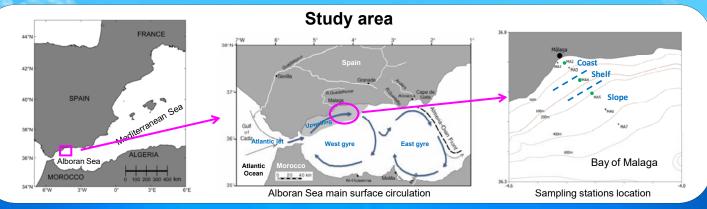
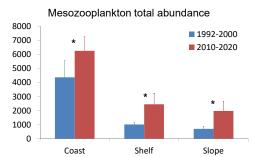
# Spatio-temporal variability of the zooplankton community in the SW Mediterranean 1992-2020: linkages with environmental drivers



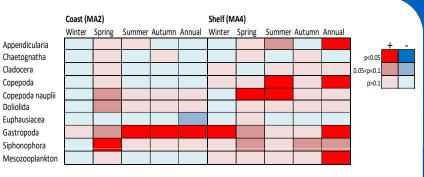
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## Mesozooplankton abundance variability

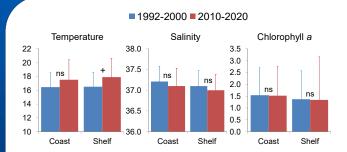


Mean mesozooplankton abundances (N·m<sup>-3</sup>±SE) in the different zones during the 1992-2000 and 2010-2020 periods. \* = significant differences between decades, p<0.05

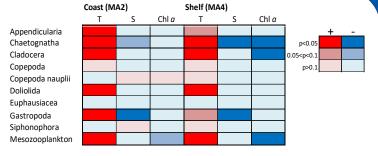


Heat map of seasonal and interannual abundance trends of the main mesozooplankton taxa in the coast and shelf for the 1992-2020 period

## Linkages with environmental drivers



Mean ( $\pm$ SD) temperature (°C), salinity, and chlorophyll *a* (µg L<sup>-1</sup>) (0-20 m depth) in the coast and the shelf during the 1992-2000 and 2010-2020 periods. Differences between decades, ns: p>0.1, +: p=0.058



Heat map of Pearson correlations between environmental variables (0-20 m depth) and main taxa abundances ( $N \cdot m^{-3}$ ) in the coast and the shelf for the 1992-2020 period

#### Summary

- Mesozooplankton abundance was significantly higher in 2010-2020 than in 1992-2000
- Mesozooplankton community structure differed significantly between decades
- Increased temperature and predators decline seem to drive mesozooplankton variability
- Plankton time series are key to understand and predict shifts in the marine ecosystem

### Open access publication

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