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) <u>Revision of historical data (ongoing)</u>

- 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

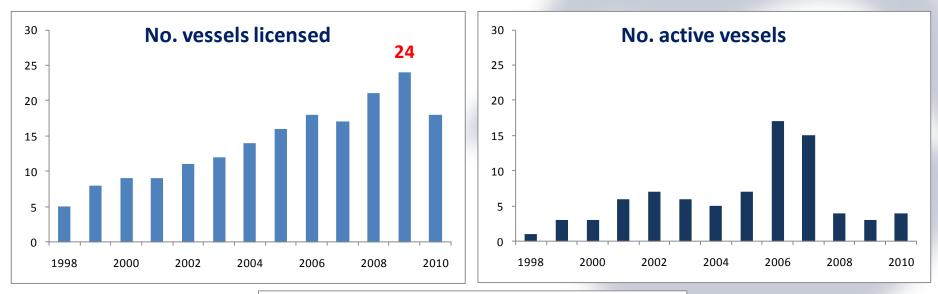
- Started in the early 1980's in the North Atlantic;
- In the mid-1990's extended to the Southern Atlantic;
- Historically used traditional multifilament gears with a similar number of hooks per basket (between buoys);
- Fishing the surface layers above 50 m depth;
- Night sets, taking advantage of the 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

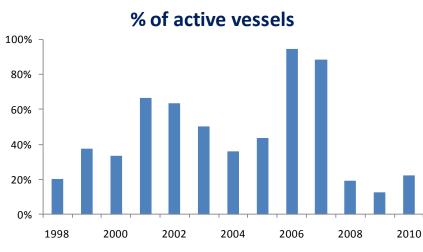
• Indian Ocean fishery

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



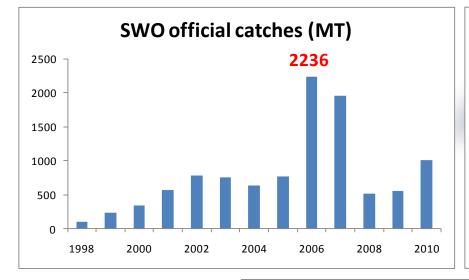
The fleet evolution

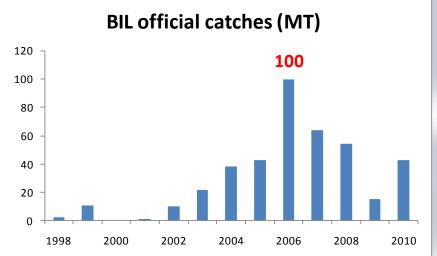


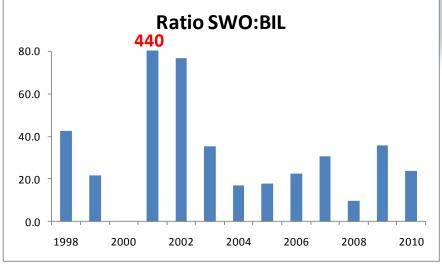




The official annual catches









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)

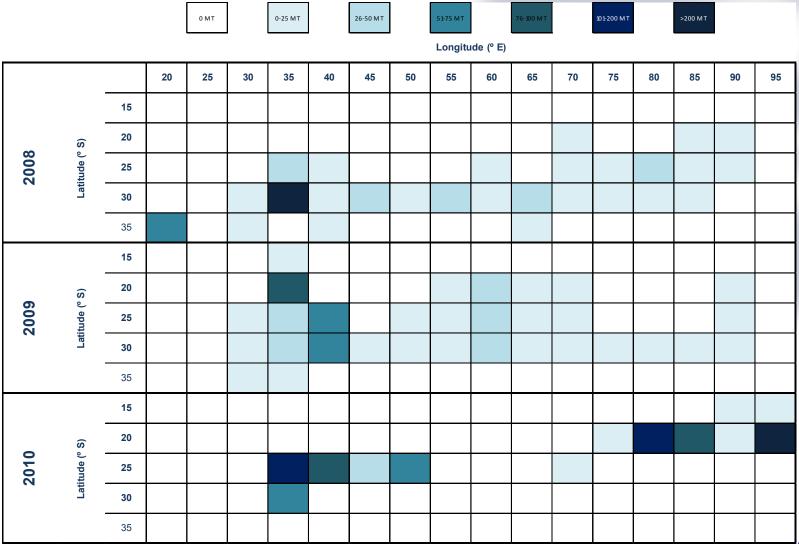
- Geographical distribution of catch & effort 5° x 5°
- Effort (no. sets)

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)



INRB, I. P. Instituto Nacional dos Recursos Biológicos



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Submission of data

Recently submited

• 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
- <u>Samples</u>
 - Muscle, vertebrae and spines



Logbook for self-sampling

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Logbook for self-sampling

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Other ongoing activities

Research (elasmobranches)

- 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

