



Seventh WMO International Workshop on Monsoons (IWM-7) 22-26 March 2022, New Delhi, India

TECHNICAL SESSION: SHORT ORAL CUM E-POSTER PRESENTATIONS

Day 3: 24 March, 2022 (Thursday)
Time: 1145-1300 IST (0615-0730 UTC) (75 Minutes)
SESSION COORDINATOR : Dr. S. I. LASKAR, IMD
SESSION : 24SP

Sr. No.	ID No.	Theme	Name	Title
1	9	CLIMATE CHANGE AND MONSOONS	RUCHI SINGH PARIHAR	MODELING OF THE MALARIA TRANSMISSION DYNAMICS OVER FOUR REGIONS IN INDIA.
2	13	CLIMATE CHANGE AND MONSOONS	SUTHINKUMAR P S	STUDY ON LONG TERM TRENDS IN ATMOSPHERIC MOISTURE AND ITS TELECONNECTIONS WITH MONSOON RAINFALL
3	14	CLIMATE CHANGE AND MONSOONS	MONICA SHARMA	SOME CHARACTERISTICS OF MONSOON DISTURBANCES OVER THE NORTH INDIAN OCEAN IN RECENT YEARS
4	15	CLIMATE CHANGE AND MONSOONS	DR. SAPANA ASHOK SASANE	ESTIMATING THE TREND OF CLIMATIC PARAMETERS OVER THE HELMAND RIVER BASIN, AFGHANISTAN FROM 1981-2019
5	16	CLIMATE CHANGE AND MONSOONS	VASUNDHARA BARDE	COUNTER-CLOCKWISE SHIFT OF THE INDIAN MONSOON SPARSE ZONE IN CONTEXT OF CLIMATE CHANGE
6	17	CLIMATE CHANGE AND MONSOONS	SANJUKTA RANI PADHI	ACTIVE-BREAK CYCLES OF INDIAN SUMMER MONSOON AND THEIR VARIABILITY DURING COLD AND WARM PHASES
7	19	CLIMATE CHANGE AND MONSOONS	SUBROTA HALDER	DECADAL VARIABILITY OF MONSOON CORE ZONE RAINFALL

8	26	FIELD EXPERIMENTS AND OBSERVATIONAL CAMPAIGNS	SUDEEP KUMAR B L	THERMODYNAMIC STRUCTURE OF ATMOSPHERIC BOUNDARY LAYER OVER THE WEST COAST OF INDIA DURING ACTIVE AND WEAK PHASES OF INDIAN SUMMER MONSOON
9	32	FIELD EXPERIMENTS AND OBSERVATIONAL CAMPAIGNS	SUKANYA PATRA	CHARACTERISTICS OF TROPICAL WARM CLOUDS AND ITS ROLE ON THE SUMMER MONSOON RAINFALL
10	37	FIELD EXPERIMENTS AND OBSERVATIONAL CAMPAIGNS	ANKITA KATOCH	WET SCAVENGING OF HEAVY METALS DURING MONSOON SEASON IN DELHI
11	85	MONSOON INFORMATION AND PREDICTION FOR SOCIETAL BENEFIT	PRAVEEN KUMAR	BIAS-CORRECTED EXTENDED RANGE FORECAST OF RAINFALL IN OPERATIONAL FRAMEWORK OF IMD
12	86	MONSOON INFORMATION AND PREDICTION FOR SOCIETAL BENEFIT	JOHNY C J	ANALYSIS OF GFS AND GEFS MODEL FORECASTS AT IMD DURING SOUTH WEST MONSOON 2021
13	87	MONSOON INFORMATION AND PREDICTION FOR SOCIETAL BENEFIT	RAM RATAN	WIND POWER POTENTIAL ASSESSMENT OVER INDIA USING IMDAA AND ERA5 REANALYSIS DATA
14	88	MONSOON INFORMATION AND PREDICTION FOR SOCIETAL BENEFIT	DR. M. T. BUSHAIR	EXTENDED RANGE FORECAST OF ONSET AND WITHDRAWAL OF SOUTHWEST MONSOON OVER INDIA USING COUPLED MODEL
15	90	MONSOON INFORMATION AND PREDICTION FOR SOCIETAL BENEFIT	VENUGOPAL KURNOOL	MONSOON RAINS AND FLOW PREDICTIONS A CASE STUDY OF UPPER KRISHNA
16	91	MONSOON INFORMATION AND PREDICTION FOR SOCIETAL BENEFIT	PRIYANKA SINGH	BLOCK LEVEL WEATHER FORECAST BASED AGRO-ADVISORY AND ITS IMPACT FOR BIHAR, INDIA
17	8	CLIMATE CHANGE AND MONSOONS	VIKRAM RAJ	ROLE OF AEROSOLS IN MODULATING CLOUDS AND PRECIPITATION OVER CENTRAL HIGHLAND REGION OF INDIA

18	10	CLIMATE CHANGE AND MONSOONS	ASHUTOSH K SINHA	REVISITING THE INDIAN SUMMER MONSOON VARIABILITY OVER THE EASTERN COAST OF INDIA
19	11	CLIMATE CHANGE AND MONSOONS	NANDINI G	DOES EL-NINO AMPLIFY THE ARABIAN SEA AEROSOL AND INDIAN MONSOON RELATIONSHIP?
20	12	CLIMATE CHANGE AND MONSOONS	ANANDU RAJEEV	LONG-TERM TREND IN RAINFALL DURING VARIOUS SEASONS: A CASE STUDY OVER INDIA
21	21	CLIMATE CHANGE AND MONSOONS	VASUNDHARA BARDE	PROJECTION OF INDIAN MONSOON SPARSE ZONE SHIFT UNDER CLIMATE CHANGE
22	24	CLIMATE CHANGE AND MONSOONS	MANALI SAHA	EVALUATION OF INDIAN SUMMER MONSOON UNDER THE INFLUENCE OF CLIMATE CHANGE
23	33	FIELD EXPERIMENTS AND OBSERVATIONAL CAMPAIGNS	MEENU R NAIR	OBSERVATIONAL ATMOSPHERIC VERTICAL STRUCTURE OF CORE MONSOON ZONE IN CENTRAL INDIA



Day 4: 25 March, 2022 (Friday)

Time: 1145-1300 IST (0615-0730 UTC) (75 Minutes)

SESSION COORDINATOR : Dr. RAJIB CHATTOPADHYAY, IMD

SESSION : 25SP

Sr. No.	ID No.	Theme	Name	Title
1	40	HIGH IMPACT MONSOON WEATHER	PAROMITA CHAKRABORTY	EXTREME RAINFALL EVENTS PREDICTION DURING INDIAN SUMMER MONSOON USING CONVECTIVE-SCALE ENSEMBLE PREDICTION SYSTEM
2	41	HIGH IMPACT MONSOON WEATHER	SAUMYENDU DE	DID THE FIRST PAPER IN METEOROLOGY PUBLISHED BY AN INDIAN DECODE TORNADO DYNAMICS 154 YEARS AGO?
3	44	HIGH IMPACT MONSOON WEATHER	PRABHATH H KURUP	SIMULATION OF CLOUDBURST EVENT OVER KERALA DURING THE 2019 MONSOON SEASON
4	46	HIGH IMPACT MONSOON WEATHER	ARULALAN T	EXTREME RAINFALL EVENTS OVER INDIA DURING MONSOONS AND ITS RELATION TO THE MADDEN JULIAN OSCILLATION: PROBABILISTIC PREDICTABILITY BY THE MEDIUM-RANGE MULTI-MODEL ENSEMBLES
5	47	HIGH IMPACT MONSOON WEATHER	TRISANU BANIK	INVESTIGATION OF RAINFALL AND LIGHTNING INTER-RELATIONSHIP DURING THE SOUTH WESTMONSOON SEASONS OVER LIGHTNING HOTSPOTS OF INDIA
6	49	HIGH IMPACT MONSOON WEATHER	AKHIL SRIVASTAVA	HRRR: NOWCAST GUIDANCE TO PREDICT EXTREME WEATHER EVENTS DURING MONSOON SEASON
7	50	HIGH IMPACT MONSOON WEATHER	AKKISSETTI MADHU LATHA	CLIMATOLOGY OF THERMODYNAMIC INDICES AND BACKGROUND SYNOPTIC CONDITIONS RESPONSIBLE FOR SEVERE CONVECTION DURING PRE TO POST MONSOON SEASONS OVER INDIAN REGION

8	55	HIGH IMPACT MONSOON WEATHER	VIGIN LAL F	MONSOON INTRA SEASONAL RAINFALL OSCILLATION OVER GUJARAT STATE 2021.
9	56	HIGH IMPACT MONSOON WEATHER	HEMLATA BHARWANI	IMPACT BASED FORECAST OF FLASH FLOODS OVER SOUTH ASIA
10	59	MODELLING MONSOON PROCESSES	SIDDHARTH KUMAR	DOES INCREASING HORIZONTAL RESOLUTION IMPROVE SEASONAL PREDICTION OF INDIAN SUMMER MONSOON? : A CLIMATE FORECAST SYSTEM MODEL PERSPECTIVE
11	60	MODELLING MONSOON PROCESSES	K. S. S. SAI SRUJAN	DOWNSTREAM AND IN SITU GENESIS OF MONSOON LOW-PRESSURE SYSTEMS IN COUPLED MODELS
12	83	MONSOON INFORMATION AND PREDICTION FOR SOCIETAL BENEFIT	DEVENDRA KUMAR TIWARI	COMPARATIVE STUDY OF INTRASEASONAL VARIABILITY OF SUMMER MONSOON RAINFALL OVER NORTH AND SOUTH BIHAR, INDIA
13	66	MODELLING MONSOON PROCESSES	ABHIJITH V	IMPROVED PQPF IN THE NEPS-G USING ENSEMBLE BMA TECHNIQUE OVER INDIA
14	104	REGIONAL MONSOONS	ARCHISMAN BARAT	CHARACTERISTICS OF MONSOON RAINFALL IN LAST FOUR DECADES OVER AN URBAN AREA OF THE GANGETIC PLAINS
15	70	MODELLING MONSOON PROCESSES	HASHMI FATIMA	ASSESSING LAND SURFACE VARIABILITY DURING SUMMER-MONSOON PERIOD WITH IMDAA REANALYSIS DATA
16	73	MODELLING MONSOON PROCESSES	ARATHY MENON	STRUCTURE AND DYNAMICS OF A CASE-STUDY MONSOON DEPRESSION IN HIGH-RESOLUTION NUMERICAL SIMULATIONS USING THE MET OFFICE UNIFIED MODEL
17	77	MODELLING MONSOON PROCESSES	USHNANSHU DUTTA	ROLE OF CLOUD PROCESSES BEHIND THE INDIAN SUMMER MONSOON RAINFALL AND ITS PREDICTION
18	80	MODELLING MONSOON PROCESSES	ASHU MAMGAIN	EVALUATION OF SHORT RANGE FORECASTS FROM GLOBAL AND REGIONAL ENSEMBLE PREDICTION SYSTEMS OF NCMRWF

19	96	NEW TECHNOLOGIES AND TOOLS	AVNISH VARSHNEY	A MACHINE LEARNING FRAMEWORK FOR THE DETECTION OF BUILTUP CHANGES: USE OF MULTI-SPECTRAL SATELLITE IMAGES
20	97	NEW TECHNOLOGIES AND TOOLS	MADHU CHANDRA R KALAPUREDDY	PYSCANCF - THE PYTHON LIBRARY FOR SINGLE SWEEP WEATHER RADAR DATASETS OF IMD
21	45	HIGH IMPACT MONSOON WEATHER	GOKUL VISHWANATHAN	COMPARING THE INTERACTION OF DRY AIR INCURSION WITH MONSOON DEPRESSION USING ERA-5 AND IMDAA REANALYSIS DATASETS
22	57	HIGH IMPACT MONSOON WEATHER	PRAJNA PRIYADARSHINI	ANALYSIS OF HEAVY RAINFALL OVER INDIA IN AUGUST 2019 AND THE PERFORMANCE OF GLOBAL NUMERICAL MODEL FORECASTS
23	81	MODELLING MONSOON PROCESSES	SAURABH VERMA	ROLE OF PBL AND MICROPHYSICAL PARAMETERIZATIONS DURING WRF SIMULATED MONSOONAL HEAVY RAINFALL EPISODES OVER MUMBAI



Day 5: 26 March, 2022 (Saturday)

Time: 1145-1300 IST (0615-0730 UTC) (75 Minutes)

SESSION COORDINATOR : Dr. A. K. DAS, IMD NWP

SESSION : 26SP

Sr. No.	ID No.	Theme	Name	Title
1	100	REGIONAL MONSOONS	DR. HRUDYA P. H.	CHANGES IN THE RELATIONSHIP BETWEEN EL NIÑO SOUTHERN OSCILLATION AND INDIAN SUMMER MONSOON RAINFALL FROM EARLY TO RECENT DECADES DURING DIFFERENT PHASES OF MONSOON
2	105	REGIONAL MONSOONS	RESHMA T	TRENDS AND VARIABILITIES OF INDIAN SUMMER MONSOON RAINFALL IN DIFFERENT INTENSITY BINS OVER WEST COAST AND MONSOON CORE ZONE
3	107	REGIONAL MONSOONS	UTKARSH VERMA	REVISITING CLIMATOLOGICAL DIURNAL CYCLE OF PRECIPITATION OVER INDIAN SUBCONTINENT USING LATEST IMERG DATA
4	108	REGIONAL MONSOONS	GOPIKA VENUGOPAL C	DYNAMIC AND THERMODYNAMIC STRUCTURE OF ATMOSPHERE ASSOCIATED WITH EXTREME RAINFALL EVENTS OVER KERALA DURING AUGUST 2019
5	113	REGIONAL MONSOONS	DR. AMIT BHARDWAJ	SECULAR TRENDS IN THE LENGTH OF THE SEASONS OF INDIA AND ITS TELECONNECTIONS
6	115	REGIONAL MONSOONS	KRISHNA MISHRA	COMPARATIVE ANALYSIS OF 2013-2021 SOUTHWEST MONSOON ADVANCE OVER INDIA
7	121	REGIONAL MONSOONS	ARIJEET DUTTA	AMO-EURASIAN TELECONNECTION AND ITS RELATIONSHIP WITH INDIAN SUMMER MONSOON

8	123	REGIONAL MONSOONS	MANISH K. JOSHI	TELECONNECTION BETWEEN ATLANTIC MULTIDECADAL OSCILLATION AND INDIAN SUMMER MONSOON RAINFALL
9	125	REGIONAL MONSOONS	SHIBIN BALAKRISHNAN	INVESTIGATION OF EXTREMELY HEAVY RAINFALL EPISODES OVER TAMILNADU DURING NORTHEAST MONSOONS OF 2015 AND 2021
10	133	SUB-SEASONAL TO SEASONAL (S2S) PREDICTIONS	LEKSHMI S	EXTENDED RANGE PREDICTION OF MADDEN-JULIAN OSCILLATION (MJO) USING IITM CFS V2 AND THE ROLE OF INITIAL ERROR ON THE PREDICTION SKILL
11	136	SUB-SEASONAL TO SEASONAL (S2S) PREDICTIONS	TIRUMANI SIVA SAIKRISHNA	IMPACT OF SPECTRAL NUDGING IN THE SIMULATION OF SUMMER MONSOON RAINFALL OVER INDIA
12	137	SUB-SEASONAL TO SEASONAL (S2S) PREDICTIONS	MAHESH KALSHETTI	THE SKILL OF SUBSEASONAL TO SEASONAL FORECAST MODELS IN PREDICTING THE EDDY FORCING ASSOCIATED WITH EXTRATROPICAL-TROPICAL INTERACTION
13	138	SUB-SEASONAL TO SEASONAL (S2S) PREDICTIONS	PRATIBHA GAUTAM	ROLE OF LAND SURFACE FEEDBACK PROCESSES AND PREDICTION SKILL IN THE S2S SCALE DURING MONSOON ONSET IN A COUPLED MODEL FRAMEWORK
14	143	SUB-SEASONAL TO SEASONAL (S2S) PREDICTIONS	DEVABRAT SHARMA	LONG-LEAD PREDICTION AND PREDICTABILITY OF THE INDIAN SUMMER MONSOON RAINFALL
15	146	SUB-SEASONAL TO SEASONAL (S2S) PREDICTIONS	VIBHUTE AMOL SURESH	CHANGES IN ASIAN JET MERIDIONAL DISPLACEMENT AND ITS INFLUENCE ON INDIAN SUMMER MONSOON RAINFALL IN OBSERVATIONS AND CFSV2 HINDCAST
16	147	SUB-SEASONAL TO SEASONAL (S2S) PREDICTIONS	DARSHANA D PATEKAR	SUB-SEASONAL VARIABILITY OF THE INDIAN SUMMER MONSOON RAINFALL 2020 IN OBSERVATION AND CFSV2 HINDCASTS
17	149	HYDROLOGICAL APPLICATIONS OF MONSOON	ASHOK RAJA	RECENT ADVANCES IN PLUVIAL FLASH FLOOD FORECASTING OF INDIA

18	106	REGIONAL MONSOONS	REJI MARIYA JOY	MERIDIONAL GRADIENT OF SEA SURFACE TEMPERATURE OVER THE BAY OF BENGAL AND ITS ASSOCIATION WITH SUMMER MONSOON RAINFALL IN THE INDIAN SUBCONTINENT
19	124	REGIONAL MONSOONS	ARCHANA SAGALGILE	CHARACTERISTICS FEATURES OF LOW-LEVEL JET (LLJ) IN ERA5 AND IMDAA DURING INDIAN SUMMER MONSOON IN SATELLITE ERA
20	129	SUB-SEASONAL TO SEASONAL (S2S) PREDICTIONS	AVINASH PAUL	PREDICTION OF RAINFALL OVER KERALA USING DEEP NEURAL NETWORK
21	110	REGIONAL MONSOONS	KÃfÂ©NEDYSILVÃfÂ©RIO	SOUTHERN AFRICAN MONSOON: INTRASEASONAL VARIABILITY AND MONSOON INDICES
22	84	MONSOON INFORMATION AND PREDICTION FOR SOCIETAL BENEFIT	YAJNASENI DASH	ROLE OF MACHINE LEARNING FOR INDIAN MONSOON PREDICTION