CV for Hjalte Jomo Danielsen Sørup (*1983)

Orcid: 0000-0002-7110-6975

Degrees:

2014	PhD in climate statistics, Technical University of Denmark and Danish Meteorological Institute.
2010	MSc in Environmental Engineering, Technical University of Denmark.
2008	BSc in Environmental Engineering, Technical University of Denmark.

Positions:

2019-	Associate professor in urban water modelling, Technical University of Denmark, Department of Environmental and Ressource Engineering.
2014-2019	Assistant professor in urban water modelling, Technical University of Denmark, Department of Environmental Engineering.
2010-2014	PhD student, Technical University of Denmark, Department of Environmental Engineering and Danish Meteorological Institute, Danish Climate Centre.

Research Area:

I am working to increase the level of knowledge for planning of complex urban water systems. To do this, I do research in sustainability measures for assessing urban water systems climate proofed with Nature Based Solutions; research in stochastic modelling of rainfall time series under climate change and evaluation on the impacts of those series on urban water systems; and research in decision support systems to best possible convey the data and uncertainties associated with planning urban water systems under climate change to the end-user.

Distinctions and awards:

2018	Awarded DTU's price for teaching development.

Memberships of scientific committees, review:

2017-	Member of The Water Pollution Committee of the Society of Danish Engineers.

Web of Science publications: 19**; Citations:** 241**; *h*-index:** 9**;**
Other publications: 0**; Patents:** 0.

Supervision of PhDs, 2017 – present (ongoing or finished in 2017 or later):

Co-supervisor for 2 PhD students.

Selected grants, 2017 – present (ongoing or finished in 2017 or later):

VÆRDI – VÆRktøjer og regndata til DImensionering af fremtidens klimatilpassede afløbssystemer. VUDP - Vandsektorens Udviklings- og Demonstrationsprogram. Amount granted to the Dept: 0.5 MDKK. Project period: 2019-2023.

Innovationsprojekt om ny LAR-beregner. EU's regional funds through the WISE program at DTU. Project period: 2017-2018.

Selected publications (2017 or later):

Thomassen, E. D., Thorndahl, S. L., Andersen, C. B., Gregersen, I. B., Arnbjerg-Nielsen, K., & **Sørup, H. J. D.** (2022). Comparing spatial metrics of extreme precipitation between data from rain gauges, weather radar and high-resolution climate model re-analyses. Journal of Hydrology, 610, [127915].

Viti, M., Löwe, R., **Sørup, H. J. D.**, Rasmussen, M., Arnbjerg-Nielsen, K., & McKnight, U. S. (2022). Knowledge gaps and future research needs for assessing the non-market benefits of Nature-Based Solutions and Nature-Based Solution-like strategies. Science of the Total Environment, 841, [156636].

Allen, K. M., Mollerup, A. L., Rasmussen, S. F., & **Sørup, H. J. D.** (2022). Efficient job list creation for long-term statistical modelling of combined sewer overflows. Water Science and Technology, 85(5), 1424–1433. [wst2022065].

Thomassen, E. D., Kendon, E. J., **Sørup, H. J. D.**, Chan, S. C., Langen, P. L., Christensen, O. B., & Arnbjerg-Nielsen, K. (2021). Differences in representation of extreme precipitation events in two high resolution models. Climate Dynamics, 57, [3029–3043].

Sørup, H. J. D. & Lerer, S. M., (2021). Principles for Distributing Infiltration-Based Storm-water Control Measures in Series. Water, 13(8), 1029.

Sørup, H. J. D., Brudler, S., Godskesen, B., Dong, Y., Lerer, S. M., Rygaard, M. & Arn-bjerg-Nielsen, K., (2020). Urban water management: Can UN SDG 6 be met within the Planetary Boundaries?. Environmental Science and Policy.

Sørup, H. J. D., Fryd, O., Liu, L., Arnbjerg-Nielsen, K. & Jensen, M. B. (2019). An SDG-based framework for assessing urban stormwater management systems. Blue-Green Sys-tems, 1(1), 102-118.

Hennequin, T., Dong, Y., Arnbjerg-Nielsen, K. & **Sørup, H. J. D.** (2019). Life cycle assess-ment of a typical European single-family residence and its flood related repairs. Journal of Cleaner Production, 228, 1334-1344.

Dong, Y. Hauschild, M. Z., **Sørup, H. J. D.**, Rousselet, R. & Fantke, P. (2019). Evaluating the costs of greenhouse gases emissions in life cycle assessment. Journal of Cleaner Production, 209, 538-549.

Hennequin, T., **Sørup, H. J. D.**, Dong, Y., & Arnbjerg-Nielsen, K. (2018). A framework for performing comparative LCA between repairing flooded houses and construction of dikes in non-stationary climate with changing risk of flooding. Science of the Total Environ-ment, 642, 473-484.

Dong, Y., Miraglia, S., Manzo, S., Georgiadis, S., **Sørup, H. J. D.**, Boriani, E., Hald, T., Thöns, S. & Hauschild, M. Z. (2018). Environmental sustainable decision making – The need and obstacles for integration of LCA into decision analysis. Environmental Science and Policy, 87, 33-44.

Sørup, H. J. D., Davidsen, S., Löwe, R., Thorndahl, S. L., Borup, M., & Arnbjerg-Nielsen, K. (2018). Evaluating catchment response to artificial rainfall from four weather generators for present and future climate. Water Science and Technology, 77(11), 2578-2588.

Andersen, J. S., Lerer, S. M., Backhaus, A., Jensen, M. B., & **Sørup, H. J. D.** (2017). Charac-teristic Rain Events: A Methodology for Improving the Amenity Value of Stormwater Control Measures. Sustainability, 9(10), [1793].

Sørup, H. J. D., Georgiadis, S., Gregersen, I. B., & Arnbjerg-Nielsen, K. (2017). Formulating and testing a method for perturbing precipitation time series to reflect anticipated climatic changes. Hydrology and Earth System Sciences, 21(1), 345-355.