OPERATIONal Plans and Tools for **Cli**mate **C**hange Adaptation in **EUROPE** – OPERATION CLIC EUROPE

Case Study 4a: Western Greece.

The Ionian is the deepest sea of the Mediterranean Sea and lies at the south of Otranto Strait which forms the boundary with the Adriatic Sea and continues south of mainland Peloponnesos and the islands of Kithira Antikithira and Gavdos continuing further east into the Levantine Sea. The Greek part of the Adriatic Sea and the north Ionian Sea are typical coastal Mediterranean areas, where the air temperature and the rainfall are the main drivers for the sea temperature and salinity variations. The area is composed by warm and high salinity water while the Italian part has colder and slightly lower salinity. Many submarine canyons are located along the Western Ionian coasts. They are important for the biodiversity in the Mediterranean Sea because they can be a refuge for many bathyal and endemic species.

The coastlines consist mainly of alluvial or deltaic sediments, sandstones, mudrocks and marls as well as calcareous rocks. The Amvrakikos Gulf is mainly affected by agricultural activities. The Patraikos Gulf is affected by the industrial and agricultural activities as well as the port of Patras. The rivers Glafkos and Acheloos also transfer polluted waters. The marine environment of Astakos Gulf is affected mainly by the existing fish farms in the vicinity with dissolved and particulate form of metals.