



# INDIAN METEOROLOGICAL SOCIETY

## AHMEDABAD CHAPTER

Issue: October-December

MEGHA

2008

### From Chairman's Desk

We have left behind 2008- a tumultuous year indeed. Meteorologically, it had abundance of 'anomalies' with varying magnitudes. What has 2009 in store? It has started with continued La Nina. Close on heels is a set of startling observations of climatic significance- *the great ocean conveyor with its north Atlantic limb impaired for about a decade appears to be restored this winter.* Do independent observations corroborate this report? If so, how did it happen? The phenomenon has far-reaching impacts on climate.

Many questions have been answered in 2008, but many more appear to have cropped up right in the beginning of 2009. No doubt a stimulating year beckons us!

Dr. Abhijit Sarkar <[sarkar.abhi@gmail.com](mailto:sarkar.abhi@gmail.com)>

### Secretary's Report

This is the last quarterly newsletter of 2008. IMSA-EC and Megha team wishes all members a happy and prosperous new year.

✂ Our annual **Lecture on South West Monsoon performance** was delivered by Dr Ajit Tyagi, Director General, IMD on November 24, 2008. Summary of his talk is presented in this issue.

✂ As mentioned in the last issue of Megha, IMSA organized a **photography contest on the theme 'Weather'**. IMSA new-year greeting card featuring the prize-winning photo will soon reach you. Look for the contest result on this page! We thank you all for the overwhelming response and participation. We are also planning to bring out a **desk calendar** based on selected photo entries from the contest.

✂ As a part of membership drive IMSA has added **22 new members** whose membership number have been received from IMS HQ, New Delhi.

✂ Members will soon receive information on this years' **Professor Satish Dhawan lecture**.

✂ In this issue we bring out the **awards received by IMSA members during 2008** based on their inputs. Check out the annexure!

Dr. B Simon <[babysimon@gmail.com](mailto:babysimon@gmail.com)>

### News / Events

✂ On October 22, 2008, ISRO's Polar Satellite Launch Vehicle, PSLV-C11, successfully launched India's first spacecraft to moon Chandrayaan-1. On November 8, Chandrayaan-1 was successfully placed into a lunar orbit and with the Moon Impact Probe hitting the lunar surface on November 14, Indian tricolour was placed on the moon's surface.

✂ Total rainfall received over India during the summer monsoon season of 2008 was 2% less than the long period average.

✂ Tropical cyclone *Nisha* (25-29 November 2008) killed 204 people making it the 4<sup>th</sup> deadliest storm in 2008 after cyclone Nargis, Typhoon Fengshen and Hurricane Hanna.

✂ International Conference on *Progress in Weather and Climate Modeling over the Indian Region* was held at the National Centre for Medium Range Weather Forecasting (NCMRWF), Noida, during December 9-12, 2008 to commemorate 20 years of NCMRWF and 50 years of NWP in India.

✂ Eminent Indian scientist Dr. J. Shukla was awarded the 52<sup>nd</sup> IMO prize for his contribution in the field of monsoon and climate prediction.

✂ National symposium on *Advances in Remote Sensing Technology & Applications* was organized by Indian Society of Remote Sensing at Nirma University, Ahmedabad during December 18-20, 2008.

✂ According to WMO, the year 2008 is likely to rank as the 10<sup>th</sup> warmest year on record.

✂ Dr. Kamaljit Ray, Director, IMD, Ahmedabad and other IMD scientists have been actively popularizing meteorology among Ahmedabad school children.

### Result of Photography Contest

Result of the much-awaited IMSA photo contest has been announced. The first prize-winning photo on the theme 'Weather' is taken by Dr. V. Sathiyamoorthy, SAC. IMSA thanks Shri. S. Ramdass, Shri. N. S. Pillai and Dr. Abhijit Sarkar, for sparing their valuable time to judge the photos.

**'Monsoon 2008'****- Lecture by Dr. Ajit Tyagi**

This year's monsoon lecture was delivered by Dr. Ajit Tyagi, DG-IMD, on November 24, 2008 at K. R. Ramanathan auditorium, Physical Research Laboratory, Ahmedabad. This lecture was attended by a large number of IMSA members, scientists of SAC, PRL, IMD and other academic institutions. Dr. Tyagi presented different aspects of southwest monsoon-2008 such as onset, progress and rainfall characteristics. About onset, he informed that May 29( $\pm 4$ days) was the predicted date, whereas the actual onset took place on May 31. In 2008, the rainfall was uniformly distributed with 92% area having normal and only 8% having deficit rainfall. He mentioned that the striking feature of this year's monsoon was its rapid advance, which covered the entire country 5 days in advance and its intra-seasonal variability. Rainfall for the season (1 June to 30 September) was 98% of its long period average (LPA). The monthly variation in rainfall is marked by above and near normal rainfall in June, August and September and suppressed rainfall in July (17% below LPA) was attributed to the dominance of mid-latitude westerly intrusion. He also informed that although different models were able to forecast annual mean rainfall with confidence, they failed in picking up the Intra-seasonal variability.

Dr. Tyagi also elaborated about different activities of IMD, particularly the new initiatives such as district level weather forecast and district level agro-met advisory provided through IMD's website. Also, Dr. Tyagi stressed on the need for satellite-derived meteorological data in addition to existing observational network for better weather forecasts with focus on value added products.

**Fog over Indo-Gangetic plains**

Over the past few years, a peculiar haze is observed floating over the Indo-Gangetic plains, a few kms thick, blocking sunlight during winter. This year end also, biting cold and dense fog continued to disrupt normal life across Uttar Pradesh / New Delhi. Cold wave and fog in the plains become worse when deep westerlies continue to empty their moisture over the cooler surface marked by little or no wind activity. Anthropogenic activities releasing harmful aerosols and pollutants into the atmosphere have also been held responsible for this marked increase in fog formation. Future INSAT-3D channels will be useful in fog detection.

**Chandrayaan-1 Snapshot**

Chandrayaan-1 is India's first spacecraft mission beyond Earth's orbit. The main objectives of Chandrayaan-1 mission was to put an unmanned spacecraft into an orbit around the moon and to perform remote sensing of moon for about two years using 11 scientific instruments built in India and 5 other countries.

The Indian payloads of Chandrayaan-1 are *Terrain Mapping Camera (TMC)*, a CCD camera that maps the topography of the moon, *Hyperspectral Imager (HySI)*, another CCD camera, designed for mapping of the minerals, *Lunar Laser Ranging Instrument (LLRI)* which determines the height of lunar surface features, *High Energy X-ray Spectrometer (HEX)* which is designed to explore the possibility of identifying Polar Regions covered by water-ice deposits and regions of high Uranium and Thorium concentrations and *Moon Impact Probe (MIP)*, which was made to hit the lunar surface consisted of a video imaging system, a radar altimeter and a mass spectrometer.

**Photo Gallery**

Dr. Ajit Tyagi  
delivering  
monsoon  
lecture

Audience at  
PRL  
auditorium

**IMSA Executive Committee (2007-2009)**

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Secretary	Dr. Baby Simon
Joint-secretary	Dr. R. D. Deshpande
Treasurer	Dr. V. Sathiyamoorthy
Members	

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## *Annexure: Awards received by IMSA members (2008)*

<b>S. No</b>	<b>IMSA Member</b>	<b>Award</b>	<b>Organizing Body</b>	<b>Date</b>
1	Dr. Anupam K.Singh (LM-1396)	Academic Award	Nirma University, Ahmedabad	February, 2008
		Best Poster (Joint)	Association of Agro- meteorologists, Hyderabad	October, 2008
2	Shri. C. P. Singh (LM-1404)	Excellence Award (International Congress, 2008)	Indian National Cartographic Association	November, 2008
3	Shri. Mehul R. Pandya (LM-1390)	Young Scientist Merit Award, 2007	ISRO	August, 2008
4	Dr. Rajkumar (LM-230)	Hari Om Ashram Prerit Vikram Sarabhai Award for Space Applications	Physical Research Laboratory / Hari Om Ashram Trust	August, 2008
5	Dr. Rashmi Sharma (LM-258)	P R Pisharoty Memorial Award	Indian Society of Remote Sensing	December, 2008
6	Shri V. K. Jain (LM-516)	Team Excellence Award for MMIC based sub system and Driver Amplifiers for GEOSAT	ISRO	August, 2008
		Team Excellence Award for INSAT- 4CR Mission	ISRO	August, 2008