Eligibility

Faculties/Scientists, Research Fellows, Research Scholars and PG Students of the ICAR institutes/SAUs/CAUs/Agricultural faculty of AMU, BHU, Vishwa Bharti, Deemed to be universities offering Postgraduate studies in Agriculture and Nagaland University are eligible for participation. All the applications must be routed through the proper channel. The total number of participants will be 25 only.

Prerequisite

All participants should bring a laptop with Linux or Unix based operating system or Linux installed as a subsystem in Windows OS.

Registration

No registration fee

Travel, Boarding and lodging

The accommodation and travel expenses should be met by the selected participants.
The accommodation will be arranged based on the request in the University Guest houses / Hostel Guest room on payment basis. Food (Breakfast, Lunch and Dinner), refreshment and intersession tea will be provided by the host institute.

How to apply

Interested candidates can apply for this workshop through the google form link (Click here)

Important Dates

- Last date for receipt of application : **10 June 2025**
- Confirmation of participation : **12 June 2025**
- Intimation of selection to the participants : **14 June 2025**

For Correspondence, please contact

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DEPARTMENT OF SCIENCE & TECHNOLOGY

DST-NMSKCC Sponsored

National Level Workshop on

ADVANCES IN CLIMATE DATA ANALYSIS

(23.06.2025 - 27.06.2025)

Organized by

DST-NMSKCC-Centre of Excellence on
Climate and Disaster Resilient Agriculture
Agro Climate Research Centre
Directorate of Crop Management
Tamil Nadu Agricultural University
Coimbatore - 641 003

DST-NMSKCC Sponsored
National Level Workshop on

ADVANCES IN CLIMATE DATA ANALYSIS

Background

Climate change poses a significant challenge to global agriculture, threatening food security, crop productivity and the sustainability of farming systems. In India, where agriculture plays a key role in the national economy and supports the livelihoods of millions, the ability to understand climate patterns and apply climate data in practical ways is essential. Agriculture is directly impact by climate change as rising temperatures, shifting rainfall patterns and more frequent extreme weather events are affecting crop yields soil health and water resources. These challenges demand a paradigm shift in how agricultural systems are monitored, planned and managed. Central to this transformation is the ability to harness historical, real-time and future climate data, which empowers researchers, practitioners and policymakers to implement evidence-based strategies that enhance resilience, increase productivity and drive sustainable agricultural development.

Climate data analysis has rapidly evolved over the past decade, driven by advances in climate modelling, artificial intelligence, big data analytics and remote sensing technologies. Advancements in climate data analysis now provide opportunities to mitigate these risks, improve planning, and optimize resource use. This workshop provides a dynamic platform to explore how innovation in climate data analysis are shaping the future of agriculture. Students and researchers in agricultural sciences will gain significant insights from modern climate data analysis methods.

The workshop will introduce participants to various data sources, including satellite observations, reanalysis datasets, and outputs from climate models. Attendees will gain practical experience using open-source tools for climate data processing and visualization. A key goal of the workshop is to foster collaboration between agricultural scientists and climate data experts that is essential for translating scientific insights into actionable strategies for farmers and policymakers

Workshop objectives

Climate change is disrupting agriculture through unpredictable weather and rising risks. It is a critical global issue that requires targeted efforts to analyze climate data to support informed decision-making in agriculture policy and resource management. Modern innovations in climate data analysis are opening new pathways for smarter agricultural planning and risk management. This workshop serves as a platform to explore these innovations and build the skills needed to apply them in real-world agricultural contexts.

The workshop objectives are

1) To build technical capacity in climate data analysis among students and researchers by introducing modern tools, state-of –the-art techniques and dataset relevant to agriculture;
2) To demonstrate practical applications of climate data in agricultural decision-making

Course Content

Types and sources of climate data: observational, satellite, and model-based. Accessing various climate data sources. Introduction to open-source tools: CDO, NCO, GrADS, Python, and R for climate data analysis. Hands-on session on analysis of various weather parameters and agroclimate indices.

About DST-NMSKCC - CoE on CDRA

The Centre of Excellence on Climate and Disaster Resilient Agriculture (CDRA), under the National Mission on Strategic Knowledge for Climate Change (NMSKCC), CEST division, DST, GoI, New Delhi is in operation at the Agro Climate Research Centre. The aim of the centre is to develop appropriate adaptation measures that enhance the adaptive capacity of agriculture and build resilience to a changing climate.

About ACRC-TNAU

Tamil Nadu Agricultural University (TNAU) is a leading agro-technology provider in India and its graduates are recognized globally. The Agro Climate Research Centre (ACRC) conducts research on weather and climate in relation to agriculture and allied sectors. ACRC provides a customised automated Agromet Advisory Service (AAS) based on location-specific weather forecasts for Tamil Nadu to help reduce the impact of weather variability on farming. The centre as conducted a serious of workshop, training, winter school and conference related to in the field of climate and crop modeling and data analysis.

Duration and Venue

5 days (23.06.2025-27.06.2025)

DST-Centre of Excellence on Climate and Disaster Resilient Agriculture,
Agro Climate Research Centre, Tamil Nadu Agricultural University ,
Coimbatore - 641 003.

DEPARTMENT OF
SCIENCE & TECHNOLOGY

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NOMINATION FORM

TRAINING PROGRAMME, DATE OF TRAINING & INSTITUTE	**DST-NMSKCC Sponsored National Level workshop on ADVANCES IN CLIMATE DATA ANALYSIS" (23.06.2025 - 27.06.2025)**		
NAME (Prof./Dr./Mr./Ms.) :			
DESIGNATION:			
ORGANISATION:			
DATE OF BIRTH :		**GENDER (M/F) :**	
COMPLETE ADDRESS / CONTACT NUMBERS / E-MAIL			

Signature of the Candidate

(Signature of the Higher Authority)
Name & Designation with Seal