Publication	Ocean model	Ice shelf implementation	Domain and time periods covered
Beckmann and Goosse (2003)	Coupled Large-scale Ice Ocean (CLIO)	Parameterization from an ice shelf–ocean interaction model	Global, 100 years
Grosfeld and Sandhager (2004)	Rigid-lid, hydrostatic primitive equation model, formulated in spherical coordinates	Dynamic	$900 \, \mathrm{km} \times 700 \, \mathrm{km}$ in the horizontal, 300 years
Hellmer (2004)	Bremerhaven Regional Ice Ocean Simulations (BRIOS)	Thermodynamics with fixed cavity	Circumpolar, 20 years
Walker and Holland (2007)	A two-dimensional model in the y–z plane	Simplified dynamic	$600 \, \mathrm{km} \times 1100 \, \mathrm{m}$, 600 years
Losch (2008)	MIT general circulation model (MITgcm)	Thermodynamics with fixed cavity	In ISOMIP (Ice Shelf–Ocean Model Intercomparison Project) experiment: from 80 to 70° S and 0 to 15° E, 10 000 days; in (nearly) global ocean model (excluding the Arctic Ocean) experiment: 80 °N southward, 100 years
Timmermann et al. (2012)	Finite Element Sea-ice Ocean Model (FESOM)	Thermodynamics with fixed cavity	Global, 53 years
Galton-Fenzi et al. (2012)	Regional Ocean Modeling System (ROMS)	Thermodynamics with fixed cavity	Regional, 20 years
Kusahara and Hasumi (2013)	Sea ice–ocean coupled model (COCO)	Thermodynamics with fixed cavity	Circumpolar, 25 years for CTRL run and 38 additional years for ERA-INT case
Mathiot et al. (2017)	Nucleus for European Modeling of the Ocean (NEMO)	Thermodynamics with fixed cavity	In academic case: from 0 to 15° E and 80 to 70° S, 10 000 days; in real ocean application: circumpolar, 10 years