

## Supplementary Material

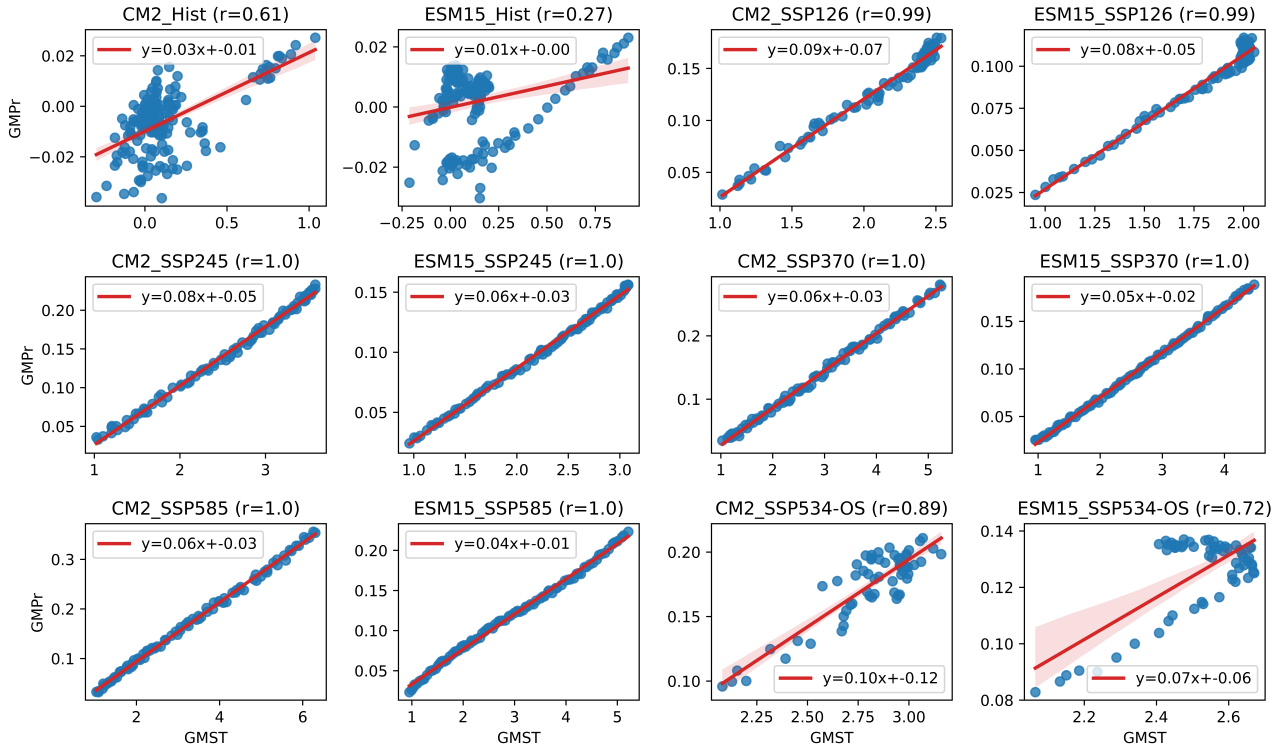
### **Global-scale future climate projections from ACCESS model contributions to CMIP6**

*Serena Schroeter<sup>A,\*</sup>, Daohua Bi<sup>B</sup>, Rachel M. Law<sup>B</sup>, Tamas F. Loughran<sup>B</sup>, Harun A. Rashid<sup>B</sup> and Zhaohui Wang<sup>B</sup>*

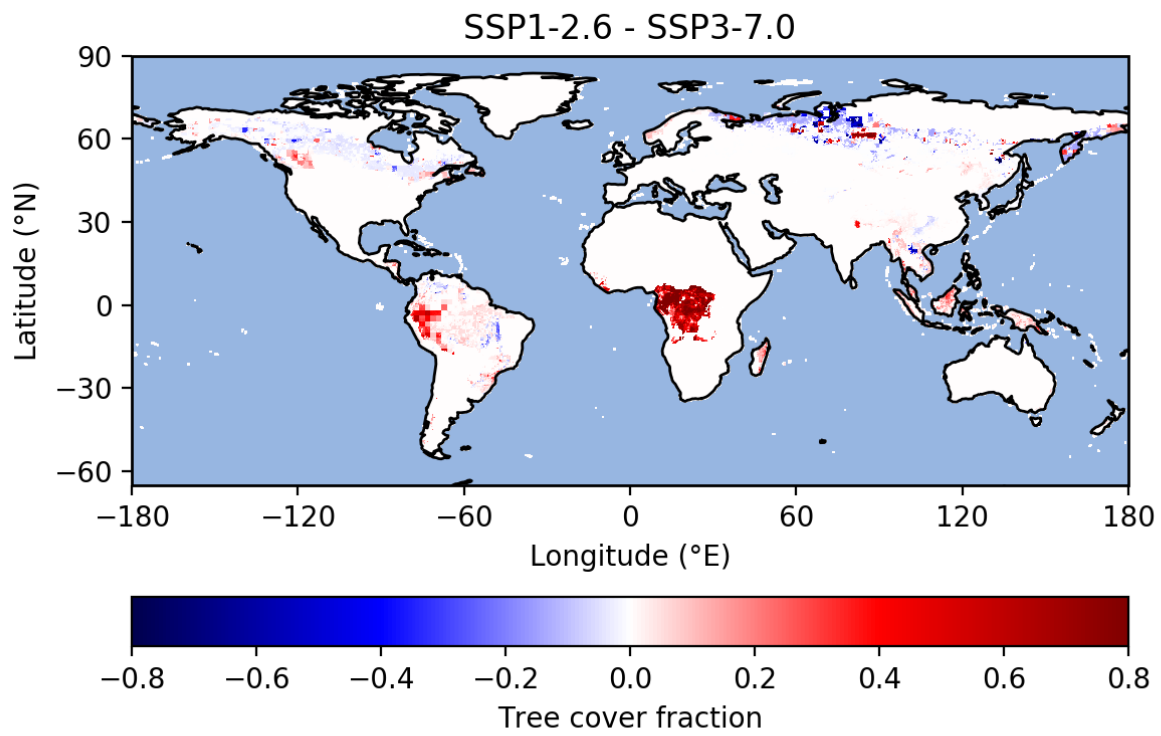
<sup>A</sup>CSIRO Environment, Hobart, Tas., Australia

<sup>B</sup>CSIRO Environment, Aspendale, Vic., Australia

\*Correspondence to: Email: [serena.schroeter@csiro.au](mailto:serena.schroeter@csiro.au)



**Figure 1.** Scatter plots of the GMST (°C) and GMPr (mm day<sup>-1</sup>) anomalies in the ACCESS historical and ScenarioMIP simulations. The correlation coefficients between these variables for different simulations are given in the respective title. A straight-line fit for each simulation is also given, the slope of which is a measure of the hydrological sensitivity (the change in GMPr per unit change in GMST). The data periods used in this figure are 1850–2014 for the historical experiment and 2015–2100 (2041–2100) for the ScenarioMIP (overshoot) experiments.



**Figure 2.** Difference in tree cover fraction between the scenarios *ssp126* and *ssp370* from LUH2. This indicates the additional (or in some places reduced) tree cover for the simulations with swapped land-use change *ssp370-ssp126Lu* and *ssp126-ssp370Lu*. Positive values indicate more tree cover in the *ssp126* scenario.