

Dr. Pravendra Kumar

List of Publications

1. Rai, Priya, Kumar, Pravendra, Al-Ansari, Nadhir and Malik, A. 2022. Evaluation of Machine Learning versus Empirical Models for Monthly Reference Evapotranspiration Estimation in Uttar Pradesh and Uttarakhand States, India. *Sustainability*, DOI: [10.3390/su14105771](https://doi.org/10.3390/su14105771)
2. Kumar, M., Kumar, Pravendra, Kumar, Anil, Elbeltagi, Ahmed and Kuriqi, Alban. 2022. Modeling stage-discharge-sediment using support vector machine and artificial neural network coupled with wavelet transform. *Applied Water Science*, DOI: [10.1007/s13201-022-01621-7](https://doi.org/10.1007/s13201-022-01621-7)
3. Tarate, S.B. and **Kumar, Pravendra**. 2022. Quantification of impact of spatio-temporal variability of land use/ land cover on runoff generation using modified NRCS-CN method. *Arabian Journal of Geosciences*, DOI: [10.1007/s12517-022-09931-5](https://doi.org/10.1007/s12517-022-09931-5).
4. Tarate, S.B., **Kumar Pravendra**, Kumar, Manish, Elbeltagi, Ahmed and Kuriqi, Alban. 2021. Potential of hybrid wavelet-coupled data-driven-based algorithms for daily runoff prediction in complex river basin. *Theoretical and Applied Climatology*, 145: 1207-1231.
5. Tarate, S.B. and Kumar, Pravendra. 2021. Characterization and trend detection of meteorological drought for a semi-arid area of Parbhani district of Indian state of Maharashtra. *Mausam*, 72(3): 583-596.
6. Tarate, S.B. and Kumar, Pravendra. 2021. Effectiveness of heuristic approach for daily sediment flow prediction of Koyna river basin. *J. of Soil and Water Conservation*, 20(1): 12-21.
7. Kaur, Lovepreet, Anvesha, Kumar, Manish, Verma, S. and Kumar, Pravendra. 2021. Annual maximum rainfall prediction using frequency analysis for Roorkee, Uttarakhand, India. *Mausam*, 72(2): 359-372.
8. Dumka, B.B. and Kumar, Pravendra. Modeling Rainfall-Runoff using Artificial Neural Network (ANNs) and Wavelet based ANNs (WANNs) for Haripura Dam, Uttarakhand. *Indian Journal of Ecology*, 48(1): 271-274.
9. Kumar, Ashish, Kumar, Pravendra and Tripathi, V.K. 2021. Runoff and sediment estimation using ANN and ANFIS: Case study of Godavari Basin, India. Book Chapter: *Field Practices for Wastewater Use in Agriculture*, DOI: 10.1201/9781003034506-18.
10. Kumar, Manish and **Kumar, Pravendra**. 2021. Stage-discharge-sediment modelling using support vector machine. *The Pharma Innovation Journal*, SP-10(1): 149-154.
11. Tarate, S.B., **Kumar Pravendra**, Kumar, Manish, Elbeltagi, Ahmed and Kuriqi, Alban. 2021. Superiority of hybrid soft computing models in daily suspended sediment estimation in highly dynamic rivers. *Sustainability*, DOI: [10.3390/su13020542](https://doi.org/10.3390/su13020542).
12. Kumar, Manish, Kumari, Anuradha, Kushwaha, D.P., **Kumar Pravendra**, Malik, Anurag, Ali, Rawshan and Kuriqi, Alban. 2020. Estimation of stage-discharge relationship by using data-driven techniques of a perennial river, India. *Sustainability*. DOI: [10.3390/su12197877](https://doi.org/10.3390/su12197877).

13. Kumar, Manish and **Kumar, Pravendra**. 2020. Daily Suspended-sediment Concentration simulation using ANN and Wavelet ANN models. International Archives of Applied Sciences and Technology, 11(3) : 60-69.
14. Rawat, Amit, **Kumar, Pravendra** and Deoli, Vaibhav. 2019. Daily Monsoon Rainfall Prediction using Artificial Neural Network (ANN) for Parbhani District of Maharashtra. International Journal of Current Microbiology and Applied Sciences, 8(12) : 1949-1963.
15. Tarate, S.B., **Kumar, Pravendra** and Kumar, Anil. 2019. Application of remote sensing and GIS for morphometric analysis of watershed: A Review, International Journal of Chemical Studies, 7(2) : 709-713.
16. Kumar, Ashish, **Kumar, Pravendra** and Singh, V.K. 2019. Evaluating Different Machine Learning Models for Runoff and Suspended Sediment Simulation. Water Resources Management, DOI: [10.1007/s11269-018-2178-z](https://doi.org/10.1007/s11269-018-2178-z).
17. Tarate, S.B., **Kumar, Pravendra** and Kumar, Anil. 2018. Spatio-Temporal Variability of Land use/Land Cover within Koyna River Basin. International Journal of Current Microbiology and Applied Sciences, 7(09) : 944-953.
18. Kumari, Pratibha, **Kumar, Pravendra** and Singh, P.V. 2018. Rainfall-Runoff Modelling Using Artificial Neural Network and Adaptive Neuro-Fuzzy Inference System. Indian Journal of Ecology, 45(2) : 281-285.
19. Nivesh, Shreya and **Kumar, Pravendra**. 2018. River suspended sediment load prediction using neuro-fuzzy and statistical models: Vamsadhara river basin, India. Indian J. Soil Conservation, 46(1): 68-76.
20. Nivesh, Shreya, **Kumar, Pravendra**, Sawant, Pragat and Verma, Ramesh. 2018. Application of Fuzzy Logic and Statistical Approaches for Estimation of Suspended Sediment Concentration. International Journal of Current Microbiology and Applied Sciences, 7(2) : 3716-3733.
21. Nivesh, Shreya and **Kumar, Pravendra**. 2018. Estimation of sediment load using ANN, ANFIS, MLR and SRC Models in Vamsadhara River Basin, India. Annals of Plant and Soil Research, 20(1): 37–45.
22. Pradip, Kyada, **Kumar, Pravendra** and Sojitra, Manoj. 2018. Rainfall forecasting using artificial neural network (ANN) and adaptive neuro-fuzzy inference system (ANFIS) models. International Journal of Agriculture Sciences 10(10) : 6153-6159.
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27. Singh, V. K, **Kumar, Pravendra**, Singh, B, P. and Malik, A, 2016. comparative study of adaptive neuro fuzzy inference system (ANFIS) and multiple linear regression (MLR) for rainfall-runoff modeling. International Journal of Science and Nature, 7(4): 714-723.
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29. 26. Kumar, Pravendra, Tiwari, Sushant, Chanu, S. N., Luthra, Kaushik and Rani, Poonam. 2016. Estimation of erosivity index using daily rainfall for Dehradun, Uttarakhand, Journal of Soil and Water Conservation, 15 (2): 113-119.
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31. Singh, Ajeet, Jilani and Kumar, Pravendra. 2015 Daily rainfall prediction using Artificial Neural Network (ANN) for monsoon season. Trends in Biosciences, 8(13),: 3303-3309.
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38. **Kumar, Pravendra** and Singh, J. K. 2012. Runoff prediction: Use of a Muskingum model for a small watershed. *J. Agricultural Engineering*, 49(4): 38-45.
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41. **Kumar, Pravendra** and Singh, P. V. 2011. Prediction of annual maximum rainfall based on frequency analysis. *Environment and Ecology*, 29(1): 39-41.
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43. Singh, P. V., **Kumar, Pravendra**, Joshi, R. P. and Kumar, Dheeraj. 2008 Judicious use of excess water in hilly regions of Uttarakhand. In Proc. *National Workshop on Appropriate Technology for Hills (ATH-2008)*, held at College of Technology, GBPUA&T, Pantnagar during Oct. 16-18, 2008: 77-79.
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