

**Issue: July-September** 

# МЕСНА

2008

# From Chairman's Desk

With Monsoon 2008 approaching its closure, attention of meteorologists will turn towards the analysis of this year's seasonal rainfall. The peak of raining 'towers' appears to have shifted towards early August this year as against July in the normal curve. Assessment of Monsoon-2008 will be an important forthcoming IMSA event. Recently IMSA organized its first tree plantation campaign, in which more than 50 participants of varying age groups took part. Such an awareness programme is necessary to arrest the dwindling green cover of Ahmedabad (dropped to 80% in last 5 years). At the end of the event, when I asked the youngest participant whether he will again come to this programme, he nodded most enthusiastically, and I knew our effort was worth!!

Dr. Abhijit Sarkar <sarkar.abhi@gmail.com>

### Secretary's Report

The third quarterly newsletter covering the highlights of recent and forthcoming events of interest to IMSA members is in your hands.

🔶 IMSA organized а tree plantation programme at the SAC-Bopal residential campus on September 21, 2008, which was inaugurated by Dr J P Agrawal IFS, Retired Principal Chief Conservator of forest, Gujarat. IMSA, their family members and CSSTEAP (SATMET) students actively participated in this event and made it a grand success. On this occasion Dr J P Agrawal gave a speech on the need for tree plantation. The Neem trees, which were planted on this occasion, have a life span of 800 years! A short film on 'Global warming and its impacts' was also screened.

♦ All the newly received membership forms have been sent to IMS-HQ to obtain IMS membership.

Dr. Baby Simon <babysimon@gmail.com>

# News / Events

**%** On September 16, 2008 International Day for the preservation of the ozone layer was observed worldwide.

**%** During September 16-17, 2008 Gujarat received heavy rainfall, which resulted in flood, caused damage to life and property.

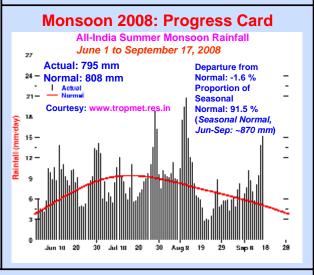
✗ IMSA organized a tree-plantation campaign on September 21, 2008 at SAC Bopal residential campus.

X Cabinet approved second unmanned Indian moon mission Chandrayan-II

✗ A national workshop on science and application program of SARAL/AltiKa was held during September 16-17, 2008 at SAC.

## Photography Contest!!!

IMSA members are invited to participate in a photography contest on the theme 'Weather'. Original (digitally unaltered) best photo will feature as IMSA's New Year e-Greetings. Your entries (maximum 2) should be sent to sathya@sac.isro.gov.in & babysimon@gmail.com latest by December 1, 2008. Editorial committee's judgement will be final.



#### Feedbacks

- ✤ Dr. S D Attri, Secretary, IMS-HQ commended the newsletter and suggested that it can be hosted on IMS website.
- 🔶 Dr. P C Pandey, CORAL, IIT Kharagpur lauded the Megha as an 'interesting and informative e-newsletter'.
- Dr. B Manikiam, ISRO HQ, Bangalore praised the Megha.
- Dr. S M Bhandari appreciated the efforts in bringing out the Megha.

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#### Saurashtra Flood

During September 11-12, 2008 a cyclonic circulation was seen over eastcentral Arabian Sea off Konkan coast. This was covering northeast Arabian Sea and Gujarat coast on September 13, 2008, moved over northeast Arabian Sea and adjoining Gujarat coast on September 14-15, 2008. It further moved over Gujarat State on September 16-17, 2008. This lead to widespread and heavy rainfall over Saurashtra, caused damage to life and property. Saurashtra subdivision received 893% more rainfall during the week ending September 17, 2008 than the weekly normal. The Gujarat subdivision received 234% more rainfall during the same period (Source, IMD, www.imd.gov.in). On September 17, 2008 Lakhator recorded 478 mm of rainfall (Source, IMD, Ahmedabad).

# Weather Engineering at Olympics

Rain had been cited as the biggest threat in the Beijing Olympic opening held this year. For the Olympic opening night, Beijing Municipal Meteorological Bureau (BMB) gave a high thundershower alert at 0935 PM. According to BMB, over 1,000 rain dispersal rockets were fired, which successfully intercepted a stretch of rain belt for the smooth opening ceremony. The efforts to engineer weather were part of a three-fold program consisting of first, tracking regional weather, then in case of impending danger, using aircrafts and an array of artillery, shooting and spraying silver iodide and dry ice into incoming clouds that are still far enough away so that their rain can be flushed out before they reach the stadium. Finally, seeding rain-laden clouds near the stadium with chemical comprising of liquid nitrogen to shrink droplets so that rain won't fall until those clouds have passed over. Whether these techniques actually work still remains the subject of debate in the scientific community.



### Interesting New Arrivals

\*Atmosphere, Ocean, and Climate Dynamics: An introductory text, Elsevier, Marshall J. (2008).

\*Climate change and groundwater, The Geological Society, Dragoni W. Ed. (2008).

\*Earth observation of global change; The role of satellite remote sensing in monitoring the global environment, Springer, Chuvieco E. Ed. (2008).

\*Surviving the century, facing climate chaos and other global challenges, Earth scan, Girardet H. Ed. (2008).

\*Human missions to Mars; Enabling technologies for exploring the red planet, Praxis Pub., Rapp D. (2008).

\*Climate Change 2007: The Physical science basis, Solomon S., Cambridge Univ. Press.

**Courtesy: PRL and SAC Libraries** 

### Science Updates

An ISRO-CNES Satellite with ARgos and AltiKa (SARAL) is proposed to be launched during 2010. The objectives of the SARAL mission are: To realize precise, repetitive global measurements of sea surface height, significant wave height and wind speed for developing operational oceanography, understanding of climate and improving forecasting capabilities. This mission will embark the AltiKa altimeter, whose aim is to provide measurements complementary to TOPEX/Poseidon, Jason and ENVISAT series of satellite missions. The added advantages of AltiKa mission is that it is based on a wideband Ka-band altimeter (35.75 GHz, 500 MHz), which will be the first oceanography altimeter to operate at such a high frequency. This unique technical characteristic of the instrument will offer higher performance both in terms of spatial and vertical resolution.

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