

Model center	Earth system model	Soil/land carbon sub-model	Number of soil carbon pools	Pool structure	Temperature sensitivity	Citations
BCC	BCC-CSM1.1	BCC_AVIM1.0; AVIM2; CEVSA	8	Cascade	$f(T)$	Cao and Woodward (1998), Ji et al. (2008), Wu et al. (2013)
CCCma	CanESM2	CTEM	2	Cascade	$Q_{10}(T)$	Arora (2003), Arora et al. (2011), Arora and Boer (2010)
NCAR NSF-DOE-NCAR NCC	CCSM4 CESM1(BGC) CESM1(CAM5) CESM1(WACCM) NorESM1-M NorESM1-ME	CLM 4.0; CN	7	Cascade	Lloyd and Taylor	Gent et al. (2011), Lawrence et al. (2011), Oleson et al. (2010), Thornton et al. (2007), Thornton and Rosenbloom (2005), Tjiputra et al. (2013)
NOAA GFDL	GFDL-ESM2G GFDL-ESM2M	LM3.0; ED	2	Independent	$f(T)$	Dunne et al. (2013), Moorcroft et al. (2001), Shevliakova et al. (2009)
MOHC*	HadGEM2-CC HadGEM2-ES	ROTHC	4	Feedback	$Q_{10} = 2$	Coleman and Jenkinson (1999), Collins et al. (2011)
INM	INM-CM4 IPSL-CM5A-MR IPSL-CM5B-LR	LSM 1.0	1	Independent	$Q_{10} = 2$	Bonan (1996), Volodin (2007)
IPSL	IPSL-CM5A-LR	ORCHIDEE	5	Feedback	$f(T)$	Dufresne et al. (2013), Krinner et al. (2005)
MIROC	MIROC-ESM MIROC-ESM-CHEM	SEIB-DGVM	3	Cascade	Lloyd and Taylor	Sato et al. (2007), Watanabe et al. (2011)
MPI-M	MPI-ESM-MR	JSBACH	5	Cascade	Lloyd and Taylor	Giorgetta et al. (2013), Schneck et al. (2013)
MRI	MRI-ESM1	LPJ-DGBM	3	Cascade	Lloyd and Taylor	Adachi et al. (2013), Obata and Shibata (2012), Sitch et al. (2003)