{rokbox title=|Study area of the sampling locations in the Mediterranean Sea to assess ingestion of anthropogenic particles in four species of commercial and ecological interest :: Image: Authors|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-vertical-distribution-and-aggregation-patterns-of-krill-in-the-bay-biscay-pena-et-al-2019-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-vertical-distribution-and-aggregation-patterns-of-krill-in-the-bay-biscay-pena-et-al-2019.jpg{/rokbox}

M. Peña, R. González-Quirós, I. Munuera-Fernández, F. González, S. Romero-Romero and E. Nogueira, 2019. **Vertical distribution and aggregation patterns of krill (Crustacea: Euphausiacea) in the Bay of Biscay: interannual and seasonal variability.**
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Abstract: Studies of krill (Crustacea: Euphausiacea) in oceanic waters of the Bay of Biscay are scarce and restricted to the epipelagic zone, overlooking vertical dynamics such as diurnal vertical migration (DVM). There is a growing interest in acoustically evaluating the biomass of krill in this area, but this requires a good knowledge of its vertical dynamics and aggregation patterns. In this work we employed acoustic data and net samples from two consecutive annual surveys covering a wide off-shelf area of the Bay of Biscay (JUVENA surveys of 2013 and 2014) and four seasonal surveys covering slope and oceanic waters in the Cantabrian Sea (SCAPA surveys of 2015). Vertical dynamics of krill were analyzed in the frame of the environmental seascape. High interannual and seasonal variations in the vertical distribution and aggregation patterns (small swarms, dense aggregations, or loose layers) of krill were observed. The vertical distribution covaried with dissolved oxygen and salinity. According to our findings, the best season to acoustically evaluate krill in the Bay of Biscay is spring, with the bulk of the biomass located above 600 m depth. Moreover, extending the acoustic recording beyond the epipelagic zone is mandatory for any season.

Keywords: krill, acoustics, net sampling, vertical distribution, diurnal vertical migration, DVM, Bay of Biscay, Crustacea, Euphausiacea