

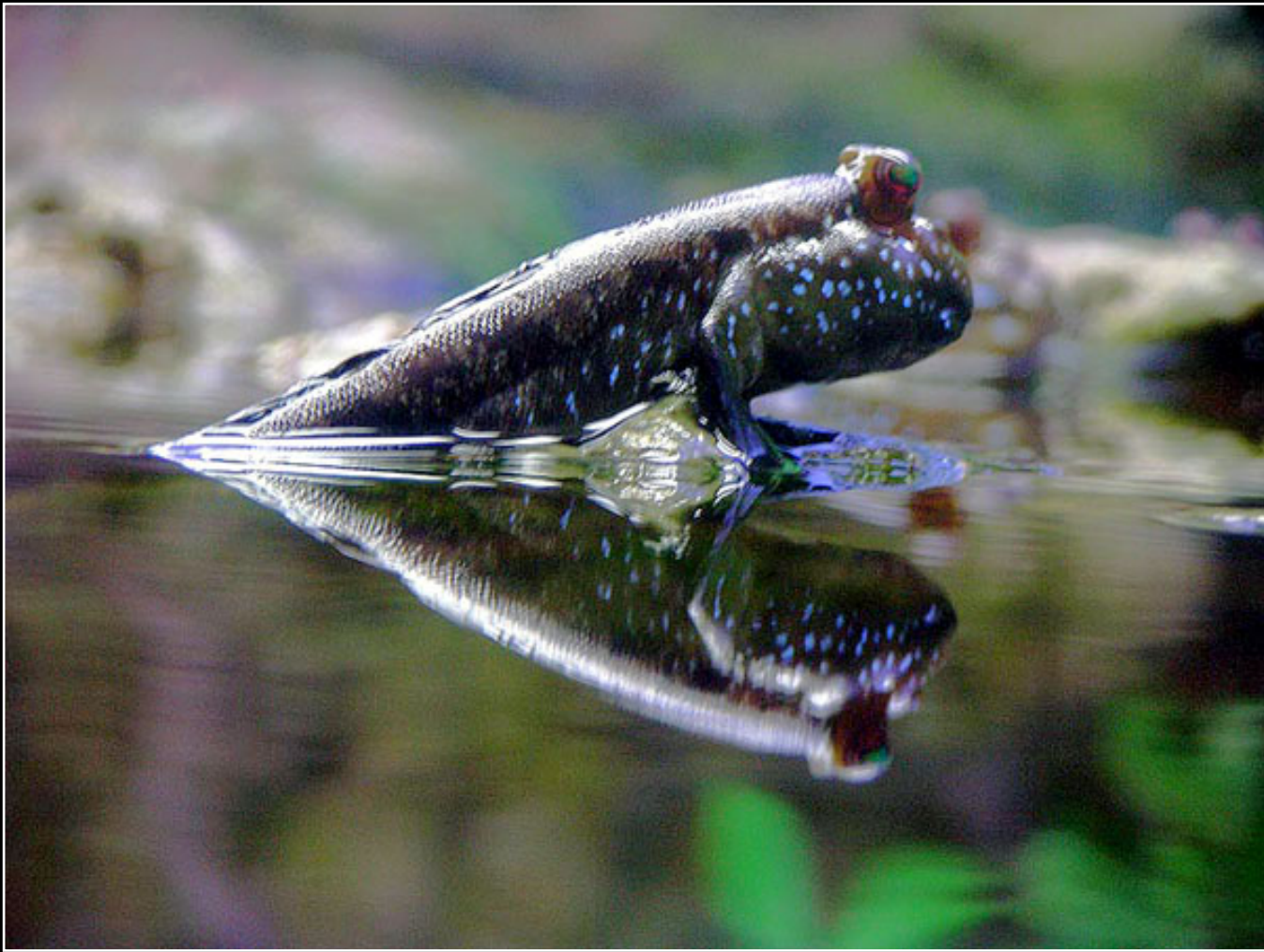
Koeranäoga kalad



Mart Jüssi
BO 62
Tartu 2023

© KAIDO HAAGEN





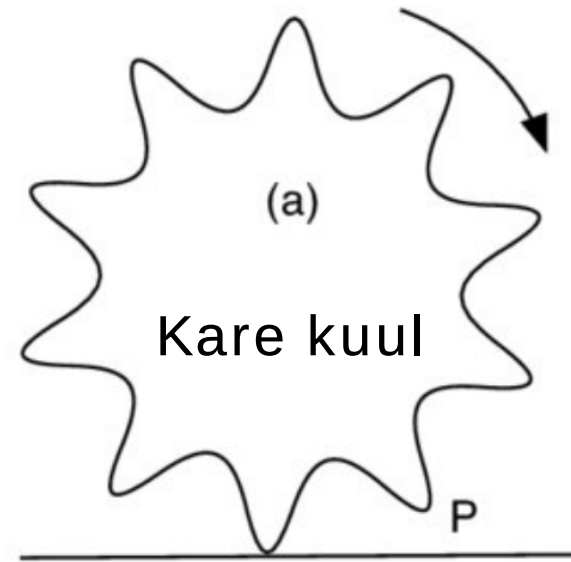
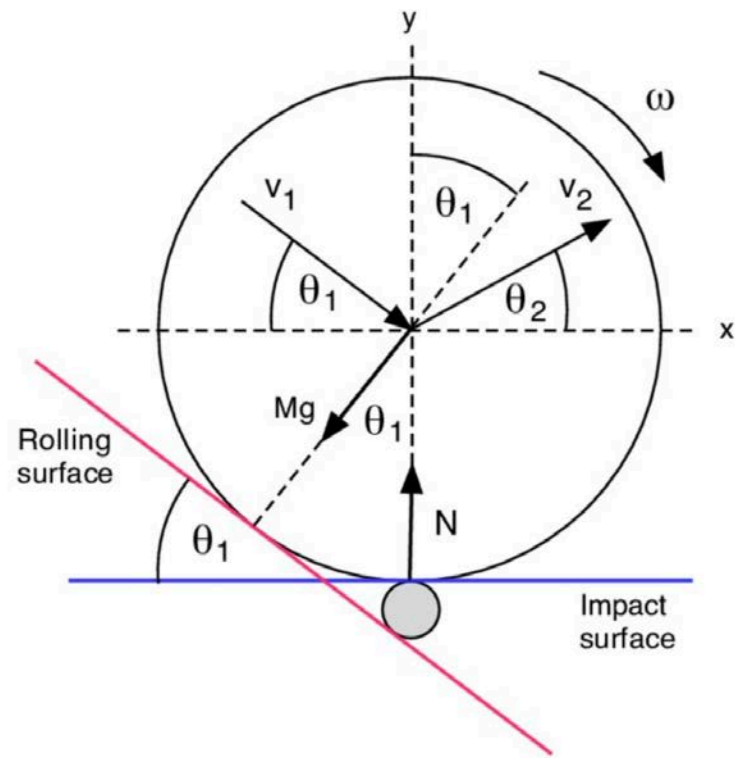




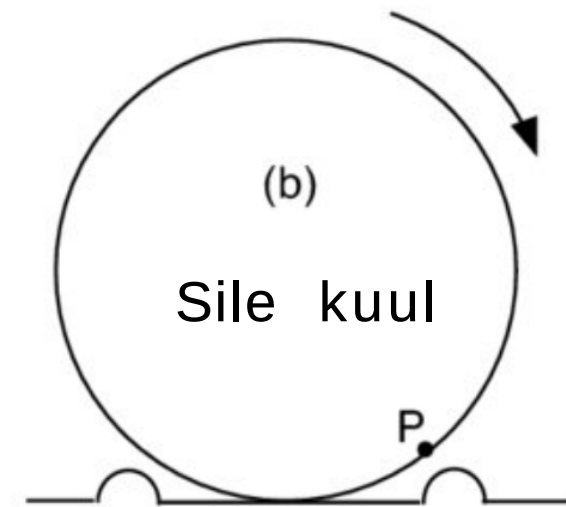
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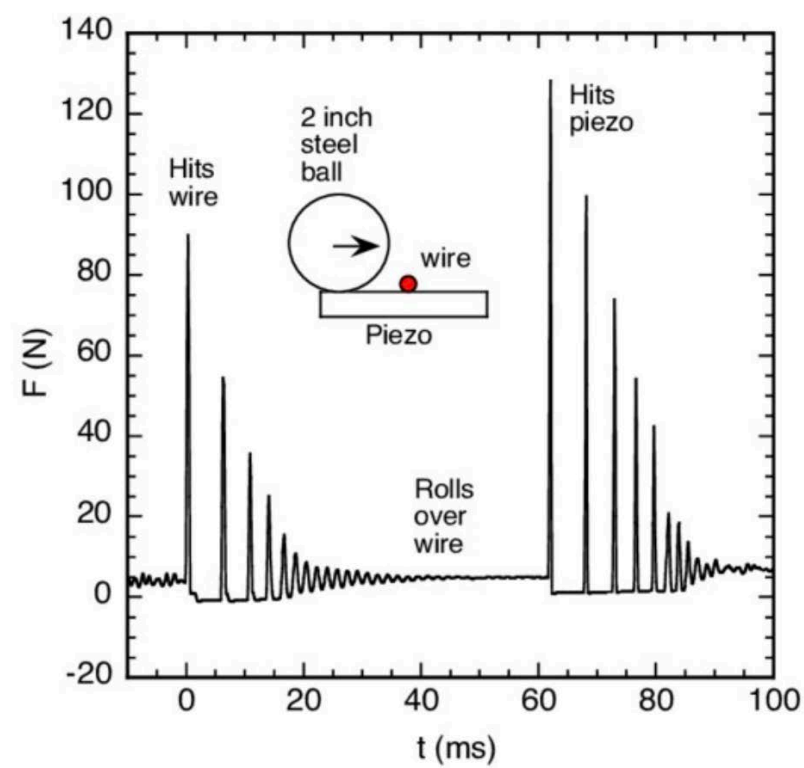
Hüljes on tegelikult kuul!

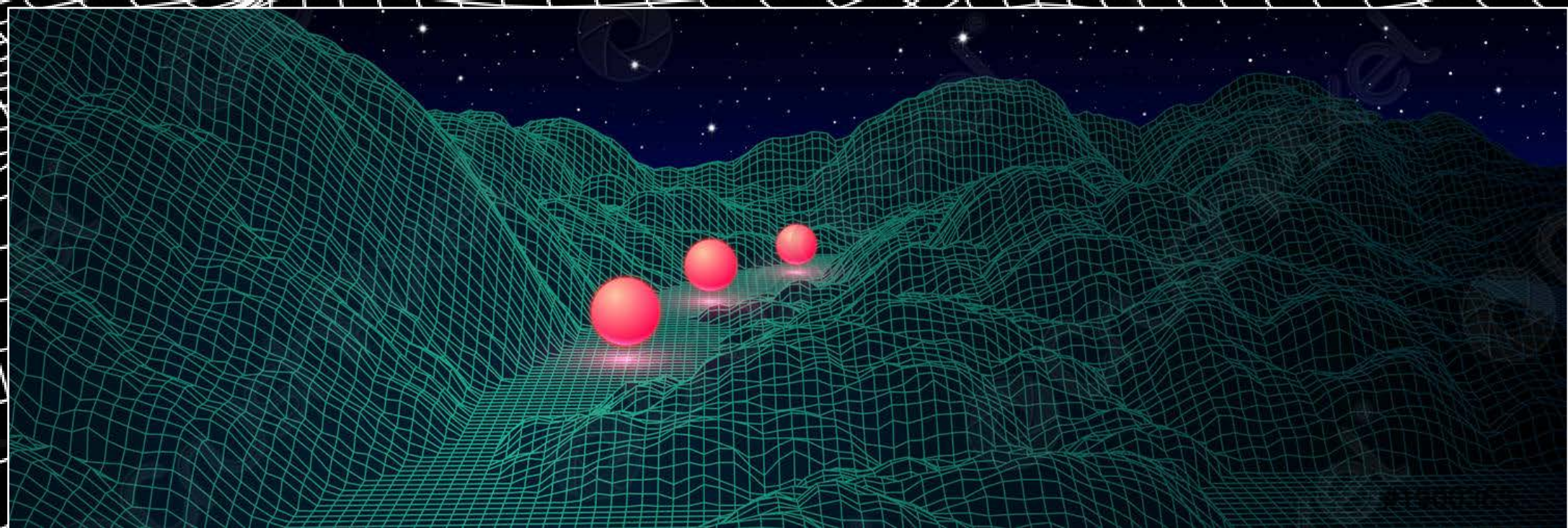
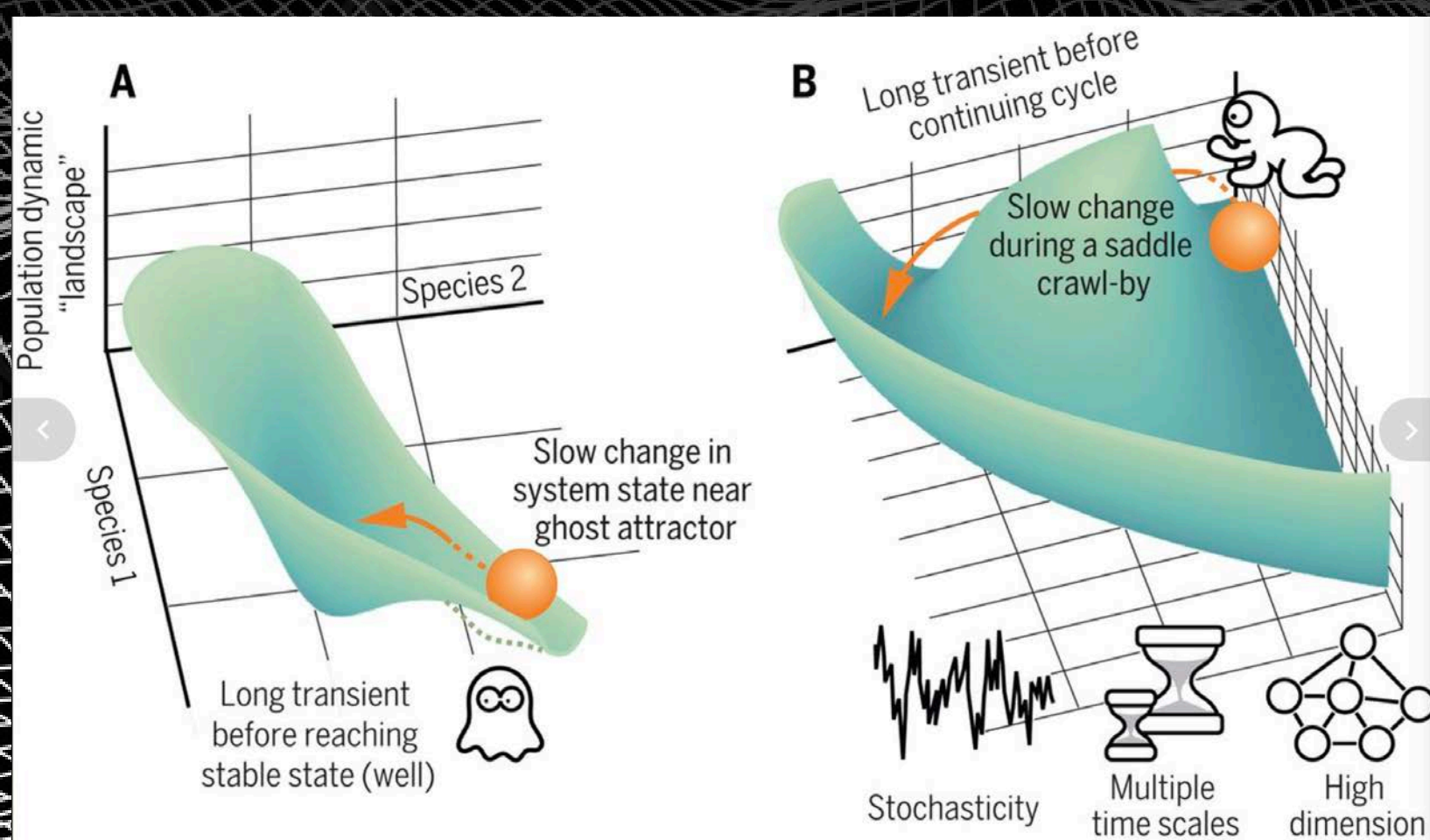


Sile pind



Kare pind





Hastings et al. Science 2018

Hüljes kui teoreetiline mudel-loom

Kolmes mõõtmes “vabalt veerev”
vee - elanik

- Varusigija, kes kogub terve aasta, et kuu aega kulutada

Kõik hülged on võrdsed (pikk iga, üks järglane aastas)

- Mõjudele tundlik kiskja



Bioloogiline mitmekesisus
Kala ja kalandus
Reostus ja keskkonna tervis
Meresõiduohutus, naftareostus
Eutrofeerumine
Kliimamuutused
Ruumikasutus



**Soome lahe aasta
2014**



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Foto: Kaido Haagen

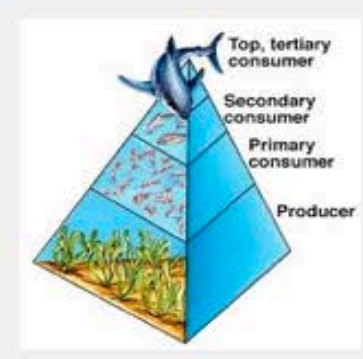
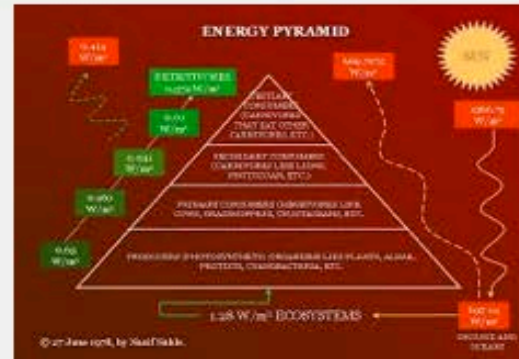
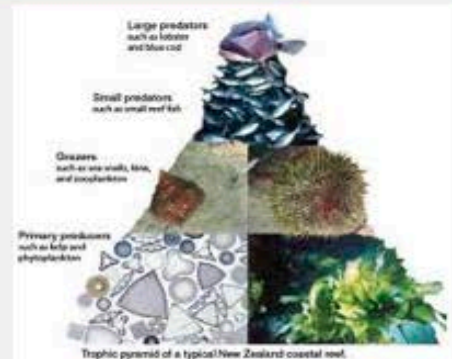
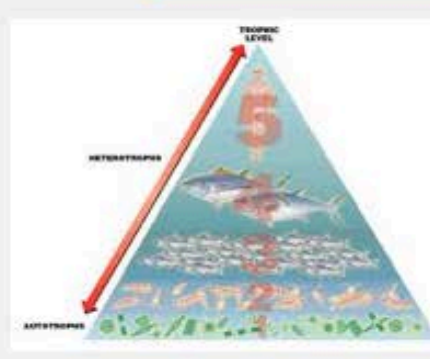
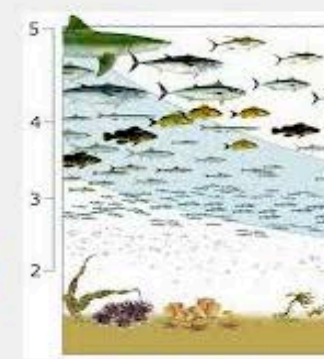
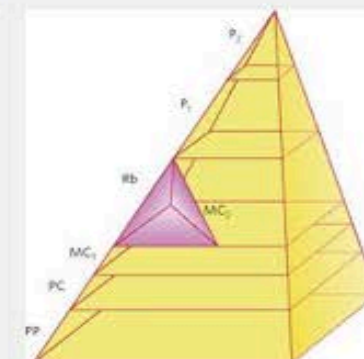
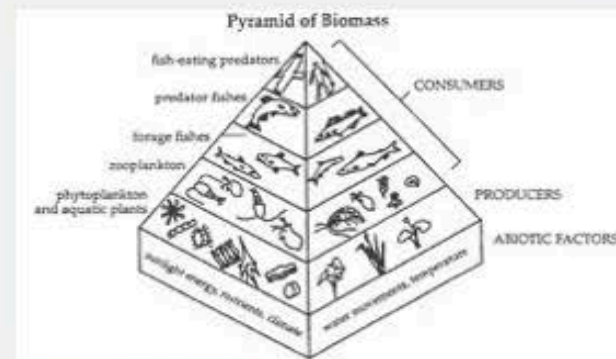
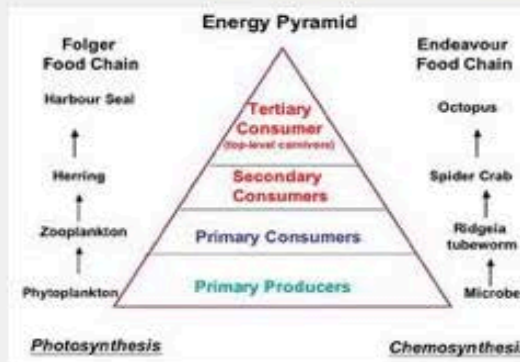
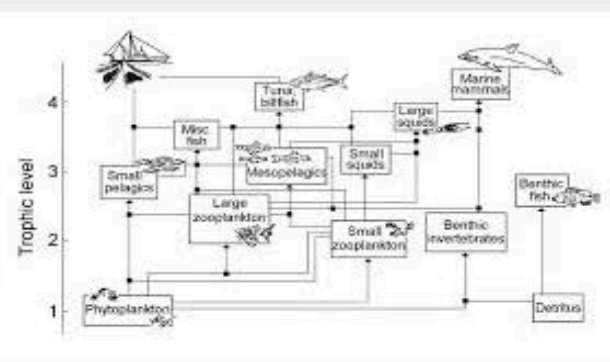
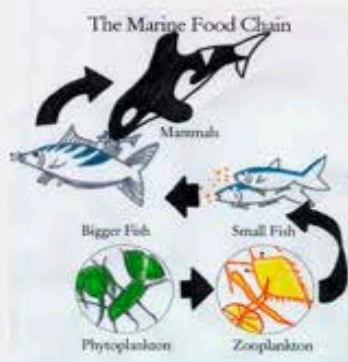
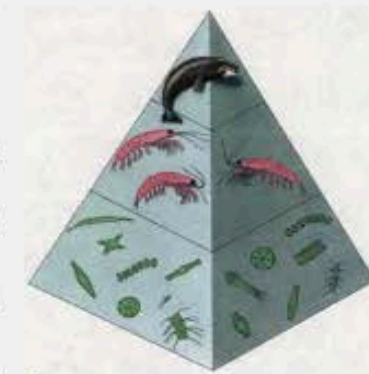
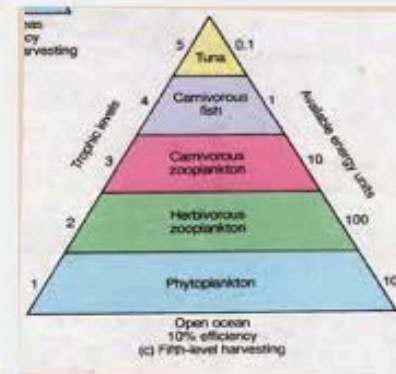
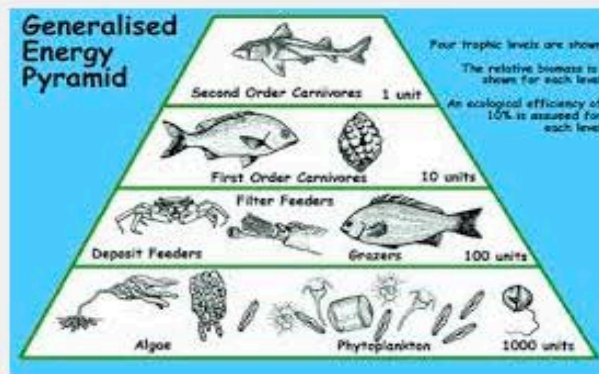
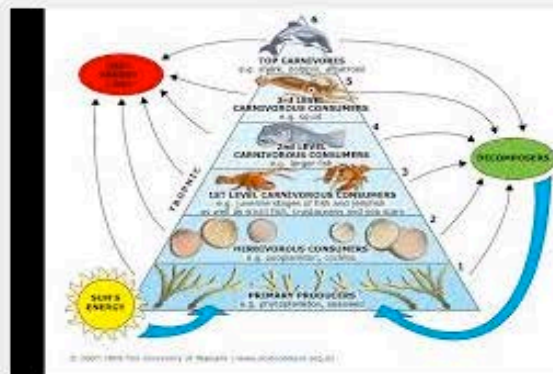
Bioloogiline mitmekesisus

Eutrofeerumine
Kala ja kalandus



© KAIDO HAAGEN

Foto: Kaido Haagen





© B. Worm



Foto: ESA/EnviSat



Foto: Dreamstime



Foto: Tiitu Toom



Foto: Mart Jüssi



Foto: Mart Jüssi



Foto: Ivar Jüssi

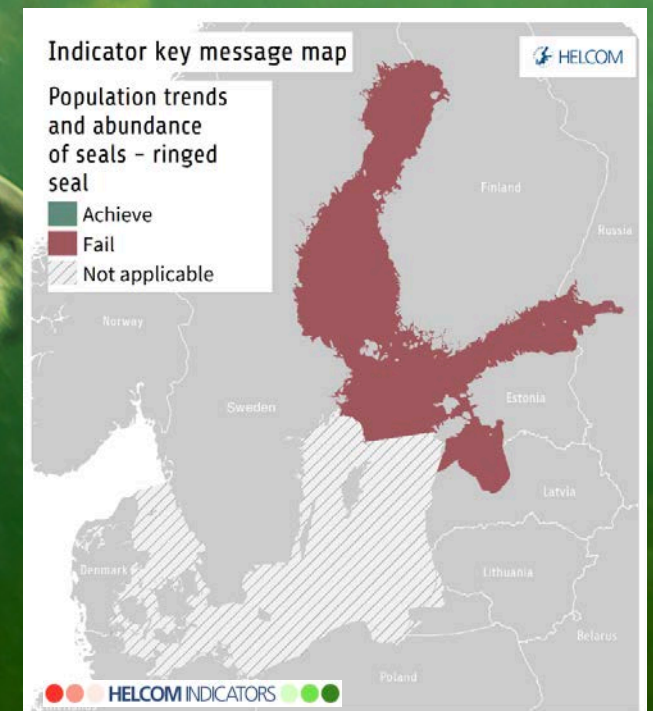
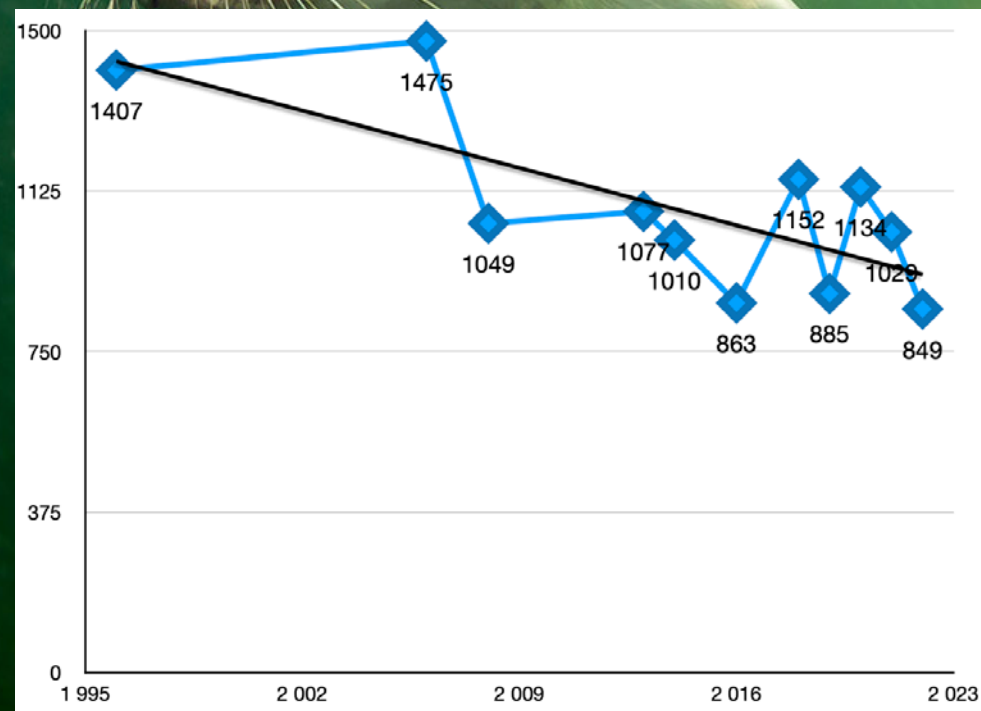
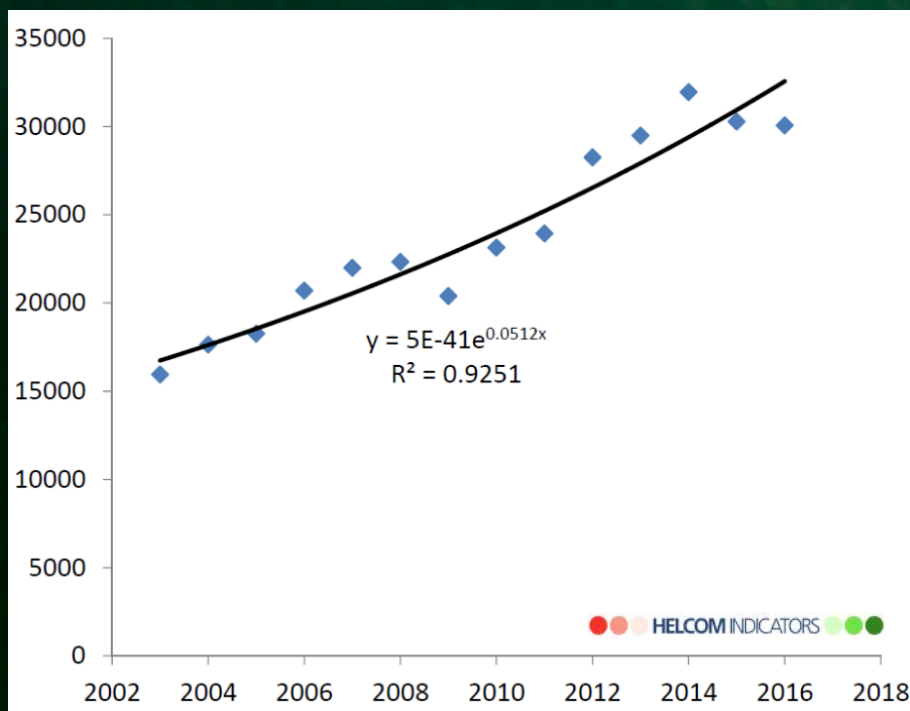
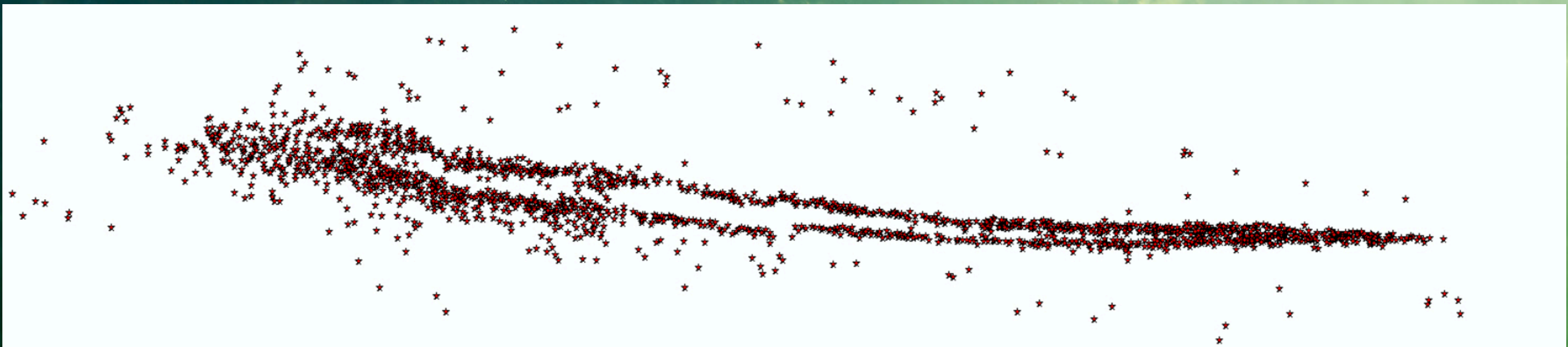


Foto: Kaido

Reostus ja keskkonna tervis

Meresõiduohutus, naftareostus



Foto: Raigo Pajula





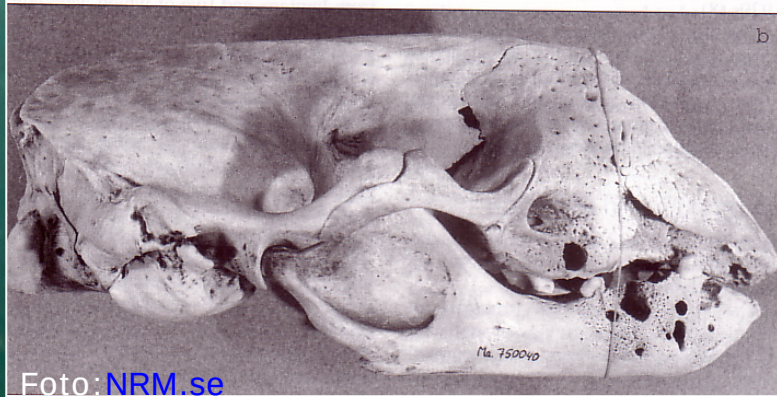


Foto: NRM.se



Foto: IWLEarn.net



Foto: NRM.se



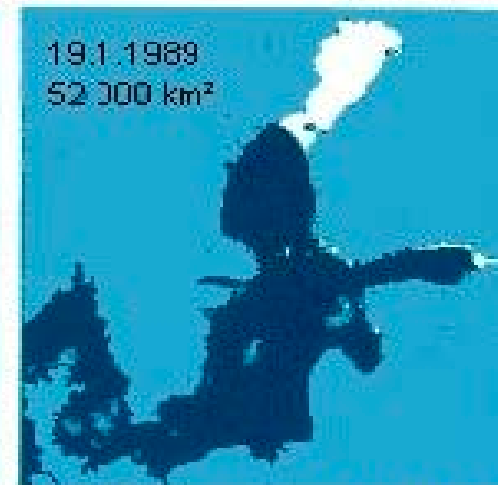
Foto: iStockphoto



Kliimamuutused



Foto: Mart Jüssi



Maximum ice cover during different years.



Foto: Aqqalu Rosing-Asvid



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Foto: Kaido Haagen





Realia et naturalia

MART JÜSSI

Living on an edge:
land-locked seals in changing climate

DISSERTATIONES
BIOLOGICAE
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TARTUENSIS
231



Foto: Mart Jüssi

Rannikujää 18.3.2007 (2020 jää



Foto: Agga Lu Rosina-Asvid



Foto: Rein Kuresoo



Foto: Mart Jüssi

3°C 2016-03-16 11:05:41



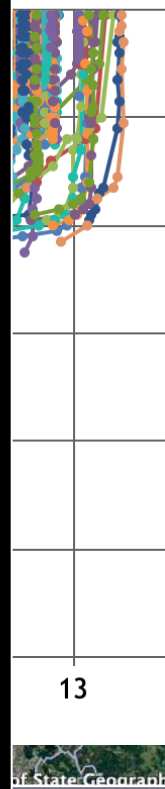
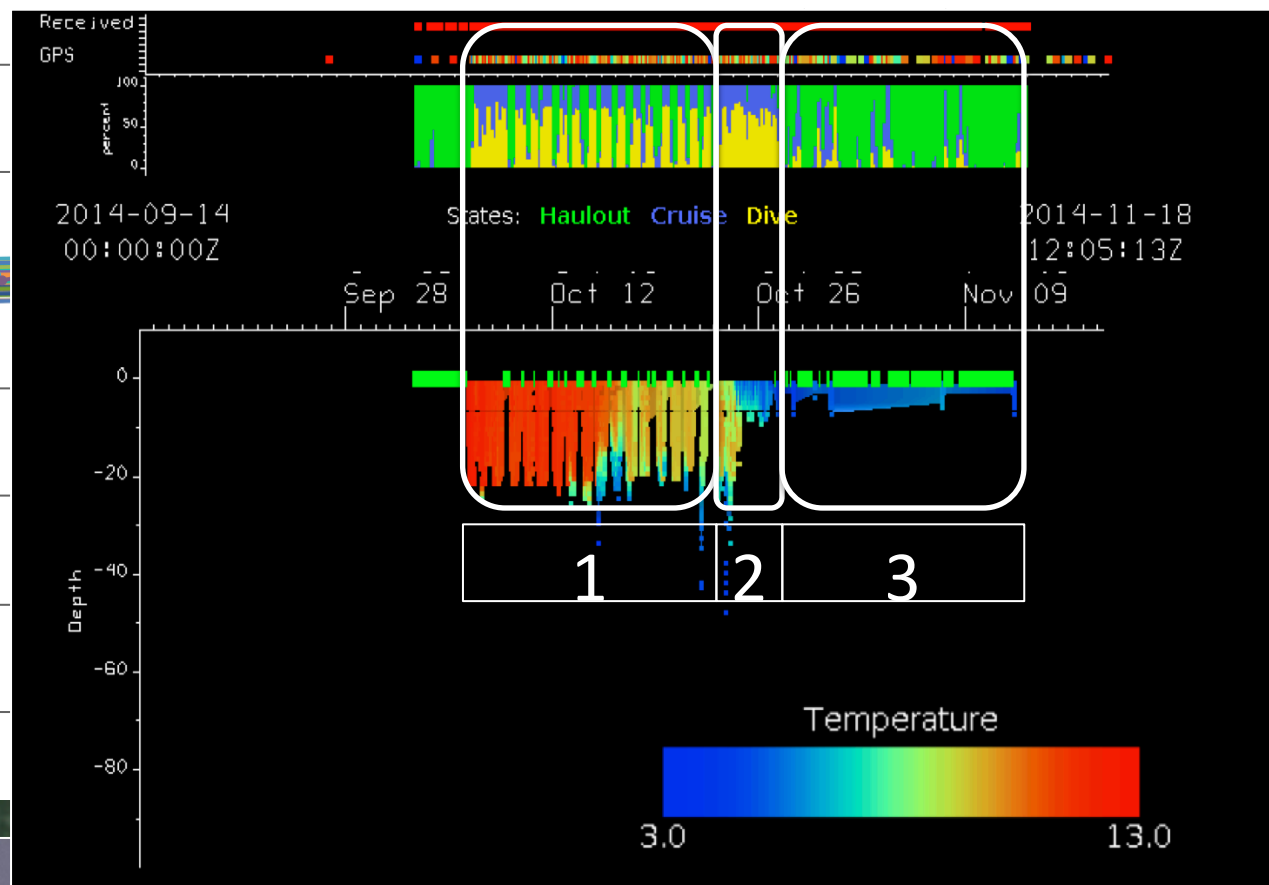
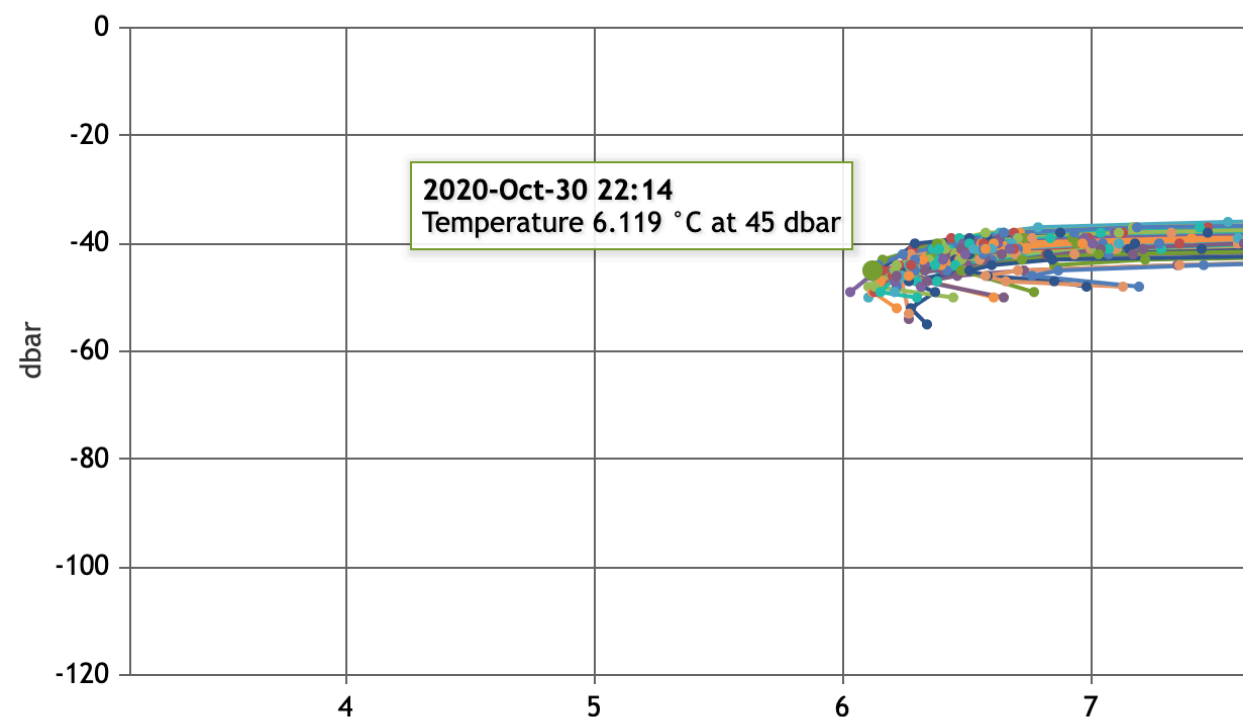
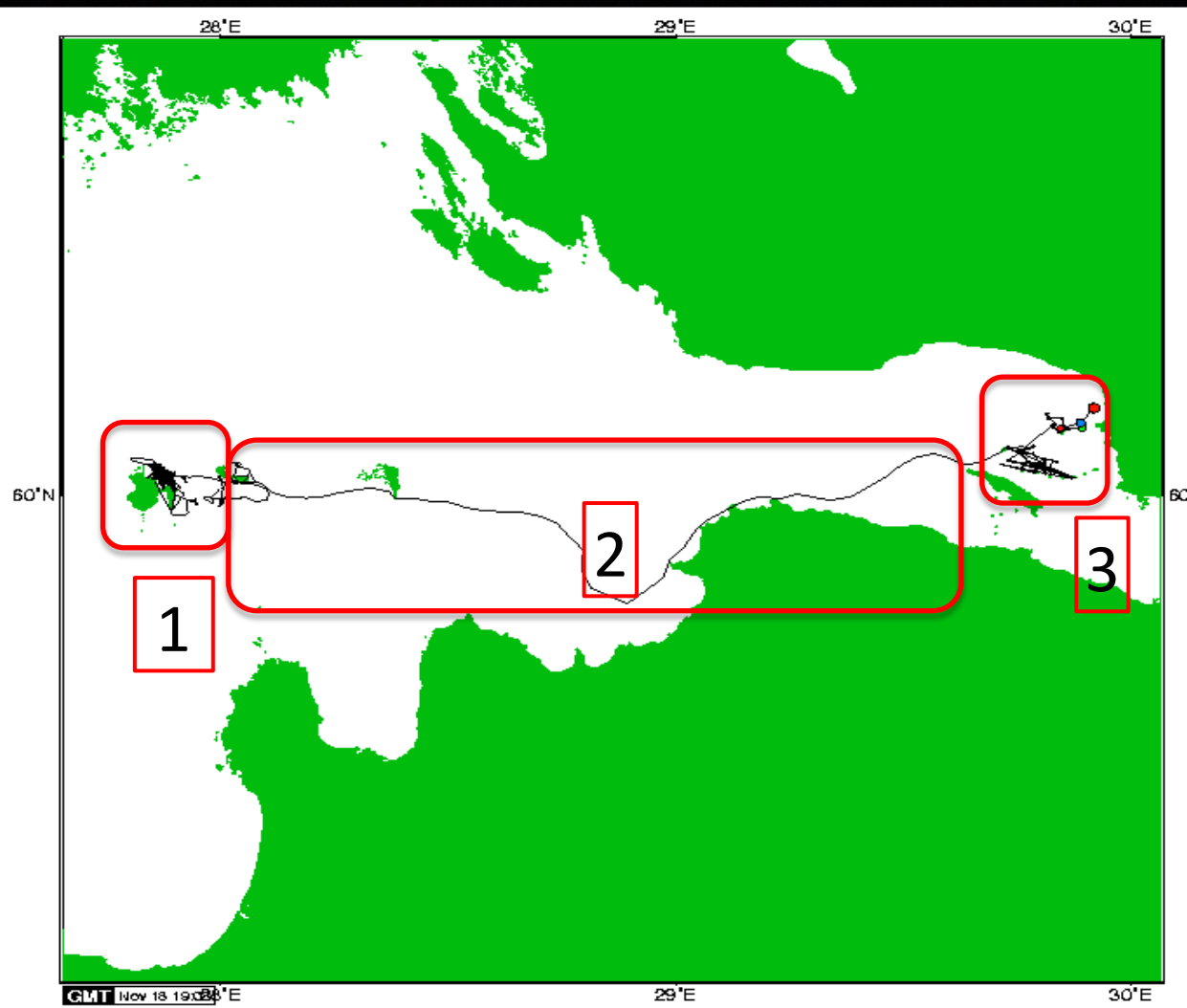
Foto: Ilmar Saabas

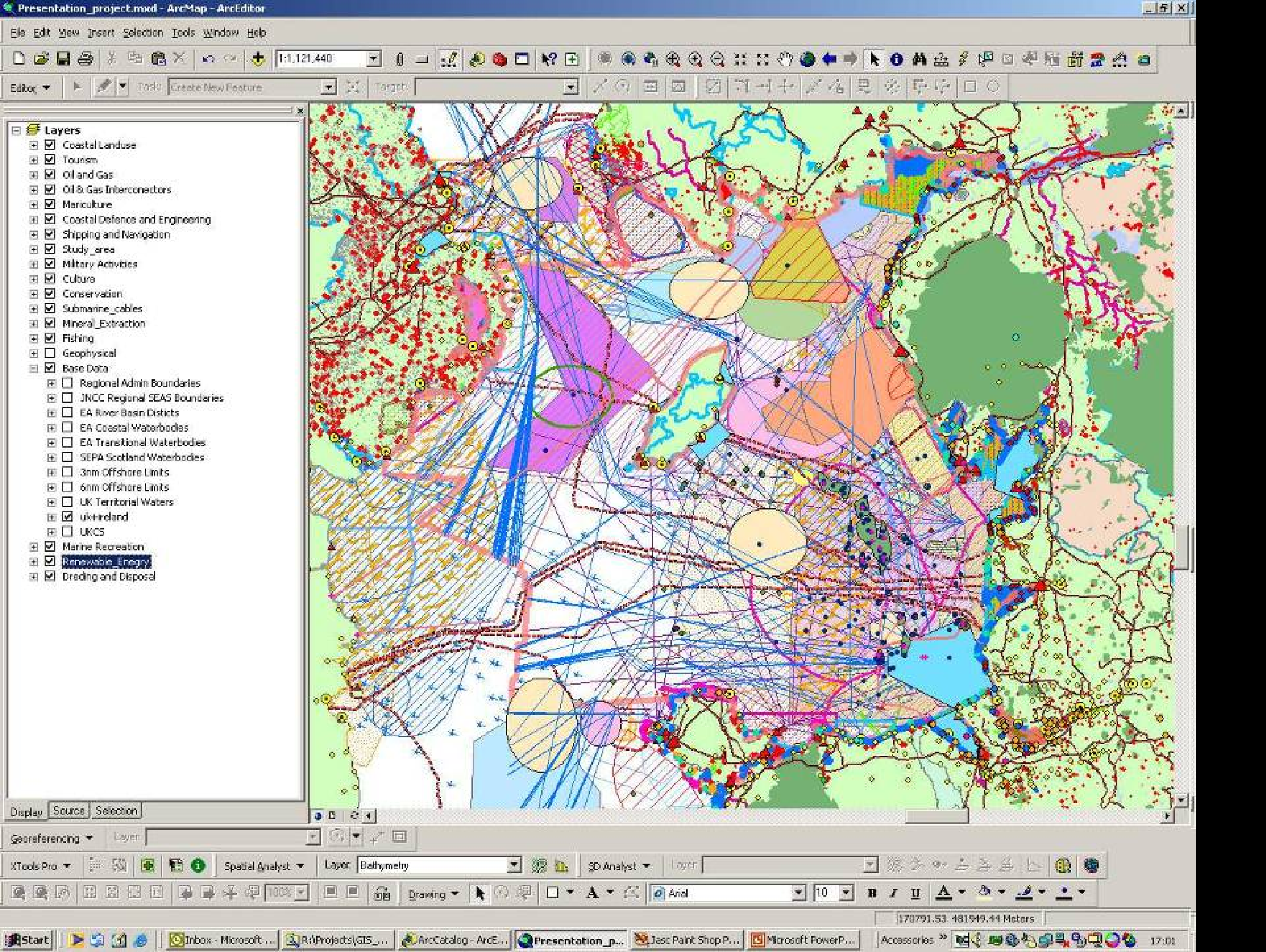
Ruumikasutus



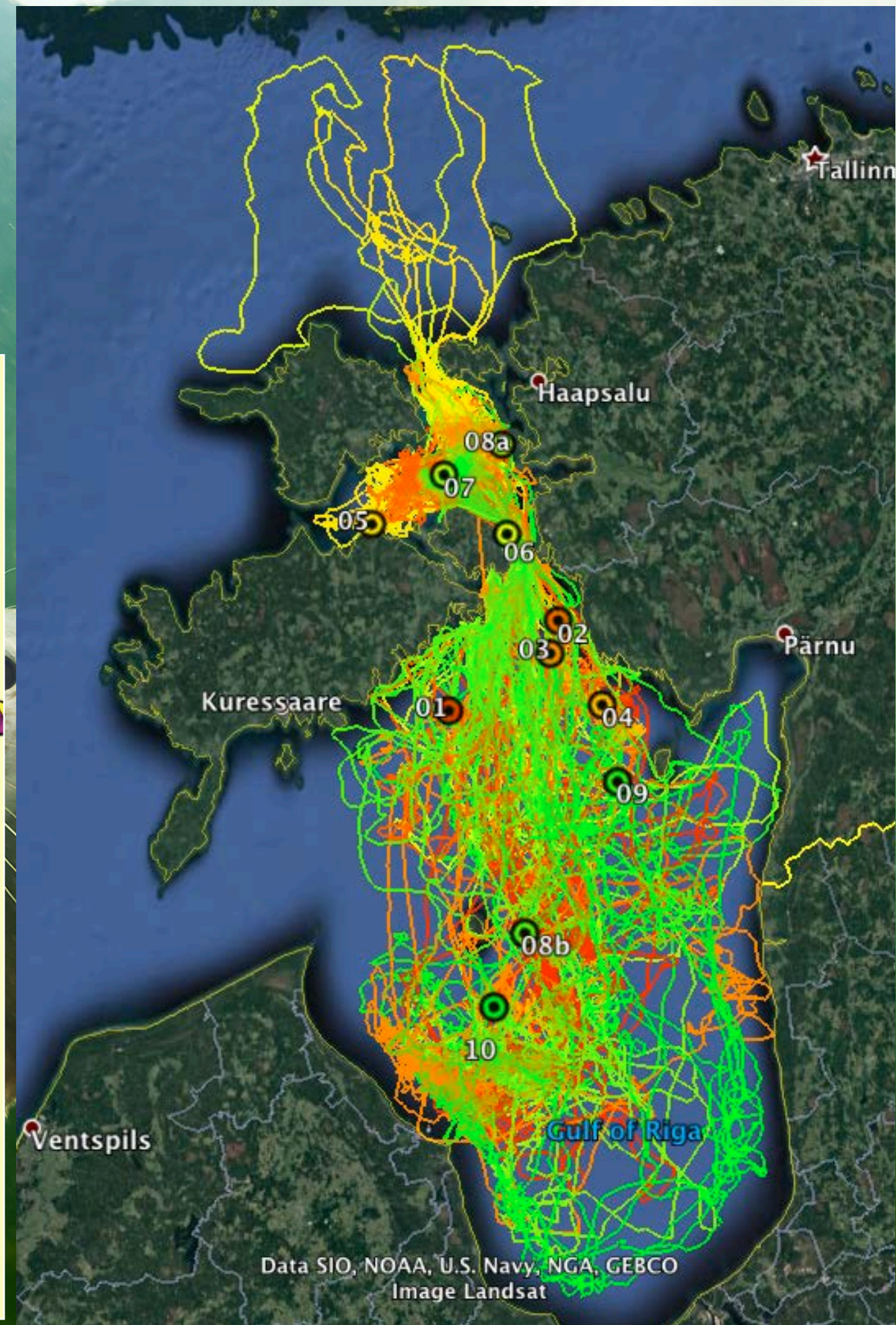
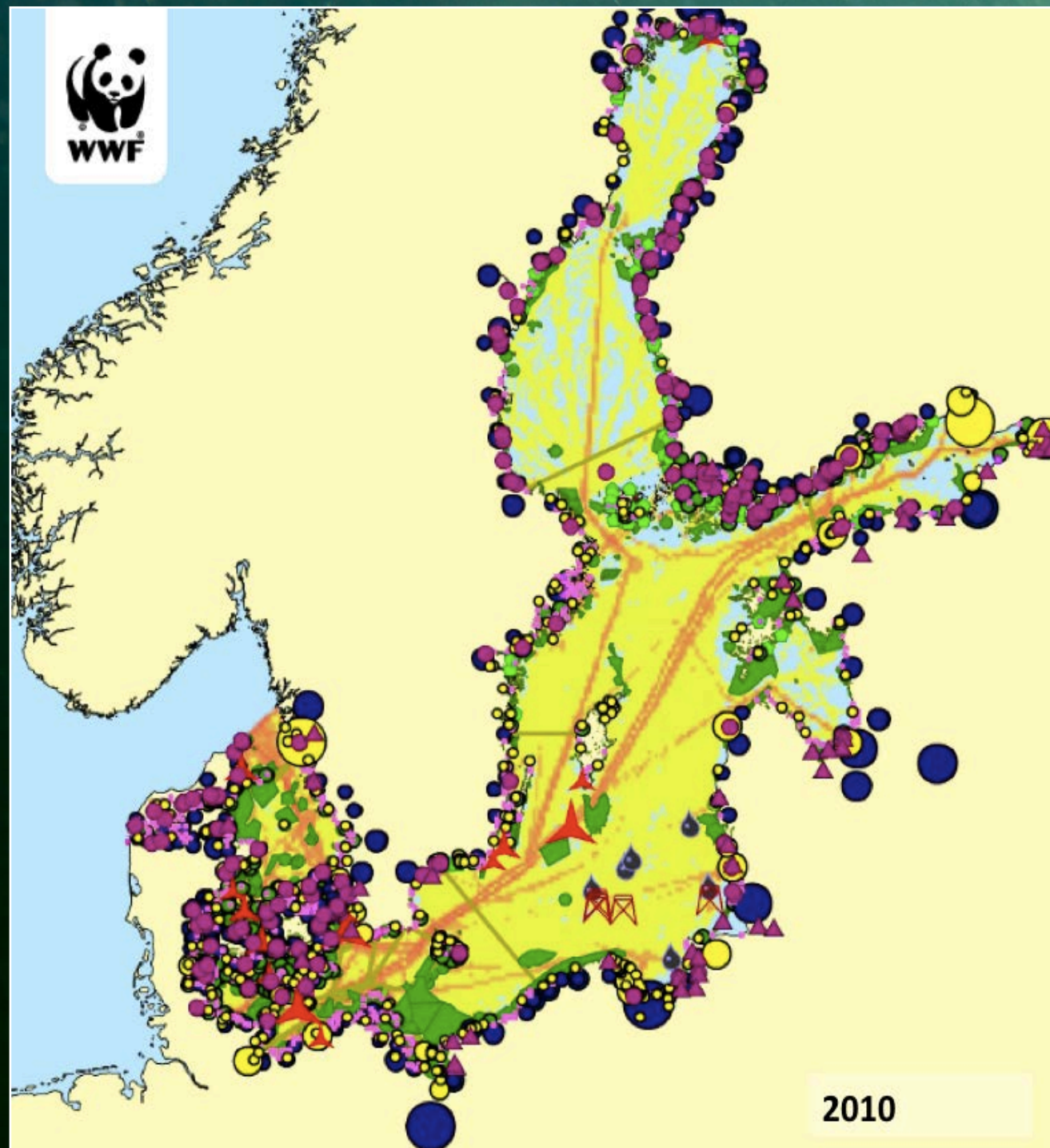
FastLoc GPS/GSM

hg73-038 (De

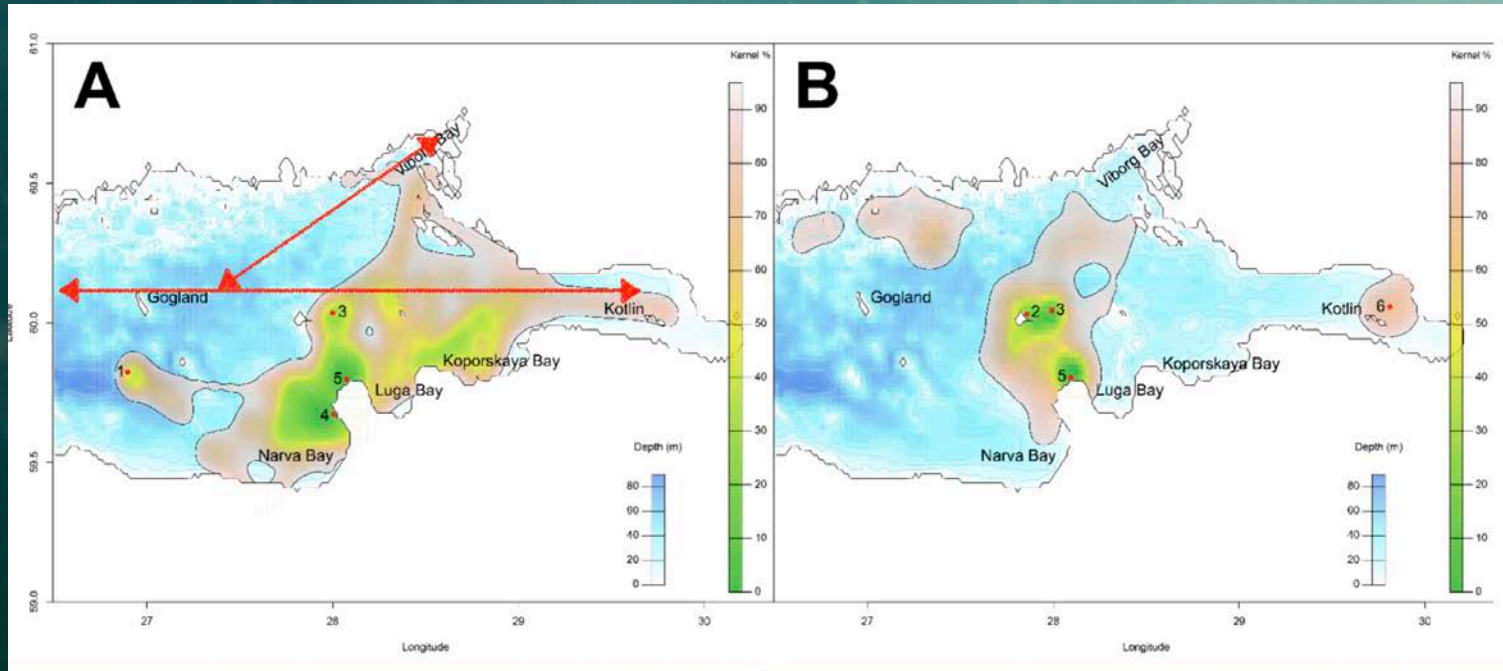




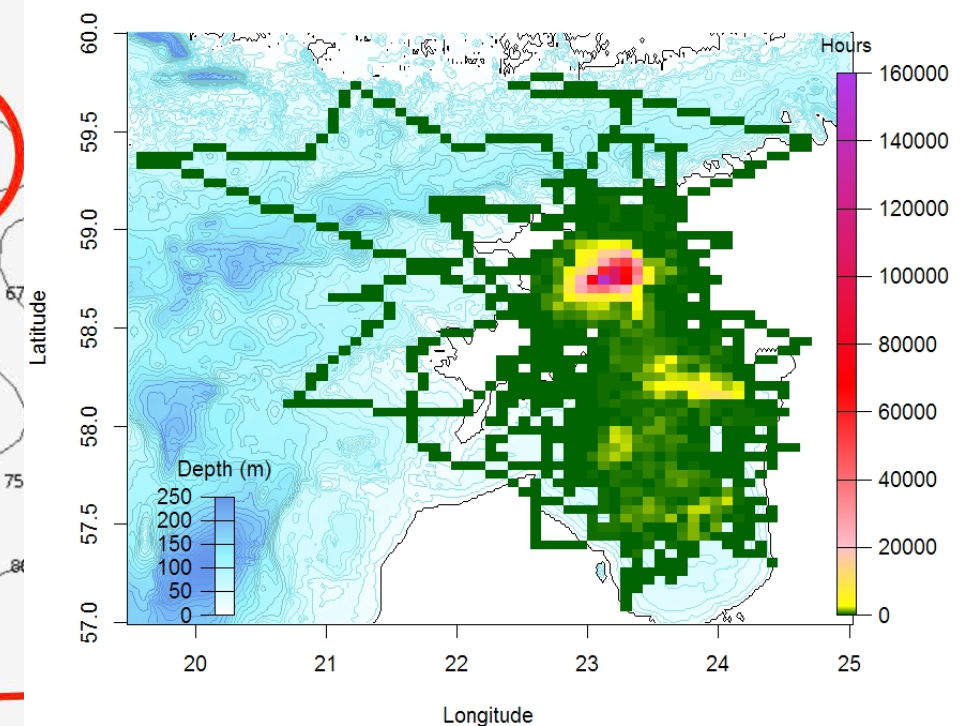
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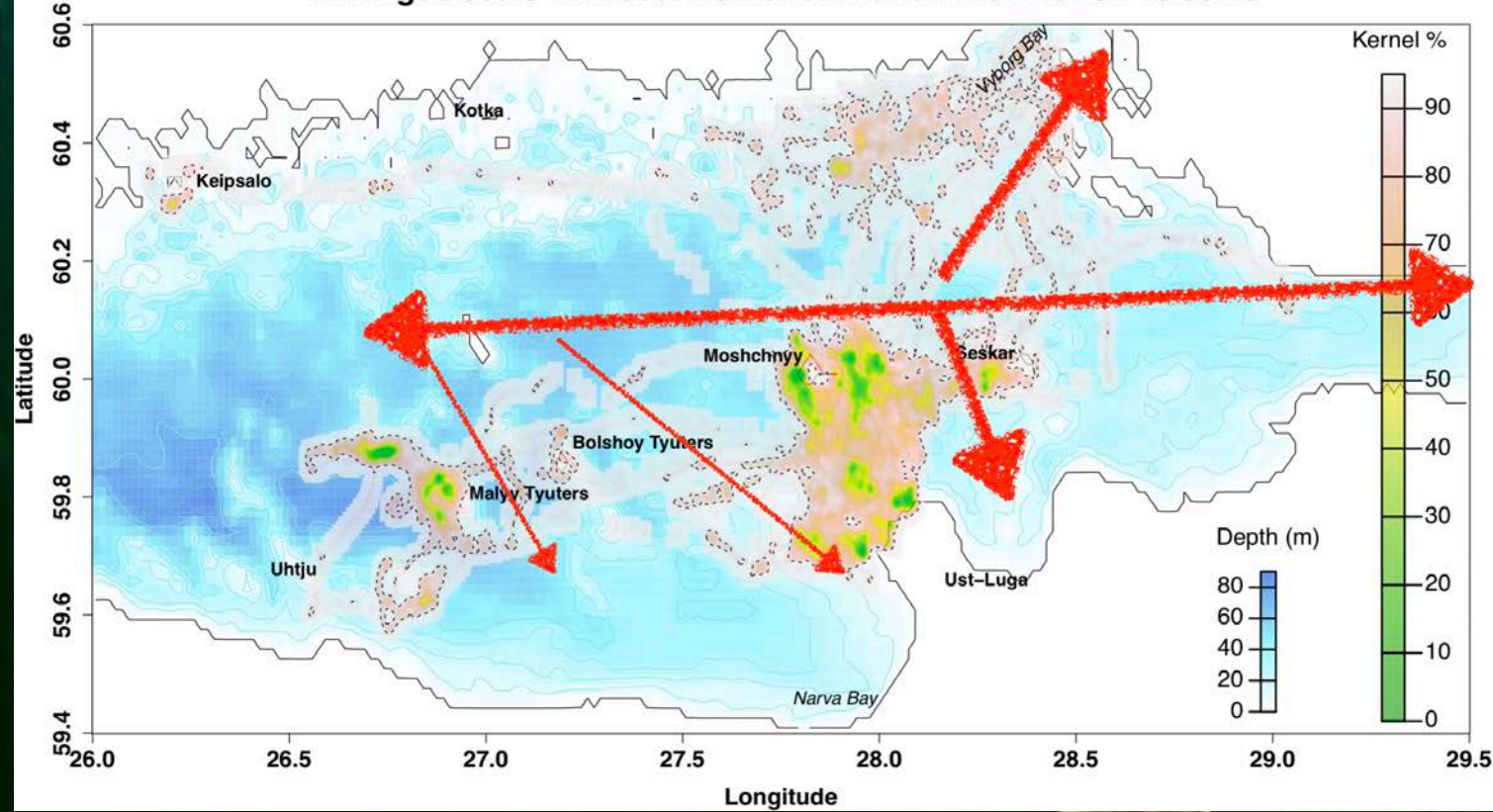
Ruumikasutus



Kõik 10 Argos viigrit 5km ruudustikus



11 Ringed seals with 95% Kernel Utilization Distribution 18.09.18



20 GPS viigri andmed 5 km ruudustikus

