Input parameter	Description	Values (using ^{18}O as a tracer)	Parametric sources
h	Relatively humidity	0.63	Measured by the humidity meter
T (°C)	Water temperature	15.66	Monitored with divers
$\delta_{surface}$ (^{18}O)‰	Surface water isotopic compositions	−12.45	Average value of surface inflow samples
δ_{gw} (^{18}O)‰	Groundwater isotopic compositions	−11.97	Average value of porewater samples
δ_L (^{18}O)‰	Lake water isotopic compositions	−12.54	Average value of Ximen Co Lake water samples
F_{gw} (mm d^{-1})	LGD rates	14.18	Calculated based on the ^{222}Rn mass balance model
ε^* (^{18}O)‰	Effective equilibrium isotopic enrichment factor	10.12	Eqs. (S13)–(S14)
C_k (^{18}O)‰	Kinetic constant for ^{18}O	14.2	Constants based on the evaporating experiment
ε_k (^{18}O)‰	Kinetic enrichment factor	5.2	From Eq. (S15)
ε (^{18}O)‰	Total isotopic enrichment factor	15.33	The sum of ε^* and C_k
α^* (^{18}O)‰	Effective isotopic equilibrium factor	1.01	$\alpha^* = 1 + \varepsilon^*$
δ_a (^{18}O)‰	Isotopic composition of ambient air	−23.12	Estimated with δ_{in} and δ_a
δ_{in} (^{18}O)‰	Isotopic composition of surface inflow water	−13.41	Average value of surface inflow water
δ_E (^{18}O)‰	Isotopic compositions of evaporating vapour	−35.1	From Eq. (S12)
$[Cl^-]_{in}$ (mgL^{-1})	Chloride concentrations in surface inflow water	0.91	Filed data
$[Cl^-]_L$ (mgL^{-1})	Chloride concentrations in lake water	1.02	Filed data
$[Cl^-]_{gw}$ (mgL^{-1})	Chloride concentrations in groundwater	1.48	Filed data