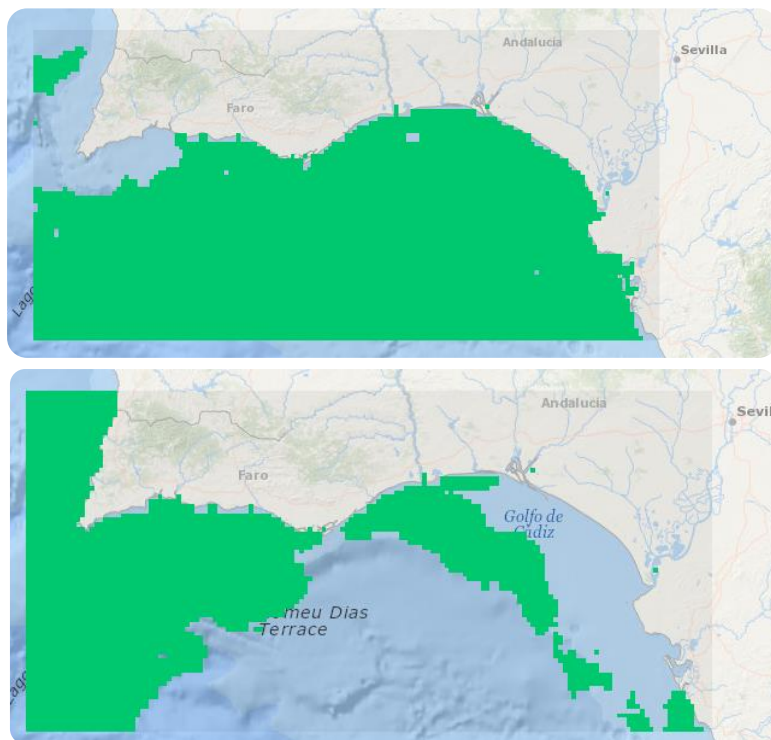




## SMALL PELAGIC SPAWNING



**FIGURE 1: INDICATOR OF SARDINES SPAWNING POTENTIAL AREAS (IN GREEN) IN THE GULF OF CADIZ, APRIL-MAY 2015**



**FIGURE 2: SARDINE LANDINGS IN GULF OF CADIZ**

**Source data:** Sea Surface Temperature from GHRSSST (<http://ghrsst.org>) or ODYSSEA (Piolo *et al.*, 2010) projects.

**Methodology:** Sardines data used for analysis were sampled immediately after catch landing. A correlation analysis between *in-situ* sampling analysis on sardine spawning and environmental conditions in the fishing area, has led to a regression model between the sea surface temperature and sardine maturation stage (i.e. the spawning stage).

**In the Gulf of Cadiz, the spawning period for sardines is observed between December-January and March-May. A correlation analysis using SST has been exploited to derive mapping of potential spawning stage for sardines in the Gulf of Cadiz. This could be adapted to other areas where biological data are available.**

References: Piolle J. F., Autret E., Arino O., Robinson I.S., Le Borgne P., (2010), Medspiration, toward the sustained delivery of satellite SST products and services over regional seas, ESA Living Planet Symposium, Bergen.