Research outputs:

Robustness and Scalability of Regional Climate Projections Over Europe
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Water use in electricity generation for water-energy nexus analyses: The European case
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Climate change risks for severe storms in developing countries in the context of poverty and inequality in Cambodia
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Infrastructure Systems in a Sustainable City
Research output: Book/Report › Report – Annual report year: 2017 › Research › peer-review

Integrating physical pressures, hazard prevention and urban development in the COHERENT project
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2017 › Research › peer-review

Simulation of Optimal Decision-Making Under the Impacts of Climate Change
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

The COHERENT Project
Research output: Contribution to conference › Poster – Annual report year: 2017 › Research › peer-review

The COHERENT project: Coastal hazard risk reduction and management
Research output: Contribution to conference › Poster – Annual report year: 2018 › Research › peer-review

Assessing the influence of groundwater and land surface scheme in the modelling of land surface-atmosphere feedbacks over the FIFE area in Kansas, USA
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Calibration of a distributed hydrology and land surface model using energy flux measurements
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Climate change impacts on groundwater hydrology – where are the main uncertainties and can they be reduced?
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
On the role of domain size and resolution in the simulations with the HIRHAM region climate model
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

The Application and Performance of Two Soil-Vegetation-Atmosphere Modelling Platforms to a Real Hydrologic Catchment
Research output: Contribution to journal › Conference abstract in journal – Annual report year: 2013 › Research › peer-review

Coupling of a climate model and a hydrological model and implications on land surface fluxes
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2013 › Research › peer-review

Observations of runoff and sediment and dissolved loads from the Greenland Ice Sheet at Kangerlussuaq, West Greenland, 2007 to 2010
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

The effect of two-way coupling in a climate-hydrological setup
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Temporal trends in N & P concentrations and loads in relation to anthropogenic effects and discharge in Odense River 1964-2002
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Projects:

Extreme Storm Surges and Climate Risk Assessment
Project: PhD

Climate Information to support integrated renewable electricity generation
Project: Research

Horizon 2020 Insurance
Project: Research

Kan man forbedre ’værdien’ af et klimamodel-ensemble ved hjælp af statistik?
Project: Research

Coastal Hazard Risk Reduction and Management
Project: Research

OASIS+ / Open access catastrophe modelling driving adaptation to enable resilience in an uncertain future
Project: Research

HYdrological Modelling for Assessing Climate Change Impacts at different Scales
Project: Research

Role of technologies in an Energy Efficient Economy – Model-based analysis of policy measures and transformation pathways to a sustainable energy system
Project: Research
Centre for regional change in the Earth system
Project: Research

Activities:

How European projections have changed through 20 years of multi-model ensemble projects
Activity: Talks and presentations › Conference presentations

Compound events and pressures in coupled catchment and storm surge modelling
Activity: Talks and presentations › Conference presentations

Effects of periodic forcing anomalies on storm surge prediction in the North Sea-Baltic Sea transition zone
Activity: Talks and presentations › Conference presentations

Benchmarking seasonal prediction of inflows to hydropower systems against a statistical approach
Activity: Talks and presentations › Conference presentations

Projections of the future European water use in electricity generation and related vulnerabilities
Activity: Talks and presentations › Conference presentations

Coupled catchment and storm surge modelling for risk assessments in the coastal zone
Activity: Talks and presentations › Conference presentations

Dynamic modelling of coastal flooding hazard risk management
Activity: Talks and presentations › Conference presentations

Improved storm surge prediction: Event based comparison of atmospheric forcing data in the North Sea – Baltic Sea transition area
Activity: Talks and presentations › Conference presentations

Pattern scaling as a method to assess robustness of the CORDEX projections for Europe
Activity: Talks and presentations › Conference presentations

The potential to reduce uncertainties in probabilistic storm surge impact assessments
Activity: Talks and presentations › Conference presentations

From PRUDENCE and ENSEMBLES to CORDEX - What’s the difference?
Activity: Talks and presentations › Conference presentations

Frontiers in Earth Science (Journal)
Activity: Editorial work and peer review › Journal editor › Research

Intergovernmental Panel on Climate Change (IPCC) (Publisher)
Activity: Editorial work and peer review › Journal editor › Research

Towards Robust Regional Climate Change Information for Europe
Activity: Talks and presentations › Conference presentations
Enhanced Confidence in Regional Climate Projections from Dynamical Downscaling
Activity: Talks and presentations » Conference presentations

Accounting for climate change-induced change in space heating demand: case of Denmark
Activity: Talks and presentations » Conference presentations

Do we know more about climate change than during PRUDENCE?
Activity: Talks and presentations » Conference presentations

EU COST (External organisation)
Activity: Membership » Membership of committees, commissions, boards, councils, associations, organisations, or similar

Integrated coastal hazard risk reduction and management – a closer look at the dynamical damage cost methodology used in the COHERENT project
Activity: Talks and presentations » Conference presentations

Regional Climate Change for Europe; From PRUDENCE and ENSEMBLES to CORDEX – a consistent story
Activity: Talks and presentations » Conference presentations

Challenges of Data Availability for Analysing the Water-Energy Nexus
Activity: Talks and presentations » Conference presentations

Consistency and Main Differences Between European Regional Climate Downscaling Intercomparison Results: From PRUDENCE and ENSEMBLES to CORDEX
Activity: Talks and presentations » Conference presentations

Integrated hydrology in the COHERENT project
Activity: Talks and presentations » Conference presentations

Challenges of Data Availability for Analysing the Water-Energy Nexus
Activity: Talks and presentations » Conference presentations

Consistency and Main Differences Between European Regional Climate Downscaling Intercomparison Results; From PRUDENCE and ENSEMBLES to CORDEX
Activity: Talks and presentations » Conference presentations

The COHERENT Project
Activity: Talks and presentations » Conference presentations

Consistency and main differences between European regional climate downscaling intercomparison projects
Activity: Talks and presentations » Conference presentations

HIRHAM5: A Regional Coupled Model System to Examine Ocean-Atmosphere-Sea Ice, Ice Sheet and Permafrost Interactions in the Arctic
Activity: Talks and presentations » Conference presentations

Improved simulation of precipitation on the regional scale by coupled climate and hydrology modelling
Activity: Talks and presentations » Conference presentations

Preparing for fully coupled climate-hydrological modelling in data-sparse regions applied over the Crati River catchment in Southern Italy
Activity: Talks and presentations » Conference presentations
On the hydrological performance in preparation for fully coupled climate-hydrology modelling in a data-sparse region
Activity: Talks and presentations › Conference presentations

Regional modelling of the Earth System: a summary of recent work
Activity: Talks and presentations › Conference presentations

Improved Regional Climate Model Simulation of Precipitation by a Dynamical Coupling to a Hydrology Model
Activity: Talks and presentations › Conference presentations

It takes a fully coupled model to get precipitation right
Activity: Talks and presentations › Conference presentations

ECRA General Assembly 2015
Activity: Attending an event › Participating in or organising a conference

Integrated Climate and Hydrology Modelling – catchment scale coupling of a regional climate model and a hydrological Model
Activity: Talks and presentations › Conference presentations

Censorkorpset i geologi (External organisation)
Activity: Membership › Membership in review committee

Improved regional scale projections using integrated climate and hydrology modelling.
Activity: Talks and presentations › Conference presentations

Coupled regional climate and hydrology modelling at the catchment scale
Activity: Talks and presentations › Conference presentations

Integrated Climate and Hydrology Modelling – catchment scale coupling of the HIRHAM regional climate model and the MIKE SHE hydrological Model
Activity: Talks and presentations › Conference presentations

Coupling a regional climate model on a meso-scale domain to a hydrological model for a groundwater dominated catchment
Activity: Talks and presentations › Conference presentations

Integrated Climate and Hydrology Modelling Coupling of the HIRHAM Regional Climate Model and the MIKE SHE Hydrological Model
Activity: Talks and presentations › Conference presentations

Stats+Climate Workshop
Activity: Attending an event › Participating in or organising a conference

Embedding complex hydrology in the climate system – towards fully coupled climate–hydrology models
Activity: Talks and presentations › Conference presentations

Koblingen mellem klima og hydrologi: Uddrag fra HYACINTS forskningsprojektet
Activity: Talks and presentations › Conference presentations

Klimaændringeres indflydelse på vandbalancen - skalaer og usikkerheder
Activity: Talks and presentations › Conference presentations
Coupling of two Model Codes: Integrated HIRHAM and MIKE SHE Simulations over a Danish Catchment
Activity: Talks and presentations › Conference presentations

2012 AGU Fall Meeting
Activity: Attending an event › Participating in or organising a conference

Coupled climate-hydrological model for Denmark
Activity: Talks and presentations › Conference presentations

HOBE – TR32 – TERENO Joint Workshop
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Preparing for a coupled climate-hydrological model: The influence of domain characteristics on the HIRHAM regional climate model
Activity: Talks and presentations › Conference presentations

Prizes:

Early Career Grant for participation in the E3S Cross community workshop on Extreme Events and Environments from Climate to Society
Prize: Prizes, scholarships, distinctions

TR32 / Tereno grant
Prize: Prizes, scholarships, distinctions

Press clippings:

Perspectives On Water-Energy Nexus Modeling
Press/Media: Press / Media

Nyt projekt skal hjælpe områder, der er truet af oversvømmelse
Press/Media: Press / Media

DHI's new integrated technology provides improved rainfall modelling
Press/Media: Press / Media

Nyudviklet nedbørsmodel i NATURE’s Scientific Reports
Press/Media: Press / Media

Vi kan blive langt bedre til at forudsige oversvømmelser og tørke
Press/Media: Press / Media

Fremtidens klima: Mere vand i nedbørsmodellerne
Press/Media: Press / Media

Udsigt til bedre prognoser for oversvømmelser og tørke
Press/Media: Press / Media

Nyt værktøj skal lukke huller i klimamodeller
Press/Media: Press / Media
Kobling af grundvandsmodellen med den regionale klimamodel
Press/Media: Press / Media