In the Canary Islands, some ancient fossiliferous marine deposits contain fossils that allow the understanding of the climatic and ecological evolution of the last 5 Ma. The definition of fossils with ecological and stratigraphic information enables an approach to the paleo-oceanographic and ecological conditions through the study of the current conditions of the genera or species.

**MIO-PLIOcene PALEOINDICATORS**

- *Siderastrea mioenica*
  - Osasco 1897
- *Rhopelia rudata*
  - Simonelli, 1890
- *Gryphea viridula*
  - Deshayes 1832
- *Isurus hastalis*
  - Agassiz, 1843
- *Nerita emiliana*
  - Mayer 1872
- *Ancilla gandiformis*
  - Lamarck 1822
- *Strombus coronatus*
  - Defrance 1827

**MIDDLE PLEISTOCENE PALEOINDICATORS. MARINE ISOTOPE STAGE 11**

- *Madracis pharensis* (Heller 1866)
- *Dendrophyllia corinigera* (Lamarck 1819)
- *Saccorita cuculata* (Born 1780)
- *Purpurellus gambiensis* (Raeve 1845)

**LOWER PLEISTOCENE PALEOINDICATORS. MARINE ISOTOPE STAGE 5.5**

- *Strombus bubonius* (Lamarck 1822)
- *Siderastrea radians* (Pallas 1786)
- *Harpa doris* (Röding, 1798)

**CURRENT BIO-OCEANOGRAPHY OF SOME PALEOINDICATORS**

- Present distribution in the western African coast of *Saccorita cuculate* (Born 1780) and *Harpa doris* (Röding, 1798).

**FOSSILIFEROUS MARINE LOCALITIES IN THE CANARY ISLANDS**

Mio-Pliocene marine deposits are located in Gran Canaria, Fuerteventura and Lanzarote. There are some characteristic fossils, typical of a very warm climate and littoral zone. Associated lava flows have been radiometrically dated and provide a range between 8.9 (El Janubio, Lanzarote Island) and circa 4.1 Ma (Barranco de Tamaracooite and Barranco de Los Dolores, Gran Canaria Island).

Fossil remains of MIS 11, circa 481,000 years ago, are preserved on the coast of Arucas (Gran Canaria Island) and in a tsunami deposit at Piedra Alta (Lanzarote Island). The former was dated by K-Ar method on pillow lavas (circa 420,000 years) and the latter by Uranium Series method on corals (circa 481,000 years).

Marine fossil deposits from the the Last Interglacial or MIS 5.5, circa 125,000 years ago, are present at Igueste de San Andrés (Tenerife Island); El Altillio, Las Palmas de Gran Canaria downtown and Maspalomas (Gran Canaria Island); Matas Blancas; Las Playitas and Morro Jable (Fuerteventura Island) and at Playa Blanca and Punta Penedo (Lanzarote Island). The main fauna are currently used in the Cape Verde archipelago, the Gulf of Guinea and the Caribbean.