SOIL SCOUT

GAIN A DEEPER VIEW

Lohkon sisäisen satovaihtelun alkuperän selvittäminen mittaamalla

Johannes Tiusanen, Soil Scout Oy





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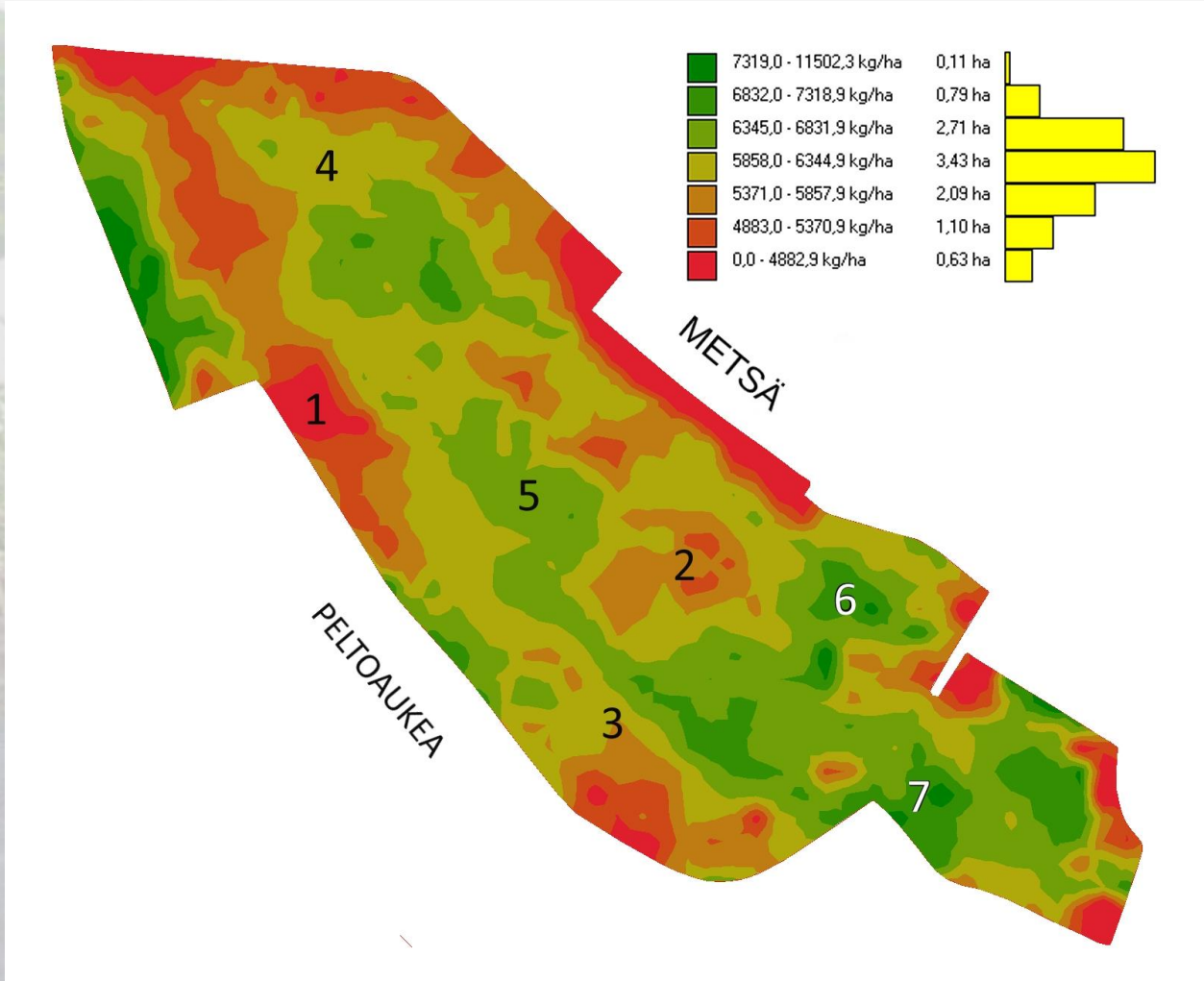
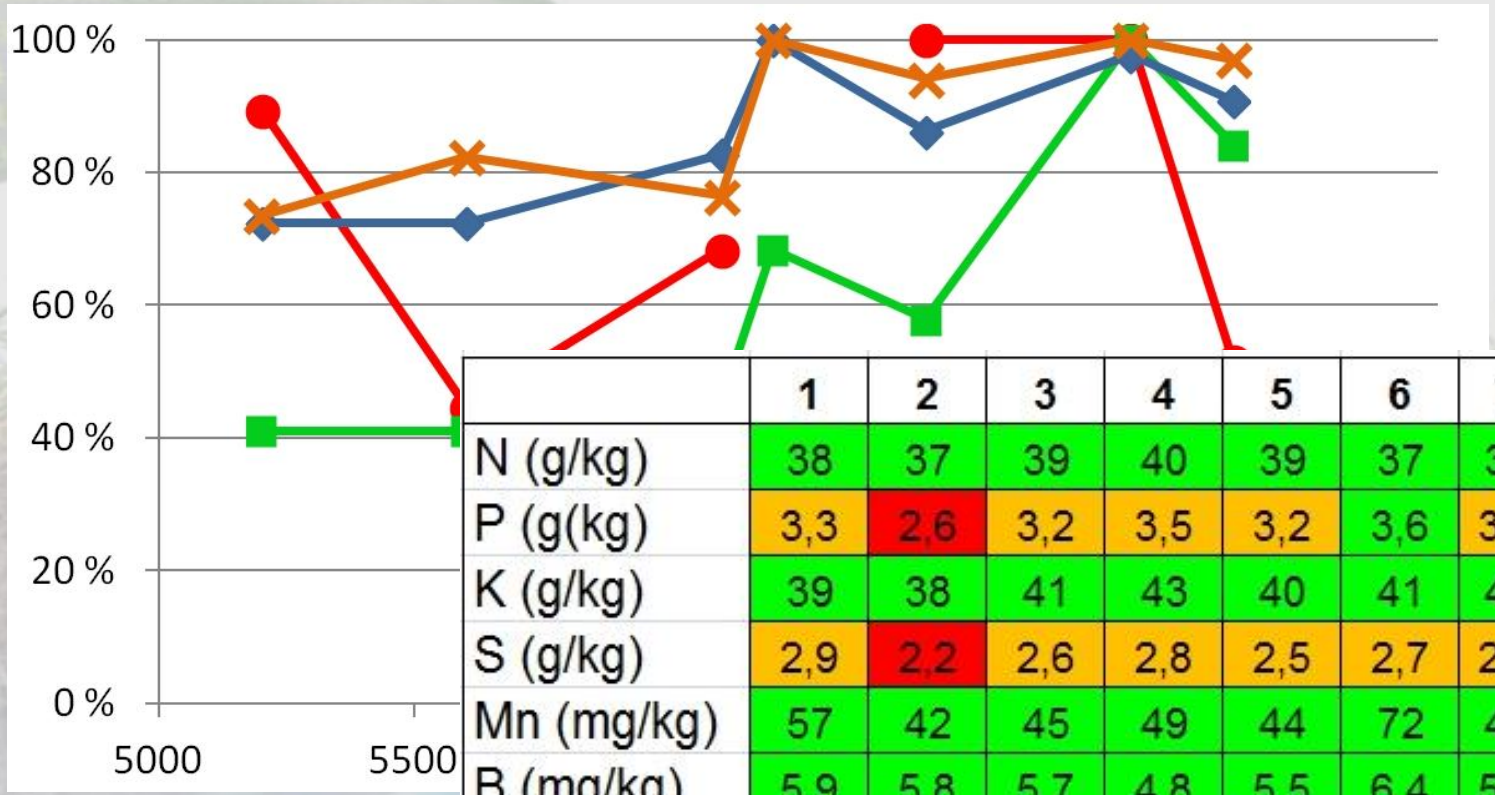
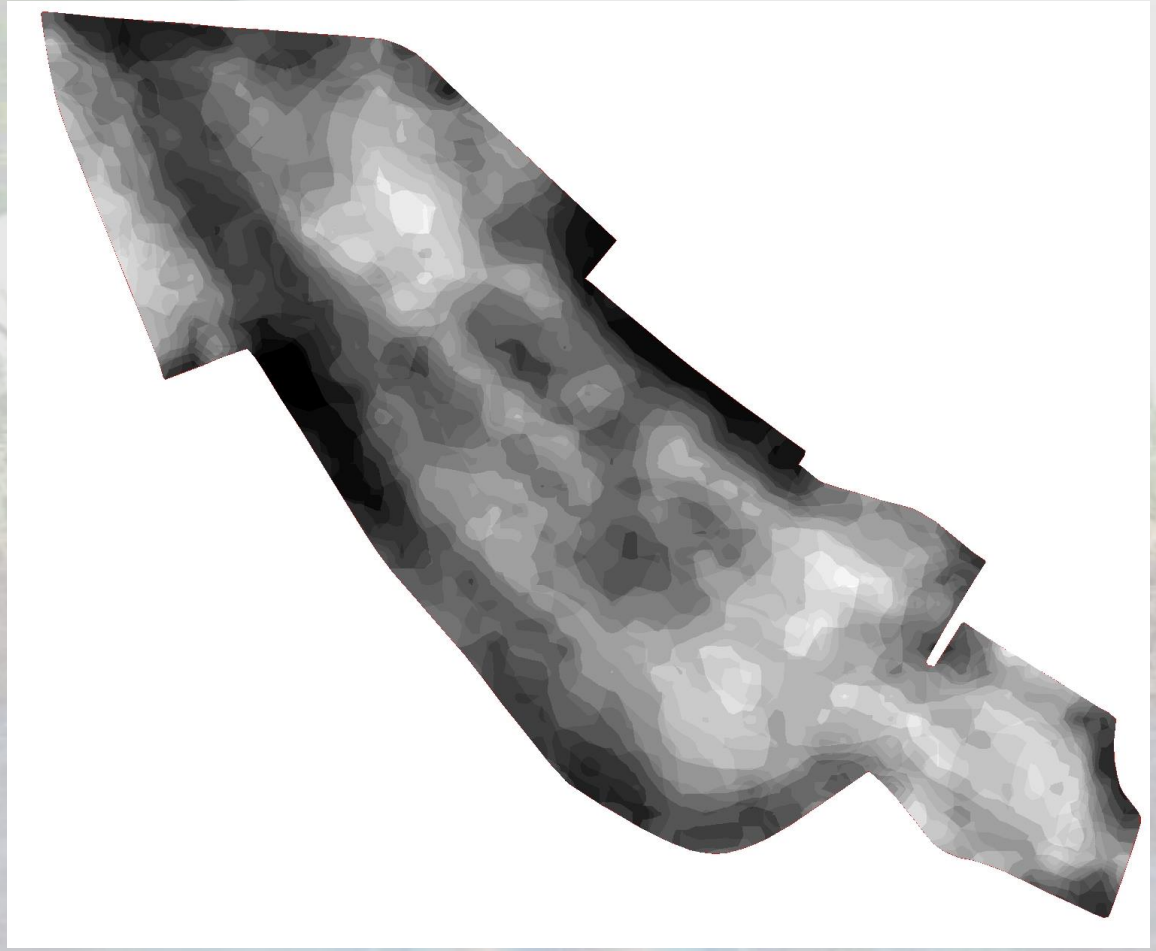
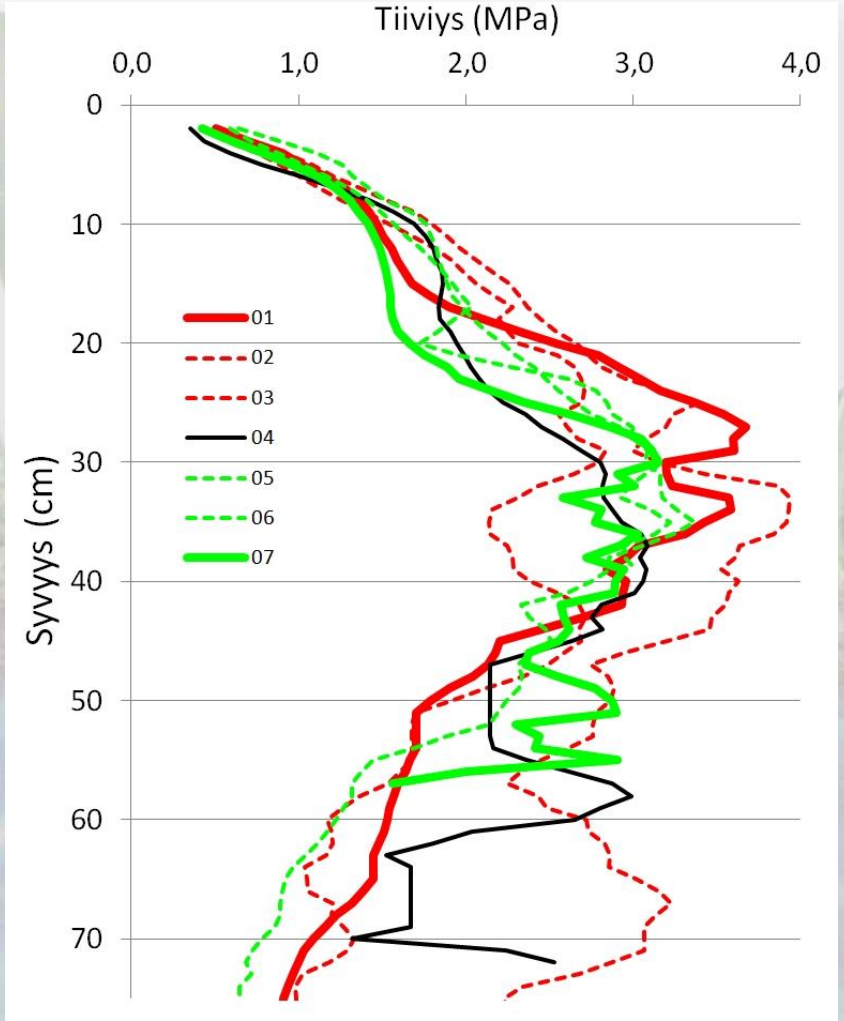
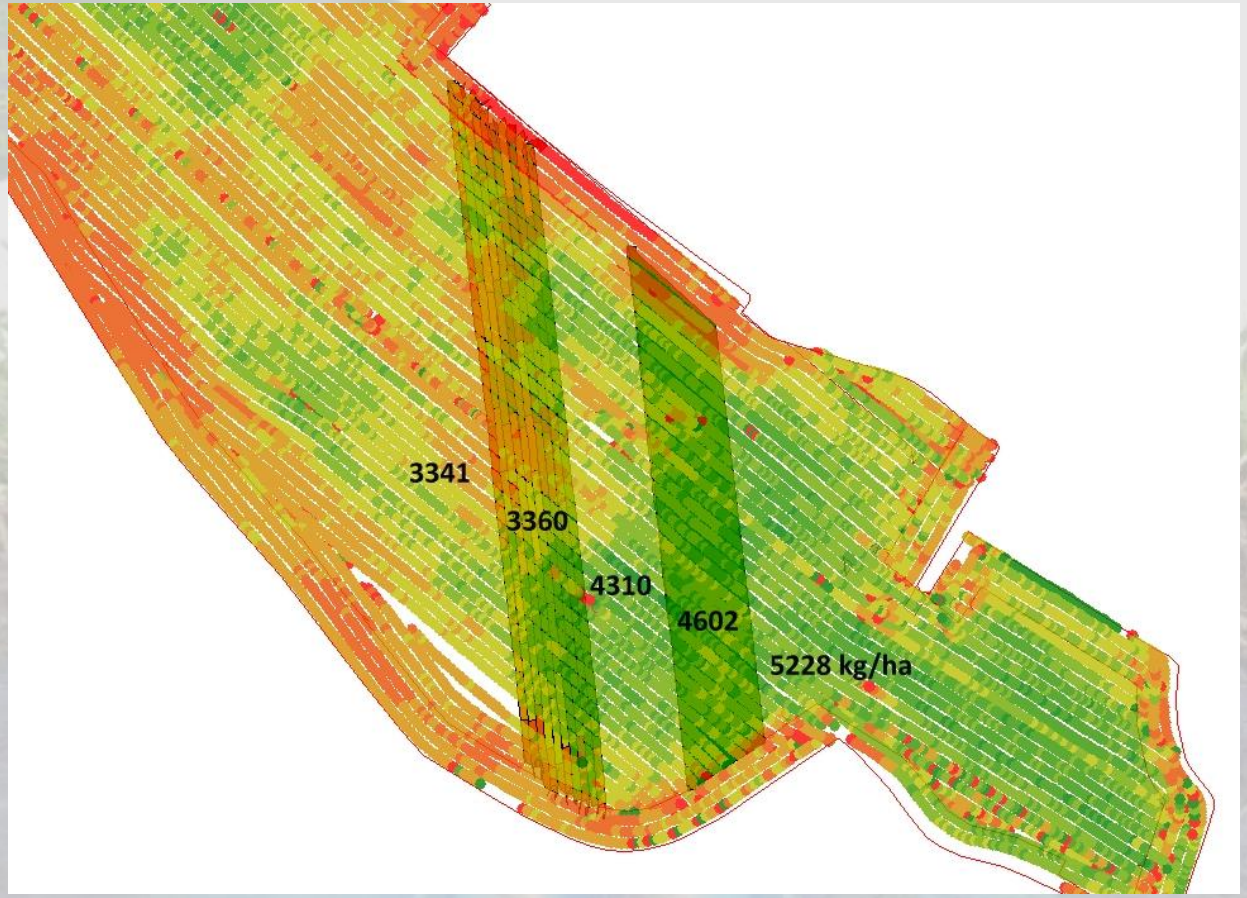

7319,0 - 11502,3 kg/ha
6832,0 - 7318,9 kg/ha
6345,0 - 6831,9 kg/ha
5858,0 - 6344,9 kg/ha
5371,0 - 5857,9 kg/ha
4883,0 - 5370,9 kg/ha
0,0 - 4882,9 kg/ha
0,11 ha
0,79 ha
2,71 ha
3,43 ha
2,09 ha
1,10 ha
0,63 ha
METSÄ
PELTOAUKEA
1
2
3
4
5
6
7



	1	2	3	4	5	6	7
N (g/kg)	38	37	39	40	39	37	38
P (g(kg)	3,3	2,6	3,2	3,5	3,2	3,6	3,1
K (g/kg)	39	38	41	43	40	41	42
S (g/kg)	2,9	2,2	2,6	2,8	2,5	2,7	2,4
Mn (mg/kg)	57	42	45	49	44	72	40
B (mg/kg)	5,9	5,8	5,7	4,8	5,5	6,4	5,6




Tiiviys (MPa)
0,0
1,0
2,0
3,0
4,0
0
10
20
30
40
50
60
70
Syvyys (cm)
01
02
03
04
05
06
07


3341
3360
4310
4602
5228 kg/ha

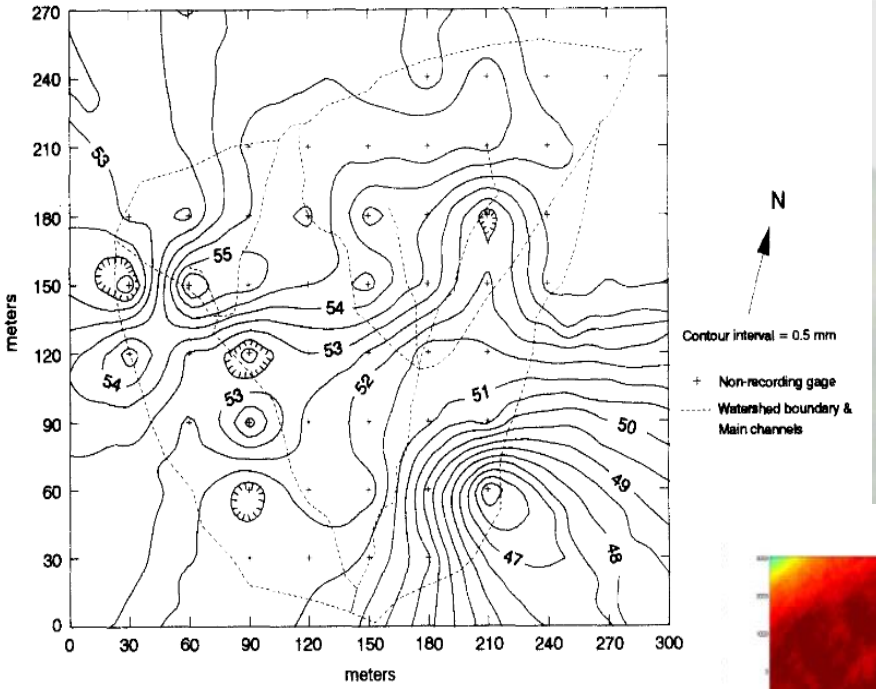
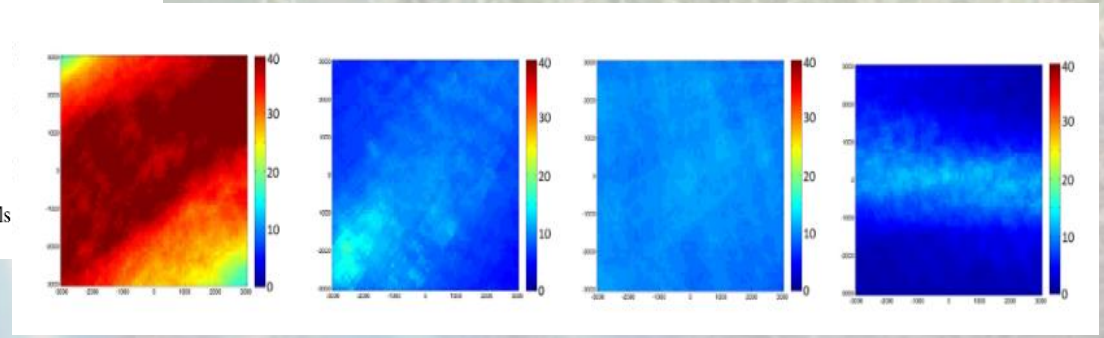
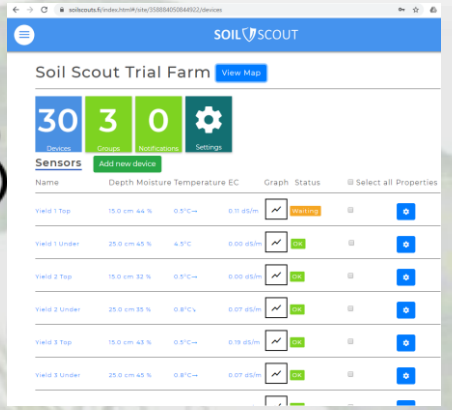


Fig. 5. Contour map of the rainfall depth for the storm of 12 August 1990 at Lucky Hills isotropic kriging).

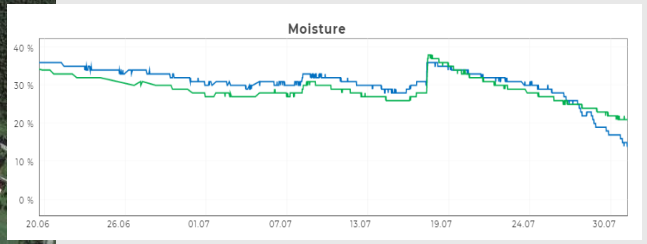


SOIL SCOUT

Palvelin







> 500 m

10-20 cm

10-200 cm

Soil Scout Hydra100

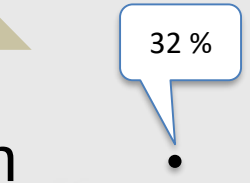
Huoltovapaa langaton anturi maanalaisten paikkakohtaisten olosuhteiden ja profiilin seurantaan



- Lämpötia
- Kosteus
- Johtavuus
- 20 vuotta

Neljä askelta kohti hallintaa

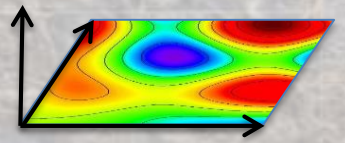
1. Realiaikainen tieto olosuhteista arvailun sijaan



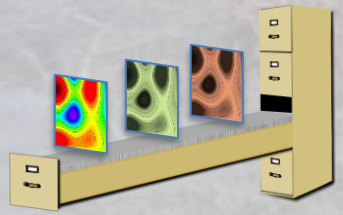
2. Ymmärrys maan dynamiikasta



3. 3D näkymä paikkakohtaisiin eroihin



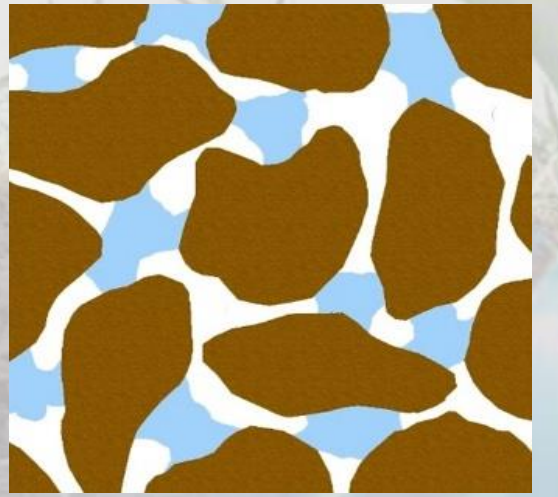
4. Dataa vuodesta toiseen vertailua varten

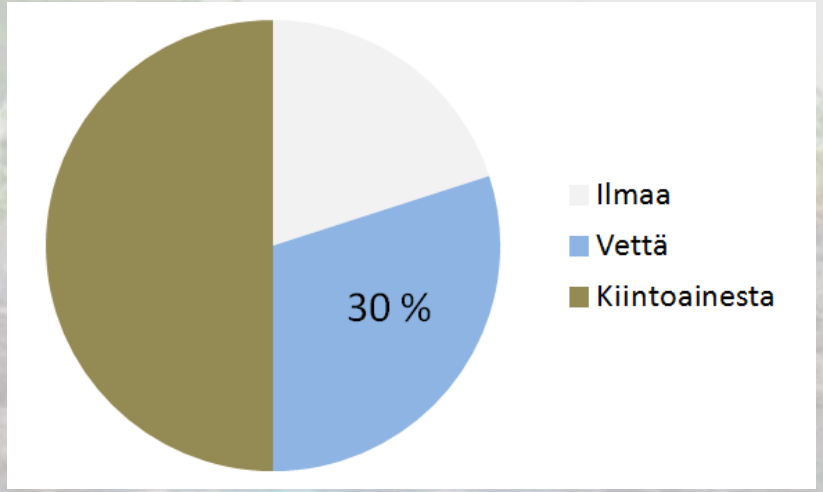


Kosteuden hallinta käytännössä

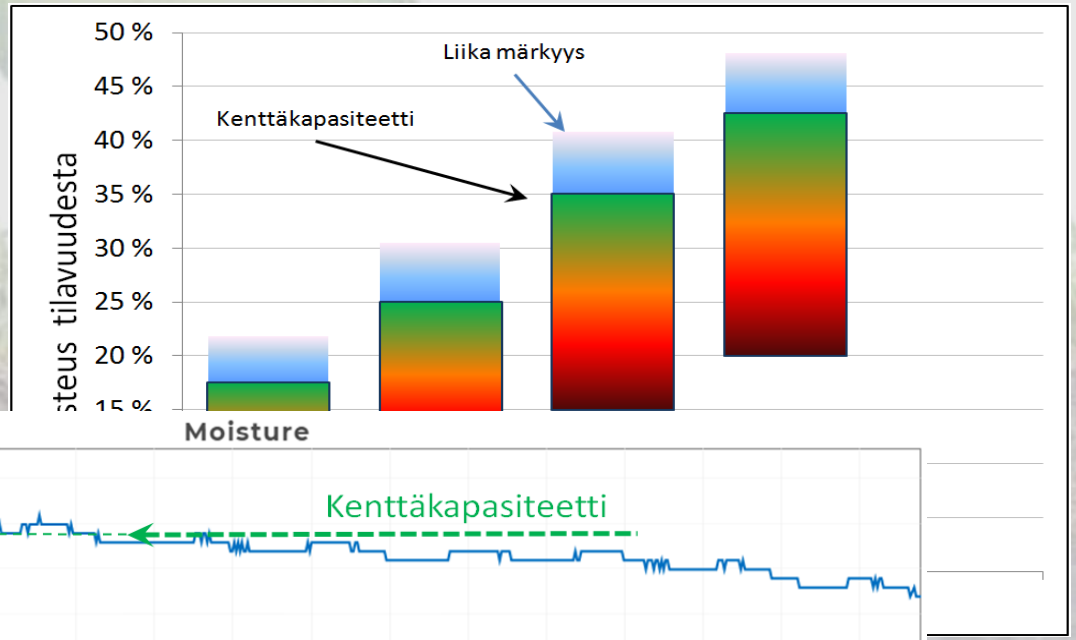


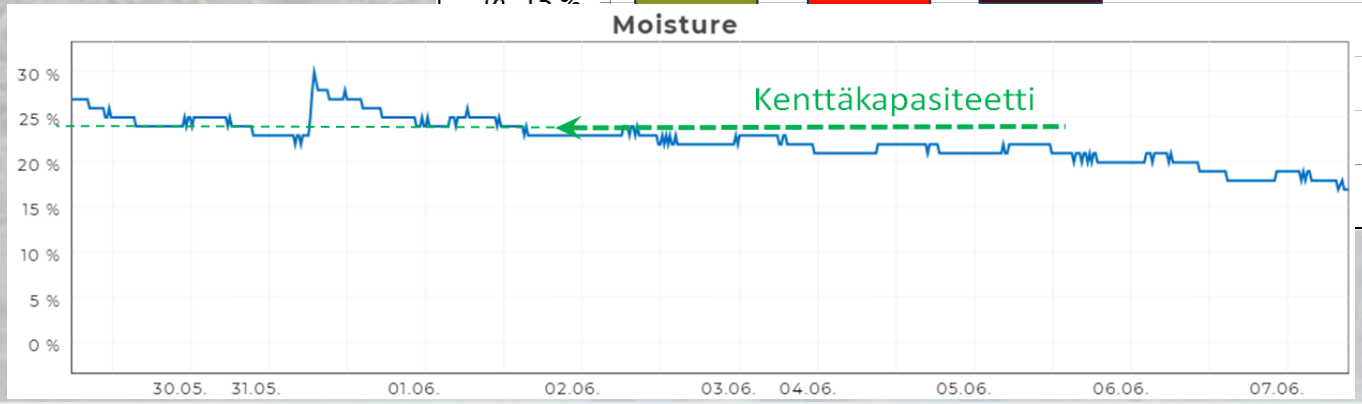
Mistä “maa” on tehty



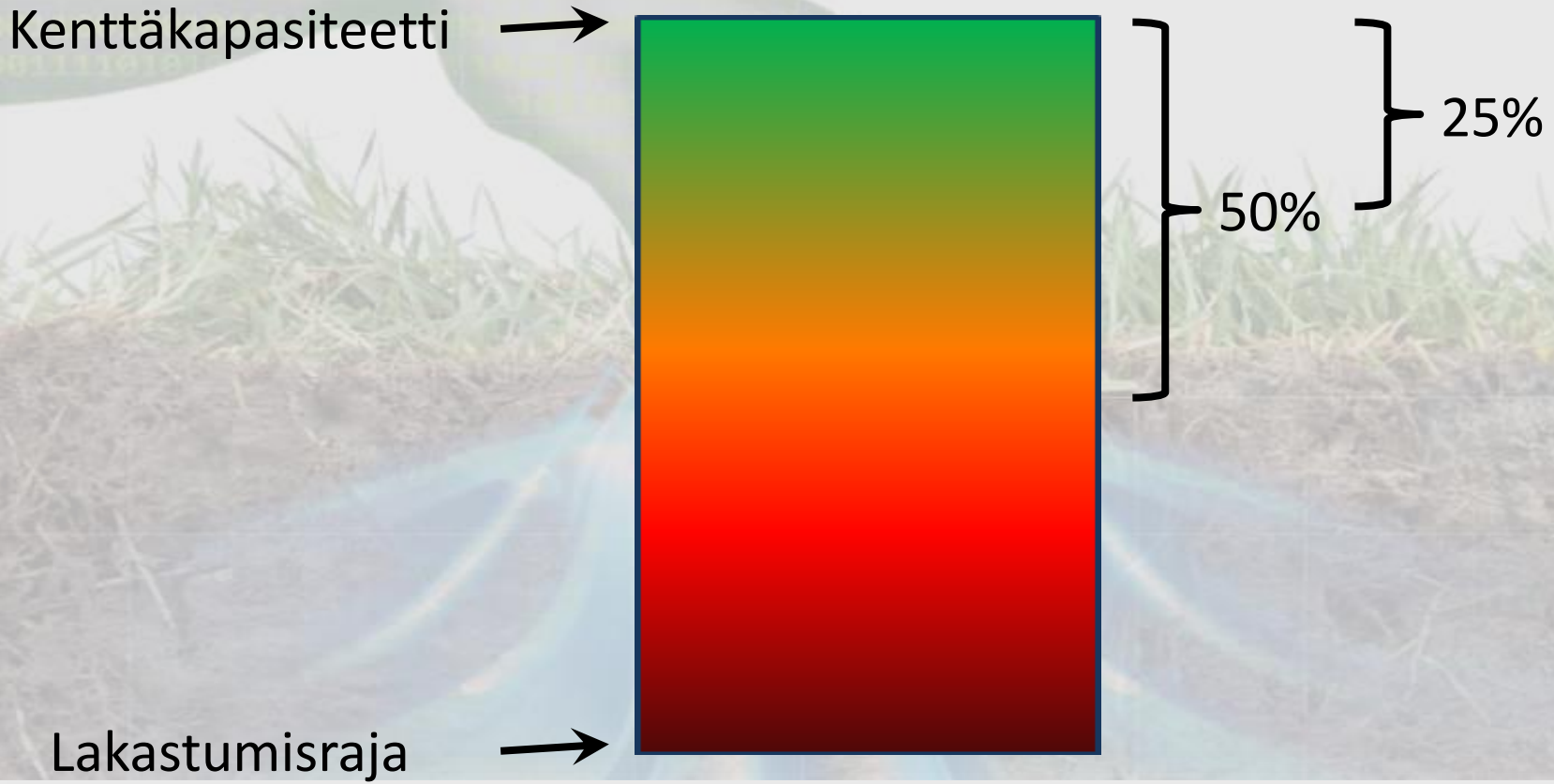


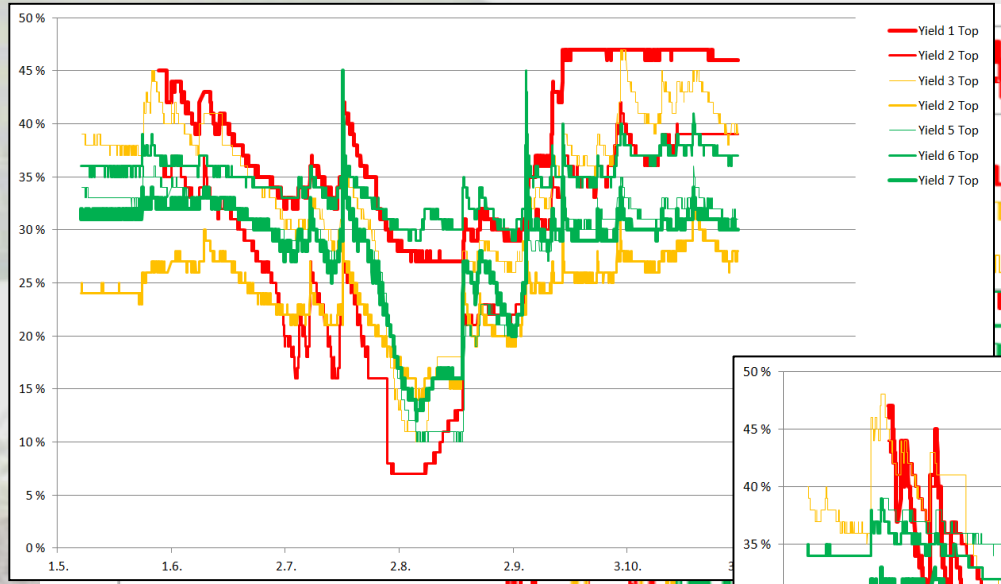
1. Mikä on paras kosteus?





2. Paljonko maa saa kuivahtaa?




50 %
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1.6.
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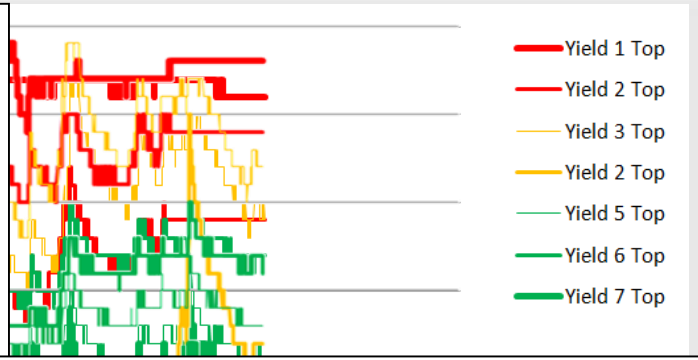
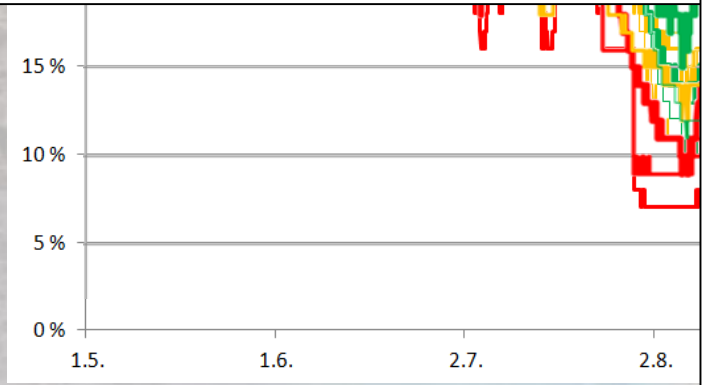
3.10.
Yield 1 Top
Yield 2 Top
Yield 3 Top
Yield 2 Top
Yield 5 Top
Yield 6 Top
Yield 7 Top


Yield 1 Top
Yield 2 Top
Yield 3 Top
Yield 2 Top
Yield 5 Top
Yield 6 Top
Yield 7 Top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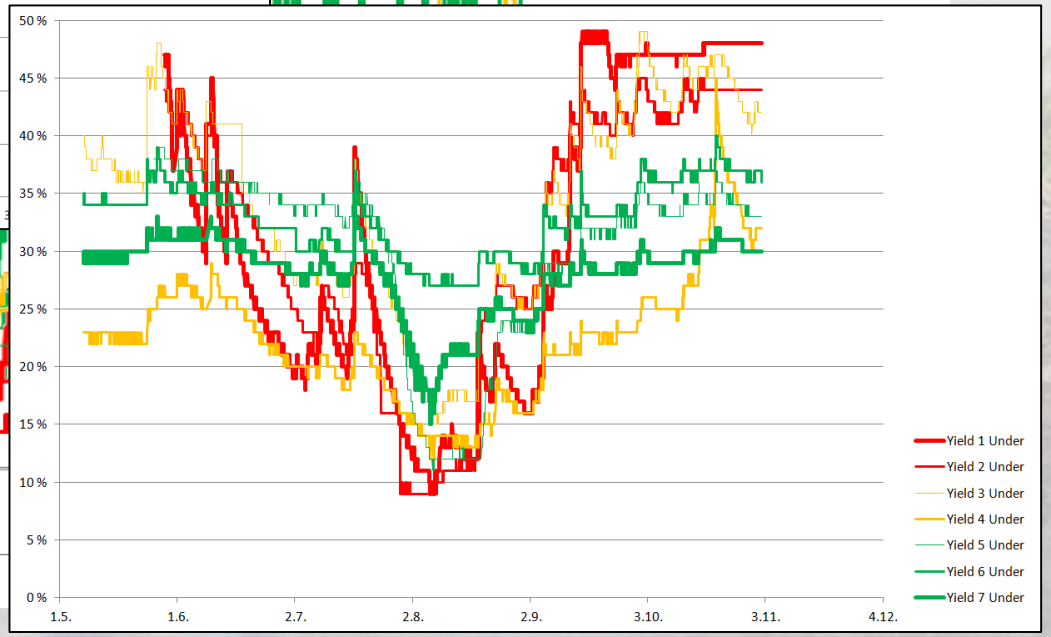
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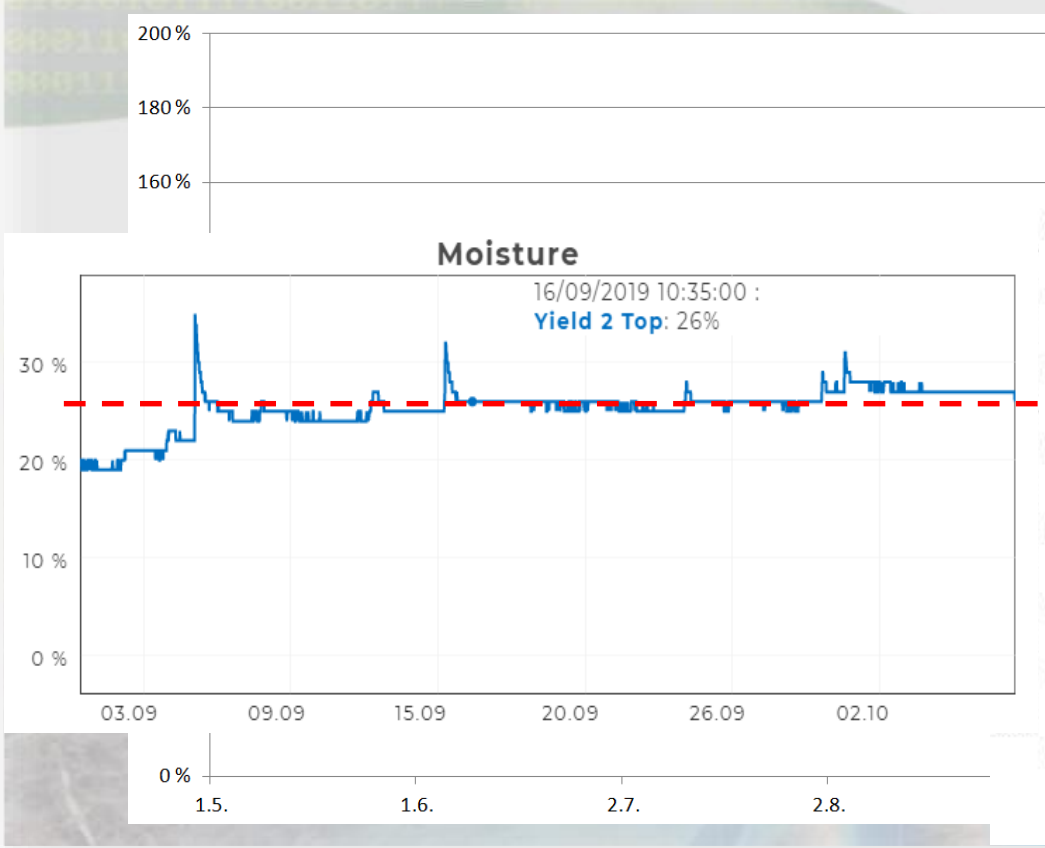
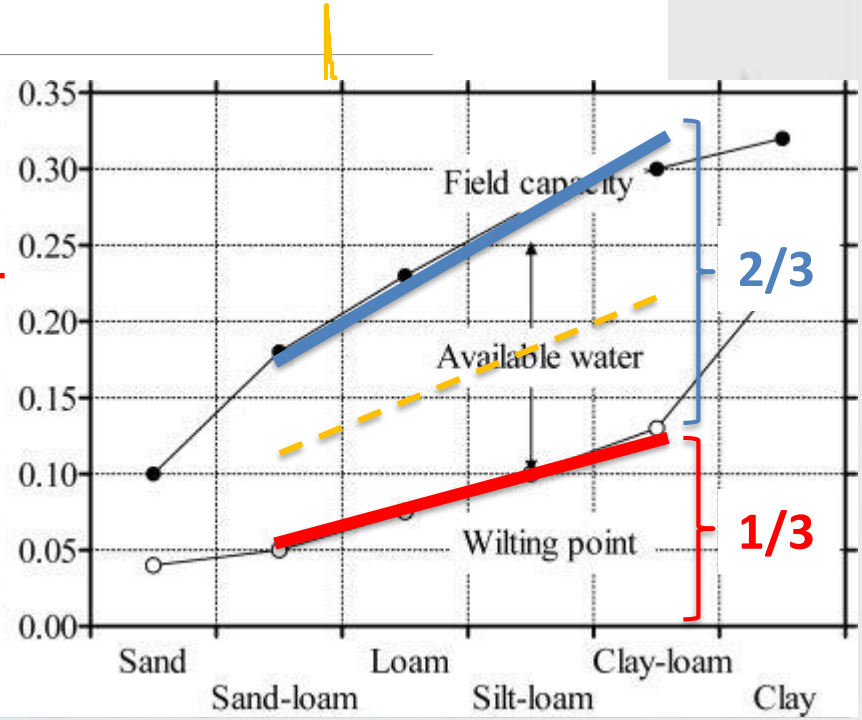
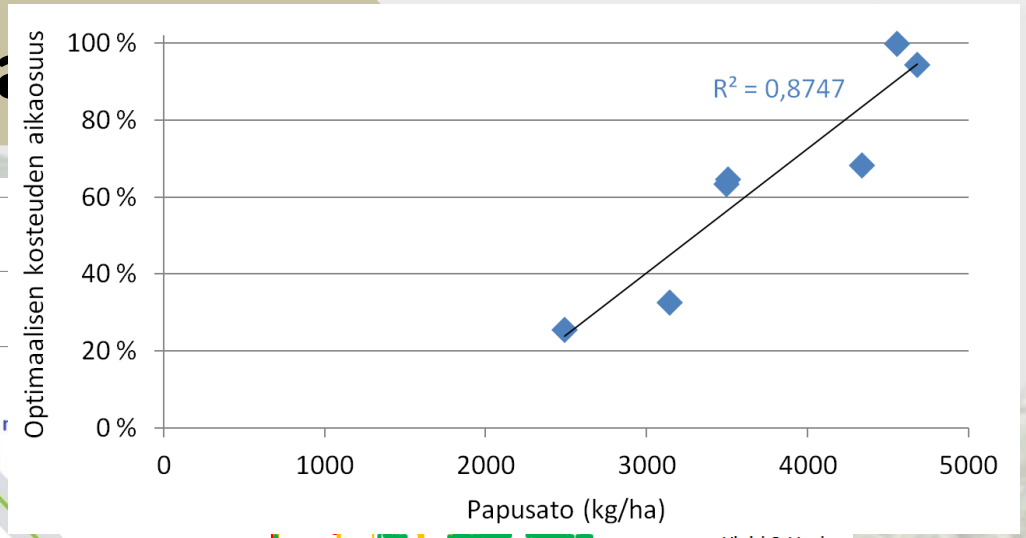
3.10.
3.11.
4.12.
Yield 1 Under
Yield 2 Under
Yield 3 Under
Yield 4 Under
Yield 5 Under
Yield 6 Under
Yield 7 Under

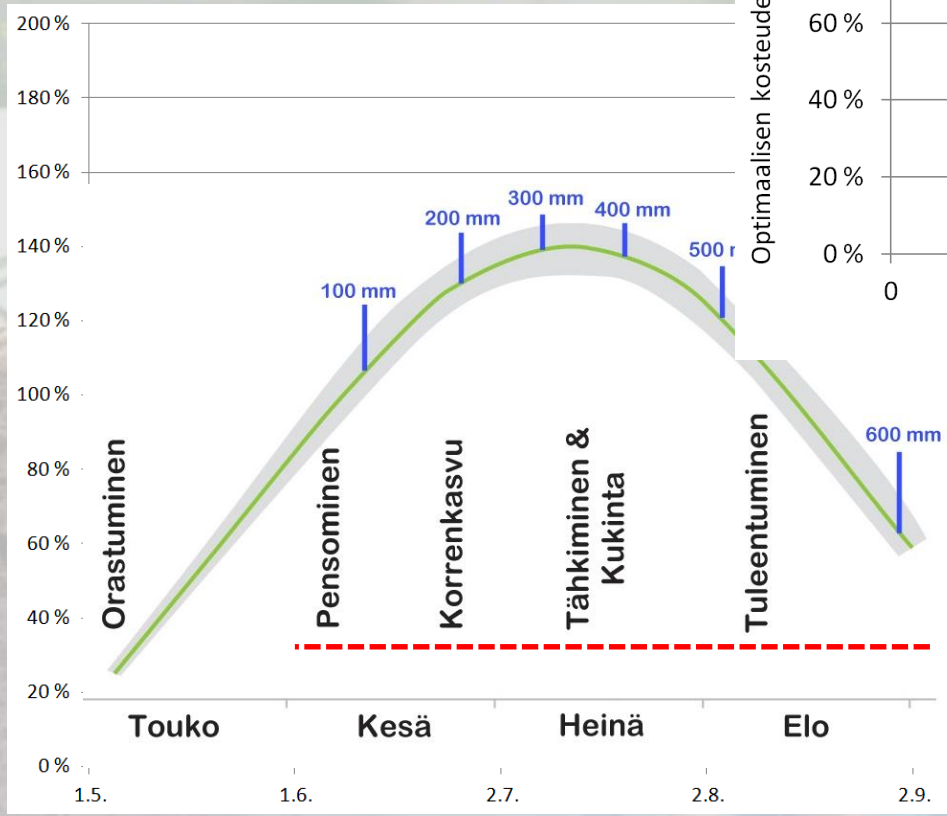
Kosteuden optimaalisuus

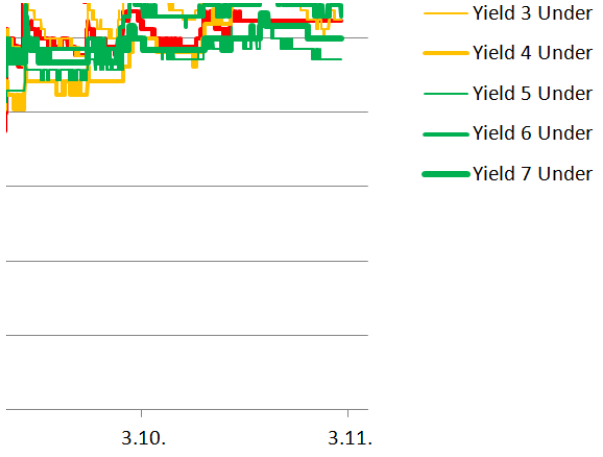




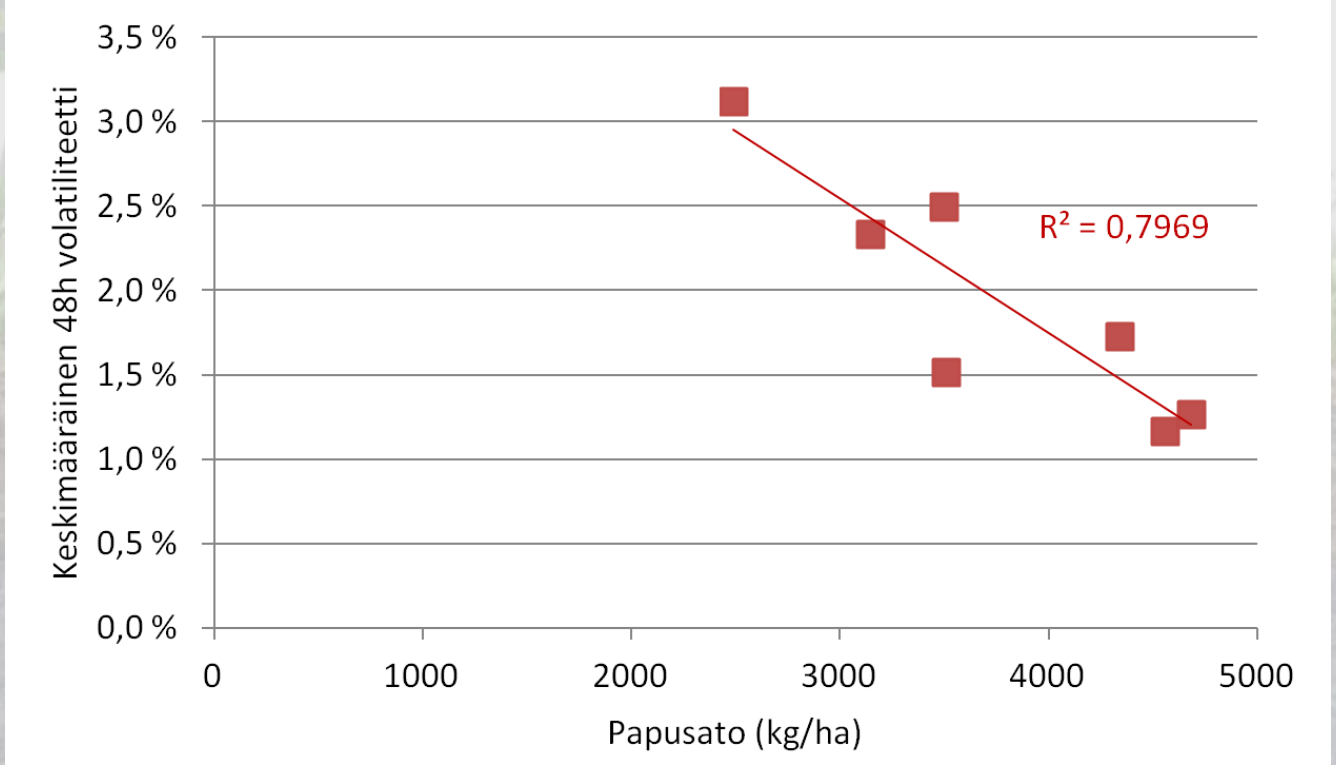
Kosteuden optima



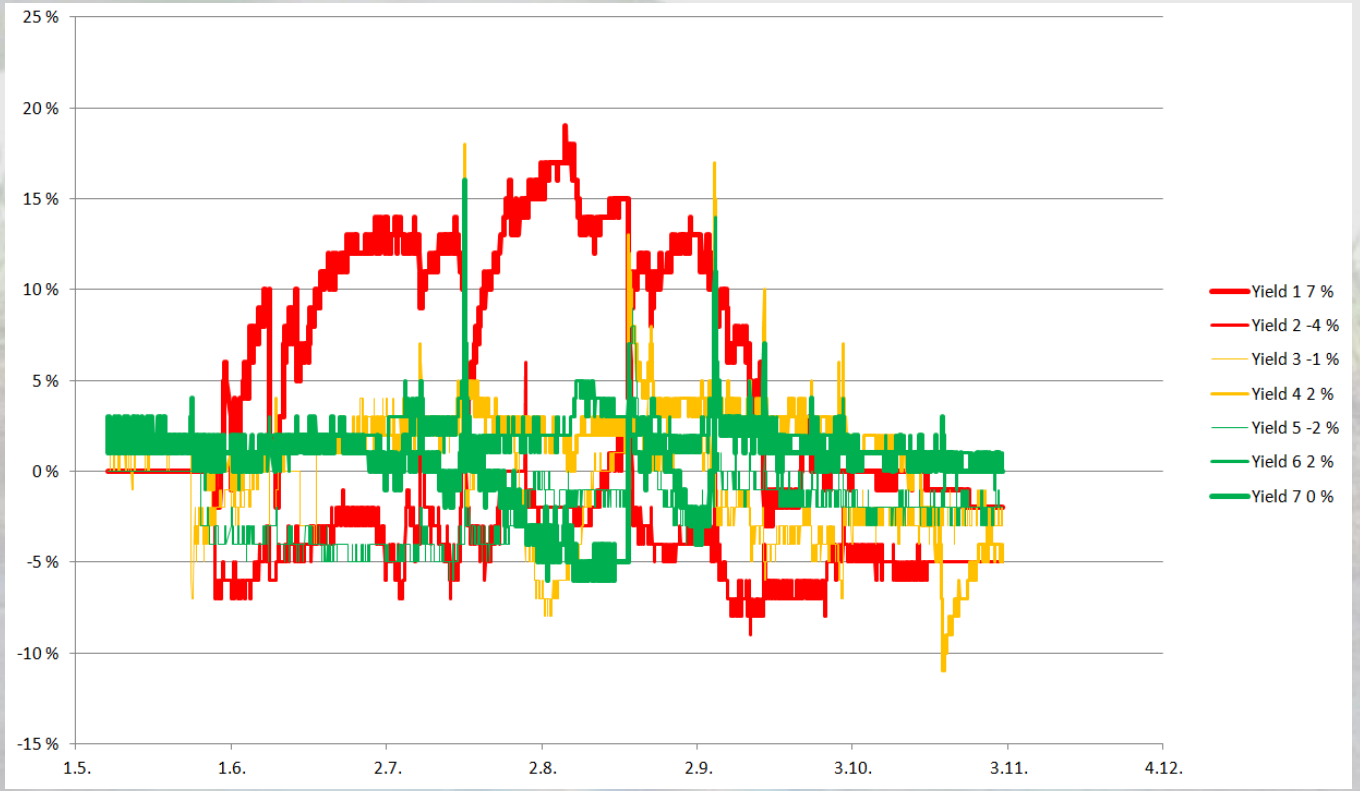




Volatiliteetti



Kosteuden inversio



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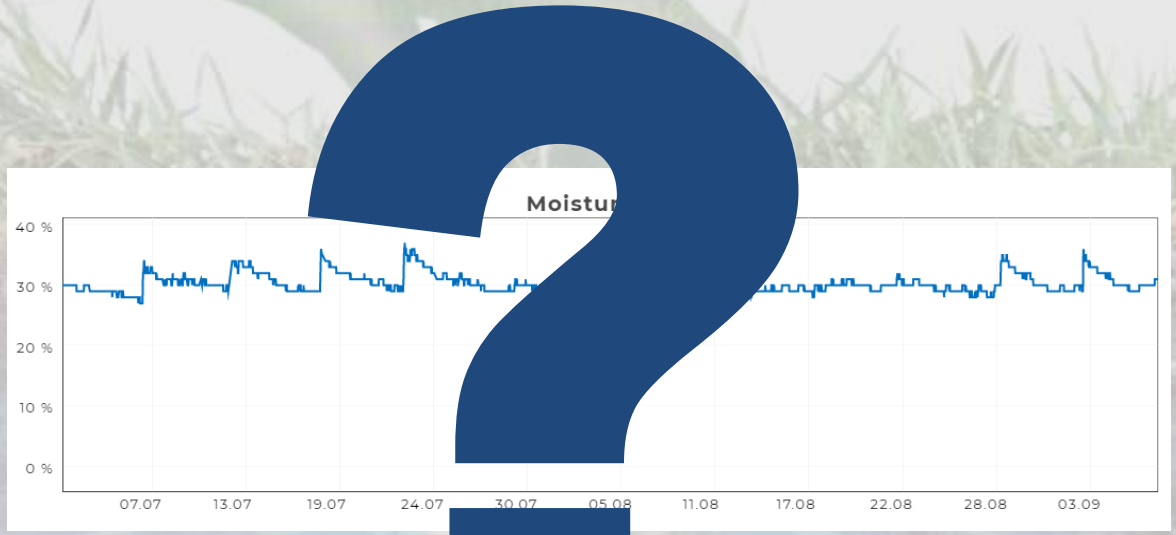
SO WHAT !?



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