



Memorandum of Understanding (MoU)

Between

**INDIA METEOROLOGICAL DEPARTMENT
Ministry of Earth Sciences, Government of India
Mausam Bhawan, Lodi Road
New Delhi - 110003**

and

**JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY
Sector 62, Noida- 201309**

on

**“Real time extreme weather event attribution analysis for predicting weather
parameters”**

This Memorandum of Understanding (Non-Financial) is made in Delhi on this 25th day of July 2024, between:

BY AND BETWEEN

India Meteorological Department, Ministry of Earth Sciences, Government of India through its Authorized Signatory (name and designation of the person) having its office at Mausam Bhavan, Lodi Road, New Delhi-110 003 (hereinafter referred as the “**IMD**”) which term or expression, unless excluded by or repugnant to the subject or context, shall mean and include its successor(s)-in-office, administrators and permitted assignees) of the **First Part**.

AND

JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY, having its registered office at A block, Sector 62, Noida – 201309 (hereinafter referred as **JIIT**), Which term of expression unless repugnant to context shall be deemed to include its successors, administrators and executors) of the **second part**.

Both “**IMD**” and “**JIIT**” are individually referred to as Party and collectively as Parties

That **IMD** and **JIIT** have decided to collaborate and work on a project titled, “Real time extreme weather event attribution analysis for predicting weather parameters” (hereinafter called “the project”).

1. That **IMD** and **JIIT** have decided to collaborate and work on a project titled, “Real time extreme weather event attribution analysis for predicting weather parameters” (hereinafter called “the project”).
2. The project will have the following elements:

Valid for **three years** (starting 25 July of 2024 to 24 July of 2027), with possible extensions in the future with mutual agreement from both parties. This MoU becomes effective from the date of its signature by the Parties and will remain valid for a period of three years after which it can be further extended with written mutual consent of the Parties. Either party may terminate this MoU by giving written notice to the other party at least three months in advance of such termination.

Jointly create and disseminate an efficient method to identify cloud type that helps meteorologists in understanding the overall weather patterns and make accurate predictions.

Help develop a setup using LoRaWAN technology to establish communication network and disseminate methodological data (weather conditions such as solar radiation, humidity, temperature, and rain) in remote locations during extreme weather conditions.

Help develop an efficient method to evaluate the relationship between received signal strength indicator and different weather parameters, as well as its temporal changes.

Developed a new platform to disseminate metrological information with different impact-based forecasts.

Do the post-event analysis based on observation using machine learning and outcomes can be used as model input to improve forecast.

Interrelate weather activity with different diseases and give prediction of disease.

Assist each other in any on-going research on extreme weather events that may be necessary to further the work of either institution.

Jointly organize outreach activities for public, and other events to disseminate knowledge and foster public engagement.

To supervise the cooperation under this MoU, each party shall designate Lead Coordinators, to be responsible for operationalization of this MoU and resolution of specific issues. Director General of Meteorology, IMD and Vice Chancellor, JIIT or their nominee shall meet once in every six months to review the status of various activities under this MoU.

3. Responsibilities

JIIT will as part of the MoU play the following roles:

- a. Fully co-operate with IMD in all the above-mentioned activities and other tasks that are mutually agreed upon from time to time.
- b. Identify platforms and network with other knowledge partners for development of knowledge materials.
- c. Support and conduct periodic reviews and assessments to measure progress as outlined in the work plan.
- d. Convene, and attend joint advocacy meetings and participate in meetings with government/s and other stakeholders as needed from time to time.

IMD will as part of the MoU play the following roles:

- a. Co-brand and allow the usage of IMD name and logo for educational purposes after written consent from IMD on case-by-case basis.
- b. Agree to share relevant scientific resources, data, facilities, and expertise, subject to availability and mutual agreement for knowledge material generation and information dissemination.

- c. Jointly organize outreach activities for public, and other events to disseminate scientific knowledge and foster public engagement.
- d. Assist in promoting of knowledge materials in print, audio, visual and multi- media formats for communicating to public at large on extreme weather events in India.

4. Confidentiality:

In respect of all information of whatever nature or form as disclosed to any of the Parties hereto by any other party in connection with the Project after execution of this MoU and which is clearly marked "confidential", and/ or is obviously of a confidential nature, each Party here to agrees to such information being confidential and that its disclosure may be prejudicial, and therefore refrains from sharing it in any form with any Party that is not a signatory to this MoU. However, this clause will not apply when disclosure of confidential information is required to be disclosed in pursuance of an order of court or tribunal or in compliance with legal and regulatory requirements.

5. Intellectual Property Ownership:

Each party shall retain all rights, title, and interests (including all copyrights, patents, organization logos, trademarks and other intellectual property rights) in its website/printed materials. Except for jointly developed products as mutually agreed on in the annual work plan, neither party shall acquire any interest in the other party's website, or any other services or materials, or any copies or portions thereof provided by such party pursuant to this MoU.

6. Force Majeure

Neither party shall be held responsible for non-fulfillment of their respective obligations under this MoU due to the exigency of one or more of the force majeure events such as but not limited to acts of God, War, Flood, Earthquakes, Strikes, Lockouts, Epidemics, Riots, Civil Commotions etc., provided on the occurrence and cessation of any such event the party affected thereby shall give a notice in writing to the other party within one month of such occurrence or cessation. If the force majeure conditions continue beyond one month the parties shall jointly decide about the future course of action.

7. Disputes resolution and jurisdiction:

"That in the event of any dispute that may crop up during execution of MoU, shall as far as possible be settled amicably with mutual consultation of Parties. However, if amicable settlement cannot be reached within 30 days from the date of the occurrence of the dispute, the matter under dispute shall be finally settled without recourse to the courts, in accordance with the provisions of the Arbitration and Conciliation Act 1996 and amendments thereto, if any, and for this purpose, the dispute shall be referred to Arbitration Committee comprising of a member nominated by two Head of Organizations and one member will be jointly nominated by two organizations. The validity, interpretation, enforceability, and performance of this MOU shall be governed and construed in accordance with the Laws in India. The arbitral award shall be final and binding upon both the parties. The arbitration proceedings shall be held at Delhi. All proceedings shall be conducted, including all documents presented in such proceedings, in English language".

IN WITNESS WHERE OF, this MOU is executed and delivered effective as of the date July 2024.

Signed and executed this day 25th July, 2024 in token of having accepted the terms and conditions mentioned therein.

On behalf of IMD

R Kumar
25/07/2024

Dr. R.K. Jenamani

Scientist-G

India Meteorological Department
Mausam Bhawan Lodi Road
New Delhi-110 003

On behalf of JIIT

Pammi Gauba
25/7/24

Prof. (Ms.) Pammi Gauba

Dean (Academics and Research)

Jaypee Institute of Information Technology
A-Block, Sector 62
Noida-201309

Witnesses:

1. *R.K. Jenamani*
Sc-G

2. *Ani Kuro*
Sc-G

Witnesses:

1. *Shweta*
25/7/24
(Prof. Shweta Srivastava)

2. *Rachna Singh*
25/7/24
(Dr. Rachna Singh)