



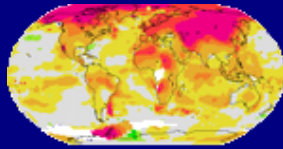
Royal Netherlands
Meteorological Institute
*Ministry of Infrastructure and the
Environment*

KNMI Climate Explorer
and the
International Climate Assessment
& dataset (ICA&D)

*Gé Verver
Geert Jan van Oldenborgh*

KNMI, The Netherlands

KNMI Climate Explorer – assessment tools & data



climexp.knmi.nl

KNMI Climate Explorer

Public access • Statistical analysis and visualization tools • Historical data and projections

Welcome, Geert Jan van Oldenborgh from KNMI
KNMI users are advised to use the URL bhlclim.knmi.nl

- > Daily station data
- > Daily climate indices
- > Monthly station data
- > Monthly climate indices
- > Annual climate indices
- > View, upload your time series

Select a field

- > Daily fields
- Monthly observations
- Monthly reanalysis fields
- Monthly seasonal hindcasts
- Monthly decadal hindcasts
- Monthly RCM runs
- Monthly CMIP3+ scenario runs
- Monthly CMIP5 scenario runs
- Annual CMIP5 extremes
- Monthly and seasonal historical constructions
- External data (ensembles, ncep, jra50, soda, ecmwf, ...)
- View, upload your field

corr Jan–Mar averaged NINO3.4
with Jan–Mar averaged CRU TS3.22 temperature, 1979–2012

35N

30N

25N

20N

15N

10N

5N

0N

5S

10S

15S

20S

25S

30S

35S

Ne

19-oct-2014 Updated CRUTEM4, HadCRUT4 to version 4.3.0.0

13-oct-2014 Added NODC mean temperature time series, fields, also for 0-100m (thanks Bob).

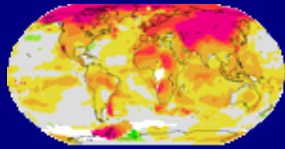
13-oct-2014 Added JMA 0-700 upper ocean heat content fields (thanks Bob).

05-oct-2014 Finally changed the fit line in scatterplots from the default gnuplot green to something better visible.

3000 Unique users per month
~100000 Plots per month
Acknowledged in ~100 scientific papers per year
Used widely for teaching



KNMI Climate Explorer – assessment tools & data

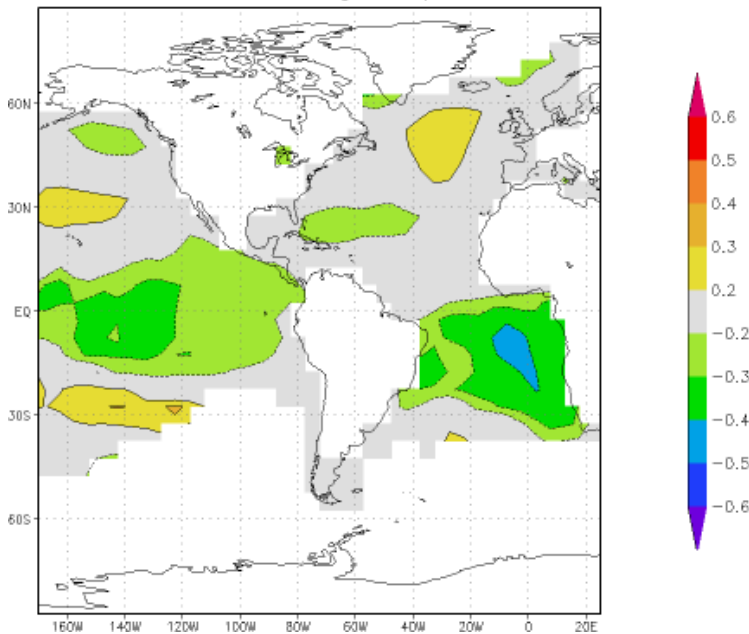


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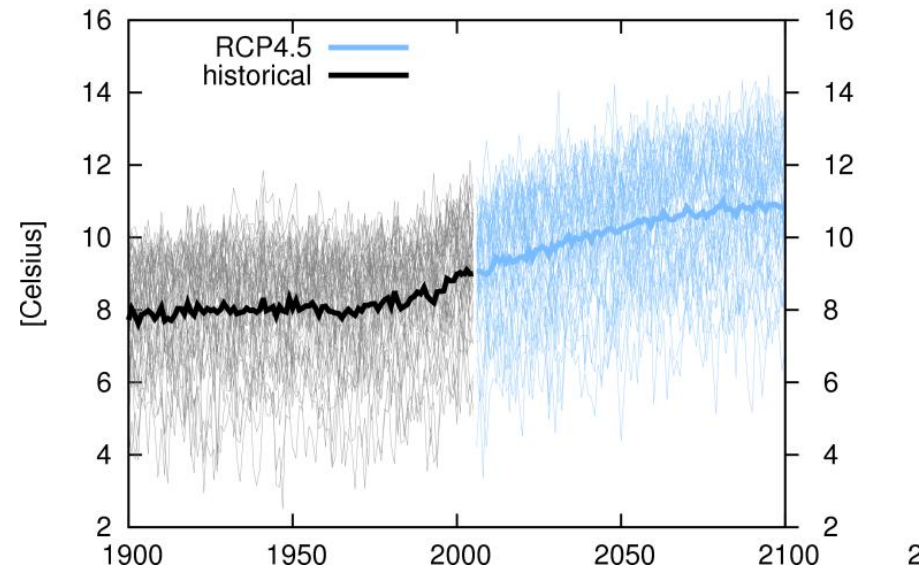
KNMI Climate Explorer

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corr Feb–Mar averaged CULTUURTUIN precipitation
with Dec–Jan averaged Kaplan SSTa



Temperature 50N, 10E Jan-Dec AR5 CMIP5 subset



Example 1: correlation precipitation in
Paramaribo (Suriname) vs SST

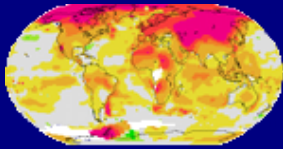


Example 2: Yearly average temperature

Demonstration of the KNMI Climate Explorer
<http://climexp.knmi.nl/>



KNMI Climate Explorer – assessment tools & data

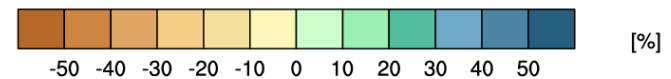
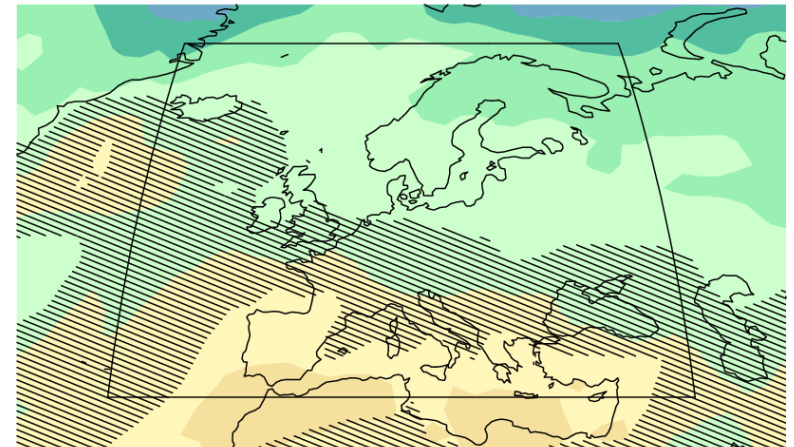
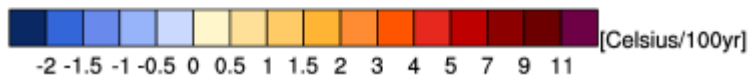
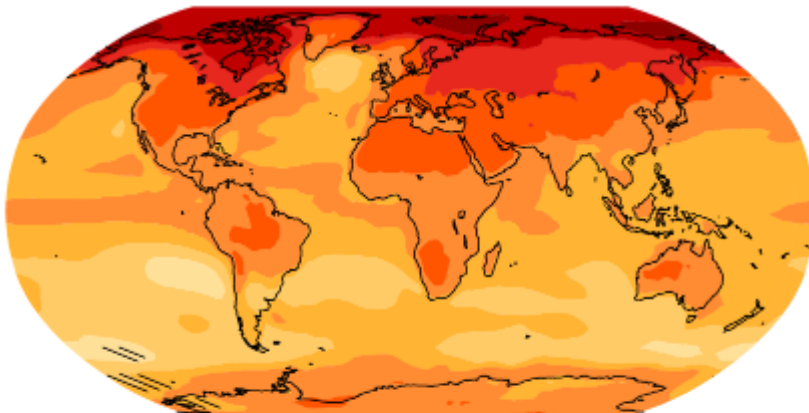


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mean rcp45 relative precipitation 2081-2100 minus 1986-2005 Jan-Dec AR5 CMIP5 subset



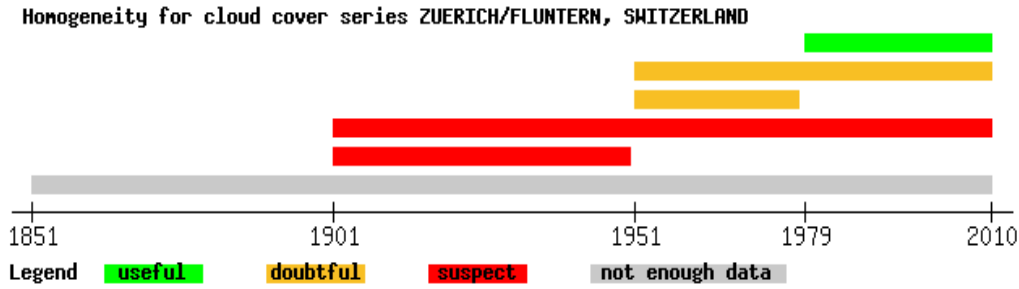
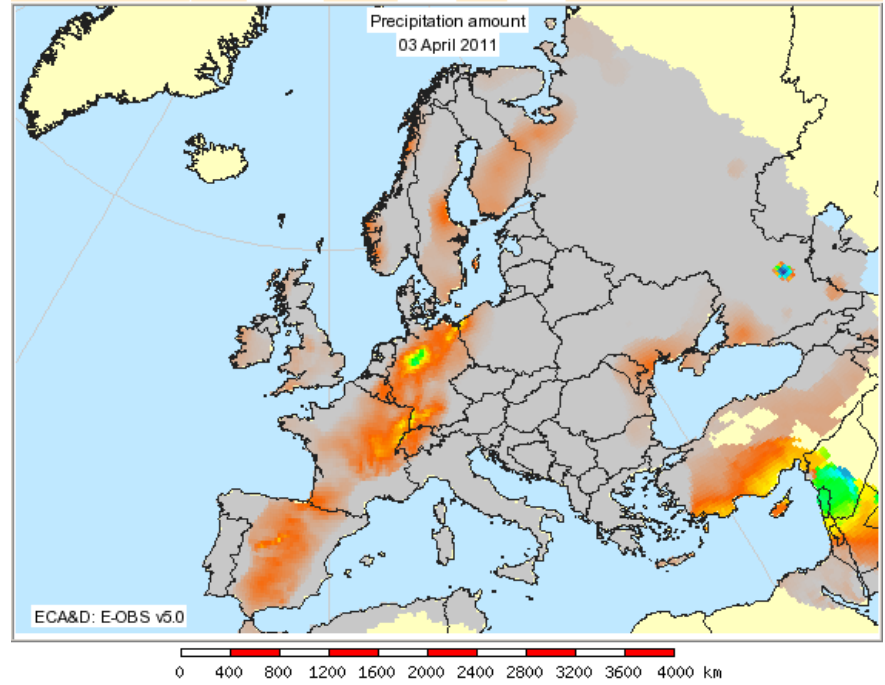
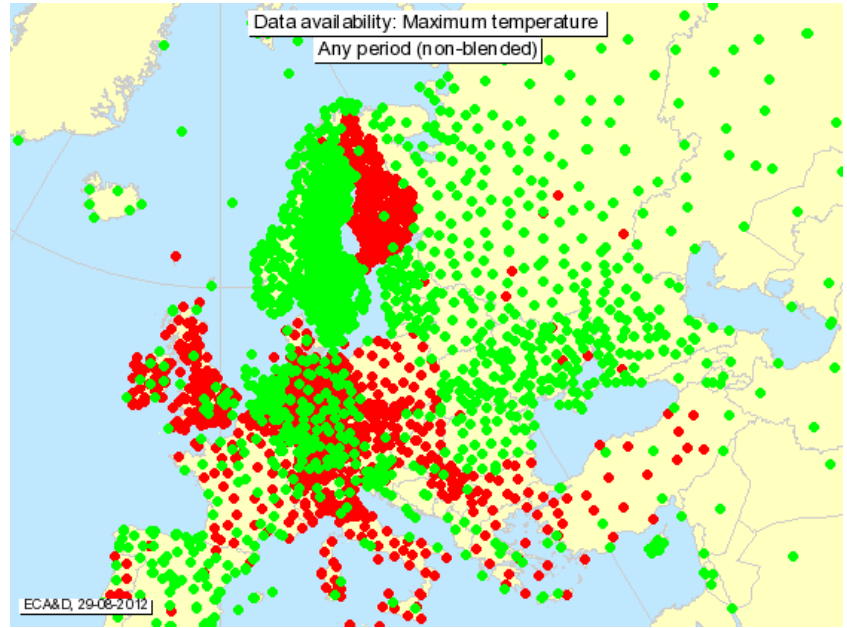
Example 3: 1979-2014 trend in Yearly average temperature (CMIP5)



Example 4: Change yearly precipitation

International Climate Assessment & dataset (ICA&D)

- 66 Participants
- 62 Countries
- 10259 Stations
- 40630 Daily station series
- 75 Derived indices per station

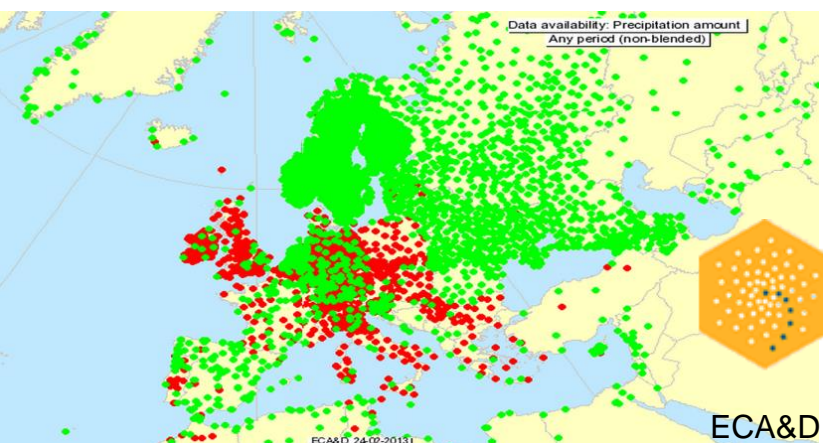


ECA&D is the backbone of the WMO RA-VI RCC on Climate Data



www.ecad.eu

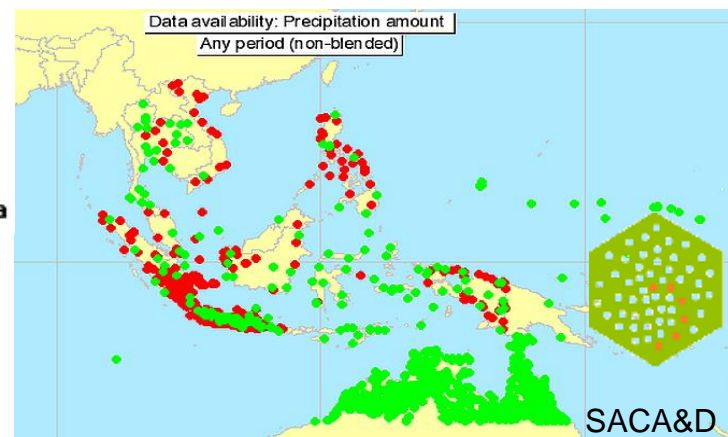
International Climate Assessment & datasets (ICA&D)



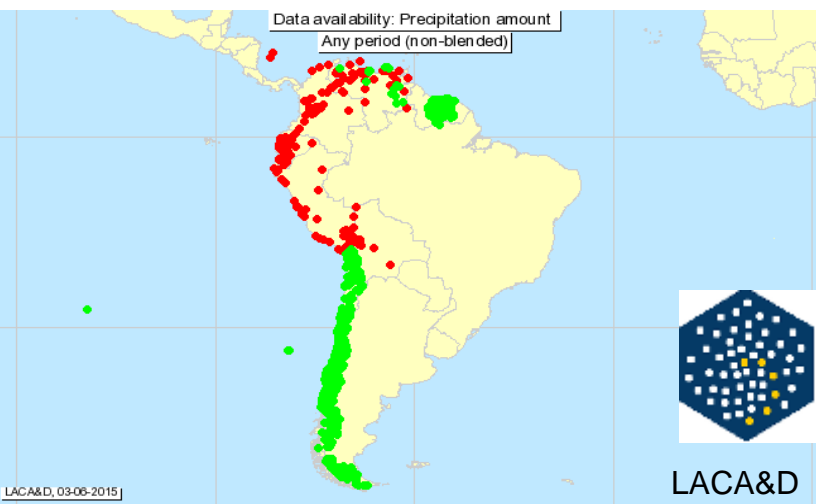
European Climate Assessment & Dataset

Data availability maps

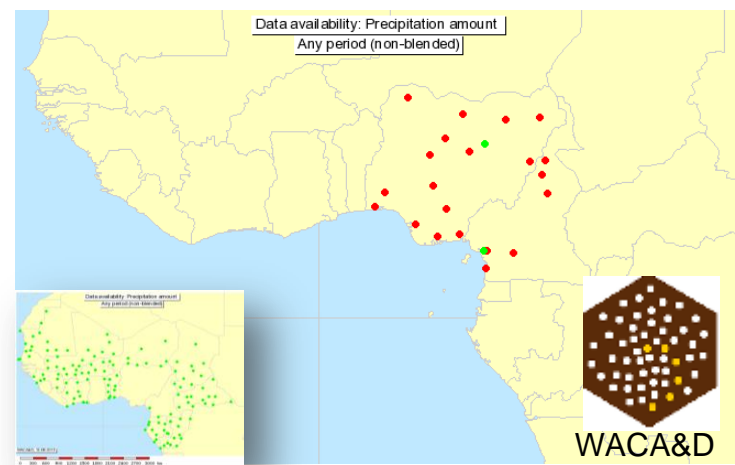
- Downloadable data
- Non-downloadable data



Southeast Asian Climate Assessment & Dataset



Latin American Climate Assessment & Dataset



West African Climate Assessment & Dataset



Thank you...



Example: improved precipitation data for water management in Jakarta



Jakarta flooding in February 2007

