



Internet of Water Flanders

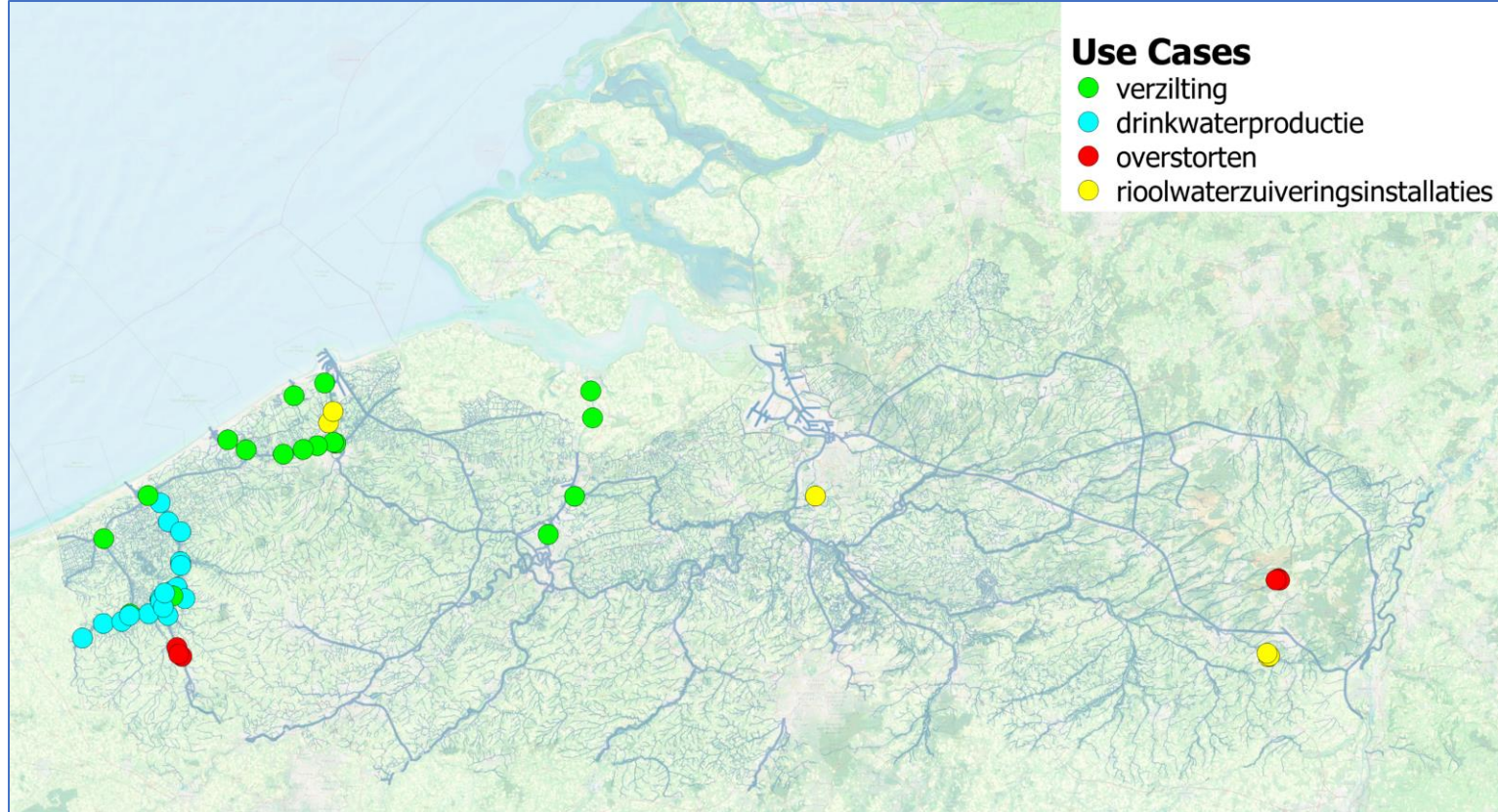
The way forward

piet.seuntjens@vito.be

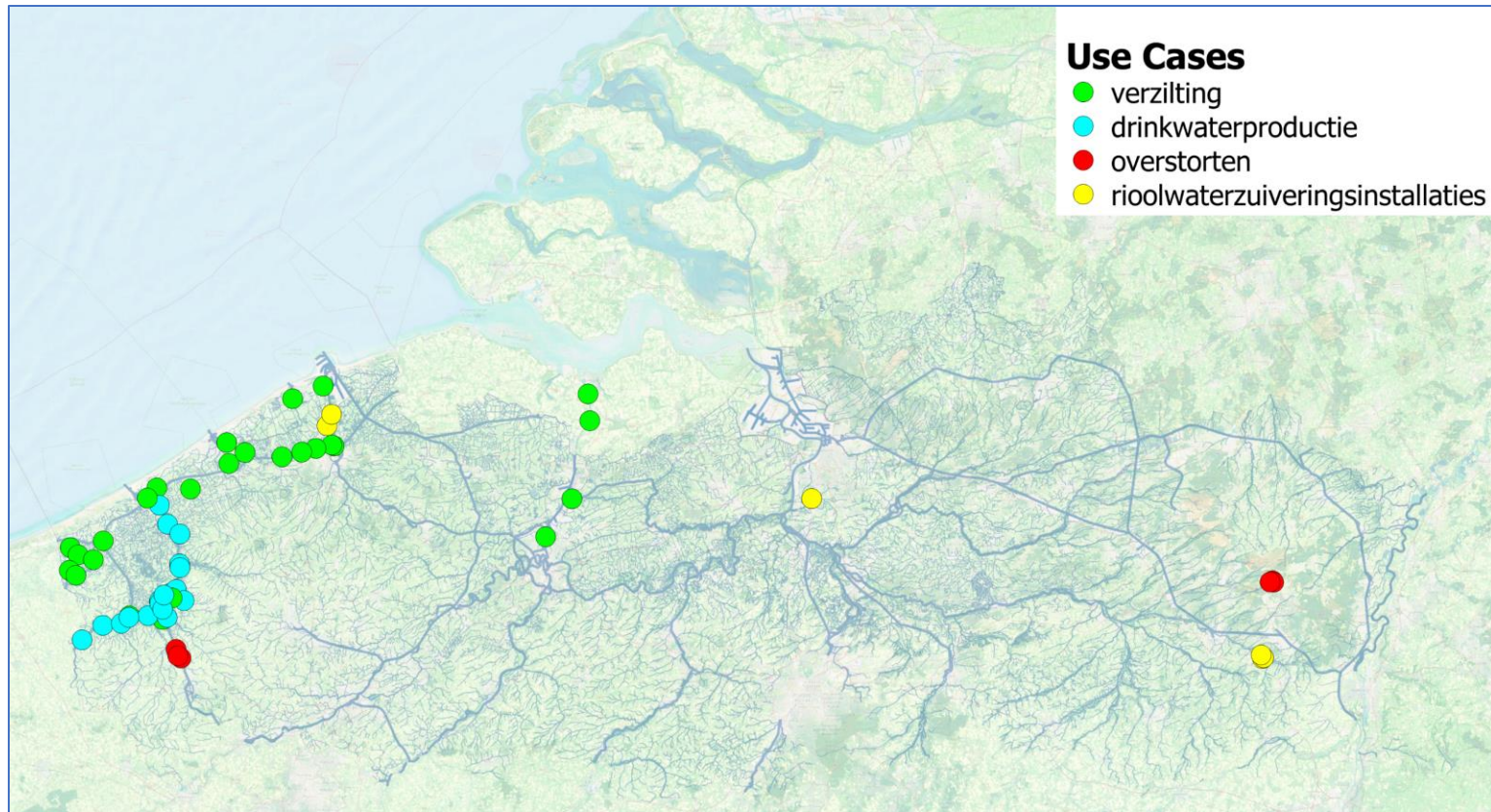
The way forward?

- ☺ **Uitbreiding fase 3** met 100-tal locaties (ter goedkeuring SG)
- ☺ Oplevering **POC-applicaties** op de pilootdata
- ☺ IoW **dataplatform** next steps
- ☺ Internet of Water Flanders **governance**
- ☺ **Kosten-baten** IoW-sensornetwerk

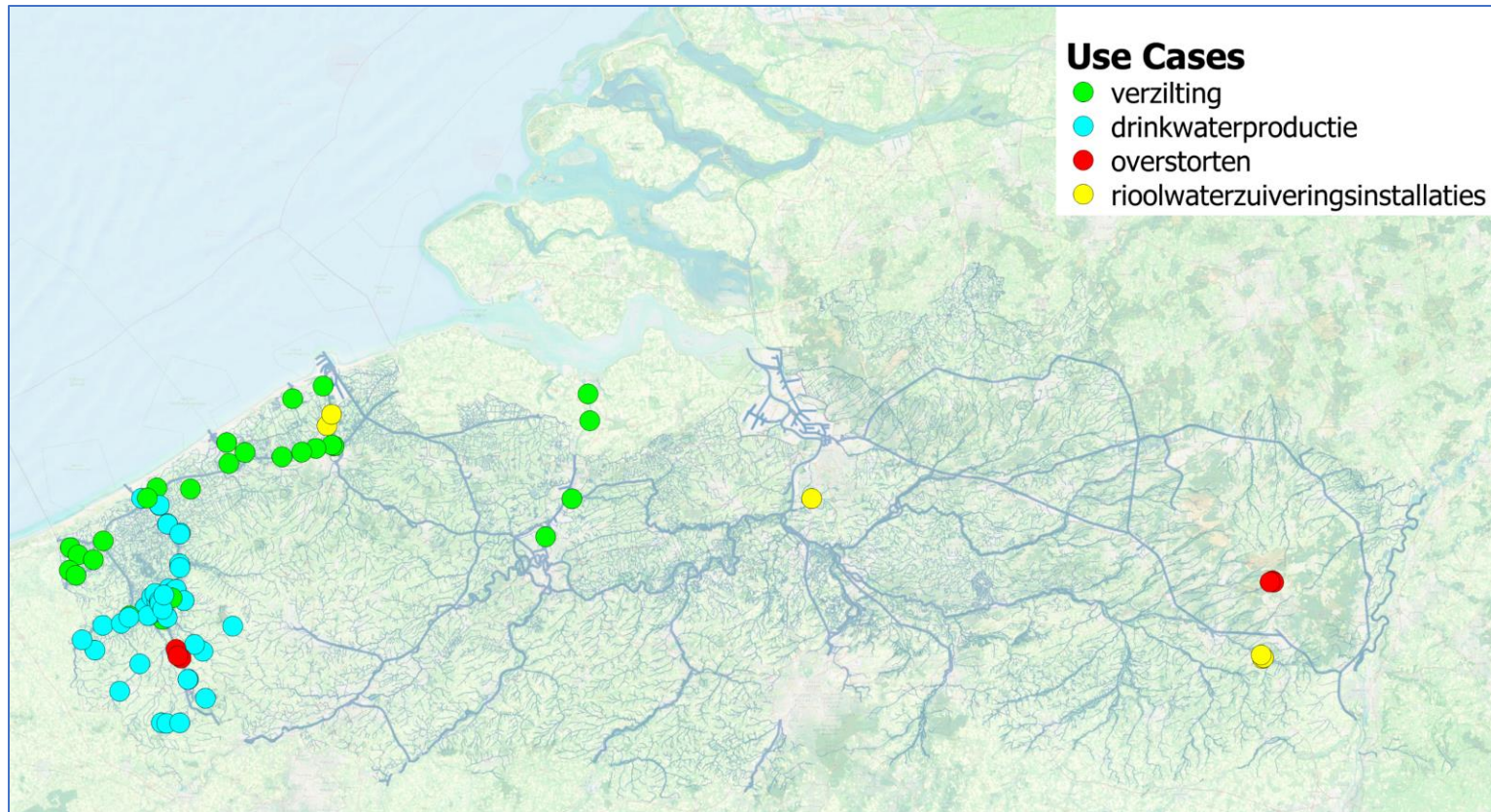
Use cases & locaties – fase 1 en 2



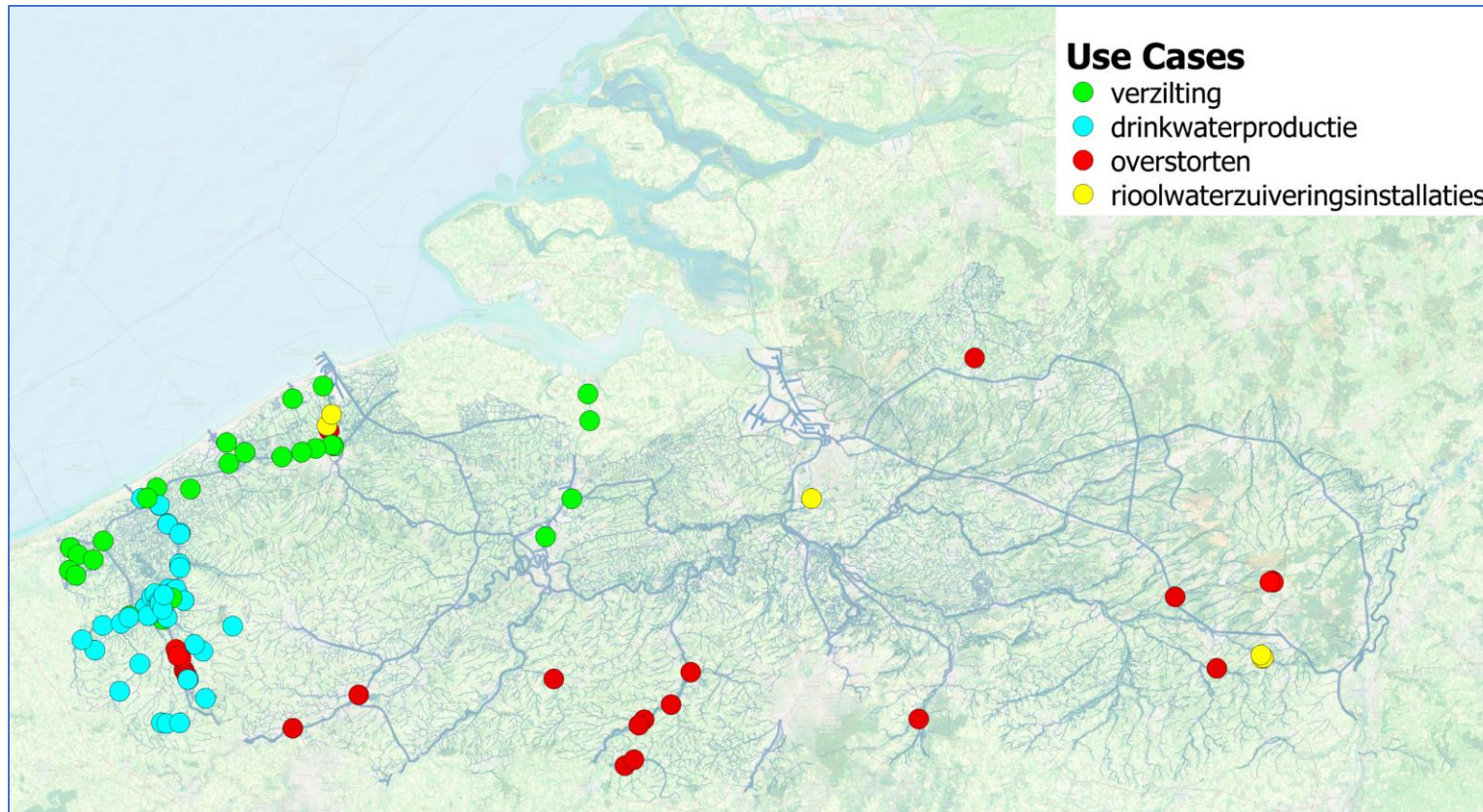
Use cases & locaties – fase 3



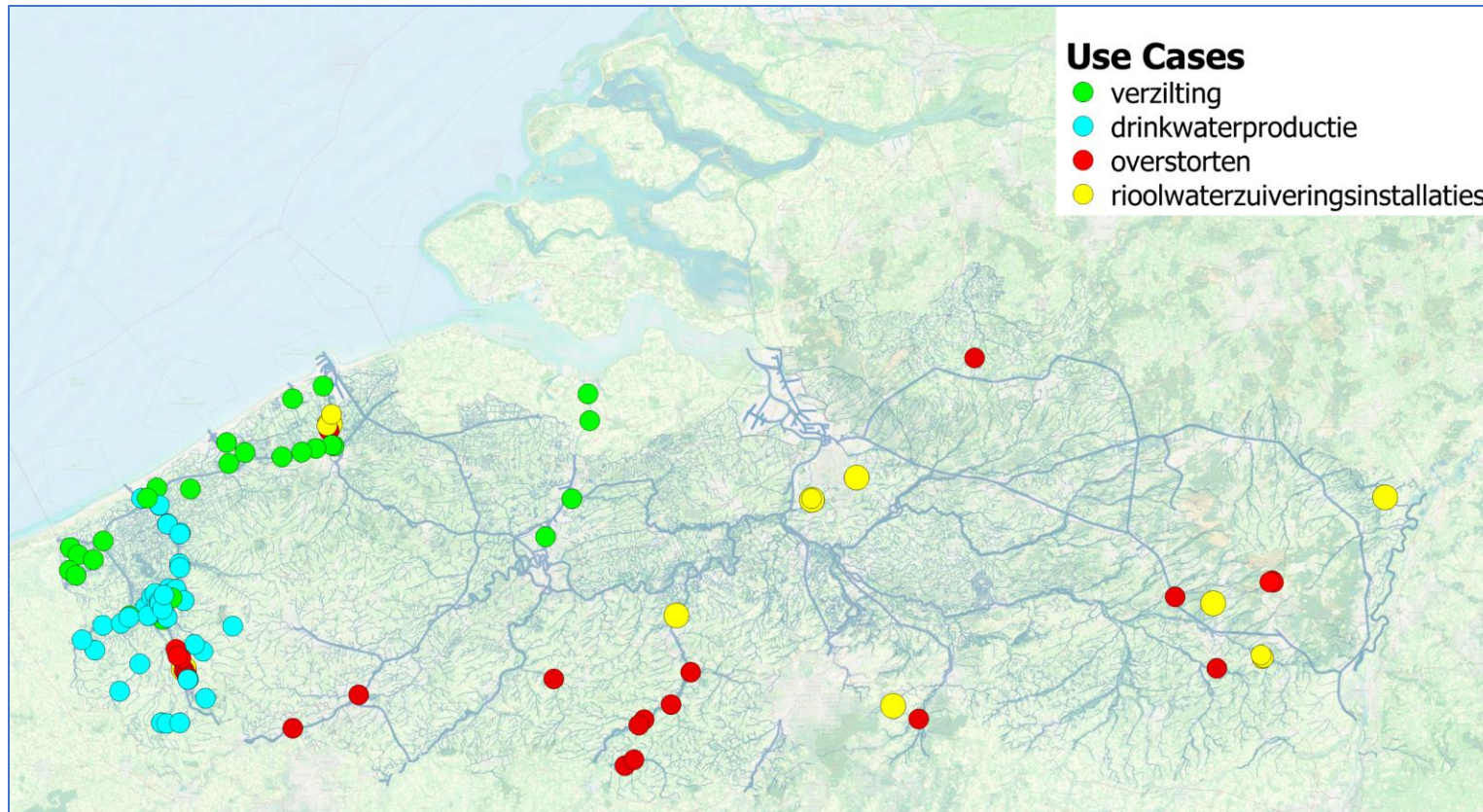
Use cases & locaties – fase 3



Use cases & locaties – fase 3



Use cases & locaties – fase 3



Proof-of-concept applicaties

 Datavalidatie

 Interpolatieservice

 Verziltingsindicator

 Eventdetector

Sensordata valideren

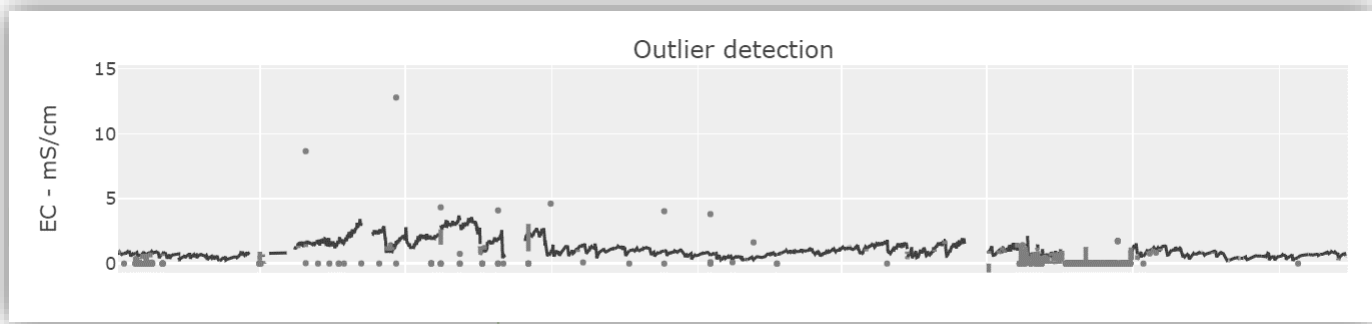
Semi-geautomatiseerd datakwaliteit beoordelen

Automatic outlier detection
with initial parameters

EWMA Range Z-score

IQR Flatline ROC

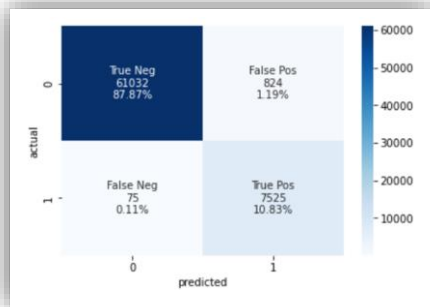
Σ



Adjusting parameters
in outlier detection algorithms

Interactive
expert validation

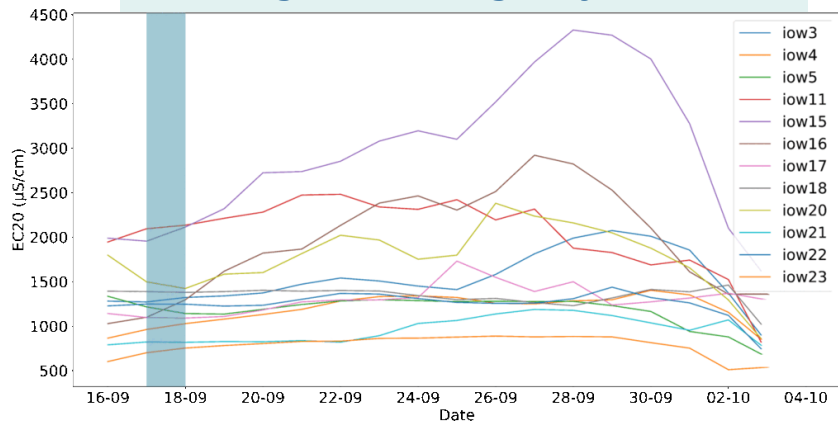
Validated dataset



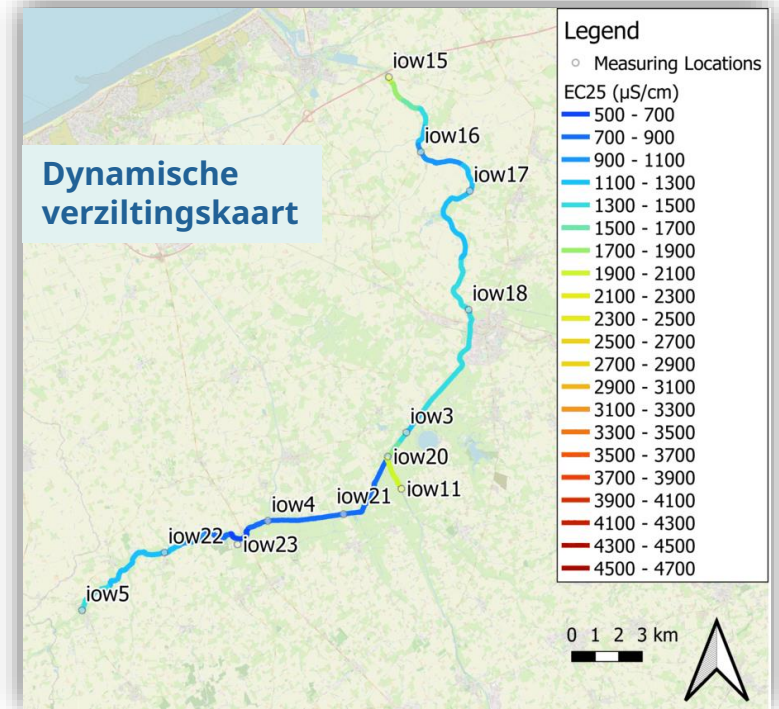
Interpolatie in tijd en ruimte

Gemeten waarden per tijdsinterval over delen van het riviernet

Verziltingsverandering in tijd en ruimte



Dynamische verziltingskaart



Parameters voor waterkwaliteit

Sensordata verwerken tot status- en trendindicatoren

Voorbeeld: verziltingsindicator

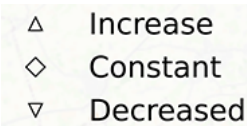
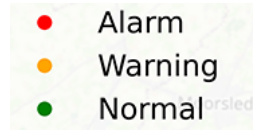
- EC-metingen
- Voor schepstalen en sensordata

Statusindicator

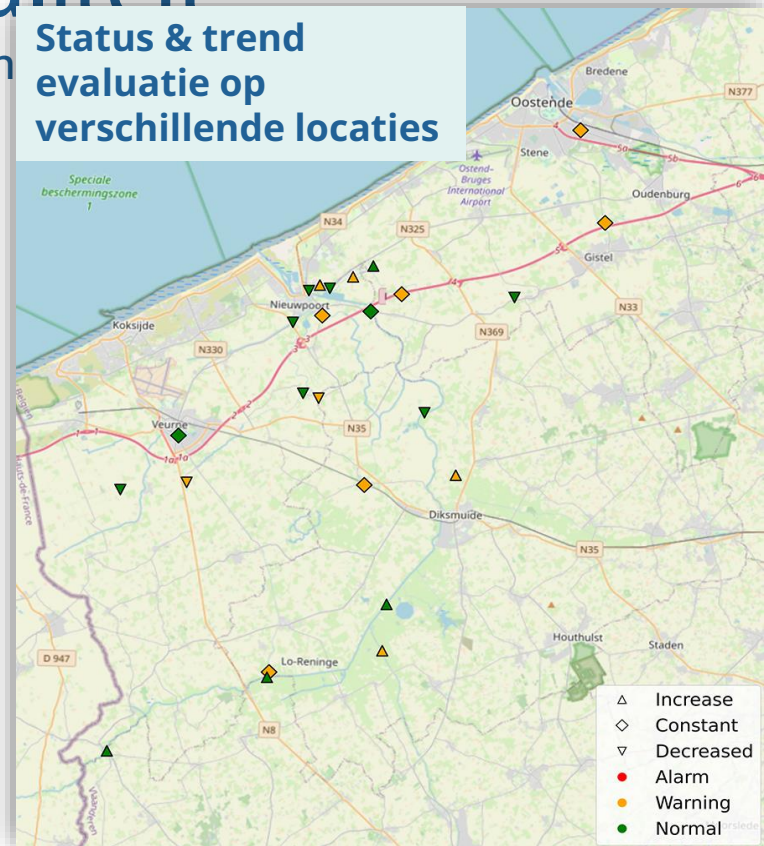
- Huidige verziltingsstatus
- Status per locatie
- Locatiespecifieke drempelwaarden obv historische data

Trendindicator

- Periodieke trend
- Waar stijgt/daalt verzilting?
- Waar is verzilting stabiel?

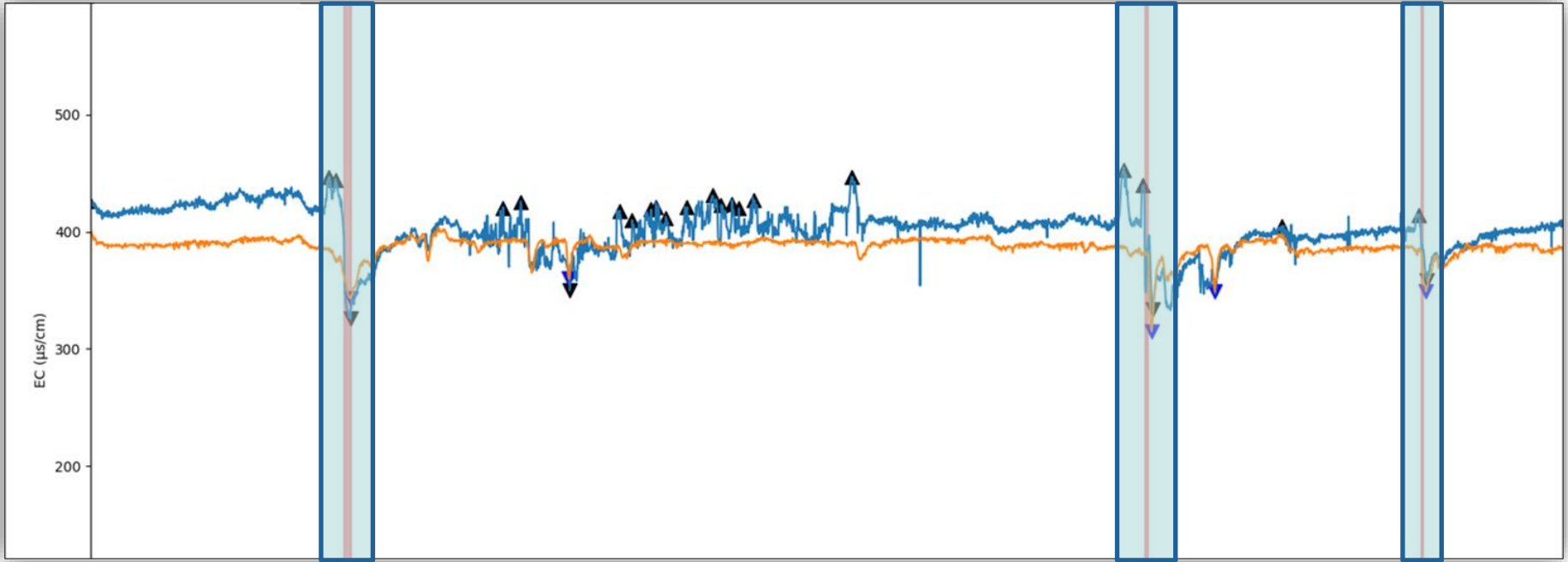


Status & trend evaluatie op verschillende locaties



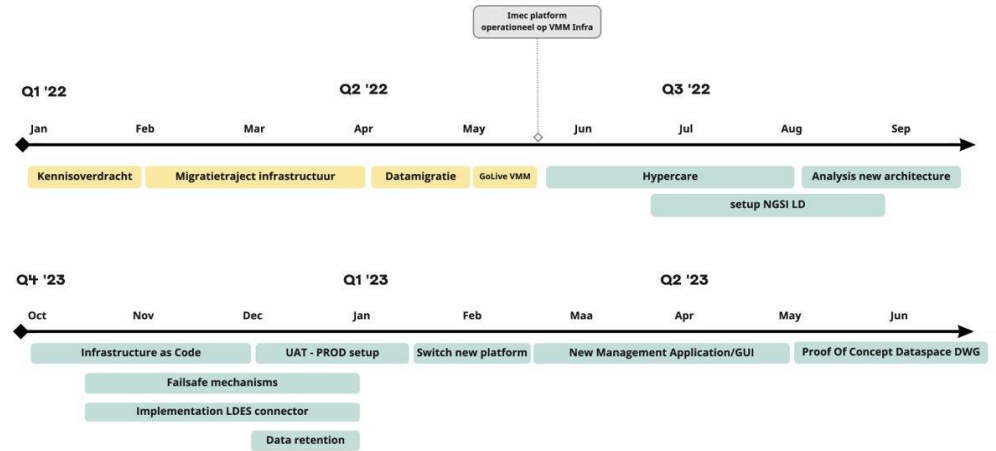
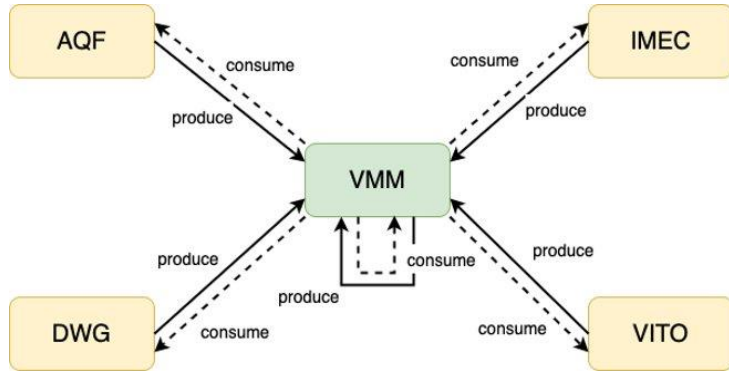
Patronen herkennen

Geautomatiseerd events herkennen via patronen

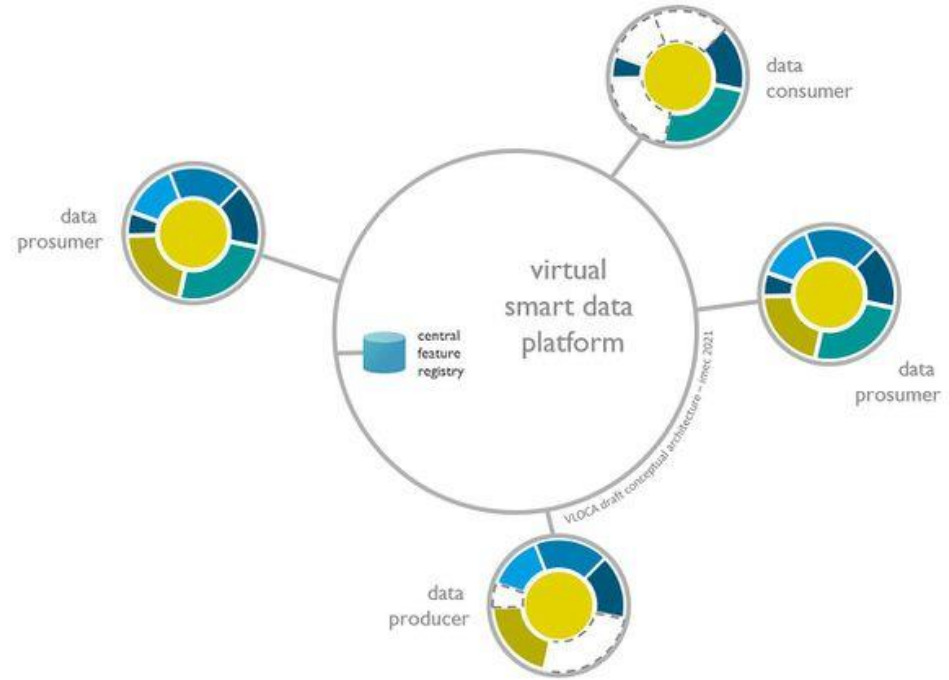
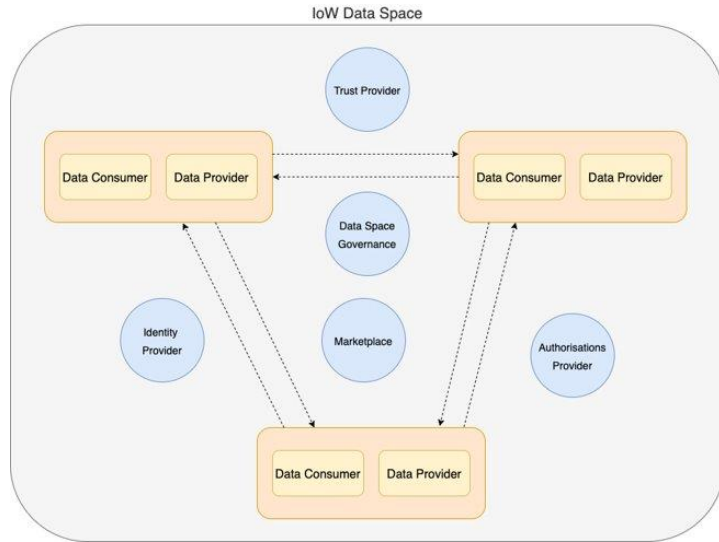


eventdetectie

Toekomst IoW-dataplatform



Governance





Internet of Water Flanders

Hartelijk dank!

info@internetofwater.be