Research outputs:

Evaluating the monetary values of greenhouse gases emissions in life cycle impact assessment
Research output: Research - peer-review › Journal article – Annual report year: 2019

A framework for performing comparative LCA between repairing flooded houses and construction of dikes in non-stationary climate with changing risk of flooding
Research output: Research - peer-review › Journal article – Annual report year: 2018

Assessing spatial correlations of sea surges around Copenhagen
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2018

Early stage planning tools for stormwater quantity and quality management in Denmark and China
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Environmental sustainable decision making – The need and obstacles for integration of LCA into decision analysis
Research output: Research - peer-review › Journal article – Annual report year: 2018

Evaluating catchment response to artificial rainfall from four weather generators for present and future climate
Research output: Research - peer-review › Journal article – Annual report year: 2018

Explorative analysis of thirteen years of radar rainfall data
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2018

Applying LCA in decision making- the need and the future perspective
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

A probabilistic approach to urban flooding from sea surges in Copenhagen
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017
Characteristic Rain Events: A Methodology for Improving the Amenity Value of Stormwater Control Measures
Smit Andersen, J., Lerer, S. M., Backhaus, A., Jensen, M. B. & Sørup, H. J. D. 2017 In : Sustainability. 9, 10, 18 p., 1793
Research output: Research - peer-review › Journal article – Annual report year: 2017

Comparative LCA of repairing flooded houses versus construction of a dam
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Essential Societal Service Functions and Planetary Boundaries: The Case of Sustainable Urban Water Management
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Evaluation of high resolution spatio-temporal precipitation extremes from a stochastic weather generator
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Explorative analysis of long time series of very high resolution spatial rainfall
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Formulating and testing a method for perturbing precipitation time series to reflect anticipated climatic changes
Research output: Research - peer-review › Journal article – Annual report year: 2017

Testing high resolution synthetic rainfall time series representing current and future climates on CSO and other indicators
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

A new tool for quantifying the hydrological effects of LID retrofit designs – the power of simplicity
Research output: Research - peer-review › Paper – Annual report year: 2016

Applying the "WSUD potential"-tool in the framework of the Copenhagen Climate Adaptation and Cloudburst Management Plans
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

Characteristic Rain Events – A tool to enhance amenity values in SUDS-design
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

Downscaling future precipitation extremes to urban hydrology scales using a spatio-temporal Neyman–Scott weather generator
Research output: Research - peer-review › Journal article – Annual report year: 2016
Efficiency of stormwater control measures for combined sewer retrofitting under varying rain conditions: Quantifying the Three Points Approach (3PA)
Research output: Research - peer-review › Journal article – Annual report year: 2016

High-resolution rainfall time series for future climate
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

Lokal afledning af regnvand - byens hverdagsregn
Research output: Education › Book – Annual report year: 2016

Modificering af regnserier så de reflekterer et ændret klima
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

On the need for integrating LCA into decision making
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Perturbing high-resolution precipitation time series to represent future climates
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2016

Probabilistic modelling of sea surges in coastal urban areas
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2016

Sustainable flood risk management – What is sustainable?
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

What does it take to practice sustainable flood risk management?
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

A new tool for quantifying the impacts of water sensitive urban design – the power of simplicity
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Identifying added value in high-resolution climate simulations over Scandinavia
LAR-potentiale: a new planning tool to support sustainable stormwater management
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Oversvømmelser - Byens ekstremregn
Research output: Education › Book – Annual report year: 2015

Quantification the Effects of Water Sensitive Urban Design in a Simplifying Manner
Research output: Research - peer-review › Poster – Annual report year: 2015

Quantitative potential for stormwater control measures
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Scalability of regional climate change in Europe for high-end scenarios
Christensen, O. B., Yang, S., Boberg, F., Maule, C. F., Thejll, P., Olesen, M., Drews, M., Sørup, H. J. D. & Christensen, J. H. 2015 In : Climate Research. 64, 1, p. 25–38
Research output: Research - peer-review › Book – Annual report year: 2015

Using the three points approach to see beyond extremes for urban hydrology
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Europe in a 6 degrees warmer climate
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Identifying added value in two high-resolution climate simulations over Scandinavia
Research output: Research - peer-review › Poster – Annual report year: 2014

Identifying added value in two high-resolution climate simulations over Scandinavia
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Modelling of spatio-temporal precipitation relevant for urban hydrology with focus on scales, extremes and climate change
Research output: Research › Ph.D. thesis – Annual report year: 2014
Validation of two high-resolution climate simulations over Scandinavia
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Assessing future climatic changes of rainfall extremes at small spatio-temporal scales
Research output: Research - peer-review › Journal article – Annual report year: 2013

Kalibrering af en regngenerator til brug for nedskalering af klimastudier
Research output: Research - peer-review › Report chapter – Annual report year: 2013

On the importance of observational data properties when assessing regional climate model performance of extreme precipitation
Research output: Research - peer-review › Journal article – Annual report year: 2013

Perturbing a Stochastic Weather Generator with Different Climate Change Signals to Assess Extreme Precipitation under Influence of Climate Change at Urban Scales
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Quantitative potentials for rainwater handling using the "Three Points Approach" (3PA)
Research output: Research - peer-review › Paper – Annual report year: 2013

Simple værktojer til helhedsorienteret vurdering af alternative teknologier til regnvandshåndtering
Research output: Research › Sound/Visual production (digital) – Annual report year: 2013

Using a weather generator to downscale spatio-temporal precipitation at urban scale
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Comparing Regional Climate Model output to observational data sets for extreme rainfall
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2012

Descriptive and predictive evaluation of high resolution Markov chain precipitation models
Research output: Research - peer-review › Journal article – Annual report year: 2012

Evaluation of high resolution spatio-temporal precipitation extremes from a stochastic weather generator
Research output: Research - peer-review › Paper – Annual report year: 2012

Extreme and mean rainfall differences in observational data used as reference in climate studies
Quantitative potential for rainwater use

Quantitative potential for rainwater use

Markov chain modeling of precipitation time series: Modeling waiting times between tipping bucket rain gauge tips

Statistical Modeling of Long Historical Rain Series

Projects:

Statistical Downscaling of Precipitation to Very High Spatio-Temporal Resolutions
Thomassen, E. D., Arnbjerg-Nielsen, K., Serup, H. J. D. & Christensen, O. B.
01/12/2018 → 30/11/2021
Project: PhD

Reducing uncertainty in future extreme precipitation
Serup, H. J. D., Mikkelsen, P. S., Arnbjerg-Nielsen, K., Christensen, O. B., Binning, P. J., Jonas, O., Thorndahl, S. & Jonas, O.
Forskningsrådsfinansiering
15/12/2010 → 19/12/2014
Project: PhD

Activities:

Hvornår er bedre godt nok? Emissioner fra dansk vand håndtering sat op imod de Planetære Grænsen
Serup, H. J. D. (Guest lecturer)
5 Mar 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Better! But is it good enough?
Serup, H. J. D. (Guest lecturer)
18 Jan 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Sustainable solutions for risky problems in urban water management
Serup, H. J. D. (Speaker)
22 Aug 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Essential Societal Service Functions and Planetary Boundaries: The Case of Sustainable Urban Water Management
Serup, H. J. D. (Speaker)
26 Jun 2017
Activity: Talks and presentations › Conference presentations
Applying LCA in decision making- the need and the future perspective
Dong, Y. (Speaker), Miraglia, S. (Other), Manzo, S. (Other), Georgiadis, S. (Other), Sørup, H. J. D. (Other), Boriani, E. (Other), Hald, T. (Other), Thøns, S. (Other), Hauschild, M. Z. (Other)
10 May 2017
Activity: Talks and presentations › Conference presentations

Applying LCA in decision making- the need and the future perspective
Dong, Y. (Guest lecturer), Miraglia, S. (Guest lecturer), Manzo, S. (Guest lecturer), Georgiadis, S. (Guest lecturer), Sørup, H. J. D. (Guest lecturer), Boriani, E. (Guest lecturer), Hald, T. (Guest lecturer), Thøns, S. (Guest lecturer), Hauschild, M. Z. (Guest lecturer)
7 May 2017 → 11 May 2017
Activity: Talks and presentations › Conference presentations

Forskning og projekter inden for klimatilpasning
Sørup, H. J. D. (Speaker)
26 Apr 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Klimatilpasning af vandinfrastruktur
Sørup, H. J. D. (Speaker)
5 Apr 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Konstruktion og test af kunstige regnserier
Sørup, H. J. D. (Speaker)
29 Mar 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

The Danish Society of Engineers, IDA (External organisation)
Sørup, H. J. D. (Member)
2017 → …
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

What does it take to practice sustainable flood risk management?
Sørup, H. J. D. (Speaker)
30 Nov 2016
Activity: Talks and presentations › Conference presentations

Modificering af regnserier så de reflekterer et ændret klima
Sørup, H. J. D. (Speaker)
9 Nov 2016
Activity: Talks and presentations › Conference presentations

High-resolution rainfall time series for future climate
Sørup, H. J. D. (Speaker)
30 Aug 2016
Activity: Talks and presentations › Conference presentations

Sustainable flood risk management – What is sustainable?
Sørup, H. J. D. (Speaker)
29 Jun 2016
Activity: Talks and presentations › Conference presentations

Perturbing high-resolution precipitation time series to represent future climates
Sørup, H. J. D. (Speaker)
18 Apr 2016
Activity: Talks and presentations › Conference presentations

**Konstruktion og test af kunstige regnserier: hvad er godt og godt nok?**
Sørup, H. J. D. (Speaker), Gregersen, I. B. (Speaker)
29 Feb 2016
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations