

List of key publications

- Aerts, J.C.J.H.** (2017). Climate-induced migration: Impacts beyond the coast. *Nature Climate Change*, 7, 315–316. <https://doi.org/10.1038/nclimate3279>
- Aerts, J.C.J.H.**, Botzen, W., Emanuel, K., Lin, N., **de Moel, H.** & Michel-Kerjan, E.O. (2014). Evaluating flood resilience strategies for coastal megacities. *Science*, 344, 473–475. <https://doi.org/10.1126/science.1248222>
- Aerts, J.C.J.H.**, Botzen, W.J., Clarke, K., Cutter, S.L., Michel-Kerjan, E., Surminski, S., Mysiak, J., Merz, B., Hall, J., Kunreuther, H. (2018). Including human behavior in flood risk assessment. *Nature Climate Change*, 8, 193–199. <https://doi.org/10.1038/s41558-018-0085-1>
- de Ruiter, M.C.** & **van Loon, A.F.** (2022). The challenges of dynamic vulnerability and how to assess it. *iScience*, 25(8), 104720. <https://doi.org/10.1016/j.isci.2022.104720>
- Eilander, D.**, Couasnon, A., **Sperna Weiland, F.C.**, Ligtoet, W., Bouwman, A., Winsemius, H.C., **Ward, P.J.** (2023). Modeling compound flood risk and risk reduction using a globally applicable framework: a pilot in the Sofala province of Mozambique. *Natural Hazards and Earth System Sciences*, 23, 2251–2272. <https://doi.org/10.5194/nhess-23-2251-2023>
- Hamed, R.**, **Vijverberg, S.**, **van Loon, A.F.**, **Aerts, J.** & **Coumou, D.** (2023). Persistent La Niñas drive joint soybean harvest failures in North and South America. *Earth System Dynamics*, 14(1), 255–272. <https://doi.org/10.5194/esd-14-255-2023>
- Hochrainer-Stigler, S., Šakić Trogrlić, R., Reiter, K., **Ward, P.J.**, de Ruiter, M.C., Duncan, M.J., Torresan, S., Ciurean, R., Mysiak, J., Stuparu, D., Gottardo, S. (2023). Toward a framework for systemic multi-hazard and multi-risk assessment and management. *iScience*, 26, 106736. <https://doi.org/10.1016/j.isci.2023.106736>
- Koks, E.E.**, Le Bars, D., Essensfelder, A.H., **Nirandjan, S.** & Sayers, P. (2023). The impacts of coastal flooding and sea level rise on critical infrastructure: a novel storyline approach. *Sustainable and Resilient Infrastructure*, 8(sup1), 237–261. <https://doi.org/10.1080/23789689.2022.2142741>
- Kreibich, H., **van Loon, A.F.**, Schröter, K., **Ward, P.J.**, **Mazzoleni, M.**, Sairam, N., Abeshu, G.W., Agafonova, S., AghaKouchak, A., Aksoy, H., Alvarez-Garretón, C., Aznar, B., Balkhi, L., **Barendrecht, M.** & 78 others (2022). The challenge of unprecedented floods and droughts in risk management. *Nature*, 608, 80–86. <https://doi.org/10.1038/s41586-022-04917-5>
- Matano, A.**, **de Ruiter, M.**, Koehler, J., **Ward, P.** & **van Loon, A.** (2022). Caught between extremes: Understanding human-water interactions during drought-to-flood events in the Horn of Africa. *Earth's Future*, 10(9), e2022EF002747. <https://doi.org/10.1029/2022EF002747>
- Nirandjan, S.**, **Koks, E.E.**, **Ward, P.J.** & **Aerts, J.C.J.H.** (2022). A spatially-explicit harmonized global dataset of critical infrastructure. *Scientific Data*, 9, 150. <https://doi.org/10.1038/s41597-022-01218-4>
- Odongo, R.A.**, **de Moel, H.** & **van Loon, A.F.** (2023). Propagation from meteorological to hydrological drought in the Horn of Africa using both standardized and threshold-based indices, *Natural Hazards & Earth System Sciences*, 23(6), 2365–2386, <https://doi.org/10.5194/nhess-23-2365-2023>

Reimann, L., Jones, B., Bieker, N., Wolff, C., Aerts, J.C.J.H. & Vafeidis, A.T. (2023). Exploring spatial feedbacks between adaptation policies and internal migration patterns due to sea-level rise. *Nature Communications*, 14(1), 2630. <https://doi.org/10.1038/s41467-023-38278-y>

Rousi, E., Kornhuber, K., Beobide-Arsuaga, G., **Luo, F. & Coumou, D.** (2022). Accelerated western European heatwave trends linked to more-persistent double jets over Eurasia. *Nature Communications*, 13(1), 3851. <https://doi.org/10.1038/s41467-022-31432-y>

Ruig, L., Botzen W.J., **Haer, T.**, Brody, S., Czajkowski, **de Moel, H. & Aerts, J.C.J.H.** (2022) How the U.S. can benefit from risk-based premiums combined with flood protection. *Nature Climate Change*, 12, 995–998. <https://doi.org/10.1038/s41558-022-01501-7> (2022).

Scholten, R.C., **Coumou, D., Luo, F. & Veraverbeke, S.** (2022). Early snowmelt and polar jet dynamics co-influence recent extreme Siberian fire seasons. *Science*, 378(6623), 1005–1009. <https://doi.org/10.1126/science.abn4419>

van den Hurk, B.J.J.M., Baldissera Pacchetti, M., Boere, E., Ciullo, A., Coulter, L., Dessai, S., Ercin, E., Goulart, H.M.D., Hamed, R., Hochrainer-Stigler, S., Koks, E., Kubiczek, P., Levermann, A., Mechler, R., van Meersbergen, M., Mester, B., Middelani, R., Minderhoud, K., Mysiak, J., ... Witpas, K. (2023). Climate impact storylines for assessing socio-economic responses to remote events. *Climate Risk Management*, 40, 100500. <https://doi.org/10.1016/j.crm.2023.100500>

van Loon, A.F. et al. (2022). Streamflow droughts aggravated by human activities despite management. *Environmental Research Letters*, 17(4), 044059. <https://doi.org/10.1088/1748-9326/ac5def>

Vijverberg, S. & Coumou, D. (2022). The role of the Pacific Decadal Oscillation and ocean-atmosphere interactions in driving US temperature variability. *npj Climate and Atmospheric Science*, 5, 18. <https://doi.org/10.1038/s41612-022-00237-7>

Wens, M.L.K., van Loon, A.F., Veldkamp, T.I.E. & Aerts, J.C.J.H. (2022). Education, financial aid, and awareness can reduce smallholder farmers' vulnerability to drought under climate change, *Natural Hazards & Earth System Sciences*, 22(4), 1201–1232. <https://doi.org/10.5194/nhess-22-1201-2022>.

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