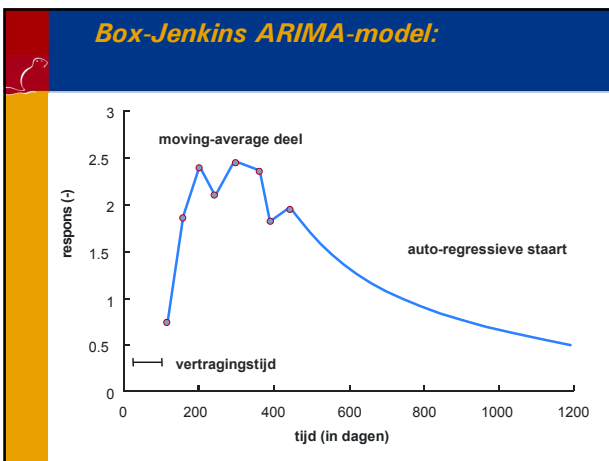
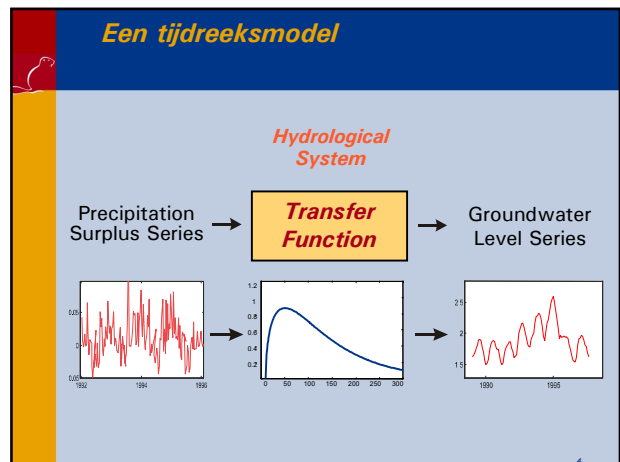
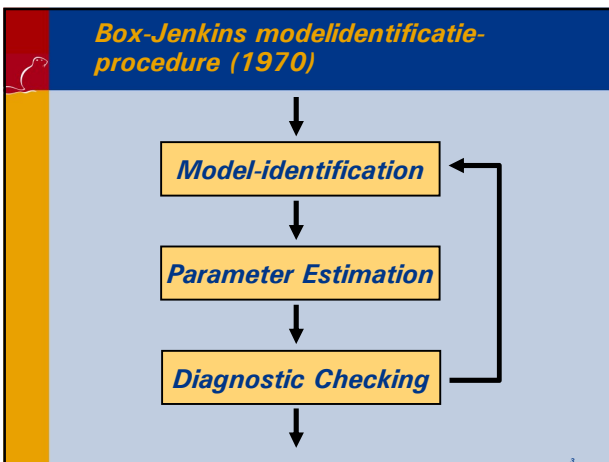
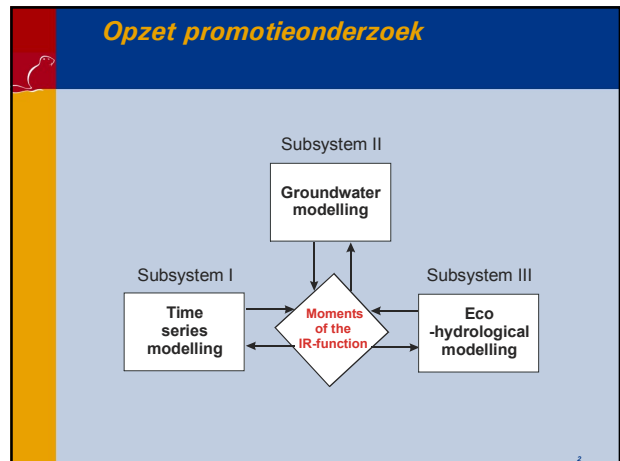


Jos von Asmuth **TU Delft** **kiwa** Partner for progress

Waar fysica de statistiek kan helpen....

NHV Studiedag: Tijdreeksen in Grondwater, 8 juni 2004

Menyanthes trifoliata



Box-Jenkins model-orde

IR-functie met MA-teller en AR-noemer

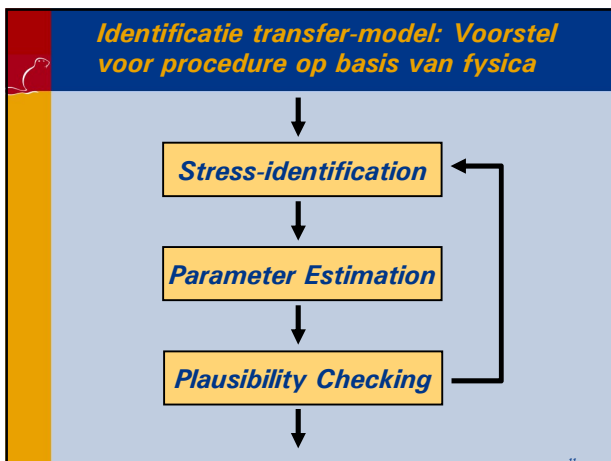
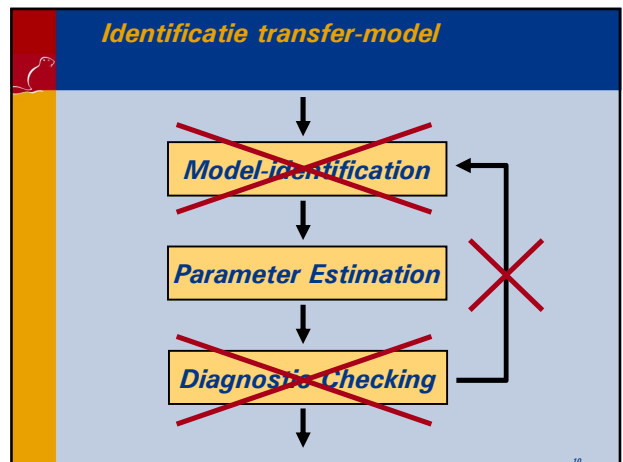
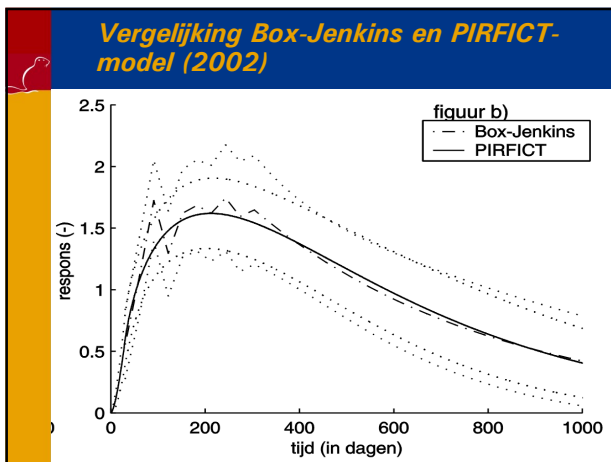
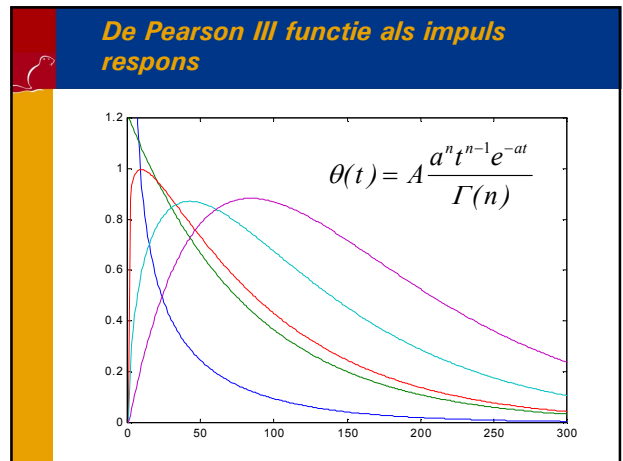
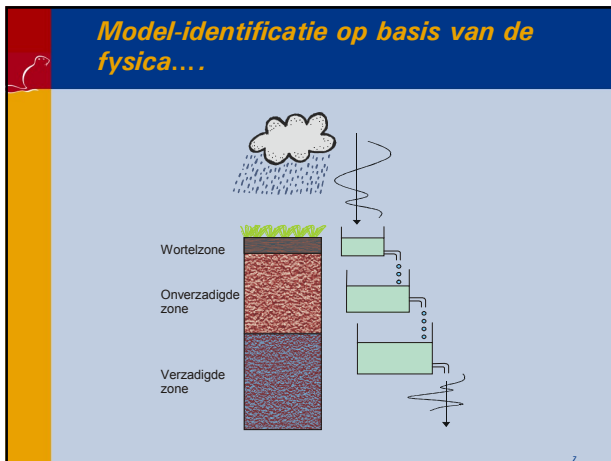
$$\Theta(B) = \frac{\omega(B)}{\delta(B)}$$

Model-identificatie:

$$\Theta(B) = B^{nk} \frac{\omega_0 + \omega_1 B + \omega_2 B^2 + \dots + \omega_{nb-1} B^{nb-1}}{1 + \delta_1 B + \delta_2 B^2 + \dots + \delta_{nd} B^{nd}}$$

$$\phi(B) = \frac{\theta(B)}{\phi(B)} = \frac{1 + \theta_1 B + \theta_2 B^2 + \dots + \theta_{nc} B^{nc}}{1 + \phi_1 B + \phi_2 B^2 + \dots + \phi_{nf} B^{nf}}$$

Model-orde = $[nb \ nc \ nd \ nf \ nk]$



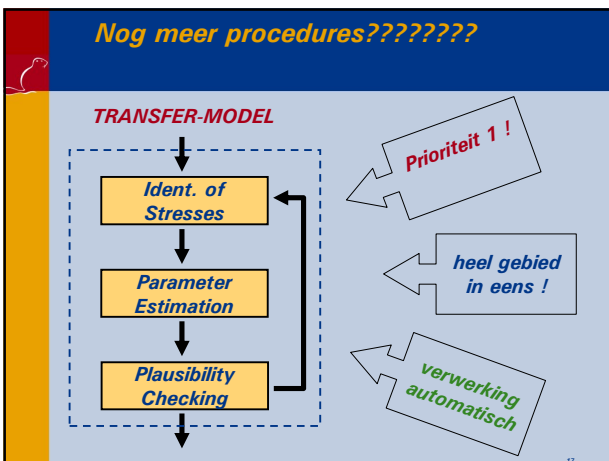
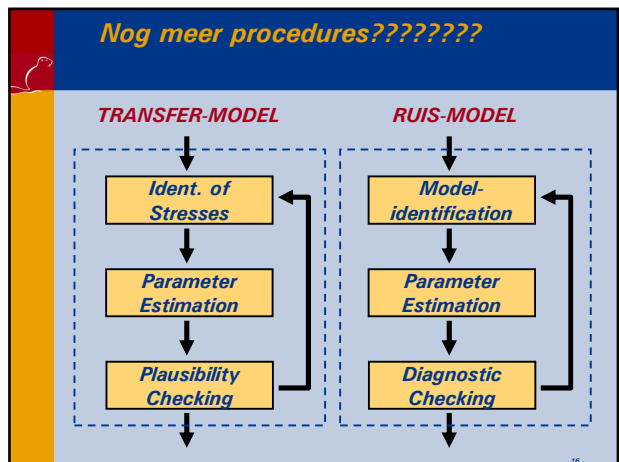
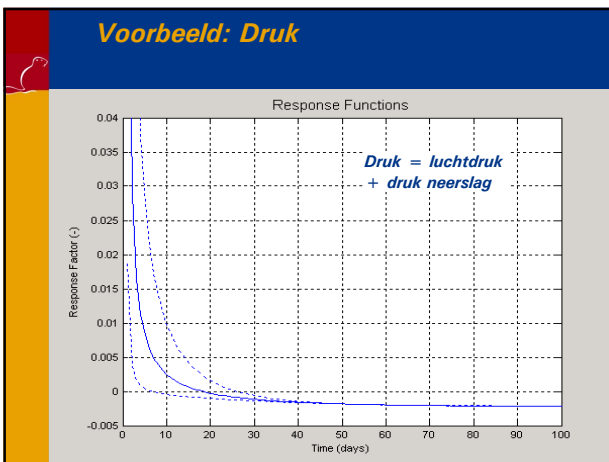
- ### 'Stress-identification'
- Geschiedenis gebied
 - Randvoorwaarden / Beïnvloedende factoren
 - Aard van de randvoorwaarden

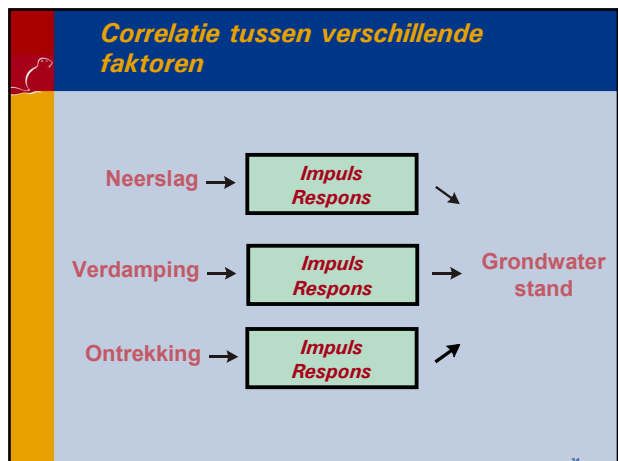
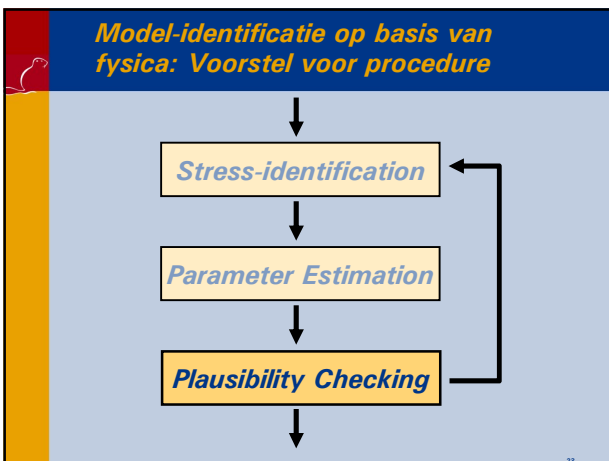
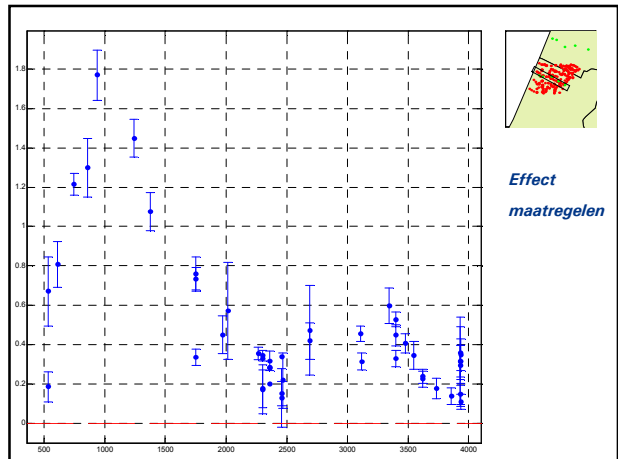
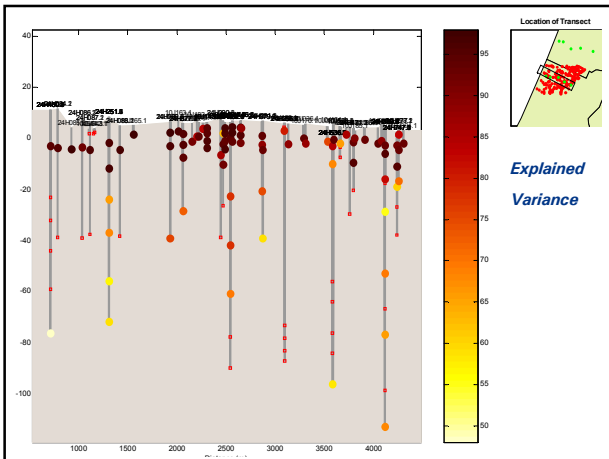
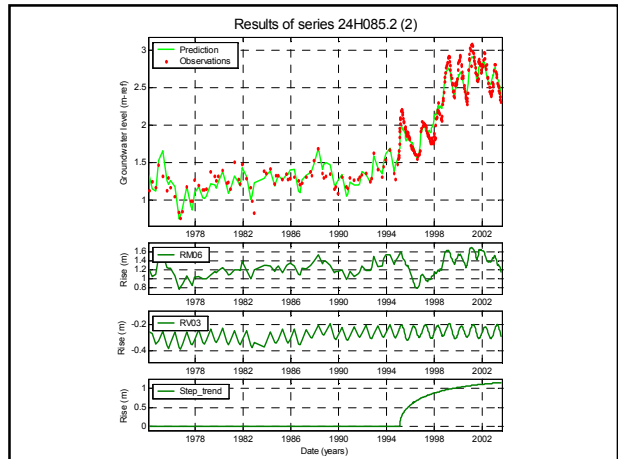
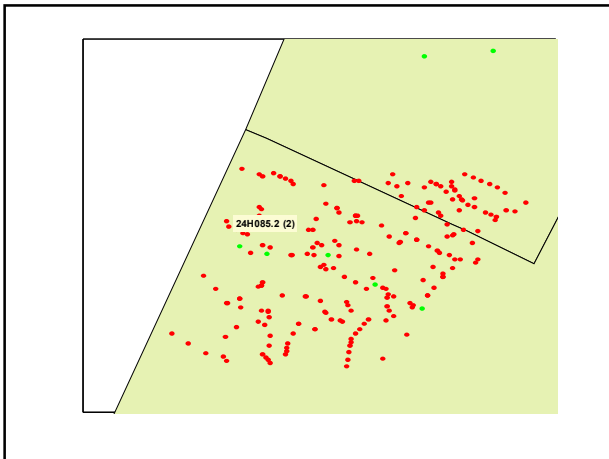
Aard van de randvoorwaarden

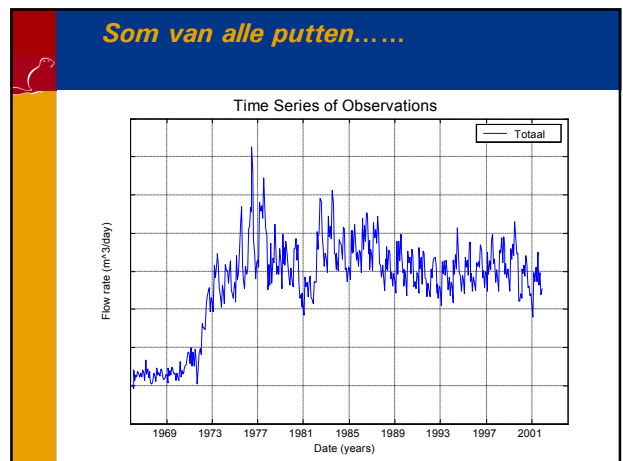
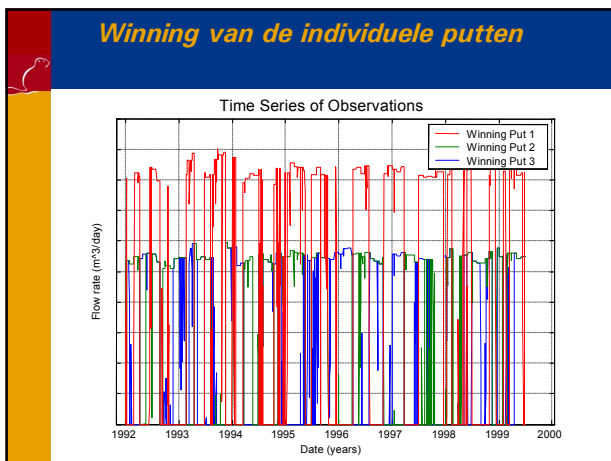
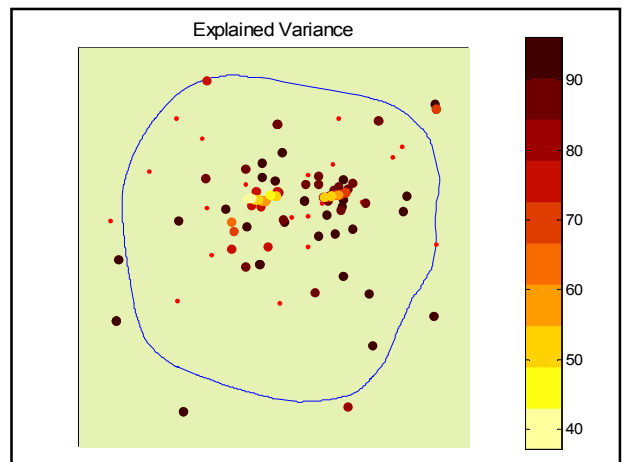
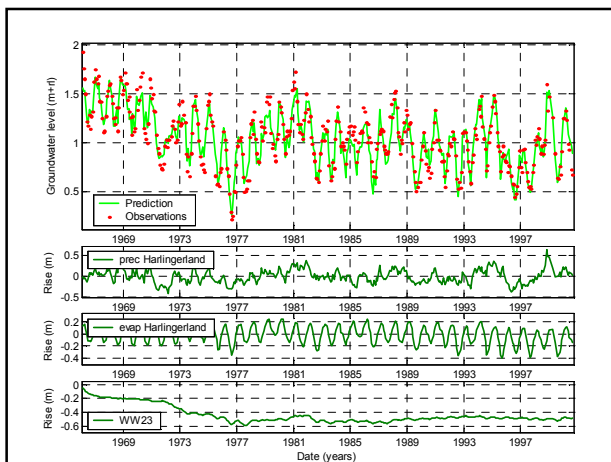
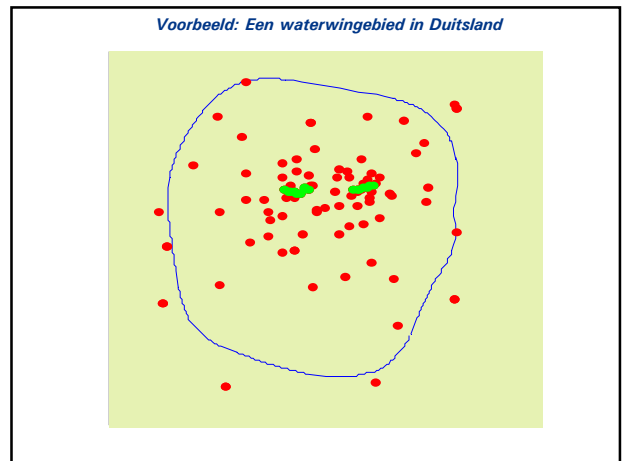
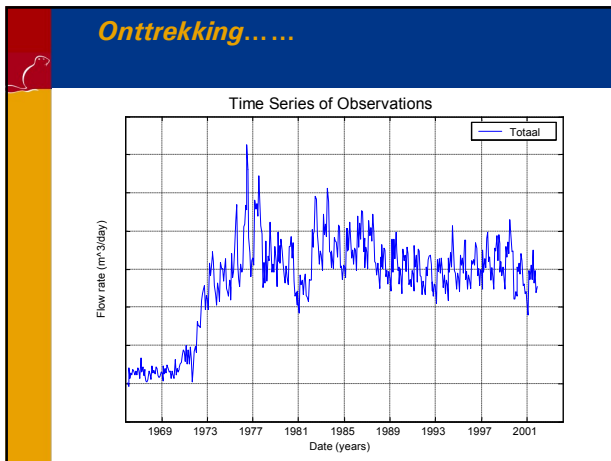
- Neerslag
- Verdamping
- Oppervlaktewater
- Onttrekking
- Luchtdruk
- Ingrepen

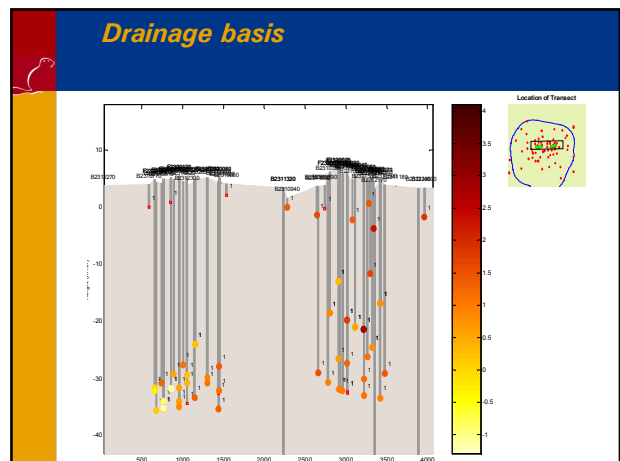
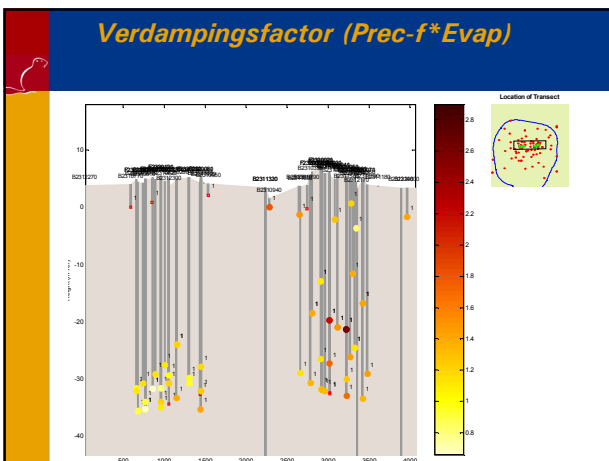
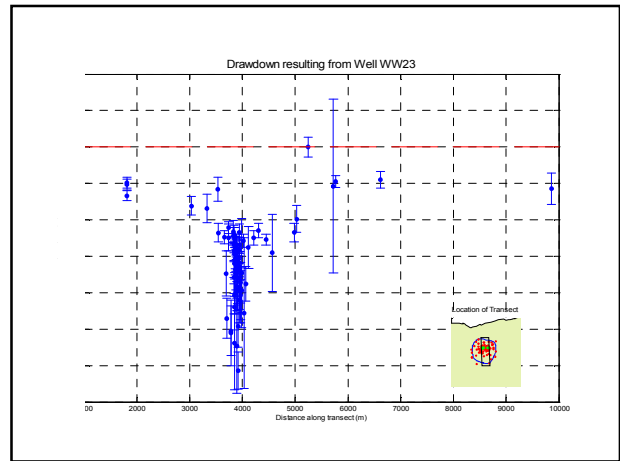
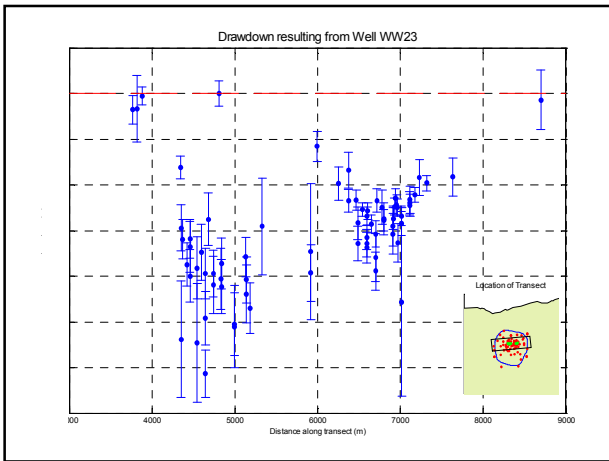
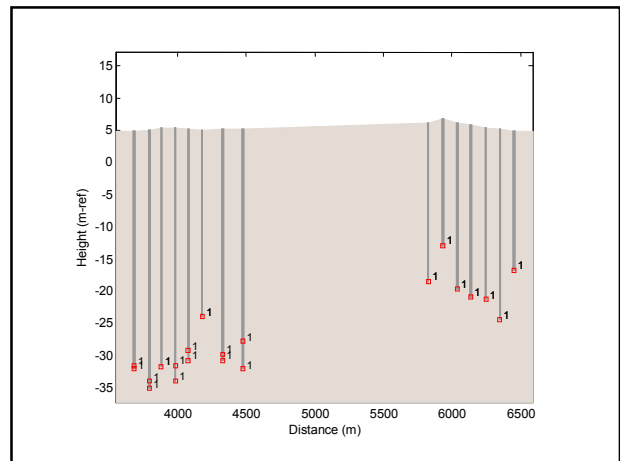
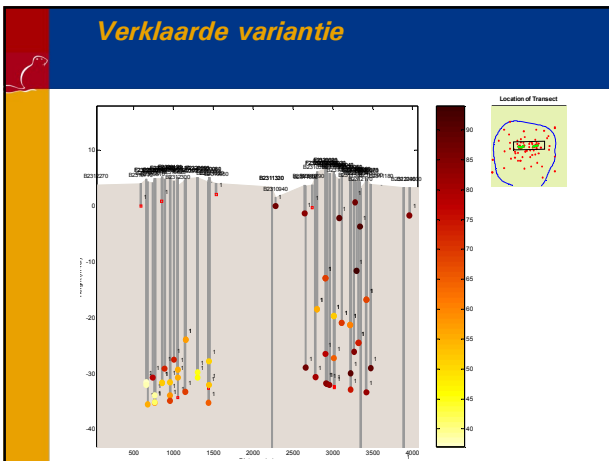
Aard van de randvoorwaarden

- Gesommeerde hoeveelheid of losse waarneming?
- Type respons (Pearson III, putformule, Krayenhoff-van de leur, etc.)
- Delen parameters met andere factoren









'Plausibility Checks'

- *Verklaarde variantie*
- *Verdampingsfactor*
- *Drainage-basis*
- *Ruimtelijke samenhang*

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'Plausibility Checks'

- *Verklaarde variantie*
- *Verdampingsfactor*
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Meer info?

www.hydrology.citg.tudelft.nl/asmuth/home.htm

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