LIST OF FIGURES

Period mean 2 meter temperature difference (°C)
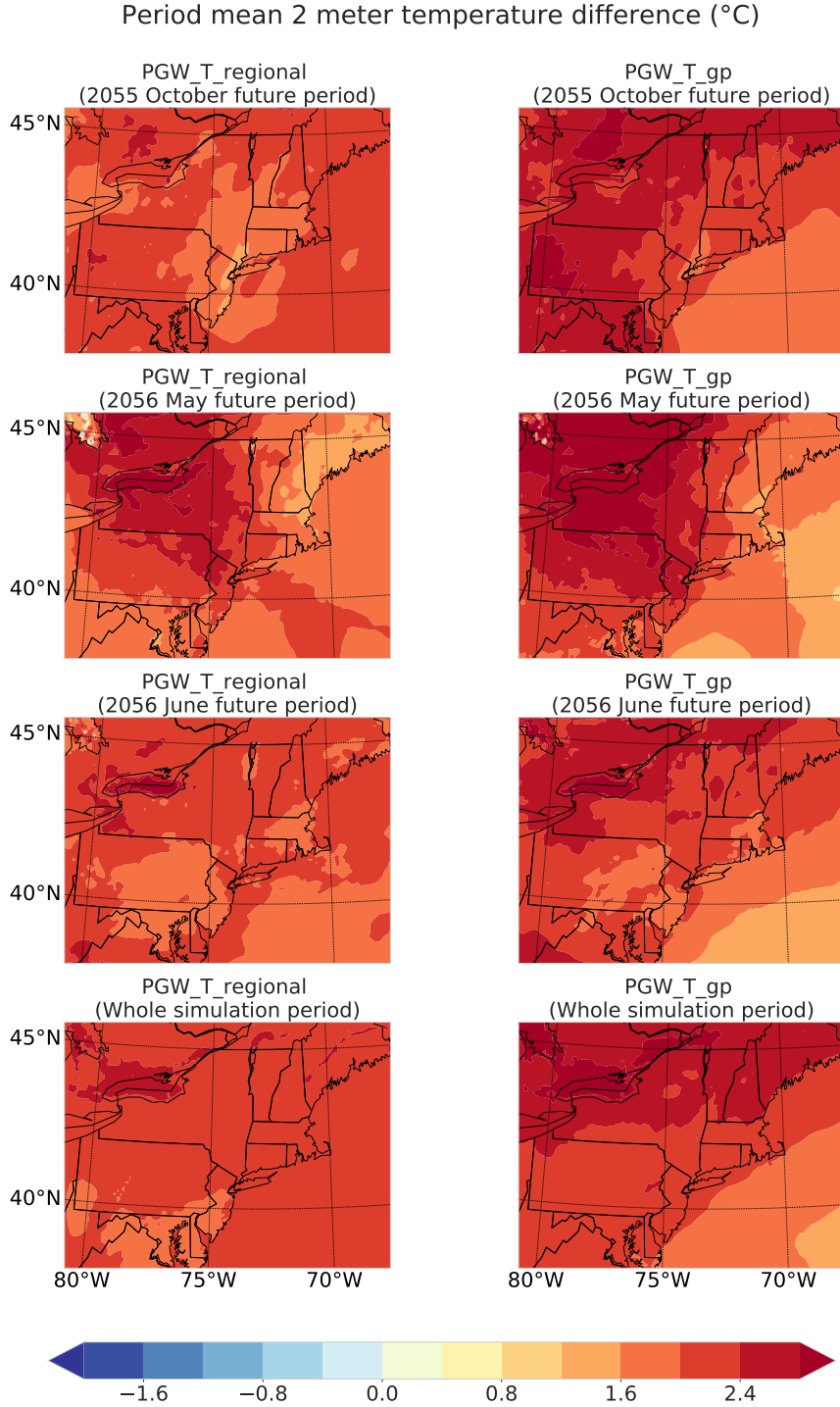

Fig. S1. Period mean temperature deltas at 2 meter (°C) over the inner domain from the simulation with temperature perturbation at regional mean scale and the simulation with temperature perturbation at each gridpoint (the baseline simulation in both columns is the historical 2000s flood period).

Period mean precipitable water (mm) during flood periods

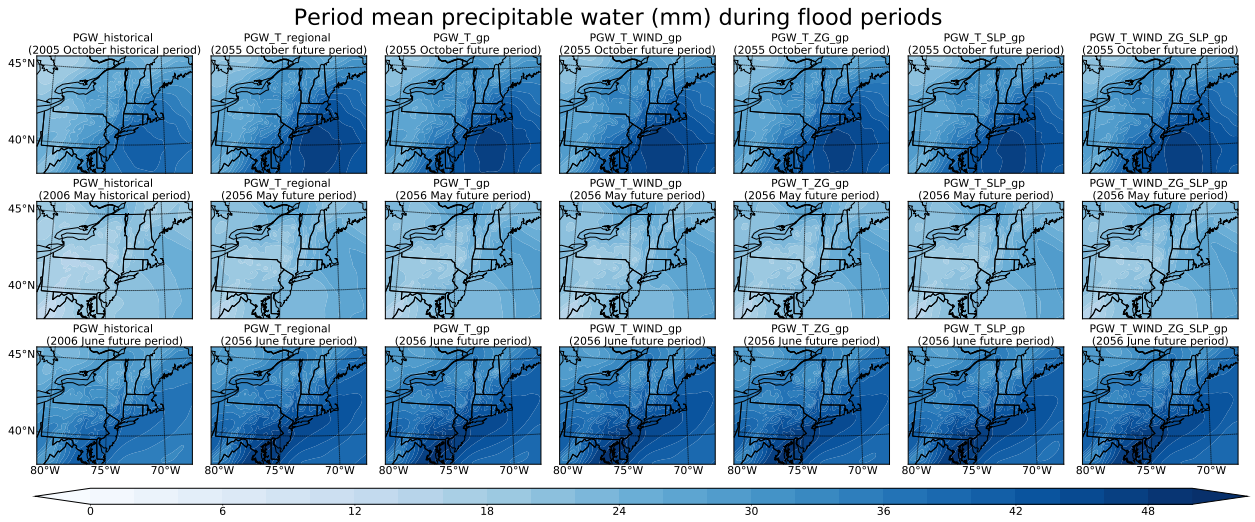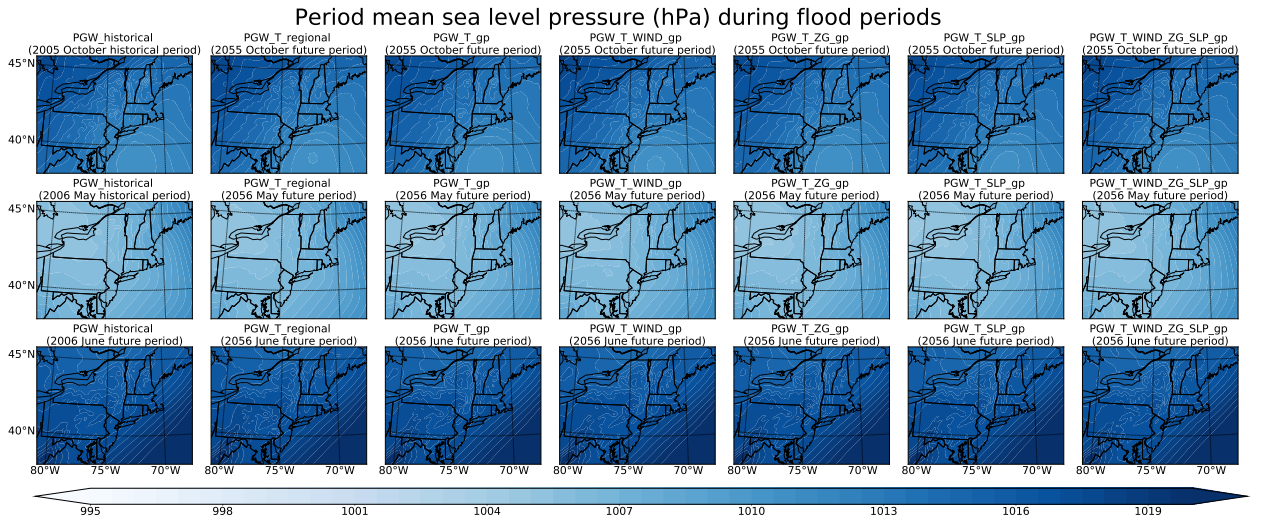Fig. S2. Period mean precipitable Water (mm) over the inner domain from all PGW simulations during flood periods.

Period mean sea level pressure (hPa) during flood periods

Fig. S3. Period mean sea level pressure (hPa) over the inner domain from all PGW simulations during flood periods.
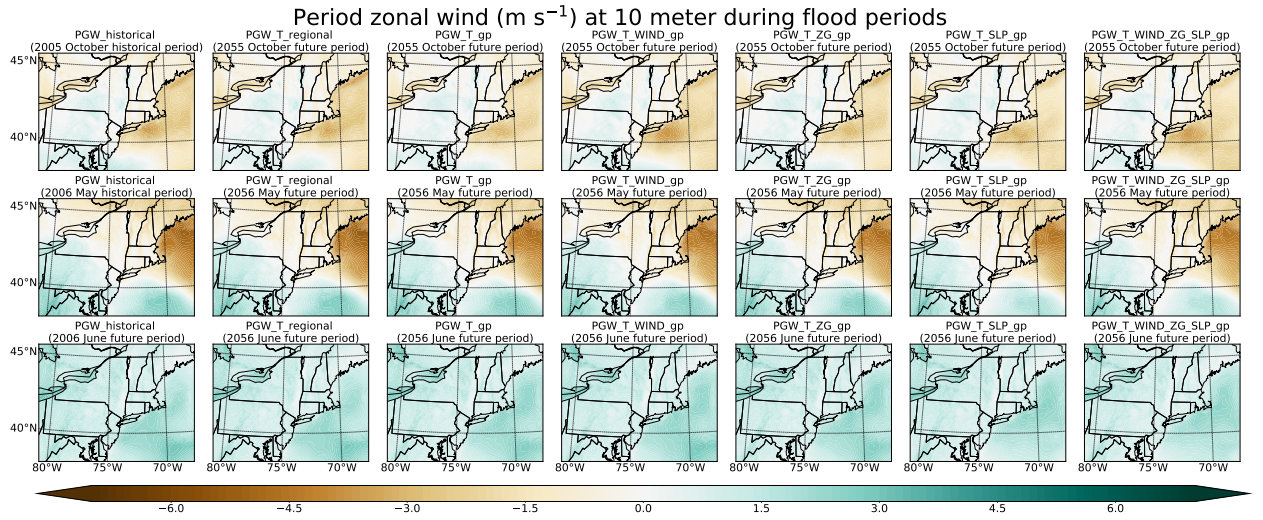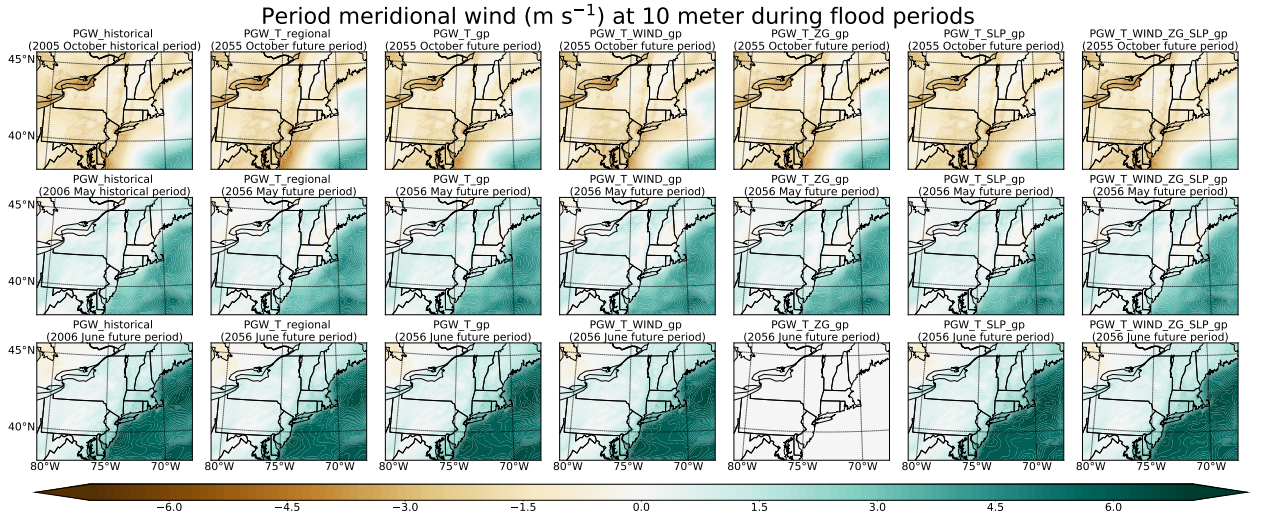
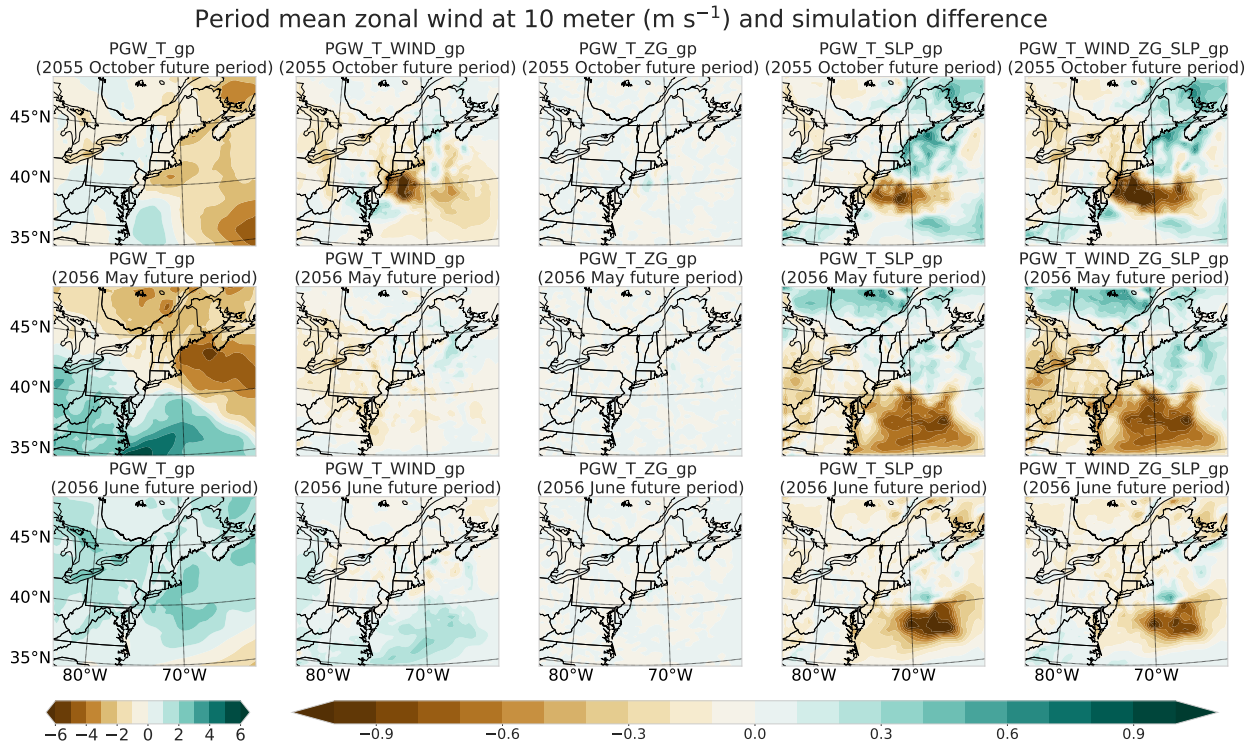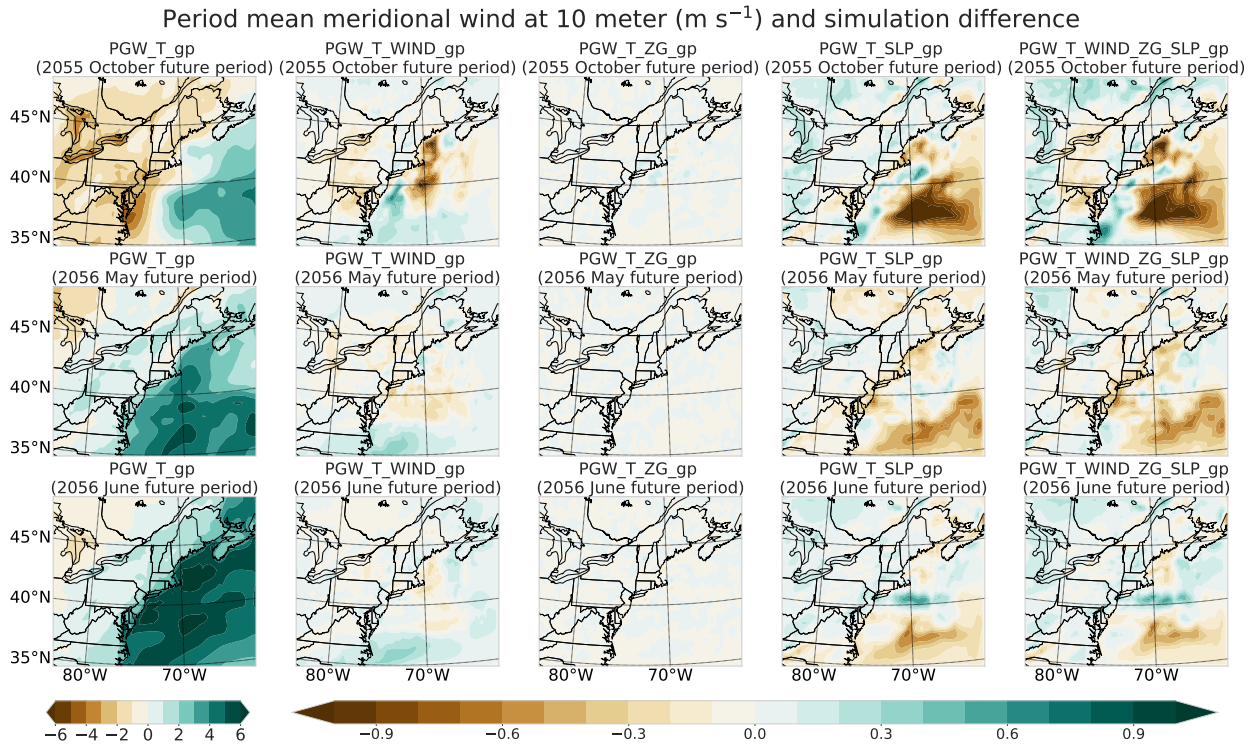Fig. S4. Period mean zonal wind (m s^{-1}) over the inner domain from all PGW simulations during flood periods.

Fig. S5. Period mean meridional wind (m s^{-1}) over the inner domain from all PGW simulations during flood periods.

Period mean zonal wind at 10 meter (m s⁻¹) and simulation difference

Fig. S6. Period mean zonal wind and simulation delta (m s^{-1}) over the whole domain from all PGW simulations during flood periods.

Fig. S7. Period mean meridional wind and simulation delta (m s^{-1}) over the whole domain from all PGW simulations during flood periods.
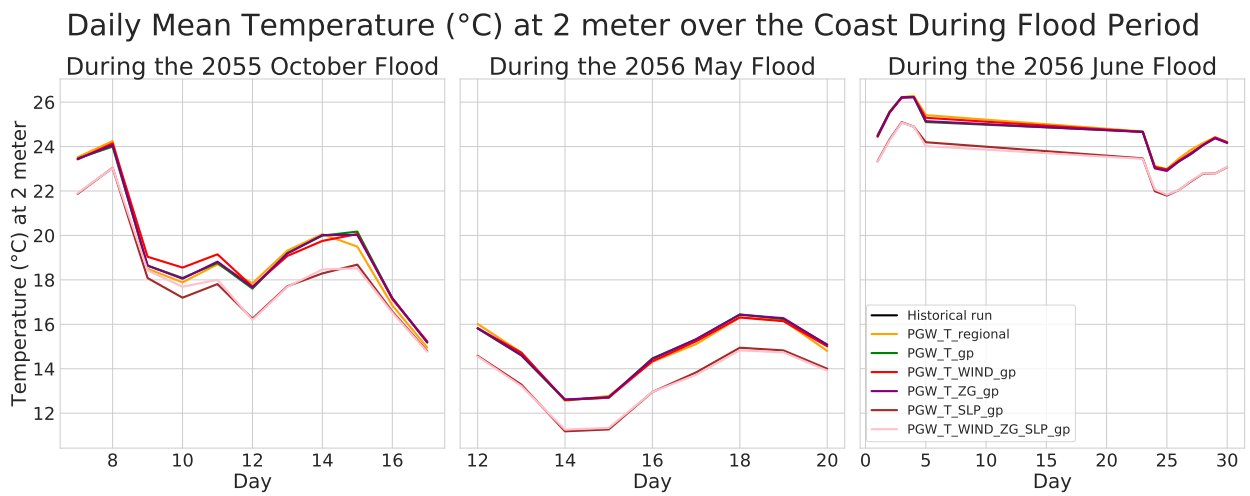
Fig. S8. Regional mean daily temperature (°C) at 2 meter over the Central Coast (defined as 40°N to 41°N latitude and 73°W to 74°W longitude) during Flood periods.
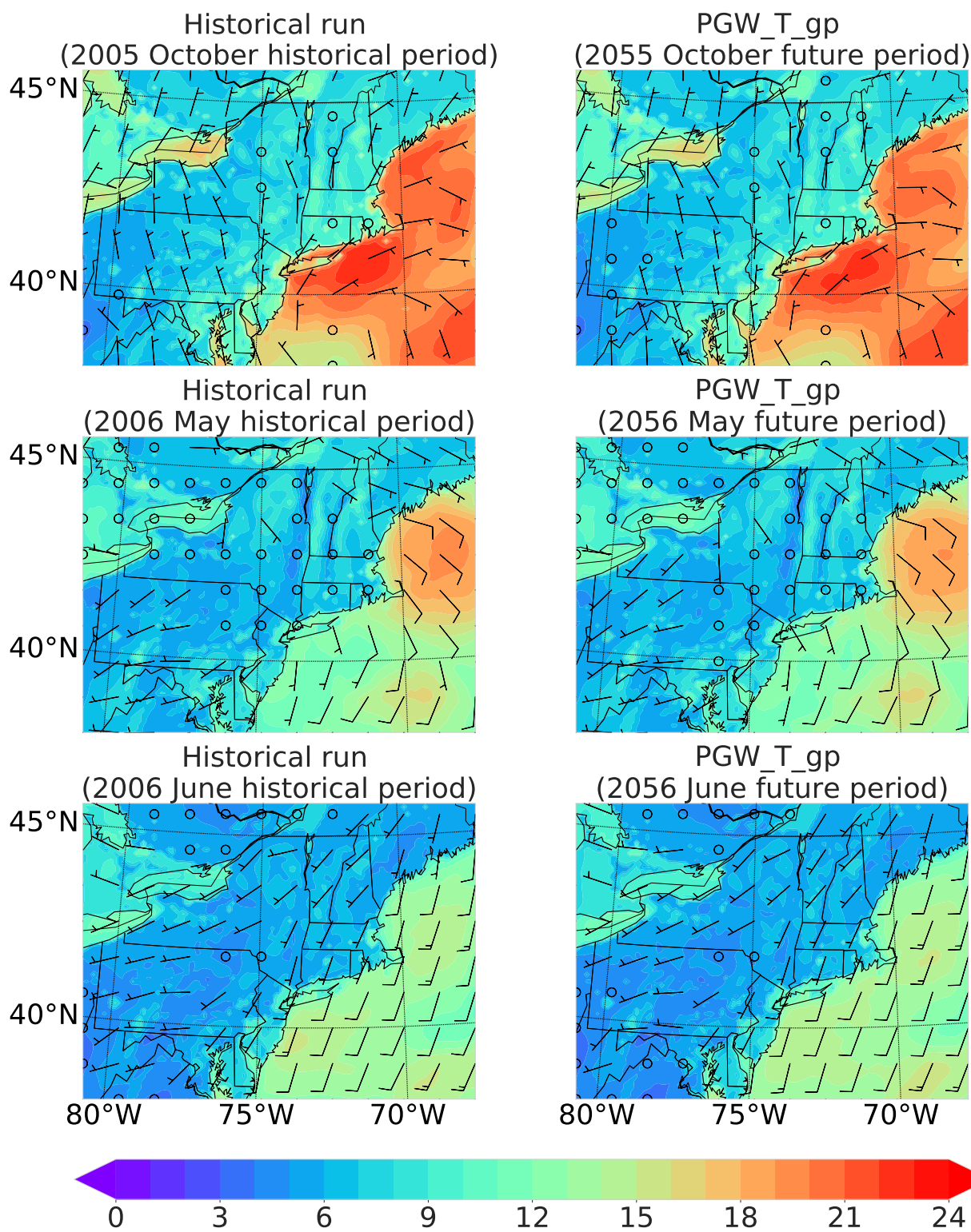
Period Mean Wind Speed (kt) and Wind Barbs

Fig. S9. Period mean wind speed (knot) and wind barbs over the inner domain during flood periods.
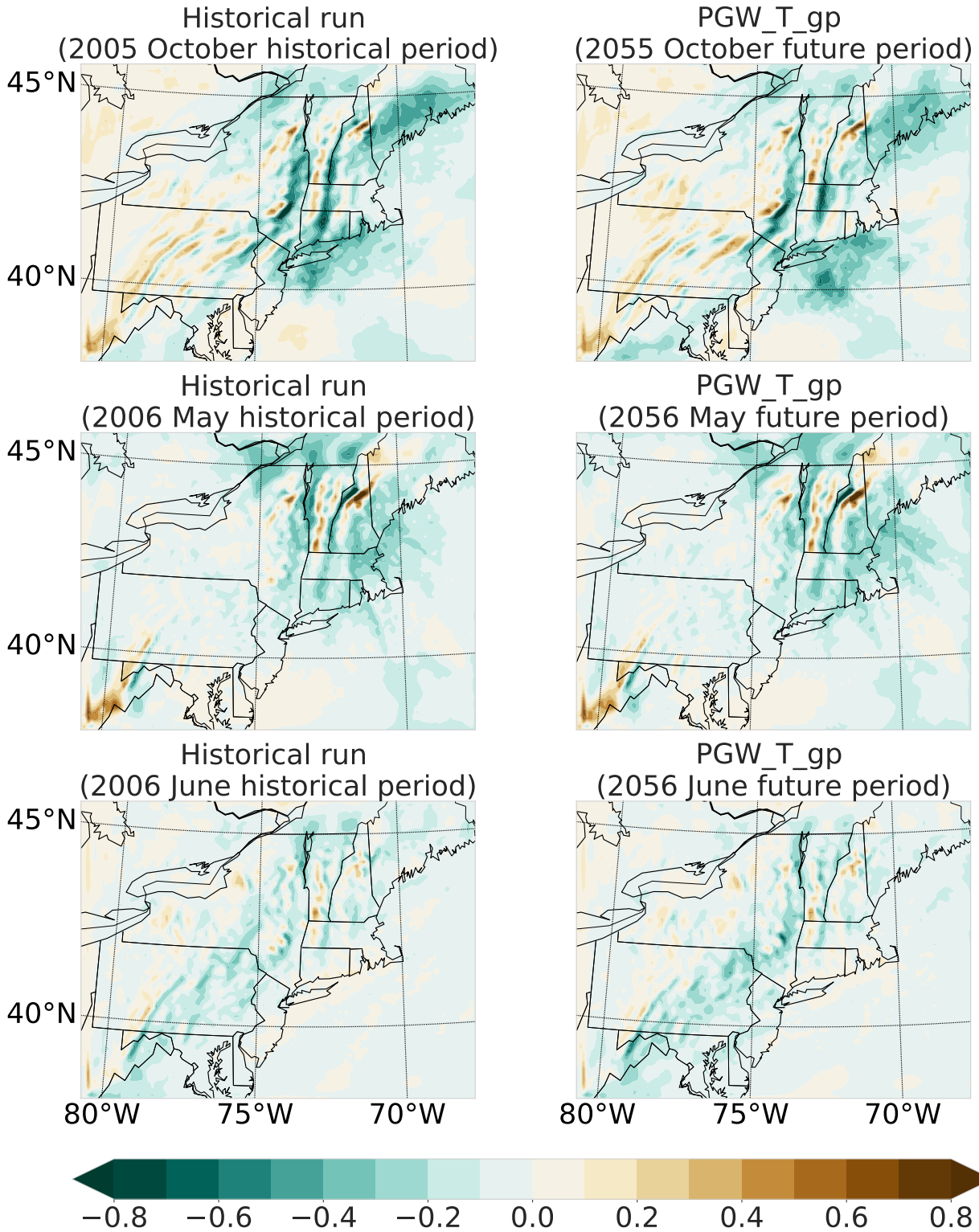
Period mean omega at 700 hPa (Pa s^{-1})

Fig. S10. Period mean omega (Pa s^{-1}) over the inner domain from all PGW simulations during flood periods.
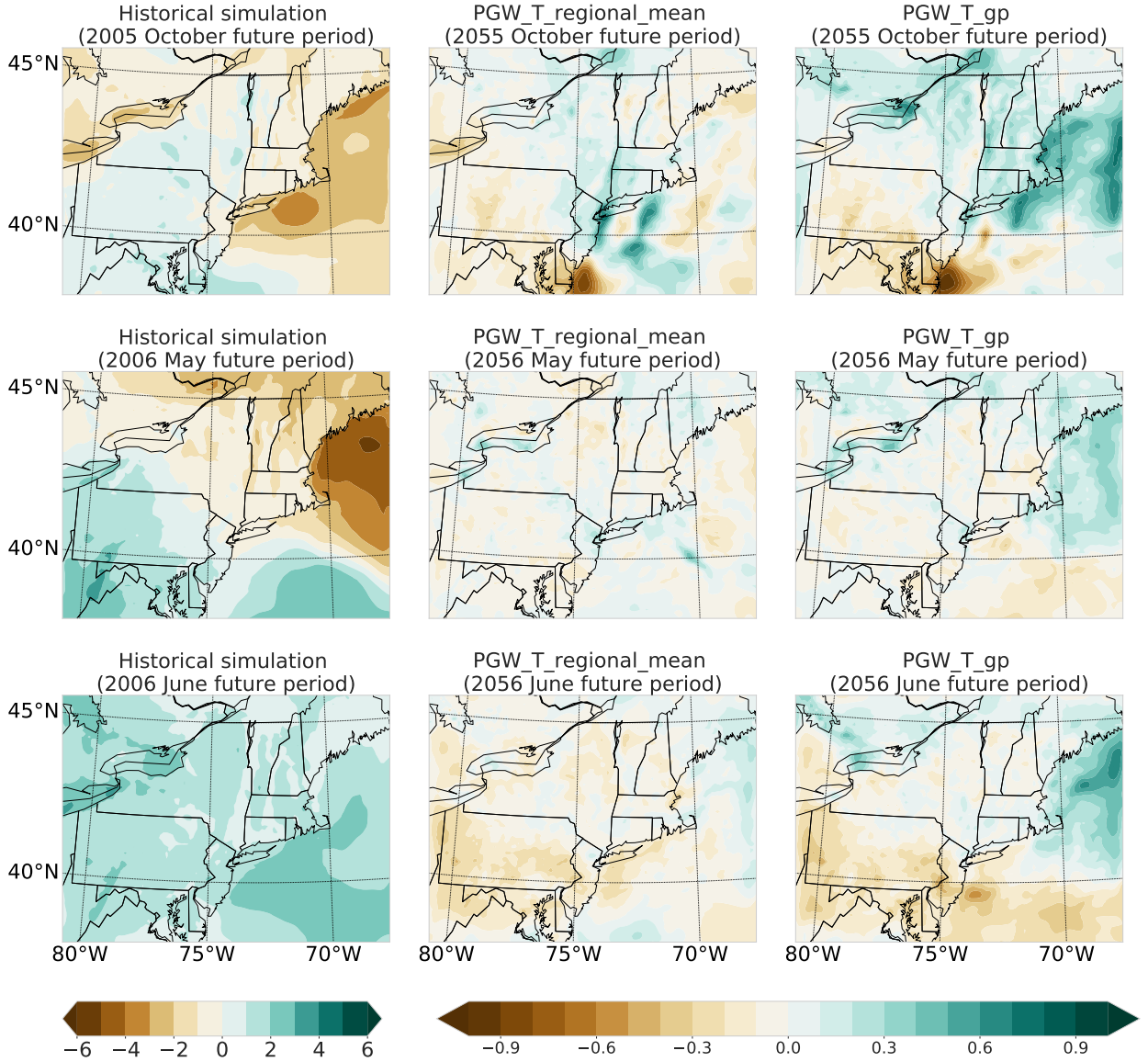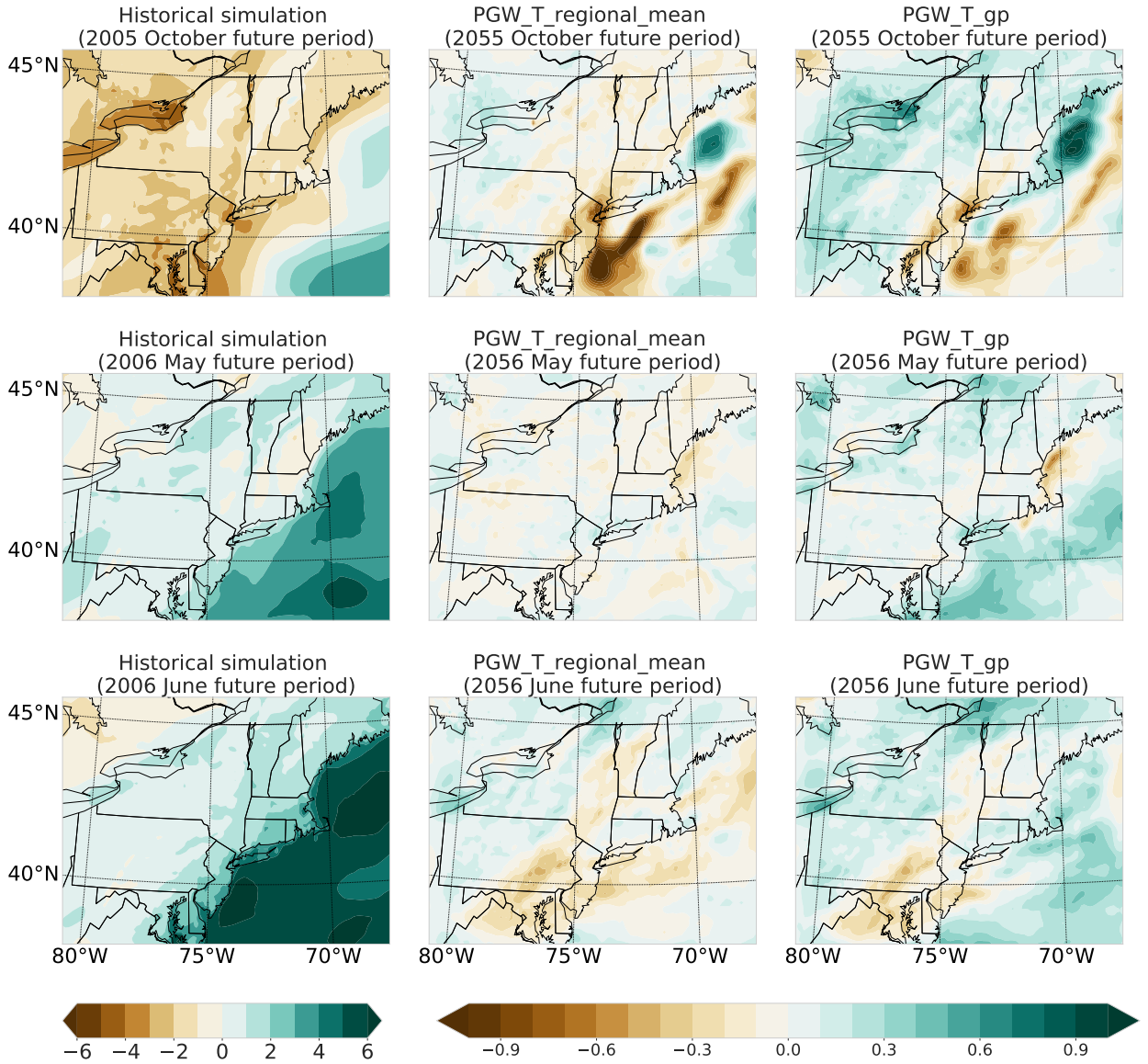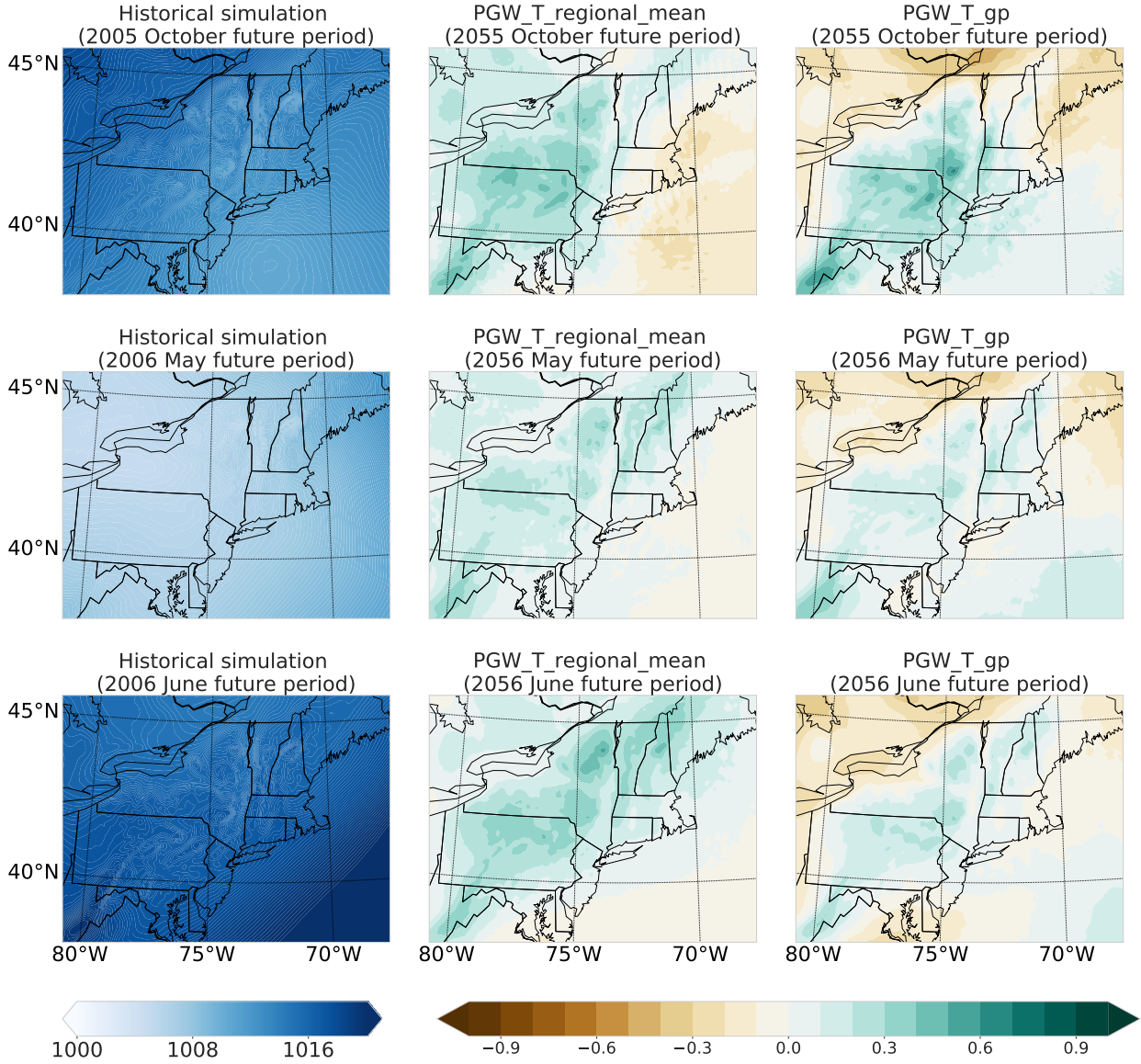
Fig. S11. Historical period mean zonal wind and simulation delta (m s^{-1}) over the inner domain from PGW simulations during flood periods.

Period mean meridional wind at 10 meter (m s^{-1}) and simulation difference

Fig. S12. Historical period mean meridional wind and simulation delta (m s^{-1}) over the inner domain from PGW simulations during flood periods.

Fig. S13. Historical period mean sea level pressure and simulation delta (hPa) over the inner domain from PGW simulations during flood periods.