

Data belonging to:

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Created 9/5/2018

Please email aimee.slangen@nioz.nl for questions.

FIG2_DATA.mat

global mean thermal expansion

Model data (in m):

Steric_benoit; 0-700 and full depth, with and without volcanic correction

Steric_zostoga: full depth, with and without volcanic correction

Observations (in mm):

LEV=Levitus

DOM=domingues

ISH=Ishii

FIG3_DATA.mat

Glaciers

Model data (in mm):

mgic: CMIP5-driven model data for glaciers

glac_corr: correction for glaciers (green dash in figure)

Observations (in mm):

obs_glac_cog_UPD: Cogley observations

obs_glac_lec_UPD: Leclercq observations

mgic_cru_new2: CRU-driven model data

FIG4_5_DATA.mat

Ice sheet Surface Mass Balance

Model data (in mm):

Gre_smb: Greenland SMB

Gris_corr: correction for Greenland SMB

Ant_pme_smb: Precipitation – evaporation approach for Antarctic SMB

Ant_tas_smb: Temperature approach for Antarctica SMB

Reanalyses (in mm) – all Greenland SMB

greobs20CRv2; greobs20CRv2c; greobsERA

FIG6_DATA.mat

Ice sheet dynamics

Icedyn: ice sheet dynamics for 4 regions: West Antarctica (WAIS), East Antarctica (EAIS), Antarctic Peninsula (AP) and Greenland (GRIS).

Corr_lin_new: non-equilibrium constant

FIG7_DATA.mat

Landwater (mm)

Land_dam: contribution of reservoir impoundment, Chao et al

Land_grw: contribution of groundwater extraction, from Doll et al and Wada et al

FIG8_DATA.mat

Ensemble contributions; mean and 1 standard deviation (mm)

ANTSMB, GRESMB, GRESMB_corr, ICEDYN, ICEDYN_corr, LAND, MGIC, MGIC_corr, TE

FIG9_11_DATA

Total sea-level change per climate model (mm)

Models:

SUM_mod: without corrections

SUM_mod_corr: with corrections

Observations:

CW11, HM15, J14, RD11: tide gauge-based reconstructions

AVISO, CSIRO, WATSON: satellite-based observations