Supporting Information for “Improved Representation of Tropical Cyclones in the NASA GISS-E3 GCM”
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References

Moon, Y., Kim, D., Camargo, S. J., Wing, A. A., Sobel, A. H., Murakami, H., . . . Zhao, M. (2020a). Azimuthally Averaged Wind and Thermodynamic Structures of Tropical Cyclones in Global Climate Models and Their Sensitivity to Horizontal Resolution. *Journal of Climate, 33*(4), 1575-1595. doi: 10.1175/JCLI-D-19-0172.1
Figure S1. Radial profiles of rain rate for TCs in V1, binned by maximum wind speed. Compare to Figure 6 of Moon et al. (2020a).

Table S1. Definitions of regions used for tropical cyclone statistics ($\phi$ is latitude)

| Region            | Hemisphere | Western Boundary                      | Eastern Boundary                      |
|-------------------|------------|----------------------------------------|---------------------------------------|
| North Indian      | Northern   | 35°E                                   | 99°E ($\phi > 8°N$)                   |
|                   |            | 35°E                                   | 99°E ($105-\frac{3}{4}\phi$)°E ($\phi \leq 8°N$) |
| Western North Pacific | Northern | 99°E ($\phi > 8°N$)                   | 160°W                                 |
|                   |            | (105-\frac{3}{4}\phi)°E ($\phi \leq 8°N$) | 160°W                                 |
| Eastern North Pacific | Northern | 160° W                                 | 107°W ($\phi > 24°N$)                 |
|                   |            | 160° W                                 | (65+\frac{7}{4}\phi)°W ($\phi \leq 24°N$) |
| North Atlantic    | Northern   | 107°W ($\phi > 24°N$)                 | 0°                                    |
|                   |            | (65+\frac{7}{4}\phi)°W ($\phi \leq 24°N$) | 0°                                    |
| South Indian      | Southern   | 25°E                                   | 105°E                                 |
| Australian Region | Southern   | 105°E                                 | 165°E                                 |
| South Pacific     | Southern   | 165°E                                 | 70°W                                  |
| South Atlantic    | Southern   | 70°W                                  | 0°                                    |