CURRICULUM VITAE



Anusha Sathyanadh

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WORK EXPERIENCE

May 2019 – April 2021

Post- doc Researcher (scholarship) with Dr. M.Peichl Department of Forest Ecology and Management Swedish University of Agricultural Sciences (SLU) Umeå, Sweden

Estimating the GHG budget based on atmospheric concentration measurements and modelling for boreal region

July 2018 – February 2019

Post- doc Researcher with Dr. Chandra Venkataraman, IDP in Climate Studies Indian Institute of Technology (IIT), Mumbai, India

Worked on the response of Indian Summer Monsoon rainfall to different future emission scenarios of aerosols and greenhouse gases.

August 2011 – July 2017

Project JRF, UGC-JRF & UGC-SRF with Dr. A Karipot Savitribai Phule Pune University, Pune, India

EDUCATION

2012 - 2018

Doctoral Research, Department of Atmospheric and Space Sciences, Savitribai Phule Pune University (SPPU) & Indian Institute of Tropical Meteorology (IITM)

PhD title: Identification of Planetary Boundary Layer Regimes over the Indian Region and Study of their Moisture and Energy Budgets Using Observations and Numerical Simulations. Research supervisor: Dr. Anandakumar Karipot (Professor). Research Co-supervisor: Dr. Thara Prabhakaran (Scientist F).

2009-2011 M.Sc. (Meteorology), Department of Atmospheric Science, Cochin

University of Science and Technology (CUSAT), Cochin.

First class with Distinction (8.01 CGPA)

Project title: Study of Influence of Jet streams on Indian Summer

Monsoon. Project supervisor: Prof. K. Mohanakumar

2006-2009 B.Sc. (Physics), Government Arts and Science College, University

of Calicut.

First class with Distinction (89.4%)

ACCOMPLISHMENTS

Dec 2010 Qualified CSIR-UGC National Eligibility Test (NET) for JRF in

Earth Sciences with all India rank 73.

May 2010 Awarded summer research Fellowship by Indian Academy of

Science at National Atmospheric Research Laboratory, Gadanki

under Prof. A. Jayaraman.

April 2011 Secured FIRST position for MSc Degree Examination in

Meteorology, Cochin University of Science and Technology

(CUSAT).

Feb 2016 Best poster presentation award for "PBL characteristics over the

Indian region in relation to southwest monsoon" at Annual monsoon workshop-2015, India Meteorological Society, Pune Chapter, Indian

Institute of Tropical Meteorology, Pune.

WORKSHOPS/CONFERENCES ATTENDED

- 1. EGU General Assembly (Virtual), 19-30 April 2021.
- 2. 4th ICOS Science Conference (Virtual), 15-17 September 2020.
- **3.** 2nd Nordic ICOS Symposium, 24. 25. Oct 2019, Gothenburg, Sweden.
- 4. International Workshop on Representation of Physical Processes in Weather and Climate Models (INTROSPECT 2017) held at IITM during 13-16 February 17, 2017
- **5.** AGU Fall meeting 2016, held 12-16 December in San Francisco, California, USA.
- 6. National Symposium Tropmet–2015 on "Weather and climate extremes", 15-18 February, 2015, Punjab University, Chandigarh, India.
- 7. Annual Monsoon Workshop (IMSP) 2012, 2013 and 2015, India Meteorological Society, Pune Chapter, Indian Institute of Tropical Meteorology, Pune.

- **8.** National Workshop on scientific/research paper writing held at Savitribai Phule Pune University, Pune ,16-17 Dec, 2014, conducted by the National Academy of Sciences, India.
- 9. "Opportunities and Challenges in Monsoon Prediction in Changing Climate" (OCHAMP) held at IITM during 21-25 February, 2012.
- 10. International Conference on Climate Change and Environment (ICCCE) hosted by Department of Atmospheric Science, Cochin University of Science and Technology
- 11. Kerala Science Congress (KSC-2011), Trivandrum, Kerala, India.
- 12. National level training programme on Concepts of Now casting And Mesoscale Disturbances (CONMED-2011) conducted by Indian Air Force.
- 13. National Symposium METOC-2010 arranged by School of Naval Oceanology and Meteorology (SNOM), Cochin.

SCIENTIFIC CONTRIBUTIONS

Journal Articles

- 1. **Sathyanadh, A.**, M., Monteil, G., A., Scholze, Klosterhalfen, A., Laudon, H., Wu, Z., Gerbig, C., Peters, W., Bastrikov, V., Nilsson, M.B., Peichl, M., *in preparation*. Reconciling the carbon balance of Northern Sweden through integration of observations and modelling.
- 2. **Sathyanadh, A.**, Karipot, A., Ranalkar, M. and Prabhakaran, T., 2016. Evaluation of soil moisture data products over Indian region and analysis of spatio-temporal characteristics with respect to monsoon rainfall. *Journal of Hydrology*, *542*, pp.47-62.
- 3. **Sathyanadh**, **A.**, Prabha, T.V., Balaji, B., Resmi, E.A. and Karipot, A., 2017. Evaluation of WRF PBL parameterization schemes against direct observations during a dry event over the Ganges valley. *Atmospheric Research*, *193*, pp.125-141.
- 4. **Sathyanadh, A.**, Prabhakaran, T., Patil, C. and Karipot, A., 2017. Planetary boundary layer height over the Indian subcontinent: Variability and controls with respect to monsoon. *Atmospheric Research*, 195. Pp 44-61.
- 5. **Sathyanadh**, A., Prabha, T.V., Subharthi C, and Balaji, B., Karipot, A., 2021. Sensitivity of PBL parameterization schemes against direct observations during a land depression over Central India, *Theoretical and Applied Climatology*. Pp 1-19.

5. Chetana Patil, Neelam Malap, **Anusha Sathyanadh**, Balaji B, T. V. Prabha and A. Karipot .Preconditioning of a land depression over Central India , *Journal of Geophysical Research: Atmospheres* (under revision)

Conference Contributions

- 1. Presented a poster titled "Spatio-temporal Variations of Planetary Boundary Layer Height during Southwest Monsoon" at International Conference on "Opportunities and Challenges in Monsoon Prediction in Changing Climate" (OCHAMP) held at IITM during 21-25 February, 2012.
- 2. Presented a paper titled "Planetary Boundary Layer Regimes over Indian Sub-Continent and Surrounding Ocean in relation to Southwest Monsoon" at Annual Monsoon 2012 Workshop, 19-20 February, 2013, IITM, Pune, India, organized by Indian Meteorological Society.
- 3. Presented a poster titled "Soil Moisture Variability over the Indian Subcontinent in Relation to Monsoon Rainfall" at Tropmet 2015 Workshop, 15-19 February, 2015, Punjab University, Chandigarh, India.
- 4. Presented a poster titled "PBL characteristics over the Indian region in relation to southwest monsoon" at Annual monsoon workshop-2015, India Meteorological Society, Pune Chapter, Indian Institute of Tropical Meteorology, Pune.
- 5. Presented a poster titled "Planetary Boundary Layer Patterns, Height Variability and their Controls over the Indian Subcontinent with respect to Monsoon" at AGU Fall meeting 2016, held 12-16 December in San Francisco, California, USA.
- 6. Presented a poster titled "Characteristics of 2018 drought at Svartberget using atmospheric measurements and modelling" at 2nd Nordic ICOS Symposium, 24. 25. Oct 2019, Gothenburg, Sweden.
- 7. Presented a paper titled "Reconciling the carbon balance of northern Sweden using measurements and modelling" 4th ICOS Science Conference (Virtual), 15-17 September 2020.
- 8. A PICO (presentation with interactive content) Presentation at EGU General Assembly (Virtual), 19-30 April 2021.

SKILLS

Languages Malayalam (Mother Tongue), English, Hindi, Swedish (beginner) Computing Programming languages: Python, NCL, Fortran, C++, GraDs Office and graphics software: Microsoft Office, Origin

Operating Systems: Windows, Linux

Worked with Atmospheric Transport models and Numerical mesoscale models,

PROFESSIONAL ACTIVITIES

o Member; India Meteorological Society (2010-present)

REFERENCES

Matthias Peichl Associate Professor Department of Forest Ecology & Management Swedish University of Agricultural Sciences 901 83 Umeå, Sweden

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Dr. Marko Scholze
Department of Physical Geography and Ecosystem Science
Lund University, Sölvegatan 12, SE-223 62 Lund

Phone:+46 46 222 4082

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Mats Nilsson Professor in Soil Science, Biogeochemistry Department of Forest Ecology & Management Swedish University of Agricultural Sciences SE-901 83 Umeå, Sweden

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DECLARATION

I hereby declare that all the statements in this curriculum vitae are true to the best of my knowledge and belief.

Date: January 20, 2021

Place: Pune, India Anusha Sathyanadh