

CS7

Tailoring project

Some results

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.... Objective and activities

Providing a solid interface between climate information produced by KNMI and potential users of this information

Activities

- Inventory of information needs of potential users
 - Inventory of possibilities to provide the desired information for impact assessments
 - 6 Pilot projects for "tailoring" climate information
 - Dissemination and guidance
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.... Case: RIZA-Lelystad (1)

Question: Development of "standard" year for hydrological studies



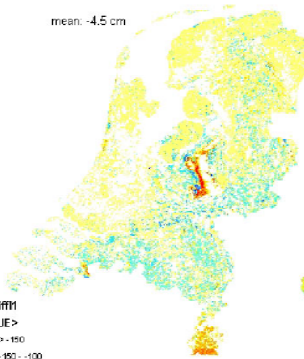
Should be/give:

- representative for average of 30 years
- same hydrological parameters as 30 year run
- average for each part of NL

Case: RIZA-Lelystad (2)

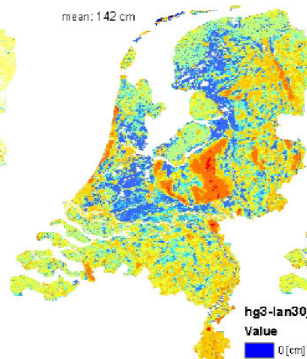
GHG: difference

mean: -4.5 cm



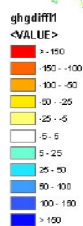
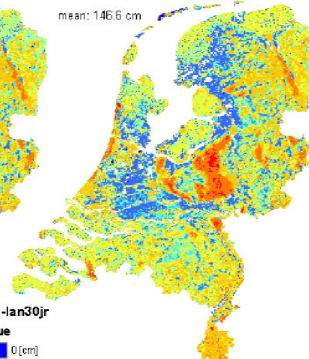
Avg. 30y-run

mean: 142 cm



Avg. alternative L1

mean: 146.6 cm



.... Case: RIZA-Lelystad (3) 

Comparison of alternative "standard" years

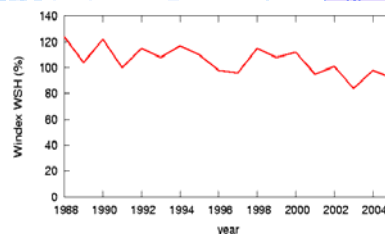
run	gws	run	eact	run	ghg
67	1.6	k8	347.3	67	117.5
67_5	1.64	67_5	366.2	67_5	122.6
k8	1.66	k6	369.8	k8	131.3
(67+73)/2	1.72	67	370.6	(67+73)/2	137.5
k7	1.75	(67+73)/2	375.6	30j	142
L1	1.75	30j	378.9	L1	146.6
k9	1.76	73	381.1	k7	147.9
30j	1.77	L1	388.2	k9	148.1
k3	1.77	k7	390.3	k3	150
k6	1.81	k9	401.4	k6	153.1
73	1.86	k3	409.9	73	157.4

.... Case: ECOFYS (1) 



Question: How to estimate wind and wind yield for the next 5-10 years

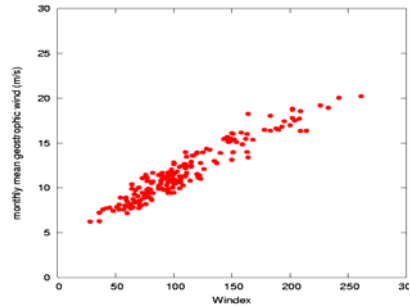
- Limited data about wind yield
- Apparent decrease in the past
- Will trend continue, is there periodicity, trend in future?
- How many years with historical data needed for estimation of wind in next 5-10 years?





Case: ECOFYS (2)

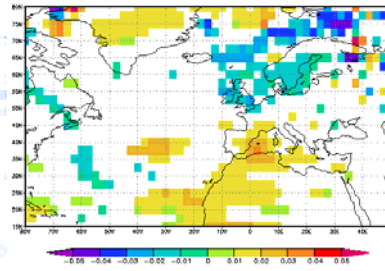
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- Geostrophic wind correlates well with actual wind yields

- Large interannual variability exceeds all other patterns. Neither trends nor periodicity can be proven

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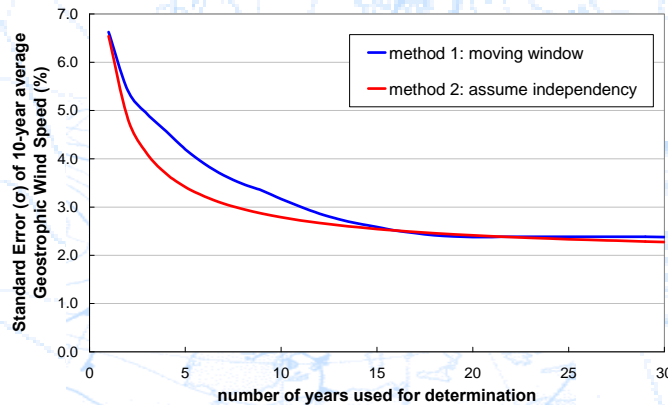


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Case: ECOFYS (3)



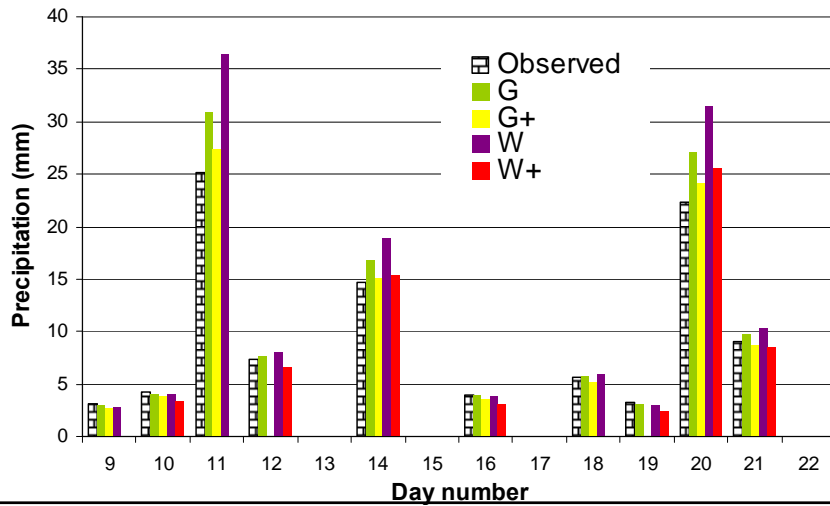
In the Netherlands, the 10-year average geostrophic wind can be estimated from a record of 10 years with a standard error (σ) of 3%



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Transformation program

Transformed rainfall (2100) of august 2006: De Bilt



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Some remarks

Important aspects during "tailoring"

- Work on location/personal contact
- Description of current situation
- Correct use and interpretation of climate data

Additional tailoring projects: urban water management, energy, Betuwe route,

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.... Climate and socio-econ. scenarios



Two main sources of uncertainty:

- Soc.-econ.-techn. developments
- Incomplete knowledge of climate system

