

Publications

A. In peer-reviewed Journal

33. Quantifying Uncertainties in CERES/MODIS Downwelling Radiation Fluxes in the Global Tropical Oceans

Venugopal Thandlam, Anna Rutgersson, Venkatramana Kaagita, **Hasibur Rahaman** and Venkatramana Reddy

Under revision Earth and Space Science

32. "Reply to comment by E. T. Swenson, D. Das and J. Shukla on ``Unraveling the Mystery of Indian Summer Monsoon Prediction: Improved Estimate of Predictability Limit''

Subodh Kumar Saha , Anupam Hazra , Samir Pokhrel , Hemantkumar S Chaudhari , K. Sujith , Archana Rai , **Hasibur Rahaman** , B N Goswami

Journal of Geophysical Research-Atmosphere, 125, e2020JD033242.

<https://doi.org/10.1029/2020JD033242>

31. A Sea Level Monopole in the Equatorial Indian Ocean

Venugopal Thandlam, Udayabhaskar, **Hasibur Rahaman**, Paolo De Luca, Anna Rutgersson, Erik Sahlee, M Ravichandran, and SSS Ramakrishna

NPJ Climate and Atmospheric Sciences, <https://www.nature.com/articles/s41612-020-0127-z>

30. Evaluation of different heat flux products and its role in the seasonal evolution of SST over the Tropical Indian Ocean

Samir Pokhrel, Ushnanshu Dutta, **Hasibur Rahaman**, Hemantkumar Chaudhari, Anupam Hazra, and Subodh Kumar Saha and Chinta Veeranjanyulu

Earth and Space Science 7, e2019EA000988. <https://doi.org/10.1029/2019EA000988>

29. An assessment of the Indian Ocean mean state and seasonal cycle in a suite of interannual CORE-II simulations

H.Rahaman, U.Srinivasu, S.Panickal, J.V.Durgadoo, S.M. Griffies, M.Ravichandran,A. Bozec, A. Cherchi , A. Voldoire,D . Sidorenko , E.P. Chassignet, G. Danabasoglu, H. Tsujino, K. Getzlaff,M. Ilıcak, M.Bentsen ,M.C. Long , P.G. Fogli, R. Farneti, S.Danilov , S.J. Marsland, S. Valcke, S.G. Yeager, Q. Wang

Ocean Modelling, [Volume 145](#), January 2020, 101503

<https://www.sciencedirect.com/science/article/pii/S1463500319301118?via%3Dihub>

28. A Note on Modeling Mixing in the Upper Layers of the Bay of Bengal: Importance of Water Type, Water Column Structure and Precipitation. L. Kantha, R. A. Weller, J. T. Farrar, **H. Rahaman** and J. Raju

Deep Sea Research II Special Issue "Bay of Bengal" <https://doi.org/10.1016/j.dsr2.2019.104643>

27. Are we in the right path in using early warning systems?

Venugopal Thandlam, Anna Rutgersson and **Hasibur Rahman**

Journal of Extreme Events DOI: 10.1142/S2345737619500039

26. Evaluation of surface downwelling radiation over global tropical oceans

Venugopal Thandlam and **Hasibur Rahaman**

SN Appl. Sci. (2019) 1: 1171. <https://doi.org/10.1007/s42452-019-1172-2>

25. Simulation of Slippery Layers in the Northern Bay of Bengal

Jampana Raju, M. Ravichandran, Lakshmi Kantha , **Hasibur Rahaman**

Deep Sea Research II Special Issue "Bay of Bengal" <https://doi.org/10.1016/j.dsr2.2019.07.004>

24. Coupled Ocean-Atmosphere Summer Intraseasonal Oscillation over Bay of Bengal

Hasibur Rahaman, Bharath Raj G.N and M Ravichandran

Pure and Applied Geophysics Geophysics <https://link.springer.com/article/10.1007%2Fs00024-019-02275-4>

23. Unraveling the Mystery of South Asian Monsoon: Prediction beyond the Limit of Potential Predictability

Subodh Kumar Saha , Anupam Hazra , Samir Pokhrel , Hemantkumar S Chaudhari , K. Sujith , Archana Rai , **Hasibur Rahaman** , B N Goswami

Journal of Geophysical Research-Atmosphere 124. <https://doi.org/10.1029/2018JD030082>

22. Improved Ocean analysis for the Indian Ocean

Hasibur Rahaman, T Venugopal, Stephen G. Penny, David Behringer, M Ravichandran, J V S Raju, U Srinivasu and Debasis Sengupta

Journal of Operational Oceanography, DOI: 10.1080/1755876X.2018.1547261

21. Shear flow instabilities and stratification over the North Bay of Bengal

Venkata Jampana , M. Ravichandran, Debasis Sengupta , E.A.D'Asaro , **Hasibur Rahaman**, Sudheer Joseph, J. Sreelekha, Dipanjan Chaudhuri

Journal of Geophysical Research-Ocean, 15-October 2018 doi: 10.1029/2017JC013272

20. An assessment on oil spill trajectory prediction - Case study on oil spill off Ennore Port

Prasad S J, Balakrishnan Nair T M , **Hasibur Rahaman** , Shenoi S S C , Vijayalakshmi T J. Earth Syst. Sci. (2018) 127:111 <https://doi.org/10.1007/s12040-018-1015-3>

19. Causes for decadal reversal of North Indian Ocean sea level in recent two decades

U.Srinivasu, M. Ravichandran, Weiqing Han, S. Sivareddy, **H Rahaman** and Shailesh Nayak Clim Dyn (2017). doi:10.1007/s00382-017-3551-y

18. Impact of an upgraded model in the NCEP Global Ocean Data Assimilation System: The tropical Indian Ocean (2016).

Hasibur Rahaman, David Behringer, Steve Penny and M Ravichandran

J. Geophys. Res. Oceans, 121, doi:10.1002/2016JC012056

17. Seasonal Prediction of Indian Summer Monsoon Rainfall in NCEP CFSv2: Potential Predictability (2016).

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16. Seasonal Prediction of Indian Summer Monsoon Rainfall in NCEP CFSv2: Forecast and Predictability Error (2015).
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14. Development of a regional model for the north Indian Ocean. (2014),
Hasibur Rahaman , M. Ravichandran , Debasis Sengupta , Matthew J. Harrison , Stephen M. Griffies. Ocean Modelling 75 1–19. <http://dx.doi.org/10.1016/j.ocemod.2013.12.005>
13. Evaluation of near surface air temperature and specific humidity from hybrid global products and their impact on latent heat flux in the north Indian Ocean.(2013),
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12. Is the trend in chlorophyll-a in the Arabian Sea decreasing? (2012),
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8. Comparison of NCEP turbulent heat fluxes with in situ observations over the south-eastern Arabian Sea. (2009),
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6. The Effect of Satellite and Conventional Meteorological Data Assimilation on the mesoscale modelling of Monsoon Depression over India. (2008),
V.F. Xavier, A.Chandrasekar, **Hasibur Rahman**, Dev Niyogi and K Alapaty,
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5. Shifting of the convective heat source over Indian Ocean region in relation to performance of monsoon: A satellite perspective. (2008),
B Simon, **S H Rahman**, P C Joshi and P S Desai
International Journal of Remote Sensing, Vol. 29, No. 2, 387–397.

4. Evolution of geophysical parameters during contrasting monsoon year of 2002 and 2003 using TRMM/TMI data. (2007),
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Journal of Earth System Science, 115, No. 5 575–586,

2. Condition leading to onset of Indian Monsoon: A satellite Perspective. (2006),
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1. Intraseasonal Oscillations over Tropical Indian Ocean in Relation to Monsoon Onset and Rainfall Events over the Peninsular India. (2003),
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B. International Conference/Symposium: Proceedings/Abstract

22. Indian Ocean thermocline dome variations in a suite of global model simulations
H.Rahaman, U.Srinivasu, S.Panickal, J.V.Durgadoo, M.Ravichandran,A. Bozec, A. Cherchi , A. Voldoire,D . Sidorenko, E.P. Chassignet, G. Danabasoglu, H. Tsujino, K. Getzlaff,M. Ilicak, M.Bentsen ,M.C. Long , P.G. Fogli, R. Farneti, S.Danilov , S.J. Marsland, S. Valcke, S.G. Yeager, Q. Wang, T. M Balakrishnan Nair and T. Srinivasa Kumar
Presented in NOAA Second General Modeling Meeting and Fair virtual during 13-16 April 2021.

21. Variability of satellite-derived downwelling radiative fluxes over the north Indian OceanK. Venkatramana,Venugopal Thandlam,**Hasibur Rahaman**,Saurabh Bhardwaj
Poster presentation in 20th National Space Sciences Symposium (NSSS-2019) during 29-31 January 2019,Pune University,Pune,India.

20. Modeling Mixing in the Upper Layers of the Bay of Bengal
Lakshmi Kantha, Jampana Raju and **Hasibur Rahaman**
AGU-Ocean Science Meeting 2018 Portland, Oregon on 11-16 February 2018

19. Evaluation of MODIS/CERES Downwelling Shortwave and Longwave Radiation over global tropical oceans.

Venugopal.T, **H Rahaman**, M Ravichandran and S.S.V.S.Ramakrishna.

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code: 0277-786X/16/\$18 · doi: 10.1117/12.2228041.

18. Impact of Model Resolution in Simulating Inter-annual Variability of Sea Surface Temperature and Fresh Water Content Over North Indian Ocean.

Hasibur Rahaman and Matthew Harrison

Accepted for oral presentation in AOGS-AGU (WPGM) Joint Assembly during
13-17 August 2012 in Singapore.

17. Indian Ocean simulations in latest Modular Ocean Model with open boundary configuration

Hasibur Rahaman, Matthew Harrison, Stephen Griffies

**Accepted in poster presentation (Session: C19 Poster: T115B) in WCRP OSC
Climate Research in Service to Society 24-28 October 2011, Denver, CO, USA.**

16. Indian Ocean Sea Level Rise Revealed from ARGO, GRACE and Altimeter
*M. Ravichandran, **Hasibur Rahman**, Siva Reddy and Shailesh Nayak*

AOGS 2010 (Asia Oceania Geosciences Society) - 7th Annual General Meeting, 5-9 July, 2010,
Hyderabad, India.

15. Ocean mass changes over Indian Ocean as inferred from GRACE

Siva Reddy, **S H Rahman**, M Ravichandran

Poster presentation on 16th National Space Science Symposium (NSSS – 2010) Saurashtra
University, February 24-27, 2010, Rajkot, India.

14.A Training Technique for Improved Estimation of Satellite Derived Rainfall Products over the Indian Land Mass

M S Narayanan, M. Rajeevan, Jyoti Bhate, C. K. Unnikrishnan, M. Ravichandran,

Hasibur Rahman, Siva Reddy

Poster presentation on 16th National Space Science Symposium (NSSS – 2010) Saurashtra
University, February 24-27, 2010, Rajkot, India.

13.Sea Level Variation and its relation to heat content over Indian Ocean

S S Reddy, **S H Rahman**, M Ravichandran and KV Subba Rao

National seminar on “Climate Change: Cause, Measure and Preparedness” Aug 24-26, 2009 at
University of Hyderabad, Hyderabad, India.

12. Long term change of chlorophyll over North Arabian Sea from satellite observations.

Prince Prakash, **S.H. Rahman**, M.Ravichandran & Shailesh Nayak

National seminar on “Climate Change: Cause, Measure and Preparedness” Aug 24-26, 2009 at
University of Hyderabad, Hyderabad, India.

11. Sea Level and Dynamic Height Variations over Indian Ocean As Inferred From Satellite Altimeter and Argo”

S S Reddy, **S H Rahman**, M Ravichandran and K V S Rao

“National Symposium on Advances in Remote Sensing Technology and Applications with special emphasis on microwave remote sensing”, December 18-20, 2008, Ahmedabad, Gujarat.

10. Assimilation of Level-II MODIS Temperature and Moisture Profiles in a Non- Hydrostatic Mesoscale Model (MM5)

Randhir Singh, **S H Rahman**, R K Jana, P K Pal, B Simon and P C Joshi

Presented in Intern. conference on Mesoscale model, IIT-Delhi, February 14- 17,2006.

9. Shifting of the convective heat source over Indian Ocean region in relation to performance of monsoon: A satellite perspective

B Simon, **S H Rahman** and P C Joshi

Presentation in “National Symposium on Atmosphere Ocean Interaction and Monsoon variability”, Cochin, India, January 11-13, 2006.

8. Analysis of outgoing longwave radiation using INSAT-3A and KALPANA and its applications for convective systems.

N J Devidas , **S H Rahman** and B Simon

Presentation in “XIV NATIONAL SPACE SCIENCE SYMPOSIUM” Andhra University, Visakhapatnam 530 0039-12 February 2006.

7. Utilization of MODIS data for meso-scale processes

B Simon, S M U Uthar and **S H Rahman** and P C Joshi

Presented in “National workshop on MODIS DATA UTILISATION”. Space Applications Centre, ISRO, Ahmedabad, Gujarat, India 19-20 April 2005.

6. Assimilation of Level-II MODIS Temperature and Moisture Profiles in a Non- Hydrostatic Mesoscale Model (MM5)

Randhir Singh, **S H Rahman**, P K Pal, B Simon and P C Joshi

Presented in “National workshop on MODIS DATA UTILISATION”. Space Applications Centre, ISRO, Ahmedabad, Gujarat, India 19-20 April 2005.

5. Impact of assimilation of observations for prediction of a monsoon depression

A. Chandrasekhar, V.F.Xavier and **Hasibur Rahman**

Presented in International Conference on “MONEX and its Legacy” ,3-7 Feb, 2005, New Delhi India.

4. Water Vapour Dynamics over tropical Indian Ocean during summer monsoon using satellite data.

Hasibur Rahman and Baby Simon

Presented in International Conference on “MONEX and its Legacy” 3-7 Feb, 2005, New Delhi, India

3. Wavelet analysis of TRMM/TMI data for characterization of heavy rainfall events over West Coast of India during summer monsoon

S H Rahman, B Simon and P C Joshi

Pre-Symposium proceeding in INTROMET-2004, pp 301-302.

2. Application of MODIS data for meso-scale processes

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1. Satellite derived water vapour fields over tropical Indian Ocean in relation to monsoon onset and heavy rainfall events over Peninsular India.

S H Rahman, B Simon and P C Joshi

Proceedings of TROPMET-2002, pp 173-181.

C. Technical Reports

5. Evaluation Of Oil Spill Trajectory Model with the observed SVP drifter track.

S.J.Prasad, T.M.Balakrishnan Nair, **Hasibur Rahaman**, Sudheer Joseph & G.Yatin

ESSO-INCOIS-ISG-MOG-TR-03 (2017)

4.SARAL AltiKa datasets usage in exploring and understanding of Indian monsoon system.

Hemantkumar S. Chaudhari, S Pokhrel, **H Rahaman**, M. Ranalkar, A. Dhakate, S. K. Saha and S. Pentakota

NNRMS (B)-39, April 2015

Published from Department of Space, Government of India, Bengaluru, India.

3. [Preliminary comparison of daily rainfall from satellites and Indian gauge data](#)

H Rahman, D Sengupta, January 2007

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2. Joint Report Monitoring of Onset of Summer Monsoon 2004

R C Bhatia, Devendra Sing, Sant Prasad, A K Sharma, S K Mukherjee, Baby Simon, **H Rahman**, P C Joshi, Swati Basu, P G Iyenger and B Manikam

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1. Utilization of TRMM data for monitoring Onset of Monsoon- 2003

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