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+30 6955615651

RESEARCH INTERESTS

- Cloud physics.
- Atmospheric Dust and their impact on weather and climate.
- Aerosol-Cloud Interaction
- cloud modeling and dust-climate impact studies.

CORE COMPETENCIES

- Dynamic team player driving collaboration toward shared objectives.
- Highly motivated and eager to embrace new challenges and expand expertise.
- Expertise in radar data interpretation and generating radar data product

Technical skills

Platform/OS
UNIX/Linux
Windows

Programming language
Python
Fortran
MATLAB

Soft wares
GrADS
Ferret
NetCDF Operator
LATEX
Microsoft Office

LANGUAGES

English (IELTS band score 7.5)
Malayalam
Hindi

Evelin Francis

Atmospheric research, Dust-Climate modelling

EDUCATION

Doctoral student | MSCA DUST-DN

2025 - present

Aristotle University of Thessaloniki, Department of Physics

National Observatory of Athens, IAASARS, ReACT

PhD thesis: *Ice nucleating dust particle concentration profiling and effects on ice crystal formation*

MSc. Meteorology

Cochin University of Science and Technology (CUSAT)

2018 - 2020::CGPA: 8.31/10

Graduated with high First Class with Distinction.

Specialized in Atmospheric Science, Climate Change, Cloud Physics, Synoptic Meteorology, Dynamic Meteorology, Geophysical Fluid Dynamics, and Programming Modeling.

Conducted thesis research on "Increasing Number and Intensity of Cyclones in Arabian Sea in Climate Change Scenario" at the National Institute of Oceanography (NIO).

BSc. Physics

University of Calicut

2014 - 2017::CGPA: 4.27/6.0

Graduated with First Class with Distinction.

EXPERIENCE

Research Scientist
Vikram Sarabhai Space Centre (ISRO)
MAY 2021 – MAY 2024

- Managed upkeep, support, and maintenance of the C-Band polarimetric Doppler weather radar.
- Calculated rain rates using reflectivity values and various Z-R relationships; compared results with ground truth measurements for accurate forecasting and nowcasting.
- Detected and analyzed bright band occurrences using Z, Zdr, and Rho signatures.
- Developed MATLAB programs for generating radar data products (reflectivity, velocity, differential reflectivity, correlation coefficient, differential phase shift).
- Participated in routine and scientific campaign mode observations and radiosonde releases for a month.

REFERENCES

Dr Jayu N arvekar
Scientist E
CSIR- NIO, Goa
08322450300
jnarvekar@nio.org

Dr Lekshmy P R
Assistant Professor
Department of Atmospheric Science,
CUSAT *rarylekshmy@gmail.com*

PUBLICATIONS

Is a warming northern Indian Ocean generating more tropical cyclones? Journal of Operational Oceanography.
Abhinav, R. S., Narvekar, J., Kumar, S. P., & **Evelin Francis.** (2025). https://doi.org/10.1080/1755876X.2025.2498272

PROJECT STUDENT

Thesis Research: "Increasing Number and Intensity of Cyclones in Arabian Sea in Climate Change Scenario"
National Institute of Oceanography (CSIR-NIO), Goa, India

- Analyzed historical data on tropical cyclones and climatological variables over 60 years.
- Investigated the impacts of SST, OHC, TCHP, relative humidity, relative vorticity, and vertical wind shear on cyclone formation and intensification.
- Examined the effects of ENSO and IOD on cyclones.
- Contributed to scientific publications, with a draft under preparation for co-authorship with Dr. Jayu Narvekar.

WORKSHOP AND SEMINARS

- Attended the 5th National Conference on India Radar Meteorology “iRAD 2022” organized by IIT Bhubaneswar
- Attended International seminar "MARICON -2019" held at CUSAT School of marine sciences
- Attended national symposium on “PHYSICS-DYNAMIC INTERACTIONS IN CLIMATE
PINNACLE-'19”
- Attended seminar on “Role of oceans in weather and climate” by Dr M R Ramesh, NIO.
- Participated in National Workshop on “Issues and Methods of Approach put forwarded by Kerala Flood” conducted by Dept. Of Atmospheric Science, CUSAT.”
- Served as volunteer for Data entry of 2019- Flood affected people in Kerala coordinated by Kerala State IT Mission.