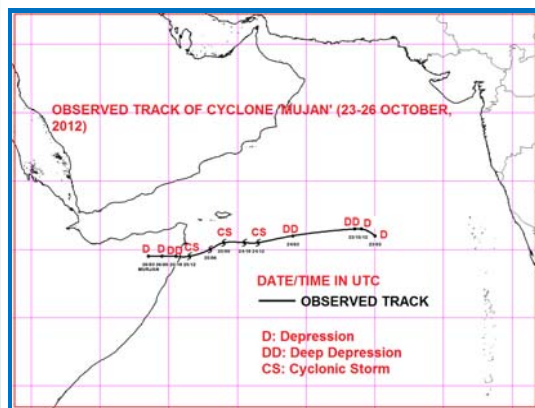


CYCLONIC DISTURBANCES DURING OCT-DEC 2012

Five cyclonic disturbances (depression and above intensity) formed over north Indian Ocean during Post Monsoon Season October – December 2012 against the normal of about 13 -14 disturbances. It included two cyclonic storms and three deep depressions. Out of five disturbances, three including one cyclonic storm, NILAM and two deep depressions formed over the Bay of Bengal and one Cyclonic storm, MURJAN and one deep depression formed over the Arabian Sea.

(i) 'MURJAN' OVER ARABIAN SEA (23-26 OCT, 2012)

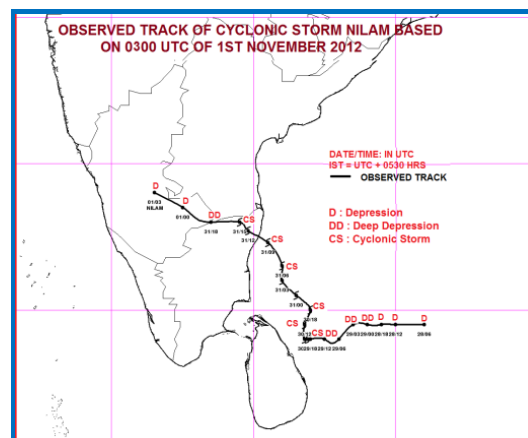


Track of cyclonic storm "MURJAN" over Arabian Sea

A depression formed over southeast and adjoining southwest and central Arabian Sea near lat. 11.0° N and long. 65.0° E, about 800 km west of Amini Divi in the morning of 23rd October 2012. It moved initially west-northwestwards and then westwards and intensified into a deep depression in the evening of 23rd October. It then moved west-southwestwards and intensified into a cyclonic storm, 'MURJAN' in the evening of 24th October. It then continued to move west-southwest wards and crossed Somalia coast near lat. 9.5° N between 2230 and 2330 hrs IST of 25th October, 2012. Due to land interaction it weakened into a deep depression over coastal Somalia at 2330 hrs IST of 25th October. It further weakened into a depression over Somalia in the morning of 26th October while moving west-southwest wards. It further weakened into a well marked low pressure area over Somalia and neighbourhood in the evening of 26th October, 2012. The track of cyclonic storm is shown above.

(ii) 'NILAM' OVER BAY OF BENGAL (28 OCT - 1 NOV, 2012)

A depression formed over southeast and adjoining southwest Bay of Bengal at 1130 hrs IST of 28th October 2012 near latitude 9.5° N and longitude 86.0° E. It moved westwards and intensified into a deep depression in the morning of 29th October, over southwest Bay of Bengal near latitude 9.0° N and longitude 83.0° E, about 550 km south-southeast of Chennai. It continued to move westwards and intensified into a Cyclonic Storm, NILAM in the morning of 30th October over southwest Bay of Bengal off Sri Lanka coast. The Cyclonic Storm, NILAM then moved north-northwestwards, crossed north Tamilnadu coast near Mahabalipuram, south of Chennai between 1600 and 1700 hrs IST of 31st October, 2012. After the landfall the cyclonic storm, Nilam moved west-northwestwards and weakened gradually into a deep depression and then into a depression over south Interior Karnataka in the morning of 1st November 2012.



Track of cyclonic storm "NILAM" over Bay of Bengal



RAINFALL ACTIVITY DURING POST MONSOON

During month of October the rainfall activity for country as a whole was below normal. It was 70% of LPA value.

During month of November rainfall for southern peninsula was 129% of LPA value which was above normal. The rainfall for the country as a whole was 113% of LPA value.

During December rainfall for southern peninsula was 57% of LPA value which was below normal. The rainfall for the country as a whole was 70% of LPA value. The subdivision wise rainfall is given in the above figure.

Editorial Team

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मौसम विज्ञान विभाग समाचार
IMD NEWS

INDIA METEOROLOGICAL DEPARTMENT
(Ministry of Earth Sciences)

NATIONAL & INTERNATIONAL CO-OPERATION

EXTRAORDINARY SESSION OF WMO



Dr. L. S. Rathore, DGM, AVM (Dr.) Ajit Tyagi and others at WMO Geneva

Indian delegation led by Dr. Shailesh Nayak, Secretary, MoES and Chairman Earth System Sciences Organisation, comprising of Dr. L. S. Rathore, DGM, Dr. Ajit Tyagi, and Shri A.S.Khati, Joint Secretary, MoES visited WMO Geneva, Switzerland during 29-31Oct., 2012 to participate in Extraordinary Session of WMO Congress. The Congress was chaired by Mr. D. Grimes, President of WMO. The session started on 29 October, 2012. The president welcomed all participants to Congress. During this congress emphasis was given to the success of the Global Framework for Climate Services (GFCS) which required the commitment of Nations and other institutions for advancement of the collective capacities to monitor, understand and forecast weather phenomena for benefit to all. Dr. L. S. Rathore, DGM and Dr. Ajit Tyagi also attended Technical Conferences on GFCS during 26-27 October 2012.

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MoU BETWEEN IMD & CWC

Memorandum of Understanding (MoU) between India Meteorological Department (IMD) and Central Water Commission (CWC) was signed by Dr. L. S. Rathore, Director General of Meteorology, and Shri Rajesh Kumar, Chairman, Central Water Commission on 26th November, 2012 for collaboration on the work of "Preparation of Probable Maximum Precipitation (PMP) Atlas for Brahmaputra Basin and Updation of old PMP Atlases". Dr. Surinder Kaur, DDGM (H), Hydromet Division, New Delhi was also present.



Dr. L. S. Rathore, DG, IMD and Shri Rajesh Kumar, Chairman, CWC

RA-II MANAGEMENT BOARD MEETING OF WMO

Dr. S. D. Attri, DDGM (O) represented India in 15th Session of Regional Association-II (RAII) Management Board Meeting and delivered Scientific Lecture on "Challenges and Opportunities of Weather and Climate Services in RA-II" during 13-19 December, 2012. He also participated in WMO Regional Seminar on "Strategic Capacity Development of National Meteorological and Hydrological Services (NMHS)" in Regional Association II (Asia) during 11-12 December 2012 and delivered lead talk on "Climate Services in India: Challenges and Plans" and served as Rapporteur for Session on Climate Services. During the session with the concerted efforts, Dr. K. J. Ramesh was nominated as Chairman of Implementation Coordination Team on Disaster Risk Reduction and Dr. N. Chattopadhyay as Co-ordinator of Expert Group on Agrometeorology.



Dr. S. D. Attri addresses during Management Board meeting



Auditorium "VRISHTI"

INAUGURATION OF AUDITORIUM

Shri Vayalar Ravi, Hon'ble Minister of Science & Technology and Earth Sciences, Overseas Indian Affairs, Micro, Small and Medium Enterprises, visited IMD at Mausam Bhavan, Lodi Road, New Delhi on 01st October, 2012 and inaugurated the "VRISHTI" Auditorium. Dr. L. S. Rathore, DG, IMD, made presentation on current activities and future plans of IMD.



Inauguration of auditorium "VRISHTI"

ACHIEVEMENTS

Dr. N. Chattopadhyay, Dr. S. Chandras, Dr. B. Das and Dr. L. S. Rathore was awarded First Prize for Poster presentation on "Evaluating the Potential of Kalpana-1 Rainfall Product for Operational Agromet. Advisory Services in India" during the workshop on "Meteorological Satellite Kalpana: A Decade of Service to the Nation" organized by Space Application Centre, Ahmedabad on 9th October, 2012.

Dr. M. Mohapatra, Sc. 'E' has been nominated as a member of the committee for planning of Science and Engineering Research Board (SERB) School on "Weather and Climate in Tropics" organized by IIT, Delhi.

QUIZ CONTEST AND ART COMPETITION



Dr. L.S. Rathore DG, IMD giving Certificate to the prize winner

A Quiz contest and Art competition of school children was organized by India Meteorological Department (Instrument Training Centre) on 17th & 18th December, 2012 for IMD Foundation day 2013. Students from many schools of Delhi & NCR participated in this competition with great enthusiasm. First prize in Quiz contest went to children of Convent of Jesus & Marry School and second prize to children of Banyan Tree School. In Art competition first prize winner was student of Spring Dales School & second prize went to student from Delhi Public School, Vidyut Nagar.

INDIAN SCIENTIFIC EXPEDITION

IMD team members **S/Shri Vilas Laxman Jogdand** from DDGM (WF), Pune and **Subash Chandar**, from MC Srinagar have been deputed to participate in 32nd Indian Scientific Expedition to Antarctica and they reached Maitri, Antarctica on 6th December, 2012 from Cape Town, South Africa by flight. They took over charge from Shri Amalendu Barua, and started their scientific programmes. Shri Amalendu Barua, Asstt. Meteorologist who was a member of 31st Indian Scientific Expedition to Antarctica during November, 2011 to December, 2012 has returned on 17th December, 2012 after successful completion of the expedition.

INSTALLATION OF ARG'S

30 Automatic Rain Gauge Stations in Kerala region have been commissioned during the quarter and the installation is completed in Kerala region.

DESIGN STORM STUDIES

During the period Design Storm Studies for Ten (10) projects were completed and a revenue of Rs 4,04,497/- (Four Lakh Four Thousand Four Hundred Ninety Seven Only) was generated by Hydro-meteorological division.



Smt. Asiya Asif Bhat receiving the trophy

Smt. Asiya Asif Bhat was awarded a trophy by Mr. Suraj Bhan, Deputy Secretary Ministry of Home in the meeting of the Town Official Language Implementation Committee on 28th September, 2012 for her excellent work done in Hindi.

SPORTS



IMD Cricket team players

IMD Cricket team participated in Cricket tournament conducted by Survey of India, Dehradun during 5-10th November, 2012. Shri Nayyar was declared as best bowler of the tournament.

23rd SAC MEETING OF PAC



Members of SAC during meeting

23rd Standing Advisory Committee meeting of Positional Astronomy Centre, Kolkata was held on 10th October, 2012 at Salt Lake office of PAC under chairmanship of Dr. G. M. Ballabh, Professor, Osmania University, Hyderabad. Dr. L. S. Rathore, DGM, Shri S. Sen, Sc. 'E', Shri U. P. Singh, Director and other members of Advisory Committee were present in the meeting.

कार्यान्वयन समिति की बैठक



मौसम विज्ञान के महानिदेशक एवं कार्यान्वयन समिति के सदस्य

मौसम विज्ञान के महानिदेशक की अध्यक्षता में मुख्यालय नई दिल्ली में राजभाषा कार्यान्वयन समिति की 120^{वीं} एवं 121^{वीं} बैठक का आयोजन क्रमशः दिनांक 6 नवंबर एवं 18 नवंबर को मौसम भवन के सम्मेलन कक्ष में हुआ। समिति के सदस्यों के बीच पिछली बैठकों के कार्यवृत्त की पुष्टि के साथ-साथ विभिन्न मदों पर विस्तृत चर्चा की गई। अंत में अध्यक्ष महोदय ने सभी समिति के सदस्यों को धन्यवाद ज्ञापन के साथ हिन्दी में अधिक से अधिक कार्य करने हेतु निर्देश दिए।

CHINESE DELEGATION

A Meeting was held at Prithvi Bhawan, MoES, on 11 December 2012 to discuss with a Six member Chinese delegation about the possibilities of establishing bilateral collaboration with China Earthquake Administration (CEA). The meeting was Chaired by Dr. Shailesh Nayak, Secretary MoES and attended by Dr. L.S. Rathore, DGM, Dr. R. S. Dattatrayam, Scientist 'F' (Head Seismology) and other Senior Officers of MoES. Dr. Dattatrayam made a presentation highlighting various seismology related activities of IMD.

SIXTH ANNUAL REVIEW MEETING ON IAAS



Dr. L. S. Rathore, DG, IMD addressing the meeting

IMD and Banaras Hindu University jointly organized Sixth Annual Review Meeting (ARM) of Integrated Agromet. Advisory Service at Varanasi from 21-23 November, 2012. A number of high level dignitaries, Scientists/Officers from IMD, Principal Nodal Officers, Nodal Officers and Technical Officers from Agro Meteorological Field Units (AMFUs), NGOs and private firms have participated in the meeting. In total there were 315 participants. The main objectives of the annual review meeting was to review the implementation of the IAAS scheme in respect of the quality of the Agromet advisories prepared, its dissemination to the farmers, performance of District Level Weather Forecast (DLWF) and ultimately working out the future course of actions for the improvements of the advisory system. Important recommendations like accuracy of weather forecast, establishing strong linkages with dissemination agencies for wider outreach, use of state-of-the-art technology in AAS etc. were made at the end of the meeting for strengthening the service.

FMO OFFICER'S MEET

Two days Workshop on Flood Meteorology for FMO officers which is an annual event of Hydromet Division, New Delhi was held on 6th - 7th December, 2012 at FMO Patna. This workshop was inaugurated by Dr. D. Pradhan, DDGM, RMC Kolkata and chaired by Dr. (Mrs) Surinder Kaur, DDGM (H). Shri S. B. Tyagi, Sc. 'E' & Shri M. K. Purohit, AM-II from Hydromet Division also participated in the Annual Flood Meet 2012.



Dr. Surinder Kaur, Sc. 'F' during the workshop

REVIEW MEETING

Review meeting of pilot project between NABARD and IMD was held on 28th December, 2012 at NABARD's Regional Office, Pune. Dr. N. Chattopadhyay, Head, Agrimet Division, Pune and other officers of IMD, Nodal Officers of KVKs & District Correspondents of NABARD under this project participated in this meeting.

TROPMET



Release of book during the conference

"Meteorology with special emphasis on mountains" was the theme of the TROPMET- 2012 conference, taking into consideration of large mountain resources of India and its important role in economic development. The Conference was organized by India Meteorological Society and held from 20-22 November, 2012 at Dehradun. It was sponsored by MoES, ISRO, ICRA, Ministry of Agriculture and Department of Science & Technology. Shri Surinder Singh Negi, Hon'ble Minister of Uttarakhand State was the Chief Guest. The presidential address was delivered by Dr. Shailesh Nayak, IMS president, Secretary MoES & Chairman Earth System Science Organisation whereas Dr. Y. V. N. Krishnamurthy, Director, IIRS welcomed the distinguished delegates. Shri Anand Sharma, Sc. 'E' M. C. Dehradun and Secretary, IMS – Dehradun Chapter was Convener of the organizing committee. A book on 'Climate of Dehradun' by S/Shri Anand Sharma, O. P. Singh and M. M. Saklani was released during this occasion. During this conference Shri D. R. Sikka, Retd. Director (IITM) was honoured by Sir Gilbert Thomas Walker Award consisting of a Medal and cash award of Rs.1 Lakh.

INDIVIDUAL PARTICIPATIONS

Dr. N. Chattopadhyay, Head, Agrimet Division, Pune participated in the 8th Convention of Grameen Gyan Abhiyan held at M.S. Swaminathan Research Foundation, Chennai, during 28th - 30th October, 2012 and addressed the session on "Step towards change: Models & Best Practices for Sustainable Development among Rural Community".

Dr. N. Puvirasan, Met. I attended 11th Biennial conference of Pan Ocean Remote Sensing Conference (PORSEC-2012) from 5th – 9th November, 2012 organized by INCOIS Kerala and submitted a paper on "South-West monsoon onset, advance and withdrawal over Indian Subcontinent – A study from PW measurements from ground based GPS System."

Dr. A. K. Shukla, Sc. 'F' attended an international workshop on "EAS-INDIA workshop 2012: Building Regional Framework for Earthquake Risk Management" on 8th – 9th November, 2012 at Ashoka Hotel, New Delhi, organized by Ministry of Home Affairs.

Shri K. Santhosh, Sc. 'E' attended City Consultation Workshop regarding implementation of the project "Climate Risk Management in Urban Areas through Disaster Preparedness and Mitigation" convened by Disaster Management (Revenue) Department, Govt. of Kerala on 14th December, 2012.

MEDIA INTERACTION

Shri B. Puttanna, Sc. 'D' participated in a discussion on "Public TV" channel on effect of cyclone "NILAM" on Karnataka on 31st Oct., 2012. He also participated in live News on TV-9 (News Kannada and English) Public TV on cyclone "NILAM" alert on 31st Oct., 2012.

Dr. Y. E. A. Raj, DDGM, RMC Chennai participated in a group discussion on North East Monsoon related matters recorded for Podhigai, Doordharshan Kendra, Chennai on 26th Oct., 2012 which was subsequently broadcast on 3rd November, 2012.

Dr. R. S. Dattatrayam, Sc. 'F' participated in a video recording of Lok Sabha Television (LSTV) channel on the subject "Coping with natural disasters – Earthquakes" on 7th December, 2012 along with Prof. Harsh K Gupta, Member, NDMA and Dr. Deep Shikha Sharma, R.G. College, Meerut, U. P. The program was telecast on 15th and 22nd December, 2012 on LSTV channel.

Shri K. V. Balasubramanian, Asst. Met Gr. I participated in AIR-FM live Programme about his book in TAM II on "Weather" which was broadcast on 10th December, 2012.

Dr. N. Chattopadhyay, Head Agrimet. division, Pune gave an interview on topic "Many countries to learn from IMD's services" in Sakal Times on 28th December, 2012.

Shri Anand Kumar Sharma, Sc. 'E' M.C. Dehradun gave interview to Network 10, Samachar plus TV and Zee TV during the period.

हिन्दी कार्यशाला का आयोजन



मौसम विज्ञान के महानिदेशक प्रमाण पत्र प्रदान करते हुए

मुख्यालय में हिन्दी कार्यशाला का आयोजन दिनांक 29 अक्टूबर से 2 नवंबर, 2012 तक किया गया, जिसमें मुख्यालय एवं नई दिल्ली स्थित अन्य उपकार्यालयों के हिन्दी प्रगति रिपोर्ट तैयार करने संबंधित अधिकारियों एवं कर्मचारियों ने भाग लिया। इस कार्यशाला में राजभाषा नीति, कंप्यूटर प्रौद्योगिकी, हिन्दी त्रैमासिक एवं वार्षिक रिपोर्ट, खरीद, नियुक्ति, सुरक्षा, टिप्पण एवं मसौदा संबंधित व्याख्यान दिए गए। इस कार्यशाला के आयोजन से राजभाषा हिन्दी में अधिक से अधिक एवं सटीक ढंग से कार्य करने को बढ़ावा मिलेगा। कार्यशाला के समापन के समय सभी भाग लेने वाले कर्मचारियों और अधिकारियों को महानिदेशक द्वारा प्रमाण पत्र प्रदान किए गए।

TRAINING

Three weeks 'Agromet Observers Course' for grass-root level observers was conducted from 24th September, 2012 to 12th October, 2012. 9 participants from the vast network of various Agromet and other observatories under different State Agricultural Universities/ ICAR Institutions, State Department of Agriculture participated in the course.

Familiarization training in **Satellite Meteorology** was imparted by SATMET division New Delhi to 20 trainee officers from faculty of Disaster Management, Haryana Institute of Public Administration (HIPA) on 11th October, 2012.

The Name of Central Training Institute has been changed to "**Meteorological Training Institute**" w.e.f. 17th October 2012. An International Training on General Meteorology training course for six Bhutan Meteorological personnels for three months duration commenced from 15th October.

Two-week training programme on operation, product generation and interpretation, related to the newly upgraded **Radar Software Rainbow 5.0** by Dr. Jens Didson of M/s Selex Systems Integration GmbH, Germany commenced at DWR Chennai from 22nd October to 2nd November, 2012. Eight Officers & Staff of other IMD offices (two each from DWRs Kolkata, Visakhapatnam, Machilipatnam and ACWC Chennai) alongwith all officers and staff of DWR Chennai got trained in this programme.

An advance refresher course for "Application of DWR products in NWP" was conducted at Meteorological Training institute Pune for 15 Trainees during 19-23 November 2012.

Eight officers from RMC Chennai and four officers from other offices have undergone Direct Trainers Skill course conducted by DoPT, Govt. of India at RMC Chennai during 17th -21st December, 2012.

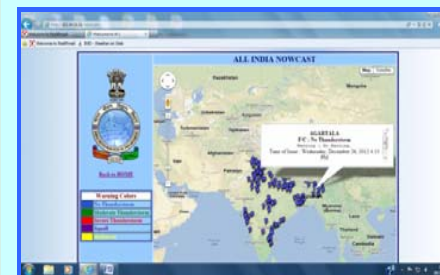
Training on "**Mentoring Skills**" was conducted from 26th -28th December, 2012 at MC Bangalore. A total of nine officers participated in the training organized by DoPT.

Capacity building programme was organized at M.C. Bangalore during 26-28 December 2012. Nine officers from the centre attended the training.

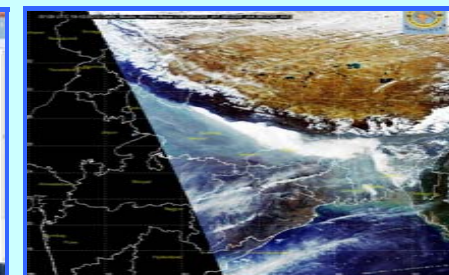


Officers during Direct Trainers Skill at RMC Chennai

RESOURCES DEVELOPMENT



Specific Nowcast of Severe Weather



New MODIS RGB product



Site acceptance test at Thiruvananthapuram

Under co-ordination between DWR Chennai and Engineers from M/s Selex Systems Integration GmbH, Germany conducted successfully Site Acceptance Test of Rainbow 5.0 software upgradation of DWR Chennai from 8th to 10th October, 2012.

Site acceptance test for U V Absorption Ozone analyzer was done by a committee comprising of Shri P. S. Biju, Sc. 'C', Dr. Sidhartha Singh, Sc. 'C' & Smt. V. K. Mini, Sc. 'C'. The equipment was commissioned at Meteorological Centre, Thiruvananthapuram on 29th October, 2012.

IMD operationalized its location specific nowcast of severe weather forecast across the country (link available on IMD website) on 10th December 2012. Nowcast for convective weather (Thunderstorms) is uploaded for 117 cities covered under the network of 14 DWRs across the country. The various centres of IMD equipped with Doppler Weather Radar are regularly monitoring various Radar, satellite and NWP products and issuing 3 hourly Nowcast and the forecast is updated on website.

SATMET Division has started to upload a new MODIS RGB product during day time FOG/HAZE/SMOG on an operational basis from December, 2012. The image is for IMD's Fog Preparedness for winter 2012-2013 http://www.imd.gov.in/section/satmet/dynamic/modis_day_fog.htm

INTERNATIONAL ASSIGNMENTS

Shri A. K. Sharma, Sc. 'F' and **Smt. Suman Goyal**, Sc. 'E' attended High profile Lab training, meeting of the coordination Group of the RA-II Pilot project to Develop Support for NMHSs in Satellite Data, Products and 3rd Asia/Oceania conference on the use of Satellite Data at Jincheon and Jeju Island, Republic of Korea from 4th October to 12th October, 2012.

Dr. K. K. Singh, Sc. 'F' visited Fairfax, USA, from 16-19 October, 2012 to participate in the International Symposium on Synergistic Applications to Food & Water Society and had informal discussions on various users with CAGM Management Group.

Shri A. K. Sharma, Sc. 'F' attended Plenary Session and Working Group Meeting of Coordination Group for Meteorological Satellites (CGMS-40) from 5th to 8th November, 2012 at Lugano, Switzerland. He co-chaired the Working Group-II on Satellite Data products and training. The outcome of the meeting CGMS-40 was the endorsement of the high level priority plan 2013-2017 guiding the way forward. The plan will be reviewed annually.

Dr. M. Mohapatra, Sc. 'E' was on ex-India deputation to Haiku, China to participate in the WMO international workshop on 'Rapid change phenomena in Tropical cyclones' held during 5th - 9th November, 2012.

Shri B. K. Bandyopadhyay, Sc. 'F' visited Citko, Indonesia from 12th to 15th November, 2012 to attend 7th Tropical Cyclone (TC) Coordination Meeting (TCM-VIII).

Dr. L. S. Rathore, DGM visited SMRC Dhaka, Bangladesh on 15th Nov, 2012 and chaired Selection Committee Meeting of SMRC.

Dr. Somenath Dutta, DDGM(MTI) participated in Training Seminar on "Management of Met. Training Institution" held at Lagen, Germany during 3-7 December 2012

Dr. N. Chattopadhyay, Head, Agrimet Division, IMD, Pune participated in the International Workshop on "Scaling Up Climate Services for Farmers in Africa and South Asia" held during 10th to 12th December, 2012 in Saly Portudal, Senegal.



Dr. N. Chattopadhyay and other participants at Senegal

Shri B. P. Yadav, Sc. 'E', visited Kuala Lumpur, Malaysia from 10th to 12th December, 2012 to attend 2nd Monsoon Heavy Rainfall Workshop.

Dr. M. Mohapatra, Sc. 'E', visited Muscat, Oman from 17-19th December, 2012 to attend Workshop on Tropical Cyclone and Forecasting in PTC-Region.

INTERNATIONAL VISITORS



Dr. J. Vivekanandan, delivering lecture at ARNAV Hall MoES

Dr. J. Vivekanandan, Earth Observing Laboratory, NCAR, Boulder, CO, USA, delivered a lecture on, "Remote sensing of precipitation, cloud, aerosol and water vapour using radar, Lidar and Micro wave radiometer" on 1st October, 2012 at ARNAV Hall, MoES Building, Prithvi Bhavan, New Delhi.

Dr. Estel Gaillard, Social Scientist from CSIRO Earth Science and Resource Engineering, Highett, Australia, and **Dr. Rengalakshmi**, Principal Coordinator of Dr. M. S. Swaminathan Research Foundation visited RMC Chennai on 1st October, 2012. An interactive session with senior scientists of RMC, Chennai was convened by DDGM, RMC, Chennai to discuss on forecasting aspects of IMD.

Dr. C. Schleifer, President ICAO Air Navigation Commission, Montreal visited AMO Bangalore, during his official visit to BIAL on 10th October, 2012.

15 delegates from Switzerland and Turkey visited AMO Bangalore during their official visit to BIAL on 16th October, 2012.

Prof. Nakajima, Director, Center for Earth Surface System Dynamics, Ocean Research Institute, University of Tokyo visited India Meteorological Department, New Delhi on 24th October 2012 and held discussion with the senior officers from EMRC SATMET, NWFC, New Delhi under the Chairmanship of Dr. K.J. Ramesh, Advisor MoES.

ICAO Technical Audit Team inspected MWO Palam on 7th Dec. The team was briefed about Met. Briefing system, various activities like MFI/Synergie, DWR and fog information system.



Prof. T. N. Krishnamurti, with Dr. Y. E. A. Raj

Prof. T. N. Krishnamurti, Florida State University, Tallahassee, USA visited RMC Chennai on 27th November, 2012. The DDGM convened an interactive session with Group-A officers and discussed on various scientific features of 'Nilam cyclone'.

LECTURES

Shri Virendra Singh, Director delivered a invited lecture on "Kalpana-Application Operational Meteorology in a workshop Meteorological Satellite KALPANA, "A decade of service to the nation", organized by SAC Ahmedabad on 9th October, 2012.

Shri B. Puttanna, Sc. 'E', delivered a lecture on Early Warning System in Disaster Management, to State Govt. officials at District Training Institute Banashankari, Bangalore on 6th November, 2012.

Dr. S. Balachandran, Sc. 'E', **Ms. B. Amudha**, Sc. 'C' and **Smt. S. Stella**, Sc. 'D', RMC Chennai delivered lectures on the topic "Cyclone Disaster Management" on 20th & 27th November, 2012 and 12th December, 2012 respectively for the trainees of Anna Institute of Management, Chennai.



Dr. Andrew Turner delivering the lecture

Dr. Andrew Turner, Department of Meteorology, University of Reading U. K. delivered a lecture on, "Climate Change: The south Asian monsoon and model mean states Biases" on 12th December, 2012 at ARNAV Hall, MoES Building, Prithvi Bhavan, New Delhi.

Dr. Y. E. A. Raj, DDGM, RMC Chennai delivered an invited talk on "Precise observation and weather prediction and protection against adverse climatic changes" on 17th December, 2012 in a special programme on "Science for Shaping the future of India" organised by Indian Science Congress, Chennai.



Dr. S. D. Attri, DDGM(O), delivered inaugural address as a Chief Guest in a National Seminar on "Population, Environment and Sustainable Development In India : Issues and Challenges" during 22-23 December, 2012 at Meerut College, Meerut, Uttar Pradesh.

PUBLICATIONS

Dr. A. K. Mitra, A. K. Sharma, V. K. Soni and P. K. Kundu, "Characteristics of recent dust storms over the Indian region using real time multi-satellite observations from the direct broadcast receiving system at IMD", Advances in Space Research doi:10.1016/j.asr.2012.11.017.

Dr. L. S. Rathore, Dr. N. Chattopadhyay and Dr. K. K. Singh, "Dissemination of Agromet. Advisory Services on Mobile Phone through Public Private Partnership Programme" and "Reaching Farming community in India through Farmer Awareness Programmes" "Climate Exchange", A joint publication of Tudor Rose, U. K. and World Meteorological Organisation, Geneva.

Dr. R. S. Dattatrayam, G. Suresh, P. R. Baidya, Rajesh Prakash, J. L. Gautam, H. P. Shukla and Dal Singh, "Standards and Methodologies on seismic data generation, processing and archival and guidelines for data sharing and supply", Proceedings of the Indian National Science Academy (INSA), New Delhi.

Dr. Jayanta Sarkar, Sc. 'E' and co-authors, "National Disaster Management Guidelines, Management of Drought" has been published by NDMA, New Delhi.

11 Research papers and 2 Letters were published in **MAUSAM**, Vol. 63 No. 4 (October 2012) issue.

SEISMIC MICROZONATION

Acceleration response spectra at 5% damping for 25 selected sites of NCT Delhi is generated for maximum considered earthquake of return period 2475 years and overlaid on the Geological Base Map of NCT Delhi on 1:10K scale.

HINDI MAGAZINE, "PAWAN-DOOT"



Release of "Pawan-Doot" Hindi magazine

Annual Hindi Magazine, "Pawan-Doot" – Volume IV, a special issue on fruits was released by Dr. R. Asokan, Sc-E at RMC Chennai on 31st December, 2012. Smt. V. Lalitha, HOD, Hindi Department, Kaligi Ranganathan Montford Matriculation Higher Secondary School, Chennai was the special Guest and spoke on the occasion. Dr. S. R. Ramanan. Sc. 'E', Ms. B. Amudha, Sc. 'C', Shri K. V. Balasubramanian, Asst. Met. (Admn), Smt. Chandra Rangan, Hindi Co-ordinating officer and staff members of RMC Chennai graced the occasion.