SCI Journals:

1. Verma, A., & **Agrawal, S.** (2024). Evaluating the natural cooling potential of waterbodies in dense urban landscape: A case study of Bengaluru, India. *Urban Climate*, 58, 102200, DOI: 10.1016/j.uclim.2024.102200 [IF =6.0]
2. Pant, S., **Agrawal, S**., & Kumar, V. (2024). An investigation of past and future LULC using multilayer perceptron-Markov chain techniques: a case study of a Himalayan smart city (2005–2040). *Environment, Development and Sustainability*, DOI: 10.1007/s10668-024-05614-1 [IF =4.7]
3. Patra, P., Das, U. & **Agrawal, S.** (2024). Satellite imagery-based tropical cyclone impact assessment on LULC and vegetation: a case study of cyclone Biparjoy. *Environmental Monitoring and Assessment*, 196(7), pp. 748, DOI: 10.1007/s10661-024-12902-w [IF =2.9]
4. Dutta, K., Basu, D., & **Agrawal, S.** (2023). Identification of critical urban clusters for placating urban heat island effects over fast-growing tropical city regions: estimating the contribution of different city sizes in escalating UHI intensity. *Photogrammetric Engineering & Remote Sensing*, 89(11), pp. 667-677, DOI: 10.14358/PERS.23-00009R2 [IF =1.0]
5. Kumar, V., & **Agrawal, S.** (2023). A multi-layer perceptron–Markov chain based LULC change analysis and prediction using remote sensing data in Prayagraj district, India. *Environmental Monitoring and Assessment*, 195(5), pp. 619, DOI: 10.1007/s10661-023-11205-w [IF =2.9]
6. Tripathi, A. K., **Agrawal, S.**, & Gupta, R. D. (2023). GeoCloud4SDI: a cloud enabled open framework for development of spatial data infrastructure at city level. *Earth Science Informatics*, 16(1), pp. 481-500, DOI: 10.1007/s12145-022-00893-6 [IF =2.7]
7. Kumar, V., & **Agrawal, S.** (2022). Urban modelling and forecasting of landuse using SLEUTH model. *International Journal of Environmental Science and Technology*, 20, pp. 6499–6518, DOI: 10.1007/s13762-022-04331-4 [IF =3.0].
8. **Agrawal, S.**, Tripathi, A. K., & Gupta, R. D. (2022). Development and implementation of automatic metadata generation framework for SDI using OSS: a case study of Indian NSDI. *Arabian Journal of Geosciences*, 15(5), pp. 408. DOI: 10.1007/s12517-022-09635-w
9. Dutta, K., Basu, D., & **Agrawal, S.** (2022). Evaluation of seasonal variability in magnitude of urban heat islands using local climate zone classification and surface albedo. *International Journal of Environmental Science and Technology*, 19(9), pp. 8677-8698, DOI: 10.1007/s13762-021-03602-w [IF =3.0]
10. Dutta, K., Basu, D., & **Agrawal, S.** (2021). Synergetic interaction between spatial land cover dynamics and expanding urban heat islands. *Environmental Monitoring and Assessment*, 193, pp. 1-22, DOI: 10.1007/s10661-021-08969-4 [IF =2.9]
11. **Agrawal, S.**, & Gupta, R. D. (2020). Development of SOA-based WebGIS framework for education sector. *Arabian Journal of Geosciences*, 13, pp. 1-20. DOI: 10.1007/s12517-020-05490-9
12. Tripathi, A. K., **Agrawal, S.**, & Gupta, R. D. (2020). Cloud enabled SDI architecture: a review. Earth Science Informatics, 13, pp. 211-231, DOI: 10.1007/s12145-020-00446-9 [IF =2.7]

13. **Agrawal, S**., & Gupta, R. D. (2017). Web GIS and its architecture: a review. *Arabian Journal of Geosciences*, 10, pp. 1-13. DOI: 10.1007/s12517-017-3296-2

SCOPUS Indexed Journals:

1. Dutta, K., Basu, D., & **Agrawal, S.** (2024). Ambient temperature modelling from surface characteristics and associating urban morphology with thermal discomfort. *Singapore Journal of Tropical Geography*, 45(2), pp. 290-310, DOI: 10.1111/sjtg.12540 [SSCI IF 2.2]
2. Saxena, S., & **Agrawal, S.** (2023). Seasonal variations in land surface temperature based on local climatic zone in the major metropolitan cities of India. *Spatial Information Research*, 31(6), pp. 609–623, DOI: 10.1007/s41324-023-00527-z [ESCI IF 2.0]
3. Meena, D. K., Tripathi, R., & **Agrawal, S.** (2023). An evaluation of primary schools and its accessibility using GIS techniques: a case study of Prayagraj district, India. *GeoJournal*, 88(2), pp. 1921-1951, DOI: 10.1007/s10708-022-10715-3 [ESCI IF 2.0]
4. Tripathi, A. K., **Agrawal, S.**, & Gupta, R. D. (2022). Comparison of GIS-based AHP and fuzzy AHP methods for hospital site selection: a case study for Prayagraj City, India. *GeoJournal*, 87(5), pp. 3507–3528, DOI: 10.1007/s10708-021-10445-y [ESCI IF 2.0]
5. Kumar, S., & **Agrawal, S.** (2020). Prevention of vector-borne disease by the identification and risk assessment of mosquito vector habitats using GIS and remote sensing: a case study of Gorakhpur, India. *Nanotechnology for Environmental Engineering*, 5(2), pp. 1-15, DOI: 10.1007/s41204-020-00084-y [Cite Score 6.5]
6. Saha, A. K., & **Agrawal, S.** (2020). Mapping and assessment of flood risk in Prayagraj district, India: a GIS and remote sensing study. *Nanotechnology for Environmental Engineering*, 5(2), pp. 1-18, DOI: 10.1007/s41204-020-00073-1 [Cite Score 6.5]

Conference Proceedings (International):

1. Verma, A., & **Agrawal, S**. (2024). A Study on the Cooling Impact of the River Yamuna and its Surrounding LULC: A Case Study of New Delhi, India. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci*. ISPRS TC III Mid-term Symposium "Beyond the canopy: technologies and applications of remote sensing", 4–8 November 2024, Belém, Brazil, pp. 409-415, DOI: 10.5194/isprs-annals-X-3-2024-409-2024
2. Saxena, S., **Agrawal, S**., & Basu, D. (2024). EHF based Heatwave Identification and its Impact on Urban Heat Island Intensity: A Case Study of an Indian City. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci*. ISPRS TC III Mid-term Symposium "Beyond the canopy: technologies and applications of remote sensing", 4–8 November 2024, Belém, Brazil, pp. 377--382, DOI: 10.5194/isprs-annals-X-3-2024-377-2024
3. Saxena, S., & **Agrawal, S.** (2023). Numerical simulation of surface albedo and temperature over New Delhi using nested WRF model. IEEE India Geoscience and Remote Sensing Symposium (InGARSS), Bangalore, India, 2023, pp. 1-4, DOI: 10.1109/InGARSS59135.2023.10490357
4. Agrawal, S., & **Agrawal, S.** (2022). Spatial mapping and cluster analysis of COVID-19: A case study of Uttar Pradesh, India. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci*. 7th International Conference on Smart Data and Smart Cities (SDSC), 19–21

October 2022, Sydney, Australia, pp. 3-10, DOI: 10.5194/isprs-annals-X-4-W3-2022-3-2022

5. Verma, S., **Agrawal, S.,** & Dutta K (2021). Satellite imagery driven assessment of land use land cover, urbanization and surface temperature pattern dynamics over tropical megacities. *International Archives Photogramm. Remote Sens. Spatial Inf. Sci.*, XLVI-4/W6-2021, Philippine Geomatics Symposium 2021, 17–19 November 2021, pp. 313-320, DOI: 10.5194/isprs-archives-XLVI-4-W6-2021-313-2021
6. Dutta, K., Basu, D., & **Agrawal, S.** (2019). Assessing degradation in local environment due to recent urban sprawl: case study of an Indian satellite town. *International Conference on Intelligent Computing and Remote Sensing (ICICRS) IEEE*, 19-20 July 2019, Bhubaneswar, India , pp. 1-6, DOI: 10.1109/ICICRS46726.2019.9555874
7. **Agrawal S.** & Khairnar, G. B. (2019). Comparative assessment of remote sensing imaging techniques: optical, SAR and LiDAR. *International Archives Photogramm. Remote Sens. Spatial Inf. Sci., XLII-5/W3*, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, 10–11 December 2019, Dhulikhel, Nepal, pp. 1-6, DOI: 10.5194/isprs-archives-XLII-5-W3-1-2019
8. Tripathi, A. K., **Agrawal, S.**, & Gupta, R. D. (2019). WPS enabled SDI: an open source approach to provide geoprocessing in web environment. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci.*, IV-5/W2, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, 10–11 December 2019, Dhulikhel, Nepal, pp. 119-126, DOI: 10.5194/isprs-annals-IV-5-W2-119-2019
9. Meena, D. K., Tripathi, R., & **Agrawal, S.** (2019). GIS based multi-parameter optimal path analysis for rural schools. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci.*, IV-5/W2, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, 10–11 December 2019, Dhulikhel, Nepal, pp. 67-74, DOI: 10.5194/isprs-annals-IV-5-W2-67-2019
10. Dutta, K., Basu, D., & **Agrawal, S.** (2019). Nocturnal and diurnal trends of surface urban heat island intensity: a seasonal variability analysis for smart urban planning. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci.*, IV-5/W2, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, 10–11 December 2019, Dhulikhel, Nepal, pp. 25-33, DOI: 10.5194/isprs-annals-IV-5-W2-25-2019
11. Mahmoodi, S. Dutta, K., Basu, D., & **Agrawal, S.** (2019). Understanding link between land surface temperature and landscape heterogeneity: a spatio-temporal and inter-seasonal variability study on Kabul city, Afghanistan. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci.*, IV-5/W2, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, 10–11 December 2019, Dhulikhel, Nepal, pp. 57-65, doi: 10.5194/isprs-annals-IV-5-W2-57-2019
12. Kumar, V., & **Agrawal, S.** (2019). Agricultural land use change analysis using remote sensing and gis: a case study of Allahabad, India. *International Archives Photogramm. Remote Sens. Spatial Inf. Sci.*, XLII-3/W6, GEOGLAM, ISRS Joint International Workshop on Earth Observations for Agricultural Monitoring 18-20 February 2019, New Delhi, India, pp. 397–402, DOI: 10.5194/isprs-archives-XLII-3-W6-397-2019
13. Yadav, P., & **Agrawal, S.** (2018). Road network identification and extraction in satellite imagery using Otsu's method and connected component analysis. *International Archives Photogramm. Remote Sens. Spatial Inf. Sci.*, XLII-5, ISPRS TC V Mid-term Symposium

"Geospatial Technology – Pixel to People", 20–23 November 2018, Dehradun, India, pp. 91–98, DOI: 10.5194/isprs-archives-XLII-5-91-2018

14. Dutta, K., Basu, D., & **Agrawal, S.** (2018). Temporal and spatial analysis of urban heat island using landsat satellite data: two Indian case studies. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci.*, IV-5, ISPRS TC V Mid-term Symposium "Geospatial Technology – Pixel to People", 20–23 November 2018, Dehradun, India, pp. 71–78, DOI: 10.5194/isprs-annals-IV-5-71-2018
15. Tripathi, A. K., **Agrawal, S.**, & Gupta, R. D. (2018). A comparative analysis of conventional Hadoop with proposed cloud enabled Hadoop framework for spatial big data processing. *ISPRS Annals Photogramm. Remote Sens. Spatial Inf. Sci*., IV-5, ISPRS TC V Mid-term Symposium "Geospatial Technology – Pixel to People", 20–23 November 2018, Dehradun, India, pp. 425-430, DOI: 10.5194/isprs-annals-IV-5-425-2018
16. **Agrawal, S**., & Gupta, R. D., (2017). Application of image analysis in land-use and land-cover assessment around schools for planning and development. *ACM CGI'17* (Computer Graphics International), 27-30 June, 2017, Yokohama, Japan, pp. 1-4, DOI: 10.1145/3095140.3095144
17. **Agrawal, S**., & Gupta, R. D., (2016). School mapping and geospatial analysis of the schools in Jasra development block of India. *International Archives Photogramm. Remote Sens. Spatial Inf. Sci.*, XLI-B2, XXIII ISPRS Congress, 12-19 July, 2016, Prague, Czech Republic, pp. 145–150, DOI: 10.5194/isprs-archives-XLI-B2-145-2016
18. **Agrawal, S**., Meena, D. K. & Gupta, R. D., (2015) Comprehensive Review of GIS and Web GIS. Geo-Engineering and Climate Change Technologies for Sustainable Environmental Management, 9-11 October, 2015, Prayagraj, India
19. **Agrawal, S**., & Gupta, R. D., (2014). Development and comparison of open source based web GIS frameworks on WAMP and Apache Tomcat web servers. International Archives Photogramm. Remote Sens. Spatial Inf. Sci., XL-4, ISPRS Technical Commission IV Symposium on "Geo-spatial Databases and Location Based Services", 14 - 16 May, 2014 , Suzhou, China, pp. 1–5, DOI: 10.5194/isprsarchives-XL-4-1-2014

Book Chapters (International Publication):

1. Dutta, K., Basu, D., & **Agrawal, S.** (2024). Directional mapping of urban sprawl and altered patterns of landscape structure over the national capital region of India. In *Advances in Environmental Research*, pp. 177 – 196. Nova Science Publishers, Inc.
2. Gupta, R. D., **Agrawal, S.**, & Tripathi, A. K. (2022). NSDI based innovative approach for development of open source SDI for health sector: a way forward. In *Geospatial Data Science in Healthcare for Society 5.0*, pp. 273-303. Singapore: Springer Singapore. DOI: 10.1007/978-981-16-9476-9_13
3. **Agrawal, S.**, & Bapurao, K. G. (2021). Cloud-based geospatial mapping and analysis of Prayagraj Kumbh Mela of India: the UNESCO intangible cultural heritage. In *Geo-intelligence for sustainable development*, pp. 17-33. Singapore: Springer Singapore. DOI: 10.1007/978-981-16-4768-0_2
4. Tripathi, A. K., **Agrawal, S.**, & Gupta, R. D. (2020). A conceptual framework of public health SDI. In *Applications of Geomatics in Civil Engineering: Select Proceedings of ICGCE 2018*, pp. 479-487. Springer Singapore. DOI: 10.1007/978-981-13-7067-0_37