

Linking climate change, temperature variability, and poverty

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Climate change is predicted to lead to increases in temperature variability

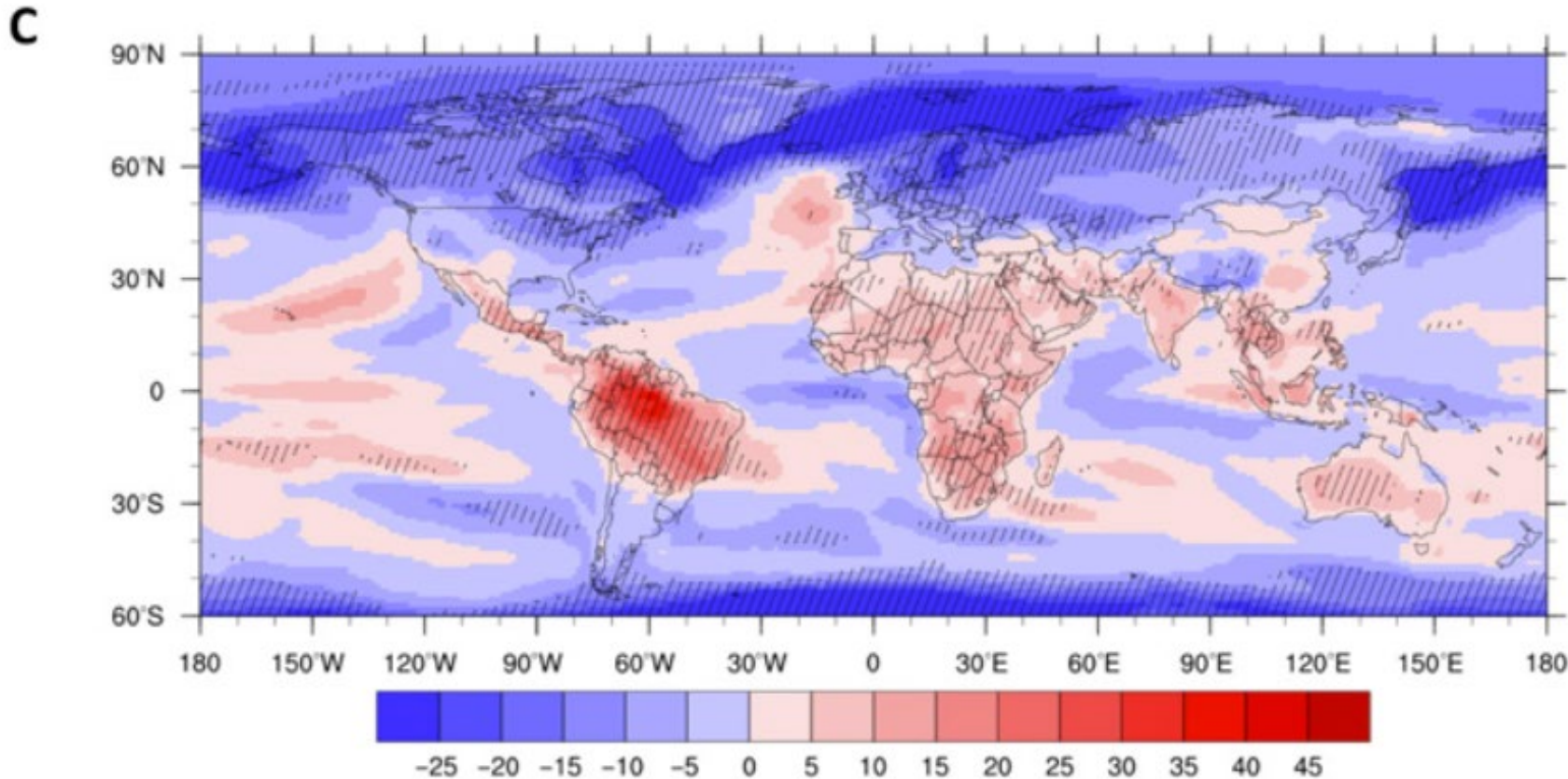


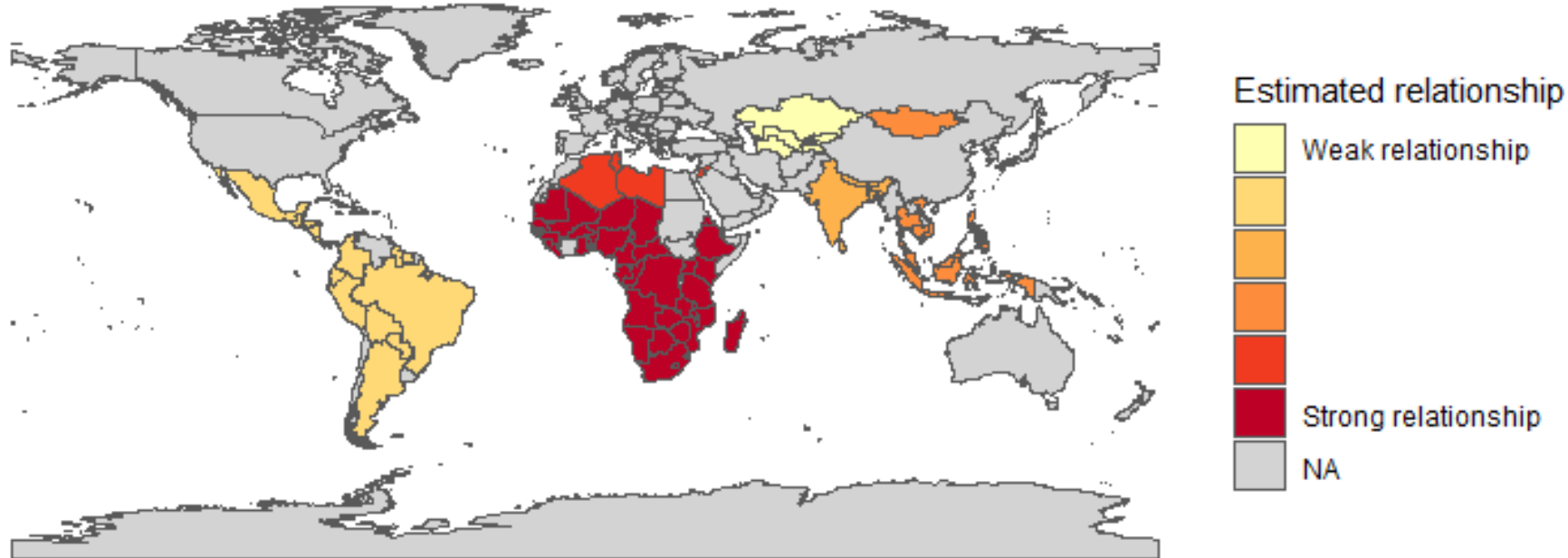
Fig. 1 Relative changes of SD of monthly temperature anomalies until the end of the 21st century.

“Poor countries are located in the (...) hotspot regions of increasing temperature variability.”

(Source: Bathiany et al., 2018)

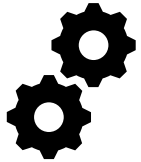
Higher variability is linked to poverty

Impact of temperature variability on household wealth by region
89 countries



Using big data, we estimate significant negative effects of temperature variability on household wealth in LMIC.

Channels are varied and complex



Macroeconomy

- Reduction of aggregate growth
- More so in poorer countries



Health

- Increase of mortality
- Negative effects on birth outcomes



Agriculture

- Reduction in yields and crop income



Productivity

- Increases in work absenteeism
- Reduction in firms' revenues and profits



Poverty traps

- Non-linear effects of shocks might 'trap' more households in poverty



Education

- Reduction of school participation

Thank you

For sources and further information:



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