

Curriculum Vitae

Personal Information

Name : Radhika Ramachandran

Designation : Scientist 'G', Head, Numerical Atmosphere
Modelling, Space Physics Laboratory, VSSC
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Address : Space Physics Laboratory, Vikram Sarabhai Space
Centre, Indian Space Research Organization,
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Research Area & Research Interests

Atmospheric Boundary Layer, Regional/Mesoscale Numerical
Weather Prediction, Climate Change Science and Policy,
International Co-operation and Technical Liaison activities, Space
Law and Space Policy

Academic Qualification (degree onwards)

B. Sc (Physics), University of Kerala

M.Sc (Physics), University of Kerala

Ph.D. (Studies on Atmospheric Boundary Layer), University of
Kerala

Post-Doctoral Fellowship (Numerical Modelling of the
Atmosphere), North Carolina State University, Raleigh, North
Carolina, USA

Professional Background

- Research in Atmospheric Science and Numerical Weather Prediction
- International Co-operation with Global Space Agencies
- Technical Co-ordination with Union Government and Prime Minister's Office

Jan1984– June 2006: Scientist, Boundary Layer Physics Branch, Space Physics Laboratory(SPL), Vikram Sarabhai Space Centre(VSSC)/Indian Space Research Organisation (ISRO), Trivandrum, Kerala, India

July 2006 –June 2008:Technical Liaison Officer / Officer on Special Duty, DOS/ISRO Branch Secretariat, New Delhi, India

June 2008- June 2011: Counsellor (SPACE), Embassy of India, Paris and Technical Liaison Officer, ISRO Technical Liaison Unit (ITLU), Paris, France

July 2011 - June 2013: Adjunct Professor, Indian Institute of Space Science and Technology (IIST), Trivandrum, INDIA

July 2013 – Till date: Scientist 'G', Head, Numerical Atmospheric Modelling, Space Physics Laboratory, Vikram Sarabhai Space Centre, Trivandrum, INDIA

Academic Positions held

Adjunct Professor, Indian Institute of Space Science and Technology, Thiruvananthapuram, INDIA, July 2012-June 2013

Visiting Faculty, International Space University, Strasbourg, France, 2008 -2011

Visiting Faculty, La Società Italiana per l'Organizzazione Internazionale (SIOI), Rome, 2008-2011

Administrative/Managerial Accomplishments

Officer on Special Duty, Department of Space Branch Secretariat, New Delhi, 2006-2008

- Managed the affairs of ISRO/Department of Space (DOS) office at New Delhi. Participated in high-level negotiations of Dept. of Space with various inter-governmental departments of Government of India and coordinated meetings with Planning Commission, Prime Minister's Office and the Parliament and also various Embassies in New Delhi.

Counsellor (Space), ISRO Technical Liaison Officer, Embassy of India, Paris, 2008-2011

- Was the sole representative of ISRO in Europe and had independent charge of the Space Wing of the Embassy, reporting to Ambassador, Embassy of India in Paris. Scientific knowledge and administrative ability could be well utilised in establishing cordial relations with all the major space agencies in Europe -CNES, DLR, ASI, ESA and the British Space Agency for furthering India's Space Programmes.
- Also the first woman scientist from ISRO selected for this assignment. Successfully completed tenure in June 2011.

Major Career Achievements in Atmospheric Science

- Initiated Numerical Weather Prediction activity in ISRO and commissioned Numerical Atmospheric Models "HRM" and "ARPS" for operational weather prediction for the first time in ISRO, during launch campaigns.
- Commissioning of ARPS Numerical Model with Doppler Weather Radar Data Assimilation for effective prediction of thunderstorms at the launch site at the Satish Dhawan Space Centre, Sriharikota

Membership in Professional Bodies

Associate, COSPAR, Paris, France
Lifetime Member – India Meteorological Society
Lifetime Member – Kerala Academy of Sciences
Life Member- Astronautical Society of India
Life Member , Indian Space Scientists Association

Professional Responsibilities

International

Full Member, International Academy of Astronautics(**IAA**), Paris, 2012
Member , Editorial Board, **Acta Astronautica** (Elsevier), 2013 onwards
Chair, IAA study group 1.11 on Comparative Climatology

India

Member, Board of Studies in Atmospheric Science , CUSAT

Thesis Examiner, University of Kerala, Trivandrum

Registered Research Guide, University of Kerala

Registered Research Guide, MG University, Kottayam

Chair person, Academic committee. SPL/VSSC

Experience in Techno-Managerial activities in Europe

- Overview of Aerospace scenario in France and Europe in respect of technological developments for providing feedback to top management and technologists of ISRO.
- Interface with the French National Space Agency (CNES), European Space Agency (ESA) and other national Space agencies like DLR, with respect to proposals on bilateral/multilateral co-operation, joint missions, payloads, tracking station support, etc.
- Representation of ISRO in various technical meetings and forums like United Nations Committee on Peaceful Uses of Outer Space (UN-COPUOS), International Astronautical Federation (IAF), International Academy of Astronautics(IAA), Committee on Space Research (COSPAR),GEOS, IOAG, ISECG, etc., as advised by ISRO Headquarters.
- Co-ordination with M/s. Arianespace, Thales Alenia, EADS , EUTELSAT and other allied agencies for smooth conduct of ISRO's launch vehicle and satellite programmes.
- Update the Indian Mission particularly the AMBASSADOR OF INDIA IN FRANCE ON the STATUS OF IMPORTANT ISSUES ON SPACE RELATED MATTERS AND ON THE ONGOING AND FUTURE PROGRAMMES OF ISRO.

Important Outreach activities for ISRO in Europe

Rome Science festival, January 15-19 2009, Rome

Invited for the ROMA Science festival to give a public lecture on 'Space Exploration in the 21st century: Global Perspectives & Indian Initiatives'.

Tech for Food, Paris, February 26 , 2009

Invited to Deliver a lecture on

'How Indian space techniques have been utilised to enhance agricultural development and food security'

(web site ,<http://www.techforfood.com/programme2.php>)

Eurisy workshop, March 11-14, 2009, Prague, Czech Republic

Invited for the EURISY WORKSHOP on 'Securing Human Resources for the Space Sector' to give a talk on 'Best Practices to Address HR needs-The Indian Strategy '.

(www.eurisy.org/DocEurisy/.../Presentations/3.1_R.Ramachandran.pdf)

CNES meeting, march 18-20, 2009, Biarritz, France

Participated in the CNES Council meeting and also had a review of CNES/ISRO Joint on-going projects by Chairman, ISRO and President, CNES which helped to bring out a lot of important issues with regard to SARAL, Megha-Tropiques and also w2m satellite power systems with a few possible solutions.

**Institute Francais des Relations Internationales (IFRI), June 2009,
Paris, France**

Was invited to participate in the International workshop organised by IFRI on "Assessing the current dynamics of space security" to represent India. Presented a statement on the Indian perspectives on the topic.

Eumetsat Meeting, June 25-26, 2009, Darmstadt, Germany

Invited to EUMETSAT for linking up various action items post Chairman's meeting with DG, EUMETSAT in May 2009 . Also made a presentation on the Indian Space Programme with special emphasis of EO satellites and missions.

**Inter Operability Agency Group (IOAG) meeting, September 22-23,
2009, Rome, Italy**

Was requested by ISRO to make a presentation on behalf of Director, ISTRAC on the status of ISRO in various activities pertaining to Interoperability.

ECMWF meeting, September 24-27, 2009 Reading , UK

A talk on "Space Activities and Policies of India" was given at ECMWF.

**ISRO-EADS Senior Manager's meeting, October 5-7, 2009, Toulouse,
France**

The meeting was held to take stock of the status of collaboration with respect to EO programmes with the 'spot image' , 'info terra' group of the EADS offices in Toulouse, France.

3rd IAA African regional Conference, November 23-26,2009, Abuja, Nigeria

Represented ISRO at the Regional conference in Abuja and made a presentation on “Space for Development – The Indian Experience”

www.ngrguardiannews.com/sunday.../291109?pdate

Organisation for Economic Co-operation and Development (OECD), November 2009, Paris, France

Invited as an expert to deliver a lecture on ‘India’s Experience in national food production monitoring using remote sensing’ at the seventh meeting of the working group of the OECD Future Programmes - Forum on Space Economics. The theme was on ‘Space Technologies and Global Food Supplies: Production, Transport, and Distribution’. As a non- OECD country, the presentation made on the Indian experience and best practices was significant and very much appreciated.

IV th ISECG Meeting, December 1-3, 2009, Noordwijk, The Netherlands

Participated in the ivth ISECG meeting in Noordwijk hosted by ESA and presented a statement on behalf of ISRO.

ESA/ESRIN, Rome, Italy – January 18 to 22, 2010

As a member, attended the Joint Working Group for Earth Observation Meetings at ESA/ESRIN along with ISRO delegation and participated in the discussions on Earth Observation.

SATEXPO 2010 Rome, Italy – February 2 to 6, 2010

Participated as a member of the ISRO delegation. Gave a talk on 'Climate change studies in ISRO' at one of the workshops during the occasion.

Missile Technology Control Regime (MTCR) meeting June 15, 2010 Paris

Represented India and participated at the 'Point of Contact' meetings of the MTCR held at Paris as Observer for recording the discussions that ensued and give a feed back and analysis to ISRO and Ambassador of India in France.

Institute Francais des Relations Internationales (IFRI), Brussels, Belgium, October 4-5, 2010

Participated in the international conference on "The Continuing Story of Europe and Space Security" organised by IFRI and Secure World Foundation.

ICG, Turin, Italy – October 17 to 22, 2010

Participated in the 5th Meeting of the International Committee on Global Navigation Systems (ICG) with Director, SCNP, ISRO as a member of the ISRO delegation.

UK Space Agency, London, UK – November 2 to 4, 2010

Participated in the Inter Agency Operability Group, IOAG-14 Meeting organised at UK Space Agency as the ISRO representative and made a presentation and update on the IOAG related activities of ISRO.

Awards & Recognition

- **Fellow**, Kerala Academy of Sciences, December 2013
- **ISRO-ASI award** for Space Science Applications constituted by the Astronautical Society of India for year 2008, awarded in 2012
- **International Award** for Best Research Paper Presentation by a woman scientist (February 2004).International Symposium on Natural Hazards INTROMET-2004, Hyderabad.
- Adjudged the best **paper** in terms of content and presentation, Hindi Seminar held at Vikram Sarabhai Space Centre, Thiruvananthapuram, November 26, 2002.
- Adjudged the **Best paper** in the Session on Space Science in the seminar, Inter Centre Technical Hindi Seminar held at ISRO Satellite Centre, Bangalore, September 13, 2001.
- **BOYSCAST Award by Department of Science and Technology, India**, Better Opportunities for Young Scientists in Chosen Areas of Science & Technology –(BOYSCAST) Award for pursuing post-doctoral research abroad (availed at NC State University, Department of Marine, Earth & Atmospheric Sciences, USA), 1995
- **Best Scientific Paper Awards at the National Space Science Symposia, India** Co-authored the best scientific papers in tropospheric studies area, **four times in succession** -1987, 1990, 1992, 1994.

- **Rotary GSE (Group Study Exchange) Award of the Rotary Foundation for Professional Excellence** (Underwent Vocational training in North Carolina, USA) March to April, 1992.
- **Best Outgoing Student**, H. H. The Maharaja's College for Women, Trivandrum, Kerala – 1980.
- **Chairperson/Speaker**, College Union, H.H. The Maharaja's College for Women, 1979.
- **University Merit scholarship** for distinction in the Pre degree, BSc degree course and MSc Courses, in 1976, 1979 and 1981 respectively

Research Supervision

Details of Students who received Ph D under my guidance

Name of the candidate:	Damu BalaSubrahmanyam (currently Scientist, SPL, VSSC, TRIVANDRUM)
Year of obtaining PhD	April 2004
University Name	Mahatma Gandhi University, Kottayam
Title of the thesis	Observational and Modelling Studies of Marine Atmospheric Boundary Layer over the Tropical Indian Ocean during INDOEX
Name of the candidate:	S. Indira Rani (Currently Scientist, NCMRWF, NOIDA, INDIA)
Year of obtaining PhD	August 2009
University Name	University of Kerala, Thiruvananthapuram
Title of the thesis	Studies on Lower Atmospheric Processes over South India Using Numerical Atmospheric Models and Experiments
Name of the candidate:	K. Nalini
	Enrolled as research scholar in SPL in 2014
Proposed research topic	Estimation and Validation of Terrestrial Carbon dioxide flux over India using ground based and space based observations and transport models

List of Publications

Publications in Peer-reviewed journals/Books/ Book Chapters

Book Chapters

D.BalaSubrahamanyam and **Radhika Ramachandran**: "Applications of Mesoscale Atmospheric Models in Short-Range Weather Predictions During Satellite Launch Campaigns in India" book chapter ,Atmospheric Model Applications, ISBN 978-953-51-0488-9, edited by Ismail Yucel, 2012

(Link: <http://www.intechopen.com/articles/show/title/applications-of-mesoscale-atmospheric-models-in-short-range-weather-predictions-during-satellite-lau>)

Radhika Ramachandran : 'DWR Data Assimilation in Numerical Weather Prediction for Forecast of thunderstorms at Sriharikota', Book Chapter from 'Technology Development for Atmospheric Research and Applications', Eds. B. Manikiam, TGK Murthy , Published by Atmospheric .Science Programme Office; ISRO HQ; Bangalore, June 2008

Books

S. Indira Rani, **Radhika Ramachandran** and D. BalaSubrahamanyam (Doctoral Thesis/Dissertation, 'Studies on Lower Atmospheric Processes over South India using Numerical Atmospheric Models and Experiments', Archive No.: V178406; ISBN (eBook):: 978-3-656-00569-8; ISBN (Book): 978656-00584-1; DOI: 10.3239/9783656005698, 2008

Peer-reviewed journals

D. BalaSubrahamanyam, **Radhika Ramachandran**, S. Indira Rani, S. Sijikumar, T. J. Anurose and Asish Kumar Ghosh : Location-specific weather predictions for Sriharikota (13.72 N, 80.22 E) through numerical atmospheric models during satellite launch campaigns, *Natural Hazards*, 61(3): 893 - 910, DOI: 10.1007/s11069-011-9942-1, 2012

M. M. Ali, Sarika Jain and **Radhika Ramachandran**, “Effect of Temperature and Salinity on Sound speed in the Central Arabian Sea”, *The Open Ocean Engineering Journal*, 4, 71-76, 2011

Radhika Ramachandran, D. BalaSubrahamanyam and P.K. Kunhikrishnan: “Characterization of Sea/Land Breeze circulation along the west coast of Indian sub-continent during pre-monsoon”, ***Atmospheric Research*, 95/4, 367-378, 2010.**

D. BalaSubrahamanyam, S. Indira Rani, **Radhika Ramachandran**, P. K. Kunhikrishnan and B. Prasad Kumar: “Impact of Wind Speed and Atmospheric Stability on Air-Sea Interface Fluxes over the East Asian Marginal Seas”, ***Atmospheric Research*, 94, 81 – 90, doi:10.1016/j.atmosres.2008.09.011; 2009.**

D. BalaSubrahamanyam, S.Indira Rani, **Radhika Ramachandran** and P. K. Kunhikrishnan: “Nudging of Vertical Profiles of Meteorological Parameters in a Mesoscale Atmospheric Model - A Step towards improvements in Numerical Simulations”, ***Ocean Science Journal*, 43(4), 165-173, 2008.**

D. BalaSubrahamanyam, **Radhika Ramachandran**, S. Indira Rani, P. K. Kunhikrishnan and B. Prasad Kumar: “Intercomparison of Air-Sea Interface Fluxes over the Yellow Sea and Korea Strait – Impact of Tsushima Warm Current”, ***Boundary Layer Meteorology*, 127, 333 – 344, doi: 10.1007/s10546-007-9248-8, 2008.**

Denny P Alappattu, D. BalaSubrahamanyam, P. K. Kunhikrishnan, **Radhika Ramachandran**, K. M. Somayaji, R. Venkatesh, G.S. Bhat, A. Bhagvath Singh:

“Spatio-temporal Variability of Surface –layer Turbulent fluxes Over the Bay of Bengal and Arabian Sea during the ICARB Field Experiment”, **Boundary Layer Meteorology** , **126**, 297 – 309, doi: 10.1007/s10546-007-9233-2, **2008**.

D. BalaSubrahamanyam, **Radhika Ramachandran**, S. Indira Rani and B. Prasad Kumar: “Air-Sea Interaction Processes over the East-Asian Marginal Seas surrounding the Korean Peninsula”, **AnnalesGeophysicae**, **25(7)**, 1477 – 1486, **2007**.

D. BalaSubrahamanyam, **Radhika Ramachandran**, S. Indira Rani, P. K. Kunhikrishnan and B. Prasad Kumar: “A Comparative Study of Air-Sea Exchange Coefficients and Turbulent fluxes over Indian Sub-continent and Korean Peninsula’, **Remote Sensing of Atmospheres, Oceans and Interactions, Proceedings of SPIE, Vol.: 6404, 640416**, doi: 10.1117/12.694109, **2006**.

D. BalaSubrahamanyam, **Radhika Ramachandran** and P. K. Kunhikrishnan: “Improvements in Simulations of Atmospheric Boundary Layer Parameters through Data Assimilation in ARPS Mesoscale Atmospheric Model”, **Remote Sensing of Atmospheres, Oceans and Interactions, Proceedings of SPIE, Vol.: 6404, 64040K**, doi: 10.1117/12.694106, **2006**.

P. K. Kunhikrishnan, **Radhika Ramachandran**, Denny P. Alappattu, N. V. P. Kiran Kumar, D. BalaSubrahamanyam (2006) A Case study of sea breeze circulation at Thumba coast through observations and modelling. In T. N. Krishnamurti, B. N. Goswami and Toshiki Iwasaki (ed): Remote Sensing and Modelling of Atmospheres, Oceans and Interactions, Proc. of SPIE , Vol. 6404, 640417, (2006) 0277-786X/06/\$15 doi: 10.1117/12.694125.

Radhika Ramachandran, U. C. Mohanty, Sujata Pattanayak, M. Mandal and S. Indira Rani: “Location specific forecast of winds and wind shears at Sriharikota during the launch of GSLV-F01”, **Current Science, Vol. 91(3)**, 285 – 295, **2006**.

Praveena Krishnan, P. K. Kunhikrishnan, S. Muraleedharan Nair, SudhaRavindran, **Radhika Ramachandran**, D. B. Subrahamanyam and M. VenkataRamana,

“Observations of the atmospheric surface layer parameters over a semi arid region during the solar eclipse of august 11, 1999”, **Proc. Indian Acad.Sci. (Earth Planet Sci.)**,**113(3)**, 353 – 363, **2004**.

D. BalaSubrahmanyam and **Radhika Ramachandran**, “Wind Speed dependence of the Air-Sea Exchange parameters over the Indian Ocean during INDOEX, IFP-99”, **AnnalesGeophysicae**, **21**, 1667 – 1679, **2003**.

D. BalaSubrahmanyam and **Radhika Ramachandran**, “Structural Characteristics of Marine Atmospheric Boundary Layer (MABL) and its associated dynamics over the Central Arabian Sea during INDOEX, IFP-99 Campaign”, **Current Science**, **85(9)**, 1334 – 1340, **2003**.

D. BalaSubrahmanyam, **Radhika Ramachandran**, K. Sen Gupta and Tuhin K. Mandal, “Variability of Mixed Layer Heights over the Indian Ocean and Central Arabian Sea during INDOEX, IFP-99”, **Boundary Layer Meteorology** **107(3)**, 683 – 695, **2003**.

D. BalaSubrahmanyam and **Radhika Ramachandran**, “Air-Sea Interface Fluxes over the Indian Ocean during INDOEX, IFP-99”, **Journal of Atmospheric and Solar-Terrestrial Physics** **64(3)**, 291 – 305, **2002**.

Prakash M. Dolas, **Radhika Ramachandran**, K. Sen Gupta, Patil, Jadhav, “Atmospheric Surface Layer Processes at a Tropical Inland Station during the Total Solar Eclipse of 11 August 1999”, **Boundary Layer Meteorology**, **104**, 445 – 461, **2002**.

M. VenkataRamana, K. Sen Gupta, **Radhika Ramachandran**, SudhaRavindran, S. Ameenulla and J.V.S. Raju, “Latitude Variation Of Boundary Layer Height Over Indian Ocean During Pre and First Field Phase (FFP-98) Of INDOEX”, **Current Science**, **76**, 899 – 902, **1999**.

K. Sen Gupta and **Radhika Ramachandran**, “The Tropical Atmospheric Boundary Layer, (Review Paper)”, **Proc. of the Indian Academy of Science (Space Physics), PINSA, 64A(3)**, 267 – 276, **1998**.

Radhika Ramachandran, J Winston Jeeva Prakash, K Sen Gupta, K Narayanan Nair and P.K.Kunhikrishnan, “Variability of surface roughness and turbulent intensities at a coastal terrain in India”, **Boundary Layer Meteorol.**, **70**, 385, **1995**.

Radhika Ramachandran, K Sen Gupta, K Narayanan Nair, P.K. Kunhikrishnan and J.W.J. Prakash, On the estimation of the exchange parameters and turbulence intensity and their variability at a coastal terrain, Exchange processes at the Land surface for a Range of Space and Time Scales, **International Association of Hydrological Science, Publ. No. 212**, 195, **1993**.

Kunhikrishnan, P.K., K. Sen Gupta, **Radhika Ramachandran**, J Winston Jeeva Prakash and KNarayanan Nair, “Study on thermal internal boundary layer structure over Thumba, India”, **Ann. Geophys.**, **11**, 52, **1993**.

Winston Jeeva Prakash, J., **Radhika Ramachandran**, K. Narayanan Nair, K. Sen Gupta and P.K. Kunhikrishnan, “On the spectral behaviour of atmospheric boundary layer parameters at Thumba, India”, **Quart. J. R. Meteorol. Soc.**, **119**, 187, **1993**.

Winston Jeeva Prakash, J., **Radhika Ramachandran**, K. Narayanan Nair, K. Sen Gupta and P.K. Kunhikrishnan, 1992, “On the structure of seabreeze fronts observed near the coast line of Thumba, India”, **Boundary Layer Meteorol.**, **59**, 111, **1992**

Kunhikrishnan, P.K., K. Narayanan Nair, K. Sen Gupta, **Radhika Ramachandran**, and J. Winston Jeeva Prakash, “Sodar echo patterns and study of thermal plumes over Thumba”, **Mausam**,**41**, 583, **1990**

Narayanan Nair, K., P.K. Kunhikrishnan, K. Sen Gupta and **Radhika Ramachandran**, “Study of vertical wind and temperature turbulence in a convective boundary layer from SODAR observations at Thumba”, **Indian J. Radio & Space Phys.**,**18**, 157, **1989**.

Sen Gupta, K., P.K. Kunhikrishnan, **Radhika Ramachandran** and K. Narayanan Nair, "Estimating surface sensible Heat flux using Sodar and surface temperature measurements in the evolving convective boundary layer", **Atmospheric Research**, 20, 119, 1986.

Symposium Proceedings:

Radhika Ramachandran: 'Climate Change Challenges in the 21st Century: ISRO initiatives ', Proceedings of the Indian Science Congress, January 3-7, 2010, Section V, Earth System Sciences.

D. BalaSubrahmanyam, **Radhika Ramachandran**, TJ Anurose and MannilMohan(2010) Short-to-Medium Range Weather Forecasting for satellite launches: Utilisation of NWP models in conjunction with Earth Observing Systems, Bulletin of National Natural Resource Management Systems, NNRMS(B) -35:37-49

D. BalaSubrahmanyam, S. Indira Rani, **Radhika Ramachandran** and P. K. Kunhikrishnan: "Can Nudging of Vertical Profiles of Meteorological Parameters improve Performance of a Mesoscale Atmo-spheric Model ?", Proceedings of TROPMET 2007, Advances in Meteorology and Their Applications, Indian Meteorological Society, 62 - 63. 2007.

D. BalaSubrahmanyam, **Radhika Ramachandran**, S. Indira Rani, and P. K. Kunhikrishnan: "An Overview of High-resolution Regional Model (HRM) Simulations during PSLV-C7 and PSLV-C8 Launch Campaigns", Proceedings of TROPMET 2007, Advances in Meteorology and Their Applications, Indian Meteorological Society, 66 - 67. 2007.

S. Indira Rani, D. BalaSubrahmanyam, **Radhika Ramachandran** and P. K. Kunhikrishnan: "Statistical Evaluation of High-resolution Regional Model (HRM) Bias and Its incorporation in Near-real Time Simulations: A Step Towards Improvements in Atmospheric Predictability", Proceedings of TROP-MET 2007, Advances in Meteorology and Their Applications, Indian Meteorological Society, 64 - 65. 2007

Subrahmanyam, D.B., K. Sen Gupta, SudhaRavindran, P.K. Kunhikrishnan, **Radhika Ramachandran**, M.V. Ramana and Praveena Krishnan, "Variation Of Marine Atmospheric Boundary Layer Parameters In The Latitude Range 15°N To 20°S And Longitude Range 63°E To 77°E During INDOEX, IFP-99", Proc. TROPMET-200 on Ocean And Atmosphere, pp. 410-414, 2001.

Radhika Ramachandran, "Effects of Orography on Circulations over Peninsular India from Three Dimensional Mesoscale Model Simulations", Meteorology Beyond 2000, Proc. TROPMET, 194-199, 1999.

Radhika Ramachandran, M.V. Ramana, K. Sen Gupta and SudhaRavindran, "Monsoon Boundary Layer Observations From A Meteorological Tower At ISTRAC Station, Lucknow", Meteorology Beyond 2000, Proc. TROPMET-1999, 250-254, 1999.

Sen Gupta K., T. Sunil, P.K. Kunhikrishnan and **Radhika Ramachandran**, "On The Growth of Atmospheric Boundary Layer At A Coastal Site", Proc. 2nd Workshop on ISRO-GBP:-02-98, 247-252, 1998.

Sen Gupta, K., P.K. Kunhikrishnan, **Radhika Ramachandran**, J. Winston Jeeva Prakash and K.Narayanan Nair, "On the characteristics of coastal atmospheric boundary layer", Proc. I Workshop on ISRO-Department of Space –IGBP –{I/D-GBP} results, DOS, Bangalore, 91, 1993.

Sen Gupta, K, Narayanan Nair, P.K. Kunhikrishnan, **Radhika Ramachandran** and J. Winston Jeeva Prakash, "On the characteristics of Thermal Internal Boundary Layer (TIBL) observed at a Coastal site, Thumba in India", Proc. V International Symposium on Acoustic Remote Sensing of the Atmosphere and Oceans, Acoustic Remote Sensing, Ed. SP. Singal, Tata McGrawHill Publ. Co. Ltd., New Delhi, 315, 1990.

Narayanan Nair, K, P.K. Kunhikrishnan, **Radhika Ramachandran**, K. Sen Gupta and J. Winston Jeeva Prakash, "Surface Layer studies using towerbased measurements at Thumba, India", Proc.V. International Symposium on Acoustic Remote Sensing

of the Atmosphere and Oceans, Acoustic Remote Sensing, Ed. SP Singal, Tata McGrawHill Publ. Co. Ltd., New Delhi, 325, 1990.

Narayanan Nair, K, K. Sen Gupta, P.K. Kunhikrishnan, **Radhika Ramachandran**, S. Muraleedharan Nair, K.C. Suma Bai and T. Sunil, "Interaction of mesoscale processes with Atmospheric Boundary Layer (ABL) for a tropical sea-shore station", Proc. I Workshop on ISRO-Department of Space –IGBP –{I/D-GBP} results, DOS, Bangalore, 107, 1993.

Scientific Reports:

Radhika Ramachandran, D. BalaSubrahmanyam and P.K. **Kunhikrishnan**, **2007** High resolution Regional Model (HRM) Simulations of Meteorological Parameters over Sriharikota during PSLV-C7 Launch – A Preliminary Report : SPL Scientific Report: SR:01:2007

Radhika Ramachandran, UC Mohanty, Sujata Pattanayak and Indira Rani: Verification of Regional /Mesoscale Model Simulations at SHAR in connection with the GSLV-F01 Launch on September 20, 2004: SPL:SR:002:04.

Radhika Ramachandran, UC Mohanty, NV Sam and AK Das: Evaluation and Verification of Simulation of winds using regional models MM5 and HRM at a launch site over S.India, SPL Technical Report,SPL:SR:01:2003

Radhika Ramachandran, UC Mohanty, NV Sam, D BalaSubrahmanyam and Praveena Krishnan: Evaluation and Verification of simulations of wind over S.India using regional models MM5 and HRM during GSLV launch, SPL scientific Report SPL, SPL:SR:02:2003

Prakash M Dolas, **Radhika Ramachandran** and D BalaSubrahmanyam: Mesoscale Modelling for SHAR: SPL:01:2001.

Subrahmanyam, D.B., **Radhika Ramachandran**, K. Sen Gupta, Praveena Krishnan, P.K. Kunhikrishnan and SudhaRavindran, Marine Atmospheric Boundary Layer (MABL) Studies Over The Indian Ocean During INDOEX, IFP-99, SPL:02: 2001.

Radhika Ramachandran, D. BalaSubrahmanyam, S.K. Pandey and C.D. Sharma, A Brief Report On The Atmospheric Boundary Layer Studies At ISRO Satellite Tracking Station (ISTRAC) Ground Station , Lucknow, SPL:02, 2000.

Radhika Ramachandran and Prakash M. Dolas, MSSHAR-1, Development Of A Mesoscale Forecast Model For SHAR (First Report), SPL: SR: 01:2000, VSSC, Thiruvananthapuram, January 2000.

Sen Gupta K., P.K. Kunhikrishnan, SudhaRavindran, **Radhika Ramachandran**, Peter George and M. VenkataRamana, Results Of The Boundary Layer Experiments During INDOEX Pre-Cruise Inter Comparison Experiment At Trivandrum, SPL: SR: 003:98, VSSC, Thiruvananthapuram, October 1998.

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