



## **How do concurrent disasters affect damages and the post-disaster recovery process?**

Marleen de Ruiter (1), Anaïs Couasnon (1), Hans de Moel (1), Philip Ward (1), and James Daniell (2)

(1) VU Amsterdam - Institute for Environmental Studies, Water and Climate Risk, W&N C571, Amsterdam, Netherlands (m.c.de.ruiter@vu.nl), (2) Geophysical Institute and Center for Disaster Management and Risk Reduction Technology, Karlsruhe Institute of Technology (KIT), Karlsruhe, 76344, Germany

In recent decades there have been striking cases of countries suffering from concurrent disasters. For example, Haiti being hit by a 7.0 magnitude earthquake in 2010 while still recovering from tropical storms and hurricanes that hit the island 18 months earlier. For first responders and disaster recovery agencies, it is crucial to improve our understanding of concurrent disasters and the implications for post-disaster recovery.

In this study, we assess the impact of concurrent disasters on a global scale. We use the historic CATDAT database, which goes back to the early 1900s, supplemented with other historic disaster data to improve our understanding of concurrent disasters and their implications on disaster risk management and the effectiveness of post-disaster recovery measures.

In this contribution, we focus on the Philippines and Taiwan, as both countries periodically suffer from earthquakes and tropical cyclones. By conducting an analysis of historical data of these two highly contrasting case study areas, we aim to assess the interactions between both hazards and to what extent these interactions affect post-disaster recovery efforts and total damages.