1. IMS-IMD Azadi ka Amrit Mahotsav Lecture Series

To commemorate the 75th anniversary of Independence of India, our country is currently celebrating Azadi ka Amrit Mahotsav. This celebration will continue till 15th August 2023 and it is an intensive countrywide campaign to visualise and inform citizens about the cultural, social, political and economic progress of our country during the past 75 years. IMS is also participating in this Mahotsav by showcasing its commitment to disseminate knowledge of meteorology and allied sciences and its application to various constructive human activities, such as, agriculture and land uses, irrigation and power development, navigation of sea and air, engineering and technology, medicine and public health etc., among the scientific workers, public and policy makers.

IMS is celebrating this Mahotsav by organising a series of popular lectures and discussions to foster and encourage communication and exchange of knowledge, ideas, resources for adapting climate variability and change, climate risk management, disaster risk reduction, detection and attribution of extreme events, severe weather forecasting and improvement of prediction models for various application in climate-based services and support; and improvement of observations, data management and infrastructure during the last 75 years. This lecture series will provide an opportunity to know about the availability of data and products to scientists engaged in impact studies in various sectors viz., agriculture, human health, water availability and environmental sciences and those who are eager to use climate data in order to examine the present and future relationships of important parameters in their sectors with the climatic variables.

(i) The 7th talk of the series was delivered by Prof. (Dr.) Elena Surovyatkina on 07 February 2023 entitled ‘Two types of critical transitions to monsoon: universal definition of local monsoon onset.

(ii) The 8th talk of the series was delivered by Dr V S Prasad on 16 March 2023 entitled ‘Progress in Medium Range Weather Forecast Services’.

2. World Meteorological Day was jointly organized by IMS and IMD on 23rd March 2023 in hybrid mode

**Invitation**

World Meteorological Day 2023

**Theme:**

"The Future of Weather Climate and Water Across Generations"

**Date:** 23rd March, 2023; **Thursday**

**Time:** 1000-1500 IST (1330-1830 UTC)

**Venue:** Mauam Bhawan, Lodhi Road, New Delhi

**Jointly organised by**

Indian Meteorological Society (IMS)

India Meteorological Department (IMD)

Ministry of Earth Sciences

Lodi Road, New Delhi - 110003

**PROGRAME 23.03.2023 (1000-1500 IST) : 1330-1830 UTC**

1600 to 1610 IST: Welcome Address by Dr. R. K. Patnaik, IMD New Delhi & Vice President, IMS

1610 to 1620 IST: Address by Dr. Rupa Kumar Koll, President, IMS

1620 to 1640 IST: Theme Talk by Dr. M. Mishra, Director, IMD and PI, India with WMO

1640 to 1700 IST (Key note talk):

**Title of the talk:** Disaster Warnings: Door to Door: Building community resilience using technology and local action

**About the speaker:** Dr. Anshu Sharma is a Co-Founder of Sustainable Environment and Ecological Development Society (SEEDS), an Indian humanitarian organisation that received Government of India’s Sushma Chandra Bose Award 2023 and the UN Srikshna Award 2022. Over the last 28 years, Dr Anshu Sharma has worked extensively on disaster risk and climate emergency issues, transforming the vulnerable into resilient and thriving communities. Dr. Anshu Sharma is trained as an urban planner from School of Planning and Architecture, Delhi, with a PhD in Global Environmental Studies from Kyoto University. He is known for his abundance of ideas, and has a keen interest in systems thinking, innovations and capacity building within the humanitarian sector. A professional trainer, he ‘has been a driving force behind SEEDS’ frontline disaster training’.

More about Dr. Anshu Sharma: https://www.linkedin.com/in/anshu-seeds/

1700 to 1730 IST: Release of Publications

(i) Special Issue of MAUSAM (WAM-I) (Vol. 74, No. 2, 2023)

(ii) IMD Met. Monograph: Northeast Monsoon of South Asia

(iii) IMD Annual Report 2022

By Dignitaries

1730 to 1740 IST: Vote of Thanks by Dr. R. K. Giri, IMD, New Delhi and Secretary, IMS

1740 to 1750 IST: High Tea
Special Issue of MAUSAM as the proceedings of 7th WMO International Workshop on Monsoons (IWM-7), jointly organised by IMD, MoES, IMS, IMPO, IITM and WMO during 22-26 March 2022 has been released on this occasion.

Under the aegis of the local chapter of the Indian Meteorological Society (IMS), the four-year national symposium TROPOMET-2022 concluded successfully on 2 December at the Indian Institute of Science Education and Research (IISER), Bhopal. TROPOMET is a series of national conferences organized annually by the IMS. Every fourth year, the TROPOMET is organized at the international level with the name INTROMET. The recently concluded TROPOMET-2022, from 29 November to 2 December, focused on weather and climate prediction, including applications in the water and agricultural sectors. The climate varies naturally in space and time. Today's concern is the occurrence of climate changes due to human activities. These changes are manifested as an increase in temperature and extreme weather events such as floods, droughts, heat waves, dust storms, heavy precipitation events, etc. These weather events need constant monitoring to reduce their potential impacts on society. Since observation stations are not available at every spatial point of interest, modelling efforts are required to help assess the situation. Also, process studies are essential to understand the phenomena in greater depth. Keeping these facts in mind, TROPOMET-2022 made successful efforts to bring together climate scientists, agricultural scientists, local government bodies, academicians, policymakers and disasters, and other related experts to discuss and share information for the benefit of society.

TROPMET-2022 was organized at Visitor Hostel Auditorium and three seminar halls in parallel sessions at IISER Bhopal. More than 400 participants have presented their work. It was attended by senior scientists, eminent academicians, young researchers, early career scientists, noticeable industry representatives, state government officials, and media personalities actively participated in the symposium. The opening ceremony of the symposium was graced with the presence of distinguished guests by Dr. Akhilesh Gupta (Guest of honor, Secretary, SERB, New Delhi), Prof. Siva Umapathy (Director, IISER Bhopal), Professor Sunil Kumar (Chief Guest, Vice-Chancellor, Rajiv Gandhi University of Technology, Bhopal), and Dr. Rupa Kumar Kolli (Chairman IMS).

There were various highlight plenary and keynote lectures by eminent scientists such as Dr. Akhilesh Gupta, Dr. Kalachand Sain (Director, Wadia Institute of Himalayan Geology), Dr. Rajeev Mehajan (Advisor, Ministry of Science and Technology, GoI), Prof. Ravi Shankar Nanjundiah
(Professor, Divecha Centre for Climate Change, IISc. Bengaluru), Dr. R. Krishnan (Director, Indian Institute of Tropical Meteorology, Pune), Dr. M. Rajeevan (Former Secretary, Government of India, Ministry of Earth Sciences), Prof. S. K. Dash (Ex-Professor, IIT Delhi), Dr. Nabanshu Chattopadhyay (Ex-Deputy Director General of Meteorology, Agricultural Meteorology Division, IMD Delhi), Professor U. C. Mohanty (Emeritus Professor, IIT Bhubaneswar), Sri Nilesh M. Desai (Director, SAC-ISRO, Ahmedabad). The valedictory ceremony witnessed the presence of Chief Guest Dr. K. Ravichandran, IFS (Director, IIFM, Bhopal) and Guest of honor Shri Nilesh M Desai (Director, SAC-ISRO, Ahmedabad), Prof. S. K. Tandon (Adjunct Professor, IISER Bhopal) and Dr. Pankaj Kumar (Convenor TROPMET-2022 and Associate Professor IISER Bhopal). During the conference, many scientific papers were presented and discussed. The eminent scientists also discussed one side event how to integrate climate science at the undergraduate level. The successful execution of this national symposium will help to bridge the gap between different sectors. It will be a noticeable change in the techniques related to forecasting weather and climate-related extreme events in India and especially in the entire Madhya Pradesh, including Bhopal, which will be ultimately beneficial for the agriculture and water sector, industry, trade, etc., TROPMET-2022 has been successful in meeting its objectives. A welcome feature of TROPMET-2022 is the active participation of brilliant young researchers from around the country and the opportunity provided for the next generation to benefit from their interaction with senior scientists. Taking advantage of a large number of IMS members attending the TROPMET-2022 sessions, the IMS has also organized an Open General Meeting on 1 December 2022 at the venue, where a major issue discussed was the potential role of IMS to help integrate climate science in the curricula at the undergraduate level. For more details on TROPMET-2022, please visit https://conf.iiserb.ac.in/TROPMET/. 

Figure: Location of participants taking part in TROPMET-2022
<table>
<thead>
<tr>
<th>Category</th>
<th>Approx. Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plenary Speakers</td>
<td>7</td>
</tr>
<tr>
<td>Keynote Speakers</td>
<td>26</td>
</tr>
<tr>
<td>Invited Speakers</td>
<td>36</td>
</tr>
<tr>
<td>Oral Talks</td>
<td>148</td>
</tr>
<tr>
<td>Lightening Talks</td>
<td>95</td>
</tr>
<tr>
<td>Poster Presentation</td>
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</tr>
<tr>
<td>NOC members</td>
<td>49</td>
</tr>
<tr>
<td>LOC members</td>
<td>24</td>
</tr>
<tr>
<td>Volunteers</td>
<td>68</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>590</strong></td>
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</tbody>
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TROPMET-2022 INAUGURAL CEREMONY
Souvenir cum Abstract Book Release & IMS Awards Presentation
## Winner of IMS Biennial Awards (2020-2021)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the Award</th>
<th>First Author</th>
<th>Full Paper</th>
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## Winner of IMS Young Scientist Award for 2021

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the Award</th>
<th>First Author</th>
<th>Full Paper</th>
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</table>
IMS General Body Meeting
Press and Media Coverage

Section on DC News Madhya Pradesh

News Section in Danik Bhaskar

Director, IISER Bhopal, DPL News

Dr. Achilesh Gupta, DPL News

Dainik Bhaskar Online
4. IMS Bhubaneswar (IMSBh) Chapter

IMS Bhubaneswar Chapter Organized “National Workshop on Drought Scenarios in Odisha: Adaptation & Mitigation Strategies” on 23rd March (Thursday) 2023 (On the Occasion of World Meteorological Day 2023) in collaboration with Centre for Climate Smart Agriculture (CCSA), Siksha ‘O’ Anusandhan (Deemed to be) University at SOA Campus.

The major objective of this National Workshop was to have brainstorming among acclaimed experts on the present state-of-the art research on the potential impacts of drought on different sectors in Odisha with particular emphasis on agriculture; and development of resilience to minimize its impact on potential crop yield in drought prone regions. The outcomes of the National Workshop have a set of recommendations implementable by the CCSA, SOADU and IMS, Bhubaneswar. The participants included experts, academicians, planners, stakeholders and students from many organizations. The eminent speakers of the workshop were:

Prof. B. Mohanty, Texas A & M, USA
Dr P K Mishra, former Director, IISWC
Dr. M. Ramadas, IIT BBS
Sh Sailendra Kr. Mohanty, JDA, GoO
Prof. B. Behera, FAS, SOA
Prof. R. K. Panda, CCSA, SOA

5. IMS Chennai (IMCC) Chapter

5.1 The Newsletter Breeze with scientific articles on various topics was released and uploaded in the Website.

5.2 Dr. T.V. Lakshmi Kumar Chairman IMSCC and Dr. Y.E.A. Raj Former DDGM Chennai, Former Chairman IMSCC and presently in the LC participated in the TROPMET 2022 at Bhopal. The Chairman participated in NC GB.

5.3 Dr. T V Lakshmi Kumar was elected as the Joint Secretary of the South Asian Meteorological Association (SAMA) Indian Chapter.

5.4 Co-sponsored Seminar on Monsoons 2022 with IMD Chennai

5.5 Participated in WMD celebration at RMC Chennai.

5.6 Discussed the activities done and charted programs for the next 6 months.

5.7 An important decision to arrange a National level One Day Symposium on Technologies and Development in Climate Action, Resilience and Sustainability during September/October 2023 was taken. This includes invited talks of different subjects and poster presentations Co-sponsoring with SRM University Chennai and IMD Chennai. Action is in progress.

5.8 The Secretary R. Nallaswamy Delivered the Inaugural address in the International Training Program on Design of Artificial Intelligence Based System for Disaster Management and Mitigation Arranged by SRM University Chennai. The Chairman Dr. T V Lakshmi Kumar coordinated the program. Dr. S R Ramanan,Former Director IMD delivered a talk on Tropical Cyclones.

5.9 SRM University is willing to arrange TROPMET 2024 at their campus in coordination with IMSCC.

6. IMS Cochin (IMSCo) Chapter

6.1 Delivered popular lectures to public and media about climate change and impacts.

6.2 Conducted training programs for Geography Higher secondary school teachers in establishing weather stations across Higher Secondary Schools inerala.

6.3 Conducted ozone day special lecture and many lecture series to students and various stake holders.

6.4 Felicitated Prof. P. V. Jospeh at his residence for receiving Sir.Gilbert Walker Gold Medal from IMS.

6.5 Conducted training programs to fishermen community to familiarize various forecast products generated by different forecasting agencies.

6.6 Celebrated WMO day.

6.7 Conducted “Climate change awareness” programs in Nayodaya School.
World Meteorological Day is observed on March 23 every year to commemorate the coming into existence of the World Meteorological Organization. To commemorate this occasion, IMS-Dehradun Chapter in collaboration with Indian Institute of Remote Sensing, Dehradun, organized a popular talk on “Weather and Climate Services for Resilient India” by Dr. Anand Sharma.
8. IMS Guwahati (IMSG) Chapter
8.1 Special lecture of Dr. Bharati Dutta, retired Head & Associate Professor, Deptt. of Geography, DHSK College, Dibrugarh on the topic ‘Environmental Issues- Challenges and Remedies’ on 28.02.2023.

8.2 Special lecture of Shri Tana Tage, Director of Centre for Earth Sciences & Himalayan Studies, Deptt. of Science & Technology, Govt. of Arunachal Pradesh on the topic ‘A glimpse of journey by Centre for Earth Sciences and Himalayan Studies in collaboration with Ministry of Earth Sciences particularly with IMD for the state of Arunachal Pradesh’ on 14.12.2022.

8.3 Special lecture of Sri Anupam Phukan, Senior Geologist, Directorate of Geology and Mining, Govt. of Assam on 23.03.2023.

9. IMS Kolkata (IMSK) Chapter
9.1 IMSK organized seminar on 22.12.2022. The speakers were 1) Dr. Misha Roy, Assistant Professor, Environmental Science, Vidyasagar University, Midnapore, Title: Assessing the Impact of Climate Change on the Spatiotemporal Variation of Water Quality of Hooghly River using Multivariate Method. 2) Dr. Amitlal Bhattacharya, Prof. Of Physics, DNC College Murshidabad, Title: “A comparative study of Air Quality and associated Climate Change”. 3) Shri Suman Chattopadhyay, Meteorologist-B, IMD, Title: “Analysis of Long Period Seasonal Variation of Temperature and Rainfall fir six sub catchments of Damodar Valley Area in a time of Climate Change”

9.2 IMSK and DNC College Murshidabad jointly organized a seminar on the occasion of World Water Day on 22.03.2023 at DNC College, Murshidabad with title” Climate Change: Water Security Across Generation”, The speakers were 1) Mr. Raj Kapoor Sharma, Secretary, IMSK 2) Dr. Anatu Bhattacharya, Prof. JIS University 3) Mr. Subhendu Karmakar, Meteorologist-A, IMD

9.3 IMSK celebrated “World Meteorological Day” on 23.03.2023 at RMC Kolkata. IMSK has started this year “Dr. S.K.Ghosh Memorial IMS Kolkata Young Scientist Award” inviting participants from all over India. The wife of Late Dr. S.K.Ghosh, Smt Banani Ghosh was present in the award ceremony. The recipients of the awards are I) Smt. Lekshmi S, The Best Paper, MoES Research Fellow, IMD Pune II) Shri Subharthi Sarkar, The Second Best Paper, Research Scholar, IIT Kharagpur III) Shri Avishek Ray, The Third Best Paper, Senior Research Fellow, IITM, Pune

9.4 IMSK started this year a annual lecture series with the name “Prof. Prasanta Chandra Mahalanobis Memorial Lecture”. The event was conducted on 23.03.2023 with the guest speaker Prof. Sankar Kumar Pal, National Science Chair, GoI, President, ISI, Kolkata, Padmashri Awardee. His title of the topic was” Machine Intelligence and Remote Sensing Image Processing: Relevance to Climate Analytics”

9.5 IMSK members demonstrated visitors on the following days

9.1 Nos. of students of Class XI along with teachers from DPS, Joka visited on 09th, 10th & 11th November’22

9.2 80 Nos. of students from St. Thomas' Boys' School, Kidderpore visited on 15.11.22

10. IMS Noida (IMSNo) Chapter

NCMRWF and Indian Meteorological Society (IMS), Noida Chapter organized an Invited Talk by Prof. (Dr., Dr Sc .) Elena Surovyatkina, Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany on 8th February 2023. All members of IMS, Noida Chapter attended the event.

11. IMS Pune (IMSP) Chapter

11.1 IMS Pune organized the Scientific lecturers and arranged the site visit to IMD for the students of Somaiyya Engineering College, Mumbai on 24th November 2022.

11.2 CDAC Pune and IMS Pune jointly organized Scientific Lectures on “From sensing to digital twins-making urban climate science useful to usable”. by Eminent Scientist Prof. Dev Niyogi, USA on 12th Dec 2022.

11.3 IMS-IITM-IMD National seminar on “Development of NOAA’s Community-based Coupled Unified Forecast System (UFS) and Operations Current Status and future plans” on 17th Jan 2023 Lecture by Dr. Vijay Tallapragada, Senior Scientist, NCEP, USA.
On this occasion, Dr. Vijaya Tallapragada was felicitated by Dr. R. Krishnan, Director IITM, Dr. Rupa Kumar Kolli, President IMS and Mr. K. S. Hosalikar, Chairman IMSP.

11.4 IMS-IITM-IMD National seminar on “Two types of Critical Transitions to Monsoon” on 17th Jan 2023 lecture by Dr. Elena Surovyatkina, Postdam Institute for Climate Research (PIK), Postdam, Germany.

11.5 IMS Pune organised Annual Monsoon workshop (AMW-2022) and National symposium on Challenges in climate services for health sector in the warming environment at IITM Pune during 28th-30th March 2023.

(i) On 28th March 2023, the Annual Monsoon Workshop (AMW 2022) held three scientific sessions to delve into various aspects related to the monsoon season.

(ii) The first session focused on discussing the observed features and predictions of the South-West and North-East monsoons.

(iii) The second session highlighted the sectoral applications of monsoon predictions in fields such as Agriculture, Hydrology, and Oceanography.

(iv) The third session of the workshop centered around the advancements in Numerical Weather Predictions.

(v) Throughout the event, 14 lectures were presented to the attendees. Moreover, during the inauguration function of the workshop, IMSP recognized and honored the contributions of scientists, students, and citizens who have made significant contributions to the field of meteorology and climate science.

The Annual Monsoon Workshop 2022 was inaugurated by the Chief Guest, Dr. Shekhar Mande, Former Secretary of the Ministry of Earth Sciences (MoES).

11.6 National Symposium successfully brought together scientists and experts from both Climate and Health backgrounds (including animal and plant health) to discuss common challenges.

(i) The symposium, held on March 29-30, March 2023, consisted of six sessions and received 100 abstracts, which were divided into six themes and classified into oral and poster presentations.

(ii) Out these, 43 abstracts were chosen for oral presentations, while the remaining abstracts were
presented as posters during morning and afternoon tea breaks over the two-day event.

(iii) The symposium provided an excellent opportunity for the research students and early career scientists to present their work in front of senior and expert delegates, and prizes were awarded for the best oral and poster presentations by a panel of judges.

The National Symposium was inaugurated by Dr. Sujata Sounik, IAS, Additional Chief Secretary, Department of General Administration, Government of Maharashtra, India.

Important Achievements from this event

Since 1994, IMS Pune chapter has a tradition of organizing a workshop to discuss about the performance of monsoon over India at the end of the season. In March 2023, IMSP held its Annual Monsoon Workshop 2022 and National Symposium on "Challenges in Climate Services for Health Sector in a Warming Environment" at the Meghdoot Auditorium of the India Institute of Tropical Meteorology in Pune. The event attracted over 400 participants from various regions of India, as well as numerous organizers and volunteers. The event was sponsored by scientific and private organizations, including IITM, MoES, NCPOR, CDAC Pune, IMS NC, SGS, Vaisala, Microsteps, Astra Microwave Private Ltd., ONGC, Azista Industries Private Ltd., and Suzlon Energy Limited., Pune.

11. IMSP published two recent online issues of Bulletin of IMSP October-December 2022 Vol 21 (10-12), and Jan - Mar 2023 Vol 22 (1-3). Compilation and Editing by Dr. Somnath Mahapatra. https://www.imdpune.gov.in/imsp /Bulletins/. IMSP thank all authors of the articles published with BIMSP.

12. IMS Raipur (IMSR) Chapter

IMS Raipur Chapter Organized W. M. Day on 23rd March (Thursday) 2023