



Virtuele Lysimeter

Irrigation Decision Support System

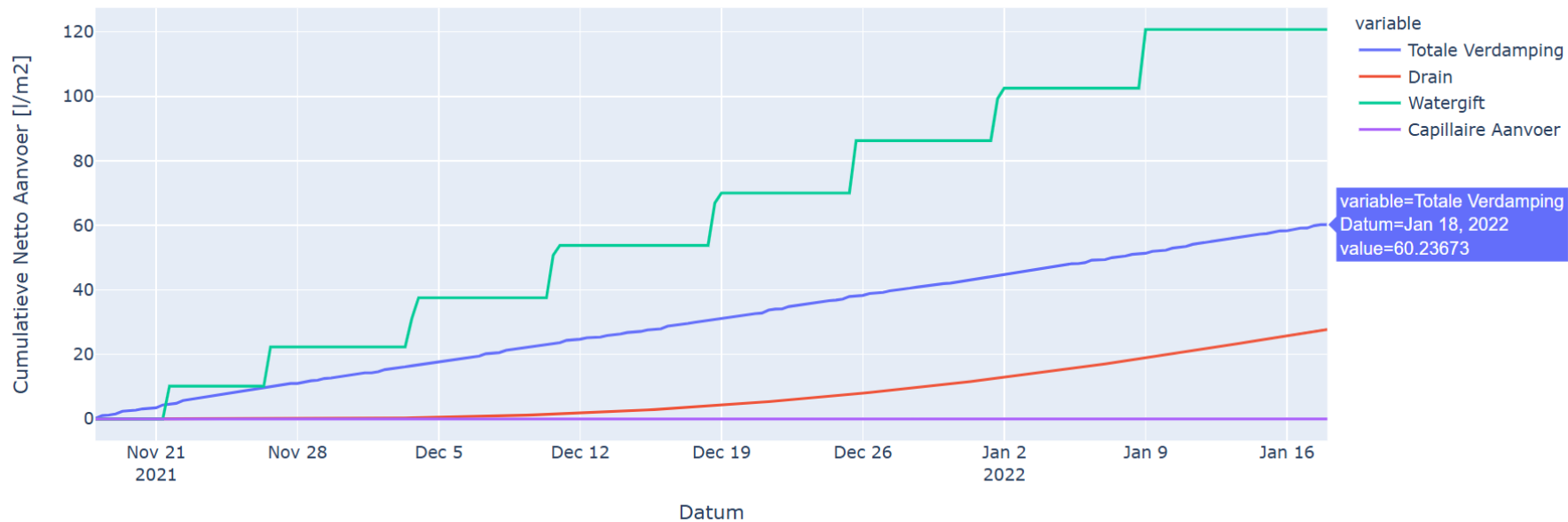
27-2-2026

Danja Brandsma-Razzon, Joseph Stoenner, Caroline van der Salm

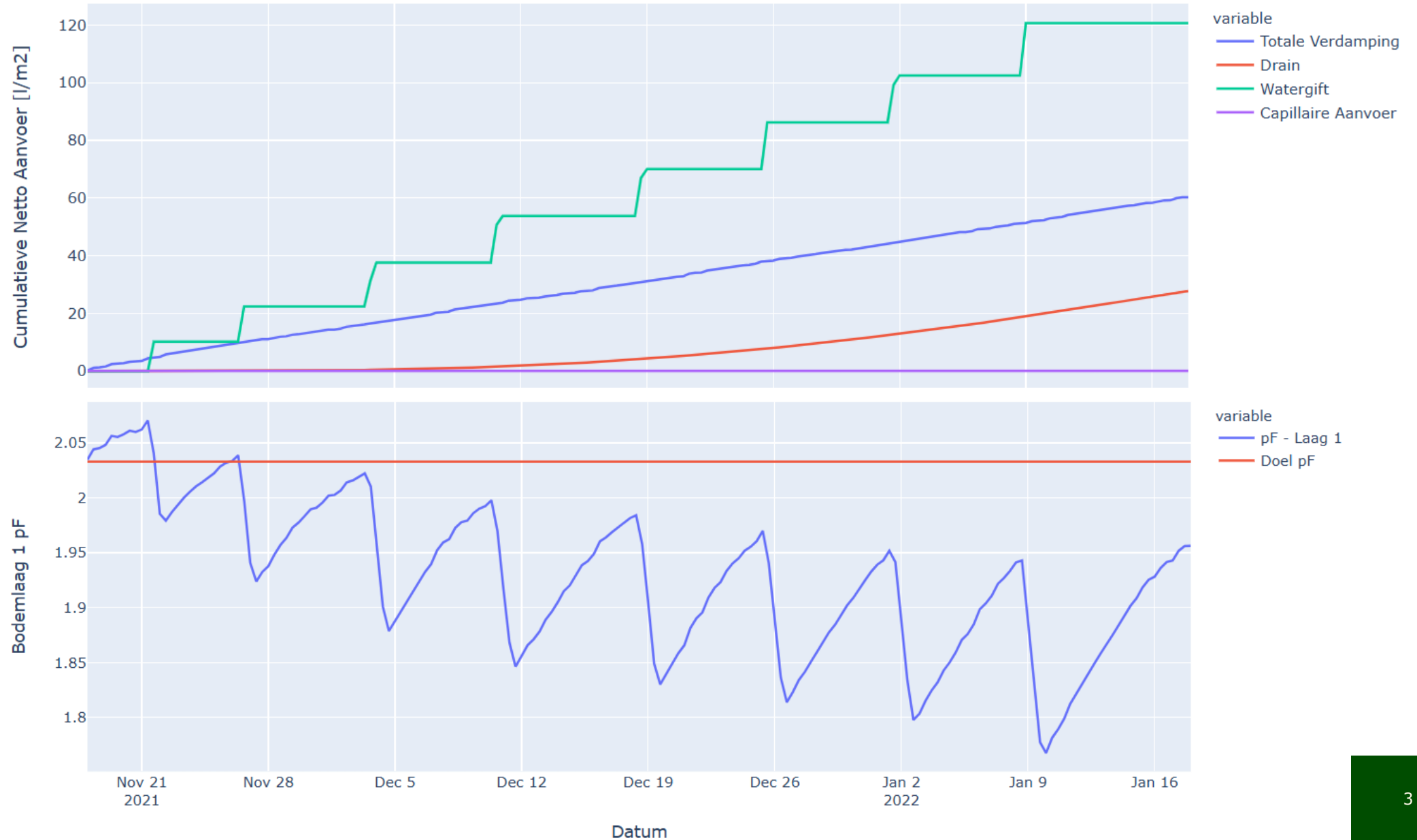
3.3: Welke teler heeft de beste irrigatie strategie?

- Teler 1: Irrigeert het wekelijks.
- Teler 2: Irrigeert elke ochtend en middag.

- Totaal irrigatie gelijk.
- Voorbeeld teelt 6, zand & LED.



3.3: Run teelt 6.



3.3: Download watergift teelt 6.

naam	plantdatum
Teelt6	2021-11-18
Teelt1	2020-01-01
Teelt2	2021-01-26
Teelt3	2021-04-05
Teelt4	2021-06-15
Teelt5	2021-08-25
Teelt7	2022-01-01
Teelt8	2022-01-18
Teelt9	2022-04-19
Teelt10	2022-06-08
Teelt11	2024-02-27
Teelt12	2024-07-11
Teelt13	2024-09-16
Teelt14	2024-11-27
Teelt15	2025-02-12
Teelt16	2025-06-26

Selecteer custom eind c
demo eind datum


specifiek advies om te zien: 03/27/2026

selecteer parameter: **LED** ▼

lad

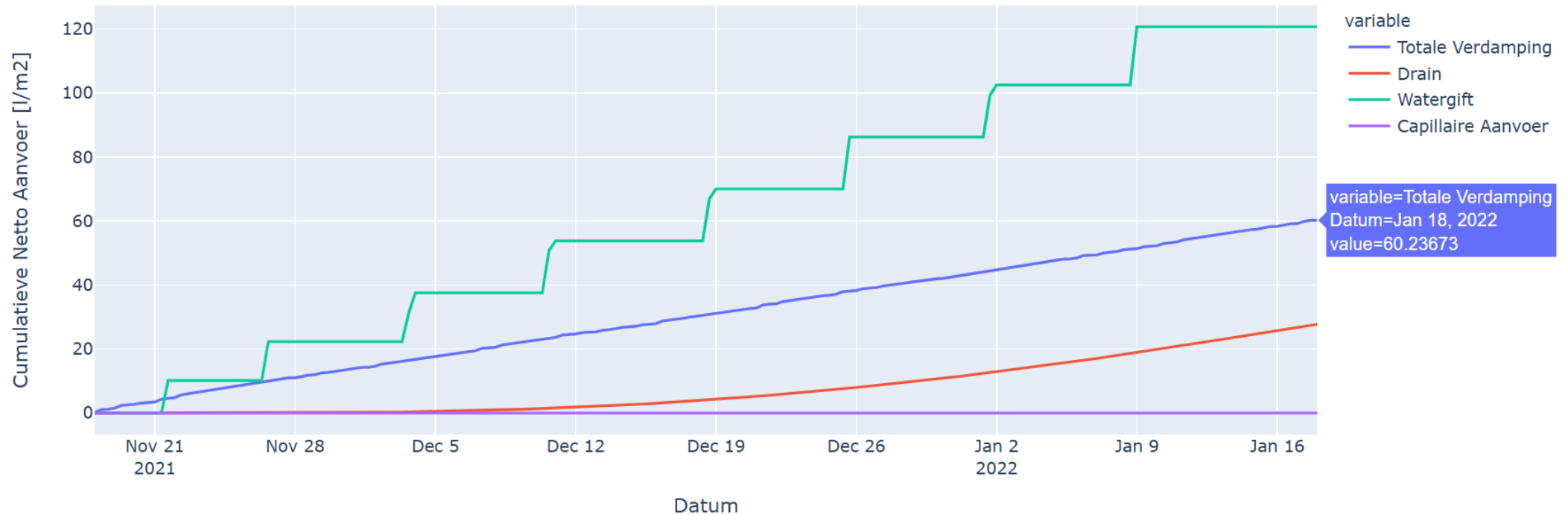
selecteer irrigation: Teelt10_gift ▼ download watergift

irri_name: upload watergift



3.3: Analyseer verdamping van de teelt.

- Totale verdamping: 60 liter/m²
- Teelt duur: Nov 18 – Jan 18 = 60 dagen
- +- 1L per dag (of 2x per dag 0.5 L)
- +- 7L per week (Teler 2)



3.3: Vul dit in in de excel sheet per teler.

1x per week

	A	B	C	D	E
67	2021-11-23 10:00:00	95.33	0		
68	2021-11-23 12:00:00	128.46	0		
69	2021-11-23 14:00:00	90.79	0		
70	2021-11-23 16:00:00	9.33	0		
71	2021-11-23 18:00:00	0.08	0		
72	2021-11-23 20:00:00	0.12	0		
73	2021-11-23 22:00:00	0.33	0		
74	2021-11-24 00:00:00	0.04	0		
75	2021-11-24 02:00:00	0.04	0		
76	2021-11-24 04:00:00	0.08	0		
77	2021-11-24 06:00:00	0	0		
78	2021-11-24 08:00:00	18.71	0		
79	2021-11-24 10:00:00	51.25	0		
80	2021-11-24 12:00:00	100.17	0		
81	2021-11-24 14:00:00	61.71	0		
82	2021-11-24 16:00:00	3.54	0		
83	2021-11-24 18:00:00	0	0		
84	2021-11-24 20:00:00	0.04	0		
85	2021-11-24 22:00:00	0	0		
86	2021-11-25 00:00:00	0.04	0		
87	2021-11-25 02:00:00	0.12	0		
88	2021-11-25 04:00:00	0	0		
89	2021-11-25 06:00:00	0	0		
90	2021-11-25 08:00:00	12.88	0		
91	2021-11-25 10:00:00	131.12	0		
92	2021-11-25 12:00:00	124.54	0		
93	2021-11-25 14:00:00	108.96	0		
94	2021-11-25 16:00:00	5.71	0		
95	2021-11-25 18:00:00	0	7		
96	2021-11-25 20:00:00	0.08	0		
97					
98	2021-11-26 00:00:00	0.04	0		

2x per dag

	A	B	C	D	E	F	G
1	time	rad_data	irrigation				
2	2021-11-18 00:00:00	0.08	0				
3	2021-11-18 02:00:00	0	0				
4	2021-11-18 04:00:00	0.08	0				
5	2021-11-18 06:00:00	0.04	0.5				
6	2021-11-18 08:00:00	45.08	0				
7	2021-11-18 10:00:00	207.17	0				
8	2021-11-18 12:00:00	248.58	0				
9							
10	2021-11-18 16:00:00	7.33	0.5				
11	2021-11-18 18:00:00	0.17	0				
12	2021-11-18 20:00:00	0.08	0				
13	2021-11-18 22:00:00	0.12	0				
14	2021-11-19 00:00:00	0.12	0				
15	2021-11-19 02:00:00	0.12	0				
16	2021-11-19 04:00:00	0.12	0				
17	2021-11-19 06:00:00	0.21	0.5				
18	2021-11-19 08:00:00	31.25	0				
19	2021-11-19 10:00:00	175.75	0				
20	2021-11-19 12:00:00	171.62	0				
21	2021-11-19 14:00:00	121.42	0				
22	2021-11-19 16:00:00	10.04	0.5				
23	2021-11-19 18:00:00	0	0				
24	2021-11-19 20:00:00	0.04	0				
25	2021-11-19 22:00:00	0.04	0				
26	2021-11-20 00:00:00	0	0				
27	2021-11-20 02:00:00	0.04	0				
28	2021-11-20 04:00:00	0.04	0				
29	2021-11-20 06:00:00	0	0.5				
30	2021-11-20 08:00:00	13.42	0				
31	2021-11-20 10:00:00	27.88	0				
32	2021-11-20 12:00:00	27.21	0				
33	2021-11-20 14:00:00	13.88	0				
34	2021-11-20 16:00:00	0.75	0.5				
35	2021-11-20 18:00:00	0.04	0				
36	2021-11-20 20:00:00	0	0				
37	2021-11-20 22:00:00	0.04	0				

3.3: Upload één voor één in de VL.

selecteer irrigator:

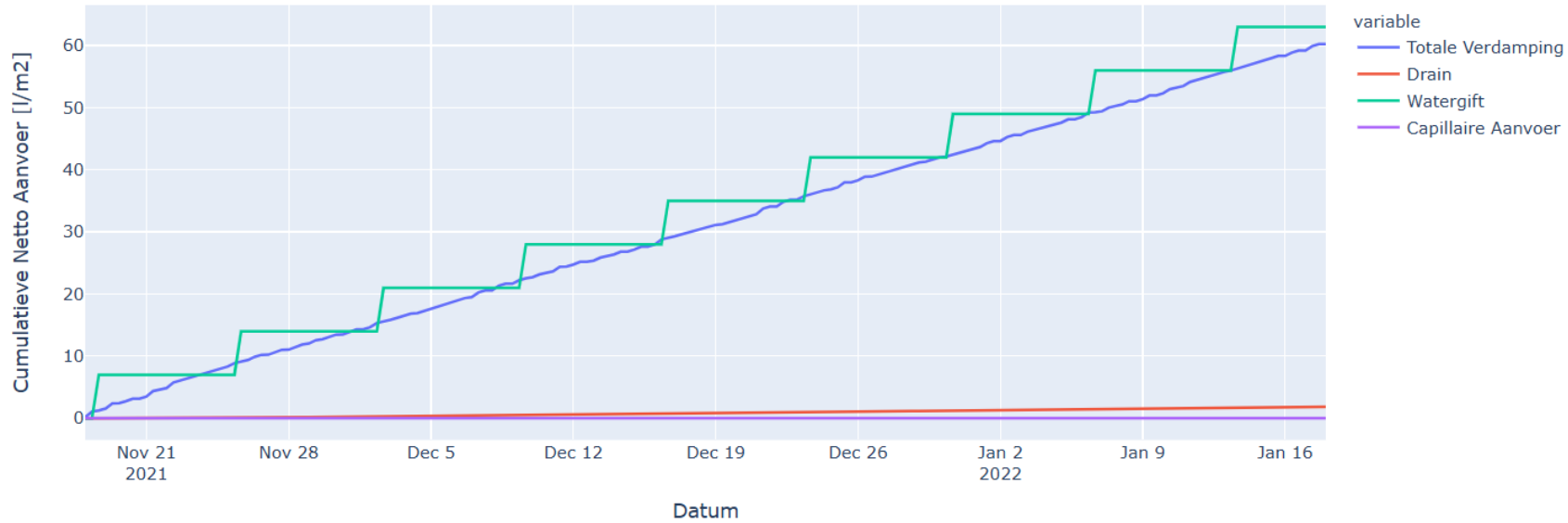
irri_name:



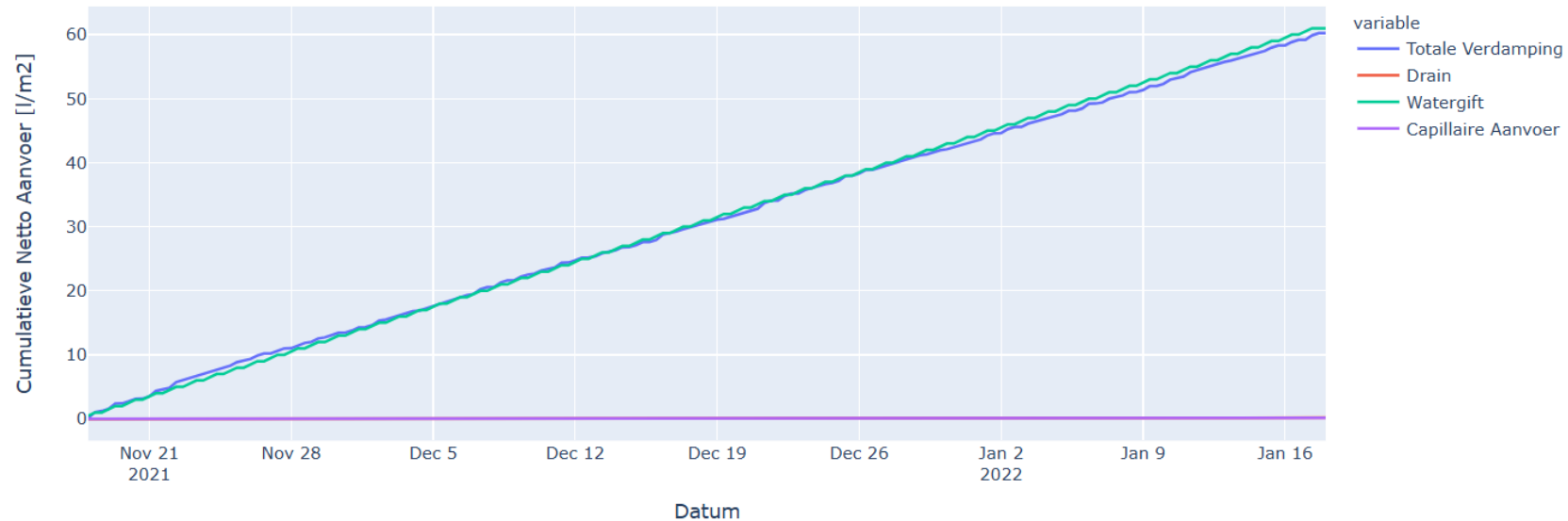
selecteer datum:

3.3: Verschil tussen de telers.

1x per week

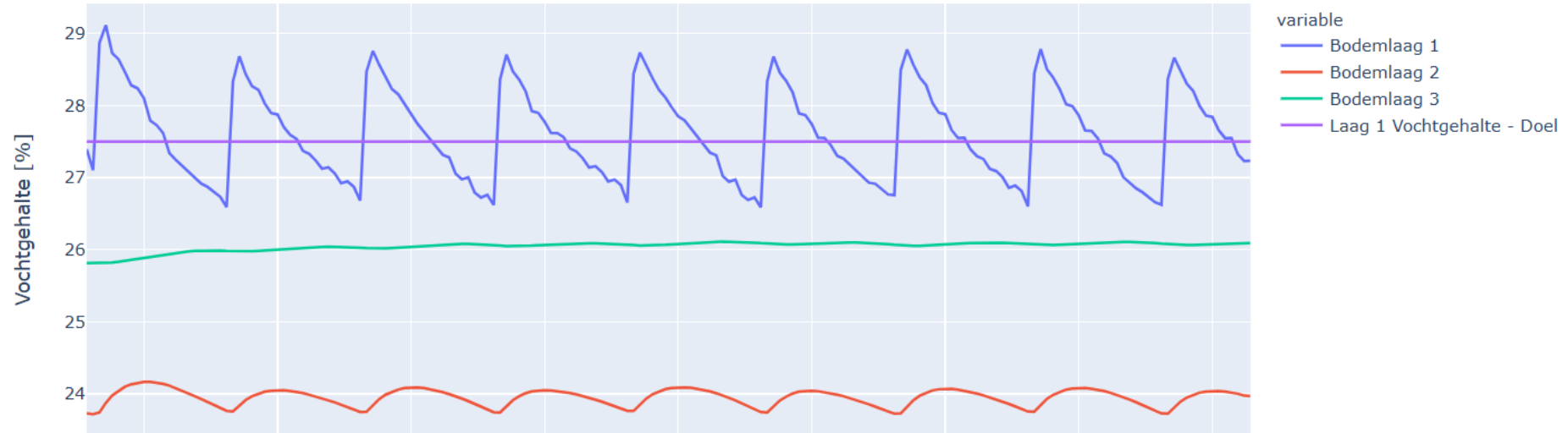


2x per dag

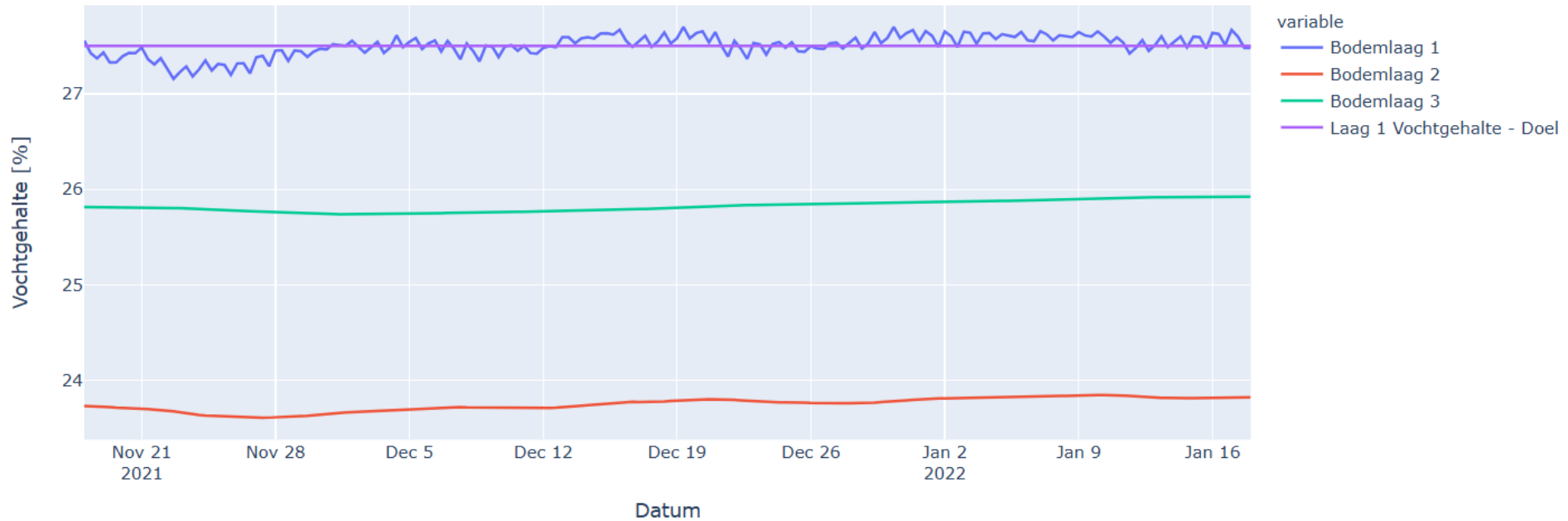


3.3: Hoger vochtgehalte laag 2 en 3.

1x per week



2x per dag

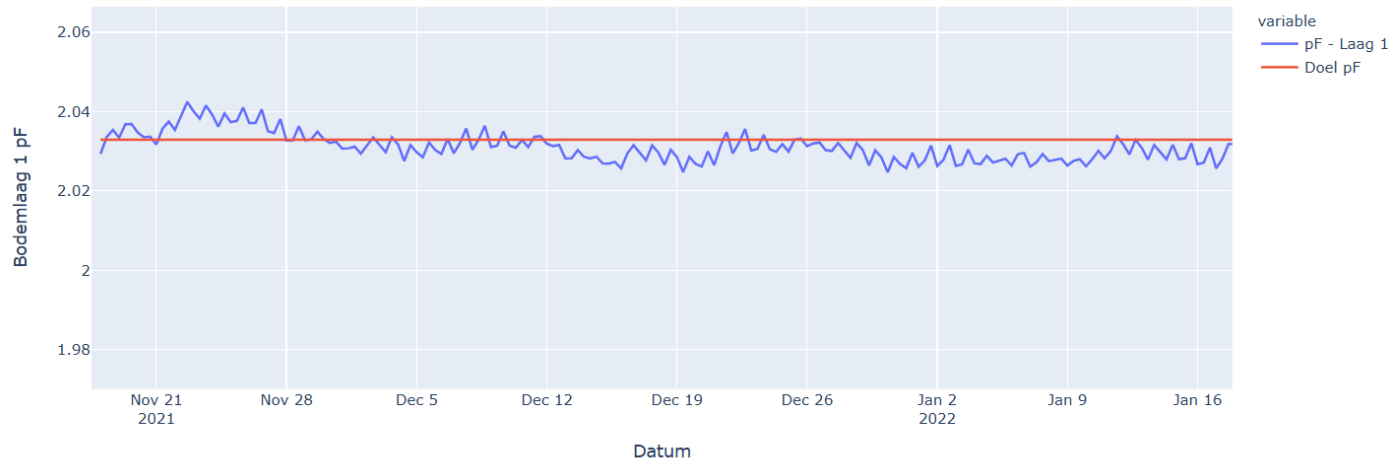


3.3: Beter doel pF 2x per week water geven.

1x per week



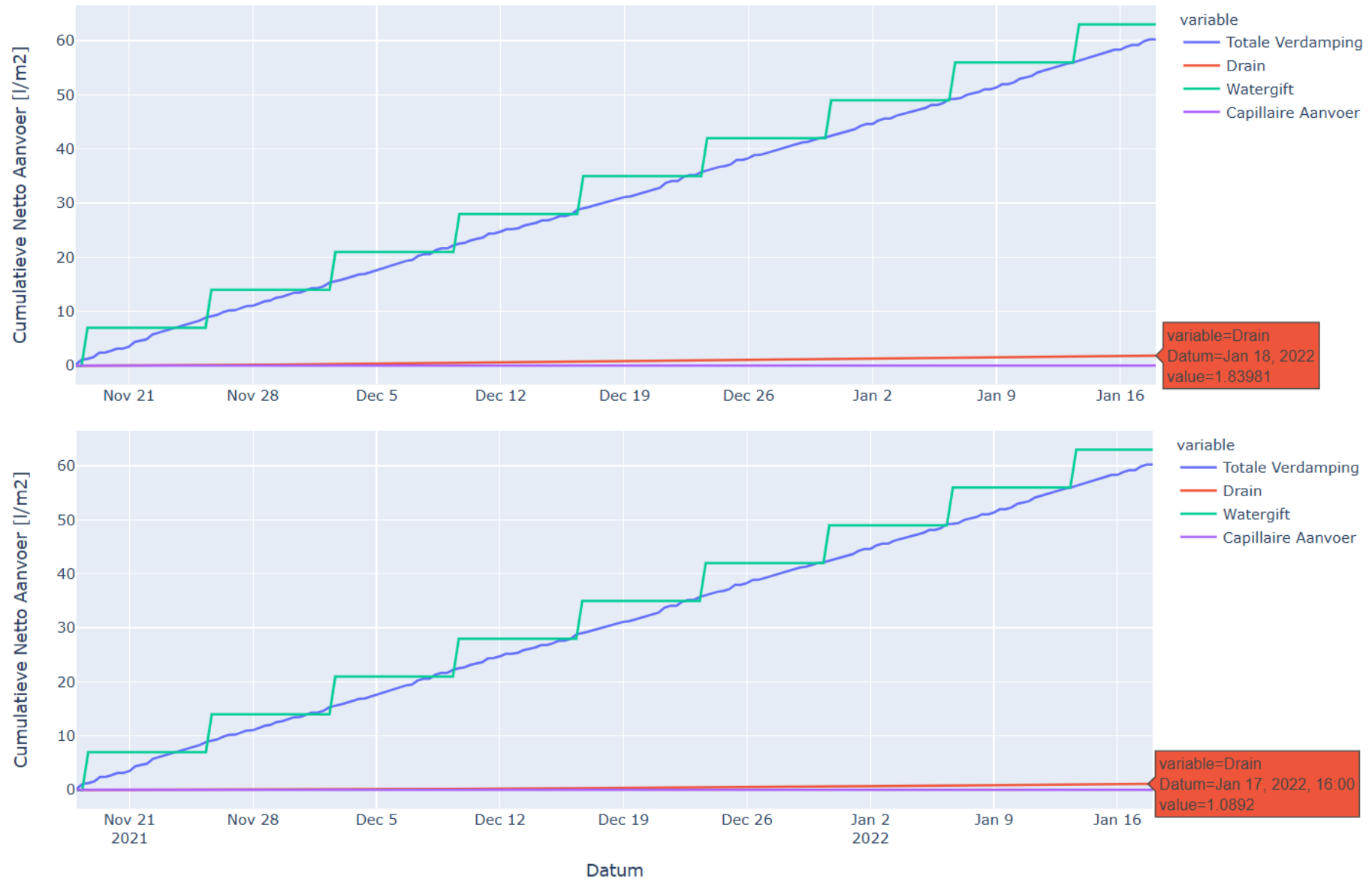
Huidige pF punten: 0.018



2x per dag

Huidige pF punten: 0.003

3.3: Zand vs leem 1x per week.



3.3: Voor de hackathon: Bekijk het per dag!



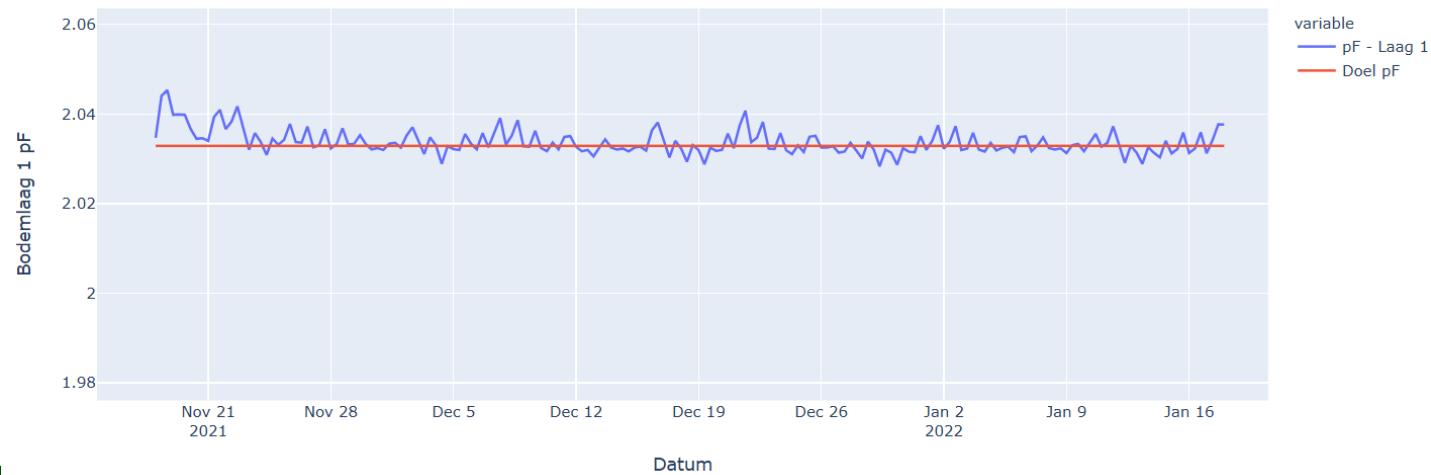
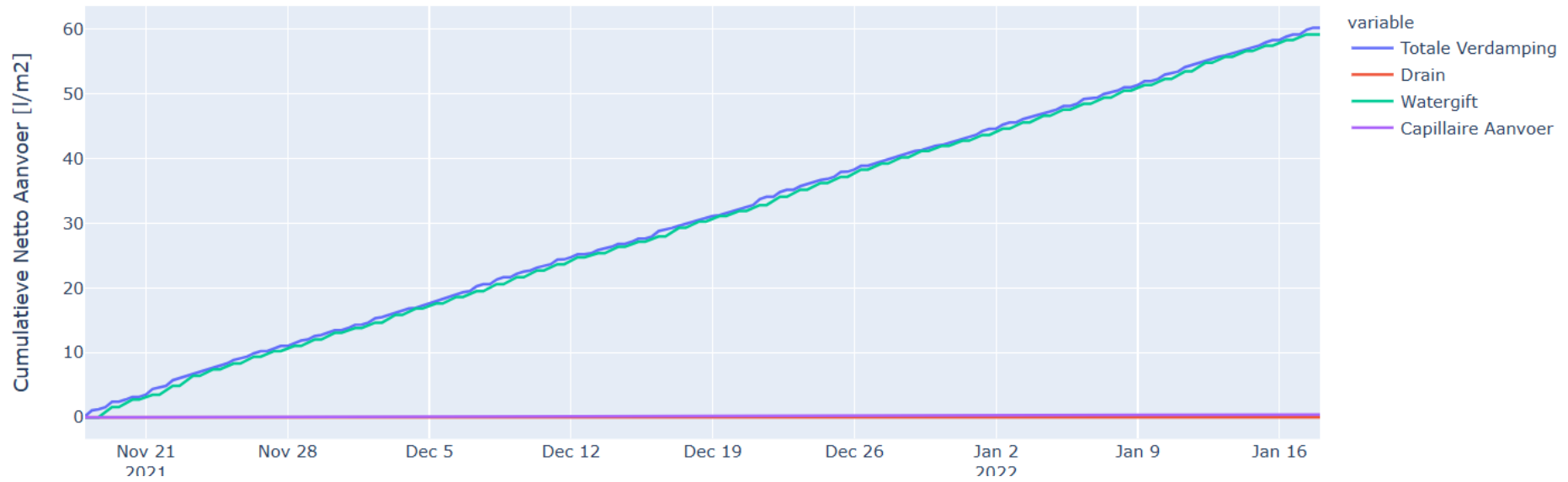
3.3: Voor de hackathon: Bekijk het per dag!

Hoeveel verdamping na 1e dag?

Dan dat aanvullen!

	A	B	C	D	E	F	G
1	time	ad_dat	gation staa	gation (teler	rdamping (teler	rdamping som	
2	2021-11-18 00:00:00	0.08	0	0			
3	2021-11-18 02:00:00	0	0	0			
4	2021-11-18 04:00:00	0.17	0	0			
5	2021-11-18 06:00:00	0.04	0	0			
6	2021-11-18 08:00:00	45.08	0	0			
7	2021-11-18 10:00:00	207.17	0	0			
8	2021-11-18 12:00:00	248.58	0	0			
9	2021-11-18 14:00:00	61.96	0	0			
0	2021-11-18 16:00:00	7.33	0	0			
1	2021-11-18 18:00:00	0.17	0	0			
2	2021-11-18 20:00:00	0.08	0	0			
3	2021-11-18 22:00:00	0.12	0	0			
4	2021-11-19 00:00:00	0.12	0	0	1.5572	1.5572	
5	2021-11-19 02:00:00	0.12	0	0			
6	2021-11-19 04:00:00	0.12	0	0			
7	2021-11-19 06:00:00	0.21	0	0.7786			
8	2021-11-19 08:00:00	31.25	0	0			
9	2021-11-19 10:00:00	175.75	0	0			
0	2021-11-19 12:00:00	171.62	0	0			
1	2021-11-19 14:00:00	121.42	0	0			
2	2021-11-19 16:00:00	10.04	0	0.7786			
3	2021-11-19 18:00:00	0	0	0			
4	2021-11-19 20:00:00	0.04	0	0			
5	2021-11-19 22:00:00	0.04	0	0			
6	2021-11-20 00:00:00	0	0	0	1.17371	2.73091	
7	2021-11-20 02:00:00	0.04	0	0			
8	2021-11-20 04:00:00	0.04	0	0			
9	2021-11-20 06:00:00	0	0	0.586855			
0	2021-11-20 08:00:00	13.42	0	0			
1	2021-11-20 10:00:00	27.88	0	0			
2	2021-11-20 12:00:00	27.21	0	0			
3	2021-11-20 14:00:00	13.88	0	0			
4	2021-11-20 16:00:00	0.75	0	0.586855			
5	2021-11-20 18:00:00	0.04	0	0			
6	2021-11-20 20:00:00	0	0	0			
7	2021-11-20 22:00:00	0.04	0	0			
8	2021-11-21 00:00:00	0.04	0	0	0.74459	3.4755	
9	2021-11-21 02:00:00	0	0	0			
0	2021-11-21 04:00:00	0	0	0			
1	2021-11-21 06:00:00	0.04	0	0.372295			

3.3: Nog betere pF score



Vragen?

Bedankt!

