

Curriculum Vitae of Dr. Abhilash. S

Name : Dr. ABHILASH. S
Address (Official) : Department of Atmospheric Sciences
Cochin University of Sci. & Technology
Fine Arts Avenue, Cochin 682 016
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Age and Date of Birth : 42 Years, 28-05-1979
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1. Educational Qualifications:

Sl. No	Degree	Year of Passing	Subjects	University	Marks Obtained	Class/Division
1	Ph.D	2009	Atmospheric Sciences	Cochin University of Science and Technology		
2	M.Sc	2002	Meteorology	Cochin University of Science and Technology	76.3%	Distinction (First Rank)
3	B.Sc	1999	Physics	Kerala University	83.1%	Distinction

2. Scientific and Academic Career:

Sl. No	Position held	Institution	Period
1	CSIR Research Fellow	Cochin University of Science and Technology (CUSAT)	2002-2007
2	Senior Research Scientist	Flagstone Reinsurance Bermuda Pvt Ltd.	2008-2009
3	Scientist C	Indian Institute of Tropical Meteorology	2009-2013
4	Visiting Scientist	University of Miami, USA	2014 - 2015
5	Visiting Scientist	National Center for Atmospheric Research, USA	2014 (Jun)- 2014 (Aug)
6	Scientist D	Indian Institute of Tropical Meteorology	2014 - 2016
7	Assistant Professor	CUSAT	2016 - Continuing
8	Associate Director	Radar Center, CUSAT	2019-2021
9	Director	Radar Center, CUSAT	2021-Continuing

3. Honors and Fellowships:

- SAARC Scientist medal for the research work on the Assimilation of IMD Doppler Radar Wind observations in a Mesoscale model for the short range prediction of Convective storms (2007).
- Indian Meteorological Society (IMS) award on Weather and Climate Services (Formerly Bhavanarayana Award) (2017).
- Outstanding Young Faculty award 2019 from Cochin University of Science and Technology (2019).
- Council for Scientific and Industrial Research (CSIR) Fellowship (2002). Qualified National Educational Test (NET)-Eligibility for Lectureship, conducted by University Grant Commission (UGC/CSIR). (2002).
- Prof. R. Ananthakrishnan Endowment Prize for Topper in MSc Meteorology.
- Best participant award in SERC School on Aviation Meteorology at Air Force Administrative College (AFAC), Coimbatore.
- UGC-BSR Startup Grant for conducting research on Cyclogenesis Prediction.

4. Research Profile:

Profile Pages :

CUSAT:http://das.cusat.ac.in/portal_password/show_faculty_member_abhilash.html

IITM:<http://www.tropmet.res.in/Dr.%20Abhilash.%20S.-89-Scientist>

Research Gate Page:

RG Score: 34.16

https://www.researchgate.net/profile/S_Abhilash

Google Scholar Profile: <https://scholar.google.co.in/citations?user=zjwT8xIAAAAJ&hl=en>

Total Citations : 1290

H-Index : 18

i10-Index : 28

Title of PhD Thesis:

"Tropical Mesoscale Convective Systems and associated Energetics : observational and Modeling Studies"

5. Major Research Areas and Interests:

- i Climate modeling and Climate Dynamics
- ii Dynamical Prediction of Indian summer Monsoon
- iii Tropical Cyclones, Clouds and Convection dynamics
- iv Radar data assimilation

6. Important Scientific Contributions:

- Played a key role in the **development of an operational extended range prediction (ERP) system using an indigenously developed multi model ensemble known as CFS based Grand Ensemble Prediction System (CGEPS)**. This is the unique extended range prediction system operationally implemented for the first time in the world. This system is now widely used for agriculture and water resource advisories. The same system is further adopted by India Meteorological Department (IMD) for operational extended range prediction over Indian region. The above contributions significantly helped to meet the prime objectives of the National Monsoon Mission Program. (Ref: **Abhilash et al., (2015), Journal of Applied Meteorology and Climatology**)
- Since most of the coupled models has inherent SST biases, **a bias correction technique is also operationally implemented in the MME framework**. Hence the atmospheric component, GFS is forced with Bias corrected forecasted SST of CFSv2 for the Extended Range Prediction. This was later included in the multi-model system and which in-turn produced improved forecast skill in the extended range. (Ref: **Abhilash et al., (2015), Atmospheric Science Letter**)
- Actively involved in the **operational Implementation of the monitoring system of Large scale Low frequency Monsoon Intra-seasonal Oscillations (MISO)** using a low dimensional metric. (Ref: **Abhilash et al., (2018), Climate Dynamics**)
- **Indian Doppler Weather Radar observations are incorporated in the operational assimilation system for the first time**. Developed observational pre-processors for Radar data assimilation in 3DVAR system of MM5 and WRF for the direct assimilation of radar reflectivity and radial velocity. (Ref: **Abhilash et al., (2012), Pure and Applied Geophysics.**)
- Played a key role in the **Development of improved Cyclogenesis Potential Parameters** for the prediction of genesis, track and intensity of Tropical Cyclones and contributing to the development of the extended range prediction system for the cyclogenesis, pre-genesis track and intensity forecast. (Ref: Ganesh, S. S., Sahai, A. K., **Abhilash, S et al: (2020), Earth and Space Science, PhD work of the student**)
- Contributed to the successful implementation of the indigenously developed 205 MHz ST Radar facility at CUSAT and Playing a Key role as **Director of Advanced Centre for Atmospheric Radar Research (ACARR), CUSAT** for further making the centre as a world class centre of excellence in "Observations and Modeling".
- Leading the modeling group for **developing regional prediction systems, fine tuning the models for capturing extreme events, developing customized and value added forecast products for different stake holders**. Developing various bias correction, signal amplification and calibration techniques for developing a robust regional ensemble prediction system. (Ref: Max Martin, **Abhilash S, et al., (2021), Weather, Climate and Society. Joint collaboration with University of Sussex**)
- *Playing a key role in the development of an **novel hybrid signal processing schemes for ST radar in separating the clear air and rain echoes** and successfully implemented for the first time in the*

205 Mhz frequency. (Ref: R. Dhanya, A. Pradeep, C. S. Abhiram Nirmal, **Abhilash. S etal.**, (2022), IEEE Geoscience and Remote Sensing Letters. PhD work of the student)

Research Projects Handled and Associated with:

Funding Agency	Project Title	Total Grant	Role	Status
UGC	Development of an Improved Cyclogenesis Potential Parameter over North Indian Ocean and Probabilistic Prediction of Cyclogenesis using a Multi Model Ensemble Prediction System.	10.0 Lakhs	PI	Completed
ISRO	Understanding the Physical processes associated with Tropical Intraseasonal Oscillations and Cyclogenesis over Indian Ocean Region using SCATSAT-1 Data	36.0 Lakhs	PI	Completed
MoES	Thunderstorm Understanding and Experimental Real-time Prediction (THUNDER) (Conditionally Accepted)	43.4 Lakhs	Co-PI	Completed
MoES	Monitoring of Extremes over Indian region on short, medium, extended and seasonal scale: Identification of Key physical processes and its representation in models.	40.7 Lakhs	PI	Completed
SERB-DST	Bias-Corrected High Resolution Future Projections of the Distribution of Rainfall over Peninsular India in Response to Warming Climate	30.5 Lakhs	PI	Completed
DST	Studies on the Tropospheric Features and Stratosphere Troposphere Coupling Processes over the Monsoon region using Stratosphere Troposphere (ST) Radar at Cochin	2000.0 Lakhs	Coordinator	Completed
MoES	Center of excellence in observational and modeling studies (Support for ACARR)	935.0 Lakhs	PI	Ongoing
DST	High-Resolution Climate Modeling For Southern Peninsular India	76.0 Lakhs	Co-PI	Ongoing
MoES and University of Miami, USA	Understanding bias errors and addressing physics errors in the CFSv2 model to improve monsoon prediction	200.0 Lakhs	Coordinator	Completed
University of Sussex, UK	Consultancy service for producing customized weather forecast for Fishers	10.0 Lakhs	Consultant	Ongoing
Hume Centre for Ecology and Wildlife Biology, Wayanad	Consultancy service for producing customized weather forecast for Farmers and Disaster Management of Wayanad District	1.50 Lakhs	Consultant	Ongoing

8. Countries Visited as part of Professional Career:

No	Country name	Purpose	Duration
1	University of Victoria BC, Canada	Attend SPARC 3rd general council Meeting	09-12 August, 2004
2	Kyoto University, Japan	International CPEA Symposium	20-23 March 2007
3	Institute of Bandung, Indonesia	4th Kyoto University International Summer school	22 July to 4th August, 2007
4	Halifax, Canada	Training on WRF Model, High Performance Computing, Parallel Processing	10 June to 1 July 2008
5	Macao, China	Fifth International workshop on Monsoons (IWM-V)	28-31 October, 2013
6	Hong Kong Observatory, Hong Kong	WMO Training workshop on Monsoons	1 November, 2013
7	National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA	Visiting scientist	10 June to 20 August, 2014
8	University of Miami, USA	Post-Doctoral Research Scholar	March 2014 to April 2015
9	ICTP, Italy	Advanced school and workshop on sub seasonal prediction	23 November to 4 December, 2015
10	Qingdao National Laboratory, China	CLIVAR open science conference	19-23 September, 2016
11	University of Stirling, Scotland, UK	IUKWC water Center conference	19-21 June, 2017
12	University Corporation for Atmospheric Research (UCAR), Boulder, Colorado, USA	WMO conference on sub-seasonal to seasonal prediction	16-21 September 2018

9. Member in Professional Bodies and Research Committees

	Role	Institution/Government
1	Expert Member	<i>Forecast and verification team, Extended Range Prediction, MoES, Govt. of India.</i>
2	Expert Member	Committee for recommending effective response to potential Cyclone related Disasters in Future, Constituted by Govt. of Kerala.
3	Expert Member	Committee for recommending effective response to potential monsoon related disasters in future, Constituted by Govt. of Kerala.
4	Member	"Research Advisory Council of Integrated Rural Technology Centre (IRTC)" Mundur, Palakkad funded by Kerala State Council for Science, Technology and Environment (KSCSTE)
5	Expert Member	"Upgrading the existing 'Weather forecasting system' purchased under 'VARSAMANA', project of India Meteorological Department (IMD)", Ministry of Earth Sciences (MoES), Govt. of India
6	Member	"Program Execution committee on Science Technology Research and Applications" by Institute for Advanced Research in Science (IARSc), Bangalore
7	Member	Advisory committee of project "Facilitating Multilevel Climate Governance in Kerala" by World Institute of Sustainable Energy (WISE)
8	Expert Member	"Committee on Environment and Climate Change" by Kerala State Biodiversity Board, GoK
9	Member	"Working group on state level sustainable development goal (SDG)-13" constituted by Kerala State Council for Science Technology and Environment. , GoK
10	Associate Editor	Academic Journal of Ocean Sciences, International Association of Scientists and Researchers
11	Editorial board member	Ocean Digest, A quarterly news Letter of Ocean Society of India
12	Secretary	Indian Meteorological Society, Cochin Chapter
13	Member	American Meteorological Society
14	Member	Indian Meteorological Society
15	Member	Indian Radar Society
16	Organizing Secretary	International symposium on Tropical Meteorology (Intromet 21) on Changing Climate: Consequences and Challenges (INTROMET-C4)

10. Academic activities and man power development.

- Recognized as Ph.D guide at Pune University, Pune and Cochin University of Science and Technology, Cochin. At present guiding 6 students for their PhD program. Guided 2 students for their M.Tech dissertation.
- Handled physical meteorology classes for the Ph.D scholars and early career scientist at the Center for Advanced Training (CAT), MoES and IITM, Pune.
- Handled Numerical Weather Prediction classes for the trainee officers of Indian Navy at SNOM, Cochin.
- Worked as expert faculty in conducting training for Meteorologist/Scientists at the MET training facility of IMD.
- Worked as external examiner for conducting various theory and practical examinations of various universities.

11. Guidance provided for:

M.Tech/MSc Dissertation	: 8 (Completed)
Ph.D	: 1 (Completed)
Ph.D	: 6 (On-going)

12. Publication Summary:

Total number of publications in peer-reviewed journals with High Impact Factor	: 67
Cumulative Impact Factor	: 203.2
Books/Book Chapters/Policy Report with ISSN/ISBN number	: 15
Popular Articles in Malayalam	: 35
Popular Lectures/Invited Talks	: 102

Publication list in Peer-reviewed Scopus Indexed International Journals Total Number of Publications with Impact Factor : 67 Cumulative Impact Factor: 200.656 Average Impact Factor : 3.08				
Sl. No	Authors & Title	Journal & DOI/Volume	Impact Factor	Year
67	Sreenath A V, Abhilash S , K Vijayakumar, and Brian Mapes (2022) "West coast India's rainfall is becoming more convective".	npj Climate and Atmospheric Science, 10.1038/s41612-022-00258-2	8.624	2022
66	Pritam Das M, S Abhilash and Ruchith. R. D (2022) "Aerosol Distribution during Spring and Summer and its relationship with Inter-Annual Variability of Summer Monsoon Rainfall Over Indian Region"	Geocarto International, DOI: 10.1080/10106049.2022.2058622	4.065	2022
65	R. Dhanya, A. Pradeep, C. S. Abhiram Nirmal, S. Abhilash , K. Mohankumar and P. Mohanan, "A Novel Hybrid Approach for the Identification of Clear Air and Rain Echoes in the 205 MHz ST Radar Spectrum,"	IEEE Geoscience and Remote Sensing Letters, DOI: 10.1109/LGRS.2022.3149149.	3.966	2022
64	K.K. Baiju, Shinoj Parappurathu, S. Abhilash , C. Ramachandran, P.S. Swathi Lekshmi, Praveen Padmajan, Shelton Padua, Thomson Kaleekal, "Achieving governance synergies through institutional interactions among non-state and state actors in small-scale marine fisheries in India"	Marine Policy, https://doi.org/10.1016/j.marpol.2022.104990 .	4.173	2022
63	Baburaj. P. P, S. Abhilash , C.S. Abhiram Nirmal, A.V. Sreenath, K. Mohankumar, A.K. Sahai, Increasing incidence of Arabian Sea cyclones during the monsoon onset phase: Its impact on the robustness and advancement of Indian summer monsoon	Atmospheric Research, https://doi.org/10.1016/j.atmosres.2021.105915 .	5.369	2022
62	Max Martin, Abhilash S , Vijaykumar Pattathil, Harikumar R, NT Niyas, TM Balakrishnan Nair, Yatin Grover, and Filippo Osella., Should I stay or should I go? South Indian artisanal fishers' precarious livelihoods and their engagement with categorical ocean forecasts	Weather, Climate and Society, DOI: https://doi.org/10.1175/WCAS-D-20-0044.1	2.746	2022
61	Sreenath, A. V., Abhilash, S. , and Vijaykumar, P. Variability in lightning hazard over Indian region with respect to El Niño–Southern Oscillation (ENSO) phases	Nat. Hazards Earth Syst. Sci., 21, https://doi.org/10.5194/nhess-21-2597-2021	4.345	2021
60	A.V. Sreenath, Neelam Malap, S.	Atmospheric Research, 262,	5.369	2021

	Abhilash , Gayatri Urankar Kulkarni, Thara Prabhakaran, Precipitation processes over Indian region under different environmental conditions from in situ measurements	https://doi.org/10.1016/j.atmosres.2021.105775		
59	M.G. Manoj, Sivan C., Rakesh V., Rejoy Rebello, Abhilash S. , Mohankumar K. Atmospheric response to the annular solar eclipse of 26 December 2019 over Cochin, India,	Advances in Space Research, 68(9), https://doi.org/10.1016/j.asr.2021.07.001	2.152	2021
58	P. Vijaykumar, S. Abhilash , A.V. Sreenath, U.N. Athira, K. Mohanakumar, B.E. Mapes, B. Chakrapani, A.K. Sahai, T.N. Niyas, O.P. Sreejith. Kerala floods in consecutive years - Its association with mesoscale cloudburst and structural changes in monsoon clouds over the west coast of India	Weather and Climate Extremes, 33, https://doi.org/10.1016/j.wace.2021.100339	5.338	2021
57	Syam Sankar, P. Vijaykumar, S. Abhilash , K. Mohanakumar. Influence of the strongest positive Indian Ocean Dipole and an El Niño Modoki event on the 2019 Indian summer monsoon	Dynamics of Atmospheres and Oceans, 95, https://doi.org/10.1016/j.dynatmoce.2021.101235	1.319	2021
56	Mukhopadhyay, P., Bechtold, P., Zhu, .Krishna, R. P. M., Kumar, S., Ganai, M., Tirkey, S., Goswami, T., Mahakur, M., Deshpande, M., Prasad, V. S., Johny, C.J., Mitra, A., Ashrit, R., Sarkar, A., Sarkar, S., Roy, K., Andrews, E., Kanase, R., Malviya, S., Abhilash, S. , Domkawle, M., Pawar, S. D., Mangain, A., Durai, V. R., Nanjundiah, R. S., Mitra, A. K., Rajagopal, E. N., Mohapatra, M., & Rajeevan, M. Mechanism for Extreme Rain Events in Kerala, India	Bulletin of the American Meteorological Society, Notes Section, May 2021, https://doi.org/10.1175/BAMS-D-20-0094.1	9.384	2021
55	U.N. Athira, S. Abhilash and R.D. Ruchith. Role of unusual moisture transport across Equatorial Indian Ocean on the extreme rainfall event during Kerala flood 2018	Dynamics of Atmospheres and Oceans, 95, https://doi.org/10.1016/j.dynatmoce.2021.101225	1.319	2021
54	Mukhopadhyay, P., Bechtold, P., Zhu, Abhilash, S. , Domkawle, M., et al. Unravelling the mechanism of extreme (more than 30 sigma) precipitation during August 2018 and 2019 over Kerala, India	Weather and Forecasting https://doi.org/10.1175/WAF-D-20-0162.1	2.950	2021
53	Sivan. C, V. Rakesh., S. Abhilash. , K. Mohanakumar: Evaluation of Global Reanalysis Winds and High Resolution Regional Model Outputs with the 205	Quarterly Journal of the Royal Meteorological Society, https://doi.org/10.1002/qj.4041	3.471	2021

	MHz Stratosphere-Troposphere Wind Profiler Radar Observations			
52	Shahi, N.K., Rai, S., Sahai, A.K., S. Abhilash (2021): Prediction of dominant daily modes of the Indian summer monsoon in the NCEP GFS model.	Meteorol Atmos Phys https://doi.org/10.1007/s00703-021-00793-2	2.204	2021
51	Saranya. S, Abhilash. S , Joseph. S, Kaur. M, A. Dey, R. Mandal, R. Phani, R. Chattopadhyay, D. R. Pattanaik and A. K. Ssahai : A review of the development and implementation of a tropical cyclone prediction system for North Indian Ocean in a multi-model ensemble framework	Mausam, 72, 1 (January 2021), 57-76	0.21	2021
50	Sreenath. A. V and Abhilash. S : Convection over the eastern equatorial Indian Ocean and Iranian branch of Asian summer monsoon anticyclone modulates the wet and dry phases of summer monsoon rainfall over Kerala.	Int.J Climatol. , https://doi.org/10.1002/joc.7042	4.063	2021
49	M. Mohapatra, D.S. Pai, A.K. Saha,..... S. Abhilash etal : Contribution of Monsoon Mission to operational advances: Short to medium range, extended range and seasonal forecasts.	The CLIVAR Exchanges, DOI: 10.36071/clivar.79.2020		2020
48	Girish Gopinath, U. Surendran, S. Abhilash etal : Assessment of drought with a real-time web-based application for drought management in humid tropical Kerala, India	Environmental Monitoring and Assessment, DOI:10.1007/s10661-020-08665-9	1.903	2020
47	Athira, U. N and S. Abhilash : <i>Ocean-Atmosphere Coupled processes in the Tropical Indian Ocean Region prior to Indian Summer Monsoon Onset over Kerala</i>	Climate Dynamics, DOI: 10.1007/s00382-020-05499-6	4.486	2020
46	Athira, U. N and S. Abhilash and V. sathiyamoorthy : <i>Distinct atmosphere-ocean coupling processes on the onset phase of Indian summer monsoon during 2017 and 2018 as revealed through SCATSAT-1 and its comparison with CFSv2</i>	International Journal of Remote Sensing, DOI: 10.1080/01431161.2020.1767827	2.976	2020
45	Saranya Ganesh, S., Sahai, A. K., Abhilash, S. , Joseph, S., Kaur, M., & Phani, R. (2020). An improved cyclogenesis potential and storm evolution parameter for North Indian Ocean.	Earth and Space Science, doi.org/10.1029/2020EA001209	2.90	2020
44	Baburaj, P. P., S. Abhilash , et al., : <i>On</i>	Adv. Atmos. Sci. doi.org/10.1007/s00376-020-9070-5	2.583	2020

	<i>the epochal variability in the frequency of cyclones during the pre-onset and onset phases of the monsoon over the North Indian Ocean</i>			
43	M. Mohapatra, D.S. Pai, A.K. Saha,.....S. Abhilash et al : Contribution of Monsoon Mission to operational advances: Short to medium range, extended range and seasonal forecasts.	The CLIVAR Exchanges, DOI: 10.36071/clivar.79.2020		2020
42	Kaur M., Krishna R., Joseph S., D Avijit, ..., Abhilash S.: <i>Dynamical downscaling of a multi-model ensemble prediction system: Application to tropical cyclones</i>	Atmospheric Science Letters, DOI:10.1002/asl.971	1.879	2020
41	Abhilash S., et al., : <i>Changing Characteristics of Droughts over Kerala, India: Inter-Annual Variability and Trend</i>	Asia-Pacific Journal of Atmospheric Sciences. doi: 10.1007/s13143-018-0060-9.	1.833	2019
40	Suryachandra A. Rao, B. N. Goswami, A. K. Sahai, ... S. Abhilash, S., et al. : <i>Monsoon Mission: A Targeted Activity to Improve Monsoon Prediction across Scales</i>	Bull. Amer. Meteor. Soc. doi.org/10.1175/BAMS-D-17-0330.1	9.384	2019
39	R Chattopadhyay, S. Joseph, S. Abhilash , et al., : <i>Understanding the intraseasonal variability over Indian region and development of an operational extended range prediction system</i>	Mausam Vol.70, 1, 31-56	0.278	2019
38	S Joseph, A. K. Sahai, ... S. Abhilash.: <i>Skill Evaluation of Extended-Range Forecasts of Rainfall and Temperature over the Meteorological Subdivisions of India</i>	Weather and Forecasting DOI: 10.1175/WAF-D-18-0055.1	2.950	2019
37	A. Dey, R. Chattopadhyay, A. K. Sahai, ... S. Abhilash, 2: <i>An Operational Tracking Method for the MJO Using Extended Empirical Orthogonal Functions</i>	Pure Appl. Geophys DOI 10.1007/s00024-018-2066-8	1.460	2018
36	Saranya G. S., Abhilash, S., et al. : <i>Genesis and track prediction of pre-monsoon Cyclonic Storms over North Indian Ocean in a Multi-Model Ensemble framework</i>	Natural Hazards DOI: 10.1007/s11069-018-3522-6.	3,656	2018
35	Abhilash S, et al., : <i>Role of Enhanced Synoptic Activity and its Interaction with Intra-seasonal oscillations on the lower extended range prediction skill during 2015 monsoon season</i>	Climate Dynamics DOI: 10.1007/s00382-018-4089-3.	4.486	2018
34	Saranya G. S., Sahai, A. K., Abhilash, S., et al. : <i>A new approach to improve</i>	Geophysical Research Letters. doi10.1029/2018GL077650.	4.5	2018

	<i>the track prediction of tropical cyclones over North Indian Ocean.</i>			
33	K. Mohanakumar, K. R. Santosh, P. Mohanan, S. Abhilash : <i>A versatile 205 MHz stratosphere troposphere radar at Cochin – scientific applications</i>	Current Science Vol. 114	0.756	2018
32	N. K. Shahi, Shailendra Rai, A. K. Sahai and S. Abhilash : <i>Intraseasonal variability of the South Asian monsoon and its relationship with the Indo-Pacific sea surface temperature in the NCEP CFSv2</i>	International Journal of Climatology DOI: 10.1002/joc.5349	3.928	2017
31	A.K. Sahai , R Chattopadhyay, Susmitha Joseph, R. Phani and S. Abhilash, 2017: <i>Extended Range Prediction System and its Application</i>	Vayu Mandal, 42(2)		2017
30	P. Vijaykumar, , S. Abhilash , , etal., : <i>Distribution of cloudiness and categorization of rainfall types based on INSAT IR brightness temperatures over Indian subcontinent and adjoining oceanic region during south west monsoon season</i>	Journal of Atmospheric and Solar-Terrestrial Physics DOI:10.1016/j.jastp.2017.06.017	1.503	2017
29	A.K. Sahai, S. Sharmila, R. Chattopadhyay, S. Abhilash , S. etal., <i>Potential predictability of wet/dry spells transitions during extreme monsoon years: Optimism for dynamical extended range prediction</i>	Natural Hazards DOI: 10.1007/s11069-017-2895-2	2.427	2017
28	Sumesh. K. G, Abhilash. S, Sandeep. V. M, Yenagi. B. S and Hiremath. J. R, 2017: <i>Influence of weather parameters on the yield of Rabi Sorghum in Vijayapur district during different climatic modes</i>	International Journal of Academic Research, ISSN: 2348-7666; Vol.3, Issue-10(1),		2017
27	A. K. Sahai, N. Borah, R. Chattopadhyay, S. Joseph, S. Abhilash : <i>A bias-correction and downscaling technique for operational extended range forecasts based on self organizing map</i>	Climate Dynamics , DOI 10.1007/s00382-016-3214-4.	4.486	2016
26	D. K. Pandey, Shailendra Rai, A. K. Sahai, Abhilash. S , and N. K. Shahi: <i>Prediction and error growth in the daily forecast of precipitation from the NCEP CFSv2 over the subdivisions of Indian subcontinent</i>	Journal of Earth System Science. DOI:10.1007/s12040-015-0647-9	1.423	2016
25	Susmitha Joseph, A. K. Sahai, R. Chattopadhyay, S. Sharmila, S. Abhilash etal., : <i>Extremes in June</i>	Quarterly Journal of Royal Meteorological Society DOI:10.1002/qj.2730	3.471	2016

	<i>rainfall during Indian summer monsoons of 2013 and 2014: Observational Analysis and Extended range prediction</i>			
24	Abhilash S. , et al., : <i>Better spread-error relationship in a multi-model ensemble prediction system</i>	Bulletin of the American Meteorological Society DOI:10.1175/ D-14-00058.1	9.384	2015
23	A. K. Sahai, R. Chattopadhyay, S. Joseph, R. Mandal, A. Dey, S. Abhilash , et al., : <i>Real-time performance of a multi-model ensemble-based extended range forecast system in predicting the 2014 monsoon season based on NCEP-CFSv2</i>	Current Science Vol. 109, No. 10, p1802-1813	0.756	2015
22	Abhilash, S. , Sahai, A. K., Borah, N., Joseph, S., Chattopadhyay, R., Sharmila, S., Rajeevan, M., Mapes, B. E., & Kumar, A. (2015). Improved Spread–Error Relationship and Probabilistic Prediction from the CFS-Based Grand Ensemble Prediction System,	Journal of Applied Meteorology and Climatology, DOI: 10.1175/JAMC-D-14-0200.1	2.506	2015
21	<i>Joseph, S., Sahai, A. K., Abhilash, S., Chattopadhyay, R., Borah, N., Mapes, B. E., Rajeevan, M., & Kumar, A: Development and evaluation of an objective criterion for predicting Indian summer monsoon onset in a coupled model framework</i>	Journal of Climate DOI:10.1175/JCLI-D-14-00842.1	5.707	2015
20	Abhilash, S. , Sahai, A. K., Borah, N., Chattopadhyay, R., Joseph, S., Sharmila, S., De, S., Goswami, B. N, Kumar, Arun: <i>Prediction and monitoring of monsoon intraseasonal oscillations over Indian monsoon region in an ensemble prediction system using CFSv2</i>	Climate Dynamics DOI:10.1007/s00382-013-2045-9	4.486	
19	Sahai A.K., Abhilash S. , et al: <i>High-resolution operational monsoon forecasts: an objective assessment.</i>	Climate Dynamics DOI:10.1007/s00382-014-2210-9	4.486	2014
18	Sharmila S., Joseph S., Sahai A.K., Abhilash S. , Chattopadhyay R. : <i>Future projection of Indian summer monsoon variability under climate change scenario An assessment from CMIP5 climate models</i>	Global and Planetary Change DOI:10.1016/j.gloplacha.2014.11.004	4.448	2014
17	Taraphdar S., Mukhopadhyay P., Leung L. R., Zhang F., Abhilash S. , Goswami B. N. : <i>Role of moist processes in the intrinsic predictability</i>	Journal of Geophysical Research, doi:10.1002/2013JD021265	3.64	2014

	<i>of Indian Ocean cyclones</i>			
16	Joseph, Susmitha , Sahai, A. K., Sharmila, S., Abhilash, S. , Borah, N., Chattopadhyay, R., Pillai, P. A., Rajeevan, M., Kumar, Arun : <i>“North Indian heavy rainfall event during June 2013: diagnostics and extended range prediction”</i>	Climate Dynamics DOI:10.1007/s00382-014-2291-5, 1-17	4.486	2014
15	Borah, N., Sahai, A.K., Abhilash, S. , Chattopadhyay, R., Joseph, S., Sharmila, S. and Kumar, A. : <i>Assessment of real-time extended range forecast of 2013 Indian summer monsoon.</i>	International Journal of Climatology, DOI:10.1002/joc.4178, 1-17	3.928	2014
14	Abhilash S. , etal., : <i>Does bias correction in the forecasted SST improve the extended range prediction skill of active-break spells of Indian summer monsoon rainfall?</i>	Atmospheric Science Letter DOI:10.1002/asl2.477	1.879	2014
13	Sahai A.K., Chattopadhyay R., Joseph S., Abhilash S. , etal., : <i>A new method to compute the principal component time series of self-organizing maps : an application to monsoon intraseasonal oscillations</i>	International Journal of Climatology, DOI: 10.1002/joc.3885	3.928	2013
12	Borah N., Sahai A.K., Chattopadhyay R., Joseph S., Abhilash S. , etal., : <i>Self-organizing map-based ensemble forecast system for extended range prediction of active/break cycles of Indian summer monsoon</i>	Journal of Geophysical Research DOI:10.1002/jgrd.50688	3.64	2013
11	Sharmila Sur, Pillai P.A., Joseph S., Roxy M., Krishna R.P.M., Chattopadhyay R., Abhilash S. , etal., : <i>Role of ocean-atmosphere interaction on northward propagation of Indian summer monsoon intra-seasonal oscillations (MISO)</i>	Climate Dynamics DOI:10.1007/s00382-013-1854-1	4.486	2013
10	A. K. Sahai, S. Sharmila, Abhilash. S. : <i>Simulation and extended range prediction of monsoon intraseasonal oscillations in NCEP CFS/GFS version 2 framework</i>	Current Sciences Vol. 104, No. 10	0.756	2013
9	Abhilash. S. , etal., : <i>Predictability during Active Break Phases of Indian Summer Monsoon in an Ensemble Prediction System using Climate Forecast System</i>	Journal of Atmospheric and Solar Terrestrial Physics doi: 10.1016/j.jastp.2013.03.017.13-23	1.503	2013
8	Abhilash, S. , Sahai, A.K., Pattnaik, S., Goswami, B.N. and Kumar, A. : <i>Extended Range Prediction of Active-</i>	International Journal of Climatology. doi:10.1002/joc.3668.93-113	3.928	2013

	<i>Break Spells of Indian Summer Monsoon Rainfall using an Ensemble Prediction System in NCEP Climate Forecast System</i>			
7	Pattnaik. S, Abhilash. S etal., : <i>Influence of convective parameterization on the systematic errors of Climate Forecast System (CFS) model over Indian monsoon region from an extended range forecast perspective</i>	Climate Dynamics DOI:10.1007/s00382-013-1662-7	4.486	2013
6	Abhilash. S. , etal., : <i>Assimilation of Doppler Weather Radar Radial Velocity and Reflectivity Observations in WRF-3DVAR System for Short-Range Forecasting of Convective Storms</i>	Pure and Applied Geophysics. DOI : 10.1007/s00024-012-0462-z	1.460	2012
5	Abhilash. S. , etal., : <i>Vertical Structure of Tropical Mesoscale Convective Systems: Observations using VHF radar and Cloud Resolving Model Simulation</i>	Meteorol. Atmos. Phys Vol. 109, 73-90	2.204	2010
4	Abhilash. S and K. Mohankumar : <i>Vertical Structure and Evolution of a Supercell Storm: Observations Using VHF Radar</i>	International Journal of Remote Sensing 30(6), 1441-1454	2.976	2009
	Abhilash. S, K. Mohankumar, G. Mrudula, Someshwar Das, V. K. Anandan and D. Narayana Rao, 2009: <i>Prediction of Intensity and Track of Tropical Cyclone over Bay of Bengal by assimilating the Wind observations from Conventional and Remotesensing data.</i>	Vatavaran, Vol. 3, 78-89.		2009
3	Abhilash. S. , etal., : <i>Microphysical Structure associated with Tropical Cloud Clusters simulated using a mesoscale model and comparison with TRMM observations</i>	International Journal of Remote Sensing Vol. 29, 2411-2432	2.976	2008
2	Abhilash. S. , etal., : <i>Assimilation of Doppler Radar Wind Observations for the Prediction of Rainfall Associated with Mesoscale Convective Systems</i>	Journal of Earth System Science Vol.116(3), 275-304	1.423	2007
1	Abhilash. S etal., : <i>Impact of Doppler radar Wind Observations in simulating the Intensity and Propagation of Rainbands Associated with Mesoscale Convective Complexes using MM5-3DVAR System</i>	Pure and Applied Geophysics Vol. 164, 1491-1509	1.460	2007

Books/Book Chapter/Report

Sl. No	Authors & Title	Books/Book Chapter/Report	Publisher	ISBN Number	Year
15	Abhilash. S and K. Mohankumar, <i>Tropical Mesoscale Convective Systems: observational and Modeling Studies</i>	Book	VDM Verlag	ISBN: 3639201671	2009
14	Abhilash. S , Someshwar Das., S. R. Kalsi., Munmun Dasgupta., K. Mohankumar., John P. George., S. K. Banarjee., S. B. Thampi and D. Pradhan, <i>Impact of Doppler Radar Wind Observations in simulating the Intensity and Propagation of Rainbands Associated with Mesoscale Convective Complexes using MM5-3DVAR System</i>	Book Chapter in Atmospheric and Oceanic Mesoscale Processes, Edited by Maithili Sharan and Sethu Raman	Birkhäuser	ISBN: 3764384921	2007
13	A.K. Sahai, R Chattopadhyay, Susmitha Joseph, Phani M Krishna, D. R. Pattnaik, Abhilash. S , 2018: <i>Seamless prediction of monsoon onset and active/break</i>	Book Chapter in the Book entitled "Seasonal to Seasonal Prediction : The Gap Between Weather and Climate Forecasting",	Elsevier	ISBN: 9780128117156	2019

	<i>phases</i>	Edited by Andrew Robertson and Frederic Vitart			
12	Abhilash. S and Krishnakumar. E. K, 2017: <i>Future Climate of Kerala - Warm and Dry?</i>	Book chapter in the Book on "Climate Variability in Kerala: Climate Change Perspectives"	Institute of Climate Change Research, Kerala		2017
11	Sundaresan, Rajendran, Andrea Deari, Abhilash , Rob Roggema, Chakrapani, Max Martin and Abdulla Bava , <i>"Climate Change - Adaptation - Synthesis of diverse intelligence and Technology Options for Kerala"</i>	Book chapter in the Compendium on 31st Kerala Science Congress	Kerala State Council for Science, Technology and Environment	ISBN No: 81-86366-98-9	2019
10	Abhilash. S , <i>"Science of Climate Change"</i>	Book chapter in the book on "Climate Change: Science and Politics" Edited by P. K. Ravindran	Kerala Shastra Sahitya Parishad		2021
9	Abhilash. S and A. K. Sahai, <i>"Accelerated hydrological cycle under warming climate and Role of extended range prediction system"</i>	Book Chapter in the book on "Impact of Climate change on hydrological cycle, ecosystem, fisheries and food security. Edited by B. Madhusoodhana Kurup, M. R. Boopendranath, M. Harikrishnan, A. V. Shibu	Om Publications	ISBN : 9789390309115	2021

8	Abhilash. S and Abhiram Nirmal C S, <i>"Increasing cyclones and Impacts on Coastal Kerala"</i>	Book chapter in book on "Between Sea and Development : Sea, Land and Climate"	Transition studies, , Thrissur		2021
7	Das Someshwar., Kalsi, S.R., Abhilash, S., Das Gupta, M., George, J.P., Banerjee, S.K., Thampi, S.B., Pradhan, D., and Mohankumar, K, 2006: <i>Assimilation of Doppler Weather Radar Wind in a Mesoscale Model and their Impact on Simulation of Thunderstorms and Severe Weather Systems.</i>	Research Report	Report no. NMRF/RR/01/200, Published by NCMRWF		2006
6	Abhilash S., Susmitha Joseph, R. Chattopadhyay, S. Pattnaik, P. Murali Krishna, S. Dey, A. K. Sahai and B.N. Goswami, <i>Performance of an Ensemble Prediction System based on CFSV2 for the Extended Range Prediction of Active-Break Spells of Indian Summer Monsoon Rainfall during</i>	Research Report	IITM research report-128	ISSN 0252-1075	2012

	2011.				
5	N. Borah, Abhilash. S. , S. Joseph, R. Chattopadhyay, S. Sharmila and A.K. Sahai . 2014: <i>Development of Extended Range Prediction System Using CFSv2 and Its verification.</i>	Research Report	IITM research report-130,	ISSN 0252-1075	2014
4	Susmitha Joseph, A.K. Sahai, S. Sharmila, Abhilash. S. , N. Borah, P.A. Pillai, R. Chattopadhyay, Arun Kumar. 2014: <i>Extended Range Prediction of Uttarakhand Heavy Rainfall Event by an Ensemble Prediction System based on CFSv2.</i>	Research Report	IITM research report-131	ISSN 0252-1075	2014
3	Abhilash S. , Raju M., Avijit D., R. Phani, S. Joseph, R. Chattopadhyay, A. K. Sahai and M. Rajeevan, <i>Performance of the Extended Range Prediction System During 2015 Monsoon Season</i>	Chapter in Research Report of MoES	MoES Report, ESSO/IITM/SERP/SR/02(2015)/185	ISSN 0252-1075	2015
2	Sahai A.K., Chattopadhyay Rajib, Dey Avijit, Joseph Susmitha, Abhilash S. , Phani M.,	Research Report	MoES Report, ESSO/IITM/SERP/SR/02(2016)/187.	ISSN 0252-1075	2016

	Mandal Raju, Rajeevan M.N. and Hendon H, <i>MJO Diagnostics for Extended Range Prediction and Simulation in IITM CFSv2</i>				
1	Someshwar Das ; S. Abhilash and Munmun Das Gupta, 2006: Simulation of Nor'westers using Doppler weather radar wind observations in a mesoscale model.	Book Chapter	Proc. SPIE 6404, Remote Sensing and Modeling of the Atmosphere, Oceans	doi:10.1117/12.694006; http://dx.doi.org/10.1117/12.694006 .	2006

13. Outreach Activities:

- 1 Writing a regular column in Mathrubhumi Weekly on "Climate". (കാലാവസ്ഥയെ സംബന്ധിച്ചു ലളിതമായി സാധാരണക്കാരിൽ അവബോധം സൃഷ്ടിക്കുവാൻ മാതൃഭൂമി ആഴ്ചതിപ്പിൽ തുടർച്ചയായി ലേഖനം എഴുതുന്നു.)
- 2 Attending weather and Climate related debates in various visual media. (കാലാവസ്ഥ സംബന്ധിച്ചു നടക്കുന്ന ചാനൽ ചർച്ചകളിൽ സജീവമായി പങ്കെടുക്കുന്നു.)

13.1 Popular Articles:

- 1 Abhilash. S, 2019: The Climate Factor, Appeared in Frontline, September 2019.
- 2 അഭിലാഷ്. എസ്, പി. വിജയകുമാർ, എ.വി.ശ്രീനാഥ്, 2019: അസ്ഥിരമാകുന്ന മൺസൂണും കേരളത്തിലെ അതിതീവ്രമാകുന്ന മഴയും. Appeared in Ezhuthu Magazine Monthly, September 2019.
- 3 അഭിലാഷ്. എസ്, 2019: കേരളത്തിന്റെ കാലാവസ്ഥാനുഭവങ്ങൾ : മൺസൂൺ മുതൽ മൺസൂൺ വരെ, Appeared in ശാസ്ത്രഗതി (കേരള ശാസ്ത്ര സാഹിത്യ പരിഷദ് പ്രസിദ്ധീകരണം), August 2019.
- 4 അഭിലാഷ്. എസ്, 2019: കാലാവസ്ഥാവ്യതിയാനത്തിന്റെ രൂക്ഷഫലങ്ങൾ. Appeared in Prasadhakan Monthly, May 2019.
- 5 അഭിലാഷ്. എസ്, 2019: കാലാവസ്ഥയും ഭൂപ്രകൃതിയും. Appeared in നമ്മൾ ജനങ്ങൾ (കേരള ശാസ്ത്ര സാഹിത്യ പരിഷദ്, എറണാകുളം പ്രസിദ്ധീകരണം), April 2019.

- 6 അഭിലാഷ്. എസ്, 2018: അതിതീവ്ര മഴയും മനുഷ്യന്റെ കൈയൊപ്പം: Appeared in ശാസ്ത്രകേരളം (കേരള ശാസ്ത്ര സാഹിത്യ പരിഷദ് പ്രസിദ്ധീകരണം), November 2018.
- 7 അഭിലാഷ്. എസ്, 2018: ഓഖി നൽകുന്ന കാലാവസ്ഥാ മാറ്റത്തിന്റെ മുന്നറിയിപ്പ്: Appeared in ശാസ്ത്രഗതി (കേരള ശാസ്ത്ര സാഹിത്യ പരിഷദ് പ്രസിദ്ധീകരണം), January 2018.
- 8 അഭിലാഷ്. എസ്, 2017: ഇനിയും വരും ഇതുപോലെ ചുഴലികൾ: Appeared in മാതൃഭൂമി ആഴ്ചപ്പതിപ്പ്, 2017 December 31.
- 9 അഭിലാഷ്. എസ്, 2017: മൺസൂൺ പ്രവചനത്തിലെ വെല്ലുവിളികൾ: ശാസ്ത്രകേരളം (കേരള ശാസ്ത്ര സാഹിത്യ പരിഷദ് പ്രസിദ്ധീകരണം), July 2017.

Popular Lectures/Invited Talks

Sl. No	Authors & Title	Program and Organizers	Nature of Talk	Date/Month/Year
102	Abhilash. S "Climate Change and Challenges in Disaster Management"	Seminar Organized by Bishope Jerome Institute, Kollam	Invited Talk	06/05/2022
101	Abhilash. S "Weather Monitoring and Prediction"	National workshop on "Emerging Trends In Emergency Management", Organized by Kerala Fire and Rescue Services , Govt. of Kerala	Invited Talk	29/04/2022
100	Abhilash. S "Understanding Disaster Risk : Cloudburst"	Webinar organized by Sendai Framework for Disaster Risk Reduction by Kerala Disaster Management Authority.	Invited Talk	19/04/2022
99	Abhilash. S "Multi hazard early warning system for recurrent weather extremes over Kerala"	National seminar on Floods and land slides : Problems of Disaster prevention and Mitigation in Kerala" organized by Department of Political Science, University of Kerala	Invited Talk	25/03/2022
98	Abhilash. S, "Climate Extremes and Adaptation Challenges"	Workshop on "Living with Climate Change: Understanding the impacts of global warming, improvising adaptations and lessening the repercussions through skill training workshop" organized by Fatima Mata National College, Kollam	Invited Talk	12/03/2022
97	Abhilash. S, "Understanding the Coastal Weather Bulletins and Services"	Training on "Weather and Climate services for Fishers" jointly organized by CUSAT, Sussex University, UK and Radion Monsoon	Lead Talk	12/03/2022
96	Abhilash. S, "Introduction to Climate modeling and Challenges"	Course on "Remote Sensing and GIS for Land and Ocean Observations, and Climate Modelling" organized by KUFOS, Cochin	Lead Talk	11/03/2022
95	Abhilash. S, "Is Southeast Arabian Sea becoming new Hot Spots for Deep Clouds and Severe Cyclonic Storms?"	National E-Symposium on "Changing climate and extreme events: impacts, mitigation & Role of oceans" organized by IMS Pune	Invited Talk	22/02/2022
94	Abhilash. S, "Climate Change & Disaster Management"	Thematic subject presentation in the Young Investors Program (YIP) by Kerala Deelopment and Innovation Startegy Council (K-DISC)	Invited Talk	25/01/2022
93`	Abhilash. S, "Rapid Arabian Sea Warming and Challenges to Sustainable Marine Ecosystem, Safety and Livelihood of Coastal Communities"	National Seminar On Reorienting the strategies towards sustainable aquaculture and fisheries Organized by Keral	Invited Talk	07/01/2022

		University of fisheries and Ocean Studies		
92	Abhilash. S, "Climate Change and Waste Management"	Seminar on Solid Waste Management organized by Kunnamkulam Municipality	Invited Talk	29/12/2021
91	Abhilash. S, "Climate change and Extreme weather events"	Short Term Program on Disaster Management organized by Human Resource Development Centre University of Hyderabad	Invited Talk	16/12/2021
90	Abhilash. S, "Global warming and extinction crisis"	Refresher Course in Environmental Studies is organized by the Human Resource Development Centre, Madurai Kamaraj University	Invited Talk	15/12/2021
89	Abhilash. S, "Challenges in Predicting and Managing the Risk of Extreme Weather Events"	International Virtual Symposium on "Outcomes of the Conference of the Parties 26 (COP26), Madurai Kamaraj University	Plenary Talk	11/12/2021
88	Abhilash. S, "Cloudbursts and Cyclones"	Pampamandan, Chenganur	Popular Lecture	08/12/2021
87	Abhilash. S, "Climate change: Science and Environment"	Janasamskriti, New Delhi	Popular Lecture	03/12/2021
86	Abhilash. S, "Mini Cloudbursts: A harbinger of Global Warming Response in Kerala"	The Institute of Engineers, Kochi Chapter	Invited Talk	30/11/2021
85	Abhilash. S, "Climate change and Disaster Risk"	Social Democratic Party of India (SDPI), Kerala	Popular Lecture	27/11/2021
84	Abhilash. S, "Why weather becoming more extreme"	Short term course in Disaster management and Climate Change by UGC-HRD, Kannur University	Invited Talk (Resource person)	13/11/2021
83	Abhilash S, "Climate change and Island Protection"	Vypin Block Panchayath	Training for LSGD, Vypin	15/11/2021
82	Abhilash. S, "Climate change and Extinction crisis"	FDP on Climate change by University of Delhi	Invited Talk (Resource person)	02/11/2021
81	Abhilash. S, "Climate change and Extreme Weather Events"	Vaikom Management Association	Popular Lecture	30/10/2021
80	Abhilash. S, "Climate change : Key messages from IPCC AR6"	Kerala Shashtra Sahitya Parishad (KSSP), Calicut	Invited Talk	26/10/2021
79	Abhilash. S, "IPCC AR6: How Kerala should be prepared"	Kerala Shashtra Sahitya Parishad (KSSP), Kerala State	Invited Talk	28/09/2021
78	Abhilash. S, "Healing the hole and Climbing up a hill"	Ozone day Celebrations, St. Thomas College, Pathanamthitta	Invited Talk	20/09/2021
77	Abhilash. S, "Uncertainties in Numerical Weather Prediction"	Ozone day Celebrations, ToCH Institute of Science and Technology	Invited Talk	16/09/2021
76	Abhilash. S, "Lessons from Montreal Protocol for Climate Action"	Ozone day Celebrations, University of Kerala	Invited Talk	16/09/2021
75	Abhilash. S, "Climate change, extreme	FDP on Disaster Management, MES	Invited Talk	09/09/2021

	<i>weather events and Challenges in Disaster Risk Reduction"</i>	college, Malpuram		
74	Abhilash. S, "Weather Forecasting and Weather news"	Workshop, Trivandrum Social Service Society (TSSS)	Invited Talk	04/09/2021
73	Abhilash. S, "Rains and Clouds"	Hume Centre, Wayanad	Children Talk	27/08/2021
72	Abhilash. S, "Climate change and Challenges"	Kerala Shastra Sahitya Parishad (KSSP), Chunakkara	Invited Talk	30/07/2021
71	Abhilash. S, "Global Warming and its Impacts"	Short Term Course on Disaster Management conducted by UGC-Human Resource Development Centre (HRDC), University of Calicut	Invited Talk	26/02/2021
70	Abhilash. S, "Climate Change & Challenges in Attaining Sustainable Development Goals"	Short Term Course on Disaster Management conducted by UGC-Human Resource Development Centre (HRDC), University of Calicut	Invited Talk	03/03/2021
69	Abhilash. S, "Climate change and disaster risk reduction"	Webinar series conducted by M S Swaminathan Botanical Garden	Invited Talk	13/03/2021
68	Abhilash. S, "Climate Change and Extreme Weather Events"	UGC-Human Resource Development Centre (HRDC), Kannur University	Invited Talk	17/03/2021
67	Abhilash. S, "Global warming and Extreme weather events"	Webinar conducted by MES College, Marampally	Invited Talk	04/03/2021
66	Abhilash. S, etal., "The climate factors on the recent extreme rainfall events over Kerala"	Annual Monsoon E-Workshop jointly organized by Indian Meteorological Society and Savitribai Phule Pune University	Invited Talk	18/01/2021
65	Abhilash. S, "Climate change and Extinction crisis"	High-end workshop on Solar activities and their influences in the Heliosphere and Planetray Atmospheres conducted by National Institute of Technology, Calicut	Invited Talk	10/03/2021
64	Abhilash. S, "State of the atmosphere and atmospheric stability"	Train the trainers program on "know your atmosphere you live in" conducted by Institute for Advanced Research in Science (IARSc), Bangalore	Invited Talk	27/03/2021
63	Abhilash. S, "Weather systems of Indian region"	Train the trainers program on "know your atmosphere you live in" conducted by Institute for Advanced Research in Science (IARSc), Bangalore	Invited Talk	03/04/2021
62	Abhilash. S, "Genesis, Evolution and Future Prospects of the Operational Extended Range Prediction System"	Webinar organized by Indian Meteorological Society, Pune	Invited Talk	26/03/2021
61	Abhilash. S, "Science of Climate Change – Past Climate: Howdo we Detect Climate Change"	FDP on Climate Science" organized by School of Environmental Sciences, CUSAT	Invited Talk	09/11/2020
60	Abhilash. S, "Monsoons in a warming	FDP on Climate Science"	Invited Talk	12/11/2020

	Climate & Climate Projections"	organized by School of Environmental Sciences, CUSAT		
59	Abhilash. S, etal., "Recent Meteorological Disasters in Kerala: Challenges in Monitoring and Prediction"	Second International Conference on Disaster, Risk and Vulnerability-2020 (DRVC 2020)" organized by School of Environmental Sciences, MG University	Invited Talk	09/10/2020
58	Abhilash. S, "Climate change and Environmental Crisis"	At WMO green School and Orphanage, Wayanad	Invited Talk	30/09/2020
57	Abhilash. S, "Climate change and Extreme weather events"	Short Term Programme on Disaster Management conducted by UGC-Human Resource Development Centre University of Hyderabad	Invited Talk	09/09/2020
56	Abhilash. S, "Climate change and Extreme weather events"	Short Term Programme on Disaster Management conducted by UGC-Human Resource Development Centre University of Hyderabad	Invited Talk	09/09/2020
55	Abhilash. S, "Extreme weather events over Kerala"	National seminar organized by Geology Department, MES College Ponnani	Invited Talk	17/08/2020
54	Abhilash. S, "Challenges in Predicting High Impact Extreme Weather Events"	Webinar organized by Department of Climate Sciences, KUFOS, Kerala	Invited Talk	19/08/2020
53	Abhilash. S, "Climate Crisis & Sixth Extinction"	UL Space club	Popular Talk	18/07/2020
52	Abhilash. S, "Climate challenges for Sustainable Development"	Organized by The Department of Economics and Centre for Research, St.Teresa's College	Invited Talk	02/07/2020
51	Abhilash. S, "Climate Change, Global warming; the challenges before Kerala"	World Environment Day Talk, organized by Kerala Labour Movement (KLM)	Invited Talk	07/06/2020
50	Abhilash. S, "Climate change and Environmental Crisis"	Environment Day Talk, organized by Shreyas, Batherry and Interagency Group	Invited Talk	05/06/2020
49				
48	Abhilash. S, "Role of Ocean in Climate"	Ocean Day Talk, Organized by Kerala University	Invited Talk	08/06/2020
47	Abhilash. S, "Respect our Oceans & Protect Life on Earth"	Ocean Day Talk, Organized by Centre for Marine Living Resources and Ecology (CMLRE), Ministry of Earth Sciences, Kochi	Invited Talk	08/06/2020
46				
45	Abhilash. S, "Climate change and Extinction threat"	Earth Day Talk, Organized by Kerala Shashtra Sahitya Parishad	Popular Talk	22/04/2020
44	Abhilash. S, "Accelerated hydrological cycle under warming climate and Role of extended range prediction system"	International Conference on Impact of Climate Change on Hydrological Cycle Ecosystem, Fisheries and Food Security, organized by School of Industrial	Invited Talk	11/02/2020

		Fisheries, CUSAT		
43	Abhilash. S , “Can Climate Crisis Drives Sixth Mass Extinction”	Seminar on "National Seminar on Scientific Solutions for Sustainable Rebuilding of Kerala in the Post Flood Scenario", organized by IQAC, Bishop Moore College, Mavelikara	Invited Talk	09/01/2020
42	Abhilash. S, “Climate Change & Challenges in Attaining Sustainable Development Goals”	Seminar on Teaching Sciences in the Amidst of Calamities organized by IQAC, Sree Snkara College, Kalady	Invited Talk	31/12/2019
41	Abhilash. S, "Climate change analysis and projections for Local action plan"	National Workshop on Local Action Plan on Climate Change organized by KILA	Invited talk	29/10/2019
40	Abhilash. S, “Climate Change & Challenges in Weather Prediction”	Physics Association Inauguration of Ansar Women’s College, Thrissur	Invited Talk	16/10/2019
39	Abhilash. S, “Environment, Climate Change and Capitalistic Development”	AIPSN Southern Regional Cadre Camp, Integrated Rural Technology Center (IRTC), Palakkad	Invited Talk	13/10/2019
38	Abhilash. S, “Extreme Weather events and Challenges in Weather Prediction”	National Seminar on Interdisciplinary Advancements in Physics, Government College for Women, Thiruvananthapuram	Invited Talk	10/10/2019
37	Abhilash. S, “Climate change and Water Cycle”	Nirmala College, Moovattupuzha	Invited Talk	03/10/2019
36	Abhilash. S, “Ozone and Climate Change”	Ozone day Celebrations, MES Ponnani College, Ponnani	Invited Talk	01/10/2019
35	Abhilash. S, “Climate Change and Climate Extremes over Kerala”	Global Climate Strike organized by March for Science in solidarity with Global Climate Strike at Trivandrum	Popular Talk	28/09/2019
34	Abhilash. S, “World Ozone Day: 32 years and Healing”	Ozone Day Celebrations, MES Asmabi College, Kodungalur	Invited Talk	24/09/2019
33	Abhilash. S, “Climate Change and Global Warming”	Ozone Day Celebrations, MA College, Kothamangalam	Invited Talk	26/09/2019
32	Abhilash. S, Role of Aerosols in Modulating the weather and Climate over Indian Region	National Seminar, School of Environmental Sciences, MG University, Kottayam	Invited Talk	04/09/2019
31	Abhilash. S, "Changing climate and Disasters in Kerala"	Talk delivered in the nature camp organized by Deshabhimani, Wyanadu	Invited Talk	03/08/2019
30	Abhilash. S, Climate change and Increasing Climate Extremes over Kerala	SNM College, Malliankara	Invited Talk	29/08/2019
29	Abhilash. S, “Land use and land cover in a changing climate”	Kerala Shatra Sahitya Parishad, Malappuram District	Invited Talk	04/05/2019
28	Abhilash. S, "Wetlands, their importance & role in global climate change”	World Wetlands Day, at Bharatha Matha College, Thrikkakara, Cochin	Invited Talk	02/02/2019
27	Abhilash. S, "Climate change and wetlands"	National Seminar on "Wetland Conservation”, Kerala Agricultural	Invited Talk	01/02/2019

		University, Thrissur		
26	Abhilash. S, "Multi-Scale Variability of Clouds and Convection over Indian Region and its Representation in Models"	International conference on thunderstorm & lightning in tropics , Organized by Odisha State Disaster Management Authority (OSDMA) and Siksha 'O' Anusandhan (SOA) University	Invited Talk	18/01/2019
25	Abhilash. S, "Challenges in the Prediction and Management of Climate Extremes and Associated Disasters"	National Seminar On Natural Disasters & Management Strategies at Carmel Polytechnic College, Alappuzha	Invited Talk	10/01/2019
24	Abhilash. S, "Challenges in water management between two Climate Extremes"	Brainstorming workshop on Kerala flood - 2018 causes, preparedness & mitigation measures held at Water Resources Development and Management (CWRDM), Kozhikode	Invited Talk	14/09/2018
23	Abhilash. S, "Climate extremes and Challenges in the Prediction"	Seminar Organized by Kerala Media Academy and Network of Woman in Media, India at Kerala Media Academy, Cochin	Invited Talk	02/10/2018
22	Abhilash. S, "Extreme climate events in Kerala and increasing disasters"	Organized by Metro Film Society and Vinodha Vayanasala, Cochin	Invited Talk	20/10/2018
21	Abhilash. S, Extreme weather events and erratic weather in Kerala"	Organized by Kerala Historical Research Society, Thrissur	Invited Talk	13/10/2018
20	Abhilash. S, "Climate disasters and solutions"	Organized by Marxist Samskarika Vedi, Vallikunnu, Malapuram.	Invited Talk	2018
19	Abhilash. S, "Cyclogenesis Prediction Approaches"	National Workshop on Small-scale Fisheries, Cyclone Ockhi and Disaster Risk Management, conducted by International Collective in Support of Fishworkers (ICSF) Trust	Invited Talk	29/05/2018
18	Abhilash. S, Recent and Historic Drought of Kerala: Climate change perspectives and possible future scenarios	National Seminar on Natural Resources Management for Horticultural Crops under Changing Climatic Conditions (NRMHCCC), Organized by Centre for Water Resources Development and Management (CWRDM), Kozhikode	Invited Talk	16/03/2018
17	Abhilash. S, " Climate Services for sustainable ecosystem"	World Environment Day, Kerala Agricultural University, Thrissur	Invited Talk	05/06/2018
16	Abhilash. S, "The role of Satellite Technology in disaster management and sustainable development"	National Science Day Celebrations-2018, SNM College, Maliankara, Ernakulam	Invited Talk	28/02/2018
15	Abhilash. S, "Severe Cyclone Ockhi : Facts and Reality",	Sastrayaan, Conducted by Cochin University of Science and	Invited Talk	27/02/2018

		Technology.		
14	Abhilash. S, "Application of Satellite based Remotesensing for Sustainable Marine Eco-System"	Prof. C. T. Mathew Endowment Lecture delivered at Mar Thoma College, Thiruvalla	Invited Talk	16/01/2018
13	Abhilash. S, " World Ozone Day 2017: Celebrating 30 years of the Montreal Protocol "	Ozone day Special lecture delivered at Sree Narayana College, Chempazhanthy, Thiruvananthapuram.	Invited Talk	16/09/2017
12	Abhilash. S, "UNDERSTANDING CLOUDS "	WMO day Special lecture delivered at School of Naval Oceanography and Meteorology, Indian Navy, INS Kochi	Invited Talk	23/03/2017
11	Abhilash. S, A. K. Sahai, K. Mohankumar, John P George and Someshwar Das, "Assimilation of Doppler Weather Radar Radial Velocity and Reflectivity Observations in WRF-3DVAR System for Short-Range Forecasting of Convective Storms"	Indian Radar Conference, iRAD—2017 organized at IIT Kharagpur	Invited Talk	08/01/2017
10	Abhilash. S, "Changes in the Characteristics of Rainfall over Kerala with Special Reference to Recent Historic Drought Event"	Indo-Dutch International conference in Climate and Atmospheric Sciences & Applications” organized at IIT Delhi	Invited Talk	20/02/2017
9	Abhilash. S, "The role of Meteorology in Urban Planning and Identifying the Renewable energy potential in and around Kochi"	Smart Cities Workshop, Organised by Heidelberg University, Germany and CUSAT	Invited Talk	11/08/2016
8	Abhilash. S, M. Raju, Dey Avijith, Susmitha Joseph, R. Cahttopadyay, R. Phani, S. De, A.K. Sahai, "Role of Enhanced Synoptic Activity and its Interaction with Intra-seasonal oscillations on the lower extended range prediction skill during 2015 monsoon season"	CLIVAR Open Science conference organized by World Climate Research Program (WCRP), Qingdao, China	Invited Talk	18/09/2016
7	Abhilash.S, M.R. Ramesh Kumar and K. R. Baiju, "Linking the climate change induced stress to Marine Productivity and Eco-systems over North Indian Ocean"	4th Retreat of Belmont Forum Research Project Adaptation Research: A Trans-Disciplinary, Transnational, Community and Policy Centred Approach (ARTISTICC) jointly organized by School of Industrial Fisheries, CUSAT and Belmont Forum	Invited Talk	05/10/2016
6	Abhilash. S, "Climate in Kerala : Forecast"	Workshop on climate variability in Kerala: climate change perspectives, organized by Institute for Climate Change Studies	Invited Talk	21/11/2016
5	Abhilash. S, Shailendra Rai, Attada Raju, Muni Krishna, "Exploring S2S Data in Predicting High Impact Weather Events over Indian Region During 2015 Monsoon Season"	Workshop on "Sub seasonal to Seasonal (S2S) Prediction" at ITCP, Trieste, Italy	Contributory Talk	04/12/2015
4	Abhilash S., Sahai A.K., Borah N.,	Development of CFS based Grand	Contributory	04/01/2015

	Chattopadhyay R., Joseph S., Sharmila S., B. E. Mapes, M. Rajeevan and A. Kumar, "	Ensemble Prediction System for the Extended Range Forecasting of Indian Summer Monsoon, American Meteorological Society Annual Meeting, in Phoenix, AZ. USA	Talk	
3	Abhilash S., Sahai A.K., Borah N., Chattopadhyay R., Joseph S., Sharmila S., De S., Goswami B.N, "Prediction and monitoring of Monsoon Intraseasonal Oscillations"	5th International Workshop on Monsoon (IWM-V), Macao, China	Invited Talk	29/10/2015
2	Abhilash S., Sahai A.K., Borah N., Chattopadhyay R., Joseph S., Sharmila S., B. E. Mapes, "Extended-range Forecasting at the Indian Institute of Tropical Meteorology"	17th CMMAP Team Meeting, Fortcollins, Colorado, USA	Invited Talk	06/08/2014
1	Abhilash S., Sahai A.K., Borah N., Chattopadhyay R., Joseph S., Sharmila S, "Extended range weather forecast for AAS"	7th Annual Review Meeting (ARM) of the project on "Integrated Agromet Advisory Service" organized by India Meteorological Department at Maharana Pratap University of Agriculture and Technology, Udaipur	Invited Talk	22/11/2013