

## Supplement

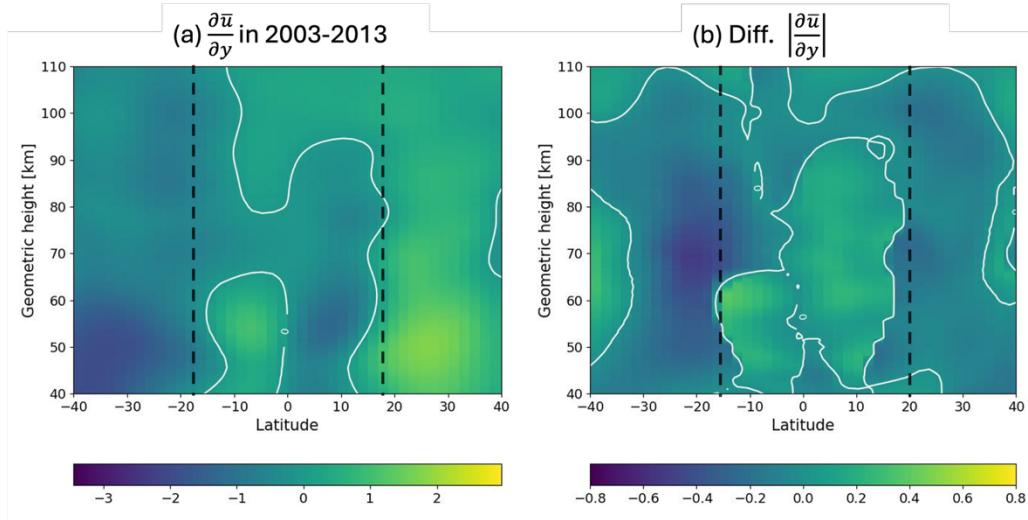


Figure S1. (a) Meridional shear of zonal mean zonal wind in 2003–2013. (b) The difference between absolute meridional shear of zonal mean zonal wind between 2003–2013. Positive means an increase in absolute values of the meridional shear in the future.

## (1, 1) mode phase

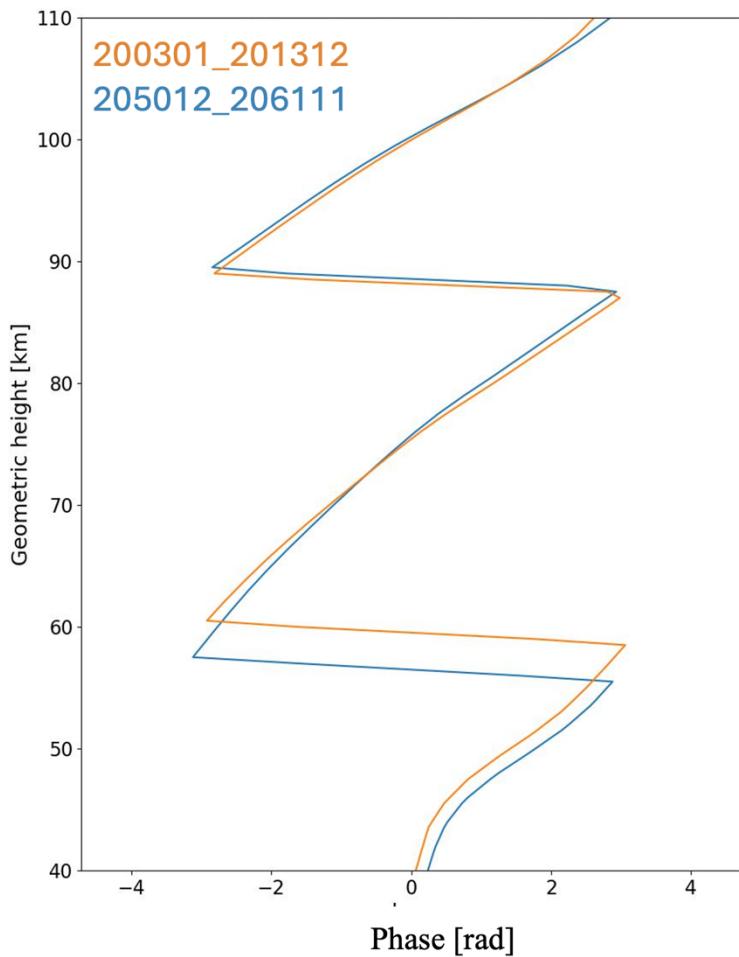


Figure S2. Phases of the tides in 2003–2013 and 2050–2061.

