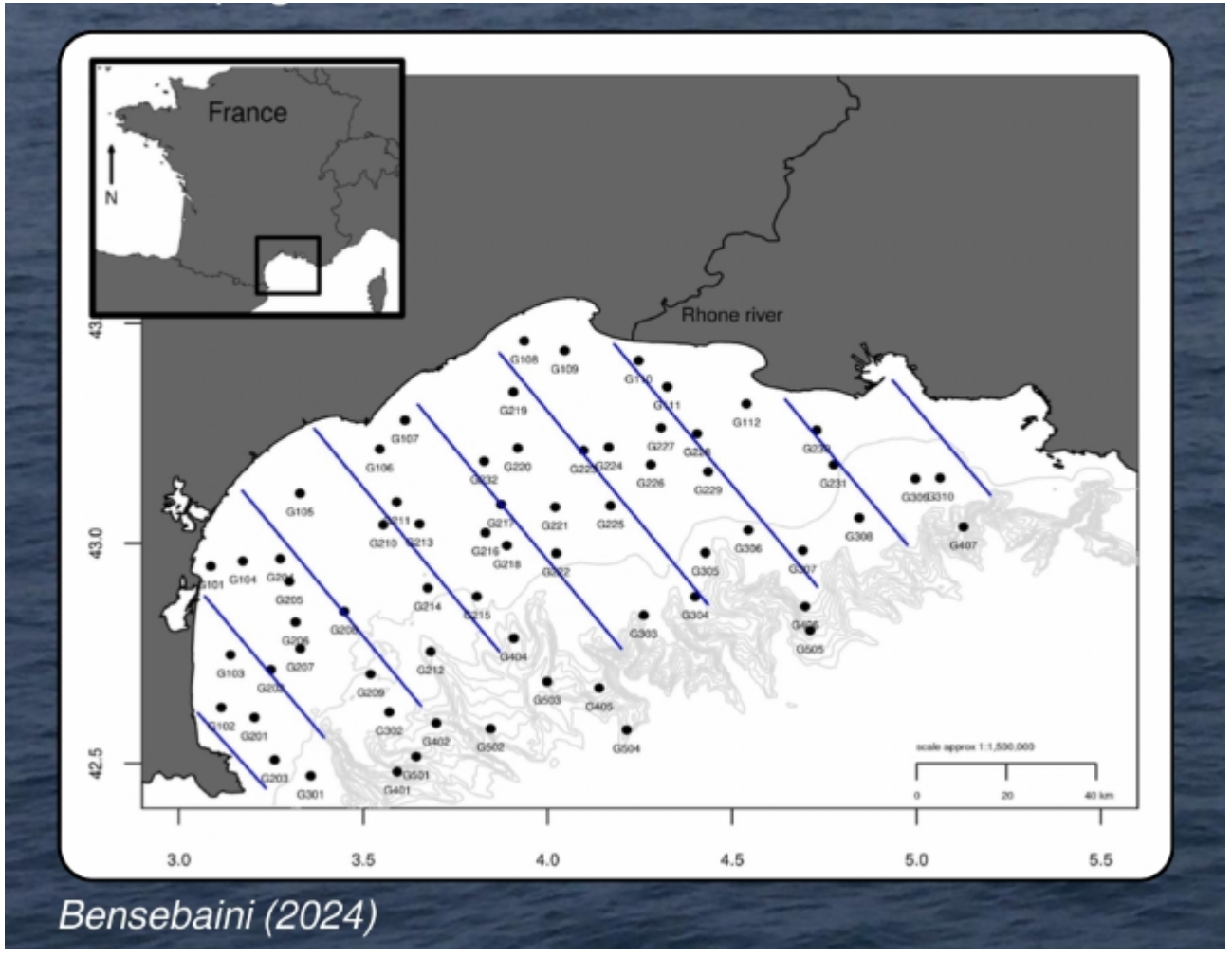
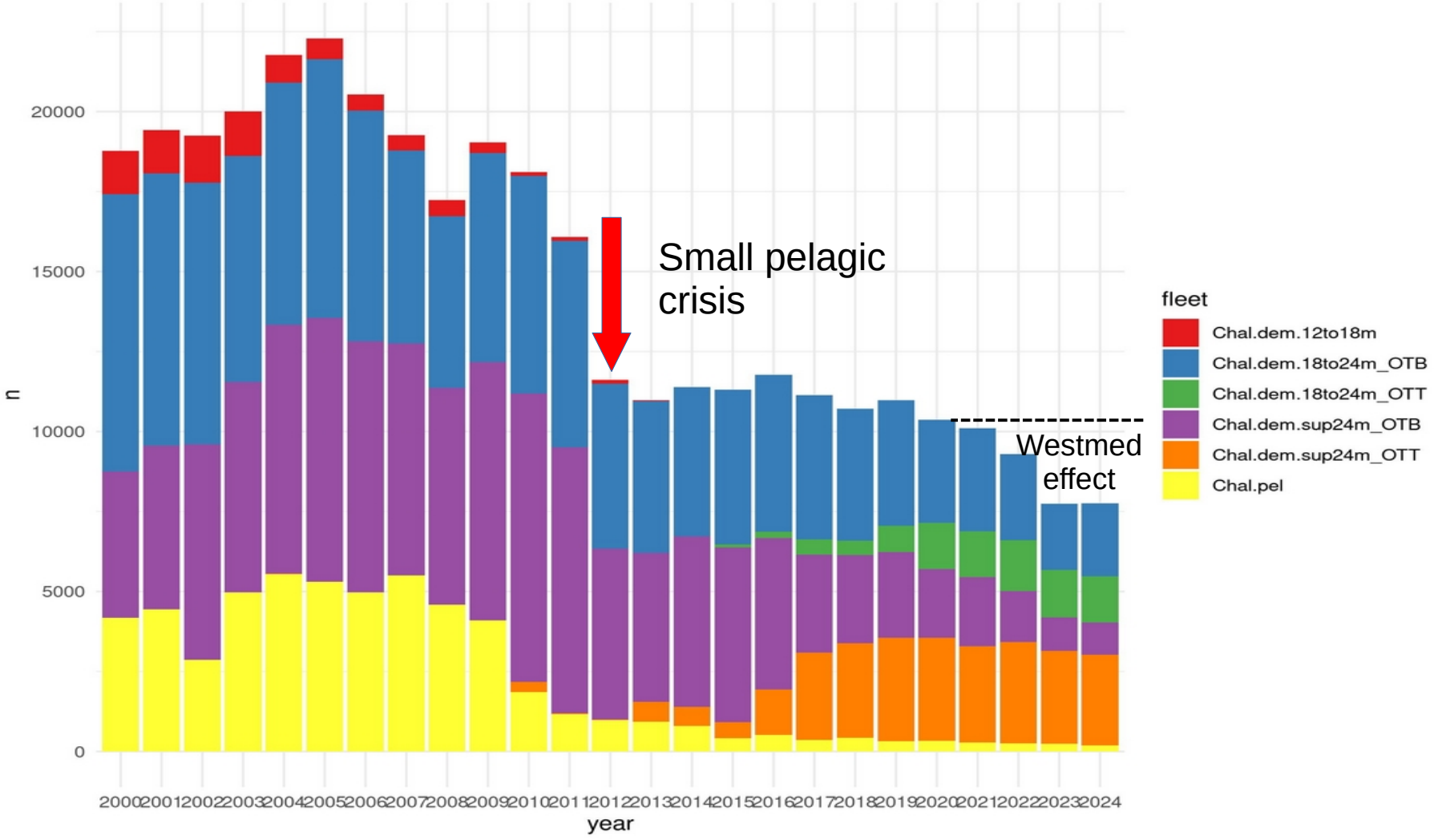
The state of fish & fisheries in GSA 7

Grégoire Certain – IFREMER - MARBEC

Gulf of Lion


France
N
Rhone river
43
43.0
42.5
3.0
3.5
4.0
4.5
5.0
5.5
scale approx 1:1,500,000
0
20
40 km
Bensebaini (2024)

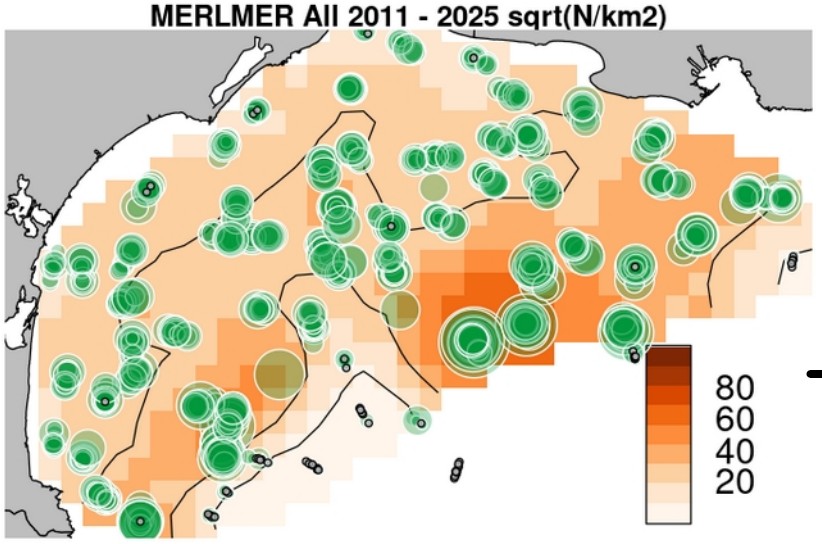
French Trawling Fleet Fishing Effort (N days at sea)

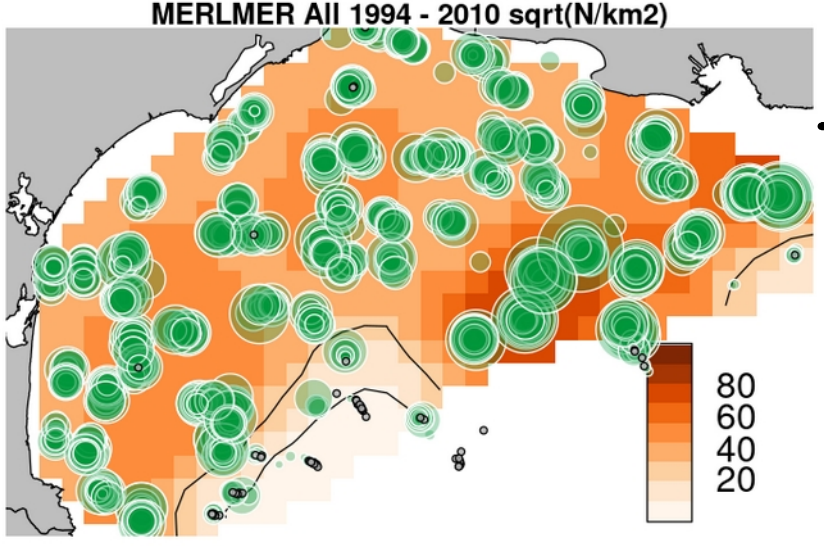


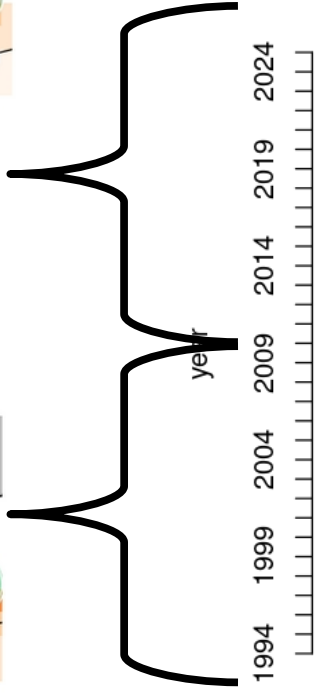
Top 20 resources (in value) (source : FDI data call, GSA7, trawling & small-scale fleet)

Stocks assessed

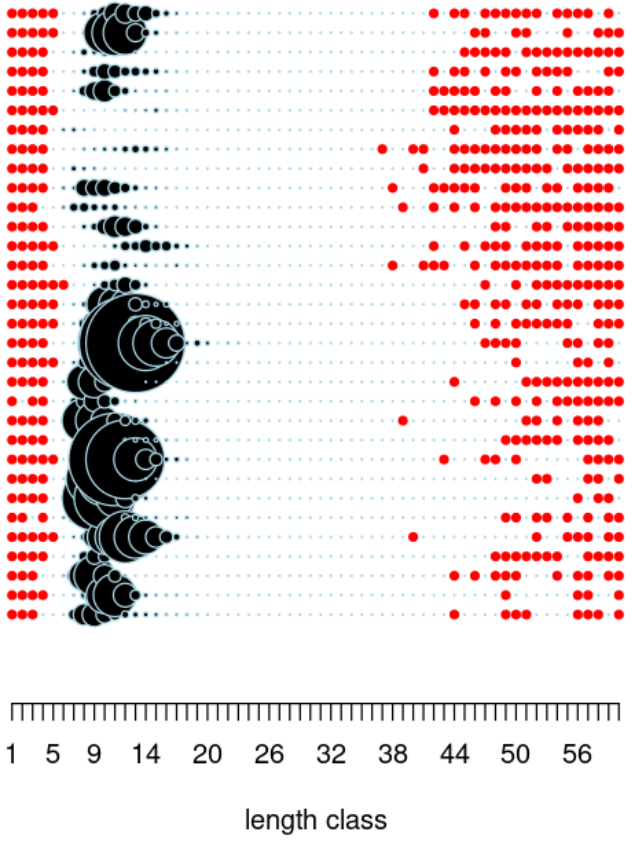
FAO_code	Scientific_name	Total value (K€, 2023-2024)	Total landings (t, 2023-2024)	Average Price
OCT	*Octopodidae*	23970.7	3384.0	7.08
SBG	*Sparus aurata*	23917.8	2450.4	9.76
HKE	*Merluccius merluccius*	8390.5	1279.4	6.56
BSS	*Dicentrarchus labrax*	7860.1	479.8	16.38
MNZ	*Lophius spp*	7122.1	1255.5	5.67
SOX	*Soleidae*	5959.8	286.2	20.82
MUX	*Mullus spp*	5697.6	968.6	5.88
NSQ	*Tritia mutabilis*	3986.9	705.9	5.65
SQZ	*Loliginidae*	3790.7	547.6	6.92
CTL	*Sepiidae, Sepiolidae*	3658.7	440.4	8.31
FLX	*Pleuronectiformes*	3475.6	207.4	16.76
GUX	*Triglidae*	3326.9	779.5	4.27
JLX	*Muricidae*	3171.5	452.4	7.01
SCO	*Scorpaenidae*	3096.0	242.0	12.79
MAX	*Scombridae*	3002.2	1073.8	2.80
MUL	*Mugilidae*	2661.2	1802.5	1.48
ANE	*Engraulis encrasicolus*	2488.5	1576.1	1.58
TUX	*Scombroidei*	2465.7	255.3	9.66
VLO	*Palinuridae*	2375.6	51.8	45.88
SBX	*Sparidae*	1805.1	308.9	5.84

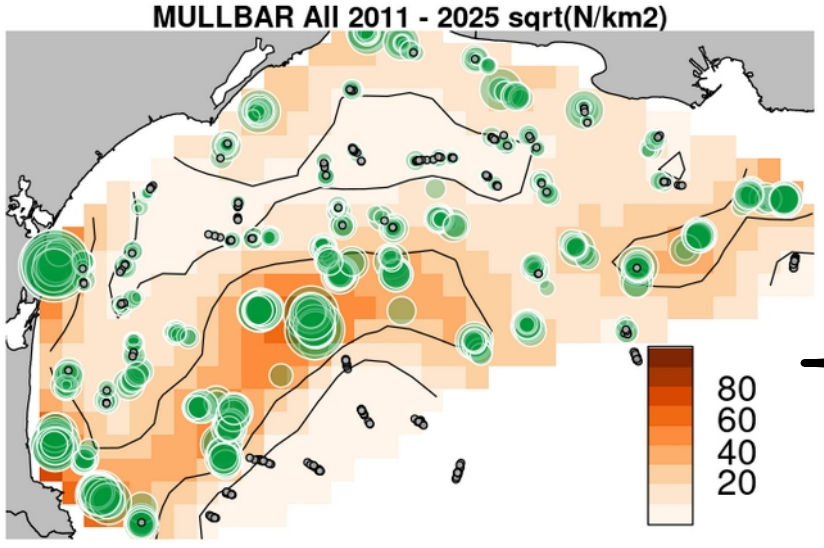

MERLMER All 2011 - 2025 sqrt(N/km2)
80
60
40
20

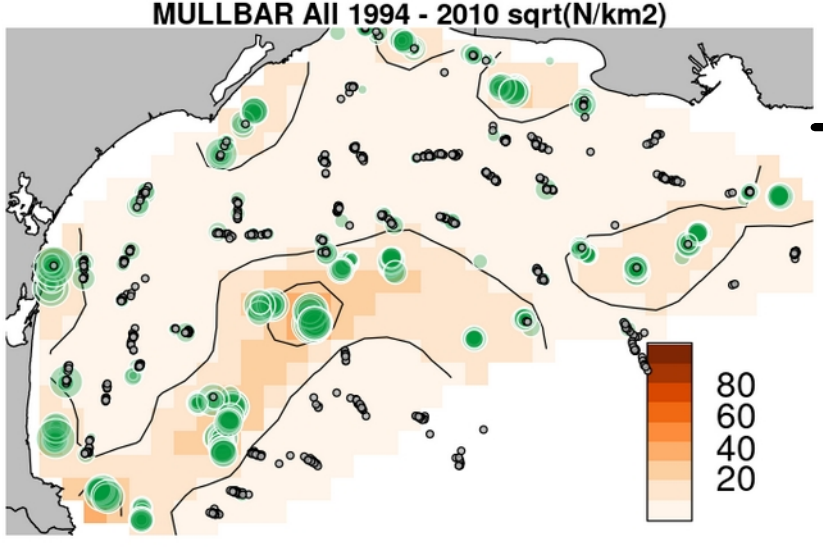

MERLMER All 1994 - 2010 sqrt(N/km2)
80
60
40
20

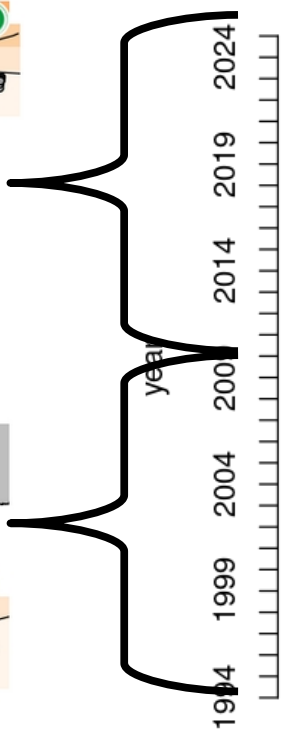

year
2024
2019
2014
2009
2004
1999
1994

MERLMER

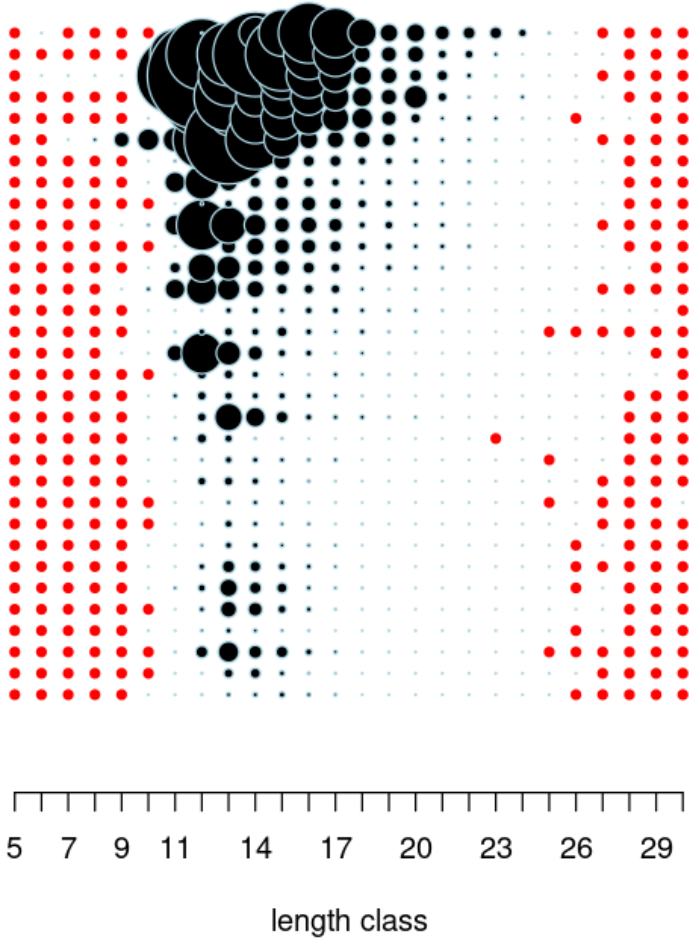

1 5 9 14 20 26 32 38 44 50 56
length class

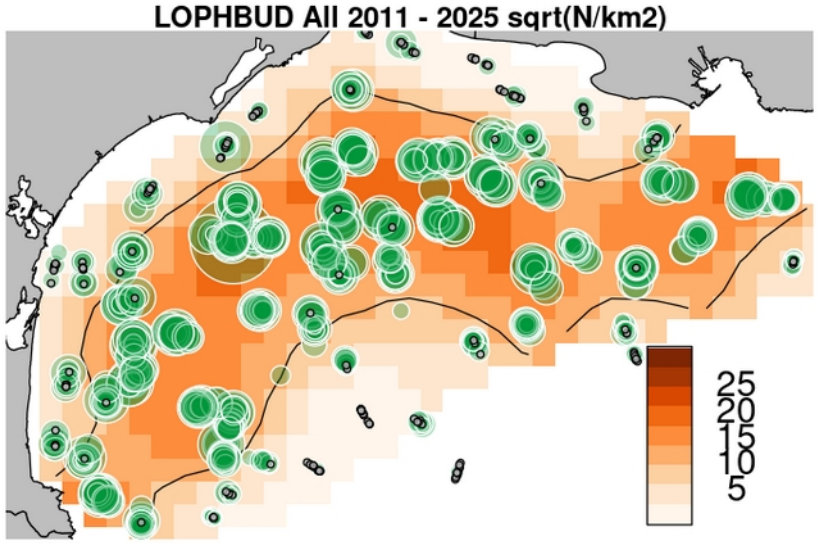

MULLBAR All 2011 - 2025 sqrt(N/km2)
80
60
40
20

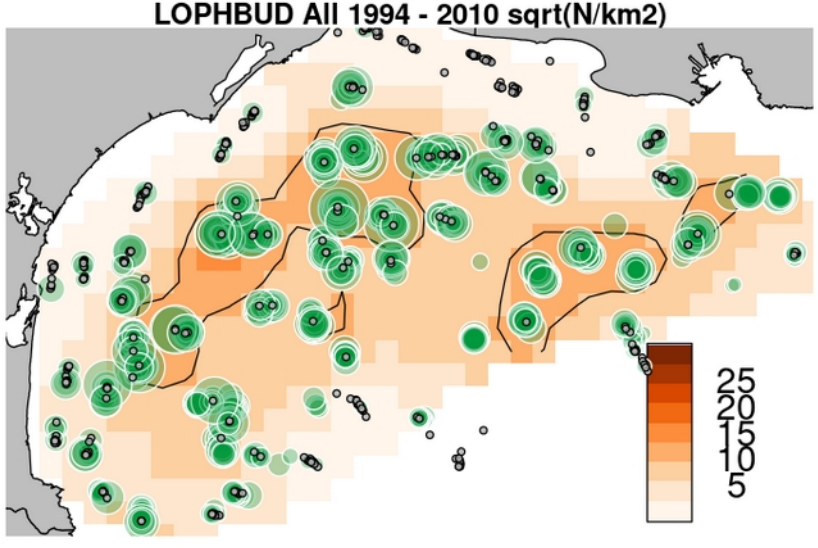

MULLBAR All 1994 - 2010 sqrt(N/km2)
80
60
40
20

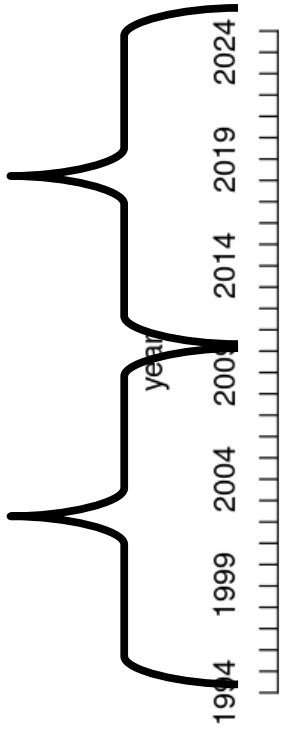

year
2024
2019
2014
2009
2004
1999
1994

MULLBAR

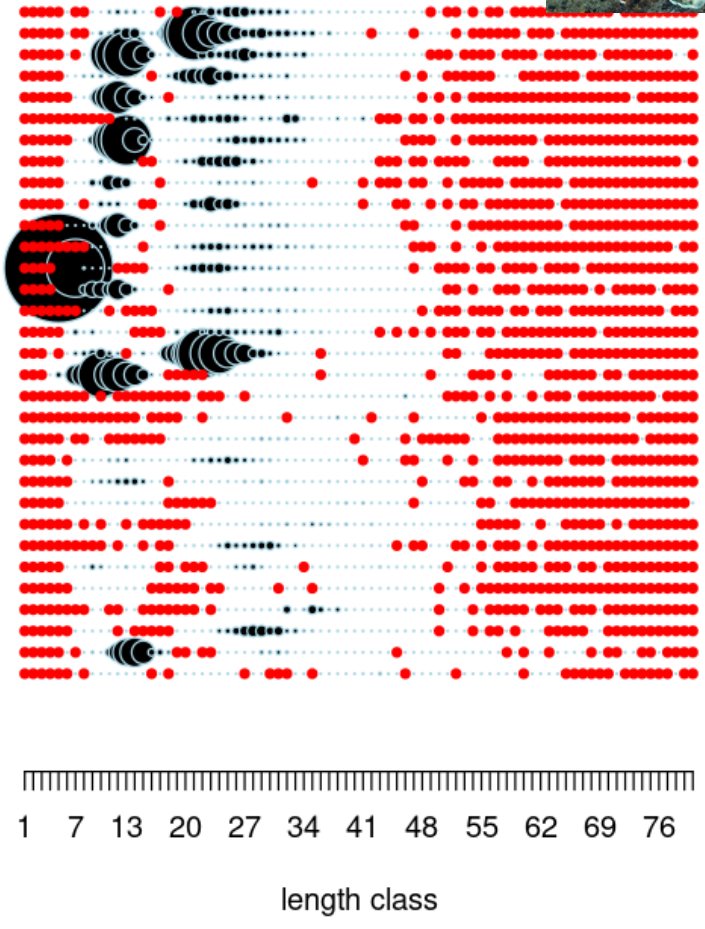

5
7
9
11
14
17
20
23
26
29
length class

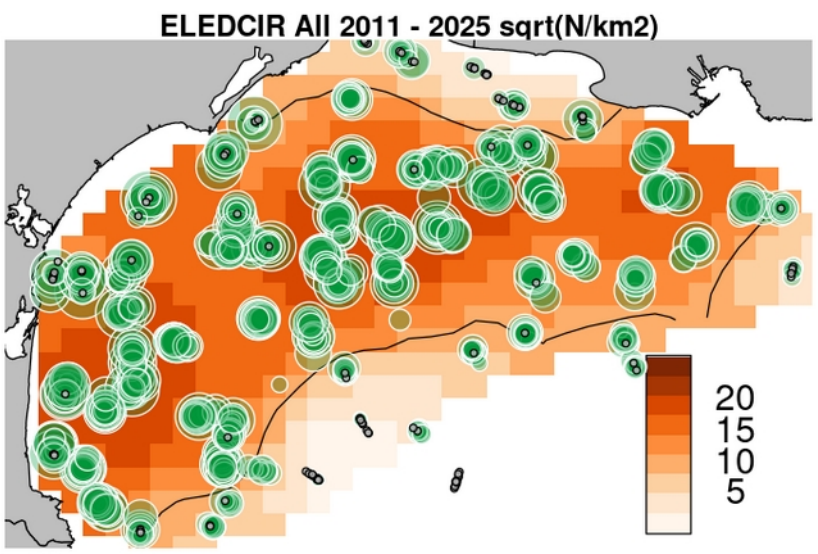

LOPHBUD All 2011 - 2025 sqrt(N/km2)
25
20
15
10
5

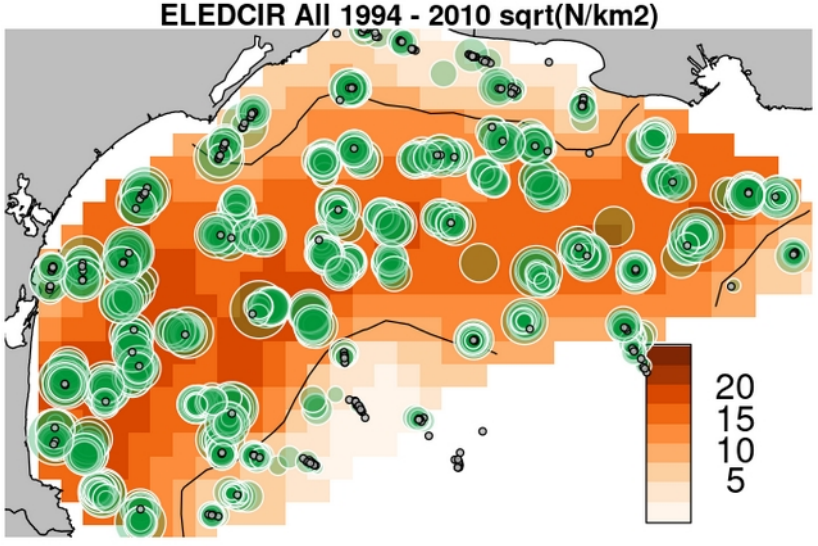

LOPHBUD All 1994 - 2010 sqrt(N/km2)
25
20
15
10
5

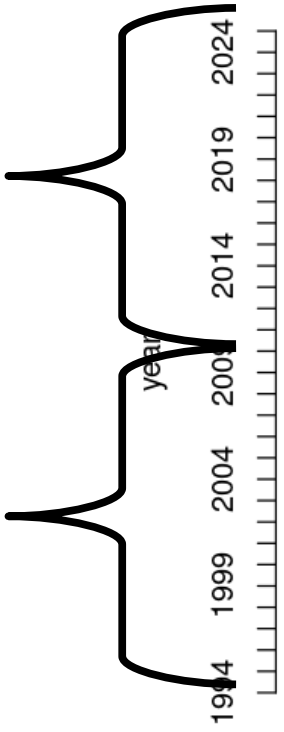

year
2024
2019
2014
2009
2004
1999
1994

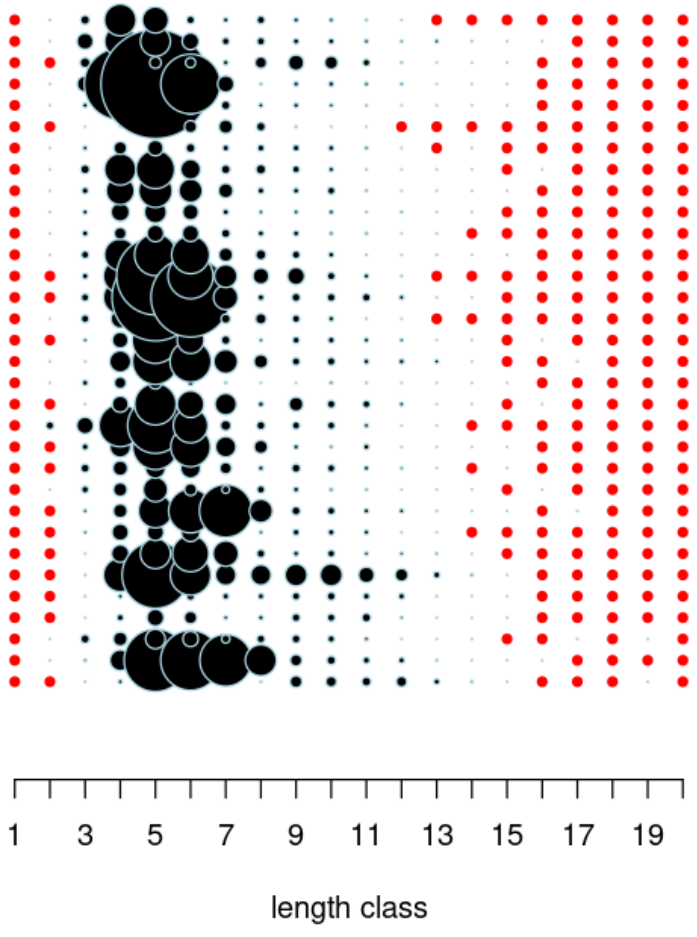
LOPHBUD


1 7 13 20 27 34 41 48 55 62 69 76
length class


ELEDCIR All 2011 - 2025 sqrt(N/km2)
20
15
10
5


ELEDCIR All 1994 - 2010 sqrt(N/km2)
20
15
10
5


year
2024
2019
2014
2009
2004
1999
1994

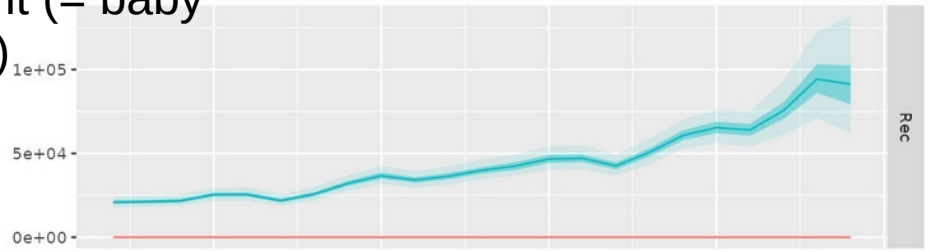

ELEDCIR
1
3
5
7
9
11
13
15
17
19
length class

We have contrasted « stories » across species – How do they translate in terms of stock assessment ?

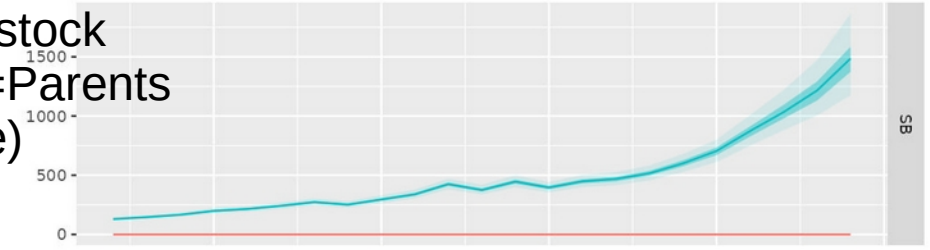
Hake → Now assessed at a bigger scale (GSA 1-5-6-7). Bad situation.

I will present Red Mullet, Black Bellied Angler, and Eledone

Recruitment (= baby production)

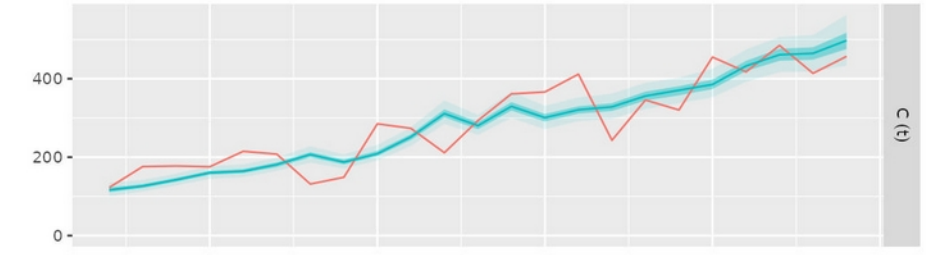


Spawning stock biomass (=Parents abundance)

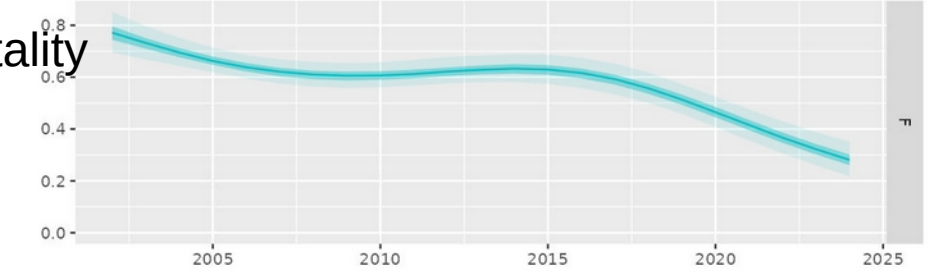


Red Mullet in GSA 7 is sustainably harvested

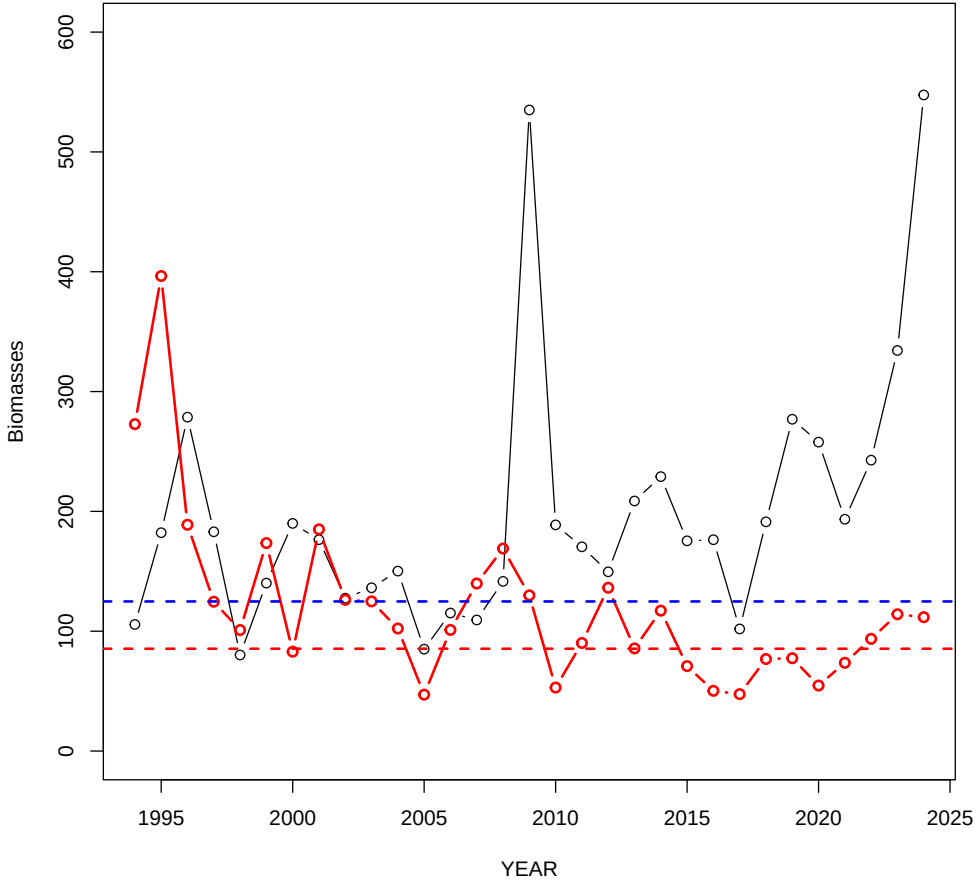
Catch



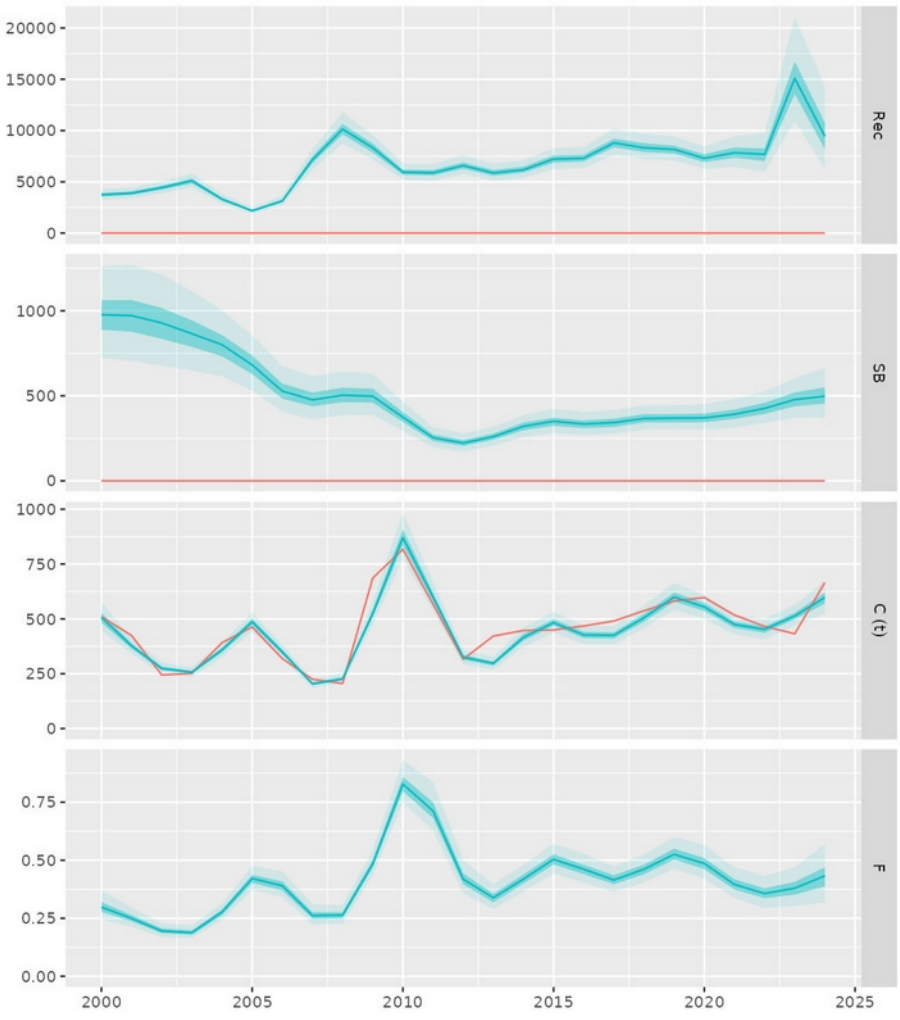
Fishing Mortality



With *Lophius*, trend in abundance differs with age : They indeed recruit massively since 2010, but in the same time the abundance of older individuals decreases...

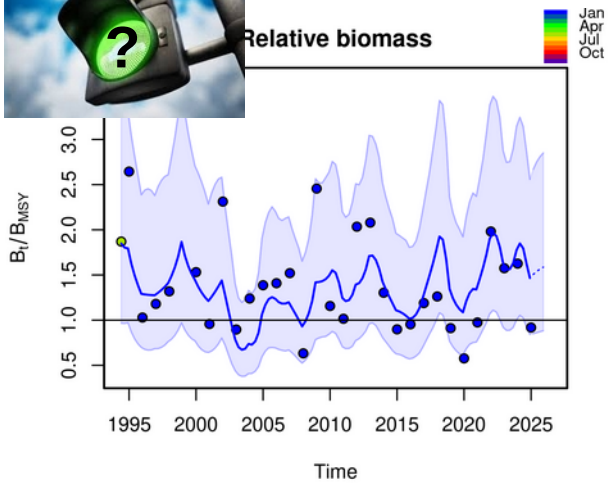


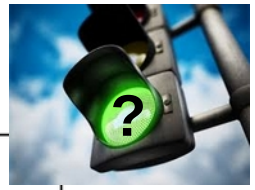
Hence, stock assessment is not as optimistic as red mullet ...

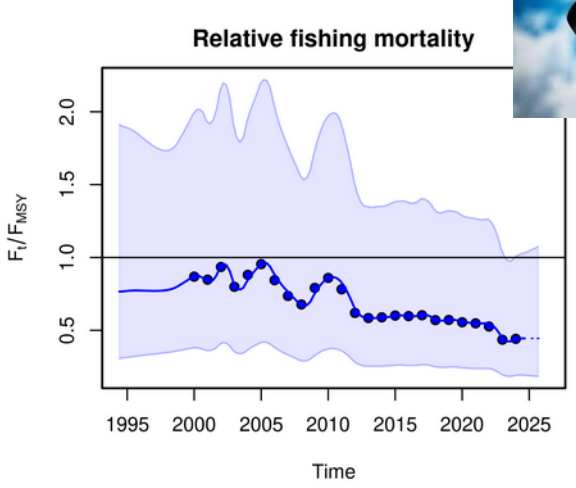


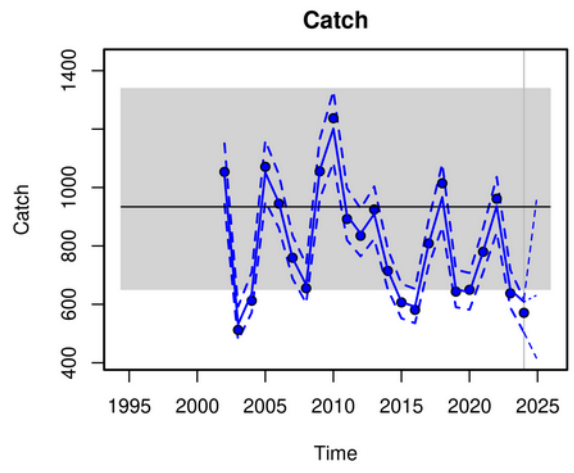
« Overfished » - because of the low abundance of reproducers.

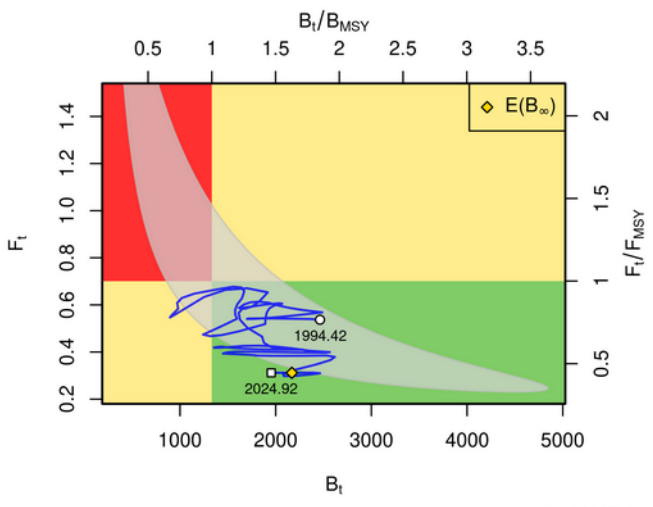
Short lived (1-2 years) – Assessed through SPICT.







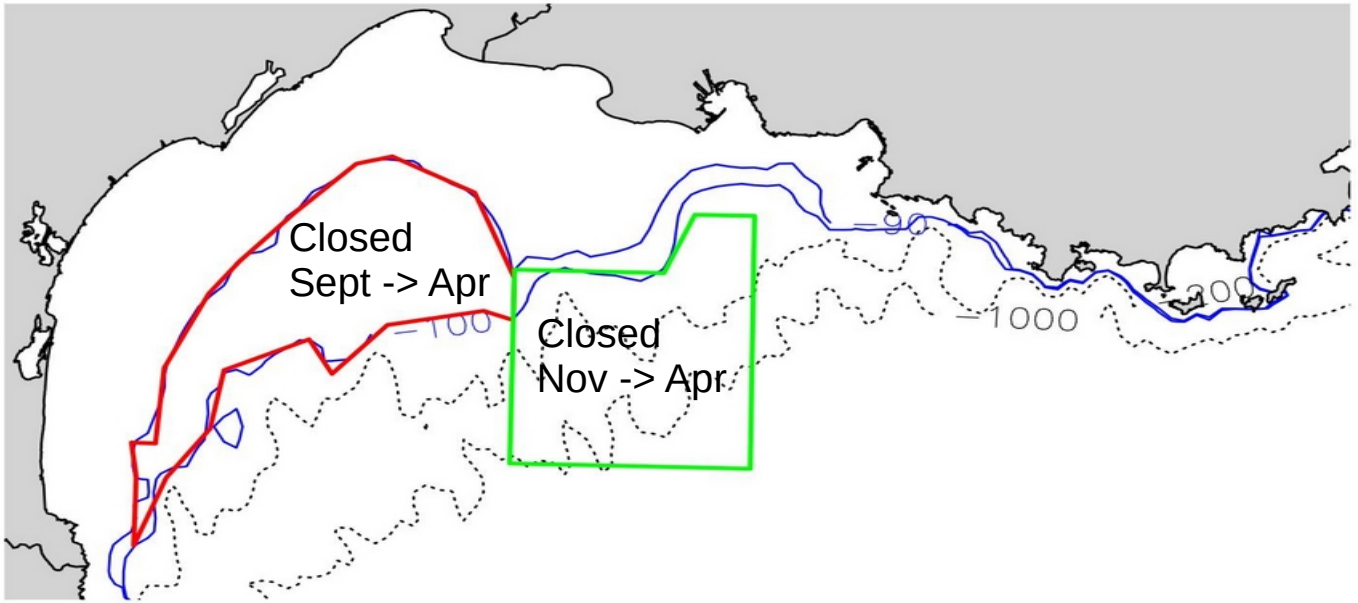




The situation *seems* good. But high fluctuations translate into high uncertainty...

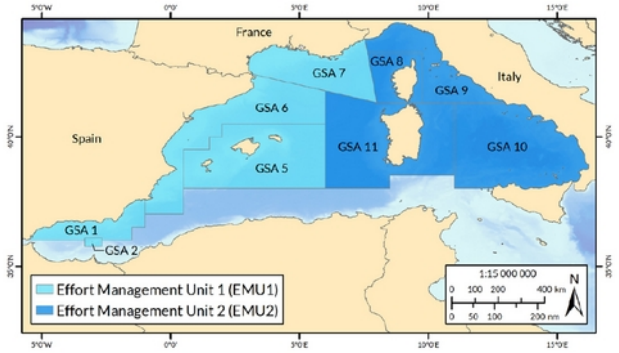
A word on spatio-temporal management measure…
(STECF 25_11)

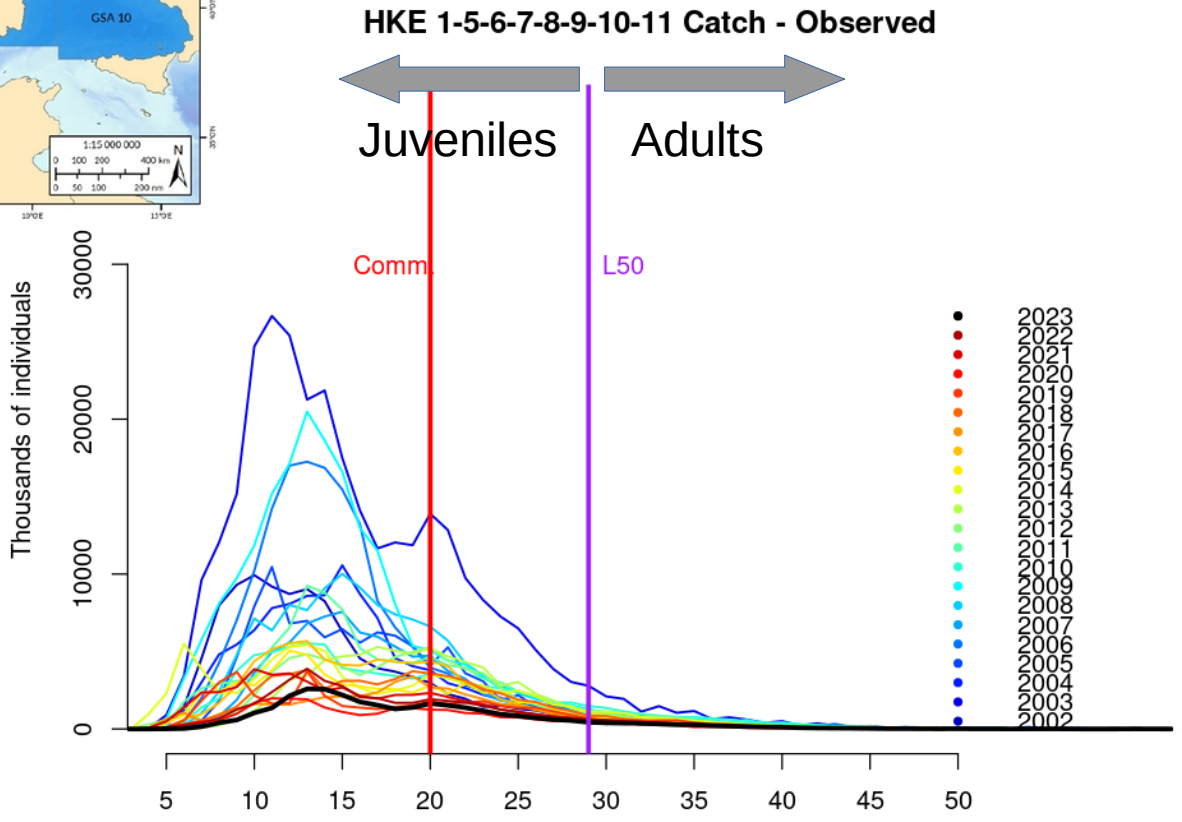
Since 2020...

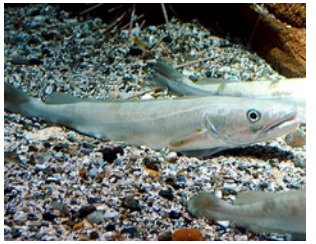


The initial idea was to reduce mortality on hake juveniles...

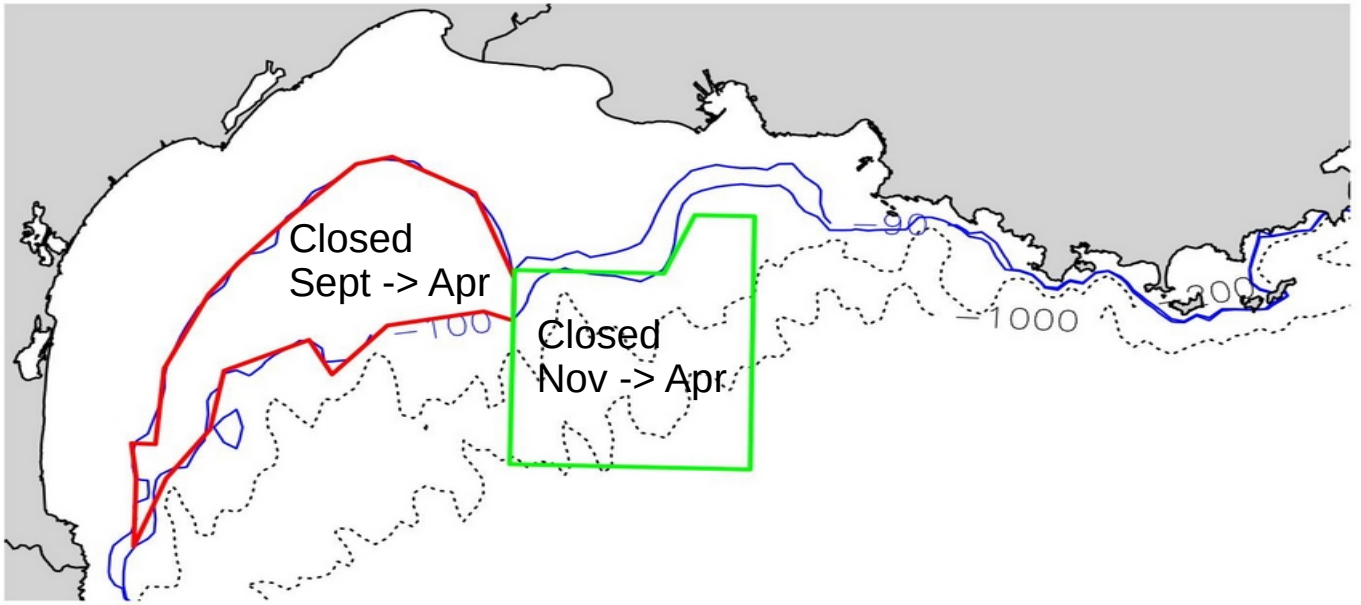
Indeed, one big issue with mediterranean fisheries is juvenile catch… to optimize fish production, individuals that have not yet reproduced should be left in the sea...



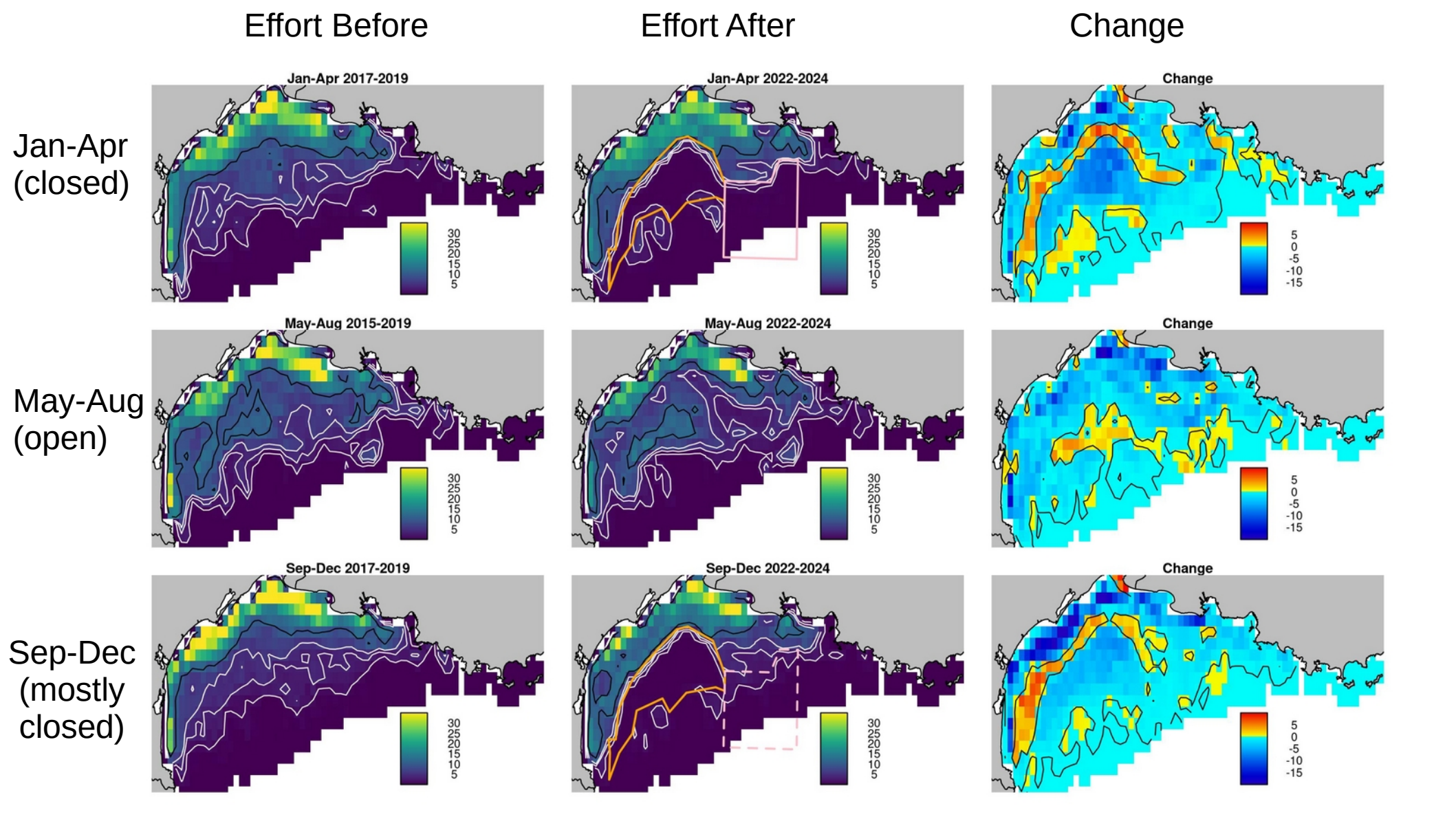




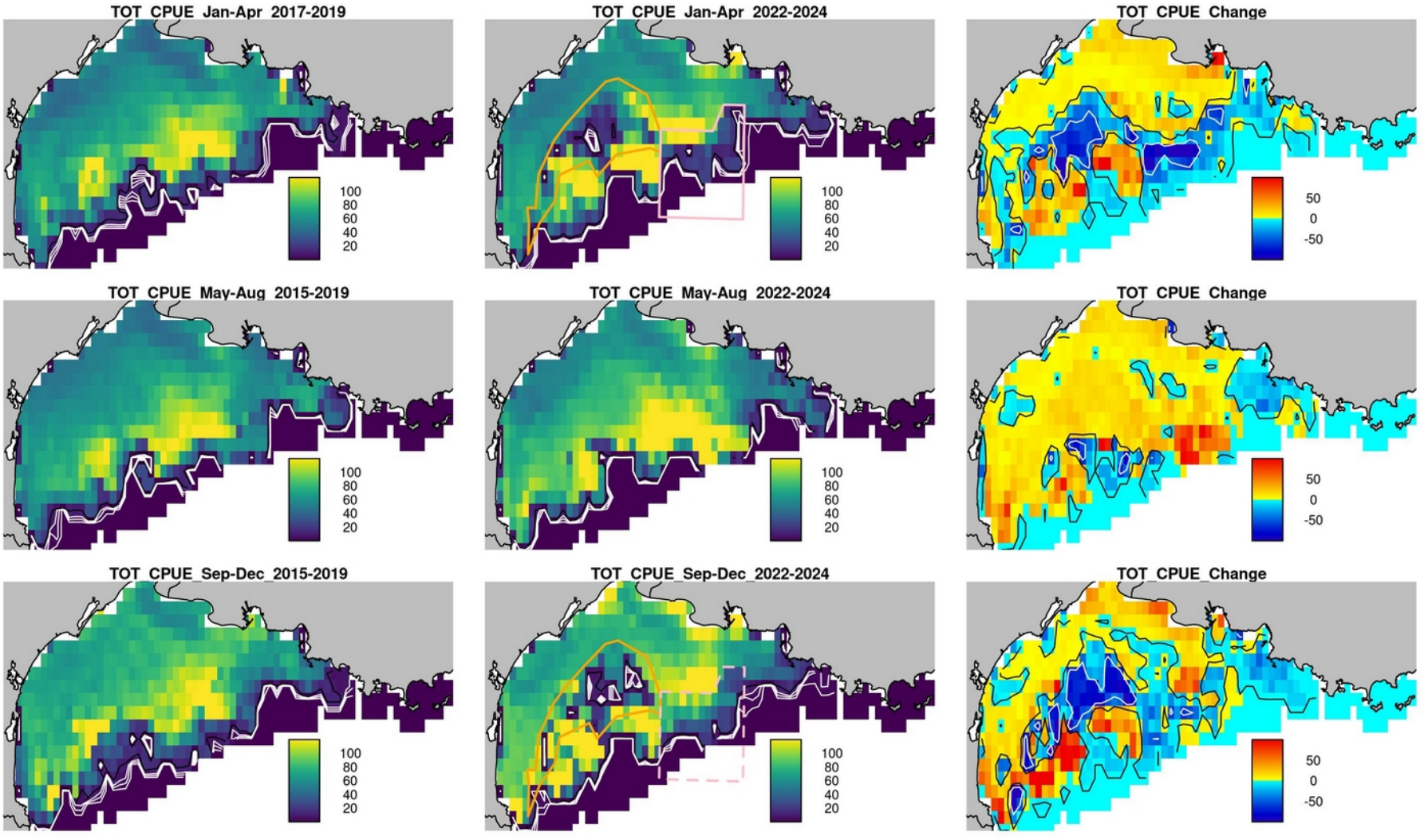
So these were an attempt to reduce juvenile fishing, as hake spawns in winter, in the upper slope.



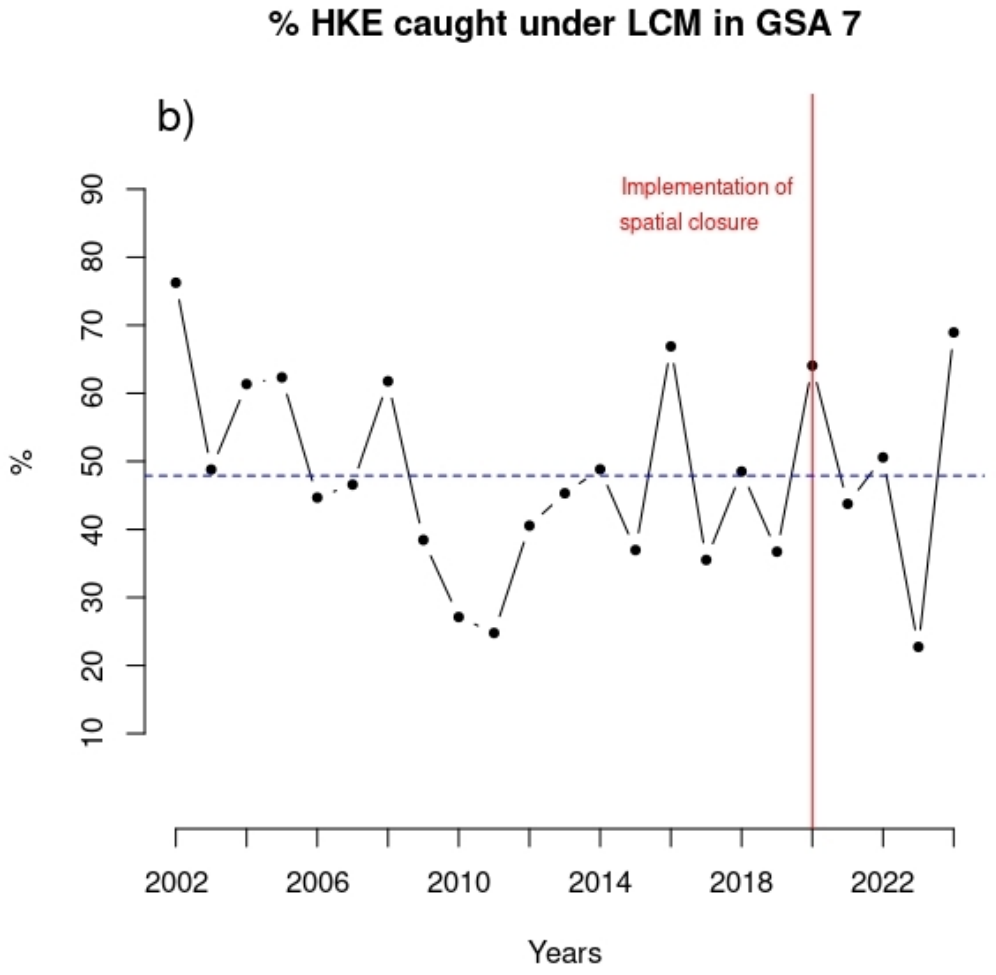
STECF 25-11 investigated the efficiency of these measures


Effort Before
Effort After
Change
Jan-Apr (closed)
May-Aug (open)
Sep-Dec (mostly closed)
Jan-Apr 2017-2019
Jan-Apr 2022-2024
Change
May-Aug 2015-2019
May-Aug 2022-2024
Change
Sep-Dec 2017-2019
Sep-Dec 2022-2024
Change
30
25
20
15
10
5
5
0
-5
-10
-15

CPUE on ALL species have globally increased...



But the proportion of Hake <20cm annually caught remained the same…



To conclude :

As in all the mediterranean Sea, there is a diversity of stocks in GSA 7. Some are critically overfished (hake), some have concerns (black-bellied angler), some seems good but uncertain (Eledone), some are in good state (red mullet).

Measures have been taken to try to improve the stock situation – Effort reduction, spatio-temporal closure. Some positive effects are observed (increased CPUE within closure). Others are lacking (juvenile catch).

Given the very high level of juvenile catch in the mediterranean, any further attempt to reduce juvenile catch will be beneficial to all mediterranean stocks.

Thanks for your attention.

MNZ 1-5-6-7-8-9-10-11 Landings + Discards - Observed