

# PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A

MATHEMATICAL, PHYSICAL AND ENGINEERING SCIENCES

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## **Intensification of short-duration rainfall extremes and implications for flash flood risks**

Discussion meeting issue organised and edited by Hayley Fowler, Conrad Wasko and Andreas F. Prein

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## About this issue

Economic losses from flooding are rising in many regions of the world caused by an increasing population in flood-prone areas and more frequent and intense extreme rainfall events. Rainfall extremes are intensifying due to climate change but the rate of intensification of short-duration downpours that are related to flash flooding is still highly uncertain. This theme issue presents evidence that climate change is exacerbating extreme rainfalls and hence flood risk, but there is still a long way to go in incorporating these changes into flood risk management. There is a need for interdisciplinary research that includes atmospheric, hydrologic, and engineering science to improve our resiliency against future flooding.

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Flash floods. Credit: J Lloa from Pixabay.

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