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ABSTRACT:

The seasonal succession of species community structure, abundance and carbon biomass of five zooplankton taxa (Copepoda, Euphausiacea, Chaetognatha, Amphipoda and fish larvae) and their variability during different oceanographic conditions was investigated on the continental shelf of the central Mexican Pacific (19° N, 105° W) during a monthly time-series (1996–1998). These zooplanktonic taxa included 291 species, with maximum species richness during El Niño 1997–98, when 54 tropical oceanic species invaded the continental shelf. This typical offshore community was advected onshore by the anomalous intrusion of Subsurface Equatorial water mass which caused