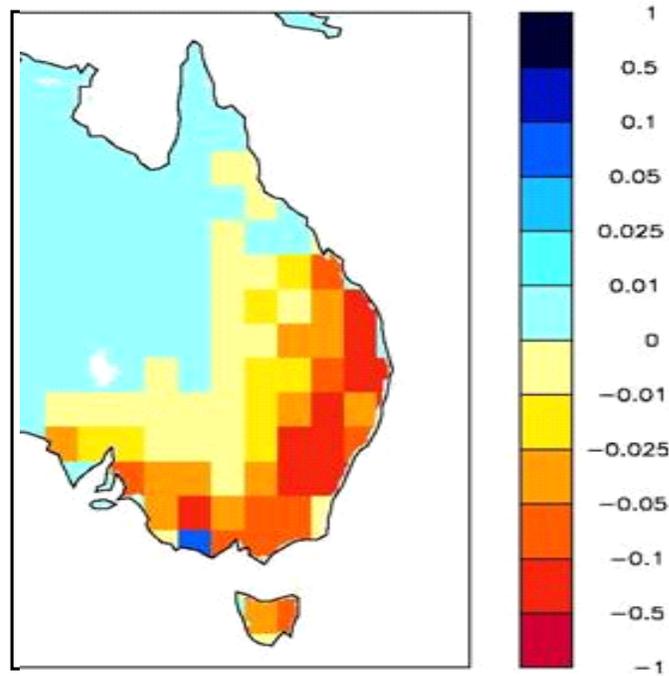
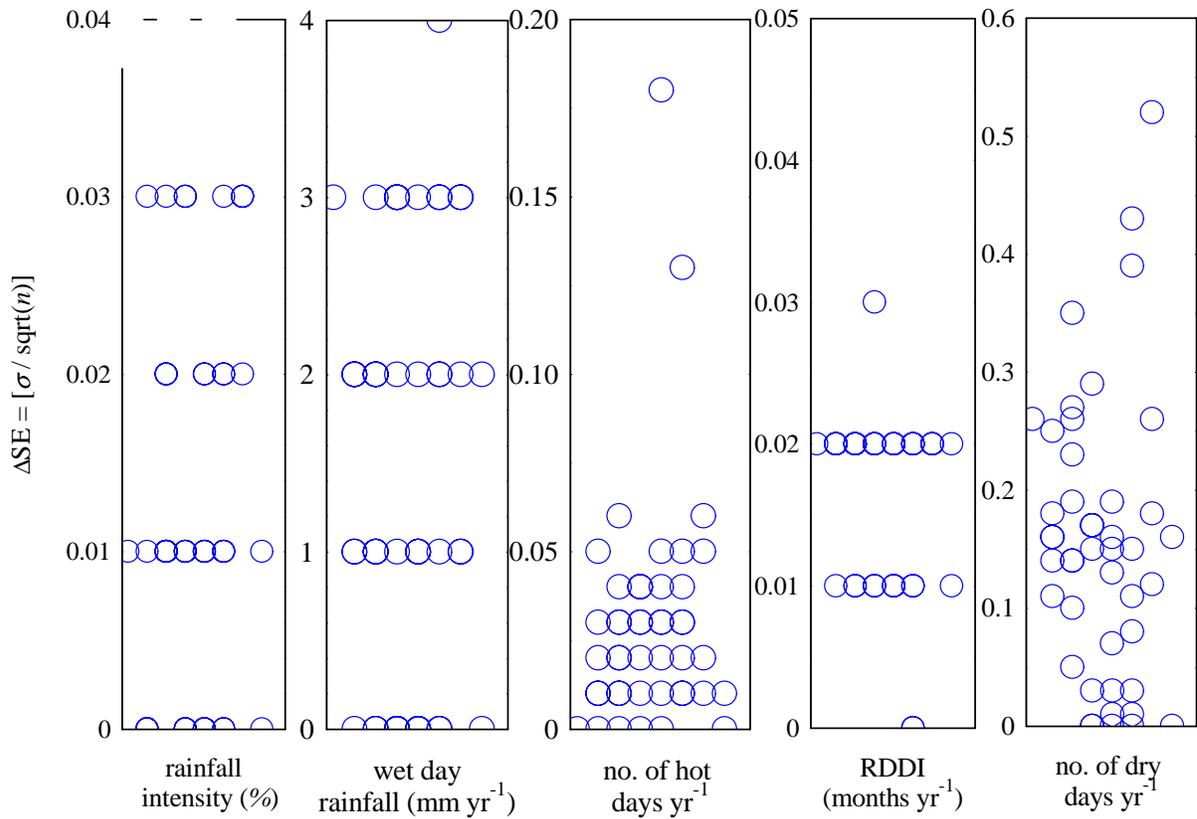


Auxiliary Figures

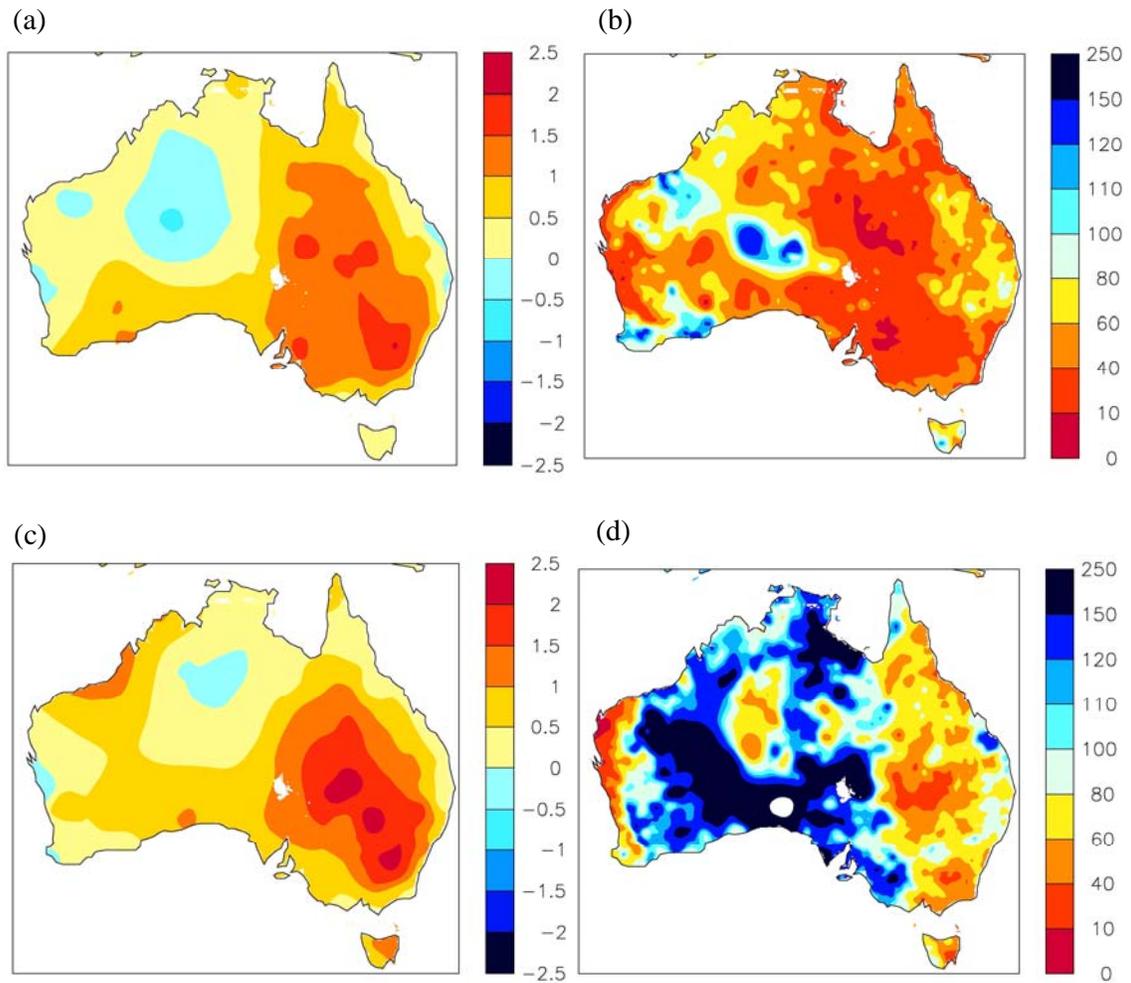


Auxiliary Figure S1: Land cover map showing the changes in vegetation fraction used in the CSIRO climate system model. Changes are for modern day conditions compared to pre-European conditions.

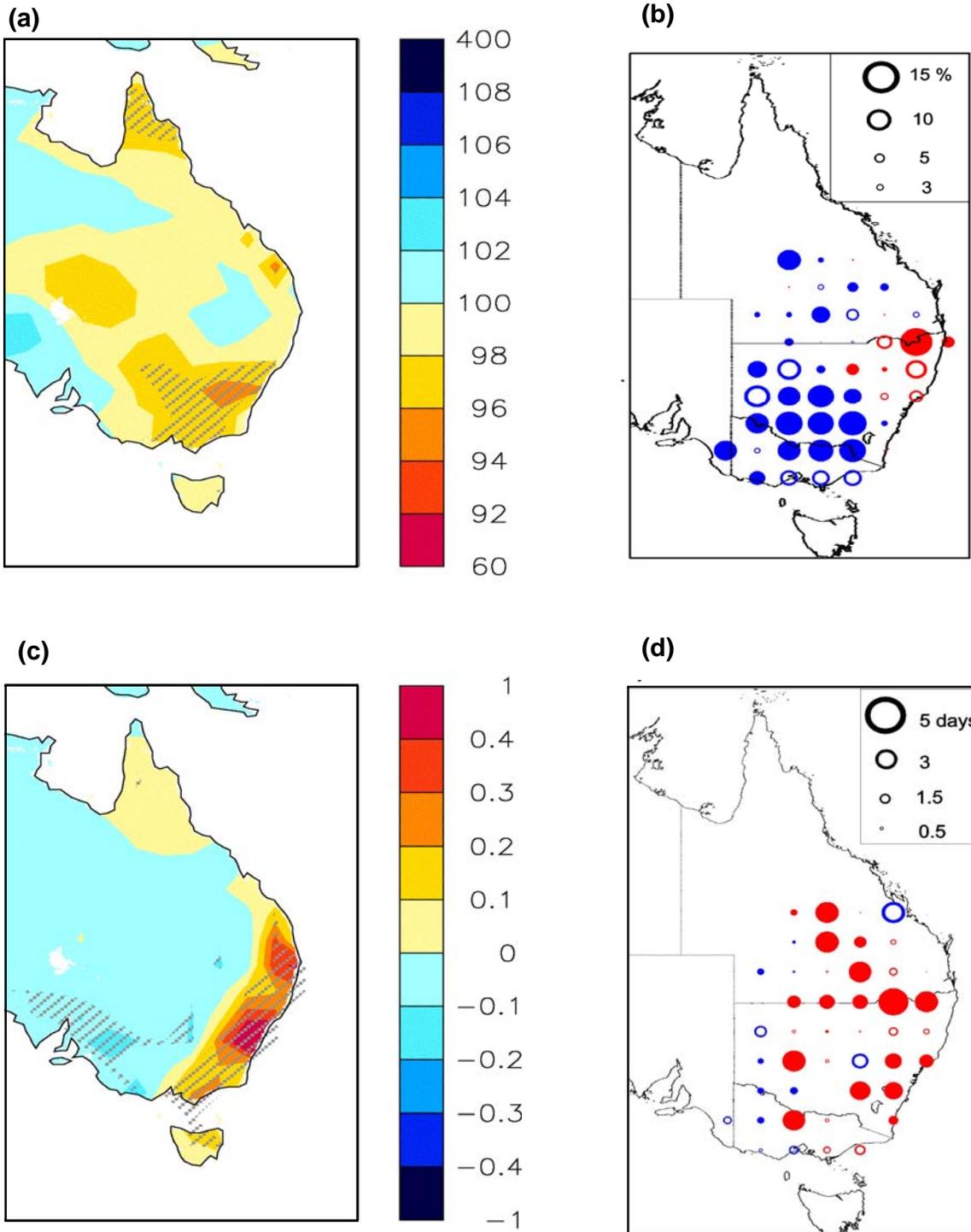


indices are plotted longitudinally

Auxiliary Figure S2: A statistical assessment of the variance in daily indices of climate extremes derived from ensemble of n model runs. Variances are calculated from the differences in standard error ($\Delta SE = \sigma / \sqrt{n}$ where σ is the standard deviation and $n = 10$) of pre-European and modern day vegetation conditions and axis are representative of longitudinal gradients running west to east.



Auxiliary Figure S3: The observed anomalies in Australian climate during the November to March (summer) period for (a) 1982/83 surface temperature, (b) 1982/83 rainfall, (c) 2002/03 surface temperature, and (d) 2002/03 rainfall. The anomalies are shown as departures from 1951-2003 climatology.



Auxiliary Figure S4: The simulated changes in annual mean climate and daily indices of climate extremes for the period 1951-2003 from pre-European to modern-day land cover conditions: (a) mean annual rainfall (% change), (b) daily rainfall intensity, (c) mean surface temperature ($^{\circ}\text{C}$), and (d) number of hot days yr^{-1} .