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IND NEWS

INDIA METEOROLOGICAL DEPARTMENT
Ministry of Earth Sciences

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Important Events / Activities

145th India Meteorological Department (IMD) Foundation Day 2020





Dr. Ashutosh Sharma, Secretary, DST, Dr. M. Rajeevan, Secretary, MoES, Dr. Mrutyunjay Mohapatra, DG, IMD and Dr. D. Pradhan, Sc.'G', IMD Foundation Day 2020, New Delhi

India Meteorological Department (IMD) celebrated it's 145th Foundation Day at Dr. Ambedkar International Centre, New Delhi on 15th January, 2020. Dr. Ashutosh Sharma, Secretary, Department of Science & Technology graced the occasion as the Chief Guest. Dr. M. Rajeevan, Secretary, Ministry of Earth Sciences presided over the Function. Dr. Mrutyunjay Mohapatra, Director General of Meteorology highlighted the achievements of IMD during the year 2019 in serving various sectors of society.



Dr. Ashutosh Sharma, Secretary, DST, Dr. M. Rajeevan, Secretary, MoES, Dr. M. Mohapatra, DG, IMD during prize distribution

Dr. Mohapatra informed about upgradation of observational network, improvements in forecast accuracv and improvements in warning dissemination mechanism through launching of new website: www.mausam.imd.gov.in for general public. The winner students from various schools in Delhi were also awarded cash prize and mementoes for their participations in various competitions like quiz, debates, poster making etc. organized by IMD. The programme is available https://youtu.be/ the 2qYaCBhhKHQ.

User's Workshop on "Weather Forecast and Associated Services"

Shri Nitin Gadkari, Hon'ble Cabinet Minister of Road Transport and Highway, Micro, Small and Medium Enterprises, Govt. of India inaugurated as Chief Guest the User's Workshop on "Weather Forecast & Associated Services" at Regional Meteorological Centre, Nagpur on 7th March, 2020 in the august presence of Dr. M. Mohapatra DG, IMD. Shri Ashish Bijawal, Dy. Collector, Nagpur and Dr. P. K. Jain, Regional Director, C.G.W.B. were Guests of Honours of the programme. Shri M. L. Sahu, Sc. 'F' was organizing secretary & about 150 persons participated in the event.



Shri Nitin Gadkari, Hon'ble Minister, Dr. M. Mohapatra, DG, IMD and others during lighting of lamp at Users meet

Important Events

NATIONAL VOTERS' DAY

A Pledge on National Voters Day on 25 January, 2020 was administered at H.Q., IMD and all sub-offices of IMD spread all over India.

Dr. Sanjib Bandyopadhyay, Sc. 'F' administered a pledge along with all officers and staff members of RMC Kolkata (Alipore).



Officials took pledge on National Voters Day at RMC, Kolkata

71ST REPUBLIC DAY

71st **Republic Day** was celebrated and National Flag was hoisted at H.Q., IMD and all sub-offices of IMD on 26th January, 2020 followed by National Anthem and other patriotic songs. On this occasion, all heads of the offices hoisted National Flag and sang National Anthem and other patriotic songs along with officers and staff members.



Officials during Flag hoisting on Republic Day 2020 at RMC Kolkata

NATIONAL SCIENCE DAY

National Science Day was celebrated on 28th February, 2020 at H.Q., IMD and all sub-offices of IMD spread all over India. On this occasion, an exhibition was arranged in the main building of of IMD, Pune. **Dr. D. S. Pai**, Scientist 'F' inaugurated the exhibition. It was well attended by large number of students, scientists, journalist and general public.

National Science Day was celebrated in Regional Meteorological Centre, Guwahati on the theme of this year 'Women In Science'. Dr. Rousy K. Baruah, State Project Manager, Assam State Rural Livelihood Mission, Guwahati was the Chief Guest of the function. Shri Ajay Narayan, PGT,

Geography, Kendriya Vidyalaya, Borjhar, Guwahati was the Guest-of-Honour. On this occasion, **Dr. Sanjay O'Neill Shaw**, DDGM, RMC Guwahati delivered a lecture on the contribution of women in the field of science and technology. Dr. Rousy K. Baruah, in her presentation, stressed on giving opportunities to females in their families to expand their wings. The programme was anchored by Ms Sandipa Bhattacharya. Vote of thanks was given by Ms. Anamika Sarma, Scientific Assistant.



Shri Ajay Narayan, Dr. Sanjay O'Neill Shaw, Dr. Rousy K. Baruah and Ms. Sandipa Bhattacharya during National Science Day

AMS Ludhiana celebrated National Science Day in fond memory of Sir C.V. Raman. On this day a group of students from Govt. Boys Sr. Sec. School, Sahnewal (Ludhiana) visited our Office premises and learnt about the "Role of Aviation and Meteorology in Nation Building". Officials at AMS Ludhiana gave a short talk on Basics of Meteorology and also held Practical demonstrations.



Officials of AMS Ludhiana giving a short talk to the students

WORLD METEOROLOGICAL DAY 2020

World Meteorological Day (WM DAY) - 2020 was celebrated on 23rd March, 2020 at IMD HQ and its sub-offices all over India on the theme "Climate, Water & Agriculture".

On the occasion, several special programmes were aired on its theme Climate, Water & Agriculture and other meteorological topics at different channels of TV and radio including DD National (DD Science) & regional channels in which many IMD scientists were invited as experts to participate.

A special programme entitled "Samjhein Mausam Ke Vigyan Ko" on the theme "Climate and Water" was aired on DD National (DD Science) at 5:00 PM on 21st March, 2020 with experts as Dr. Mrutyunjay Mohapatra, Director General of Meteorology, India Meteorological Department and Prof. S. K. Dube, Vice Chancellor, Amity University.





Dr. M. Mohapatra, DG, IMD and Prof. S. K. Dube, Vice Chancellor, Amity University on DD National

Human Resource Development Activities

CONFERENCES/SEMINAR/TALK

Dr. S. D. Attri, Sc., 'F' delivered a talk on "Agromet-DSS to enhance climate services to agriculture for risk management" in Inaugural Session of Asia Regional workshop on "Digital Solutions to Accelerate Adaptation to Climate Change in Agriculture" held during 13-14 January, 2020 at Divecha Centre for Climate Change, Indian Institute of Science, Bengaluru.



Dr. S. D. Attri, Sc. 'F' during the talk at IISC

Shri S. K. Manik, Sc. 'C' attended 11th Seminar of "**Water Talk**" organized by DoWR, RD&GR (National Water Mission) on 17th January, 2020 at Dr. Ambedkar International Centre, New Delhi.

Shri H. R. Biswas, Sc. 'E' attended the International Conference on "Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) Disaster Management Exercise - 2020" held at Puri and Bhubaneswar during 11-13 February, 2020 and delivered a lecture on Early Warning System.

Dr. M. Mohapatra, DG, IMD attended the National Conference on "Coastal Ocean-Atmosphere Science and Technology (COAST 2020)" at Berhampur University and National Science Day at Institute of Physics, Department of Atomic Energy, Govt. of India as Chief Speaker on 28th February, 2020. He was also felicitated for accurate cyclone warning services in the region.



Dr. M. Mohapatra, DG, IMD during the Conference

TRAININGS

Dr. Sanjib Bandyopadhyay, Sc. 'F' and Shri H. R. Biswas, Sc. 'E' convened a two days Training Programme for all Officer Incharges of MCs under RMC Kolkata on "**Block Level Forecast and Administrative & other Technical issues**" on 20-21 January, 2020 at RMC, Kolkata.

A two days 'Training-Cum-Familiarization Workshop on Precipitation and Aerosol Chemistry' was held from 25-26 February, 2020 in the office of CR&S, Pune.

A two-days "AWS training programme" for officials from different observatories in Odisha for installation and maintenance of Cellcomm instruments was held at M. C., Bhubaneswar under the guidance of Shri P. S. Biju, Sc. 'E' from O/o CRS, Pune from 2-3 March, 2020.

Shri U. V. Singh, Sc. 'E', Dr. A. K. Mitra, Sc. 'E', Shri Shibin, Sc. 'C' and Shri Ramashray Yadav, Sc. 'C' imparted on the "**Job training on activity of Satellite Meteorology Division**" to the trainees of Meteorological Instrumentation and Information System during 12-13 March, 2020.

Dr. Sanjib Bandyopadhyay, Sc., 'F' inaugurated "**Cellcomm Training on AWS data logger system**" to IMD Participants from all over the region, on 13th March 2020. **Shri Sanjoy Bhowal**, S.A. from FMO Jalpaiguri, **Shri Shyam Sagar Yadav**, S.A. from MC Ranchi and **Shri Rakesh Kumar**, S.A. from FMO Asansol were on training on Cellcomm Data Logger at RMC Kolkata.



Dr. Sanjib Bandyopadhyay, Sc. 'F' during Cellcomm Training

WORKSHOP

Dr. S. O. Shaw, Sc. 'E' Guwahati participated in the workshop on "**Interim Report of SSAP for water sector Assam**" on 18th January, 2020 at IIT Guwahati.

Shri S. K. Manik, Sc. 'C' attended the International Workshop on "Advanced spatial Analytics and Deep Learning for Geospatial Applications" during 20-31 January, 2020 at Bengaluru.

Dr. K. K. Singh, Sc. 'G' and **Dr. S. D. Attri**, Sc. 'F' participated in "**Peer Exchange Round-table on Drought Resilient Agriculture**" organised by NIDM, New Delhi on 30th January, 2020.

Dr. S. D. Attri, Sc. 'F' participated in the workshop on "Assessment and management of ground water resources under changing climatic conditions" held at PAU Ludhiana on 6th February, 2020.



Dr. S. D. Attri, Sc. 'F' during the workshop

Shri Kuldeep Srivastava, Sc. 'E' attended a National Workshop on "**e-office**" on 12th February, 2020 at Pravasi Bhartiya Kendra, New Delhi.

Dr. Sanjib Bandyopadhyay, Sc. 'F' attended a workshop and delivered a lecture on "**Weather & Climate: Data Analysis and Application**" on 17th February, 2020 at University of Calcutta, Kolkata 700019 Organized by Department of Atmospheric Sciences, University of Calcutta.

Dr. G. K. Das, Sc. 'E' attended National Workshop on "**Weather & Climate: Data analysis and application**" at the Deptt. of Atmospheric Science, University of Calcutta on 18th February, 2020.

Shri H. R. Biswas, Sc. 'E' attended the Workshop on Implementation of Project on "**Urban Integrated Environmental Modeling and Services for Indian Cities**" at OSDMA, Rajiv Bhawan, Bhubaneswar on 19th February, 2020.

Dr. S. D. Attri, Sc. 'F' delivered talk on "Operationalizing District Agromet Units (DAMU) for Effective Weather Based Services" at ICAR-KVK Workshop 28th February, 2020 at NASC, New Delhi.

Dr. Sanjib Bandyopadhyay, Sc. 'F' inaugurated and participated in the Hindi workshop. **Shri Ramesh Chandra Mishra**, Hindi instructor from Department of Official Languages imparted the training on 5th March 2020.



Dr. Sanjib Bandyopadhyay, Sc. 'F' during the Hindi workshop

Dr. S. D. Attri, Sc. 'F' delivered invited talk on "Operationalising District Agromet Units (DAMUs) For **Effective Weather Based Services"** in Regional User Meet on 7th March, 2020 at Nagpur.

Shri B. P. Yadav, Sc. 'F' and Shri Asok Raja Sc. 'C' attended the half Day Workshop on "**Water Security and Sustainable Development Hub**" on 13th March, 2020 at IIT, Delhi.

LECTURES

Shri Virendra Singh, Sc. 'F' delivered lecture to the trainees of "**Forecasters Training course Batch-188**" on 22-23 January, 2020 at MTI Pune.

Dr. S. D. Attri, Sc. 'F' delivered lecture on "**Effect of urbanization on extreme events**" in Advanced Refresher course on "**Extreme weather events**" at IMD Pune on 23rd January, 2020.

Shri Umasankar Das, Sc. 'C', delivered a lecture on "**A Tale of two spices: Indian Monsoon and Its variability**" at Department of Applied Geography, Ravenshaw University, Cuttack on 25th January, 2020.



Shri Umasankar Das, Sc. 'C', during delivering lecture

Shri H.R. Biswas, Sc. 'E' delivered a lecture on "Climate Change, Regional Scenario and Weather Forecasting" on the occasion of celebrating the Golden Jubilee of Geography Department, Utkal University, Vani Vihar, Bhubaneswar on 18th February, 2020.

Shri Amit Kumar, Sc. 'C', delivered lecture in Familiarization Training on "**Interpretation of Radar**, **Satellite and NWP Products For Nowcasting**" held at M.C., Chandigarh during 4-5 March, 2020.



Infrastructure Development & Installations

new Automatic Weather Station was Installed & commissioned at Jammu Met. Office and Jammu Met. observatory.

Shri U. K. Shende, Sc. 'E' visited New Delhi from 14-19 January, 2020 for "Installation of New Drishti Current Weather Information System (DCWIS)" at IGI Airport, Palam, New Delhi

Five (5) numbers of Manual Surface Observatory have been opened and installed Single Stevenson Screen with four thermometers (DB, WB, Max. and Min.) and ORG in each Observatory of five District Head Quarters at Nayagarh, Boudh, Chhatrapur (Ganjam), Paralakhemundi (Gajapati) and Rayagada by M. C., Bhubaneswar in collaboration with **Odisha Govt.** during the month January, 2020.



Manual Surface Observatory opened at Chhatrapur (Ganjam/District)

S/Shri S. S. Mairal, Met. 'B' and S. Y. Waghmare, S.A. visited and installed Agromet observatory at AMFU Khargone, Madhya Pradesh and AMFU Bharari, Uttar Pradesh from 6-14 February, 2020.

S/Shri S. D. Doke, S.A. and Rajesh Kumar Yadav, S.A. were on from 17-22 February, 2020.

Aviation Weather Observing system comprising of Four Drishti Transmissometer Systems & Two Current Weather **Instrument systems** on 10 mts Frangible mast installed & commissioned at New Runway of Bangalore Airport.

CWIS has been installed (except anemometer) on 7th March, 2020 at **Pakyong Airport** by the touring party from CRS Pune.



CWIS installed at Pakyong Airport, Sikkim

PTO Siliguri opened on 18th March, 2020 with the 0300 UTC Observation at Siliguri College.



New Installations: Seventy-Eight (78) more stations/locations were added on IMD's new station-wise nowcast warning web page for issuing three hourly nowcast warnings thereby increasing the total number of nowcast stations to 854.

Inter-Agency Meetings

Dr. (Ms.) Sathi Devi, Sc.'F' and Smt. Sunitha Devi S., Sc.'E' attended a Meeting of the "Expert Committee constituted for vetting of Terms of Reference of Expression of Interest (EoI)/ Request for Proposal (RFP)" for selection of an agency for conducting a pilot study on 'Multi Hazard Vulnerability Risk Assessment' at NDMA on 7th January, 2020 and provided inputs for modification of the RFP.

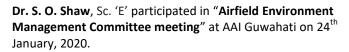
Dr. R. K. Jenamani, Sc. 'F' represented IMD and participated in "23rd Cauvery Water Regulation Committee (CWRC)" meeting held during 9-10 January, 2020 at Puducherry and presented the rainfall status of NE monsoon of 2019-20. He also visited tour to Varanasi Airport for "Installation of New CWIS system" October iver delta and canal areas of Karikal-Tamil Nadu border areas with expert team for hydro-meteorological assessment.

> Shri H. R. Biswas, Sc. 'E' attended "Crop Weather Watch Group Committee Meeting" at Krushi Bhawan, Deptt. of Agriculture & Farmer's Empowerment, Govt. of Odisha on 13th January, 2020.

> Dr. A. K. Das, Sc. 'E' attended the "Inter-Ministerial Committee meeting on Water Conservation" on 16th January, 2020 organized by DoWR, RD&GR (National Water Mission) at Sharm Shakti Bhawan, New Delhi.

> Dr. S. D. Attri, Sc. 'F' participated in Project monitoring committee meeting for NSM project "Urban Modelling: Development of multi-sectorial simulation lab and science based decision support framework to address urban environment issues" on 17th January, 2020 chaired by Secretary, MoES in New Delhi.

> Shri U. K. Shende, Sc. 'E' attended the meeting with AAI-DIAL (Delhi International Airport Limited) on 17th January, 2020 regarding "Meteorological site selection for newly constructed runway number 29L to 11L" at IGI Airport, New Delhi.



Shri Vivek Sinha, Sc. 'F' along with **Shri A. Shankar**, Sc. 'B' attended a meeting with Vice Chairman and members of Bihar State Disaster Management Authority regarding "**Services provided by IMD**" on 24th January 2020.

Dr. Ranjeet Singh, Sc. 'F' attended "**Crop Weather Watch Group meeting**" at Krishi Bhavan on 31st January, 2020.

Shri H. R. Biswas, Sc. 'E' attended a meeting on "Implementation of Comprehensive Mass Messaging System for dissemination Disaster Early Warning" at O/o SRC, Rajiv Bhawan, Bhubaneswar on 1st February, 2020.

Shri Virendra Singh, Sc. 'F', Dr. R. K. Giri, Sc. 'E' and Dr. A. K. Mitra, Sc. 'E' attended the meeting with "Meteo France International (MFI)" on 4th February, 2020 at H.Q., New Delhi.

Dr. Kuldeep Srivastava, Sc. 'E' attended a meeting to discuss and finalize technicalities pertaining to hosting of "**Web-DCRA**" & **DSS Tool at IMD, HQ**" on 6th February, 2020 at NDMA, New Delhi.

Dr. S. L. Singh, Sc. 'F', **Dr. Kuldeep Srivastava**, Sc. 'E', **Shri Sankar Nath**, Sc. 'E' and **Shri Sunny Chug**, Sc. 'C' attended a meeting regarding "**UMANG App**" on 7th February, 2020 at H.Q., IMD, New Delhi.

Shri H. R. Biswas, Sc. 'E' attended the Brainstorming Session on "**Climate Change**" at the Centre for Excellence in Environment, Climate Change and Public Health (CoE-ECCPH), Utkal University, Bhubaneswar on 10th February, 2020.

Dr. D. S. Pai, Sc. 'F', Dr. Pulak Guhathakurta, Sc. 'F', Dr. Kripan Ghosh, Sc. 'E', Shri R. Balasubramanian, Sc. 'E' and Senior Scientists attended the "ICCS-6 and South Asia Heat Health Summit (SAHHS) meeting" at IITM Pune from 11-15 February, 2020.

Dr. S. O. Shaw, Sc. 'E' participated in DAMU review meeting. "ICAR-ATARI Zone VI" for newly recruited SMS and Observers held at Guwahati, during 14th & 15th February, 2020.

Shri A. K. Baxla, Sc. 'E', attended Review meeting of "Pilot Studies for GP level Yield Estimation using Technology of MoAg&FW, DAC&FW under Pradhan Mantri Fasal Bima Yojna scheme" on 18th March 2020 at MNCFC Pusa Road, New Delhi.

Dr. Mrutyunjay Mohapatra, DG, IMD participated in preparatory meeting for "**Shri Amarnath Yatra, 2020**" held by Home Secretary, Govt. of India on 19th March, 2020.

माननीय संसदीय राजभाषा समिति की दूसरी उप समिति द्वारा दिनांक 27 फरवरी, 2020 को मौसम केंद्र, अहमदाबाद का वडोदरा में निरीक्षण किया गया। इस निरीक्षण में मुख्यालय से डॉक्टर देवेंद्र प्रधान, वैज्ञानिक 'जी', सुश्री रेवा शर्मा, उपनिदेशक (राजभाषा) तथा श्रीमती सरिता जोशी, सहायक निदेशक (राजभाषा) ने भाग लिया।



माननीय संसदीय राजभाषा समिति का मौसम केंद्र, अहमदाबाद में निरीक्षण

भारत मौसम विज्ञान विभाग, मुख्यालय की राजभाषा कार्यान्वयन समिति की 150 वीं विशेष बैठक दिनांक 19 मार्च, 2020 को डॉक्टर देवेंद्र प्रधान वैज्ञानिक जी 'की अध्यक्षता में आयोजित की गई।



भारत मौसम विज्ञान विभाग, मुख्यालय की राजभाषा कार्यान्वयन समिति की 150 वीं विशेष बैठक

Awards & Recognitions

The 29th Biennial MAUSAM Award consists of a Citation and cash prize of Rs.50,000/- (Rs. Fifty Thousand only) were also conferred upon Dr. S. P. Ghanekar, Dr. S. G. Narkhedkar and Late Prof. D. R. Sikka for their research paper entitled, "Progress of Indian summer monsoon onset and convective episodes over Indo-Pacific region observed during 2009-2014" published in the October 2016 (Vol. 67, No. 4) issue of MAUSAM.

India Meteorological Department (IMD) presented awards for the year 2019-20 for Best RMC - RMC, Mumbai; Best MC - MC, Bhubaneswar; Best MO - (i) M.O. Puri, (ii) M.O. Kolhapur, (iii) M.O. Ramagundam; Best AMO/AMS - (i) AMO Kolkata, (ii) AMO Thiruvananthapuram, (iii) AMO Nagpur; Best RS/RW -RS/RW Jodhpur; Best DWR - DWR, Vishakhapatnam; Rajbhasha Shield - MC, Gangtok; Best Group 'A' Officers -(i) Shri J. P. Gupta, Sc. 'F', MC, Lucknow, (ii) Shri Sandeep Kumar Sharma, Sc. 'B' MWO Palam; Best Group 'B' Officials -(i) Shri S. N. R. Gopal, Met. 'B', MC, Banglore, (ii) Shri Arun Sharma, Met. 'A', DGM's Office (HQ), (iii) Sh. Rajiv Chawla, A.O.-III, DGM's Office, (iv) Shri Ashwin Raju D K, S.A., RMC, Chennai, (v) Mrs. Priya Dinesh, Assistant, MC, Hyderabad; Best Group 'C' Officials: (i) Shri Naveen Prajapati, Steno Gr.II, RMC, Kolkata, (ii) Shri Manoj Kumar Paul, UDC, RMC, Guwahati, (iii) Shri D. V. Bhinge, MTS, CRS, Pune (iv) Shri S.S. Tike, MTS, M.O. Satara on the occasion of 145th IMD foundation day on 15th January 2020 at New Delhi.



Fakir Mohan University, Odisha conferred the Doctor of Science (D. Sc.) (Honoris Causa) to Dr. Mruryunjay Mohapatra, DG, IMD for his outstanding & distinguished contributions in the field of Atmospheric Sciences and Meteorology during it's 10th Convocation on 4th March, 2020.



conferred the Doctorate of Science

Research & Publications

On the occasion of IMD Foundation Day 2020, IMD's Hindi "Mausam Manjusha", Probable Maximum entitled "Observational Study of Black Carbon Aerosols: A Preliminary Assessment from Environment Monitoring Network of IMD", Pre-monsoon Thunderstorms during 2019: A Report" and "Monsoon Report 2019" were also released.



Dr. Ashutosh Sharma, Secretary, DST, Dr. M. Rajeevan, Secretary, MoES, Dr. M. Mohapatra, DG, IMD and Dr. D. Pradhan, Sc.'G'. during IMD Foundation Day

Fifteen (15) Research paper published in guarterly research journal MAUSAM Vol. 71 No. 1 (January, 2020).

RSMC New Delhi prepared "Tropical Cyclone Operational Plan TCP-21 (Edition 2019)" and sent it to WMO for publication. The same is also available on RSMC website at http://www.rsmcnewdelhi.imd.gov.in/images/pdf/ publications/tcp-21/tcp-21-2019.pdf. The TCP-21 consists of an explicit formulation of the procedures adopted by all the member countries of WMO/ESCAP Panel on Tropical Cyclones in the Bay of Bengal and Arabian Sea region including Bangladesh, India, Iran, Maldives, Myanmar, Pakistan, Qatar, Saudi Arabia, Sri Lanka, Sultanate of Oman, Thailand, United Arab Emirates and Yemen for the preparation, distribution and exchange of information and warnings pertaining to tropical cyclones.

Report on "Super cyclonic storm KYARR" was circulated to all stake holders and uploaded on RSMC website. The same is available at the link:http://www.rsmcnewdelhi. imd.gov.in/ images/pdf/publications/preliminary-report/ kyarr.pdf.

Media Interaction

MEDIA WORKSHOP

Dr. S. O. Shaw, Sc. 'E', Shri Sunit Das, Sc. 'E' and Shri Atul Kumar Singh, Sc.'C' attended Media Workshop on "Weather and Climate information" on 7th January, 2020 at RMC Guwahati. Dr. Sanjay O'Neill Shaw, Sc. 'E' in his inaugural speech welcomed the media persons and thanked them for giving wide coverage of weather forecasts and warnings provided by Regional Meteorological Centre, Guwahati. S/Shri S.N. Deka and H.G. Pathak were invited as special guest.

The workshop was attended by media persons of various houses like:- Doordarshan, Aaj Tak, India, G Plus, DY365, Pratidin Time, News18, News Live, E TV, Time 8, News Time, Prag News etc. During interaction session with media persons, answers were given to their Precipitation atlas of Indus River Basin, Met. Monograph OG Cqueries. The media persons were highly satisfied with the presentations given to them. They liked the facilities available at RMC, Guwahati and appreciated the services provided to media.



Dr. S. O. Shaw, Sc. 'E' and others during media workshop

Shri S. S. Mairal, Met. 'B' visited Doordarshan Kendra, Pune and participated in talk on 'Effects of Cyclones on Agriculture and it's management' in Krishi darshan programme on 28th February.

IMD NEWS

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M.C. Bhubaneswar issued Special Weather Bulletins (Informatory Messages) and Press Release on "**Wet spell, Intense Rainfall and Thunderstorm Activity**" to State Govt. Offices, Media and General Public and all concerned users during 5th to 8th and 21st to 25th February, 2020. Frequent print and electronic media briefings about the system and its intensification have been done during the period.

Dr. Sanjib Bandyopadhyay, Sc. 'F' delivered his talk in All India Radio on the occasion of "**WMO day**" on 17^{th} and 20^{th} March, 2020.

Visitors

Forty (40) students of ITI Arab Ki Sarai, Delhi visited **Satellite Meteorology Division, IMD H.Q.** on 6th January, 2020 for familiarization with the activity of Satellite Meteorology Division.

Two (2) students from Deptt. of Atmospheric Science, School of Earth Science, Central University of Rajasthan visited M.C. Bhubaneswar on 6th January, 2020 for exposure to Met. Observatory and Operational Forecasting Methods.



Students at M.C. Bhubaneswar

Twenty Four (24) students along with 12 teachers of major mining and industrial regions of the state participating in the event visited **M.C., Bhubaneswar** on 11th January, 2020 as part of the State level Environment cum Mineral Awareness Programme (EMAP).



Students & teachers of during visit of M.C., Bhubaneswar

A delegation led by **Director of Meteorological Department of Qatar and Permanent Representative of Qatar with WMO**

visited IMD, H.Q. on 13th January, 2020 and held a meeting with **Secretary, MoES and Director General of Meteorology** and a team of senior scientists. The delegation was briefed about various activities of IMD and the meteorological support in terms of observation, model & forecast products and trainings being provided by IMD to Qatar.

Twenty (20) Students along with two teachers of Surendranath Centenary School, Ranchi visited **M.C., Ranchi** on 17th January, 2020. They were briefed about modern weather forecast procedure of IMD and Climate Condition of Ranchi.

One hundred Sixty (160) students of Vosco Public School of class Fifth, Delhi visited Satellite Meteorology Division, IMD H.Q. during 20-23 January, 2020 for familiarization.

One hundred five (105) students of Krishna Engineering College visited Satellite Meteorology Division, IMD H.Q. during 29th and 30th January, for familiarization.

World Meteorological Organization (WMO) Evaluation Team inspected IMD's training centre at Delhi and Pune during 10-14 February, 2020 to review WMO's Regional Training Centre (RTC). The delegation from WMO had a live demonstration of teaching & training facilities at Regional Training Centre (RTC), hostel facilities and also visited various work-stations/divisions of IMD at Delhi and Pune.



WMO Evaluation Team at IMD

Sixty eight (68) students and teachers of Akra Krishnanagar alika Vidyalaya on 13th February, 2020 and to 85 students and teachers of Belgharia Jatindas Vidyamandir for Girls, Kolkata on 20th February visited **RMC**, **Kolkata** and they were briefed details of weather forecast by RMC Kolkata officials.

Eighty (80) students and 8 teachers of Aerodrome Colony, U.G. U. P. School, Bhubaneswar visited **M. C., Bhubaneswar** to get



Students and teachers at M.C. Bhubaneswar

familiarized with different observation instruments, operational activities and weather forecasting on the occasion of National Science Day on 28th February, 2020.

Sixty (60) students and 6 teachers of degree college and engineering students were visited **RMC**, **Nagpur**. They were briefed by IMD officials about basics of surface observatory sites, instruments, AWS and upper air observation (RS/RW observation) and radiation unit. A Films on cyclone and working of various section was explained to them.



Students and officers posting in RSRW during visit at RMC, Nagpur

One thousand fifty five (1055) visitors/ students visited Central Hydromet Observatory (CHO), IMD, H.Q. during the month of January (495), February (510) and March (50), 2020 from different schools, colleges and other official agency for the familiarization of the Meteorological instruments using in CHO.



Visitors/students visited Central Hydromet Observatory, IMD, H.Q.

National / International Collaboration

Dr. A. K. Mitra, Sc. 'E', **Shri R. S. Negi**, Met. 'B' and **Shri Mukesh Kumar**, S.A. participated in a joint campaign of "**CAL/VAL observations for INSAT-3D and INSAT-3DR Satellite data**" during 4-8 January, 2020 at Bhuj, Gujarat. The campaign was conducted in collaboration with SAC, ISRO team members.

A "Location specific SMS based Nowcast and Dissemination System" for thunderstorm and lighting warning to the expected affected people over Jharkhand is formulated by joint collaboration of Meteorological Centre, Ranchi, Jharkhand Space Application Centre, (JSAC), Govt. of Jharkhand and State Disaster Management Authority (SDMA) of Govt. of Jharkhand. The system has been made operational from February, 2020.

Foreign Visit

Indian delegation lead by **Dr. M. Rajeevan, Secretary**, MoES, Dr. Gopal lyengar, Sc. 'G', MoES and **Dr. M. Mohapatra**, DG, IMD was on ex-India deputation to Bangkok, Thailand during 20-22 January, 2020 to participate "11th Council Meeting of Regional Integrated Multi-Hazard Early Warning System (RIMES)". During the meeting, DG, IMD made a presentation on the "Success story of cyclone warning services of IMD for the region" in the RIMES Council meeting held at Asian Institute of Technology, Bangkok on 21 January, 2020.

Shri S. C. Bhan, Sc. 'F' was on foreign deputation to Geneva, Switzerland during 21-23 January, 2020 to participate in "Expert team meeting: Implementation of WHO/WMO Joint Work plan and Integrated Health Science and Services".

Dr. (Mrs.) Suman Goyal, Sc. 'F' was on foreign deputation to California, USA during 23-28 January, 2020 to participate the Workshop on "**Merging geostationary infra-red with Lowearth-orbit microwave observations to improve the now casting of severe convection**" under the Jet Propulsion Laboratory's Science Visitor and Colloquium Program (SVCP) in Pasadena

Ms. Soma Sen Roy, Sc. 'E' was on foreign deputation to USA during 28-31 January, 2020 to participate in the "4th Convective Scale Modeling Workshop at National Centre for Atmospheric Research (NCAR) Boulder".

Dr. Sunit Das, Sc. 'E' was on ex-India deputation to Japan from 19th January to 15th February, 2020 to participate in the knowledge Co-creation Program on "Practical Methodology for Flood Control Planning and River Basin Management in Asia Region".

Shri Shanker Pal, Sc. 'B' National Centre for Seismology (NCS), was on ex-India deputation to Japan during 13th January to 7th March, 2020 to participate in the "Group and Region Focused Program – Global Seismological Observation" at Building Research Institute (BRI) Tsukuba, Japan.

Mrs. Sunitha Devi Santhamma, Sc. 'E' was on foreign deputation to Geneva, Switzerland during 6-7 February, 2020 to participate in "Tropical Cyclone Impact Estimation for Humanitarian Preparedness and Response: Joining the Dots" was held in conjunction with the Humanitarian Network & Partnerships Week (HNPW) 2020 during the period.

Dr. N. Puviarasan, Sc. 'E' was on foreign deputation to European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), Germany during 19-21 February, 2020 to participate in "2nd Risk assessment workshop of The Coordination Group for Meteorological Satellites (CGMS) Working Group III".

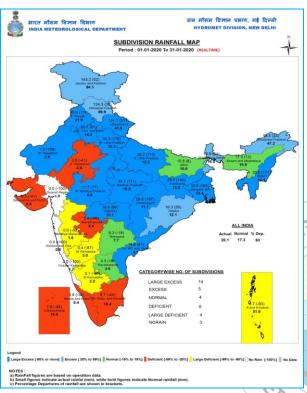
Dr. Kuldeep Srivastava, Sc. 'E' was on Ex-India deputation during 3-6 March, 2020 to participate in "CI/CD (Continuous Integration/Continuous Delivery) Training /Workshop and Publish/Subscribe Workshop" in Toulouse, France.

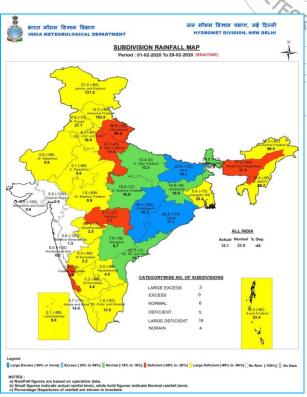
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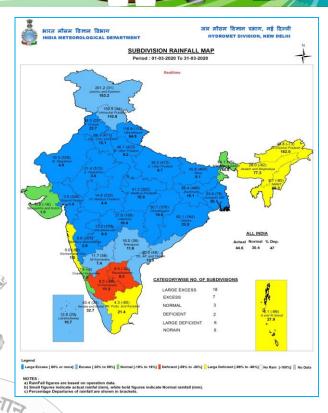
WEATHER SUMMARY

IMD has provided **daily weather forecast** to the **Rashtrapati Bhavan** during 18-25 January, 2020 for the **Annual Republic Day Parade of 26th January, 2020** along with three hourly nowcasts from the evening of 25th January 2020 to evening of 26th January 2020.

THE SUBDIVISION-WISE REAL-TIME RAINFALL MAPS JANUARY-MARCH, 2020







IMD HAS BROUGHT OUT THE IMPORTANT PRESS RELEASES DURING JANUARY TO MARCH, 2020

(i) Seasonal Outlook for temperature during March-May, 2020 on 27th February 2020 (ii) Seasonal Outlook for temperature for the period from April to June 2020 on 30th March 2020 (iii) IMD has carried out an analysis of observed monsoon rainfall variability and changes of 29 States & Union Territory at State and District levels during the Southwest monsoon season from June to September (JJAS), based on IMD's observational data of recent 30 years (1989-2018) and press release related to the same was released on 30th March 2020.

Important Weather Occurrences

Ten numbers each of Western Disturbances (WDs) have affected the NW India during the month of January and February whereas nine WDs have affected the region during March, 2020. The lowest minimum temperature of -0.6 °C had been recorded at Kota (East Rajasthan) on 20th January, 2020 over the plains of the country during the period.

COLD WAVE & COLD DAY CONDITIONS OVER WEST BENGAL

Cold day condition observed two days over Gangetic West Bengal, four days in Sub-Himalayan West Bengal in January. Cold wave condition observed over Sub-Himalayn West Bengal four days in January, one day in February.

DENSE FOG/HAIL/SNOW OVER THE PERIOD

Dense fog observed over Gangetic West Bengal three days in January, four days in February and over Sub-Himalayan West Bengal & Sikkim eleven days in January, ten days in February. In Sub-Himalayan West Bengal & Sikkim snow fall observed one day each in January & February, 2020.