The influence of regional and local oceanography in early stages of marine fishes from temperate rocky reefs

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Nearshore ichthyoplankton assemblages are constantly influenced by the dynamics of coastal environments (i.e. daily thermal gradients and coastal currents), as well as by regional environmental forcing, such as upwelling events. The aims of this study were to describe larval and postlarval fish assemblages on a short-time scale and relate their intra- and interannual fluctuations to local (< 1 km) and regional (~ 40 km) oceanographic conditions, at two locations of central Chile (Montemar and El Quisco), 50 km distant from each other. Environmentally, spring?summer 2015?2016 was more stable than spring?summer 2016?2017, evidencing weaker temperature fluctuations. In addition, the first season of the study showed positive temperature anomalies that agree with the warm phase of El Niño?Southern Oscillation (ENSO) 2015. Both larval abundance (29,090 ind. 100 m ?3 period 1; 23,100 ind 100 m ?3 period 2) and postlarval CPUE (6.8