

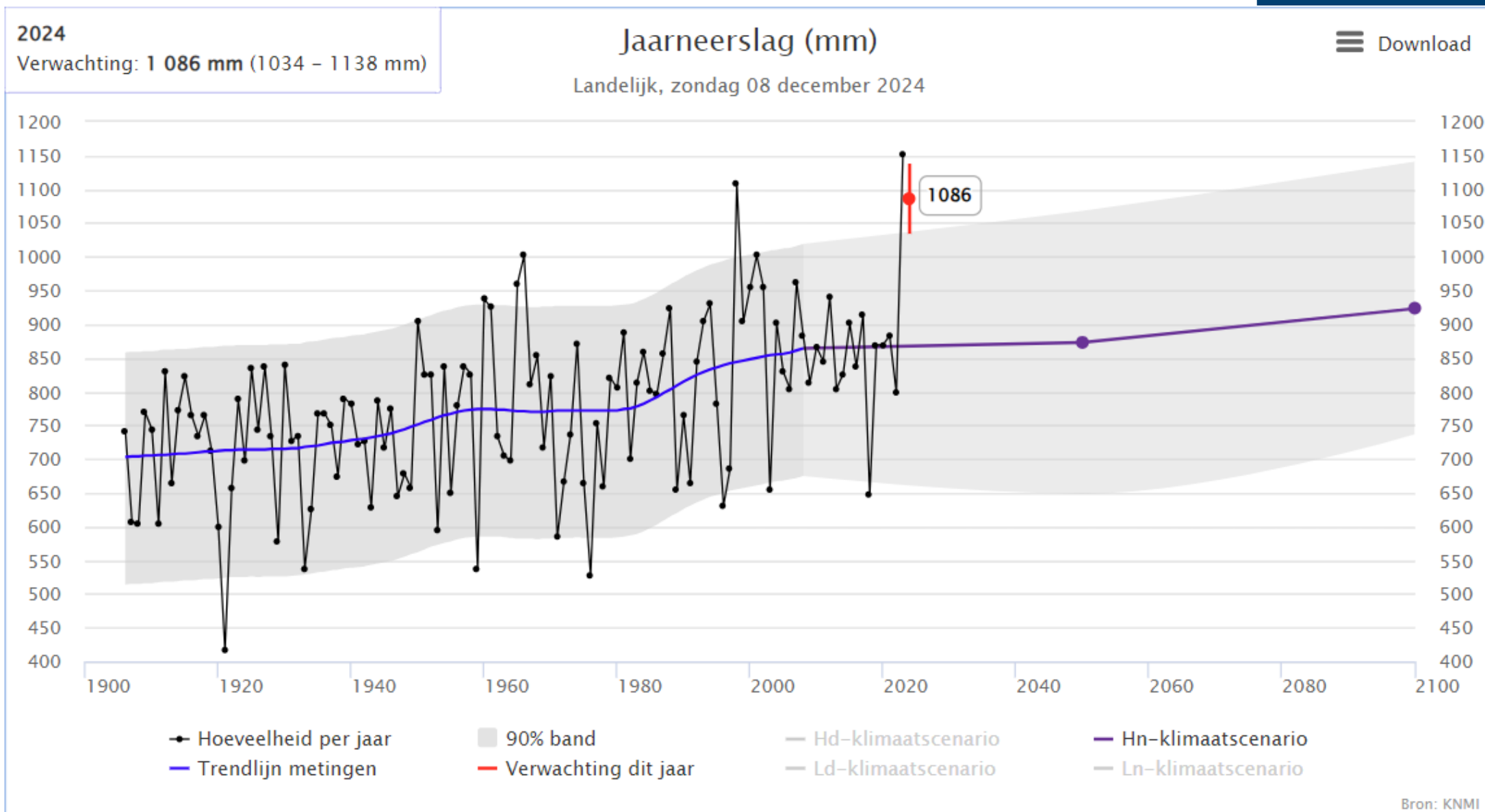


Wateroverlast Maashorst

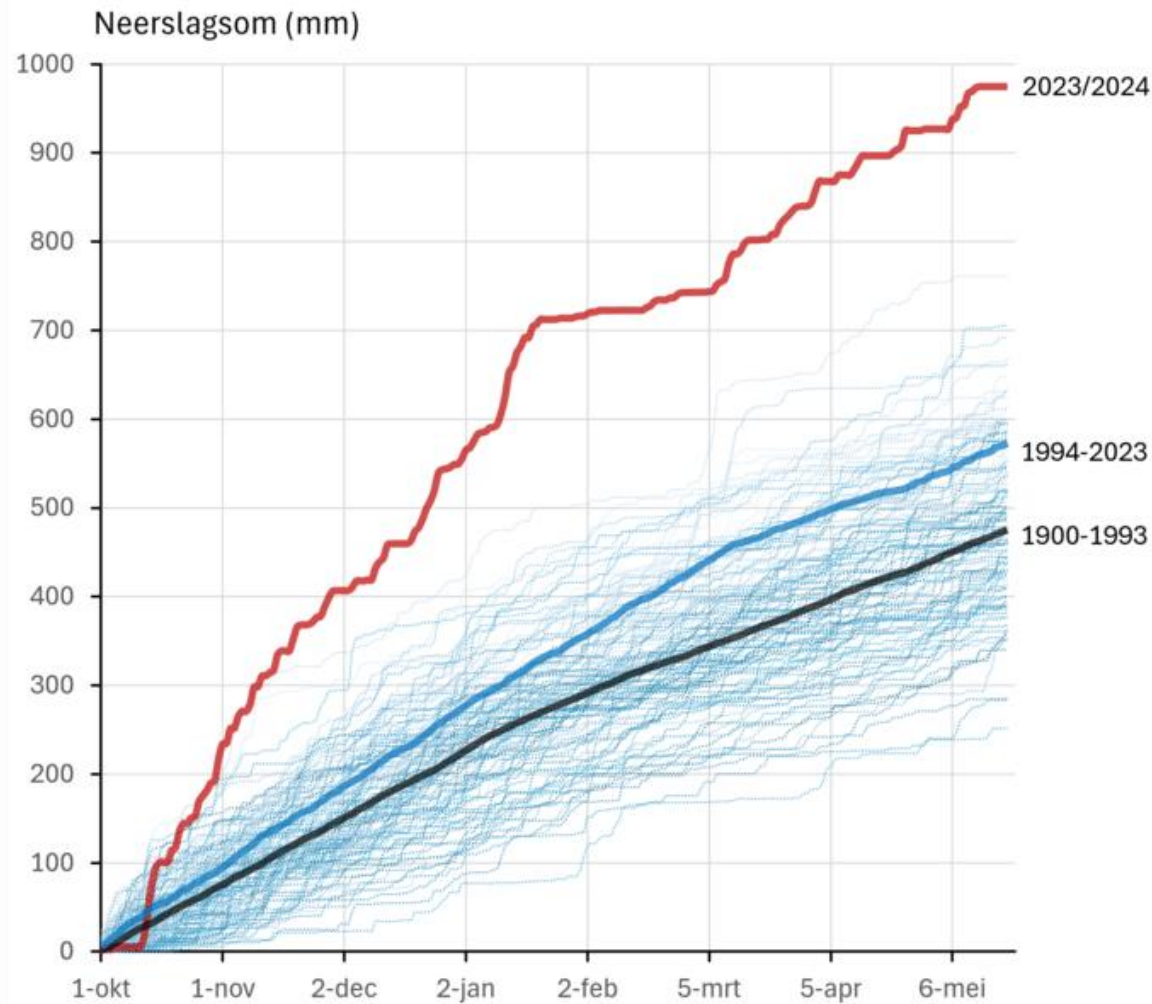
Gesprek met bewoners Zevenhuis 18 december 2024

19-12-2024

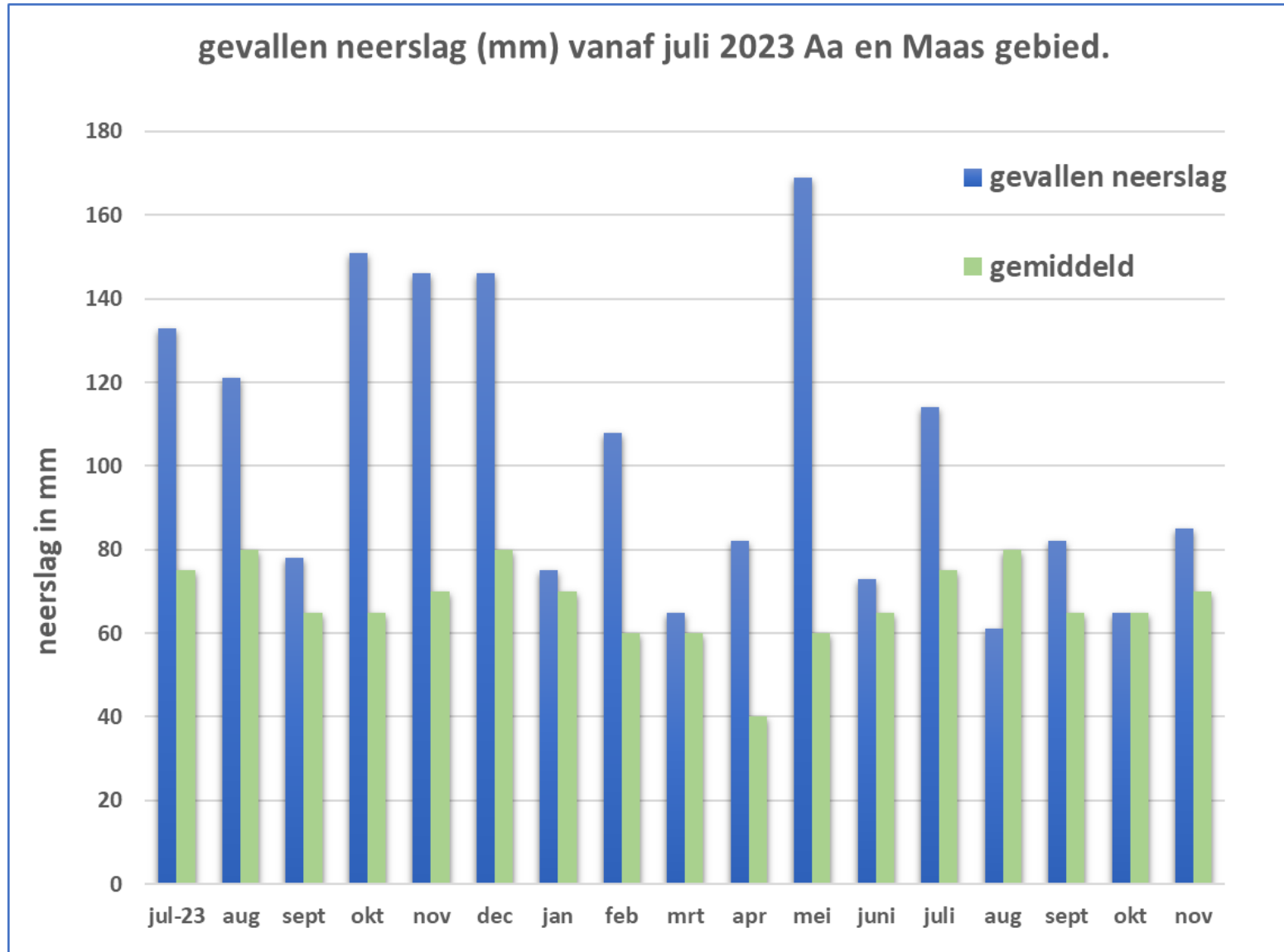
gevallen neerslag landelijk vanaf 1906



Neerslagsom okt 23 tot mei 24 in vergelijking met de jaren vanaf 1900.



gevallen neerslag per maand vanaf juli 23

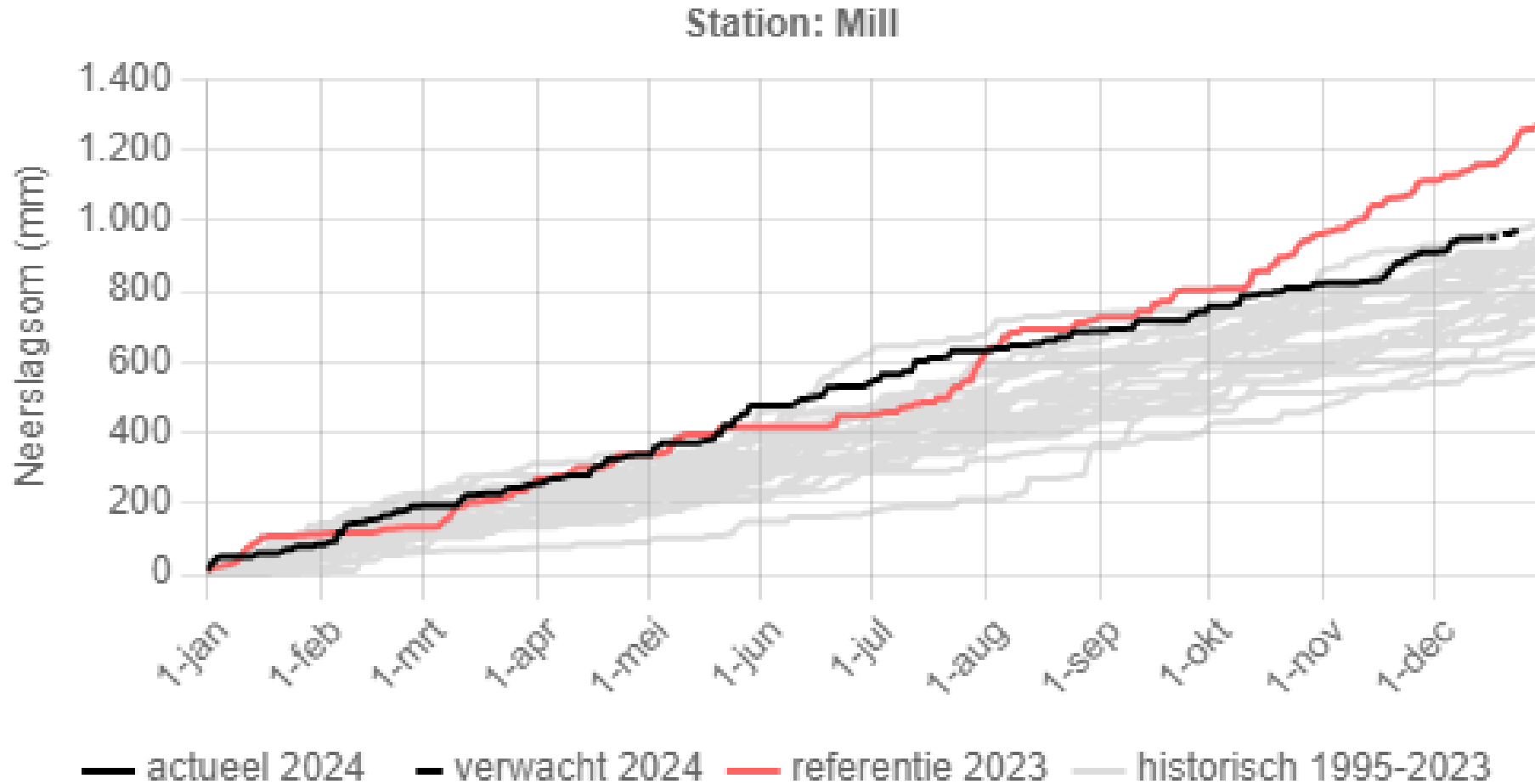


juli 23 t/m juli 24: 1461 mm

gemiddeld: 865 mm

Verschil: 596 mm

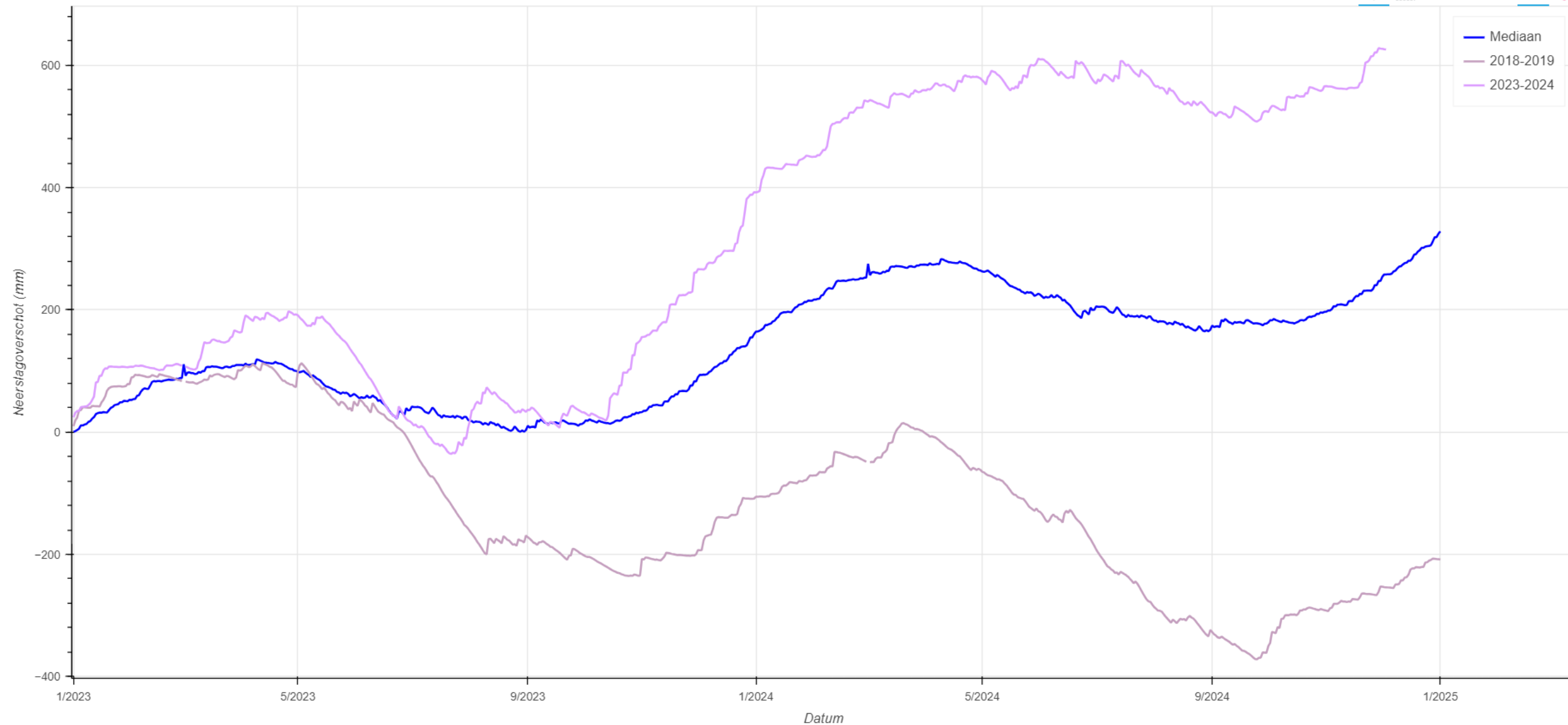
gevallen neerslag cumulatief meetstation Mill



neerslagoverschot/tekort over 2 jaar cumulatief



Neerslagoverschot Volkel

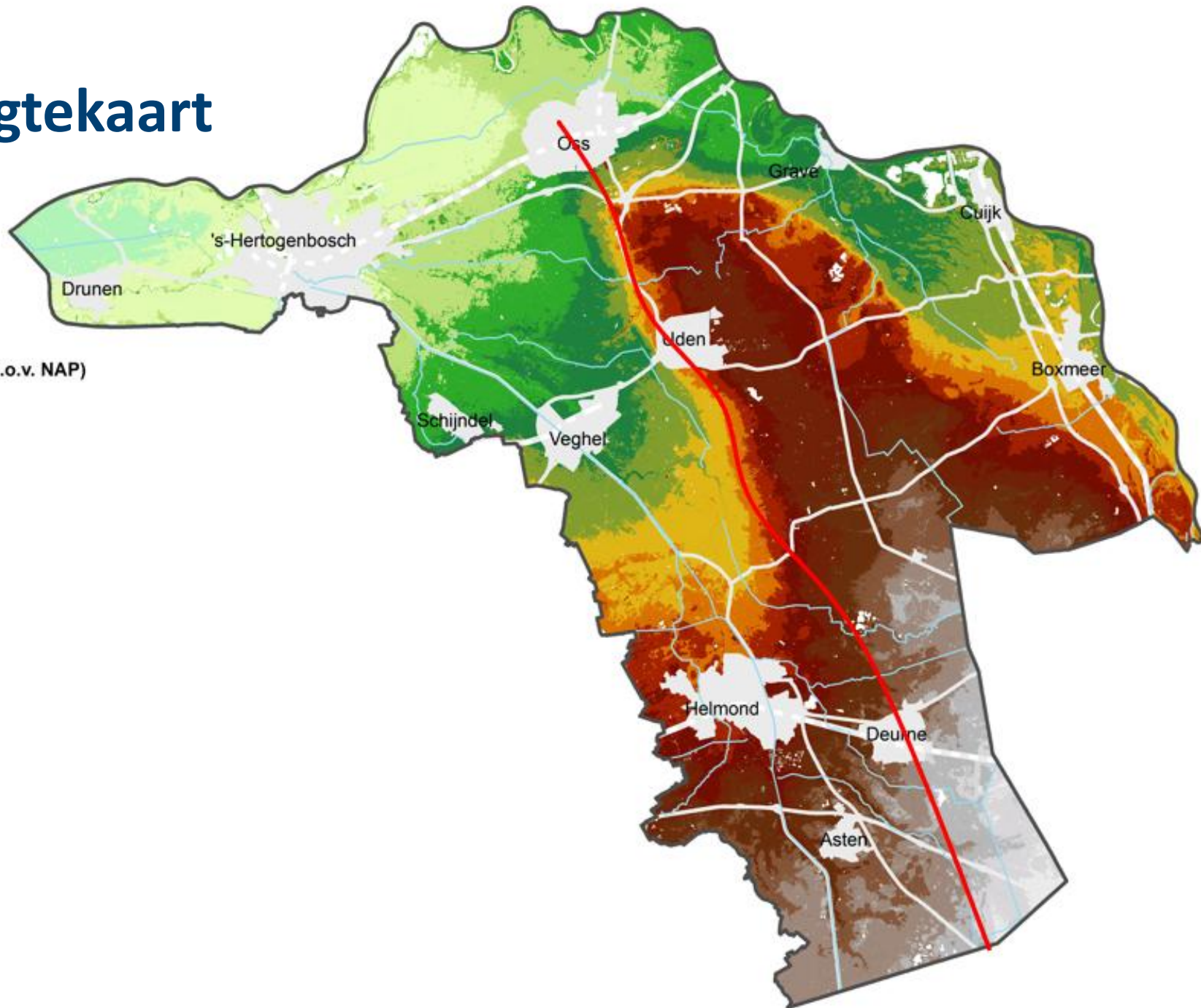
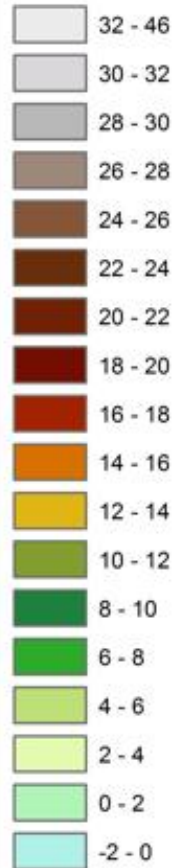


**zoveel neerslag heeft het
watersysteem nog nooit te
verwerken gekregen**

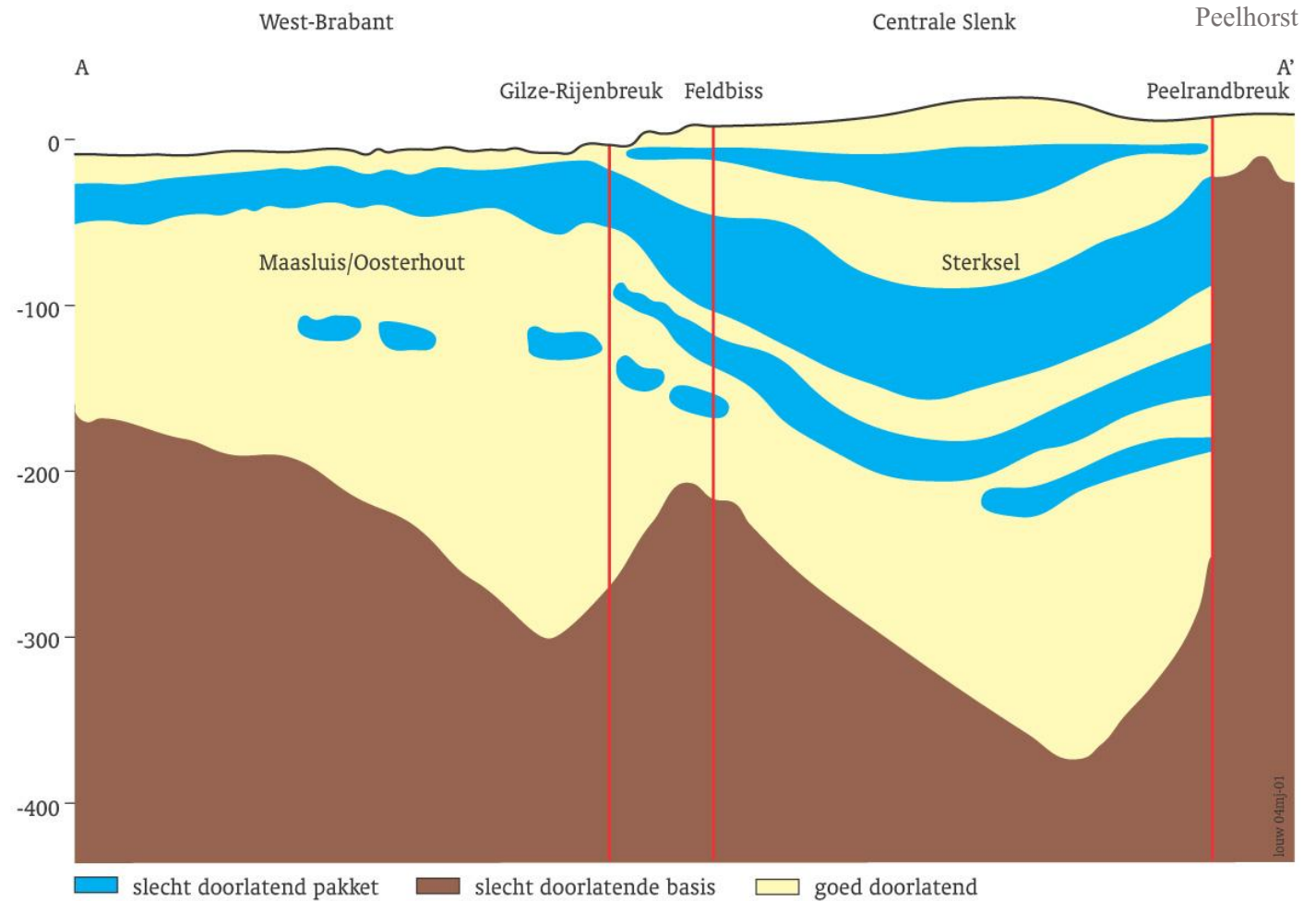
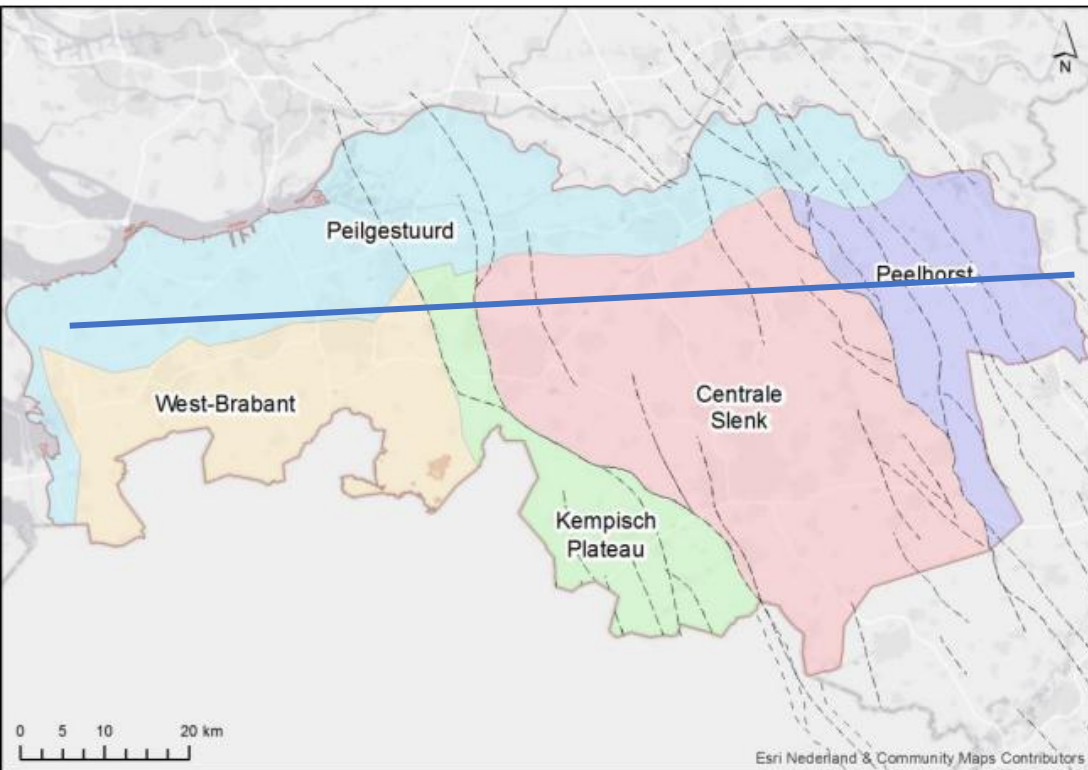
Hoogtekaart

Legenda

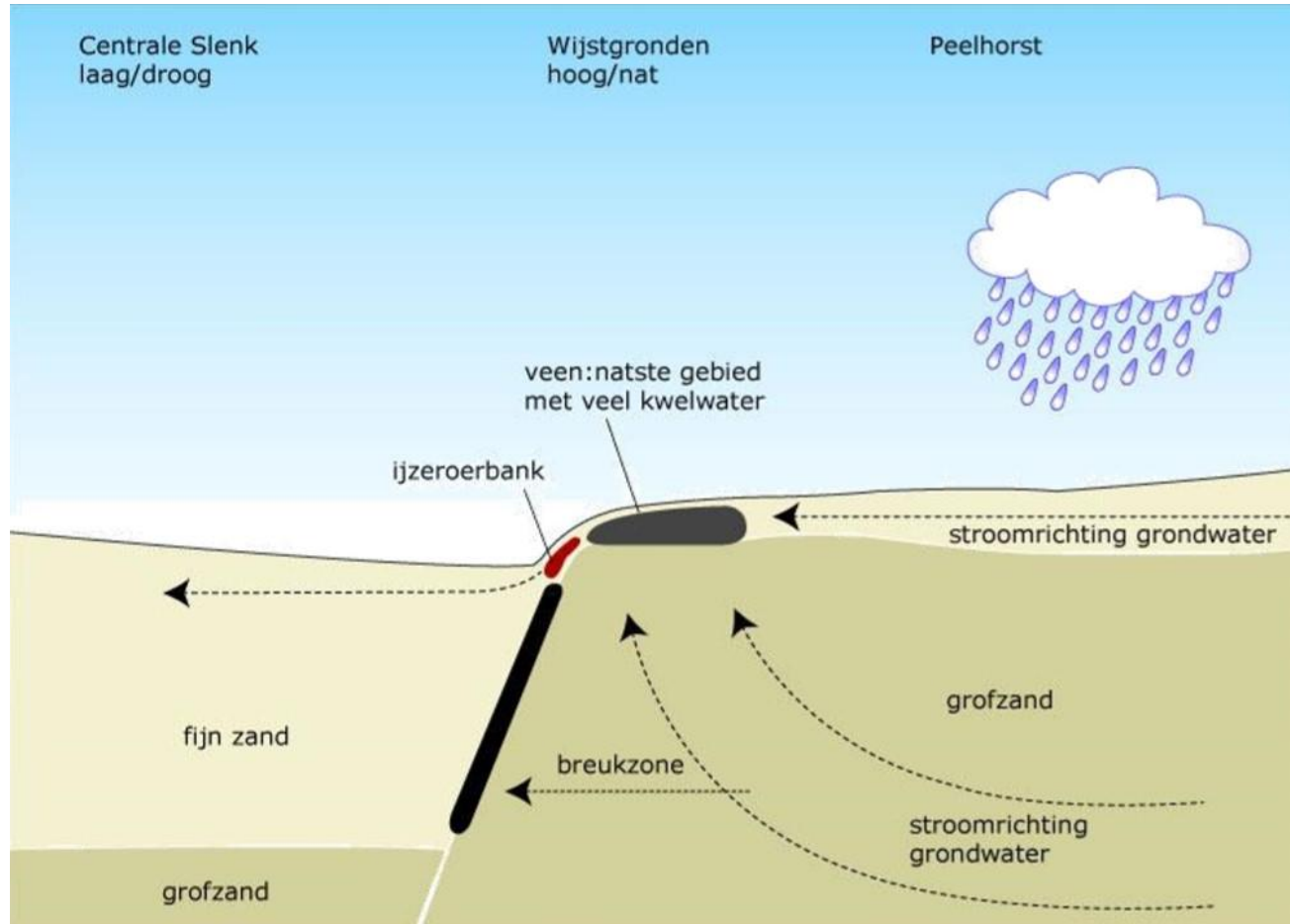
Terreinhoogtes (m t.o.v. NAP)



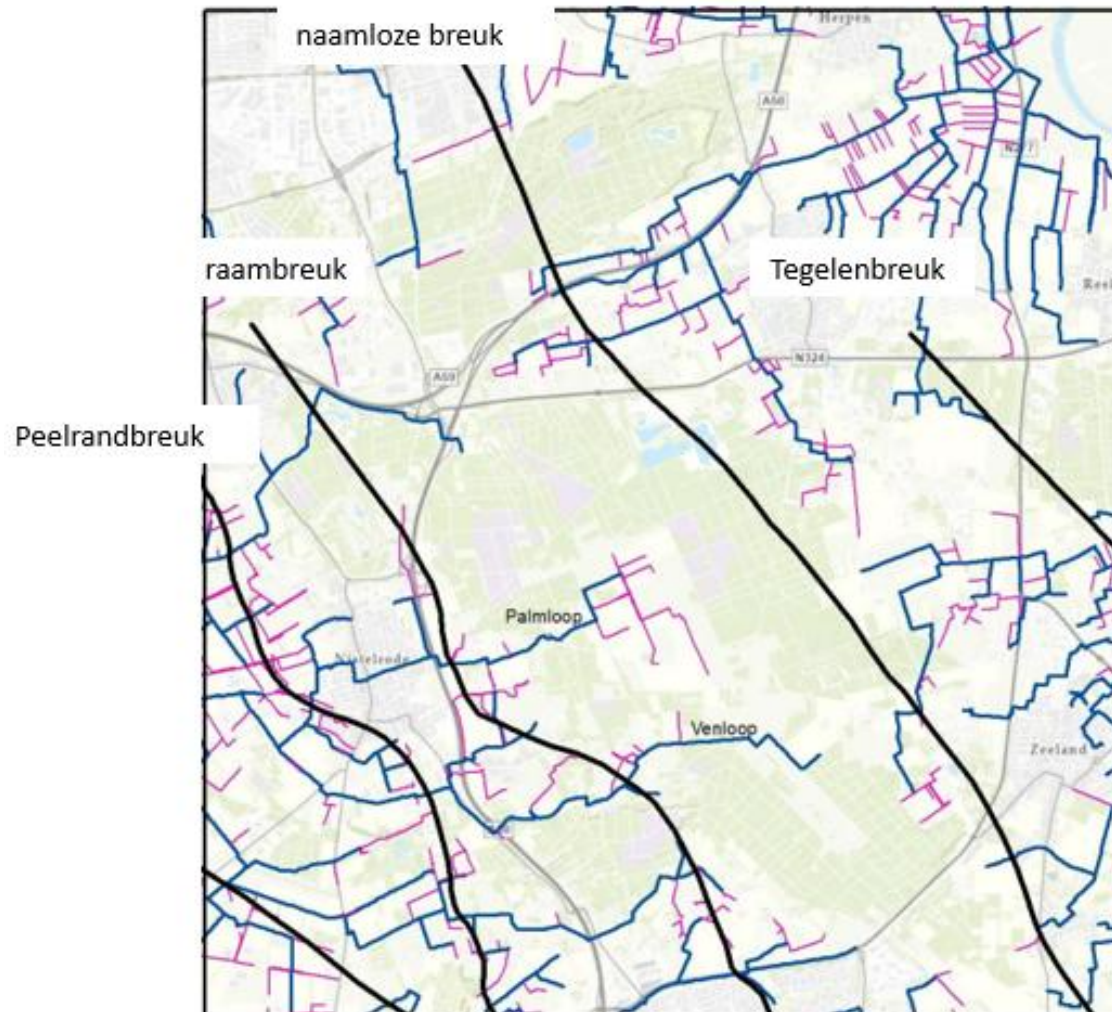
Geologische dwarsdoorsnede Brabant



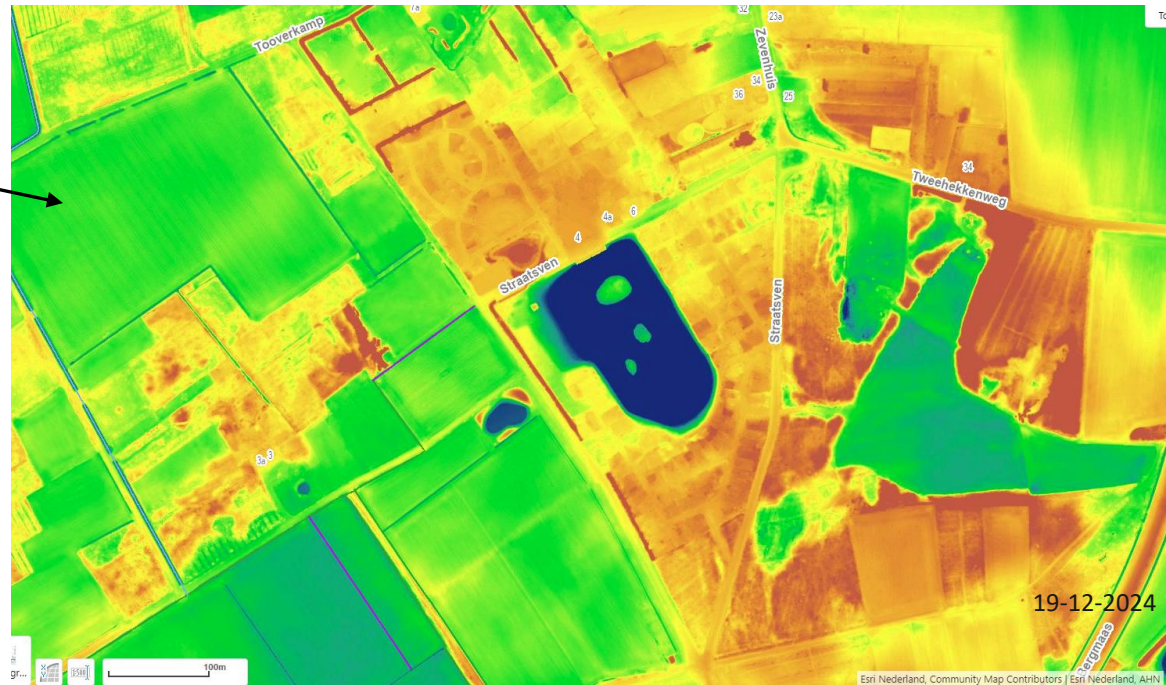
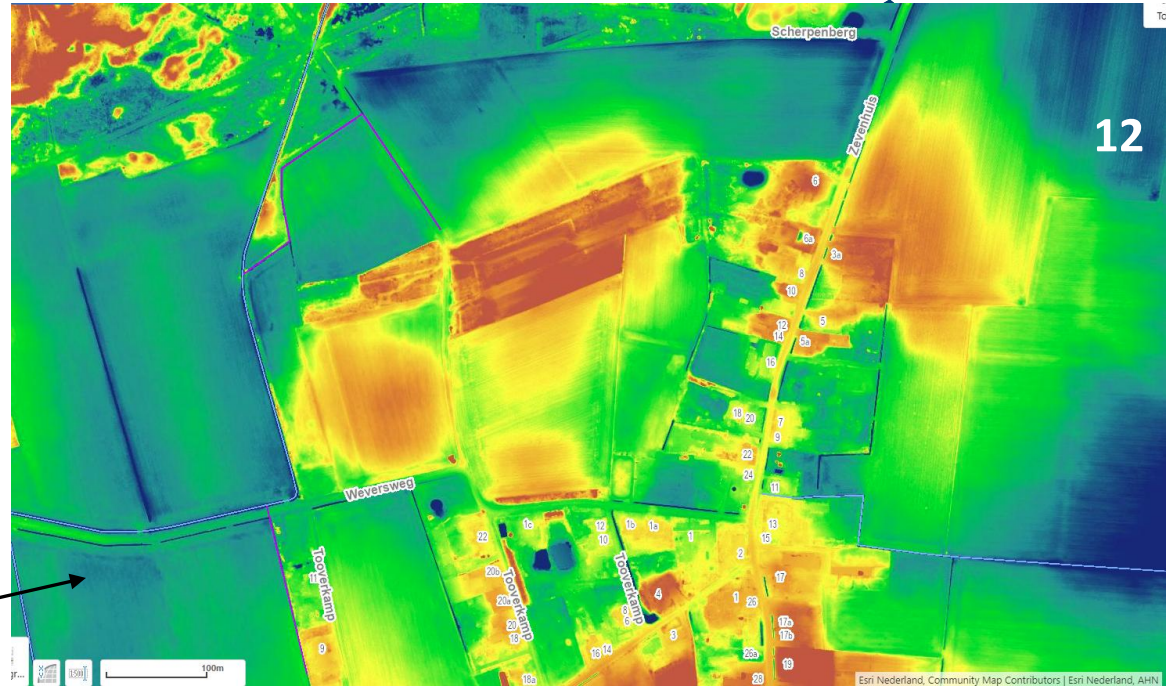
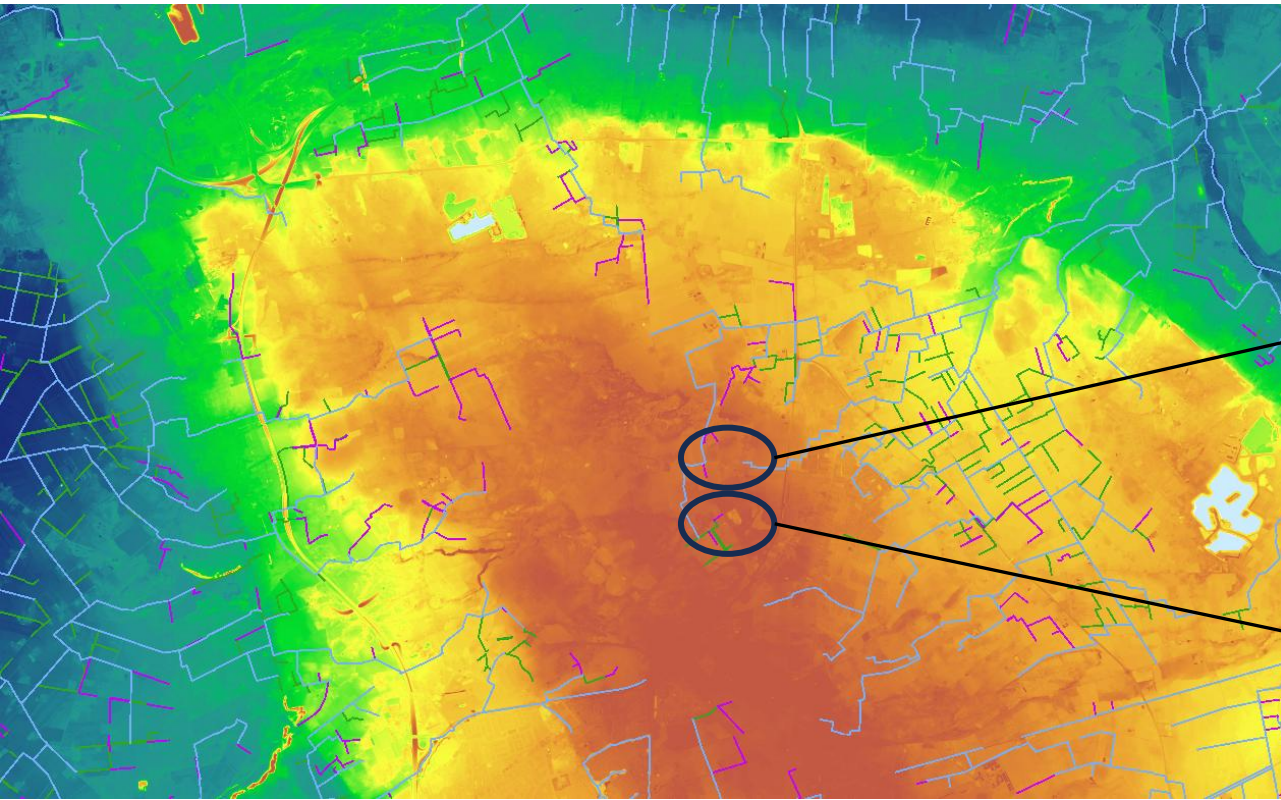
Grondwater bij een breuk



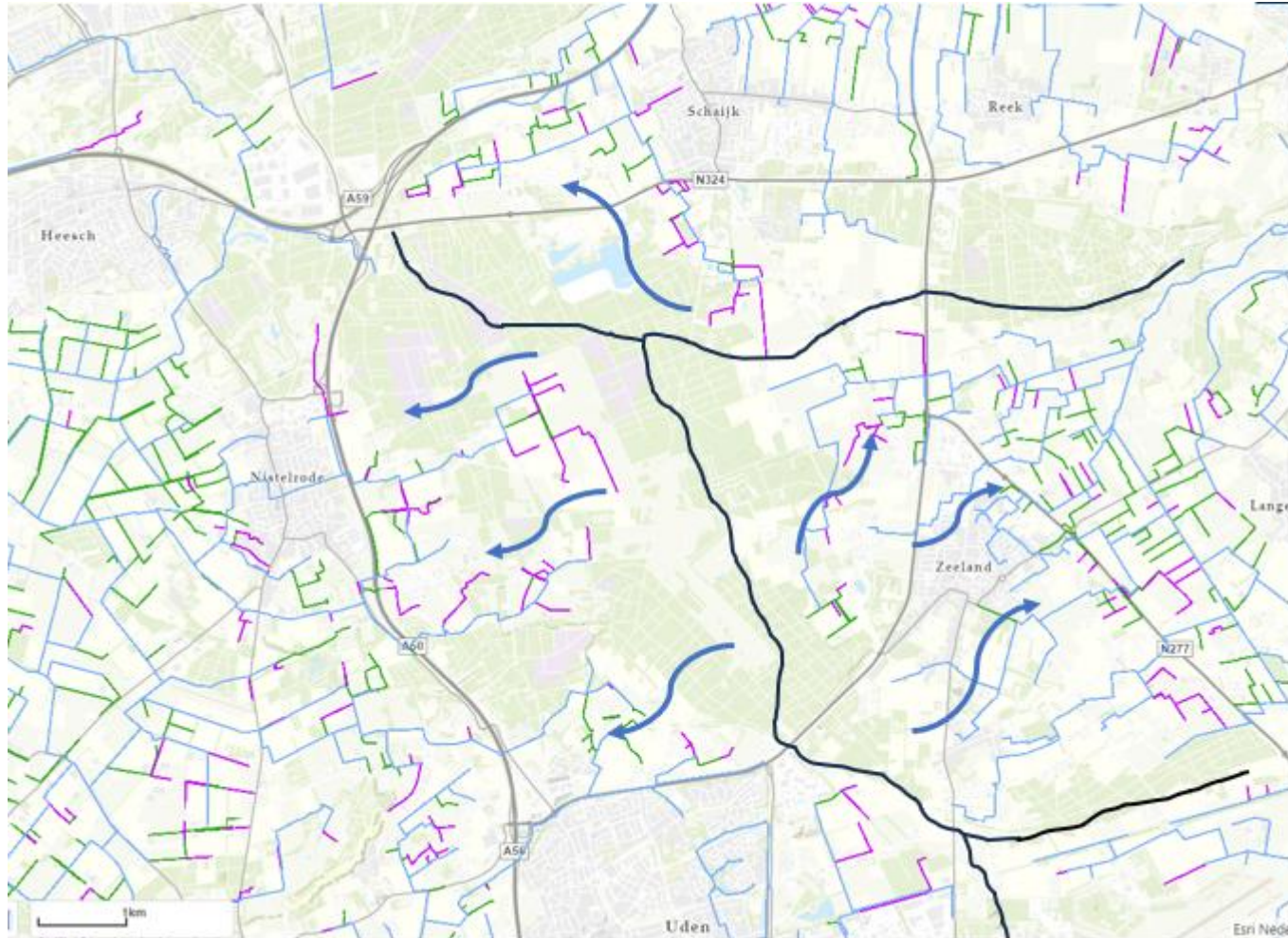
Breuklijnen Maashorst



Maashorst en zevenhuis op hoogtekaart



Watersysteem met waterscheiding en zevenhuis in detail met stuwen



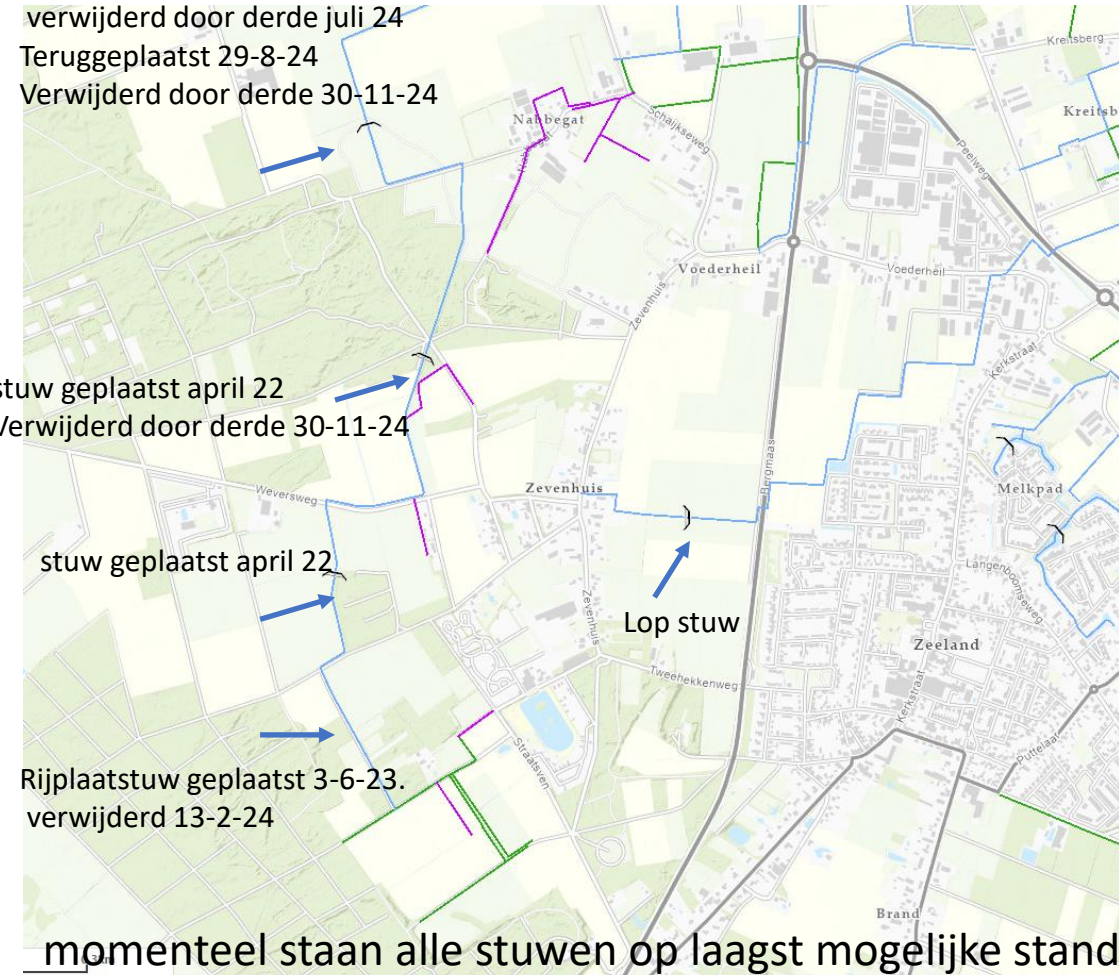
Rijplaatstuw geplaatst april 22
verwijderd door derde juli 24
Teruggeplaatst 29-8-24
Verwijderd door derde 30-11-24

stuw geplaatst april 22
Verwijderd door derde 30-11-24

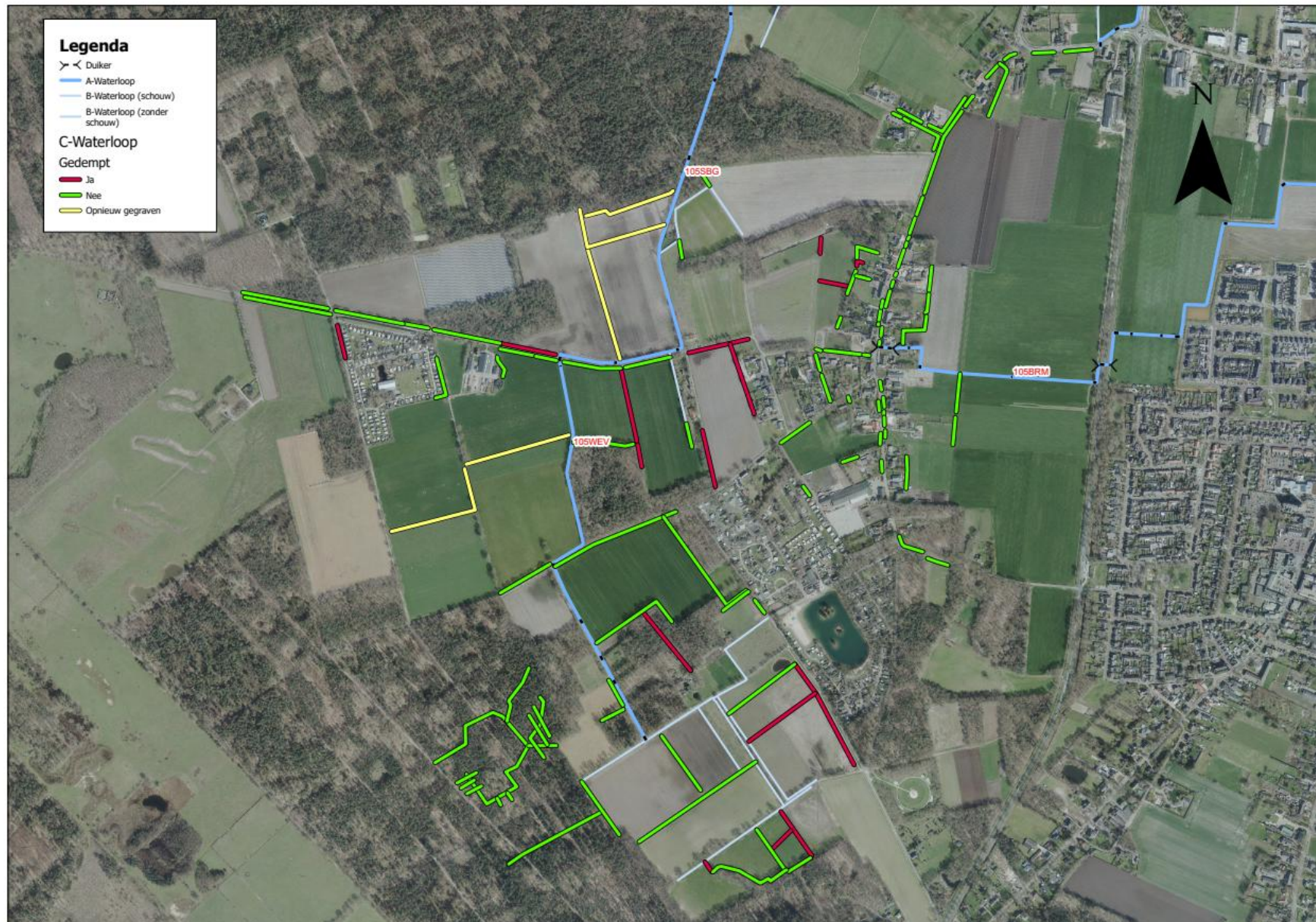
stuw geplaatst april 22

Rijplaatstuw geplaatst 3-6-23.
verwijderd 13-2-24

momenteel staan alle stuwen op laagst mogelijke stand

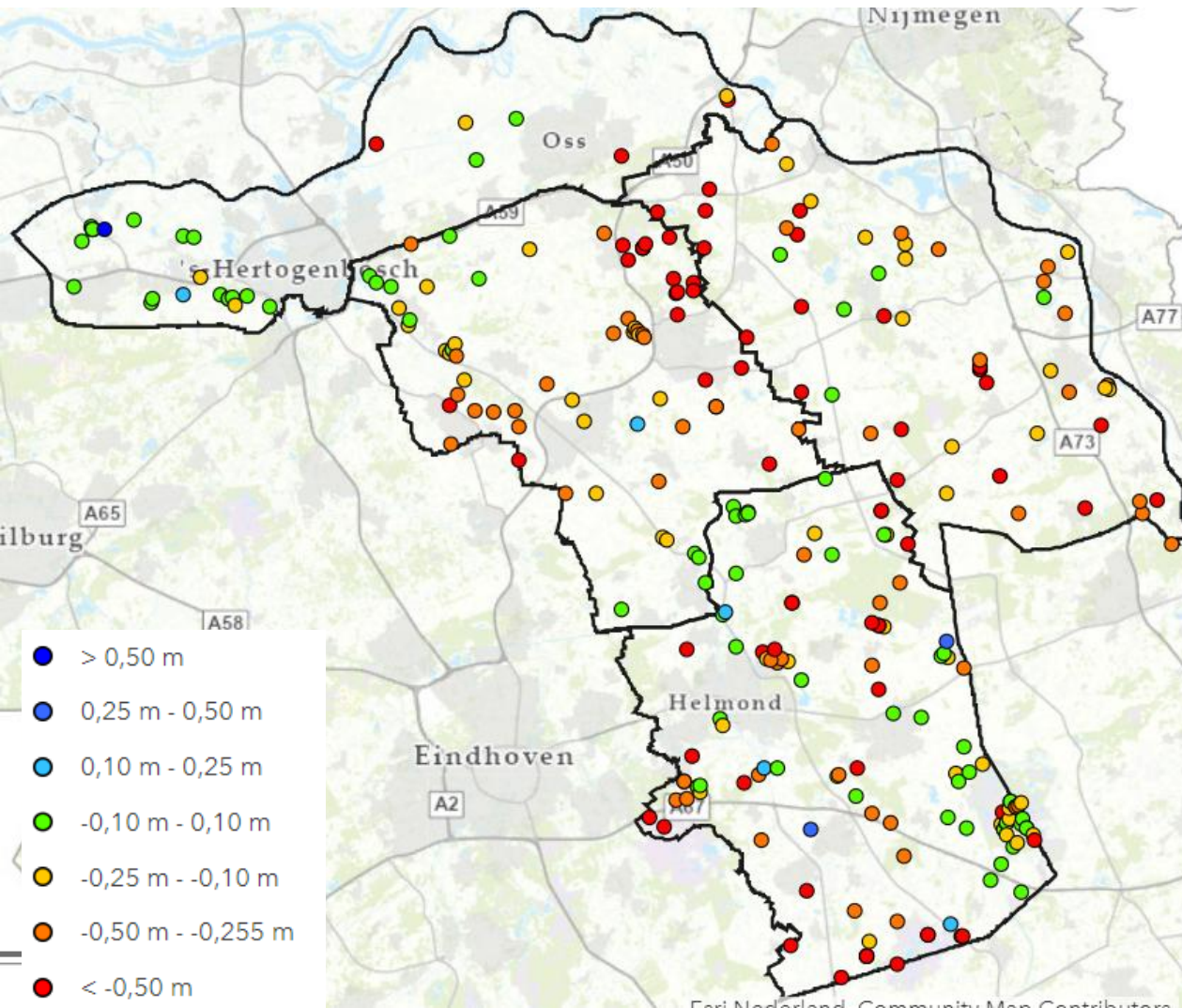


Detailontwatering

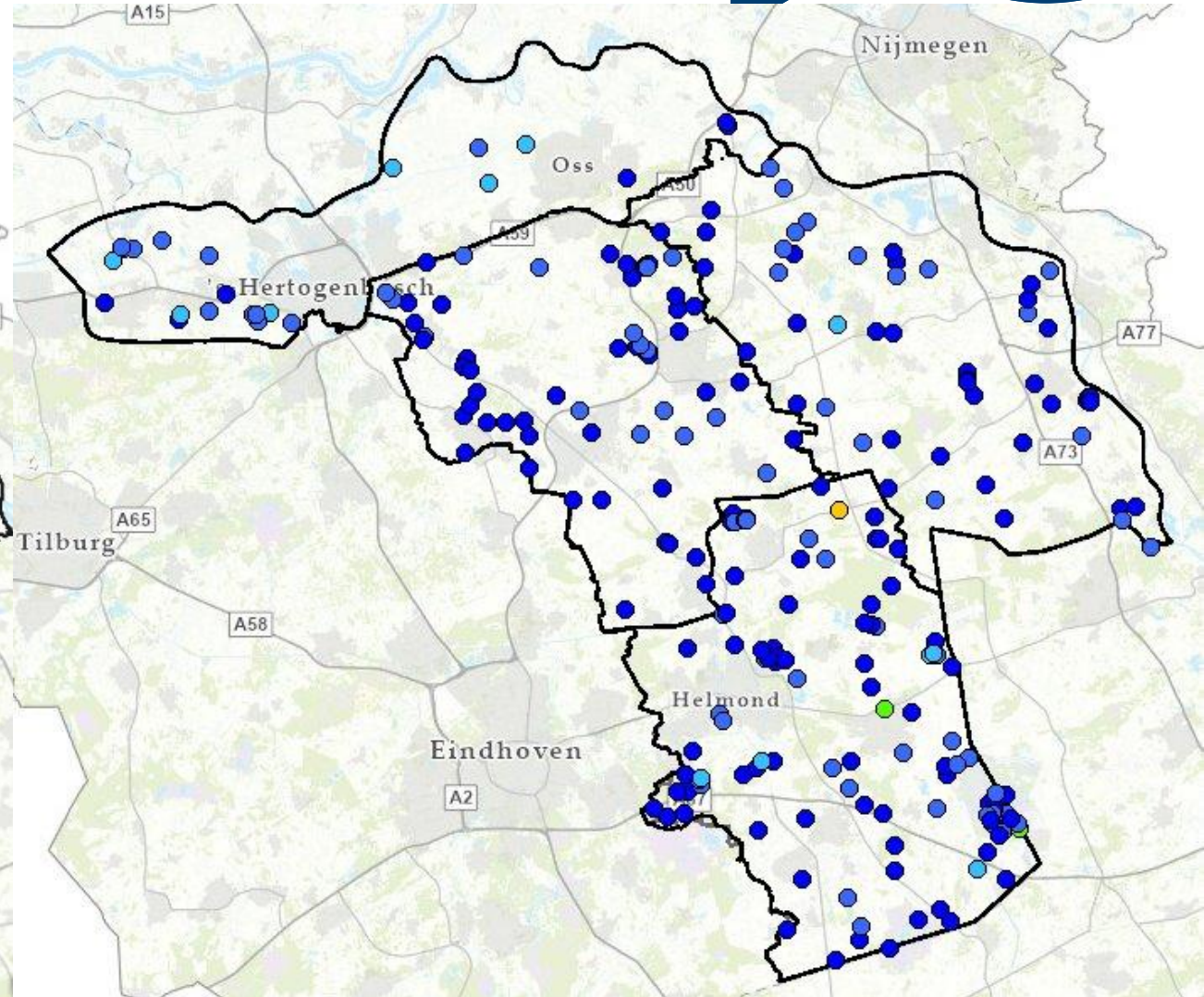


Grondwater absolute afwijking

Winter 2022/2023



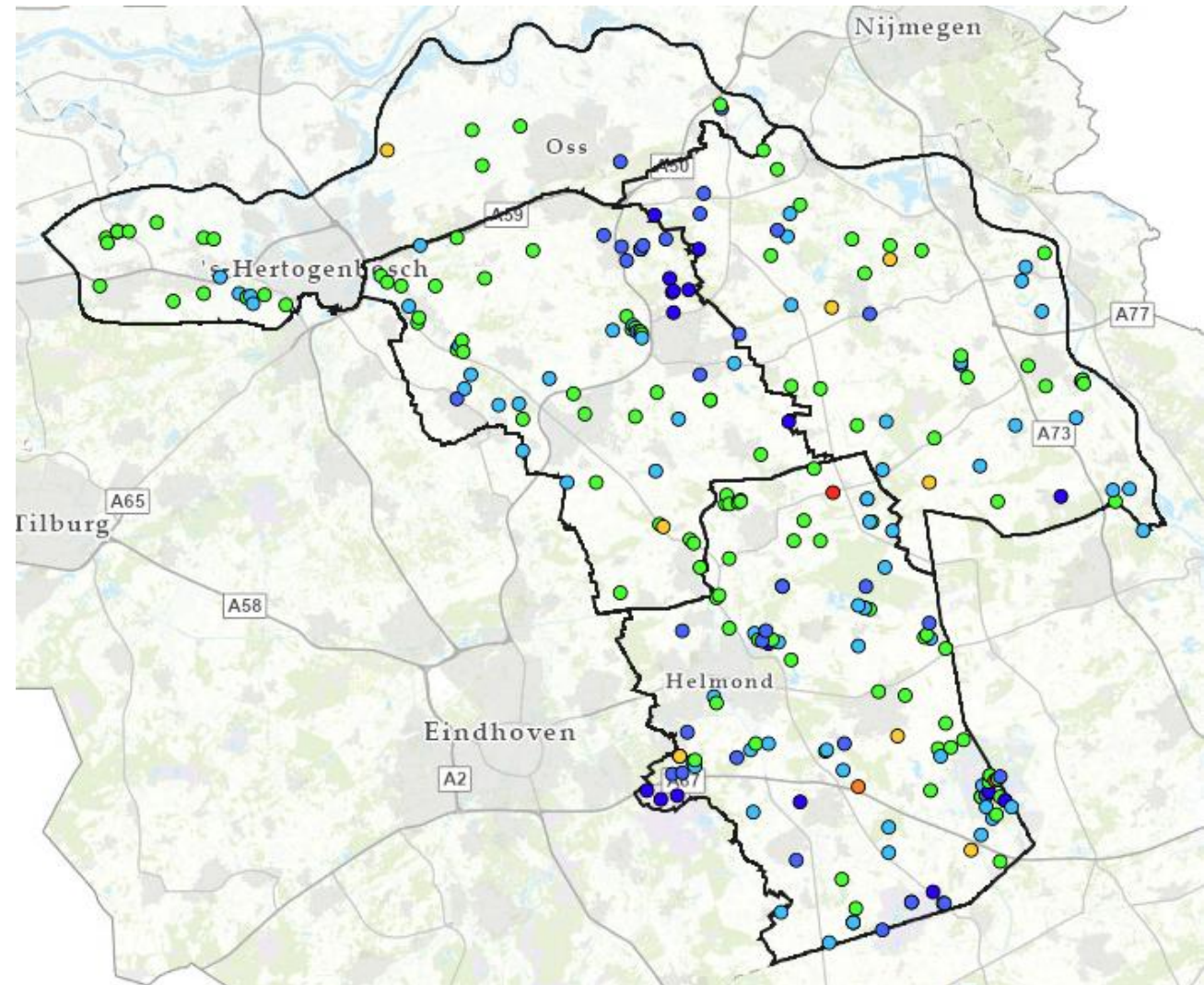
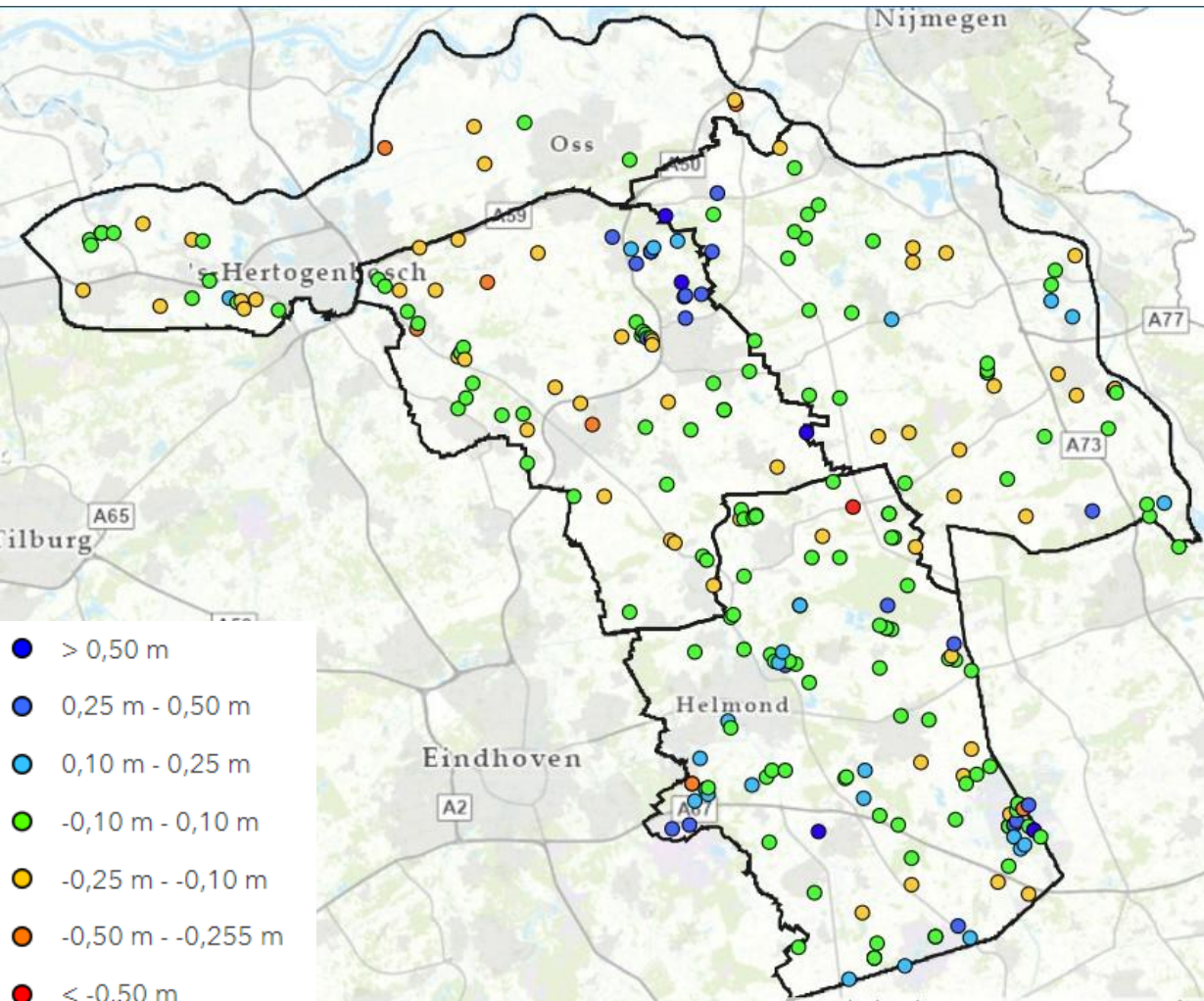
Winter 2023/2024



Grondwater absolute afwijking

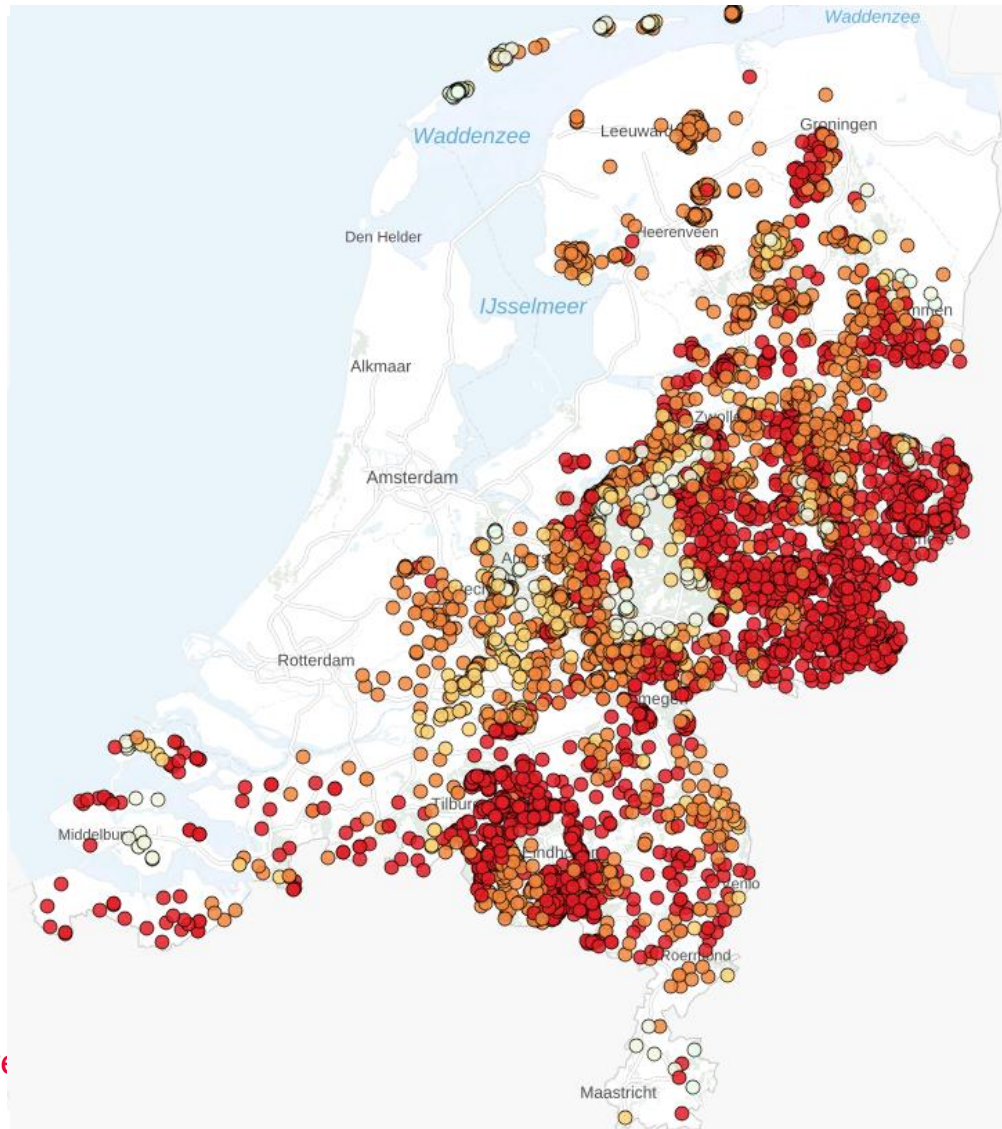
Begin november

actueel

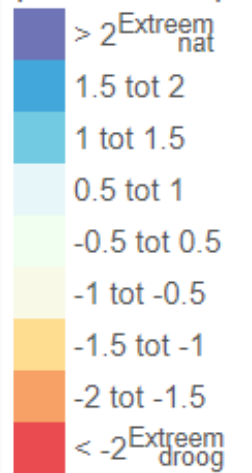
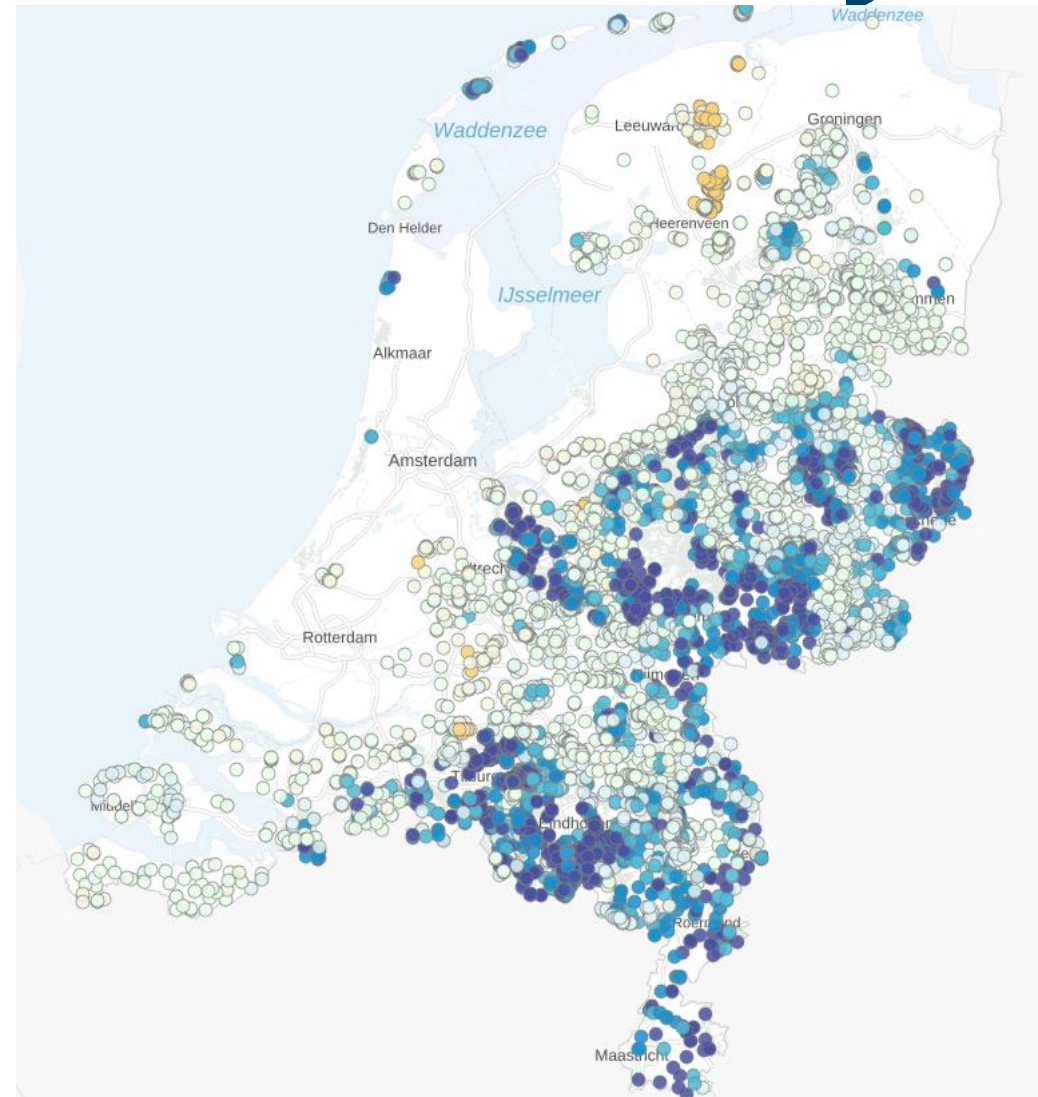


Grondwater landelijk

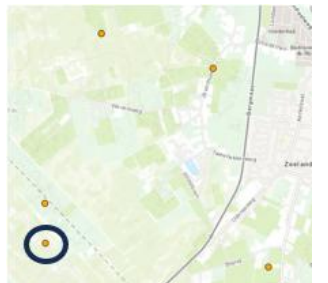
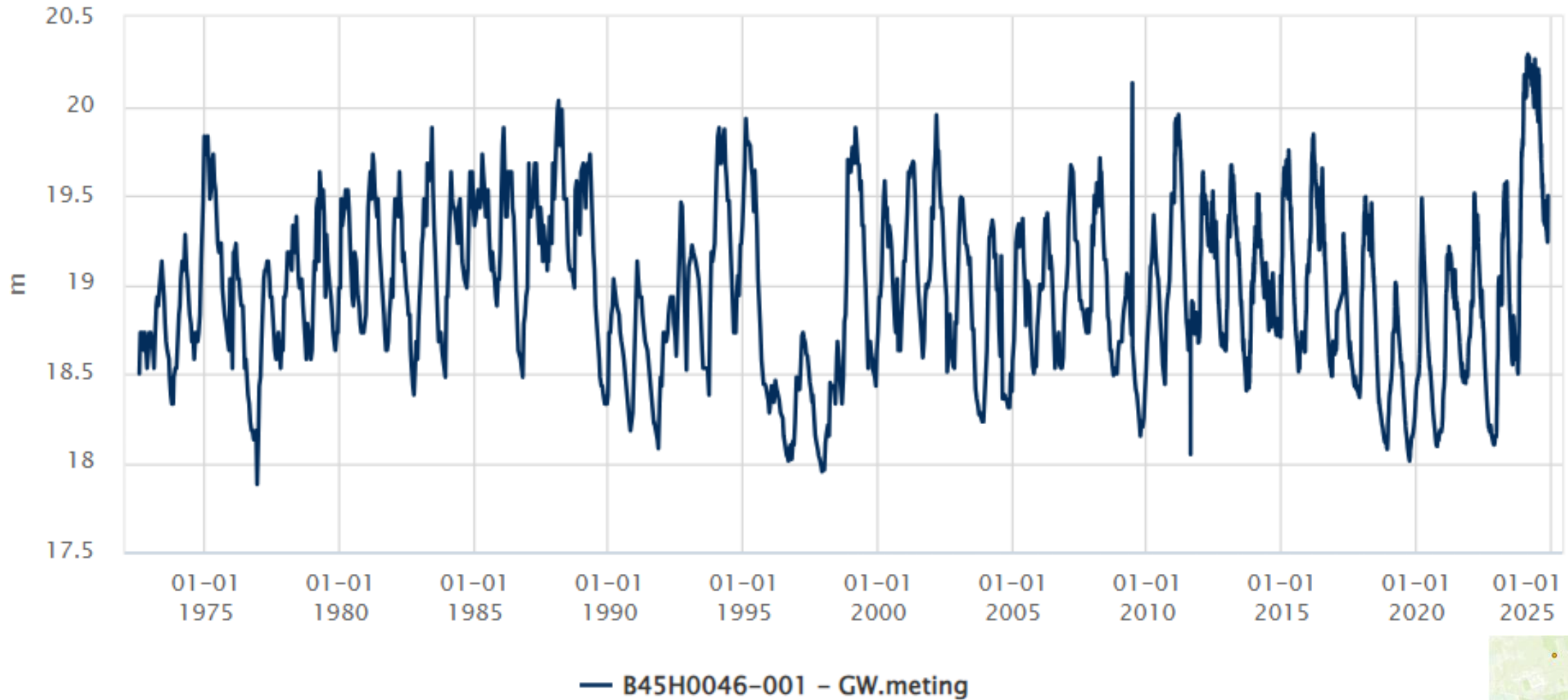
September 22



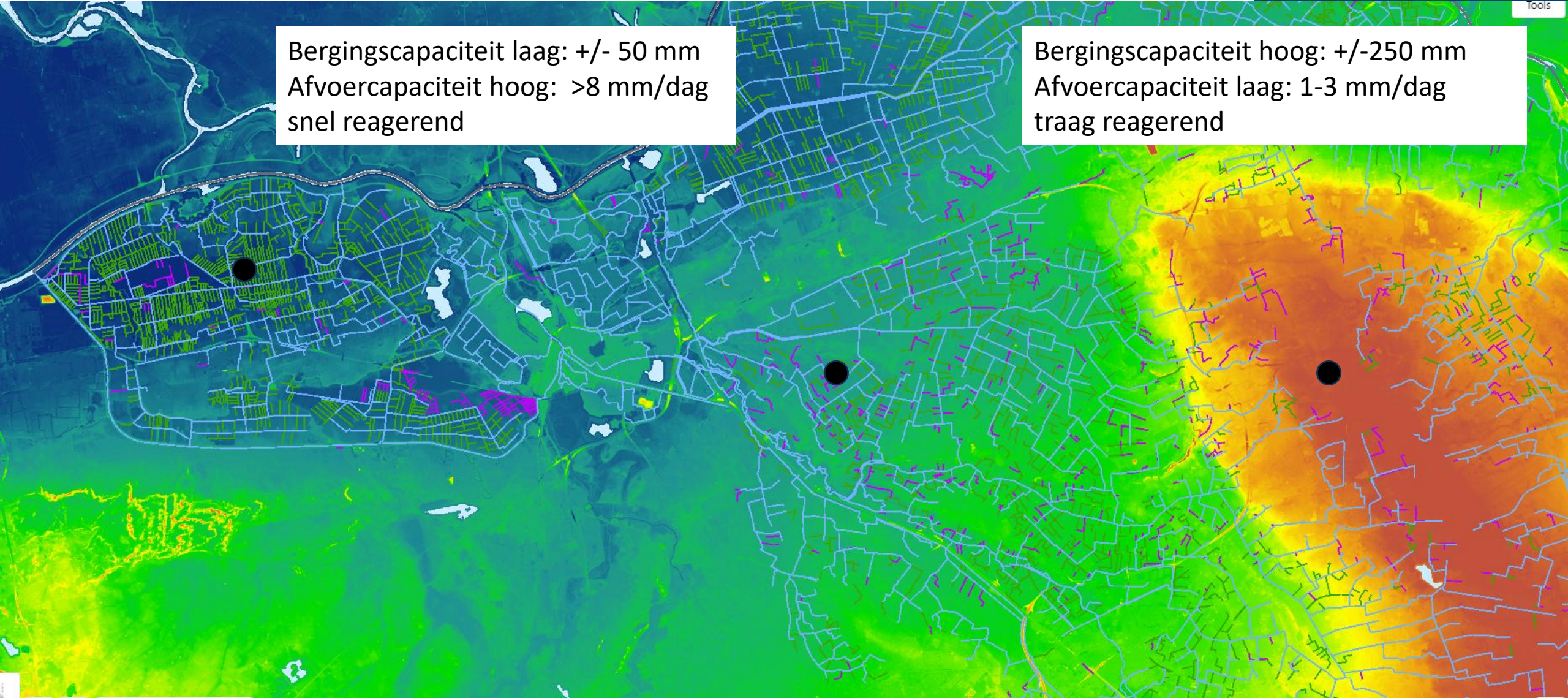
actueel



Grondwater Maashorst langjarige reeks



Hoog vs laag

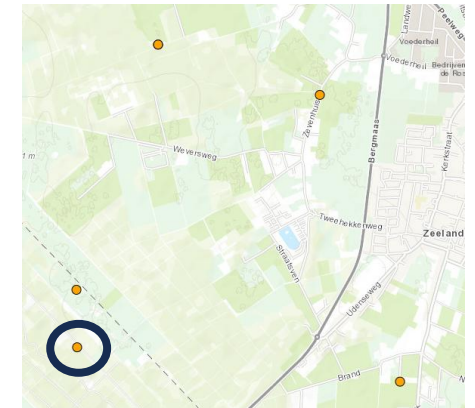
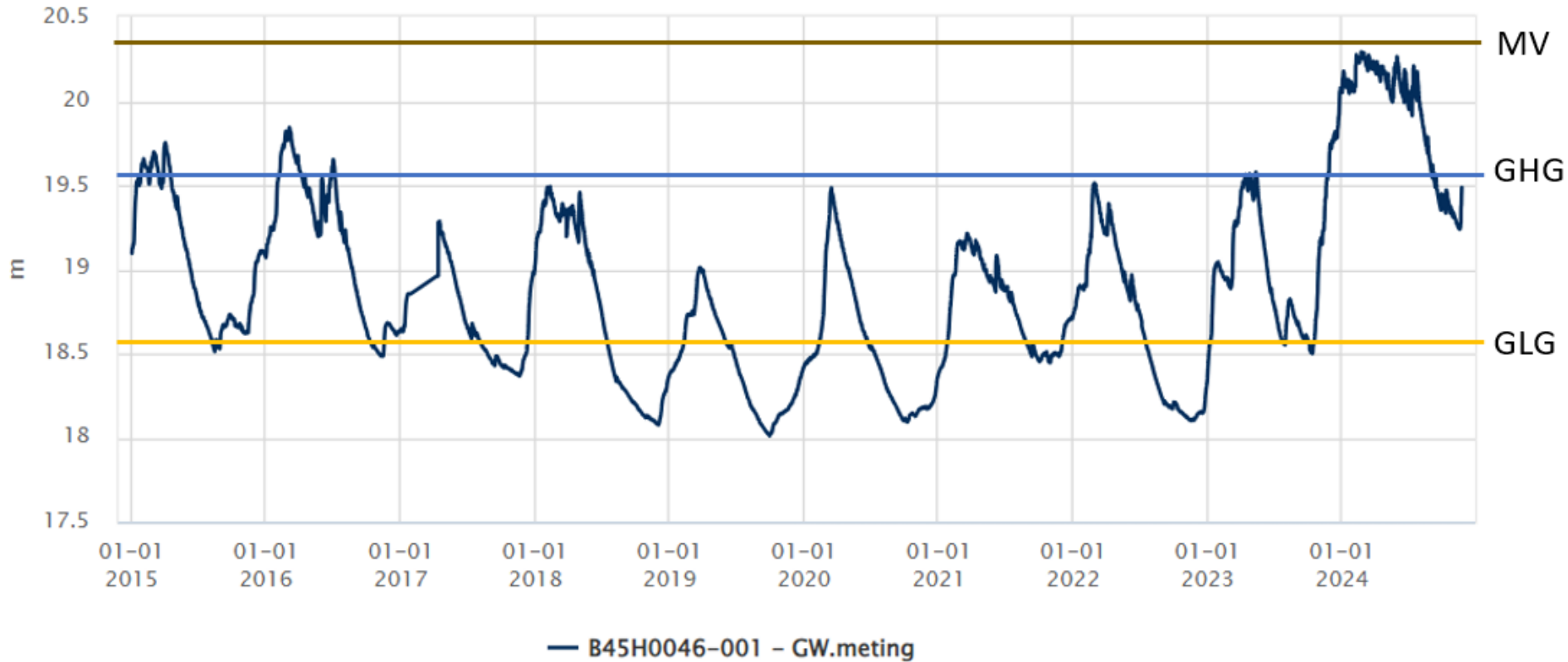


Bergingscapaciteit laag: +/- 50 mm
Afvoercapaciteit hoog: >8 mm/dag
snel reagerend

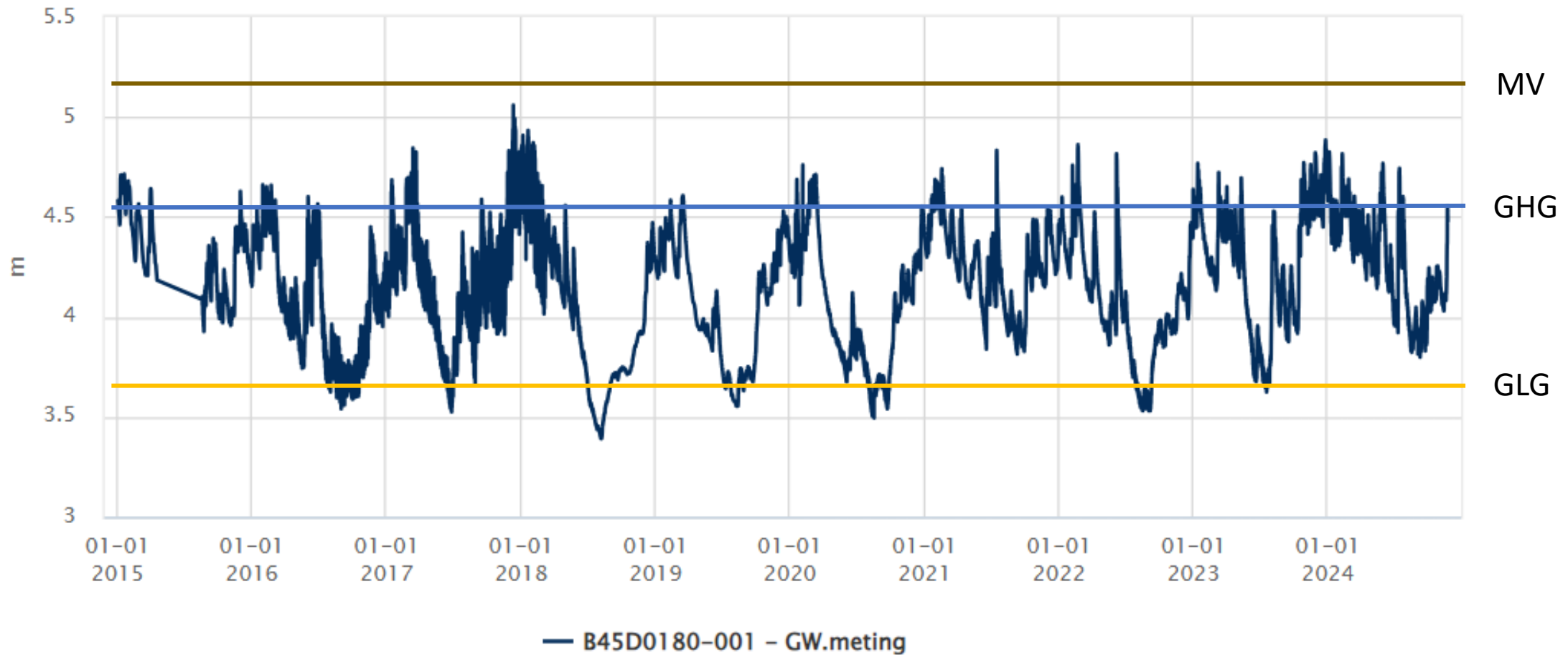
Bergingscapaciteit hoog: +/-250 mm
Afvoercapaciteit laag: 1-3 mm/dag
traag reagerend

Grondwater hooggelegen Maashorst: Reeks over 10 jaar

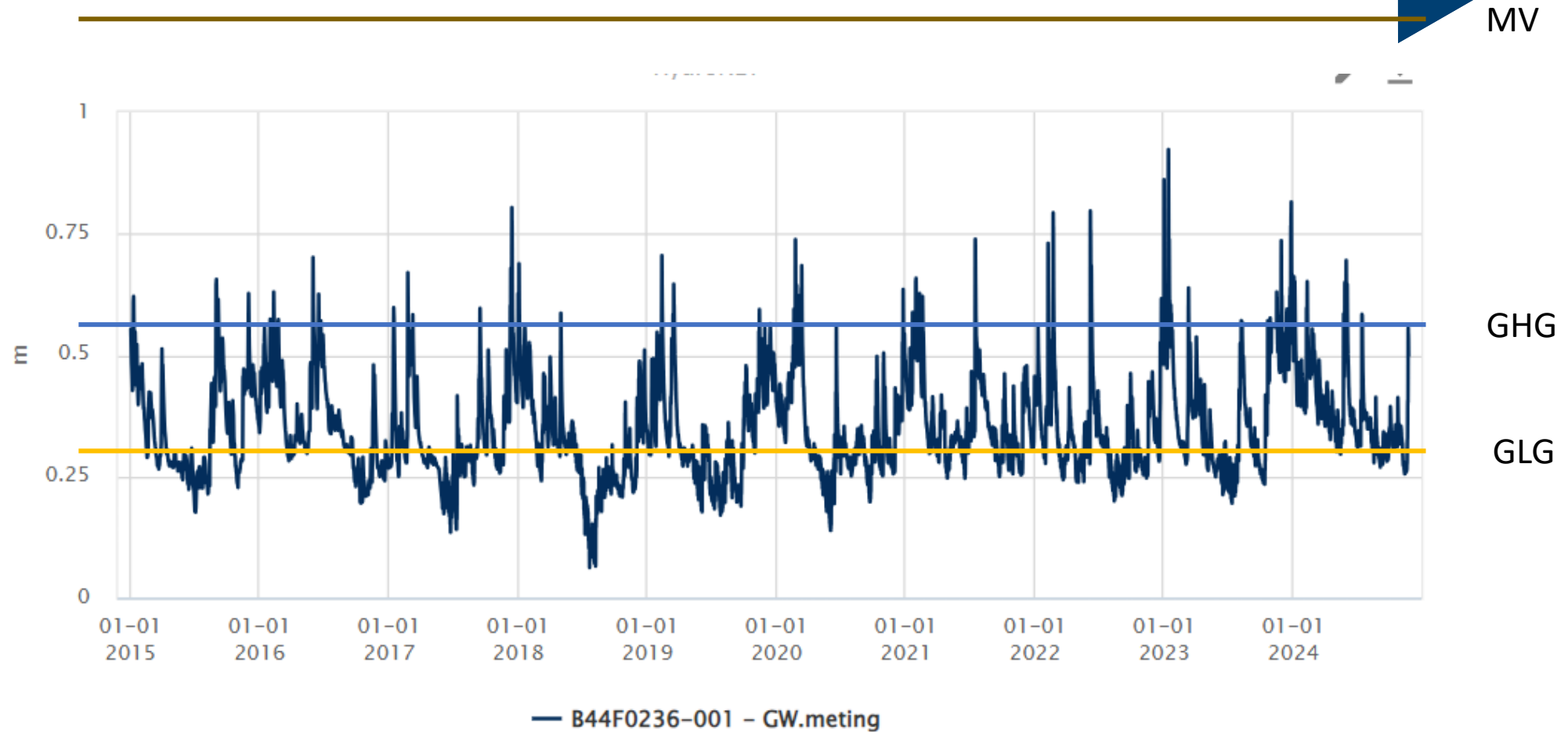
2
1



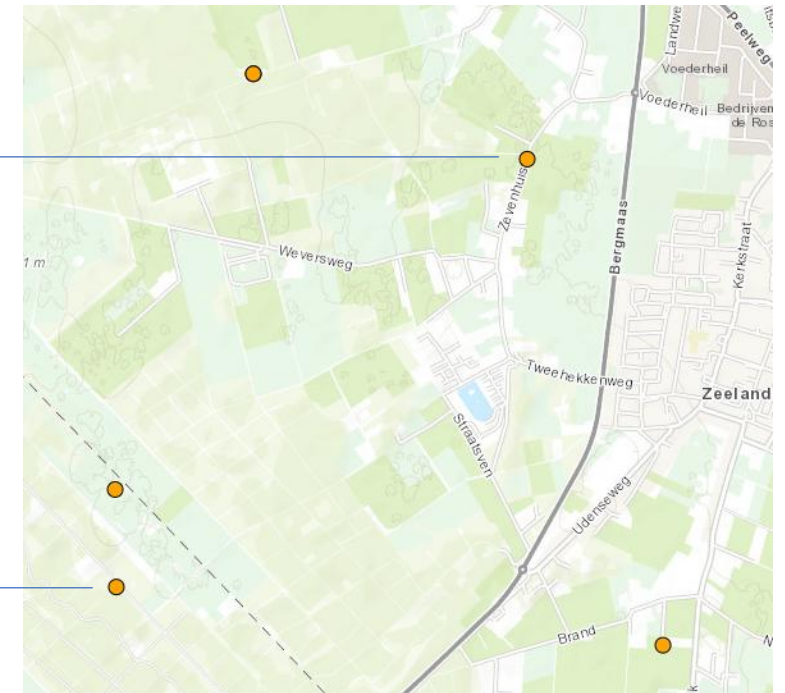
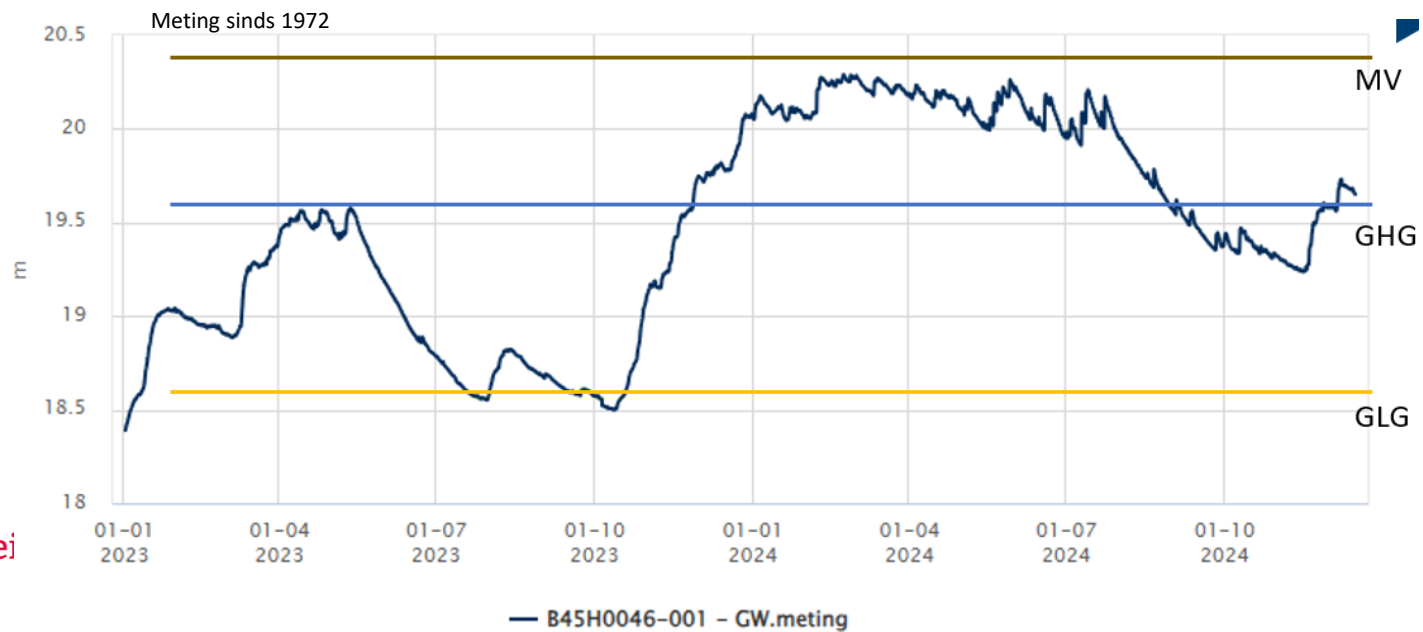
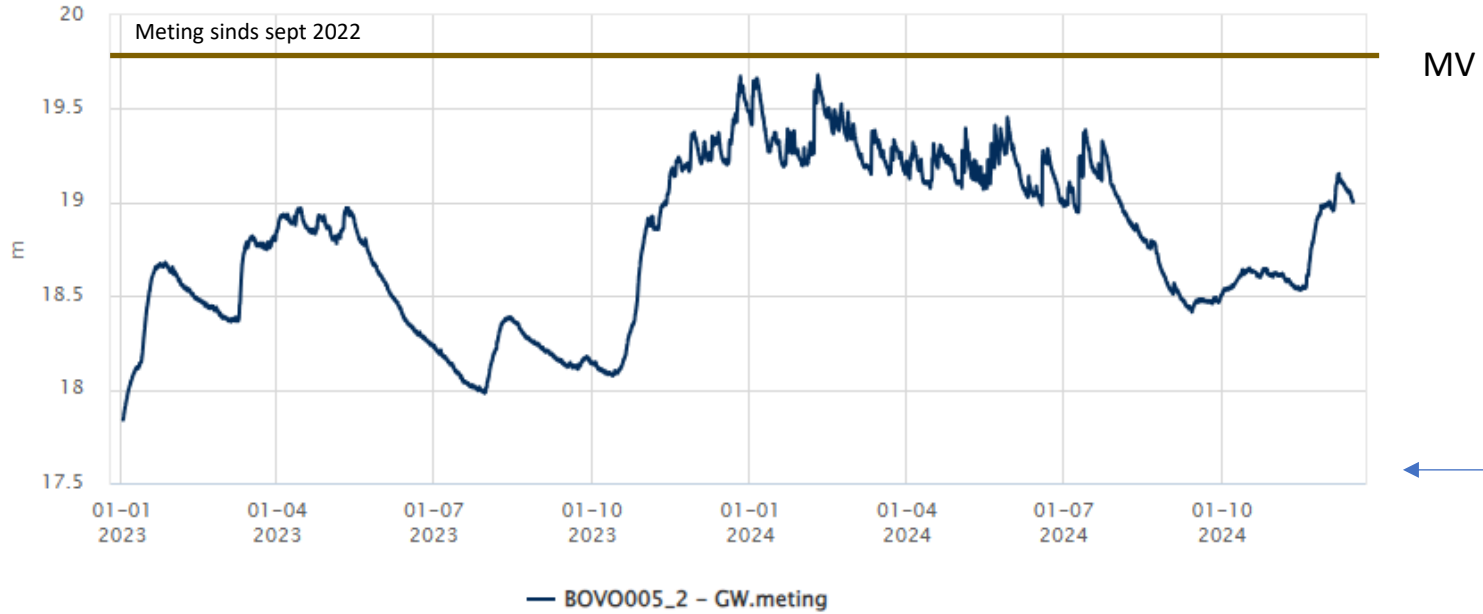
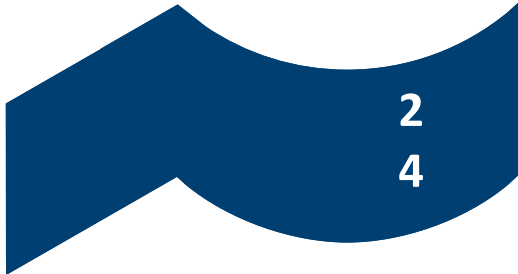
Grondwater laaggelegen Berlicum: reeks over 10 jaar



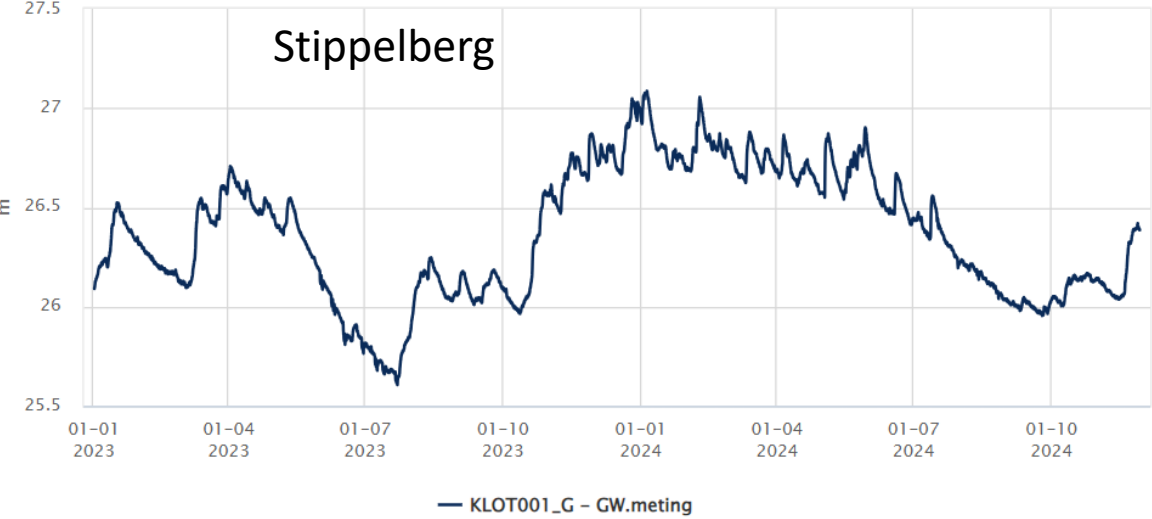
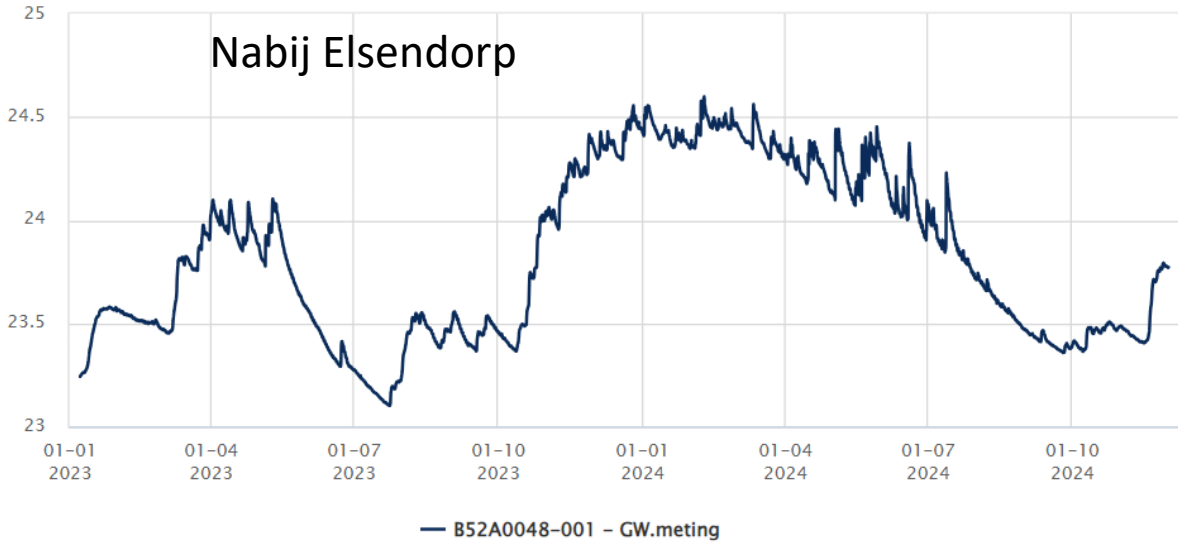
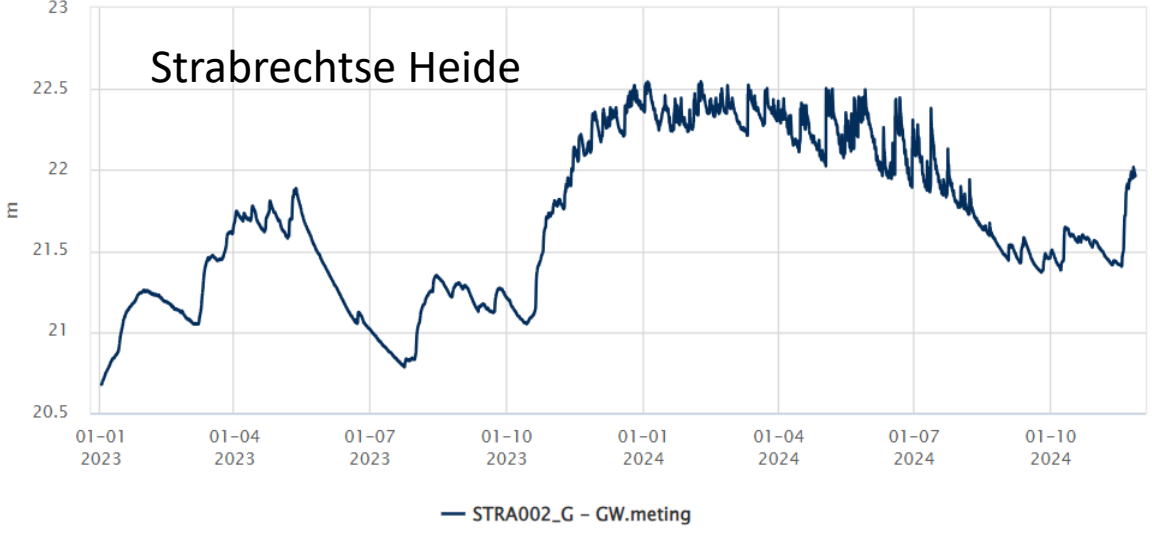
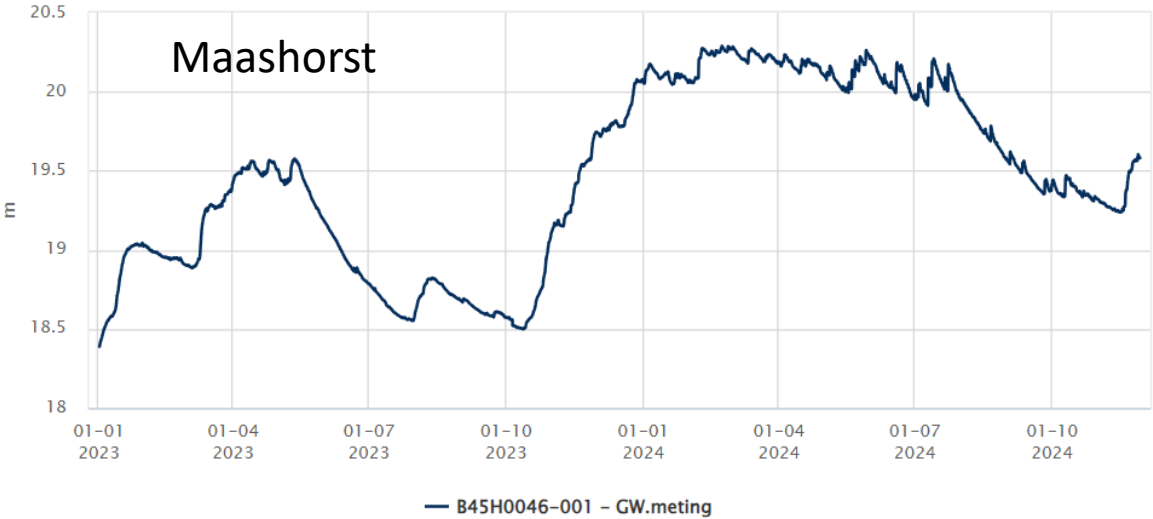
Grondwater nog lager in de polder (bij Oudheusden)



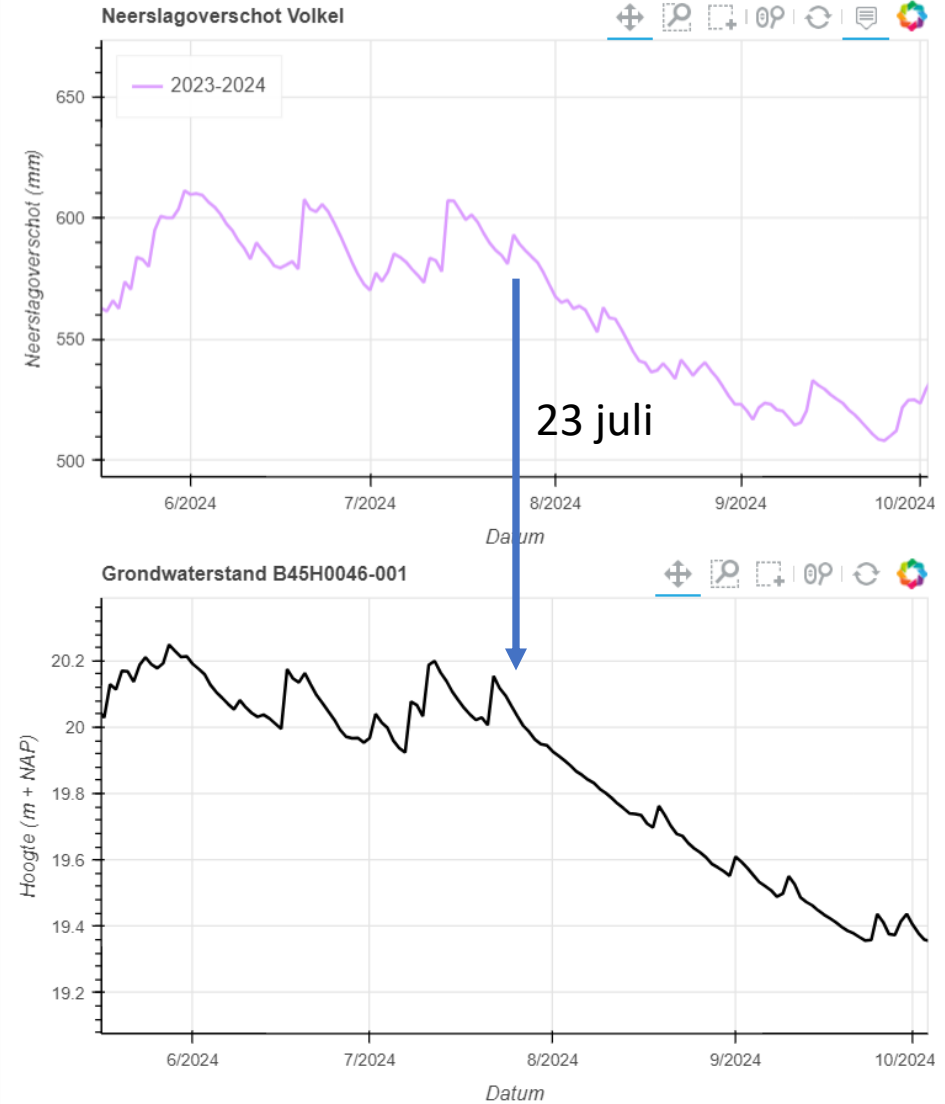
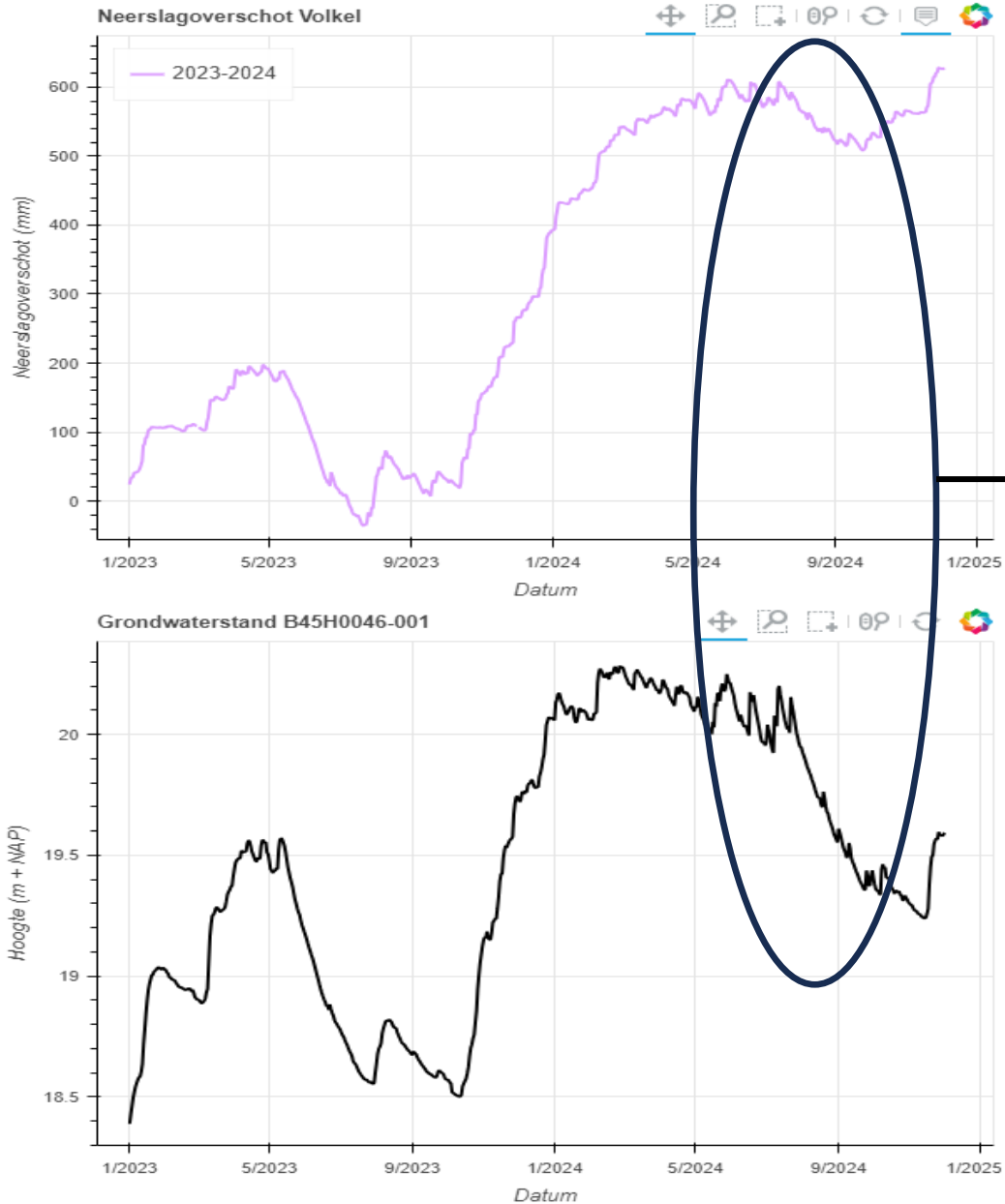
Vanaf 2023 peilbuizen nabij Zevenhuis.



Grondwater laat in verschillende hooggelegen gebieden dezelfde reactie zien



Grondwater stijging en daling verklaard.

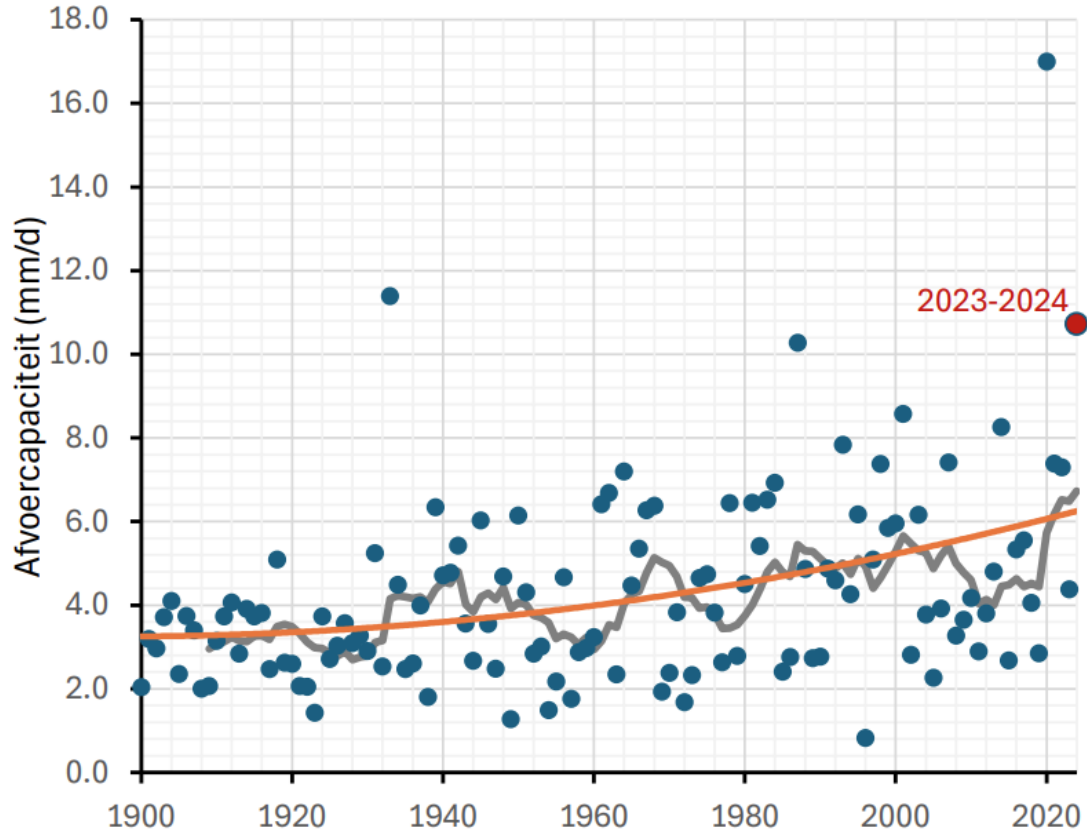


extra achtergrond sheets

23/24 zeer extreem voor hooggelegen gebieden

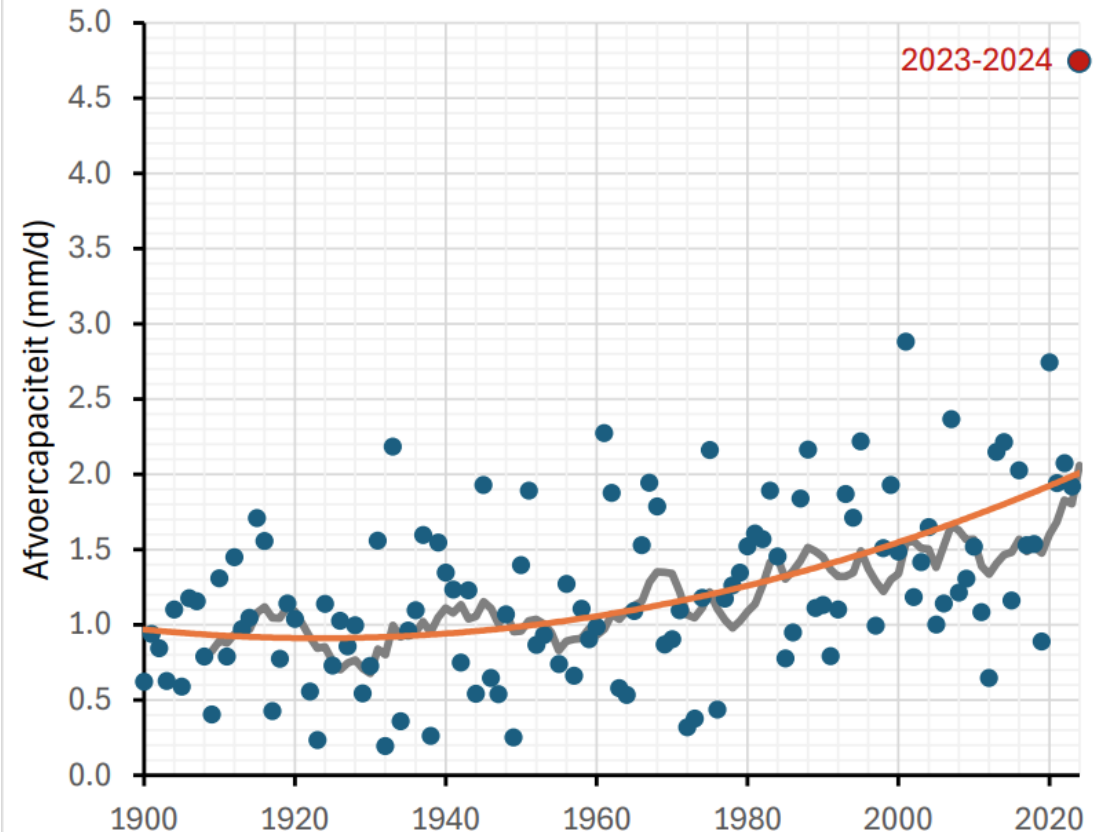
laag gelegen gebieden

Bergingscapaciteit = 50 mm



Hoog gelegen zandgronden

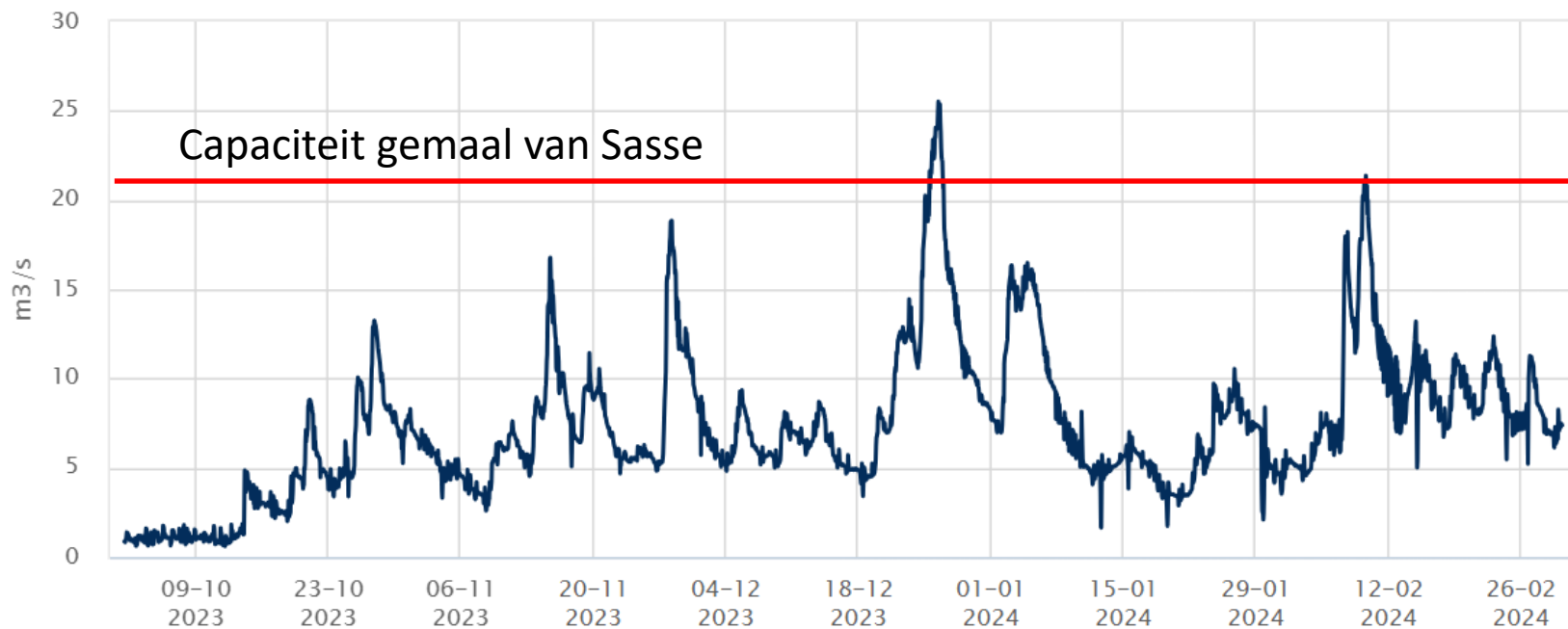
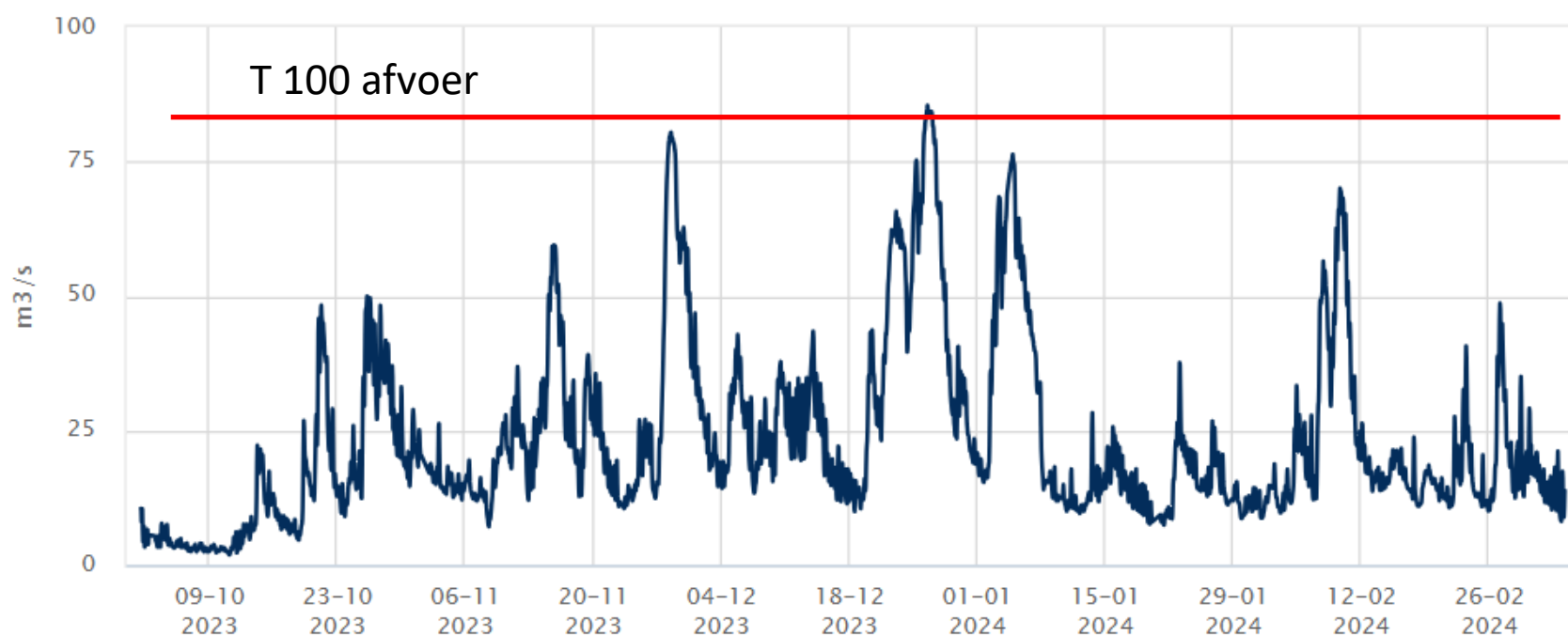
Bergingscapaciteit = 250 mm





Afvoer Aa in Den Bosch.

Afvoer Raam in Grave. Hoogst gemeten piekafvoer ooit



veilig

Gemiddelde maandaafvoer van de Aa in Den Bosch vanaf 1976

jan 1995 A2
onder water

Dec 2023
33,4 m³/s.

3
1

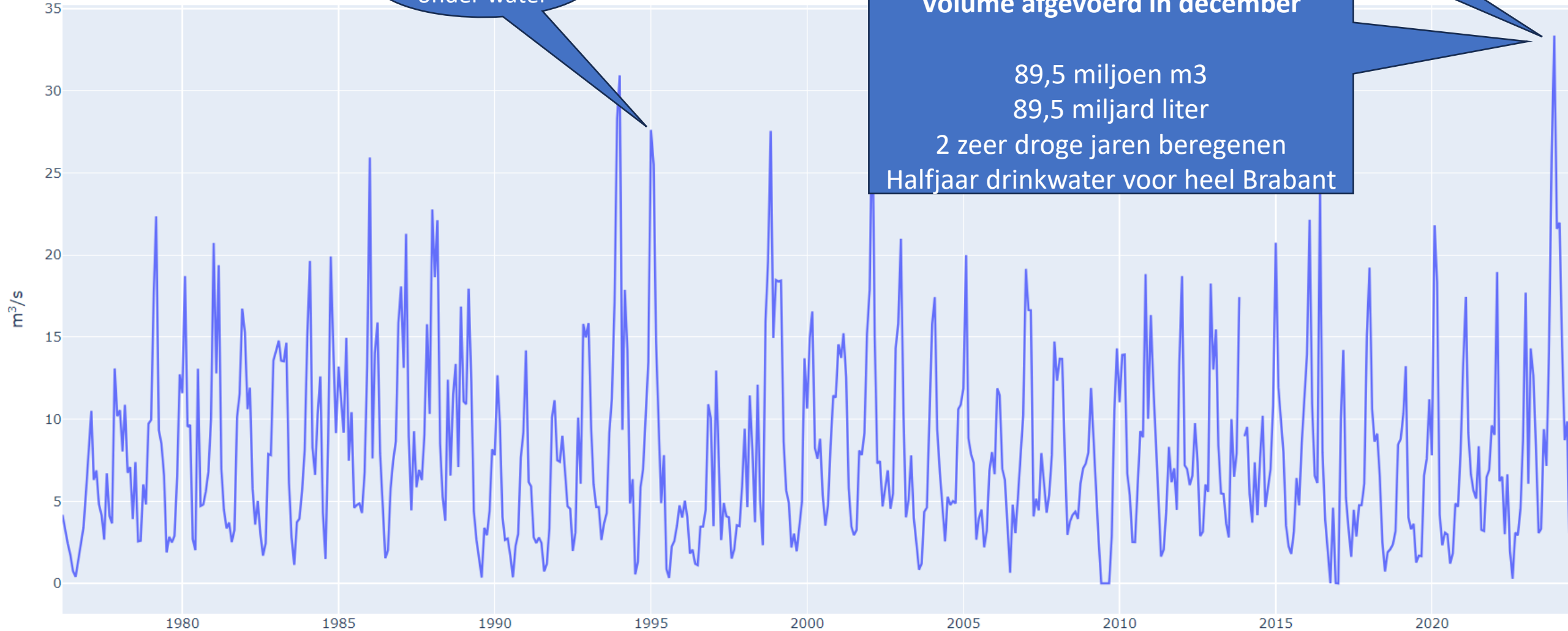
Volume afgevoerd in december

89,5 miljoen m³

89,5 miljard liter

2 zeer droge jaren beregenen

Halfjaar drinkwater voor heel Brabant



Gemiddelde jaarafvoer van de Aa in Den Bosch vanaf 1976

