

Model	Model type	Evaporation	Snow	Soil layers	Runoff	Reservoirs	Water use
HTESSEL-CaMa	LSM	Penman–Monteith	Energy balance	4	Saturation excess	No	No
LISFLOOD	GHM	Penman–Monteith	Degree day	2	Saturation and infiltration excess	Yes	Yes
ORCHIDEE	LSM	Bulk method (Barella-Ortiz et al., 2013)	Energy balance	11	Green–Ampt infiltration	No	Irrigation only
PCR-GLOBWB	GHM	Hamon	Temperature based	2	Saturation excess	Yes (lakes only)	No
SURFEX-TRIP	LSM	Penman–Monteith	Energy and mass balance	14	Saturation and infiltration excess	No	No
W3RA	GHM	Penman–Monteith	Degree day	3	Saturation and infiltration excess	No	No
WaterGAP3	GHM	Priestley–Taylor	Degree day	1	Beta function	Yes	Yes