Climate oscillations effects on market prices of commercially important fish in the northern Alboran Sea

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Climate oscillations affect fish population dynamics, ecological processes and fisheries activities in marine ecosystems. In the western Mediterranean, several atmospheric indices associated with pressure oscillations have been identified as the main drivers of the abundance or availability of certain resources exploited by fisheries. The main aim of this study was to explore the association between the potential effects of the North Atlantic Oscillation (NAO) and the Arctic Oscillation (AO) on the first sale price of fresh fish at the fish market of the most representative commercial species of the fisheries in the Alboran Sea (Mediterranean Sea). We used the Pearson correlation test to investigate correlations between the atmospheric oscillation indices and the fish market price of the selected species. The results suggest that inter- and intra-annual atmospheric oscillations may have an effect on bonito (Sarda sarda), European anchovy (Engraulis encrasicolus) and catsharks (Scyliorhinus spp.) abundance and catchability in the Alboran Sea and, therefore, an impact on their fish market presence and price variability according to the law of supply and demand.

Alboran Sea

Atmospheric oscillation

Fisheries bioeconomy

Law of supply and demand

animal

Arctic

climate

ecosystem

fish

Mediterranean Sea

Animals

Arctic Regions

Climate

Ecosystem

Fishes

Mediterranean Sea