



Annual Monsoon E-Workshop and National E-Symposium on “Cloud and Precipitation Processes”

Date : 18th – 20th January, 2021

Jointly Organised by
Ministry of Earth Sciences (MoES)
India Meteorological Department (IMD),
Indian Institute of Tropical Meteorology (IITM),
National Centre for Medium Range Weather Forecasting (NCMRWF),
Savitribai Phule Pune University (SPPU),

and
Indian Meteorological Society (IMS)

Day 1 : 18th January, 2021

Brain Storming Workshop on Monsoon 2020

YouTube Link (Day 1) <https://youtu.be/KvtJEDrn0zs>

Day 2-Day 3 : 19th – 20th January, 2021

National E-Symposium on “Cloud and Precipitation Processes”

YouTube Link (Day 2) https://youtu.be/dhFR_u0hvWo

YouTube Link (Day 3) <https://youtu.be/mAti7zW9TuE>

Hosted

By

Indian Meteorological Society, Pune Chapter (IMSP)

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Brain Storming Workshop on Monsoon 2020
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Date : 18th January, 2021

S. No.	Time	Agenda	Speaker
1.	1000-1010	Inauguration of the event Address by Dr. M. N. Rajeevan, Secretary, MoES	
2.	1010-1300	Technical Session –I Observational Features and Forecasts of Monsoon 2020 Chairman : Prof U. C. Mohanty Co-Chair : Dr. M. Mohapatra	
3.	20 minutes (1010-1030)	An Overview of Synoptic Aspects of Monsoon 2020 (Rainfall and Synoptic Aspects)	Smt S. Sunitha Devi IMD, Delhi
4.	30 minutes (1030-1100)	Seasonal Forecast of Monsoon 2020: Success & Problem Areas & Plan for 2021	Dr. D. S. Pai, IMD, Pune
5.	30 minutes (1100-1130)	Extended Range Forecast of Monsoon 2020: Success & Problem Areas and Plan for 2021	Dr. D. R. Pattanaik, IMD
6.	20 minutes (1130-1150)	GFS & GEFS Model Forecast Verification	Dr. MedhaDeshpande/ Dr. ParthaMulpadhyay, IITM
7.	20 minutes (1150-1210)	Unified Model MRF and Ensemble Forecast Verification	Dr. RaghavendraAshrit, NCMRWF
8.	30 minutes (1210-1240)	Performance of Meso-Scale model (WRF) & NCUM-Regional with regard to heavy rainfall events.	1. Dr. Anand Kumar Das, IMD Delhi 2. Dr. Jaya Kumar, NCMRWF
9.	20 minutes (1240-1300)	Understanding the Monsoon of 2020	Prof. Sulochana Gadgil, CAOS
LUNCH BREAK (1310 to 1400)			
10.	1400-1500	Technical Session –II (Sectoral Applications) Chairman: Dr. AjitTyagi Co-Chair : Dr. E. N. Rajagopal	
11.		Riverine Flood Meteorological Support and Flash Flood Guidance	Shri. B. P. Yadav, IMD, Delhi
12.		IFLOWS - MUMBAI	Shri K. S. Hoslikar, IMD Mumbai
13.		Impact based Heavy Rainfall Warning: Issues & Challenges	Dr. R. K. Jenamani, IMD, Delhi
14.		Technical Session –III (New Modelling Plan for Monsoon 2021) Chairman: Prof J. Srinivasan Co-Chair : Dr. Ravi Nanjundiah	
15.	1500-1600	<ul style="list-style-type: none"> • Data Assimilation – Dr. V. S. Prasad, NCMRWF • NWP Model development – Dr. ParthaMulpadhyay, IITM • New Extended Range Modelling Strategy - Dr. A. K. Sahai, IITM • New Seasonal Modelling Strategy - Dr. Surya Chandra Rao, IITM (Discussion)	
16.	1600-1630	Post-processing strategy for application products for decision making on extreme weather during monsoon	Joint PPT (IMD + IITM + NCMRWF) Presentation by Dr. A. K. Mitra, NCMRWF
17.	1630-1730	Concluding Session & Recommendations Chairman : Dr. M. N Rajeevan, Secretary, MoES Final Comments – Dr. M. Mohapatra, DGM, IMD. Concluding Remarks : Dr. M. N. Rajeevan, Secretary, MoES	

Annual Monsoon E-Workshop (AMW 2019 & 2020) and National E-Symposium on “Cloud and Precipitation Processes” (Jointly organized by IMSP, SPPU & IITM)

Date : 19th January, 2021

S. No.	Time	Agenda
		National E-Symposium on “Cloud and precipitation processes”
1.	09:15-10:15	Inauguration (symposium honouring Dr. P. Pradeep Kumar)
2.	09:15-9:25	Arrival of the Guests
3.	09:25	Inviting and welcoming dignitaries to virtual Dias
4.	09:30	Saraswati Vandana
5.	09:35	Welcome address by the Chairman IMSP
6.	09:40	Release of book on “cloud seeding” by Dr. J. R. Kulkarni at the hands of Director IITM
7.	09:50	Address by Director, IITM
8.	10:00	Vote of Thanks by Secretary, IMSP
9.		Session-1 : Clouds and its characteristics Co-Chairs: Dr. A. K. Kamra, IITM, Pune & Prof. Anand Karipot, SPPU Rapporteur : Ambujha & Sukanya Patra
10.	10:10-10:30	Invited Lecture by Dr. J. R. Kulkarni : Rain-shadow : An Area Harboring “Gray Ocean” Clouds
11.	10:30-10:40	Inviting Chief Guest and Address by the Chief Guest, VC SPPU
12.	10:40-11:10	Felicitation of Prof. Pradeep Kumar by Chief Guest, VC SPPU and Release of souvenir for Prof. Pradeep Kumar
13.	11:10-11:30	Invited lecture by Dr. Thara Prabhakaran, IITM : Understanding on the mixed phase processes in the monsoon clouds
14.	11:30-11:50	Invited lecture by Dr. G. Pandithurai, IITM : Aerosol- Cloud- Precipitation interaction processes as observed from High Altitude Cloud Physics Laboratory (HACPL)
15.	11:50-12:10	Invited lecture by Dr. S. D. Pawar, IITM: Effect of drop size distribution on charging process inside thundercloud
16.	12:10-12:30	Special lecture by Dr. P. Pradeep Kumar: Ice Nuclei and its role in Cloud Microphysics
17.	12:30-15:10	Theme-1 : Oral presentations by young scientists/researchers/P.G. students
18.	12:30-12:40	IMA19-T1-A001 SudarsanBera_IITM, Entrainment Rate and Mass-Flux Parameterization in Monsoon Cumulus Clouds
19.	12:40-12:50	IMA19-T1-A015 Manisha Dhutraj_FC, Tropospheric aerosols and different types
20.	12:50-13:00	IMA19-T1-A019 RohitMangla_IIT(P), Study of Aerosol-Cloud interaction on precipitation system using spaceborne radars
21.	13:00-13:10	IMA19-T1-A020 LoisThomas_IITM, Diffusional growth of cloud droplets in homogeneous isotropic turbulence: Scaled-up DNS
22.	13:10-13:20	IMA19-T1-A023 SaurabhPatil_SPPU, Sensitivity experiments with surface temperature and impact on cloud processes using cloud resolving simulations

23.	13:20-13:30	IMA20-T1-A001 Ushnanshu Dutta_IITM, Role of cloud hydrometeors in Indian summer monsoon rainfall predictability
24.	13:30-13:40	IMA20-T1-A003 SuvarnaFadnavis_IITM, Elevated aerosol layer over South Asia worsens the Indian droughts
	13:40-14:00	Lunch Break
25.	14:00-14:10	IMA20-T1-A004 Divya E. Surendran_IMD, Study Of Cloud Condensation Nuclei (CCN) Behaviour In Relation to Fog Occurrences over Delhi
26.	14:10-14:20	IMA20-T1-A005 Sneha Sunil_IITM, Retrievals of cloud fraction and its diurnal and seasonal variability over a high altitude station in the Western Ghats using Ground-based Remote sensing technique -Comparison with MODIS
27.	14:20-14:30	IMA20-T1-A008 Kandula V Subrahmanyam_SPL, Characterizing the diurnal variation of precipitating clouds as observed by C-band Polarimetric Doppler Weather Radar at Thumba, India
28.	14:30-14:40	IMA20-T1-A009 Sukanya Patra_IITM, The onset of rain from the base of the warm tropical clouds: Cloud radar prospective
29.	14:40-14:50	IMA20-T1-A013 Meenu R Nair_IITM, Investigation of Cloud Vertical Structure and Turbulence over the Core Monsoon Zone in Central India
30.	14:50-15:00	IMA20-T1-A014 M. C. R. Kalapureddy_IITM, Role of Cloud vertical structure measurements for better predictability of ISM extremes
31.	15:00-15:10	IMA20-T1-A016 Emmanuel Rongmie_IITM, Investigation of Tropical Cyclone genesis over the North Indian Ocean during monsoon onset
32.		Session-2: Extreme weather events Co-Chairs: Dr. A. K. Sahai, Scientist-G, IITM & Dr. D. S. Pai, Scientist-G, IMD Rapporteur : Emmanuel Rongmie and Sunil Kumar
33.	15:10-15:30	Invited lecture by Prof. Vimal Mishra (IIT-G): Drought and flood under warming climate in India
34.	15:30-15:50	Invited lecture by Dr. S. Abhilash (CUSAT): The climate factors on the recent extreme rainfall events over Kerala
35.	15:50-16:10	Invited lecture by Dr. N. R. Deshpande, IITM: Devastating Floods on the Lee Side of the WG of India: A Phenomenological Discovery of Very Heavy Rainfall due to Hydraulic Jump
36.	16:10-17:20	Theme-2 : Oral presentations by young scientists/researchers/P.G. students
37.	16:10-16:20	IMA19-T2-A004 Radhika Kanase_IITM, Deterministic and Probabilistic Approaches in Predicting Tropical Cyclones: active season of 2019 over North Indian Ocean
38.	16:20-16:30	IMA19-T2-A007 Ranade Ashwini_NIH, Unusual Lifecycle of Indian Monsoon-2019 using Meteorological Information System (MIS)
39.	16:30-16:40	IMA20-T2-A004 Harvir Singh_NCMWF, Spatial verification of Cyclones Amphan and Nisarga using MODE/METPlus
40.	16:40-16:50	IMA20-T2-A006 Raghavendra Ashrit_NCMWF, Extremely Rainfall Events over Mumbai in Recent Years : Forecasting Challenge and Performance of NCMRWF Models
41.	16:50-17:00	IMA20-T2-A007 Anumeha Dube_NCMWF, Best fit probability distribution and return periods for maximum monsoon rainfall over Mumbai
42.	17:00-17:10	IMA20-T2-A010 Sahadat Sarkar_IITM, GFS T1534 model fidelity in capturing the anomalous synoptic activity during August-2020 using energetics approach
43.	17:10-17:20	IMA20-T2-A014 Avijit Dey_IITM, Intra-seasonal fluctuation of Indian Summer Monsoon and its relation with MJO and MISO phases
		Poster viewing is available online on 18-20 January 2021

Date : 20th January, 2021

S. No.	Time	Agenda
		Session-3 : Ocean-atmosphere coupling & extreme events Co-Chairs:Dr.Rupa Kumar K., ICMPO, IITM & Dr. C. Gnanaseelan, Scientist-G, IITM Rapporteur : Dr. J. S. Deepa and Darshana Patekar
1.	09:30-9:50	Invited Lecture by Dr. Roxy Mathews (IITM): Climate Change and Extreme Weather Events in the Indian Ocean region
2.	09:50-10:10	Invited Lecture by Dr. P. A. Francis (INCOIS): Variability in June rainfall over India and links to Pacific ocean
3.	10:10-10:30	Invited lecture by Dr. J. S. Chowdary (IITM), Interdecadal modulations of ENSO-ISM rainfall regional teleconnection patterns
4.	10:30-10:50	Invited lecture by Dr. Prasanth Srivastava (BHU) Appraisal of AI/ML and radiative transfer models for precipitation retrieval
5.	10:50-12:10	Theme-3 : Oral presentations by young scientists/researchers/P.G. students
6.	10:50 -11:00	IMA19-T3-A001 P. RenukaShastri_SPPU, Modulations in the Indian Summer Monsoon rainfall
7.	11:00-11:10	IMA19-T3-A006 Ramesh Kumar Yadav_IITM, North India summer monsoon precipitation and east equatorial Indian Ocean clouds
8.	11:10-11:20	IMA19-T3-A006 S. D. Sanap_IMD, Impact of El- Niño and Easterly Wave activity on the occurrence of heavy rainfall events over South East peninsular India during NE monsoon season
9.	11:20-11:30	IMA20-T3-A002 Rashmi Kakatkar_IITM, Strong subsurface and surface temperature modes and their interactions during 2019-2020 over the Tropical Indian Ocean
10.	11:30-11:40	IMA20-T3-A003 Devyani Kamble_IITM, Identification of Freshening Episodes in Bay of Benagl : Its Impact on Upper Ocean State and influence of different processes for its formation
11.	11:40-11:50	IMA20-T3-A004 Darshana Patekar_IITM, Unusual rainfall pattern of July 2020 Indian summer monsoon in observation and model prediction
12.	11:50-12:00	IMA20-T3-A006 T. S. Fousiya_IITM, A new approach for seasonal prediction using CFSv2 with special emphasis on Indian Summer Monsoon Rainfall of 2020
13.	12:00-12:10	IMA20-T3-A008 Praveen Kumar_IMD, Medium to Extended Forecast Over River Basins During Monsoon-2020
14.		Session-4 : Climate Change impacts (Dedicated to Late Dr. G. B. Pant, Ex-Director, IITM) Co-Chairs : Dr. R. Krishnan, Scientist-G, CCCR, IITM & Dr. S.A. Rao, Scientist-G, IITM Rapporteur : Bhupendra Singh and Lekshmi Mudra
15.	12:10-12:30	Invited Lecture by Dr. R. Krishnan (CCCR, IITM): Assessment of Climate Change over the Indian Region
16.	12:30-12:50	Invited Lecture by Dr.Borgoankar (Ex-IITM) : Contributions of Dr. G. B. Pant on the advancement of climate science in India
17.	12:50-13:10	Invited Lecture by Dr. A. K. Srivastava (Ex-IMD) Climate Change over India
18.	13:10-13:30	Invited lecture by Dr. Subimal Ghosh (IIT, Mumbai) : Land Atmosphere Interactions in the Indian Monsoon Region
19.	13:30-14:00	Lunch Break
20.	14:00-15:50	Theme-4 : Oral presentations by young scientists/researchers/P.G. students
21.	14:00-14:10	IMA19-T4-A003 D. K. Sharma_MRU, Atmospheric aerosols and their impact on climate
22.	14:10-14:20	IMA20-T4-A002 J. S. Deepa_IITM, The decadal sea level predictions over the Indian Ocean from coupled models
23.	14:20-14:30	IMA20-T4-A004 Pushpa Pandey_UoA, Multi-Decadal Variability of Indian Summer Monsoon Rainfall and Southern Annular Mode : Linkage with Atlantic Meridional Oscillation
24.	14:30-14:40	IMA20-T4-A005 Amol Vibhute_IITM, Meridional displacement of Asian Jet variability and Indian Summer monsoon rainfall in observations and CMIP6 models
25.	14:40-14:50	IMA20-T4-A006 D. Panda_UU, Rainfall variability analysis of the Budhabalanga Basin of Odisha
26.	14:50-16:10	Special oral presentation session for best posters/videos Co-Chairs - Dr. TharaPrabhakaran, Scientist-F,IITM & Dr. Pandithurai, Scientist-F, IITM
27.	16:10-17:00	Concluding session & Announcement of Prizes
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