

High quality climate projections for adaptation in the Netherlands

Arnout Feijt, KNMI



Climate Projections

This theme is about information on **local impacts** of global climate change for **professional users**.

Local means: the Netherlands, it's Delta, Coast, Cities

Impact for: Water management, Water quality, Agriculture, Spatial Planning, Ecology, Air Quality, Operations
(But the impacts are more diverse)

Professional Users: decision makers, researchers, consultants, other theme's within KfC



Climate Projections

Science

WP1. Mechanisms of local climate change in the Netherlands

WP2. Time series, Extremes and Probabilities

WP3. Coupling of climate projections to impact research

WP4. Climate Services

Society



Climate Projections



WP1. Mechanisms of local climate change in the Netherlands
extreme drought,
extreme precipitation,
extreme wind conditions,
pace of sea level rise



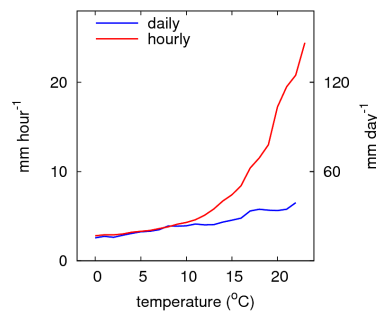
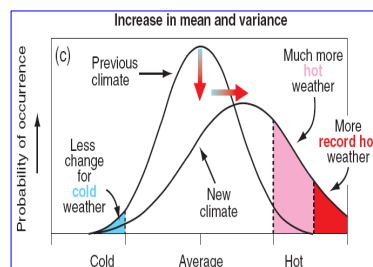
Climate Projections

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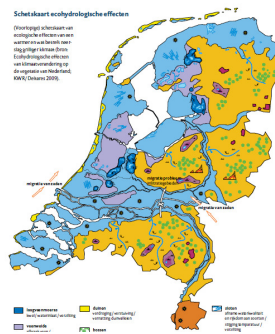
Climate Projections

WP2. Probabilities, time series and extremes
assessing methods to estimate probabilities
cases of possible future weather
high spatial and time resolutions (cities, showers)



Climate Projections

WP3. Coupling of climate projections to impact research
Water management, Water quality, Agriculture,
Spatial Planning, Ecology, Air Quality, Operations



Climate Projections

WP4. Climate Services

- overview of available information on climate and impacts
- advice on the use of data
- consistency in time horizon + scenarios



Climate Projections

Uncertainty

WP 1: reducing uncertainty for critical meteorological phenomena

WP2: assessing uncertainty/probability / extremes

WP3: propagating uncertainties to impact assessments

WP4: communicating uncertainties



Example local flooding



- WP1: the physics of extreme precipitation events
- WP 2: assess probability of these boundary conditions and high resolution modelling
- WP3: hydrological modelling of the time series to assess the impact on water management
- WP4: interaction with water managers on their requirements on data and communication and decision support options

