



[Centre of Natural Hazards and Disaster Science celebrates its 10th anniversary this year](#) - Over 30 PhD CNDS students have

successfully earned their doctoral degrees in the last decade. Today, the centre currently has 28 active early career scientists (postdocs and PhD candidates). It has also contributed to the advancement of the international educational curricula of disaster risk reduction by organizing its international research summer school for doctorate students as well as its biennial conference *Forum for natural hazards and disasters*, which focuses on nurturing an open dialogue with practitioners in the field. Over and beyond significant contributions made in the field of natural hazards and disaster science through numerous research publications,

CNDS has also been successful in attaining external research grants that are used to make further progress in the field of disaster risk reduction. We look forward to another good ten years!

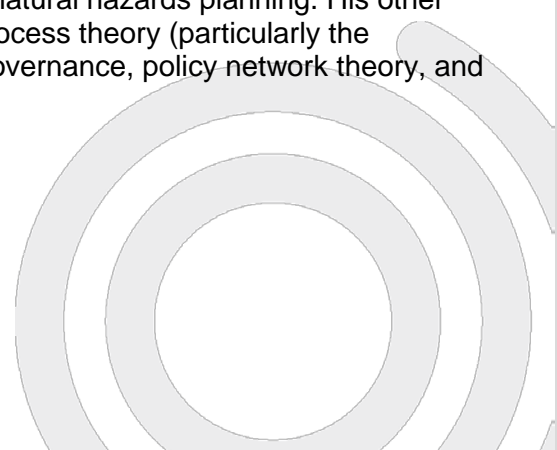
Two centres become one! Karlstad University is at the forefront in climate and public safety research. In order to enable larger research projects and developed international collaborations, the former CNDS collaborative partner Centre for Climate and Safety (CCS) and Centre for Public Safety (CPS) have now been merged into a new centre: the [Centre for Societal Risk Research \(CSR\)](#). So CNDS

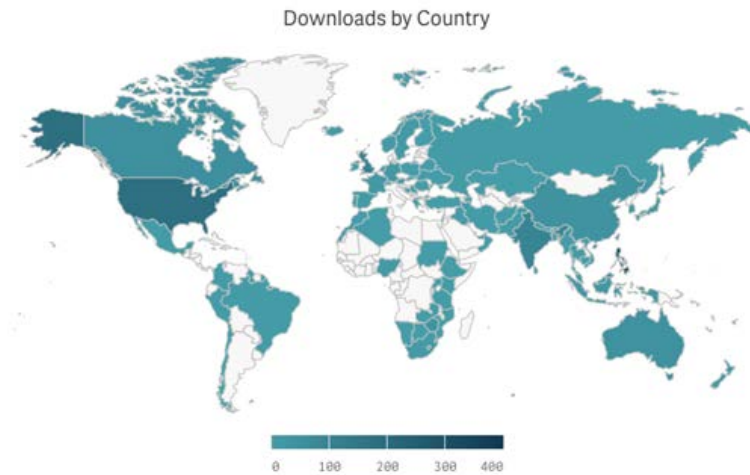


now welcomes CSR as our new collaborative partner from Karlstad University. The new centre will be headed by CNDS fellow [Mikael Granberg](#) (to the right) and [Finn Nilson](#) (to the left).



Congratulations to [Daniel Nohrstedt](#) who has recently been appointed as professor in political science by Uppsala University. Daniel has played an active part in the initiative and development of CNDS over the years as CNDS research coordinator. He studies processes of inter-organizational collaboration, learning, change, and performance in the context of crisis management and natural hazards planning. His other research interests include policy process theory (particularly the Advocacy Coalition Framework), governance, policy network theory, and collaborative public management.





CNDS fellow [Colin Walch](#), Dept of Peace and Conflict Studies at Uppsala University, was one of Geo website's most accessed papers. His article "[Evacuation ahead of natural disasters: Evidence from cyclone Phailin in India and typhoon Haiyan in the Philippines](#)" was among the most downloaded from the Geo Wiley Online Library website in 2019 with 1,188 full-text downloads. In comparison, the average number of full-text downloads per article published in Geo in 2019 was 567.

[Funding to CNDS fellows from the Kamprad Family Foundation](#) - The research project *When it rains it pours: Biogeophysical drivers and societal responses to compound natural hazard events in Sweden* has been awarded funding from the Kamprad Family Foundation. The purpose of the Kamprad Family Foundation is to support, stimulate and reward education and scientific research to promote entrepreneurship, the environment, competence, health and social improvement. The research team was awarded 3 400 000 SEK and consists of [Daniel Nohrstedt](#), Dept of Government, Uppsala University; [Johanna Mård](#) (principal investigator), Dept of Earth Science, Uppsala University; and [Örjan Bodin](#), Stockholm Resilience Centre.



The research and collaboration project SPLASH ([Swedish Pluvial Modelling Analysis and Safety Handling](#)) has come to an end. The final project results and achievements were presented at a seminar with around twenty participants from several insurance companies, municipalities, and universities. The SPLASH project focused on the modelling of rainfall and the handling of insurance data with the aim of strengthening the Swedish capacity for disaster modelling. The municipality of Jönköping was used as a study area for carrying out an analysis of rainfall and future risks. In addition, Länsförsäkringar AB, Länsförsäkringar Jönköping, Guy Carpenter and Restvärderäddning AB actively participated in SPLASH. This two-year project was funded by the Swedish Knowledge Foundation (KK-stiftelse). [Project summary as pdf](#)

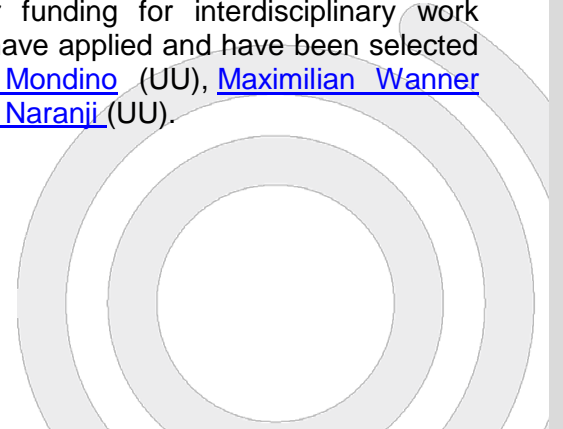


CNDS researchers at Karlstad University hosted a group of researchers from the University of West England, University of Gloucestershire, and Linköping University for a two-day workshop with the aim to address doing transdisciplinary research in collaboration with actors outside academia. One of the main purposes of the workshop was to provide an opportunity for the researchers to meet and share research results with the aim to learn and be inspired but also to explore possibilities for deepened collaboration.

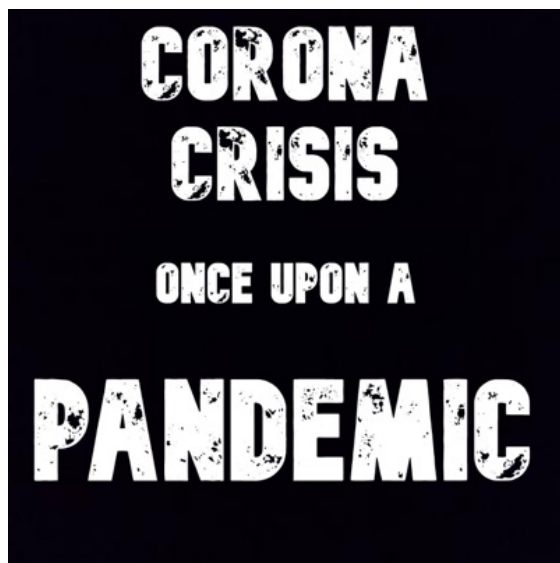


A book release was held for “Att samverka i kris: Vanliga människor i ovanliga situationer” (“Cooperation during a crisis: Ordinary people in unusual situations”) where the authors of the book as well as narrators who contributed testimony to the significance cooperation plays in situations when everything is at stake and nothing is as it should be. In writing the book, CNDS fellows and researchers at the Swedish Defence University [Sara Bondesson](#), [Fredrik Bynander](#), and [Helena Hermansson](#) interspersed research findings with fictional stories about ordinary people who end up in difficult situations and are forced to navigate the crisis management rules and actors. The research project and the book were commissioned by the Swedish Civil Contingencies Agency (MSB).

Congratulations to the recipients of the CNDS Interdisciplinary Grant 2020. CNDS provided Early Career Scientists partnering universities Uppsala University (UU), Karlstad University (KAU) and Swedish Defence University (SEDU) to apply for funding for interdisciplinary work within natural hazard and disaster science. The following have applied and have been selected to receive funding: [Frederike Albrecht](#) (SEDU), [Elena Mondino](#) (UU), [Maximilian Wanner](#) (UU), [Jacob Hileman](#) (UU), [Emma Rhodes](#) (UU), and [Joshi Naranji](#) (UU).



CNDS PERSPECTIVES ON THE CORONAVIRUS PANDEMIC IN ENGLISH



CNDS fellow [Eric Paglia](#) (KTH) and Marc van den Bossche have started the podcast [Corona Crisis: Once upon a pandemic](#) to discuss different dimensions of the pandemic, with a focus on crisis management at the national and international levels, and the long term societal and geopolitical implications of the COVID-19 contagion.

The first podcast [Confronting the Coronavirus in Sweden](#) included CNDSer [Fredrik Bynander](#) (SEDU) who analyzes Sweden's response to the coronavirus crisis thus far and reflects on some of the longer term geopolitical dimensions that need to be considered in parallel with the short term actions taken during the acute phase of the crisis.

Another podcast [Why were countries such as the United States caught off guard and slow to forcefully respond to COVID-19 at an earlier stage of the outbreak?](#) included CNDSer [Charles Parker](#) (UU) who draws on lessons from previous mega disasters to explain some of the most significant failures in the coronavirus crisis response so far and how decision makers can learn and adapt to better manage the pandemic.

[What are scientists saying about the effects the Corona crisis is having on the air and environment? Can we learn something? Professor Anna](#)

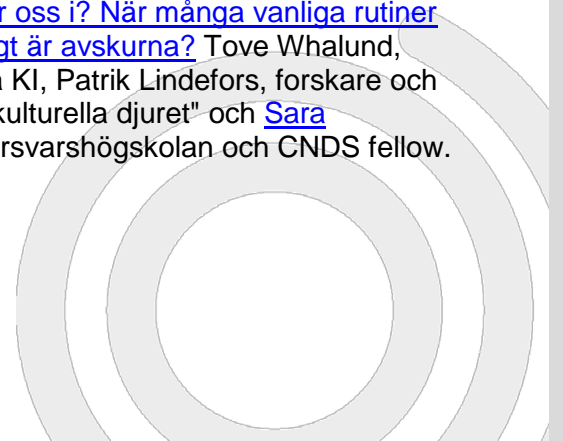


[Rutgersson](#) (UU) and Dr. Mårtensson (UU) provide some promising news about how the Corona crisis can actually provide new opportunities for the air and environment. For example, there is evidence that air pollution in China decreased by 20-30 percent this February, and satellite images show that the emissions of the poisonous gas nitrogen dioxide decreased throughout Europe.

CNDS PERSPECTIVES ON THE CORONAVIRUS PANDEMIC IN SWEDISH



Podcast - [Vem blir du i krisen? Hur tar dig igenom den här speciella tiden vi befinner oss i? När många vanliga rutiner och sammanhang plötsligt är avskurna?](#) Tove Whalund, psykolog och forskare på KI, Patrik Lindefors, forskare och författare till boken "Det kulturella djuret" och [Sara Bondesson](#), lektor vid Försvarshögskolan och CNDS fellow.





Både den svenska och den globala ekonomin har tvärbromsat på grund av de restriktioner som införts för att stoppa Coronaviruset. Är åtgärderna proportionerliga mot det hot som viruset utgör? Och hur förberedda var vi för en pandemi och dess konsekvenser? Vad görs just nu inom vården för att hantera situationen? [Ekots Lördagsintervju specialprogram](#) om Corona gästas av bland annat [Fredrik Bynander](#), chef på Centrum för Totalförsvarets och Samhällets säkerhet vid FHS och CNDS fellow.



Beredskap i krisens tid, författare i karantän och världsekonomin fall. I [Godmorgon, världen!](#) intervjuas CNDS [Fredrik Bynander](#), FHS och CNDS.



["Bör förbereda befolkningen på att det kommer mer"](#) [Fredrik Bynander](#), FHS och CNDS, kommenterar på TV4 Nyheterna hur myndigheter har kommunicerat informationen kring den höjda krisberedskapen på grund av corona-utbrottet.



[Vilka har förutsättningar att klara en långvarig karantän?](#) Länstidningen möter krisforskaren [Sara Bondesson](#), FHS och CNDS, som berättar att det finns underliggande ojämlika strukturer och maktordningar som spelar roll även i en till synes "jämlig" kris som tycks drabba alla lika.



[Vi måste lära oss av corona-krisen](#) debattartikel i Aftonbladet. Den pågående corona-pandemin en god illustration av samhällsriskers komplexitet och hur svårt det är för demokratiska stater att hantera samhällsrisker i befintliga strukturer. Under de senaste åren har forskningen om risker och samhällets hantering och förståelse av dessa tilltagit. Forskningen har, i likhet med samhällets riskhantering, ofta skett inom traditionella discipliner såsom teknik, medicin, ekonomi och miljö på sätt som inte alltid förmår fånga samhällsriskers

komplexitet, skriver [Finn Nilson](#) och [Mikael Granberg](#) vid Centrum för forskning om samhällsrisker, Karlstads universitet, i en debattartikel i Aftonbladet debatt.



LIST OF NEW PUBLICATIONS



COLLABORATIVE CRISIS MANAGEMENT

Inter-Organizational Approaches to Extreme Events

Edited by Fredrik Bynander
and Daniel Nohrstedt

[Fredrik Bynander](#) and [Daniel Nohrstedt](#) (2020) [Collaborative Crisis Management: Interorganizational Approaches to Extreme Events](#). Routledge. ISBN: 9780367148560.

Placing emphasis on five conceptual dimensions, this book illustrates how this panacea works out on the ground and in the boardrooms, and how insights on collaborative practices can shed light on the outcomes of complex inter-organizational challenges across cases derived from different problem areas, administrative cultures, and national systems. It places modes of collaboration under an analytical microscope by assessing not only the collaborative tools available to actors but also how they are used, to what effect, and with which adaptive capacity. Ten empirical chapters span different international cases and contexts discussing: natural and "man-made" hazards: earthquakes, hurricanes, wildfires, terrorism, migration flows, and violent protests; different examples of collaborative institutions,

such as regional economic communities in Africa, and multi-level arrangements in Canada, the Netherlands, Turkey, and Switzerland; and the application of a multimethod approach, including single case studies, comparative case studies, process-tracing, and "large-n" designs.

Collaborative Crisis Management includes contributions from several CNDS fellows. Here is the Table of Contents:

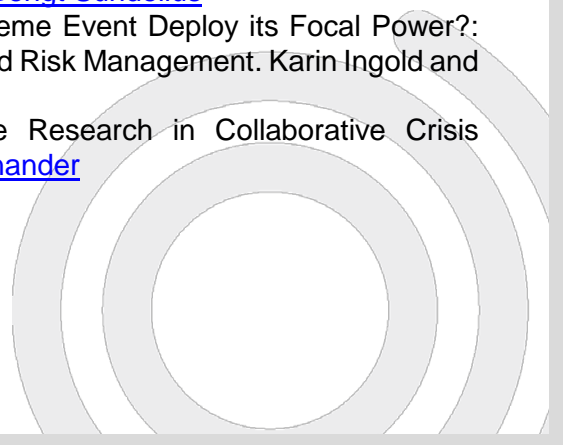
- Chapter 1** - Collaborative Crisis Management: Inter-organizational Approaches to Extreme Events. [Fredrik Bynander](#) and [Daniel Nohrstedt](#)
- Chapter 2** - Upscaling Collaborative Crisis Management: A Comparison of Wildfire Responder Networks in Canada and Sweden. [Daniel Nohrstedt](#), Julia Baird, [Örian Bodin](#), Ryan Plummer, and Robert Summers
- Chapter 3** -Secure Summits: Collaborative Crisis Management Before and During Global Government Conventions. Sanneke Kuipers and Marij Swinkels
- Chapter 4** - Managing Extraordinary Influx of Migrants: The 2015 Migration Crisis in Sweden. Edward Deverell and Dan Hansén
- Chapter 5** -Overcoming Collective-Action Problems in Collaborative Crisis Management: Meta-Governance and Security Communications Systems. [Oscar Larsson](#)
- Chapter 6** -Vertical Collaboration During the 2014 Swedish Wildfire. [Fredrik Bynander](#)
- Chapter 7** -Collaborative Crisis Management in Turkey: Perceptions and Outcomes of Collaboration During Two Earthquakes. [Helena Hermansson](#)
- Chapter 8** -Transregional Crisis Management in Africa. [Simon Hollis](#) and [Eva-Karin Olsson](#)
- Chapter 9** -Addressing the Challenges of Transboundary Crises: The Dutch Local Response to the Global Surge in ISIS Supporters. Scott Douglas, Aline Bos, and Mirko Noordegraaf
- Chapter 10** -Avoiding the Failures of Collaborative Crisis Management: Lessons from Research and Practice. [Charles F. Parker](#) and [Bengt Sundelius](#)
- Chapter 11** -Under What Conditions Does an Extreme Event Deploy its Focal Power?: Toward Collaborative Governance in Swiss Flood Risk Management. Karin Ingold and Alexandra Gavilano
- Chapter 12** - Lessons and Avenues for Future Research in Collaborative Crisis Management. [Daniel Nohrstedt](#) and [Fredrik Bynander](#)



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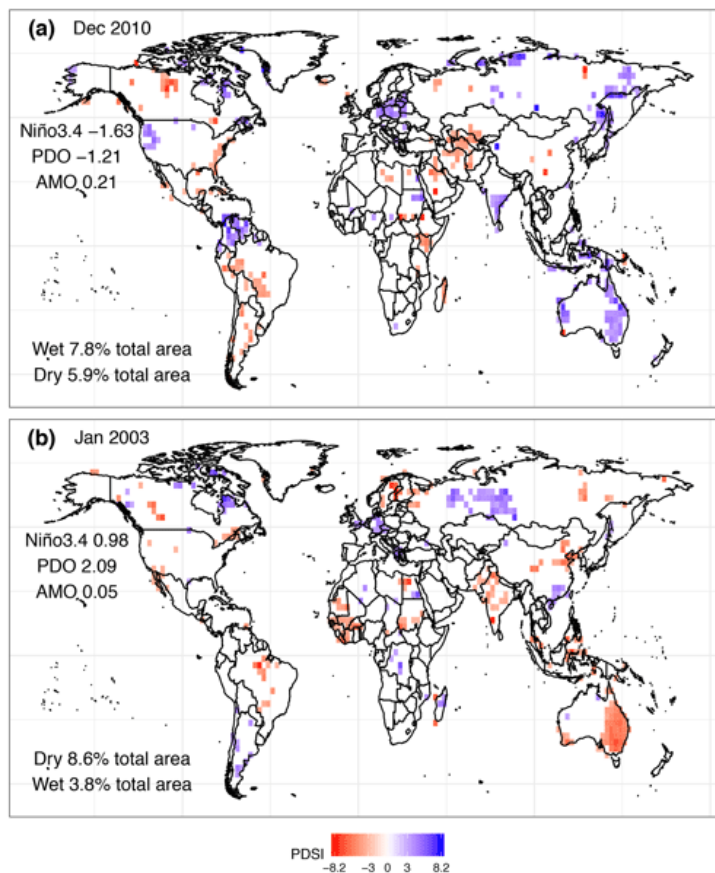
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[Can Regional-Scale Governance and Planning Support Transformative Adaptation? A Study of Two Places.](#) Mikael Granberg, Karyn Bosomworth, Susie Moloney, Ann-Catrin Kristianssen, and Hartmut Fünfgeld (2019) [Sustainability](#), December.

This study examines more closely the idea that climate change adaptation is best leveraged at the local scale is a well- institutionalized script in both research and formal governance. This idea is based on the argument that the local scale is where climate change impacts are “felt” and experienced. However, sustainable and just climate futures require transformations in systems, norms, and cultures that underpin and reinforce our unsustainable practices and development pathways, not just “local” action. Governance interventions are needed to catalyse such shifts, connecting multilevel and multiscale boundaries of knowledge, values, levels and organizational remits. The authors critically reflect on current adaptation governance processes in Victoria, Australia and the Gothenburg region, Sweden to explore whether regional-scale governance can provide just as important leverage for adaptation as local governance, by identifying and addressing intersecting gaps and challenges in adaptation at local levels. The authors suggest that regional-scale adaptation offers possibilities for transformative change because they can identify, connect, and amplify small-scale (local) wins and utilize this collective body of knowledge to challenge and advocate for unblocking stagnated, institutionalized policies and practices, and support transformative change.



[Concurrent wet and dry hydrological extremes at the global scale \(2020\)](#) Paolo De Luca, Gabriele Messori, Robert L. Wilby, [Maurizio Mazzoleni](#) and [Giuliano Di Baldassarre](#). *Earth System Dynamics*. 11, 251–266, 2020.

Multi-hazard events can be associated with larger socio-economic impacts than single-hazard events. Understanding the spatio-temporal interactions that characterize the former is therefore of relevance to disaster risk reduction measures. Here, the authors consider two high-impact hazards, namely wet and dry hydrological extremes, and quantify their global co-occurrence. They define these using the monthly self-calibrated Palmer Drought Severity Index based on the Penman–Monteith model (sc_PDSI_pm), covering the period 1950–2014, at 2.5° horizontal resolution. We find that the land areas consequently tend to only capture large objects.





[Sara Lindersson](#), Luigia Brandimarte, [Johanna Mård](#) and [Giuliano Di Baldassarre](#) (2020) 'A review of freely accessible global datasets for the study of floods, droughts and their interactions with human societies', *WIREs Water*. DOI: 10.1002/wat2.1424.

These CNDS researchers have tackled the question of how global datasets can advance our understanding of a rapidly changing world by creating and structuring

a collection of freely accessible global datasets to support future studies on floods, droughts, and their interactions with changing societies. The review of datasets confirms that we are currently more skilled at mapping the hazard and exposure components of the risk equation, compared to vulnerability aspects. There are, however, numerous challenges when using these large-scale datasets in scientific studies. One challenge relates to the fact that global datasets

[Örjan Bodin](#), [Daniel Nohrstedt](#), Baird, J. *et al.* [Working at the “speed of trust”: pre-existing and emerging social ties in wildfire responder networks in Sweden and Canada](#). *Reg Environ Change* **19**, 2353–2364 (2019).

Weible, C.M., Ingold, K., [Daniel Nohrstedt](#), Henry, A.D. and Jenkins-Smith, H.C. (2020), [Sharpening Advocacy Coalitions](#). *Policy Stud J*. doi:10.1111/psj.12360

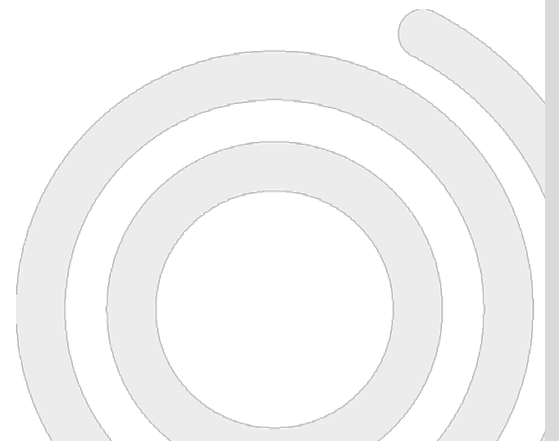
De Luca, P., Messori, G., Wilby, R., [Mazzoleni, M.](#), [Di Baldassarre, G.](#) (2020). [Concurrent wet and dry hydrological extremes at the global scale](#). *Earth System Dynamics, Copernicus Gesellschaft MBH*. **11(1)**: 251-266

[Mondino, E.](#), Scolobig, A., Borga, M., [Albrecht, F.](#), [Mård, J.](#) *et al.* (2020). [Exploring changes in hydrogeological risk awareness and preparedness over time: a case study in northeastern Italy](#). *Hydrological Sciences Journal*.

[Oriangi, G.](#), [Albrecht, F.](#), [Di Baldassarre, G.](#), Bamutaze, Y., Mukwaya, P. *et al.* (2020). [Household resilience to climate change hazards in Uganda](#). *International Journal of Climate Change Strategies and Management, Emerald Group Publishing Ltd*. **12(1)**: 59-73

Weyrich, P., [Mondino, E.](#), Borga, M., [Di Baldassarre, G.](#), Patt, A. *et al.* (2020). [A flood-risk-oriented, dynamic protection motivation framework to explain risk reduction behaviours](#). *Natural hazards and earth system sciences, Copernicus Gesellschaft mbH*. **20(1)**: 287-298

Bloeschl, G., Bierkens, M., Chambel, A., Cudennec, C., Destouni, G. *et al.* (2019). [Twenty-three unsolved problems in hydrology \(UPH\) - a community perspective](#). *Hydrological Sciences Journal, Taylor & Francis Ltd*. **64(10)**: 1141-1158



UPDATE ON THE STATUS OF SCHEDULED CNDS ACTIVITIES

- **The research seminar scheduled for 3 June will be conducted remotely** - Research seminar commemorating UN World Environment Day being organized by Johanna Mård. PhD candidate Kristina Petrova will be presenting her doctoral work and Magdalena Nordsäter will be the discussant for this presentation. Details about participating remotely will be sent out closer to the date.
- Discussions about the **CNDS Summer School** scheduled for 24-28 August are in progress and various options are being considered, but the summer school will most likely be shorten and tailored to be delivered remotely. More details will be provided after an official decision has been made. At this point, CNDS has decided to temporarily pause registration for the Summer School 2020. A final careful decision regarding the status of the Summer School will be made later this spring.
- **Annual Assembly scheduled for 26 August** will most likely be conducted remotely.
- No changes made as of yet for the **research seminar scheduled for 15 September** at the Swedish Defence University – This research seminar will commemorate UN International Day of Democracy and is being organized by Daniel Nohrstedt and Charles Parker. PhD candidate Elisa Savelli will be presenting her doctoral work and Rasmus Andrén will be the discussant for this presentation.
- **The CNDS Forum on Natural Hazards has been officially postponed until spring of 2021.**
- No changes made as of yet for the **research seminar scheduled 10 December** at the Swedish Defence University – This research seminar is in tribute to Nobel research advancements is being organized by Klas Hjort. PhD candidate Simon Södergren will be presenting her doctoral work and the discussant for this presentation will be announced later.

Reminders

- Please send your updates (new publications, conference participation, video footage, news items or any other exciting events we should share) to [Stephanie Young](#) or [Johanna Mård](#).
- Please remember to add your CNDS affiliation (and logo where appropriate) in your correspondences and publications. Example: Name, Department, University, “Centre of Natural Hazards and Disaster Science”



Hijack the CNDS twitter account and keep the rest of us updated on what's happening. If you are interested in doing this, please contact [Stephanie Young](#) or [Frederike Albrecht](#).

Links to the CNDS units

- [Centre for Societal Risk Research \(CSR\)](#), Karlstad University
- [Centre for Societal Security](#), Swedish Defence University
- [Department of Earth Sciences](#), Uppsala University
- [Department of Government](#), Uppsala University
- [Department of Peace and Conflict Research](#), Uppsala University
- [Department of Engineering Sciences](#), Uppsala University
- [Department of Information Technology](#), Uppsala University

