### LIST OF PUBLICATION

## **PUBLISHED**

- 1. Paul, B., Mishra, M.K. and Das, A.K. 2022. Spatial heterogeneity and estimation of PM10 concentration over Brahmaputra valley using geographic weighted regression model assimilating surface, MODIS, and ERA-interim reanalysis data. *Air Quality, Atmosphere & Health*, pp.1-11
- 2. Paul, B. and Das, A.K., 2022. Spatial heterogeneity in boundary layer dynamism and PM2. 5 surface concentration over the complex terrain of Brahmaputra valley. *Remote Sensing Applications: Society and Environment*, 28, p.100828.

## **UNDER REVIEW**

- 1. Exploring the feasibility of ground-based and reanalysis meteorological data for estimating PM10 surface mass concentration over a complex terrain, *Journal of Atmospheric and Oceanic Technology*, American Meteorological Society (3<sup>rd</sup> revision).
- Comprehensive analysis of PM2.5 relationship with AOD 550 nm and meteorology over the Brahmaputra valley-site scale by integrating MODIS, MERRA-2, and ERA5 data. *Atmospheric Environment*.

## PUBLICATIONS IN PROCEEDING OF CONFERENCE

- Presented technical paper on "Performance assessment of GWR and MLR model in estimating PM10 surface concentration over Guwahati city" at 2<sup>nd</sup> International Conference on Aerosol, Air Quality and Climate Change over Himalayan region of Uttarakhand organized by the Department of Physics HNB Garhwal University Srinagar Uttarakhand India from 4th to 6th Nov 2022. Authors: Bharati Paul, Apurba Kumar Das, Sunita Verma
- 2. Presented poster on "Exploring the relationship between meteorological factors and PM10 surface concentration over a tropical city along Eastern Himalayas" at European Aerosol Conference (EAC) organized by 'The Aerosol Society', held virtually from 30<sup>th</sup> August to 3<sup>rd</sup> September 2021. Authors: Bharati Paul, Apurba Kumar Das.

- 3. Presented Poster on "Seasonality analysis of relationship of PM2.5 and PM10 with micro-meteorology parameters over a complex terrain" at National Symposium on "Weather and Climate Services over Mountainous region" TROPMET, organized by NESAC and IMD- Shillong Chapter, Dec 14<sup>th</sup> to 17<sup>th</sup> 2020 Shillong Meghalaya. Authors: Bharati Paul, Apurba Kumar Das, Nilamoni Barman, R.R.Hoque.
- 4. Presented Technical paper on "Effect of tropospheric aerosols on Land Surface Albedo" at National Seminar on "Current Perspectives in Environmental Pollution: Challenges and opportunities" 7<sup>th</sup> - 8<sup>th</sup> June, 2019 Department of Environmental Science Tezpur University. Authors: Nanika Konwar, Bharati Paul, Apurba Kumar Das.
- 5. Presented Technical paper on "Observed Relation between Aerosol Optical Properties with Relative Humidity" at Conference of Indian Aerosol Science and Technology Association on Aerosol Impact: Human Health and Climate Change Nov 26<sup>th</sup>-28<sup>th</sup>, 2018 IIT Delhi India. Authors: Bharati Paul, Apurba Kumar Das, Nilamoni Barman, Shyam Sundar Kundu.
- 6. Presented Technical Paper on "Seasonal Trend Analysis of Aerosol Optical Properties over Kamrup Metro Using MODIS data" at seminar on "Advances In Remote Sensing & GIS Application" held on May 10-11, 2018 at North Eastern Space Application Centre, Umiam, Meghalaya India. Authors: Bharati Paul, Apurba Kumar Das.

# **ACHIEVEMENT**

Secured Best poster award for presenting poster entitled "Seasonality analysis
of relationship of PM2.5 and PM10 with micro-meteorology parameters over
a complex terrain" at National Symposium on "Weather and Climate Services
over Mountainous region" organized by NESAC and IMD- Shillong Chapter
Dec 14<sup>th</sup> to 17<sup>th</sup>, 2020 Shillong Meghalaya.