

## TKI-pilot: D-HYDRO boezemmodel Waternet

*13 oktober 2022*

# Doel pilot

- SOBEK model omzetten naar D-Hydro
  - Complexe sturing IJmuiden in RTC
- D-Hydro model implementeren in FEWS
- Koppelen van waterbalansen in FEWS



# Inhoud

- Droogvallende watergang
  - Ruwheid
  - Analyse uitwisseling RTC - FlowFM
- Status waterbalansen in FEWS
- Planning komende periode

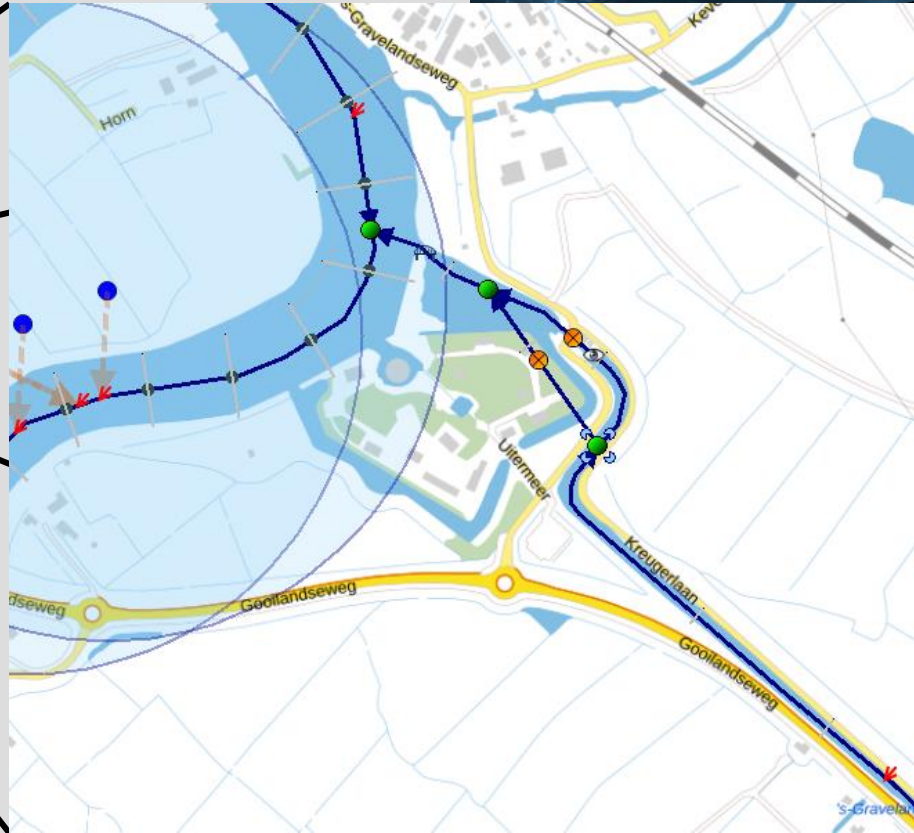
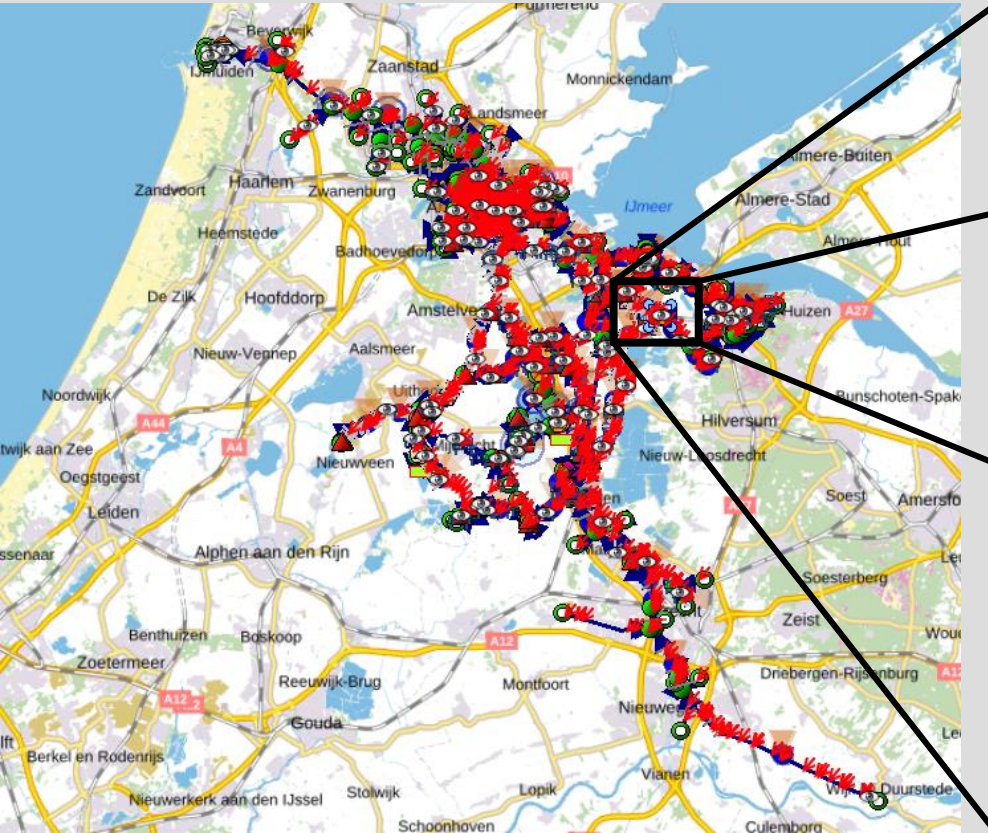




# Droogvallende watergang

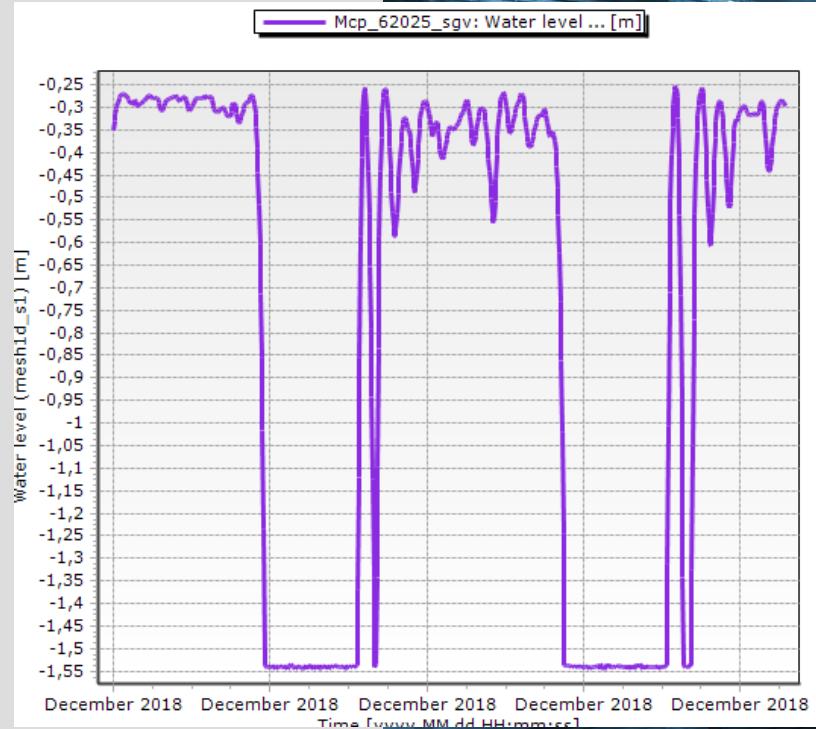


# Droogvallende watergang



# Aanleiding

## Droogvallende watergang



# Mogelijke oorzaken

- Ruwheid
- Uitwisseling tussen RTC - FlowFM
  - Inzicht gewenst in of de uitwisseling tussen modules (RTC - FlowFM) effect heeft op resultaten





# Ruwheid

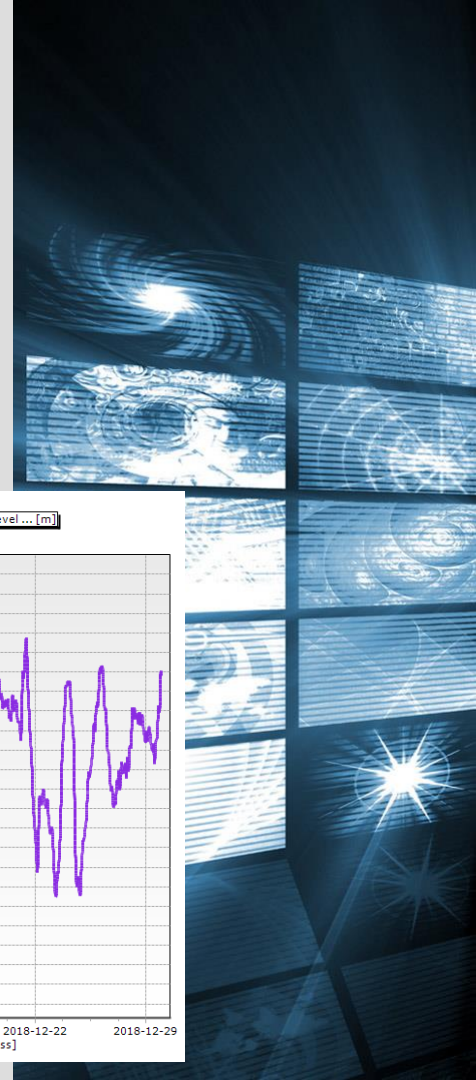
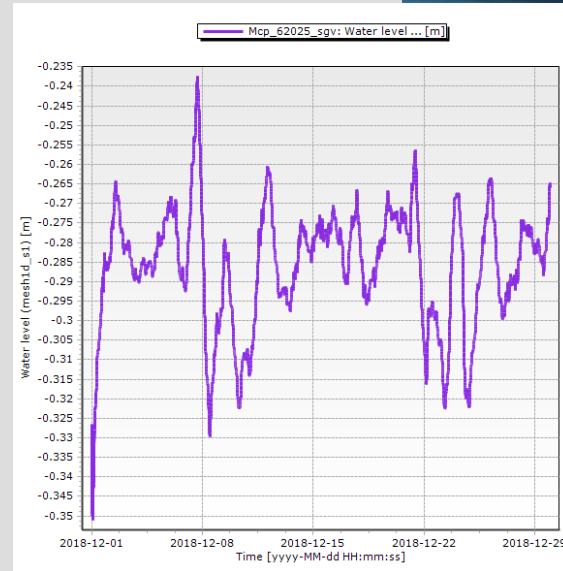
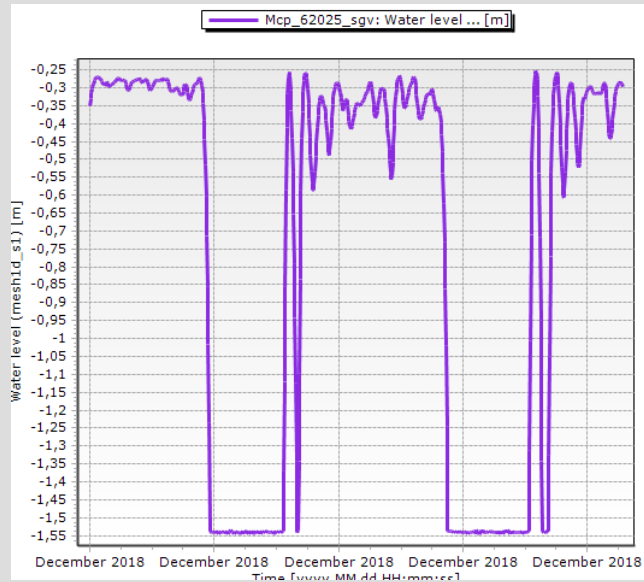
- Overgenomen uit SOBEK model
  - gedefinieerd per cross-section
- Nieuwe modelvariant
  - Alle losse definities verwijderd
  - Uniforme ruwheid opgegeven





# Uitkomst

- Uniforme ruwheid opgegeven
  - snellere rekentijd
  - waterstand nu wel zoals verwacht



# Uitwisseling tussen RTC - FlowFM



# Modelvarianten

- tijdstap 10 min
- tijdstap 1 min



**Run parameters**

Start time:  2018-12-01 00:00:00 ▼

Stop time:  2018-12-30 00:00:00 ▼

Time step:  0d 00 : 01 : 00.000

Duration: 29 days 0 hours 0 minutes 0 seconds

**Spatial parameters**

Coordinatesystem: Amersfoort / RD New

**Models**

**Rainfall Runoff** (29 days 0 hours 0 minutes 0 seconds)

Start: 2018-12-01 00:00:00 ▼

Stop: 2018-12-30 00:00:00 ▼

Time step: 0d 00 : 01 : 00.000

**Real-Time Control** (29 days 0 hours 0 minutes 0 seconds)

Start: 2018-12-01 00:00:00 ▼

Stop: 2018-12-30 00:00:00 ▼

...

**Workflows**

(RR + RTC + FlowFM)

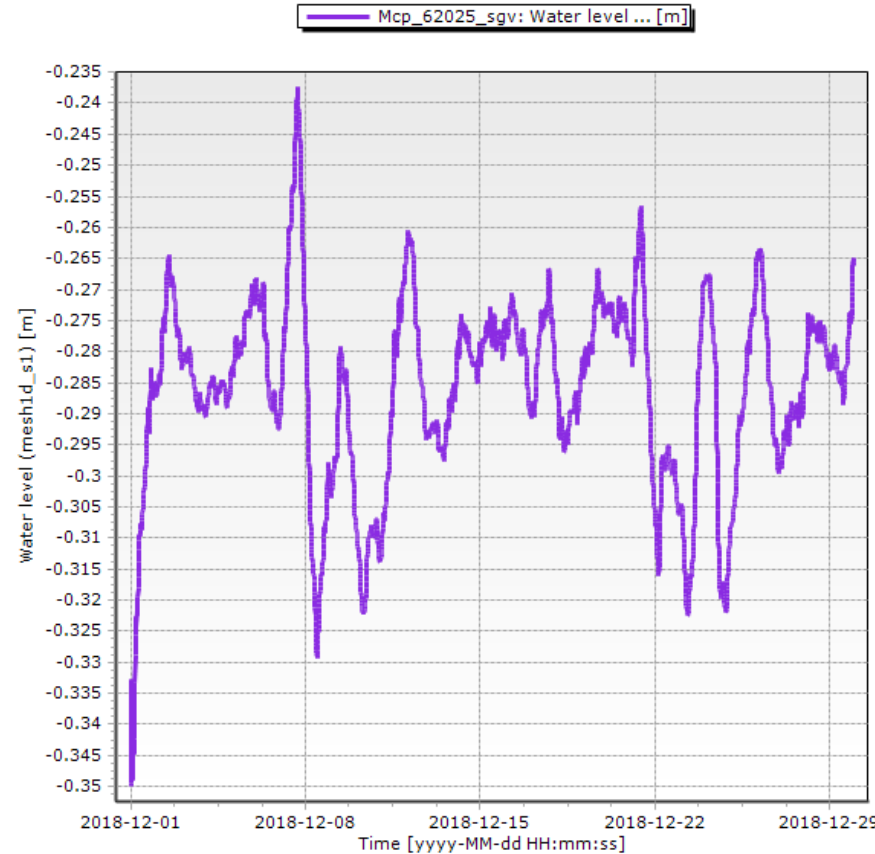
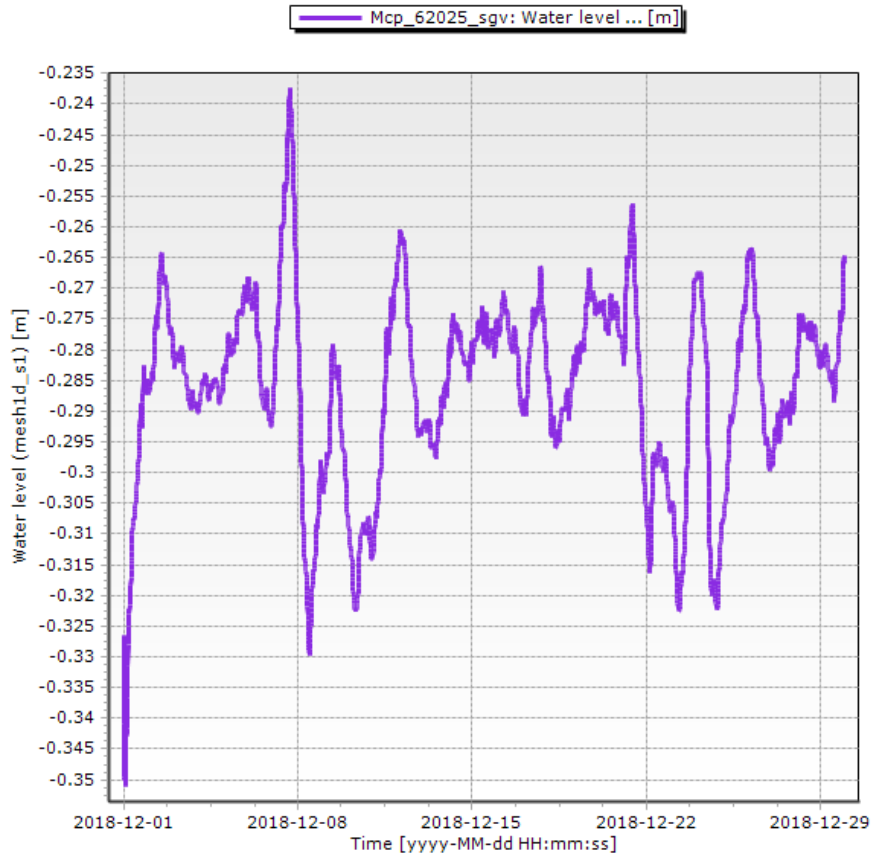
(RTC + FlowFM)

(RR + FlowFM)

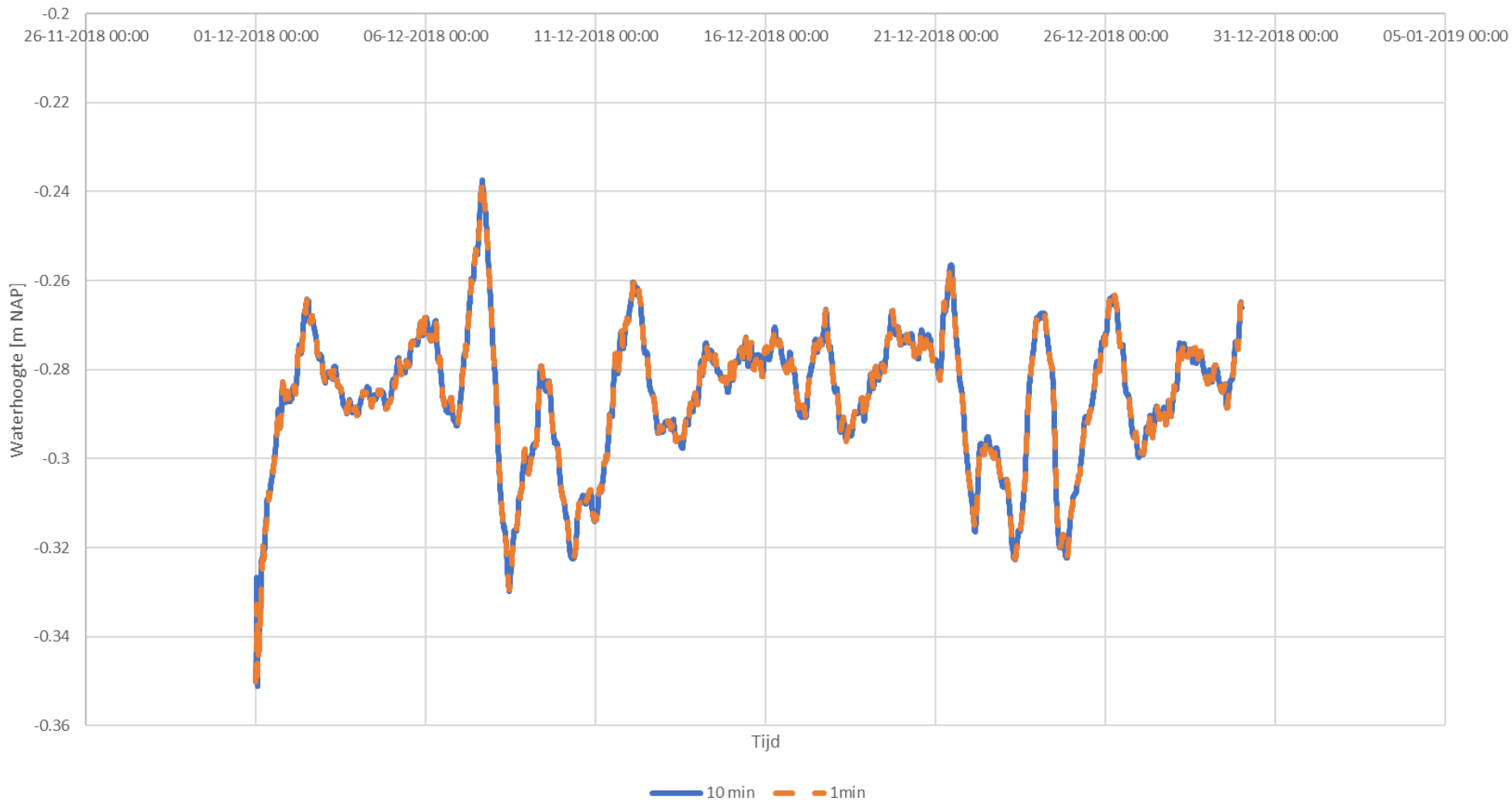
(RR)

(FlowFM)

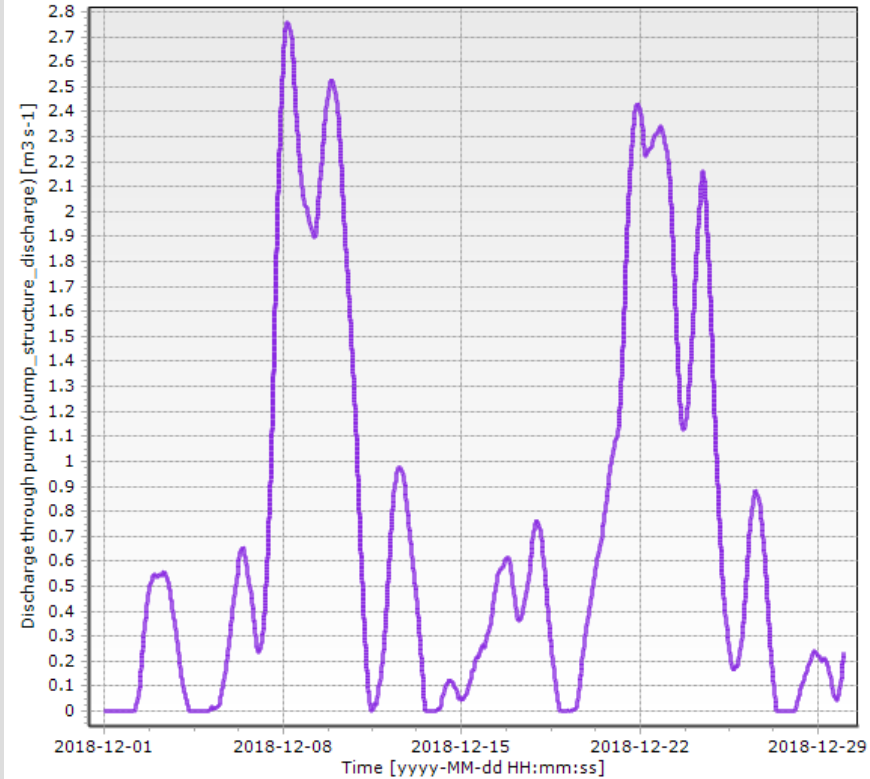
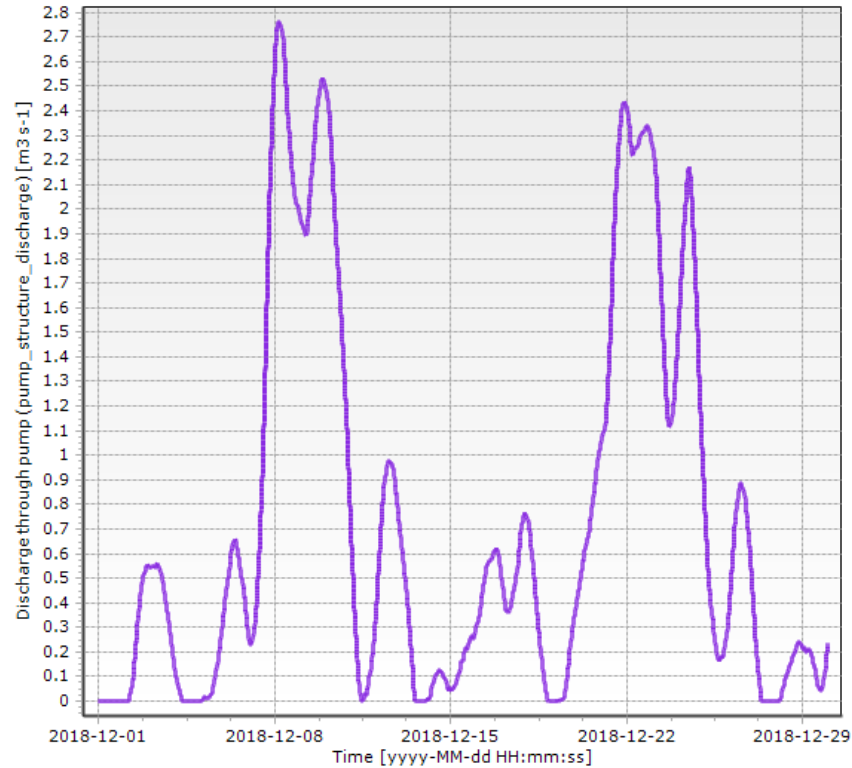
# Waterhoogte bovenstrooms

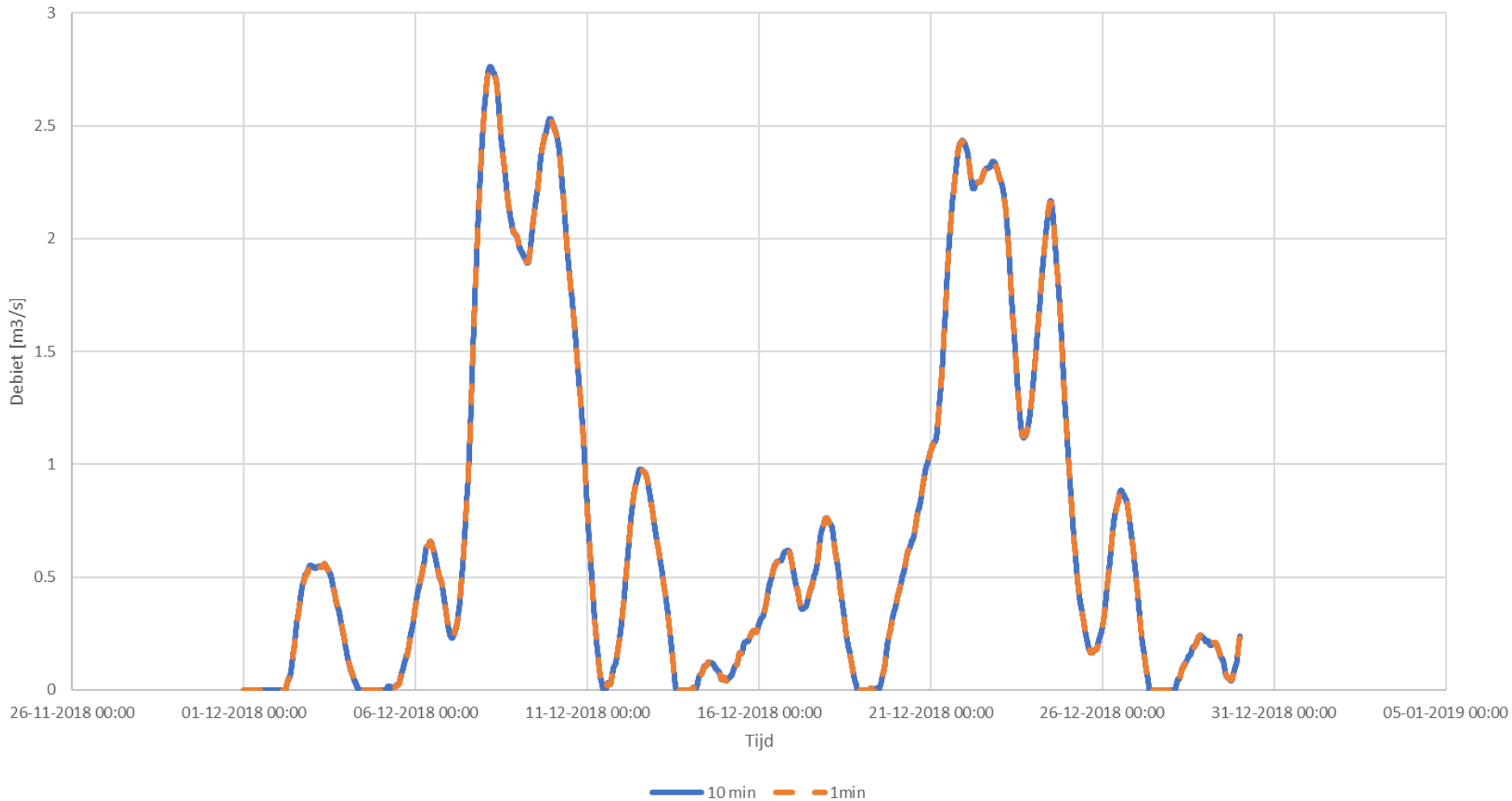






# Debieten





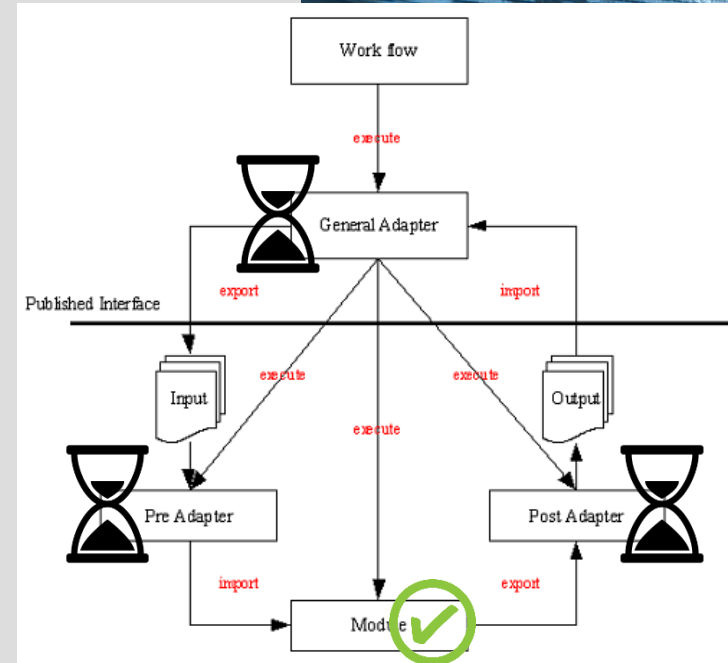
# Waterbalansen in FEWS





# Status waterbalansen in FEWS

- 1 deelgebied implementeren
- general adapter



# Planning komende periode

- waterbalansen in FEWS



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