



## **EGU22 Media Tip Sheet: Learning from catastrophes**

*“The past is a horrible master but a great teacher.” In this list of abstracts, environmental catastrophes are studied, dissected, and analysed so that future generations can be better prepared – whether in terms of knowledge of high-risk areas, or the new kinds of disasters slowly making their way into our ecosystems.*

### **Dynamic risk scenarios for single and multi-hazards in the Global South: Nairobi, Istanbul and Kathmandu**

*This presentation assesses the development of dynamic risk scenarios for single and multi-hazards, including multi-hazard interrelationships, in the context of three urban areas, Istanbul, Kathmandu, and Nairobi, all foci of the UK GCRF funded “Tomorrow’s Cities” Research Hub.*

**Mon, 23 May, 08:35–08:45 CEST**

Session [NH9.9](#)

### **Lower magnitude volcanic eruptions as Global Catastrophic Risks**

*Researchers propose that volcanic eruptions of even moderate magnitudes (VEI 3-6) could constitute a global catastrophic risk. This study presents seven global pinch points, including the Strait of Malacca and the Mediterranean, which represent localities where disruption to any of these systems can result in a cascade of global disruptions.*

**Tue, 24 May, 10:47–10:53 CEST**

Session [NH9.1](#)

### **Evidence of an unreported Chilean tsunami highlights the importance of combining geological and historical records in tsunami hazard assessment**

*So far, there is no known record of the 1737 tsunami, either due to civil unrest or a small tsunami due to deep fault slip below land. Historical evidence such as this can potentially reduce average recurrence intervals and provide long-term patterns to inform seismic and tsunami hazard assessment.*

**Tue, 24 May, 17:42–17:49 CEST**

Session [NH5.3](#)

### **Future fire impact on PM2.5 pollution and attributable mortality**

*Every year, fine particulate matter with a diameter of  $\leq 2.5$  (PM2.5) contributes to 4.5 million to 8.9 million of global mortality. Among the total PM2.5 related mortality, 5%–21% were attributed to fires, which is set to increase due to climate change. This research was supported by the Environment Research and Technology Development Fund of the Environmental Restoration and Conservation Agency of Japan.*

**Wed, 25 May, 11:36–11:42 CEST**

Session [BG1.2](#)

**Biotoxicological risks and hazards of a warming Arctic**

*Climate change accelerates permafrost degradation throughout the Arctic, introducing previously sequestered known and unknown biotoxicological hazards. Researchers stress the need to combine remote sensing, in-situ field work, and modeling to better understand biological and chemical hazards that arise from this and to integrate micro-scale dynamics (including permafrost thaw) into Earth systems models.*

**Thu, 26 May, 08:30–08:40 CEST**

Session [CR3.4](#)