

The background of the slide is a photograph of dry, cracked earth. The soil is light brown and has formed into irregular, angular clumps separated by deep, dark cracks. The lighting is bright, creating strong shadows in the crevices. In the bottom right corner, there is a small patch of green grass.

Wonen op klei, “het Rekkense experiment”

Kees van der Werf en Cock Blom

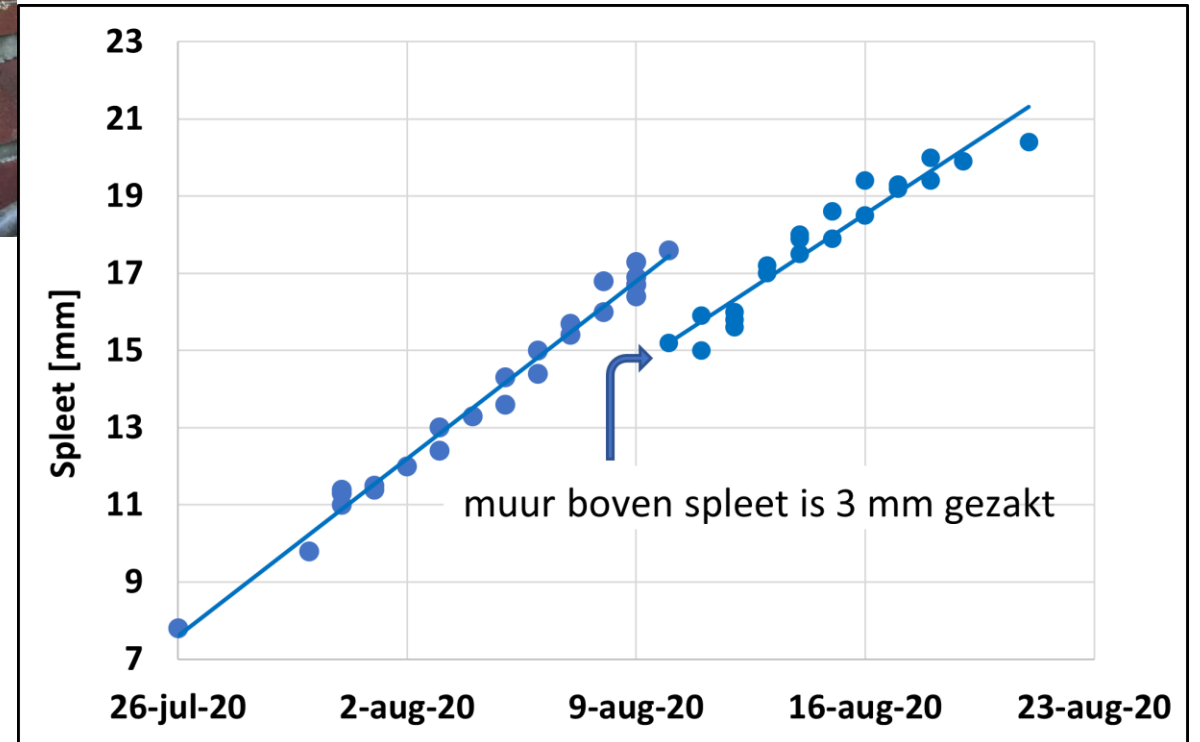
KCAF congres 18-4-2024



augustus 2020



Schade ontstond snel:
1 cm in 2 weken

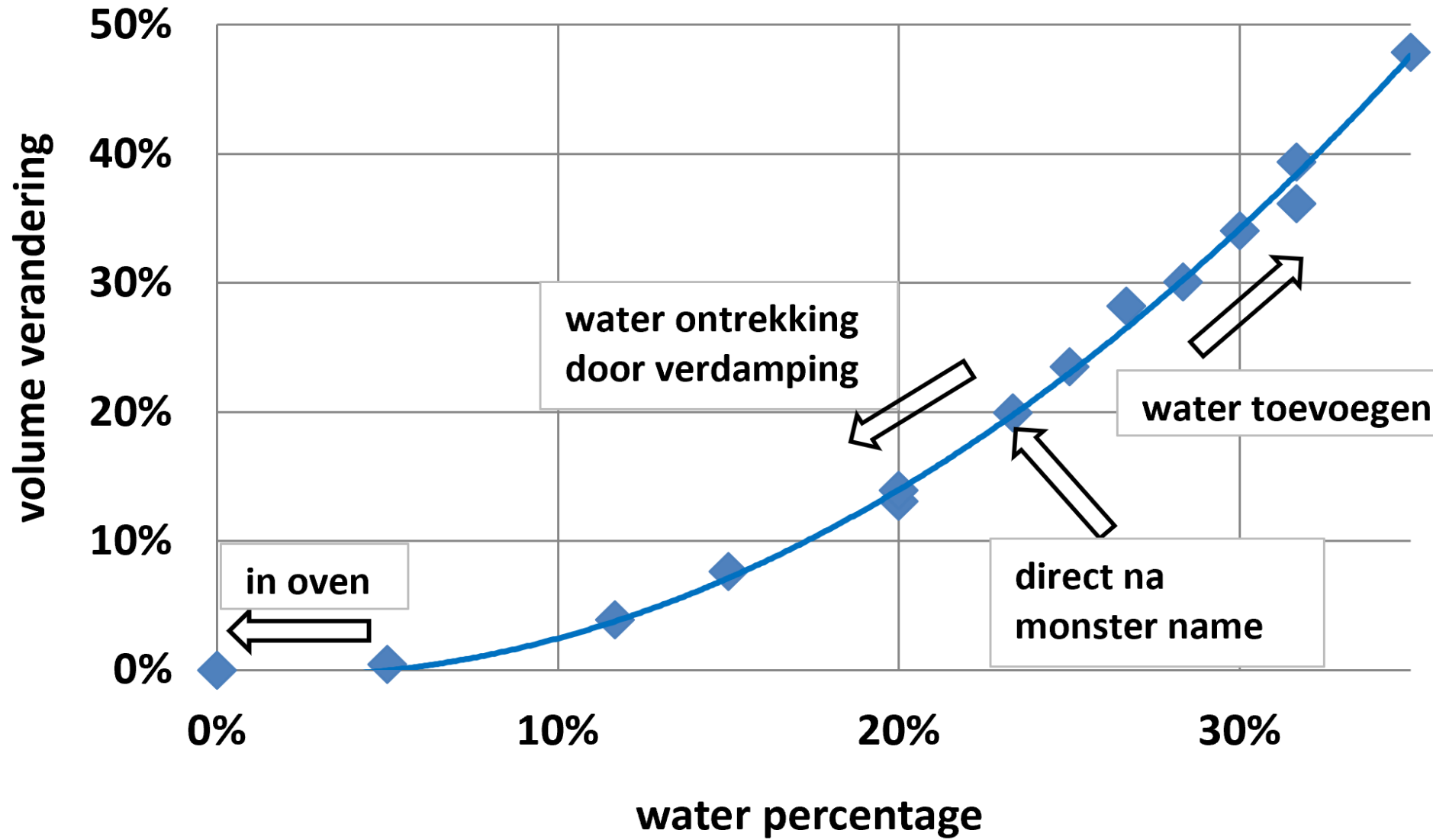


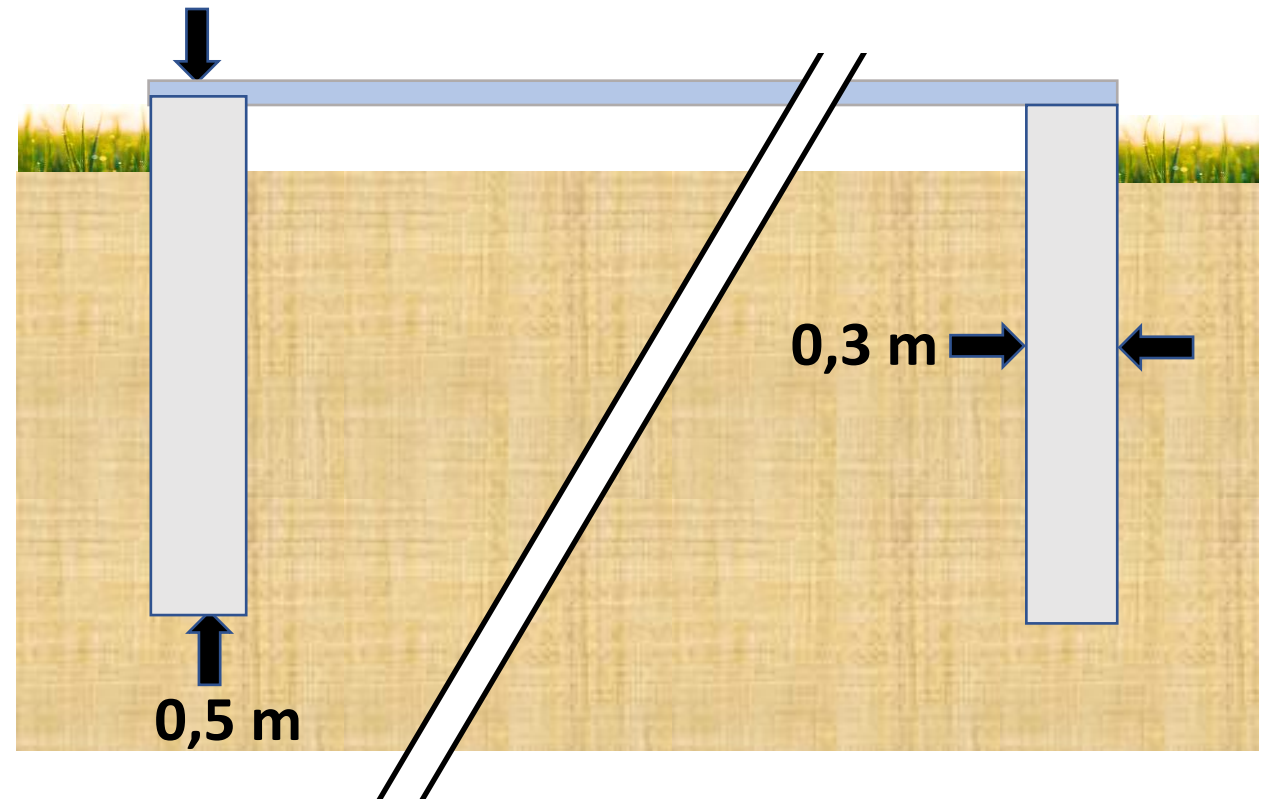
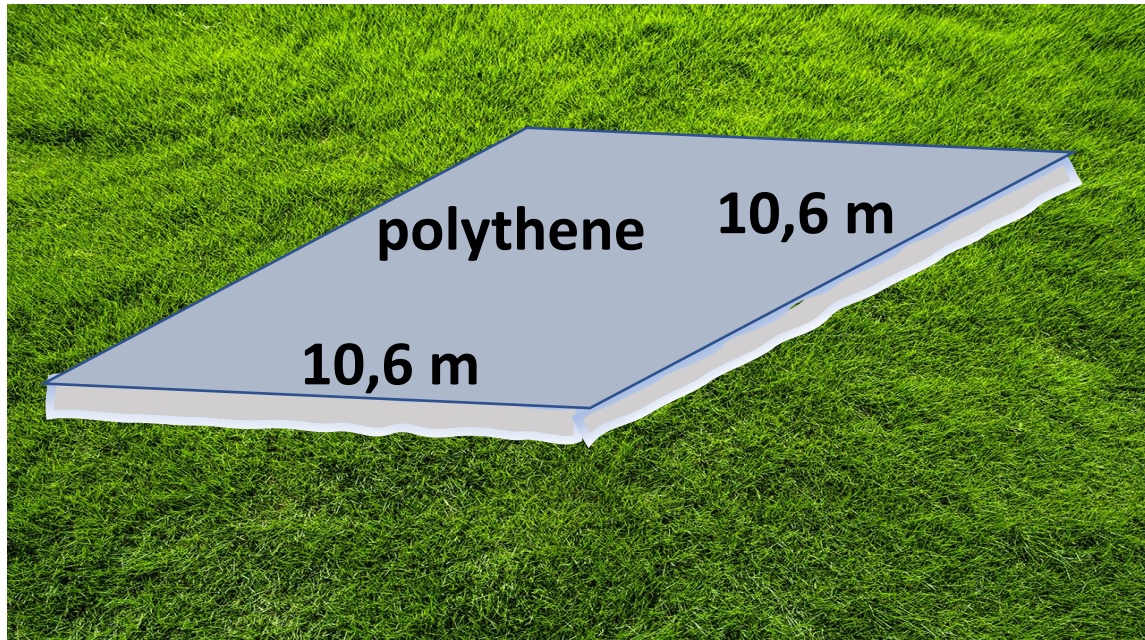
woonkamer



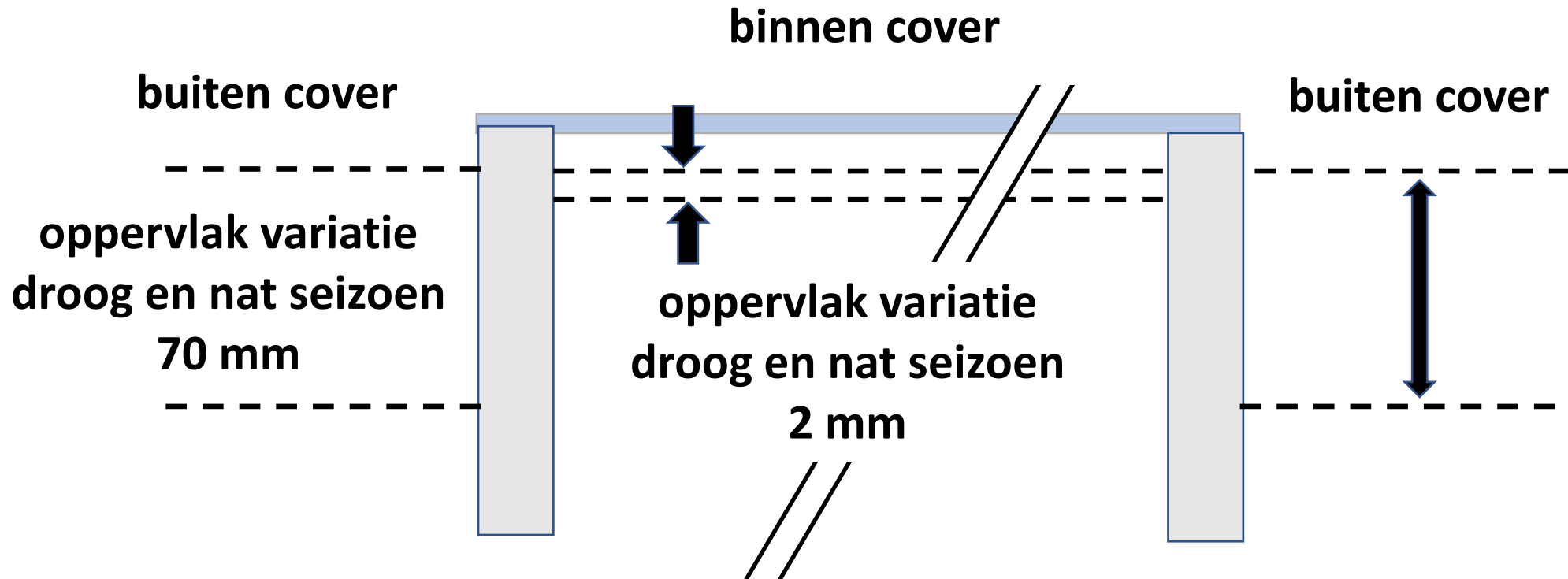


Sondering: klei vanaf een diepte van 60 cm

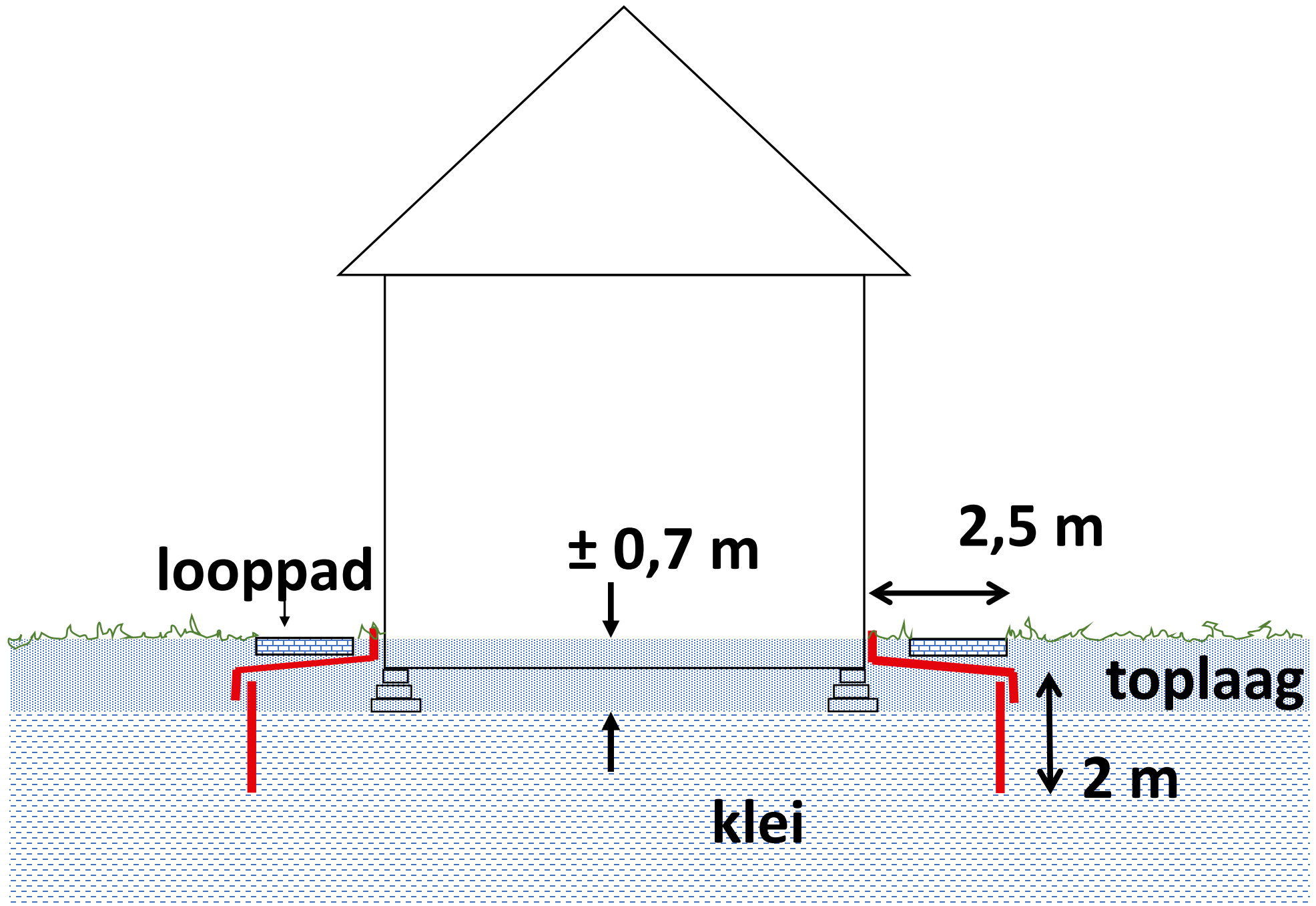




Meting van bodembeweging binnen en buiten een met polyethene cover afgedekt oppervlak
In Newcastle, Australie; Fytius e.a. 2004



Voor ons de inspiratie voor de oplossing van het probleem





verticale barrière

april 2021



horizontale barrière

The background of the slide is a photograph of parched, cracked earth. The soil is light brown and has formed a complex network of deep, irregular fissures. The lighting is bright, creating strong shadows in the cracks and highlighting the texture of the soil. The overall appearance is one of extreme dryness and desiccation.

**Veel metingen om het effect van de aangebrachte
barrieres te volgen:**

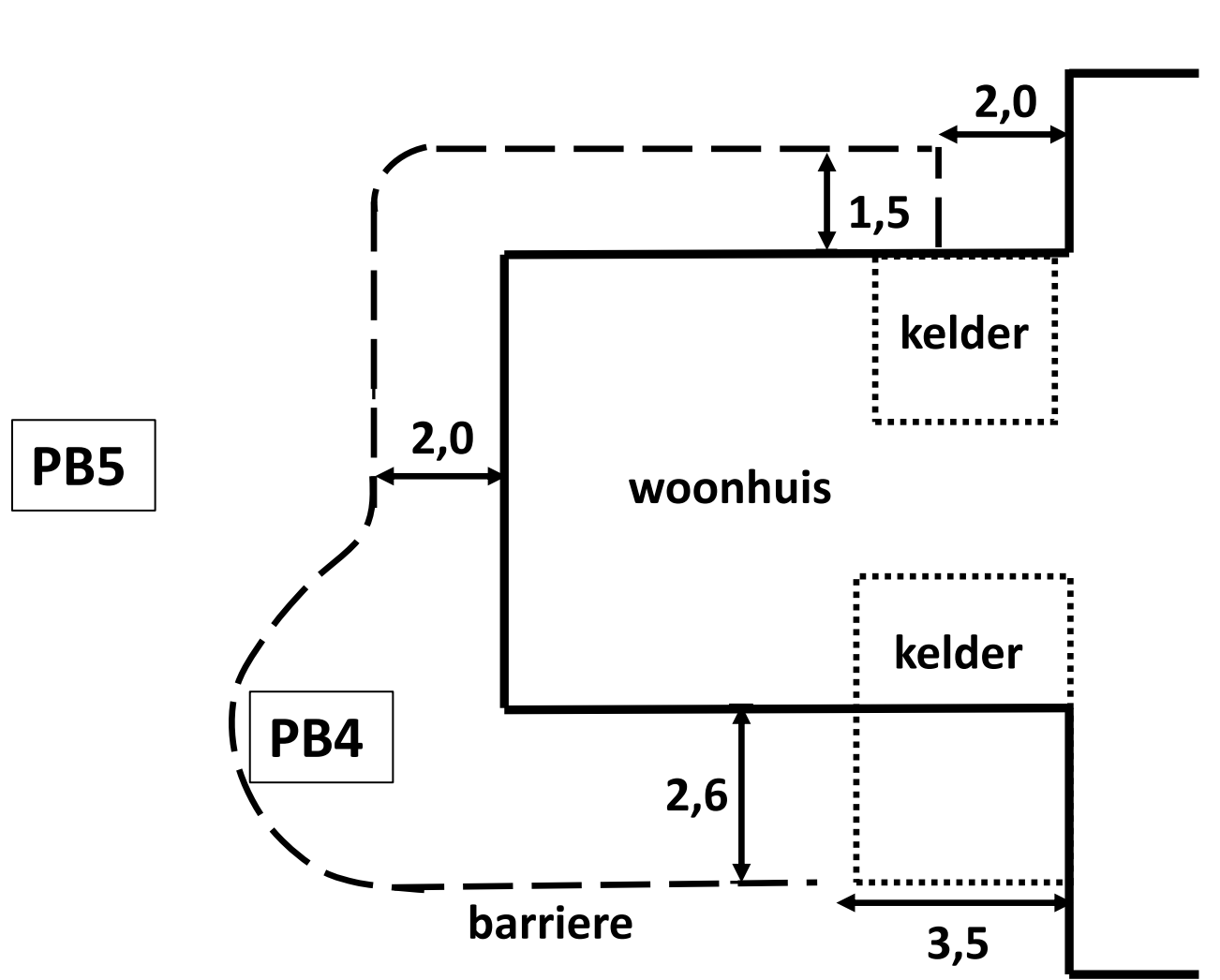
Grondwaterstand: peilbuizen

Bodemvochtigheid: vochtsensoren

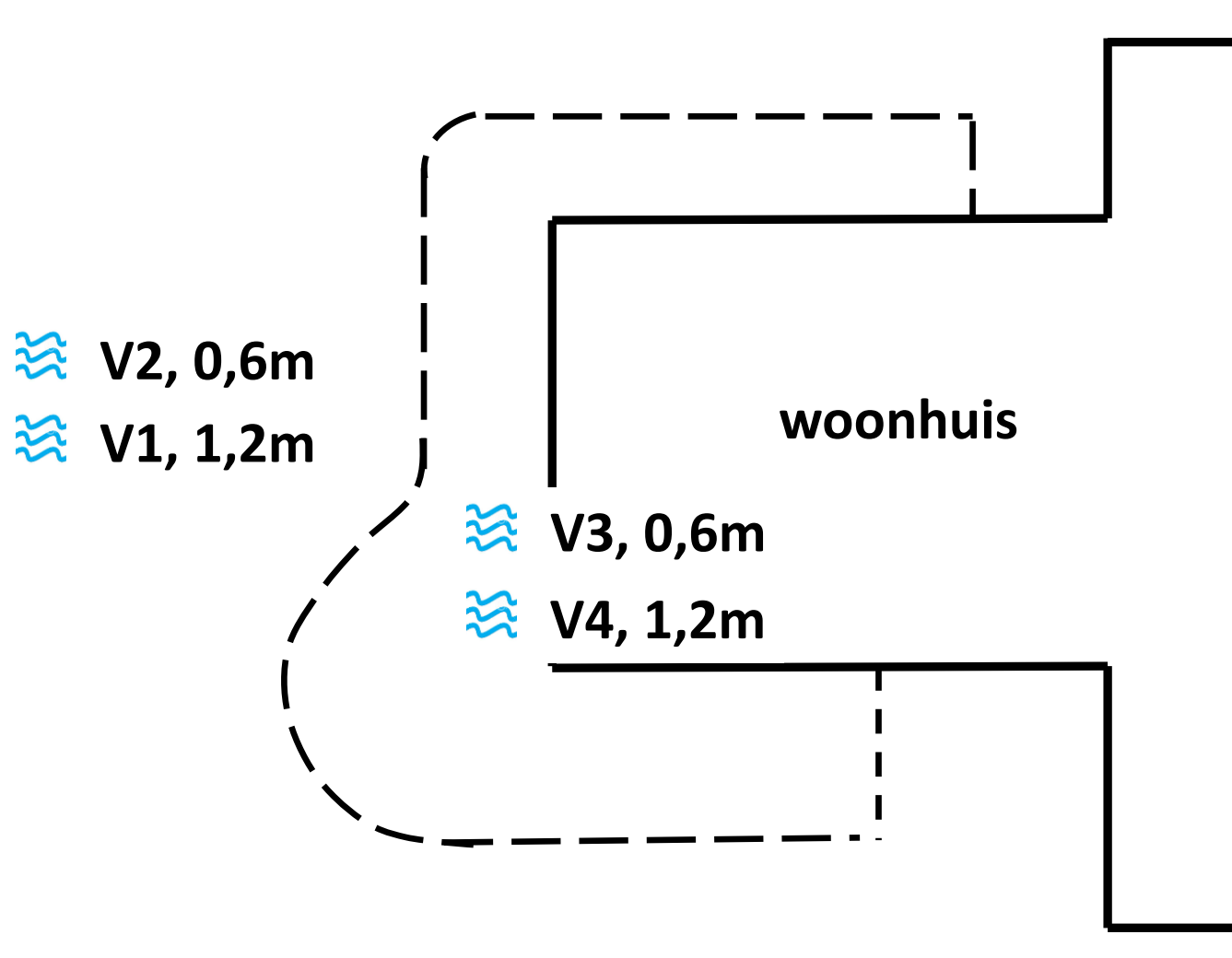
Beweging bodem: zakbaken

Beweging muren huis: referentie punten

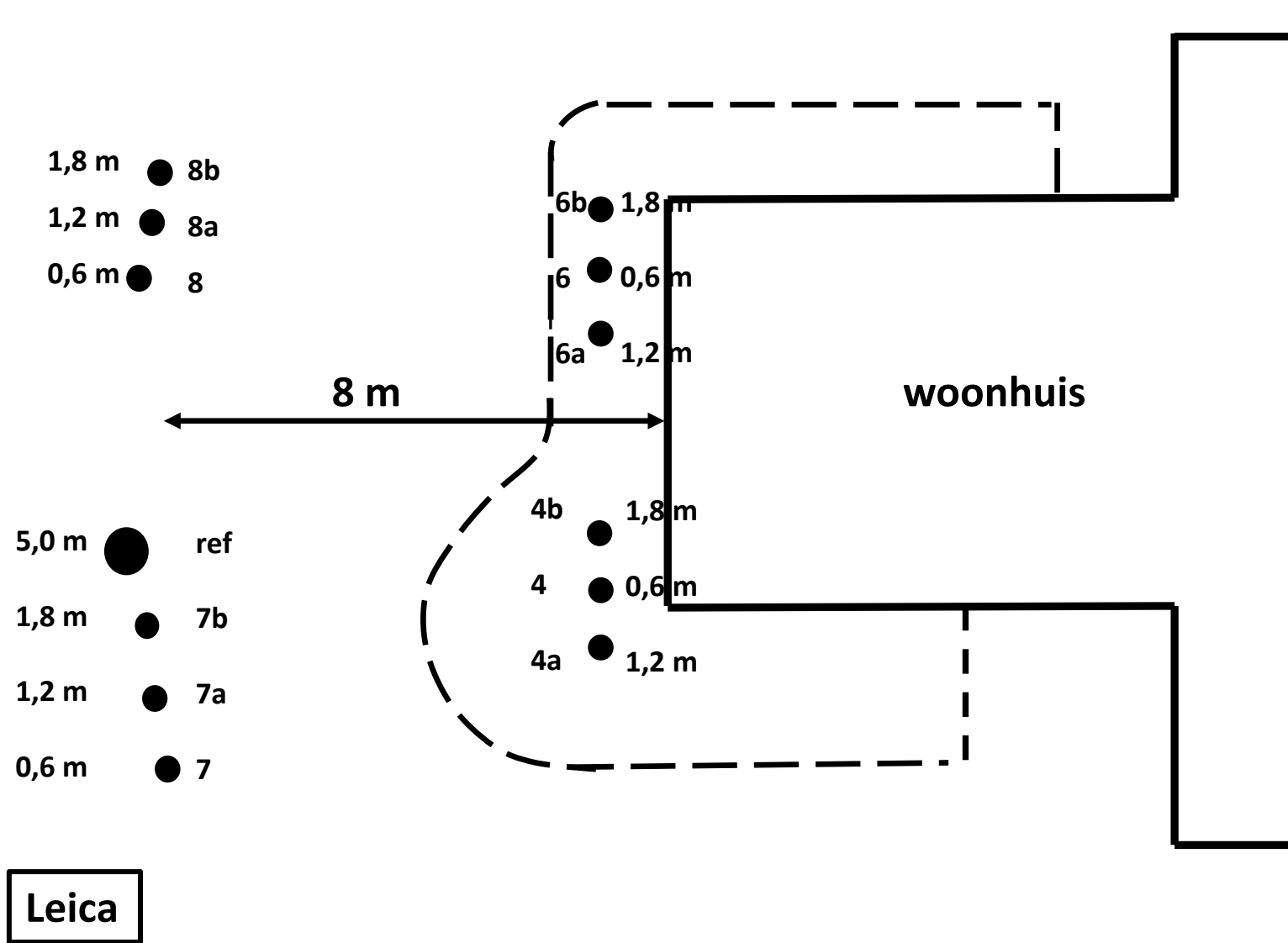
Posities en nummering peilbuizen

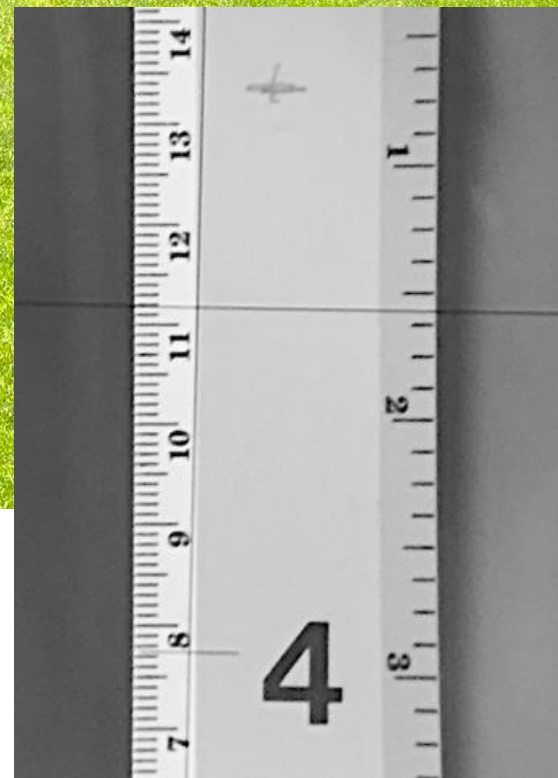


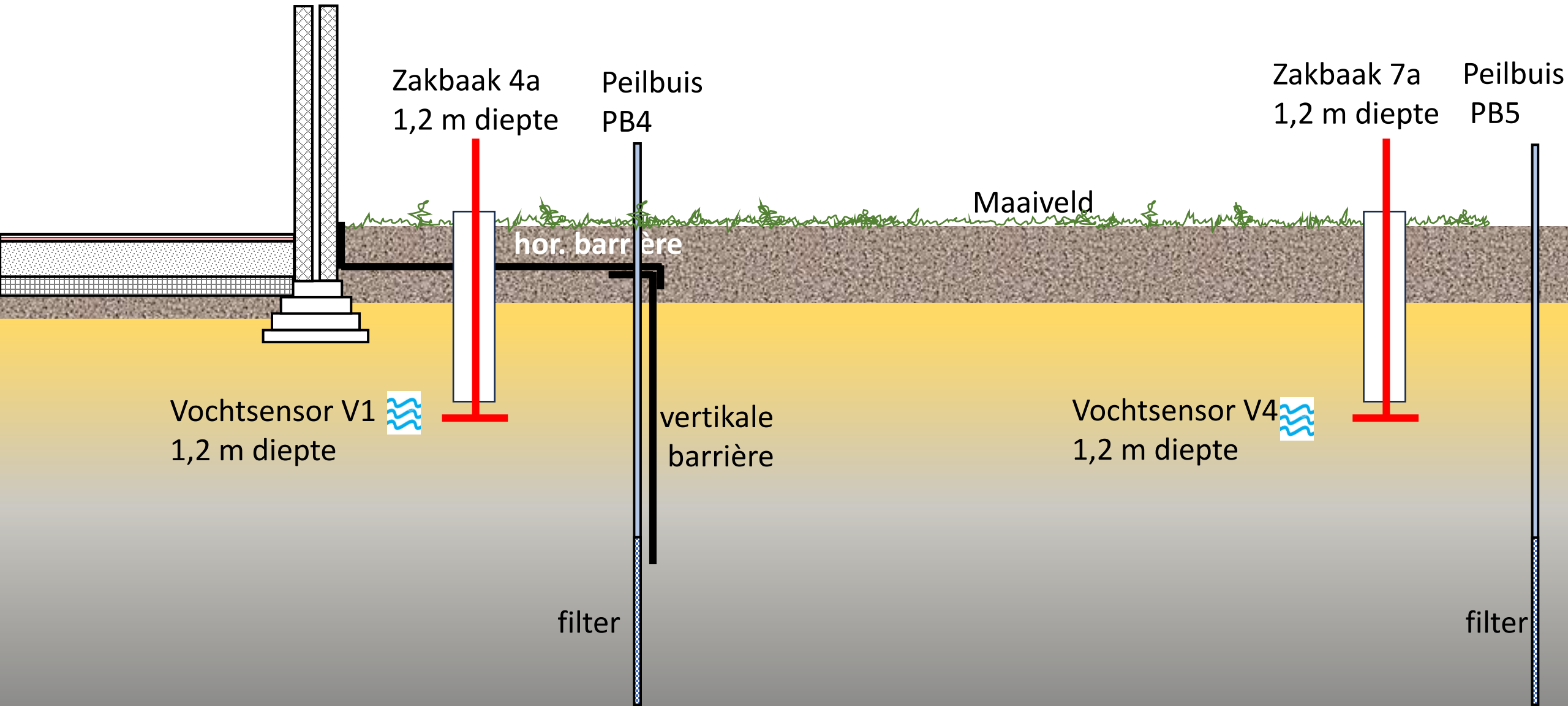
Posities, nummering en dieptes vochtsensoren



Posities, nummering en dieptes van zakbaken







Zakbaak 4a
1,2 m diepte

Peilbuis
PB4

Zakbaak 7a
1,2 m diepte

Peilbuis
PB5

Maaiveld

hor. barrière

Vochtsensor V1
1,2 m diepte



vertikale
barrière

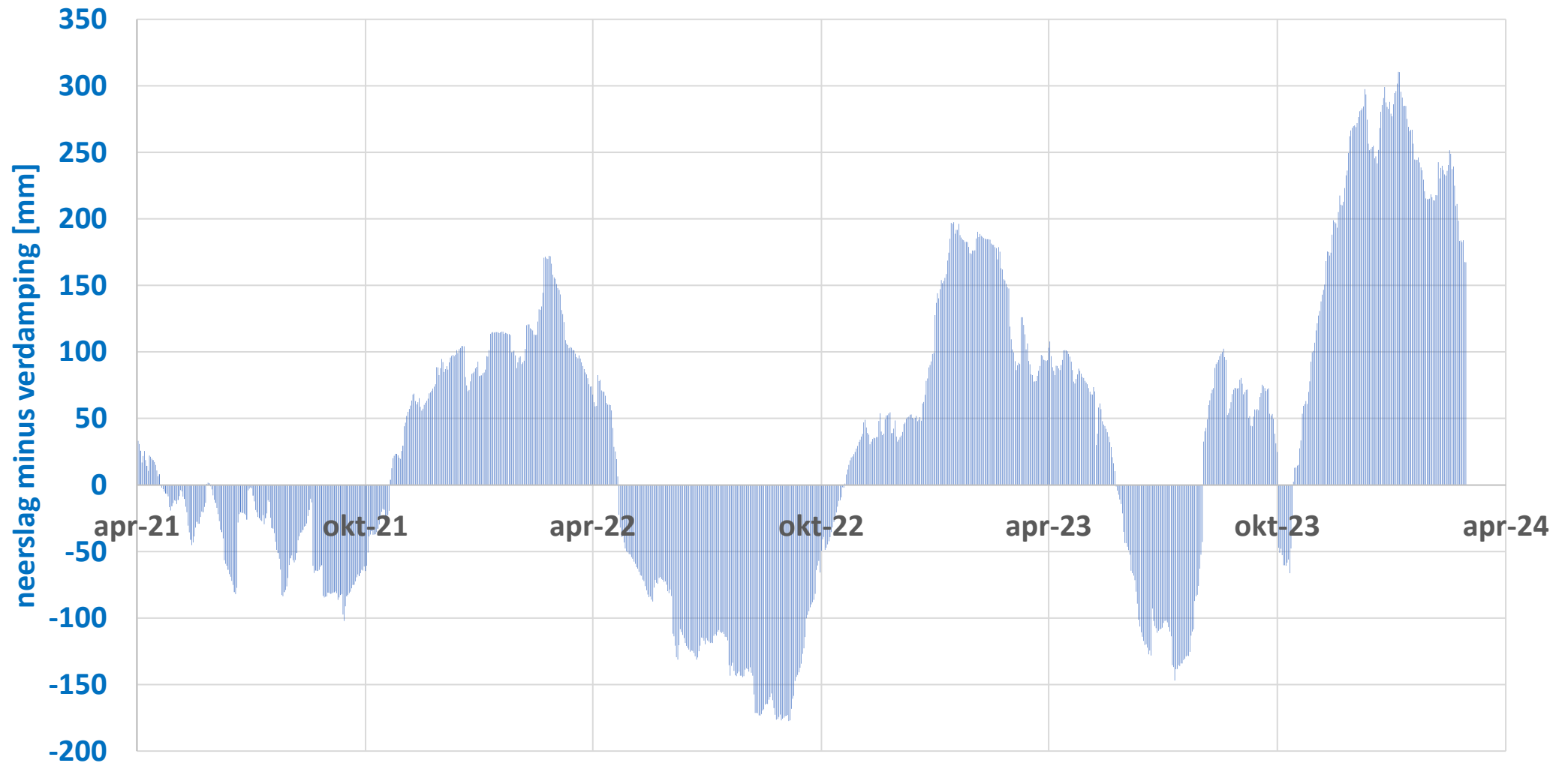
Vochtsensor V4
1,2 m diepte



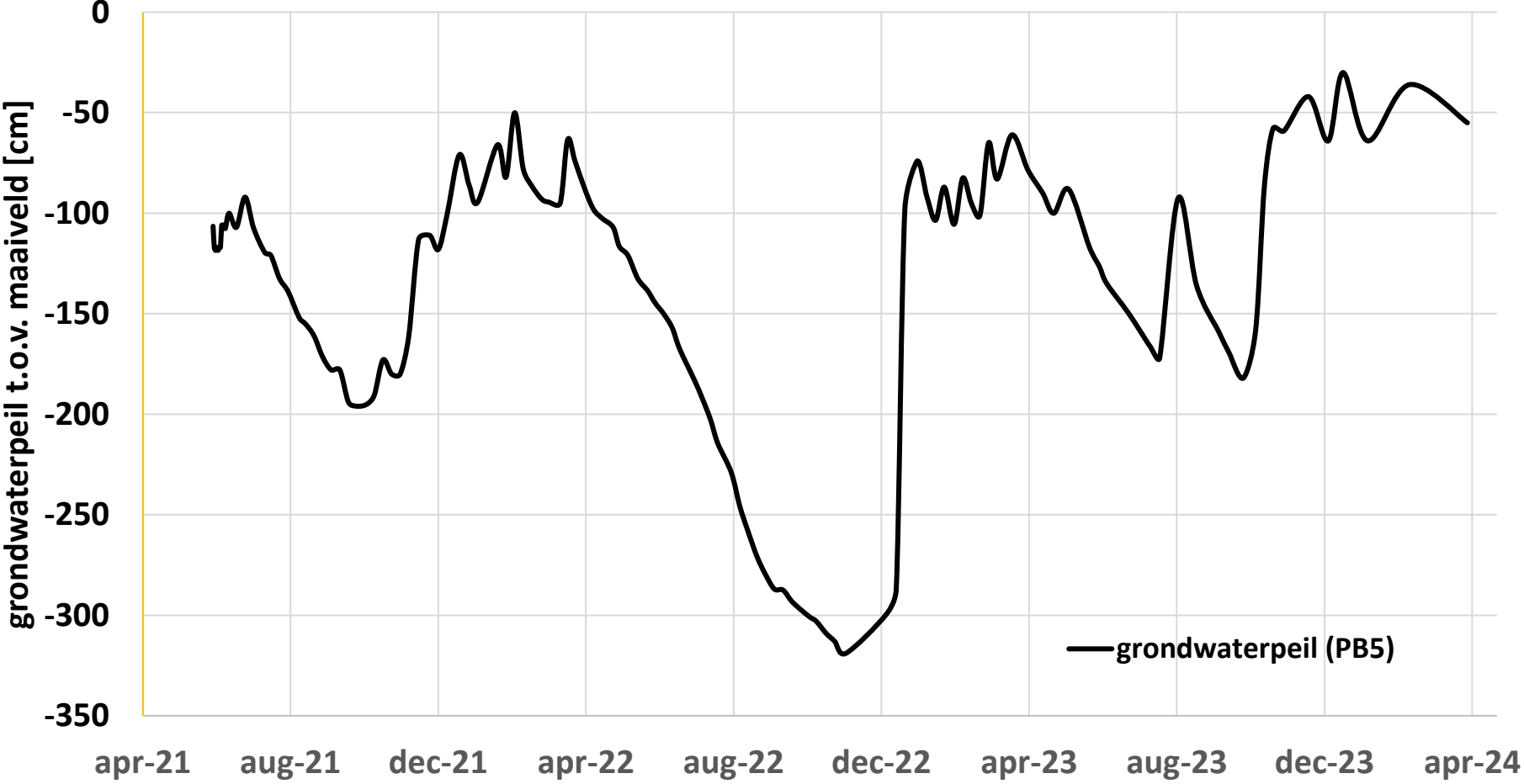
filter

filter

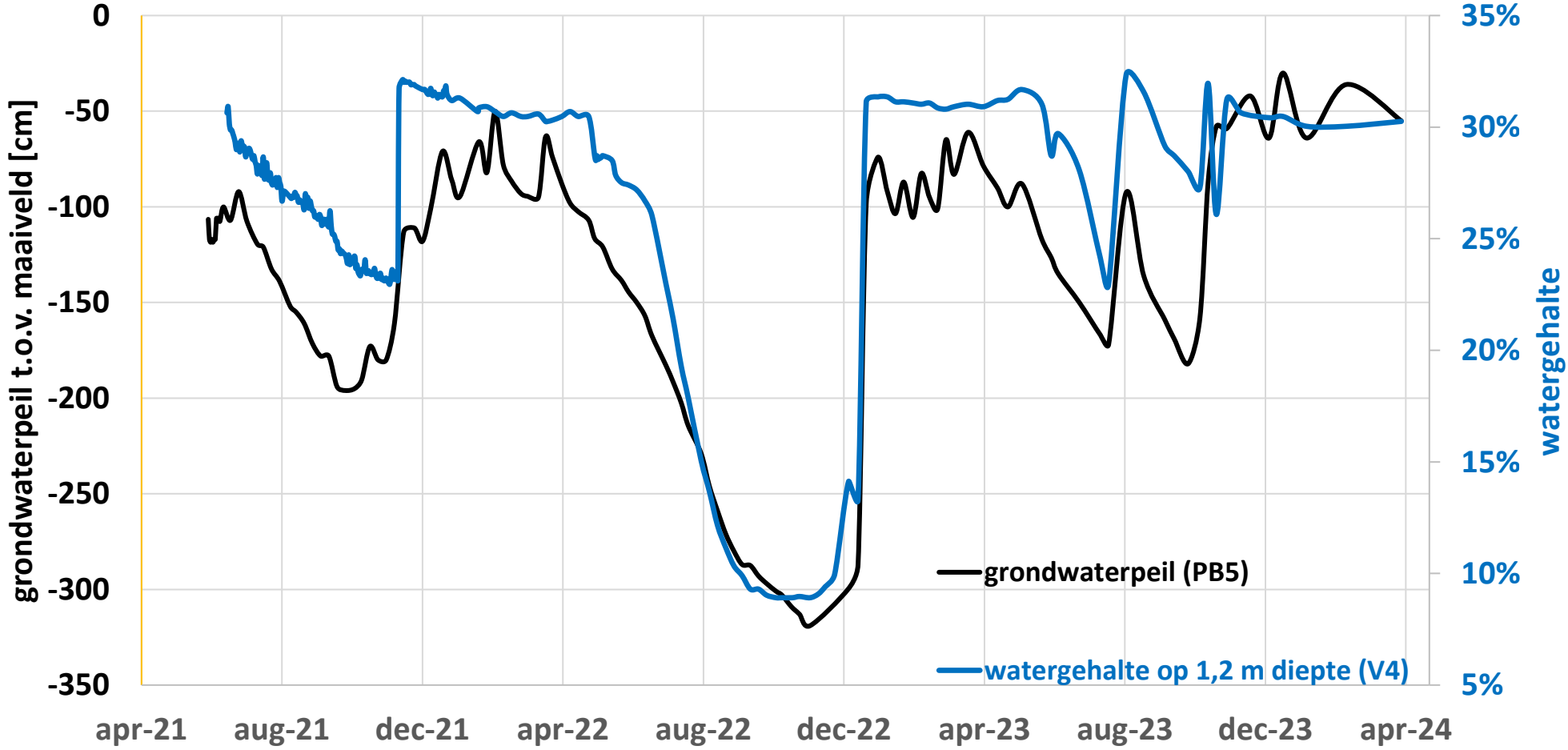
neerslag minus referentie verdamping,voortschrijdende som over 60 dagen in Rekken



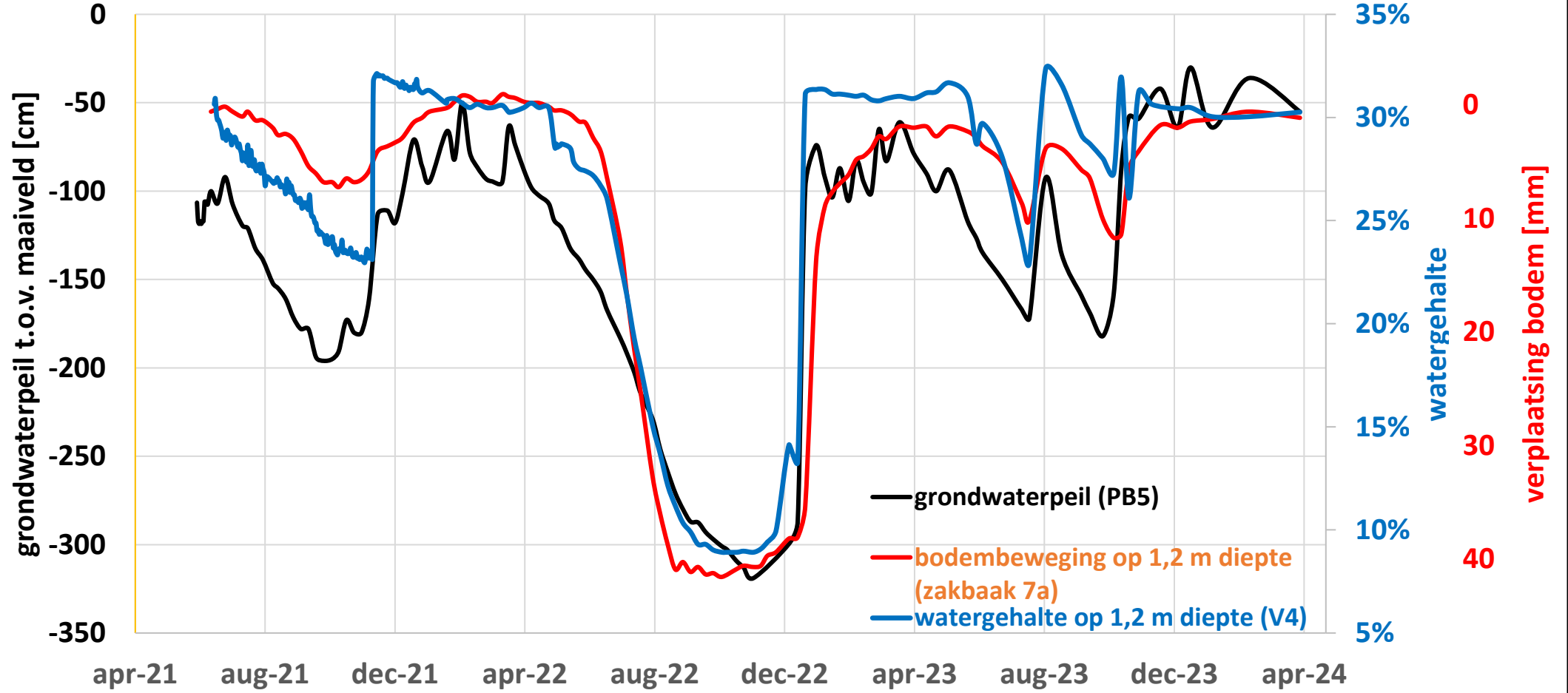
Buiten de barriere



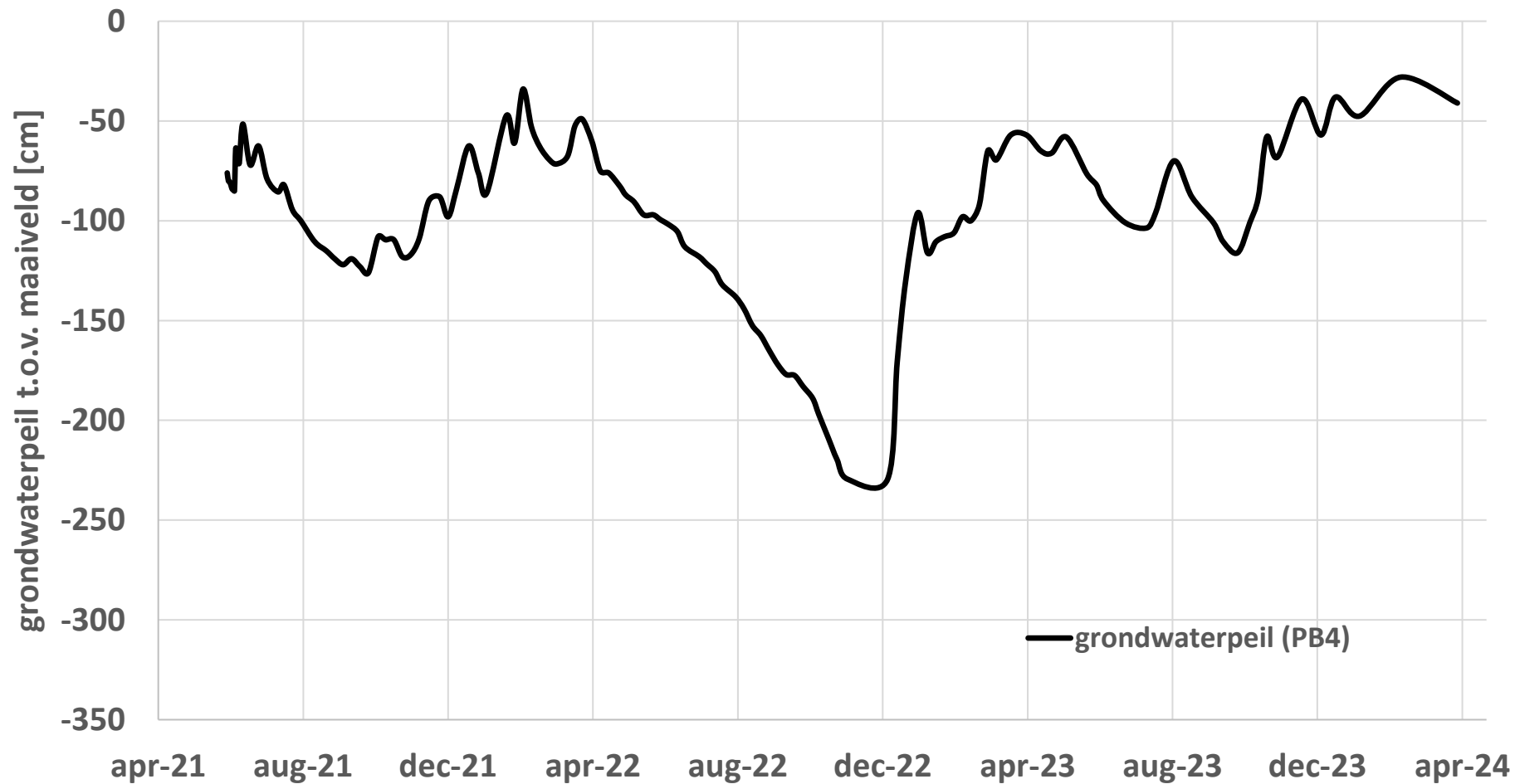
Buiten de barriere



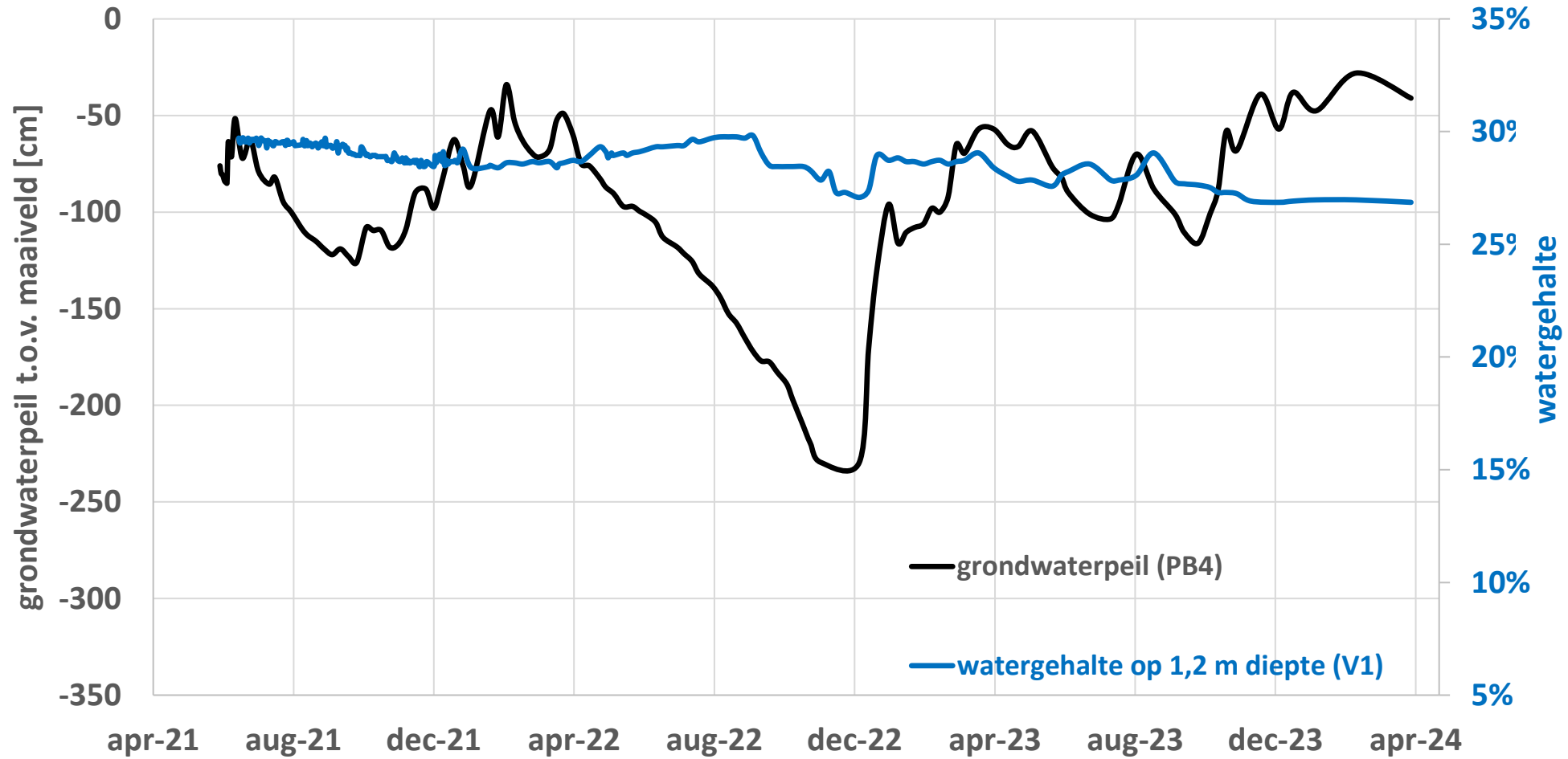
Buiten de barriere



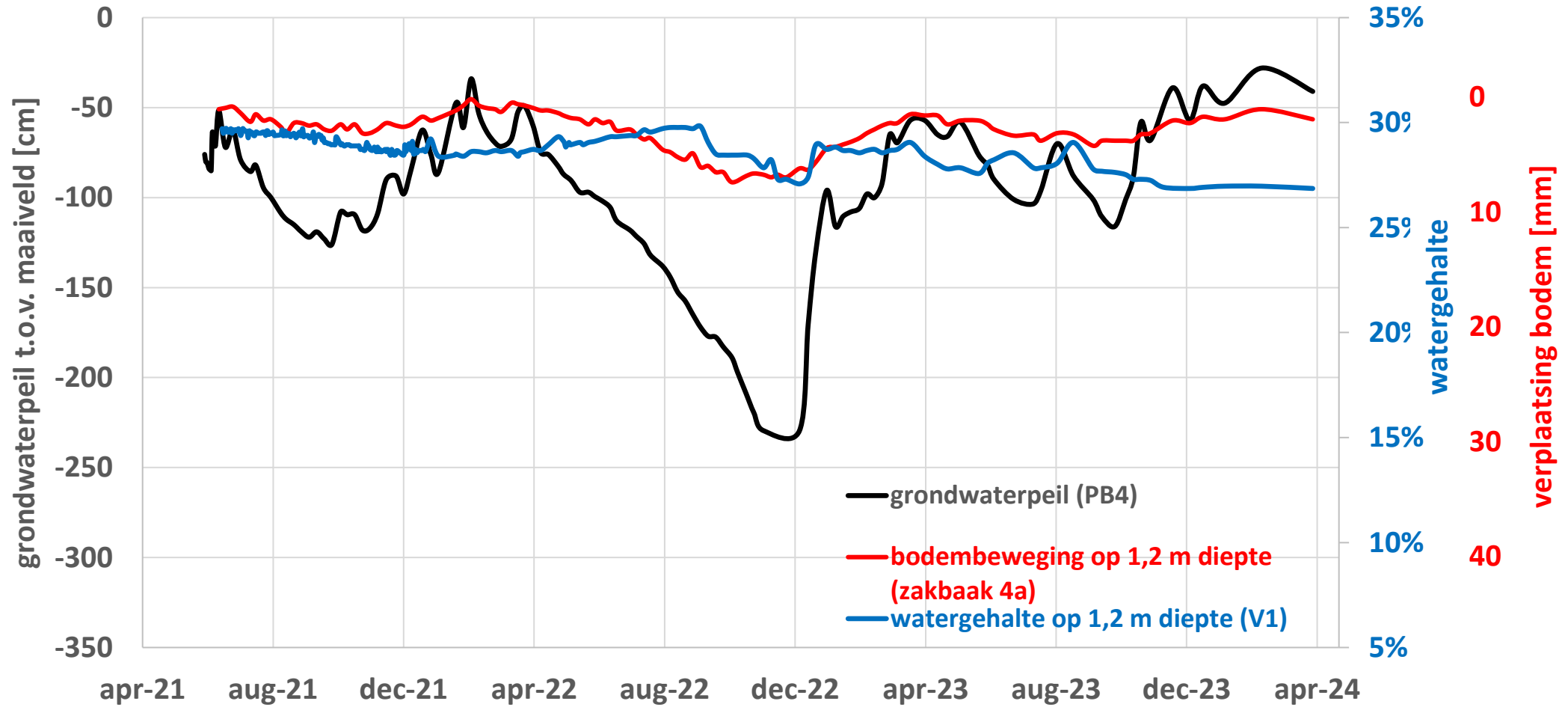
Binnen barriere



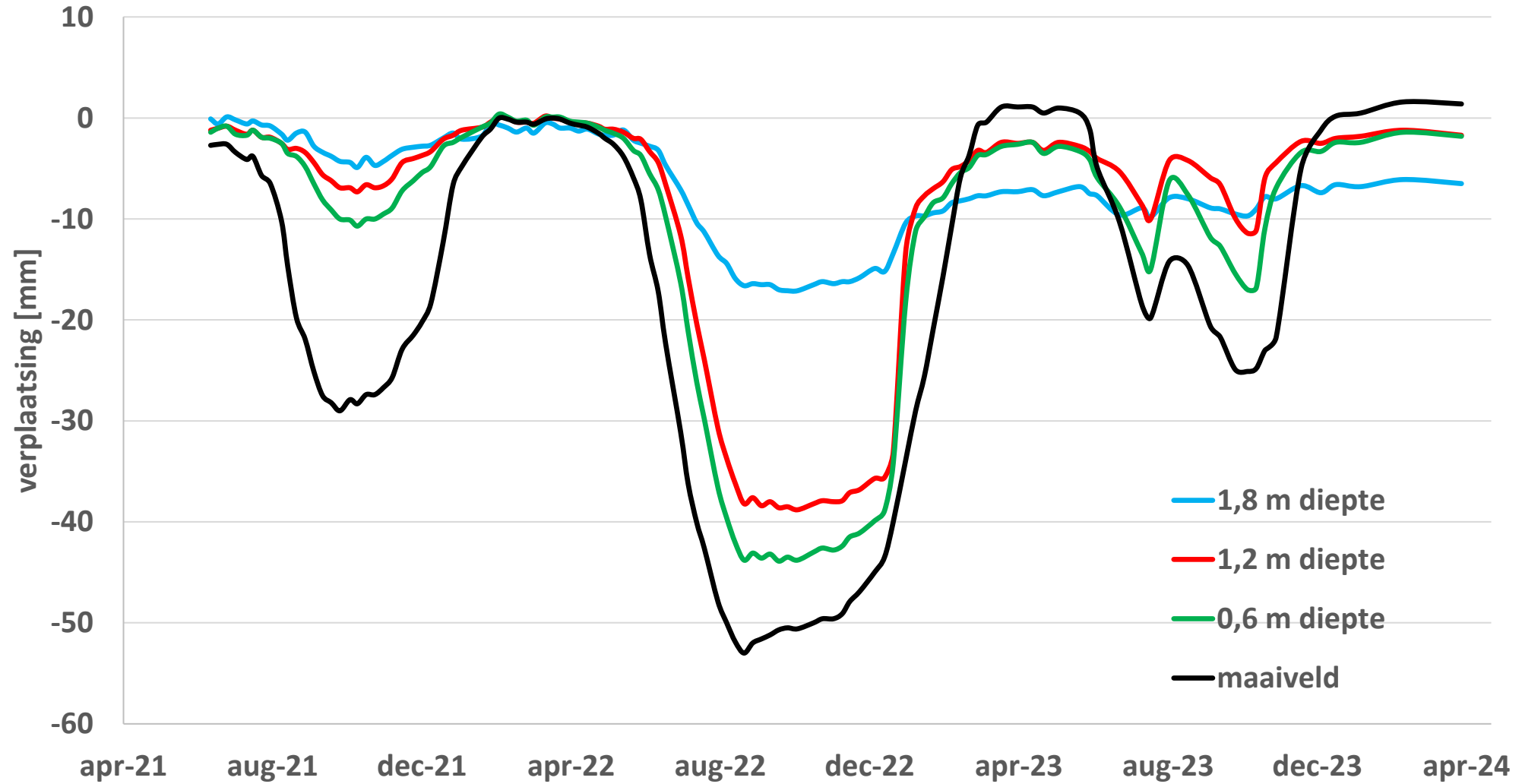
Binnen barriere



Binnen barriere

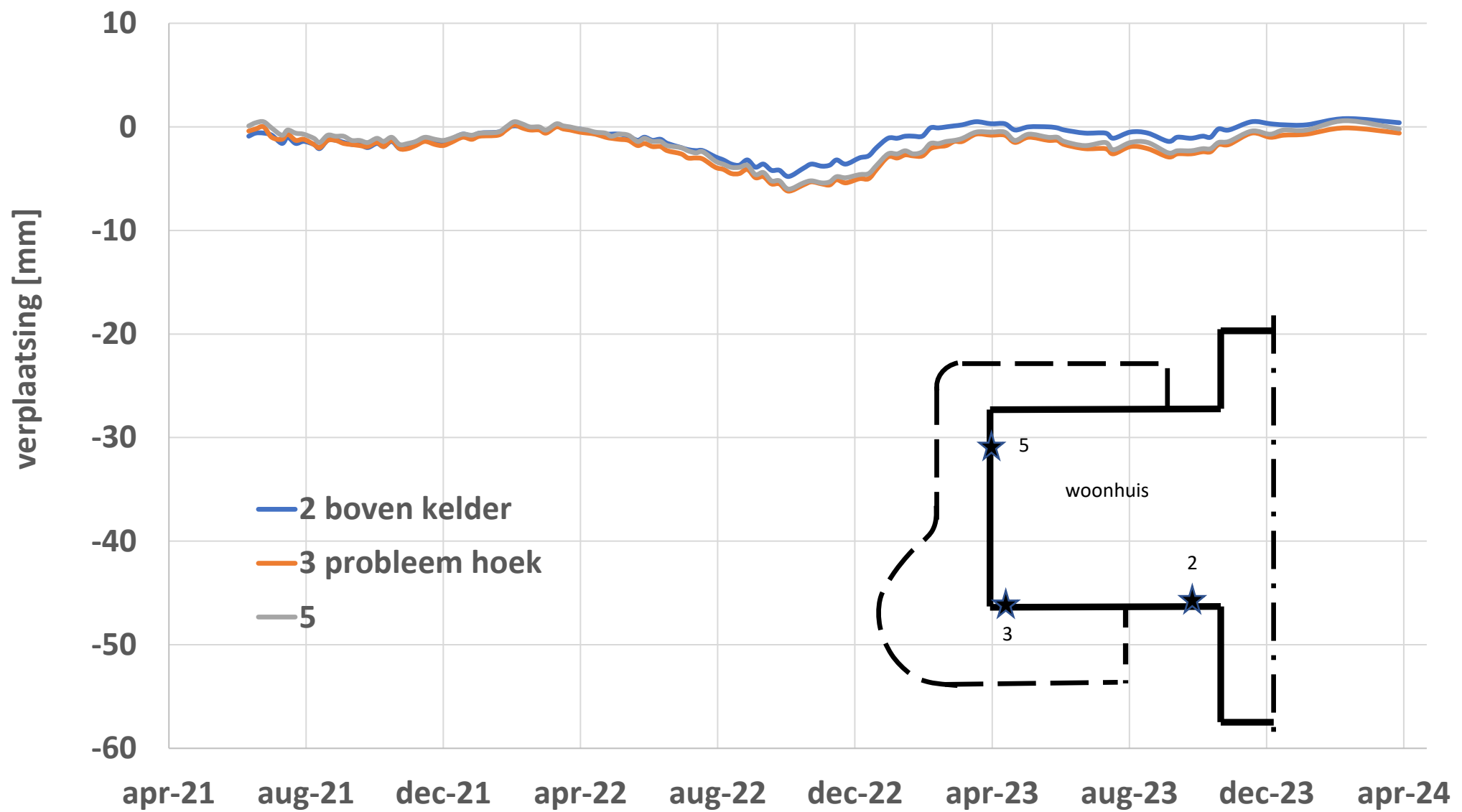


bodembeweging buiten barriere



bodembeweging binnen barriere

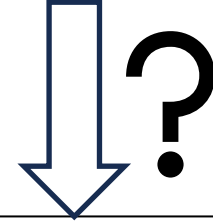






**Schade hersteld en na de droge warme zomer van 2022
geen nieuwe schade meer ontstaan, experiment geslaagd!**

Laag grondwaterpeil

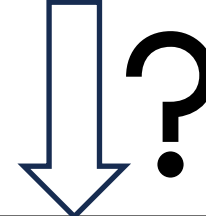


Schade aan fundering/huis

**Droge zomer:
Neerslag-verdamping negatief
(=neerslag tekort)**



Laag grondwaterpeil



Schade aan fundering/huis

**Droge zomer:
Neerslag-verdamping negatief
(=neerslag tekort)**

**Uitdroging klei boven het
grondwater peil, onder
fundering**

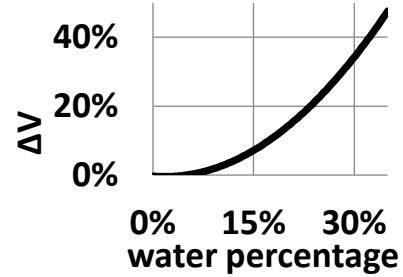
Laag grondwaterpeil



Schade aan fundering/huis

**Droge zomer:
Neerslag-verdamping negatief
(=neerslag tekort)**

**Uitdroging klei boven het
grondwater peil, onder
fundering**



**Krimp van de klei onder de
fundering**

Laag grondwaterpeil



Schade aan fundering/huis

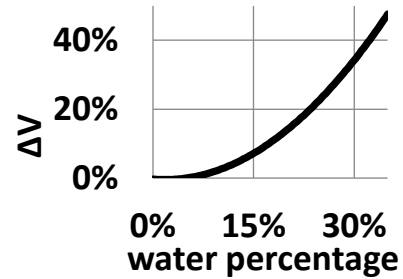
**Droge zomer:
Neerslag-verdamping negatief
(=neerslag tekort)**

**Uitdroging klei boven het
grondwater peil, onder
fundering**

Laag grondwaterpeil

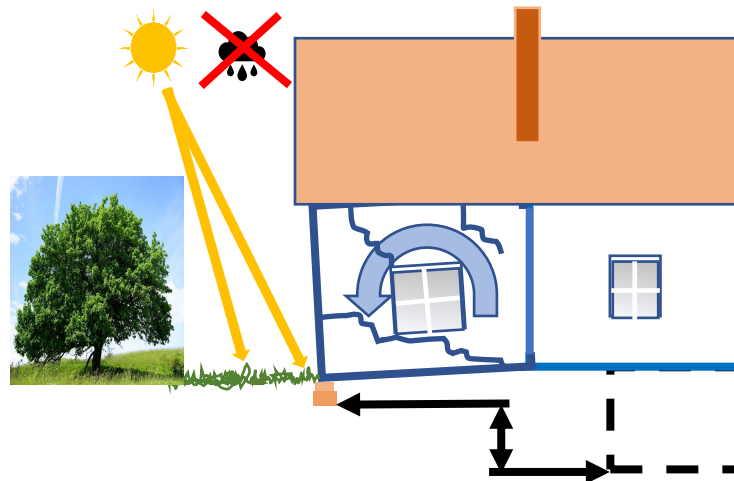


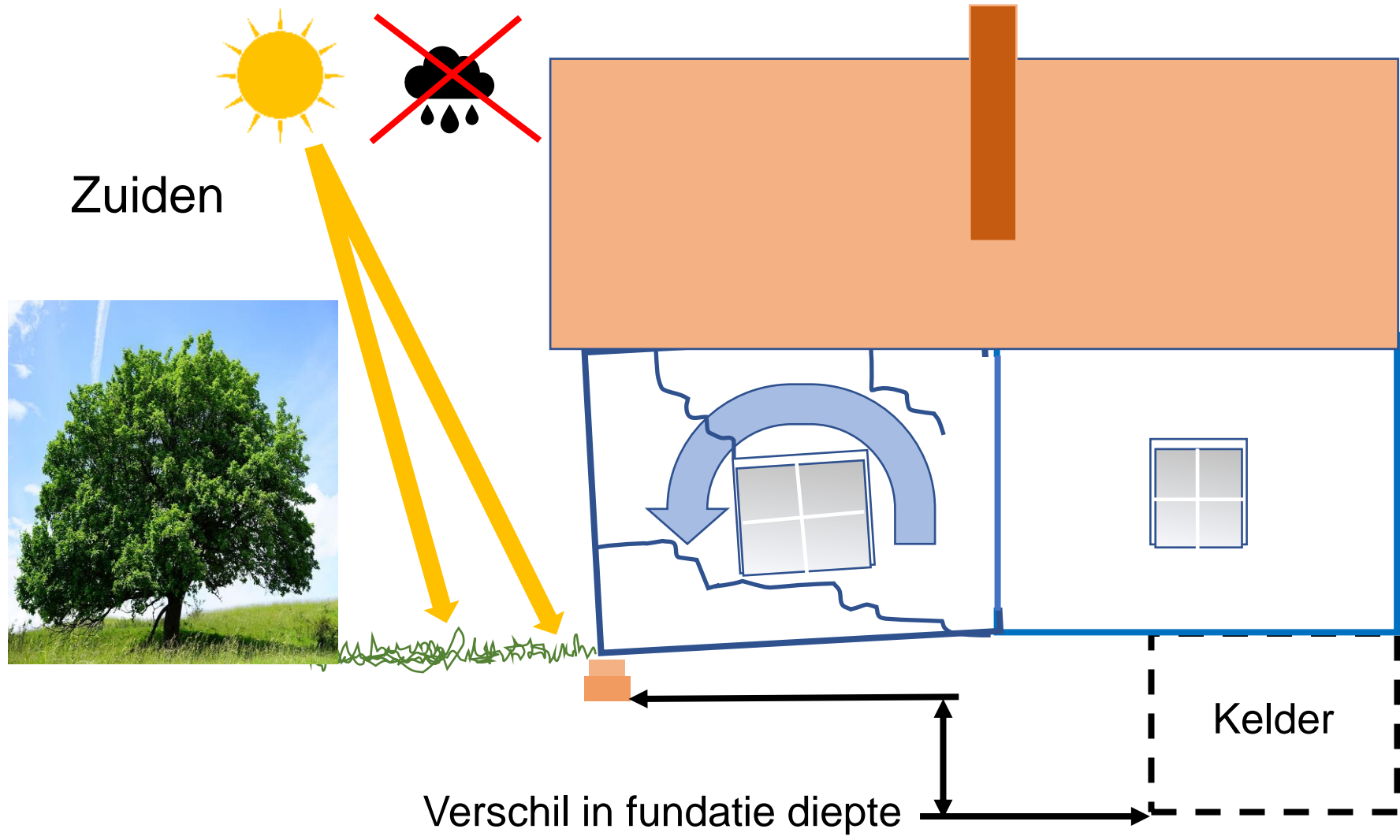
Schade aan fundering/huis



**Krimp van de klei onder de
fundering**

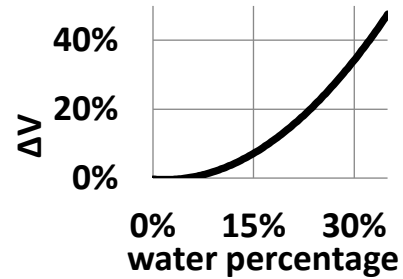
**Krimp niet gelijk onder de hele
fundering: verschilzetting**





**Droge zomer:
Neerslag-verdamping negatief
(=neerslag tekort)**

**Uitdroging klei boven het
grondwater peil, onder
fundering**



**Krimp van de klei onder de
fundering**

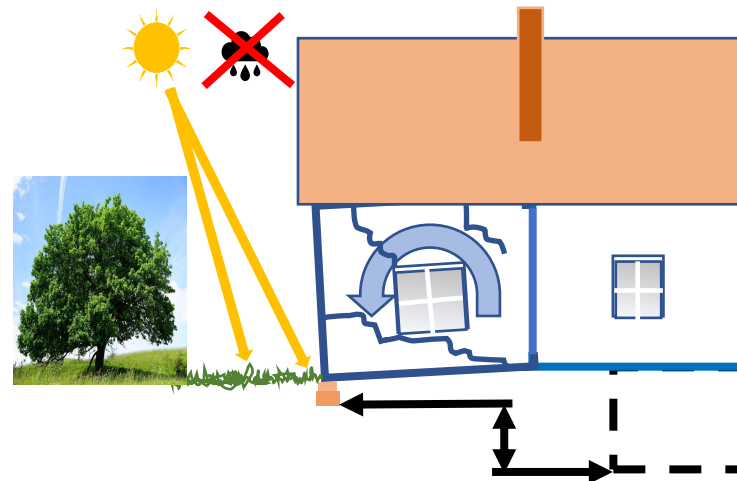
**Krimp niet gelijk onder de hele
fundering: verschilzetting**

Schade aan fundering/huis

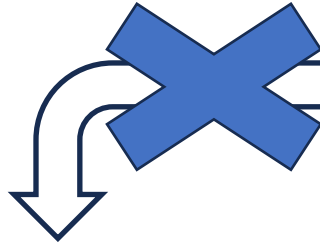
Laag grondwaterpeil



Schade aan fundering/huis



**Droge zomer:
Neerslag-verdamping negatief
(=neerslag tekort)**

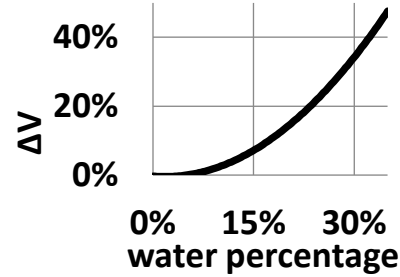


**Uitdroging klei boven het
grondwater peil, onder
fundering**

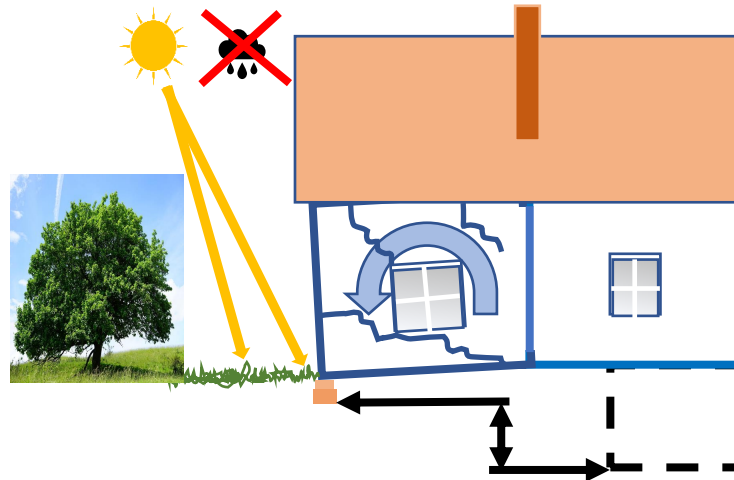
Laag grondwaterpeil



Schade aan fundering/huis



**Krimp van de klei onder de
fundering**



**Krimp niet gelijk onder de hele
fundering: verschilzetting**

Schade aan fundering/huis

The background of the slide is a photograph of parched, cracked earth. The soil is light brown and has formed a complex network of deep, irregular fissures. The lighting is bright, creating strong shadows in the cracks and highlighting the texture of the soil. There are some small, dry plant stems and a few green blades of grass visible on the right side of the image.

**Alle metingen die we regelmatig actualiseren ook
van het tweede huis in Rekken zijn te vinden op
www.wonenopklei.nl**

Kees van der Werf en Cock Blom