The mechanism of sapropel formation in the Mediterranean Sea: Insight from long duration box-model experiments

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**Table 1.** Forcing parameters that are the same for all runs

Parameter	Value	units
R1min	$5 \cdot 10^3$	m^3/s
R2min	$3 \cdot 10^3$	m^3/s
emax	0.9	m/yr
TA1min	10	$\deg C$
TA2min	12	$\deg C$

Table 2. Forcing parameters that vary between runs.

Run name	R1max (m^3/s)	R2max (m^3/s)	emin (m/yr)	TA1max ($\deg C$)	TA2max ($\deg C$)
Reference run	$1.2 \cdot 10^4$	$3 \cdot 10^4$	0.75	10	12
Temperature variability run	$1.2 \cdot 10^4$	$3 \cdot 10^4$	0.75	13	15
fwb1 run	$1.2 \cdot 10^4$	$3 \cdot 10^4$	0.75	13	15
fwbtot run	$1.4 \cdot 10^4$	$8 \cdot 10^4$	0.74	13	15
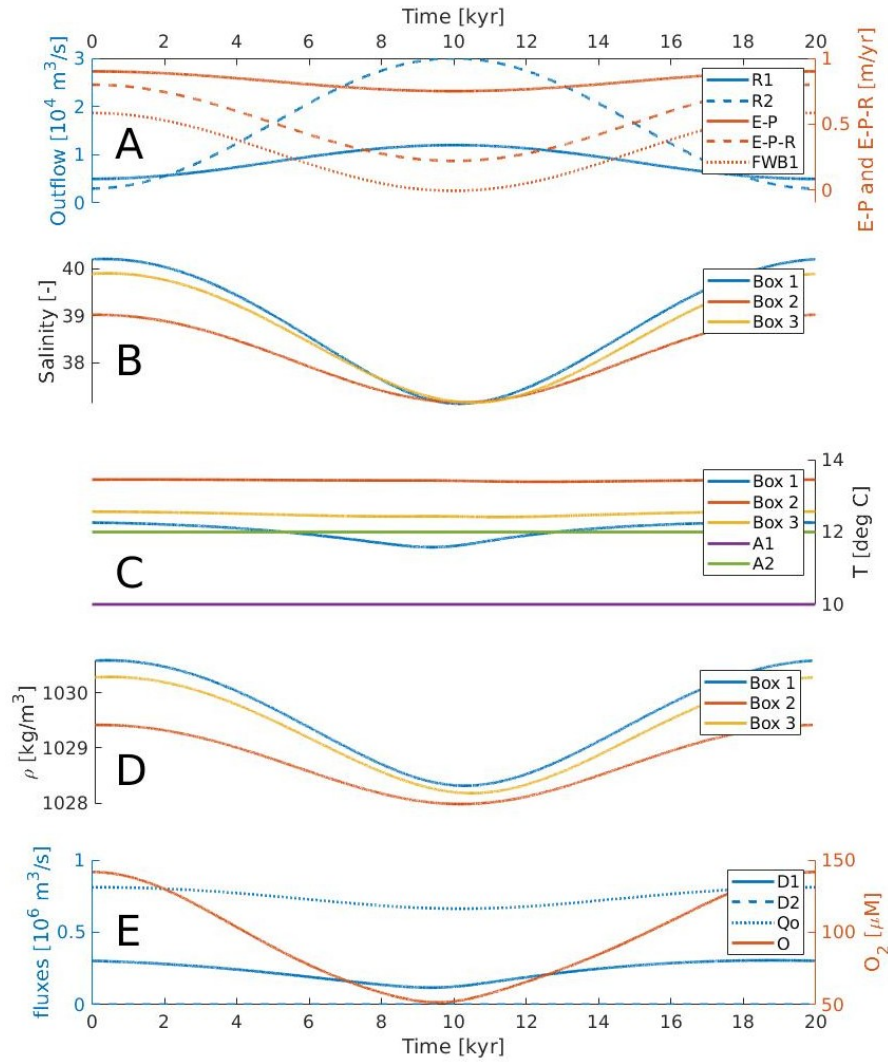
Figure 1. The forcing and results of the reference run. (A) The model forcing, with the river outflow on the left axis and the evaporation on the right axis. (B)-(D) For each box respectively the salinity, temperatures, and densities. (E) The relevant fluxes (left axis) and the deep water oxygen concentration (right axis)
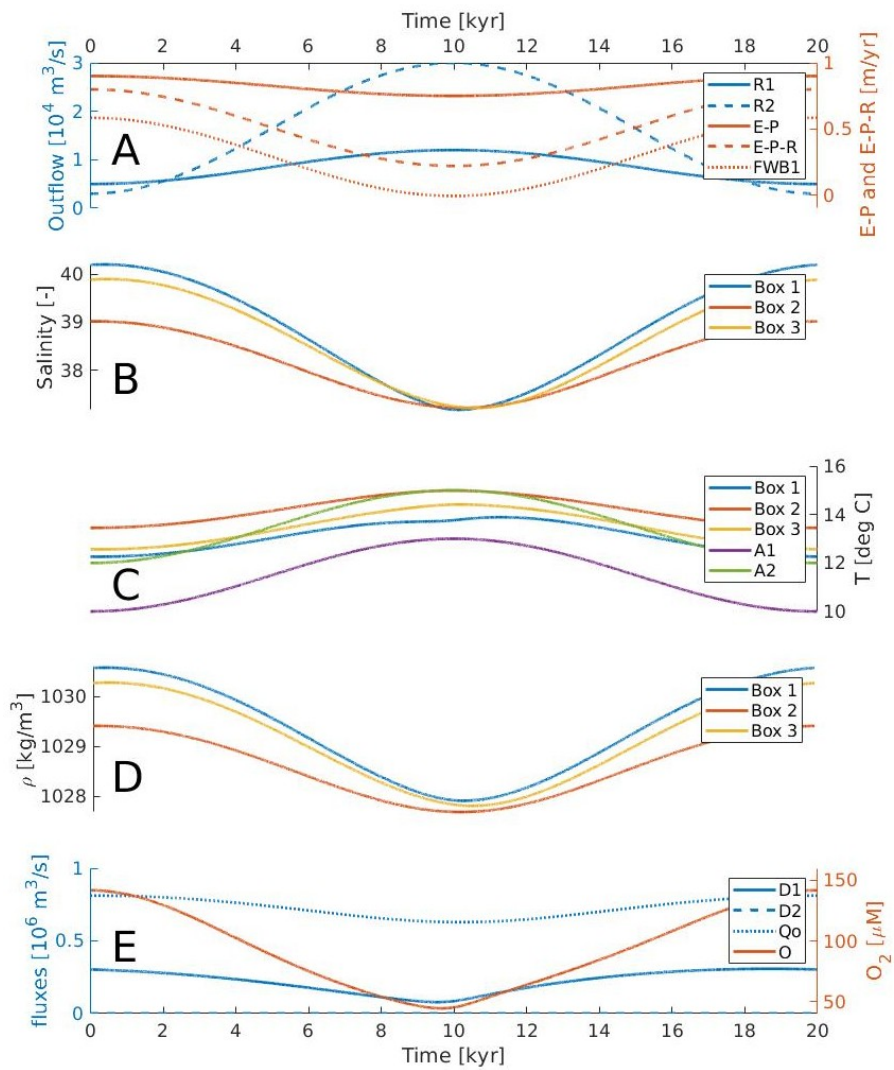
Figure 2. The forcing and results of the temperature variability run. Layout of the panels is the same as in Fig. 1. Note that the minimum in oxygen is slightly lower than in the reference run in Fig. 1E