

Intensified departures from natural variability in coupled climate variables

8th GEWEX Open Science Conference: Extremes and Water on the Edge
May 8th, 2018

Colin Mahony¹ and Alex Cannon²

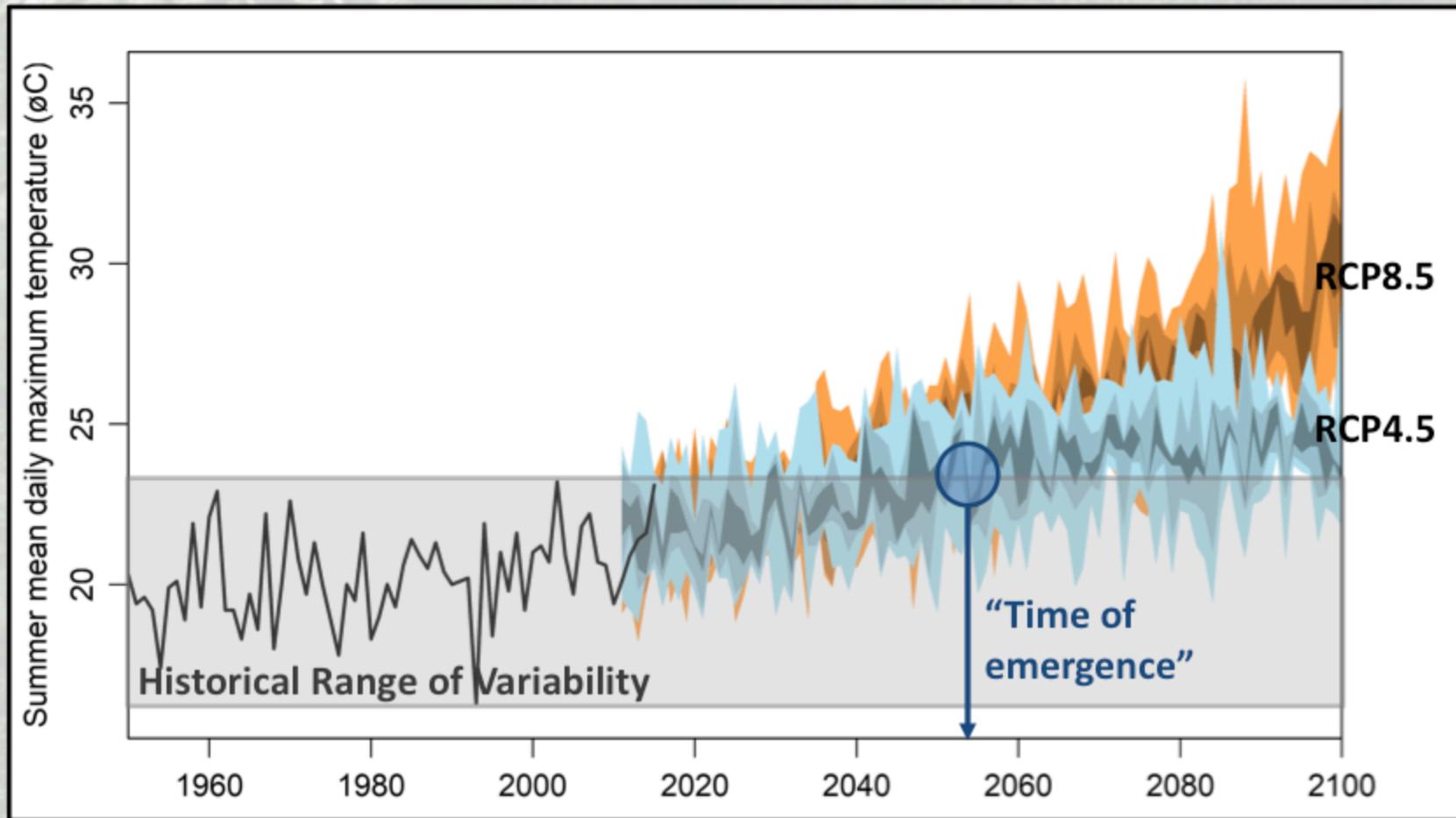
¹Department of Forest and Conservation Sciences, University of British Columbia

²Climate Research Division, Environment and Climate Change Canada

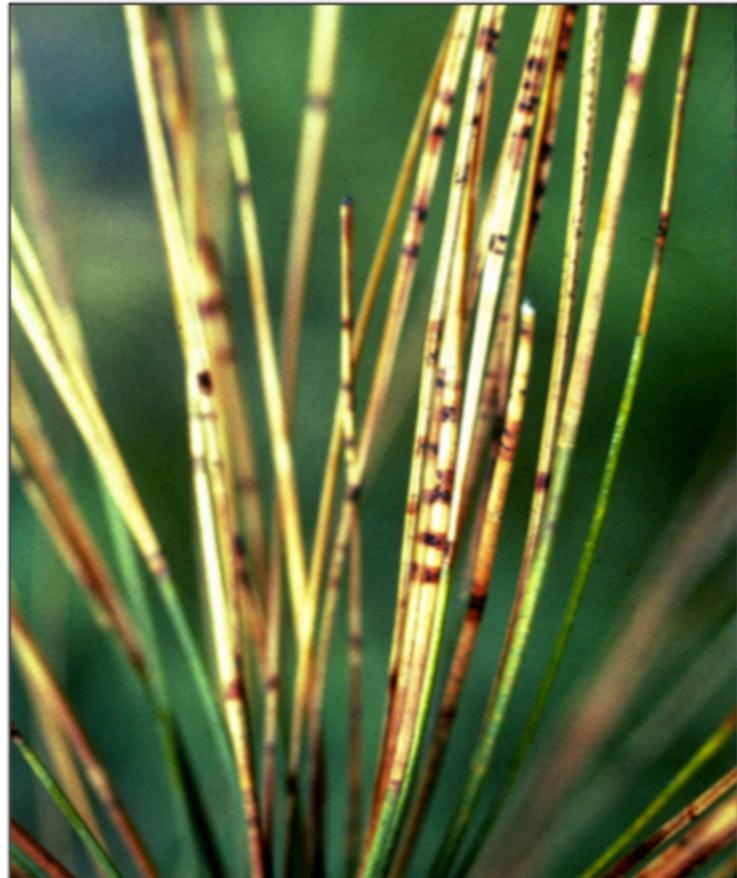
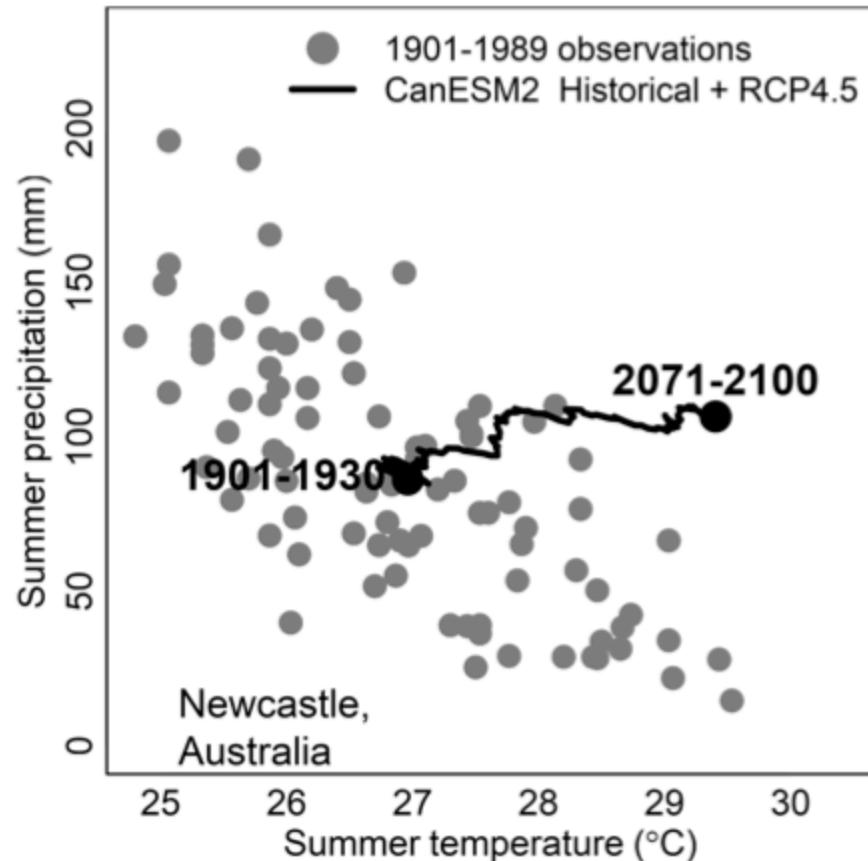


a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

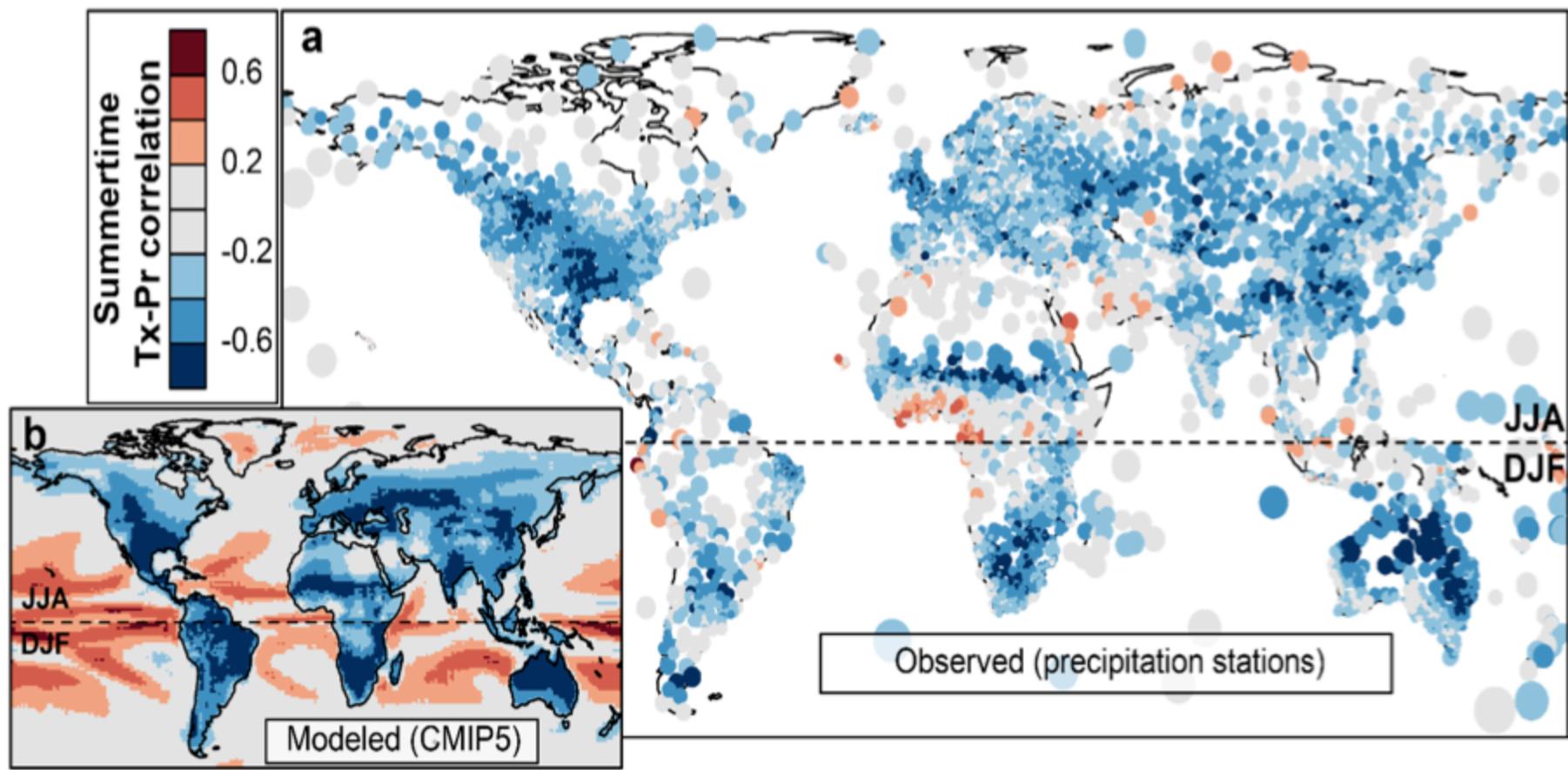
Departures from historical/natural climatic variability



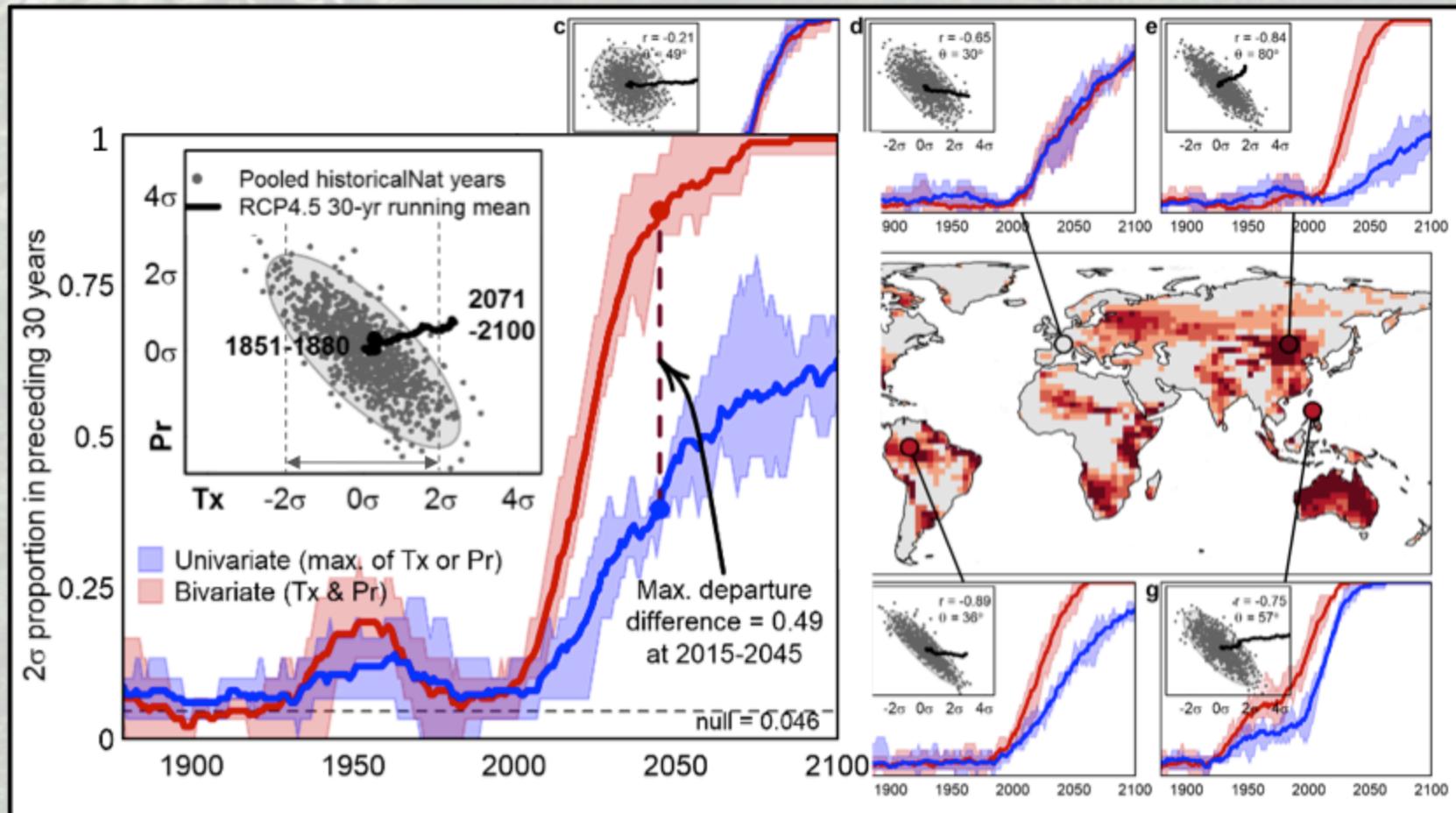
Multivariate departures from historical variability



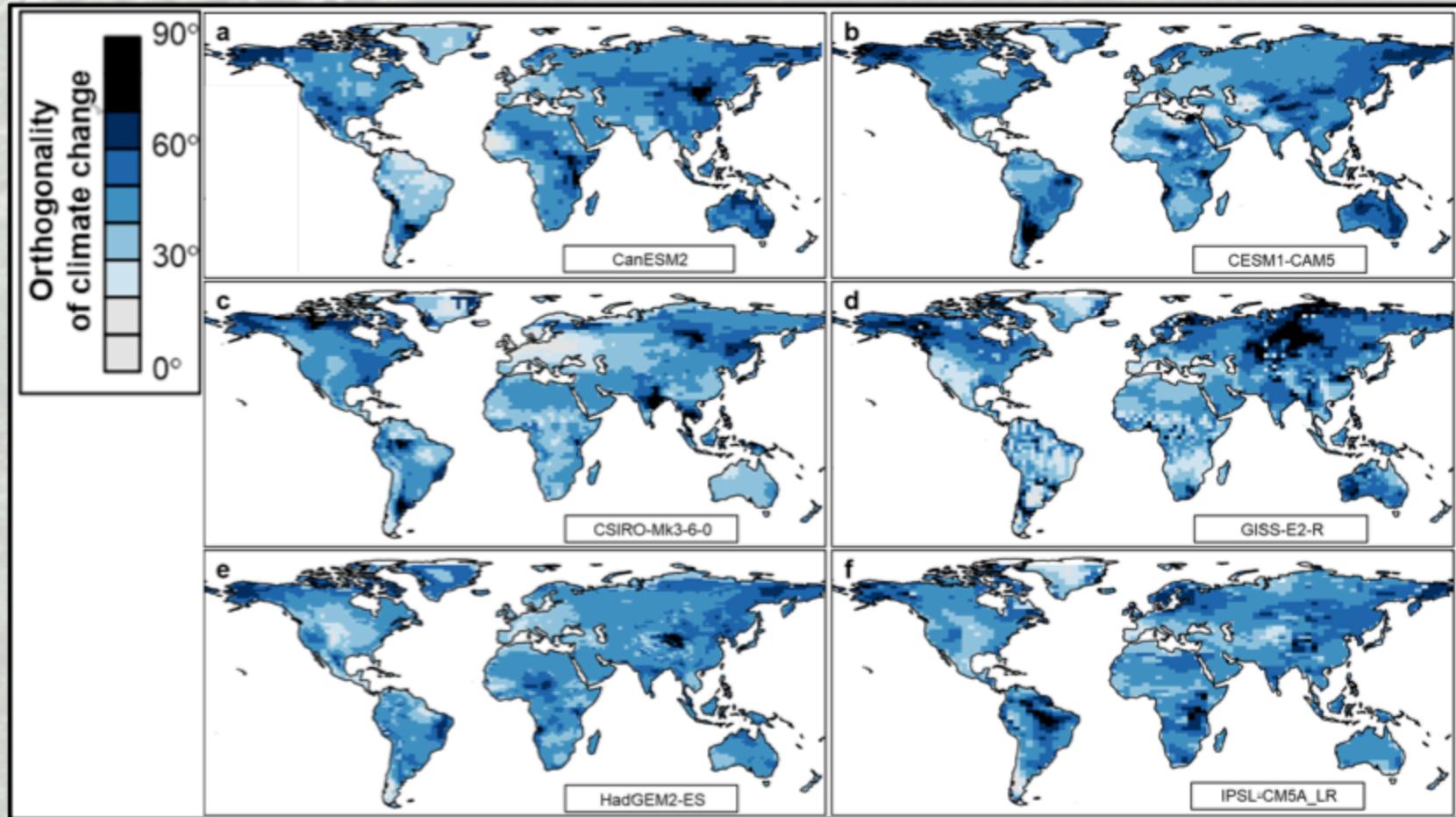
Correlation between summer precipitation and daytime temperature



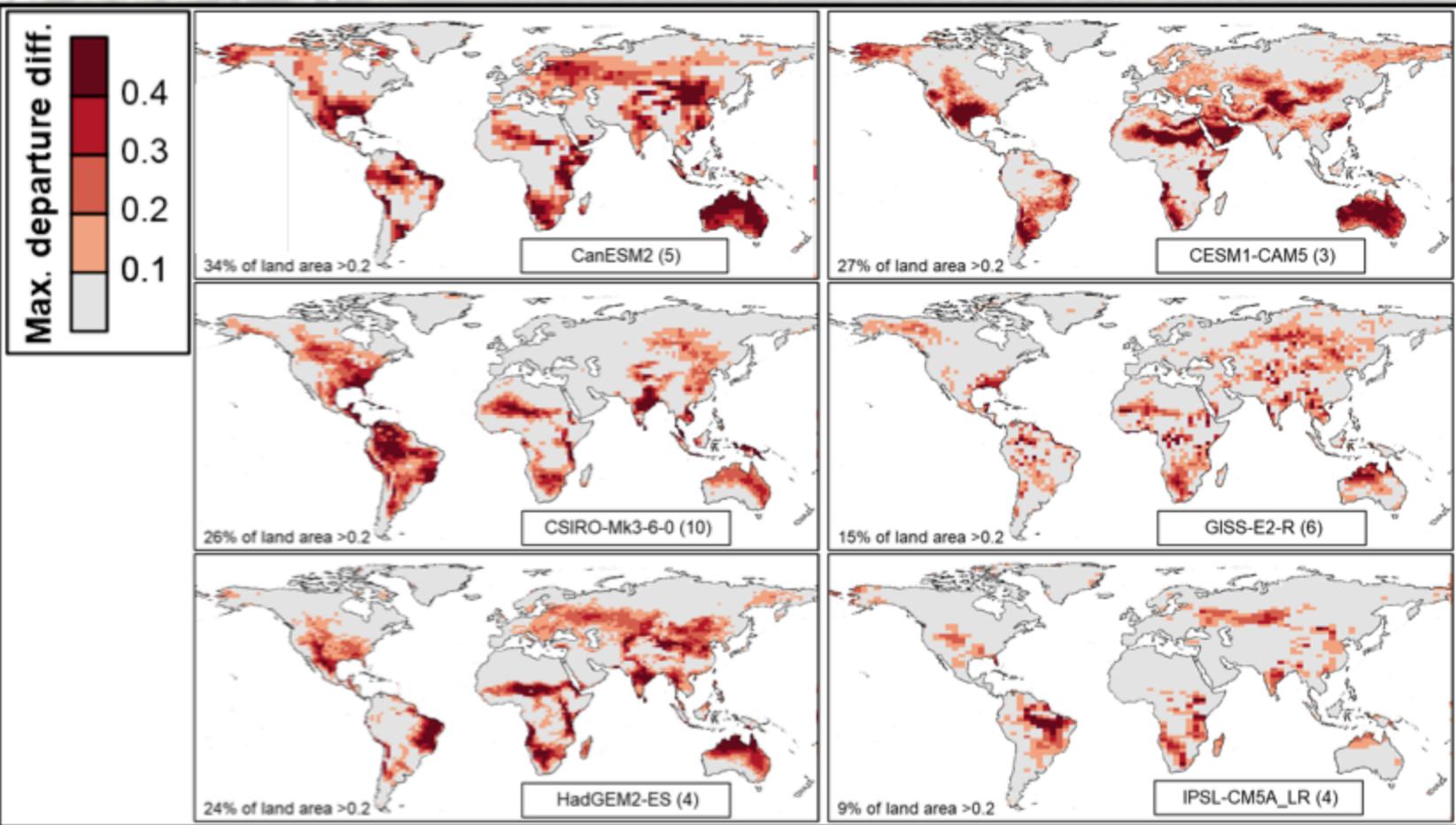
Departure intensification in CanESM2 (RCP4.5)



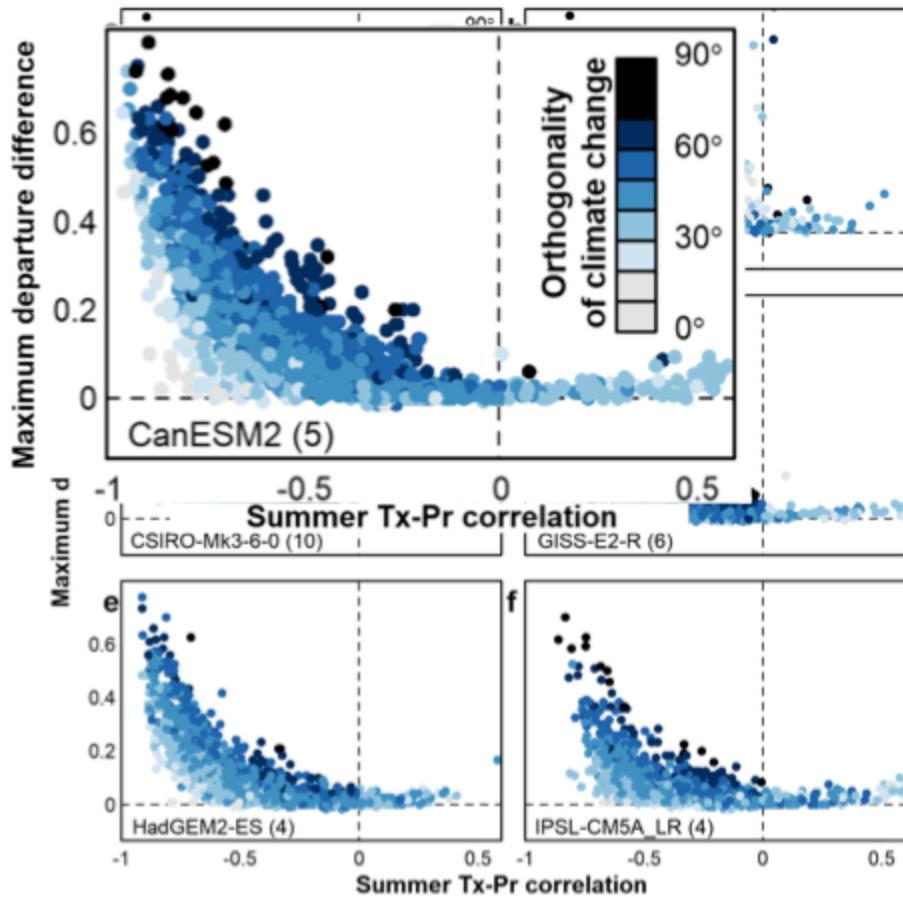
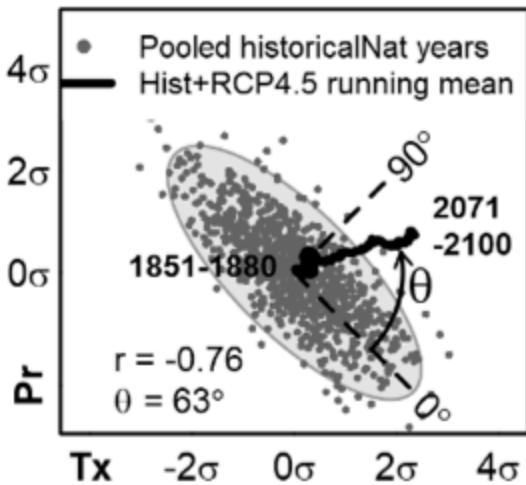
Orthogonality of climate change in CMIP5 model projections (RCP4.5)



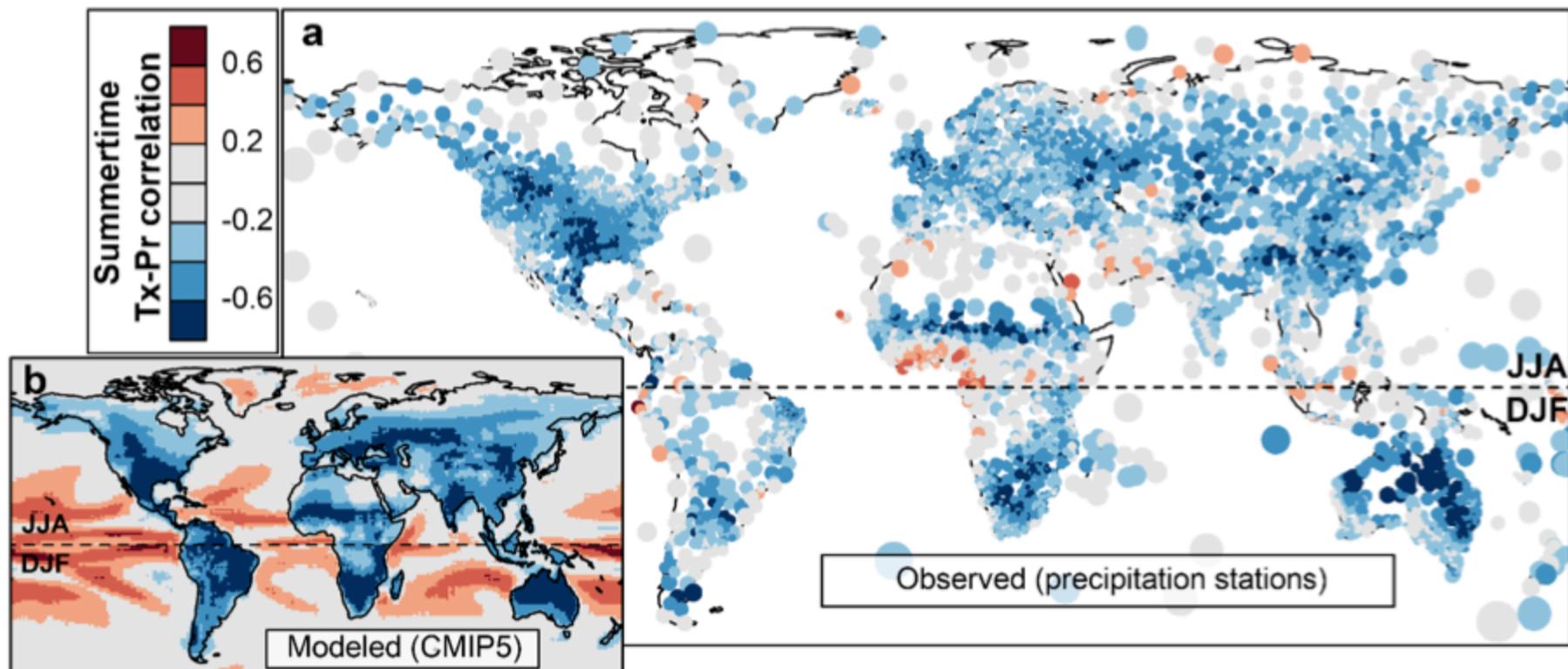
Departure intensification in CMIP5 model runs (RCP4.5)



Thresholds for departure intensification



Correlation between summer precipitation and daytime temperature





ARTICLE

DOI: 10.1038/s41467-018-03132-z

OPEN

Wetter summers can intensify departures from natural variability in a warming climate

Colin R. Mahony¹ & Alex J. Cannon^{1,2}



Alex Cannon
Research Climatologist,
Environment and Climate Change Canada