

## MoES Publications 2020

	ACROSS	OSMART	PACER	SAGE	TOTAL
<b>Total no. of Publications</b>	216	147	91	46	<b>500</b>

### ACROSS

(IITM+ IMD+ NCMRWF)

1. Acharja P., Ali K., Trivedi D.K., Safai P.D., Ghude S., Prabhakaran Thara, Rajeevan M., 2020, Characterization of atmospheric trace gases and water soluble inorganic chemical ions of PM1 and PM2.5 at Indira Gandhi International Airport, New Delhi during 2017-18 winter, **Science of the Total Environment**, 729:138800, DOI:10.1016/j.scitotenv.2020.138800, 1-13
2. Acharya R., 2020, Ocean Energy and related Technological Advances, **Earth Science India**, 13, 2, 13-17.
3. Afreen S., Victor N.J., Bashir G., Chandra S., Ahmed N., Siingh D., Singh R.P., 2020, First observation of atmospheric electric field at Kashmir valley North Western Himalayas, Srinagar (India), **Journal of Atmospheric and Solar Terrestrial Physics**, 211: 105481, DOI:10.1016/j.jastp.2020.105481, 1-14
4. Agnihotri G., Gouda K.C., Das Someshwar, 2020, Characteristics of pre-monsoon convective systems over south peninsular India and neighborhood using Tropical Rainfall Measuring Mission's Precipitation Radar, **Meteorology and Atmospheric Physics**, 115.
5. Ahmed M., Lotus S., Rajalakshmi D., Singh S., Subha Rao A.V.M., 2020, Analysis of rainfall and drought climatology for crop planning in subtropical plains of Chatha, Jammu, **Mausam**, 71, 4, 749-756.
6. Anand V., Panicker A.S., Beig G., 2020, Gaseous pollutants over different sites in a metropolitan region (Pune) over India, **SN Applied Sciences**, 2:682, DOI:10.1007/s42452-020-2472-2, 1-19
7. Anil Kumar V., Pandithurai G., Kulkarni G., Hazra A., Patil S.S., Dudhambe S.D., Patil R.D., Chen J-P, Niranjan K., 2020, Atmospheric ice nuclei concentration measurements over a high altitude-station in the Western Ghats, India, **Atmospheric Research**, 235:104795, DOI:10.1016/j.atmosres.2019.104795, 1-12
8. Anju M., Sreeush M.G, Valsala V., Smitha B.R., Hamza F., Bharathi G., Naidu C.V., 2020, Understanding the role of nutrient limitation on plankton biomass over Arabian Sea via 1-D coupled biogeochemical model and Bio-Argo observations, **Journal of Geophysical Research: Oceans**, 125: e2019JC015502, DOI:10.1029/2019JC015502, 1-28
9. Ansari K., Pandithurai G., Anil Kumar V., 2020, Role of droplet size classes on the cloud droplet spectral dispersion as observed over the Western Ghats, **Atmospheric Research**, 246: 105104, DOI:10.1016/j.atmosres.2020.105104, 1-10
10. Aswini M.A., Kumar Ashwini, Das S.K., 2020, Quantification of long-range transported

aeolian dust towards the Indian peninsular region using satellite and ground-based data - A case study during a dust storm over the Arabian Sea, **Atmospheric Research**, 239:104910, DOI:10.1016/j.atmosres.2020.104910, 1-11

11. Attri S.D., Giri R.K., 2020, Impact of Environmental and Climatic Factors on Monuments, **Indian Journal of Air Pollution Control**, XX, 1-2, 8-16.
12. Attri S.D., Kumar Sudheer, Chattopadhyay N., Tiwari S., Kashyap A., 2020, The study of frost occurrence and risk analysis in Indo-Gangetic Plains of India during recent decades, **Mausam**, 71, 1, 95-102.
13. Baburaj P.P., Abhilash S., Mohankumar K., Sahai A.K., 2020, On the Epochal Variability in the Frequency of Cyclones during the Pre-Onset and Onset Phases of the Monsoon over the North Indian Ocean, **Advances in Atmospheric Sciences**, 37, DOI:10.1007/s00376-020-9070-5, 634–651
14. Bandgar A., Prabhu P., Sreejith O.P., Pai D.S., 2020, An analysis of monthly rainfall and the meteorological conditions associated with the deficient rainfall towards the end of 2017 southwest monsoon season, **Mausam**, 71, 3, 391-404.
15. Banerjee S., Padmakumari B., 2020, Spatiotemporal variability and evolution of day and night winter fog over the Indo Gangetic Basin using INSAT-3D and comparison with surface visibility and aerosol optical depth, **Science of the Total Environment**, 745: 140962, DOI:10.1016/j.scitotenv.2020.140962, 1-13
16. Bankar R.M., Patil R.M., Nimbalkar R., Pardessi R., Pandit A., Pawar S.D., 2020, Aircraft mounted field mill for meteorological applications, **Journal of Indian Geophysical Union**, 24, 78-90
17. Beal L.M., Vialard J., Roxy M.K. et al., 2020, A roadmap to IndoOOS-2: Better observations of the rapidly-warming Indian Ocean, **Bulletin of American Meteorological Society**, 101, DOI:10.1175/BAMS-D-19-0209.1, E1891-E1913
18. Beig G., Bano S., Sahu S.K., Anand V., Rathod A., Yadav R., Mangaraj P., Murthy B.S., Singh S., Latha R., Shinde R., 2020, COVID-19 and environmental -weather markers: Unfolding baseline levels and veracity of linkages in tropical India, **Environmental Research**, 191: 110121, DOI:10.1016/j.envres.2020.110121
19. Beig G., George M.P., Sahu S.K., Rathod A., Singh S., Dole S., Murthy B.S., Latha R., Tickle S., Shinde R., 2020, Towards baseline air pollution under COVID-19: implication for chronic health and policy research for Delhi, India, **Current Science**, 119, DOI: 10.18520/cs/v119/17/1178-1184, 1178-1184
20. Beig G., Sahu S.K., Singh V., Tickle S., Sobhana S.B., Gargeva P., Ramakrishna K., Rathod A., Murthy B.S., 2020, Objective evaluation of stubble emission of North India and quantifying its impact on air quality of Delhi, **Science of the Total Environment**, 709:136126, DOI:10.1016/j.scitotenv.2019.136126
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(NO<sub>2</sub>, HCHO and SO<sub>2</sub>) and aerosols over India during pre-monsoon of 2020, **Aerosol and Air Quality Research**, 21: 200306, Sp. Issue 10, DOI:10.4209/aaqr.2020.06.0306, 1-20

23. Budhavant K.B., Gawhane R.D., Rao P.S.P., Nair H.R.C.R., Safai P.D., 2020, Physico-chemical characterization and sink mechanism of atmospheric aerosols over South-west India, **Journal of Atmospheric Chemistry**, 77, DOI:10.1007/s10874-020-09400-x, 17-33
24. Chakraborty S., 2020, Potential of reef building corals to study the past Indian monsoon rainfall variability, **Current Science**, 119, DOI:10.18520/cs/v119/i2/273-281, 273-281
25. Chakravarty K., Murugavel P., Christy A.A., Singh V., Pandithurai G., 2020, Impact of electrified and non-electrified clouds on the inter-seasonal characteristics of surface-based precipitation, **Journal of Earth System Science**, 129:169, DOI:10.1007/s12040-020-01432-x, 1-11
26. Chance R., Liselotte T., Sarkar A., Sinha A.K Mahajan A.S., Chacko R., Sabu P., Roy R., Jickells T.D., Stevens D., Wadley M., Carpenter L.C., 2020, Surface Inorganic Iodine Speciation in the Indian and Southern Oceans From 12°N to 70°S, **Frontiers in Marine Science**, 7: 621, DOI:10.3389/fmars.2020.00621, 1-16
27. Chen Y., Wild O., Ryan E., Sahu S.K., Lowe D., Archer-Nicholls S., Wang Y., McFiggans G., Ansari T., Singh V., Sokhi R.S., Archibald A., Beig G., 2020, Mitigation of PM<sub>2.5</sub> and ozone pollution in Delhi. a sensitivity study during the pre-monsoon period, **Atmospheric Chemistry and Physics**, 20, DOI:10.5194/acp-20-499-2020, 499-514
28. Choudhury B.A., Konwar M., Hazra A., Mohan G.M., Pithani P., Ghude S.D., Deshamukhya A., Barth M.C., 2020, A diagnostic study of cloud physics and lightning flash rates in a severerepre-monsoon thunderstorm over northeast India, **Quarterly Journal of Royal Meteorological Society**, , DOI:10.1002/qj.3773, 1-22
29. Chowdhuri S., Deb Burman P.K., 2020, Representation of the Reynolds stress tensor through quadrant analysis for a near-neutral atmospheric surface layer flow, **Environmental Fluid Mechanics**, 20, DOI:10.1007/s10652-019-09689-7, 51-75
30. Chowdhuri S., Kalmár-Nagy T., Banerjee T., 2020, Persistence analysis of velocity and temperature fluctuations in convective surface layer turbulence, **Physics of Fluids**, 32: 076601, DOI:10.1063/5.0013911, 1-17
31. Chowdhuri S., Prabhakaran Thara, Banerjee T., 2020, Persistence behavior of heat and momentum fluxes in convective surface layer turbulence, **Physics of Fluids**, 32: 115107, DOI:10.1063/5.0027168, 1-16
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33. Collins M., Barreiro M., Frölicher T., Kang S.M., Ashok K., Roxy M.K., Singh D., Tedeschi R.G., Wang G., Wilcox L., Wu B., 2020, Frontiers in climate predictions and projections, **Frontiers in Climate**, 2: 571245, DOI:10.3389/fclim.2020.571245, 1-3
34. Dandapat S., Gnanaseelan C., Parekh A., 2020, Impact of excess and deficit river runoff on Bay of Bengal upper ocean characteristics using an ocean general circulation model, **Deep Sea Research Part II**, 172, DOI:10.1016/j.dsr2.2019.104714, 1-14

35. Darshana P., Chowdary J.S., Gnanaseelan C., Parekh A., Srinivas G., 2020, Interdecadal modulation of the Indo-western Pacific Ocean Capacitor mode and its influence on Indian summer monsoon rainfall, **Climate Dynamics**, 54, DOI:10.1007/s00382-019-05085-5, 1761–1777
36. Das S.K., Murali Krishna U.V., Kolte Y.K., Deshpande S.M., Pandithurai G., 2020, Assessment of ground-based X-Band Radar Reflectivity: attenuation correction and its comparison with space-borne radars over the Western Ghats, India, **Earth and Space Sciences**, 7: e2019EA000861, DOI:10.1029/2019EA000861, 1-15
37. Das S.K., Simon S., Kolte Y.K., Murali Krishna U.V., Deshpande S.M., Hazra A., 2020, Investigation of raindrops fall velocity during different monsoon seasons over the Western Ghats, India, **Earth and Space Science**, 7: e2019EA000956, DOI: 10.1029/2019EA000956, 1-14
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42. Devara P.C.S., Vijayakumar K., Safai P.D., 2020, Multi-spectral nephelometer characterization of urban aerosols, **Measurement**, 154:107471, DOI:10.1016/j.measurement.2020.107471, 1-8
43. Devika M.V., Pillai P.A., 2020, Recent changes in the trend, prominent modes, and the interannual variability of Indian summer monsoon rainfall centered on the early twenty-first century, **Theoretical and Applied Climatology**, 139, DOI:10.1007/s00704-019-03011-7, 815–824
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