

Landslides in a changing environment

The Kivu Rift: 1958-2016



Depicker A., Jacobs L., Mboga N., Smets B., Van Rompaey A., Lennert M., Kervyn F., Michellier C., Dewitte O. & Govers G.

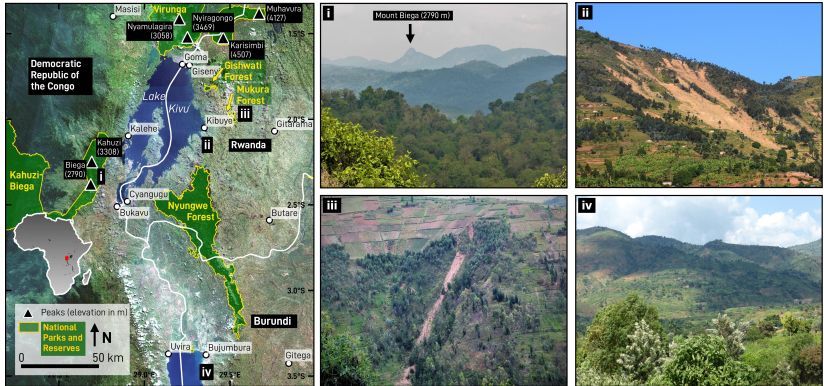
Faculty of Science

Department of Earth and Environmental Sciences

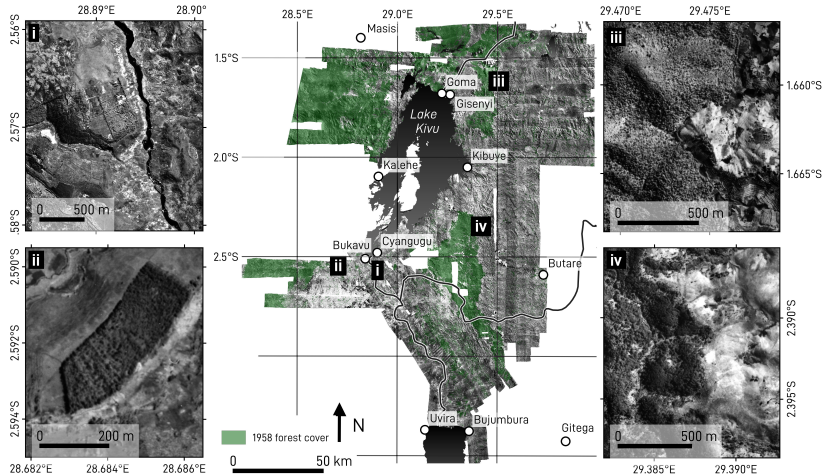
Division of Geography and Tourism

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The Kivu Rift



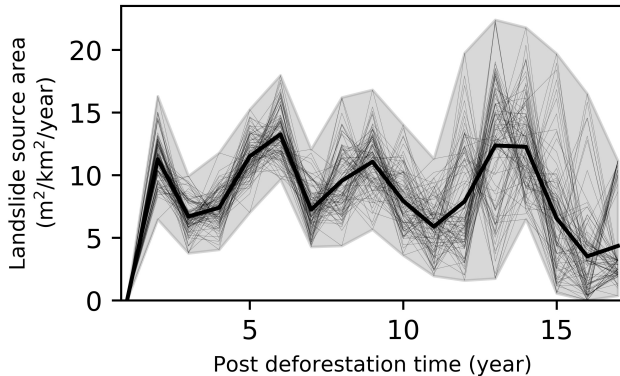
The Kivu Rift



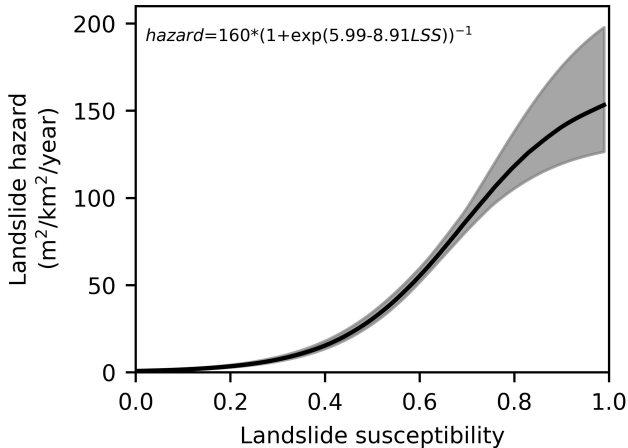
Reconstruct annual forest cover

- Deforestation/afforestation susceptibility
- Annual deforestation rate estimates

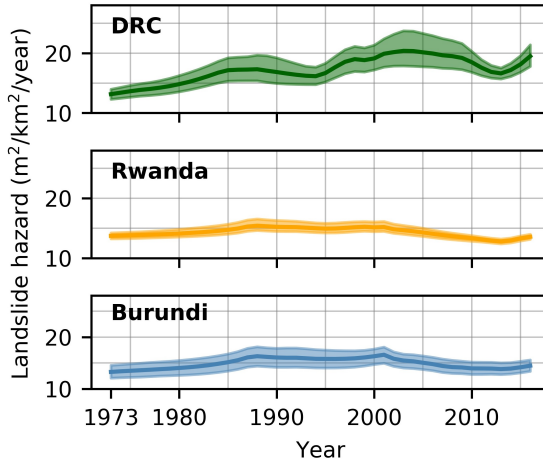
Link forest dynamics to landslide hazard



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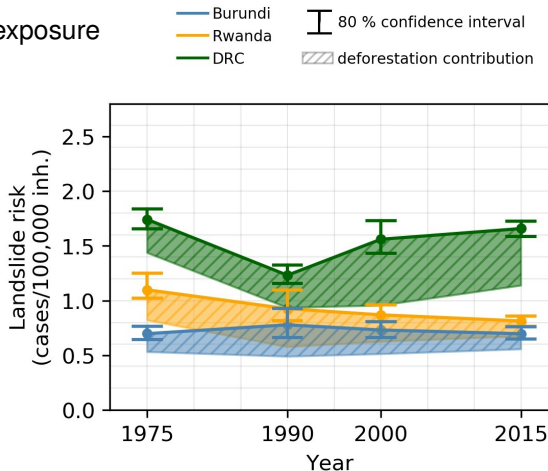
Link forest dynamics to landslide hazard



Landslide risk history

- Risk $\approx$ hazard $\times$ exposure

- Risk in DRC is overall higher than in Rwanda and Burundi



Why is risk highest in DRC?

- More deforestation → more hazard
- More exposure → more risk
 - migration and conflict?
 - unregulated mining activity and the associated urban sprawl?
 - ...

Questions?

