

Model	Ocean resolution	Atmos. resolution	Age of palaeogeography	Sinking regions	Reference
CCSM1.4	$1.8^{\circ} \times 3.6^{\circ}$	3.75°	Early Eocene (Sewall et al., 2000)	Southern Ocean and N. Atlantic	Huber and Sloan (2001); Huber et al. (2004)
CCSM3	$1^{\circ} \times 2.8^{\circ}$	3.75°	Early Eocene (Sewall et al., 2000)	Southern Ocean	Eldrett et al. (2009); Liu et al. (2009)
CESM1.0	$1.8^{\circ} \times 3.6^{\circ}$	3.75°	Early Eocene (Sewall et al., 2000)	Southern Ocean	Goldner et al. (2014)
CESM1.0.5	1°	2°	Late Eocene 38 Ma (Baatsen et al., 2016)	S. Pacific only	Baatsen et al. (2018a); in review
CM2Mc	$2.5^{\circ} \times 0.6\text{--}3^{\circ}$	$3^{\circ} \times 3.75^{\circ}$	Modern + gateway perturbations	Southern Ocean and N. Atlantic	Yang et al. (2014); Elsworth et al. (2017)
COSMOS	$1.8^{\circ} \times 3^{\circ}$	3.75°	Early Miocene 20–15 Ma Herold et al., 2008) + gateway perturbations	Southern Ocean and N. Atlantic	Stärz et al. (2017)
FOAM	$1.4^{\circ} \times 2.8^{\circ}$	$4.5^{\circ} \times 7.5^{\circ}$	Early Eocene (Zhang et al., 2010)	Not stated	Zhang et al. (2010)
FOAM	$1.4^{\circ} \times 2.8^{\circ}$	$4.5^{\circ} \times 7.5^{\circ}$	Middle Oligocene (Scotese, 2001)	Southern Ocean	Lefebvre et al. (2012); Ladant et al. (2014)
HadCM3L	$2.5^{\circ} \times 3.75^{\circ}$	$2.5^{\circ} \times 3.75^{\circ}$	–38 to 34 Ma Rupelian –34 to 30 Ma Priabonian (GETECH – proprietary)	Southern Ocean and N. Atlantic	Inglis et al. (2015); Kennedy et al. (2015)
MITgcm (ocean only)	4°	n/a	Early Eocene (Sewall et al., 2000)	S. Pacific and N. Pacific	Thomas et al. (2014)
POP2.1 (ocean only)	1°	n/a	Late Eocene 38 Ma (Baatsen et al., 2016)	S. Pacific or N. Pacific	Baatsen et al. (2018b)
UVic	$1.8^{\circ} \times 3.6^{\circ}$	EBM	Modern + gateway perturbations	Southern Ocean and N. Atlantic	Fyke et al. (2015)
UVic	$1.8^{\circ} \times 2.4^{\circ}$	EBM	Early Eocene (Huber et al., 2004)	Southern Ocean	Sijp et al. (2011)
GFDL CM2.1	$1^{\circ} \times 1.5^{\circ}$	$3^{\circ} \times 3.75^{\circ}$	Late Eocene 38 Ma (Baatsen et al., 2016)	Southern Ocean and N. Pacific	This study