DIPJYOTI MUDIAR

Pune, India +917588428858(M) d.mudiar@gmail.com

He/his/him

Project Scientist at Indian Institute of Tropical Meteorology, Pune, India

SKILLS

- Instrumentation in atmospheric electricity measurements.
- Climate data analysis.
- Numerical weather modeling.
- Experience in High performance computing.
- Unix, matlab, Python, Ferret, shell scripting.

1st rank in National Eligibility Test (NET) for lectureship (2015), Council of Scientific and Industrial Research, India.

PROFILE

PhD in Physics with research experience in Cloud microphysics, Electrification of cloud, numerical modeling of cloud processes and Tropical dynamics.

RESEARCH INTEREST

Tropical Convection, Cloud Microphysics and Dynamics, Cloud Electrification and Lightning, Severe Rainfall events.

WORK EXPERIENCE

Research Scholar at Indian Institute of Tropical Meteorology, Pune, India

(Sept. 2013-Dec. 2017)

Project Scientist-B at Indian Institute of Tropical Meteorology, Pune, India

(January 2018 to present)

EDUCATION

PhD in Physics from Indian Institute of Tropical Meteorology, Pune, India (Banaras Hindu University, Varanasi, India)

Thesis: Effects of Electrical forces on Rain Formation Processes in Tropical Cloud

2013-2021

MSc in Physics from Gauhati University, Guwahati, India

2010-2012

BSc in Physics from Gauhati University, Guwahati, India

2007-2010

PREFERRED START DATE AT IST: 01-August-2021 (FLEXIBLE)

PUBLICATIONS

1. Mudiar D., Pawar, S. D., Gopalakrishnana, V., & Williams, E. (2021). Electric Field Enlarges Raindrops beneath Electrified Clouds: Observational Evidence. *Geophysical Research Letters*, 48, e2021GL093577. https://doi.org/10.1029/2021GL093577

2. Mudiar D., S. D. Pawar, Anupam Hazra, V. Gopalkrishnan, D.M. Lal, Kaustav Chakravarty, Manoj A. Domkawale, Manoj K. Srivastava, B.N. Goswami, Earle Williams (2021), Lightning and precipitation: The possible electrical modification of observed raindrop size distributions, *Atmospheric Research*, Volume 259, 2021, 105663, ISSN 0169-8095, https://doi.org/10.1016/j.atmosres.2021.105663.

3. Mudiar D., S. D Pawar, Anupam Hazra,, Konwar, M., Gopalakrishnan, V., Srivastava, M. K., & Goswami, B. N. (2018), Quantification of observed electrical effect on the raindrop size distribution in tropical clouds. *Journal of Geophysical Research: Atmospheres*, 123 https://doi.org/10.1029/2017JD028205

4. Mudiar D., Anupam Hazra, S. D. Pawar, Rama Krishna Karumuri, Mahen Konwar , Subrata Mukherjee, M. K. Srivastava, E. R. Williams and B. N. Goswami, Role of Electrical Effects in Intensifying Rainfall rates in the Tropics (pre-print available at https://arxiv.org/abs/2004.08888).

5. Mudiar D., S. D. Pawar, Anupam Hazra, D. M. Lal, M. K. Srivastava, Effect of Electric field on the freezing temperature of pure water drops: A cloud chamber Experiment (2021) (under review in JESS).

CONFERENCE AND TALK

1. American Geophysical Union Fall Meeting, 9-15 December 2017, New Orleans, USA.
2. International Conference on Thunderstorm and Lightning in Tropics (ICTLT-2019), Bhubaneswar, India, 17th –19 January 2019.
3. 3rd Conference on Indian Radar Meteorology, IITM, Pune, 9-12 January, 2019.
4. International Workshop on "Modeling Atmospheric-Oceanic Processes for Weather and Climate Extremes" (MAPEX-2019), IIT Delhi, 28-29 March, 2019 (Poster).

WEB PROFIELS

ResearchGate: https://www.researchgate.net/profile/Dipjyoti-Mudiar-2

Google Scholar: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=dipjyoti+mudiar&oq=dip

OTHER INTEREST

Cooking, trekking, Wildlife photography, birding

REFEREES

1. Dr. Sunil D Pawar, (PhD advisor)
   Scientist-F,
   Indian Institute of Tropical Meteorology, Pune,
   India.
   Phone: +91-(0)20-25904284
   Email: pawar@tropmet.res.in

2. Prof. Earle R. Williams
   Professor,
   Massachusetts Institute of Technology, Cambridge, MA, USA
   Email: ekagww@gmail.com