

Research Publications

Year wise: Research publications etc. of the Department

In 2025

1. P. Shome, A.J. Prakash, M.D. Behera, S. Mudi, P. Das, S. Behera, P.V, Vinod; B.K. Prusty; **B.R. Parida**; Biswajeet Pradhan; S.K. Srivastava; P.S. Roy (2025). A Synergistic Approach Using Machine Learning and Deep Learning for Forest Fire Susceptibility in Himalayan Forests. . J. of the Indian Society of Remote Sensing. [IF 2.3] [ISSN: 0974-3006]
2. **B.R. Parida***, S. Tiwari, C.S. Dwivedi, A.C. Pandey, Bhaskar Singh and M.D. Behera, and N. Kumar (2025). Comparative Assessment of Satellite-based Models through PlanetScope and Landsat-8 for determining Physico-chemical Water Quality Parameters in Varuna River (India). Applied Water Science. [IF 5.8] [ISSN: 2190-5495]
3. S. Kumar, **B.R. Parida*** and K. K. Basheer Ahammed (2025). Flood Risk Assessment of the Kosi River Basin in North Bihar using Synthetic Aperture Radar (SAR) data and AHP approach. Natural Hazards Research, xx, xx. <https://doi.org/10.1016/j.nhres.2025.02.002> [CiteScore 4.1] [ISSN: 2666-5921]
4. A.C. Pandey, A. Islam, B.R. Parida*, C.S. Dwivedi (2025). Permafrost destabilization induced hazard mapping in Himalayas using Machine Learning methods. Advances in Space Research., <https://doi.org/10.1016/j.asr.2025.01.063> [IF 2.8] [ISSN: 1879-1948]

2024

1. S. K. Chaudhary, A.C Pandey and **B.R. Parida** (2024). Geospatial analysis of Elephant Habitat Suitability and Movement for Mapping the Elephant Corridor in Dalma Wildlife Sanctuary (India). Environ. Monitoring & Assessment, 196 (936), 1-21. <https://doi.org/10.1007/s10661-024-13110-2> [IF 3.307] [ISSN: 0167-6369]
2. C.S. Dwivedi, A.K. Mahato A,C. Pandey, **B.R. Parida*** and R Kumar (2024). Delineation of Groundwater potential zone using Geospatial and AHP techniques in Ken River Basin (KRB) in Central India. Discover Water, 4 (60), 1-21. <https://doi.org/10.1007/s43832-024-00125-6>
3. C.S. Dwivedi, S Kumari, A,C. Pandey, **B.R. Parida*** and G. Sikka (2024). Site Suitability Analysis for Municipal Solid Waste Management System in Ranchi City using AHP: A Multi-Criteria Decision Approach. Environmental Quality Management, 34, 1-15. <https://doi.org/10.1002/tgem.22312> [IF 1.5], (UGC-CARE Group II)
4. Bishal Kanu, **B.R. Parida***, S. Bar, C.S. Dwivedi and A.C. Pandey (2024). Estimating forest biophysical and biochemical parameters in Behali Reserve Forest (Assam) using proximal and remote sensing techniques. Tropical Ecology. <https://doi.org/10.1007/s42965-024-00359-4> [IF 1.6] [ISSN: 0564-3295]
5. C.S. Dwivedi, Dishant, B.R. Parida, A.C. Pandey, Ravi Kumar and Navneet Kumar (2024). Geoinformatics based Mapping of Environmental Sensitive Areas for Desertification over Satara and Sangli districts of Maharashtra, India. GeoHazards, 5(2), 415-440. <https://doi.org/10.3390/geohazards5020022> . [ISSN: 2624-795X] [Scopus]
6. Sparsha, Shaily, B.R. Parida* (2024). Vegetation browning trend progressively leading to forest degradation in Eastern Himalaya in response to climatic and anthropogenic drivers. Remote Sensing Applications: Society and Environment (RSASE), 35, 101209. <https://doi.org/10.1016/j.rsase.2024.101209> [ISSN: 2352-9385] [IF 4.7]
7. S.B. Tarate, N. R. Patel, A. Danodia, S. Pokhariyal and B.R. Parida* (2024). Geospatial technology for sustainable agricultural water man-agement in India -A Systematic Review. Geomatics, 4(2), 91-122. <https://doi.org/10.3390/geomatics4020006> [ISSN: 2673-7418]
8. Smrutisikha Mohanty, Prem Chandra Pandey, Manish Pandey, Prashant K Srivastava,

Chandra Shekhar Dwivedi (2024). Wetlands contribution and linkage to support SDGs, its indicators and targets: A critical review. Sustainable Development. <https://doi.org/10.1016/j.spc.2024.05.024> IF: 12.5, ISSN: 0968-0802, IF: 12.5

9. S. Bar, P. Acharya, B.R. Parida*, S. Sannigrahi, A. Maiti, G. Barik and Navneet Kumar (2024). Investigation of fire regime dynamics and modeling of burn area over India for the twenty-first century. Environmental Science and Pollution Research, xx, 1-17. <https://doi.org/10.1007/s11356-024-32922-w> [IF 5.8] [ISSN: 1614-7499]
10. T. Mahato, B.R. Parida*, and S. Bar (2024). Assessing tea plantations biophysical and biochemical characteristics in Northeast India using satellite data. Environ. Monitoring & Assessment, 196 (327), 1-18. <https://doi.org/10.1007/s10661-024-12502-8> [IF 3.307] [ISSN: 0167-6369]
11. A.J. Prakash; S. Mudi; S. Paramanik; M.D. Behera; S. Shekar; N. Sharma, B.R. Parida (2024). Dominant expression of SAR Backscatter in predicting aboveground biomass: Integrating multi-sensor data and Machine Learning in Sikkim Himalaya. J. of the Indian Society of Remote Sensing. <https://doi.org/10.1007/s12524-024-01812-6> [IF 2.5] [ISSN: 0974-3006]

2023

1. S. Bhattacharjee, AC Pandey, Rahul Dev Garg (2023). Long-term estimation of glacier mass balance using geospatial techniques in Western Himalayas, Ladakh, India, Quaternary Science Advances, 12. <https://doi.org/10.1016/j.qsa.2023.100118>
2. S Bhattacharjee, AC Pandey (2023). Estimating thickness of Zemu glacier, Sikkim (India) using ice-flow velocity approach: a geoinformatics based perspective. Spat. Inf. Res. <https://doi.org/10.1007/s41324-023-00515-3>
3. Santra, M., Dwivedi, C.S. & Pandey, A.C. Quantifying shoreline dynamics in the Indian Sundarban delta with Google Earth Engine (GEE)-based automatic extraction approach. Trop Ecol (2023). <https://doi.org/10.1007/s42965-023-00321-w>
4. Raunak kumar, Kasturi Chakraborty, Chandra Shekhar Dwivedi and Arvind Chandra Pandey (2023). Vegetation recovery dynamics in forest fire zones of mizoram using spectral vegetation indices derived from landsat data series. The Indian Forester. <https://www.indianforester.co.in/index.php/indianforester/issue/view/9690>
5. CS Dwivedi, S Singh, AC Pandey, KK Basheer Ahammed, D Mitra (2023). Indicator Based Approach and Geospatial Technology for Coastal Vulnerability Assessment along Chennai District Coast, Tamil Nadu State, India. Thalassas: An International Journal of Marine Sciences. <https://doi.org/10.1007/s41208-023-00583-0>
6. **B.R. Parida***, B. Kanu, C.S Dwivedi (2023). Deciphering forest cover losses and recovery (1990-2022) using satellite data in Behali Reserve Forest of Northeastern Himalaya. *Remote Sens. in Earth Systems Sci.*, x, xx. <https://doi.org/10.1007/s41976-023-00100-0> (Scopus Cite-Score 4.9) [ISSN: 2520-8209]
7. D.P. Sarkar, B.U. Shankar, **B.R. Parida** (2023). A novel approach for retrieving GPP of evergreen forest regions of India using random forest regression. *Remote Sensing Applications: Society and Environment (RSASE)*, 101116. <https://doi.org/10.1016/j.rsase.2023.101116> [IF 4.7] [ISSN: 2352-9385].
8. Dwivedi, C.S.; Pampattiwar, S.T.; Pandey, A.C.; **B.R. Parida***; Mitra, D.; Kumar, N (2023). Characterization of the Coastal Vulnerability in Different Geological Settings: A Comparative Study on Kerala and Tamil Nadu Coasts Using Fuzzy AHP. *Sustainability*, 15(12), 9543. <https://doi.org/10.3390/su15129543> [IF 3.889] [ISSN: 2071-1050]
9. A.K. Ranjan, **B.R. Parida**, J. Dash, A. K. Goari (2023). Evaluating impacts of opencast stone mining on vegetation primary production and transpiration over Rajmahal Hills. *Sustainability*,

- 15 (10), 8005. <https://doi.org/10.3390/su15108005> [IF 3.889] [ISSN: 2071-1050]
10. B.R. Parida*, T. Mahato, and S. Ghosh (2023). Monitoring Tea plantations during 1990-2022 using multi-temporal satellite data in Assam (India). *Tropical Ecology*, x, xx. <https://doi.org/10.1007/s42965-023-00304-x> [IF 1.6] [ISSN: 0564-3295]
 11. K.K. Basheer Ahammed, A.C. Pandey, B.R. Parida, Wasim, C.S. Dwivedi (2023). Impact Assessment of Tropical Cyclones Amphan and Nisarga in 2020 in the Northern Indian Ocean. *Sustainability*, 15, 3992. <https://doi.org/10.3390/su15053992> [IF 3.889] [ISSN: 2071-1050]
 12. M. K. Munda and B.R. Parida* (2023). Soil moisture modelling over Agricultural Fields using C-band Synthetic Aperture Radar and modified Dubois Model. *Applied Geomatics*. <https://doi.org/10.1007/s12518-023-00489-9> [IF 2.7] [ISSN: 1866-928X]
 13. S. Bar, B.R. Parida*, A.C. Pandey, B. Uma Shankar, P. Kumar, S.K. Panda and M.D. Behera (2023). Modeling and prediction of fire occurrences along an elevational gradient in Western Himalayas. *Applied Geography*, 151. 102867. <https://doi.org/10.1016/j.apgeog.2022.102867> [IF 4.9]. [ISSN: 0143-6228]
 14. Kishore BSPC, Kumar Amit*, Saikia P., Khan ML. 2023. Alpha and Beta Diversity Mapping in Tropical Deciduous Forests using High-fidelity Imaging Spectroscopy. *Advances in Space Research*. Accepted on 18 Feb. 2023. <https://doi.org/10.1016/j.asr.2023.02.031> IF: 2.611.
 15. Diksha, Tripathi P., Kumar A. 2023. Geographically Weighted Logistic Regression to measure the role of Intra-Urban Drivers for urban growth modelling in Kathmandu, Central Himalayas. *Environmental Monitoring and Assessment*, Accepted on 23 March 2023). IF: 3.307
 16. Upreti M, and Kumar A*. 2023. Landscape Modeling for Urban Growth Characterization and its Impact on Ecological Infrastructure in Delhi-NCR: An Approach to Achieve SDGs. *Physics and Chemistry of the Earth*. 131: 103444. Accepted on 14 July 2023. <https://doi.org/10.1016/j.pce.2023.103444> IF: 3.7
 17. Prakash A, Diksha, and Kumar A*. 2023. Measuring Vertical Urban Growth of Patna Urban Agglomeration using Persistent Scatterers Interferometry SAR (PSInSAR) Remote Sensing. *Remote Sensing*, 15(14), 3687; <https://doi.org/10.3390/rs15143687> , IF: 5.0.
 18. Diksha, Kumar A*, Saikia P, Sirvastava PK. 2023. Human-induced Impacts on Ecological Infrastructure in the Himalayan Urban Agglomerations. *Acta Ecologica Sinica*, Accepted on 05 July 2023. SCI H Index: 36; Scopus, ISSN: 1872-2032. <https://doi.org/10.3390/resources12050058>
 19. Ahmad T, Pandey AC*, Kumar Amit, Tirkey A. 2023. Understanding the relationship of surface run-off in potential flood inundation in Kashmir valley, Western Himalayas, *Physics and Chemistry of the Earth*. <https://doi.org/10.1016/j.pce.2023.103423> . IF: 3.7.
 20. Kumar A*, Upreti M, Pandey AC, Saikia P, and Khan ML. 2023. Contribution of Landscape Transformation in the Development of Heat Islands and Sinks in Urban and Peri-Urban Regions in the Chota-Nagpur Plateau, India. *Resources*, 12, 58:1-25. <https://doi.org/10.3390/resources12050058> (issn: 2079-9276).
 21. Diksha, Kumar A*, Tripathi P, 2023. Geographically Weighted Regression to measure the role of Intra-Urban Drivers for urban growth modelling in Kathmandu, Central Himalayas. *Environmental Monitoring and Assessment*, 195:627. <https://doi.org/10.1007/s10661-023-11164-2>. ISSN: 1573-2959. IF: 3.307.
 22. Kishore BSPC, Kumar Amit*, Saikia P., Khan ML. 2023. Alpha and Beta Diversity Mapping in Tropical Deciduous Forests using High-fidelity Imaging Spectroscopy. *Advances in Space Research*. Accepted on 18 Feb. 2023. <https://doi.org/10.1016/j.asr.2023.02.031> IF: 2.611.

2022

1. S. K. Chaudhary, A.C. Pandey, B.R. Parida (2022). Forest fire characterization using Landsat-

- 8 satellite data in Dalma Wildlife Sanctuary. *Remote Sens. in Earth Systems Sci.*, 2 (2), 96-107. [ISSN: 2520-8209]
2. S. Chaudhary, A.C Pandey and B.R. Parida (2022). Geoinformatics based detection and delineation of paleochannels in hard rock terrain of Koel River Basin, Jharkhand, Eastern India. *Groundwater for Sustainable Development*. [Cite Score 7.9] [ISSN: 2352-801X] <https://doi.org/10.1016/j.gsd.2022.100832>
 3. A.K. Ranjan, B.R. Parida, J. Dash, A. K. Goari (2022). Quantifying the impacts of opencast mining on vegetation dynamics over eastern India using the long-term Landsat-series satellite dataset. *Ecological Informatics*. [IF 4.498] [ISSN:1574-9541]
 4. Gupta, S.K., Pandey, A.C (2022). PROSAIL and empirical model to evaluate spatio-temporal heterogeneity of canopy chlorophyll content in subtropical forest. *Model. Earth Syst. Environ.* 8, 2151–2165. <https://doi.org/10.1007/s40808-021-01214-4>
 5. Kashyap, R., Pandey, A. C., & Kuttippurath, J. (2022). Photosynthetic trends in India derived from remote sensing measurements during 2000–2019: Vegetation dynamics and key climate drivers. *Geocarto International*, 1–17. <https://doi.org/10.1080/10106049.2022.2060325> (IF 3.45)
 6. Basheer Ahammed, K. K., & Pandey, A. C. (2022). Assessment and prediction of shoreline change using multi-temporal satellite data and geostatistics: A case study on the eastern coast of India. *Journal of Water and Climate Change*, 13(3), 1477–1493. <https://doi.org/10.2166/wcc.2022.270> (IF 2.8)
 7. Singh, N., Shekhar, M., Parida, B. R., Gupta, A. K., Sain, K., Rai, S. K., Bräuning, A., J.S. Charkaborty, Sharma, V., and Tiwari, R. K., P. Chauhan, L. Montagnani (2022). Tree isotopic records suggest seasonal importance of moisture dynamics over glacial valleys of the Central Himalaya, *Frontiers in Earth Science* 10:868357. <https://doi.org/10.3389/feart.2022.868357> [IF 3.661]
 8. D.P. Sarkar, B.U. Shankar, B.R. Parida (2022). Machine Learning Approach to Predict Terrestrial Gross Primary Productivity using Topographical and Remote Sensing Data. *Ecological Informatics*, 70, 1-13, 101697. <https://doi.org/10.1016/j.ecoinf.2022.101697> [IF 4.498] [ISSN:1574-9541]
 9. A.C Pandey*, S. Bhattacharjee, Md. Wasim, M. Salim and B.R. Parida (2022). Extreme Rainfall-induced Urban Flood Monitoring and Damage assessment in Wuhan (China) and Kumamoto (Japan) cities using Google Earth Engine. *Environ. Monitoring & Assessment*, 194 (6). <https://doi.org/10.1007/s10661-022-10076-x> [IF 3.307] [ISSN: 0167-6369]
 10. B.R. Parida*, A.C Pandey, R. Kumar, S. Kumar (2022). Surface Soil Moisture Retrieval using Sentinel-1 SAR data for crop planning in Kosi River Basin of North Bihar. *Agronomy*, 12, 1045. <https://doi.org/10.3390/agronomy12051045> [IF 3.949] [ISSN: 2073-4395]
 11. Pandey, A.C.; Kaushik, K.; Parida, B.R (2022). Google Earth Engine for Large-Scale Flood Mapping Using SAR Data and Impact Assessment on Agriculture and Population of Ganga-Brahmaputra Basin. *Sustainability*, 14, 4210. <https://doi.org/10.3390/su14074210> [IF 3.889] [ISSN: 2071-1050]
 12. G. Tripathi, A.C Pandey, B.R. Parida* (2022). Flood Hazard and Risk Zonation in North Bihar using Satellite-derived Historical Flood events and Socio-Economic data. *Sustainability (MDPI)*, 14 (3), 1472, 1-26. <https://doi.org/10.3390/su14031472> [IF 3. 889] [ISSN: 2071-1050]
 13. S. K. Chaudhary, A.C. Pandey, B.R. Parida, S. Kumar (2022). Using geoinformatics to link forest fire severity and fragmentation in India's Dalma Wildlife Sanctuary. *Tropical Ecology*. <https://doi.org/10.1007/s42965-021-00202-0> [IF 1.333] [ISSN: 0564-3295]
 14. Preet Lal, A.K. Dubey, Amit Kumar, P. Kumar, C. S. Dwivedi. 2022. Measuring the Control of Landscape Modifications on Surface Temperature in India. *Geocarto International*.

<https://doi.org/10.1080/10106049.2022.2102224> . Impact Factor: 3.45

15. A Jaya Prakash, Shubham Kumar, Mukunda Dev Behera, Pulakesh Das, Amit Kumar, and P.K. Srivastava. 2022. Impact of extreme weather events on cropland Inundation over Indian Subcontinent. Environmental Monitoring and Assessment. EMAS-D-22-01316R. Accepted on 28 June 2022.
16. Liang, ... Kumar, Amit... 2022. Evidence of co-limitation in global forest diversity gradients. Nature Ecology & Evolution. (ISSN: 2397-334X), Impact factor: 15.46. accepted on 15 June 2022.
17. Diksha, Kumar, Amit*, Lal P. 2022. Analysing Climatic Variability and Extremes Events in the Himalayan regions focusing on Mountainous Urban Agglomerations. Geocarto International. doi: <https://doi.org/10.1080/10106049.2022.2086635> . Accepted on 01 June 2022. Impact Factor: 3.45
18. Kumar, R., Kumar, Amit, Saikia, P.* (2021). Forest composition regulates above-ground biomass in Sal forests of Ranchi, Eastern India. Environmental Sustainability (accepted on 13 June 2022). ISSN: 2523-8922.
19. Kumari, Sheetal, Lal, Preet, and Kumar, Amit. 2022. Spatial heterogeneity for urban built-up footprint and its characterization using microwave remote sensing. Advances in Space Research. Accepted on 21 March. 2022. <https://doi.org/10.1016/j.asr.2022.03.025> . Impact factor: 2.152
20. Tripathy, Pratyush; Balakrishnan, Krishnachandran; Franchis, Carlo; Kumar, Amit. 2022. Generating Megacity-scale Building Height Maps Without DGNS Surveyed GCPs: An Open Source Approach. Environment and Planning B: Urban Analytics and City Science. EPB-2021-0270.R1 (ISSN: 2399-8083). <https://doi.org/10.1177/23998083221084990> Impact factor: 3.619
21. Kumar, Amit, 2022. Impact of Shifting Cultivation on Green Infrastructure: A Remote Sensing Perspective. International Journal of Ecology and Environmental Sciences. (ISSN: 2320-5199) Accepted on 21 Feb. 2022.
22. Diksha and Kumar, Amit. 2022. Measuring the Paradigm Shift in Ecological Services in the Mountainous Urban and Peri-Urban Systems of the Himalayas. International Journal of Ecology and Environmental Sciences. (ISSN: 2320-5199) Accepted on 21 Feb. 2022. <https://doi.org/10.55863/ijees.2022.0105>
23. Kishore, B.S.P.C., Kumar, Amit, Saikia, P., Khan, M.L. 2022. Hyperspectral Remote Sensing for Mapping Foliar Pigment Concentration in Mudumalai Tiger Reserve, India. International Journal of Ecology and Environmental Sciences. (ISSN: 2320-5199) Accepted on 21 Feb. 2022.
24. Tripathi S., Setia R, Ghosh T, Uniyal PL and Kumar Amit, 2022. Evaluation of spectral indices to monitor the vegetation species in a sanctuary for carbon sequestration in soils using LANDSAT satellite remote sensing. International Journal of Ecology and Environment Sciences.
25. Gatti, R.C., Reich, P.B., Liang, J., Kumar, A. et al. (2022). The number of tree species on Earth. PNAS (Proceedings of the National Academy of Sciences of the United States of America) 119(6): e2115329119. IF: 11.2
26. Kumar Amit, Manisha, Lal Preet, Prasad Alisha, Tripathy Pratyush, Saikia Purabi, 2022. Analysing Urban Damage and Surface Deformation based hazard-risk in Kathmandu City occurred during Nepal Earthquake (2015) using SAR Interferometry. Advances in Space Research. Impact factor: 2.152
27. Kumar, Amit, Kumar, Gajendra, Saikia, Purabi, Khare, PK, Khan, ML. 2022. Spatial pattern of tree diversity and impacts of ecological disturbances on forest structure in tropical deciduous forests of Central India. Biotropica. 1–13. <https://doi.org/10.1111/btp.13068> . ISSN: 1744-7429.

Impact Factor: 2.508

28. Tripathi S., Setia R, Ghosh T, Uniyal PL, and Kumar Amit, 2022. Evaluation of spectral indices to monitor the vegetation species in a sanctuary for carbon sequestration in soils using LANDSAT satellite remote sensing. International Journal of Ecology and Environment Sciences. UGC referred. ISSN: 2320-5199.
29. Tiwari S, Mishra SN, Kumar D, Kumar B, Vaidya SN, Ghosh SG, Rahaman SKM, Khatun M, Garai S, Kumar Amit. 2022. Modelling Potential Risk Zone of Lantana camara Invasion and Response to Climate Change in Eastern India. Ecological Processes. ISSN: 2192-1709. Impact Factor: 2.849.
30. Santosh Kumar, Dr. Bijay Singh, Dr. Sharad Tiwari and Dr. Kiran Jalem (2022). "Geospatial Mapping of Geotourism Hotspots in Latehar District, Jharkhand", The Indian Mining & Engineering Journal, Vol. 61, No.07 July 2022, pp.30-36, ISSN: 0019-5944.
31. Dr. Hemalatha Ramakrishnan, Dr. Niranjana Sahoo, Dr. Kiran Jalem, Dr. Keyurkumar M Nayak, Dr. Vanisree Ramanathan and Dr. M. Christopher (2022). "Influence of Technology and Its Impact on Urban Migration Productive Capacity, Journal of Contemporary Issues in Business and Government (C-Category Journal), Vol. 28, No. 04, P-ISSN: 2204-1990; E-ISSN: 1323-6903, DOI: 10.47750/cibg.2022.28.04.0014, May 2022, Indexing: Scopus
32. Dr. Bhupinder Pal Singh Chahal, Mrs. Vaishali prakash, Dr. Vijayalaxmi G. Nemmaniwar, Dr. Kriti Gulati Mehra, Dr. Kiran Jalem and Dr. S. Radhakrishnan (2022). "Effect of E-Word of Mouth on Brand Equity and Intention to Purchase: A Study on Green Products in the Retail Sector, Journal of Positive School Psychology, Vol.6, No.4, pp: 9917–9924, ISSN: 2717-7564 (Online), Indexing: Scopus, EBSCO.

2021

1. Munizzah Salim, Arvind Chandra Pandey, Estimation of temporal snowmelt runoff using geospatial technique in Gangotri glacier basin, Uttarakhand, India, Remote Sensing Applications: Society and Environment, Volume 24, 2021, 100660, ISSN 2352-9385, <https://doi.org/10.1016/j.rsase.2021.100660>.
2. Basheer Ahammed, K. K., & Pandey, A. C. (2021) Characterization and impact assessment of super cyclonic storm AMPHAN in the Indian subcontinent through space borne observations Ocean & Coastal Management E.Bv. 205(1). 105532 Doi: 10.1016/j.ocecoaman.2021.105532
3. Tauseef Ahmad, Arvind Chandra Pandey and Amit Kumar (2021) Long-term precipitation monitoring and its linkage with flood scenario in changing climate conditions in Kashmir valley, Geocarto International, DOI: 10.1080/10106049.2021.1923829
4. Shubham Bhattacharjee and Arvind Chandra Pandey (2021). Contrasting behaviour of temporal glacier changes and long term estimation of glacier mass balance across Himalayan–Karakoram range Geocarto International DOI: 10.1080/10106049.2021.1923832
5. Priya, T., Pandey, A.C. (2021) Geoinformatics-based assessment of land deformation and damage zonation for Gorkha earthquake, 2015, using SAR interferometry and ANN approach SN Appl. Sci. 3,573 <https://doi.org/10.1007/s42452-021-04574-9>.
6. Preet Lal, Amit Kumar©, Alisha Prasad, Shubham Kumar, Purabi Saikia, Arun Dayanandan, P.S. Roy, M.L. Khan. 2021. COVID-19 Pandemic Hazard-Risk- Vulnerability Analysis: A framework for effective Pan-India response. Geocarto International.. DOI:10.1080/10106049.2021.2012529. IF: 4.889
7. Preet Lal, Ankit Shekhar and Amit Kumar©. 2021. Quantifying temperature and precipitation change caused by land cover change: a case study of India using WRF model. Frontiers in Environmental Science. Accepted on 30 Oct. 2021. doi: 10.3389/fenvs.2021.766328. IF: 4.581.

8. Keshav K. Thakur, Poorna Bhat, Amit Kumar, G. Ravikanth, and Purabi Saikia. 2021. Distribution mapping of *Bauhinia vahlii* Wight & Arn. in India using ecological niche modelling. *Tropical Ecology*. IF: 0.850
9. Shubham Kumar, Preet Lal, Amit Kumar©. (2021). Influence of Super Cyclone 'Amphan' in the Indian subcontinent amid COVID-19 pandemic. *Remote Sensing in Earth Systems Sciences*.
10. AK Dubey, P. Kumar, Preet Lal, Amit Kumar, Anton Y. Dvornikov. (2021). Present and Future Projections of Heatwave Hazard-Risk over India: A Regional Earth System Model Assessment. *Environmental Research*. IF: 5.715.
11. Preet Lal, Amit Kumar©, Purabi Saikia, Anup Das, C. Patnaik, Gajendra Kumar, A.C. Pandey, Parul Srivastava, C.S. Dwivedi, M.L. Khan. (2021). Effect of Vegetation Structure on Above Ground Biomass in Tropical Deciduous Forests of Central India. *Geocarto International*. IF: 3.789
12. Sharad Tiwari, B. Ghosh, S.N. Vaidya, S.K.M. Rahaman, M. Khatun, S. Garai, P. Saikia, Amit Kumar. (2021). Modelling potentially suitable lac cultivation zones of *Butea monosperma* to promote livelihood security in rural India. *Vegetos*
13. B.R. Parida, S. Bar, Gareth Roberts, SP. Mandal, AC. Pandey, Manoj Kumar, Jadunandan Dash (2021). Improvement in air quality and its impact on land surface temperature in major urban areas across India during the first lockdown of the pandemic. ***Environment Research***. <https://doi.org/10.1016/j.envres.2021.111280>
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