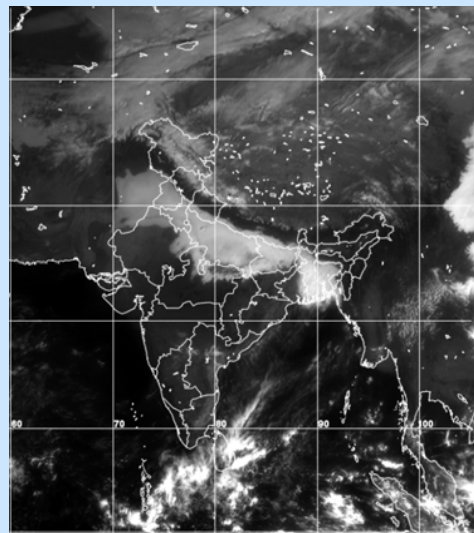


**UNUSUAL DENSE FOG AT IGI AIRPORT**

During fog season of 2009-2010, while December at IGI had no dense fog, but January had ended with a total of 172 hours of dense fog, Visibility reduced less than 200m, an unusual highest hours for any January since 1960. It disrupted the aviation service at IGI Airport severely causing diversion of around two hundred seventeen flights and cancellation of nearly thousand flights.



Vis Kalpana – 1 Imagery (18<sup>th</sup> Jan 2010)

Visible Satellite imageries at mornings during 15-20 Jan, 2010 shows unusual and most severe dense fog conditions developed and persisted day by day till late noon from previous mid-night. Fog affected severely every day the Road/Rail/Air transport service affecting flight operations over most of the locations in this region.

The strengthening of the real time Fog Services for the fog season of 2009-2010 when unusual dense fog paralyzed under FDP-FOG, a new 24 x 7 "Fog monitoring and forecasting and Dissemination system" was made operational at IGI airport by AMO, Palam for delivering high quality fog services to its users. The system has made available real time fog information especially its formation, intensification and dissipation at IGI Airport with seven digital RVR instruments located at various key locations of various RWYs. Fog Browsers were distributed to passengers at airport terminals by IMD-DIAL for increasing awareness among them.

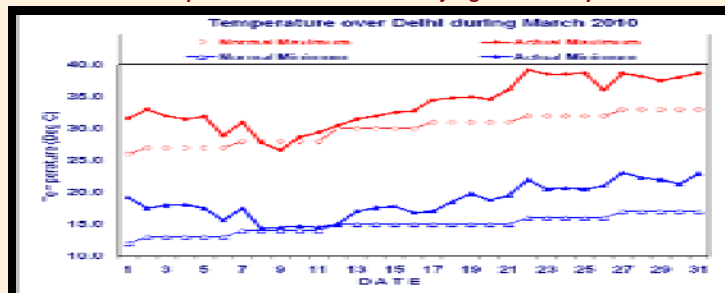
**SECOND WARMEST MARCH IN THE RECORDED HISTORY OF DELHI**

The month of March 2010 started on a warm note with both maximum and minimum temperatures 5-6°C above their normal values. It was only during the second week when they were near normal. The temperatures started to rise again from the beginning of the third week and became 5-6°C above normal by end of the week and remained so till end of the month. The mean maximum and minimum temperatures for the month were 33.8°C and 18.6°C against their normal values of 30.0°C and 15.4°C respectively. The highest maximum temperature during the month was 39.2°C recorded on 22 March, whereas the all time record for the city is 40.6°C recorded on 11 March 1915.

Since 1901, there have been only 5 years when maximum temperatures in excess of 39.2°C have been recorded during the month of March. The mean maximum temperature of March 2010 (33.8°C) was the second highest only behind 1953 (34.3°C). Similarly, the mean temperature of 26.2°C for March 2010 was second highest behind 26.4°C for March 1953. **Thus, the month of March 2010 turned out to be the second warmest March for the city since 1901.**

The Subsidence associated with an anomalous anticyclone over the region during the third week led to the increase in temperatures.

Temperatures recorded at Safdarjung Observatory

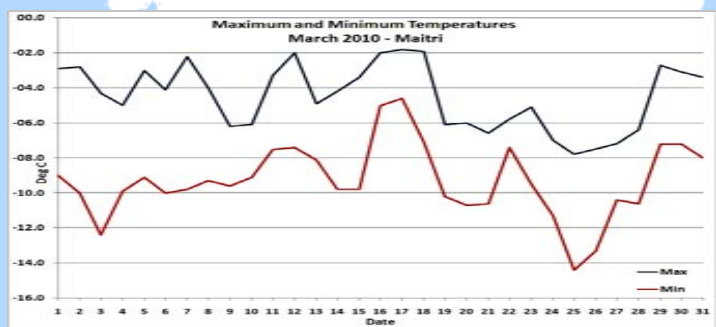


The normal rainfall during the month of March is 14.8 mm. However, during this month, only trace rainfall was recorded on 05 March 2010. There have been 21 more years since 1901 when no rainfall was received in the city.

**WEATHER MAITRI - ANTARCTICA**

As usual during summer season in month of January & February, no unusual weather occurred at Maitri. In January, the highest day temperature 7.7°C recorded on 23<sup>rd</sup> January 2010 with month average 1.3°C and lowest recorded temperature -03.9°C on 27<sup>th</sup>. The highest wind gust 53 kts was recorded on 1<sup>st</sup> January 2010. The temperature continued to fall during later days. The average temperature of February was -1.7°C with lowest temperature -10.3°C recorded on 22<sup>nd</sup> February 2010. Average temperature for the month March was -7.0° C with lowest temperature -14.4° C recorded on 25<sup>th</sup> March.

March is commencement of autumn season which experienced a blizzard on 15<sup>th</sup> March 2010 reaching wind gust 102 kts followed by snowfall on 16<sup>th</sup> and 17<sup>th</sup>.



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**IMD NEWS**

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**INDIA METEOROLOGICAL DEPARTMENT**

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**NO 1**

**JAN – MAR 2010**

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**CERTIFICATE OF MERITS**



Dr. Y.E.A. Raj receiving Certificate of best RMC, Chennai

On this foundation day an exhibition and a cultural program was organized in IMD. Mementos and Certificate of Merits were also distributed to the veteran weather scientists and young students of various schools for best performance in quiz competition. Dr. N. Sen Roy, Ex DGM was presented a shawl as an honour by the Hon'ble Minister. Dr. Y.E.A. Raj, DDGM, Chennai was honoured with the best RMC award for excellent work. Met. Centre, Bhopal has been selected best Met Centre. On this occasion a documentary film and brochure were brought out.

**CELEBRATION OF FOUNDATION DAY**



Secretary, MoES addressing the audience

In the history of India Meteorological Department, 15<sup>th</sup> January 1875 is a momentous day, as on this day Mr. H.F. Blanford took charge as the Meteorological Reporter to the Govt. of India. IMD considered 15<sup>th</sup> January as an opportune moment to highlight its achievements and pathway for future development. During 135 year of its existence, IMD has contributed immensely for the development of Science of Meteorology over the sub-continent. The department has served the cause of safety and well being of Indian population against weather related hazards and to economic development of the country.



Shri Prithviraj Chavan, Hon'ble Minister of Science & Technology and Earth Sciences was Chief Guest of the function. On this occasion Shri Chavan inaugurated the High Power Computing System (HPCS) installed at NHAC, New Delhi.

The system is capable of running high resolution global regional and local numerical weather prediction Models on 24 x 7 basis which will further lead to improved weather & climate services from very short range to long range scale for the country.



AVM Dr. Ajit Tyagi, DGM briefing Media about HPCS

Dr. Shailesh Nayak, Secretary, MoES enumerated the achievements of IMD. He also emphasized that efforts should be made to bring the best brains to IMD.

Dr. R. R. Kelkar stressed the need for self assessment and development of indigenous numerical models instead of dependency on foreign models.

AVM (Dr.) Ajit Tyagi, DG, IMD extended his gratitude for seniors of the department and highlighted important landmarks of completion of modernization Phase-1 programme to improve forecasting as well as computational capability.

**MEMORABLE HISTORY**

- 1875 : First IMD Headquarters at Alipore, Kolkata
- 1878 : Publication of IDWR
- 1882 : First Seismic observatory at Kolkata
- 1905 : Launching of Pilot Balloon Ascent
- 1932 : Agromet. Division at Pune
- 1954 : Radars pressed into aviation weather service
- 1957 : First Ozone measurement at Kodaikanal
- 1970 : Setup of Dte. of Telecom Division at New Delhi
- 1977 : National Data Centre started functioning
- 1982 : An unmanned Data Collection Platform
- 2000 : Departmental Web site started
- 2002 : Commissioning of first DWR at Chennai
- 2006 : Modernization of observing system
- 2008 : Need Based District Level Forecast
- 2010 : Installation of HPCS at HQ, New Delhi

## WORLD METEOROLOGICAL DAY

Each year on 23<sup>rd</sup> March, the WMO and Meteorological community of all its 189 member states celebrate the day as World Meteorological Day with a chosen theme. The day 23<sup>rd</sup> March commemorates the convention held on this date in 1950 to create WMO. As a result it came into existence in 1951, as a specialized agency of United Nations System.



DG, IMD Presenting Memento to Prof. S. Kumar



School Children at Ahmedabad observatory

WMO emerged on solid pillar laid by the International Meteorological Organization which was functioning since 1873. WMO took appropriate initiatives on various issues. The most recent concern was on environmental issue as a challenge for the benefit of mankind and society. This year the theme was **"60 YEARS OF SERVICE FOR YOUR SAFETY AND WELL-BEING"**.

Celebration of World Meteorological Day was organized by this department all over India. Prof. Santosh Kumar from National Institute of Disaster Management delivered a lecture at H.Q., New Delhi to mark the theme. A live talk of DGM was broadcast on Doordarshan on the day.

Also, Dr. S. Balachandran, Director gave a talk in Tamil at AIR Chennai. The IMD offices throughout the country were kept open to the General Public. The school children visited the various offices of IMD and they were briefed about divisional activities. An exhibition on the activities of IMD, balloons and banners of WM Day 2010 were displayed for visitors.

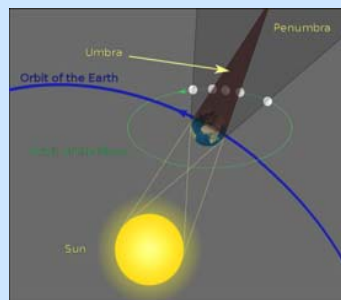
## NATIONAL SCIENCE DAY



Dr. H. R. Hatwar, ADGM (R) inaugurating National Science Day

The day is celebrated to honour Nobel laureate Sir C.V. Raman for his invention of the 'Raman effect' on 28<sup>th</sup> February 1928. IMD celebrated National Science Day. There was an overwhelming response from public. The day attracts many young minds and creates awareness about Meteorology. The celebrations of this day include showcasing IMD competence in the field of Meteorology.

## JANUARY - ECLIPSES MONTH



General Annular Solar Eclipse



Annular solar eclipse observation on 15 January, 2010 at PAC Kolkata

The month January 2010 witnessed three eclipses - 1<sup>st</sup> January, 15<sup>th</sup> January and 26<sup>th</sup> January.

The Partial Eclipse of Moon on 1<sup>st</sup> Jan occurred in the early hours. In this eclipse, only a very small part of the Moon was under the Earth's umbral shadow. The eclipse was visible throughout India.

The annular solar eclipse on January 15, 2010, was the longest solar eclipse since 1992 which lasted for about 11 minutes and eight seconds. This eclipse was visible from across central Africa, the Indian Ocean and eastern Asia.

The path of annularity passed through southern tip of India. The eclipse was seen as partial Solar Eclipse from rest of the country. Observation of the partial phase of the eclipse was carried out from the roof top of the building of Positional Astronomy Centre at Salt Lake, Kolkata.

A talk in Tamil by Kum. B. Amudha, Met. Gr.-I, RMC Chennai on the celestial event "Annular Solar Eclipse on 15 January 2010", was telecast on 13 January 2010 at 0830 hrs (IST) on AIR Chennai 'A' channel.

## REPUBLIC DAY



The Republic Day of India is celebrated to mark the adoption of the Constitution of India and the transition of India from a British Dominion to a republic on January 26, 1950. AVM (Dr.) Ajit Tyagi, Director General of Meteorology hoisted the flag in the office premises on this 61<sup>st</sup> Republic Day of India. The Republic Day Celebrations were also held in all MCs & MOs, where the concerned officers unfurled the National flag.

## MARTYRS DAY

The 30<sup>th</sup> Jan is observed as Martyr's Day, to honour all those who gave up their lives in service of the Nation. The date was chosen as it marks the martyrdom of the Father of Nation, Mahatma Gandhi in 1948. A two-minute silence in memory of the Father of the Nation and other martyrs was observed in IMD.

## INTEGRATED LONG TERM PROGRAMME (ILTP)



From (L to R) Prof. Nikolaev, Shri G. Suresh and Dr. Belyakov at Seismological Observatory, Ridge

A team of Russian Scientists Prof. Alexi Nikolaev and Dr. Belyakov, Institute of Physics of Earth (IPE), Russian Academy of Sciences (RAS), Moscow, visited IMD, New Delhi during 2-12 March 2010 under the project titled "High resolution monitoring of Geodynamic processes using borehole seismic investigations (Project code: B-2.49)" as part of Integrated Long Term Programme of DST. The team has carried out joint analysis of the recorded data and its interpretation for preparation of the final report on the project. Prof. Nikolaev, Shri G. Suresh and Dr. Belyakov prepared report at Seismological Observatory, Ridge, Delhi. A tri-axial seismic magneto-elastic acoustic sensor was installed there.

## SEMINAR ON MET. INSTRUMENT

A seminar on Meteorological Instrument and AWS was jointly organized by IMD, Pune and Bureau of Indian Standards at DCP, Pashan. AVM (Dr.) Ajit Tyagi, DGM inaugurated the seminar on 26<sup>th</sup> February. Dr. H. R. Hatwar, ADGM(R), Dr. R. D. Vasistha, DDGM(SI) participated in the seminar.

## ACHIEVEMENTS

**Dr. R. Suresh**, Scientist E, AMO Chennai conducted practical exams as external examiner for M.Tech course (ST&A) at Sri Venkateswara University, Tirupathi during 28<sup>th</sup> - 29<sup>th</sup> January 2010.

**Shri K. V. Balasubramanian**, A.M.-II has been given an award for writing best scientific articles in Tamil by the Tamil Magazine "Arivial".

**Shri Anand Kumar Sharma**, Director, Meteorological Centre, Dehradun participated as a panelist for panel discussion on "Leadership in Government organisation" at LBSHAA on 4<sup>th</sup> Feb 2010.

## H. R. DEVELOPMENT TRAINING COURSE ON AGROMET.

AVM (Dr.) Ajit Tyagi, DGM, inaugurated the short term (3 weeks) Training Course on Agrometeorology towards better advisories for serving end user requirement to AMFU scientists conducted by Agrimet. Division, Pune on 18<sup>th</sup> January 2010. 22 scientists have attended this course. The DGM also visited office of ADGM(R) and held discussions with senior officers.

## FOREIGN TRAINEES



Mr. K.H.M.S. Premalal &amp; DG, IMD

Two officials, viz., Mr. K.H.M.S. Premalal, (Sri Lanka) and Mr. Kyaw Lwin, (Myanmar) were sponsored by WMO/ESCAP panel for cyclone forecaster's attachment training with RSMC, New Delhi during 1-12 February, 2010. They were provided a certificate on successful completion of the training.

## TRAINING FOR OBSERVERS

An orientation programme of training of 10 Observers of Part Time Observatory of Tamil Nadu was held at RMC Chennai during the period 8-12 March 2010. The observers were issued certificate by RMC Chennai.

## TRAINING ON FILE MANAGEMENT

Two days training on purchasing and file management was organized jointly by MoES and RMC, New Delhi at B. R. Ambedkar Institute of Hotel Management catering and nutrition, Chandigarh on 5<sup>th</sup> and 6<sup>th</sup> February 2010. Shri H. L. Syal, Assistant Meteorologist and Shri Rajiv Kumar, Scientific Assistant from M.C. Chandigarh attended the training.

**A TRAINING COURSE** for Linux Operating System was conducted during 1-11 Feb at NDC by MFI in association with Focus Training Services, Pune as a part of Clisys implementation.

## LECTURES

**Dr. Medha Khole**, Director participated in the two days workshop on 7 & 8 January 2010 at University of Mumbai, Kalina, Campus on the topic 'Natural Disasters : Cyclones, Monsoon Floods – Outreach Programme and delivered a talk on "Indian Summer Monsoon General Features".

**Shri Anand Kumar Sharma**, Director-In-charge, Meteorological Centre, Dehra Dun delivered lectures on UNFCCC at Forest Research Institute, Dehradun during 11<sup>th</sup> to 14<sup>th</sup> January 2010.

**Shri B. Puttanna**, Director delivered a lecture on "Effect of climate vagaries on Agriculture" in the Farmers Awareness Program jointly organized by IMD and University of Agricultural Sciences, GKVK, Bangalore on 30<sup>th</sup> January.

**Dr. Ajeet P. Pandey**, Met-I participated in the workshop on "Application of satellite geodetic techniques in scientific studies in India" held at Survey of India, Hyderabad during 3-4 Feb 2010. Dr. Pandey made oral presentations on two topics.

**Dr. Y. E. A. Raj**, DDGM, RMC Chennai gave an invited talk on "Urban Risks in Chennai with reference to Local Climate" on 18 Feb 2010 in an International workshop on "Local Climate and Disaster Resilience in Chennai" organized by University of Madras, Chennai.

**Shri Surender Paul**, Director M.C. Chandigarh delivered talk on Role of IMD for "Farming Community of Haryana" in a seminar organized by Department of Agricultural Meteorology, HAU Hisar on 19<sup>th</sup> February 2010.

## LECTURE BY A VISITING PROFESSOR



Prof. Timothy Del Sole delivering lectures

**Prof. Timothy Del Sole**, Associate Professor of Climate Dynamics, Harvard University COLA, USA was on a visit to IMD. The visiting professor delivered series of lectures in IMD on 'Statistical methods of Long Range Forecast' during 1<sup>st</sup> - 3<sup>rd</sup> February. The scientists from IMD, NCMRWF and Air Force attended the lectures.

## SAC – PAC MEETING

The 21<sup>st</sup> Meeting of Standing Advisory Committee (SAC) was held on 15<sup>th</sup> March 2010 in the office of Positional Astronomy Centre (PAC), Kolkata. This meeting was presided by Dr. G.M. Ballabh, Professor, Osmania University, Hyderabad. AVM (Dr.) Ajit Tyagi, DGM was present in the meeting. The meeting was also attended by Shri A. K. Bhatnagar, ADGM (EREC), Shri B. Mukhopadhyay, DDGM (DM),



DG, IMD and SAC members

Shri U. P. Singh, Director, Publication and other members of the Standing Advisory Committee. Shri S. Sen. Director, PAC acted as member secretary.

Shri A.K. Bhatnagar, ADGM welcomed the Chairman & other members of SAC. He expressed his gratitude towards SAC members for their continuous support for progress of the centre and framing its future plan. Chairman was satisfied on the action taken by H.Q.'s New Delhi. The Committee made several recommendations for future progress of the Centre.

## VARSAMANA PROJECT REVIEW MEETING



Steering Committee Meeting for Varsamana Project

Review Meeting was held on 12<sup>th</sup> March 2010. Secretary, MoES, AVM (Dr.) Ajit Tyagi, DG, IMD and other Scientists from MoES, ADGM(R), Pune, IMD H.Q.'s attended the meeting and discussed about the project.

## USER'S MEET AT CWC, VISHAKHAPATNAM

A user's meet was conducted at Cyclone Warning Centre, Vishakhapatnam on 22<sup>nd</sup> February, 2010 in two sessions followed by feedback. The purpose was to familiarize and understand various problems of users in respect of services rendered by the centre. After Jyoti Prajwalan, Dr. Y. E. A. Raj, DDGM explained briefly about IMD and importance of its forecast.



Prof B. Satyanarayana, Vice Chancellor facilitated by AVM (Dr.) Ajit Tyagi, DGM

AVM (Dr.) Ajit Tyagi made the presidential speech and highlighted the developments in the department. He emphasized the need for collaborative studies between IMD and Andhra University. Prof. Bela Satyanarayana, Vice Chancellor congratulated DG, IMD for taking such step to come closer to users. A Media briefing was organized before a number of print and visual media.

## A COMMITTEE ON POLAR SCIENCE

The first meeting of the committee to organize a workshop on Polar Science was held on 12<sup>th</sup> March 2010 under chairmanship Shri T. V. P. Bhasakar Rao, Advisor MoES & Scientist 'G' at IMD H.Q.'s which was attended by seven senior officers of IMD. The Committee decided to hold a brainstorm session on polar science on chosen themes. The speakers may be invited from the institutes which have a long association with Antarctica programme.



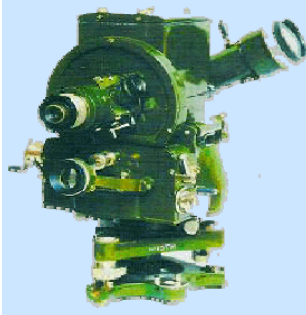
## SPORTS MEET AT PUNE

M. B. More memorial tournament was held from 22<sup>nd</sup> to 26<sup>th</sup> March 2010 in Pune. Six teams of IMD consisting of about 96 players from different corners of India participated in this Tournament.

The Opening ceremony was held on 22<sup>nd</sup> March. Dr. H. R. Hatwar, ADGM(R) and all other Head of the offices of IMD Pune were also present on this occasion. The Ammunition Factory, Kirkee, Pune was declared Winner whereas IMD Pune was runners up during the Tournament.



## COMMISSIONING OF OPTICAL THEODOLITES'



The Commissioning of 70 numbers of Optical Theodolites for up-gradation of pilot balloon network of IMD, was started in April 2007 as a project. New optical theodolites have been dispatched / installed at all the 62 PB stations in the PB network of IMD.

The project has been completed. The performance of the new optical Theodolites is being monitored.

## PUBLICATIONS



Release of Technical report

A technical report on 'Cyclonic Disturbances over north Indian Ocean during 2009' was prepared by Cyclone Warning Division, IMD New Delhi and released by Hon'ble Minister of Earth Sciences on the foundation day of IMD on 15 January, 2010.

A Met. Monograph was prepared on 'Super Cyclone - GONU' by Cyclone Warning Division, IMD New Delhi and released by DGM, IMD in ACR meeting on 22<sup>nd</sup> January, 2010 at Thiruvananthapuram.

Rashtriya Panchang in Hindi, Bengali, Oriya, Telugu, Kannada, Punjabi, Tamil, Assamese and Urdu for 2010-11 AD (1932 Sake Era) have been published during the quarter, January to March, 2010.

'Monsoon 2009 – A Report' was brought out as an IMD Met. Monograph "Synoptic Meteorology No. 9/2010".

Climate Diagnostics Bulletins of India for December 2009 and Post Monsoon (October-December) 2009 were brought out.

Crop Yield Forecast for Rabi wheat was prepared for 16 meteorological sub-divisions for February 2010 and issued at H.Q., New Delhi.

Monthly Aridity anomaly indices for January 2010 were compiled.

'Climatology and extremes for various districts of Gujarat' prepared by M.C. Ahmedabad.

MAUSAM Vol. 61, No.1, Jan 2010 containing 9 research papers, 4 shorter contribution and Winter Season 2009 Summary was published during the quarter.

## PARTICIPATION IN EXHIBITIONS

IMD participated in Northern India International Trade Fair (NIITF 10) from 19<sup>th</sup> to 26<sup>th</sup> January 2010 at Kanpur (U.P.) "Science & Rural Technology Expo-2010" 1<sup>st</sup> Destination Rajasthan 2010 from 12<sup>th</sup> to 14<sup>th</sup> February & in "OceanTex, Ener Tech, Shipping Marine & Ports World Expo 2010" from 3<sup>rd</sup> to 6<sup>th</sup> March 2010 at Goregaon, Mumbai. Shri J.P.S. Bhullar, A.M.II was deputed at these exhibitions.



IMD Exhibition at IITF 2010

## INTER DEPARTMENTAL CO-OPERATION

In connection with establishment of Met. Observatory in High Schools under PROBE-Orissa sponsored by DST, Govt. of India, New Delhi, five days training in batches were arranged by OSCARD, Bhubaneswar. M. C. Bhubaneswar actively participated in this training programme for about 400 teachers. Lectures including practical were delivered by officers.

## INTER MINISTERIAL BRIDGE TOURNAMENT

IMD Bridge Team won the winners trophy of team championship and also won the winners/runners trophy of pair event in Inter-Ministry Bridge Tournament 2009-10 conducted by Central Civil Services Cultural and Sports Board during 13-14 March 2010.



DG, IMD and Bridge Team with Trophy

## INTER MINISTERIAL CULTURAL COMPETITION



DG, IMD and Cultural Team Members

Five Members IMD Team lead by Team Manager, Smt. Jiga Kaul participated in inter ministry music, dance & short play competition 2009-10 held from 22-25 February at Mavlankar Auditorium, New Delhi conducted by Central Civil Services Cultural and Sports Board. The IMD team stood up runner.

## INDIAN SCIENCE CONGRESS



Hon'ble Minister, Shri Prithviraj Chavan, Secretary, MoES and former Chairman of ISRO

The 97<sup>th</sup> Indian Science Congress (ISC) 2010 Science Exhibition was held at University of Kerala, Karyavattom Campus, Thiruvananthapuram from January 3-7, 2010. Under the guidance of Shri K. Santhosh, Director, Met. Centre, Thiruvananthapuram made all arrangements for the display of exhibits from India Meteorological Department in the pavilion of Ministry of Earth Sciences, which was inaugurated by Hon'ble Minister Shri Prithviraj Chavan. The visitors were explained in details about the exhibition. Shri Bhullar, A.M.-II participated from HQrs. New Delhi. About 2,00,000 people visited the pavilion during the five days and MoES was one of the major exhibitors.

## DISTINGUISHED VISITORS

Prof. Mike Wallace and Prof. Jagadish Shuka from USA visited IMD, HQ's 17<sup>th</sup> February. Prof. Jagadish Shukla, George Mason University (GMU) President, Institute of Global Environment and Society (IGES) gave a talk on Global Warming : An Overview Climate Change over India. Prof Wallace, delivered a lecture on Climate change science, it is the hub of environmental science, or is it just a part of it? followed by discussions. They also visited IMD, Pune office on 25<sup>th</sup> February.



Prof. J. Shukla delivering lecture in Seminar Hall



Korean delegation at Conference Hall

## DELEGATION TEAM FROM KOREA

A two member delegation consisting of Dr. Yun Won-Tae, Director, and Mr. Kim Seong-Heon, Dy. Director, International Cooperation, Korea Meteorological Administration visited IMD, New Delhi on 17<sup>th</sup> March 2010. DGM welcomed them in conference hall followed by meeting with senior officers and a presentation. The senior officers from HQ's were also present during the meeting. The delegates were apprised of present status and functioning of RTH, NWP, Satellite Division and Seismology Division.

**Dr. Shaik H. Hakeem** Scientist from RSMC, Darwin, Australia visited IMD Pune on 8<sup>th</sup> January and delivered a scientific talk on the topic, "Tropical Climate Monitoring Activities at RSMC, Darwin, Australia". The officers of Pune office attended the lecture.

## FOREIGN VISITS

**Dr. Soma Sen Roy**, Met.-I and Dr. S. D. Kotal, Met.-I were deputed for training in Now-casting system and regional Unified Model of UKMO for 4 weeks period from 4-31 January.

**Shri S. Venkateswarlu**, Director, CWC Visakhapatnam and Shri Y. K. Reddy, Director, MC Hyderabad were on tour to China for the Factory Acceptance Test (FAT) of 6 numbers of Beijing Metstar Radars from 05 January to 24 January 2010.

**Dr. A. K. Singh**, Met-I deputed to Bhutan to attend planning meeting for installation of AWS and GPS Sonde during 23-24 January.

**Dr. M. Mohapatra**, Director attended Forecasting Demonstration Project (SWFDP) (Vietnam) from 2<sup>nd</sup> to 5<sup>th</sup> February, 2010 and the WMO workshop on Severe Weather Development for Southeast Asia at Hanoi. **contd...**

## WMO EXECUTIVE COUNCIL MEET

**Dr. Ajit Tyagi**, DGM, was on tour to Geneva, Switzerland to attend the third session of WMO Executive Council working Group on **Strategic and operation planning implementation** to be held at WMO, H.Q., during the period 29-31 March 2010. The Executive Council working Group reviewed actions taken from the last meeting of the EC WG/SOP held in March 2009 and discussed WMO Strategic Plan and Operating Plan 2012 – 2015 followed by discussions on :

- **The Sixty-third Session of the WMO Bureau (BUR-LXIII)**
- **WMO Interaction with the Private Sector**
- **Secretariat implementation plan and budget**
- **Statement on the role and operation of NMHSS**

## WMO COMMISSION FOR AERONAUTICAL METEOROLOGY

**Shri M. K. Bhatnagar**, Scientist "E" & Director Aviation Services attended the 14<sup>th</sup> session of WMO Commission for Aeronautical Meteorology (CAeM) held in Hong Kong, China from 3<sup>rd</sup> to 7<sup>th</sup> February 2010. During this period he visited the Hong Kong Observatory and Hong Kong Airport Meteorological Office also.



Shri M.K. Bhatnagar with Mr. C.M. Chun, President of CAeM at Tai Lam Chung, Hong Kong

## FOREIGN VISITS (Continued)

**Dr. A. L. Koppa**, DDGM(C) was on deputation to Antalya, Turkey during 14<sup>th</sup> to 26<sup>th</sup> February 2010 for attending 'Technical Conference on Changing Climate & Demands for Climate Services for Sustainable Development' and XV Session of the Commission for Climatology of WMO.

**Shri B. K. Bandyopadhyay**, DDGM (Services) attended the 37<sup>th</sup> Session of WMO/ESCAP panel meeting on Tropical Cyclone held at Phuket, Thailand from 15<sup>th</sup> to 19<sup>th</sup> February, 2010.

**Shri L. R. Meena**, DDGM(ISSD) was deputed to Seoul (Korea), to participate in Inter Commission coordination group on WMO information system during the period 22-26 February.

**Dr. V. Rajeswara Rao, Director and Shri D. K. Malik, Director** were deputed to Australia during 24-28 March 2010 for Factory Acceptance Test of Ground Receiving and processing system to be installed at New Delhi, Chennai and Guwahati to receive data from NOAA, METOP and MODIS Satellites.

## WORKSHOP ON FLOOD METEOROLOGY



Officers from Hydromet Division and FMO with DG, IMD

A Workshop on Flood Meteorology was held during 22<sup>nd</sup> – 23<sup>rd</sup> March 2010 at New Delhi. The Director In-charge of FMOs and scientists from H.Q. Hydrology unit attended the workshop and presented various work done by them to mitigate flood damages. AVM (Dr.) Ajit Tyagi Director General of Meteorology gave concluding remarks at the end of the session.

## TRAINING-CUM-WORKSHOP ON DOPPLER WEATHER RADAR

A training-cum-workshop on Doppler Weather Radars was held during 15-17 March, 2010 at RMC, Chennai, in which officers and staff of IMD including IAF, Tambaram, INS Rajali and Indian Institute of Science, Bangalore participated during the workshop.

## अट्ठारहवीं राष्ट्रीय वैज्ञानिक हिन्दी संगोष्ठी



डॉ. वसुधा गुप्ता, निदेशक, पृ. वि. मंत्रालय से प्रमाण पत्र लेते हुए डॉ. जी. डी. मिश्रा

पृथ्वी विज्ञान मंत्रालय द्वारा 'समाज पर जलवायु परिवर्तन के प्रभाव' पर संगोष्ठी इंडिया हेवीटेड सेंटर, लोदी रोड, नई दिल्ली में दिनांक 8 फरवरी 2010 को आयोजित की गई। इस हिन्दी संगोष्ठी में भारत मौसम विज्ञान विभाग के चार कार्मिकों ने व्याख्यान दिए। इस संगोष्ठी में मौसम केन्द्र, भोपाल में कार्यरत डॉ. जी. डी. मिश्रा, वैज्ञानिक सहायक को द्वितीय पुरस्कार मिला। भारत मौसम विज्ञान विभाग, नई दिल्ली के अन्य अधिकारियों एवं कर्मचारियों ने भी इस संगोष्ठी में भाग लिया।

## NATIONAL SEMINAR ON DOPPLER RADAR AND WEATHER SURVEILLANCE

RMC Chennai organized National seminar on 18-19 March 2010 at National Institute of Ocean Technology, Pallikaranal, Chennai to explore the potential of Doppler Weather Radars and analyse the still unexplored areas of Doppler Weather Radar application. Dr. Shailesh Nayak, Secretary, MoES, was the Chief Guest. Dr. M.A. Atmanand, Director, NIOT, Chennai was the Guest of Honour. AVM (Dr.) Ajit Tyagi, DG, IMD, presided over the function.



Release of booklet by Secretary, MoES

The Book of Abstracts 'DRaWS – 2010' and the Booklet on 'History of Radar Meteorology in India' compiled by Shri. S.Raghavan, DDGM (retd.) IMD was released on the occasion.



Press meet during DRaWS 2010

During the two-day seminar, 14 Invited Talks by eminent experts in the field of radars were delivered. Fourteen organizations including IMD had nominated their scientists for participation and presentation of papers in the seminar including media persons.

## INTEGRATED HIMALAYAN PROGRAMME

First Science Committee Meeting on Integrated Himalayan Programme under the Chairmanship of DGM held at Conference Hall, New Delhi on 19<sup>th</sup> January. About 17 officials from different organizations attended this meeting. Shri B.P. Yadav, Director made a presentation about the concept paper and approach of IMD for the implementation.

## PUBLIC WEATHER SERVICES FOR KERALA &amp; LAKSHADWEEP

Address by AVM (Dr.) Ajit Tyagi, DGM on User's meet on 20<sup>th</sup> January 2010

Users' conference Meet on "Public Weather Services for Kerala & Lakshadweep" was held on 20 January 2010 at Meteorological Centre, Thiruvananthapuram. AVM(Dr.) Ajit Tyagi, DGM presided over the meetings. The conference was attended by 46 delegates from 22 User agencies and media. 25 delegates from IMD attended the meet. Dr. D. Alexander, Director of Research, Kerala Agricultural University, Thrissur was the Chief Guest. There were 3 presentations from the Officers of MC Thiruvananthapuram and 12 presentations from User Agencies.

## AMR/ACR/ATR MEETINGS

The annual monsoon/cyclone/technical review meeting 2010 was held during 21-22<sup>nd</sup> January and was organized at M.C. Thiruvananthapuram. About 35 delegates attended ATR meeting on 21st. AVM (Dr.) Ajit Tyagi, DGM presided over the meeting & mentioned importance of holding such types of meeting which involves sub offices in process of revamping our activities to receive the best result.



On 22<sup>nd</sup> January, 52 delegates attended ACR/AMR meetings. Met. Monograph on Monsoon-2009 was released by the Director General, IMD during AMR meeting. Dr. H.R. Hatwar, ADGM(R) spoke about salient feature of Monsoon 2009 and also emphasized on study of Atlantic anomalies over SW monsoon rainfall.