

South Africa's biggest climate change risks, and how a new set of climate change fact sheets can help us to prepare.

YOU ARE INVITED TO ATTEND A WEBINAR



Presented by:
Prof. Francois Engelbrecht
Director – Wits Global Change Institute and
Wits-Nedbank Chair in Climate Modelling
and

Dr. Mandy Barnett
Chief Director – Climate Change and Adaptation
Finance, South African National

Biodiversity Institute

DATE: Tuesday 30 September

TIME: 14:00-16:00



Link to register: [Click here](#)

In June 2025, flooding in the Mthatha area of the Eastern Cape claimed more than 100 lives. It was a grim reminder for South Africans, of the devastating flooding in Durban, KwaZulu-Natal on 11-12 April 2022, when 544 people tragically lost their lives. What was the role of climate change in these events? In this information session, Prof. Francois Engelbrecht of the Wits Global Change Institute, and holder of the Wits-Nedbank Chair in Climate modelling, will use the new science of 'climate change attribution' to answer this question. He will subsequently reveal what climate science has flagged as South Africa's four biggest climate change risks. These are likely to impact broadly, across all sectors of the South African economy, potentially affecting our very way of life.

How do we respond to these risks, and how do climate change risks differ across South Africa? To help answer these questions, Prof. Engelbrecht joined by Dr. Mandy Barnett, Chief Director of the unit leading climate change adaptation and finance in the South African Biodiversity Institute (SANBI), will introduce innovative 'climate change fact sheets', developed for all South African provinces and district municipalities.

These sub-national climate change fact sheets can be used to understand how climate change hazards such as extreme rainfall and oppressive temperatures will impact across South Africa in a warmer world. They are very unique in the South African context, offering high-resolution climate information at a district level, providing sub-national actors with accessible and credible science to guide their climate adaptation planning and implementation. More importantly, once contextualised in terms of the vulnerabilities and exposure unique to each Province and District Municipality, the fact sheets will be valuable for the climate change adaptation actions that South Africa urgently needs.

¹ Engelbrecht, F.A., Steinkopf, J., Chang, N. et al. Extreme event attribution using km-scale simulations reveals the pronounced role of climate change in the Durban floods. *Commun Earth Environ* 6, 506 (2025). <https://doi.org/10.1038/s43247-025-02460-5>

² Engelbrecht F.A., Maviza A., Steinkopf J., Vogel C., Von Maltitz G., Yose P. and Barnett M (2025). Sub-national climate-change fact sheets for South Africa. © South African National Biodiversity Institute (SANBI) and University of the Witwatersrand – Global Change Institute (WITS-GCI). DOI: <https://doi.org/10.5281/zenodo.16962181>.