



Figure 5-S1.  $\text{ACO}_2\text{eq}$  Calibration for PHASE-POD in 2100.

(A) Projected annual emissions of  $\text{CO}_2$ ,  $\text{CH}_4$  and  $\text{N}_2\text{O}$  for shown scenarios. (B) Projected atmospheric concentrations of  $\text{CO}_2$ ,  $\text{CH}_4$  and  $\text{N}_2\text{O}$  under each emission scenario. (C) Radiation Forcing. (D) Cumulative difference between scenario and BAU of Radiative Forcing.