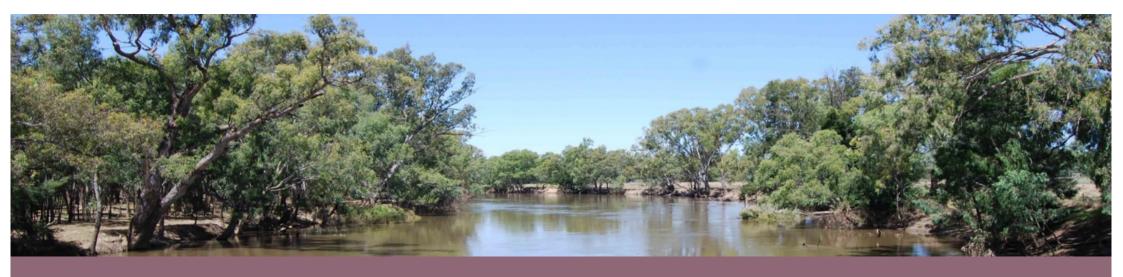


National Environmental Science Programme



The ACCESS contributions to CMIP6

Simon Marsland (CSIRO), WCRP/WGCM-CMIP, 16th Dec 2020

CMIP6 and **ACCESS** - entry

MIP	Experiment	ACCESS-CM2	ACCESS- ESM1.5
CMIP	DECK	Yes	Yes
	historical	3	10 (30)
	esm-historical		10
ScenarioMIP	Ssp126, 245 370, 585	3	10

Equilibrium Climate Sensitivity – ECS

Gregory method – abrupt-4xCO2 @ 150 years

ACCESS-CM2 4.7K

ACCESS-ESM1.5 3.9 K



CMIP6 and **ACCESS** - continuing

MIPs	CM2	ESM1.5	OM2	OM2-025
CMIP/DECK	Yes	Yes	-	-
historical	3	10 (30)	-	-
esm-historical	-	10	-	1
ScenarioMIP Tier 1 LTE's underway	3	10	-	ı
FAFMIP	7		-	1
C4MIP	-	10	-	1
CDRMIP	-	3	-	1
RFMIP	5	6	-	1
DAMIP	(14)	9	-	1
OMIP	-	-	(1)	(1)
CovidMIP	-	(60+)	-	-



Recent ACCESS successes - 2020

- Apr NCI Australasian Leadership Computing Grant (37M SU)
 - ACCESS Climate Modelling ensembles and new MIPs
- Oct ACCESS National Research Infrastructure \$7.8M/3 years announcement
- Oct "Getting Started with ACCESS-CM2 and ACCESS-ESM1.5" model release
 - Slides and recording: http://nespclimate.com.au/access-evaluation-and-application-5-1/
- Nov COSIMA-II ARC Linkage Project 4 years (ACCESS, MOM-ocean modelling)
- Dec National Environmental Science Program Climate Systems Hub
 - https://minister.awe.gov.au/ley/media-releases/149-million-commitment-environmental-science



Appetite for CMIP7



Fig. 1: The Official ACCESS CMIP6 Cake: Baked by Rachel Law (CSIRO Climate Science Centre ACCESS Group Leader). Photo by Simon Marsland



References - 2020

RESEARCH ARTICLE (Open Access)

Previous

Configuration and spin-up of ACCESS-CM2, the new generation Australian Community Climate and Earth System Simulator Coupled Model

Daohua Bi ^{A I}, Martin Dix ^A, Simon Marsland ^{A B C}, Siobhan O'Farrell ^A, Arnold Sullivan ^A, Roger Bodman ^D, Rachel Law ^A, Ian Harman ^E, Jhan Srbinovsky ^A, Harun A. Rashid ^A, Peter Dobrohotoff ^A, Chloe Mackallah ^A, Hailin Yan ^F, Anthony Hirst ^F, Abhishek Savita ^{A B C}, Fabio Boeira Dias ^{A B C}, Matthew Woodhouse ^A, Russell Fiedler ^G and Aidan Heerdegen ^{C H}

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The Australian Earth System Model: ACCESS-ESM1.5

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ACCESS-OM2 v1.0: a global ocean—sea ice model at three resolutions

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