Peer Reviewed Journals

1. Das, P., **Chanda, K.**, 2025. Selection of optimum GCMs through Bayesian networks for developing improved machine learning based multi-model ensembles of precipitation and temperature. *Stoch Environ Res Risk Assess* 39, 155–179). https://doi.org/10.1007/s00477-024-02856-3
2. Kumar, S., Das, P., Mandal, N., Chanda, K., & Pasupuleti, S. 2024. Joint probabilistic behaviour of climate extremes over the Godavari River basin, India. *International Journal of Climatology*, 44(9), 2876–2896. https://doi.org/10.1002/joc.8486
3. Mahmoudi, P., Maity, R., Amir Jahanshahi, S.M., Chanda K., 2024. Changing Pattern of Drought Proneness Across Iran. *Iran J Sci Technol Trans Civ Eng* 48, 4709–4729. https://doi.org/10.1007/s40996-024-01579-3
4. Mandal, N. and **Chanda, K.**, 2023. Contribution of climate and catchment characteristics to runoff variations in Indian river basins: a climate elasticity approach. *Hydrological Sciences Journal*, pp.1-18.
5. Mandal, N. and **Chanda, K.**, 2023. Performance of machine learning algorithms for multi-step ahead prediction of reference evapotranspiration across various agro-climatic zones and cropping seasons. *Journal of Hydrology*, *620*, p.129418.
6. Kumar, S., **Chanda, K.** and Pasupuleti, S., 2023. Association of tropical daily precipitation extremes with physical covariates in a changing climate. *Stochastic Environmental Research and Risk Assessment*, pp.1-19.
7. Das, P. and **Chanda, K.,** 2023. A Bayesian network approach for understanding the role of large-scale and local hydro-meteorological variables as drivers of basin-scale rainfall and streamflow. *Stochastic Environmental Research and Risk Assessment*, *37*(4), pp.1535-1556.
8. Das, P., Sachindra, D.A. and **Chanda, K.**, 2022. Machine learning-based rainfall forecasting with multiple non-linear feature selection algorithms. *Water Resources Management*, *36*(15), pp.6043-6071.
9. Kumar, S., **Chanda, K.** and Pasupuleti, S., 2022. Pre-and post-1975 scaling relationships of monsoon and non-monsoon hourly precipitation extremes with coincident temperature across urban India. *Journal of Hydrology*, *612*, p.128180.
10. Mahmoudi, P., Maity, R., Amir Jahanshahi, S.M. and **Chanda, K.**, 2022. Changing spectral patterns of long-term drought propensity in Iran through reliability–resilience–vulnerability-based Drought Management Index. *International Journal of Climatology*, *42*(8), pp.4147-4163.
11. Dutta, R., **Chanda, K.** and Maity, R., 2022. Future of solar energy potential in a changing climate across the world: A CMIP6 multi-model ensemble analysis. *Renewable Energy*, *188*, pp.819-829.
12. Maity R, Khan MI, Sarkar S, Dutta R, Maity SS, Pal M and **Chanda K**, (2021), Potential of Deep Learning in Drought Assessment by Extracting Information from Hydrometeorological Precursors, Journal of Water and Climate Change, IWA Publishing, DOI: 10.2166/wcc.2021.062.
13. Das P and **Chanda K**, (2020). Bayesian Network based modeling of regional rainfall from multiple local meteorological drivers. Journal of Hydrology, Elsevier, 591, 125563, DOI: 10.1016/j.jhydrol.2020.125563.
14. Kumar S, **Chanda K**, Pasupuleti S, (2020), Spatio-temporal Analysis of Extreme Indices derived from Daily Precipitation and Temperature for Climate Change Detection over India, Theoretical and Applied Climatology, Springer, DOI: 10.1007/s00704-020-03088-5.

15. Maity R, **Chanda K**, Dutta R, Ratnam JV, Nonaka M, Behera SK, (2020), Contrasting features of hydroclimatic teleconnections and predictability of seasonal rainfall over east and west Japan, Meteorological Applications, Royal Meteorological Society, DOI: 10.1002/met.1881.
16. **Chanda K** and Maity R, (2017), Assessment of Trend in Global Drought Propensity in the Twenty-First Century Using Drought Management Index, Water Resources Management, 31: 1209. DOI:10.1007/s11269-017-1571-3.
17. **Chanda K** and Maity R (2016), Uncovering Global Climate Fields Causing Local Precipitation Extremes, Hydrological Sciences Journal, Taylor and Francis, DOI: 10.1080/02626667.2015.1006232.
18. Maity R, Aggrawal A and **Chanda K**, (2016), Do CMIP5 models hint at a warmer and wetter India in the twenty-first century?, Journal of Water and Climate Change, DOI: 10.2166/wcc.2015.126.
19. **Chanda K** and Maity R, (2015), Meteorological Drought Quantification with Standardized Precipitation Anomaly Index (SPAI) for the Regions with Strongly Seasonal and Periodic Precipitation, Journal of Hydrologic Engineering, ASCE, DOI: 10.1061/(ASCE)HE.1943-5584.0001236, 06015007-1 to 06015007-7.
20. **Chanda K**, Maity R, Sharma A and Mehrotra R, (2014), Spatiotemporal variation of long-term drought propensity through reliability-resilience-vulnerability based Drought Management Index, Water Resources Research, AGU, 50(10), DOI: 10.1002/2014WR015703, 7662–7676.
21. Maity R, Sharma A, Nagesh Kumar D and **Chanda K**, (2013), Characterizing drought using the reliability-resilience-vulnerability concept, Journal of Hydrologic Engineering, ASCE 18(7), 859–869, DOI:10.1061/(ASCE)HE.1943-5584.0000639.

Book Chapters

1. **Chanda, K.**, Das, P., (2022). Dimensionality reduction of correlated meteorological variables by Bayesian network-based graphical modeling, in: Handbook of HydroInformatics Volume II: Advanced Machine Learning Techniques. Elsevier, pp. 69–76. https://doi.org/10.1016/B978-0-12-821961-4.00021-X
2. Das, P., **Chanda, K.** (2022). Feature Selection for Rainfall Prediction and Drought Assessment Using Bayesian Network Technique. In: Kolathayar, S., Mondal, A., Chian, S.C. (eds) Climate Change and Water Security. Lecture Notes in Civil Engineering, vol 178. Springer, Singapore. https://doi.org/10.1007/978-981-16-5501-2_10
3. Kumar S, **Chanda K**, Pasupuleti S, (2021), Influence of Air Temperature on Local Precipitation Extremes across India, In Climate Change Impacts on Water Resources, Edited by R. Jha, V.P. Singh, V. Singh, L.B. Roy and R. Thendiyath, Springer Nature, Switzerland, DOI: 10.1007/978-3-030-64202-0_14.
4. **Chanda K**, and Maity R, (2017), Global Climate Pattern Behind Hydrological Extremes in Central India, In Climate Change Impact (ICWEES 2016), Edited by V.P. Singh et al., Springer Nature Singapore, pp. 71-89, DOI: 10.1007/978-981-10-5714-4_6.
5. Maity R and **Chanda K**, (2015), Potential of Genetic Programming in Hydroclimatic Prediction of Droughts: An Indian Perspective, Handbook of Genetic Programming Applications, Edited by A. H. Gandomi, A. H. Alavi, and C. Ryan, Springer, pp. 381-398, DOI: 10.1007/978-3-319-20883-1_15, 381-398.

Conferences (Recent)

1. Mandal, N., Das, P., and **Chanda, K**. (2024). Performance of two-step technique for gap-filling and reconstruction of basin-scale Terrestrial Water Storage Anomalies (TWSA) , EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-18755, https://doi.org/10.5194/egusphere-egu24-18755, 2024.
2. Mandal, N.S., Kumar, S, **Chanda, K.** (2023) Urban Heat Islands (UHI) or Urban Cool Islands (UCI): Examining the Spatial Variation of Land Surface Temperature (LST) in the City of Bongaigaon, India, HYDRO 2023, NIT Warangal, India, 21-23 Dec 2023.
3. Mandal, N., **Chanda, K.** (2023). Comparison of Neural network based and Kernel based Machine Learning approaches for daily forecasting of reference evapotranspiration in data scarce regions, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-11950, DOI: 10.5194/egusphere-egu23-11950
4. Das, P. and **Chanda, K.** (2023). Influence of large-scale climate modes and local hydrometeorological factors in predicting basin scale rainfall and streamflow: A Bayesian network approach, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23 3826, https://doi.org/10.5194/egusphere-egu23-3826, 2023.
5. Kumar S, **Chanda K**, Pasupuleti S, (2022), Scaling relationships of sub-daily precipitation extremes with temperature for monsoon and non-monsoon months in India, American Geophysical Union (AGU) Fall Meeting 2022.
6. Das, P., **Chanda, K.**, (2022). Potential of Bayesian Network for regional rainfall prediction from multiple meteorological drivers, American Geophysical Union (AGU) Fall Meeting 2022. https://doi.org/10.13140/RG.2.2.30666.24009
7. Das, P., **Chanda, K.**, and Maity, R (2020). How useful are CORDEX products for the assessment of future agricultural drought propensity across the Indian subcontinent? EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-15885, https://doi.org/10.5194/egusphere-egu2020-15885
8. Kumar S, **Chanda K**, Pasupuleti S, (2020), Spatio-temporal variation of extreme indices derived from observed and reanalysis products for detection of climate change across India, EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-5837.
9. Maity R, **Chanda K**, Dutta R, Ratnam VJ, Nonaka M, and Behera S, (2020), How dissimilar are the large-scale hydroclimatic precursors and predictability of anomalous monthly rainfall in east and west Japan?,EGU General Assembly Conference Abstracts, 10496, (online format)
10. **Chanda K**, Maity R, (2019), Hydroclimatic Prediction using Machine Learning Approach incorporating Time-varying Concept, In the Proceedings of the 16th Annual Meeting of Asia Oceania Geosciences Society (AOGS 2019), Jul 28-Aug 02, 2019, Singapore.
11. Kumar S, **Chanda K**, Pasupuleti S, (2018), Influence of Air Temperature on Local Precipitation Extremes across India, HYDRO 2018, NIT Patna, India, 19-21 Dec 2018.