



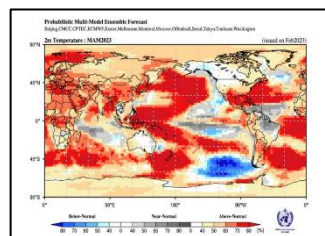
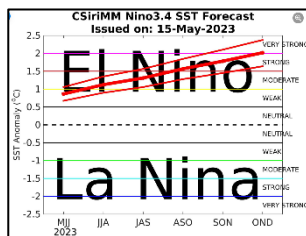
The Extreme Climate Events Research Alliance invites you to attend:

El Niño 2023 Summit

Monday, 19 June 2023

Department of Geography, Geoinformatics and Meteorology,
The University of Pretoria

10:00 to 16:00



The strongest seasonally varying ocean-atmosphere signal known is the El Niño Southern Oscillation (ENSO) signal (also known as the El Niño and La Niña). These are names given to a particular state of the ocean-atmospheric configuration in the Pacific Ocean region at various thresholds in a continuously oscillating system. When the system reaches certain thresholds, we may declare that the system is in an El Niño, La Niña or a neutral state along a gradient from strong to weak. The extreme state of this system is known to impact global weather. The seasonal climate in southern Africa responds to this signal with generally warmer and drier conditions associated with the El Niño state, as well as cooler and wetter conditions in the La Niña state. El Niños have, in the past, been associated with record heat and droughts in the summer rainfall region, while La Niñas have been associated with flooding.

Researchers in South Africa and around the globe have indicated that the regular monitoring of the ENSO system suggests that a strong El Niño is currently developing in 2023. This is the first such event (following three years of a La Niña phase) since the 2018/19 and 2015/16 events, which had a serious impact on our country with significant droughts in various summer rainfall locations. This comes on top of reports of unprecedented global sea surface temperatures and continuously rising average atmospheric temperatures. Should this El Niño manifest as projected, we should expect that this will have significant impact on the coming summer climate and weather in southern Africa.

We have called this meeting to share information with affected sectors, businesses, government departments and any stakeholders who seek to understand the basics of the climate predictions, as well as to consider how this may impact them. We aim to raise awareness of the pending climate anomaly and start the process of gathering information and information requirements in anticipation of its possible impact across the country. This will be followed up with further briefings as we learn more when we approach the summer rainfall season. We will invite a selected number of experts to present some information and we will allow for some discussion, questions and answers. This may lead to a follow up event depending on how the predicted El Niño will develop. The questions we will address, along with those from the delegates, include:

- What is the likelihood of this El Nino manifesting?
- When and where could we see impacts?
- How severe could the event be and how could the impacts manifest?
- How would various sectors be affected?
- What plans are in place to deal with this and potential resulting emergencies?
- What economic impacts could we anticipate?
- How may this event impact agriculture and food security?
- What does the future look like in terms of ENSO?

A follow up meeting will be organised to assess the development of this climate event. Attendance of this event is free. To participate, please register [here](#).

For further information, please contact Dr Neville Sweijd:

Director, Alliance for Collaboration on Climate and Earth Systems Science (ACCESS)

 The Council for Scientific and Industrial Research

Email: nsweijd@access.ac.za

Presenters and experts:

Prof. Serena Coetzee, University of Pretoria (UP), Head of Department (HOD) – host

Mr Ishaam Abader, South African Weather Services (SAWS), Chief Executive Officer (CEO) – co-host

Dr Neville Sweijd, ACCESS/ECERA/CSIR – convener

Prof. Willem Landman, UP

Dr Johan Malherbe, Agricultural Research Council

Dr Mokhele Moeletsi, Agricultural Research Council

Dr Christien Engelbrecht, SAWS

Dr Katlego Ncongwane, SAWS

Dr Peter Johnston, University of Cape Town

Mr Dechlan Pillay, National Disaster Management Center

Draft agenda

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| 09:30 | Welcome from UP | HOD Prof. Serena Coetzee |
| | Welcome from SAWS | CEO Mr Ishaam Abader |
| 09:40 | Introduction of experts Introducing ECERA, Extreme Climate Events and the purpose of this workshop | Dr Neville Sweijd |
| 10:00 | What is ENSO, El Niño, La Niña and other important climate phenomena? Question and answer (Q&A) | Prof. Willem Landman |
| 10h30 | The history of ENSO in southern Africa – with regards to impacts on temperature and rainfall Q&A | Drs Johan Malherbe, Mokhele Moeletsi and Christien Engelbrecht |
| 11:00 | Tea break | |
| 11:30 | Panel discussion on the 2015/16 El Nino impacts <ul style="list-style-type: none"> • Description of the event (where and when) • Impacts on agriculture • Impacts on human health • Impact on water supply • Disaster response Q&A | Chair: Dr Katlego Ncongwane. Panelists: Dr Peter Johnston, Dr Johan Malherbe, Dr Mokhele Moeletsi, Dr Christien Engelbrecht, Mr Dechlan Pillay and Dr Neville Sweijd |
| 12:30 | Lunch | |
| 13:15 | El Nino 2023 – what do we know? What do we mean by “likelihood”? What can we say about the future of ENSO? Q&A | Prof. Willem Landman |
| 13:45 | The National Disaster Management Center planning | Mr Dechlan Pillay |
| 14:00 | Interaction with participants: <ul style="list-style-type: none"> • Planning for the summer 2023 • Where to get information? • What are participants’ concerns? • What would you like to know specifically? • What should you do? | Facilitated by Dr Neville Sweijd |
| 15:00 | Meeting closes with coffee | |

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