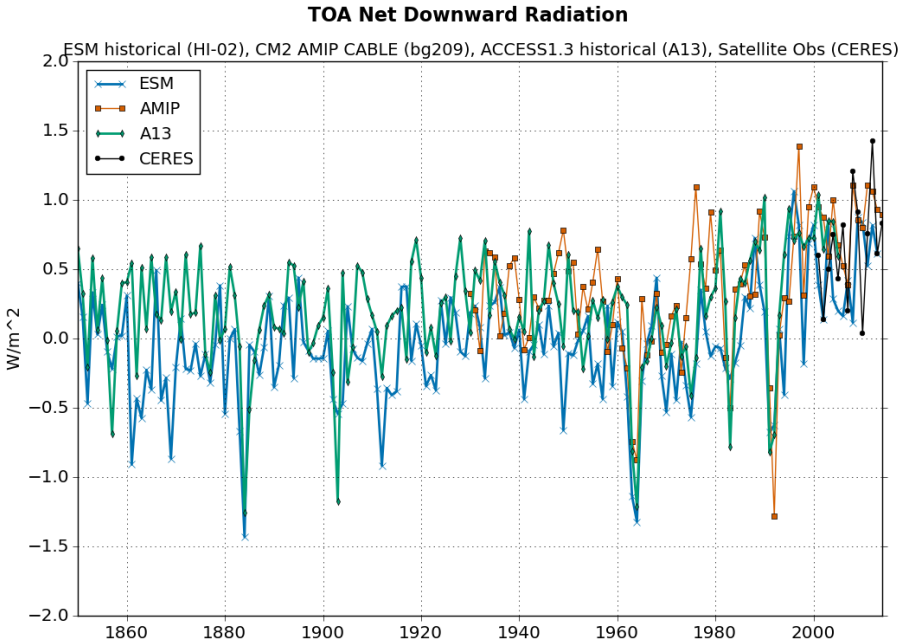
Earth Systems and Climate Change Hub

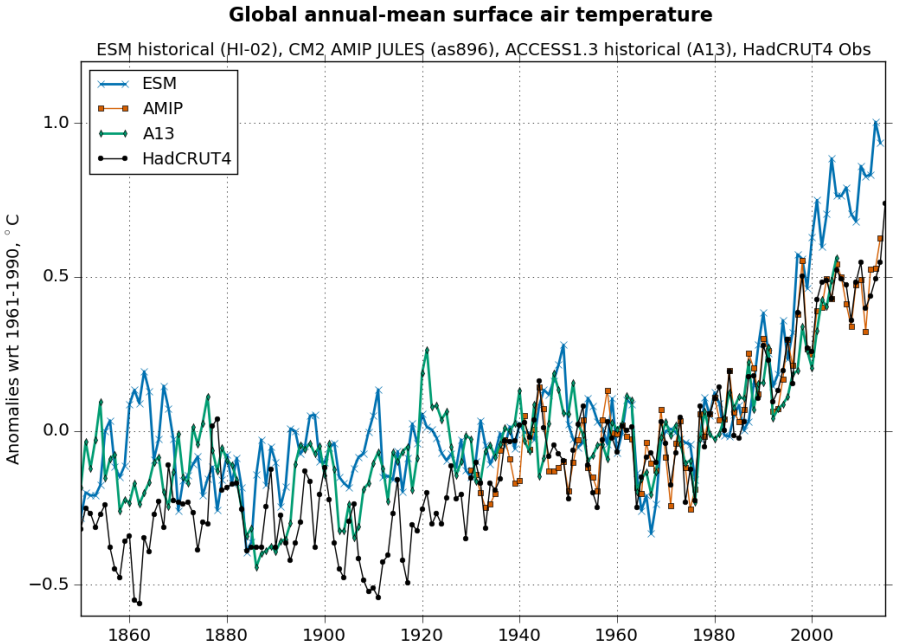
National Environmental Science Programme

ACCESS-ESM1.5 – ESM Historical simulation
24 May 2019

Roger Bodman | University of Melbourne & CSIRO

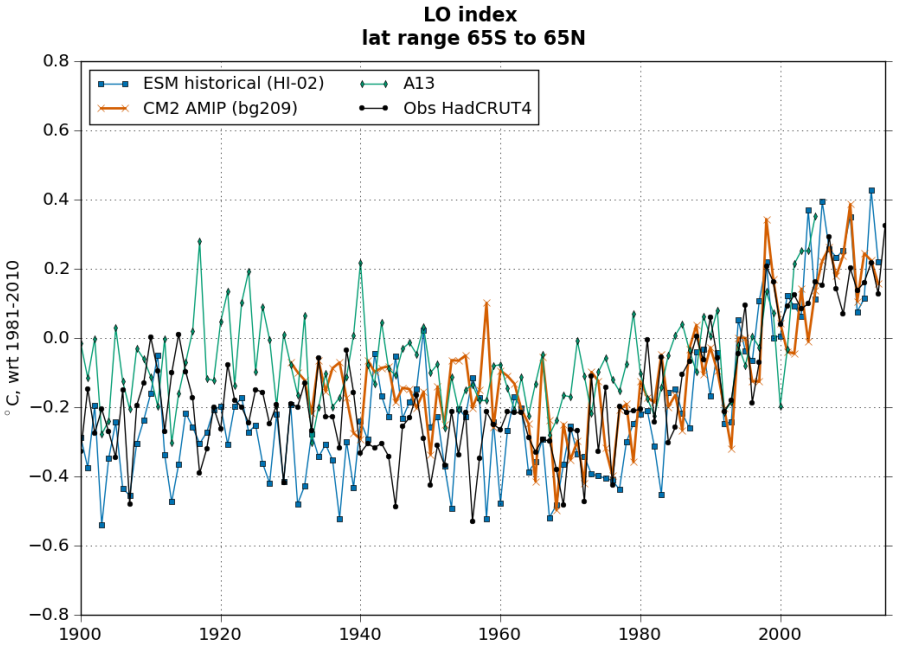
ESM historical – TOA radiation and surface air temperature (SAT)



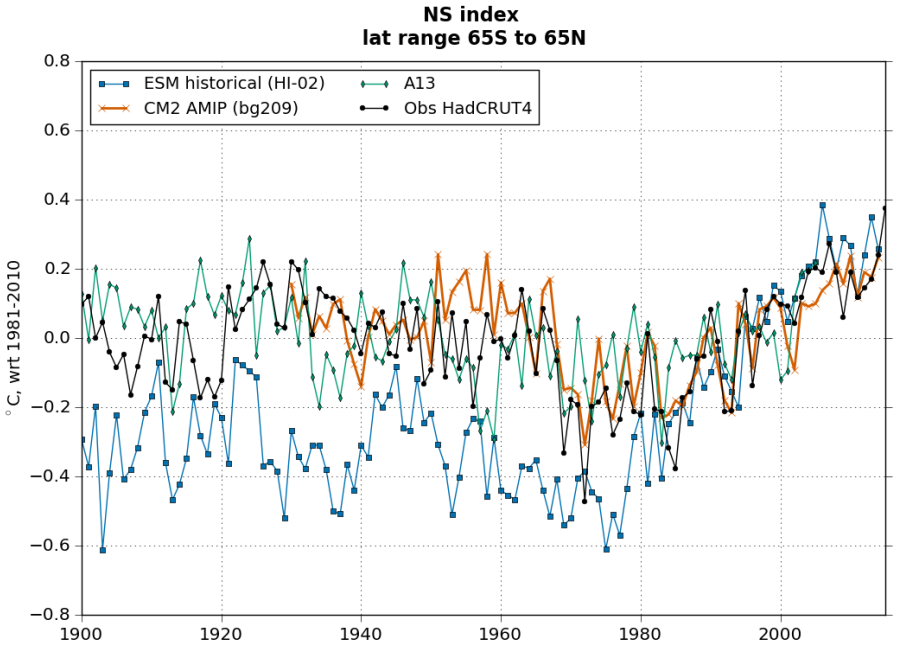


ESM coupled model with CMIP6 forcings, CABLE land surface model for both ESM and AMIP

Karoly-Braganza Indices

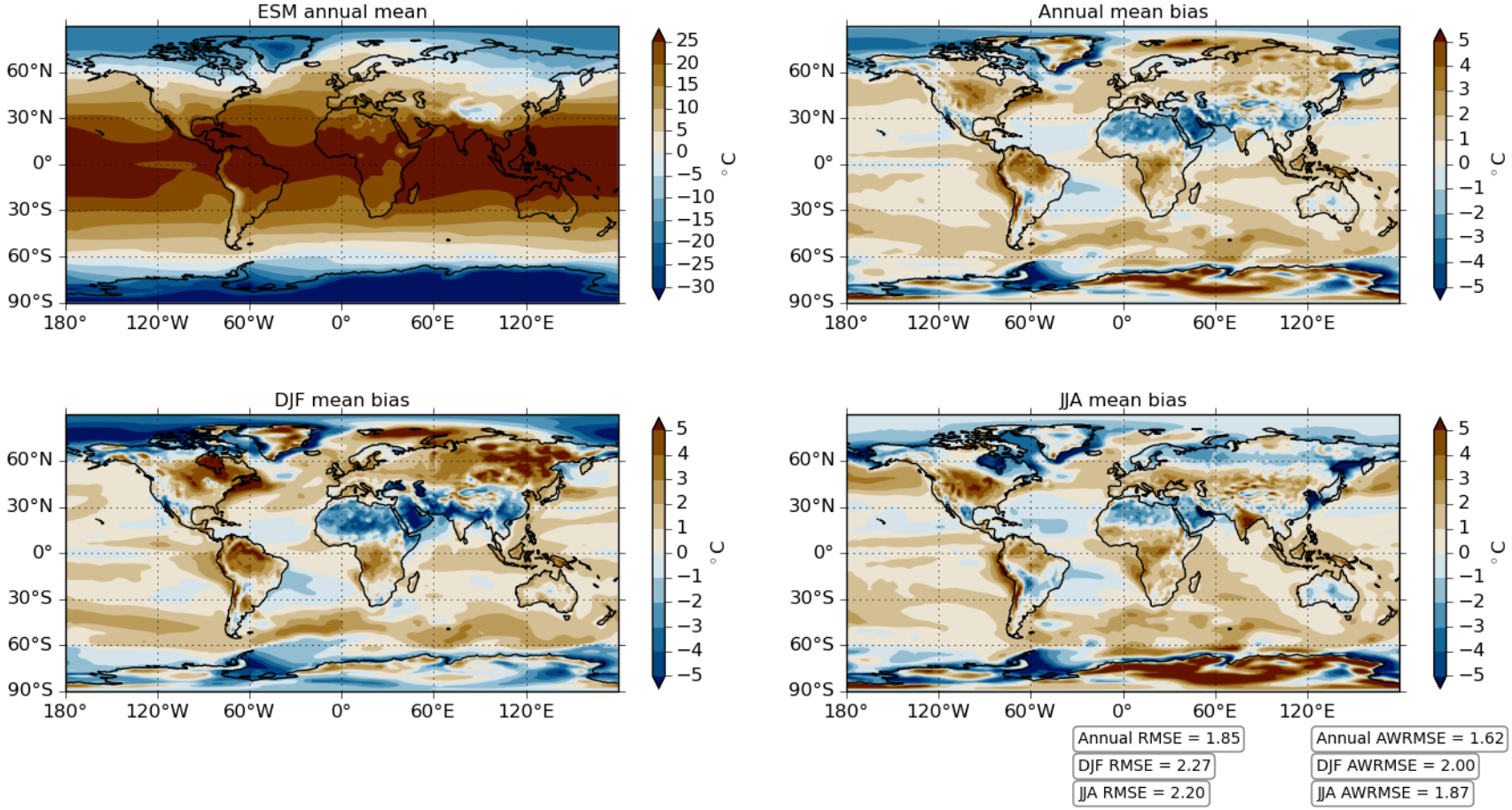


Land – Ocean

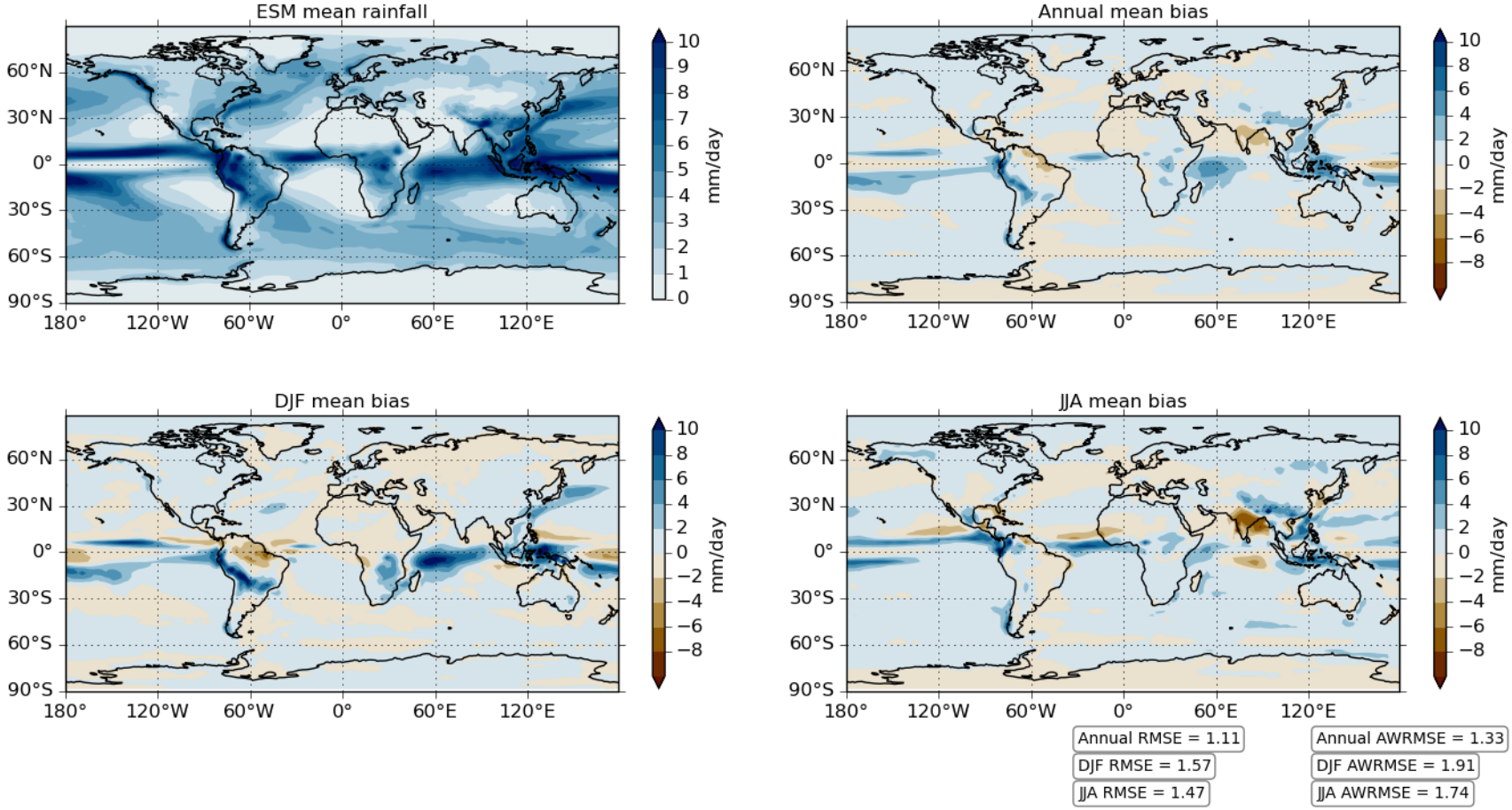


Northern – Southern Hemisphere

Global-mean temperature seasonal bias, ESM historical – ERAI, 1979-2014



Global-mean rainfall seasonal bias, ESM historical – GPCP, 1979-2014



Temp and Precip: global scale biases

AWRMSE bias: AMIP				Coupled	
	A1.3	CABLE	JULES ensemble*	A1.3	ESM historical
Temperature (model – ERAI)					
annual	1.21	1.04	1.06	1.68	1.62
djf	1.50	1.29	1.44	2.01	2.00
jja	1.44	1.34	1.33	1.91	1.87
Precipitation (model – GPCP)					
annual	1.26	1.34	1.23	1.43	1.33
djf	1.57	1.53	1.34	2.00	1.91
jja	2.02	1.88	1.72	1.88	1.74

* 3 realisations


End