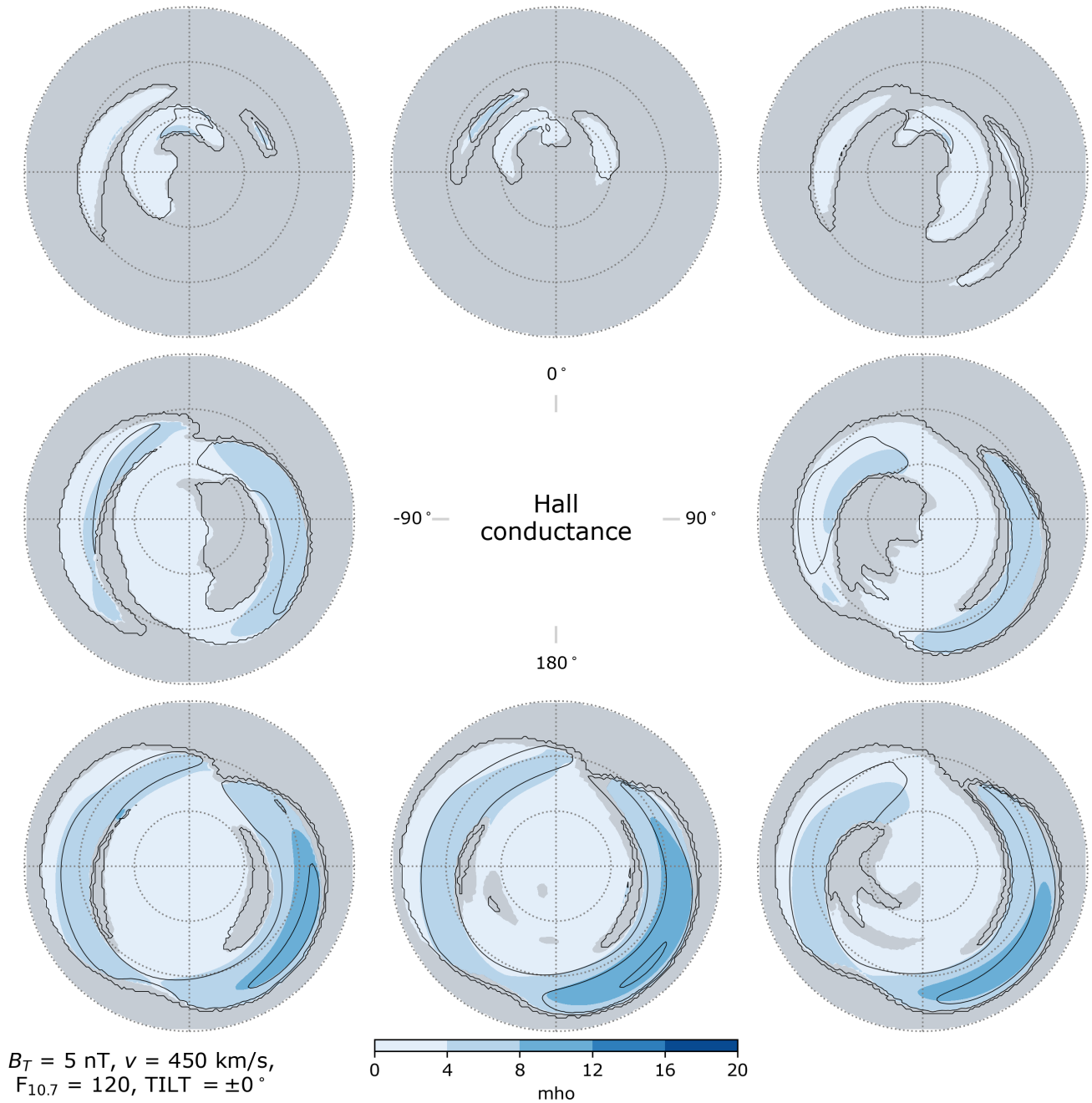


Figure S3. Hall conductance in the Southern Hemisphere (colored contours) and Northern Hemisphere (black contour lines) as a function of IMF clock angle for dipole tilt angle $\Psi = \pm 25^\circ$ (local summer), in the same layout as Figure ?? in the main text. Areas where the criteria (37) are not met in the Southern Hemisphere are indicated in gray.

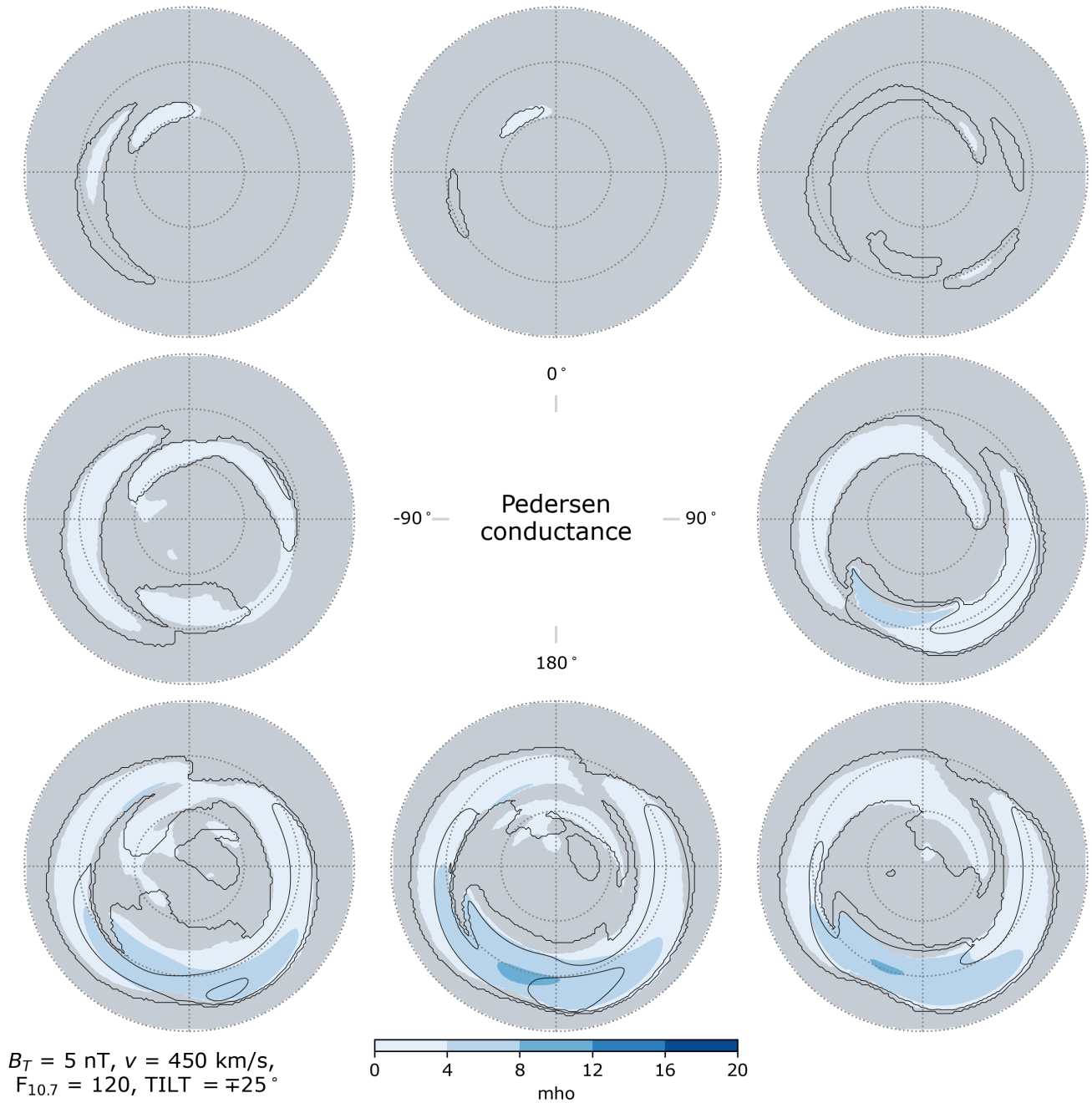


Figure S4. Pedersen conductance in the Southern Hemisphere (colored contours) and Northern Hemisphere (black contour lines) as a function of IMF clock angle for dipole tilt angle $\Psi = \pm 25^\circ$ (local winter), in the same layout as Figure 2 in the main text. Areas where the criteria (37) are not met in the Southern Hemisphere are indicated in gray.

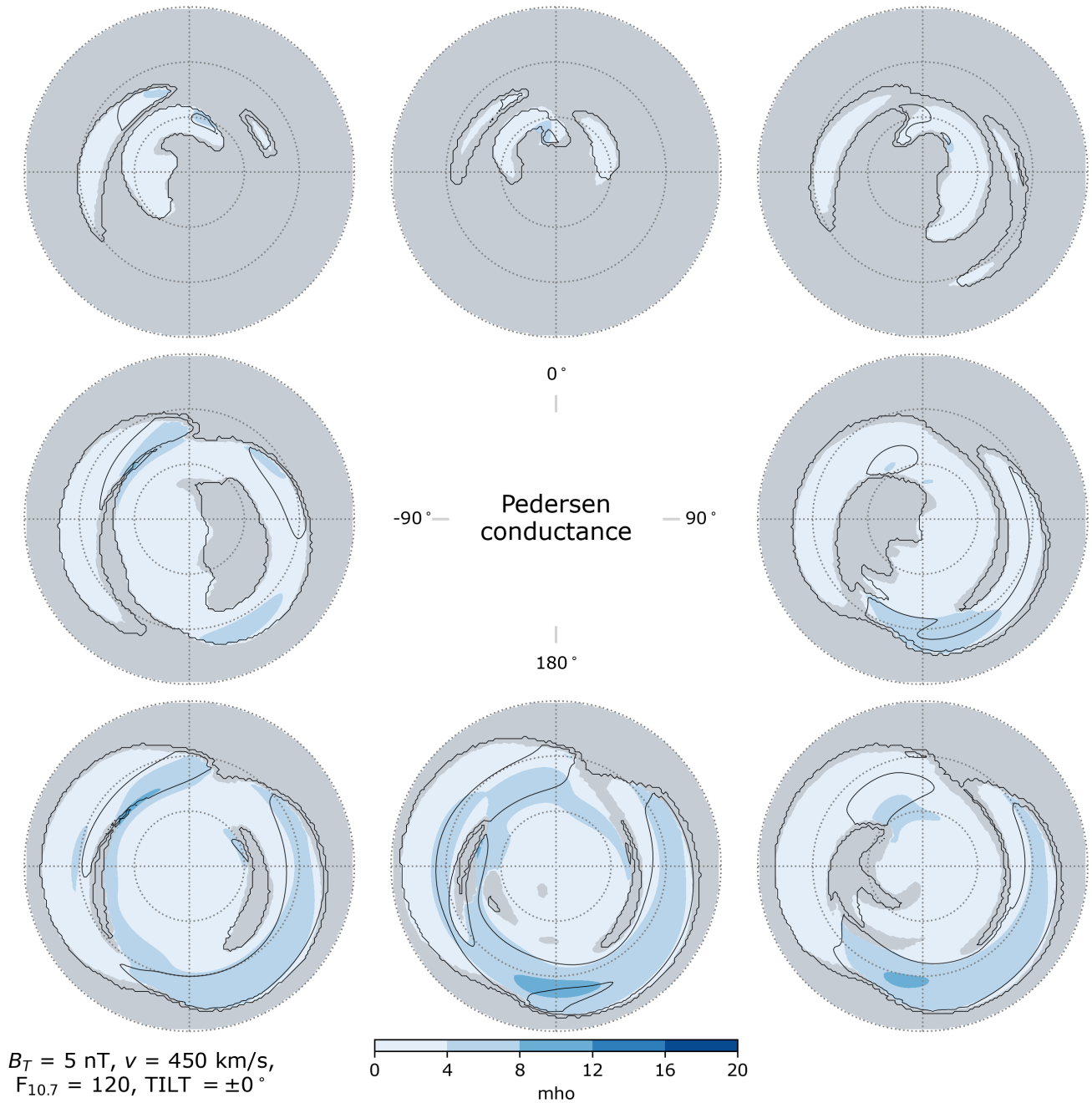


Figure S5. Pedersen conductance in the Southern Hemisphere (colored contours) and Northern Hemisphere (black contour lines) as a function of IMF clock angle for dipole tilt angle $\Psi = 0^\circ$ (equinox), in the same layout as Figure 2 in the main text. Areas where the criteria (37) are not met in the Northern Hemisphere are indicated in gray.

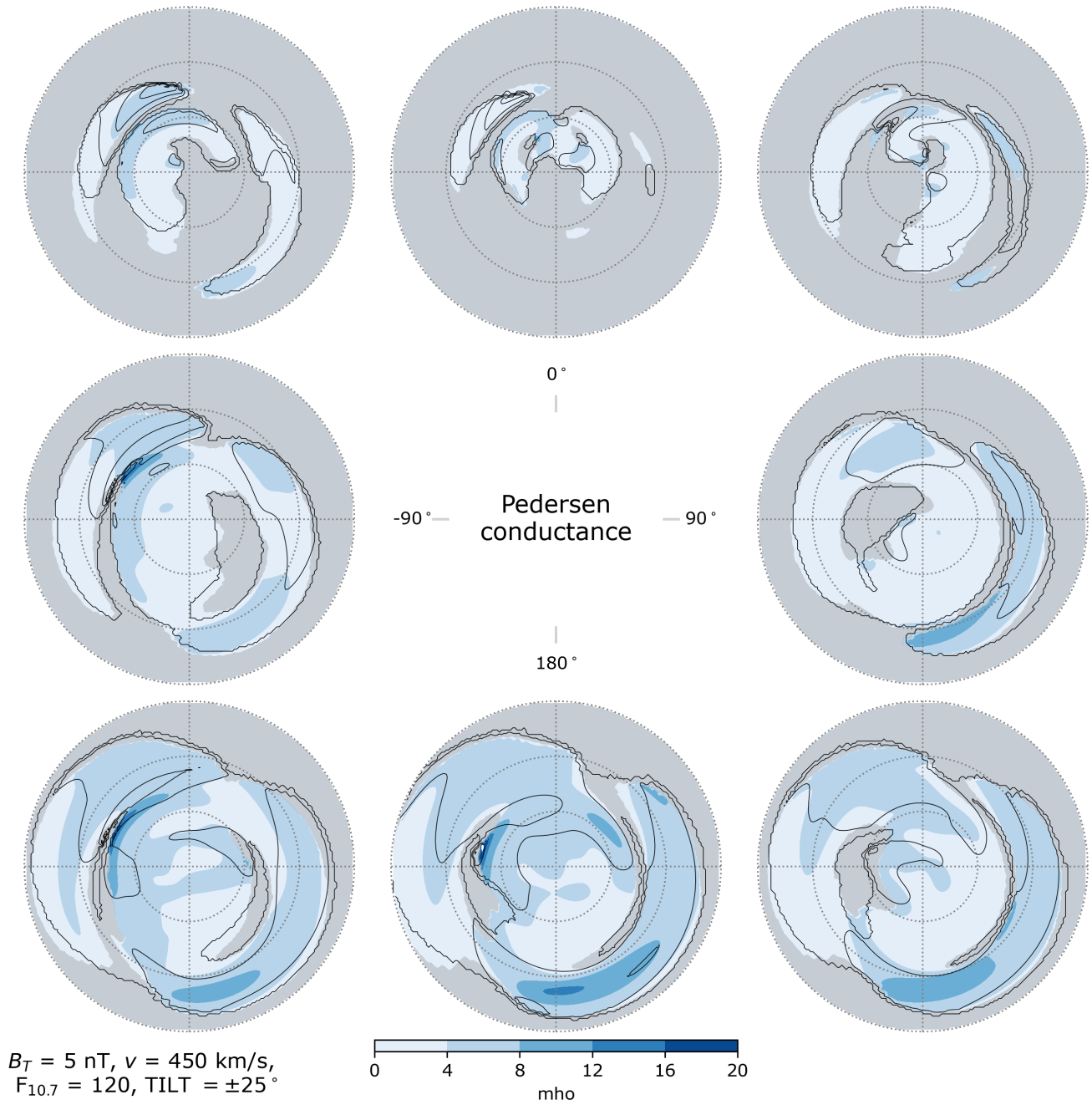
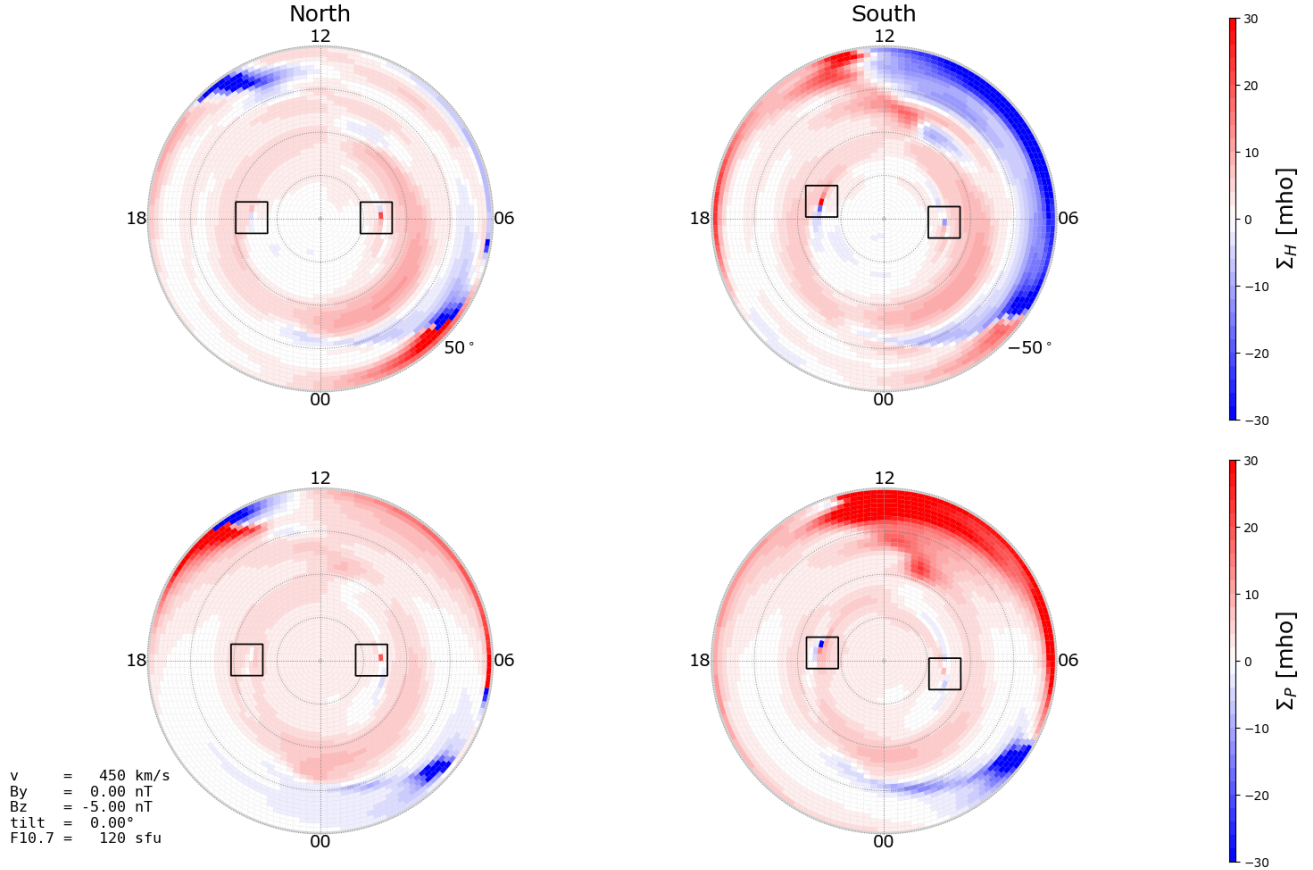


Figure S6. Pedersen conductance in the Southern Hemisphere (colored contours) and Northern Hemisphere (black contour lines) as a function of IMF clock angle for dipole tilt angle $\Psi = \pm 25^\circ$ (local summer), in the same layout as Figure 2 in the main text. Areas where the criteria (37) are not met in the Northern Hemisphere are indicated in gray.



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Figure S7. Hall (top row) and Pedersen (bottom row) conductance distributions in the Northern (left column) and Southern (right column) Hemispheres without criteria (37) applied. In the locations indicated by black boxes the conductances change by as much as 50 mho from one grid cell to the next. There are also many cells within which the conductances are negative (blue).

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