

International Workshop  
On

"Extreme Severe  
Storms and Disaster  
Mitigation Strategies"

December 24-26, 2018

Funded by



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



JOINTLY ORGANIZED BY

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

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2513 Houses damaged, more than 4000 people killed,  
11091 livestock lost, 4200 villages affected due to  
Cloudburst in Uttarakhand, India on 16-17 June 2013



Sand and Dust Storm, Bikaner, Rajasthan 1 Apr 2018

## 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 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. 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 atmospheric warming is melting the glaciers, creating a huge number of glacier lakes, increase in extreme rainstorms, and significantly increasing the potential of atmospheric mega-disasters. 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, an international workshop/brainstorming session is being organized at Central University of Rajasthan during 24-26 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 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. Furthermore, the new Asian monsoon hydroclimatological project, Post-MAHASRI, is officially proposed as a Regional

Hydroclimatological Project (RHP) in GEWEX Hydroclimatology Panel (GHP) framework. It aims understanding of Asian land precipitation and its application, focused on mountain precipitation and extreme weather. Post-MAHASRI is also planning to lead a coordinated observation and modeling initiative, Asian Monsoon Year (AMY)-II in 2020. 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 every day.

## Weather

Weather is generally cold in the month of December and January in CURAJ. Average minimum and maximum temperatures are in the range of 7-8° C and 15-16° C respectively. Days are warm, but nights are cold. Average rainfall is about 3-7 mm.

## Contact Details

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