

Gróður á opnum havi - og á Landgrunninum

Hjálmar Hátún

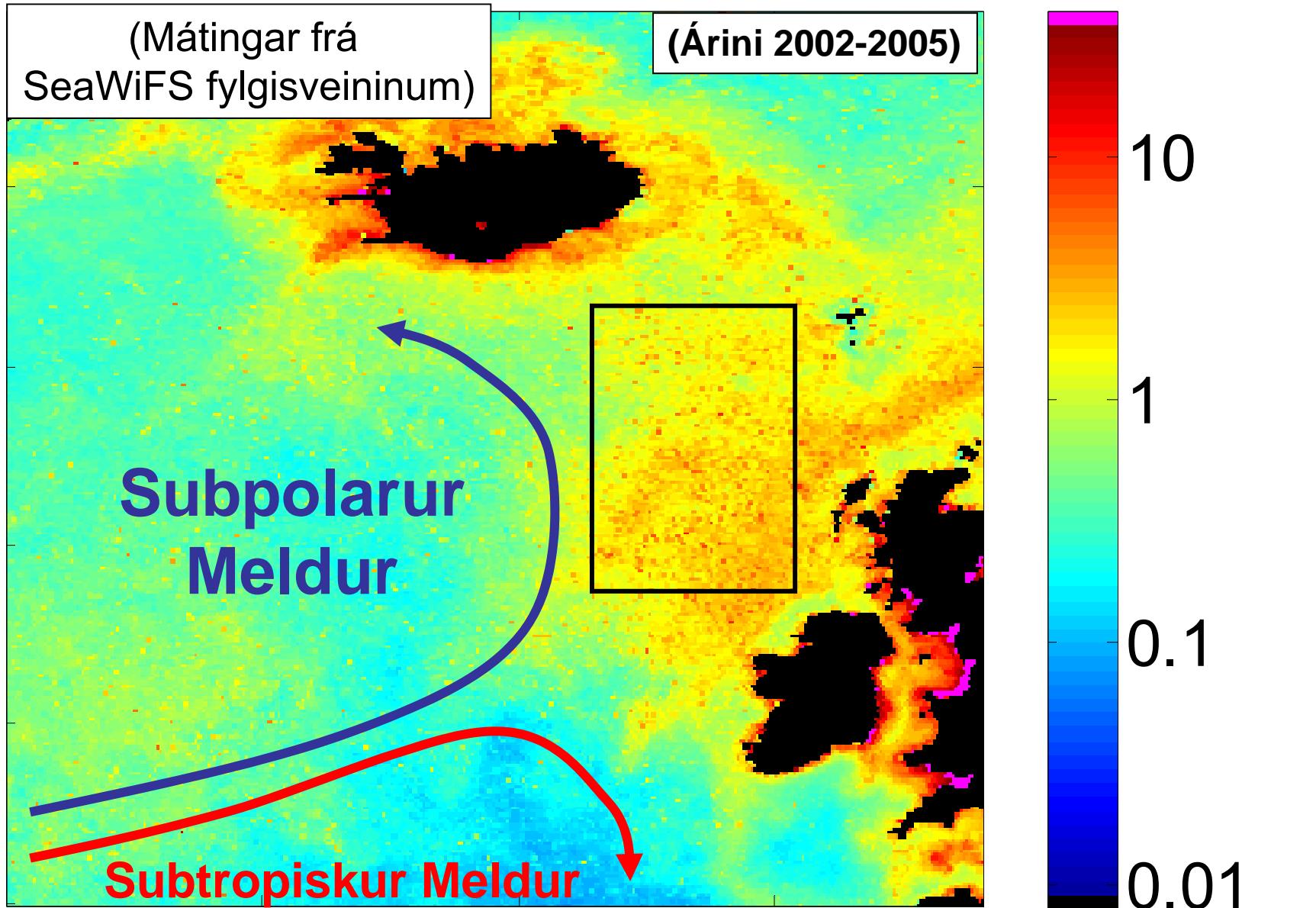


Vísindavøka, sept. 2009

Yvirlit

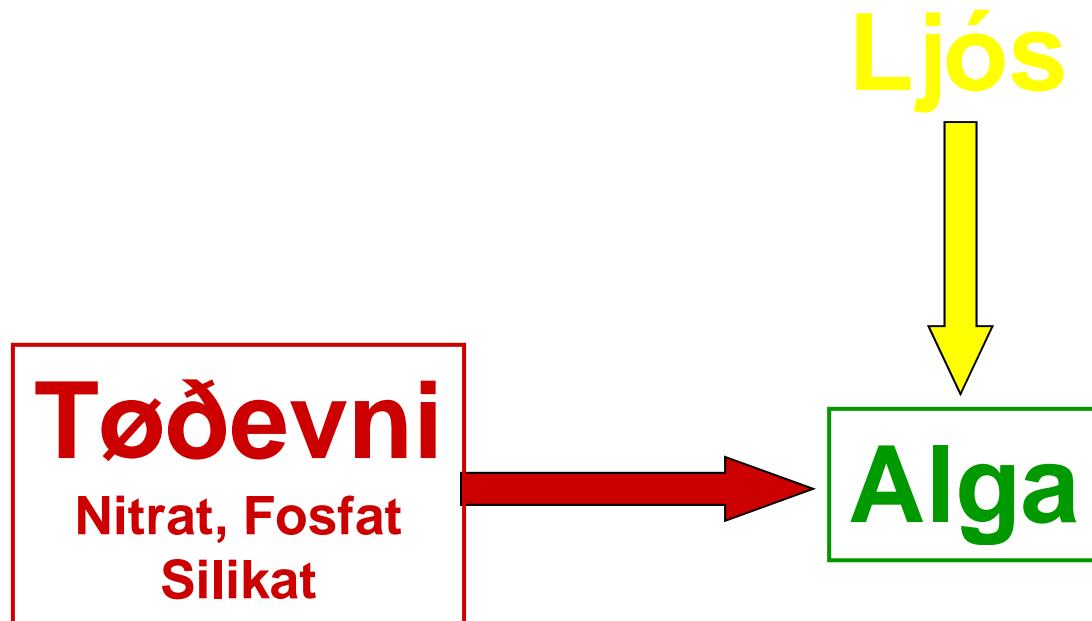
1. Eitt sindur um gróður
2. Gróður á opnum havi - Subpolari Meldurin
ávirkan á svartkjaftastovnин
3. Opið hav og Landgrunnurin
ávirkan á toskastovnин

Nógvur gróður á opnum havi





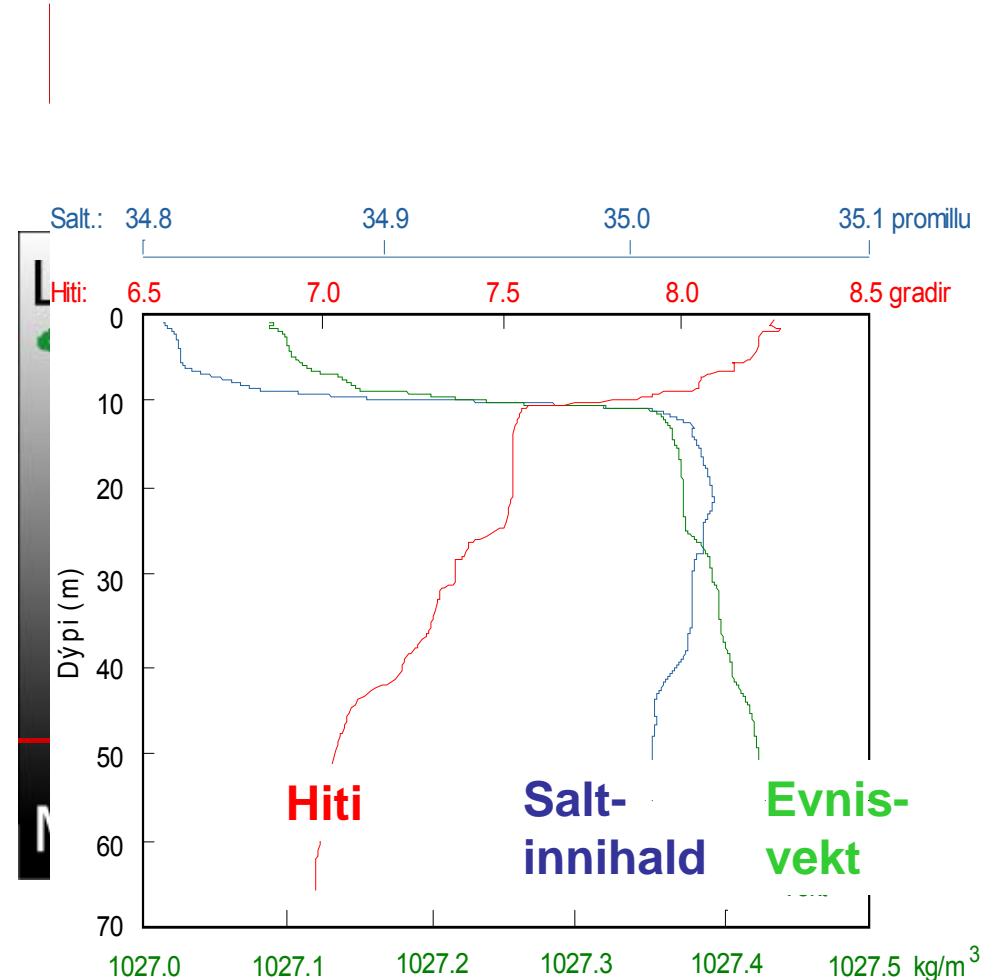
Phytoplankton gróður





Alguvandring

Lítil gróður

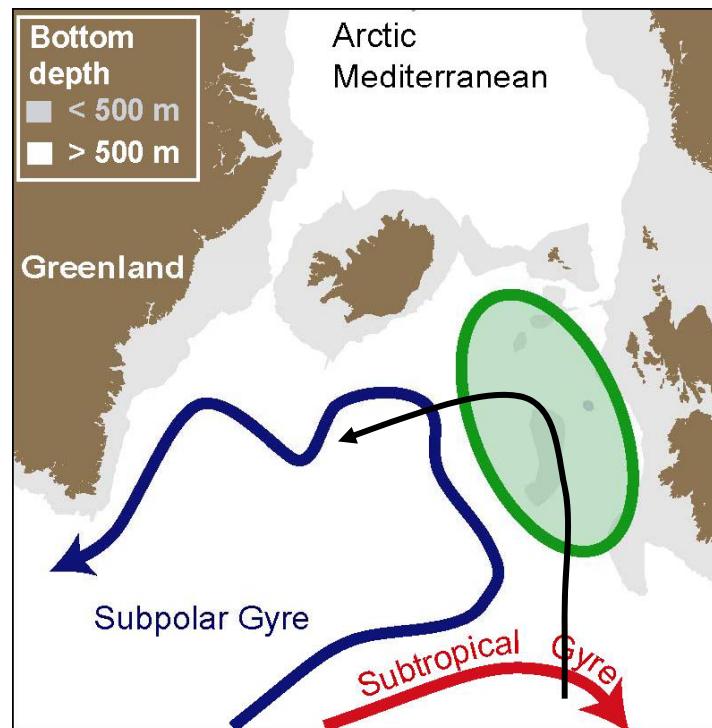


1. Gróður á opnum havi

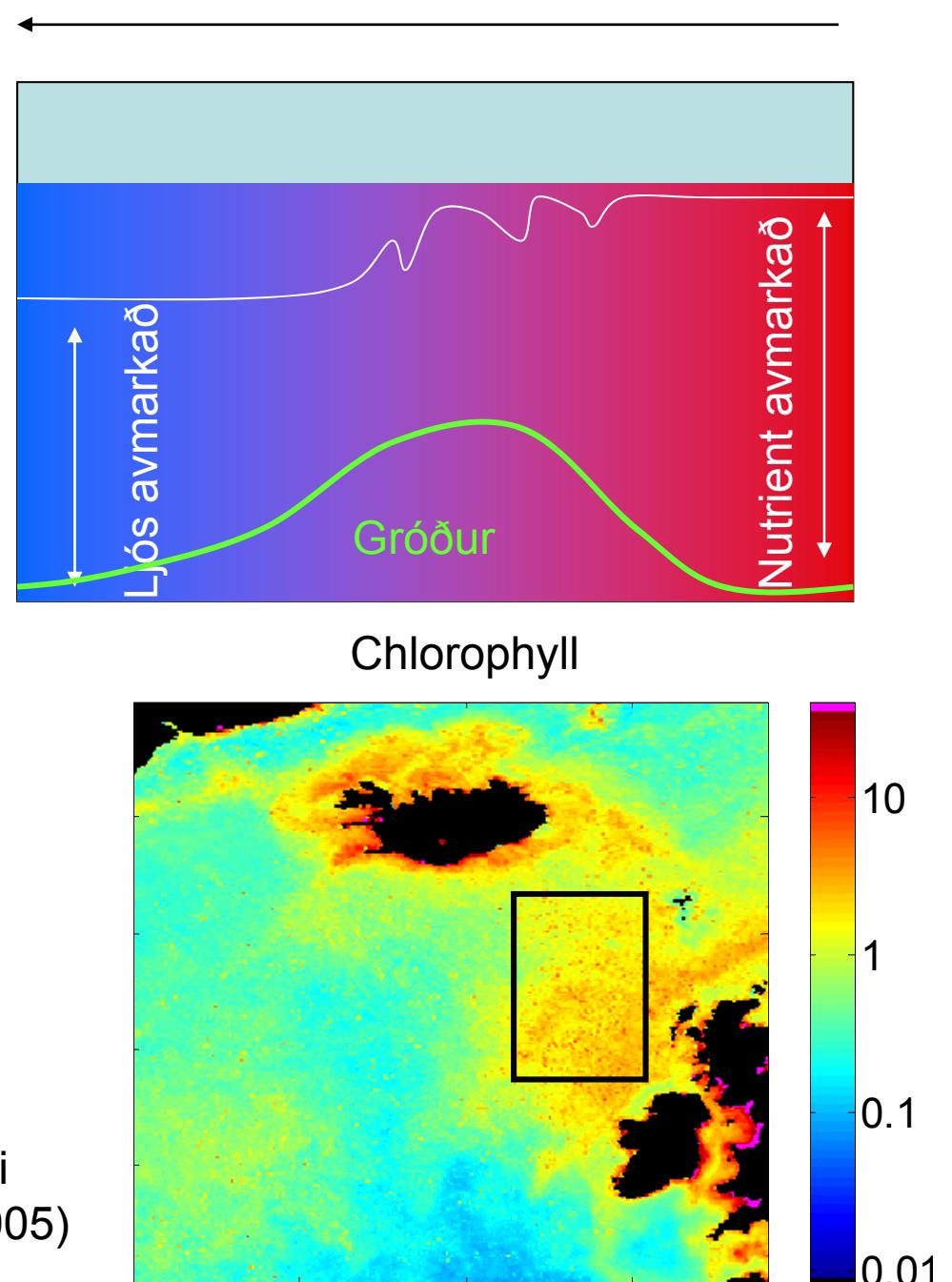
- Subpolari Meldurin

Seinar (> 10 ár) broytingar

Subpolari meldurin og gróðrararlíkindi



Ársmiðal yvir ár tá subpolari
meldurin er veikur (2002-2005)



Subpolari Meldurin og havklima

■ > 500 m

Grønland

Norðurhøv

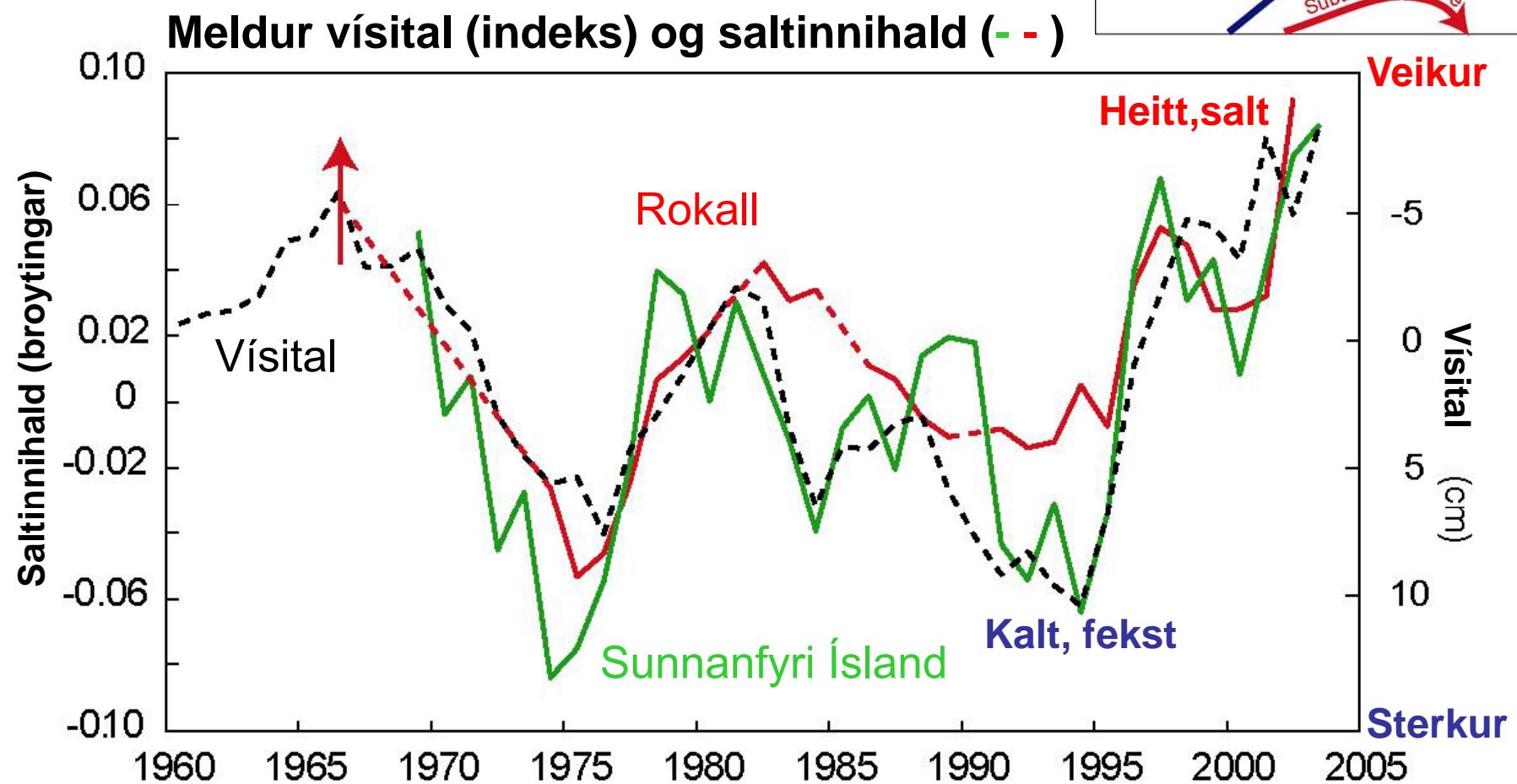
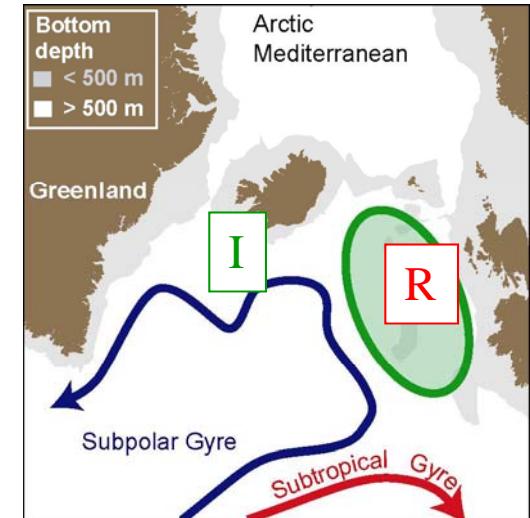
Rockall

Subpolari meldurin

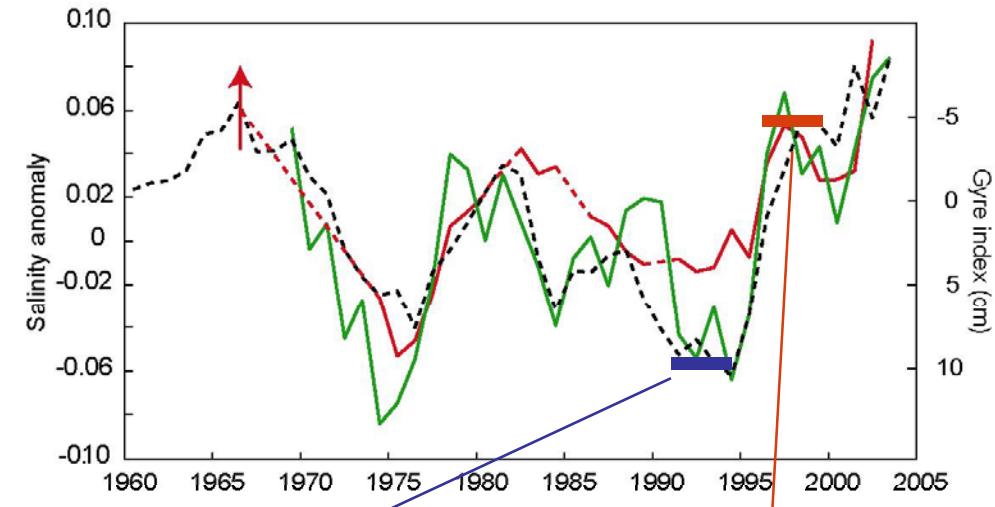
Subtropiski
meldurin

(Hatun et al., Science 2005)

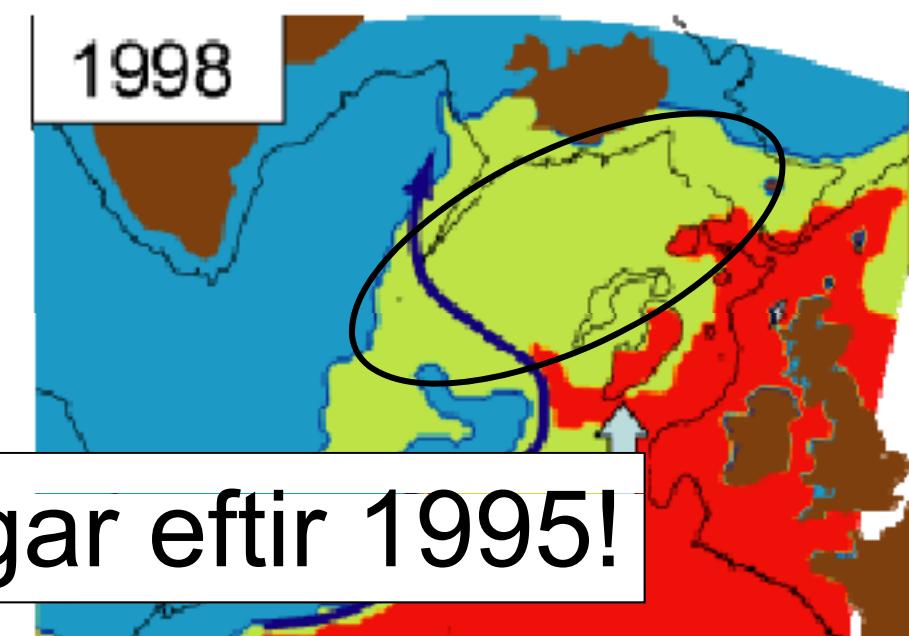
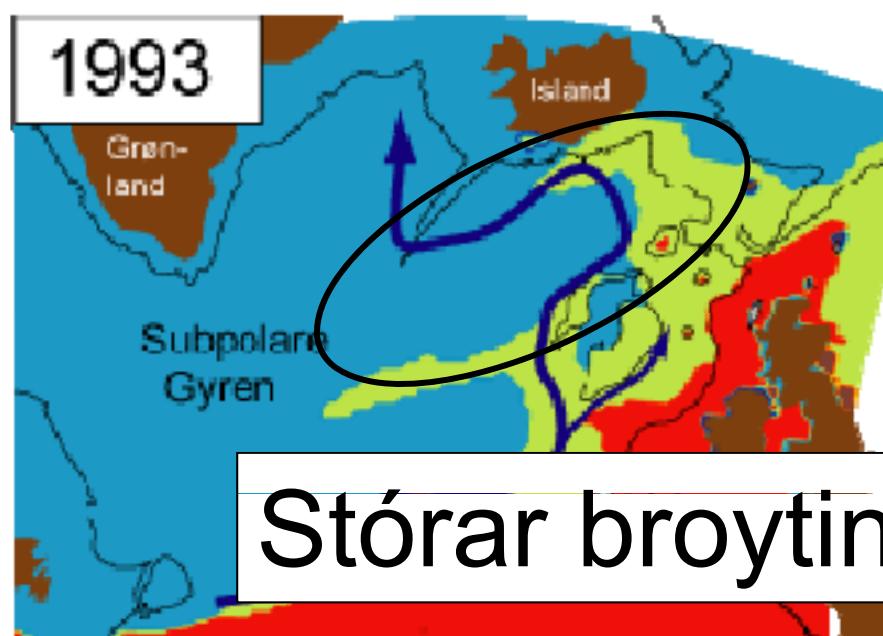
Subpolari Meldurin og havklima



Subpolari Meldurin og havklima



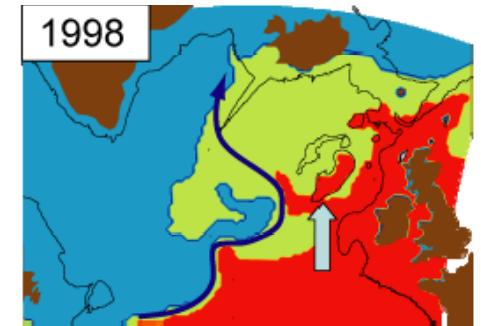
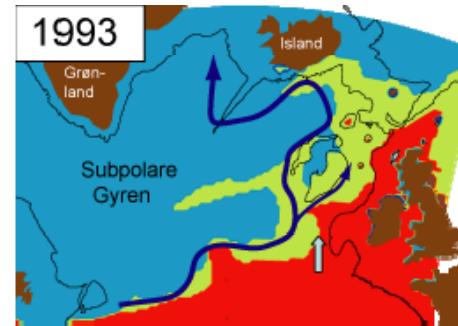
Roknaður hiti



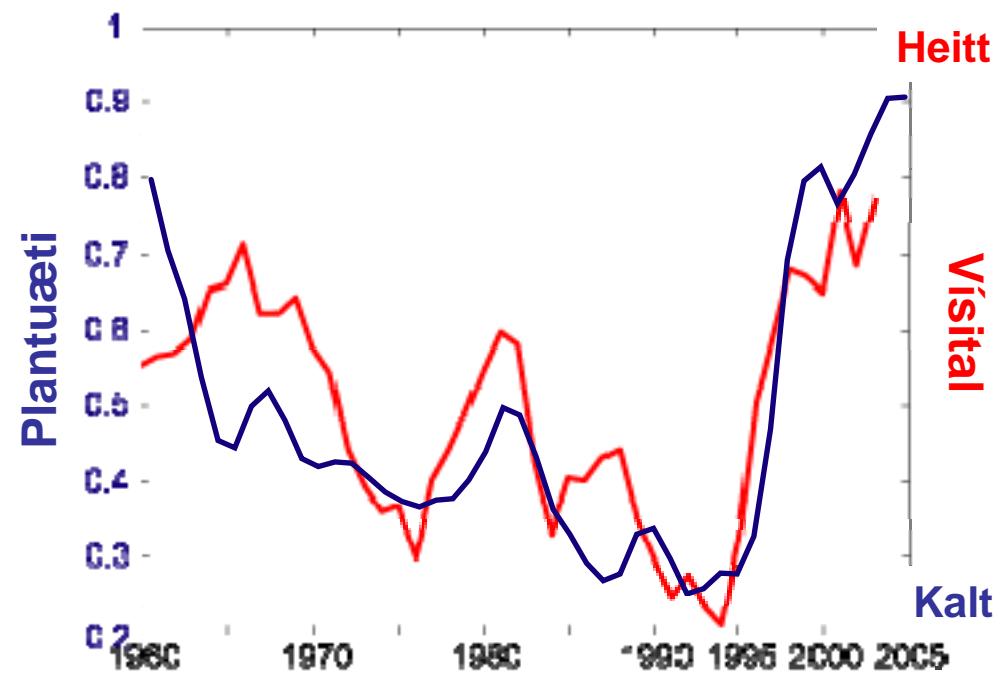
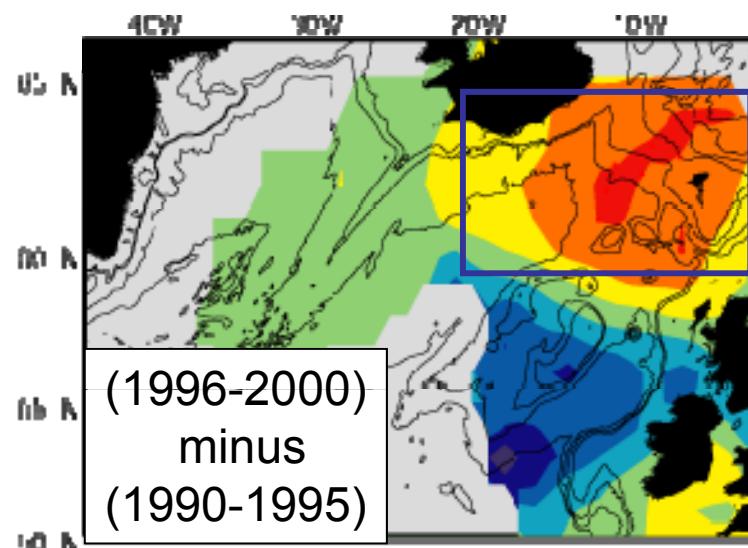
Stórar broytingar eftir 1995!

Subpolari Meldurin og plantuæti

Plantuæti (1958-2005)

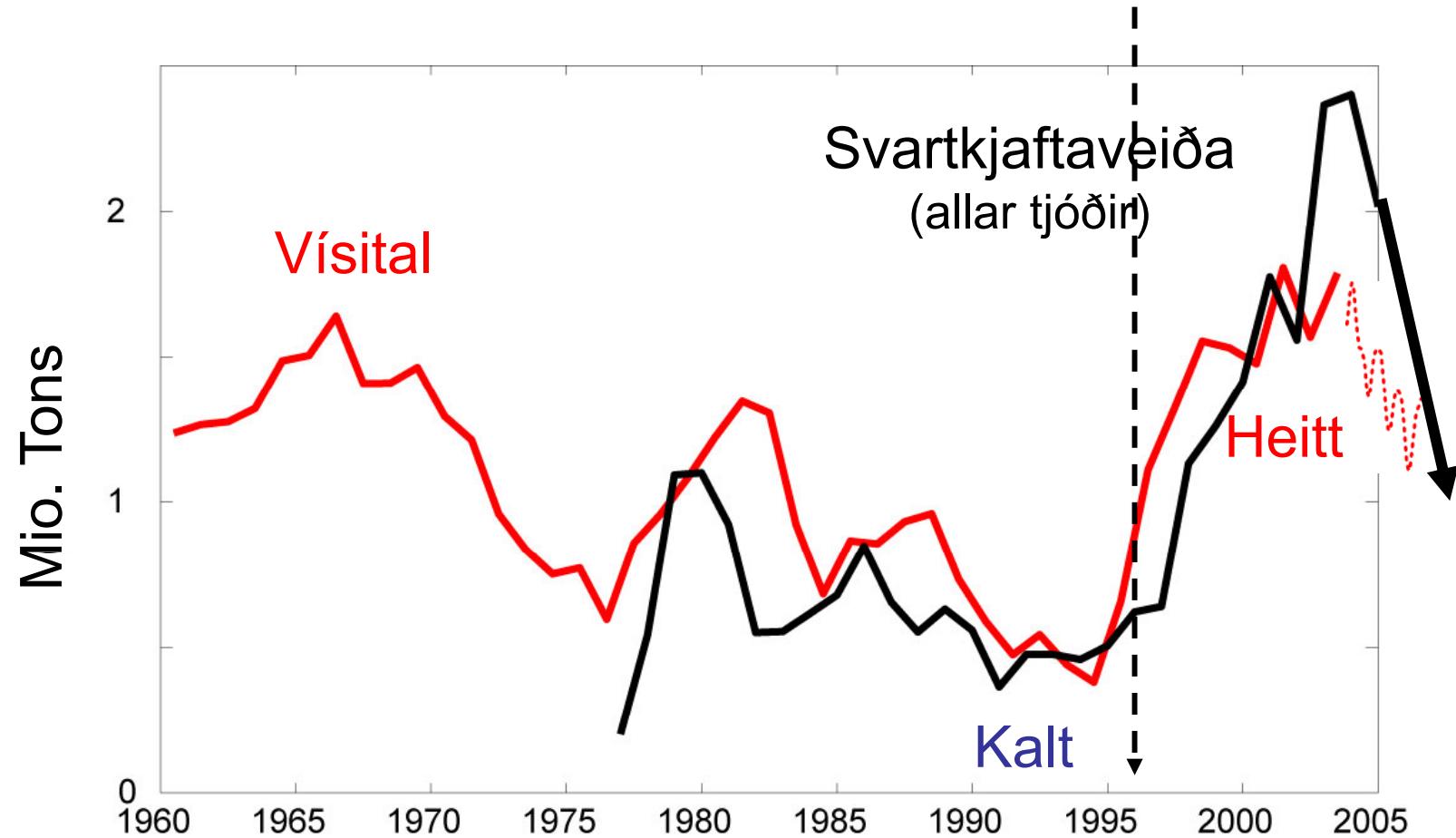


Nógv meira plantuæti efter 1995!



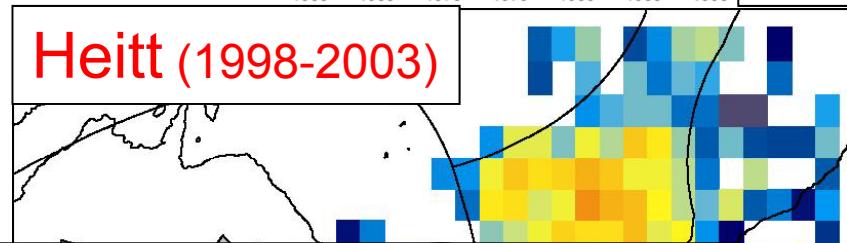
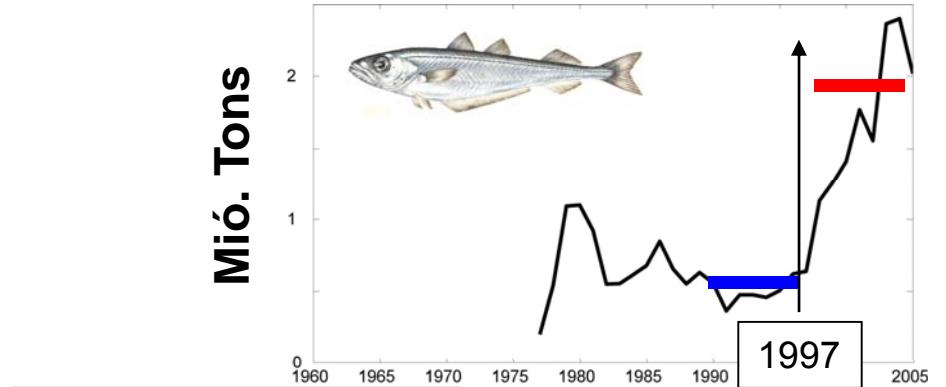
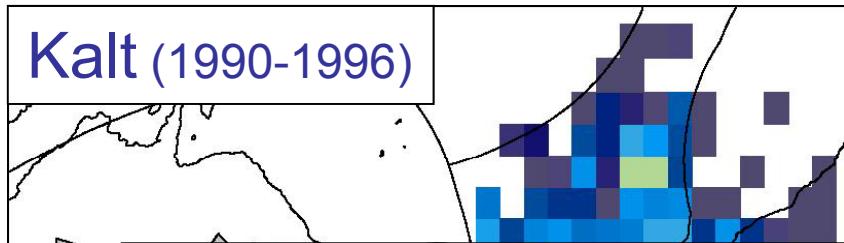


Subpolari Meldurin og svartkjaftur

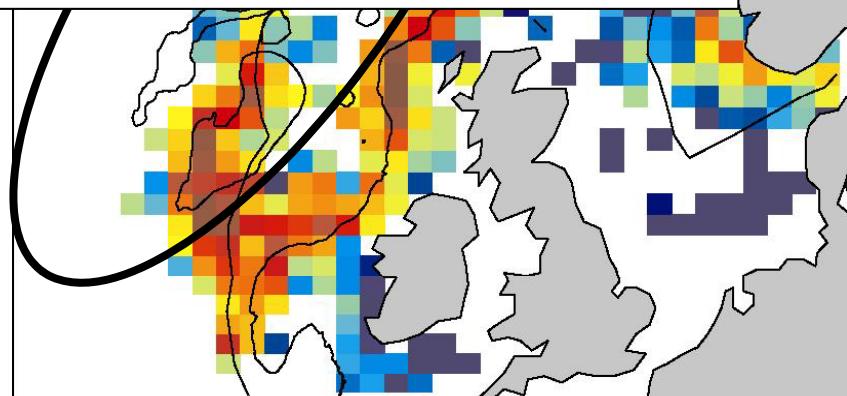
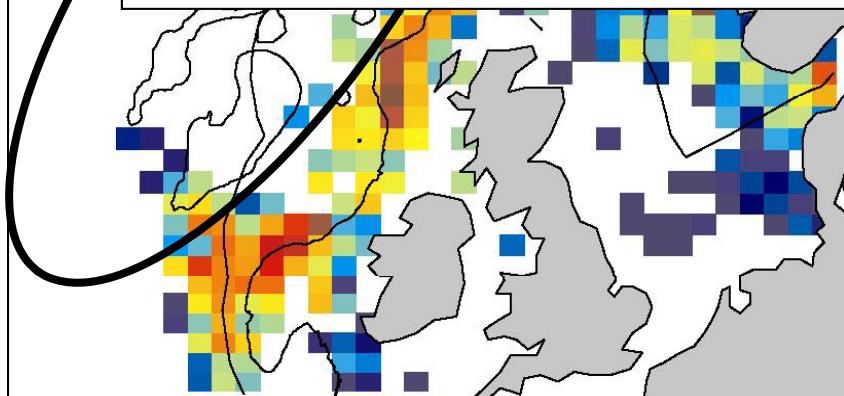


Subpolari Meldurin og svartkjaftur

(Veiða – allar tjóðir, alt árið)



Veikur meldur:
**Nógvur gróður á opnu leiðunum
og stórur svartkjaftastovnur**

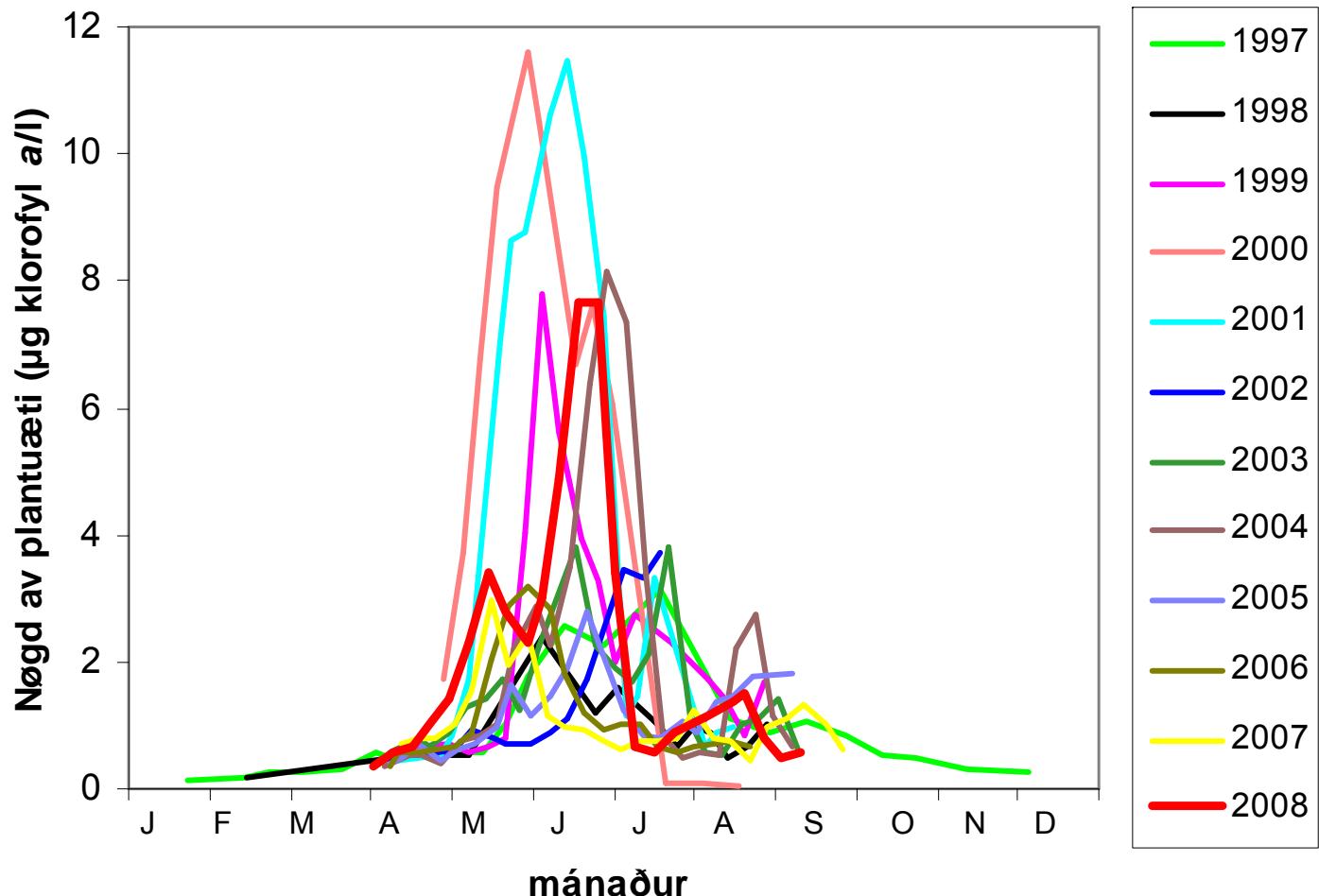


Opið hav og Landgrunnurin

Skjótar (< 10 ár) broytingar

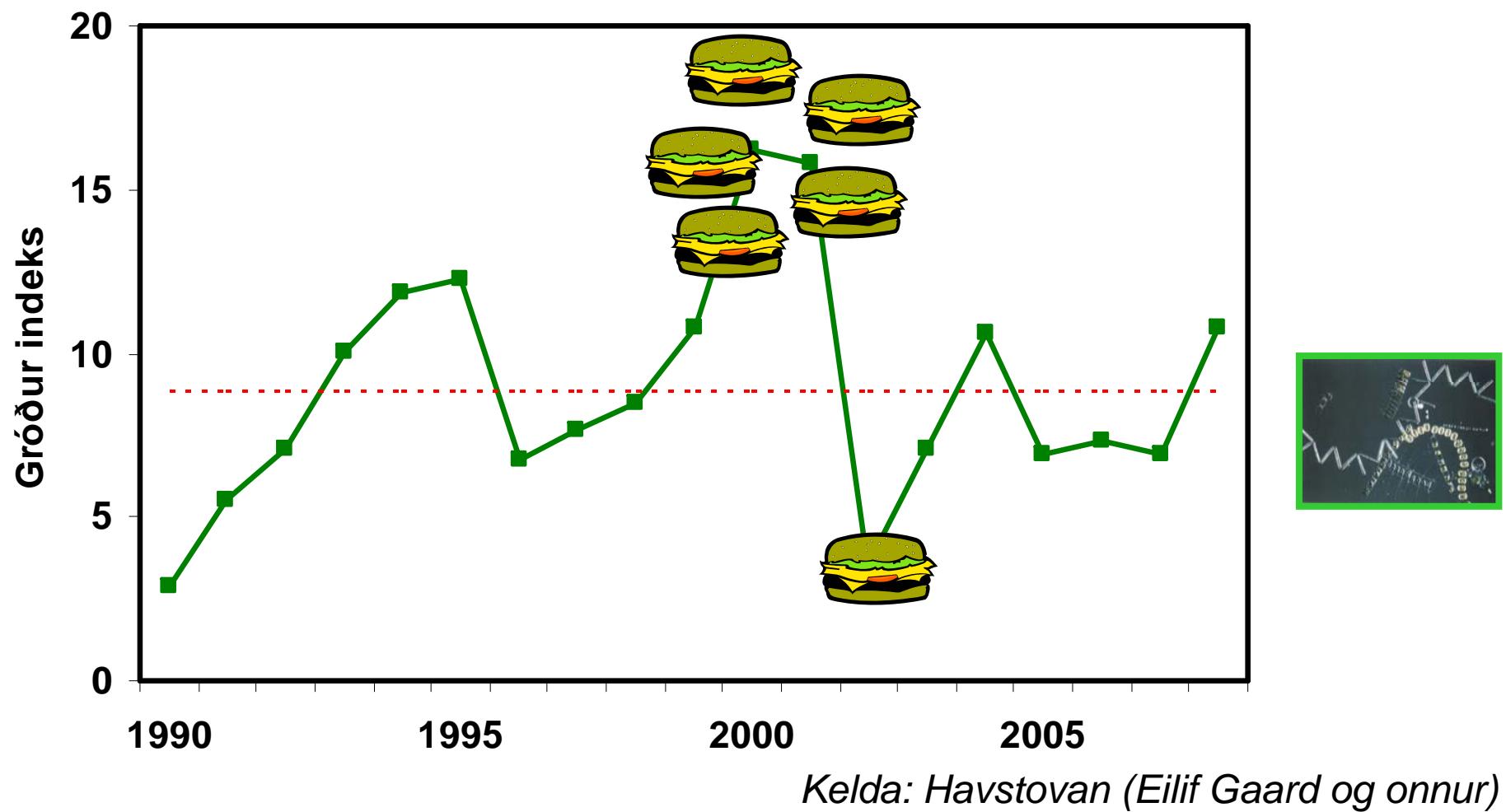


Plantuæti (Skopun)

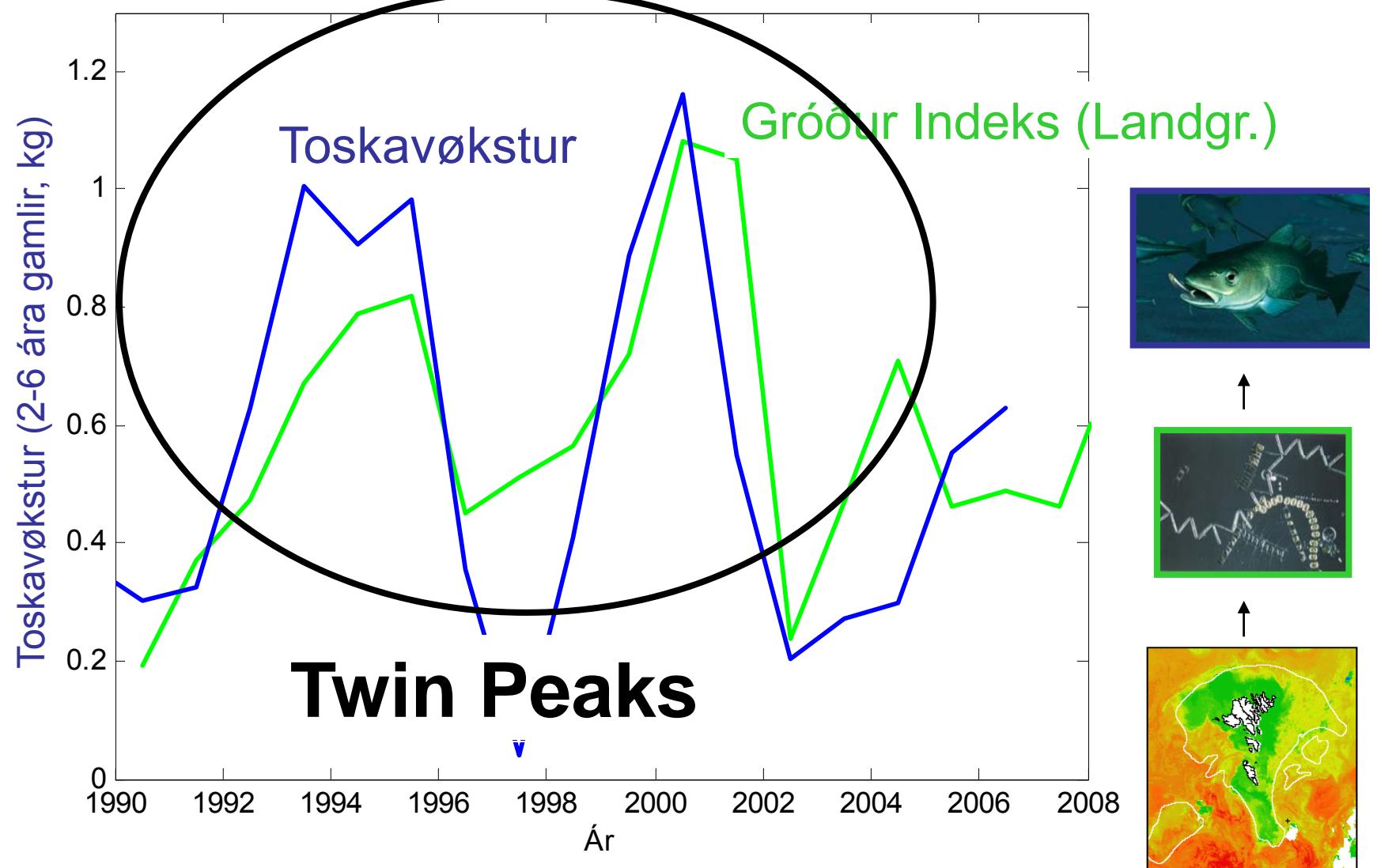


Kelda: Havstovan (Eilif Gaard og onnur)

Gróður á Landgrunninum, 1990-2008

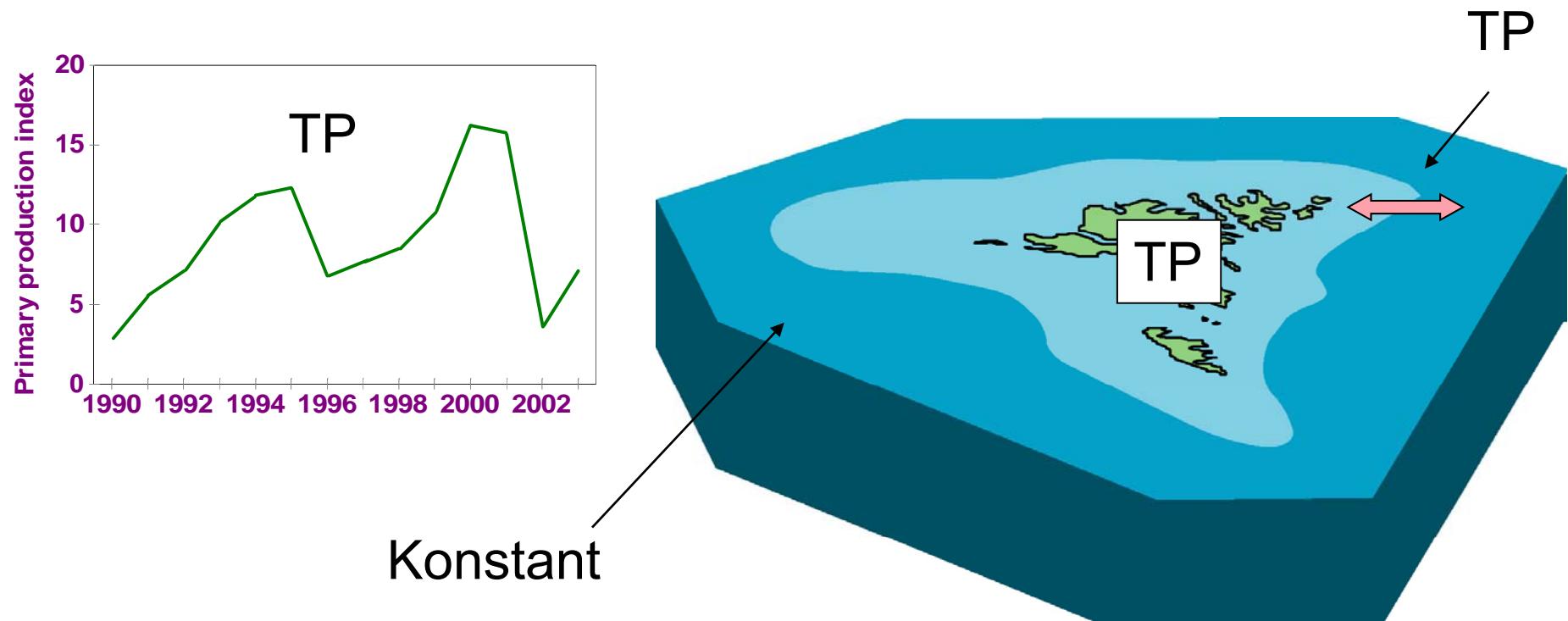


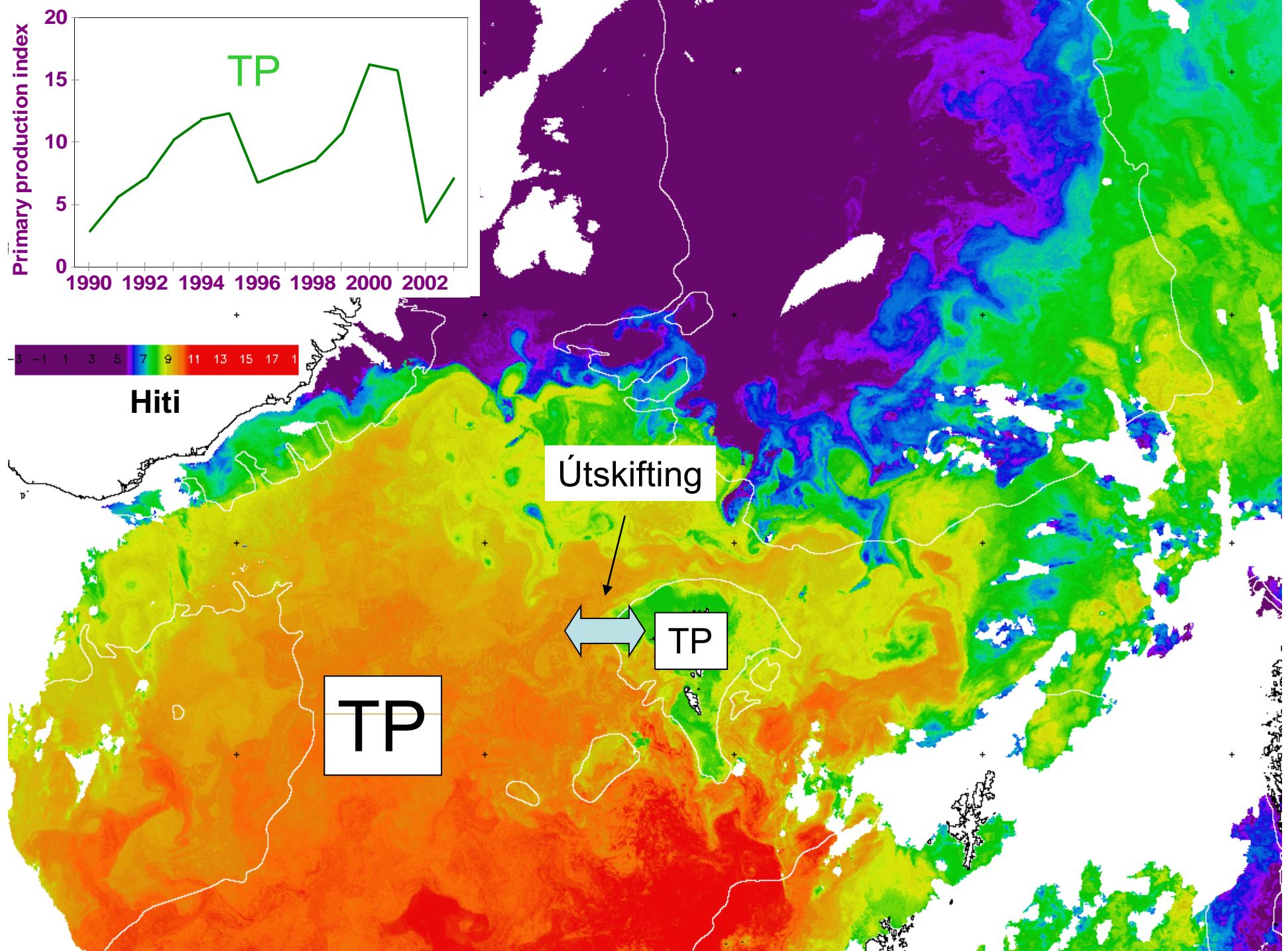
Gróður og Fiskur á Landgrunninum



Verðandi hypotesa: “Twin Peaks” er stýrt av útskifting

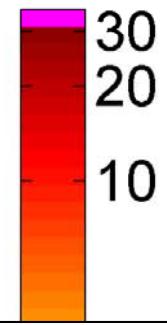
Er hetta einasta forkláringin?



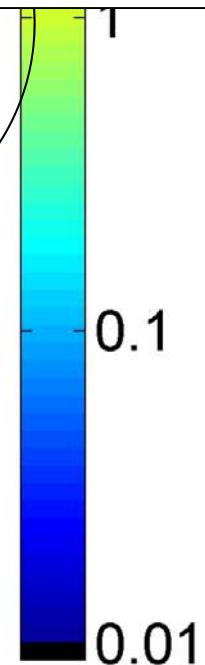
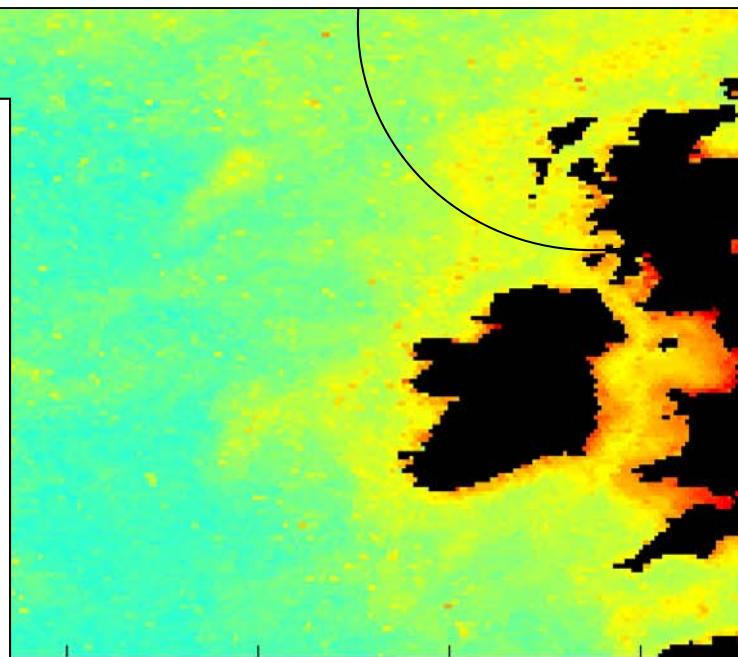
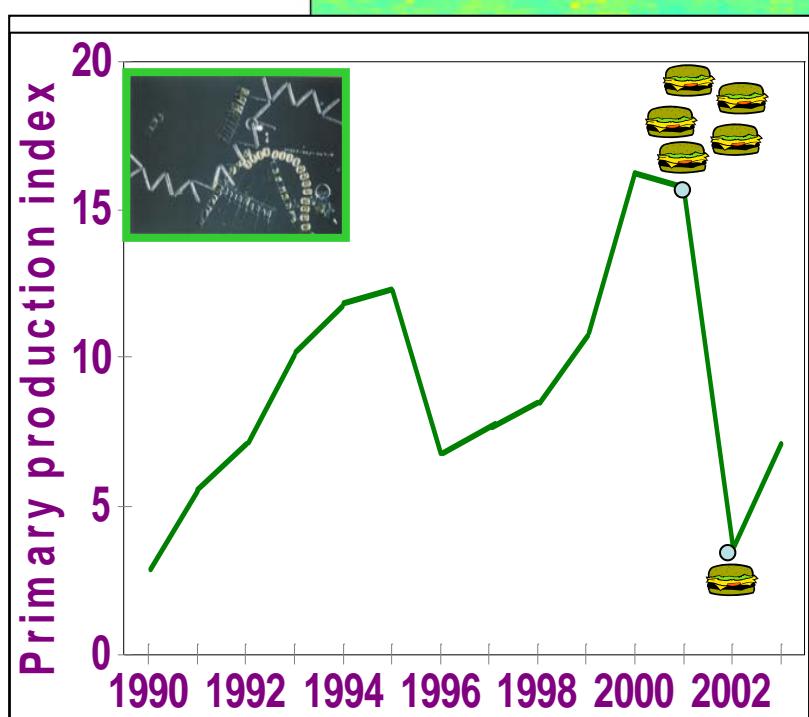


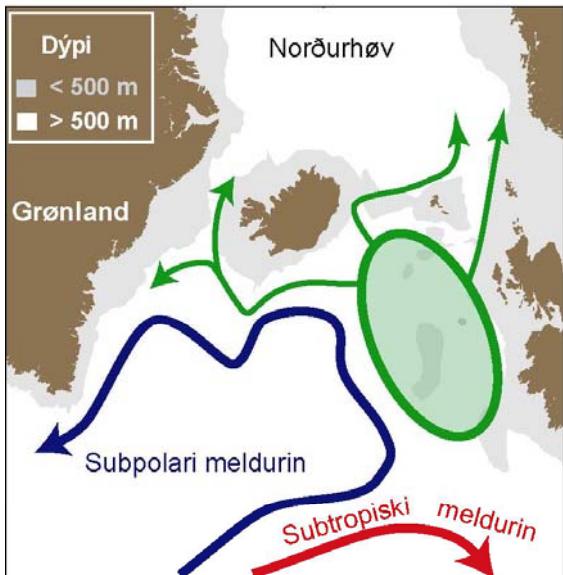
Opið hav
og Landgrunnurin

chlorophyll in 2002

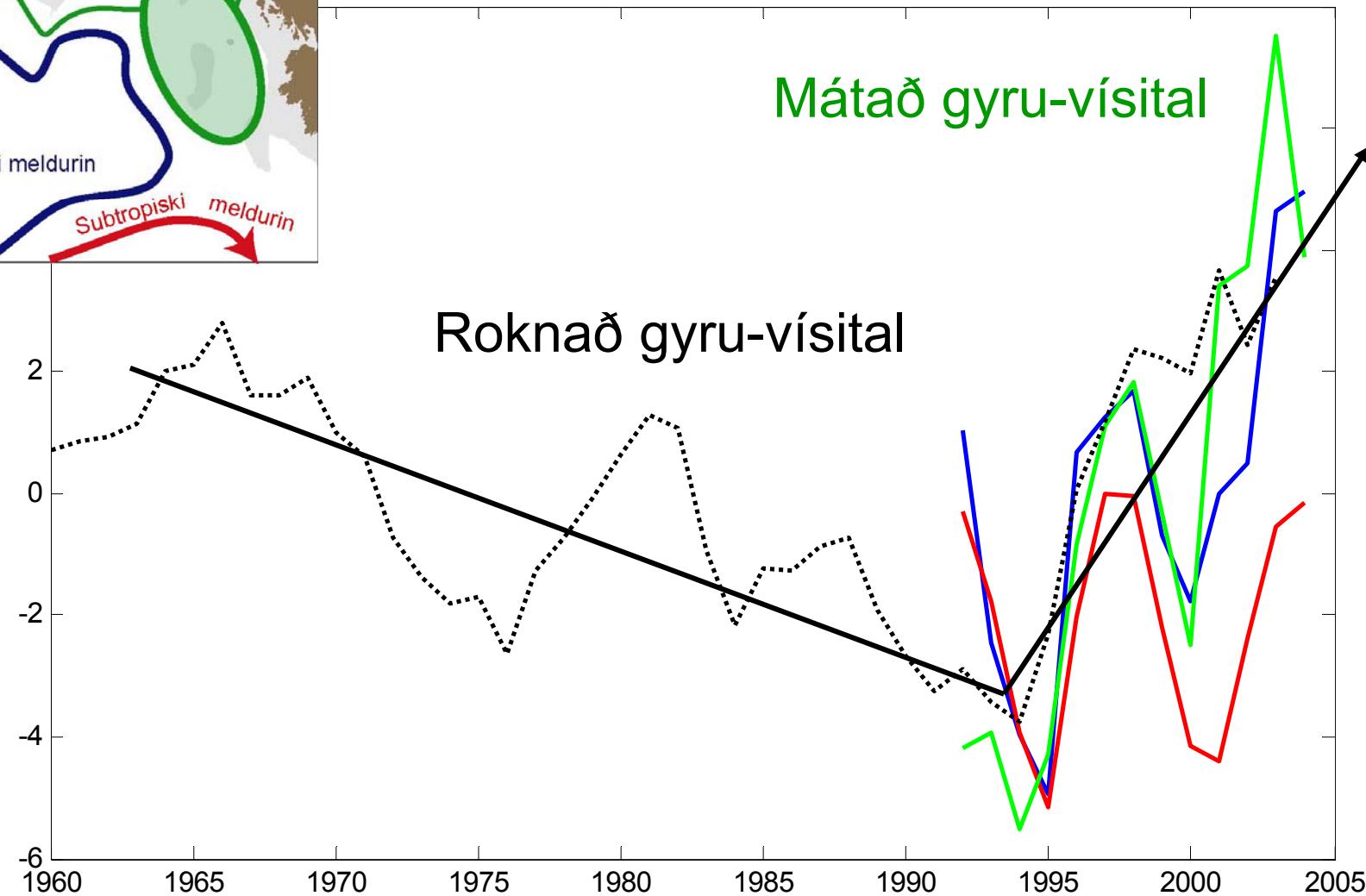


Kann *Twin Peaks* koma uttanefrir?



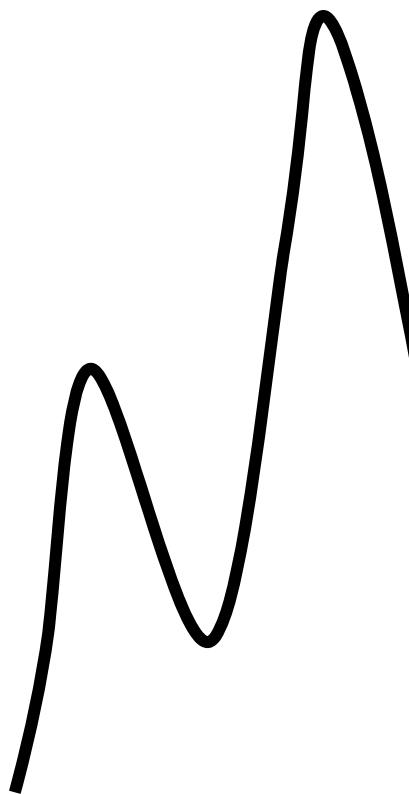


Twin Peaks sæst á stóraskala havs-sirkulasjón

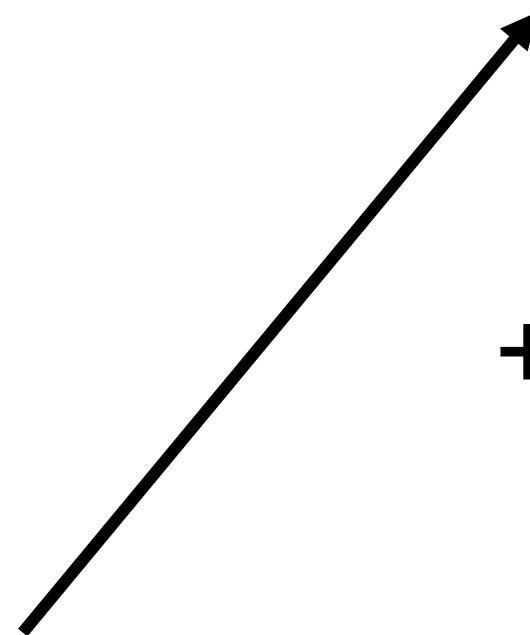


Twin Peaks og Trendur

Kring Føroyar

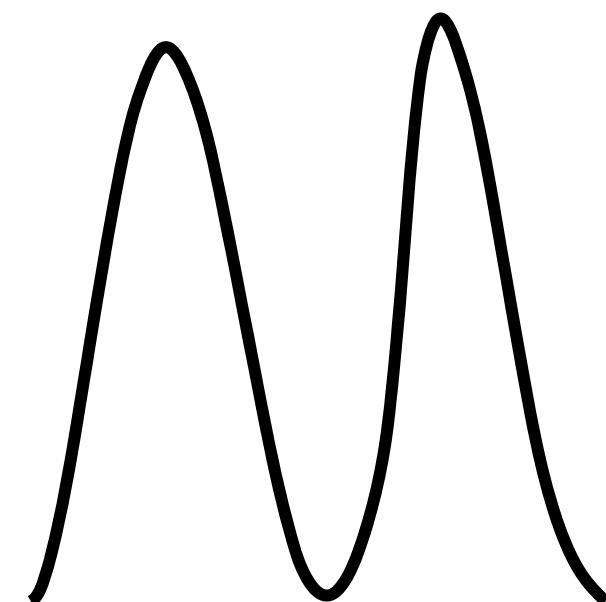


Stór-skala trendur

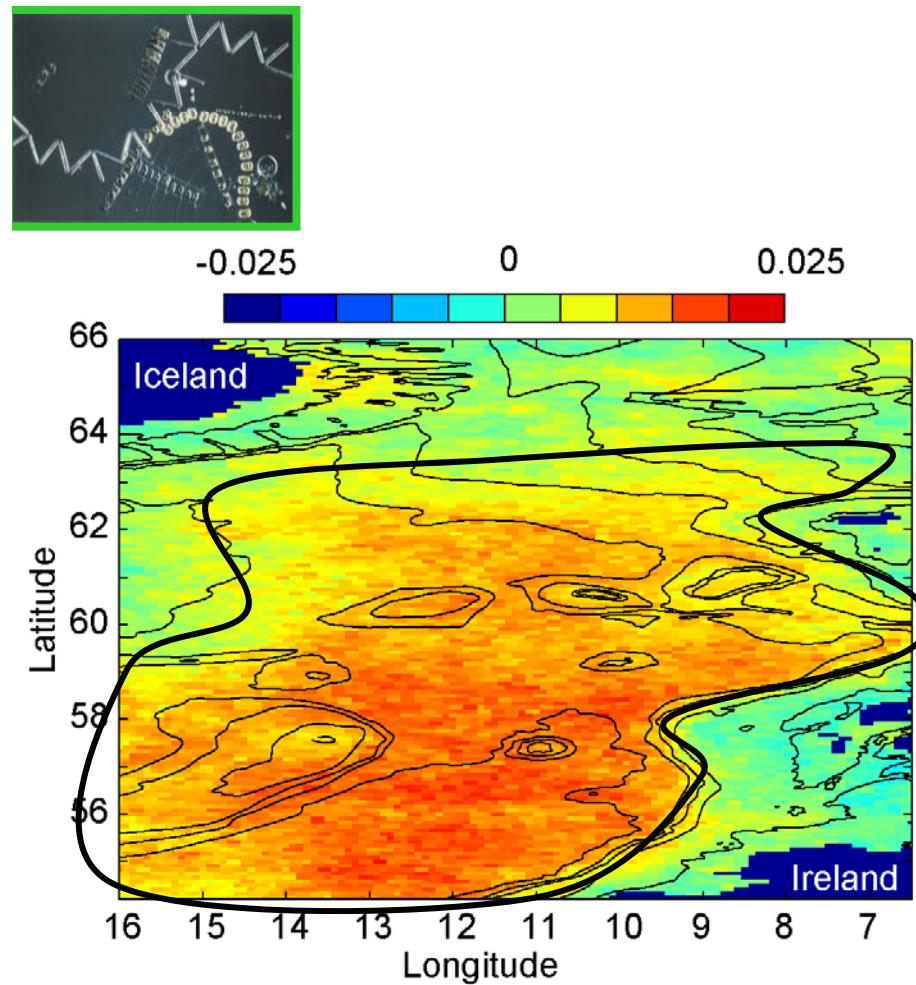


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Landgrunnur
(*Twin Peaks*)

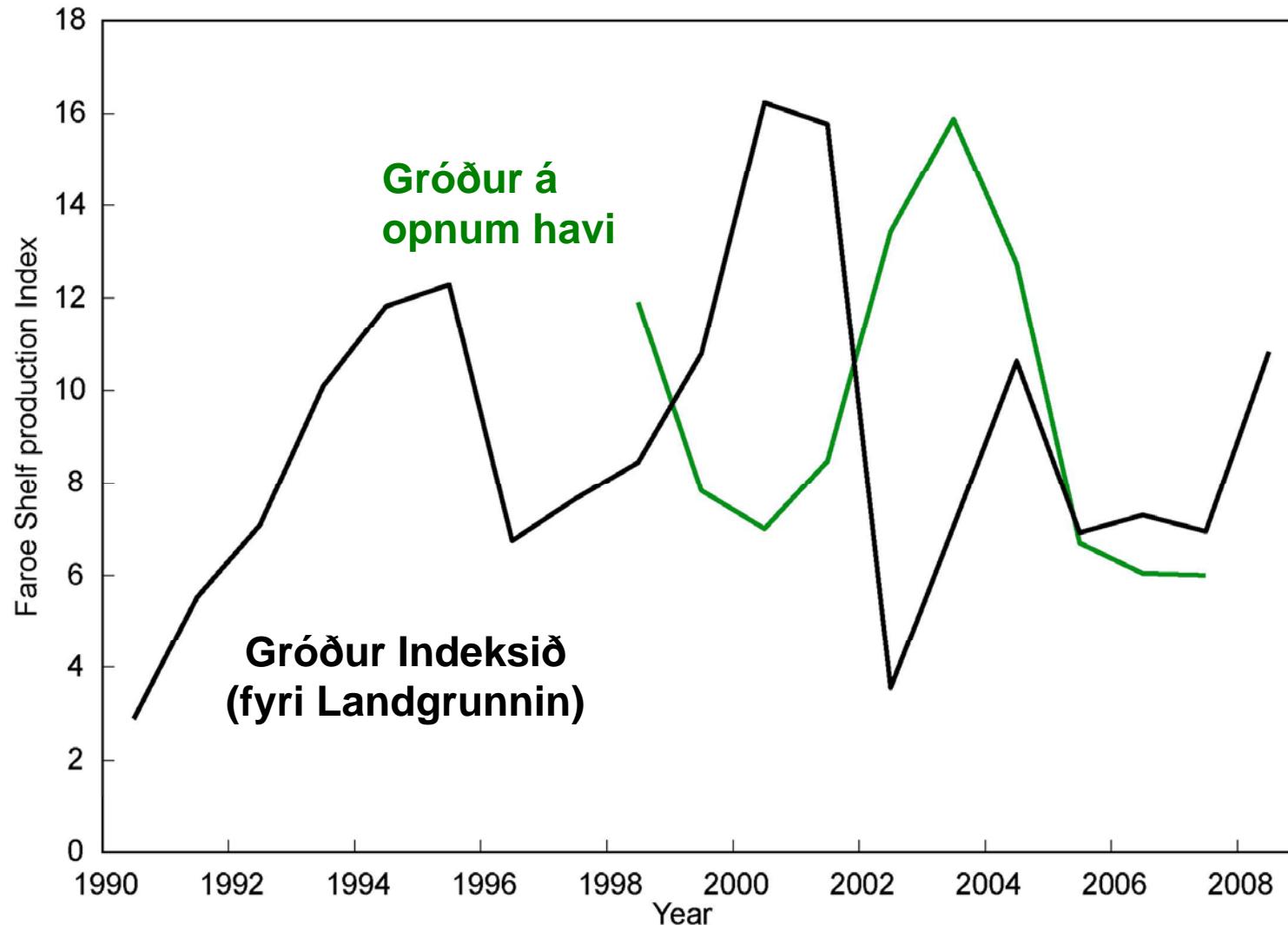


Twin Peaks á opnum havi Havklima og gróður



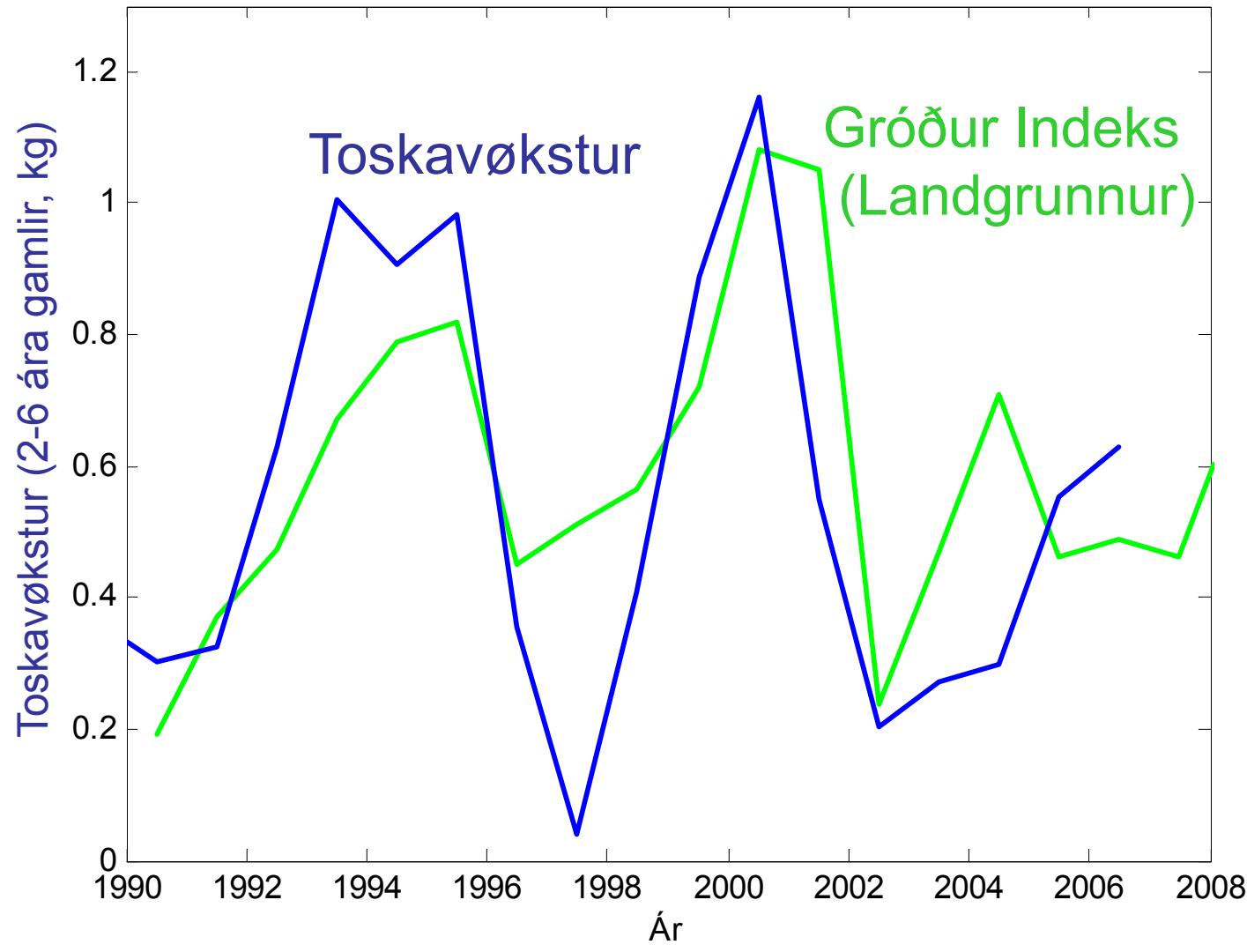


Umvent samband Landgrunnur - opið hav

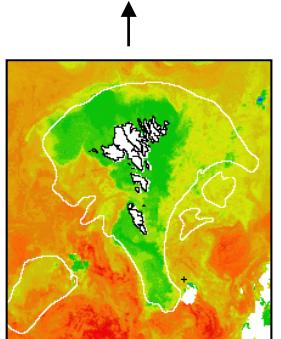


Gróður og Fiskur á Landgrunninum

Korrelasjón: 0.67

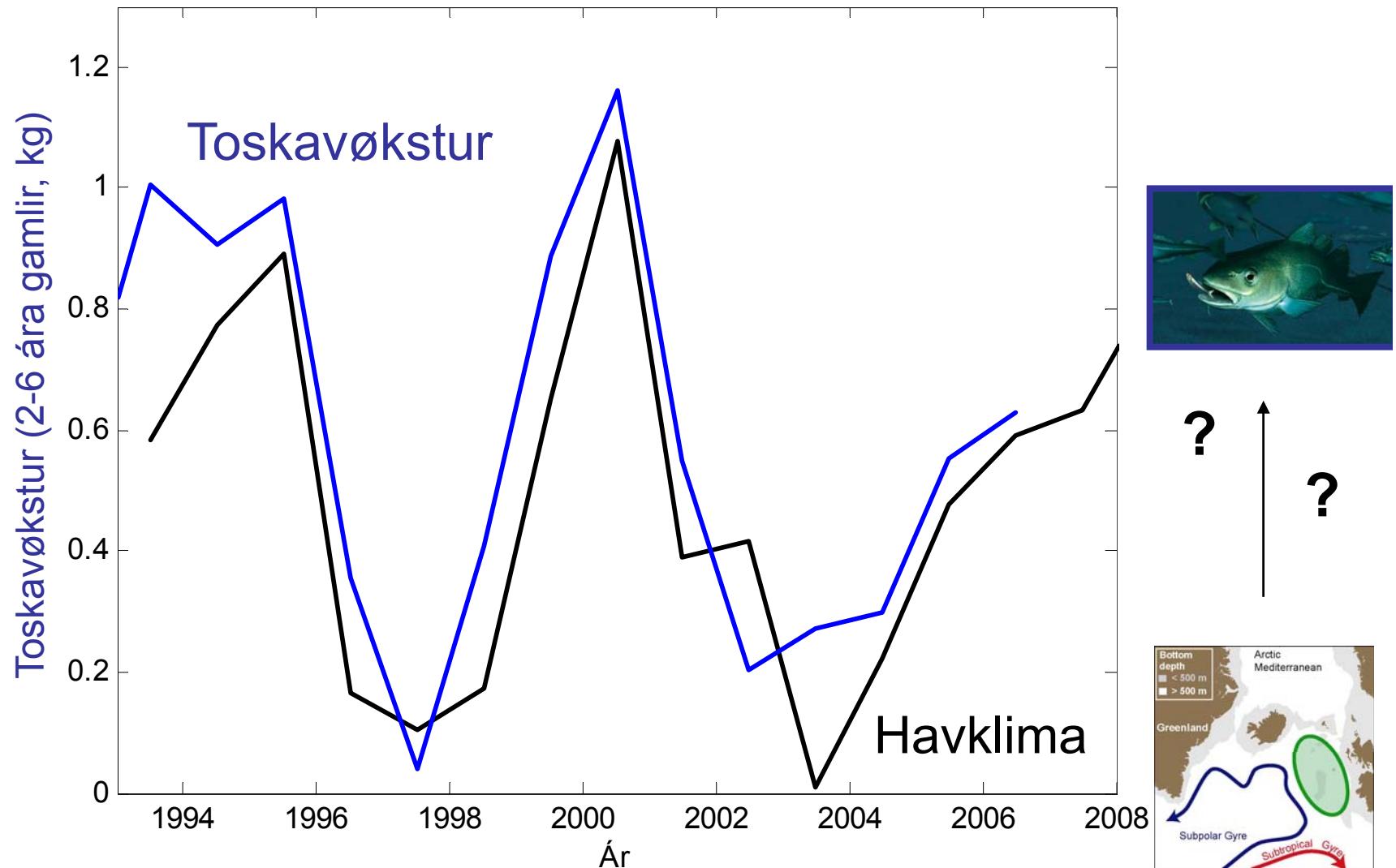


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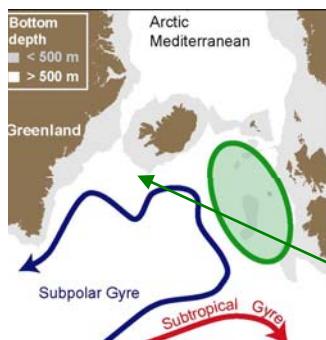


Havklima og Fiskur á Landgrunninum

Korrelasjón: 0.90



Saltinnihald og Toskavøkstur

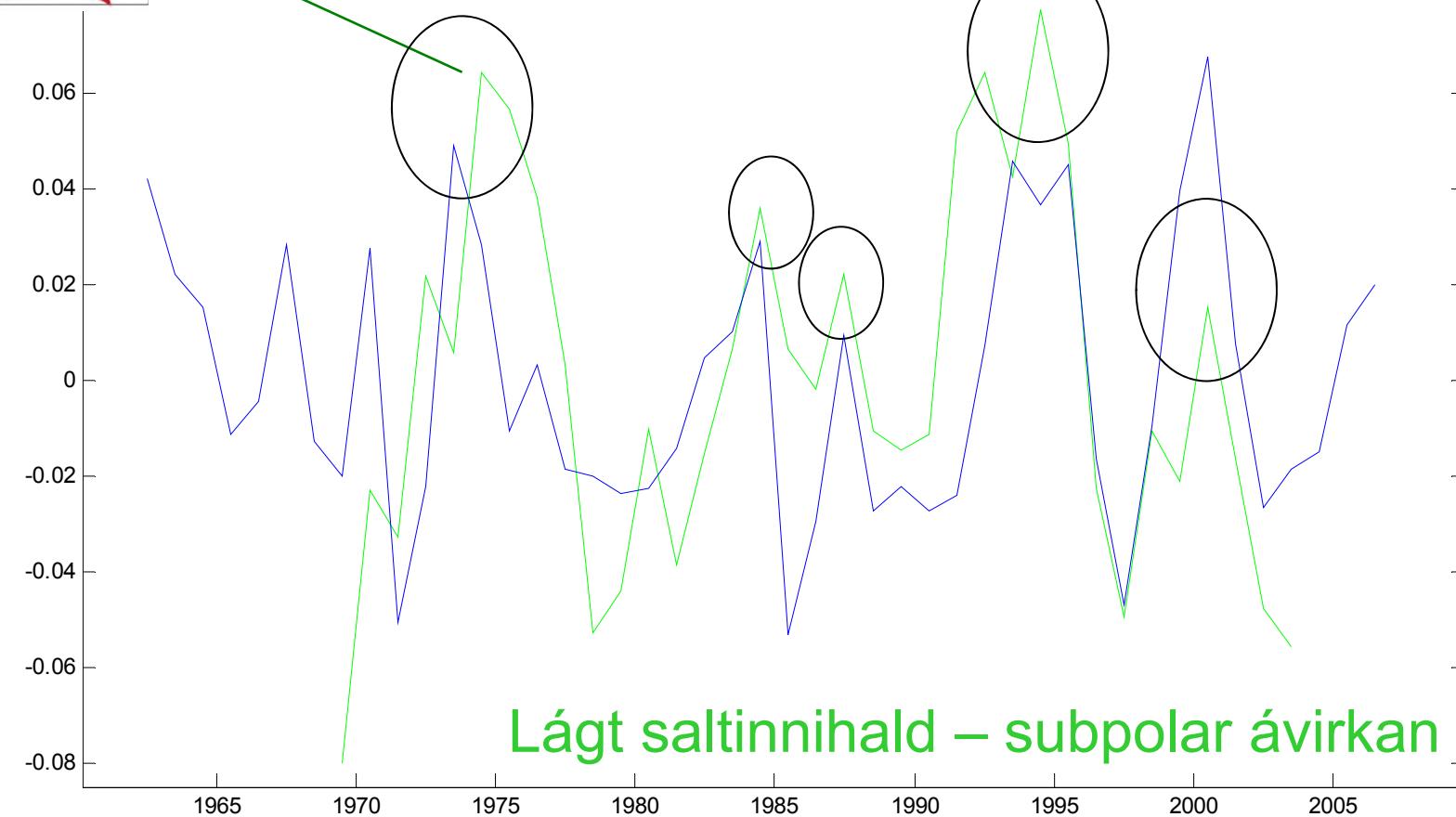


Góður vøkstur

Feskari

Saltari

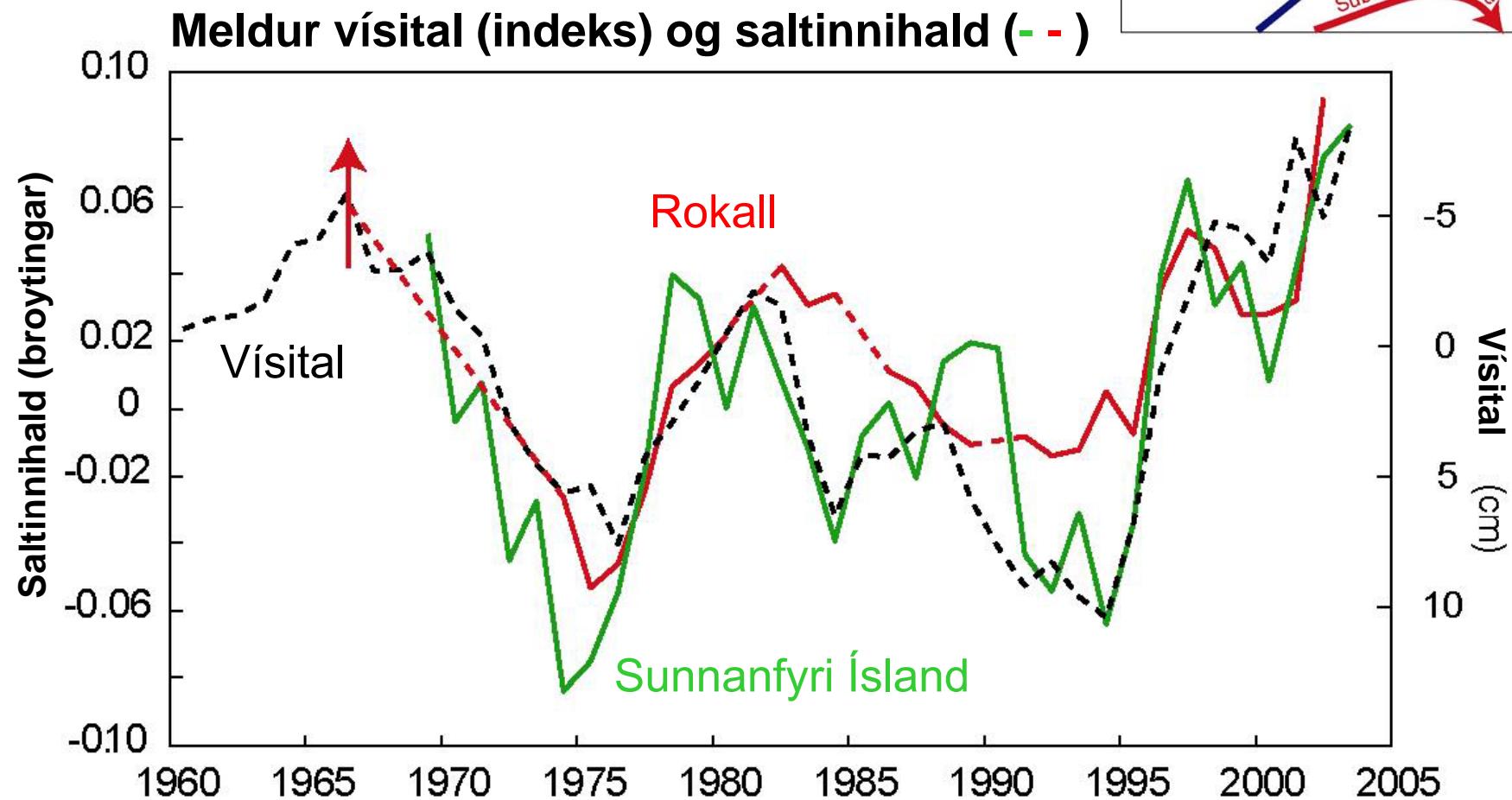
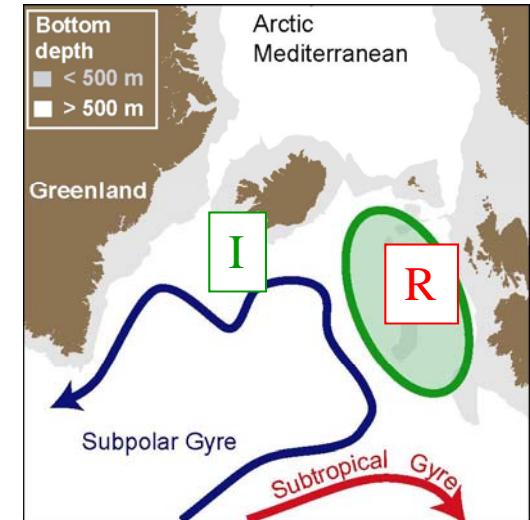
Lágt saltinnihald – subpolar ávirkan



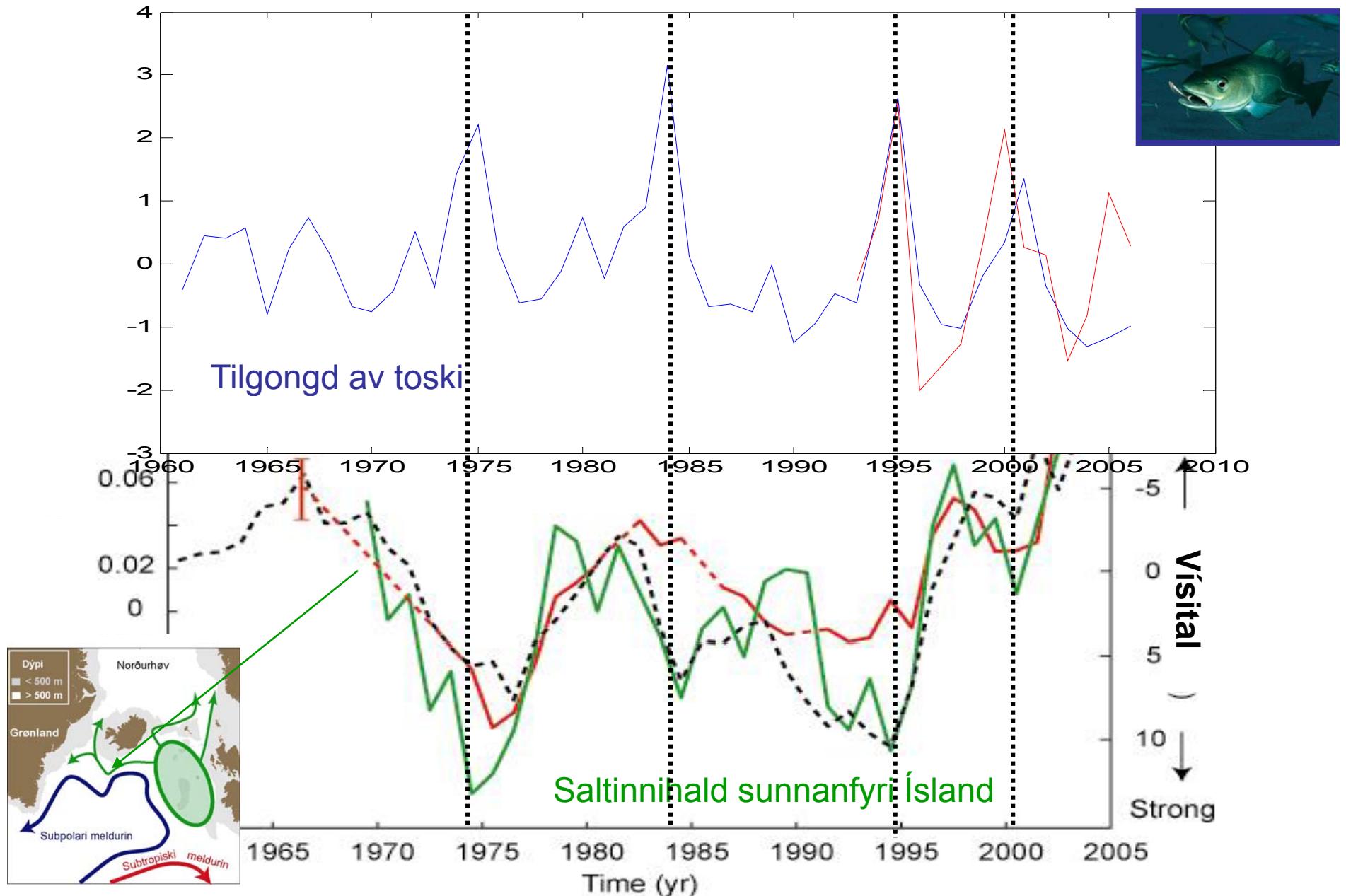
Boðskapur

- Veikur subpolarur meldur: 'Subtropisk',
Heitt og góður gróður á opnum havi
- Stór broyting í 1995: **Meldurin viknaði nógv,**
gróður og svartkjaftastovnur øktust nógv
- Umvent samband millum Landgrunnin og
opið hav:
 - Subpolart og kalt → góður gróður á
Landgrunninum
 - Subpolart og kalt → góð tilgongd og vøkstur hjá
toski á Landgrunninum

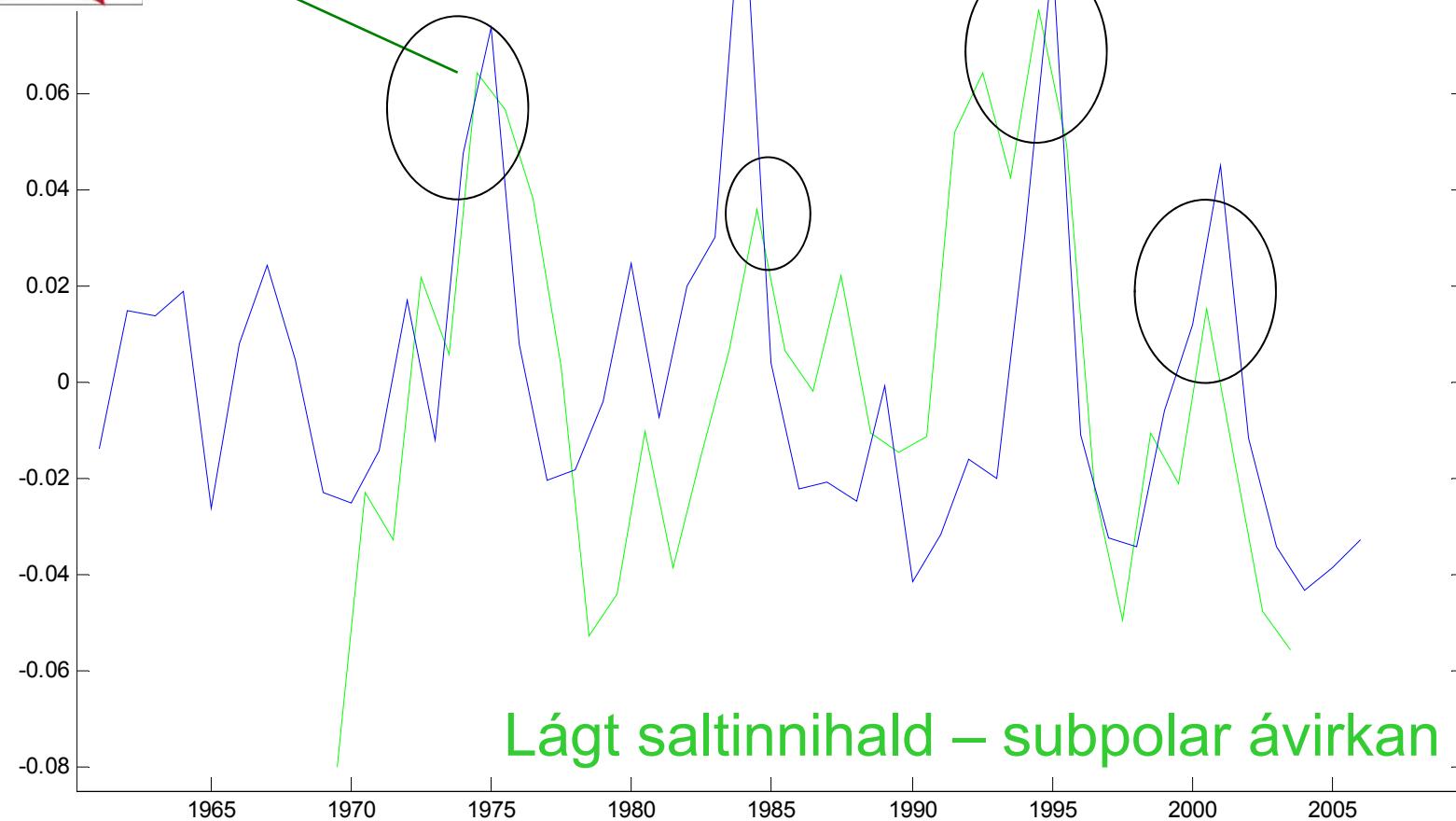
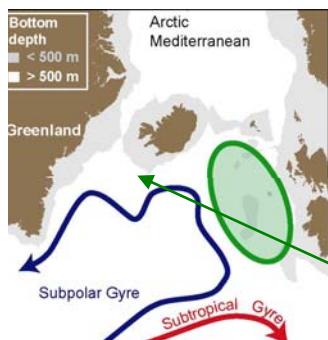
Subpolari Meldurin og havklima



Havklima og Toskatilgongd



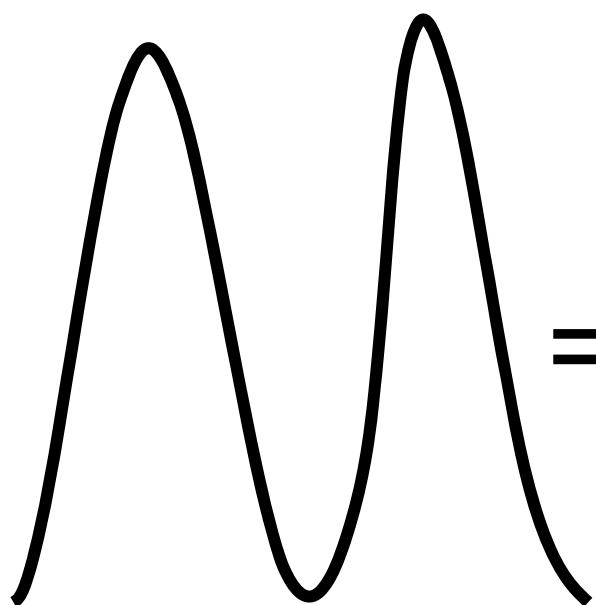
Saltinnihald og Toskatilgongd



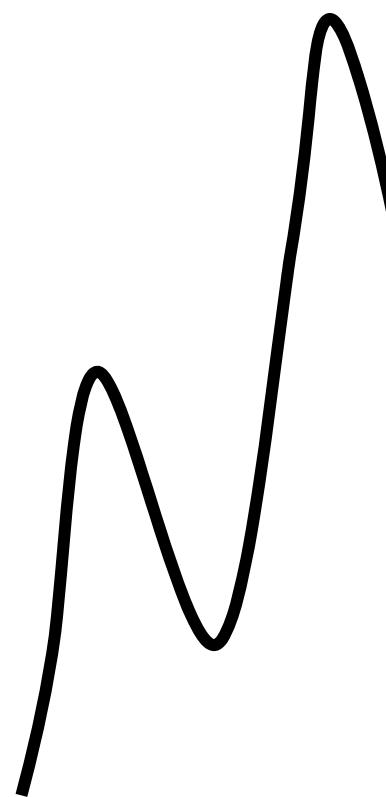
Lágt saltinnihald – subpolar ávirkan

Twin Peaks og Trendur

Twin Peaks
(Kring Føroyar)

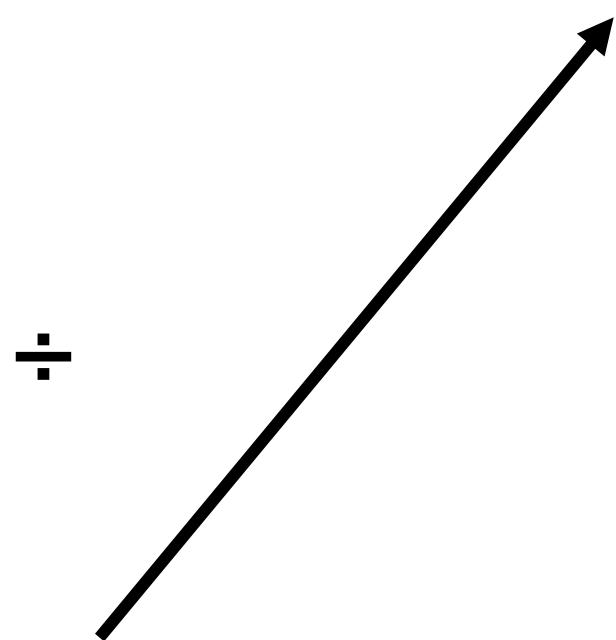


Gyru signal



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Trendur



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