

THE PORTUGUESE LONGLINE FISHING ACTIVITIES IN THE INDIAN OCEAN: ONGOING ACTIVITIES AIMING THE COLLECTION OF HISTORICAL DATA

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1) Historical data

- Fleet: no. registered and operative vessels
- Official annual catches (SWO and BIL)

2) Revision of historical data (ongoing)

- Official logbooks
- VMS data
- Skippers logbooks
- Spatial catches

3) Data collection and research (ongoing)

- Onboard observers
- Self-sampling
- Port sampling
- Research

Portuguese pelagic longline fishery

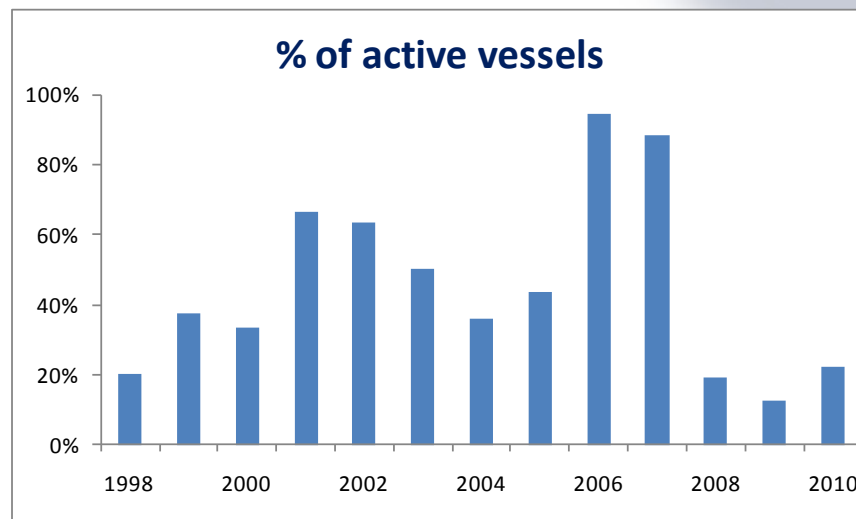
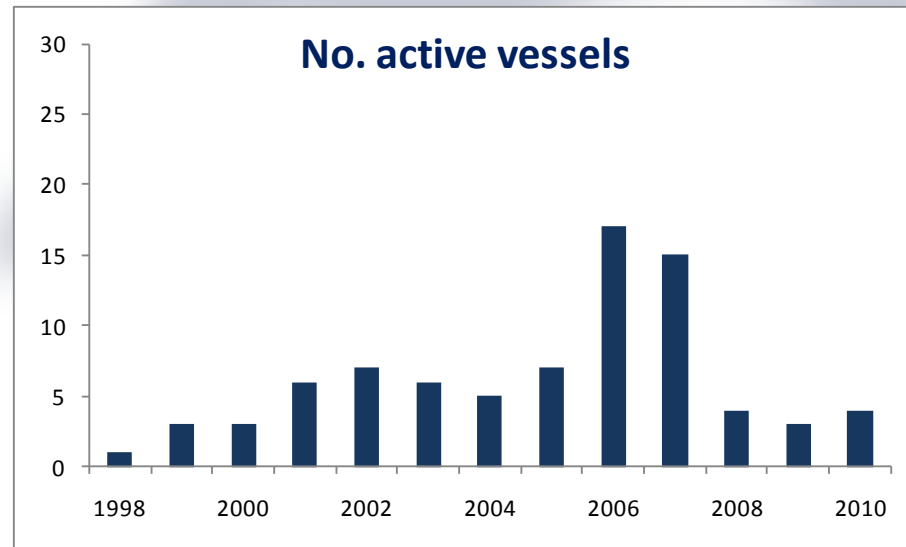
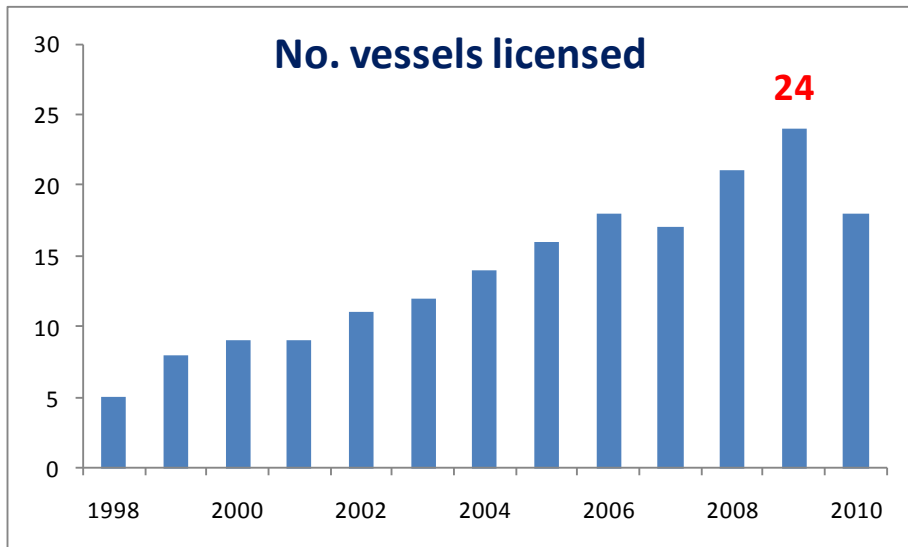
- Begun in the Atlantic Ocean

- Started in the early 1980's in the North Atlantic;
- In the mid-1990's extended to the Southern Atlantic;
- Historically used traditional multifilament gears with a similar number of hooks per basket (between buoys);
- Fishing the surface layers above 50 m depth;
- Night sets, taking advantage of the higher availability of swordfish
- Early 2000's changed to "Florida style" monofilament gear, followed by other gear changes (e.g. iron multifilament branch) » change on target species, taking advantage of higher abundances (pelagic sharks) and market opportunities

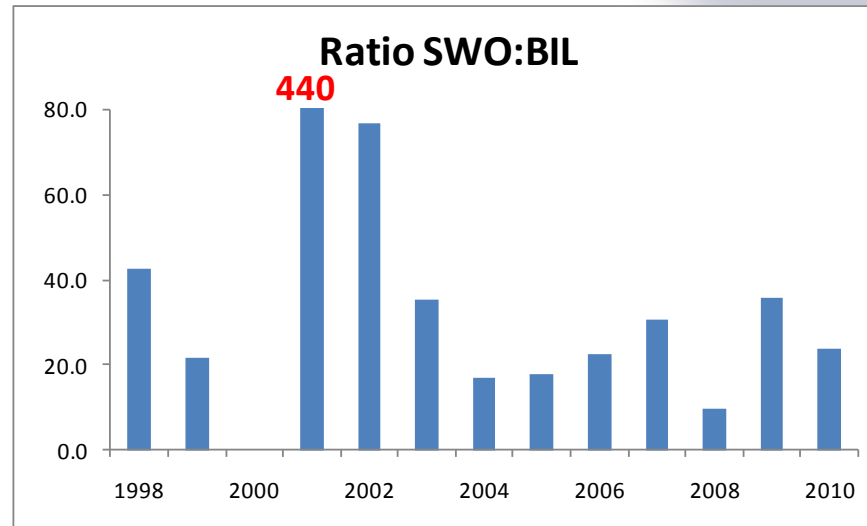
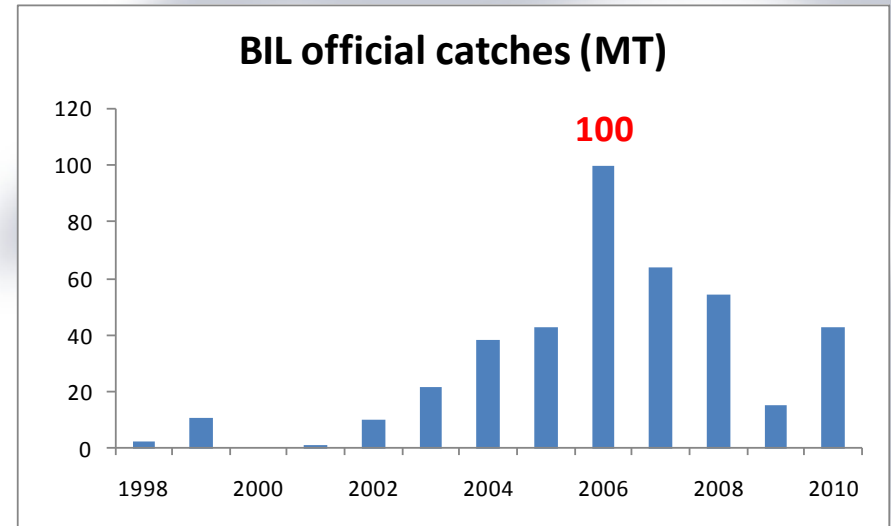
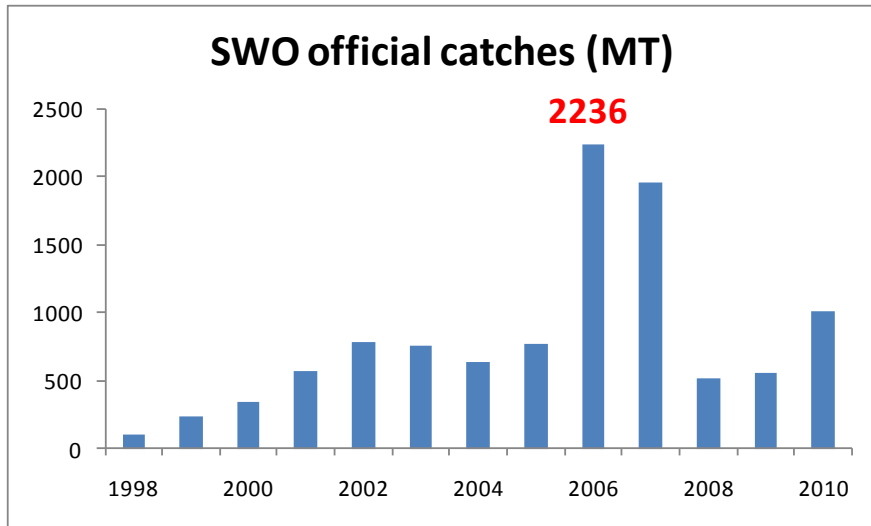
- Indian Ocean fishery

- Started in the late 1990's;
- Started the SW area, later went further to the East.

The fleet evolution



The official annual catches



Revisiting historical data

Official logbooks and data bases

- Species catches
- Effort (no. sets; no. hooks ???)
- Geographical distribution of catch & effort (FAO areas)

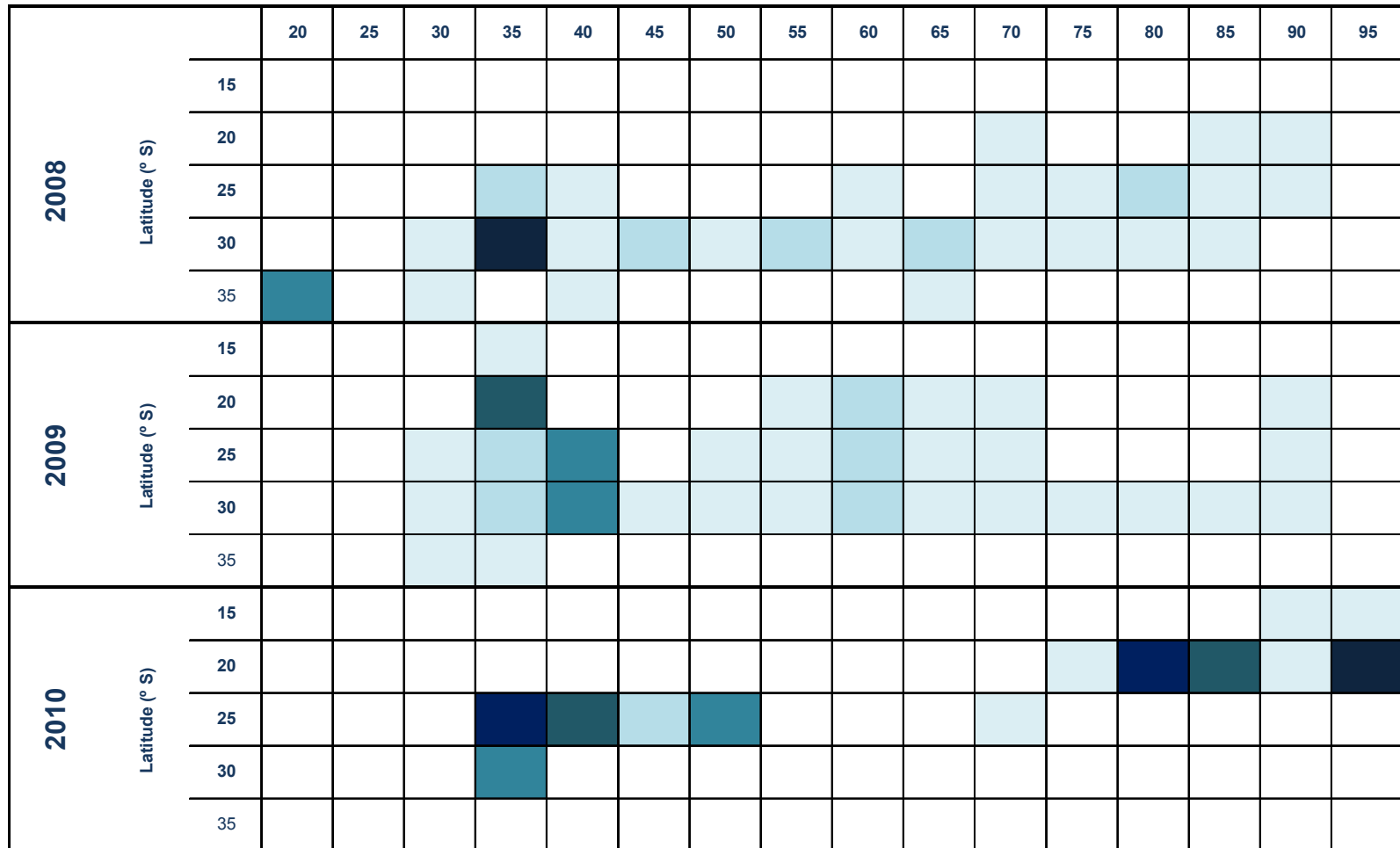
VMS data (1st: 2006-2010; 2nd 2000-2005)

- Geographical distribution of catch & effort 5° x 5°
- Effort (no. sets)

Skippers logbooks

- Species catches
- Catch and effort (no. sets; no. hooks)
- Geographical distribution of catch & effort 2° x 2°
- Catch at size (major species: SWO, BSH, SMA)

SWO spatial catches 5°x5° (2008-2010)



Submission of data

Recently submitted

- SWO catch at size (2001-2010) (provisional data)

Near future (2011-2012)

- Geographical distribution of the catches 5°x5° (prior to 2008)
- Improve SWO catch at size data (2001-2010)
- Provide standardized CPUE series

Other ongoing activities

Onboard observers are recording/collecting

- Set information:

- date and location
- time (set and haulback)
- number of hooks
- bait and branch type
- seabird mitigation measures

- Catch data:

- All species (including marine turtles, seabirds and mammals)
- At-haulback condition (alive/dead)
- Size (FL), weight (round and trunk) and sex (when possible)
- Fate (retained/discarded), condition if discarded (alive/dead) and reason

- Samples

- Muscle, vertebrae and spines

Logbook for self-sampling

The screenshot shows an Excel spreadsheet with the following content:

Excel (Title Bar)

Ribbon:

- Styles:** Normal, Bad, Good, Neutral
- Cells:** Insert, Delete, Format
- Editing:** AutoSum, Fill, Clear, Sort & Filter, Find & Select

Grid Content:

Columns: AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR

Highlighted Section (Blue Box):

Kerangka

Isa (ker) pada masa. Utilisasi de disposiion para afekar pSuarua (keri lio)

Calculus conficio la ficio 3 la cal

T. ligo IGCI	T. unua IRTI	P. lio (HOX)	M. (PLS)	Deqo JALI	Caqo (GAC)	Jamala IRMI	T. unua IPKI		
Time	Hour	Time	Hour	Time	Hour	Time	Hour	Time	Hour
1	1	2	3			2	3		

Other ongoing activities

Research (elasmobranchs)

- By-catch
- haulback mortality
- size/weight relationship
- shark fin weight : body weight ratios
- biology (age and maturity)
- genetics

Port sampling

- Opportunistic:
 - set information
 - species
 - size/weight