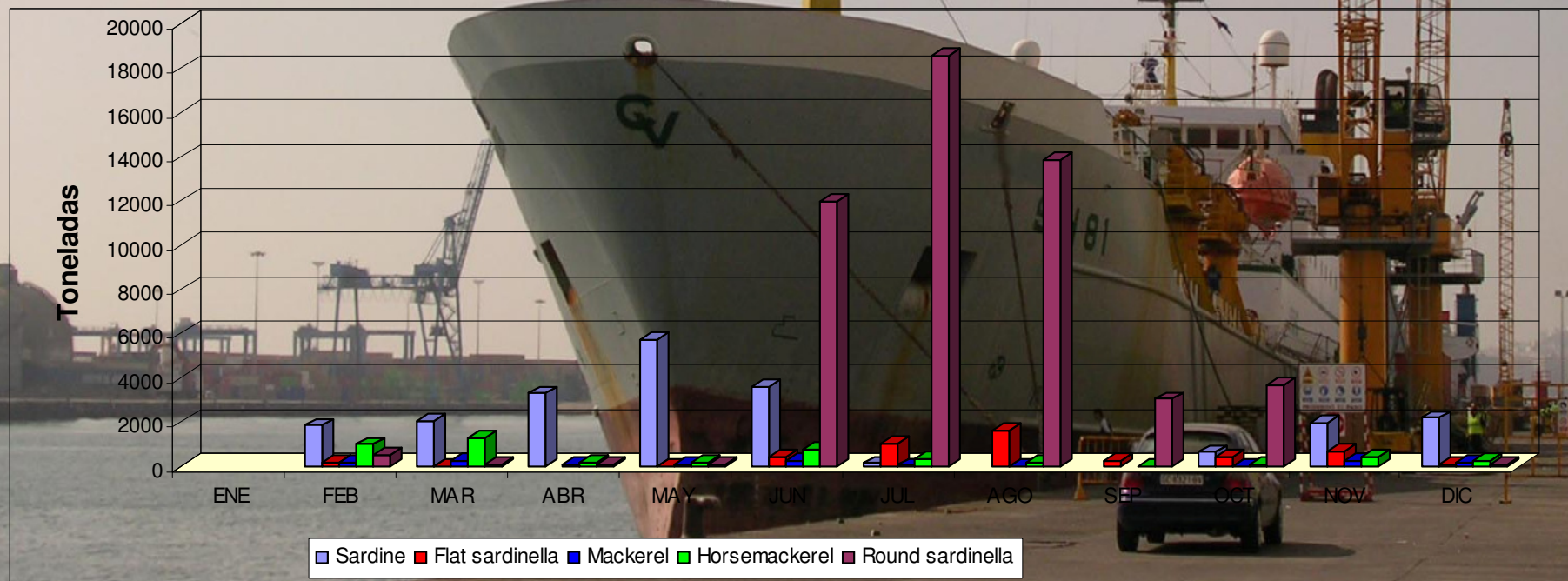


Activity of European pelagic trawlers fishing in Mauritania and landing in the port of Las Palmas de Gran Canaria (Canary Islands, Spain) from 2004-2007. Relationship between catches and SST/SSTA)

Authors: Pascual-Alayón, P, M.T.G. Santamaría, E. Balguerías
E. Hernández, L. Bravo de Laguna, A. Sancho and V. Duque



SCIENCE AND THE CHALLENGE OF MANAGING SMALL PELAGIC FISHERIES ON SHARED STOCKS IN NORTHWEST AFRICA. 11-14 March 2008 Casablanca, Morocco.

**The European Community Regulations
(EC) N°1543/2000, N°1639/2001, N°1581/2004 and N° 1343/2007
established the requirements for the national programmes
for the collection of data in the fisheries sector.**

(EC) N° 1543/2000 establishing a Community framework for the collection and management of the data needed to conduct the common fisheries policy.

(EC) N° 1639/2001 establishing the minimum and extended Community programmes for the collection of data in the fisheries sector.

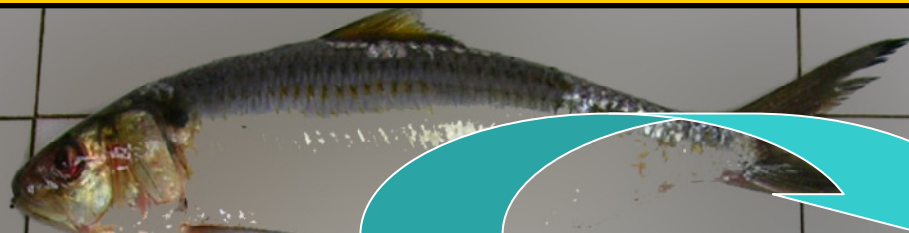
(EC) N° 1581/2004 of 27 August 2004 update the N° 1639/2001.

(EC) N° 1343/2007 of 13 November 2007 update the N° 1543/2000.



The Spanish National Programme for the development of these studies began through the Spanish Institute of Oceanography in May 2004.

Fishery description of the small pelagic fish in Mauritanian waters



- **Nº average of vessels: 6**
- **Tonnage (GT): 5578 to 14055**
- **Power (CV): 7007 to 9840**
- **Length (m): 107 to 144**
- **Construction years: 1988 to 2000**

Target species

- *Sardinella aurita* Valenciennes, 1847
- *Sardina pilchardus* (Walbaum, 1792)
- *Sardinella maderensis* (Lowe, 1838)
- *Scomber colias* Gmelin, 1789
- *Trachurus* spp.

Common name

- Round sardinella
- Sardine
- Flat sardinella
- Club Mackerel
- Horse Mackerels



Fishing zone and landing activity of the small pelagic fish in Las Palmas Port (Canary Islands)



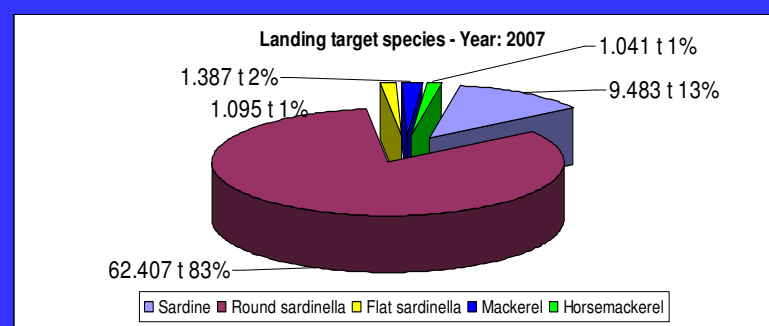
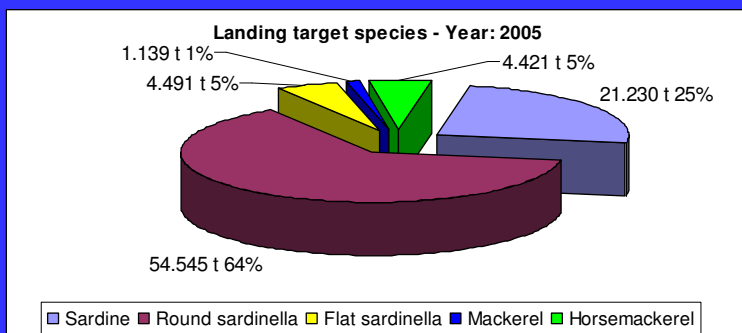
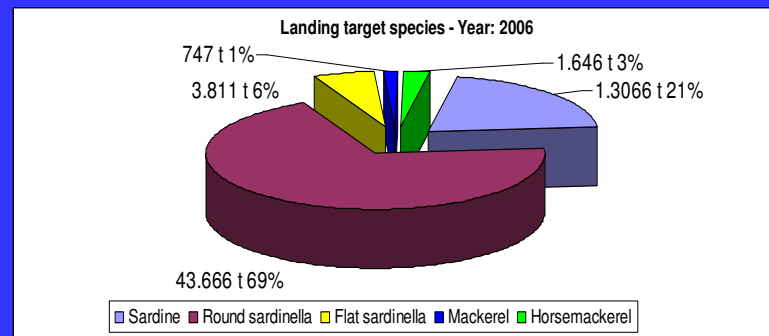
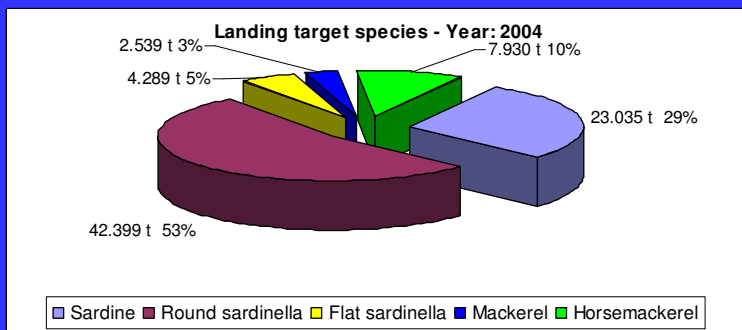
Evolution of the total catch landing of target species and effort (n° trips) in Las Palmas Port

Effort: Number of trips during the years 2004, 2005, 2006 and 2007 by quarter

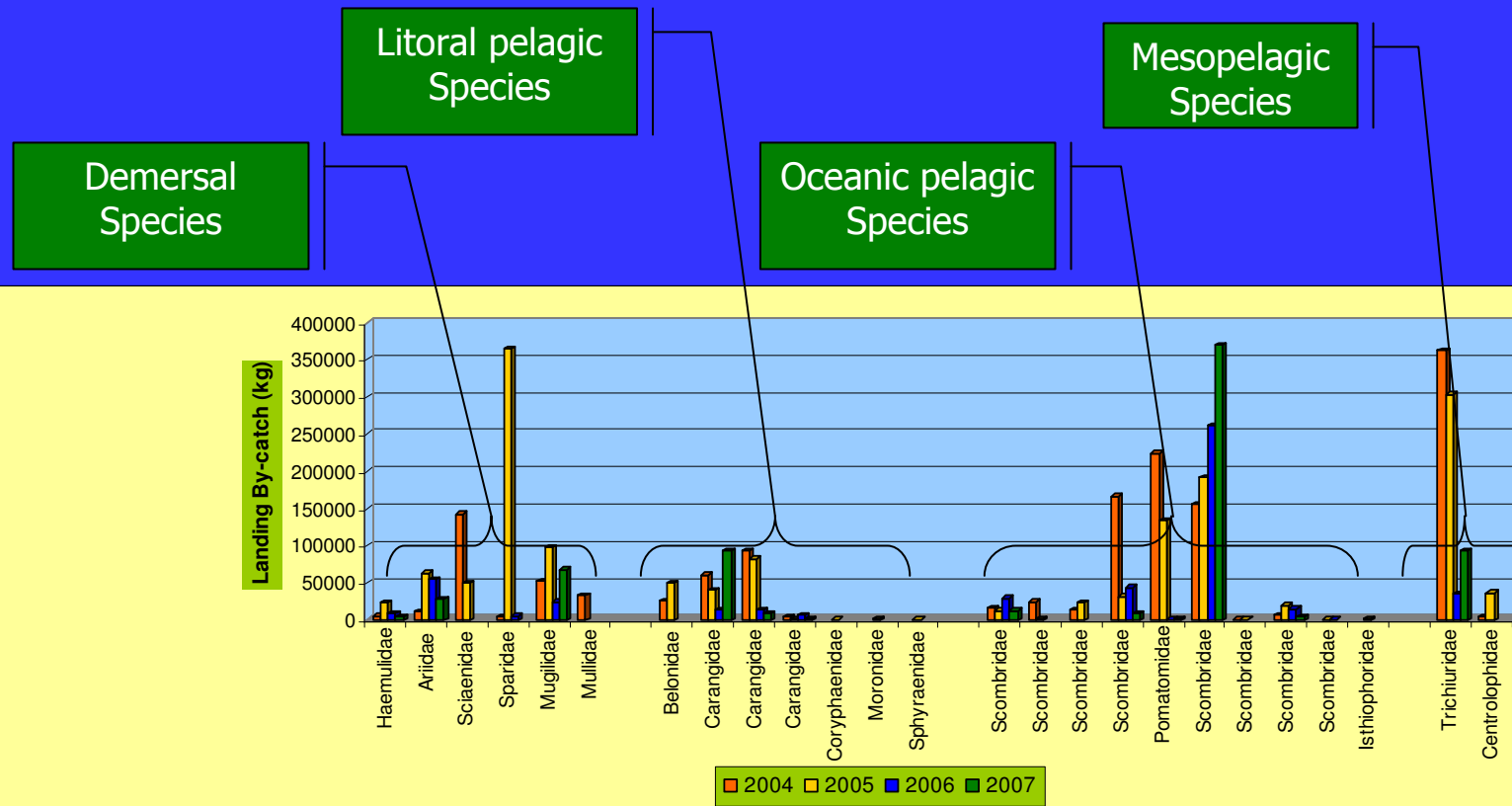
Years	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total by year
2004	3	7	9	4	23
2005	3	11	8	3	25
2006	3	9	6	2	20
2007	3	8	10	2	23
Total by quarter	9	27	23	9	

Total Catch landing of target species together

	2004	2005	2006	2007
	80191 (t)	85827 (t)	60217 (t)	75413 (t)



Types of by-Catch by European pelagic trawlers during the period 2004-2007.

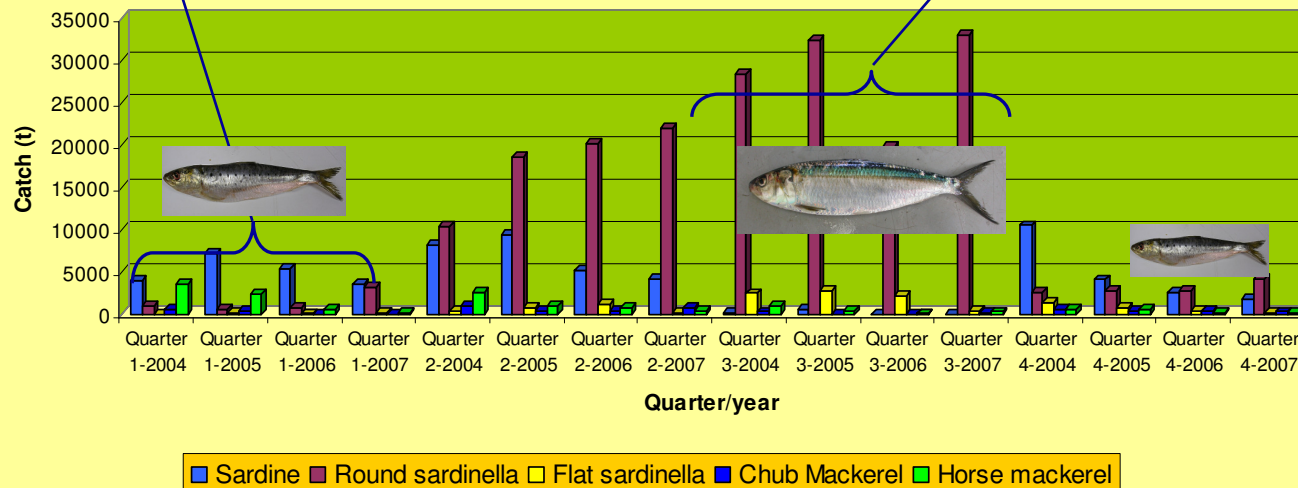


Seasonal landing of target species during period (2004-2007) in Las Palmas Port

In winter
Sardine

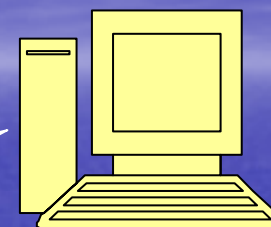
In Summer
Round Sardinella

Landing target species by quarter/year

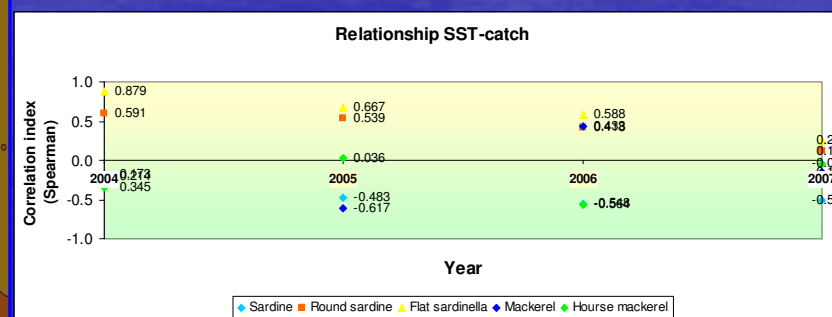


Relationship between the target species catches and SST/SSTA in Mauritanian waters during the period (2004-2007).

The Temperature data were processed for the geographical area comprised between 16.5° N _ 20.5° N and 17° W _ 21.5° W, assigning the SST and SSTA values to the midpoint of each 1°x1° grid.



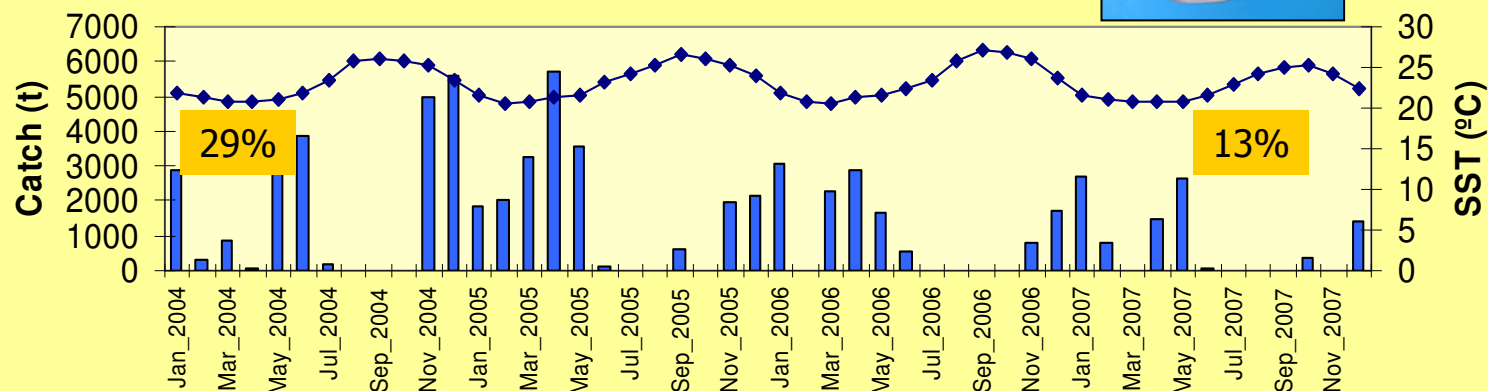
First analysis



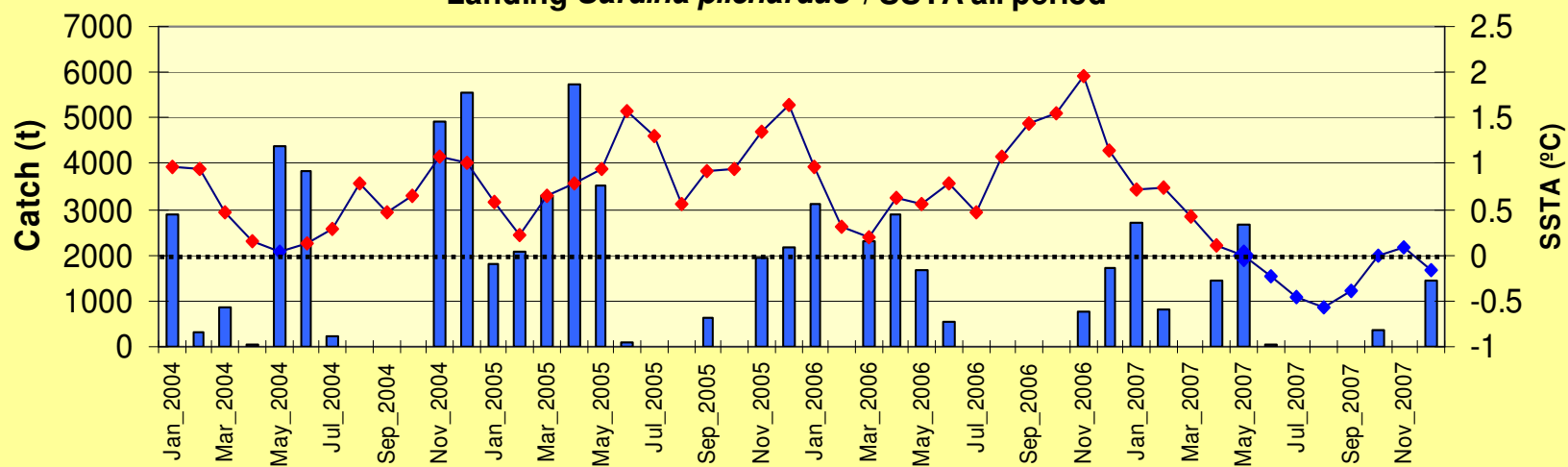
IGOSS database located at the International Research Institute for Climate Prediction (IRI) seated at the Columbia University.
<http://www.unesco.org/ioc/igoss/igoshome.htm>

Relationship between the target species catches and SST/SSTA in Mauritanian waters during the period (2004-2007).

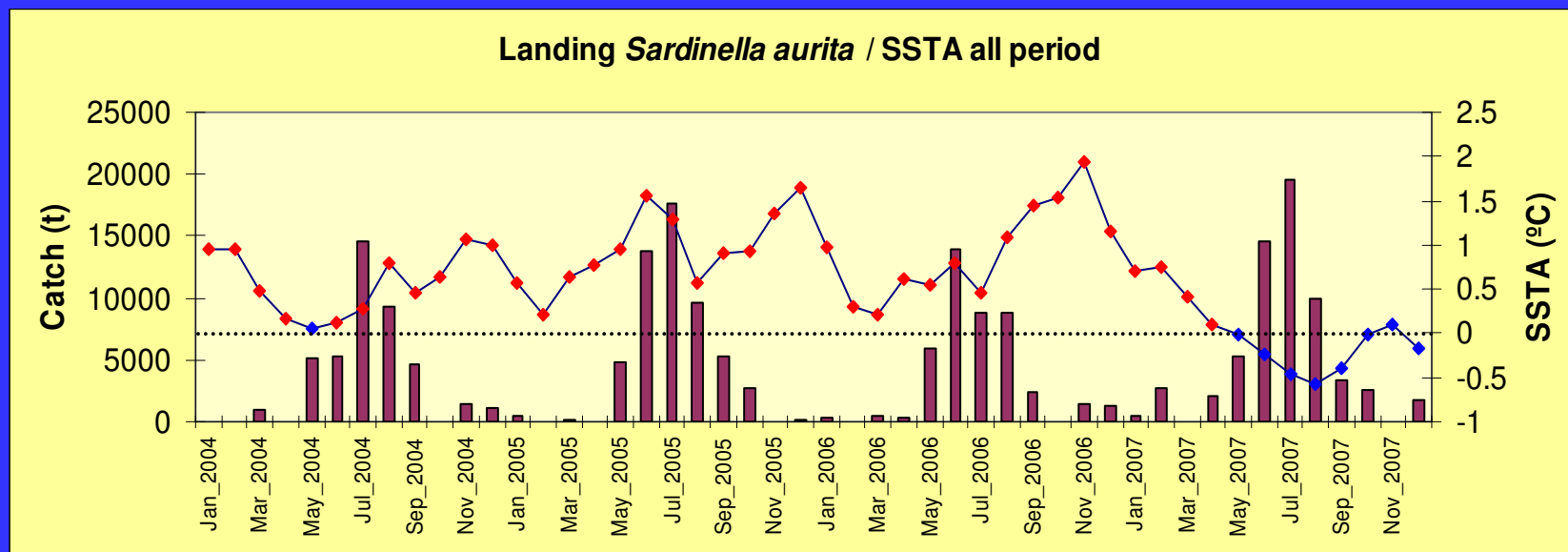
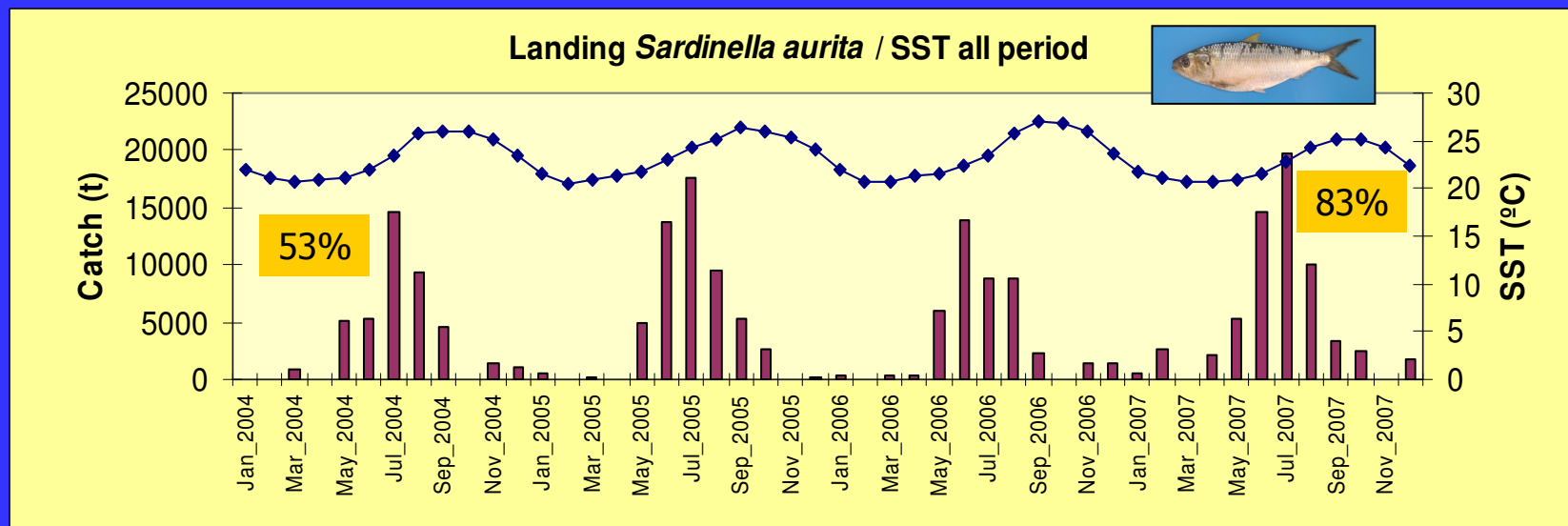
Landing *Sardina pilchardus* / SST all period



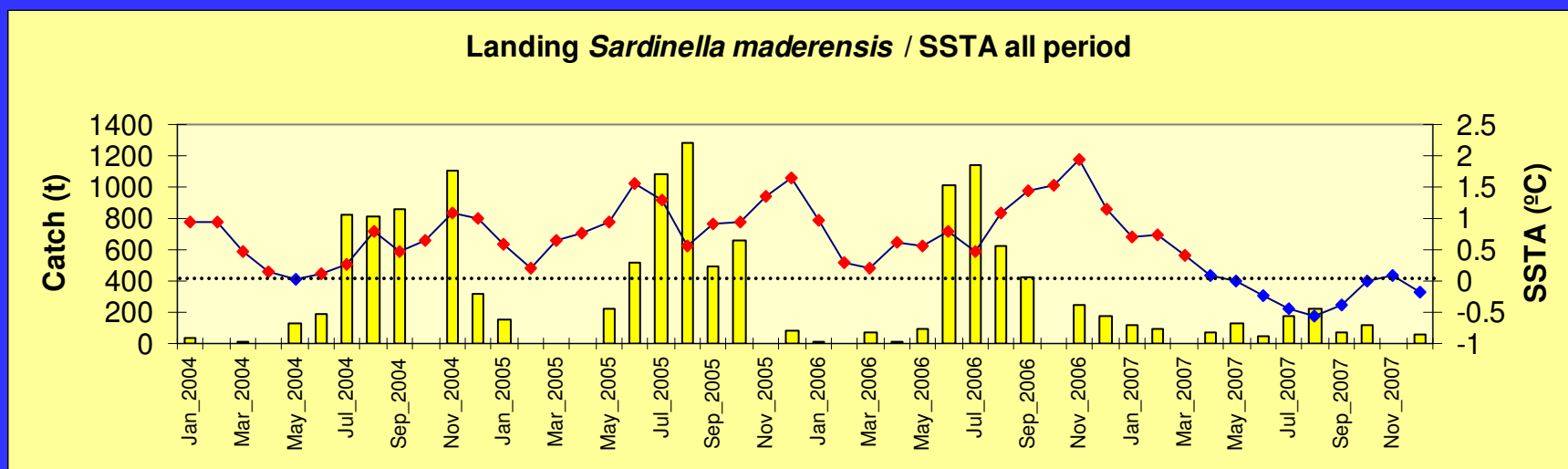
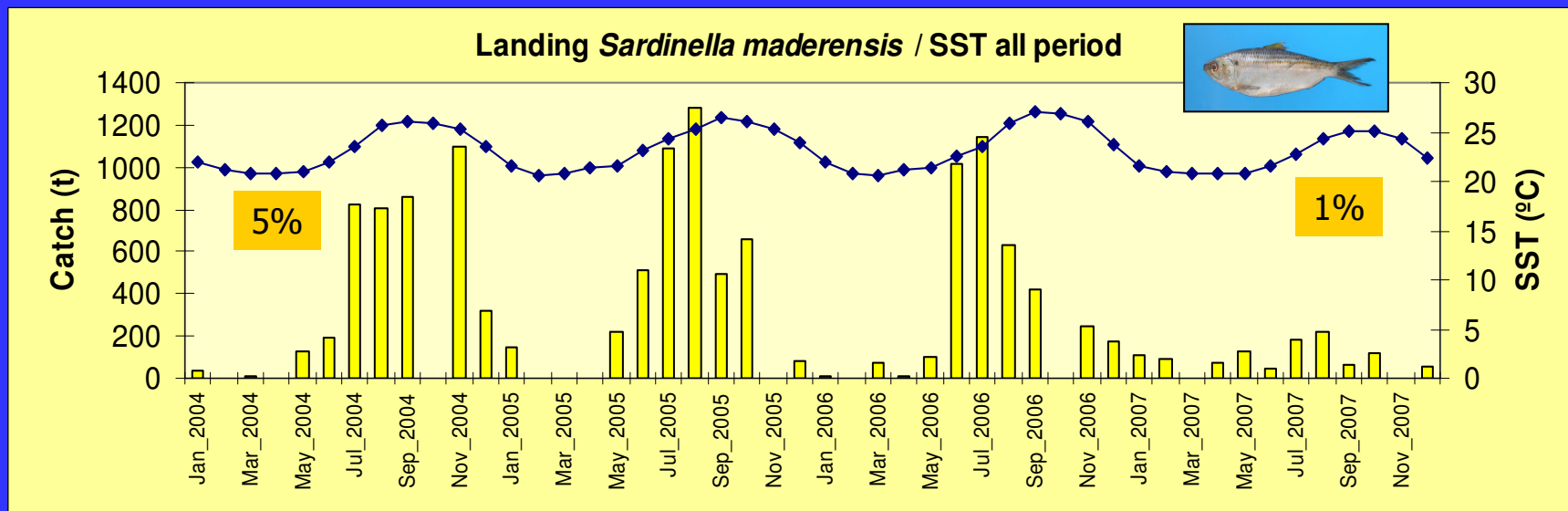
Landing *Sardina pilchardus* / SSTA all period



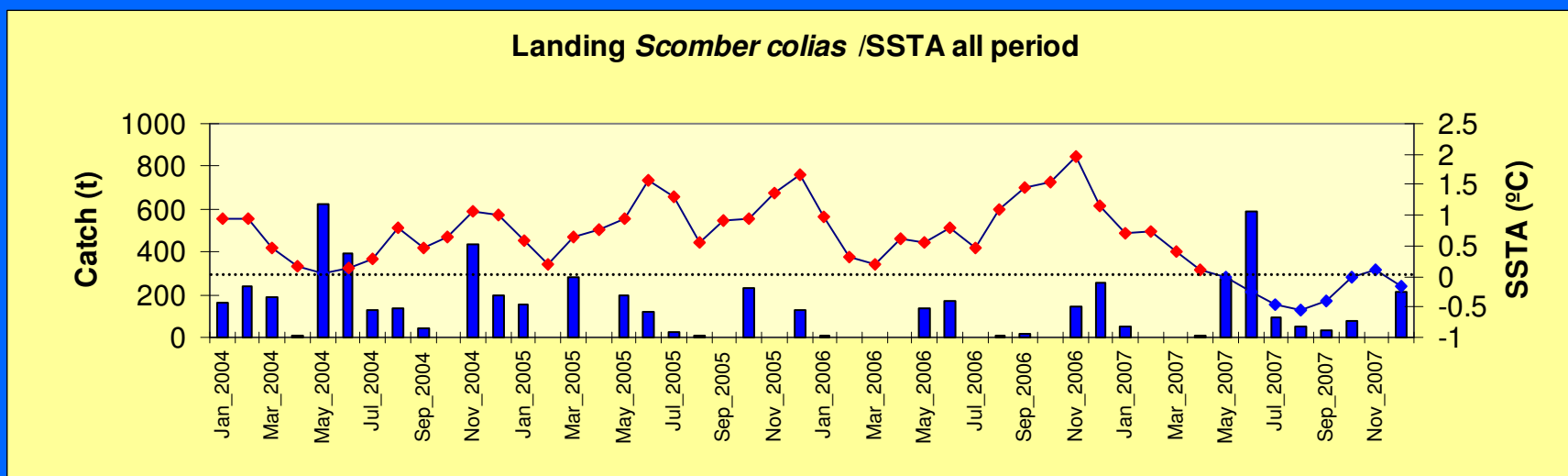
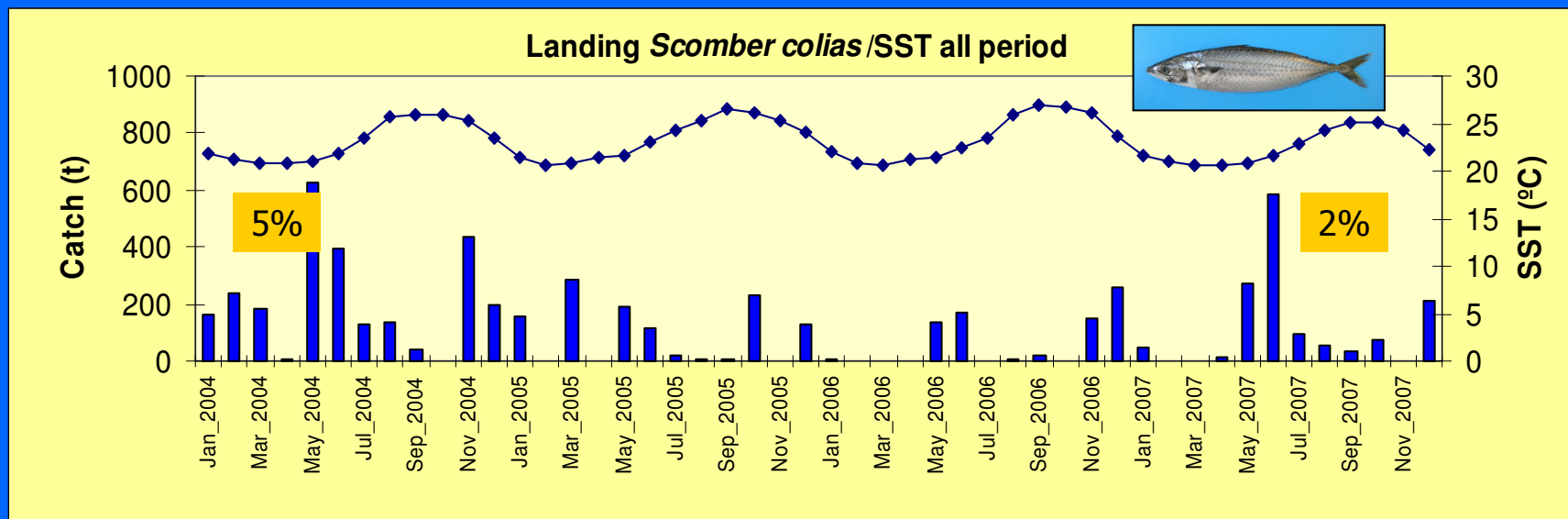
Relationship between the target species catches and SST/SSTA in Mauritanian waters during the period (2004-2007).



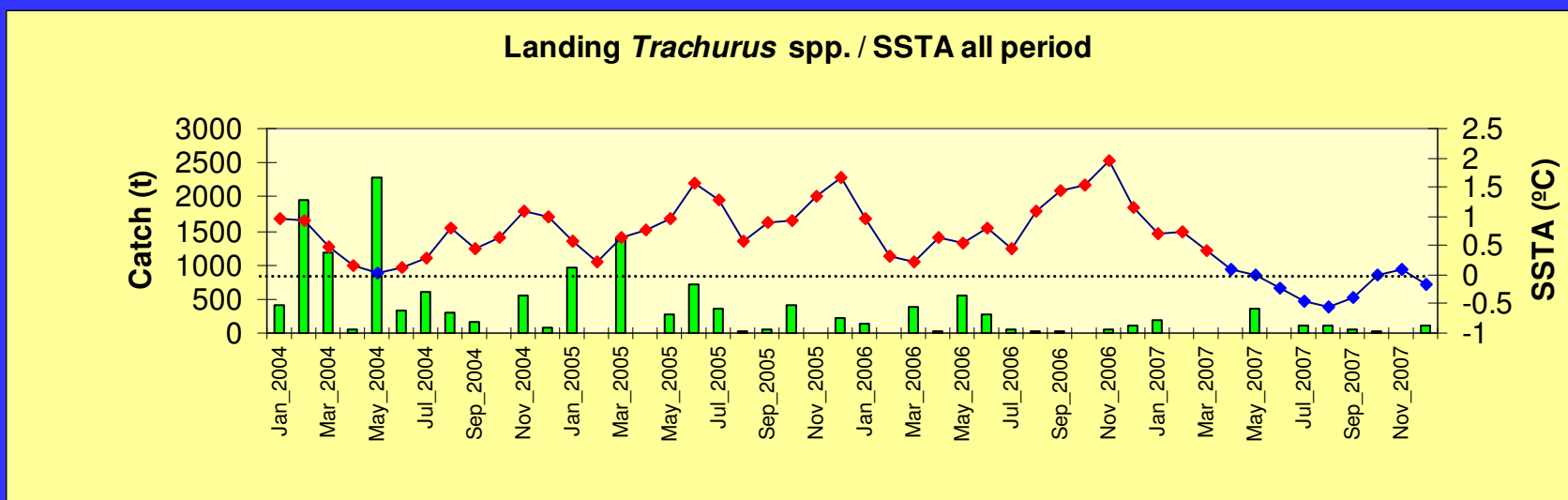
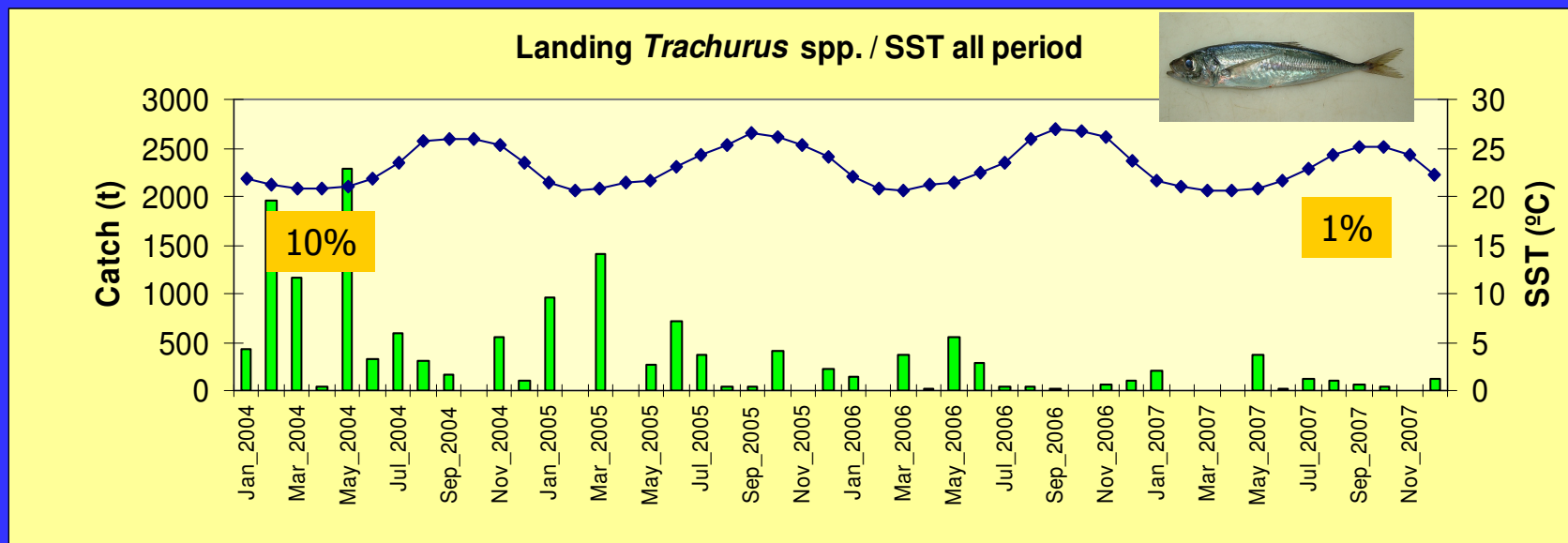
Relationship between the target species catches and SST/SSTA in Mauritanian waters during the period (2004-2007).



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↳ Conclusions:

- .- Catches of European pelagic trawlers fishing in Mauritania are very important both in terms of weight and species variety.
- .- The main target species is *Sardinella aurita* (Round Sardinella) which accounts for more than 80 % to the total catch.
- .- There is a seasonal variability both in Sardine pilchardus (winter) and Sardinellas (summer) catches.
- .- There are clear evidence of relationship between sea surface temperature (SST) and catches of some target species such as Sardine pilchardus and Sardinella aurita.
- .- The last warm period seems to be favouring catches of Sardinella aurita (Round Sardinella).

Thank you for your attention