

Joerg Priess

Center for Environmental Systems Research (CESR)

University of Kassel - Germany



CESR
CENTER FOR ENVIRONMENTAL SYSTEMS RESEARCH

Who we are

Research Center at University of Kassel:

Research foci:

- Scenario analysis and development of methodologies
  - MEA: global; Prelude: EU; INKLIM: German
  - (J. Alcamo, G. Busch, J. Priess, R. Schaldach)
- Hydrological modelling
  - WATERGAP 2 model: continental & global scale
  - (J. Alcamo, P. Doell, M. Floerke, L. Menzel, K. Schulz)
- Land use and land cover change & crop modelling
  - LandSHIFT: global; regional: HILLS, STORMA, JETSET
  - (J. Alcamo, M. Heistermann, M. Mimler, J. Priess, R. Schaldach, E. Stehfest)

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Data Distribution Policy

Data are made available free of charge for the scientific community

- Reports: direct download
- Tables: direct download
- GIS maps: sign licence agreement → get data
- Project data: usually upon request

- URL: http://www.usf.uni-kassel.de

  → library (publications, documents, data); → research (research projects)

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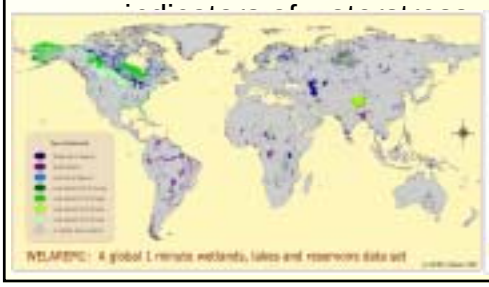
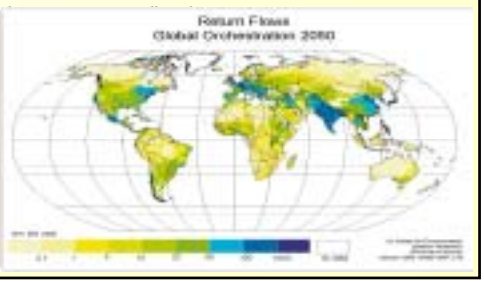
Hydrologic data

- Drainage direction map (resolution 30‘)
- Wetlands, lakes, reservoirs (WELAREM1 map; resolution 1‘)
- WATERGAP 2 model (usually for different scenario families SRES, MEA, GEO3)

  water availability (climate normal or annual)

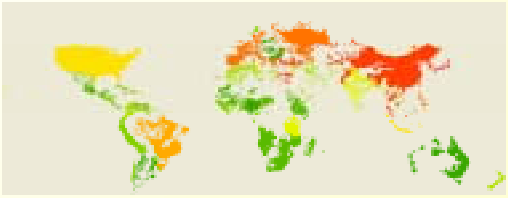
  water withdrawals (irrigation, livestock, domestic, industrial, electricity)





Global Modelling Group of MEA

- Tables (resolution: country or 17 world regions)
  population of SRES & MEA; GDP; electricity production)
- Reports of scenario generation and simulations
  1st - 3rd round of modelling; scenario reports; tech assumptions; etc.
- Maps (30‘ resolution; e.g. Irrigation in 2100 LL scenario)



In collaboration with: IFPRI, USA; NIES, Japan; RIVM, Netherlands; University of British Colombia, Canada; IIASA, Austria

All sources are directly downloadable from **http://www.usf.uni-kassel.de/ma-gmgroup/**

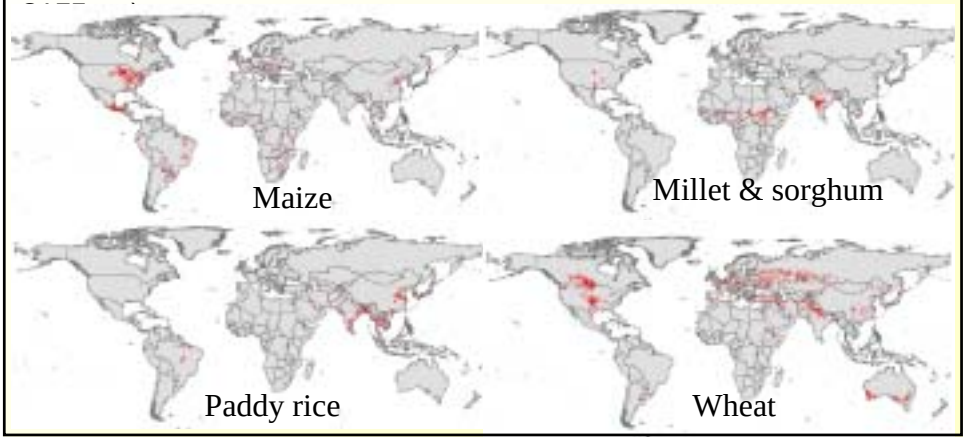
Note: pages will move to MEA homepage in 2005

Land use change & crop modelling

Global distribution of major crops

Resolution 5‘; based on suitability assessments, satellite images, local stats

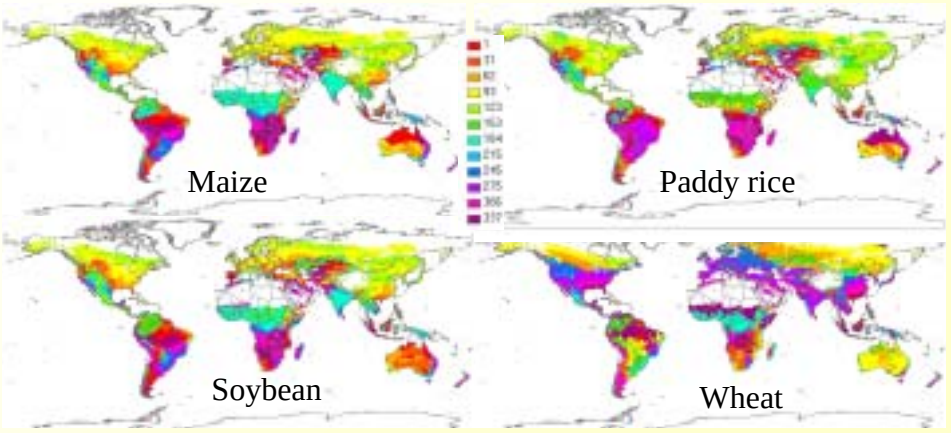
Consistant with FAO country data area; presently testphase (USDA,



Land use change & crop modelling

Global planting dates of major crops

resolution 5‘; based on max crop yields, monthly climate data 1961-90
Presently: testphase (consistancy with FAO, USDA, IRRI, and local data)
Available soon at CESR (end 2004 – early 2005)



Outlook

Current efforts

- Improve spatial resolution of (global) models e.g. 30‘ → 5‘
- Increase timeliness of base data e.g. 1990-95 → 2000-02
- Develop consistant description of data, maps, model versions, ...

New products to be expected soon

- Global landuse map (5‘; 10-15 crops, grasslands)
- Crop yields of major crops (5‘; CESR version of DAYCENT by Parton/Ojima)
- Planting dates of 10-15 crops (5‘)

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Thank you

For your attention