Dr. Malasala Murali Nageswara Rao,
UCAR Associate Scientist-II,
NOAA Center for Weather and Climate Prediction,
Environmental Modeling Center (EMC)
National Centers for Environmental Predictions
5830 University Research Court,
College Park, Maryland- 20740, USA

E-mail: muralinagesh.ocean@gmail.com
murali.n.malasala@noaa.gov
murali@ucar.edu

Phone: +1 4698655286
USA immigration Status: Green Card

Career Objective

To work with an organization that offers a challenging career, where my professional knowledge and potential can be utilized to the maximum in attaining the organizational goals, which in turn contributes to my excellence.

Academic Pursuit

- **Ph.D.** (Meteorology and Oceanography): Department of Meteorology & Oceanography, Andhra University, Visakhapatnam, India, 2017 [Thesis entitled "**The Role of Atmosphere-Ocean Coupled Climate System: Prediction of Winter precipitation and Temperatures over Northwest India**"]
- **M.Sc** (**Physical Oceanography**): Department of Meteorology & Oceanography, Andhra University, Visakhapatnam, India, 2006
- **B.Ed** (**Physical and Mathematical Sciences**):D.S.N. College of Education, Anakapalle, Andhra University, India, 2007
- **B.Sc** (**Mathematics, Physics, and Chemistry**): A.M.A.L College, Anakapalle, Andhra University, Visakhapatnam, India, 2003

Work Experience

- **Jan 2023- Till date** : **UCAR Associate Scientist-II** at NOAA Center for Weather and Climate Prediction, NCEP EMC, University Research Court, College Park, MD, USA.
- **Mar 2021- Jan 2023** : **UCAR Associate Scientist-I** at NOAA Center for Weather and Climate Prediction, NCEP EMC, University Research Court, College Park, MD, USA.
- **Feb 2021-Mar 2021** : **Research Scientific Assistant** at Jackson School of Geological Sciences, the University of Texas at Austin, Texas, USA.
- **Feb 2020- Feb 2021** : **UCAR Visiting Scientist** at NOAA Center for Weather and Climate Prediction, NCEP, CPC, International Desks, University Research Court, College Park, MD, USA.
- **Apr 2019 – Jan 2020** : **Project Scientist-C**, Indian Institute of Tropical Meteorology (IITM) Pune, Ministry of Earth Sciences, Govt. of India.
- **Dec 2015-Mar 2019** : **Project Scientist**, School of Earth, Ocean and Climate Sciences, Indian Institute of Technology (IIT) Bhubaneswar, India.
- **Oct 2013-Dec 2015** : **Project Associate**, School of Earth, Ocean and Climate Sciences, Indian Institute of Technology (IIT) Bhubaneswar, India.

- **Jul 2013-Oct 2013** : **Junior Research Fellow**, Department of Meteorology and Oceanography, Andhra University, Visakhapatnam, India.
- **Oct 2012-Jul 2013** : **Senior Research Fellow**, Department of Meteorology and Oceanography, Andhra University, Visakhapatnam, India.
- **Sep 2009-Oct 2012** : **Senior Research Fellow**, Center for Atmospheric Science, Indian Institute of Technology (IIT) Delhi, India
- **Jun 2006- Sep 2009** : **Physics lecturer**, Ushodaya Junior and Degree Colleges, Chodavaram, Andhra University, Visakhapatnam.

Awards/ Honors

- **UCAR Special Recognition Award** on 14th March 2022 with the amount of 2000 USD for contributions to the CPAESS Program through exemplary work for NOAA NCEP Environmental Modeling Center (EMC), College Park, MD, USA.
- **India Meteorological Society (IMS) Biennial Award-2019-20** (**Formerly B.N. Desai**) for Best Paper published in Monsoon Research study "**Characteristics of various Rainfall events over South Peninsular India during Northeast Monsoon using High-resolution gridded dataset**" which was published in Theoretical and Applied Climatology
- **Research Excellence Award-2020** from Society of Institute of Scholars for the study "**Impact of Climate Variability On Various Rabi Crops Over Northwest India**" which was published in Theoretical and Applied Climatology.
- **Best Citizen of India Award-2017** from International Publishing House, New Delhi for Scientific contribution to the Science & Technology.
- **India Achiever's Award-2021-22** from the Indian Achievers Forum for Achievement and Contribution in Nation Building.
- Stood second in the quiz contest organized by **India Meteorological Society (IMS)** on the occasion of WMO day on 23rd March 2017.
- **All India 26th Rank** in Council of Scientific & Industrial Research- University Grants Commission National Eligibility Test (**CSIR-UGC NET**), June 2011 in Earth, Atmospheric, Ocean and Planetary Sciences.

Membership Of Professional Societies

- Member of American Geophysical Union (AGU).
- IMS Associate member of American Meteorological Society (AMS).
- Life Member of South Asian Meteorological Association (SAMA, SAMA-LM-IND-98).
- Life member of Indian meteorological society (IMS, LM-1827).
- Life Member of Ocean Society of India (OSI, LM-566).
- Life Member of Association of Hydrologists of India (AHI, LM-549-852).
- Life Member of Indian Society of Remote Sensing (ISRS, L-5822).
- Life member of Association of Agrometeorologists (AAS, LM-769).
- Life member of the Indian Science Congress Association (ISCA, L41762)
- Life Member of Institute of Scholars (InSc, InSc2019E1F0).

Reviewer of Journals:

1. Agricultural and Forest Meteorology
2. Agronomy
3. Applied Sciences
4. Artificial Intelligence for the Earth Systems
5. Atmospheric and Climate Sciences (ACS)
6. Climate Dynamics
7. Climate Research
8. Computers and Electronics in Agriculture
9. Current Sciences
10. Dynamics of Atmospheres and Oceans
11. Global and Planetary Change
12. INSC International Journal
13. International Journal of Agriculture Sciences
14. International Journal of Climatology
15. Journal of Agrometeorology
16. Journal of Climate
17. Journal of Earth System Sciences
18. Journal of Environmental Pollution and Management (JEPM)
19. Journal of Geophysical Research-Atmosphere
20. Journal of Geophysical Research-Oceans
21. Journal of Basic and Applied Sciences
22. Land
23. Mausam
24. Meteorology and Atmospheric Physics
25. Modeling Earth Systems and Environment
26. Natural Hazards
27. Nature Scientific Reports
28. Physics and Chemistry of the Earth
29. Pure and Applied Geophysics
30. Remote Sensing
31. Stochastic Environmental Research and Risk Assessment
32. Sustainability
33. Theoretical and Applied Climatology
34. Water

Short-term Courses Attended

- Short-term ICTP course "**Artificial Intelligence for Detection and Attribution of Climate Extremes**" during 20th June-1st July 2022.

- Short-term course on "**Recent Advances in AI & ML for Climate Sciences"** during 13-15 November 2021 organized by Technology Innovation Hub (TIH), Indian Statistical Institute (ISI), Kolkata in association with IEEE GRSS Kolkata Chapter.

- Certificate course on "**Regional Climate Projections: Statistical Downscaling through R**" organized by the Centre for Climate Research & Studies of South Asian Institute for Advanced Research and Development (SAIARD) in association with India Meteorological Department, Kolkata, Govt. of India held on 05 - 27th December 2020.

- Short-term course on "**Development of Climatic Risk Management tools in Agriculture using Extended Range Forecast**", Organized by India meteorological department (IMD), Ministry of Earth Sciences, Govt. of India, Department of Agriculture corporation and Farmers Welfare (DAC&FW), Ministry of Agriculture, India and IIT Bhubaneswar, during Dec 2015.

- Global Initiative of Academic Networks (GIAN) short-term course on "**Climate Change: Science, Impact and Adaptation**" at IIT Bhubaneswar from Ministry of Human Resource Development (HRD), Govt. of India, during Dec 2016. has

- Global Initiative of Academic Networks (GIAN) short term course on "**Extreme Weather and Climate Variability: Observation, Understanding and Prediction**" at IIT Bhubaneswar, from Ministry of Human Resource Development (HRD), Govt. of India, during Dec 2016.

- 18thIIRS Outreach course on "**Basics of Remote Sensing, Geographical Information System & Global Navigation Satellite System**" at IIRS, ISRO, Dehradun, India, during Aug- Nov2016.

- 19thIIRS Outreach course on "**Remote Sensing and GIS Applications in Carbon Forestry**" at IIRS, ISRO, Dehradun, India, during Feb-Mar 2017.

- **Postgraduate Certificate course** in Building Resilience to Climate Change Part-I: "**Science, Impact, and Vulnerability**" and Part-II: "**Approaches to Adaptation**" from United Nations University, Tokyo, Japan, 2014

Computer Skill /Hands-On Experience

1. Excellent working knowledge of computer (MS-DOS, MS-Office, Matlab, Rstudio, Python, CDO, Grads, GIS, Ferret, Linux operating system, HPC system, FORTRAN, and C language).

2. Hands-on experience in data analysis of Observation and Model Outputs (AOGCMs (IPCC models) and GCMs (IRI products)) and Diagnostic studies of models. More experience in statistical post-processing techniques to improve the prediction skill of weather and climate forecasts at various spatial and temporal scales.

Real-Time Forecast Experience

1. Real-time forecast of Extended Range Forecast of Temperature and Rainfall on at Meteorological sub-divisional level over India and Dissemination to Agriculture institutions through IMD, since 2009.

2. Development of Extended Range forecast system (ERFS) and Application for Climate Risk Management in Agriculture.

Ex-India Visit

1. Visited USA as UCAR Visiting Scientist at NOAA Center for Weather and Climate Prediction, NCEP CPC International Desks, University Research Court, College Park, MD, USA from Feb-2020 to Feb-2021.
2. Visited USA as Research Scientist at Jackson School of Geological Sciences, University of Texas, Austin (Feb-2021 to March 2021).

3. Visited USA as UCAR Associate Scientist-I at NOAA Center for Weather and Climate Prediction, NCEP EMC, University Research Court, College Park, MD, USA from Feb-2021 to Till date.
4. Visited Sri Lanka as Guest faculty of UN-CECAR Training Course on "Climate Change Downscaling Approaches and Applications" at Sri Lanka Institute of Information Technology (SLIIT), Sri Lanka organized by United Nation University (UNU), Tokyo, Japan 30th March 2015-4th April 2015.

The Domain of Work Interested

- Numerical Weather modeling
- Dynamical and Statistical downscaling Approaches.
- Monsoon prediction and variability studies
- Statistical Post-Processing Methods on GCMs products
- Climate change studies using climate models and observations, multi-model climate change projections
- Use of Artificial Neural Networks/Machine Learning for prediction and data analysis
- Extended Range Prediction of extreme weather events like heavy rainfall events, heat/cold waves, cyclogenesis, etc.
- Climate change impacts weather and climate extreme events (droughts and floods, Cold and Heatwaves) at a regional level.
- Role of SST bias in the simulation of continental weather and climate
- Studies on Atmosphere-Ocean Coupled process and the impact on Atmospheric and Oceanic parameters.
- Model Diagnostics and Bias correction methods.
- Application development of weather and climate prediction for various climate risk management sectors.

Recent Publications in National & International Reputed Journals

1. **M. M. Nageswararao**, Susmitha Joseph, Raju Mandal et al. (**2024**) The Role of Antecedent Southwest Summer Monsoon Rainfall on the Occurrence of Pre-Monsoon Heatwaves over India in the present Global Warming Era. Discover Environment (Under Revision), https://doi.org/10.21203/rs.3.rs-4864613/v1

2. **M. M. Nageswararao**, Yuejian Zhu, Vijay Tallapragada and Chen, M. -S. (**2023**). Hybrid Post-Processing on GEFSv12 Reforecast for Summer Maximum Temperature Ensemble Forecasts with an Extended-Range Time Scale over Taiwan. Atmosphere 2023, 14(11), 1620; https://doi.org/10.3390/atmos14111620

3. **M. M. Nageswararao**, Yuejian Zhu, Vijay Tallapragada and Chen, M. -S. (**2023**). Predictability of summer extreme maximum temperatures over Taiwan by using NOAA NCEP GEFSv12 reforecast products. In NOAA's 47th Climate Diagnostics and Prediction Workshop Special Issue (pp. 55-69). College Park: NOAA. doi:http://dx.doi.org/10.25923/ggwg-0b54 , http://n2t.net/ark:/85065/d7t72ngw

4. **M.M.Nageswararao**, M.C.Sannan, A.K.Sahai, K.R. Baswanth Kumar, Susmita Joesph, and M.Anji Reddy (**2023**) District-Level Seasonal Rainfall Characteristics over Andhra Pradesh and its Global Teleconnections in Changing Climate. Journal of Basic and Applied Sciences, 19,1-19, https://doi.org/10.29169/1927-5129.2023.19.01

5. **M. M. Nageswararao**, Yuejian Zhu, and Vijay Tallapragada (**2022**) Prediction skill of GEFSv12 in depicting Monthly Rainfall and Associated Extreme Events over Taiwan during Summer Monsoon. Weather and Forecasting, 37(12), 2239–2262, https://doi.org/10.1175/WAF-D-22-0025.1

6. **M. M. Nageswararao**, Yuejian Zhu, and Vijay Tallapragada (**2022**) Prediction Skill of GEFSv12 for Southwest Summer Monsoon Rainfall and Associated Extreme Rainfall Events on Extended Range scale over India. Weather and Forecasting, 37(7), 1135–1156, https://doi.org/10.1175/WAF-D-21-0184.1

7. **M. M. Nageswararao**, Yuejian Zhu, and Vijay Tallapragada (**2022**) Predictability of summer monsoon extreme rainfall events over Taiwan using NCEP GEFSv12 reforecast. 46th NOAA Climate Diagnostics and Prediction Workshop Special Issue, 76-82, https://doi.org/10.25923/rj6c-rk11 , https://opensky.ucar.edu/islandora/object/books:721

8. **M.M. Nageswararao**, Atul Kumar Sahai, Susmitha Joseph (**2021**) Relation between Occurrence of Heat Waves and Antecedent Southwest Summer Monsoon Rainfall. 101st American Meteorological Society Annual Meeting, http://n2t.net/ark:/85065/d78055pj , https://ams.confex.com/ams/101ANNUAL/meetingapp.cgi/Paper/382969

9. **M.M. Nageswararao**, P. Sinha, U.C. Mohanty, R.K.Panda and G.P. Dash (**2019**) Evaluation of District level Rainfall characteristics over Odisha using High-resolution gridded dataset (1901–2013). SN Applied Sciences, 1 (10), 1:1211,DOI :https://doi.org/10.1007/s42452-019-1234-5

10. **M.M. Nageswararao**, P. Sinha, U.C. Mohanty, and S.Mishra (**2019**) Occurrence of More Heat Waves Over the Central East Coast of India in the Recent Warming Era. Pure and Applied Geophysics, 177(2): 1143–1155, DOI: https://doi.org/10.1007/s00024-019-02304-2

11. **M.M. Nageswararao**, M. C. Sannan, U.C. Mohanty (**2019**) Characteristics of various Rainfall events over South Peninsular India during Northeast Monsoon using High-resolution gridded dataset. Theoretical and Applied Climatology, 137(3-4):2573–2593, DOI: https://doi.org/10.1007/s00704-018-02755-y

12. **M.M. Nageswararao**, U.C. Mohanty, A.P. Dimri, Krishna K. Osuri (**2018**): Probability of occurrence of monthly and seasonal winter precipitation over Northwest India based on antecedent monthly precipitation. Theoretical and Applied Climatology,132(3-4):1247–1259, DOI: https://doi.org/10.1007/s00704-017-2171-0, ISSN: 0177-798X

13. **M. M. Nageswararao**, U. C. Mohanty, S. S. V. S. Ramakrishna, A. P. Dimri (**2018**): An intercomparison of observational precipitation data sets over Northwest India during winter. Theoretical and Applied Climatology, 132(1-2): 181–207, DOI: https://doi.org/10.1007/s00704-017-2083-z, ISSN: 0177-798X

14. **M. M. Nageswararao**, B. S. Dhekale and U. C. Mohanty (**2018**): Impact of climate variability on various Rabi crops over Northwest India. Theoretical and Applied Climatology, 131(1-2):503–521, DOI:https://doi.org/10.1007/s00704-016-1991-7, ISSN: 0177-798X

15. **M. M. Nageswararao**, U. C. Mohanty, Krishna K. Osuri, S. S. V. S. Ramakrishna (**2016**): Prediction of Winter Precipitation over Northwest India using Ocean Heat Fluxes. Climate Dynamics, 47 (7-8):2253–2271, DOI: https://doi.org/10.1007/s00382-015-2962-x, ISSN: 0930-7575

16. **M. M. Nageswararao**, U. C. Mohanty, Archana Nair, S. S. V. S. Ramakrishna (**2016**): Comparative Evaluation of Performances of Two Versions of NCEP Climate Forecast System in Predicting Winter Precipitation over India. Pure and Applied Geophysics, 173 (6): 2147–2166, DOI: https://doi.org/10.1007/s00024-015-1219-2, ISSN: 0033-4553

17. **M. M. Nageswararao**, U. C. Mohanty, S. Kiran Prasad, Krishna K. Osuri, S. S. V. S. Ramakrishna (**2016**): Performance evaluation of NCEP climate forecast system for the prediction of winter temperatures over India. Theoretical and Applied Climatology, 126(3-4):1–15, DOI: https://doi.org/10.1007/s00704-015-1588-6, ISSN: 0177-798X

18. **M. M. Nageswararao**, U. C. Mohanty, S. S. V. S. Ramakrishna, Archana Nair, S. Kiran Prasad (**2016**): Characteristics of winter precipitation over Northwest India using High-resolution gridded dataset (1901–2013). Global and Planetary Change, 147:67–85, DOI: http://dx.doi.org/10.1016/j.gloplacha.2016.10.017, ISSN: 0921-8181

19. **Murali Nageswara Rao Malasala** (**2016**) The Role of Atmosphere-ocean coupled climate system:Prediction of Winter Precipitation and Temperatures over Northwest India. Ph.D Thesis,

Department of Meteorology and Oceanography, Andhra University, Visakhapatnam,India; http://hdl.handle.net/10603/380349 , xviii, 238p.

20. **M. M. Nageswara Rao**, U. C Mohanty, P. Sinha, R.K Pal (**2012**) Predicting winter temperatures over India different versions of NCEP climate forecast system and their evaluation. Proceedings of the international symposium on the cryosphere and climate change, published by Defense Research & Development Organisation, Snow & Avalanche Study Establishment (SASE) Manali, India, https://www.researchgate.net/publication/280976079_Predicting_winter_temperature.

21. U. C. Mohanty, **M.M. Nageswararao**, Palash Sinha, Ankita Singh, Archana Nair, R.K.S. Maurya, K.K. Singh, D.R. Pattnaik, K. Ghosh, Itesh Dash (**2024**) Monthly and Seasonal Forecast of Precipitation and Temperature over India for Agro-meteorological Applications. In: Chattopadhyay, N., Stefanski, R., Attri, S.D., Rathore, L.S. (eds) Agrometeorological Applications for Climate Resilient Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51083-0_11

22. Vasundhara Barde, **M.M. Nageswararao**, U.C. Mohanty and R.K. Panda (**2023**) Performance of the CORDEX-SA regional climate models in simulating Summer Monsoon Rainfall and Future Projections over East India. Pure and Applied Geophysics, https://doi.org/10.1007/s00024-022-03225-3 .

23. Vasundhara Barde, **M.M. Nageswararao**, U.C. Mohanty, R.K.Panda, M.Ramadas (**2020**) Characteristics of southwest summer monsoon rainfall events over East India. Theoretical and Applied Climatology, 141, pages 1511–1528, DOI: https://doi.org/10.1007/s00704-020-03251-y, http://n2t.net/ark:/85065/d78k7dc1

24. M. C. Sannan, **M. M. Nageswararao**, and U.C. Mohanty (**2019**) Performance Evaluation of CORDEX-South Asia simulations for Future projections of Northeast Monsoon Rainfall over South Peninsular India. Meteorology and Atmospheric Physics, DOI: https://doi.org/10.1007/s00703-019-00716-2.

25. Palash Sinha, **M. M. Nageswararao**, Guru Prasad Dash, Archana Nair and U.C. Mohanty (**2019**): Pre-monsoon Rainfall and Surface Air Temperature Trends over India and its global linkages. Meteorology and Atmospheric Physics, 131(4): 1005–1018, DOI: https://doi.org/10.1007/s00703-018-0621-6

26. U.C. Mohanty, **M.M. Nageswararao**, P. Sinha, A. Nair, A. Singh, R.K. Rai, S.C. Kar, K.J. Ramesh, K.K. Singh, K. Ghosh, L.S. Rathore, R. Sharma, A. Kumar, B.S. Dhekale, R.K.S. Maurya, R.K. Sahoo and G.P. Dash (**2019**): Evaluation of Performance of Seasonal Precipitation Prediction at Regional Scale over India. Theoretical and Applied Climatology, 135(3-4):1123–1142, DOI: https://doi.org/10.1007/s00704-018-2421-9

27. B. S. Dhekale, **M. M. Nageswararao**, A. Nair, U. C. Mohanty, D. K. Swain, K. K. Singh, T. Arunbabu (**2018**): Prediction of Kharif Rice yield at Kharagpur using Disaggregated Extended Range Rainfall Forecasts. Theoretical and Applied Climatology, 133(3-4):1075–1091, DOI: https://doi.org/10.1007/s00704-017-2232-4, ISSN: 0177-798X

28. U.C.Mohanty, **M. M. Nageswararao**, P. Sinha, K.K. Singh, B.S.Dhekale, K. Ghosh, D.K.Swain, R.K. Rai, A. Kumar, N. Awasthi, (**2018**) ERFS Forecast: Climate Risk Management in Agriculture, Scientific Documentation, and User Manual, Indian Institute of Technology Bhubaneswar.

29. R.K. Pal, **M.M.Nageswaraao**, N.S. Murty (**2013**) Agrometeorological Indices to Predict Plant Stages and Yield of Wheat for Foot Hills of Western Himalayas. International Journal of Agriculture and Food Science Technology. 4 (9), 909-914, https://www.ripublication.com/ijafst_spl/ijafstv4n9spl_11.pdf

30. R.K. Pal, **M.M.Nageswararao**, N.S. Murty (**2013**) Effectiveness of Weather Generators in Stipulations of Crop Production in Foot Hills of Western Himalayas. Environment & Ecology, 31(3), 1326-1330, https://www.cabdirect.org/cabdirect/abstract/20143107974

31. R.K. Pal, **M.M.Nageswararao**, N.S. Murty (**2013**). Simulation of the impact of projected climate change and Strategic intervention to minimize their adverse effect on wheat. International Journal

of Agriculture and Food Science Technology. 4(9): 867-872, https://www.ripublication.com/ijafst_spl/ijafstv4n9spl_05.pdf

32. R. K. Pal , **M.M.Nageswararao**, N.S Murty (**2013**) Relative temperature disparity and wheat yield as influenced by sowing environments and genotypes in Tarai Region of Uttarakhand. Environment and Ecology, 31(2B): 979-983, https://www.cabdirect.org/cabdirect/abstract/20133306971

33. R.K.Pal, **M. M. Nageswararao**, A.S. Nain, R. Sumanan (**2012**) Temperature effect on wheat (cv WH-542) as simulated with CERES-wheat model for different sowing environments. J Environment & Ecology 30(4A):1541–1545 ISSN 0970–0420, https://drive.google.com/file/d/1jGPc4BxNShsAbFHmQ5cCgpyKba0Wm6TC/view

34. V. B. Sunkara, **M. M. Nageswara Rao**, V. Jitendra, and A. D. Rao (**2012**) Anomalous distribution of freshwater during the southwest monsoon along the east coast of India. Current Development in Oceanography, 5 (2), 75-88, http://www.pphmj.com/abstract/7333.htm

35. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**) Climate Risk Management in Agriculture:Monthly and Seasonal Forecast Application. Springer Cham,Pages:1-354, ISBN: 978-3-031-51861-4https://doi.org/10.1007/978-3-031-51862-1

36. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh. (**2024**). Panorama. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_1

37. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Climate Variability and Food Security. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_2

38. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Hierarchy of Agromet Forecast. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_3

39. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Weather and Climate Forecast. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_4

40. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Status of Monthly and Seasonal Forecast. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_5

41. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Generation of Regional Scale Monthly and Seasonal Forecast. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_6

42. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Disaggregation of Monthly and Seasonal Forecasts. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_7

43. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Crop Modelling and Simulation Concept. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_8

44. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Generation of Climate Risk Matrices. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_9

45. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Lessons from the Farmers on the Application of Weather Forecasts. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_10

46. U. C. Mohanty, Palash Sinha, **M. M. Nageswara Rao**, Dillip Kumar Swain, K. K. Singh (**2024**). Hands-On Practice. In: Climate Risk Management in Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-51862-1_11

47. S.T. Pavan Kumar, Biswajit Lahiri, **M.M.Nageswararao**, Rafael Alvarado, Silkame N Sangma (**2023**) Trend analysis and changepoint detection of monthly, seasonal and annual climatic parameters in the Garo Hills of Northeast India. Ecological Informatics, https://doi.org/10.1016/j.ecoinf.2023.102104

48. Narayana Reddy Karrevula, Dandi A. Ramu, **M. M. Nageswararao**, and A. Suryachandra Rao (**2022**) Inter-annual variability of pre-monsoon surface air temperatures over India using the North American Multi-Model Ensemble models during the global warming era. Theoretical and Applied Climatology, 151,133–151, https://doi.org/10.1007/s00704-022-04269-0

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Presentations/Invited Talks in Conferences/Training-Workshops:

1. **Murali Nageswara Rao Malasala**, Xingren Wu, Keqin Wu, and Vijay Tallapragada (2024) Forecasting Integrated Water Vapor Transport and Precipitation on U.S. West Coast with Atmospheric River Analysis and Forecast System. Unifying Innovations in Forecasting Capabilities Workshop (UIFCW-2024), Jackson State University (JSU), Mississippi, USA, July 22-26, 2024.

2. Keqin Wu, Xingren Wu, **M.M. Nageswararao**, and Vijay Tallapragada (2024) Advancing the Development of Atmospheric River Analysis and Forecast System (AR-AFS): Impacts of Physics and Domain Size on Precipitation Forecasts. 5th International Atmospheric Rivers Conference (IARC-2024), at the Scripps Seaside Forum in San Diego, CA, 24–27 June 2024.

3. **M. M. Nageswararao**, Keqin Wu, Xingren Wu, and Vijay Tallapragada (2024) A Deep Learning-based Ensemble Post-processing Method for Atmospheric Rivers and Associated Precipitation Forecasts on Sub-seasonal Scale for the U.S. West Coast. 5th International Atmospheric Rivers Conference (IARC-2024), at the Scripps Seaside Forum in San Diego, CA, 24–27 June 2024.

4. **Malasala, M. N. R**., & Tallapragada, V. (2024). Hybrid Post-processing of NOAA NCEP GEFSv12 reforecasts for predicting extreme rainfall events on sub-seasonal scale over CONUS. In 21st Annual Climate Prediction Applications Science Workshop (CPASW21). National Oceanic and Atmospheric Administration (NOAA): Tallahassee, FL, US.

5. **Malasala, M. N. R.,** Tallapragada, V., & Zhu, Y. (2024). Sensitivity of data size vs. deep-learning model performance using GEFSv12 reforecast products for rainfall and temperatures over CONUS. In AMS Annual Meeting 2024. American Meteorological Society (AMS): Baltimore, MD, US.

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8. **Malasala, M. N. R**., Wu, K., Wu, X., & Tallapragada, V. (2023). Sub-seasonal prediction skill of GEFSv12 for atmospheric rivers and associated precipitation forecasts over the U.S. West Coast. In 9th NOAA Ensemble Users Workshop 2023. National Oceanic and Atmospheric Administration (NOAA): College Park, MD, US.

9. **Malasala, M. N. R**., Wu, K., Wu, X., & Tallapragada, V. (2023). Calibration on GEFSv12 reforecast products for predicting atmospheric rivers and associated precipitation on sub-seasonal scale over the U.S. West Coast. In AGU Annual Meeting 2023. American Geological Union (AGU): San Francisco, CA, US.

10. **Malasala, M. N. R**., Zhu, Y., & Tallapragada, V. (2023). Post-processing on GEFSv12 reforecast products for extreme rainfall event's prediction on sub-seasonal scale at regional level. In 9th NOAA Ensemble Users Workshop 2023. National Oceanic and Atmospheric Administration (NOAA): College Park, MD, US.

11. **Malasala, M. N. R**., Wu, K., Wu, X., & Tallapragada, V. (2023). Sub-seasonal prediction skill of GEFSv12 for atmospheric rivers and associated precipitation forecasts over the U.S. West Coast. In ECMWF Atmospheric River Reconnaissance Workshop 2023. European Centre for Medium-Range Weather Forecasts (ECMWF): Reading, GB.

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36. **Murali N Malasala (**2016) "Operational Techniques for combining Extended and Seasonal scale forecasts and Modeling in Climate risk management in Agriculture" Organized by PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY, 28th November-03rd December 2016.

37. **Murali N Malasala** (2016) "Hands-on practice course on Modeling-cum-Climate Risk Management" Organized by Odisha University of Agriculture & Technology Bhubaneswar 23-29th July 2016

38. **Murali N Malasala** (2016) "Modeling on Climate Risk Management using ERFS Products" Organized by Odisha University of Agriculture & Technology Bhubaneswar 30th May -10th June 2016

39. **Murali N Malasala** (2015) "Development of Extended Range Forecast at regional level by using bias-corrected GCM outputs". UN-CECAR Training Course on "Climate Change Downscaling Approaches and Applications" at Sri Lanka Institute of Information Technology (SLIIT), Sri Lanka & UNU, Tokyo, Japan 30th March 2015-4th April 2015.

40. **Murali N Malasala** (2015) " Development of Climate Risk Management tools by using Extended Range Forecasts" at the Indian Institute of Technology Bhubaneswar from 15-20th December 2015

41. **Murali N Malasala** (2015) "Statistical methods for predicting seasonal winter precipitation using empirical relationships". In Workshops entitled 'Development of Climatic Risk Management tools in Agriculture using Extended Range Forecast", Organized by India meteorological department (IMD), Ministry of Earth Sciences, Govt. of India, Department of Agriculture corporation (DAC), Ministry of Agriculture, India and IIT Bhubaneswar, 15th Dec 2015.

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43. Oral paper presentation in International Symposium on "Cryosphere and climate change" organized by DRDO, SASE, Manali, India during April 02-04, 2012.

44. Oral paper presentation in national seminar on "Meteorology for socio-economic development" organized by Indian Meteorological Society (IMS-TROPMET-2011), Hyderabad during December 14-16, 2011.

Weblinks

1. https://www.researchgate.net/profile/Murali_Malasala
2. https://scholar.google.com/citations?user=_eeXVdMAAAAJ&hl=en
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PERSONAL DETAILS

Date of Birth : 15th July, 1982

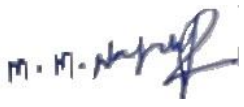
Sex : Male

Marital Status : Married

Nationality : Indian

Permanent Address : Dr. Murali Nageswara Rao Malasala
S/o Simhadri naidu
A.S Peta(Post & vill),
Kasimkota (Mandal)
Yelamanchili (SPO)
Visakhapatnam(Dist)
Andhra Pradesh (state) PIN -531055

Corresponding Address : Dr. Murali Nageswara Rao Malasala
9314 Cherry Hill Road, APT-001,
College Park, Maryland-20740, USA



Date: 27th September 2024

Place: NOAA, College Park, MD

(Dr. M. M. Nageswara Rao)