

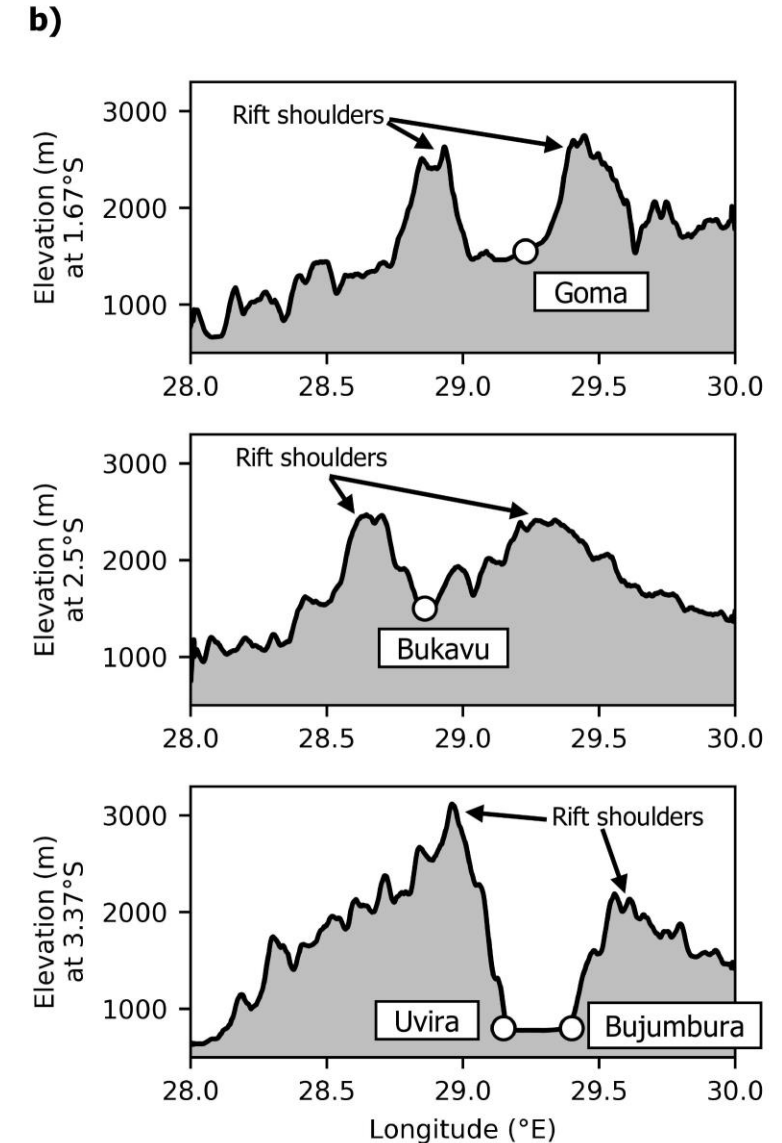
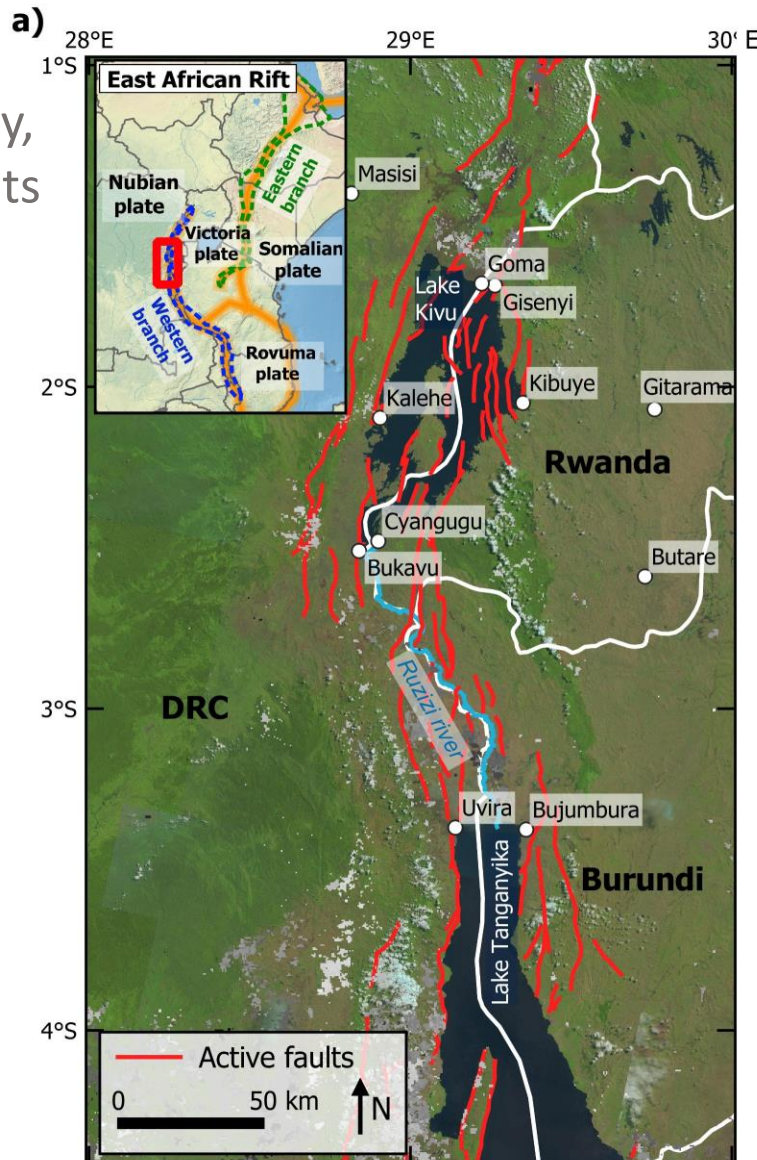
The flash floods of April 2020 in Uvira (DR Congo): story of an event with extreme impacts

Josué Mugisho Bachinyaga, Axel Deijns, Guy Ilombe Mawe, François Kervyn, Caroline Michellier,
Toussaint Mugaruka Bibentyo, Jaziel Nkere Buliba, Charles Nzolang, Benoît Smets, Olivier Dewitte

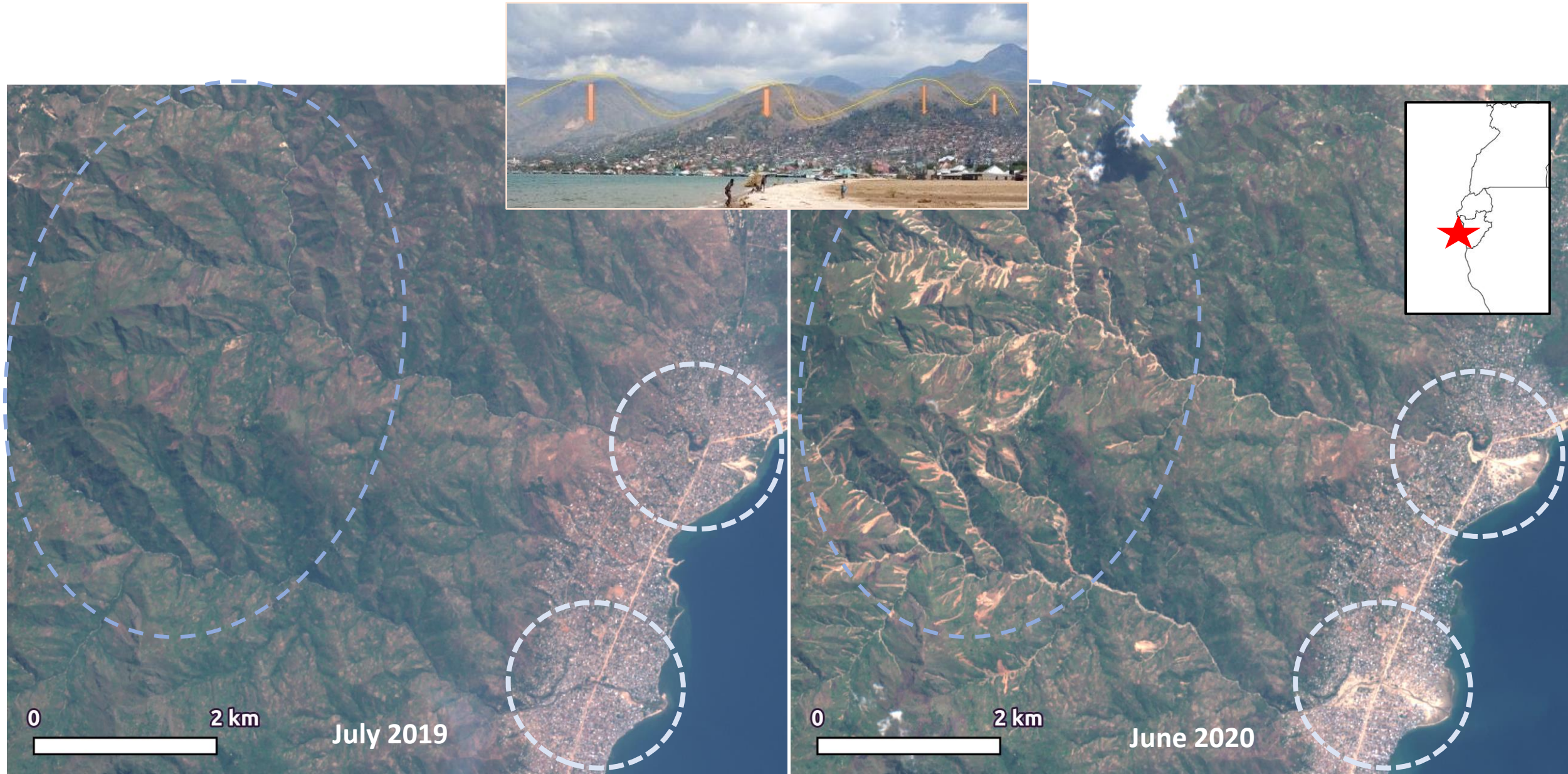


A geomorphological hazard hotspot in Africa

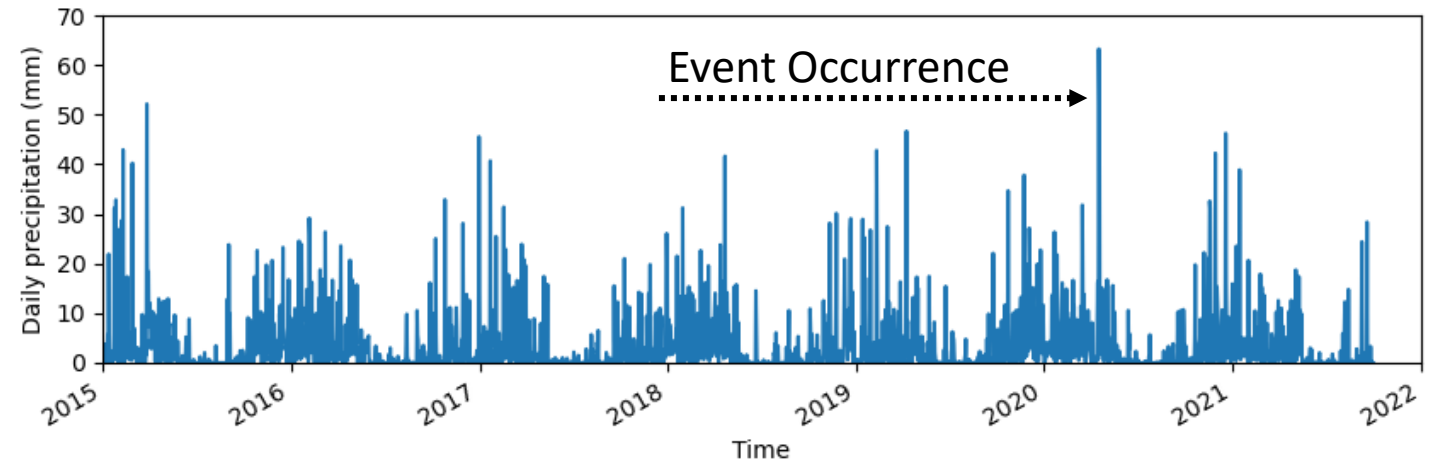
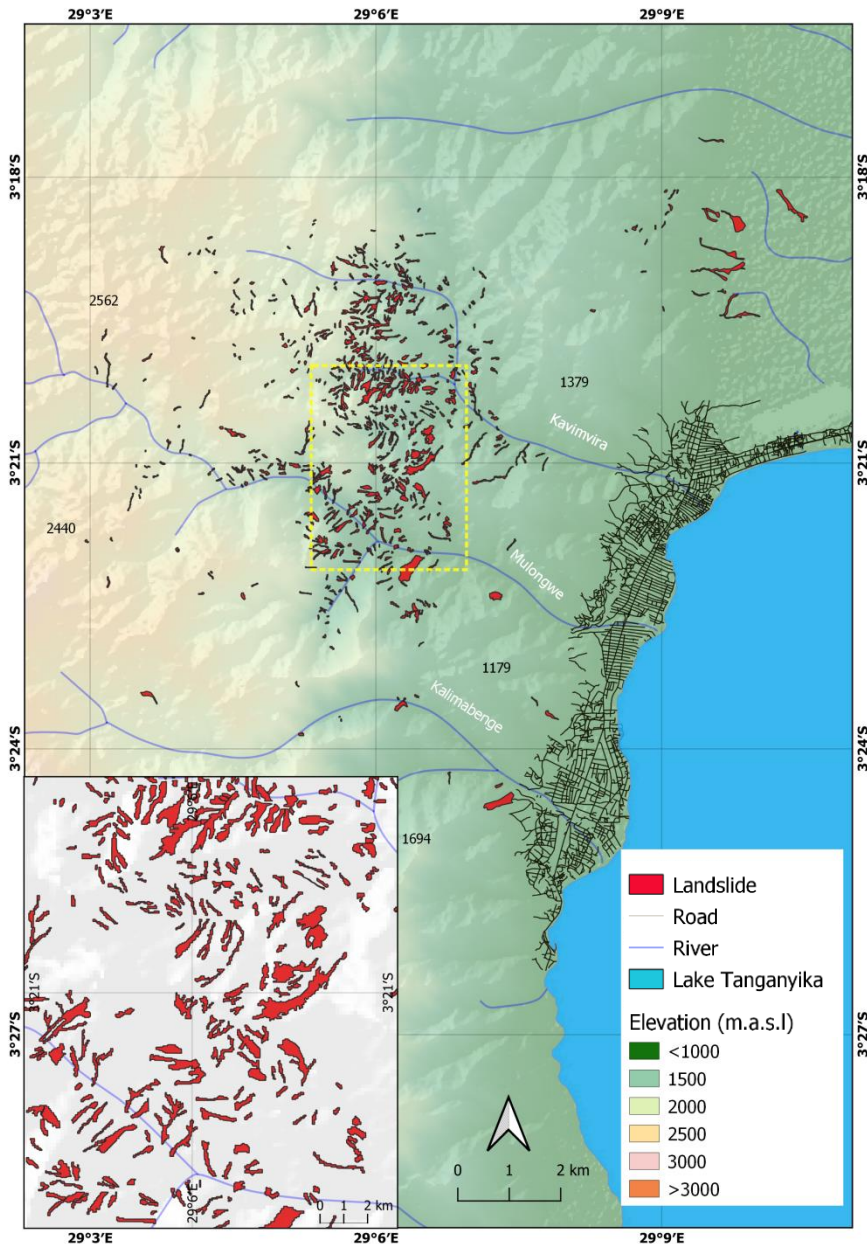
- ❖ Geodynamic context: rifting, seismicity, landscape rejuvenation and knickpoints
- ❖ Tropical environment with strong landslide drivers:
 - Occurrence of high-magnitude rainfall events
 - Deep weathering of the hillslope
- ❖ Hotspot of environmental change & uncontrolled deforestation
[Depicker et al., 2021. Nature Sustainability](#)
- ❖ High population densities and uncontrolled urbanization (increased exposure)



A profound landscape disturbance



An extreme landslide – flash flood compound event



[EGU22-4082](#) | [NH6.3](#) | [Axel Deijns et al.](#)

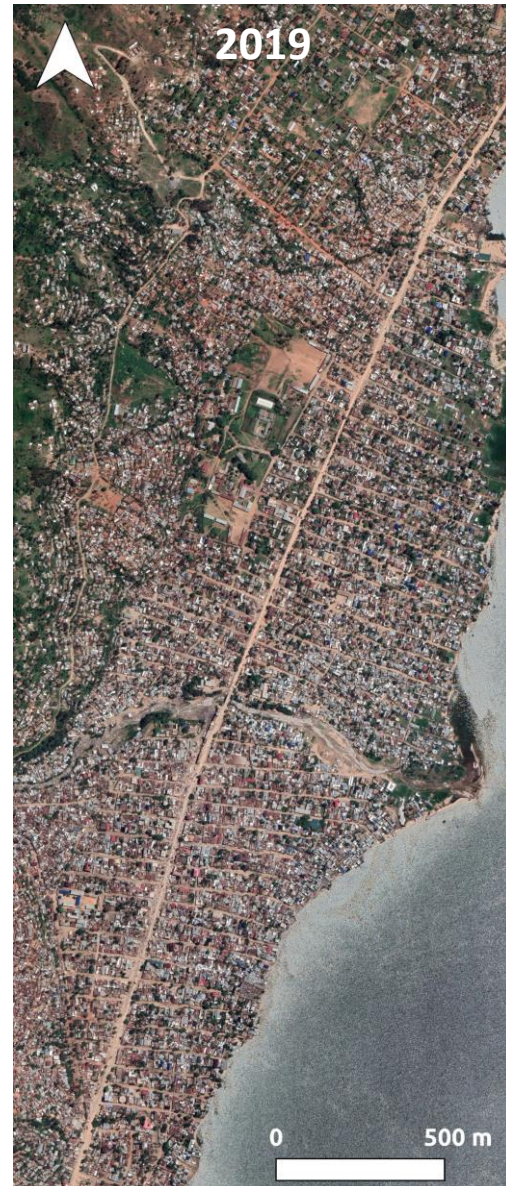
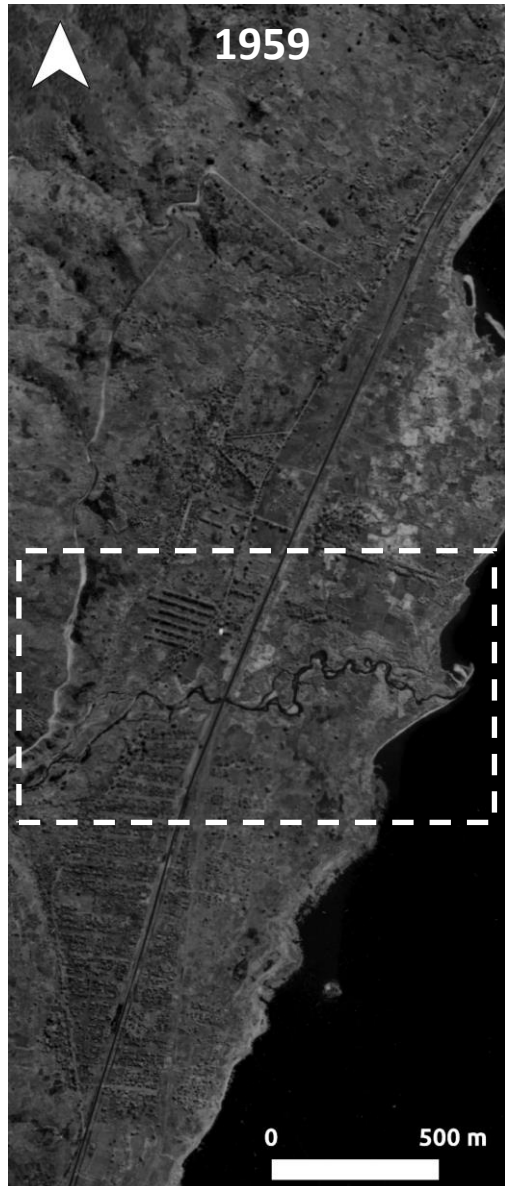
- No deforestation
- High and intense rainfall
- ~600 landslides
- High connectivity – sediment transfer to rivers



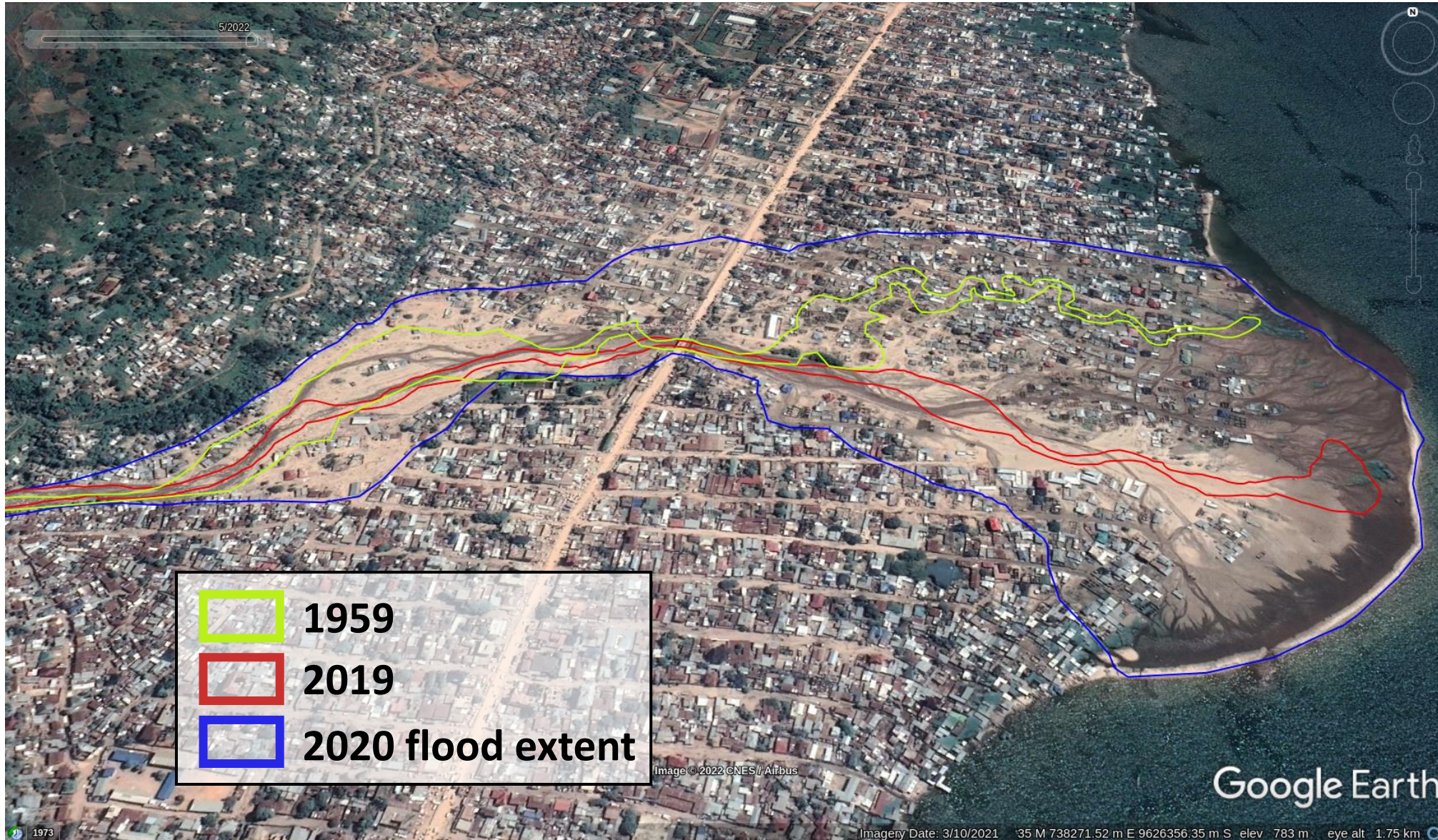
Uncontrolled urban growth and migrating rivers



Uncontrolled urban growth and migrating rivers



Uncontrolled urban growth and migrating rivers



- 43 fatalities
- > 5,000 damaged houses
- 70,000 homeless
- 280,000 without hydroelectric power



One year later...



One year later...

communications
earth & environment

COMMENT

<https://doi.org/10.1038/s43247-021-00332-2>

OPEN

Stop blaming the climate for
disasters

Emmanuel Raju^{1,2✉}, Emily Boyd³ & Friederike Otto⁴

Thank you!

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<https://georiska.africamuseum.be>

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