Model Metadata for ZECMIP

**Model:**

**Primary Contacts:**

**ECS:**

**TCR:**

**TCRE:**

**Model:** ACCESS

**Primary Contacts:** Tilo Ziehn (tilo.ziehn@csiro.au)

**ECS:** 3.9 K

**TCR:** 1.9 K

**TCRE: 1.87**

**PI TEMP:** 287.6 K

Efficacy: 1.24

R2x: 2.86

**1pct start at branch or year 0?:** branch

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 68 | 100 | 289.467 | 1.0925 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 54 | 100 | 288.987 | 0.8185 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 116 | 100 | 291.112 | 1.823 |
| B1:*esm-bell-1000PgC* | **N** |  |  |  |  |
| B2:*esm-bell-750PgC* | **N** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **N** |  |  |  |  |

**Model:** BERN ECS 2.0K

**Primary Contacts:** Aurich Jeltsch-Thömmes (jeltsch@climate.unibe.ch)

**ECS:** 1.65 K

**TCR:** 1.22 K

**TCRE: 1.19**

**PI TEMP:** 287.47 K

Efficacy: 1.01

R2x: 3.71

**1pct start at branch or year 0?:** Year 0

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1918.5 | 1000 | 288.66 | 1.27670445 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1905.5 | 1000 | 288.41 | 1.104516146 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 1959.5 | 1000 | 289.50 | 1.71531328 |
| B1:*esm-bell-1000PgC* | **Y** | NA | 1000 |  |  |
| B2:*esm-bell-750PgC* | **Y** | NA | 1000 |  |  |
| B3:*esm-bell-2000PgC* | **Y** | NA | 1000 |  |  |

**Model:** BERN ECS 3.0K

**Primary Contacts:** Aurich Jeltsch-Thömmes (jeltsch@climate.unibe.ch)

**ECS:** 2.57 K

**TCR:** 1.58 K

**TCRE: 1.54**

**PI TEMP:** 287.60 K

Efficacy: 0.95

R2x: 3.71

**1pct start at branch or year 0?:** Year 0

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1918.5 | 1000 | 289.14 | 1.755 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1905.5 | 1000 | 288.78 | 1.482 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 1960.5 | 1000 | 290.32 | 2.393 |
| B1:*esm-bell-1000PgC* | **Y** | NA | 1000 |  |  |
| B2:*esm-bell-750PgC* | **Y** | NA | 1000 |  |  |
| B3:*esm-bell-2000PgC* | **Y** | NA | 1000 |  |  |

**Model:** BERN ECS 5.0 K

**Primary Contacts:** Aurich Jeltsch-Thömmes (jeltsch@climate.unibe.ch)

**ECS:** 5.27 K

**TCR:** 2.17 K

**TCRE: 2.22**

**PI TEMP:** 287.675K

Efficacy: 1.07

R2x: 3.71

**1pct start at branch or year 0?:** Year 0

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1919.5 | 1000 | 289.90 | 2.454 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1906.5 | 1000 | 289.39 | 2.078 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 1962.5 | 1000 | 291.81 | 3.543 |
| B1:*esm-bell-1000PgC* | **Y** | NA | 1000 |  |  |
| B2:*esm-bell-750PgC* | **Y** | NA | 1000 |  |  |
| B3:*esm-bell-2000PgC* | **Y** | NA | 1000 |  |  |

**Model:** CanESM5

**Primary Contacts:** Vivek Arora (vivek.arora@canada.ca)

**ECS:** 5.7 K

**TCR:** 2.8 K

**TCRE:** 2.27

**PI TEMP: 13.28**

Efficacy: 1.04

R2x: 3.35

**1pct start at branch or year 0?:** Branch

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1911 | 100 | 15.55 | 1.475 |
| A2:*esm-1pct-brch-750PgC* | **N** |  |  |  |  |
| A3:*esm-1pct-brch-2000PgC* | **N** | 1947 | 100 | 17.39 | 2.145 |
| B1:*esm-bell-1000PgC* | **N** | NA |  |  |  |
| B2:*esm-bell-750PgC* | **N** | NA |  |  |  |
| B3:*esm-bell-2000PgC* | **N** | NA |  |  |  |

**Model:** CESM

**Primary Contacts:** Charles Koven (cdkoven@lbl.gov)

**ECS:** 5.1 K

**TCR:** 2.0 K

**TCRE: 1.99**

**PI TEMP:** 287.15 K

Efficacy: 1.31

R2x: 3.71

**1pct start at branch or year 0?:** branch

**Notes: ECS from slab ocean, Efficacy assumed R2x 3.71**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 68 | 150 | 289.14 | 1.59 |
| A2:*esm-1pct-brch-750PgC* | **N** |  |  |  |  |
| A3:*esm-1pct-brch-2000PgC* | **N** |  |  |  |  |
| B1:*esm-bell-1000PgC* | **N** |  |  |  |  |
| B2:*esm-bell-750PgC* | **N** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **N** |  |  |  |  |

**Model:** CNRM-ESM2-1

**Primary Contacts:** Roland Séférian(rseferian.cnrm@gmail.com)

**ECS:** 4.55 K (4.84 K full years)

**TCR:** 1.92 K

**TCRE:** 1.9

**PI TEMP:** 286.71 K

Efficacy: 0.93

R2x: 3.23

**1pct start at branch or year 0?:** Branch

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1920 | 100 | 288.61 | 1.978 |
| A2:*esm-1pct-brch-750PgC* | **N** |  |  |  |  |
| A3:*esm-1pct-brch-2000PgC* | **N** |  |  |  |  |
| B1:*esm-bell-1000PgC* | **N** |  |  |  |  |
| B2:*esm-bell-750PgC* | **N** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **N** |  |  |  |  |

**Model:** CLIMBER2

**Primary Contacts:** Victor Brovkin(victor.brovkin@mpimet.mpg.de)

**ECS: 2.8 K**

**TCR:** 1.83 K

**TCRE:** 1.71

**PI TEMP:** 287.12 K

Efficacy: -1

R2x: 3.71

**1pct start at branch or year 0?:** Branch

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1917 | 100 | 288.83 |  |
| A2:*esm-1pct-brch-750PgC* | **N** |  |  |  |  |
| A3:*esm-1pct-brch-2000PgC* | **N** |  |  |  |  |
| B1:*esm-bell-1000PgC* | **N** |  |  |  |  |
| B2:*esm-bell-750PgC* | **N** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **N** |  |  |  |  |

**Model:** DCESS

**Primary Contacts:** Gary Shaffer (gs@nbi.ku.dk, gary.shaffer.chile@gmail.com)

**ECS:** 3.11

**TCR:** 2.02

**TCRE:** 2.05

**PI TEMP:** 15.08 oC

Efficacy: 1.10

R2x: 3.71

**1pct start at branch or year 0?:** Year 0

**Notes:** The overall carbon balance of the model and the distribution of carbon among the different model components are influenced by climate-dependent weathering of carbonate and silicate rocks (*WCal* and *WSil*), climate-dependent weathering of rocks containing old organic carbon (*WOrgC*), and lithosphere outgassing (*Vol*). *WOrgC*and *Vol* are the two external sources of atmospheric CO2. All forms of model weathering depend upon climate and the amount of substrate according to

  (1)

where *Q10* is the weathering rate increase for a 10 °C increase of global mean temperature *T* and *PI* is pre-industrial

In a steady state, net carbon inputs and outputs to the combined atmosphere-ocean-land biosphere-ocean sediment system balance such that

  (2)

where *BCal* and *BOrgC* are calcite and organic carbon burial rates, respectively. In the model, all burial takes place down out of the bioturbated ocean sediment layer.

Also in a steady state, just enough of the biogenic CaCO3 falling on the sediment surface is buried to satisfy

  (3)

From the above we also have in a steady state that

  (4)

In a steady state there is also net carbon balance in each of the model compartments. For the atmosphere, we have

  (5)

where *fgCO2*  is the gas flux from the ocean to the atmosphere. Based on data-constrained estimate for all the other properties, pre-industrial *fgCO2* is found to be 0.128 GtC/yr.

pr, dissocos and gpp are not simulated and therefore not included but the extra variable we discussed, fco2geo, is included. The ocean surface fluxes are expressed per m2 of ocean surface. In the DCESS model the ocean covers 70.477% of the Earth's surface.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1833.65 | 1000 | 17.13 | 1.863 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1820.40 | 1000 | 16.65 | 1.614 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 1874.40 | 1000 | 18.26 | 2.441 |
| B1:*esm-bell-1000PgC* | **N** |  |  |  |  |
| B2:*esm-bell-750PgC* | **N** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **N** |  |  |  |  |

**Model:** GFDL ESM2M

**Primary Contacts:** Friedrich Burger (burger@climate.unibe.ch)

**ECS:** 2.4 K

**TCR:** 1.4 K

**TCRE:** 1.2

**PI TEMP:** 286.93948 K

Efficacy: 1.27

R2x: 3.55

**1pct start at branch or year 0?:** Year 0

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1922 | 500 | 288.14 | 0.869 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1910 | 500 | 287.91 | 0.764 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 1961 | 500 | 289.08 | 1.575 |
| B1:*esm-bell-1000PgC* | **Y** | NA | 500 |  |  |
| B2:*esm-bell-750PgC* | **Y** | NA | 500 |  |  |
| B3:*esm-bell-2000PgC* | **Y** | NA | 500 |  |  |

**Model:** LOVECLIM 1.2

**Primary Contacts:** Laurie Menviel (l.menviel@unsw.edu.au)

**ECS:** 2.8 K

**TCR:** 1.53 K

**TCRE:** 1.43

**PI TEMP:** 16.03 K

Efficacy: 0.99

R2x: 3.71

**1pct start at branch or year 0?:** Year 0

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1920 | 1150 | 17.46 | 2.73 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1905 | 1150 | 17.06 | 2.29 |
| A3:*esm-1pct-brch-2000PgC* | **N** |  |  |  |  |
| B1:*esm-bell-1000PgC* | **Y** | NA | 1150 |  |  |
| B2:*esm-bell-750PgC* | **N** | NA |  |  |  |
| B3:*esm-bell-2000PgC* | **N** | NA |  |  |  |

**Model:** MESM

**Primary Contacts:** Andrei Sokolov (sokolov@mit.edu)

**ECS:** 2.87 K

**TCR:** 1.78 K

**TCRE:** 1.73

**PI TEMP:** 13.30

Efficacy: 0.79

R2x: 4.11

**1pct start at branch or year 0?:** Year 0

**Notes:** All runs were done with emissions from initial conditions from long preindustrial run (1860 conditions). Provided results are averaged over 10 runs with different IC.

Emissions were calculated from 1% CO2 per year run and are the same in all runs for a given scenario.

Our model calculates CH4 emissions primarily from wetlands. These emissions are taken into account in the simulations and reported as Surface Carbon Mass Flux into the Atmosphere Due to Natural Sources. Since CH4 and CO2 modules of Terrestrial Ecosystem Model use the same carbon pool these emissions are compensated by NBP and net carbon flux in the equilibrium is zero.

Terrestrial Ecosystem Model output only available carbon.

Our ocean model uses flux correction and radiative balance in equilibrium run is not zero. It can be seen from rsdt, rsut and rlut.

Since net radiation on the top of the model and heat flux into the ocean will be, presumably, used to evaluate heat uptake by the earth system, they are provided as a difference from their values in equilibrium control run.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 69 | 1200 | 15.03 | 1.8 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 57 | 1200 | 14.65 | 1.515 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 111 | 1200 | 16.58 | 2.809 |
| B1:*esm-bell-1000PgC* | **Y** | NA | 1200 |  |  |
| B2:*esm-bell-750PgC* | **Y** | NA | 1200 |  |  |
| B3:*esm-bell-2000PgC* | **Y** | NA | 1200 |  |  |

**Model:** MIROC-ES2L

**Primary Contacts:** Tomohiro Hajima (hajima@jamstec.go.jp)

**ECS**: 2.7 K

**TCR:** 1.5 K

**TCRE:** 1.3

**PI TEMP:** 288.14 K

Efficacy: 0.95

R2x: 4.05

**1pct start at branch or year 0?:** Branch

**Notes:** ECS by Gregory plot

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1913 | 210 | 289.45 | 1.639 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1901 | 210 | 289.17 | 1.292 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 1954 | 210 | 290.67 | 2.590 |
| B1:*esm-bell-1000PgC* | **N** |  |  |  |  |
| B2:*esm-bell-750PgC* | **N** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **N** |  |  |  |  |

**Model:** MIROC-lite

**Primary Contacts:** Tachiiri, Kaoru (tachiiri@jamstec.go.jp)

**ECS**: 1.74 K

**TCR: 1.16**

**TCRE: 1.06**

**PI TEMP: 285.078**

Efficacy: 0.98

R2x: 2.97

**1pct start at branch or year 0?:** Branch

**Notes:** ECS by Gregory plot

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 66 | 1200 | 286.14 | 1.040 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 54 | 1200 | 285.92 | 0.9163 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 106 | 1200 | 286.88 | 1.408 |
| B1:*esm-bell-1000PgC* | **Y** |  |  |  |  |
| B2:*esm-bell-750PgC* | **Y** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **Y** |  |  |  |  |

**Model:** MPIESM

**Primary Contacts:** Victor Brovkin(victor.brovkin@mpimet.mpg.de)

**ECS: 2.83 K**

**TCR:** 1.82 K

**TCRE:** 1.63

**PI TEMP:** 286.715 K

Efficacy: 1.10

R2x: 4.10

**1pct start at branch or year 0?:** Branch

**Notes:** Real ECS 2.77 K

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1915 | 100 | 288.34 | 1.581 |
| A2:*esm-1pct-brch-750PgC* | **N** |  |  |  |  |
| A3:*esm-1pct-brch-2000PgC* | **N** |  |  |  |  |
| B1:*esm-bell-1000PgC* | **N** |  |  |  |  |
| B2:*esm-bell-750PgC* | **N** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **N** |  |  |  |  |

**Model:** NorESM2

**Primary Contacts:** Jerry Tjiputra(jerry.tjiputra@norceresearch.no)

**ECS: 3.1 K**

**TCR:** 1.48 K

**TCRE:** 1.4

**PI TEMP:** 287.62K

Efficacy: 1.17

R2x: 2.4

**1pct start at branch or year 0?:** Branch

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 67 | 100 | 289.0245 | 0.99 |
| A2:*esm-1pct-brch-750PgC* | **N** |  |  |  |  |
| A3:*esm-1pct-brch-2000PgC* | **N** |  |  |  |  |
| B1:*esm-bell-1000PgC* | **N** |  |  |  |  |
| B2:*esm-bell-750PgC* | **N** |  |  |  |  |
| B3:*esm-bell-2000PgC* | **N** |  |  |  |  |

**Model:** PLASIM-GENIE

**Primary Contacts:** Philip Holden (philip.holden@open.ac.uk)

**ECS**: 3.4 K

**TCR: 1.7**

**TCRE:** 1.56

**PI TEMP:** 286.8 K

Efficacy: 0.90

R2x: 4.2

**1pct start at branch or year 0?:** Year 0

**Notes:** PLASIM-GENIE outputs don’t allow me to diagnose TOA incoming and outgoing solar separately, so I have provided net TOA shortwave and named it rsmt. Sorry didn’t pick this up before doing the simulations.

You will notice sum(rtmt) <0. This is because PLASIM-GENIE does not conserve energy and is in balance at roughly -0.7Wm-2. To quote from the GMD paper “We note that the PLASIM atmosphere does not precisely conserve energy, as illustrated by Hoskins and Simmons (1975) for a similar dry dynamical core. The largest effect in PLASIM comes from the conversion from potential to kinetic energy. This conversion cannot be formulated in a conservative manner in the semi-spectral scheme since it involves triple products while the (Gaussian) grid only allows for the conservation of quadratic quantities. The top-of-atmosphere energy balance converges to 0.7 Wm 2 in both the coupled and stand-alone versions of PLASIM, dominating over the conservation errors of ICE-SURFLUX.”

All data are diagnosed from annual averages. In the case of gpp, npp and rh, these are diagnosed from annual average fluxes, whereas other carbon data are diagnosed from change in annual average reservoirs. This will lead to inconsistencies at annual resolution, i.e. essentially a 6-month offset between the two data types.

The surface DIC and DOC concentrations are provided in mol/kg. For now I have converted to mol/m-3 by multiplying by 1000, will have a look to see if I can do better here, at least a conversion using average surface density. This is a bit more complicated than it sounds as goldstein uses density anomalies, not absolute densities, and I need to look through the biogeochemical model to understand how this conversion works in practice.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 64 | 1100 | 288.36 | 1.874 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 51 | 1100 | 288.01 | 1.602 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 104 | 1100 | 289.47 | 3.052 |
| B1:*esm-bell-1000PgC* | **Y** | NA | 1100 |  |  |
| B2:*esm-bell-750PgC* | **Y** | NA | 1100 |  |  |
| B3:*esm-bell-2000PgC* | **Y** | NA | 1100 |  |  |

**Model:** UKESM1

**Primary Contacts:** Chris Jones (chris.d.jones@metoffice.gov.uk), Andy Wiltshire (andy.wiltshire@metoffice.gov.uk)

**ECS:** 5.4

**TCR:** 2.765

**TCRE:** 2.575

**PI TEMP:** 286.5 K

Efficacy: 1.0

R2x: 4.02

**1pct start at branch or year 0?:** Branch

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1917 | 100 | 289.17 | 1.853 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1904 | 100 | 288.59 | 1.418 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 1962 | 100 | 291.58 | 2.758 |
| B1:*esm-bell-1000PgC* | **N** | NA |  |  |  |
| B2:*esm-bell-750PgC* | **N** | NA |  |  |  |
| B3:*esm-bell-2000PgC* | **N** | NA |  |  |  |

**Model:** UVic ESCM

**Primary Contacts:** Andrew MacDougall (amacdoug@stfx.ca)

**ECS: 3.70**

**TCR: 1.87**

**TCRE: 1.82**

**PI TEMP:** 286.59 K

Efficacy: 1.01

R2x: 4.07

**1pct start at branch or year 0?:** Year 0

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 1918 | 1000 | 288.41 | 2.62 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 1905 | 1000 | 288.00 | 2.21 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 1963 | 1000 | 290.07 | 3.98 |
| B1:*esm-bell-1000PgC* | **Y** | NA | 1000 |  |  |
| B2:*esm-bell-750PgC* | **Y** | NA | 1000 |  |  |
| B3:*esm-bell-2000PgC* | **Y** | NA | 1000 |  |  |

**Model:** IAPRAS

**Primary Contacts:** Alexey Eliseev (eliseev.alexey.v@gmail.com)

**ECS:** 2.18 K

**TCR: 1.5 K**

**TCRE: 1.45**

**PI TEMP: 286.4 K**

Efficacy: 1.13

R2x: 3.7

**1pct start at branch or year 0?:** Year 0

**Notes:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Complete?** | **Branch Year** | **Length** | **T Cease** | **N Cease** |
| A1:*esm-1pct-brch-1000PgC* | **Y** | 69 | 1000 | 287.85 | 1.090 |
| A2:*esm-1pct-brch-750PgC* | **Y** | 56 | 1000 | 287.46 | 1.060 |
| A3:*esm-1pct-brch-2000PgC* | **Y** | 109 | 1000 | 289.06 | 1.152 |
| B1:*esm-bell-1000PgC* | **Y** | NA | 1000 |  |  |
| B2:*esm-bell-750PgC* | **Y** | NA | 1000 |  |  |
| B3:*esm-bell-2000PgC* | **Y** | NA | 1000 |  |  |