Regd No. 21693/71 ISSN 0970 1397

VAYUMANDAL

JANUARY-JUNE 2018



CONTENTS

	From the President's Desk			i
1.	Seismological Aspects of Korean and other Nuclear Explosions	-	H. N. Srivastava and Rajesh Prakash	1
2.	Impact of Climate on Sugarcane Yield over Gorakhpur District, U.P. using Statistical Model	-	R. Bhatla, Babita Dani and A. Tripathi	1
3.	Relationship between Iran Surface Pressure and India Summer Monsoon	-	Ramesh Kumar Yadav	2
4.	Monitoring of In-situ Observations over Indian Region	-	Jaya Singh, Priti Sharma, Amit Verma, S. K. Choudhary and M. Das Gupta	3
5.	Development of Rice Yield Forecast in Mid-season using Weather Indices based Agrometeorological Model in Chhattisgarh	-	M. Rajavel, Prakash Khare J. R. Prasad, K. K. Singh, H. V. Puranik and G. K. Das	3
6.	Monsoonal Rainfall of Sub-Himalayan West Bengal: Empirical Modelling and Forecasting	-	Pijush Basak	4
7.	Long Term Trends and Variations in Rainfall under Present Climatic Scenarios at Pantnagar	-	Ravi Kiran	5
8.	Report on Severe Weather Events for the Period of October to December	-	Sathi Devi	6
9.	A Report from Indian Meteorological Society and its Local Chapters	-		6

Published by Editorial Committee of the Indian Meteorological Society Printed and Bound in India at Focus Impressions, New Delhi - 110 003

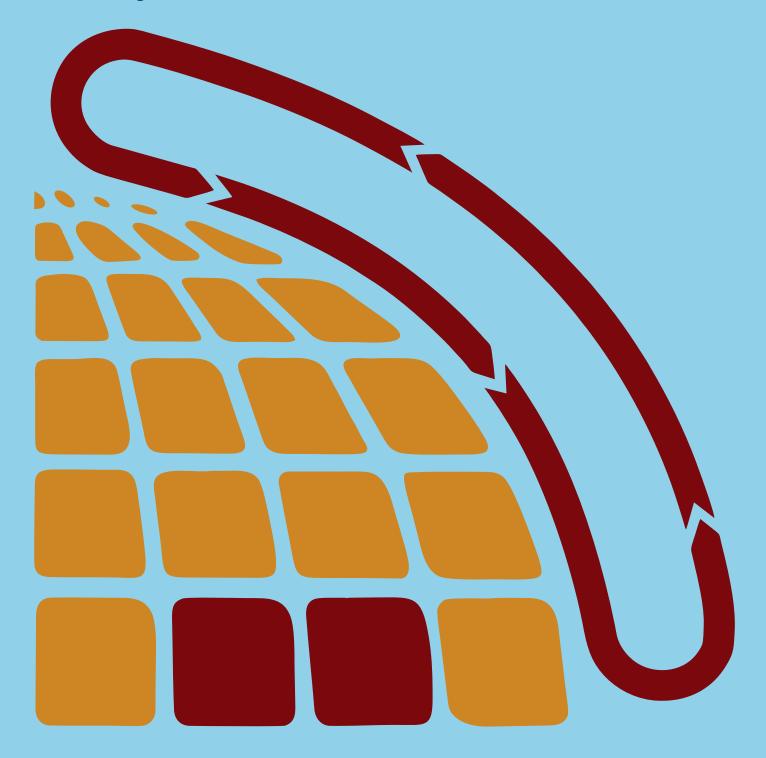
VAYUMANDAL

Vol. 44 No. 1

JANUARY - JUNE 2018

Bulletin of Indian Meteorological Society





Indian Meteorological Society National Council 2018-2020

President

Prof. Sushil Kumar Dash
Immediate Past President
AVM Dr. Ajit Tyagi
Vice- Presidents
Dr. A. K.Sahai
Sh. Anand.Sharma
Secretary
Dr. D.R.Pattanaik
Jt. Secretary
Dr. S.I.Laskar
Treasurer

Sh.A.K.Baxla

Council Members
Dr. U.C.Mohanty
Dr.D.Rajan
Sh.R.K.Giri
Prof.R.Bhatla

Sh. Sikandar M Jamadar Ms. Samanti Sarkar Dr. D. Ram Rajak Sh. Manas kumar De

- 1. The Society was established in 1957 and was registered on 26 May, 1972 under the Societies Registration Act of 1860 as amended by Punjab Amendment Act 1957 and applicable to the Delhi State. Registration No. of the Society is 5403.
- 2. Objectives of the Society
 - i. Advancement of Meteorological and Allied sciences in all their aspects
 - ii. Dissemination of knowledge of such sciences both among the scientific workers and among the public and
 - iii. Promotion of application of Meteorology and allied sciences to various constructive human activities.
- 3. The Society is a non-profit making organization and none of its income of arrears accrues to the benefit of its members.
- 4. Activities of the Society
 - i. To encourage and expand research activity.
 - ii. To organize meeting, discussions, symposia & conferences
 - iii. To arrange to publish suitable publications.
 - iv. To promote cooperation in scientific work as far as it may be practicable between Government Department, academic and other research institutions, scientific societies and industries.
- 5. The Society's Headquarter is located at Delhi and its local chapters are functional at various places in India.
- 6. Any person who is interested in the aims of Societies is eligible to become a member. The annual subscription of membership is Rs.300. Life membership subscription is Rs.3000 (U.S.\$300) for scientists from India (abroad). Admission fee is Rs.50 (U.S.\$10).

DISCLAIMER & LIMITATIONS

- The contents published in this bulletin have been checked and authenticity assured within limitations of human errors
- The geographical boundaries shown in this report do not necessarily correspond to the political boundaries.

EDITORIAL COMMITTEE (VayuMandal)

Chief Editor:

Prof. S.K. Dash, skdash@cas.iitd.ernet.in, IIT Delhi, New Delhi

Managing Editor:

Dr.D.R.Pattanaik, drpattanaik@gmail.com, IMD, New Delhi **Executive Editor:** Dr. Kamaljit Ray, kamal.ray@nic.in, MoES, New Delhi

Members

Prof U.C. Mohanty, ucmohanty@gmail.com, IIT Bhubaneshwar

Prof G.S. Bhat, bhat@iisc.ac.in, IISC, Bangalore Prof D.V. Bhaskar Rao, dvbrao@gmail.com,

K.L.University, Hyderabad

Prof K. Mohankumar, kmkcusat@gmail.com, CUSAT

Dr Someshwar Das, somesh03@gmail.com, Central

University of Rajasthan, Jaipur

Dr C.M. Kistwal, chandra_k@sac.isro.gov.in, SAC, Ahmedabad

Dr R.C. Dhiman, r.c.dhiman@gmail.com, NIMR, Delhi

Dr A.K. Sahai, atul.sahai360@gmail.com, IITM,Pune

Dr S.S. Ray, shibendu.ncfc@nic.in, MNCFC, New Delhi

Dr M. Mohapatra, mohapatraimd@gmail.com, ,IMD, New Delhi

Dr Snehmani, snehmani@sase.drdo.in, SASE Prof P.K. Mohanty, pratap_mohanty@yahoo.com, Berhampur University

- 1. VayuMandal, which is the official bulletin of the Indian Meteorological Society, is Rs. 300/- per copy. The annual subscription is Rs. 500/-. For Foreign Subscription, the rates are US \$50 (by air mail) and US\$ 25 (by ordinary mail). Members of the Indian Meteorological Society receive a free electronic copy.
- 2. Correspondence and contribution to the Journal may be sent to the Executive Editor, VayuMandal Mausam Bhawan, Lodi Road, New Delhi-110003. The papers should be typed in double spacing. The number of figures, photographs and tables should be kept to the minimum possible and they should be in a form ready for photo reproduction. Use of mathematical expressions may be minimized and lengthy list of references avoided. Subscription by Demand Draft/Local Cheque Payable to Indian Meteorological Society at Delhi may be sent to the Secretary
- 3. Authors will receive the copy of the issue of Vayu Mandal containing their contributions. Extra Copies can be provided on advance payment.
- 4. The society can use any material published in Vayu Mandal in other publications.
- 5. The editor and the society are not responsible for the views Expressed by any author in their contribution published in Vayu Mandal.
- 6. Email: vayumandal.ims@gmail.com

Guidelines to Authors

General

Only original work should be submitted. It should not have been published earlier in any form or should not be under consideration elsewhere. Manuscripts should be sent to the Executive Editor, Vayu Mandal by email to

vayumandal.ims@gmail.com

Presentation

Articles should be as brief as full documentation allows. They should not usually exceed 5-6 printed pages (approximately 4000 words) including diagrams. Invited articles can be upto 10 pages. Paper must be written clearly and concisely with consistency in style and spelling, and typed double spaced on good paper. The format is 'Abstract', 'Keywords', 'Introduction', 'Data and Method', 'Discussion', 'Summary/Conclusion', 'Acknowledgements' (if any), and 'References'.

Title

Title should be specific, brief and informative of the subject discussed.

Keywords

Up to five key words should be provided.

Abstract

The abstract should be typed on a separate page and should not exceed 100 words.

Text

Only standard abbreviations should be used. All measurements should be in SI units. Avoid beginning of a sentence with numbers.

Tables

All tables must be numbered serially and be placed at the end. Tables should carry brief titles. Abbreviations used in the table should be defined at the bottom of the table.

Illustrations

A set of original figures must be sent along with the manuscript. All diagrams must be neatly labeled. Maximum size of a diagram can be A4 size

References

References in the text should be cited by authors name and year of publication. The references should contain the author(s) name(s), year, title, name of the journal, (in standard abbreviations), Vol. No., and pages. References to book should contain name of Editor, if any, preceded by, Ed(s), place of publication, publisher, and year of publication and chapter or pages referred to. References to thesis should contain the degree, the year in which submitted, the university and the place. Samples are given below:

Mooley D.A. and Munot, A.A., 1993, 'Variation in the relationship of the Indian Summer Monsoon with global factors', Proc. Indian Acad. Sci., (Earth Planet Sci.) Vol. 102, No. 1, pp. 89-104.

Asnani G.C., Tropical Meteorology, Pune, 1993, pp 120-134.

Phillips N.A. The atmosphere in Motion', Ed. B. Bolin, New York Rockfeller Inst. Press., 1959, pp 501-504.

Singh U.S., 'Some studies on Vertical Motion and diabatic heating over the Indian Monsoon region', Ph.D Thesis 1975, Banaras Hindu University, India.

Executive Editor

Vayu Mandal

Rates of Advertisement per issue

Half Page : Rs. 10,000 Full Page : Rs. 15,000 Inner Book Cover (Colour) : Rs. 25,000

The Managing Editor VAYUMANDAL

IMS office, Room No. 605, Satellite Building, Mausam Bhawan, Lodi Road, New Delhi-110003 E-mail:vayumandal.ims@gmail.com