

# IMPRESSIONS

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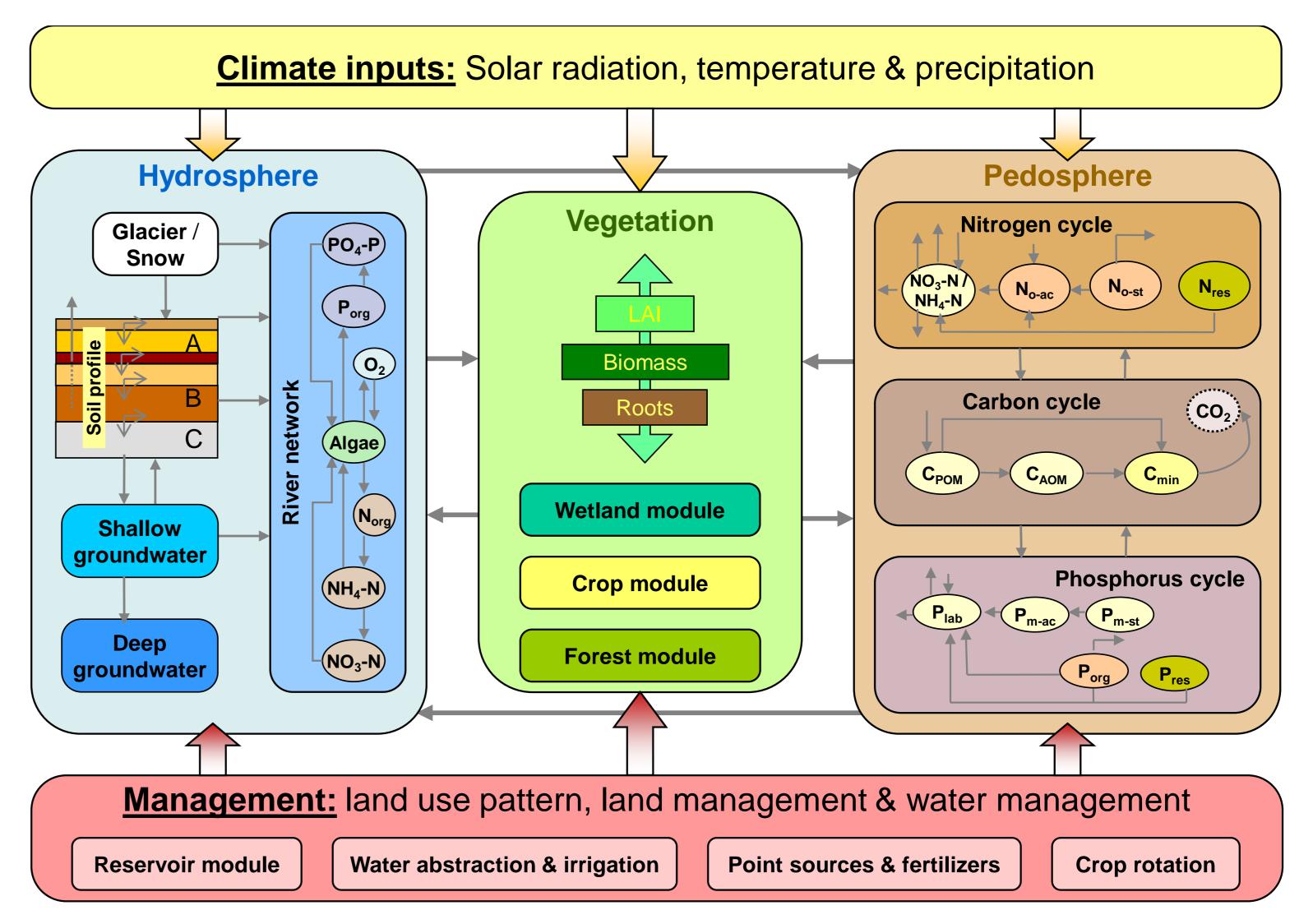
# **PIK - Potsdam Institute for Climate Impact Research**

WHO WE ARE

The Potsdam Institute for Climate Impact Research (PIK) was established in 1992 and is regarded as a pioneer in interdisciplinary research in the field of Global Change, climate impacts and sustainable development. It is a member of the Leibniz Association and receives funding from the German federal government and the Federal State of Brandenburg. About 300 employees work together to assess the Earth's systems resilience to human interventions and to devise paths and strategies for sustainable development. The main methodologies are system analysis and scenario analysis, quantitative and qualitative modelling, computer simulation and data integration. PIK has also succeeded in initiating intensive dialogue with and within the public sphere (Science and Society) on the issue of climate change. In order to address all essential aspects of Global Change the scientific activities in PIK are divided into four major research domains: Earth System Analysis (I), Climate Impacts and Vulnerabilities (II), Sustainable Solutions (III) and Transdisciplinary Concepts and Methods (IV). A team from Research Domain II will fulfill the modelling and assessment tasks for the regional and European scale case studies within the IMPRESSIONS Project.

## WHAT OUR EXPERIENCE IS

- Coordination of Work Blocks and case studies in the EU FP7 and other projects (NEWATER, INNOVATE, HARMONI-CA, SuMaRiO, PSI-connect, WETwin, AFROMAISON, IMPACT2C, DEWFORA, SPI-Water).
- Ecohydrological modelling at the river basin scale.
- Assessment of impacts of climate and land use changes on water resources, water-related extremes and vegetation at the regional scale by means of process-based modelling.



- Adaptation strategies to climate change in water management.
- System and scenarios analysis as a basis for decision making.
- Bridging the scales between global and regional impact assessment.

### SWIM model structure

# WHAT WE DO IN IMPRESSIONS

- Contributing to WP2 in the preparation of the multi-scale integrated scenarios for driving the impact models at the European and regional scales.
- Contributing to WP3 by applying the process-based model SWIM for water and agricultural resources assessment in the Iberian case study, and for water resources assessment in a number of representative river basins at the European scale.
- Contributing to WP4 and WP5 by evaluation of adaptation options related to the water and agricultural sector.

# WE ARE ALSO INVOLVED IN

- ISI-MIP (<u>http://isi-mip.org/</u>)
- INNOVATE (<u>http://www.innovate.tu-berlin.de/</u>)
- LAGOONS (<u>http://lagoons.web.ua.pt/</u>)
- SuMaRiO (<u>http://www.sumario.de/de/</u>)
- AFROMAISON (<u>http://www.afromaison.net</u>/)

### Dr. Valentina Krysanova



- Leading scientist at the Potsdam Institute for Climate Impact Research
- WP leader in LAGOONS, SuMaRiO and ISI-MIP, Associated Editor of Regional Environmental Change (REC), Editor of Special Issues in HSJ and REC
- Research Interests:

assessment of climate and land use change impacts on water availability and quality at the river basin and regional scales; intercomparison of climate change impacts

#### **Dr. Fred Fokko Hattermann**



 Leading scientist at the Potsdam Institute for Climate Impact Research

 WP leader in INNOVATE, AFROMAISON, Associated Editor of the Hydrological Sciences Journal (HSJ)

**Research Interests:** 

impacts of global change at the regional scale; integrated analysis of climate and landuse scenarios and how they influence regional water balances, agriculture and water quality of river basins; hydroclimatic extremes

#### Anastasia Lobanova



- PhD student at PIK, Research Domain II
- MSc in Hydroinformatics and Water Management
- Research Interests:

sustainable water resources management in the context of Global Change; hydroclimatic extremes; hydrological and hydraulic modelling and evaluation of associated uncertainties