

G7SST1-cirrus (GeoMIP)

SSTs from year 2020 of SSP5-8.5; forcings and other prescribed conditions from year 2020 of SSP5-8.5 + cirrus thinning

Description: Time slice at year 2020 of GeoMIP G7cirrus. Run for 10 years.

Rationale: To assess radiative forcing of G7cirrus at the beginning of the simulation (2020).

Requirements

RCP85 Forcing: Impose RCP8.5 forcing.

Additional Requirements:

- Representative Concentration Pathway 8.5 Well Mixed Greenhouse Gases
- Representative Concentration Pathway 8.5 Short Lived Gas Species
- Representative Concentration Pathway 8.5 Aerosols
- Representative Concentration Pathway 8.5 Aerosol Precursors
- Representative Concentration Pathway 8.5 Land Use for Shared Socioeconomic Pathway 5

Increase Cirrus Sedimentation Velocity: Add a local variable that replaces (in all locations where temperature is colder than 235K) the ice mass mixing ratio in the calculation of the sedimentation velocity with a value that is eight times the original ice mass mixing ratio. Cirrus seeding to begin in 2020 and continue through to the year 2100.

SSP5-85 SST 2020: Sea surface temperature climatology calculated from the ScenarioMIP SSP5-85 experiment for the year 2020.

SSP5-85 SIC 2020: Sea ice concentration climatology calculated from the ScenarioMIP SSP5-85 experiment for the year 2020.

SSP5-85Initialisation2020: Initialisation is from the beginning of year 2020 of the SSP5-8.5 experiment.

AGCM Configuration: An Atmosphere only general circulation model configuration.

2020-2029 10yrs: Timeslice, begin in 2020 and run for 10 years.

SingleMember: One ensemble member