

Een jaar in het kielzog van de fint

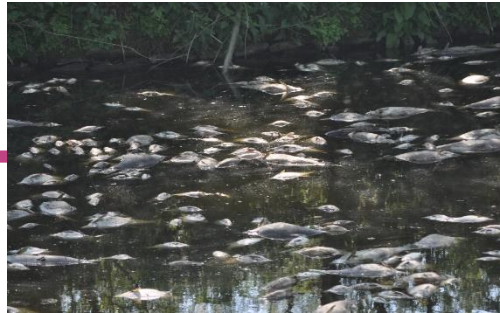
Pieterjan Verhelst
Team Aquatisch Beheer
INBO

INSTITUUT
NATUUR- EN BOSONDERZOEK



They're back!

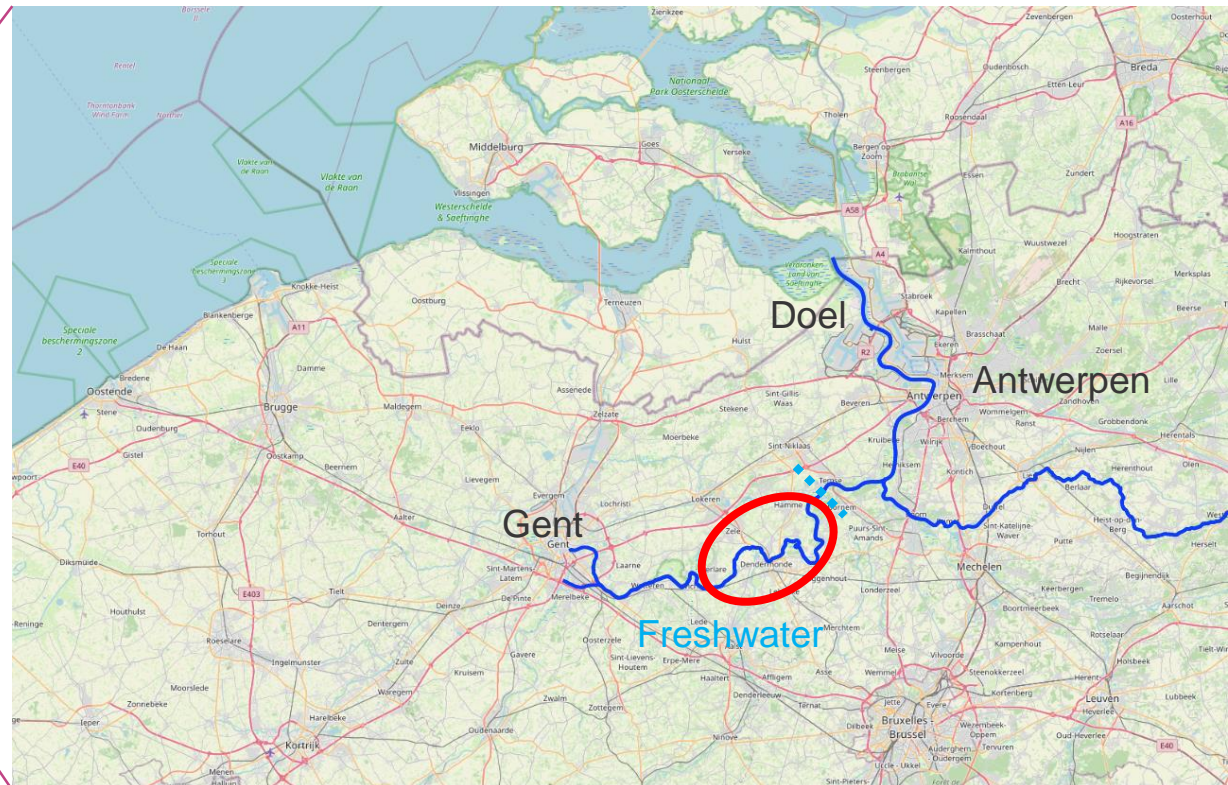
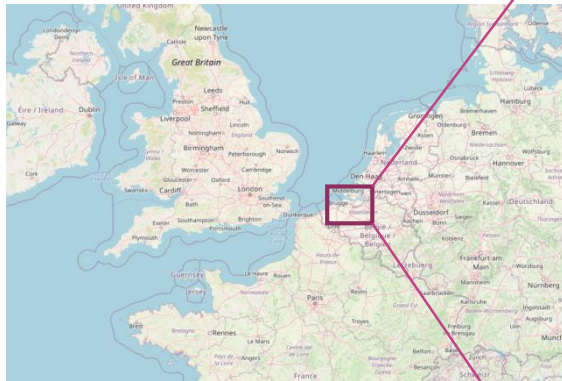
1905
Vervuiling



1996
koelwater estuarium
Doel

2002

2014
paai



Akoestische telemetrie



Akoestische telemetrie

Jaar	External of internal	Aantal	Overleving (%)	Returners (% van overlevers)
2015	External	8	5 (62%)	0
2016	External	26	23 (88%)	0
2017	External	5	4 (80%)	0
2018	External	2	1 (50%)	0
	Internal	3	0 (0%)	0
2019	External	1	0 (0%)	0
	Internal	4	4 (100%)	2 (50%)
2020	Internal	19	16 (84%)	7 (44%)
2021	Internal	37	29 (78%)	11 (38%)
2022	Internal	52	49 (94%)	TBD
2023	Internal	92	TBD	TBD



Settings:

69 kHz

Ø 9 mm

Lengte: 24 mm

Gewicht: 4 g

30 – 60 s

Ca. 20 maanden



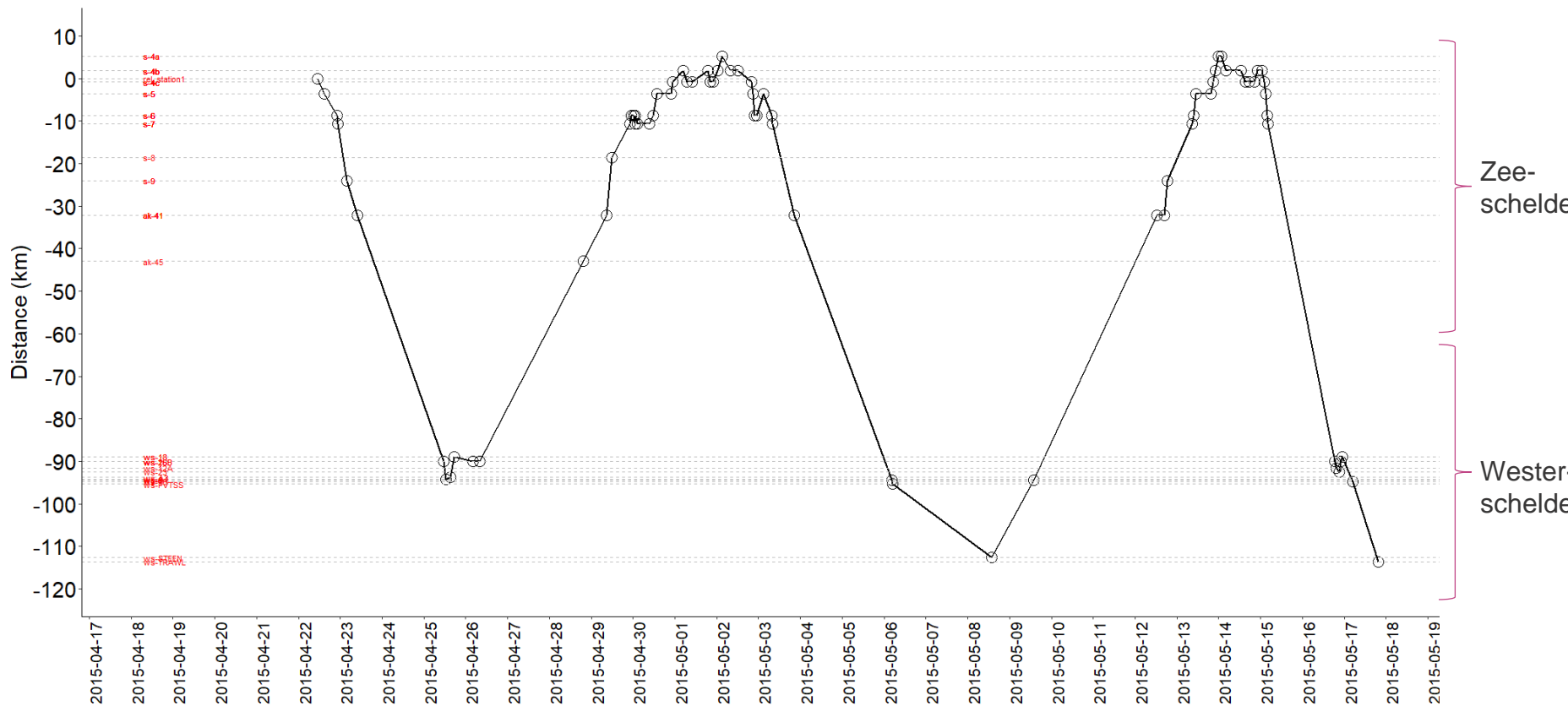
Akoestische telemetrie



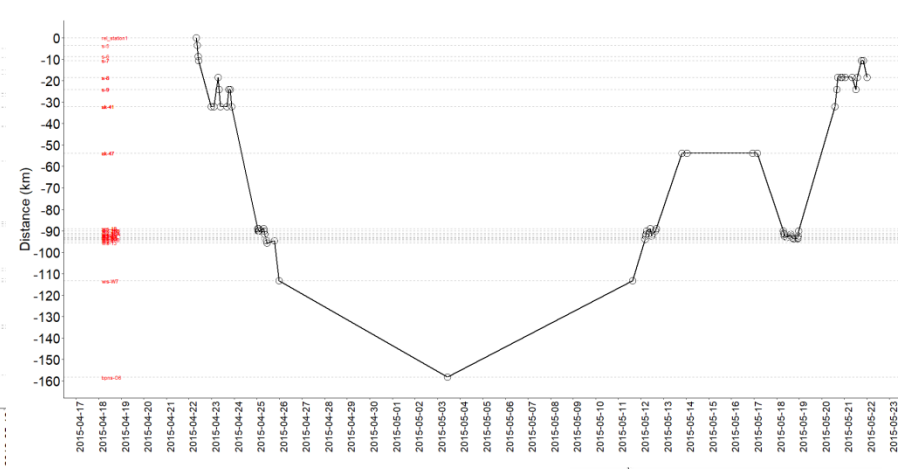
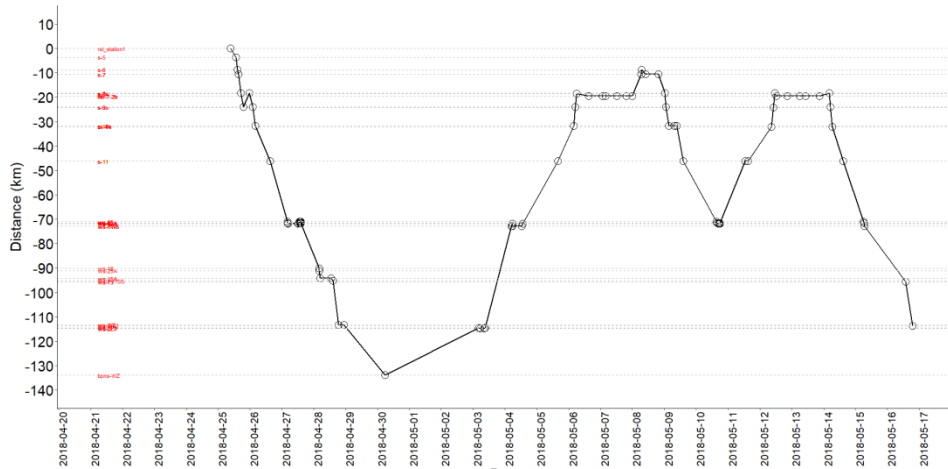
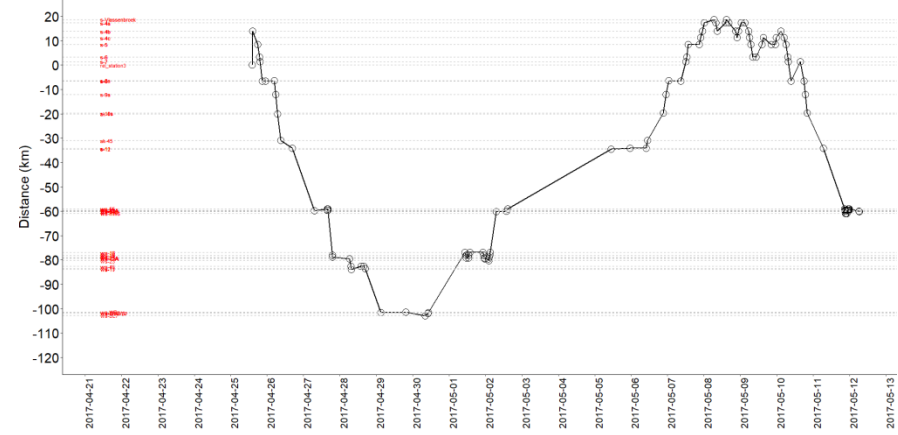
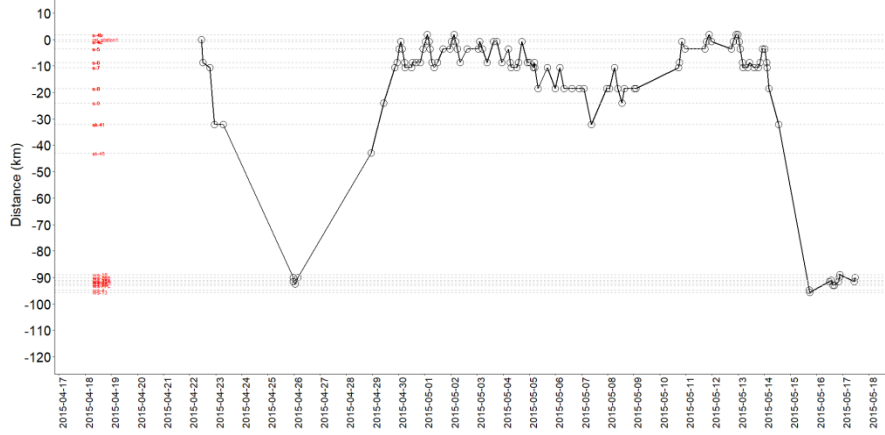
Akoestische telemetrie



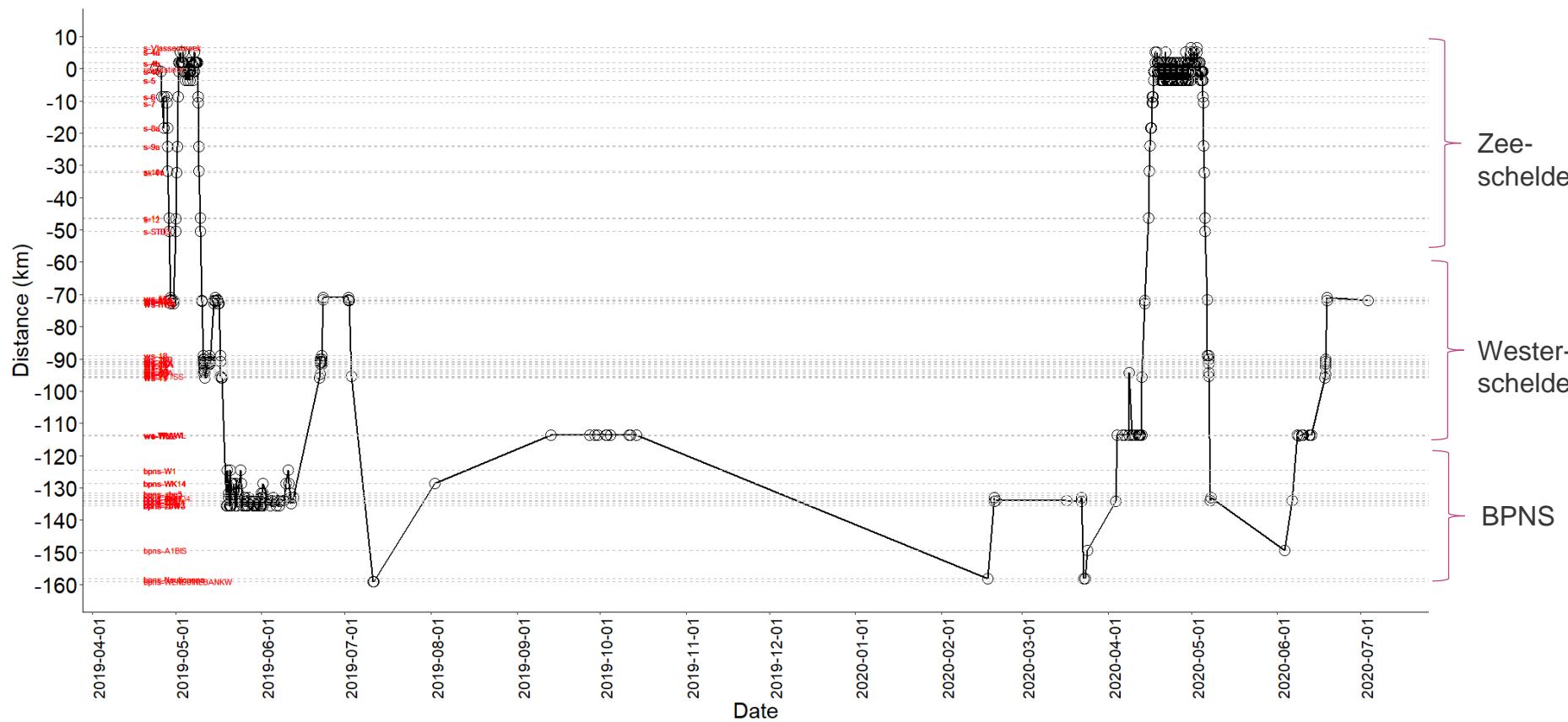
'In den beginne'



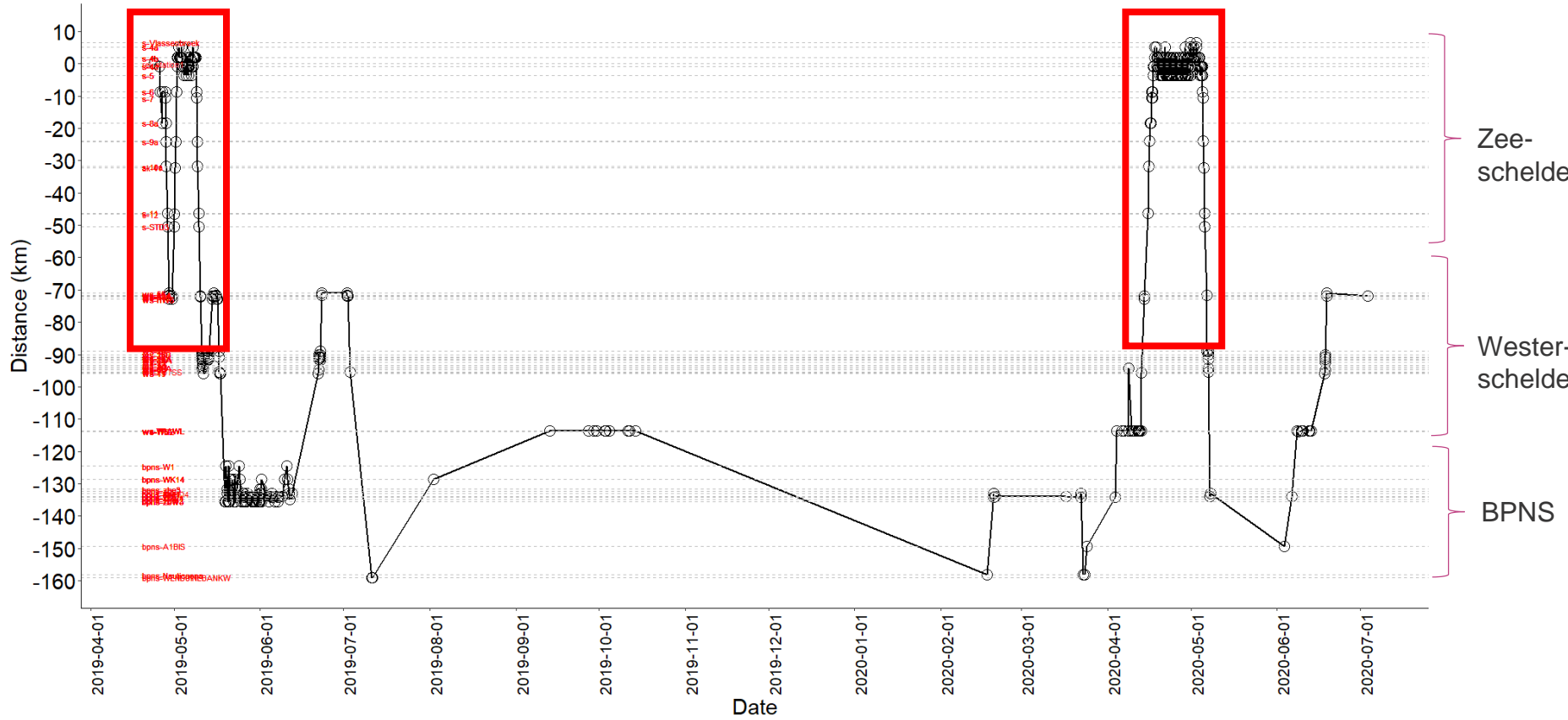
'In den beginne'



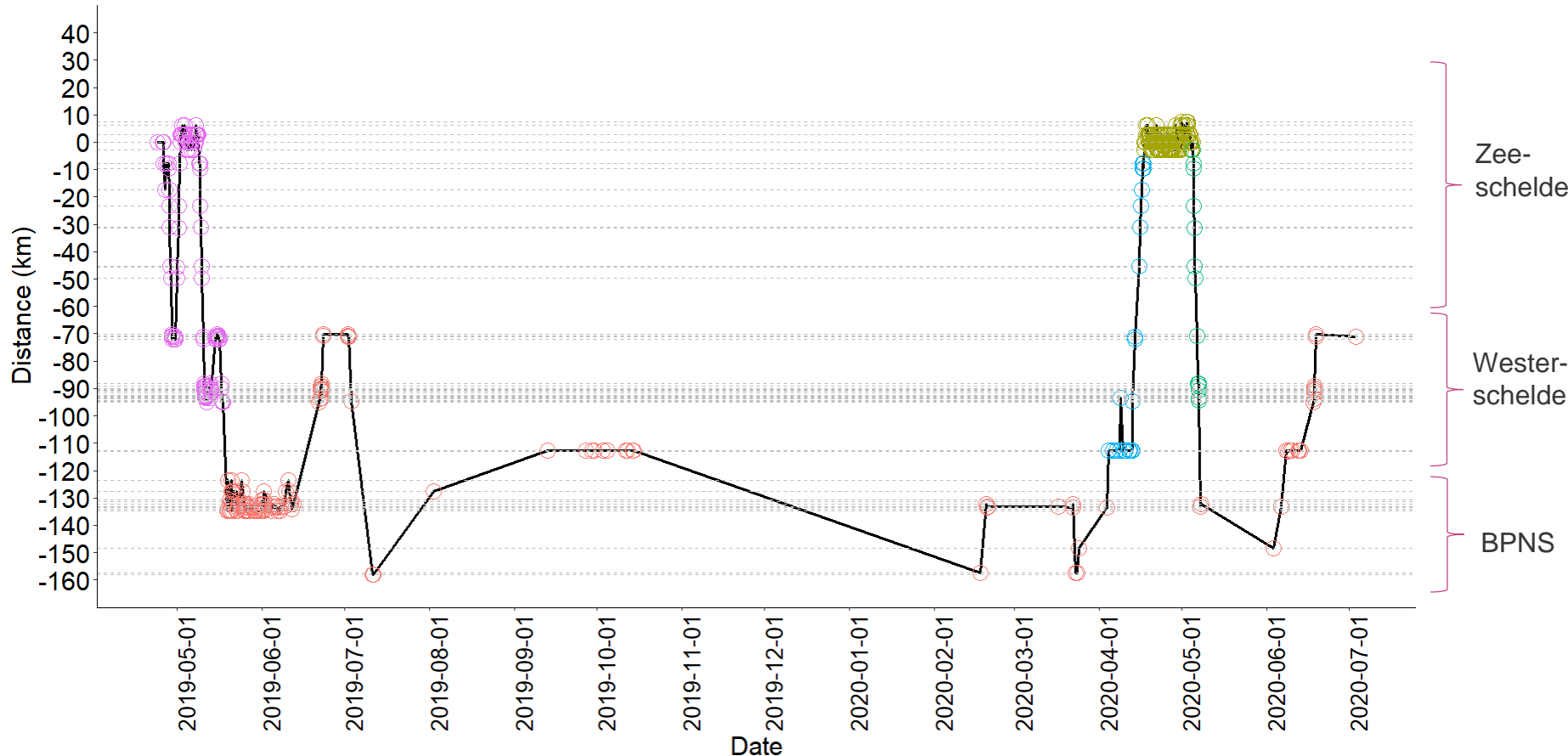
Returners



Returners



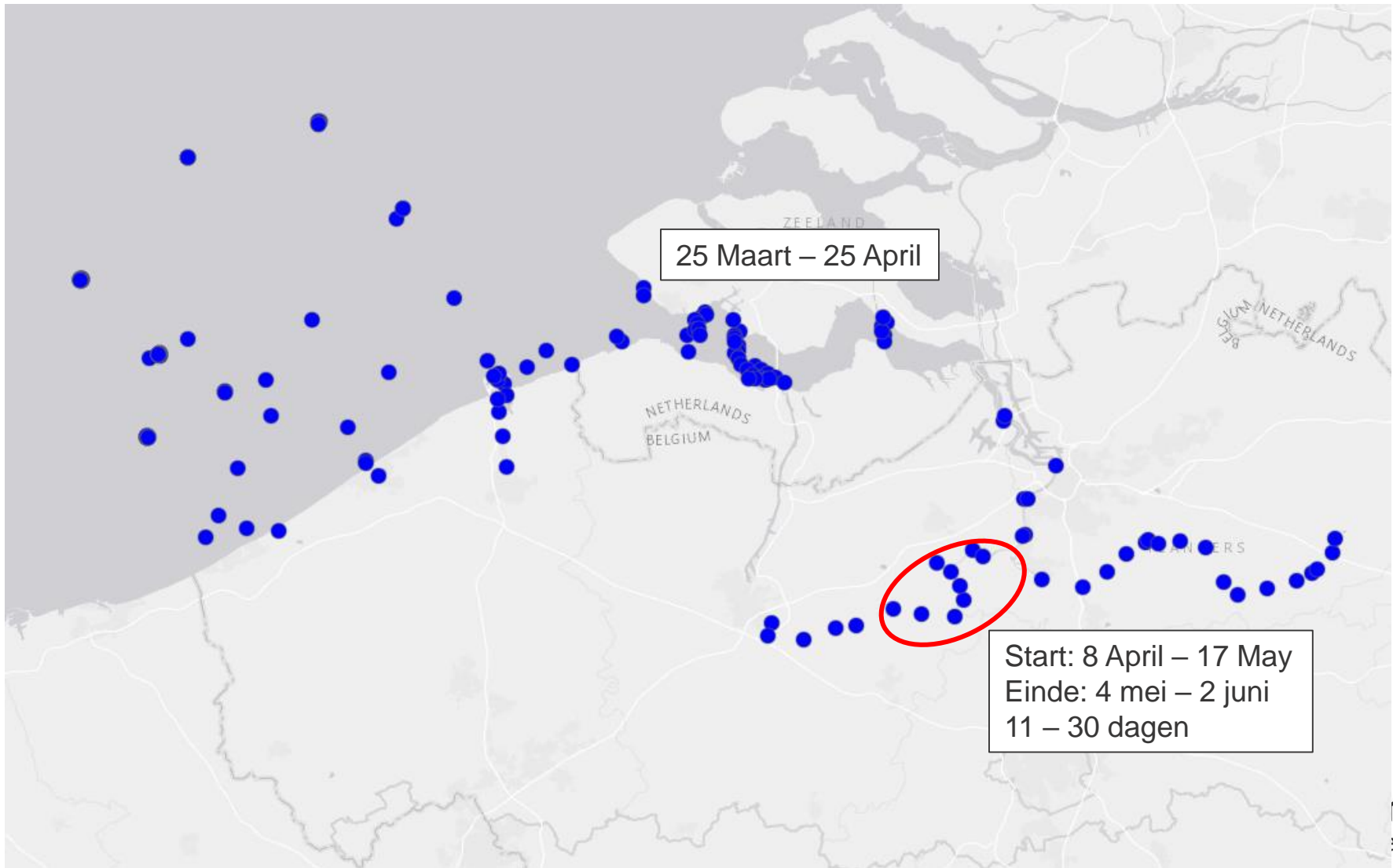
Returners



● Tagging effect
● Foerageren

● Opwaartse migratie
● Paai
● Afwaartse migratie

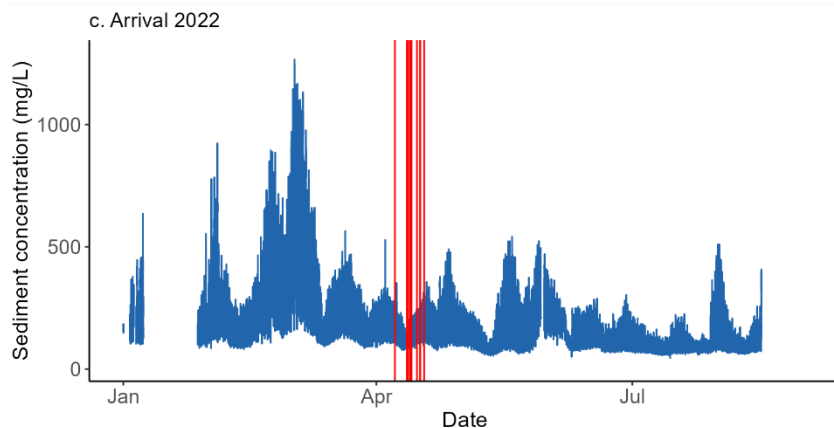
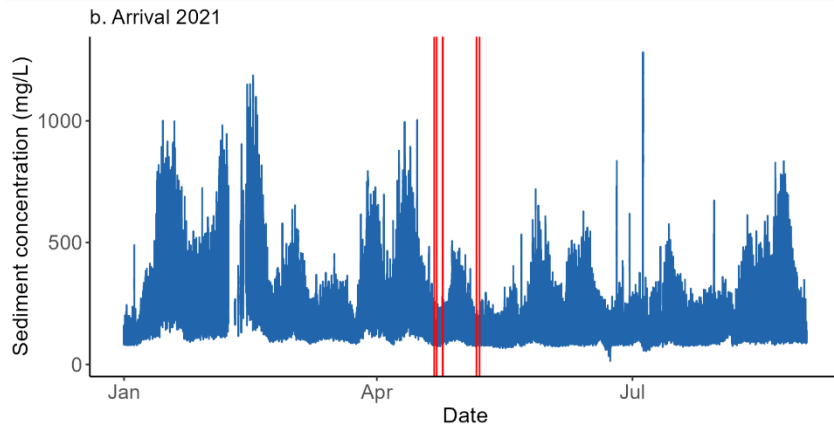
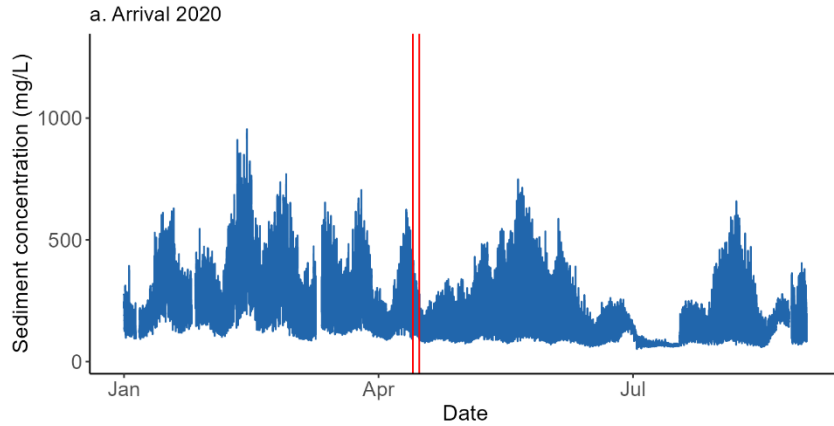
Returners – paaimigratie



Returners – paaimigratie

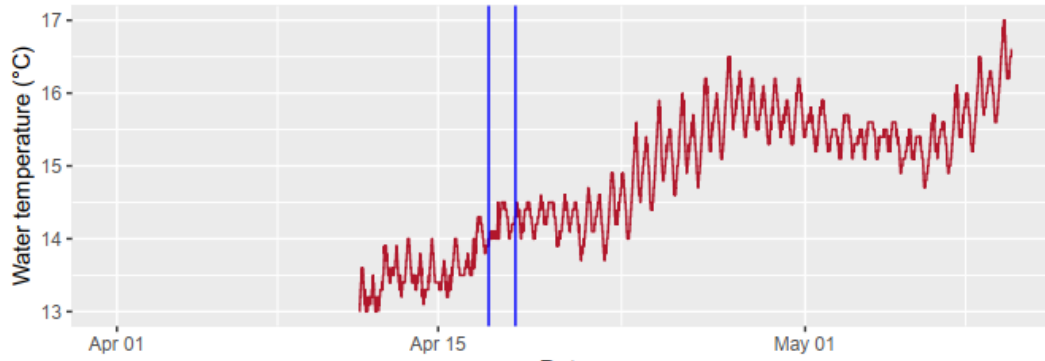
Sediment concentratie

< 250 mg/L



Returners – paaimigratie

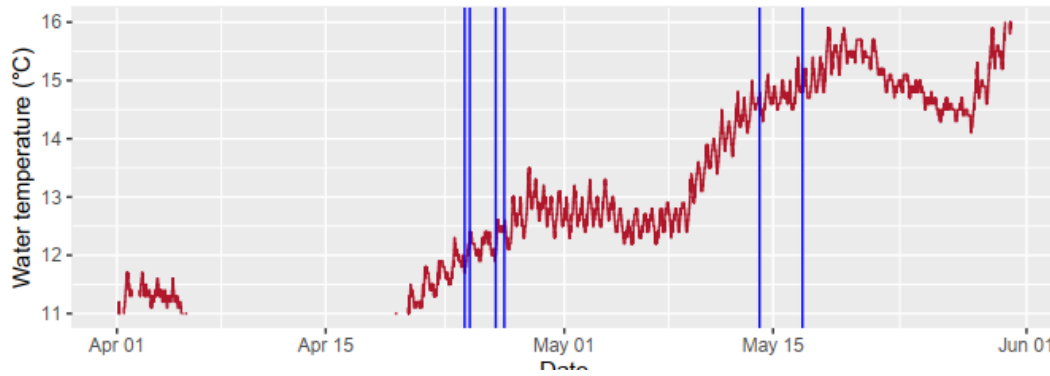
2020



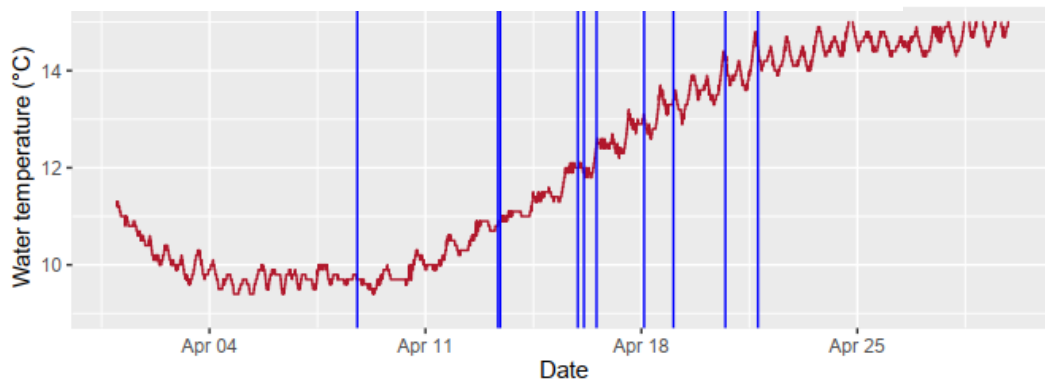
Watertemperatuur

9.80 - 14.80°C

2021

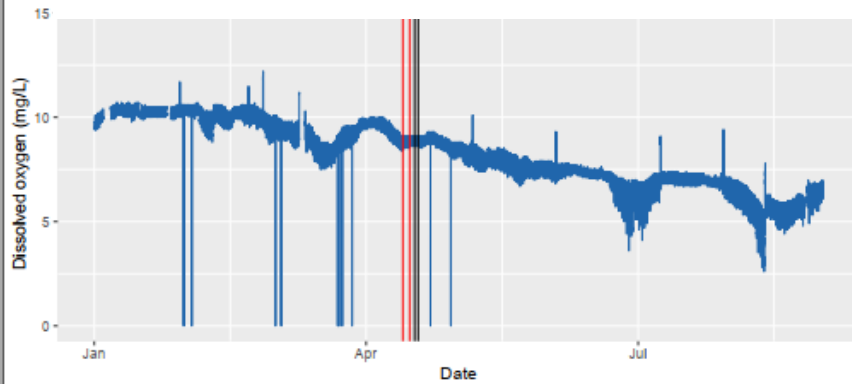


2022



Returners – paaimigratie

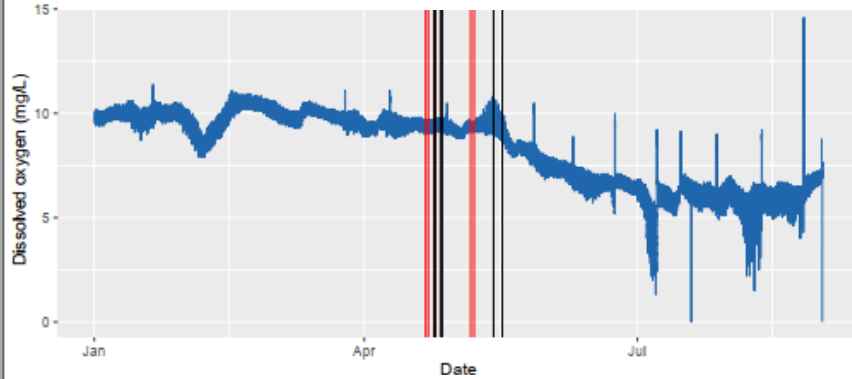
2020



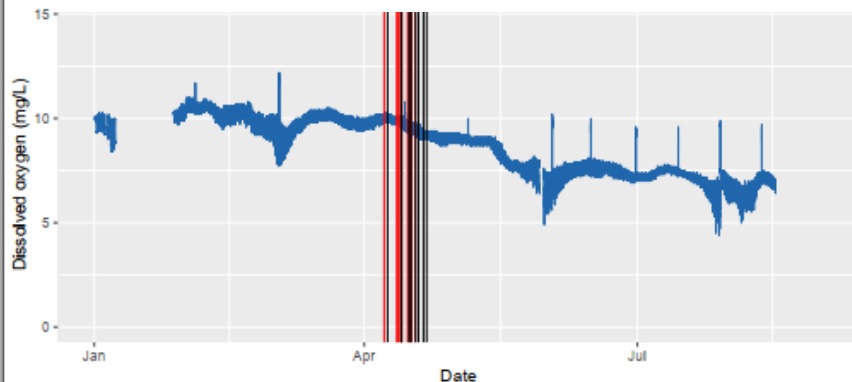
Opgeloste zuurstof

6.90 - 9.80
mg/L

2021

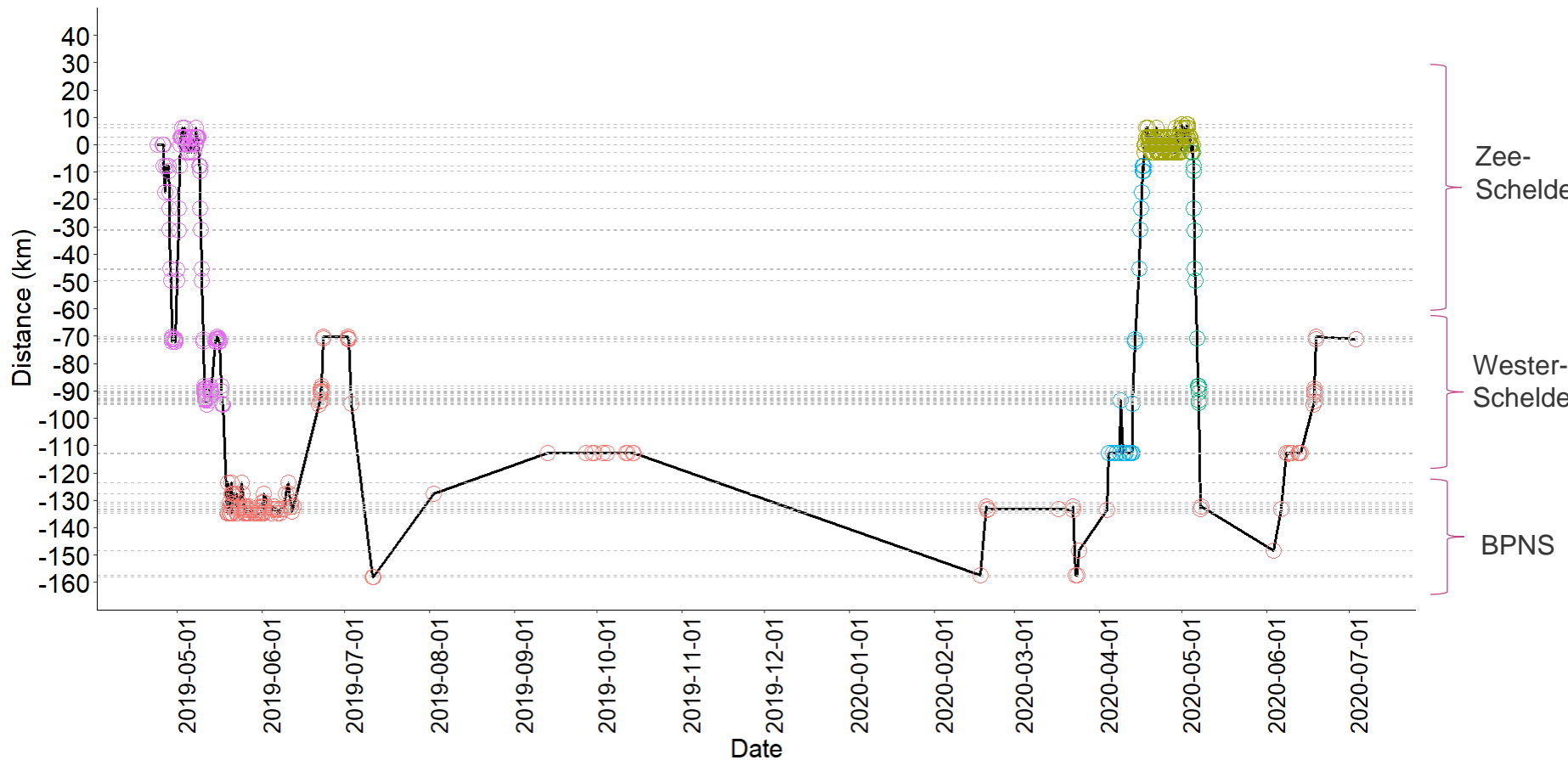


2022



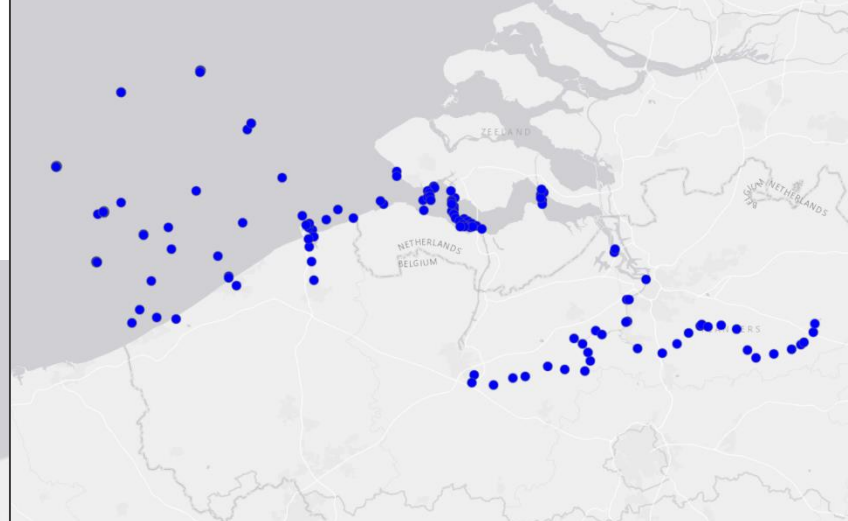
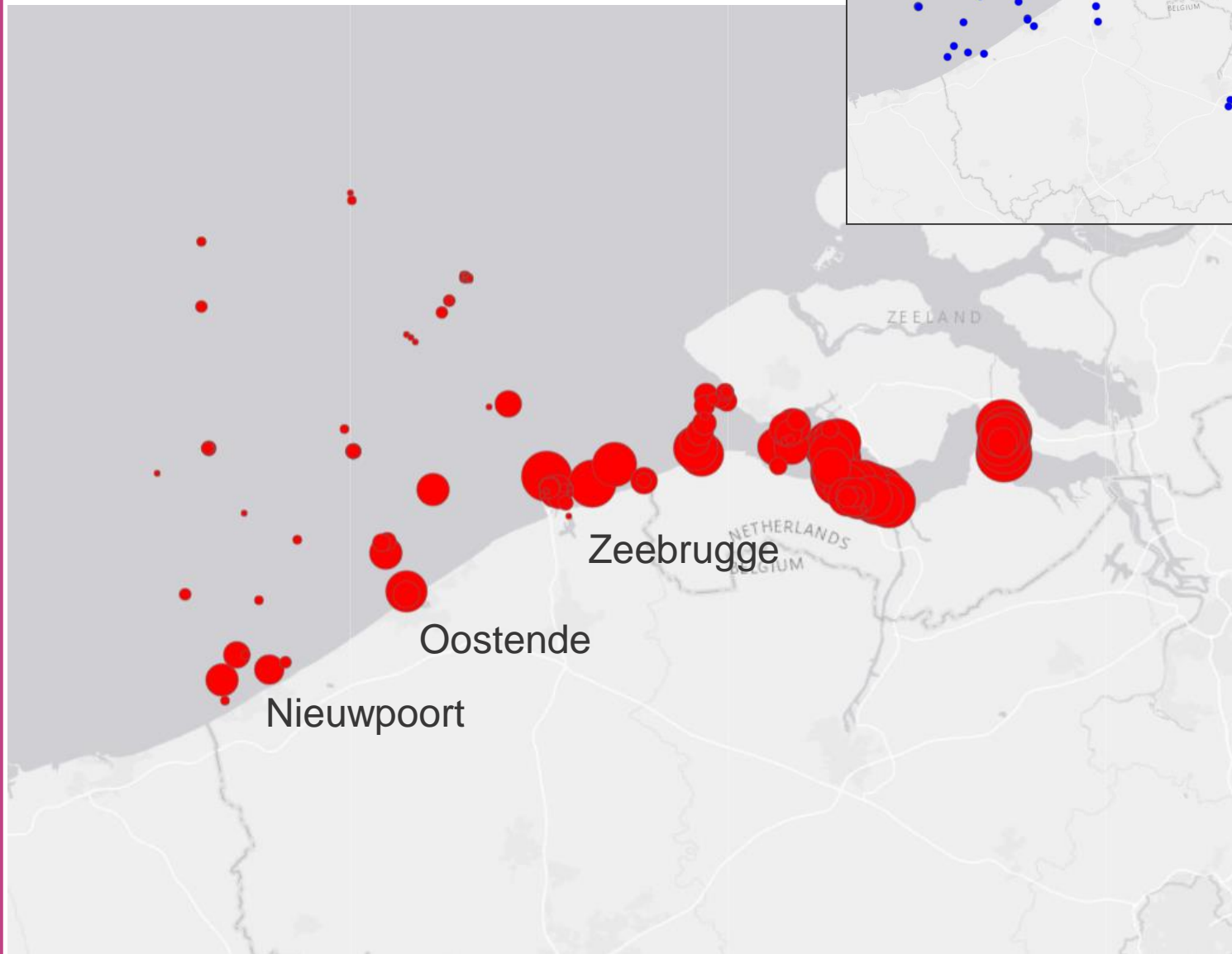
Life @ sea

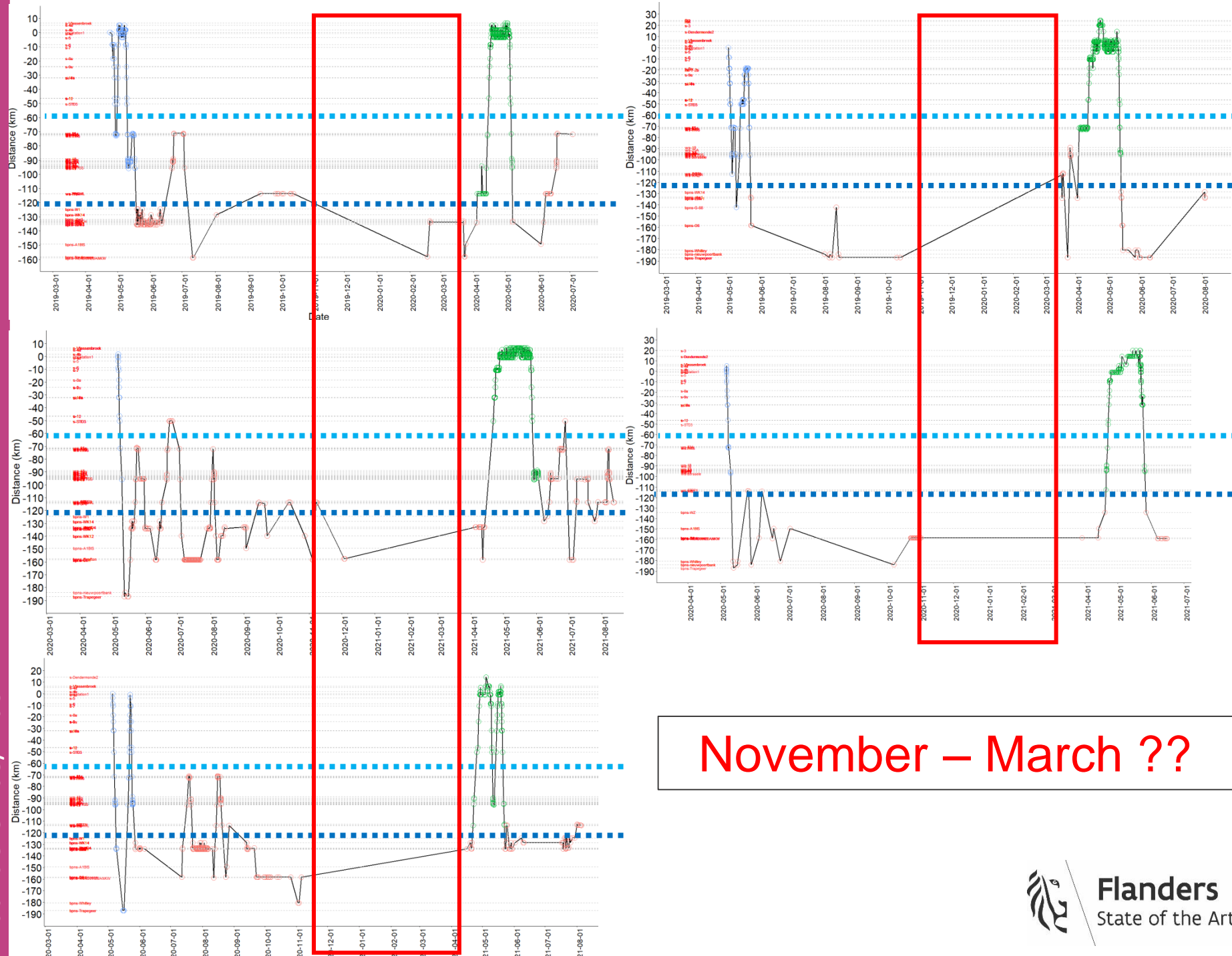




- Tagging effect
- Opwaartse migratie
- Foerageren
- Paai
- Afwaartse migratie

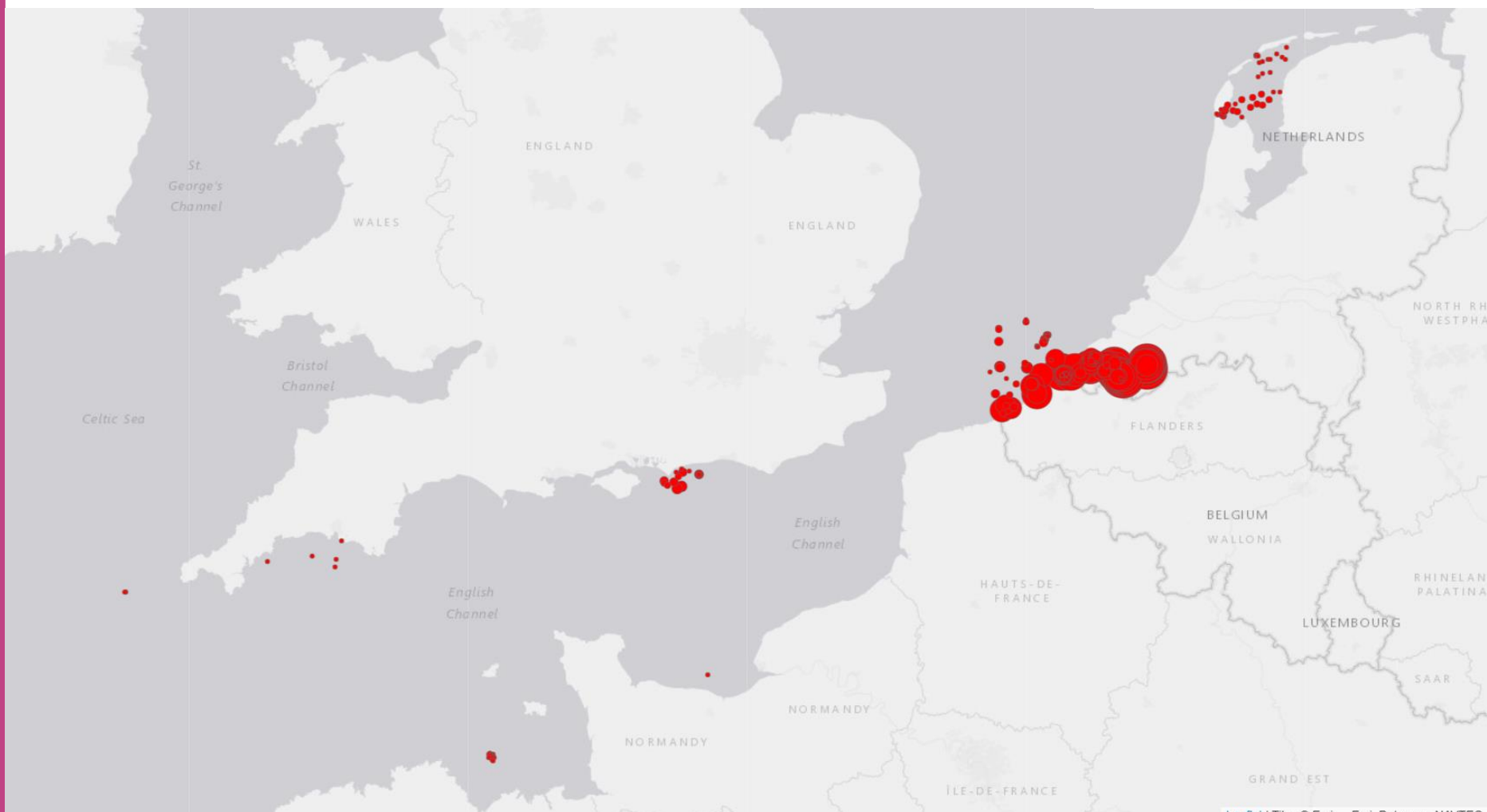
Life @ sea





November – March ??

Life @ sea





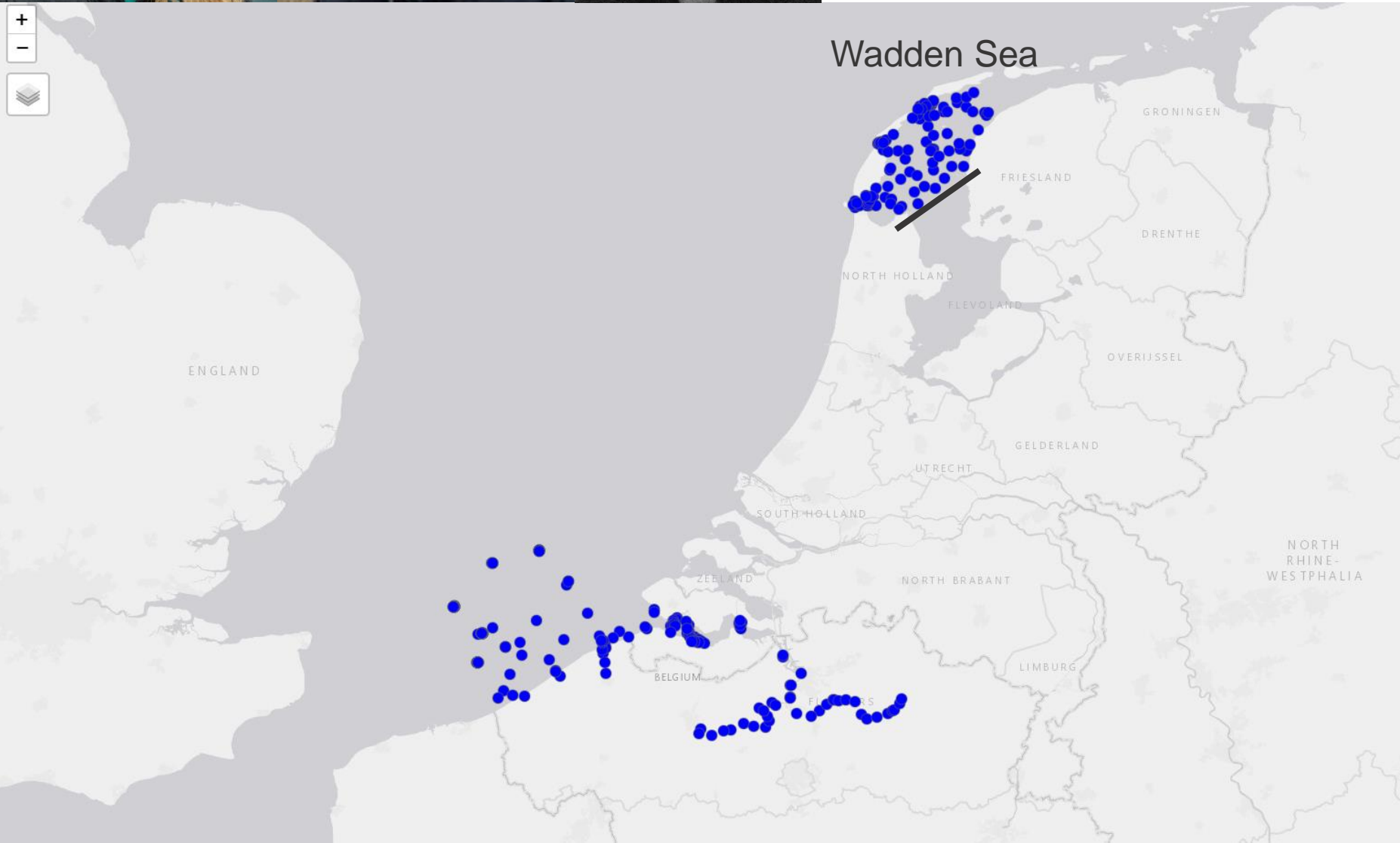
Jena Edwards



Erwin Winter



Allert Bijleveld

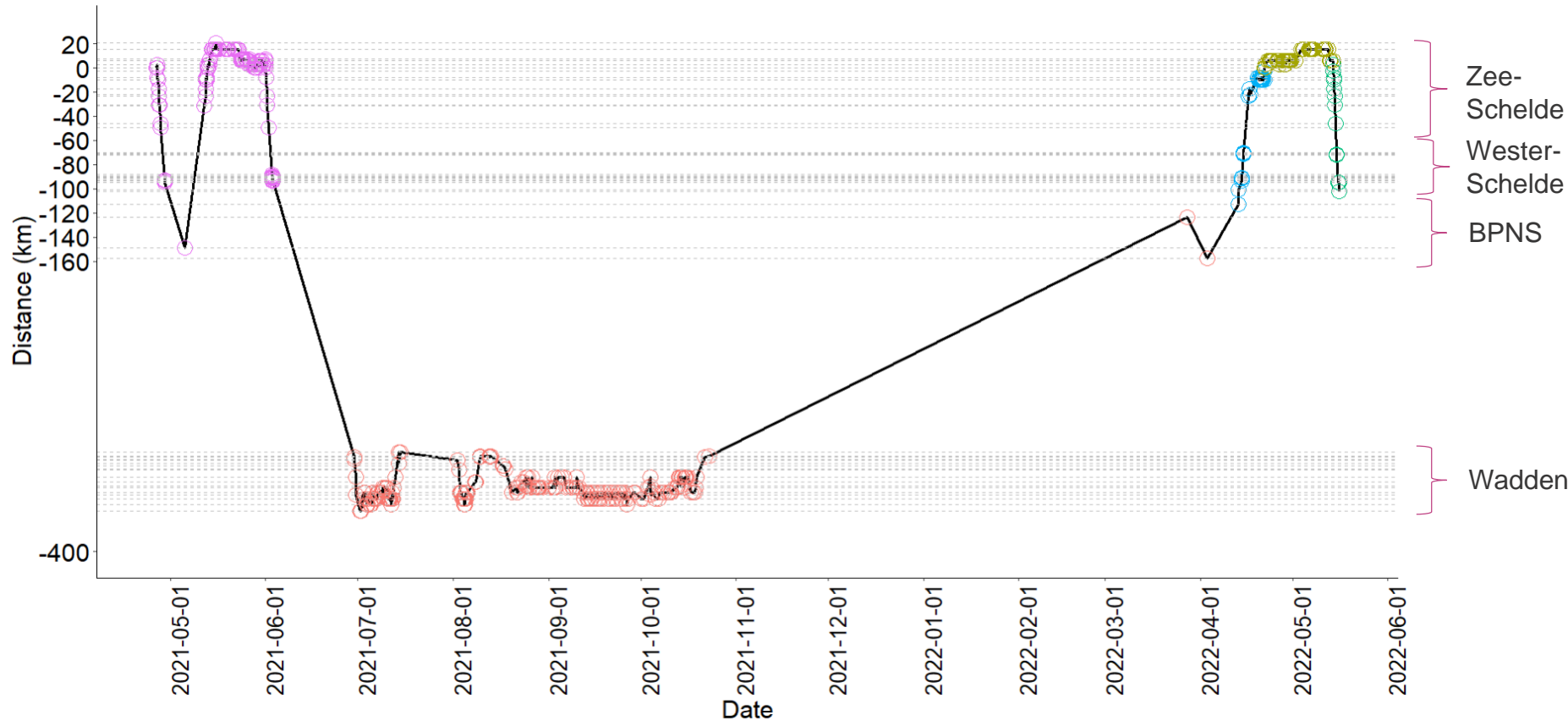


Wadden Sea



200 km

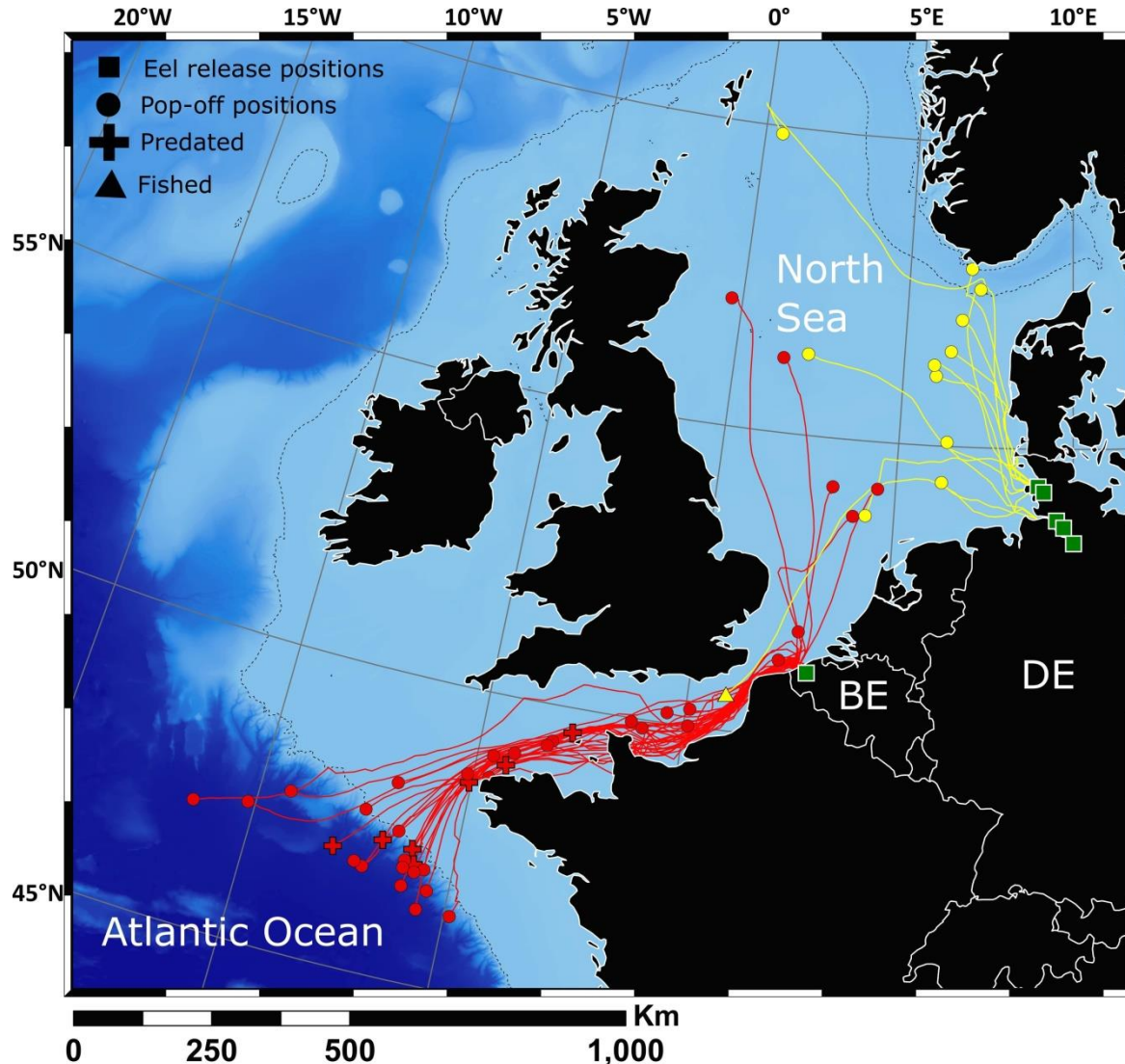
Wadden-fint



- Tagging effect
- Foerageren
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- Afwaartse migratie



Paling migratieroutes



Verhelst et al. (2022). Mapping silver eel migration routes in the North Sea. *Scientific Reports* 12, 1-10.

Data storage tags

G5 Standard (Cefas Technology Ltd.)

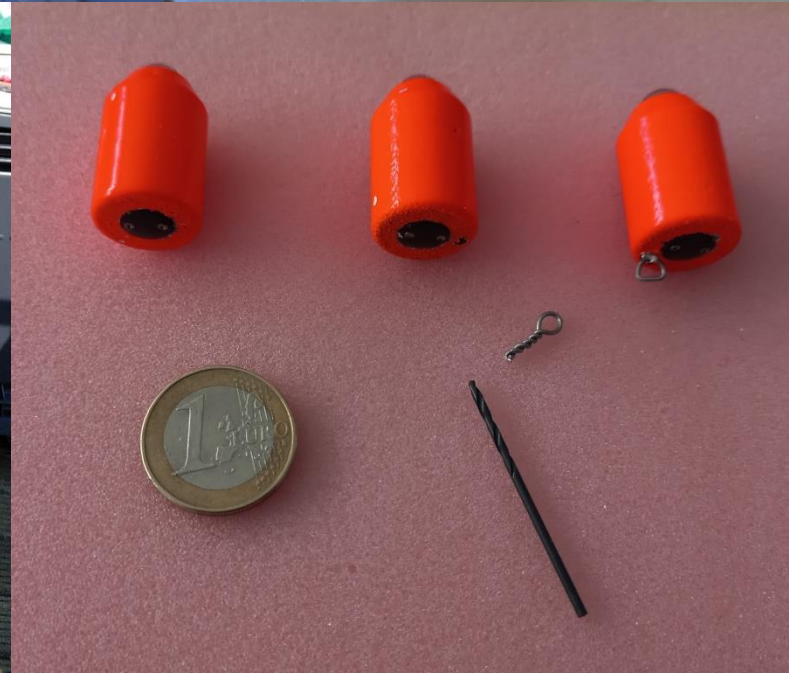


- 2 Mb memory
 - Temperatuur
 - Diepte
- 12 maand recording
- Floatation collar
- 2.7 g (zonder FC)

Data storage tags

G5 Standard (Cefas Technology Ltd.)

110 finten min. 40 cm TL



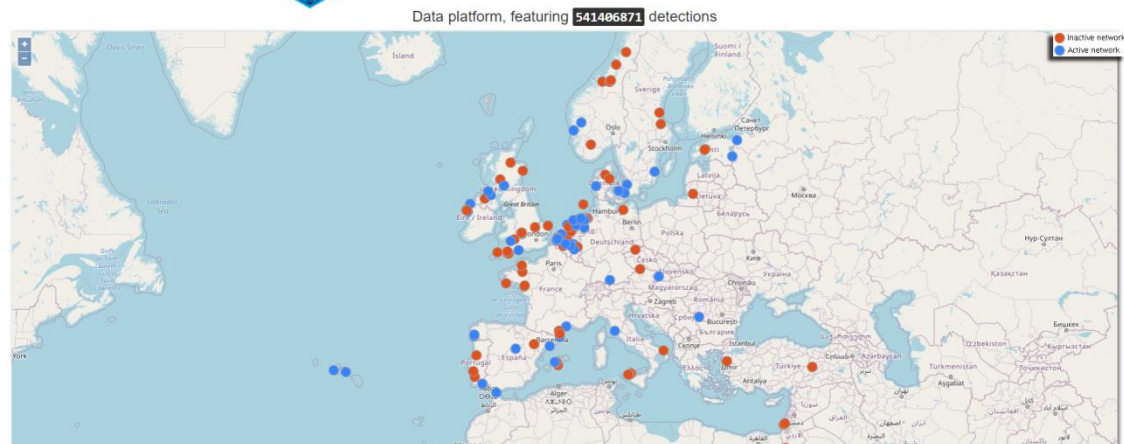


Conclusie

- ▶ Kustgebonden en estuariene soort (?)
→ Habitatrictlijnsoort maar we kennen niet het habitat...
- ▶ Kan 100den kilometers weg van geboorteplek foerageren
- ▶ Over administratieve grenzen → adequaat management
- ▶ Schoolgedrag? Populatiestructuur?
- ▶ Samenwerken loont



ETN - European tracking network





Een werk van een heel team, vrijwilligers en studenten!

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