

{rokbox title=|Workflow applied to each entry of the database :: Image: Authors|
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[Early-life dispersal traits of coastal fishes: an extensive database combining observations and growth models.](https://doi.org/10.5194/essd-16-3851-2024)

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Abstract: Early-life stages play a key role in the dynamics of bipartite life cycle marine fish populations. Difficult to monitor, observations of these stages are often scattered in space and time. While Mediterranean coastlines have often been surveyed, no effort has been made to assemble historical observations. Here we build an exhaustive compilation of dispersal traits for coastal fish species, considering in situ observations and growth models. Our database contains over 110 000 entries collected from 1993 to 2021 in various subregions. All observations are harmonized to provide information on dates and geolocations of both spawning and settlement, along with pelagic larval durations. When applicable, missing data and associated confidence intervals are reconstructed from dynamic energy budget theory. Statistical analyses allow traits' variability to be revisited and sampling biases to be revealed across taxa, space and time, hence providing recommendations for future studies and sampling. Comparison of observed and modelled entries provides suggestions to improve the feed of observations into models. Overall, this extensive database is a crucial step to investigate how marine fish populations respond to global changes across environmental gradients.

Keywords: