

Faculty Profile

Department of Geoinformatics

Name:	Dr.rer.nat. Bikash Ranjan Parida	
Designation:	Associate Professor & Head Department of Geoinformatics	
Additional role/ responsibility:	Head since 30 th Jan 2024	
Educational Qualification:	<ol style="list-style-type: none"> 1. Ph.D. in Natural Sci. (Meteorology/ Earth System Modelling), Max Planck Institute for Meteorology, University of Hamburg, Germany (2007-2011) 2. M.Sc. in Geo-information Science & Earth Observation, Faculty of Geo-Information Science and Earth Observation (ITC), University of Twente, The Netherlands (2004-2006) 3. B.Sc. in Agricultural Sciences, University of Agricultural Sciences, Dharwad (2000-2004) 	
Awards/ recognition:	<ol style="list-style-type: none"> 1. Bonn International Fellowship (2025) 2. Best Research Award in CUJ (2022) 3. Sentinels of Science Awards in 2016 (Top10 Reviewers) 4. UGC-FRP under III-cycle (2015) 5. Faculty Excellence award for Research (2013-14), Shiv Nadar University 6. Post-Doctoral Fellowship, UCLA (2011-2012) 7. Max Planck Society Fellowship (2007-11), for undergoing Ph.D. program by International Max Planck Research School on Earth System Modelling (IMPRS-ESM), Germany. 8. ITC Fellowship (short-term) for undergoing M.Sc. program at ITC, The Netherlands. 	
Area of Interest:	<ol style="list-style-type: none"> 1. Vegetation-Climate-Human Interactions Vegetation-Remote Sensing 2. Land Carbon and Nutrients Cycling Modelling Emissions viz. CO₂, N₂O, CH₄ 3. Drought Monitoring & Forecasting Other natural disasters viz. Forest fire, Land degradation 4. Environmental issues like Ground water depletion and Hydrology 5. Satellite Earth Observations Hyperspectral 	

	remote sensing applications 6. GeoAI, Machine Learning Techniques (RF, SVM) Statistical Computing in R, GEE & Python 7. Applications of Geographical Information Systems and Remote-Sensing in agriculture	
Courses Taught:	1. Elements of Surveying Engineering Hydrology Fluid Mechanics 2. Remote Sensing & Image Interpretation 3. Digital Image Processing Hyperspectral Imaging 4. Principles of Cartography and GIS 5. The Climate System and Climate Change 6. Remote sensing & GIS applications in Agriculture, Forestry, and Disaster mitigation 7. Solid Waste Management & Urban Remote Sensing	
Contact:	+91-8130848255	
Email:	bikash.parida@cuja.ac.in, bikashrp143@gmail.com	

Brief introduction: max. 200 words

Dr.rer.nat. Bikash Ranjan Parida is Associate Professor since January 2024. He previously served as Assistant Professor (UGC-FRP) at Central University of Jharkhand (CUJ) since September 2016. Prior to joining CUJ, he was employed at various premium institutes such as Shiv Nadar University (SNU, Institution of Eminence) during 2012-2016, University of California Los Angeles (UCLA) (postdoc during 2011-2012), Max-Planck-Institut für Meteorologie, Hamburg, Germany (2007-2011), and Asian Institute of Technology (AIT), Bangkok, Thailand. He has been involved in Earth and Environmental studies specifically solving the environmental problems using space-based technologies and climate modeling. He is interested in cross cutting activities related to atmosphere-land surface exchange processes (surface water, energy, carbon fluxes etc.), carbon cycling modeling, application areas in agriculture, forest and natural resources monitoring and assessment, and climate change.

Academic Experiences:

1. Associate Professor & Head at at Central University of Jharkhand (CUJ) (Since Jan 2024)
2. Assistant Professor (UGC-FRP) at Central University of Jharkhand (CUJ) (Sep. 2016- Jan. 2024)
3. Assistant Professor, Department of Civil Engineering & Center for Environmental Sciences & Engineering (CESE), Shiv Nadar University (SNU) – Aug. 2012 to Aug. 2016.
4. Postdoctoral Scholar, Institute of the Environment, University of California, Los Angeles (UCLA), USA - Aug. 2011 to July 2012.
5. Research Scientist at Max-Planck-Institut für Meteorologie, Hamburg, Germany (June 2011)
6. Research Associate, Geoinformatics center, Asian Institute of Technology (AIT), Bangkok, Thailand - July 2006 to June 2007.

Number of Papers in Journals: 81

International Fellowship: Received Bonn International Fellowship (2025)

ORCID: <https://orcid.org/0000-0001-7444-573X>

IRINS : <https://cuj.irins.org/profile/108441>

Google Scholar : <https://scholar.google.co.in/citations?user=7JwmyoAAAAJ&hl=en>

Scopus ID : 23989756500

Service Period : Date of joining Sep, 2016 - Present

Administrative responsibilities (with active period) With duration:

1. Head of Department of Geoinformatics at CUJ (30 Jan 2024 onwards)
2. Dept Hardware/ Software-in-Charge, Dept of Geoinformatics, CUJ (Since Jan 2024)
3. Training & Placement Cell, Department Coordinator (2022 onwards)
4. Indian Society of Geomatics (ISG), Secretary of Ranchi Chapter (2022-onwards)
5. Admission Committee Members in Department of Geoinformatics (2017-2024)
6. Member, Board of School, SNRM (2024 onwards); Board of Studies (BoS), DGI (2021-2023)
7. JEE/ CTET/NET/NEET Observer (NTA/CBSE) in 2018, 2019 and 2022
8. Doctoral Research Committee (DRC)/ RAC, CUJ (2018 onwards)
9. Course In-charge Int.Mtech Batch 2016, CUJ (July, 2016 onwards)/ Departmental Admission Committee
10. Indian Society of Geomatics (ISG), Treasurer of Ranchi Chapter (2017-2022)
11. Member of Result Committee, SNU (2012-14) | Postgraduate Prog. Coordi., SNU (2015-16)

Articles Published/ Accepted:

Year wise: Projects details, Research publications *etc.*

Project (Ongoing) during 2022 onwards

1. Bikash Parida (Co-PI) received a research Grant of Rs. **39,20,040/-** from **IIRS-ISRO**. Permafrost destabilization induced mass wasting vulnerable zones modelling in higher Himalayan regions (Bhagirathi-Alaknanda Valley) through Snow cover-climate-terrain interactive mechanism employing Deep Learning techniques". (Duration 3 years (**2022-2025**); Status: **Ongoing**)

Project (Completed) before 2022

2. Bikash Parida (Co-PI) received a research Grant of Rs. 19,00,000/- in collaboration with ISI, Kolkata for the project titled "Machine Learning based Global Terrestrial Gross Primary Productivity (GPP) Model Development" (Duration 4 years (2020-2023); Status: Completed)
3. Bikash Parida (PI) received a research Grant of Rs. 16,56,000/- from SERB (DST) on Nov 2015 for the project titled "Climate and Non-climatic Drivers of Ecosystem Change" (**Project Reference No.: YSS/2015/000801**; Duration 4 years (2015-2019); Status: Completed)
4. Bikash Parida (PI), A.C. Pandey (Co-PI) and A. Kumar (Co-PI) received a research Grant of Rs. 24.03 Lakhs from SAC, ISRO for the project titled "Flood prognosis and inundation mapping using Airborne SAR (L bands) imags" (**Project Reference No.: HYD-03 EPSA/3.1.1./2017**; Duration 3 years (2018-2021); Status: Completed)
5. Bikash Parida (PI) received a research Grant of Rs. 6 Lakhs from UGC-FRP for the project titled "Modeling terrestrial carbon dynamics using LUE-based

model" (Project Reference No.: F. 4-5(209-FRP)/2015/BSR; Duration 3 years (2018-2021); Status: Completed)

Research publications: 81

Articles in Journals (Published/ Accepted) {Style of paper should be typed as given below}

In 2025 (04)

- 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]

In 2024 (10)

- 5) 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]
- 6) 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>
- 7) 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)

- 8) 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]
- 9) 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]
- 10) 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]
- 11) S.B. Tarate, N. R. Patel, A. Danodia, S. Pokhariyal and B.R. Parida* (2024). Geospatial technology for sustainable agricultural water management in India -A Systematic Review. *Geomatics*, 4(2), 91-122. <https://doi.org/10.3390/geomatics4020006> [ISSN: 2673-7418]
- 12) 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]
- 13) 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]
- 14) 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]

In 2023 (08)

- 15) 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*. <https://doi.org/10.1007/s41976-023-00100-0> (Scopus Cite-Score 4.9) [ISSN: 2520-8209]
- 16) 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].
- 17) Dwivedi, C.S.; Pampattiwar, S.T.; Pandey, A.C.; Parida*, B.R.; 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]
- 18) 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]
- 19) 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*, na, 1-13. <https://doi.org/10.1007/s42965-023-00304-x> [IF 1.333] [ISSN: 0564-3295]
- 20) 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]
- 21) M. K. Munda and B.R. Parida* (2023). Soil moisture modeling over Agricultural Fields using C-band Synthetic Aperture Radar and modified Dubois Model. *Applied Geomatics*, 1-12. <https://doi.org/10.1007/s12518-023-00489-9> [ISSN: 1866-928X] (Scopus Cite-Score 4.1)
- 22) 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 4.732).

In 2022 (14)

- 23) A.C. Pandey, N. Kumari, S. Ahmad, A. Kumar, P. Saikia, B. Parida, S.K. Chaudhary, N. Lele (2022). Evaluating Biochemical and Biophysical Characteristics of Tropical Deciduous Forests of Eastern India Using Remote Sensing and In-situ Parameter Estimation. *Remote Sensing Applications: Society and Environment (RSASE)*, 29, 100909. <https://doi.org/10.1016/j.rsase.2022.100909> (Scopus Cite-Score 5.0)
- 24) A.C. Pandey, T. Ghosh, B.R. Parida*, C.S. Dwivedi, R.K. Tiwari (2022). Modeling Permafrost Distribution Using Geoinformatics in the Alaknanda Valley, Uttarakhand, India. *Sustainability*, 14(23), 15731. <https://doi.org/10.3390/su142315731> [IF 3.889]
- 25) S. Bar, B.R. Parida, A.C. Pandey, N. Kumar (2022). Pixel-based long-term (2001-2020) estimations of forest fire emissions over the Himalaya. *Remote Sensing*, 14(21), 5302. <https://doi.org/10.3390/rs14215302> [IF 5.349]
- 26) V. Sood, R.K. Tiwari, S. Singh, R. Kaur, B.R. Parida, (2022). Glacier Boundary Mapping using Deep Learning Classification over Bara Shigri Glacier in Western Himalayas. *Sustainability*, 14, 4210. <https://doi.org/10.3390/su142013485> [IF 3.889]
- 27) 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.* <https://doi.org/10.1007/s41976-022-00076-3> [ISSN: 2520-8209]

- 28) 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*, 19, 100832. <https://doi.org/10.1016/j.gsd.2022.100832> [Cite Score 7.9] [ISSN: 2352-801X]
- 29) A.K. Ranjan, B.R. Parida, Jadunadan 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*, 71, 101812. <https://doi.org/10.1016/j.ecoinf.2022.101812> [IF 4.498] [ISSN:1574-9541]
- 30) Singh, N., Shekhar, M., B. R. Parida, 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 3.498] [ISSN: 2296-6463]
- 31) 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*, 101697. <https://doi.org/10.1016/j.ecoinf.2022.101697> [IF 3.142] [ISSN:1574-9541]
- 32) 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 and Assessment*, 194 (6). <https://doi.org/10.1007/s10661-022-10076-x> [IF 2.513] [ISSN: 0167-6369]
- 33) 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 3.417]
- 34) A.C. Pandey. K. Kaushik, B.R. Parida* (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 3.251]
- 35) 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 1.137]
- 36) 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 3.251]

In 2021

- 37) B.R. Parida*, A. Kumari (2021). Mapping tea plantations dynamics during 2000–2020 and monitoring biophysical attributes using multi-temporal satellite data in North Bengal (India). *Arab J Geosci* 14, 2096 (2021). <https://doi.org/10.1007/s12517-021-08468-3> [IF: 1.985]

- 38) M. Marandi, B.R. Parida*, S. Ghosh (2021). Retrieving vegetation biophysical parameters and GPP using satellite-driven LUE model in a National Park. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-021-01815-0> [IF: 3.219]
- 39) B.R. Parida*, S. Bar, D. Kaskaoutis, A.C. Pandey, S. D. Polade, S. Goswami (2021). Impact of COVID-19 induced lockdown on Land Surface Temperature, aerosol, and urban heat in Europe and North America. *Sustainable Cities and Society*, 75, 103336. <https://doi.org/10.1016/j.scs.2021.103336> [IF 7.587]
- 40) J. S. Chakraborty, B.R. Parida, N. Singh (2021). Future Food Sustainability Can Be Traced Back into Local People's Socio-Cultural Roots in Uttarakhand Himalaya, India. *Sustainability (MDPI)*, 13, 1-18. <https://doi.org/10.3390/su13137060> [IF 2.576]
- 41) S. Bar, B.R. Parida*, SP. Mandal, A.C. Pandey, N. Kumar, B. Mishra (2021). Impacts of partial to complete COVID-19 lockdown on NO₂ and PM_{2.5} levels in major cities of Europe and USA. *Cities*. <https://doi.org/10.1016/j.cities.2021.103308> . IF 5.008]
- 42) Singh, N., Shekhar, M., Parida, B. R., Gupta, A. K., Sain, K., Rai, S. K., Bräuning, A., Sharma, V., and Tiwari, R. K. (2021) Tree-ring oxygen isotope based inferences on winter and summer moisture dynamics over the glacier valleys of Central Himalaya, *Clim. Past Discuss.* [preprint], <https://doi.org/10.5194/cp-2021-53> , in review, 2021.
- 43) 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> [IF 5.735]
- 44) B.R. Parida, A. Kushwaha, A.K. Ranjan (2021). Synergy of Sentinel-2A and Near-proximal sensor data for deriving biochemical parameters of paddy at different growth stages. *Environment, Development and Sustainability*. [IF: 2.19] <https://doi.org/10.1007/s10668-021-01482-1>
- 45) Kashyap, R., Pandey, A.C. & Parida, B.R (2021). Spatio-temporal variability of monsoon precipitation and their effect on precipitation triggered landslides in relation to relief in Himalayas. *Spatial Information Research*. <https://doi.org/10.1007/s41324-021-00392-8>
- 46) B.R. Parida, G. Tripathi, A.C Pandey and A. Kumar (2021). Estimating Floodwater depth using SAR-derived Flood inundation maps and Geomorphic model in Kosi River Basin (India). *Geocarto International*. <https://doi.org/10.1080/10106049.2021.1899298> [IF 3.789]
- 47) S. Kumar and B.R. Parida (2021). Hydroponic farming hotspot analysis using the Getis-Ord G_i^* statistic and high-resolution satellite data of Majuli Island, India. *Remote Sensing Letter*. DOI: [10.1080/2150704X.2021.1895446](https://doi.org/10.1080/2150704X.2021.1895446) [IF 2.2298]
- 48) B.R. Parida and S. Singh (2021). Spatial mapping of winter wheat using C-band SAR (Sentinel-1A) data and Yield prediction in Gorakhpur district, Uttar Pradesh (India). *J. Of Spatial Sciences*. <https://doi.org/10.1080/14498596.2021.1896393> [IF 1.489]
- 49) B.R. Parida, A. Kumar, A.K. Ranjan (2021). Crop types discrimination and yield prediction using Sentinel-2 data and AquaCrop model in Hazaribagh

district, Jharkhand. *KN J. Cartogr. Geogr. Inf.* [DOI: 10.1007/s42489-021-00073-4](https://doi.org/10.1007/s42489-021-00073-4). [ISSN:2524-4957] (Scopus Cite-Score 0.9)

- 50) S.Bar, B.R. Parida, Gareth Roberts, A.C. Pandey, P. Acharya and J. Dash (2021). Spatio-temporal characterization of landscape fire in relation to anthropogenic activity and climatic variability over the Western Himalaya, India. *GIScience & Remote Sensing*, 1-19. [DOI: 10.1080/15481603.2021.1879495](https://doi.org/10.1080/15481603.2021.1879495). [IF 5.965]

In 2020 & before

- 51) A.K. Ranjan and B.R. Parida (2020). Predicting Paddy Yield at Spatial Scale using Optical and Synthetic Aperture Radar (SAR) based Satellite Data in conjunction with Field-based Crop Cutting Experiment (CCE) data. *Int. J. of Remote Sensing*, 42(6), 2046-2071. [IF 2.976]
- 52) V. Anand, Oinam B, B.R. Parida (2020). Uncertainty in hydrological analysis using multi-GCM predictions and multi-parameters under RCP 2.6 and 8.5 scenarios in Manipur River basin, India. *J. Of Earth System Science*, 129 (223), 1-15. [IF 1.646]
- 53) B.R. Parida, S. Bar, N. Singh, B. Oinam, A.C Pandey, and M. Kumar (2020). A short-term decline in anthropogenic emission of CO₂ in India due to COVID-19 confinement. *Progress in Physical Geography: Earth and Environment*, 1-17. DOI: 10.1177/0309133320966741. [IF 4.777]
- 54) B.R. Parida and A. Kumari (2020). Mapping and modeling mangrove biophysical and biochemical parameters using Sentinel-2A satellite data in Bhitarkanika National Park, Odisha. *Modeling Earth Systems and Environment*, 1-12. DOI: 10.1007/s40808-020-01005-3.
- 55) B.R. Parida and P. Kumar (2020). Mapping and dynamic analysis of mangrove forest during 2009–2019 using landsat–5 and sentinel–2 satellite data along Odisha Coast. *Tropical Ecology*, 61, 538–549. [IF 0.972] [ISSN: 0564-3295]
- 56) B.R. Parida, A.C Pandey, and N.R Patel (2020). Greening and Browning Trends of Vegetation in India and Their Responses to Climatic and Non-Climatic Drivers. *Climate, MDPI*, 8, 92, 1-29. (Scopus Cite-Score 3.2)
- 57) S. Ahmad, A.C Pandey, A. Kumar, B.R. Parida, N.V. Lele, and B.K. Bhattacharya (2020). Chlorophyll deficiency (Chlorosis) detection based on spectral shift and yellowness index using hyperspectral AVIRIS-NG data in Sholayar reserve forest, Kerala. *Remote Sensing Applications: Society and Environment (RSASE)*, 19, 1-10, 100369. (Scopus Cite-Score 3.2)
- 58) B.R Parida* and S.P Mandal (2020). Polarimetric decomposition methods for LULC mapping using ALOS L-band PolSAR data in Western parts of Mizoram, Northeast India. *SN Applied Sciences*, 2, 1049, 1-15.
- 59) S. Bar and B.R. Parida and A.C Pandey (2020). Landsat-8 and Sentinel-2 based Forest fire burn area mapping using machine learning algorithms on GEE cloud platform over Uttarakhand, Western Himalaya. *Remote Sensing Applications: Society and Environment (RSASE)*, 18, 100324, 1-11. [ISSN: 2352-9385] (Scopus Cite-Score 3.2)
- 60) G. Tripathi, A.C Pandey, B.R. Parida and A. Kumar (2020). Flood inundation mapping and impact assessment using multi-temporal Optical and SAR

satellite data: A case study of 2017 Flood in Darbhanga district, Bihar, India, *Water Resources Management*, 34 (6), 1871-1892. [IF 3.209] [ISSN: 0920-4741]

- 61) A.K. Ranjan and B.R. Parida (2020). Estimating biochemical parameters of paddy using satellite and near-proximal sensor data in Sahibganj Province, Jharkhand (India). *Remote Sensing Applications: Society and Environment (RSASE)*, 18, 100293, 1-12. [ISSN: 2352-9385] (Scopus Cite-Score 3.2)
- 62) NR Patel, A. Mukund, B.R. Parida* (2019). Satellite-derived Vegetation Temperature Condition Index to infer root zone soil moisture in semi-arid province of Rajasthan, India. *Geocarto International*, 35 (1), 1-18. [IF 3.789]
- 63) N. Singh, B.R. Parida*, JS Charakborty, NR Patel (2019). Net ecosystem exchange of CO₂ in deciduous pine forest of lower western Himalaya, India. *Resources*, 8(2), 98, 1-20. [ISSN: 2079-9276] (Scopus Cite-Score 3.5)
- 64) Tripathi G, B.R. Parida* and A.C Pandey (2019). Spatio-temporal rainfall variability and flood prognosis analysis using satellite data over North Bihar during the August 2017 flood event, *Hydrology*, 6(2), 38, 1-20. [ISSN: 2306-5338] (Scopus Cite-Score 3.2)
- 65) B.R. Parida* and A.K. Ranjan (2019). Wheat acreage mapping and yield prediction using Landsat 8-OLI satellite data: A case study in Sahibganj province, Jharkhand (India). *Remote Sens. in Earth Systems Sci.*, 2 (2), 96-107. <https://doi.org/10.1007/s41976-019-00015-9>
- 66) A.K. Ranjan and B.R. Parida* (2019). Paddy Acreage Mapping and Yield Prediction Using Sentinel-based Optical and SAR Data in Sahibganj district, Jharkhand (India). *Spatial Information Research*, 27(4), 399-410. <https://doi.org/10.1007/s41324-019-00246-4>.
- 67) Singh N, B.R. Parida* (2019). Environmental Factors Associated with Seasonal Variations of Night-time Plant Canopy and Soil Respiration Fluxes in Deciduous Conifer Forest, Western Himalaya, India. *Trees*, 33 (2), 599-613. <https://doi.org/10.1007/s00468-018-1804-y> [IF 2.256]
- 68) S.S. Singh, B.R. Parida* (2018). Satellite-Based Identification of Aquaculture Farming over Coastal Areas around Bhitarkanika, Odisha Using a Neural Network Method. *Proceedings, MDPI*, 2(7), 331.
- 69) B.R. Parida*, S.N. Behera, B. Oinam, N.R. Patel, and R.N. Sahoo (2018). Investigating the effects of episodic Super-cyclone 1999 and Phailin 2013 on hydro-meteorological parameters and agriculture: An application of remote sensing. *Remote Sensing Applications: Society and Environment (RSASE)*, 10, 128-137. (Scopus Cite-Score 3.2)
- 70) B.R. Parida*, S.N. Behera, B. Oinam, A.C. Pandey and N. Singh (2017). Evaluation of satellite-derived Rainfall Estimates for an Extreme Rainfall Event over Uttarakhand, Western Himalayas. *Hydrology, MDPI*, 4(2), 22. (Scopus Cite-Score 3.2)
- 71) W. Buermann, C. Beaulieu, B.R. Parida, D. Medvigy, G.J. Collatz, J. Sheffield and J.L. Sarmiento (2016). Climate-driven shifts in continental net primary production implicated as a driver of a recent abrupt increase in the land carbon sink. *Biogeosciences*, 13, 1597-1607. [IF 4.194]
- 72) B.R. Parida* and B. Oinam (2015). Unprecedented drought in North East India compared to Western India. *Current Science*, 109 (11), 2121-2126. [IF 0.725]
- 73) B.R. Parida and W. Buermann (2014). Increasing Summer Drying in North

- American Ecosystems in Response to Longer Non-frozen Periods. *Geophys. Res. Lett.*, 41(15), 5476-5483. [IF 4.58]
- 74) 25. N. Singh, N.R. Patel, B.K. Bhattacharya, P. Soni, B.R. Parida and J.S. Parihar (2014). Analyzing the Dynamics and Inter-Linkages of Carbon and Water Fluxes in Subtropical Pine (*Pinus roxburghii*) Ecosystem. *Agricultural and Forest Meteorology*, 197, 206-218. [IF 5.142]
- 75) 26. W. Buermann, B.R. Parida, M. Jung, G.M. MacDonald, C.J. Tucker, M. Reichstein (2014). Recent Shift in Eurasian Boreal Forest Greening Response May be Associated with Warmer and Drier Summers. *Geophys. Res. Lett.*, 41, 1995-2002. [IF 4.58]
- 76) 27. W. Buermann, B.R. Parida, M. Jung, D. H. Burn, and M. Reichstein (2013). Earlier springs decrease peak summer productivity in North American boreal forests. *Environ. Res. Lett.*, 8, 024027 (10pp). [IF 6.096] [ISSN: 1748-9326]
- 77) 28. D.S. Goll, V. Brovkin, B.R. Parida, C.H. Reick, J. Kattge, P. B. Reich, P.M. vanBodegom and U. Niinemets (2012). Nutrient limitation reduces land carbon uptake in simulations with a model of combined carbon, nitrogen and phosphorus cycling. *Biogeosciences*, 9, 3547-3569. [IF 4.194]
- 78) 29. N.R. Patel, B.R. Parida, V. Venus, S.K. Saha and V.K. Dadhwal (2012). Analysis of agricultural drought using vegetation temperature condition index (VTCI) from Terra/MODIS satellite data. *Environ. Monitoring & Assessment*, 184 (12), 7153-7163. [IF 2.273]
- 79) 30. B.R. Parida*, W.B. Collado, R. Borah, M.K. Hazarika and L. Samarakoon (2008). Detecting Drought-Prone Areas of Rice Agriculture Using a MODIS-Derived Soil Moisture Index. *GIScience & Remote Sensing*, 45(1), 109-129. [IF 5.965]
- 80) B.R. Parida*, B. Oinam, N.R. Patel, N. Sharma, M.K. Hazarika and R. Kandawal (2008). Land Surface Temperature Variation in relation to Vegetation Types using MODIS Satellite Data in Gujarat state of India. *International J. of Remote Sensing*, 29(14), 4219-4235. [IF 2.976]
- 81) B.R. Parida*, B. Oinam (2008). Drought Monitoring In India and Philippines with Satellite Remote Sensing Measurements. *EARSeL eProceedings*, 7(1), 81-91. (Scopus Cite-Score 1.00) <http://www.eproceedings.org>, <https://www.scopus.com/sourceid/21100830171>

Books and Book Chapters (Published)

For Book

1. Handbook of “**Himalayan Ecosystems and Sustainability**” (2022), Volume 1: *Spatio-Temporal Monitoring of Forests and Climate*. Edited by B.R. Parida, A.C Pandey, M.D. Behera and N. Kumar. CRC Press, Taylor & Francis, Group. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383>
2. Handbook of “**Himalayan Ecosystems and Sustainability**” (2022), Volume 2: *Spatio-Temporal Monitoring of Water Resources and Climate*. Edited by B.R. Parida, A.C Pandey, M.D. Behera and N. Kumar. CRC Press, Taylor & Francis, Group. ISBN 9781032203157. <https://doi.org/10.1201/9781003265160>

For Book Chapter (25)

1. Sourav Kumar and Bikash Ranjan Parida* (2025). Crop Insurance Using Geo-Information - A Strategy For Climate Change Mitigation. "Sustainable Development Perspectives in Earth Observation." edited by Mukunda Behera, Swadhin Behera, Saroj Kanta Barik, Mrutyunjaya Mohapatra, Trilochan Mohapatra, ISBN: 9780443140723, eBook ISBN: 9780443140730, Elsevier. <https://shop.elsevier.com/books/earth-observation/behera/978-0-443-14072-3>
2. T. Ghosh, AC Pandey*, B.R. Parida, CS Dwivedi and Reetkamal Tiwari (2024). Permafrost-induced hazard zonation using satellite data-driven multi-parametric approach employing AHP techniques in Alaknanda valley, Uttarakhand, India. "Geo-information for Disaster Monitoring and Management", Edited by P.C. Pandey, R Kumar, M. Pandey, G. Giuliani, R.K. Sharma, and P.K. Srivastava, Springer, Cham, pp 165–180. https://doi.org/10.1007/978-3-031-51053-3_8 (ISSN: 978-3-031-51052-6)
3. K. Kaushik, A.C. Pandey, B. R. Parida, N. Kumar (2022). Flood monitoring and assessment over the Himalayan River catchment. "Himalayan Ecosystems & Sustainability Vol. 2: Spatiotemporal Monitoring of Water Resources and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203157. <https://doi.org/10.1201/9781003265160-6>
4. G. Tripathi, B. S. Phulwari, B. R. Parida*, A. C. Pandey, and M. D. Behara (2022). Flood Inundation and floodwater depth mapping using Synthetic Aperture Radar data in Gandak river basin. "Himalayan Ecosystems & Sustainability Vol. 2: Spatiotemporal Monitoring of Water Resources and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203157. <https://doi.org/10.1201/9781003265160-7>
5. S. Kumar, A. Prakash, S. Kumar, B.R. Parida (2022). Effects of Land-Use Land-Cover Changes on Surface Temperature and Urban Heat Island over Kathmandu District in Nepal. "Himalayan Ecosystems & Sustainability Vol. 2: Spatiotemporal Monitoring of Water Resources and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203157. <https://doi.org/10.1201/9781003265160-17>
6. S.P. Mandal, A.K. Ranjan, B.R. Parida, S.N. Behera (2022). Assessing Aerosol and Nitrogen Dioxide Concentrations in Major Urban Cities over the Himalayan Region during the COVID-19 Lockdown Phases. "Himalayan Ecosystems & Sustainability Vol. 2: Spatiotemporal Monitoring of Water Resources and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203157. <https://doi.org/10.1201/9781003265160-18>
7. S.N. Behera, B.R. Parida, J. K. Tripathi, M. Sharma (2022). Development of Spatially Distributed GIS-Based Emission Inventory of Particulate Matter From Anthropogenic Sources over India and Assessment of Trends of Pollution. "Himalayan Ecosystems & Sustainability Vol. 2: Spatiotemporal Monitoring of Water Resources and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203157. <https://doi.org/10.1201/9781003265160-19>
8. A.K. Singh, S.N. Behera, M. Sharma, B.R. Parida (2022). Spatial Distribution of Particulate Organic Carbon over India and the Prediction of Its Deposition in the Himalayas through the GIS-WRF-CAMx Modeling System. "Himalayan Ecosystems & Sustainability Vol. 2: Spatiotemporal Monitoring of Water Resources and Climate"

- Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203157. <https://doi.org/10.1201/9781003265160-20>
9. B.R. Parida*, P. Kumar, J.S. Chakraborty, N. Bag, and N. Kumar (2022). Dynamics of Land Use/Land Cover over Indian Himalayan Region (IHR) Using Satellite Data from 1985 to 2015 Coupled with Local Perceptions. "Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-2>
 10. M.D Behera and B.R. Parida (2022). Corroborating Satellite-Derived Forest Types Distribution and Diversity in the Subansiri Region of the Eastern Himalaya, India. "Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-5>
 11. A. Kumari, B.R. Parida*, S. Ghosh (2022). Monitoring Tea Plantations Dynamics Using Satellite Data between 2000 and 2020 in Dooars Regions of Himalaya. "Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-6>
 12. S.Bar, B.R. Parida*, J. Dash (2022). Disentangle the Short-Term Forest Degradation over Most Fire-Affected Parts of Western Himalaya, India. "Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-7>
 13. T. Joesph, M.D. Behera, P. Tripathi, B.R. Parida (2022). Effect of Terrain Slope in Canopy Height Estimate Using LiDAR Data. "Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-8>
 14. S. Kumar, B.R. Parida*, M.D. Behera, N. Singh (2022). Estimating GPP over Croplands Using PlanetScope High- Resolution Satellite Data, Vegetation Index, and Photosynthetically Active Radiation on Majuli Islands in Assam. "Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-12>
 15. S. Mandal, P. Das, M.D. Behera, B.R. Parida (2022). Himalayan Carbon Flux Demonstrates Higher Aseasonality GOSAT-Derived Spatio-Temporal Profile and Comparison through Wind and Water Vapour. "Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-13>
 16. B.R. Parida*, S. Sparsha, S. Bar, A.C. Pandey, N. Kumar (2022). Monitoring Land Use/Land Cover Change and High-altitude Vegetation Trends along with Their Climatic Controls across the Central and Eastern Himalayas. "Himalayan Ecosystems &

- Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate*" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-15>
17. R. Kashyap, A.C. Pandey, B.R. Parida (2022). Climate Forcing on Photosynthetic Variability across Various Relief Zones in the Himalaya. "*Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate*" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-16>
 18. S. Bar, B.R.Parida*, A.C. Pandey S. K. Panda (2022). Changing Forest Fire Regime in Relation to Climatic Conditions over Western and Eastern Himalaya, India. "*Himalayan Ecosystems & Sustainability Vol. 1: Spatio-Temporal Monitoring of Forests and Climate*" Edited by B. R. Parida, A. C. Pandey, M. D. Behara, and Navneet Kumar, CRC Press, Taylor & Francis. ISBN 9781032203140. <https://doi.org/10.1201/9781003268383-19>
 19. B.R. Parida, A.C. Pandey*, S. Kumar, and G. Tripathi (2022). Comparative flood area analysis based on Change Detection and Binarization methods using Sentinel-1 synthetic aperture radar data. "Radar Remote Sensing: Application and Challenges" Edited by P. K. Srivastava, DK Gupta, T Islam, D Han, R Prasad, Elsevier Inc, pp 93-108, ISBN: 9780128234570. <https://doi.org/10.1016/B978-0-12-823457-0.00001-X>
 20. A.C Pandey, B.R. Parida, S. Bhattacharjee, T. Priya, Wasim, M. Salim, R Kashyap (2021). Factors Associated with COVID-19 and Predictive Modelling of Spread Across Five Urban Metropolises in the World. In: Kautish S., Peng SL., Obaid A.J. (eds) Computational Intelligence Techniques for Combating COVID-19. EAI/Springer Innovations in Communication and Computing. Springer, Cham, pp 257-273. ISBN: 9783030689353. https://doi.org/10.1007/978-3-030-68936-0_13
 21. Tripathi G, A.C Pandey, B.R. Parida, and A. Shakya (2020). Comparative Flood Inundation Mapping Utilizing Multi-Temporal Optical and SAR Satellite Data Over North Bihar Region: A Case Study of 2019 Flooding Event Over North Bihar (Chapter 8, pp 149-168), in *Spatial Information Science for Natural Resource Management*, IGI Global. ISBN: 9781799850274. <https://doi.org/10.4018/978-1-7998-5027-4.ch008>
 22. **B.R. Parida** and W. Buermann (2016). Book chapter on "*Longer Growing Season Decreases Peak Summer Vegetation Productivity In North American Ecosystems*", Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment: Challenges, Processes and Strategies edited by N.J. Raju, Springer International Publishing, pp. 421-426, **ISBN 9783319186627**.
 23. **B.R. Parida** and W Buermann (2014), abstract booklet on "*Peak Summer Vegetation Greenness Decreases Across Northern America*", Agriculture Sustainability, Food Engineering, Sustainable Environment and Biotechnological Sustainability edited by G.C. Mishra, R Singh, B.B Singh, and U Mina, Excellent Publishing House, **ISBN 978-9383083657**.

Seminar/ Workshop/ Conference Participation:	<p>{Style of seminar/ workshop/ conference should be typed as given below}</p> <ol style="list-style-type: none"> 1. B. Kanu and BR Parida (2024). Monitoring Tropical Forest Dynamics in Northeastern Himalayas and its Health using Multi-temporal Satellite data. The 5th International Electronic Conference on Remote Sensing (ECRS), 07-21 November 2023, Remote Sensing, MDPI publisher. 2. B.U. Shankar, D.P. Sarkar, BR Parida (2024). Modeling GPP with Machine Learning Algorithms using multisource features based on fluxnet data. IEEE 2024 9th International Conference for Convergence in Technology (I2CT), 5-7 April, 2024, Pune, India. 3. BR Parida, M. Kumar, AC Pandey (2023). "Retrieval of Surface Soil Moisture from Spaceborne Synthetic Aperture Radar (SAR) and Optical Sensors for Crop Planning in India" at 3rd International Workshop on Biodiversity and Climate Change (BDCC)-Sustainable Development Perspective, February 16-19, 2023. IIT Kharagpur, India. 4. S. Bar, BR Parida, P Acharya (2023). "A Segmenting Approach to Explain the Anthropogenic and Natural Induced Variability in Forest Fire Intensity through Machine Learning " at 3rd International Workshop on Biodiversity and Climate Change (BDCC)-Sustainable Development Perspective, February 16-19, 2023. IIT Kharagpur, India. 5. AK. Ranjan, BR Parida, J. Dash, AK Gorai (2023). "Deciphering Vegetation Cover Loss and Threat to Ecological Services in Response to Large-Scale Stone Quarrying Over Rajmahal Hills in Jharkhand (India)" at 3rd International Workshop on Biodiversity and Climate Change (BDCC)-Sustainable Development Perspective, February 16-19, 2023. IIT Kharagpur, India. 6. AK. Ranjan, BR Parida, J. Dash, AK Gorai (2023). "Leveraging The Potential of High-Resolution Sentinel-2 Satellite Data for Foliar Dust Approximation in Coal Mining Regions: Opportunities and Challenges" at 3rd International Workshop on Biodiversity and Climate Change (BDCC)-Sustainable Development Perspective, February 16-19, 2023. IIT Kharagpur, India. 7. S. Bar, BR Parida, AC Pandey (2022). Altering forest fire regime due to changing climatic pattern over south and central Indian Agro-climatic regions. Souvenir Cum Abstract Volume of International Conference on <i>Geospatial Pathways and Big Data Analytics in Natural Resource Applications and Climate Change</i>, June 16-17, 2022. Editors: B.R. Parida, C.S. Dwivedi, and A.C. Pandey. Report No. 01/Department of Geoinformatics, Central University of Jharkhand, Ranchi, India. 8. AK. Ranjan, BR Parida, AK Gorai (2022). Long-term vegetation dynamics assessment over opencast mining dominated regions in Eastern India using time-series Landsat satellite data. Souvenir Cum Abstract Volume of International Conference on <i>Geospatial Pathways and Big Data Analytics in Natural Resource Applications and Climate Change</i>, June 16-17, 2022. Editors: B.R. Parida, C.S. Dwivedi, and A.C. Pandey. Report No. 01/Department of Geoinformatics, Central University of Jharkhand, Ranchi, India. 9. D.P. Sarkar, B.U. Shankar, BR Parida (2022). GPP Estimation using Random Forest Model: A Machine Learning Approach. Souvenir Cum Abstract Volume of International Conference on <i>Geospatial Pathways and Big Data Analytics in Natural Resource Applications and Climate Change</i>, June 16-17, 2022. Editors: B.R. Parida, C.S. Dwivedi, and A.C. Pandey. Report No. 01/Department of Geoinformatics, Central University of Jharkhand, Ranchi, India.
---	---

10. AK. Ranjan, BR Parida, AK Gorai (2022). Evaluating impacts of opencast mining activity on vegetation dynamics and mining heat island using time-series (2000–2020) satellite data. *The 4th International Electronic Conference on Remote Sensing (ECRS)*, 25-27 January 2022, Remote Sensing, MDPI publisher.
11. S. Sparsha, BR Parida* (2021). Long-term trends of LAI and climatic variables during 2000-2020 to investigate changes in vegetation pattern in response to climate in Northeast region. *National Symposium on i-GEOMATICS: An Integrated Technology to Empower Citizens Towards Self Reliant Nation*, 15 - 17 December 2021, Ludhiana, Punjab, India.
12. AK. Ranjan, BR Parida, J. Das, AK Gorai (2021). Quantifying vegetation disturbance using time-series Landsat satellite data in mining dominated regions over Jharkhand and Odisha state, India. *National Symposium on i-GEOMATICS: An Integrated Technology to Empower Citizens Towards Self Reliant Nation*, 15 - 17 December 2021, Ludhiana, Punjab, India.
13. S. Bar, A.C Pandey, BR Parida (2021). Unfolding the contribution of environmental and anthropogenic variables in forest fire over western Himalayan fire regime. *InGARSS 2021: IEEE India Geoscience and Remote Sensing Symposium (InGRASS)*, 6 - 10 December 2021, SAC Ahmedabad, India. pp. 557-560, <https://doi.org/10.1109/InGARSS51564.2021.9792002>
14. G. Tripathi, A.C Pandey, BR Parida (2021). Flood Frequency Analysis using Era5-Land based Precipitation for Kosi-Mahasetu Station in North Bihar, India. *InGARSS 2021: IEEE India Geoscience and Remote Sensing Symposium (InGRASS)*, 6 - 10 December, 2021, SAC Ahmedabad, India. pp. 53-56, <https://doi.org/10.1109/InGARSS51564.2021.9792046>
15. B.R. Parida, A.C Pandey, and N.R Patel (2020). Spatial-temporal Patterns of vegetation trends and Responses from Climate and Non-climate Factors. National Symposium on Remote Sensing for Environment Monitoring & Climate Change Assessment: Opportunities and Challenges, 18-19 December, 2020 SAC Ahmedabad, India.
16. B.R. Parida, S Bar, and SP Mandal (2020). Satellite-derived Atmospheric NO2 concentration during SARS COVID-19 Pandemic and Its Impact on Air Quality at Global scale. National Symposium on Remote Sensing for Environment Monitoring & Climate Change Assessment: Opportunities and Challenges, 18-19 December, 2020 SAC Ahmedabad, India.
17. G. Tripathi, A.C Pandey, and BR Parida (2020). Rapid monitoring during peak monsoon flood in July-August 2020 over North Bihar plains (India) using SAR data through Google Earth Engine platform. National Symposium on Remote Sensing for Environment Monitoring & Climate Change Assessment: Opportunities and Challenges, 18-19 December, 2020 SAC Ahmedabad, India.
18. Bar, S and Parida, BR (2020). Synergistic association between forest fire burn area and atmospheric pollutants over Uttarakhand and Himachal Pradesh, Western Himalaya. National Symposium on Remote Sensing for Environment Monitoring & Climate Change Assessment: Opportunities and Challenges, 18-19 December, 2020 SAC Ahmedabad, India.
19. G. Tripathi, A.C Pandey, B.R. Parida (2020). Spatio-temporal Analysis Of Turbidity in Ganga River in Patna, Bihar Using Sentinel-2 Satellite data linked with Covid-19 Pandemic. IEEE International India Geoscience and Remote Sensing Symposium, 2-4 December, 2020 Ahmedabad, India.
20. Bar, S and Parida, B (2020). Synergetic relation of Forest fire, vegetation proportion

	and Leaf area index over Western Himalaya. American Geophysical Union, Fall Meeting 2020 (12), USA.
Research Supervision	M.Sc. Dissertation (six months): 26 B.Tech Project (six months): 24 M.Tech Dissertation (one year): 24
PhD Supervision	<p>Awarded (03)</p> <ol style="list-style-type: none"> 1. Mr. Somnath Bar (2018-2023): Thesis entitled “Assessment of Forest fire and its impact on regional atmospheric pollution and forest degradation in parts of Western Himalaya, India”. Awarded on 25 May 2023. 2. Mr. Gaurav Tripathi (2016-2023): Thesis entitled “Flood Inundation Characterization through Remote Sensing for Flood Risk Mapping and Monitoring in parts of North Bihar region, India”. Awarded on 17 November 2023. 3. Mr. Satendra K. Chaudhary (2015-2023): Thesis entitled “Spatio Temporal Evaluation of forest stress through forest fire and forest fragmentation studies with focus on elephant corridor and wildlife habitat”. Awarded on 5 July 2024 <p>Ongoing (03)</p> <ol style="list-style-type: none"> 4. Ms. Shaily Sparsha (2019-present): Thesis entitled “Developing a satellite-driven LUE model in simulating GPP and monitoring implications of climate change on vegetation productivity in Northeast India”. (Ongoing) 5. Ms. Bristi Ghosh (2024--present): Thesis TBD 6. Mr. Manish Kumar (2024--present): Thesis TBD
Program Organized:	<ol style="list-style-type: none"> 1. 4-Day Workshop on Introduction to SAR Data Processing & Applications organised by Central University of Jharkhand, Ranchi and Indian Society of Geomatics (ISG), Ranchi Chapter during 11-14 November 2024. 2. Two Days Programme on “National Technology Day” at Central University of Jharkhand, Ranchi, 11-12 May 2023. (Role: Organising Secretary). 3. Three Days Training Programme on “Application of Geoinformatics and Electrical Resistivity Techniques in Groundwater Investigations” at Central University of Jharkhand, Ranchi, 12-14 April 2023. (Role: Organising Secretary). 4. 3rd International Workshop on Biodiversity and Climate Change -Sustainable Development Perspective, February 16-19, 2023. IIT Kharagpur. (Role: Organizing Committee). 5. 3-Day Online Training Program on "Community Based Disaster Risk Reduction & Management" organized by NIDM, New Delhi and CUJ, Ranchi, on October 26-28, 2022. (Role: Organizing Committee). 6. International Webinar on ‘Higher Education Opportunities in Geospatial Sciences: Trends and Future Perspectives’ organized by Department of Geoinformatics, Central University of Jharkhand, Ranchi, on 18 August. 2022. (Role: Organising Secretary).

	<ol style="list-style-type: none"> 7. Program on 'MODI@20 Dreams Meet Delivery' organized by Department of Geoinformatics, Central University of Jharkhand, Ranchi, on 11 August. 2022. (Role: Organising committee). 8. 3 Days Online Training Program on 'Public Participation for Disaster Risk Management' organized by NIDM, New Delhi and Central University of Jharkhand, Ranchi, on 18-20th July. 2022. (Role: Coordinator). 9. International Conference on "Geospatial Pathways and Big Data Analytics" on 16-17 June 2022, organised by Department of Geoinformatics, Central University of Jharkhand, Indian Society of Geomatics (ISG), Ranchi Chapter, Vigyan Bharati Jharkhand, and International Society for Tropical Ecology (ISTE). (Role: Organising Secretary). 10. Summer Training Program (virtual) on "Spatial Data Programming with R, GEE and Python for Natural Resource Applications" During 02-08 June 2022, organised by Department of Geoinformatics, Central University of Jharkhand, Indian Society of Geomatics (ISG), Ranchi Chapter, and Vigyan Bharati Jharkhand. (Role: Organising Secretary). 11. National Webinar on National Education Policy, NEP 2020: A Paradigm Shift in Education and Future Challenges In Collaboration with NITI Aayog & Bharatiya Shikshan Mandal April 12th, 2021. (Role: Organising committee). 12. National Webinar on Biodiversity Conservation and Disaster Risk Reduction, 26 March, 2021; Jointly Organised by Central University of Jharkhand, Ranchi and National Institute of Disaster Management, New Delhi (Role: Co-convenor). 13. National Webinar on Recent Trends in Geospatial Technology in Earth Resource mapping, 19-20 March, 2021 at Central University of Jharkhand, Ranchi (Role: Organising committee). 14. National Seminar on Anthropogenic Impact on the Environment, Society and Human Health, 30-31 January, 2021 at Central University of Jharkhand, Ranchi (Role: Organising committee). 15. 14. International Conference on Environmental Challenges and Sustainability (ICECS 2018), 31 Oct. to 2 Nov., 2018 at Central University of Jharkhand, Ranchi (Role: Organising committee).
PROFESSIONAL ACTIVITIES	<p>Reviewer in > 50 Journals https://www.webofscience.com/wos/author/record/432058 Some Selected Journals Are:</p> <ol style="list-style-type: none"> a) Env. Science and Pollution Research (1614-7499) Remote Sensing of Env. (0034-4257) b) GIScience & Remote Sensing Physics and Chemistry of the Earth Heliyon (2405-8440) c) Remote Sensing App: Society and Env. (RSASE) (ISSN: 2352-9385) Geocarto int. (1752-0762) d) Environment, Development and Sustainability Earth Systems and Environment (2509-9434) e) Int. J. of Climatology (0899-8418) Climate change (Climatic Change (ISSN: 1573-1480) f) Remote Sensing (ISSN: 2072-4292) Earth Syst. Sci. (ISSN: 0253-4126) Geospatial Information Sci. <p>Journal Guest Editor</p> <ol style="list-style-type: none"> a) Sustainability (ISSN 2071-1050) -2 issues

	<p>b) Tropical Ecology (ISSN: 0564-3295)</p> <p>Open Source Software Package Contribution</p> <p>a) cruts package: Interface to Climatic Research Unit Time-Series (https://cran.r-project.org/web/packages/cruts/cruts.pdf)</p> <p>Research Blog</p> <p>a) <u>Assam: Why Behali Reserve Forest must be declared wildlife sanctuary</u></p> <p>b) Emissions Dataset hosted at https://zenodo.org/records/10565406</p> <p>More info at S. Bar, B.R. Parida, A.C. Pandey, N. Kumar (2022). Pixel-based long-term (2001-2020) estimations of forest fire emissions over the Himalaya. Remote Sensing, 14(21), 5302. https://doi.org/10.3390/rs14215302 [IF 5.349]</p>
<p>Any other information:</p>	<p>Personal Website: https://sites.google.com/view/bikash-parida/</p>
<p>Updated as on</p>	<p>08 Feb. 2025</p>