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SPATIAL REPARTITION OF EUPHAUSIIDS *EUPHAUSIA CRYSTALLOROPHIAS* AND *THYSANOESSA MACRURA* LIFE STAGES AND *PLEURAGRAMMA ANTARCTICUM* FISH LARVAE IN THE COASTAL ZONE FROM TERRE ADELIE TO THE MERTZ GLACIER IN SUMMER 2004.

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The purpose of this study is to know the spatial distribution of the main species of euphausiids according to the environmental factors and their developmental stage in the coastal zone from Terre Adélie to the Mertz glacier. The continental shelf of this area is surrounded by two deep trenches. Strong winds, mainly katabatic are often observed and a gyre due to the Adelian depression influence the water mass near the Mertz glacier. The Mertz glacier is the largest one in this area.

Zooplanktonic samples and environmental parameters measurements were carried in summer 2004. Three species of euphausiids were identified: *Euphausia superba, E crystallorophias* and *Thysanoessa macrura*. Larvae of *Euphausia crystallorophias* and *T macrura* were the dominant euphausiids in the coastal zone. *Pleuragramma antarcticum* were the most dominant fish larvae.

Geostatistics were used to map life stages and water-mass characteristics. It highlighted a zone of higher larval abundance located on the continental shelf. Multivariate analysis show correlations between the distribution of euphausiids and fish larvae with their prey and predators like Adelie penguins. Life stages distribution are explained by hydrodynamics, bathymetry and phytoplankton.