Rapid global hazard forecasting to support early action in data poor regions

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Early Warning Systems

Cost-effective

3.1 B$ pledged at COP27 “Early Warning for All”

Emergency action

Inform vulnerable populations
Mobilize emergency measures

Location, timing and impacts?

Advanced technologies are available
Make sure it works locally!
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HERE THINGS GO WRONG!
Rapid global hazard forecasting

Static hazard map

Hazard driver: precipitation

Dynamic hazard map: early warning
Rapid global hazard forecasting

Static hazard map

Hazard driver: precipitation

Dynamic hazard map: early warning

Data is available globally!
Rapid global hazard forecasting

Static hazard map

Hazard driver: precipitation

Dynamic hazard map: early warning

Based on terrain characteristics

Real time or forecasts

Emergency alerts

Data is available globally!

Multiple hazards:

Floods – Droughts – Landslides - Forest fires
No artefacts from artificial boundaries

Licungo and Zambezi floods of 2015 (Mozambique)
Early action

https://tsmangrove.hkvservices.nl/4E-multi-hazard/
Early action
Test cases for Guatemala, Madagascar, Mozambique

Expand to global scale

Include impacted population and assets

This is possible for a fraction of the pledged 3.1B$
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