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Have Fishing opportunities increased in Europe following the introduction of MSY framework?

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Have Fishing opportunities increased in Europe following the introduction of MSY framework?

Hilaire Drouineau



Youen Vermard



CFP Monitoring (STECEF)

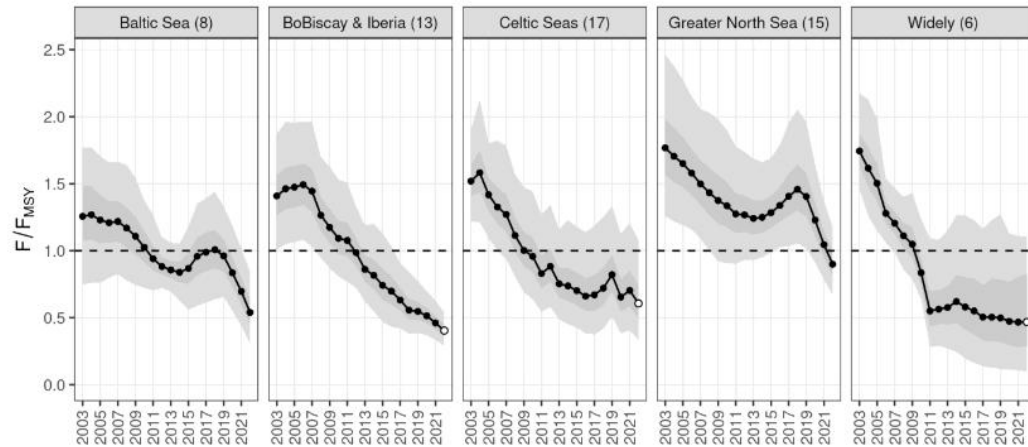


Figure 10: Trend in F/F_{MSY} by ecoregion. The number of stocks in each ecoregion are shown between parentheses (NEAI7b)

Average fishing pressures decrease in all areas

Average Biomass increase... or stable...

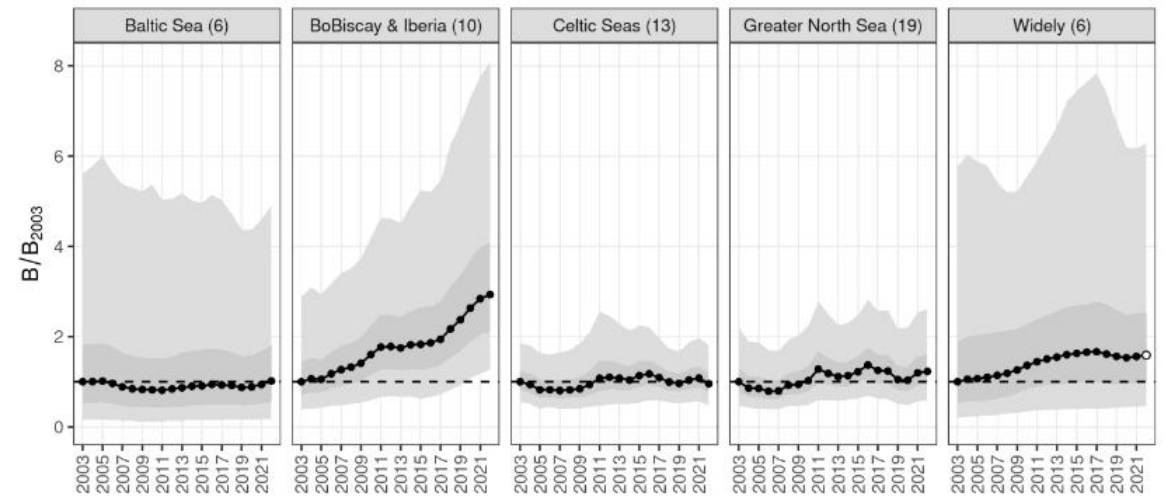
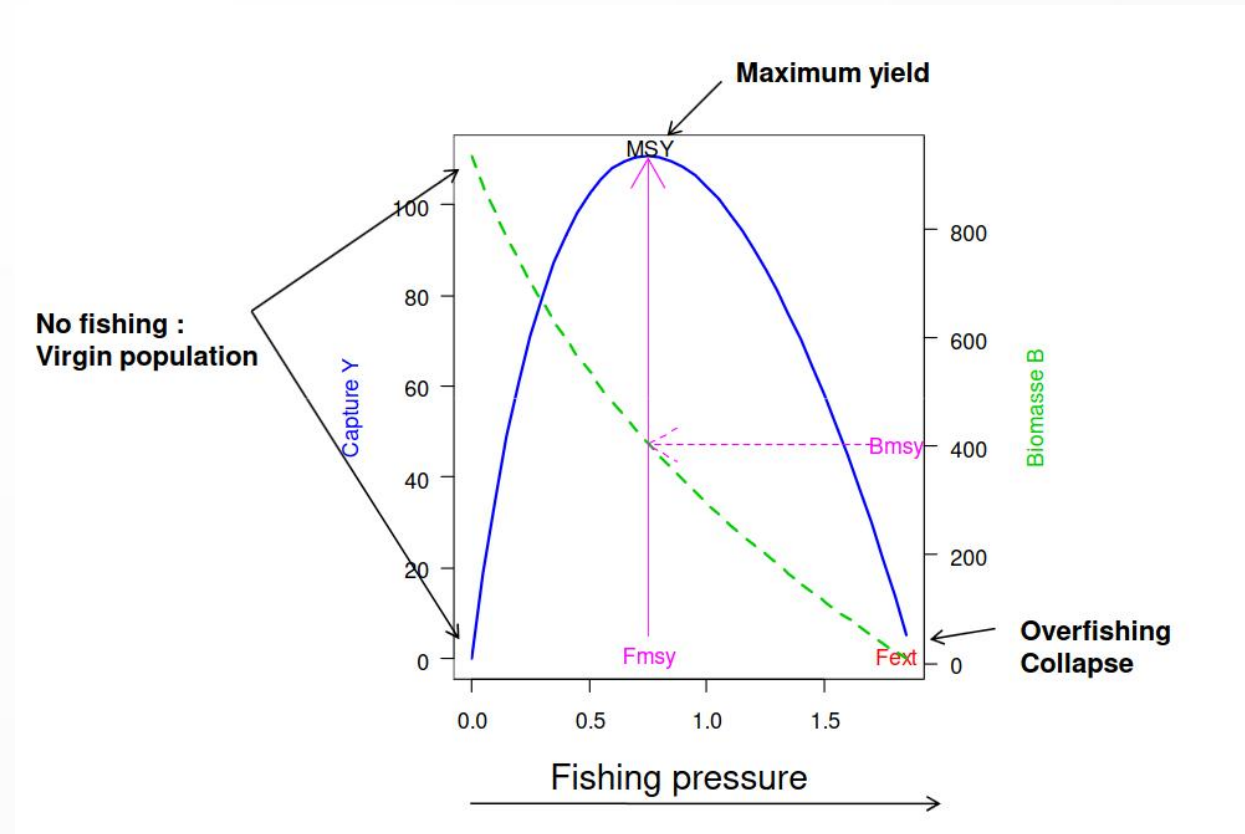


Figure 14: Trend in SSB relative to 2003 by ecoregion. The number of stocks in each ecoregion are shown between parentheses (NEAI8b)

MSY framework

Decreasing Fishing pressure should
(at medium/long term)
increase biomass but also fishing
opportunities

CFP 2013 => MSY framework



But...



Communiqués de presse

- 12.12.2023

Un conseil TAC et quota profondément décevant

Un Conseil TAC et quotas profondément décevant et frustrant

FISHING NEWS

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MIXED FORTUNES ON 2024 TACS

19th December 2023

But...

How has advice evolved the last 10 years???

How has ICES advice evolved in relation to stock status?



2013 -> 2023 assessments

235 assessed stocks

130 assessed stocks with $nF > 8$

118 assessed stocks with
 $nF > 8$ & $nAdvice \geq 8$)

How has ICES advice evolved in relation to stock status?

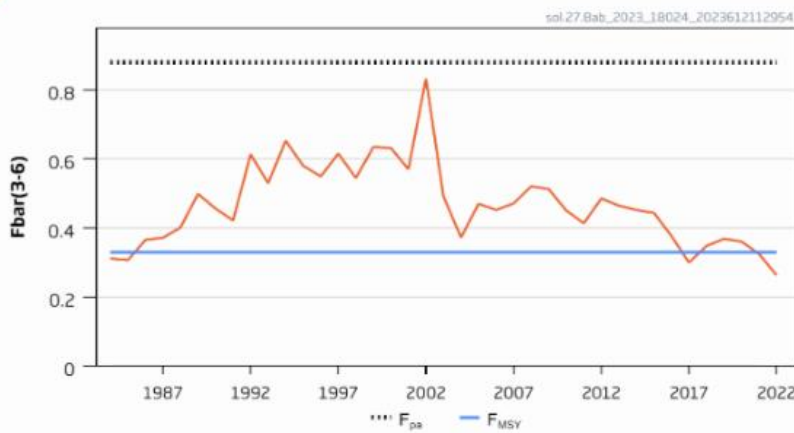


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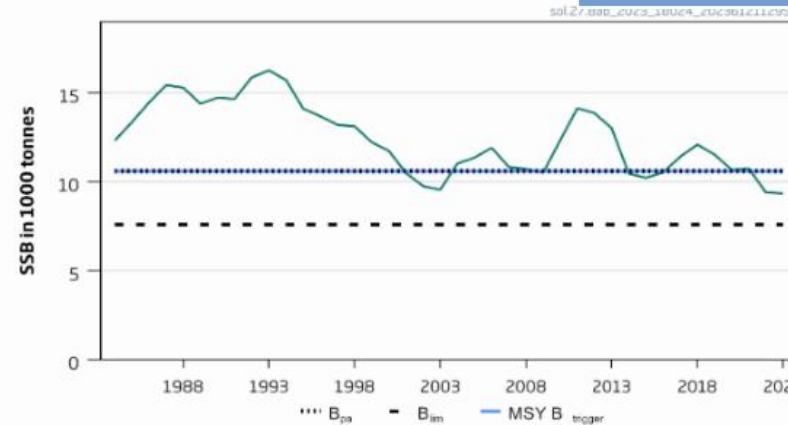
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F



SSB



Year	ICES advice	Catch corresponding to advice	Agreed TAC	Official Landings	ICES landings	Discards^^	ICES catch
2015	MSY approach	2407	3800	3796	3644	62	3706
2016	MSY approach	≤ 2393	3420	3346	3232	134	3366
2017	MSY approach	≤ 3107	3420	3232	3249	55	3304
2018	MSY approach	≤ 3725	3621	3468	3308	79	3332
2019	MSY approach	≤ 3967	3872	3388	3376	88	3464
2020	Management plan	3768 (range 2209–5196)	3666	3222	3219	74	3293
2021	Management plan	3483 (range 2036–4814)	3483	3063	3069	40	3109
2022	Management plan	2233 (range 1265–2233)	2233	2325	2306	37	2343
2023	Management plan	2685 (range 1563–2685)	2685				
2024	Management plan	2489 (range 1454–2489)					

How has ICES advice evolved in relation to stock status?

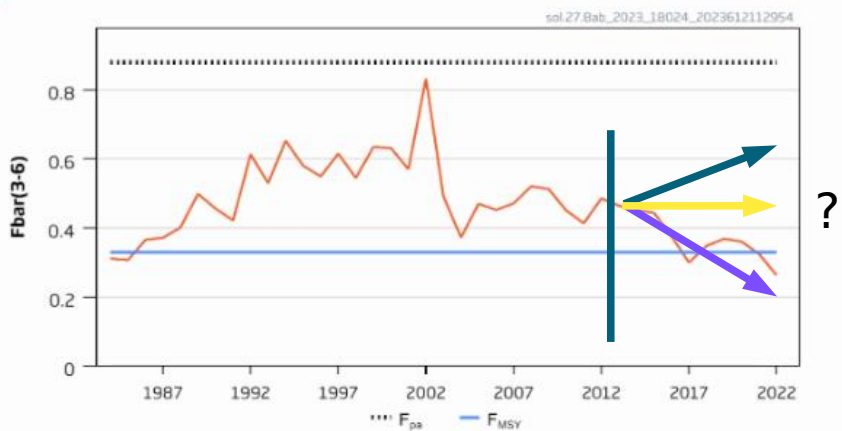


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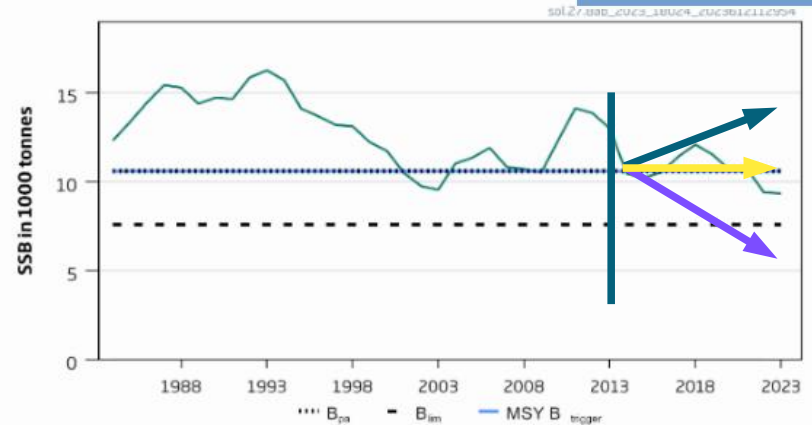
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SSB



Mann-Kendall trend tests
F, SSB, Advice
→ Detecting monotonous trends

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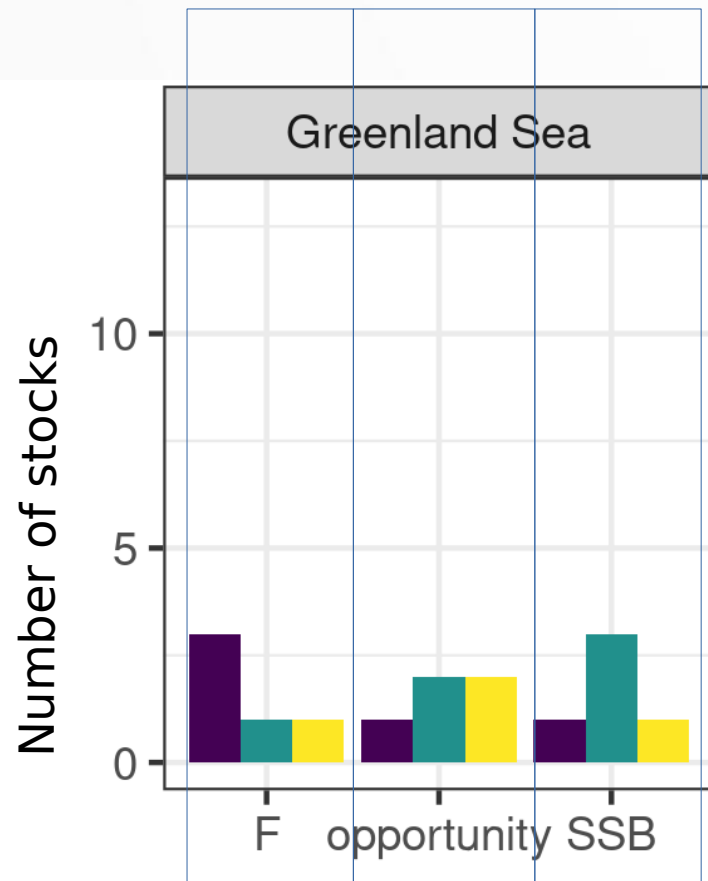
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direction
decreasing
increasing
no trend

Mann-Kendall trend tests
F, SSB, Advice
→ Detecting monotonous trends

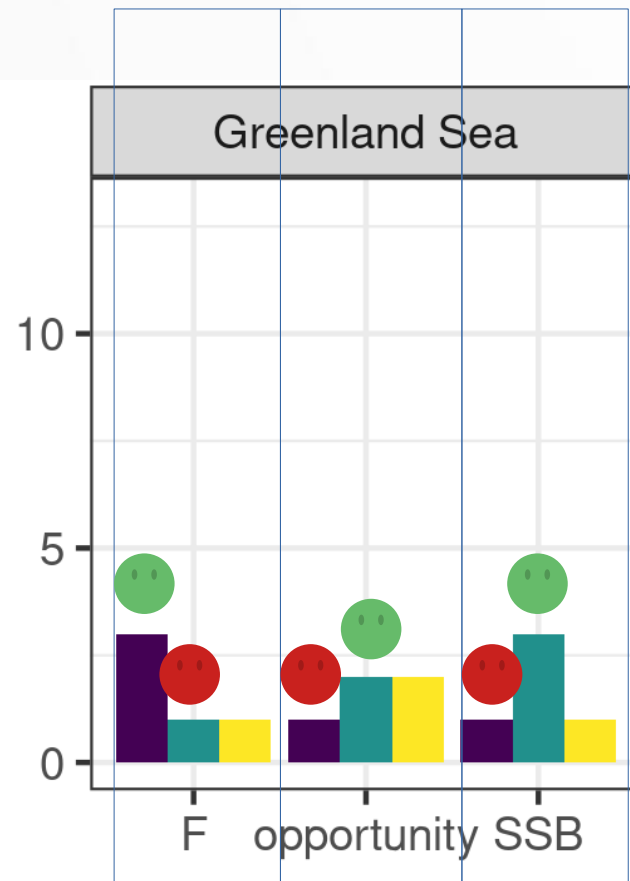
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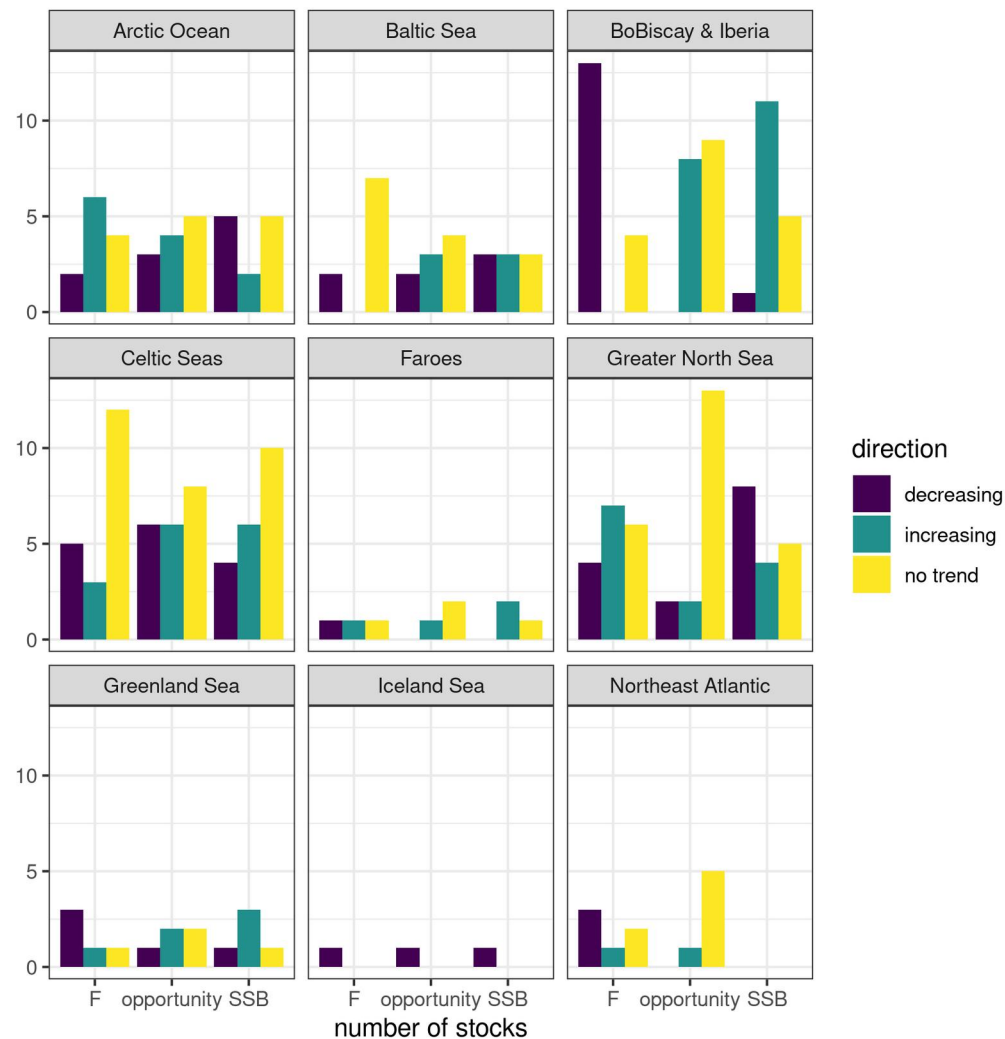
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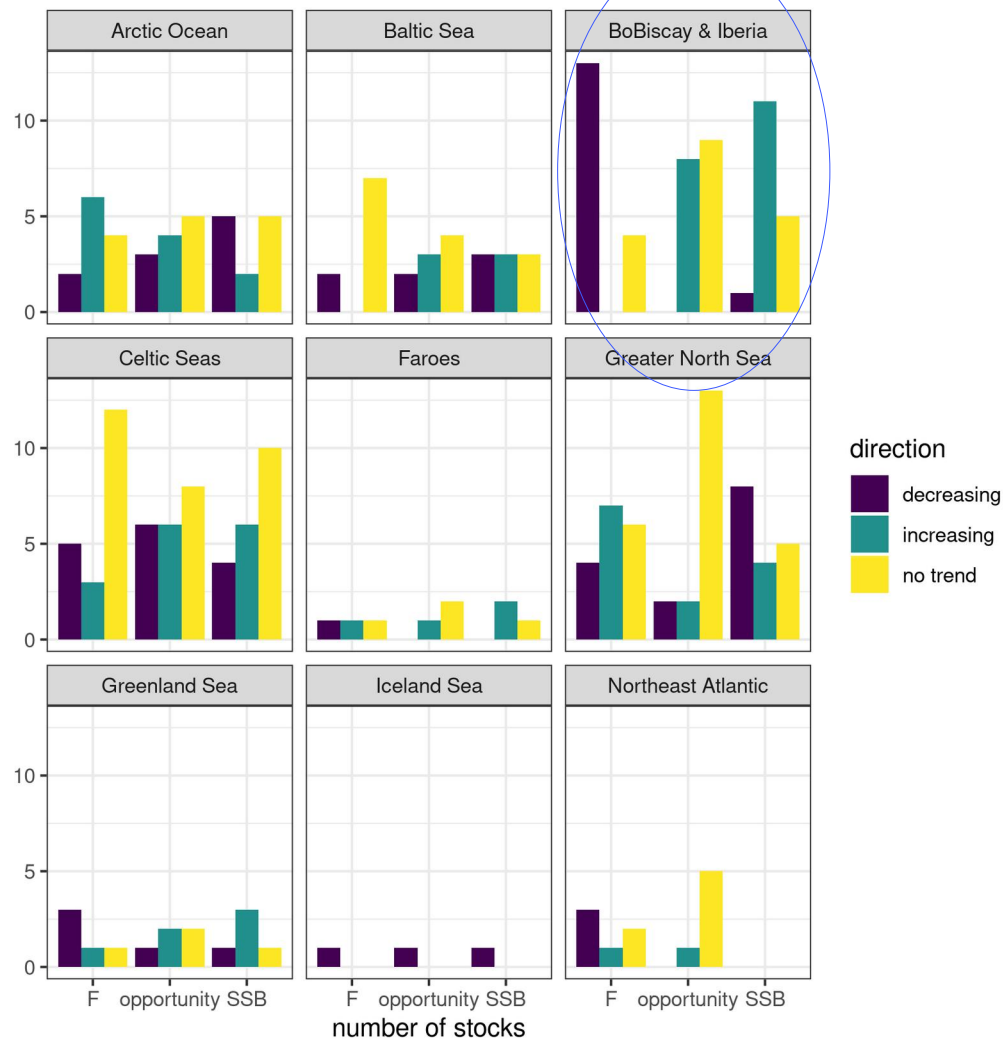
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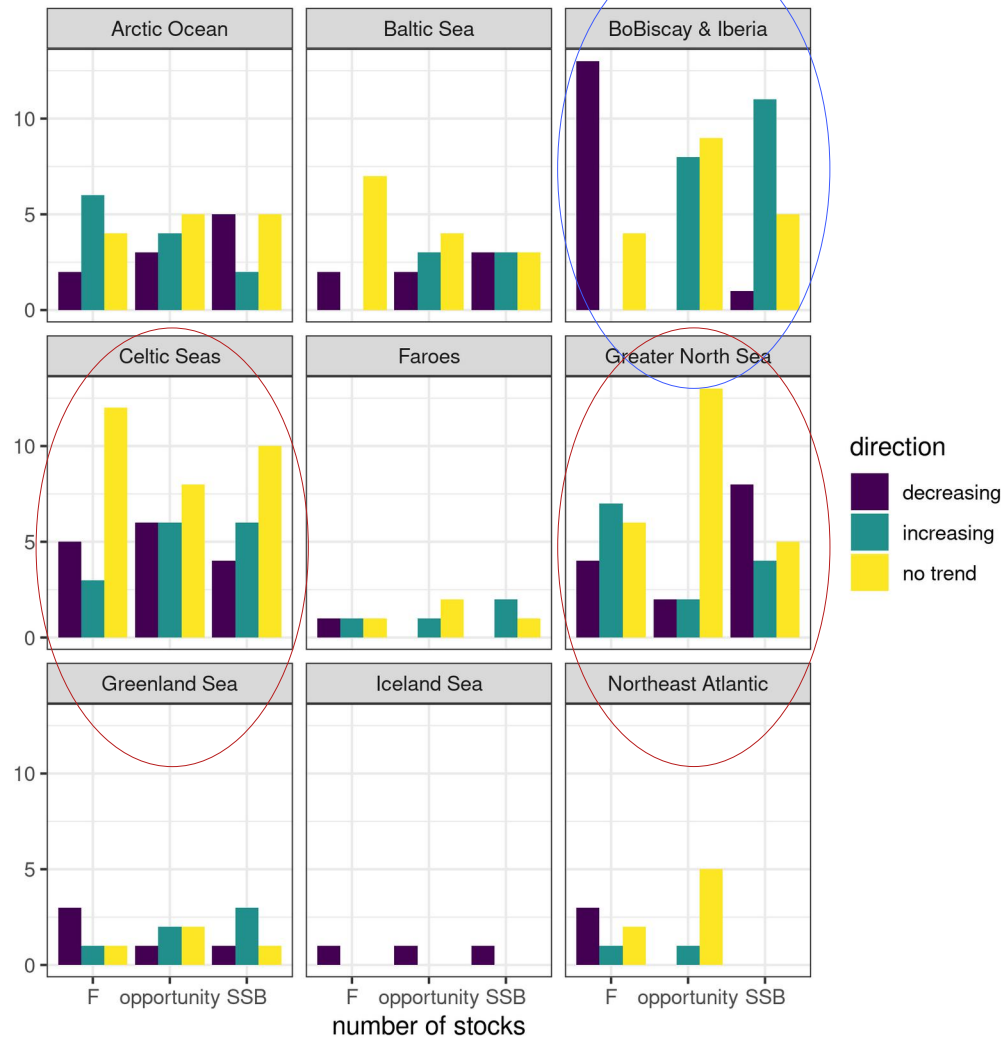
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Mann-Kendall trend tests
F, SSB, Advice
→ Detecting monotonous trends

How has ICES advice evolved in relation to stock status?



χ^2 test

→ detect significant associations between F, SSB and advice

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How has ICES advice evolved in relation to stock status?



χ^2 test

→ detect significant associations

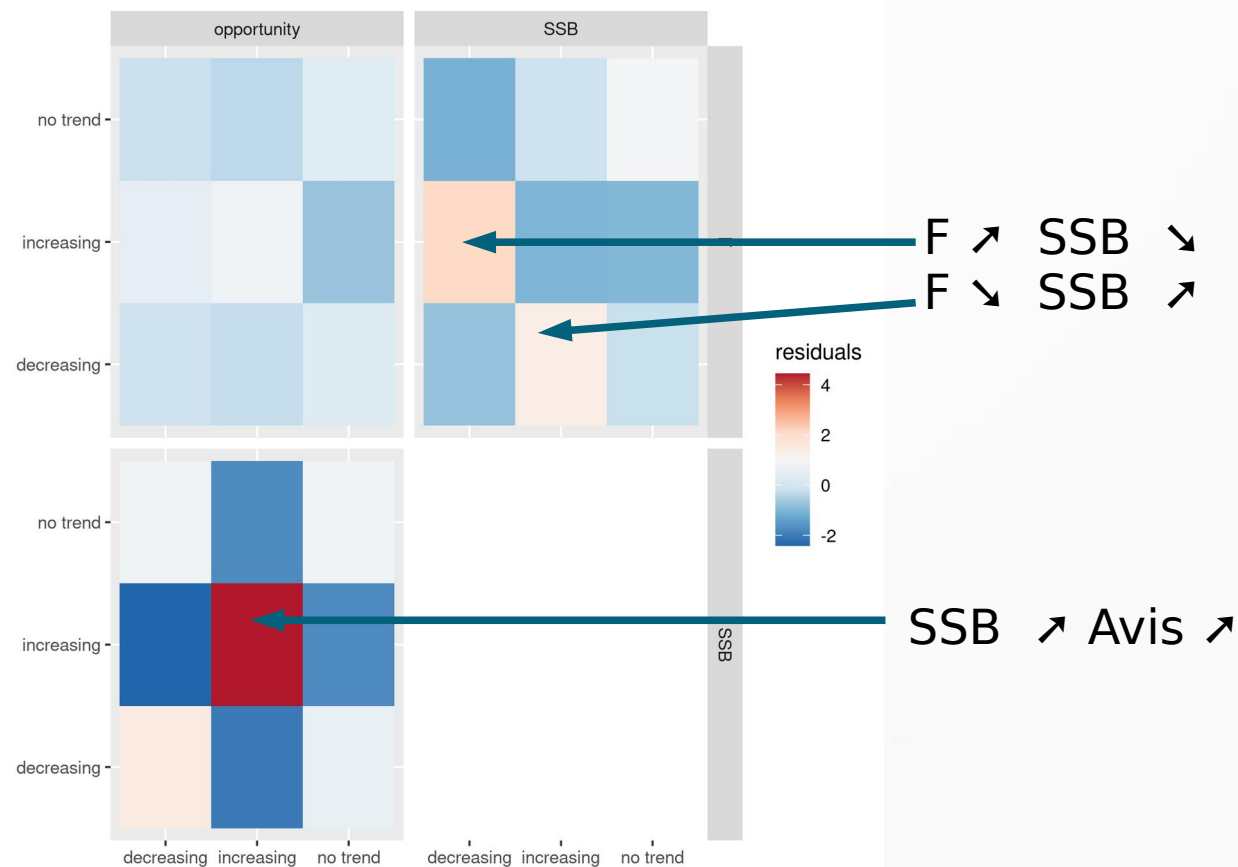
Significant association
F/SSB and SSB/Advice

No significant association
F/Advice (Indirect
link/delayed)

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Conclusion

Situations favouring an increase in advice:

- $F < F_{msy}$ and $SSB \nearrow > MSYB_{trigger}$
(F may have a decreasing trend)

Decrease in advice despite a downward trend in F :

- Series of poor recruitments observed
- For some stocks, **ICES advice mentions the additional effects of other factors impacting stock productivity.**

SSB/Advice and F/SSB links but no direct F/Advice link => delays?

F is the management target

Advice and TAC might be different (management/advice area),
politic decision

Conclusion

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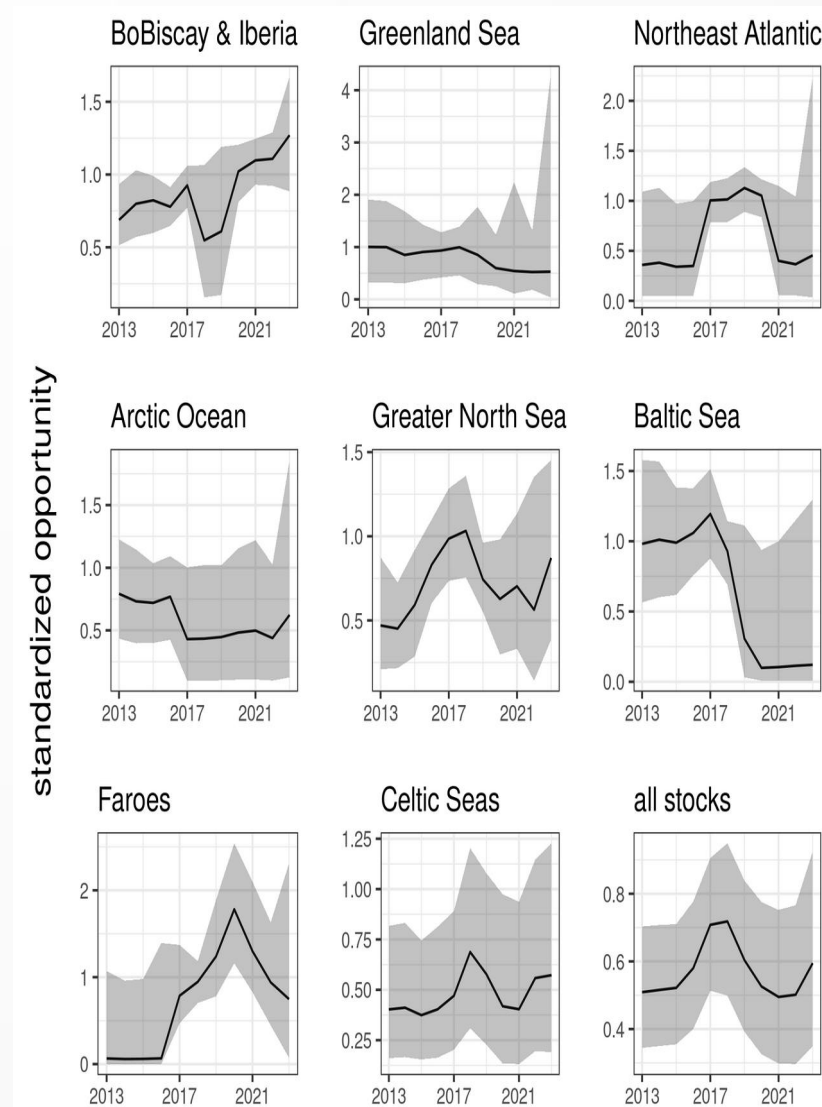
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F is the management target

Advice and TAC might be different (management/advice area),
politic decision

Produce Trend in cumulative advice by region ?

Possibility of deriving trend indicators for advices by region
(autoregressive smoother)



Thank You

Hilaire Drouineau



Youen Vermard

