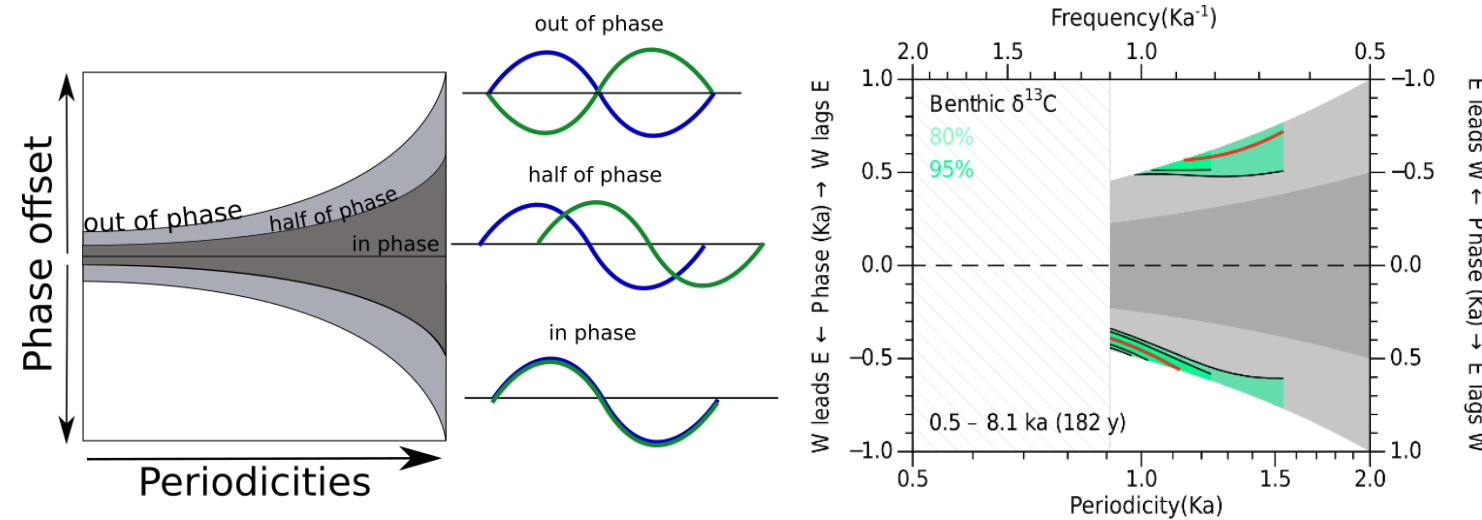
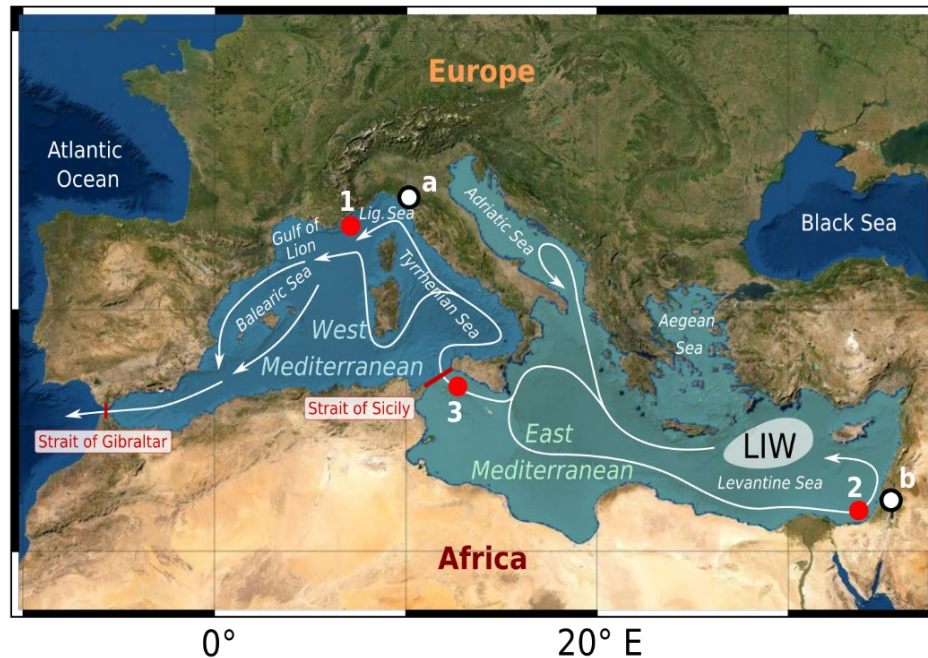


# Assessing atmospheric and oceanic teleconnections between the eastern and western Mediterranean over the past 8,000 years

We produced for the first time, analysis of phase relationships on east, central and west Mediterranean archives combining speleothems and marine records (Fig. 1) to assess periodic lead/lag relationships (Fig. 2) and climatic/oceanic teleconnection pattern on multi-centennial and millennial time scales over the last 8000 years. Our main result is an out-of-phase relationship between eastern and western benthic foraminiferal isotope records (both  $\delta^{13}\text{C}$ ) (Fig. 2).

**Fig.1.** a) Map of the region with site locations. Numbers 1-3 refer to Holocene marine sediment cores and letters a-b to cave records. LIW: Levantine Intermediate Water.



**Fig. 2.** **Left:** Blackman-Tukey cross spectral analyses. **Right:** Phase computations between the benthic foraminiferal  $\delta^{13}\text{C}$  records from the western (core 1) and eastern (Core 2) Mediterranean basins