INTERNATIONAL CONFERENCE ON

INTEGRATED RESPONSES TO THE INTENSIFICATION OF EXTREME CLIMATE AND WEATHER EVENTS IN DEVELOPING ECONOMIES

22-24 MAY, 2024 STELLENBOSCH, SOUTH AFRICA

ORGANISED BY



Centre for Science and Technology of the Non -Aligned and Other Developing Countries



Alliance for Collaboration on Climate & Earth Systems Science



Scientific Committee on Problems of the Environment



School for Climate Studies, University of Stellenbosch

About the Conference

The year 2023 has been the warmest year on record globally experienced by the human civilization, with high temperatures recorded over the land surface and in the ocean surface water. This is a trend which, as noted by the IPCC AR6 Report published in 2023, has resulted in Extreme Climate Events (ECEs) intensifying in terms of frequency, magnitude and impact. Some significant and unprecedented extreme weather events and their consequences have recently made news headlines, including floods in Pakistan, Nigeria, Libya and South Africa; heat waves in India; wildfires in Europe and the USA, along with many other associated disasters worldwide. Increasing trends in the range of climate and weather variability such as seasonal maxima and minima, and onset and duration of seasons and seasonal phenomena are strong indications of climate change. It is, however, ECEs which are in the frontline of climate change impacts. They are now occurring at the time and spatial scales that are directly affecting the lives and livelihoods of people.

For this reason, the ECEs are becoming a focal point of climate change adaptation and this reality is driving a need for policies, strategies and tactics for its mitigation. Developing countries, whose citizens, infrastructure, social and governance systems are relatively more vulnerable to these effects are suffering more and are having more long-lasting impacts due to extreme weather events.

The initial impacts of climate change should receive an urgent attention, as it is almost certain for these events to have lasting and multi-faceted impacts on societies, both as individual events and as compounded disasters. Technically, it is important to be able to predict the likelihood of extreme climate events (such as extreme rainfall, high wind conditions, sea level rise, heat waves etc.) that can lead to such disasters (such as droughts, floods, fires and health impacts and storm surges), at shorter and longer time scales. From a policy perspective, it is important to develop and implement systems designed to reduce the impacts of these disasters at the appropriate time and space scales. From the perspective of loss and damage, it is vital that the evidence of the social and economic impacts of ECEs is collected for public/ private sectors and civil societies to facilitate investments for enhancing adaptation to these types of climate risks and to estimate the compensatory funding. A collective national and international action are also required in order to understand, predict, respond, and recover from ECEs, particularly in less-developed countries and emerging economies.

To initiate collaboration on developing appropriate systems to deal with and respond to extreme climate events, the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi in collaboration with the School for Climate Studies, University of Stellenbosch (SU), South Africa; Alliance for Collaboration on Climate and Earth Systems Science (ACCESS), South Africa; and the Science Scientific Committee on Problems of the Environment (SCOPE), the Netherlands, announces the organization of three days comprehensive International Conference on "Integrated Responses to the Intensification of Extreme Climate and Weather Events in Developing Economies" during 22-24 May, 2024 in Stellenbosch, South Africa.

The Conference will be hosted by ACCESS, South Africa in collaboration with the Stellenbosch Institute for Advanced Study (STIAS), Stellenbosch, South Africa.

Aim

The main aim of the Conference is to share knowledge and experience in anticipating and adapting to the risks posed by the ECEs and to identify the common policy approaches and actionable implementation plans for predicting, preparing, responding and recovering from the extreme climate events.

Topics to be Covered

The following topics will be covered during the Conference:

- Research on the Climate Dynamics and Associated Natural Disasters Resulting from ECEs
- Science of Prediction for Early Warning of ECEs and their likely Impacts
- Categorization of Associated Time and Space Scales of various ECEs
- Governance and Adaptive Management Strategies to Anticipate the Impacts of ECEs
- Real-time Management of ECEs and their Impacts
- Policy and Practices to Recover from ECEs
- Best Practices for Handling ECEs
- Case Studies

Important Dates

Activity	Dates
Date of Conference	May 22-24, 2024
Beginning of Registration (along with submission of extended abstract of the paper)	March 22, 2024
Deadline for Submission of Applications	April 19, 2024
Deadline for Submission of Full Papers	April 30, 2024

Target Participants

Researchers, natural and social scientists, climate and weather experts, disaster mitigation agencies, government officials and policymakers, representatives from industry and non-government organizations, research and academic organizations who are engaged in the field of atmospheric sciences, meteorology and related areas are invited to participate in the Conference.

The Conference will allow participants to initiate collaboration on developing appropriate systems to deal with and respond to extreme climate events as well as provide opportunities for interaction and global networking.

^{*}English will be the official language for the Conference.

Thematic Structure

Session	Descriptor	Format
21 May, 2024 Evening	Opening Ceremony	Welcome Cocktails
22 May, 2024 Climate Science (CS)	CS-1 Trends in Climate & Climate Drivers and Configurations Pertaining to the Generation of ECEs	Keynote Speaker(s) Delegate Presentations Roundtable and Panel Discussion
	CS-2 Observations and Modeling Systems for Forecasting and Predicting ECEs at Various Time Scales	Keynote Speaker(s) Delegate Presentations Roundtable and Panel Discussion
23 May, 2024 Risks, Impact and Vulnerability (RIV)	RIV-1 Typologies of ECEs, Case Studies and Learnings	Keynote Speaker(s) Delegate Presentations Roundtable and Panel Discussion
	RIV-2 Assessment and Adaptation to ECEs – Risk, Impact and Vulnerability Systems, Methods and Research	Keynote Speaker(s) Delegate Presentations Roundtable and Panel Discussion
24 May, 2024 Response and Policy Initiatives (RP)	RP-1 Policies and Strategies for ECEs Management	Keynote Speaker(s) Delegate Presentations. Roundtable and Panel Discussion
	Roundtable Discussion	Panel Discussion Resolution Session Planning for a Global Action Network Involving Member States from NAM Member and Other Developing Countries

About the Organizers

NAM S&T CENTRE

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre; www.namstct.org) is an Inter-Governmental Organisation with a Membership of 47 countries spread over Asia, Africa, Middle East and Latin America. The Centre was set-up in 1989 in New Delhi, based on decisions taken during various NAM Summits and mandated to undertake a variety of programmes, including organization of international workshops, symposiums, training courses and implementation of collaborative projects. It also offers short-term Research Fellowships to scientists from developing countries in association with the Centres of Excellence in various countries. The Centre also brings out technical books, monographs and other scientific publications in different S&T subjects of interest to developing countries. The Centre's activities provide opportunity for scientist-to-scientist contact and interactions; familiarizing participants on the latest developments and techniques in the subject areas; identification of the requirements of training and expert assistance; locating technologies for transfer between the Members and other developing countries, and dissemination of S&T information etc. In addition, the Centre encourages Academic-R&D-Industry interactions in the developing countries through its "NAM S&T-Industry Network".

SCIENTIFIC COMMITTEE ON PROBLEMS OF THE ENVIRONMENT (SCOPE), THE NETHERLANDS

SCOPE is an international multidisciplinary non-profit non-governmental organization based in the Netherlands. The objective of the SCOPE is to serve as a source of advice with respect to emerging, ecological and environmental issues, seeking to advance knowledge of the influence of humans on the environment, as well as the effects of these environmental changes upon mankind, its health and well-being. In order to reach that goal, the activities of SCOPE include advance and facilitate studies of fundamental environmental processes, develop collaborative programmes among Scientific Unions, National Members and Scientific Committees and other appropriate organizations including those concerned with the social sciences and the biological aspects of the medical sciences and promote education and understanding of the environmental issues. SCOPE is an affiliated member of the International Science Council (ISC).

SCHOOL FOR CLIMATE STUDIES, THE UNIVERSITY OF STELLENBOSCH, SOUTH AFRICA

The School for Climate Studies is a world-class academic faculty of Stellenbosch University, conducting interdisciplinary and trans-disciplinary climate-related research in and for Africa. The School engages in the following activities: Research and development - Developing and implementing an Africa-relevant research programme that responds to existing and emerging issues in climate change impacts, adaptation and mitigation responses, thus supporting human climate resilience. Consolidating and integrating current disciplinary and trans-disciplinary thinking on climate, conduct and coordinate primary research, publish and make accessible research results, and create or support the required platforms for data-intensive research and innovation; collaboration and capacity building - facilitating, strengthening and expanding climate related multi- and inter-disciplinary collaborations at Stellenbosch University, and establishing new strategic partnerships and collaborations in regionally and internationally; developing new academic capacity, career paths and infrastructure for climate studies, creating opportunities for students to gain work experience in leading national and international public and private entities engaged in fundamental and applied climate studies; facilitating and developing curricula, sharing climate training and learning expertise across multiple faculties at SU through undergraduate and postgraduate modules, and coordinating internal and external

climate training through workshops, short courses, training events, and congresses; commercialization and social impact by offering consultancy services and climate expertise to SU divisions and partners, as well as to industry and other private & public organizations.

ALLIANCE FOR COLLABORATION ON CLIMATE AND EARTH SYSTEMS SCIENCE (ACCESS), SOUTH AFRICA

The Alliance for Collaboration on Climate and Earth Systems Science, or ACCESS programme, is an instrument of the Global Change Programme of the South African Department of Science and Innovation (DSI) and the National Research Foundation. It is hosted by the Council for Scientific and Industrial Research (CSIR), South Africa. The main purpose of the programme is to provide a platform for multi-institutional and trans-disciplinary research on the drivers, mechanisms of manifestation, impacts and applications and responses to the dynamics of earth systems, as they affect the natural world, ecosystem services and human society. ACCESS also organizes training programmes for emerging researchers and students who are interested in the future of our planet and society. ACCESS is the caretaker host of the Extreme Climate Events Research Alliance (ECERA) which is being developed to help guide research in this area.

Submission of Applications

Scientists and experts from NAM S&T Member Countries and other developing countries, except those from South Africa, desirous of participating in the Conference may submit their application electronically to the Director General, NAM S&T Centre, New Delhi at nameteentre@gmail.com as early as possible but latest by April 19, 2024.

However, interested applicants from South Africa should submit their requests directly to Dr. Neville Sweijd, Director: Alliance for Collaboration on Climate & Earth Systems Science (ACCESS), CSIR, Lower Hope Road, Rosebank, 770, Cape Town, South Africa at nsweijd@access.ac.za.

The following documents must be submitted as e-mail attachments:

- a) Filled in Application Form (enclosed along with the announcement brochure).
- b) A Write-up (a short paragraph) on what qualifies the applicant to attend the Conference.
- c) A Short Biography (to be written in third person) highlighting the current engagement, area of expertise, major achievements, academic qualification and professional experience as succinctly as possible.
- d) An Abstract (about 250-300 words, in MS-Word document) of the Paper that is proposed to be presented by the applicant at the Conference.
- e) A Copy of the relevant pages of valid Passport.

Note: The documents (b), (c) and (d) above must be in MS-WORD FORMAT only; PDF or image files will not be accepted. Hard copies of the Application Form and the above attachments are **NOT REQUIRED** to be submitted.

Presentation of Papers

Participants are expected to present a Country Status Report and/or a research/scientific paper on any of the themes appropriate to the Conference.

Publication of Papers

A publication edited by one or more international experts and based on the papers presented by the participants during the Conference and also containing papers contributed by other eminent experts in the field will be brought out in the form of a book or a Special Issue of an appropriate Scientific Journal. Therefore, all participants are requested to submit the manuscripts of their full papers in **MS-Word** only and well in advance, but latest by **April 30, 2024.** A copy of the guidelines for authors is also **attached**. The book/journal will be published by a reputed international publishing house.

Selection of Applicants

Selection of applicants will be made based on their academic and professional backgrounds and the abstract submitted along with the application. Successful applicants will be electronically informed about their selection and other important details.

Other details and terms and conditions of participation will be given to the individual candidates on receipt of their applications.

Local Hospitality and Travel

Local hospitality in Stellenbosch, South Africa including accommodation, meals and local transport for the foreign participants sponsored by the NAM S&T Centre will be provided from **21 May 2024 [Noon] - 25 May 2024 [Noon]** (i.e. from one day before the commencement to one day after the completion of the Conference). The participants are requested to book their flights accordingly; otherwise, they will have to make their own arrangements to stay beyond these indicated dates.

Financial Arrangements for Travel

The financial terms and arrangements for international travel of foreign participants will be conveyed to individual applicants on receipt of their application form along with other required documents.

Entry Formalities and Immigration

Participants of the Conference must be in possession of a current passport or any other internationally recognized travel document, which must have a **period of validity of at least six months beyond the period of stay in South Africa** and must be endorsed for travel to South Africa.

Participants should have a valid visa for entry into South Africa. The South African diplomatic mission located in the country of the participant should be approached for obtaining an entry visa. For a large number of countries, however, online visa application is required. The organizers will facilitate the issuance of visa by providing the participants with an official letter of invitation, if needed.

- *Note: The government/institution of the selected participants will be required to bear the following costs:
 - All expenses in the home country incidental to travel abroad, including expenditure for passports, required medical examinations, vaccinations and miscellaneous expenses such as internal travel to the airport of departure in the home country.
 - Salary and other related allowances for the participants during the period of the Conference.

• Cost of medical insurance to cover the period of participation in the Conference.

The organizers of this Conference will not assume responsibility for the following expenditure in connection with the participant's attendance in the Conference:

- Expenses incurred with respect to any insurance, medical bills or hospitalization fees.
- Compensation in the event of death, disability or illness of participant.
- Loss of personal belongings or compensation for damage caused to them by climatic or other conditions.
- Other costs, including visa fee, airport taxes and excess baggage fee, etc.

Other Useful Information

- The temperature in Stellenbosch during the Conference period would be around 21°C, with evenings being pleasant and cold at around 10°C.
- South African Standard Time is +02 hours ahead of GMT.
- The South African Currency is Rand (ZAR); the current exchange rate of USD 1\$ = ~18.80 ZAR.

Secretariat and Enquires

NAM S&T CENTRE, NEW DELHI

Dr. Amitava Bandopadhyay,

Director General,

Centre for Science and Technology of the Non-Aligned and other Developing

Countries (NAM S&T Centre),

Core-6A, 2nd Floor, India Habitat Centre, Lodhi Road, New Delhi–110003, India

Tel: +91-11-24645134, 24644974 Email: namstcentre@gmail.com Website: https://www.namstct.org

ACCESS, SOUTH AFRICA

Dr. Neville Sweijd,

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

CSIR, Lower Hope Road, Rosebank, 770, Cape Town, South Africa

Email: nsweijd@access.ac.za

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APPLICATION FORM

PLEASE TYPE OR USE BLOCK CAPITALS (NO COLUMN SHOULD BE LEFT BLANK)

PHOTO

SECTION-A

(To be	e filled in by the Applicant)	
1	First Name (Prof. /Dr. /Mr. /Mrs. /Ms.): Middle Name: Last Name:	
2	Designation (Position held):	
3	Nationality:	
4	Date of Birth:	
	Place of Birth (City)(Country)	
5	Name of the Parent Institution (Employer): Full Address (Office):	
	Phone: Fax: E-mail:	
6	Full Address (Home):	
	Phone: Mobile:	
	Fax: E-mail:	
7	Educational Qualifications: Highest Degree. Year of Award:	

	Field of Study:
8	Short Biography:
9	Extended Abstract of Paper proposed to be presented at the Workshop (Maximum 250-300 Words, in MS Word; to be attached)
10	A Write-up on what qualifies you to attend the Workshop
	Date: Signature:
SECT	TION-B
END	ORSEMENT BY THE NOMINATING AUTHORITY
endor extend	Applicant in a Member Country of the NAM S&T Centre must get the Application Formsed by the Focal Point of the Centre in his/her country, if he/she wishes to take advantages ded to the official nominee of the country. For the list of Member Countries and names, sees of the Focal Points please visit the Centre's official website; www.namstct.org .)
Signa	ture:
Name	(in full):
Desig	nation:
Date:	

SEAL

Enclosures:

- A Write-up (a short paragraph) on what qualifies the applicant to attend the Conference.
- A Short Biography (to be written in third person) highlighting the current engagement, area of expertise, major achievements, academic qualification and professional experience as succinctly as possible.
- An Abstract (about 250-300 words, in MS-Word document) of the Paper that is proposed to be presented by the applicant at the Conference.
