Dr. PRAMITHA M

Research Associate,
Space Physics Laboratory,
Vikram Sarabhai Space Centre,
Trivandrum, Kerala, India.
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RESEARCH AREA **: Atmospheric Dynamics**

RESEARCH SUPERVISOR **: Dr. Karanam Kishore Kumar**
Scientist SG, SPL, VSSC, ISRO

ACADEMIC QUALIFICATIONS

PhD. in Physics (2017) : National Atmospheric Research Laboratory, Gadanki, Andhra Pradesh & Sri Venkateswara University, Tirupati, Andhra Pradesh.

Msc. in Physics (2011) : Calicut University Campus, Calicut, Kerala.

Bsc. in Physics (2009) : Govt. Arts & Science College, Calicut, Kerala & Calicut University, Calicut,Kerala.

ACHIEVEMENTS

- Reviewer in Geophysical Research Letters (AGU), Journal of Atmospheric and Solar Terrestrial Physics (Elsevier) and Frontiers in Astronomy and Space Sciences (2020).
- Awarded research fellowship from Space Physics Laboratory, VSSC to pursue research (2019).
- Awarded National Post-Doctoral Fellowship from Department of Science and Technology to Pursue research (2017).
- Participated and presented a paper in 'International Symposium on Whole Atmosphere' which is held at Tokyo University, Japan (2016).

- ❖ Received best paper award in National Space Science Symposium which is held at Thiruvananthapuram, India (2016).
- ❖ Received Best paper award in National Space Science Symposium which is held at Dibrugarh, India (2014).
- ❖ Awarded the research fellowship from National Atmospheric Research Laboratory, Gadanki for the period 2011-2016 (2011).
- ❖ First rank in MSc Physics from Calicut University, Kerala (2011).
- ❖ Done a project on 'Higher Order WKB Approximation'. (2011).
- ❖ Qualified GATE in Physics (2011).
- ❖ Qualified UGC-NET in Physics (2010).

LIST OF PUBLICATIONS

1. **Pramitha,M.,** K. Kishore Kumar, M. Venkat Ratnam, M. Praveen, and S. Vijaya Bhaskara Rao (2020) Gravity Wave Source Spectra Appropriation for Mesosphere Lower Thermosphere using Meteor Radar Observations and GROGRAT Model Simulations. Geophys. Res. Lett.,47, https://doi.org/10.1029/2020GL089390.
2. **Pramitha, M.**, K. Kishore Kumar, M. V. Ratnam, S. V. B. Rao, and G. Ramkumar (2019) Meteor radar estimations of gravity wave momentum fluxes: Evaluation using simulations and observations over three tropical locations.J. Geophys. Res.-Space Physics, 124,7184-7201, https://doi.org/10.1029/2019JA026510.
3. **Pramitha, M.,** M. Venkat Ratnam, B. V. Krishna Murthy,S. Vijaya Bhaskara Rao (2017) Source spectra of the gravity waves obtained from momentum flux and kinetic energy over a tropical station: Comparison between observations and model results, J. Atmos. Sol. Terr. Phys., 154,1–9, https://doi.org/10.1016/j.jastp.2016.12.001.
4. **Pramitha, M.,** M. Venkat Ratnam, P.P., Leena, B.V. Krishna Murthy, S. Vijaya Bhaskara Rao (2016) Identification of Inertia Gravity Wave sources observed in the troposphere and the lower stratosphere over a tropical station Gadanki, Atmos. Res.,176, 202-211, https://doi.org/10.1016/j.atmosres.2016.03.001.
5. **Pramitha, M.**, M. Venkat Ratnam, Alok Taori, B. V. Krishna Murthy, D. Pallamraju, and S. Vijaya Bhaskara Rao (2015) Evidence for tropospheric wind shear excitation of high phase-gravity waves reaching the mesosphere using ray tracing technique, Atmos. Chem. Phys., 15,2709-2721, https://doi.org/10.5194/acp-15-2709-2015.
6. Venkat Ratnam, M., N. Pravallika, S. Ravindra babu, G. Basha, **M. Pramitha**, and B. V. Krishna Murthy (2014) Assessment of GPS radiosonde descent data, Atmos. Meas. Tech.,7, 1011-1025, https://doi.org/10.5194/amt-7-1011-2014.
7. Venkat Ratnam M., S.V. Sunilkumar, K. Parameswaran, B.V. Krishna Murthy, Geetha Ramkumar, K. Rajeev, Ghouse Basha, S. Ravindra Babu, M. Muhsin, ManojKumar

Mishra, A. Hemanth Kumar, S.T. Akhil Raj, **M. Pramitha** (2014) Tropical Tropopause Dynamics (TTD) Campaigns over Indian region: An Overview, J. Atmos and Sol. Terres. Phys., 121, 229-239, https://doi.org/10.1016/j.jastp.2014.05.007.

CONFERENCE PAPERS PRESENTED

1. **Pramitha, M**, K.Kishore Kumar, M. Venkat Ratnam, and S. Vijaya Bhaskara Rao Meteor radar estimation of Gravity Wave Variances and Momentum Fluxes in the mesosphere lower thermosphere: Evaluation of different methods using simulations and observations over three tropical locations, URSI–APRASC,09-15 March 2019, Delhi, India.
2. **Pramitha, M**, K.Kishore Kumar, M. Venkat Ratnam, and S. Vijaya Bhaskara Rao Source spectra characterisation of atmospheric gravity waves observed at mesospheric altitude using Ray tracing modeling and Meteor Radar observations. NSSS,29-31 January 2019, Pune, India.
3. **Pramitha, M**, M. Venkat Ratnam, Leena, P.P., Alok Taori, Pallamraju, D., Krishna Murthy, B. V., and S. Vijaya Bhaskara Rao Identification of Gravity Wave sources Over Tropical Latitudes Using Reverse Ray Tracing Technique. NSSS,09-12 February 2016, Thiruvananthapuram, India.
4. **Pramitha, M**, M. Venkat Ratnam, Leena, P.P., Krishna Murthy, B. V., and S. Vijaya Bhaskara Rao Identification of Inertia Gravity Wave sources observed in the troposphere and the lower stratosphere over a tropical station Gadanki, APAS 27-29 January 2016, SV University, Tirupati, India.
5. **Pramitha, M,** M. Venkat Ratnam, Alok Taori, and S. Vijaya Bhaskara Rao: Identification of high frequency gravity wave sources using ray tracing method over tropical latitude: First results. APAS, 13-15 November 2014, Hyderabad, India.
6. **Pramitha, M**, M. Venkat Ratnam, Alok Taori and S. Vijaya Bhaskara Rao: Identification of high frequency gravity wave sources using ray tracing method over tropical latitude: First results. National Space Science Symposium (NSSS) 29.01.2014 to 01.02.2014, Dibrugarh, India.
7. **Pramitha, M**, M. Venkat Ratnam, Leena, P.P., Alok Taori, Pallamraju, D., Krishna Murthy, B. V., and S. Vijaya Bhaskara Rao: Identification of Gravity Wave sources Over Tropical Latitudes Using Reverse Ray Tracing Technique. International Symposium on Whole Atmosphere, ISWA, 14-16 September2016, Tokyo University, Tokyo, Japan.