

**Table 3**

Hydrologic and climatic boundary conditions for the isotopic balance model

Time slice (kyr BP)	V (km <sup>3</sup> )	Q <sub>r</sub> (km <sup>3</sup> ·yr <sup>-1</sup> )	δ <sup>18</sup> O <sub>r</sub> (‰)	Q <sub>p</sub> (km <sup>3</sup> ·yr <sup>-1</sup> )	δ <sup>18</sup> O <sub>p</sub> (‰)	Q <sub>e</sub> (km <sup>3</sup> ·yr <sup>-1</sup> )	T (°C)	h (%)
25-18	537000	450	-20	230	-11.5	205	4	76
18-17.4	537000	550	-21.5	230	-11.5	230	4	76
17.4-15 <sup>a</sup>	537000	570	-22.3	230	-11.5	230	4	76
17.4-15 <sup>b</sup>	537000	460	-20.2	230	-11.5	230	4	76
15-14.5	537000	450	-20	230	-11.5	240	4	76
modern <sup>c</sup>	537000	350	-10	230	-8	280	11.2	78

V - lake volume; Q<sub>r</sub> – volume of run-off; δ<sup>18</sup>O<sub>r</sub> – δ<sup>18</sup>O of run-off; Q<sub>p</sub> – volume of on-lake precipitation; δ<sup>18</sup>O<sub>p</sub> – δ<sup>18</sup>O of precipitation; Q<sub>e</sub> – volume of evaporation; T – temperature of lake surface; h – relative humidity

<sup>a</sup> values for periods with peak Ti/Ca

<sup>b</sup> values for periods with average Ti/Ca

<sup>c</sup> values from: Swart, 1991. Factors affecting the oxygen isotopic composition of the Black Sea. In: E. Izdar and J. W. Murray (eds.): Black Sea Oceanography. Kluwer, Dordrecht, Boston, London, pp. 75-88.