

2nd International Workshop
On
**Extreme Severe Storms
and Disaster Mitigation
Strategies**

February 27-29, 2020

Funded by



Disaster Prevention Research Institute
(DPRI)-Kyoto University (KU), Japan



JOINTLY ORGANIZED BY

**Department of Atmospheric Science
School of Earth Sciences
Central University of Rajasthan, INDIA
and
International Consortium for Earth and
Development Sciences (ICEDS), Kagawa
University, JAPAN**

Chief Patron

Prof. Arun K. Pujari
(Vice Chancellor, CURAJ)

Patron

Prof. Neeraj Gupta (Dean Academics)
Prof. M. D. Shrimali (Dean Research)

Chairperson

Prof. Someshwar Das (Chair)
Dr. L. K. Sharma (Co-Chair)

Convener

Dr. Subrat Kumar Panda, CURAJ

International Organizing Committee

Prof. Toru Terao, Kagawa University, Japan
Prof. Hirohiko Ishikawa, DRPI, Japan

Local Organizing Committee

Prof. Someshwar Das, CURAJ
Prof. Rajesh Kumar, CURAJ
Dr. Devesh Sharma, CURAJ
Dr. Subrat Kumar Panda, CURAJ
Dr. Garima Kaushik, CURAJ
Dr. Alok Kumar, CURAJ
Dr. Ritu Singh
Dr. Chinmay Malik, CURAJ
Dr. Jayanti Pal, CURAJ
Dr. Shailesh Patidar



19 persons were killed and 48 injured due to dust storm and lightning in various parts of Uttar Pradesh, India on 5-7 June 2019.



Worst monsoon in 25 years kills 148 across India, floods ravage in Bihar and Uttar Pradesh, India during Southwest monsoon in 2019.



About the University

The Central University of Rajasthan (CURAJ) was established by an Act of Parliament as a Central University in 2009. There are 10+ central universities established around the same time, mostly one in each state. In order to meet the challenges of the knowledge era and to keep pace with the knowledge explosion in higher education, the CURAJ is committed to inculcate and sustain quality in all the dimensions of higher education viz. teaching, learning, research, extension and governance while catering to the regional and global needs. Uniquely, all the programs are so designed to develop CURAJ as a centre for generation of knowledge, enhancement of employability and most importantly as a breeding ground of ideas and techniques for sustainable development.

About the School of Earth Sciences

The School of Earth Sciences is committed to provide interdisciplinary knowledge in the field of Earth Sciences and their linkage with societal development. Presently it has 2 departments (Atmospheric & Environmental science). The prime goal of the school is to train manpower with scientific knowledge and technical skills in the field of earth sciences to serve local and global communities.

About the Department of Atmospheric Science:

The Department of Atmospheric Science, was established in 2016 under the School of Earth Sciences. The Department offers MSc and Ph.D. programmes in Atmospheric Science. The objective of the MSc programme is to promote strong interdisciplinary research and application capabilities in the area of atmospheric and climate science.

The training encompasses numerical modelling of atmosphere and ocean, monsoon studies, high impact severe weather forecasting, air pollution, land-air-sea interaction, and climate change to understand its physical and social consequences.

About the Workshop:

Over the South Himalayan range, many severe atmospheric mega-disasters occur due to extreme

rainstorm events. In June 2013, severe rainstorm (also known as cloudburst) caused more than 4000 death because of flooding and landslides in Uttarakhand Himalayan region near the Kedarnath shrine in India. On 31st March 2019, Nepal witnessed the 1st Tornado in its recorded history that killed 30 and injured more than 1150 people. Many such events occur annually over the Himalayan region, where the terrain is complex, economy is poorly developed and fragile. Such atmospheric mega-disasters in this region are expected to increase in number rapidly due to global warming. The economic development in South Asian countries on the other hand results in the unplanned human intervention in nature, rising disaster vulnerabilities in these areas.

There is an urgent need to facilitate implementation of early warning system in different time scales for the South Himalayan severe rainstorm disasters. Extreme rainfall events are now catching new interests of wide research communities in South Asia. We are making an attempt, to foster international linkage and collaboration in this field among interdisciplinary researchers, which will emit an agenda for the implementation of early warning system of severe rain storm disaster in South Himalayan region.

In this context, the 1st international workshop was organized at Central University of Rajasthan (CURAJ) during December 2018 in collaboration with the Disaster Prevention Research Institute (DPRI), Kyoto University, and International Consortium for Earth and Development Sciences (ICEDS), Kagawa University, Japan. The 2nd international workshop on this subject is being organised at CURAJ during 27-29 February 2020. The objective of this workshop is to foster research ideas for modeling, process studies, rainfall retrievals through in-situ observation, Satellites & Radars, and development of early warning system for severe storms through collaboration with the affected countries.

Recently, a new mega project on Asian precipitation experiment (**AsiaPEX**) under GEWEX framework has

been launched in Aug 2019, which is a follow up of the MAHASRI.

It aims understanding of Asian land precipitation and its application, focused on mountain precipitation and extreme weather. India has launched an integrated Himalayan Meteorology programme for west, central and eastern Himalayas. Japanese researchers have continued a strong observational activity over the North-eastern Indian region. It is proposed to integrate all these observation and modeling efforts under the **AsiaPEX/ South Asia (SA)**. We will discuss our collaborative activity regarding these research frameworks as well. Participation in the workshop is by invitation only.

How to reach CURAJ

The University is located at Bandarsindri (~20 km from Kishangarh town) on the Jaipur-Ajmer highway. The nearest railway stations are Kishangarh (25 km), Ajmer (50 km) and Jaipur (80 km). The nearest airport is at Kishangarh, which is connected to Delhi by a direct flight.

Weather

Weather is generally cold in the month of February and March in CURAJ. Average minimum and maximum temperatures are in the range of 9-12° C and 23-26° C respectively. Days are warm, but nights are cold. Average rainfall is about 2-3 mm.

Contact Details

All the related correspondence should be sent to: essdms@curaj.ac.in

