

Michael Grose (CSIRO)

Session 5: Advances in modelling and projections

Title: The new generation of CMIP6-based climate projections for climate change services in Australia

Co-authors: The whole climate projections team in the Australian Climate Service (ACS)

Climate change projections are now informing many decisions and planning exercises for adaptation and resilience to climate change. Projections for climate services need to be scientifically credible, salient, legitimate, actionable, up to date and locally relevant. There has been community support for a coordinated ensemble of Regional Climate Model simulations to play a much larger role in projections than in previous generations of projections.

Here I will give an overview of the strategy for producing new simulations to underpin climate change services in Australia, including the value from partnerships with the various groups, the leverage of international structures (such as CORDEX) and uplifting the quantitative approach to many questions such as added value, evaluation and projection ranges.

A CMIP6-based multi-model downscaling ensemble to underpin climate change services in Australia
<https://www.sciencedirect.com/science/article/pii/S2405880723000298>.