

# Curriculum Vitae

- 1. Name of the applicant in full** PRASAD KUMAR BHASKARAN
- 2. Date and Place of Birth** 05 August, 1970  
Visakhapatnam, ANDHRA PRADESH
- 3. Address with Telephone/Fax/Email etc.**
- (a) Official  
(Present designation, Dept, Inst. etc)
- Dr. Prasad Kumar Bhaskaran  
Professor  
Dept. of Ocean Engg. & Naval Architecture  
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- (b) Residential  
Qr. No. B-267, IIT Campus  
Kharagpur - 721 302, Dist: West Medinipur  
West Bengal, INDIA
- 4. Applicant's field of Specialization** Ocean Wave Modeling, Coastal Processes,  
Climate change impact on Wind-Waves,  
Port & Harbor Engineering, Physical &  
Dynamical Oceanography, Sediment  
Transport Dynamics, Coastal Hydrodynamics,  
Tropical Cyclones, Coastal Engineering

## 5. Academic Qualifications (Bachelor's Degree onwards)

Sl. No.	Degree	Subject	Class/Division	Year	University
1	PhD*	Atmospheric & Oceanic Sciences		1999	Kurukshetra University
2	M.Sc	Physical Oceanography	First with Distinction and University Gold Medal	1991	Andhra University, Visakhapatnam
3	B.Sc	Physics (Main) Mathematics, Electronics	First	1989	Andhra University, Visakhapatnam

\*Thesis Title: Ocean Wave Prediction Model for the Indian Seas.

## 6. Administrative Experience

Sl. No.	Position held	Organization	Period
1	Head of Department	Ocean Engineering & Naval Architecture, IIT Kharagpur	01 October 2016 – 30 September, 2019
2	Warden	B. R. Ambedkar Hall of Residence	26 June 2015 – 05 July, 2017
3	Asst. Warden	R. K. Hall of Residence, IIT Kharagpur	Sept. 2009 - Nov. 2011
4	Research Coordinator	ESTC, IIT Kharagpur (a research Cell of MoES, Govt. of India)	July 2013 - Till date

## 7. Research/Teaching Experience

Organization	Designation	Period
Dept. of Ocean Engg. & Naval Architecture, IIT Kharagpur, INDIA	Professor	25 March, 2015 - Till date
Dept. of Ocean Engg. & Naval Architecture, IIT Kharagpur, INDIA	Associate Professor	22 March, 2010 - 25 March, 2015
Dept. of Ocean Engg. & Naval Architecture, IIT Kharagpur, INDIA	Assistant Professor	27 December, 2004 - 21 March, 2010
Louisiana State University, U.S.A	Post-Doctoral Researcher (Naval Research Lab.)	06 October, 2003 - 06 December, 2004
Indian National Centre for Ocean Information Services, Hyderabad	Project Scientist - C	05 May, 2003 - 30 September, 2003
King Fahd University of Petroleum & Minerals, Kingdom of Saudi Arabia	Physical Oceanographer	02 September, 2002 - 30 April, 2003
Centre for Atmospheric Sciences, IIT Delhi	Project Scientist	03 August, 1998 - 30 August, 2002
Dept. of Atmospheric & Oceanic Sciences, Kurukshetra University, Kurukshetra	JRF & SRF (Ministry of Earth Sciences, Govt. of India)	27 August 1992 – 31 July 1997

## 8. Foreign Assignments

Sl. No.	Country	Period of Visit	Duration of Visit	Purpose
1	Kingdom of Saudi Arabia	02 Sept., 2002 - 30 April, 2003	8 Months	Worked on a Prestigious Project funded by the United Nations Compensation Commission (UNCC)
2	U.S.A	06 Oct., 2003 - 06 Dec., 2004	14 Months	Post-doctoral Researcher sponsored by the Naval Research Laboratory, USA
3	U.S.A	15 May 2005 - 15 July 2005	2 Months	Collaborative research work for the Gulf of Mexico

4	Kingdom of Saudi Arabia	15 Dec 2005 - 24 Dec 2005	10 Days	Collaborative research program for the Persian Gulf
5	Singapore	23-27 April, 2012	5 Days	International Conference (MARSIM - 2012)
6	Philippines	24-26 February, 2015	3 Days	International Workshop (UNESCO-PAGASA-IFI) sponsored by UNESCO
7	Japan	4-12 February, 2013	9 Days	KIZUNA Bond Project sponsored by the Japan International Cooperation Center (JICE)
9	Australia	30-31 January, 2017	2 Days	MIPP Conference at University of Melbourne, Australia
10	U.K.	15-21 August, 2017	7 days	DST-UKIERI Workshop at University of Edinburgh, U.K.
11	U.K.	23-27 August, 2019	5 days	Workshop-II of the DST-UKIERI at University of Edinburgh, U.K.

## 9. Supervision of Research/Project

Sl.No.	UG/PG level	No. completed	No. in progress
1	BTech/MSc	35	2
2	5 <sup>th</sup> Year Dual Degree M.Tech/Two Years M.Tech	22	2
3	Ph.D	16	3
4	Post-Doctoral Fellow	1	-
5	JRF (DST Project)	-	1
6	Research Associate (DST Project)	1	-

## 10. Member of Editorial Board of Journals

- Journal of Oceanography & Marine Sciences
- Big Data and Cloud Innovation

## 11. Member of Board of Studies

- Cochin University of Science & Technology (CUSAT), Kochi, Kerala, India
- Kerala University of Fisheries & Ocean Sciences, Kochi, Kerala, India
- Andhra University, Visakhapatnam (2023-2026)

## 12. Courses taught at UG/PG Level

- Physical & Dynamical Oceanography (UG/PG)

- Marine Acoustics (UG/PG)
- Ocean Circulation & Wave Modeling (UG/PG)
- Port & Harbour Engineering (UG/PG)
- Ocean Dynamics (PG)
- Modeling of Extreme Events - theory/lab (PG)
- Design Problems in Ocean Engineering (PG)

### **13. Reviewer of Journals and Conference Papers**

- Geophysical Research Letters (American Geophysical Union)
- Journal of Physical Oceanography (American Meteorological Society)
- Nature Scientific Reports
- Applied Ocean Research (Elsevier)
- Journal of Geophysical Research (Oceans)
- Journal of Coastal Research (CERF)
- Natural Hazards (Springer)
- Marine Geodesy (Taylor & Francis)
- Sedimentology
- Journal of Oceanography & Marine Sciences
- Coastal Engineering (Elsevier)
- Coastal Engineering Journal (World Scientific)
- Deep Sea Research
- Current Science
- Climate Dynamics (Springer)
- Ocean Engineering (Elsevier)
- Neural Computing and Applications
- ISH Journal of Hydraulic Engineering
- Jour. of Waterways, Port, Coast, and Ocean Engineering (ASCE)
- Journal of Marine Science and Applications
- Defence Science Journal (DRDO)
- International Journal of Climatology (Royal Meteorological Society)
- Neural Computing & Applications (Springer)
- IEEE Journal of Oceanic Engineering
- Environmental Fluid Mechanics (Springer)
- Meteorology & Atmospheric Physics (Springer)
- Theoretical & Applied Climatology (Springer)
- Ocean & Coastal Management (Elsevier)
- Journal of Operational Oceanography (Taylor & Francis)
- Pure & Applied Geophysics (Springer)
- Weather & Climate Extremes (Elsevier)
- Journal of Earth System Science
- Environment Monitoring and Assessment, Springer
- Journal of Coastal Conservation, Springer
- Ocean and Coastal Management, Elsevier
- Journal of Environmental Management, Springer

- Annals of Nuclear Energy, Elsevier
- Meteorological Applications (Royal Meteorological Society)
- Journal of Atmospheric and Solar-Terrestrial Physics, Elsevier
- Applied Energy, Elsevier
- ISTAM and other National Symposiums regularly

#### **14. List of Past/Present Collaborating Organizations**

- Space Applications Centre (ISRO), Ahmedabad
- Vikram Sarabhai Space Centre (ISRO), Ahmedabad
- National Centre for Earth Science Studies, Thiruvananthapuram
- ESSO-Indian National Centre for Ocean Information Services, Hyderabad
- Indian Institute of Technology Delhi, New Delhi
- Louisiana State University, U.S.A.
- Cheju National University, South Korea
- Korea Ocean Research & Development Institute, South Korea
- Naval Research Laboratory, U.S.A.
- National Oceanic & Atmospheric Administration (NOAA), U.S.A.
- University of Illinois, U.S.A.
- Vellore Institute of Technology, Vellore
- Cochin University of Science & Technology, Kochi
- King Fahd University of Petroleum & Minerals, Kingdom of Saudi Arabia
- CSIR-National Institute of Oceanography, Goa
- National Institute of Ocean Technology, Chennai
- Florida Gulf Coast University, U.S.A
- Indian Institute of Technology Madras, Chennai
- Indian Institute of Technology Bombay, Mumbai
- University of Calcutta, Kolkata
- Madanapalle Institute of Technology & Science, Madanapalle, Andhra Pradesh
- Vellore Institute of Technology, Vellore, Tamil Nadu
- Jadavpur University, Kolkata
- Integrated Coastal Zone Management - Project Directorate, Kolkata
- National Centre for Sustainable Coastal Zone Management, Chennai
- University of Melbourne, Australia
- University of Edinburgh, U.K.
- University of Massachusetts Dartmouth, USA
- South China Sea Institute of Oceanology, State Key Laboratory of Tropical Oceanography, China
- Second Institute of Oceanography, State Key Laboratory of Satellite Ocean Environment Dynamics, China
- Oceanographic Institute of the University of Sao Paulo, Brazil
- Institute of Oceanography of the Federal University of Rio Grande
- Cape Peninsula University of Technology, South Africa
- Dept. of Oceanography, University of Cape Town, South Africa
- South African Environmental Observational Network, South Africa
- Université des Antilles, Reunion, France

- Qatar University, Qatar

### 15. Departmental Activities

- Head of Department, Ocean Engineering & Naval Architecture
- Member, Departmental Academic Committee (UG/PG)
- Incharge, Annual & Convocation Report
- Member, Department Purchase Committee
- Department Representative, UGPEC
- Department Representative for Central Library
- Acted as Professor in-charge Dept. Time Table
- Acted as Professor in-charge Dept. Examinations
- Department ERP Representative
- Faculty Advisor (UG/PG)

### 16. Professional and outreach program activities

Served as Ph.D examiners of CUSAT Kochi; Andhra University, Visakhapatnam; University of Calcutta, Kolkata; Banaras Hindu University, Varanasi; Goa University, Goa; Bharathidasan University, Tiruchirappalli; ACSIR NIO, Goa; NITK Surathkal; IIT Madras; IIT Bombay.

Served as MS Thesis Examiner of IIT Kharagpur.

Served as M.Tech Thesis Examiner of IIT Bhubaneswar.

### 17. Technology Transfer

- Customization and training Scientists on Operational WAM model for Indian Seas - trained Scientists of Space Applications Centre (ISRO), Ahmedabad and Indian National Centre for Ocean Information Services, Ministry of Earth Sciences, Govt. of India, Hyderabad.

### 18. Ph.D Students (Completed/Ongoing)

Sl. No.	Name	Thesis Title	Present Position
1	R. Rajesh Kumar	An improved energy balance parameterization in a third-generation ocean wave prediction model	Ph.D Completed and worked as a Post-doc (2009-2011) at Uppsala University, Sweden and as a NSERC Postdoctoral Fellow at Environment Canada, Montreal, Canada. Worked as a Research Scientist at the New York University, Abu Dhabi. Presently working as Senior Scientist at National Environment Agency, Singapore.

2	Chitra Arora	Numerical Modeling of bottom boundary layer characteristics in the Hooghly Estuary	Ph.D Completed and worked at National University of Singapore, Singapore.
3	Sashikant Nayak	Development of a Wave forecasting system for Operational Application at Coastal Kalpakkam	Ph.D Completed and worked as a Postdoctoral researcher at Texas A&M University (TAMU) Qatar campus. Worked as Faculty at KIIT Bhubaneswar and Postdoctoral Research Associate at Inst. Of Ocean & Earth Sciences, University of Malaya, Malaysia. Presently Faculty at KIIT Bhubaneswar.
4	Naresh K. Vissa	Response of Upper Ocean during passage of Tropical cyclones over the Bay of Bengal	Ph.D Completed and worked as a Post-doctoral fellow at the University of Dundee, Scotland, U.K. and as a Senior Research Associate at Lancaster University, U.K. Presently working as Assistant Professor Grade-I at NIT Rourkela.
5	Nitika Gupta	Wind-Wave Climate studies for the Indian Ocean	Ph.D Completed. Worked as a Senior Data Scientist at Annik Technology Services Pvt. Ltd., Gurgaon, Haryana. Presently, working as Senior Data Scientist at Novartis.
6	Gayathri R	Numerical Modeling of Storm Surge and Coastal Inundation for Indian seas	Ph.D Completed and working as Project Scientist at ICMAM, Ministry of Earth Sciences, Chennai.
7	Bishnupriya Sahoo	Artificial Intelligence for Mapping Coastal Inundation from Tropical Cyclones	Ph.D completed in March, 2018. Worked as a Research Associate (RA) in the DST Centre of Excellence (CoE) established at IIT Kharagpur. Presently working as Assistant Scientist at Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, China.
8	Linta Rose	Water level Prediction system for the Head Bay of Bengal	Ph.D completed in January, 2018. Presently working as a Project Scientist – ‘C’ at ESSO-Indian National Centre for Ocean Information



			Services, Ministry of Earth Sciences, Govt. of India, Hyderabad.
9	Anindita Patra	Wind-Wave Climate Variability over the Head Bay of Bengal	Ph.D completed in July, 2018 and presently working as a Postdoctoral Research at POSTEC, South Korea.
10	Balaji M (CORAL)	Analysis of tropical cyclone activity over NIO basins and its numerical study of air-sea coupling using Mesoscale Coupled Modeling System	Ph.D completed in August, 2018 and presently working as Research Scientist at Willis Towers Watson, Mumbai.
11	Sudha Rani N.N.V (Joint Supervisor)	Integrated approach to assess the coastal vulnerability over West Bengal, India	Ph.D completed in December, 2018. Presently working as a Postdoctoral Researcher at IIT Bombay.
12	Parvathy K.G.	Impact of Coastal Mangroves and Geomorphology on Shallow Water Wave Dissipation	Ph.D completed in February, 2019. Worked as a Guest Faculty at KUFOS, Kochi. Presently working as a Coastal Wave Modeler/Coastal Engineer at ABB, Ludvika, Dalarna County, Sweden
13	Pavan Harika Raavi (as co-Supervisor) under the MIPP Program.  Joint Ph.D with Prof. Kevin Walsh, School of Earth Sciences, University of Melbourne, Australia	The Relationship between Climate and Mechanisms of Tropical Cyclone Formation	Ph.D in Atmospheric Sciences completed in 2020.  Presently working as Postdoctoral Research Fellow at IBS Centre for Climate Physics, Pusan, Korea
14	Jiya Albert	Tropical Cyclogenesis and its Detection for the North Indian Ocean	Ph.D completed on the 8 <sup>th</sup> October, 2021. Working as a Scientific Consultant at National Centre for Sustainable Coastal Zone Management, Ministry of Environment, Forest, and



			Climate Change, Government of India
15	Sreelakshmi M	Swell wave propagation and its characteristics in the Indian Ocean region	Ph.D completed on 24 <sup>th</sup> June, 2022. Working as a Research Associate at Indian National Centre for Ocean Information Services, Ministry of Earth Sciences, Government of India
16	Athira Krishnan	Extreme wind-wave climate projections for the Indian Ocean	Ph.D completed on 24 <sup>th</sup> March, 2022. Presently working as a Climate Scientist at POSTECH, South Korea. Selected as Scientist-C at CSIR-National Institute of Oceanography, Goa.
17	Teppala Vikranth	Real-Time Estuary Observatory System for Monitoring Bhavanapadu Estuary by Utilizing Internet of Underwater Things	Ongoing Joined in July 2021
18	Anup Kumar Mandal	Impact of satellite derived products on storm surge forecasting	Ongoing Joined in July 2022
19	Anjana S	Rapid intensification of tropical cyclones in the North Indian Ocean	Ongoing Joined in January 2023

#### 19. Post-Doctoral Students (Completed/Ongoing)

Sl. No.	Name	Topic	Present Position
1	Dr. Umesh P.A.	Development of Ocean Wave Spectra for the Indian Seas	Completed. Worked as a Post-Doctoral Researcher at IIT Bombay. Presently, Research Scientist at Department of Physics and Astronomy, University of Bologna, Italy.
2	Ms. Soumya Mohan	Climate projections of extreme wind-waves over the Indian Ocean region	Completed Presently working as Scientist- 'C' at CSIR-National Institute of Oceanography, Goa

## 20. Sponsored Projects (National/International)

S. No.	Project Title / Role	Funding Agency	Amount (in Lakhs)	Remarks
01	Estimation of suspended sediment concentration onboard OCEANSAT and algorithm development for settling velocity (Principal Investigator)	Naval Research Board (DRDO), New Delhi	4.86	Completed
02	Development of a Regional Wave Prediction Model for the Indian Seas (Principal Investigator)	Space Applications Centre (ISRO), Ahmedabad	22.62	Completed
03	Development of a Tsunami Travel Time Atlas and propagation Model for the Indian Seas (Principal Investigator)	ISIRD, IIT Kharagpur	1.10	Completed
04	Implementation of an Integrated Nested Wave-Current-Surge Model with improved Air-Sea coupling parameterization for Kalpakkam region (Principal Investigator)	Indira Gandhi Centre for Atomic Research (DAE), Kalpakkam	32.33	Completed
05	Development of an Integrated Ocean Wave Forecasting System and Study its impact on Coastal Structures (Principal Investigator)	Indian National Centre for Ocean Information Services (INCOIS), Hyderabad	47.00	Completed
06	Experimental Validation of Theoretical Models on Sediment Settling Velocity and Suspended Sediment Concentration using OCEANSAT data (Principal Investigator)	Naval Research Board (DRDO), New Delhi	9.56	Completed
07	Development and implementation of coupled ADCIRC-SWAN model for the Indian seas (Principal Investigator)	Indian National Centre for Ocean Information Services (INCOIS), Hyderabad	32.31	Completed
08	Application of artificial intelligence on mapping coastal inundation and evacuation route planning through multiple scenarios of storm surge simulations (Principal Investigator)	Department of Higher Education, Ministry of Human Resources Development, New Delhi	46.32	Completed
09	Development of a Hybrid Co-ordinate Ocean Model (HYCOM) for the Bay of Bengal	Indian National Centre for Ocean Information	43.00	Completed

	<b>(co- Principal Investigator)</b>	Services (INCOIS), Hyderabad		
10	Monitoring Thermodynamical structure of Atmospheric Boundary Layer during pre-monsoon convective activity over Kharagpur <b>(co-Principal Investigator)</b>	Department of Science & Technology, New Delhi	110.00	Completed
11	Effect of climate change on local sea level rise and its impact on coastal areas: Kolkata region as a pilot study <b>(co-Principal Investigator)</b>	Department of Higher Education, Ministry of Human Resources Development, New Delhi	35.74	Completed
12	An investigation into the maneuvering performance of ships in shallow navigation channels around Indian coast under different weather conditions <b>(co-Principal Investigator)</b>	Naval Research Board (DRDO), New Delhi	27.117	Completed
13	Coastal protection in the Mahakalpara area of Kendrapara district, Orissa <b>(co-Principal Investigator)</b>	Ministry of Earth Science, New Delhi	42.32	Completed
14	<b>Centre of Excellence in Climate Change Studies at IIT Kharagpur</b> – Vulnerability and Risk Assessment due to various Environmental drivers in a Climate Change scenario over Eastern India <b>(Principal Coordinator &amp; Principal Investigator)</b>	Department of Science & Technology, Govt. of India	690.0	Ongoing
15	Tidal Energy for Sustainable Village Electricity Supply in the Indian Sundarbans Biosphere. (Prof. Prasad K. Bhaskaran, <b>Principal Investigator</b> from India) & Dr. V. Vengatesan ( <b>PI</b> from University of Edinburgh, U.K.)	DST-UKIERI	GBP 191,788 From DST: GBP 86,313	Completed
16	Variability of conducive environment for development of severe thunderstorms due to climate change and future projections <b>(co-Principal Investigator)</b>	Department of Science & Technology, Govt. of India	46.070	Completed
17	Wind-Waves and Extreme Water level Climate projections for East Coast of India <b>(Principal Investigator)</b>	Department of Science & Technology, Govt. of India	46.906	Completed
18	Tropical cyclone induced storm surges and associated coastal flooding in a changing climate for the North Indian Ocean	Indian National Centre for Ocean Information	47.50	Ongoing

	<b>(co-Principal Investigator)</b>	Services (INCOIS), Hyderabad		
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## 21. Consultancy Projects (National/International)

S.No.	Project Title/Role	Funding Agency	Amount (in Lakhs)	Remarks
01	Development of a Comprehensive Ocean Atlas for the Indian Ocean utilizing ARGO data <b>(Principal Consultant)</b>	Indian National Centre for Ocean Information Services (INCOIS), Hyderabad	19.00	Completed
02	Operational Marine Forecasting System for the Persian Gulf <b>(Principal Consultant)</b>	King Fahd University of Petroleum & Minerals, Kingdom of Saudi Arabia	4.20	Completed
03	Coastal Vulnerability study for the West Bengal region <b>(co-Principal Consultant)</b>	Government of West Bengal	50.00	Completed
04	Impact of Storm Surge, Wind Waves and Sieches on the Design of proposed KALPASAR Dam <b>(Principal Consultant)</b>	Government of Gujarat	10.00	Completed
05	Thermal re-circulation features in ambient waters and its dispersion characteristics <b>(Principal Consultant)</b>	SENES Consultants India Pvt. Limited, Noida	6.00	Completed
06	Hydrodynamic and Sediment Transport Modeling Studies for the Expansion of ADANI Petronet (Dahej) Port Pvt. Limited, Gujarat <b>(Principal Consultant)</b>	Cholamandalam MS Risk Service Limited, Chennai	3.52	Completed
07	Flood (Internal & External) probabilistic safety assessment (FPSA) of MAPS <b>(co-Principal Consultant)</b>	Nuclear Power Corporation of India Ltd., Madras Atomic Power Station	16.00	Completed
08	Mathematical Modelling to Study Dispersion of Cold Water Discharge from FSRU <b>(Principal Consultant)</b>	H- Energy Gateway Private Limited, Mumbai	9.16	Completed
10	Proof Check of Cross-Sectional Design & Drawings of Barak River <b>(Principal Consultant)</b>	Reach Dredging Limited, Kolkata	2.95	Completed
10	Cyclone and Storm Surge Framework for Hydromet Resilience Action Plan <b>(Principal Consultant)</b>	Taru Leading Edge Pvt. Ltd., 221, Okhla Phase 3, New Delhi	15.34	Completed
11	Long Term Master Plan of Digha Shankarpur Planning Area <b>(Joint Consultant)</b>	Digha Shankarpur Development	108.2	Ongoing

		Authority, Government of West Bengal		
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## 22. New Projects (under preparation/submitted)

S.No.	Project Title	Funding Agency	Amount (in Lakhs)	Remarks
01	Shoreline protection measures along Digha-Sankarpur coast, coastally trapped Kelvin waves, and numerical study of Coastal Hydrodynamics in Sunderbans ( <b>Principal Investigator</b> )	Ministry of Environment & Forest, Government of India & ICZMP West Bengal	<b>50.00</b>	Proposal Submitted
02	Development of indigenous X-band Marine Radar and its application in real-time mapping of renewable energy from oceans ( <b>co-Principal Investigator</b> )	IMPRINT-INDIA, Ministry of Human Resources Development, & Department of Science & Technology, Govt. of India	<b>300.00</b>	Phase-I and II Scrutiny Completed
05	A Consortium for Oceanographic Research and Training of Shelf Seas	DST-BRICS	<b>33.55</b>	Proposal Submitted

## 23. Awards and Honours

- Fellow, Ocean Society of India (FOSI)
- Fellow, National Academy of Sciences, India (NASI)
- James Rennell MoES Young Fellow – Ministry of Earth Sciences, Government of India.
- Adjunct Professor: IIT Bhubaneswar
- Member, Board of Studies – CUSAT, Kochi, India
- Member, Board of Studies – KUFOS, Kochi, India
- Research Coordinator: ESTC, Ministry of Earth Sciences, Government of India
- Young Scientist Award for my Ph.D student on the Best Technical Paper titled “Impact of Climate Change on the Inter-annual Seasonal Variability of Ocean Wave Climate in the Indian Ocean” – Central University of Odisha, Koraput.
- Best Paper Selected by the Advances in Engineering Series "Parameterization of bottom friction under combined wave-tide action in the Hooghly estuary, India" – Advances in Engineering, USA.
- Best Paper Award at ICO 2017: 19<sup>th</sup> International Conference on Oceanography for the paper titled ‘Coastal Vulnerability Index and its Projection for Odisha coast, East coast of India’ awarded to Bishnupriya Sahoo and Prasad K. Bhaskaran by the World Academy of Science, Engineering & Technology (WASET) during June 15-16, 2017 at Edinburgh, U.K.
- Member, Project Review Board, National Institute of Ocean Technology, Ministry of Earth Sciences, Government of India.
- National Expert Panel Member, Central Water Commission, Ministry of Water Resources, Government of India.
- Expert Panel Member, Ocean Environment Panel, Naval Research Board (NRB), DRDO.
- Expert Panel Member in Ocean Engineering, Prime Ministers Research Fellowship (PMRF).

- National Expert Panel Member, Programme Advisory and Monitoring Committee (PAMC) for National Network Programme on Climate Change and Coastal Vulnerability Department of Science & Technology, Government of India.
- Research Advisor, Nan Yang Academy of Sciences, Singapore.
- Member, Advisory Committee, Ranbir and Chitra Gupta School of Infrastructure Design and Management, IIT Kharagpur.
- Selection Committee Member for Scientists at National Centre for Sustainable Coastal Management, Ministry of Environment, Forest & Climate Change, Government of India, Chennai.
- Selection Committee Member for Scientists at Defence Research & Development Organization (DRDO), Ministry of Defence, Government of India.
- National Expert Panel Member, Project Monitoring and Appraisal Committee (PAMC), Ocean Sciences and Resources (OSR), Ministry of Earth Sciences, Government of India.
- National Expert Member for OSI Pan-India PG Dissertation Award for East India covering the States of West Bengal and Northeastern States.
- National Expert Member in the high-power peer committee - Technological preparedness for dealing with National disruptions in Ocean related disasters, Indian National Academy of Engineering (INAE).
- Member, Deep Ocean Mission, Ocean Climate Change Advisory Services (OCCAS), Ministry of Earth Sciences, Government of India.
- Member, Project Review and Monitoring Committee, Indian National Centre for Ocean Information Services, Ministry of Earth Sciences, Government of India.
- Member, Research Advisory Committee, Indian National Centre for Ocean Information Services, Ministry of Earth Sciences, Government of India.
- Expert Member, DST-SERB, Ministry of Science & Technology, Government of India.
- Vice-President, Ocean Society of India (OSI).
- Chairman, Expert Committee on Environment, Ecology, and Climate Change, Department of Science & Technology and Biotechnology, Government of West Bengal, Kolkata.

## **24. Institute activities**

- Research Coordinator, Earth Science & Technology Cell (ESTC), IIT Kharagpur (June 2013 - till present).
- Doctoral Scrutiny Committee member of students (Ocean Engineering & Naval Architecture, Civil Engineering, Centre for Oceans, Rivers, Atmosphere & Land Sciences (CORAL), Mathematics).
- Institute Representative for the IIT-JEE, JAM, and GATE Examinations held at various centers from 2006 until present.
- Participated in the Post-graduate Curriculum development programme for CORAL, IIT Kharagpur, CUSAT and KUFOS, Kochi.

## **25. Hall/Student activities at IIT Kharagpur**

- Assistant Warden, R. K. Hall of Residence, IIT Kharagpur from Sept. 2007 to Sept. 2009.

- Warden, B.R. Ambedkar Hall of Residence, IIT Kharagpur from June 2015 - till present.
- Member, Purchase Committee in various Halls of Residence, IIT Kharagpur.
- Member, Hostel Vigilance Committee during 2005, 2006, and 2009.
- Assisted several UG students of Ocean Engineering & Naval Architecture Department to take up summer projects in Organizations such as NPOL (DRDO), CSIR-NIO, SAC (ISRO), NIOT, LSU (USA), RSMAS (USA), and INCOIS, Hyderabad.

## 26. Patents/Copyrights

S.No.	Title of Patent/Copyright	Status
01	Tsunami Travel Time Prediction using Neural Networks	Granted by the Government of India
02	A New approach to derive Ocean parameters using Neural Networks	Granted by the Government of India
03	Development of a Comprehensive Ocean Atlas for Indian Ocean using ARGO data.	Granted by the Government of India
04	A new approach for estimation of strong ground motion and information dissemination during an earthquake	Granted by the Government of India
05	Dredging Maintenance Plan for a Riverine Port	Filed

## 27. Professional Memberships

- Life Member, Ocean Society of India
- Life Member, Indian Society of Theoretical & Applied Mechanics

## 28. Community Services

- President, Tech-Keralites, IIT Kharagpur, 2006-2007.
- Treasurer, Technology Club, IIT Kharagpur
- Treasurer, Indian Society of Theoretical & Applied Mechanics
- Joint Secretary, Ocean Society of India

## 29. Other Professional and Outreach Program activities

- Delivered a series of 20 lectures in the training program on Coastal processes and Coastal Structures organized by **ADANI** in Ahmedabad during January and February 2016 in two phases.
- Delivered a series of 8 lectures in the Workshop on Numerical Ocean Wave Modeling held during 29-30 April 2016 at VIT University, Vellore.
- Organizing Committee Member for ICSOT-2015 (jointly organized by RINA and IIT Kharagpur) on the theme 'Coastal and Inland Shipping'.



- Organizing Committee Member for the bi-annual International Conference on Ship and Offshore Technology (ICSOT) held during 2009, 2011, 2013 organized by the Dept. of Ocean Engineering & Naval Architecture, IIT Kharagpur.
- Principal Coordinator for the training program on Integrated Coastal Zone Management in 2014 for the Government officials from State of Gujarat and West Bengal.
- Coordinated the Ministry of Earth Sciences, Government of India sponsored workshop on 'Integrated Coastal Zone Management' as part of the Green Earth Day celebration on 27 April, 2013 held at IIT Kharagpur.
- Coordinated the Ministry of Earth Sciences, Government of India sponsored workshop on 'Ocean Science & Technology' as part of the Green Earth Day celebration on 22 April, 2012 held at IIT Kharagpur.
- Coordinated the Ministry of Earth Sciences, Government of India sponsored workshop on 'Developments in Ocean Science & Technology' as part of the Green Earth Day celebration on 23 April, 2011 held at IIT Kharagpur.
- Delivered lecture series on 8<sup>th</sup> May, 2019 for the NRDMS-DST sponsored Advanced Training Program on "Coastal Vulnerability Assessment using Geospatial Technology" organized by the Department of Ocean Engineering, IIT Madras on the topics: 'Multi-hazard Risk Assessment of Coastal Vulnerability from Storm surge and Tropical cyclones' and 'Numerical Modelling of Coastal Hydrodynamics and its Validation using In situ and Satellite data for Very Severe Cyclones in the Indian Ocean'.
- Delivered a Invited talk on the topic 'Numerical Modeling and its validation for very severe cyclones in the Indian Ocean' for the Inaugural Program OSIMOD-2019 organized by the Ocean Society of India (OSI) on 11<sup>th</sup> June, 2019 at Kerala University of Fisheries and Ocean Studies (KUFOS), Panangad, Kochi.
- Delivered a Training Program on Simulating Waves Nearshore (SWAN) model for the Students and Research Scholars at KUFOS, Panangad, Kochi on 11<sup>th</sup> and 12<sup>th</sup> June, 2019 organized by the Ocean Society of India (OSI).
- Ph.D Thesis Examiners of CUSAT, Kochi; University of Calcutta; Goa University; Andhra University; Banaras Hindu University, Varanasi; AcSIR NIO Goa; IIT Madras, IIT Bombay.
- M.Tech Thesis Examiner of IIT Bhubaneswar.
- MS Thesis Examiner of IIT Kharagpur.

### 30. Publication in Books/Book Chapters

Title of Book	Authors	Publisher	Year
Tsunami Travel Time Atlas for the Indian Ocean	<b>Prasad K. Bhaskaran,</b> S.K.Dube, T.S. Murty, A. Gangopadhyay, Ayan Chaudhri & A. D. Rao	IIT Kharagpur	2005

A Comprehensive Ocean Atlas for the Indian Ocean: Volume-I and II	<b>Prasad K. Bhaskaran</b> , P.C. Pandey S.K. Dube M. Ravichandran Shailesh Nayak	IIT Kharagpur	2006
The Indian Ocean Tsunami	<b>Prasad K. Bhaskaran</b> , S.K.Dube, T.S. Murty, A. Gangopadhyay, Ayan Chaudhri & A. D. Rao	Taylor & Francis Group, London, U.K.	2007
Tsunami Early Warning System: An Indian Ocean Perspective in Natural and Anthropogenic Disasters - Vulnerability, Preparedness and Mitigation	<b>Prasad K. Bhaskaran</b> , and P.C. Pandey	Springer	2010
Climate Change and the Vulnerable Indian Coast: Chapter titled ‘Tropical Cyclogenesis for North Indian Ocean region’	<b>Prasad K. Bhaskaran</b> , Jiya Albert, and Bishnupriya Sahoo	Ministry of Environment, Forest and Climate Change, New Delhi, Government of India.	2018
Techniques for Disaster Risk Management and Mitigation: Chapter titled ‘Tropical Cyclone-Induced Storm Surges and Wind-Waves in the Bay of Bengal’ First Edition, Eds: Prashant K. Srivastava, Sudhir Kumar Singh, U. C. Mohanty, and Tad Murty], 239-294,	<b>Prasad K. Bhaskaran</b> , A. D. Rao, and T. Murty	American Geophysical Union, Geophysical Monograph 244, John Wiley & Sons, Inc., USA.	2019
Climate Change Impacts on Water Resources: Book Chapter # 23 titled ‘Seasonal and Inter-Annual Variability of Sea Surface Temperature and Its Correlation with Maximum Sustained Wind Speed in Bay of Bengal’, Hydraulics, Water Resources and Coastal Engineering, Eds: [Jha, R., Singh, V.P., Singh, V., Roy, L.B., Thendiyath, R.]	Jiya Albert and <b>Prasad K. Bhaskaran</b>	Water Science & Technology Library, Volume 98, 1 <sup>st</sup> Edition, pp. 253-265, <a href="https://doi.org/10.1007/978-3-030-64202-0">https://doi.org/10.1007/978-3-030-64202-0</a>	2021
Climate Change Impacts on Water Resources: Book Chapter # 24 titled ‘Comparison of CMIP5 wind speed from global climate models with in-situ observations for the Bay of Bengal’, Hydraulics, Water Resources and Coastal Engineering, Eds: [Jha, R., Singh, V.P., Singh, V., Roy, L.B., Thendiyath, R.]	Athira Krishnan and <b>Prasad K. Bhaskaran</b>	Water Science & Technology Library, Volume 98, 1st Edition, pp. 267-278, <a href="https://doi.org/10.1007/978-3-030-64202-0_24">https://doi.org/10.1007/978-3-030-64202-0_24</a>	2021

Extreme wind-wave characteristics in the North Indian Ocean in a Changing Climate. In: Extreme Natural Events: Sustainable Solutions for Developing Countries. Eds: A. S. Unnikrishnan, Fredolin Tangang, Raymond Durrheim	<b>Prasad K. Bhaskaran, S. Neelamani, Khaled Al-Salem, Athira Krishnan, Jiya Albert, S. Sreelakshmi</b>	Springer Nature	2022
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### 31. Complete list of Publications in Peer-reviewed Journals

S. No.	Title of paper	Author's name as in the Paper	Name of the Journal	Year, Vol. & Page No.	I.F.	Remarks
01	Extreme wave conditions over the Bay of Bengal during a severe cyclone – simulation experiment with two spectral wave models	<b>Prasad K. Bhaskaran,</b> Ruchi Kalra, S.K.Dube, P.C.Sinha, A.D.Rao, Raj Kumar and Abhijit Sarkar	<b>Marine Geodesy,</b> Taylor & Francis	<b>2000,</b> 23(2), 91-102, <a href="https://doi.org/10.1080/01490410050030661">https://doi.org/10.1080/01490410050030661</a>	1.115	Published
02	Sea State hindcast for the Korean seas with a spectral wave model and validation with buoy observations during January 1997	<b>Prasad K. Bhaskaran,</b> Ig-Chan Pang, A.D.Rao, Tae-Hee Kim, Jae-Cheol Nam, and Chang-Su Hong	<b>Int. Journal of Korean Earth Sci. Society,</b> Springer	<b>2003,</b> 24(1), 7-21, <a href="https://db.koreascholar.com/article.aspx?code=304297">https://db.koreascholar.com/article.aspx?code=304297</a>	0.617	Published
03	Sea State Hindcast with ECMWF data using a Spectral wave model for typical monsoon months	<b>Prasad K. Bhaskaran,</b> Ruchi Kalra, S.K.Dube, P.C. Sinha and A.D.Rao	<b>Natural Hazards,</b> Springer	<b>2004,</b> 31(2), 537-548, <a href="https://doi.org/10.1023/B:NHAZ.0000023366.68304.3e">https://doi.org/10.1023/B:NHAZ.0000023366.68304.3e</a>	1.958	Published
04	Complex morpho hydrodynamic response of estuaries and bays to winter storms: north-central Gulf of Mexico, USA	Gregory W. Stone, <b>Prasad K. Bhaskaran,</b> A. Sheremet and Dana Watzke	<b>High Res. Morpho-dynamics &amp; Sed. Evol. of Estuaries,</b> Springer	<b>2005,</b> 243-267, <a href="https://doi.org/10.1007/1-4020-3296-X_12">https://doi.org/10.1007/1-4020-3296-X_12</a>	2.741	Published
05	Tsunami Travel Time Computation and Skill assessment for the 26 December 2004 Event in the Indian Ocean	<b>Prasad K. Bhaskaran,</b> R. Rajesh Kumar, S.K. Dube, Tad Murty, Avijit Gangopadhyay, Ayan Chaudhuri and A.D. Rao	<b>Coastal Engineering Journal,</b> Japan Society of Civil Engineers	<b>2006,</b> 48(2), 147-166, <a href="https://doi.org/10.1142/S0578563406001349">https://doi.org/10.1142/S0578563406001349</a>	1.478	Published

06	Tsunami Travel Time prediction using Neural Networks	Rahul Barman, <b>Prasad K. Bhaskaran</b> , P.C.Pandey and S.K. Dube	<b>Geophysical Research Letters</b> , American Geophysical Union	<b>2006</b> , 33, L16612, doi:10.1029/2006GL026688	4.456	Published
07	Numerical Simulation of Typhoon wind forcing in the Korean seas using a Spectral wave model	<b>Prasad K. Bhaskaran</b> and G.W.Stone	<b>Journal of Coastal Research</b> , CERF	<b>2007</b> , 23(2), 362-373, <a href="https://doi.org/10.2112/04-0173.1">https://doi.org/10.2112/04-0173.1</a>	0.755	Published
08	Air-Sea Interaction processes over the East-Asian Marginal seas surrounding the Korean Peninsula	D.Balasubrahmanyam, Radhika Ramachandran, S. Indira Rani and <b>Prasad K. Bhaskaran</b>	<b>Annales Geophysica</b> , European Geophysical Union	<b>2007</b> , 25,1477-1486, <a href="https://doi.org/10.5194/angeo-25-1477-2007">https://doi.org/10.5194/angeo-25-1477-2007</a>	1.676	Published
09	Application of wave model for weather routing of ships in the North Indian Ocean	Chinmaya Prasad Padhy, Debabrata Sen and <b>Prasad K. Bhaskaran</b>	<b>Natural Hazards</b> , Springer	<b>2008</b> , 44, 373 -385, <a href="https://doi.org/10.1007/s11069-007-9126-1">https://doi.org/10.1007/s11069-007-9126-1</a>	1.958	Published
10	Inter-comparison of Air-Sea fluxes over the Yellow Sea and Korean Strait: Impact of Tsushima Warm current	D. Balasubrahmanyam, RadhikaRamachandran, S. Indira Rani, P.K. Kunhikrishnan and <b>Prasad K. Bhaskaran</b>	<b>Boundary Layer Meteorology</b> , Springer	<b>2008</b> , 127, 333-344, <a href="https://doi.org/10.1007/s10546-007-9248-8">https://doi.org/10.1007/s10546-007-9248-8</a>	2.525	Published
11	Parameterization of wave attenuation in muddy beds and implication on coastal structures	R. Rajesh Kumar, Aseem Raturi, <b>Prasad K. Bhaskaran</b> , Ashoke Bhar, D. Bala Subrahmanyam and Felix Jose	<b>Coastal Engineering Journal</b> , Japan Society of Civil Engineers	<b>2008</b> , 50(3), 309-324. <a href="https://doi.org/10.1142/S0578563408001843">https://doi.org/10.1142/S0578563408001843</a>	1.478	Published
12	Effect of varied atmospheric stability on sea surface drag in shallow seas and its impact on wind-wave growth	R. Rajesh Kumar, <b>Prasad K. Bhaskaran</b> , A.N.V. Satyanarayana, D. B. Subrahmanyam, A.D. Rao and S.K. Dube	<b>Natural Hazards</b> , Springer	<b>2008</b> , 49, 213-224, <a href="https://doi.org/10.1007/s11069-008-9279-6">https://doi.org/10.1007/s11069-008-9279-6</a>	1.958	Published
13	Parameterization of sea-surface drag under varying sea state and its dependence on wave age	R. Rajesh Kumar, <b>Prasad K. Bhaskaran</b> , A.N.V. Satyanarayana, D. B. Subrahmanyam, A.D. Rao and S.K. Dube	<b>Natural Hazards</b> , Springer	<b>2008</b> , 49, 187-197, <a href="https://doi.org/10.1007/s11069-008-9309-4">https://doi.org/10.1007/s11069-008-9309-4</a>	1.958	Published

14	Tsunami early warning system - an Indian ocean perspective	<b>Prasad K. Bhaskaran</b> , R. Rajesh Kumar, S.K. Dube, A.D. Rao, Tad Murty, A. Gangopadhyay and A. Chaudhuri	<b>Journal of Earthquake and Tsunami</b> , World Scientific	<b>2008</b> , 2(3), 197-226, <a href="https://doi.org/10.1007/978-90-481-2498-5_6">https://doi.org/10.1007/978-90-481-2498-5_6</a>	0.407	Published
15	Impact of wind speed and Atmospheric stability on Air-Sea interface fluxes over the East Asian Marginal seas	D. Balasubrahmanyam, Radhika Ramachandran, S. Indira Rani, P.K. Kunhikrishnan and <b>Prasad K. Bhaskaran</b>	<b>Atmospheric Research</b> , Elsevier	<b>2009</b> , 94(1), 81-90, <a href="https://doi.org/10.1016/j.atmosres.2008.09.011">https://doi.org/10.1016/j.atmosres.2008.09.011</a>	2.421	Published
16	Development of a Comprehensive Ocean Atlas for Indian Ocean utilizing ARGO data	<b>Prasad K. Bhaskaran</b> , Rahul Barman, S.K. Dube, P.C. Pandey, M. Ravichandran and Shailesh Nayak	<b>Int. Journal Climatology</b> , Royal Met. Society	<b>2009</b> , 30(2), 185-196, <a href="https://doi.org/10.1002/joc.1885">https://doi.org/10.1002/joc.1885</a>	3.76	Published
17	Parameterization of rain induced surface roughness and its validation study using a third-generation wave model	R. Rajesh Kumar, <b>Prasad K. Bhaskaran</b> , and D. Bala Subrahmanyam	<b>Ocean Science Journal</b> , Springer	<b>2009</b> , 44(3), 125-143, <a href="https://doi.org/10.1007/s12601-009-0012-5">https://doi.org/10.1007/s12601-009-0012-5</a>	1.962	Published
18	Variability in Sound speed structure and SOFAR channel depth in the Indian Ocean	Swaminathan, V.S., and <b>B. Prasad Kumar</b>	<b>Journal of Ship Technology</b>	<b>2009</b> , 5(1), 53-72		Published
19	Bottom boundary layer characteristics in the Hooghly estuary under the combined action of waves and currents	Chitra A, <b>Prasad K. Bhaskaran</b> , Indu Jain, Bhar, A, and Narayana, A.C.	<b>Marine Geodesy</b> , Taylor & Francis	<b>2010</b> , 33, 261 – 281, <a href="https://doi.org/10.1080/01490419.2010.492308">https://doi.org/10.1080/01490419.2010.492308</a>	1.115	Published
20	Influence of particle shape on drag coefficient for commonly occurring sandy particles in coastal areas	Chitra Arora, and <b>Prasad K. Bhaskaran</b>	<b>Int. Journal of Oceans and Climate Systems</b> , Multi-Science	<b>2010</b> , 1(2), 99-112,		Published
21	A new approach for deriving temperature and salinity fields in the Indian Ocean using	<b>Prasad K. Bhaskaran</b> , R. Rajesh Kumar, Rahul Barman, and M. Ravichandran	<b>Journal of Marine Science &amp; Technology</b> , Springer	<b>2010</b> , 15(2), 160-175, <a href="https://doi.org/10.1260/1759-3131.1.2.99">https://doi.org/10.1260/1759-3131.1.2.99</a>	0.718	Published

	artificial neural networks					
22	A bubble population density spectrum model for the central Arabian Sea	Uphar Saxena and <b>B. Prasad Kumar</b>	<b>Journal of Ship Technology</b>	<b>2010</b> , 6(2), 30-44		Published
23	Reliability based design method for coastal structures in shallow seas	<b>Prasad K. Bhaskaran</b>	<b>Indian Journal of Geo-Marine Sciences, NISCAIR</b>	<b>2010</b> , 39(4), 605-615	0.313	Published
24	Impact of rain in modifying wave height in a coupled wave-climate model	Rajesh Kumar, Anna Rutgersson and <b>Prasad K. Bhaskaran</b>	<b>Geophysical Research Abstracts, European Geophysical Union</b>	<b>2011</b> , 13	2.724	Published
25	Retrieval of Ocean Parameter using Genetic Algorithm	S. Koteswar Rao and <b>Prasad K. Bhaskaran</b>	<b>Journal of Ship Technology</b>	<b>2011</b> , 7(1), 44-56		Published
26	Parameterization of bottom friction under combined wave-tide action in the Hooghly estuary, India	Chitra Arora, and <b>Prasad K. Bhaskaran</b>	<b>Ocean Engineering, Elsevier</b>	<b>2012</b> , 43, 43-55, <a href="https://doi.org/10.1016/j.oceaneng.2011.12.018">https://doi.org/10.1016/j.oceaneng.2011.12.018</a>	1.337	Published
27	Response of Upper Ocean during passage of MALA cyclone utilizing ARGO data	Naresh K. Vissa, A.N.V. Satyanarayana and <b>Prasad K. Bhaskaran</b>	<b>Int. Journal of Applied Earth Observation and Geo-information, Elsevier</b>	<b>2012</b> , 14, 149-159, <a href="https://doi.org/10.1016/j.jag.2011.08.015">https://doi.org/10.1016/j.jag.2011.08.015</a>	2.539	Published
28	Near-shore wave induced setup along Kalpakkam coast during an extreme cyclone event in the Bay of Bengal	Sashikant Nayak, <b>Prasad K. Bhaskaran</b> and R. Venkatesan	<b>Ocean Engineering, Elsevier</b>	<b>2012</b> , 55, 52-61, <a href="https://doi.org/10.1016/j.oceaneng.2012.07.036">https://doi.org/10.1016/j.oceaneng.2012.07.036</a>	1.337	Published
29	Comparison of Mixed Layer Depth and Barrier Layer Thickness for the Indian Ocean using two different climatologies	Naresh K. Vissa, A.N.V. Satyanarayana and <b>Prasad K. Bhaskaran</b>	<b>Int. Journal Climatology, Royal Met. Society</b>	<b>2013</b> , 33, 2855-2870, <a href="https://doi.org/10.1002/joc.3635">https://doi.org/10.1002/joc.3635</a>	3.76	Published



30	Response of oceanic cyclogenesis metrics for NARGIS cyclone: a case study	Naresh K. Vissa, A.N.V. Satyanarayana, and <b>Prasad K. Bhaskaran</b>	<b>Atmospheric Science Letters</b> , Royal Met. Society	<b>2013</b> , 14, 7-13, <a href="https://doi.org/10.1002/asl2.407">https://doi.org/10.1002/asl2.407</a>	1.876	Published
31	Intensity of tropical cyclones during pre- and post-monsoon seasons in relation to accumulated tropical cyclone heat potential over Bay of Bengal	Naresh K. Vissa, A.N.V. Satyanarayana and <b>Prasad K. Bhaskaran</b>	<b>Natural Hazards</b> , Springer	<b>2013</b> , 68, 351-371, <a href="https://doi.org/10.1007/s11069-013-0625-y">https://doi.org/10.1007/s11069-013-0625-y</a>	1.958	Published
32	Modulation of local wind-waves at Kalpakkam from remote forcing effects of Southern Ocean swells	Sashikant Nayak, <b>Prasad K. Bhaskaran</b> , R. Venkatesan and Sikha Dasgupta	<b>Ocean Engineering</b> , Elsevier	<b>2013</b> , 64, 23-35, <a href="https://doi.org/10.1016/j.oceaneng.2013.02.010">https://doi.org/10.1016/j.oceaneng.2013.02.010</a>	1.337	Published
33	Performance and validation of a coupled parallel ADCIRC-SWAN model for THANE cyclone in the Bay of Bengal	<b>Prasad K. Bhaskaran</b> , Sashikant Nayak, Subba Reddy Bonthu, P L N Murty and Debabrata Sen	<b>Environmental Fluid Mechanics</b> , Springer	<b>2013</b> , 13, 601-623, <a href="https://doi.org/10.1007/s10652-013-9284-5">https://doi.org/10.1007/s10652-013-9284-5</a>	1.164	Published
34	Impact of South China Sea Cold Surges and Typhoon Peipah on Initiating Cyclone Sidr in the Bay of Bengal	Naresh K. Vissa, A.N.V. Satyanarayana and <b>Prasad K. Bhaskaran</b>	<b>Pure and Applied Geophysics</b> , Springer Basel	<b>2013</b> , 170, 2369-2381, <a href="https://doi.org/10.1007/s00024-013-0671-0">https://doi.org/10.1007/s00024-013-0671-0</a>	1.854	Published
35	Numerical Modeling of Suspended Sediment Concentration and its Validation for the Hooghly Estuary, India	Chitra Arora and <b>Prasad K. Bhaskaran</b>	<b>Coastal Engineering Journal</b> , Japan Society of Civil Engineers	<b>2013</b> , 55(2), 1-23, <a href="https://doi.org/10.1142/S057856341350006X">https://doi.org/10.1142/S057856341350006X</a>	1.478	Published
36	Response of Upper Ocean and Impact of Barrier Layer on SIDR cyclone induced sea surface cooling	Naresh K. Vissa, A.N.V. Satyanarayana and <b>Prasad K. Bhaskaran</b>	<b>Ocean Science Journal</b> , Springer Link	<b>2013</b> , 48(3), 279-288, <a href="https://doi.org/10.1007/s12601-013-0026-x">https://doi.org/10.1007/s12601-013-0026-x</a>	1.962	Published



37	A numerical study of coastal inundation and its validation for Thane Cyclone in the Bay of Bengal	<b>Prasad K. Bhaskaran</b> , R. Gayathri, P.L.N. Murty, Subba Reddy B., and Debabrata Sen	<b>Coastal Engineering</b> , Elsevier	<b>2013</b> , 83, 108-118, <a href="https://doi.org/10.1016/j.coastaleng.2013.10.005">https://doi.org/10.1016/j.coastaleng.2013.10.005</a>	2.062	Published
38	Wave forecasting system for Operational Use and its Validation at coastal Puducherry, East Coast of India	Sandhya, K.G., T.M. Bala Krishnan Nair, <b>Prasad K. Bhaskaran</b> , Sabique, L., Arun, N., and Jeykumar, K	<b>Ocean Engineering</b> , Elsevier	<b>2013</b> , 80, 64-72, <a href="https://doi.org/10.1016/j.oceaneng.2014.01.009">https://doi.org/10.1016/j.oceaneng.2014.01.009</a>	1.337	Published
39	Coastal Vulnerability due to extreme waves at Kalpakkam based on historical tropical cyclones in the Bay of Bengal	Sashikant Nayak and <b>Prasad K. Bhaskaran</b>	<b>Int. Journal Climatology</b> , Royal Met. Society	<b>2014</b> , 34, 1460-1471, <a href="https://doi.org/10.1002/joc.3776">https://doi.org/10.1002/joc.3776</a>	3.76	Published
40	Role of gas bubbles in the attenuation of acoustic waves at the air-sea interface	<b>Prasad K. Bhaskaran</b>	<b>Current Science</b>	<b>2014</b> , 107(6), 983-993	0.905	Published
41	Dredging maintenance plan for the Kolkata port, India	<b>Prasad K. Bhaskaran</b> , Swetha, M., SubbaReddy, B	<b>Current Science</b>	<b>2014</b> , 107(7), 1125-1136	0.905	Published
42	A coupled hydrodynamic modeling system for PHAILIN cyclone in the Bay of Bengal	Murty, P.L.N., Sandhya, K.G., <b>Prasad K. Bhaskaran</b> ., Felix J., Gayathri, R., Balakrishnan Nair, T.M., Srinivasa Rao, T., and Sheno, S.S.C	<b>Coastal Engineering</b> , Elsevier	<b>2014</b> , <b>93</b> , 71-81, <a href="https://doi.org/10.1016/j.coastaleng.2014.08.006">https://doi.org/10.1016/j.coastaleng.2014.08.006</a>	2.062	Published
43	Wind-wave climate projections for the Indian Ocean from Satellite observations	<b>Prasad K. Bhaskaran</b> ., Nitika Gupta, and Mihir K. Dash	<b>Journal of Marine Science Research &amp; Development</b>	<b>2014</b> , S11: 005, <a href="https://doi.org/10.4172/2155-9910.S11-005">https://doi.org/10.4172/2155-9910.S11-005</a> .		Published
44	Coastal vulnerability assessment studies over India: a review	Sudha Rani, N.N.V., A.N.V.Satyanarayana, and <b>Prasad K. Bhaskaran</b>	<b>Natural Hazards</b> , Springer	<b>2015</b> , 77, 405-428, <a href="https://doi.org/10.1007/s11069-015-1597-x">https://doi.org/10.1007/s11069-015-1597-x</a>	1.958	Accepted
45	Assessment on historical cyclone	Bishnupriya Sahoo, and	<b>Int. Journal Climatology</b> ,	<b>2015</b> , 36(1), 95-109,	3.76	Published

	tracks in the Bay of Bengal, east coast of India	<b>Prasad K. Bhaskaran</b>	<b>Royal Met. Society</b>	<a href="https://doi.org/10.1002/joc.4331">https://doi.org/10.1002/joc.4331</a>		
46	Tidal Prediction for Complex Waterways in the Bangladesh region	Linta Rose, and <b>Prasad K. Bhaskaran</b>	<b>Aquatic Procedia, Elsevier</b>	<b>2015</b> , 4, 532-539, <a href="https://doi.org/10.1016/j.aqpro.2015.02.069">https://doi.org/10.1016/j.aqpro.2015.02.069</a>		Published
47	Synthesis of Tropical cyclone tracks in a Risk Evaluation Perspective for the East Coast of India	Bishnupriya Sahoo, and <b>Prasad K. Bhaskaran</b>	<b>Aquatic Procedia, Elsevier</b>	<b>2015</b> , 4, 389-396, <a href="https://doi.org/10.1016/j.aqpro.2015.02.052">https://doi.org/10.1016/j.aqpro.2015.02.052</a>		Published
48	Numerical study on Storm Surge and associated Coastal inundation for 2009 AILA Cyclone in the head Bay of Bengal	Gayathri, R., <b>Prasad K. Bhaskaran</b> ., and Debabrata Sen	<b>Aquatic Procedia, Elsevier</b>	<b>2015</b> , 4, 404-411, <a href="https://doi.org/10.1016/j.aqpro.2015.02.054">https://doi.org/10.1016/j.aqpro.2015.02.054</a>		Published
49	Recent trends in Wind-Wave Climate for the Indian Ocean	Nitika Gupta, <b>Prasad K. Bhaskaran</b> , and Mihir K. Dash	<b>Current Science</b>	<b>2015</b> , 108(12), 2191-2201	0.93	Published
50	Tidal analysis and prediction for the Gangra location, Hooghly estuary in the Bay of Bengal	Linta Rose, <b>Prasad K. Bhaskaran</b> , and Selvin P. Kani	<b>Current Science</b>	<b>2015</b> , 109, 745-758	0.93	Published
51	A numerical study of hypothetical storm surge and coastal inundation for AILA cyclone in the Bay of Bengal	R. Gayathri, P.L.N. Murty, <b>Prasad K. Bhaskaran</b> and T. Srinivasa Kumar	<b>Environmental Fluid Mechanics, Springer</b>	<b>2016</b> , 16(2), 429-452, <a href="https://doi.org/10.1007/s10652-015-9434-z">https://doi.org/10.1007/s10652-015-9434-z</a>	1.164	Published
52	Trends in wind-wave climate over the head Bay of Bengal region	Anindita Patra and <b>Prasad K. Bhaskaran</b>	<b>Int. Journal Climatology, Royal Met. Society</b>	<b>2016</b> , 36, 4222-4240, <a href="https://doi.org/10.1002/joc.4627">https://doi.org/10.1002/joc.4627</a>	3.76	Published

53	The Role of Environmental forcing on Tidal Dynamics along Complex Near-shore waters off Bangladesh	Linta Rose and <b>Prasad K. Bhaskaran</b>	<b>Ocean Engineering, Elsevier</b>	<b>2016</b> , 115, 68-81, <a href="https://doi.org/10.1016/j.oceaneng.2016.02.031">https://doi.org/10.1016/j.oceaneng.2016.02.031</a>	1.337	Published
54	Neural Network Based Data Assimilation to Improve Numerical Ocean Wave Forecast	Aditya N. Deshmukh, M. C. Deo, <b>Prasad K. Bhaskaran</b> , T.M. Balakrishnan Nair and K.G. Sandhya	<b>IEEE Journal of Oceanic Engineering</b>	<b>2016</b> , <a href="https://doi.org/10.1109/JOE.2016.2521222">https://doi.org/10.1109/JOE.2016.2521222</a>		Published
55	Temporal variability in wind-wave climate and its validation with ESSO-NIOT wave atlas for the head Bay of Bengal	Anindita Patra & <b>Prasad K. Bhaskaran</b>	<b>Climate Dynamics, Springer</b>	<b>2016</b> , 49, 1271-1288, <a href="https://doi.org/10.1007/s00382-016-3385-z">https://doi.org/10.1007/s00382-016-3385-z</a>	4.708	Published
56	Inter-dependency of wave parameters and directional analysis of ocean wind-wave climate for the Indian Ocean	Nitika Gupta & <b>Prasad K. Bhaskaran</b>	<b>International Journal of Climatology, Royal Met. Society</b>	<b>2016</b> , 37, 3036-3043, <a href="https://doi.org/10.1002/joc.4898">https://doi.org/10.1002/joc.4898</a>	3.76	Published
57	Numerical study of coastal hydrodynamics using a coupled model for Hudhud cyclone in the Bay of Bengal	P.L.N.Murty, <b>Prasad K. Bhaskaran</b> , R. Gayathri, Bishnupriya Sahoo, T. Srinivasa Kumar, & B. Subba Reddy	<b>Estuarine, Coastal and Shelf Science, Elsevier</b>	<b>2016</b> , 183, 13-27, <a href="https://doi.org/10.1016/j.ecss.2016.10.013">https://doi.org/10.1016/j.ecss.2016.10.013</a>	2.355	Published
58	Performance of WRF-ARW winds on computed storm surge using hydrodynamic model for Phailin and Hudhud cyclones	D. Dhana Lakshmi, P.L.N. Murty, <b>Prasad K. Bhaskaran</b> , Bishnupriya Sahoo, T. Srinivasa Kumar, S.S.C. Shenoi, & A.S. Srikanth	<b>Ocean Engineering, Elsevier</b>	<b>2017</b> , 131, 135-148, <a href="https://doi.org/10.1016/j.oceaneng.2017.01.005">https://doi.org/10.1016/j.oceaneng.2017.01.005</a>	1.488	Published

59	Coastal Inundation Research: an Overview of the Processes	R. Gayathri, <b>Prasad K. Bhaskaran</b> and Felix Jose	<b>Current Science</b>	<b>2017</b> , 112(2), 267-278	0.93	Published
60	Assessment of Climatological Trends of Sea Level over the Indian Coast using Artificial Neural Network and Wavelet Techniques	Sudha Rani, N.N.V., A.N.V.Satyanarayana, and <b>Prasad K. Bhaskaran</b>	<b>Pure and Applied Geophysics</b>	<b>2017</b> , 174(4), 1527-1546, <a href="https://doi.org/10.1007/s00024-017-1501-6">https://doi.org/10.1007/s00024-017-1501-6</a>	1.677	Published
61	The application of low-rank and sparse decomposition method in the field of climatology	Nitika Gupta & <b>Prasad K. Bhaskaran</b>	<b>Theoretical &amp; Applied Climatology</b> , Springer	<b>2017</b> , 1-11, <a href="https://doi.org/10.1007/s00704-017-2074-0">https://doi.org/10.1007/s00704-017-2074-0</a>	3.40	Published
62	Tidal propagation and its non-linear characteristics in the Head Bay of Bengal	Linta Rose & <b>Prasad K. Bhaskaran</b>	<b>Estuarine, Coastal and Shelf Science</b> , Elsevier	<b>2017</b> , 188, 181-198, <a href="https://doi.org/10.1016/j.ecss.2017.02.024">https://doi.org/10.1016/j.ecss.2017.02.024</a>	2.335	Published
63	Wave attenuation in presence of mangroves: A sensitivity study for varying bottom slopes	Parvathy K G & <b>Prasad K. Bhaskaran</b>	<b>International Journal of Ocean and Climate Systems</b> , SAGE	<b>2017</b> , 1-9 <a href="https://doi.org/10.1177/1759313117702919">https://doi.org/10.1177/1759313117702919</a>		Published
64	Dipole behavior in maximum significant wave height over the Southern Indian Ocean	Nitika Gupta, <b>Prasad K. Bhaskaran</b> & Mihir K. Dash	<b>International Journal of Climatology</b> , Royal Met. Society	<b>2017</b> , 37, 4925-4937, <a href="https://doi.org/10.1002/joc.5133">https://doi.org/10.1002/joc.5133</a>	3.76	Published
65	An assessment on the impact of wind forcing on simulation and validation of wave spectra at coastal Puducherry, east coast of India	Umesh P A, <b>Prasad K. Bhaskaran</b> , Sandhya K G & Balakrishnan Nair T. M	<b>Ocean Engineering</b> , Elsevier	<b>2017</b> , 139, 14-32, <a href="https://doi.org/10.1016/j.oceaneng.2017.04.043">https://doi.org/10.1016/j.oceaneng.2017.04.043</a>	1.488	Published
66	Inter-seasonal variability of wind-waves and their attenuation	Parvathy K G, Umesh P A & <b>Prasad K. Bhaskaran</b>	<b>International Journal of Climatology</b> ,	<b>2017</b> , 37(5), 5089-5106,	3.76	Published

	characteristics by mangroves in a reversing wind system		<b>Royal Met. Society</b>	<a href="https://doi.org/10.1002/joc.5147">https://doi.org/10.1002/joc.5147</a>		
67	Role of continental shelf on non-linear interaction of storm surges, tides and wind waves: An idealized study representing the west coast of India	Jismy Poulse, Rao A D & <b>Prasad K. Bhaskaran</b>	<b>Estuarine, Coastal and Shelf Science, Elsevier</b>	<b>2017</b> , <a href="https://doi.org/10.1016/j.ecss.2017.06.007">https://doi.org/10.1016/j.ecss.2017.06.007</a>	2.335	Published
68	Numerical Simulation of Wave Characteristics off Kulasekharapatnam, Southeast Coast of India	Umesh P A, Selvin P, Kani & <b>Prasad K. Bhaskaran</b>	<b>Pure and Applied Geophysics</b>	<b>2017</b> , 174, 3979-4001, <a href="https://doi.org/10.1007/s00024-017-1599-6">https://doi.org/10.1007/s00024-017-1599-6</a>	1.677	Published
69	A comprehensive data set for tropical cyclone storm surge-induced inundation for the east coast of India	Bishnupriya Sahoo & <b>Prasad K. Bhaskaran</b>	<b>International Journal of Climatology, Royal Met. Society</b>	<b>2017</b> , <a href="https://doi.org/10.1002/joc.5184">https://doi.org/10.1002/joc.5184</a>	3.76	Published
70	Tidal asymmetry and characteristics of tides in the Head Bay of Bengal	Linta Rose & <b>Prasad K. Bhaskaran</b> & Felix Jose	<b>Quarterly Journal of the Royal Meteorological Society, Royal Met. Society</b>	<b>2017</b> , 143 (708), 2735-2740, <a href="https://doi.org/10.1002/qj.3122">https://doi.org/10.1002/qj.3122</a>	3.669	Published
71	Time evolution of atmospheric parameters and their influence on sea level pressure over the head Bay of Bengal	Anindita Patra, <b>Prasad K. Bhaskaran</b>	<b>Climate Dynamics, Springer</b>	<b>2017</b> , 1-16, <a href="https://doi.org/10.1007/s00382-017-3892-6">https://doi.org/10.1007/s00382-017-3892-6</a>	4.708	Published
72	Wave Hindcasting Using WAM and WAVEWATCH III: A Comparison Study Utilizing Oceansat-2 (OSCAT) Winds	Swain J, Umesh P A, Balchand A N, <b>Prasad K. Bhaskaran</b>	<b>Journal of Oceanography and Marine Research, OMICS International</b>	<b>2017</b> , <a href="https://doi.org/10.4172/2572-3103.1000166">https://doi.org/10.4172/2572-3103.1000166</a>	1.55	Published
73	Multi-hazard risk assessment of coastal vulnerability	Bishnupriya Sahoo, and <b>Prasad K. Bhaskaran</b>	<b>Journal of Environmental</b>	<b>2017</b> , <a href="https://doi.org/10.1016/j.jenvman.2017.10.075">https://doi.org/10.1016/j.jenvman.2017.10.075</a>	4.712	Published

	from tropical cyclones – A GIS based approach for the Odisha coast		<b>Management, Elsevier</b>			
74	Impact of PBL and convection parameterization schemes for prediction of severe land-falling Bay of Bengal cyclones using WRF-ARW model	K.S.Singh, and <b>Prasad K. Bhaskaran</b>	<b>Journal of Atmospheric and Solar-Terrestrial Physics</b>	<b>2017</b> , 165-166, 10-24, <a href="https://doi.org/10.1016/j.jastp.2017.11.004">https://doi.org/10.1016/j.jastp.2017.11.004</a>	1.419	Published
75	Wave-Current Interaction during Hudhud cyclone in the Bay of Bengal	Volvaiker Samiksha, P.Vethamony, Charls Antony, <b>Prasad K. Bhaskaran</b> , and Balakrishnan Nair	<b>Natural Hazards and Earth System Sciences, European Geosciences Union</b>	<b>2017</b> , 17, 2059 -2074, <a href="https://doi.org/10.5194/nhess-17-2059-2017">https://doi.org/10.5194/nhess-17-2059-2017</a>	2.709	Published
76	High frequency tail characteristics in the coastal waters off Gopalpur, north-west Bay of Bengal - A Nearshore Modelling Study	Umesh P A, <b>Prasad K. Bhaskaran</b> , Sandhya K G, Balakrishnan Nair, T.M.	<b>Pure and Applied Geophysics, Springer Nature</b>	<b>2017</b> , <a href="https://doi.org/10.1007/s00024-017-1761-1">https://doi.org/10.1007/s00024-017-1761-1</a>	1.677	Published
77	Impact of radiance data assimilation on the prediction performance of cyclonic storm SIDR using WRF-3DVAR modelling system	Singh K.S., M. Mandal, and <b>Prasad K. Bhaskaran</b>	<b>Meteorology &amp; Atmospheric Physics</b>	<b>2017</b> , <a href="https://doi.org/10.1007/s00703-017-0552-7">https://doi.org/10.1007/s00703-017-0552-7</a>	1.356	Published
78	Impact of lateral boundary and initial conditions in the prediction of Bay of Bengal cyclones using WRF model and its 3D-VAR data assimilation system	Singh K.S., and <b>Prasad K. Bhaskaran</b>	<b>Journal of Atmospheric and Solar-Terrestrial Physics</b>	<b>2018</b> , <a href="https://doi.org/10.1016/j.jastp.2018.05.007">https://doi.org/10.1016/j.jastp.2018.05.007</a>	1.419	Published
79	A Peak-over-Threshold Approach for the Numerical Modeling of 26 December 2004 Indian Ocean	Denesh Herrick, Mohit Sharma, <b>Prasad K. Bhaskaran</b> and Neeraj Goyal	<b>ISH Journal of Hydraulic Engineering</b>	<b>2018</b> , <a href="https://doi.org/10.1080/09715010.2018.1498752">https://doi.org/10.1080/09715010.2018.1498752</a>	1.04	Published

	Tsunami at the Kalpakkam coast, Tamil Nadu, India					
80	Spectral Modelling on the Characteristics of High Frequency Tail in Shallow Water Wave Spectra at Coastal Puducherry, East Coast of India	Umesh, P.A., <b>Prasad K. Bhaskaran</b> , Sandhya, K.G., and Balakrishnan Nair, T.M.	<b>Pure and Applied Geophysics</b>	<b>2018</b> , <a href="https://doi.org/10.1007/s00024-018-1957-z">https://doi.org/10.1007/s00024-018-1957-z</a>	1.652	Published
81	Application of weather forecasting model WRF for operational electric power network management - a case study for Phailin cyclone	Bishnupriya Sahoo, <b>Prasad K. Bhaskaran</b> , and Ashok K. Pradhan	<b>Theoretical &amp; Applied Climatology</b> , Springer	<b>2018</b> , <a href="https://doi.org/10.1007/s00704-018-2639-6">https://doi.org/10.1007/s00704-018-2639-6</a>	3.40	Published
82	Development of Regional Algorithm to Estimate Suspended Sediment Concentration (SSC) Based on the Remotely Sensed Reflectance and Field Observations for the Hooghly Estuary and West Bengal Coastal Waters	Selvin Pitchaikani, J., Ratheesh Ramakrishnan, <b>Prasad K. Bhaskaran</b> , D. Ilangoan, and Rajawat, A.S.	<b>Journal of the Indian Society of Remote Sensing</b> , Springer	<b>2018</b> , <a href="https://doi.org/10.1007/s12524-018-0884-x">https://doi.org/10.1007/s12524-018-0884-x</a>	0.810	Published
83	Role of mesoscale eddies on atmospheric convection during summer monsoon season over the Bay of Bengal: a case study	Venkata Sai Gulakaram, Naresh K. Vissa and <b>Prasad K. Bhaskaran</b>	<b>Journal of Ocean Engineering &amp; Science</b> , Springer	<b>2018</b> , <a href="https://doi.org/10.1016/j.joes.2018.11.002">https://doi.org/10.1016/j.joes.2018.11.002</a>		Published
84	Numerical simulation and preliminary analysis of spectral slope and tail characteristics using nested WAM-SWAN in a shallow water application off Visakhapatnam	Umesh, P.A., <b>Prasad K. Bhaskaran</b> , Sandhya, K.G., and Balakrishnan Nair, T.M.	<b>Ocean Engineering</b> , Elsevier	<b>2019</b> , 173, 268-283, <a href="https://doi.org/10.1016/j.oceaneng.2018.12.034">https://doi.org/10.1016/j.oceaneng.2018.12.034</a>	2.214	Published
85	Prediction of storm surge and coastal inundation using Artificial Neural Network – A case	Bishnupriya Sahoo, and <b>Prasad K. Bhaskaran</b>	<b>Weather and Climate Extremes</b> , Elsevier	<b>2019</b> , <a href="https://doi.org/10.1016/j.wace.2019.100196">https://doi.org/10.1016/j.wace.2019.100196</a>	4.21	Published



	study for 1999 Odisha Super Cyclone					
86	Prediction of storm surge and inundation using climatological datasets for the Indian coast using soft computing techniques	Bishnupriya Sahoo, and <b>Prasad K. Bhaskaran</b>	<b>Soft Computing, Springer</b>	<b>2019,</b> <a href="https://doi.org/10.1007/s00500-019-03775-0(0123456789().volIV)(0123456789,-().volV)">https://doi.org/10.1007/s00500-019-03775-0(0123456789().volIV)(0123456789,-().volV)</a>	2.367	Published
87	Simulation of near-shore waves using boundary conditions from WAM and WWIII – a case study	J. Swain, Umesh, P.A., <b>Prasad K. Bhaskaran,</b> and A.N.Balchand	<b>ISH Journal of Hydraulic Engineering</b>	<b>2019,</b> <a href="https://doi.org/10.1080/09715010.2019.1603087">https://doi.org/10.1080/09715010.2019.1603087</a>	1.04	Published
88	River-tide-storm surge interaction characteristics for the Hooghly estuary, East coast of India	R. Gayathri, <b>Prasad K. Bhaskaran,</b> and P.L.N.Murty	<b>ISH Journal of Hydraulic Engineering</b>	<b>2019,</b> <a href="https://doi.org/10.1080/09715010.2019.1601036">https://doi.org/10.1080/09715010.2019.1601036</a>	1.04	Published
89	Nearshore modelling of wind-waves and its attenuation characteristics over a mud dominated shelf in the Head Bay of Bengal	Parvathy K.G., and <b>Prasad K. Bhaskaran</b>	<b>Regional Studies in Marine Science, Elsevier</b>	<b>2019,</b> <a href="https://doi.org/10.1016/j.rsma.2019.100665">https://doi.org/10.1016/j.rsma.2019.100665</a>	1.152	Published
90	Hydrodynamic response of Bahamas archipelago to storm surge and hurricane generated waves – A case study for Hurricane Joaquin	Bishnupriya Sahoo, Felix Jose and <b>Prasad K. Bhaskaran</b>	<b>Ocean Engineering, Elsevier</b>	<b>2019, Vol. 184,</b> 227-238, <a href="https://doi.org/10.1016/j.oceaneng.2019.05.026">https://doi.org/10.1016/j.oceaneng.2019.05.026</a>	2.214	Published
91	Evaluation of CMIP5 climate model projections for surface wind speed over the Indian Ocean region	Soumya Mohan and <b>Prasad K. Bhaskaran</b>	<b>Climate Dynamics, Springer</b>	<b>2019,</b> <a href="https://doi.org/10.1007/s00382-019-04874-2">https://doi.org/10.1007/s00382-019-04874-2</a>	4.048	Published
92	Spectral Wave Characteristics over the Head Bay of Bengal: A Modeling Study	Anindita Patra, <b>Prasad K. Bhaskaran</b> and Rajib Maity	<b>Pure and Applied Geophysics, Springer Nature</b>	<b>2019,</b> <a href="https://doi.org/10.1007/s00024-019-02292-3">https://doi.org/10.1007/s00024-019-02292-3</a>	1.466	Published

93	CMIP5 wind speed comparison between satellite altimeter and reanalysis products for the Bay of Bengal	Athira Krishnan and <b>Prasad K. Bhaskaran</b>	<b>Environmental Monitoring &amp; Assessment, Springer Nature</b>	<b>2019</b> , <a href="https://doi.org/10.1007/s10661-019-7729-0">https://doi.org/10.1007/s10661-019-7729-0</a>	1.959	Published
94	Challenges and Future Directions in Ocean Wave Modeling — A Review	<b>Prasad K. Bhaskaran</b>	<b>Journal of Extreme Events, World Scientific</b>	<b>2019</b> , <a href="https://doi.org/10.1142/S2345737619500040">https://doi.org/10.1142/S2345737619500040</a>		Published
95	Prediction of land-falling Bay of Bengal cyclones during 2013 using the high resolution WRF model	Kuvar Satya Singh and <b>Prasad K. Bhaskaran</b>	<b>Meteorological Applications, Royal Met. Society</b>	<b>2019</b> , 27(1), <a href="https://doi.org/10.1002/met.1850">https://doi.org/10.1002/met.1850</a>	1.411	Accepted
96	Tidal and non-tidal components of water level and currents in the Sundarbans Ecosystem	Selvin Kani and <b>Prasad K. Bhaskaran</b>	<b>S N Applied Sciences, Springer</b>	<b>2019</b> , <a href="https://doi.org/10.1007/s42452-019-1444-x">https://doi.org/10.1007/s42452-019-1444-x</a>		Published
97	Attenuation of Wave Energy due to Mangrove Vegetation off Mumbai, India	Samiksha, S.V., Vethamony, P., Prasad K. Bhaskaran, Pednekar, P., Jishad, M., Arthur James, R.	<b>Energies, MDPI</b>	<b>2019</b> , 12(22), 4286; <a href="https://doi.org/10.3390/en12224286">https://doi.org/10.3390/en12224286</a>	2.990	Published
98	Performance of CMIP5 wind speed from global climate models for the Bay of Bengal region	Athira Krishnan and <b>Prasad K. Bhaskaran</b>	<b>International Journal of Climatology, Royal Met. Society</b>	<b>2019</b> , <a href="https://doi.org/10.1002/joc.6404">https://doi.org/10.1002/joc.6404</a>	3.601	Published
99	Effect of Wave Radiation Stress in Storm Surge-Induced Inundation: A Case Study for the East Coast of India	Murty, P. L. N., Rao, A. D., Siva Srinivas, K., Rama Rao, E. P., and <b>Prasad K. Bhaskaran</b>	<b>Pure and Applied Geophysics, Springer Nature</b>	<b>2019</b> , <a href="https://doi.org/10.1007/s00024-019-02379-x">https://doi.org/10.1007/s00024-019-02379-x</a>	1.652	Published
100	Improved cyclonic wind fields over the Bay of Bengal and their application in storm surge and wave computations	Murty, P. L. N., Siva Srinivas, K., Rama Rao, E. P., <b>Prasad K. Bhaskaran</b> ., Sheno, S.S.C., and Padmanabham, J.	<b>Applied Ocean Research, Elsevier</b>	<b>2020</b> , <a href="https://doi.org/10.1016/j.apor.2019.102048">https://doi.org/10.1016/j.apor.2019.102048</a>	2.436	Published

101	Characteristics and vertical structure of oceanic mesoscale eddies in the Bay of Bengal	Venkata Sai Gulakaram, Naresh Krishna Vissa, and <b>Prasad K. Bhaskaran</b>	<b>Dynamics of Atmospheres and Oceans, Elsevier</b>	<b>2020,</b> <a href="https://doi.org/10.1016/j.dynatmoce.2020.101131">https://doi.org/10.1016/j.dynatmoce.2020.101131</a>	1.405	Published
102	Evaluation and bias correction of global climate models in the CMIP5 over the Indian Ocean region	Soumya Mohan and <b>Prasad K. Bhaskaran</b>	<b>Environmental Monitoring &amp; Assessment, Springer Nature</b>	<b>2020,</b> <a href="https://doi.org/10.1007/s10661-019-7700-0">https://doi.org/10.1007/s10661-019-7700-0</a>	1.959	Published
103	Potential generation sites of internal solitary waves and their propagation characteristics in the Andaman Sea—a study based on MODIS true-colour and SAR observations	N. Jithendra Raju, Mihir K. Dash, Subhra Prakash Dey and <b>Prasad K. Bhaskaran</b>	<b>Environmental Monitoring &amp; Assessment, Springer Nature</b>	<b>2020,</b> <a href="https://doi.org/10.1007/s10661-019-7705-8">https://doi.org/10.1007/s10661-019-7705-8</a>	1.959	Published
104	Regional wise characteristic study of significant wave height for the Indian Ocean	S. Sreelakshmi and <b>Prasad K. Bhaskaran</b>	<b>Climate Dynamics, Springer</b>	<b>2020,</b> <a href="https://doi.org/10.1007/s00382-020-05186-6">https://doi.org/10.1007/s00382-020-05186-6</a>	4.048	Published
105	Role of mangroves in wind-wave climate modeling – A review	Parvathy K.G. and <b>Prasad K. Bhaskaran</b>	<b>Journal of Coastal Conservtion, Springer Nature</b>	<b>2020,</b> <a href="https://doi.org/10.1007/s11852-020-00740-0">https://doi.org/10.1007/s11852-020-00740-0</a>	1.264	Published
106	Spatio-temporal distribution and variability of High Threshold Wind Speed and Significant Wave Height for the Indian Ocean	S. Sreelakshmi and <b>Prasad K. Bhaskaran</b>	<b>Pure and Applied Geophysics, Springer Nature</b>	<b>2020,</b> <a href="https://doi.org/10.1007/s00024-020-02462-8">https://doi.org/10.1007/s00024-020-02462-8</a>	1.652	Published
107	Optimal grid resolution for the detection lead time of cyclogenesis in the North Indian ocean	Jiya Albert and <b>Prasad K. Bhaskaran</b>	<b>Journal of Atmospheric and Solar-Terrestrial Physics, Elsevier</b>	<b>2020,</b> <a href="https://doi.org/10.1016/j.jastp.2020.105289">https://doi.org/10.1016/j.jastp.2020.105289</a>	1.799	Published
108	Wind-generated wave climate variability in the Indian Ocean using ERA-5 dataset	S. Sreelakshmi and <b>Prasad K. Bhaskaran</b>	<b>Ocean Engineering, Elsevier</b>	<b>2020,</b> 209, <a href="https://doi.org/10.1016/j.oceaneng.2020.107486">https://doi.org/10.1016/j.oceaneng.2020.107486</a>	2.214	Published

109	Skill assessment of global climate model wind speed from CMIP5 and CMIP6 and evaluation of projections for the Bay of Bengal	Athira Krishnan and <b>Prasad K. Bhaskaran</b>	<b>Climate Dynamics, Springer</b>	<b>2020,</b> <a href="https://doi.org/10.1007/s00382-020-05406-z">https://doi.org/10.1007/s00382-020-05406-z</a>	4.486	Published
110	Ocean heat content and its role in tropical cyclogenesis for the Bay of Bengal basin	Jiya Albert and <b>Prasad K. Bhaskaran</b>	<b>Climate Dynamics, Springer</b>	<b>2020,</b> <a href="https://doi.org/10.1007/s00382-020-05450-9">https://doi.org/10.1007/s00382-020-05450-9</a>	4.486	Published
111	Numerical Investigation of Bidirectional Mode-1 and -2 Internal Solitary Wave Generation from North and South of Batti Malv Island, Nicobar Islands, India	N. Jithendra Raju, Mihir K. Dash, <b>Prasad K. Bhaskaran</b> and P. C. Pandey	<b>Journal of Physical Oceanography, American Meteorological Society</b>	<b>2020,</b> <a href="https://doi.org/10.1175/JPO-D-19-0182.1">https://doi.org/10.1175/JPO-D-19-0182.1</a>	3.318	Published
112	Evaluation of Track Length, Residence Time and Translational Speed for Tropical Cyclones in the North Indian Ocean	Jiya Albert and <b>Prasad K. Bhaskaran</b>	<b>ISH Journal of Hydraulic Engineering</b>	<b>2020,</b> <a href="https://doi.org/10.1080/09715010.2020.1825124">https://doi.org/10.1080/09715010.2020.1825124</a>	1.04	Published
113	Numerical Simulation of an Extremely Severe Cyclonic Storm Hudhud over the North Indian Ocean in a Medium Range Scale: Influence of Cloud Microphysical Schemes	K. S. Singh, Parvez Alam, Jiya Albert and <b>Prasad K. Bhaskaran</b>	<b>Pure and Applied Geophysics, Springer Nature</b>	<b>2020,</b> <a href="https://doi.org/10.1007/s00024-020-02596-9">https://doi.org/10.1007/s00024-020-02596-9</a>	1.652	Published
114	Possible Linkages between Microseisms in the Andaman-Nicobar Region and Swells	R. Reddy, P. Dewangan, <b>Prasad K. Bhaskaran</b> and P.N.S. Roy	<b>Seismological Research Letters, Seismological</b>	<b>2020,</b> <a href="https://doi.org/10.1785/0220200193">https://doi.org/10.1785/0220200193</a>	3.131	Published

	in the South Indian Ocean		<b>Society of America</b>			
115	Assessment of Groundwater Vulnerability using Integrated Remote Sensing and GIS Techniques for the West Bengal Coast, India	N. N. V. Sudha Rani, A.N.V. Satyanarayana, <b>Prasad K. Bhaskaran</b> , Louis Rice, Komali Kantamaneni	<b>Journal of Contaminant Hydrology, Elsevier</b>	<b>2021</b> , <a href="https://doi.org/10.1016/j.jconhyd.2020.103760">https://doi.org/10.1016/j.jconhyd.2020.103760</a>	2.347	Published
116	Assessment of extremely severe cyclonic storms over Bay of Bengal and performance evaluation of ARW model in the prediction of track and intensity	K. S. Singh, Jiya Albert, <b>Prasad K. Bhaskaran</b> , Parvez Alam	<b>Theoretical &amp; Applied Climatology, Springer Nature</b>	<b>2021</b> , <a href="https://doi.org/10.1007/s00704-020-03510-y">https://doi.org/10.1007/s00704-020-03510-y</a>	3.40	Published
117	Numerical simulation of an extremely severe cyclonic storm over the Bay of Bengal using WRF modelling system: influence of model initial condition	K. S. Singh, Jiya Albert, <b>Prasad K. Bhaskaran</b> , Parvez Alam	<b>Modeling Earth Systems and Environment, Springer Nature</b>	<b>2021</b> , <a href="https://doi.org/10.1007/s40808-020-01069-1">https://doi.org/10.1007/s40808-020-01069-1</a>		Published
118	Climate projections of sea level rise and associated coastal inundation in atoll islands: Case of Lakshadweep Islands in the Arabian Sea	Aysha Jennath, Athira Krishnan, Saikat Kumar Paul, <b>Prasad K. Bhaskaran</b>	<b>Regional Studies in Marine Science, Elsevier</b>	<b>2021</b> , <a href="https://doi.org/10.1016/j.rsma.2021.101793">https://doi.org/10.1016/j.rsma.2021.101793</a>	1.183	Published
119	CMIP5 model performance of significant wave heights over the Indian Ocean using COWCLIP datasets	Athira Krishnan, <b>Prasad K. Bhaskaran</b> , and Prashant Kumar	<b>Theoretical &amp; Applied Climatology, Springer Nature</b>	<b>2021</b> , <a href="https://doi.org/10.1007/s00704-021-03642-9">https://doi.org/10.1007/s00704-021-03642-9</a>	3.40	Published

120	Tropical cyclogenesis identification using eddy detection technique for the Bay of Bengal Basin	Jiya Albert, Bishnupriya Sahoo and <b>Prasad K. Bhaskaran</b>	<b>Atmospheric Research, Elsevier</b>	<b>2021,</b> <a href="https://doi.org/10.1016/j.atmosres.2021.105670">https://doi.org/10.1016/j.atmosres.2021.105670</a>	4.676	Published
121	Wave-current-surge interaction in a Changing Climate over a shallow continental shelf region	Bishnupriya Sahoo, Trilochan Sahoo and <b>Prasad K. Bhaskaran</b>	<b>Regional Studies in Marine Science, Elsevier</b>	<b>2021,</b> <a href="https://doi.org/10.1016/j.rsma.2021.101910">https://doi.org/10.1016/j.rsma.2021.101910</a>	1.183	Published
122	Role and influence of key atmospheric parameters in large-scale environmental flow associated with tropical cyclogenesis and ENSO in the North Indian Ocean basin	Jiya Albert, Athira Krishnan, <b>Prasad K. Bhaskaran</b> and K. S. Singh	<b>Climate Dynamics, Springer</b>	<b>2021,</b> <a href="https://doi.org/10.1007/s00382-021-05885-8">https://doi.org/10.1007/s00382-021-05885-8</a>	4.486	Published
123	Impact assessment of Indian Ocean Dipole on the North Indian Ocean tropical cyclone prediction using a statistical model	Wahiduzzaman, M., Cheung, K. Luo, J.-J., <b>Prasad K. Bhaskaran</b> , Tang, S., Yuan, C	<b>Climate Dynamics, Springer</b>	<b>2021,</b> <a href="https://doi.org/10.1007/s00382-021-05960-0">https://doi.org/10.1007/s00382-021-05960-0</a>	4.486	Published
124	Extreme Swell Wave Energy and its Directional Characteristics in the Indian Ocean	S. Sreelakshmi and <b>Prasad K. Bhaskaran</b>	<b>Climate Dynamics, Springer</b>	<b>2021,</b> <a href="https://doi.org/10.1007/s00382-021-06000-7">https://doi.org/10.1007/s00382-021-06000-7</a>	4.486	Published
125	Impact of Time Step Size on Different Cumulus Parameterization Schemes in the Numerical Simulation of a Heavy Rainfall Event Over Tamil Nadu, India	K. S. Singh, Subbareddy B, <b>Prasad K. Bhaskaran</b> , Purvaja R, and Ramesh R	<b>Pure &amp; Applied Geophysics, Springer</b>	<b>2021,</b> <a href="https://doi.org/10.1007/s00024-021-02896-8">https://doi.org/10.1007/s00024-021-02896-8</a>	1.652	Published
126	Prediction of rapid intensification for land-falling extremely severe	K. S. Singh, Ambily, T., Thatiparthi, K., Reshma, M.S., Jiya Albert, Subbareddy B,	<b>Theoretical &amp; Applied Climatology,</b>	<b>2022,</b> <a href="https://doi.org/10.1007/s00704-022-03923-x">https://doi.org/10.1007/s00704-022-03923-x</a>	3.40	Published

	cyclonic storms in the Bay of Bengal	and <b>Prasad K. Bhaskaran</b>	<b>Springer Nature</b>			
127	Extreme wind-wave climate projections for the Indian Ocean under changing climate scenarios	Athira Krishnan, <b>Prasad K. Bhaskaran</b> , and Prashant Kumar	<b>Climate Dynamics, Springer</b>	<b>2022</b> , <a href="https://doi.org/10.1007/s00382-022-06147-x">https://doi.org/10.1007/s00382-022-06147-x</a>	4.486	Published
128	Impacts of aerosols and climate modes on tropical cyclone frequency over the North Indian Ocean: a statistical link approach	MD Wahiduzzaman, Md. Arfan Ali, Kevin Cheung, Jing-Jia Luo, Tang Shaolei, <b>Prasad K. Bhaskaran</b> , Chaoxia Yuan, Muhammad Bilal, Zhongfeng Qiu, and Mansour Almazroui	<b>Journal of Climate, American Meteorological Society</b>	<b>2022</b> , <a href="https://doi.org/10.1175/JCLI-D-21-0228.1">https://doi.org/10.1175/JCLI-D-21-0228.1</a>	5.148	Published
129	Influence of River Inflow and its impact on the Salinity Variations and Flushing Time in a Networked System, Northwest Coast of India	Jubin Thomas, Naidu, V.S, Naidu, C.V, Shanas, P.R, and <b>Prasad K. Bhaskaran</b>	<b>Journal of Earth System Science, Springer</b>	<b>2022</b>	1.371	Published
130	A Spatial Model for Predicting North Indian Ocean Tropical Cyclone Intensity: Role of Sea Surface Temperature and Tropical Cyclone Heat Potential	MD Wahiduzzaman, Kevin Cheung, Jing-Jia Luo, and <b>Prasad K. Bhaskaran</b>	<b>Weather and Climate Extremes, Elsevier</b>	<b>2022</b>	5.338	Published
131	Tidal variations associated with sea level changes in the Northern Bay of Bengal	Linta Rose and <b>Prasad K. Bhaskaran</b>	<b>Estuarine, Coastal and Shelf Science, Elsevier</b>	<b>2022</b>	2.929	Published
132	Swell wave propagation and its characteristics while approaching the Indian Coast	S. Sreelakshmi and <b>Prasad K. Bhaskaran</b>	<b>Climate Dynamics, Springer</b>	<b>2022</b> , <a href="https://doi.org/10.1007/s00382-022-06378-y">https://doi.org/10.1007/s00382-022-06378-y</a>	4.486	Published



133	Amplification of regional tides in response to sea level	Linta Rose, Rohith B, and <b>Prasad K. Bhaskaran</b>	<b>Ocean Engineering, Elsevier</b>	<b>2022</b> , <a href="https://doi.org/10.1016/j.oceaneng.2022.112691">https://doi.org/10.1016/j.oceaneng.2022.112691</a>	4.372	Published
134	Influence of Climate Variability on Sea Level Rise and its Teleconnection with SST Anomalies over the Indo-Pacific Ocean	Prashant Kumar, Divya Sardana, Evan Weller and <b>Prasad K. Bhaskaran</b>	<b>International Journal of Climatology, Royal Meteorological Society</b>	<b>2022</b> , <a href="https://doi.org/10.1002/joc.7893">https://doi.org/10.1002/joc.7893</a>	4.069	Published
135	The projected changes in extreme wave height indices over the Indian Ocean using COWCLIP2.0 datasets	Divya Sardana, Prashant Kumar, <b>Prasad K. Bhaskaran</b> and Balakrishnan Nair T.M.	<b>Climate Dynamics, Springer</b>	<b>2022</b> , <a href="https://doi.org/10.1007/s00382-022-06579-5">https://doi.org/10.1007/s00382-022-06579-5</a>	4.486	Published
136	Forest cover resilience to climate change over India using the MC2 dynamic vegetation model	Pulakesh Das, Mukunda Dev Behera, <b>Prasad K. Bhaskaran</b> and Parth Sarathi Roy	<b>Environmental Monitoring and Assessment, Springer</b>	<b>2022</b> , <a href="https://doi.org/10.1007/s10661-022-10545-3">https://doi.org/10.1007/s10661-022-10545-3</a>		Published
137	Predicting the Forest Canopy Height from LiDAR and Multi-Sensor Data Using Machine Learning over India	Sujit M. Ghosh, M. D. Behera, Subham Kumar, P. Das, A. J. Prakash, <b>Prasad K. Bhaskaran</b> , P. S. Roy, S. K. Barik, C. Jeganathan, P. K. Srivastava, and S. K. Behera	<b>Remote Sensing, MDPI</b>	<b>2022</b> , <a href="https://www.mdpi.com/1968402">https://www.mdpi.com/1968402</a>	5.349	Published
138	Recent Warming Trends in the Arabian Sea: Causative Factors and Physical Mechanisms	Jiya Albert, Gulakaram, V.S., Naresh K. Vissa, <b>Prasad K. Bhaskaran</b> , and Mihir K. Dash	<b>Climate, MDPI</b> , 11, 35. <a href="https://doi.org/10.3390/cli11020035">https://doi.org/10.3390/cli11020035</a>	<b>2023</b>	4.70	Published
139	Mesoscale eddies with anomalous sea surface temperature and its relation with atmospheric convection over the North Indian Ocean	Gulakaram, V. S., Naresh K. Vissa, and <b>Prasad K. Bhaskaran</b>	<b>International Journal of Climatology, Royal Meteorological Society</b>	<b>2023</b> , <a href="https://doi.org/10.1002/joc.8018">https://doi.org/10.1002/joc.8018</a>	4.069	Published

140	Evaluation of multi-level upper ocean heat content and its relationship with intensity and translation speed of tropical cyclones in the North Indian Ocean	Jiya Albert and <b>Prasad K. Bhaskaran</b>	<b>Theoretical &amp; Applied Climatology, Springer Nature</b>	<b>2023,</b> <a href="https://doi.org/10.1007/s00704-023-04641-8">https://doi.org/10.1007/s00704-023-04641-8</a>	3.40	Published
141	Processes responsible for mixed layer variations near mesoscale eddies in the Bay of Bengal	Gulakaram, V. S., Naresh K. Vissa, and <b>Prasad K. Bhaskaran</b>	<b>Ocean Dynamics, Springer</b>	<b>2024,</b> <a href="https://doi.org/10.1007/s10236-024-01612-z">https://doi.org/10.1007/s10236-024-01612-z</a>	2.30	Published

### 32. List of Workshops/Conferences/Short-term Courses Organized:

- National Workshop on **Oceanographic Processes and its Modeling of Weather & Climate [2010]** organized at the Dept. of Ocean Engineering & Naval Architecture, IIT Kharagpur [**Principal Coordinator**] – Duration: July 5-16, 2010; Amount: Rs.6.00 Lakhs
- Workshop on **Hydrodynamics of the Coastal Environment [2010]** organized at the Dept. of Ocean Engineering & Naval Architecture, IIT Kharagpur [**Principal Coordinator**] – Duration: December 13-15, 2010; Amount: Rs.4.50 Lakhs
- **Integrated training module under ICZMP with Gujarat perspective - 1st Batch (01-08 January, 2014)** for Officials from Government of Gujarat organized at the Dept. of Ocean Engineering & Naval Architecture, IIT Kharagpur [**Principal Coordinator**] – Duration: January 01-08, 2014; Amount: Rs.6.9624 Lakhs
- **Integrated training module under ICZMP with Gujarat perspective – 2nd Batch (20-27 February, 2014)** for Officials from Government of Gujarat organized at the Dept. of Ocean Engineering & Naval Architecture, IIT Kharagpur [**Principal Coordinator**] – Duration: February 20-27, 2014; Amount: Rs.6.9624 Lakhs
- **Integrated training module ICZMP West Bengal (21-26 April, 2014)** for Officials from Government of West Bengal organized at the Dept. of Ocean Engineering & Naval Architecture, IIT Kharagpur [**Principal Coordinator**] – Duration: April 21-26, 2014; Amount: Rs.6.9864 Lakhs
- **Integrated training module under ICZMP with Gujarat perspective - 3rd Batch (14-21 July, 2014)** for Officials from Government of Gujarat organized at the Dept. of Ocean Engineering & Naval Architecture, IIT Kharagpur [**Principal Coordinator**] – Duration: July 14-21, 2014; Amount: Rs.6.9624 Lakhs
- **Integrated training module under ICZMP with Gujarat perspective - 4th Batch (20-27 November, 2014)** for Officials from Government of Gujarat organized at the Dept. of Ocean Engineering & Naval Architecture, IIT Kharagpur [**Principal Coordinator**] – Duration: November 20-27, 2014; Amount: Rs.4.48329 Lakhs
- **Training program on Coastal processes and Coastal Structures** organized by **ADANI** at Ahmedabad during **January and February 2016** (in two phases) [**Principal Coordinator**] – Duration: January 29-31, 2016 (Phase I); February 19-20, 2016 (Phase II), Amount: Rs.2.43846 Lakhs
- Workshop on **Numerical Ocean Wave Modeling** organized at VIT, Vellore during **29-30 April, 2016** [**Principal Coordinator**].
- **Training program on Simulating Waves Nearshore (SWAN) model** for the Students and Research Scholars at Kerala University of Fisheries and Ocean Studies (KUFOS), Panangad, Kochi on 11<sup>th</sup> and 12<sup>th</sup> June, 2019 organized by the Ocean Society of India (OSI).

### 33. List of papers published in Conferences/Symposia/Seminars etc.

1. **Prasad K. Bhaskaran [1994]: Storm surge prediction – a theoretical approach.** Presented at National Space Science Symposium at Space Physics Laboratory, Vikram Sarabhai Space Centre, Trivandrum (India).
2. **Prasad K. Bhaskaran [1995]: A concept for breaking ocean waves by freely floating balls.** Presented at TROPMET, Indian Meteorological Society Symposium on Advanced Technologies in Meteorology, National remote Sensing Agency, Hyderabad (India).
3. P. Vethamony., **Prasad K. Bhaskaran** and Y.V.B. Sarma., [1998]: **Attenuation of surface waves due to monsoon rain: a model study for the north Indian Ocean.** Proc. of National Conf. on Currents Trends in Ocean Prediction with special reference to Indian Seas. Naval Physical and Oceanographic Laboratory, Kochi (India).
4. Raj Kumar., Abhijeet Sarkar., V.K. Aggarwal., Vihang Bhatt., **Prasad K. Bhaskaran** and S.K.Dube., [2000]: **Ocean Wave Model : Sensitivity experiments.** Proc. of International Conf. PORSEC 2000, NIO, Goa.
5. P. Vethamony., **Prasad K. Bhaskaran** and K.Sudheesh., [2001]: **Directional waves simulated for a severe cyclone and a typical Monsoon season in the North Indian Ocean.** Proc. of International Conf. on Port and Maritime R &D and Technology, Singapore, pp.217-221.
6. **Prasad K. Bhaskaran**, D.K.Mahapatra., Ruchi Kalra., A.D.Rao and S.K.Dube., [2004]: **Wave height dependence on wind input: Sensitivity study using a spectral model.** INTROMET-2004: International Symposium on Natural Hazards, 24-27 February, 2004.
7. R. Rajesh Kumar and **Prasad K. Bhaskaran**, [2006]: **Dependence of wind speed and gustiness on air-sea interaction parameters**, National Conference on Atmosphere Ocean Interaction and Monsoon Variability, Cochin, Kerala.
8. **Prasad K. Bhaskaran**, R. Rajesh Kumar, S.K.Dube and D.Sen., [2006]: **Development of a Comprehensive Atlas of Tsunami Travel Time for the Indian Ocean**, 15<sup>th</sup> Congress of Asia and Pacific Division of International Association of Hydraulic Engineering, IIT Chennai.
9. **Prasad K. Bhaskaran**, Khin Win Mhaw, S.K.Dube and D.Sen., [2006]: **Numerical Modeling of Storm Surge for the 1994 Maungtaw Cyclone off Myanmar coast**, 15<sup>th</sup> Congress of Asia and Pacific Division of International Association of Hydraulic Engineering, IIT Chennai.
10. Subrahamanyam, D. B., Radhika Ramachandran, S. Indira Rani, P. K. Kunhikrishnan and **Prasad K. Bhaskaran**, [2006]: **A Comparative Study of Air-Sea Exchange Coefficients and Turbulent fluxes over Indian Sub-continent and Korean Peninsula**, Remote Sensing and

Modeling of the Atmosphere, Oceans, and Interactions, edited by T.N. Krishnamurti, B. N. Goswami, Toshiki Iwasaki, Proc. of SPIE, Vol. 6404, 640416, doi:10.1117/12.694109.

11. **Prasad K. Bhaskaran**, R. Rajesh Kumar, S.K. Dube, and Debabrata Sen [2007]: Tsunami Travel Time computations for the Indian Ocean. Proceedings of National Institute of Disaster Management, IDMC, New Delhi.
12. Subrahmanyam, D. B., S. Indira Rani, Radhika Ramachandran, P. K. Kunhikrishnan and **Prasad K. Bhaskaran**, [2008]: How realistic are the high values of sensible heat flux over the Korean Strait: Is it a direct impact of Tsushima Warm Ocean Current?, National Space Science Symposium - 2008 (Ooty, February 25 - 29, 2008).
13. **Prasad K. Bhaskaran** and P.C. Pandey., [2008]. Soft computing tools in tsunami travel time prediction. 95<sup>th</sup> Indian Science Congress, Andhra University, Visakhapatnam (3-7 January, 2008).
14. R. Rajesh Kumar, **Prasad K. Bhaskaran** and D. Bala Subrahmanyam. [2008]: A case study of three oceanic events on rain induced stress at air-sea interface – qualitative validation. 53<sup>rd</sup> Congress of Indian Society of Theoretical and Applied Mechanics (an International meet), December 27-30, 2008, Hyderabad, India.
15. **Prasad K. Bhaskaran**, Rajesh Kumar, Dube, S.K., Murty, T.S., Gangopadhyay, A., Chaudhuri, A., Rao, A.D., [2008]. Travel time atlas and the role of neural networks for an early warning system for tsunamis in the Indian Ocean. AGU Fall Meeting, 15-19 December, 2008, San Francisco, U.S.A
16. R. Rajesh Kumar and **Prasad K. Bhaskaran** [2008]: Application of Genetic Algorithm for Ocean Parameter mapping. 53<sup>rd</sup> Congress of Indian Society of Theoretical and Applied Mechanics (an International meet), December 27-30, 2008, Hyderabad, India.
17. Chitra Arora and **Prasad K. Bhaskaran** [2009]: Parameterization of effective bottom roughness for the Hooghly estuary under the combined action of waves and currents, Indian Society of Theoretical & Applied Mechanics, NSIT, New Delhi, ISTAM, December 18-21, 2009.
18. **Prasad K. Bhaskaran** [2009]: Wave forecasting capabilities for the North Indian Ocean. GOOS Workshop on Enhancing Wave Forecasting capabilities for North Indian Ocean Storm Surges, IIT Delhi, 14-17 July 2009, New Delhi, India.
19. **Prasad K. Bhaskaran** [2010]: Reliability based design method for coastal structures in shallow seas. Proceedings of National Conference on Coastal Processes, Resources & Management, CESS, 5-7 February, 2010, Thiruvananthapuram.
20. Sashikant Nayak, **Prasad K. Bhaskaran** and Ashoke Bhar. [2010]: An inter-comparison of wave forces using two higher order wave theories for a vertical wall in the Andaman Sea. Proceedings of National Conference on Coastal Processes, Resources & Management, CESS, 5-7 February, 2010, Thiruvananthapuram.

21. Naresh Krishna Vissa, A.N.V. Satyanarayana and **Prasad K. Bhaskaran [2010]**: A Comparative Study of mixed layer depth and barrier layer thickness using two different climatologies, Presented at Nansen Winter School 2010, Cochin February, 6-12, 2010.
22. Naresh Krishna Vissa, A.N.V. Satyanarayana, **Prasad K. Bhaskaran [2010]**: Barrier Layer Thickness using two different climatology atlas for the Bay of Bengal. Tropical Meteorology (TROPMET) 2010- Advances in Weather and Climate Services Kolkata, May 19-21 (2010).
23. **Prasad K. Bhaskaran [2010]**: Tsunami Inundation Modeling. Intergovernmental Oceanographic Commission (IOC) Meeting, IIT Delhi, New Delhi.
24. Naresh Krishna Vissa, A.N.V. Satyanarayana, **Prasad K. Bhaskaran [2011]**: Air sea interactions and upper ocean thermal structure variations during different epochs of MALA cyclone. National Conference of Ocean Science of India (OSICON 2011), National Institute of Ocean Technology, Chennai OD-12, pp.78.
25. Chitra Arora and **Prasad K. Bhaskaran [2011]**: Role of bottom friction in a tidal estuary under combined wave-current action and its validation. 2nd National Conference of Ocean Society of India, CPCZM-10, (2011), 13-15 July 2011, NIOT Chennai.
26. Naresh Krishna Vissa, A.N.V. Satyanarayana, **Prasad K. Bhaskaran [2012]**: Oceanic mixed layer characteristics during different epochs of Tropical cyclones in the North Indian Ocean. Second WMO International Conference on Indian Ocean Tropical Cyclones and Climate Change New Delhi (2012).
27. **Prasad K. Bhaskaran [2012]**: Coupled Wave-Current Modeling System and its Validation for Thane cyclone. 57th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM - An International Conference), 17-20 December 2012, Defence Institute of Advanced Technology, Girinagar, Pune, India.
28. **Prasad K. Bhaskaran [2012]**: The effects of sedimentation on navigation environment in a tidal dominated estuary through numerical modeling study. MARSIM 2012, Singapore Polytechnic, 23-27 April 2013, Singapore.
29. R. Gayathri and **Prasad K. Bhaskaran [2013]**. A numerical study of coastal inundation in Tamil Nadu from THANE cyclone. COSMOS 2013, NPOL, DRDO, Kochi, 9-10 May, 2013.
30. **Prasad K. Bhaskaran** and R. Gayathri **[2013]**. Performance of a Coupled ADCIRC-SWAN model for an extreme event in the Bay of Bengal. COSMOS 2013, NPOL, DRDO, Kochi, 9-10 May, 2013.
31. **Prasad K. Bhaskaran**, Nitika Gupta and Mihir K. Dash **[2013]**: Wind-wave climate projections for the Indian Ocean from Satellite Observations. National Seminar on Climate Change and Biodiversity, Central University of Odisha, Koraput, 23-24 November, 2013.



32. Nitika Gupta, **Prasad K. Bhaskaran** and Mihir K. Dash [2013]. Impact of Climate Change on the Inter-annual Seasonal Variability of Ocean Wave Climate in the Indian Ocean. National Seminar on Climate Change and Biodiversity, Central University of Odisha, Koraput, 23-24 November, 2013.
33. R. Gayathri and **Prasad K. Bhaskaran** [2013]. A numerical study on water level variations and onshore inundation for *Thane* cyclone, OSICON 2013, IITM Pune, 26-28 November, 2013.
34. Nitika Gupta, **Prasad K. Bhaskaran**, and Mihir K. Dash [2014]: Wind-wave variability in the Indian ocean and its relation with various climate indices. National Seminar on Impact of Climate Change: Success and Challenges in Ocean and Atmospheric Research (SCOAR 2014), 9-11 October, 2014, Andhra University, Visakhapatnam, India.
35. Nitika Gupta, and **Prasad K. Bhaskaran** [2014]: Seasonal variability of wind-wave climate in North Indian Ocean and their correlation with various climate indices. 59th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM - An International Conference), 17-20 December, 2014, Alliance University, Bangalore, India.
36. Gayathri, R., **Prasad K. Bhaskaran**., and Debabrata Sen [2015]: Numerical study on storm surge and associated coastal inundation for 2009 AILA Cyclone in the head Bay of Bengal, International Conf. on Water Resources, Coastal, and Ocean Engineering (ICWRCOE 2015), 12-14 March, 2015, AMD, NITK, Surathkal, India.
37. **Prasad K. Bhaskaran** [2015]: A review on storm surge studies along the Indian coasts. Ocean Digest, Vol.2 (4), December 2015.
38. Bishnupriya Sahoo, and **Prasad K. Bhaskaran** [2015]: Synthesis of Tropical Cyclone Tracks in a Risk Evaluation Perspective for the East coast of India. International Conf. on Water Resources, Coastal, and Ocean Engineering (ICWRCOE 2015), 12-14 March, 2015, AMD, NITK, Surathkal, India.
39. Linta Rose, and **Prasad K. Bhaskaran** [2015]: Tidal Prediction for Complex Waterways in the Bangladesh region. International Conf. on Water Resources, Coastal, and Ocean Engineering (ICWRCOE 2015), 12-14 March, 2015, AMD, NITK, Surathkal, India.
40. Gayathri, R., Murty, P.L.N., and **Prasad K. Bhaskaran** [2015]: Modeling of storm surge inundation from severe cyclones in the Indian coast. World Ocean Science Congress, 5-8 February, 2015, Kochi, India.
41. Navaneeth Krishnan, V., and **Prasad K. Bhaskaran** [2015]: Decadal variations in observed temperature and salinity fields over Bay of Bengal. World Ocean Science Congress, 5-8 February, 2015, Kochi, India.
42. **Prasad K. Bhaskaran** [2015]: Influence of wave age and its dependence on sea surface drag under varying sea states. WISE (Waves in Shallow Water Environments) 2015, CSIR-NIO, Goa, 15-19 March, 2015, India.



43. **Prasad K. Bhaskaran [2015]**: Challenges in Storm surges and Coastal inundation modeling for the Indian coasts. 60th Congress of Indian Society of Theoretical and Applied Mechanics (an International meet), December 16-19, 2015, MNIT Jaipur, India.
44. Umesh P.A., **Prasad K. Bhaskaran**, Sandhya, K.G., and Balakrishnan Nair, T.M [2016]. Validation of Nearshore Wave Spectra off Puducherry - A Modeling Study. 61st Congress of ISTAM, VIT University, Vellore, 11-15 December 2016.
45. Umesh P.A., **Prasad K. Bhaskaran**, Sandhya, K.G., and Balakrishnan Nair, T.M [2016]. Nearshore Modelling and Validation of Coastal Wave Spectra - A Case Study. National Symposium on Climate Change and Coastal Vulnerability, TROPMET 2016, 18-21 December 2016, Bhubaneswar.
46. Anindita Patra and **Prasad K. Bhaskaran [2016]**. Assessment of Ocean wave parameters from ESSO-NIOT Wave Atlas. National Symposium on Climate Change and Coastal Vulnerability, TROPMET 2016, 18-21 December 2016, Bhubaneswar.
47. Bishnupriya Sahoo and **Prasad K. Bhaskaran [2016]**. Coastal Vulnerability associated with Tropical cyclones - a case study for the Odisha coast. National Symposium on Climate Change and Coastal Vulnerability, TROPMET 2016, 18-21 December 2016, Bhubaneswar.
48. Bishnupriya Sahoo and **Prasad K. Bhaskaran [2016]**. A comprehensive database on Storm surge and onshore inundation for the Odisha coast. 61st Congress of ISTAM, VIT University, Vellore, 11-15 December 2016.
49. Linta Rose and **Prasad K. Bhaskaran [2016]**. Numerical simulation of Tidal characteristics in the Head Bay of Bengal. 61st Congress of ISTAM, VIT University, Vellore, 11-15 December 2016.
50. Gayathri R and **Prasad K. Bhaskaran [2016]**. Numerical Study on the Interaction between River flow and Tides – A Case Study for the Hooghly River, East Coast of India. 61st Congress of ISTAM, VIT University, Vellore, 11-15 December 2016.
51. Parvathy K.G. and **Prasad K. Bhaskaran [2016]**. Inter-seasonal variability of wave attenuation by Mangroves in a reversing wind system. 61st Congress of ISTAM, VIT University, Vellore, 11-15 December 2016.
52. Gayathri R. and **Prasad K. Bhaskaran [2016]**. Numerical Study on Interaction between River flow and Storm surge for AILA cyclone in the Head Bay of Bengal. National Symposium on Climate Change and Coastal Vulnerability, TROPMET 2016, 18-21 December 2016, Bhubaneswar.
53. Sudha Rani, N.N.V, Satyanarayana, A.N.V, and **Prasad K. Bhaskaran [2016]**. Shoreline changes and saltwater intrusion along West Bengal coastal regions. National Symposium on Climate Change and Coastal Vulnerability, TROPMET 2016, 18-21 December 2016, Bhubaneswar.

54. Sudha Rani, N.N.V, Satyanarayana, A.N.V, and **Prasad K. Bhaskaran [2016]**. Impact of ENSO and IOD events on Mean Sea Level variations over the Indian Coast. AGU Fall Meeting, 12-16 December 2016, San Francisco, USA.
55. **Prasad K. Bhaskaran [2016]**. Tsunami Early Warning system: Perspective for the Indian Ocean region (Lead Talk). National Symposium on Climate Change and Coastal Vulnerability, TROPMET 2016, 18-21 December 2016, Bhubaneswar.
56. Bishnupriya Sahoo and **Prasad K. Bhaskaran [2017]**. Coastal vulnerability index and its Projection for Odisha coast, East coast of India. ICO 2017: International Conference on Oceanography, 15-16 June 2017, Edinburgh, U.K.
57. Anindita Patra and **Prasad K. Bhaskaran [2017]**. Influence of long-term variability in Atmospheric Parameters on Ocean State over the Head Bay of Bengal. ICO 2017: International Conference on Oceanography, 15-16 June 2017, Edinburgh, U.K.
58. Linta Rose and **Prasad K. Bhaskaran [2017]**. Numerical Modeling of the Influence of Meteorological Forcing on Water-Level in the Head Bay of Bengal. ICO 2017: International Conference on Oceanography, 15-16 June 2017, Edinburgh, U.K.
59. **Prasad K. Bhaskaran [2017]**: Extreme Weather Events in a Changing Climate and its Implication on Coastal Vulnerability (Lead Talk). International Symposium on Water Urbanism and Infrastructure Development in Eco-sensitive Zones, Jointly Organized by Ranbir & Chitra Gupta School of Infrastructure Design and Management, IIT Kharagpur & Columbia University, USA, 6-7 January 2017, Kolkata, India.
60. Harika, R.P., Kevin J E Walsh, and **Prasad K. Bhaskaran [2017]**. The relationship between Climate and Mechanisms of Tropical Cyclone Formation, MIPP Conference, 30-31 January 2017, University of Melbourne, Australia.
61. Naresh K. Vissa, Venkata Sai G, and **Prasad K. Bhaskaran [2017]**. Sea level anomalies variability during contrasting summer monsoon seasons over Bay of Bengal, 5<sup>th</sup> National Conference of Ocean Society of India, OSICON-17, August 28-30, 2017, ESSO-National Centre for Earth Science Studies, Thiruvananthapuram.
62. Jismy Poulose, Rao, A.D., and **Prasad K. Bhaskaran [2017]**. The role and dependence of continental shelf geometry on the nonlinear interaction between storm surge, tides, and wind-waves: an idealized study representing the west coast of India, 5<sup>th</sup> National Conference of Ocean Society of India, OSICON-17, August 28-30, 2017, ESSO-National Centre for Earth Science Studies, Thiruvananthapuram.
63. Anindita Patra and **Prasad K. Bhaskaran [2017]**. A zonal dipole pattern in wind-wave trend over the head Bay of Bengal, 5<sup>th</sup> National Conference of Ocean Society of India, OSICON-17, August 28-30, 2017, ESSO-National Centre for Earth Science Studies, Thiruvananthapuram.
64. Bishnupriya Sahoo and **Prasad K. Bhaskaran [2017]**. Development of semi-empirical formulations for storm surge and inundation associated with varying parameters of tropical

cyclones for the State of Odisha, 5<sup>th</sup> National Conference of Ocean Society of India, OSICON-17, August 28-30, 2017, ESSO-National Centre for Earth Science Studies, Thiruvananthapuram.

65. Athira Krishnan and **Prasad K. Bhaskaran [2017]**. Temporal variability of Significant Wave Heights over Bay of Bengal – Comparison study using ERA-Interim and Wave Watch-III datasets. National Seminar on Impact of Climate Change on Extreme Weather Events and Indian Ocean, EWEOI 2017, Andhra University, Visakhapatnam, 27-29 November, 2017.
66. Soumya Mohan and **Prasad K. Bhaskaran [2017]**. Comparison of CMIP5 climate model wind data for the Indian Ocean. National Seminar on Impact of Climate Change on Extreme Weather Events and Indian Ocean, EWEOI 2017, Andhra University, Visakhapatnam, 27-29 November, 2017.
67. Bal Krishna, Dubey, R.P., Chaudhuri, B., and **Prasad K. Bhaskaran [2017]**. Methodology for Reclamation of Nayachara Island by Dredge Material from Jellingham Shoal of Hooghly Estuary by DCI TSHD. Hydro 2017, 22<sup>nd</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering, Indian Society of Hydraulics (ISH), L.D. College of Engineering, December 21-23, 2017.
68. Soumya Mohan and **Prasad K. Bhaskaran [2018]**. Evaluation of CMIP5 climate model projections of surface wind speed over the Indian Ocean region. TROPMET 2018, National Symposium on Understanding Weather and Climate Variability: Research for Society, Banaras Hindu University, Varanasi, Uttar Pradesh, 24-27 October, 2018.
69. Athira Krishnan and **Prasad K. Bhaskaran [2018]**. Comparison of CMIP5 wind speed from Global Climate models with In-situ observations for the Bay of Bengal. HYDRO 2018 International Conference (Hydraulics, Water Resources and Coastal Engineering), NIT Patna, 19-21 December, 2018.
70. Jiya Albert and **Prasad K. Bhaskaran [2018]**. Seasonal and Inter-annual variability of SST and its correlation with maximum sustained wind speed in Bay of Bengal. HYDRO 2018 International Conference (Hydraulics, Water Resources and Coastal Engineering), NIT Patna, 19-21 December, 2018.
71. Bishnupriya Sahoo, Felix Jose and **Prasad K. Bhaskaran [2018]**. Coastal response to Extreme events: Fidelity of Model Predictions of Surge, Inundation, and Morphodynamics, AGU Fall Meeting 2018, Washington D.C, 10-14 December, 2018.
72. Jiya Albert, Bishnupriya Sahoo and **Prasad K. Bhaskaran [2018]**. Eddy Detection Technique for Tropical Cyclogenesis in the Bay of Bengal basin. TROPMET 2018, National Symposium on Understanding Weather and Climate Variability: Research for Society, Banaras Hindu University, Varanasi, Uttar Pradesh, 24-27 October, 2018.
73. Parvathy K.G. and **Prasad K. Bhaskaran [2018]**. Numerical Modeling of Combined Wave-Current-Tide-Surge-Mangrove Interaction during AILA Cyclone. TROPMET 2018,

National Symposium on Understanding Weather and Climate Variability: Research for Society, Banaras Hindu University, Varanasi, Uttar Pradesh, 24-27 October, 2018.

74. Athira Krishnan and **Prasad K. Bhaskaran [2019]**. Correlation between wind and wave climate variability for the Bay of Bengal. International Conference on Climate Change Impacts, Vulnerabilities, and Adaptation: Emphasis on India and Neighbourhood (CCIVA 2019), IIT Kharagpur, 26 February – 02 March, 2019.
75. Jiya Albert and **Prasad K. Bhaskaran [2019]**. Variability of Ocean heat content and its mutual correlation with cyclonic intensity and SST over Bay of Bengal. International Conference on Climate Change Impacts, Vulnerabilities, and Adaptation: Emphasis on India and Neighbourhood (CCIVA 2019), IIT Kharagpur, 26 February – 02 March, 2019.
76. Sreelakshmi S. and **Prasad K. Bhaskaran [2019]**. Wind-Wave Climate using Satellite Altimetry data for the Indian Ocean basin. International Conference on Climate Change Impacts, Vulnerabilities, and Adaptation: Emphasis on India and Neighbourhood (CCIVA 2019), IIT Kharagpur, 26 February – 02 March, 2019.
77. Kuvar Satya Singh, **Prasad K. Bhaskaran**, Bhishma Tyagi **[2019]**. Impact of data assimilation and different background fields for prediction of tropical cyclones over Bay of Bengal region using WRF and 3DVAR system. International Conference on Climate Change Impacts, Vulnerabilities, and Adaptation: Emphasis on India and Neighbourhood (CCIVA 2019), IIT Kharagpur, 26 February – 02 March, 2019.
78. Kuvar Satya Singh, Subba Reddy B, and **Prasad K. Bhaskaran [2019]**. Influence of an urban parameterization for prediction of heavy rainfall event over Tamil Nadu, India using high resolution WRF model. International Conference on Climate Change Impacts, Vulnerabilities, and Adaptation: Emphasis on India and Neighbourhood (CCIVA 2019), IIT Kharagpur, 26 February – 02 March, 2019.
79. Venkata Sai Gulakaram, Naresh Krishna Vissa, **Prasad K. Bhaskaran**, Deepak Kumar **[2019]**. Role of Tropical cyclone ‘Hudhud’ on the variability of mesoscale eddies in the Bay of Bengal. International Conference on Climate Change Impacts, Vulnerabilities, and Adaptation: Emphasis on India and Neighbourhood (CCIVA 2019), IIT Kharagpur, 26 February – 02 March, 2019.
80. Athira Krishnan and **Prasad K. Bhaskaran [2019]**. Assessment of the CMIP5 global climate model projections of the ocean surface wind speed and comparison to scatterometer winds over central Bay of Bengal. National Seminar on Climate Change and Coastal Ocean Processes (CCCOP-2019), IIT Delhi, 04 July – 05 July, 2019.
81. Jiya Albert, **Prasad K. Bhaskaran** and Bishnupriya Sahoo **[2019]**. Comparison study of OW detection among pre-monsoon and post-monsoon cyclone in Bay of Bengal. National Seminar on Climate Change and Coastal Ocean Processes (CCCOP-2019), IIT Delhi, 04 July – 05 July, 2019.

82. Sreelakshmi S and **Prasad K. Bhaskaran [2019]**. Long-term wind-wave climate study for Indian Ocean using Satellite Altimetry Data. National Seminar on Climate Change and Coastal Ocean Processes (CCCOP-2019), IIT Delhi, 04 July – 05 July, 2019.
83. **Prasad K. Bhaskaran [2019]**. Impact of Climate Change on Wind-Waves and its Implications on Coastal Ocean Processes for the Indian Region. National Seminar on Climate Change and Coastal Ocean Processes (CCCOP-2019), IIT Delhi, 04 July – 05 July, 2019.
84. Vengatesan Venugopal, Ingram David, Sugata Hazra, **Prasad K. Bhaskaran**, Jaykumar Seelam **[2019]**. Tidal Energy Resource Modelling for the Indian Sundarbans Biosphere. European Wave and Tidal Energy Conference Series (EWTEC 2019), Napoli, Italy, 1-6 September, 2019.
85. Athira Krishnan and **Prasad K. Bhaskaran [2019]**. Evaluation of CMIP5 and CMIP6 Wind Speed using Satellite scatterometer measurements and Reanalysis Product for the Bay of Bengal. Sixth Biennial Conference of Ocean Society of India - OSICON 2019: Indian Ocean Processes and Resources - a Key to Blue Economy, CMLRE Kochi, 12 December – 14 December, 2019.
86. Jiya Albert and **Prasad K. Bhaskaran [2019]**. Optimization of Grid Resolution for Early detection of Indian Ocean Cyclones. Sixth Biennial Conference of Ocean Society of India - OSICON 2019: Indian Ocean Processes and Resources - a Key to Blue Economy, CMLRE Kochi, 12 December – 14 December, 2019.
87. Sreelakshmi S and **Prasad K. Bhaskaran [2019]**. Variability in the area of Occurrence of higher percentile wind-waves for the Indian Ocean. Sixth Biennial Conference of Ocean Society of India - OSICON 2019: Indian Ocean Processes and Resources - a Key to Blue Economy, CMLRE Kochi, 12 December – 14 December, 2019.
88. Linta Rose and **Prasad K. Bhaskaran [2019]**. Tide-Surge Interaction during AILA Cyclone in the Northern Bay of Bengal. Sixth Biennial Conference of Ocean Society of India - OSICON 2019: Indian Ocean Processes and Resources - a Key to Blue Economy, CMLRE Kochi, 12 December – 14 December, 2019.
89. Naresh Krishna Vissa, Venkata Sai Gulakaram and **Prasad K. Bhaskaran [2019]**. Impact of mesoscale eddies on mixed layer dynamics in the Bay of Bengal. Sixth Biennial Conference of Ocean Society of India - OSICON 2019: Indian Ocean Processes and Resources - a Key to Blue Economy, CMLRE Kochi, 12 December – 14 December, 2019.
90. Pavan Harika Raavi, Kevin Walsh and **Prasad Bhaskaran [2019]**. Basin-wise statistical analysis of factors limiting Tropical storm formation from an initial tropical circulation. MIPP/MIPA Conference 2019, 9-13 December, University of Melbourne, Australia.
91. Athira Krishnan, **Prasad K. Bhaskaran**, and Prashant Kumar **[2021]**. Performance of COWCLIP Significant Wave Height datasets and Extreme Wave Height Projections for the Indian Ocean. Seventh National Conference of the Ocean Society of India - OSICON-2021: Ocean for Sustainable Development, NCPOR Goa, August 12–14, 2021.



92. Jiya Albert and **Prasad K. Bhaskaran [2021]**. Response of Ocean Heat Content variability on Cyclone Frequency over North Indian Ocean. Seventh National Conference of the Ocean Society of India - OSICON-2021: Ocean for Sustainable Development, NCPOR Goa, August 12–14, 2021.
93. Sreelakshmi S and **Prasad K. Bhaskaran [2021]**. Variability and distributional analysis of extreme swell wave energy flux in the Indian Ocean. Seventh National Conference of the Ocean Society of India - OSICON-2021: Ocean for Sustainable Development, NCPOR Goa, August 12–14, 2021.
94. Reshma M. S, Ambily Thankachan, Thatiparthi K, Singh K. S, Subbareddy Bonthu, and **Prasad K. Bhaskaran [2021]**. Performance of Atmospheric-Ocean Coupled Model in the prediction of Rapid intensification of Super Cyclonic Storm *Amphan* over the North Indian Ocean. Seventh National Conference of the Ocean Society of India - OSICON-2021: Ocean for Sustainable Development, NCPOR Goa, August 12–14, 2021.
95. Thatiparthi K, Ambily Thankachan, Reshma M. S, Singh K. S, Subbareddy Bonthu, **Prasad K. Bhaskaran [2021]**. Climatological Characteristics of Atmospheric Parameters during the Rapid Intensification of Tropical Cyclones over the North Indian Ocean. Seventh National Conference of the Ocean Society of India - OSICON-2021: Ocean for Sustainable Development, NCPOR Goa, August 12–14, 2021.
96. Athira Krishnan, **Prasad K. Bhaskaran**, Prashant Kumar **[2021]**. Extreme wind-wave projections for the Indian Ocean under a changing climate. International Symposium on Tropical Meteorology ‘Changing Climate: Consequences and Challenges (INTROMET-C4)’, November 23-26, 2021, CUSAT, Kochi.
97. Jiya Albert, Venkata Sai Gulakaram, **Prasad K. Bhaskaran**, and Naresh K. Vissa **[2021]**. Ocean warming induced by Kelvin wave activity in Arabian Sea and its implication on enhanced tropical cyclone activity. International Symposium on Tropical Meteorology ‘Changing Climate: Consequences and Challenges (INTROMET-C4)’, November 23-26, 2021, CUSAT, Kochi.
98. Sreelakshmi S and **Prasad K. Bhaskaran [2021]**. Increasing swell wave power and its spatial variability in the Indian Ocean. International Symposium on Tropical Meteorology ‘Changing Climate: Consequences and Challenges (INTROMET-C4)’, November 23-26, 2021, CUSAT, Kochi.
99. Linta Rose and **Prasad K. Bhaskaran [2022]**. Tidal changes associated with Sea level changes in the Northern Bay of Bengal. AGU, Ocean Sciences Meeting, 28 February – 04 March, 2022, Honolulu, Hawaii, USA.

**34. Student Assessment on various subject courses taught at IIT Kharagpur (since Academic Session 2009-2010)**

S.No.	Session	Semester Number	Subject Number	Subject Name	Credit	No. of students given feedback	Feedback Response (out of 5)
1	2009-2010	AUTUMN	NA60011	MARINE ACOUSTICS	3	2	4.00
2	2009-2010	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	7	4.00
3	2009-2010	SPRING	NA60013	PORT & HARBOUR ENGINEERING	3	26	4.00
4	2010-2011	AUTUMN	NA60011	MARINE ACOUSTICS	3	29	3.69
5	2010-2011	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	5	3.20
6	2010-2011	SPRING	NA60035	PORT & HARBOUR ENGINEERING	3	7	4.71
7	2011-2012	AUTUMN	NA60011	MARINE ACOUSTICS	3	3	4.67
8	2011-2012	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	41	3.95
9	2011-2012	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	16	4.18
10	2011-2012	SPRING	NA60035	PORT & HARBOUR ENGINEERING	3	21	4.22
11	2012-2013	AUTUMN	NA60011	MARINE ACOUSTICS	3	13	3.69
12	2012-2013	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	8	4.67
13	2012-2013	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	5	3.40
14	2012-2013	SPRING	NA60048	PORT & HARBOUR ENGINEERING	3	21	4.38
15	2013-2014	AUTUMN	NA60011	MARINE ACOUSTICS	3	34	4.41
16	2013-2014	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	12	4.17



17	2013-2014	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	10	3.90
18	2013-2014	SPRING	NA60048	PORT & HARBOUR ENGINEERING	3	28	4.19
19	2014-2015	AUTUMN	NA60011	MARINE ACOUSTICS	3	26	4.38
20	2014-2015	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	28	4.55
21	2014-2015	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	33	4.07
22	2014-2015	SPRING	NA60048	PORT & HARBOUR ENGINEERING	3	62	4.05
23	2015-2016	AUTUMN	NA60011	MARINE ACOUSTICS	3	65	4.02
24	2015-2016	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	38	4.56
25	2015-2016	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	69	4.08
26	2015-2016	SPRING	NA60048	PORT & HARBOUR ENGINEERING	3	64	4.25
27	2016-2017	AUTUMN	NA60011	MARINE ACOUSTICS	3	31	4.26
28	2016-2017	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	41	4.26
29	2016-2017	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	28	3.96
30	2016-2017	SPRING	NA60048	PORT & HARBOUR ENGINEERING	3	28	4.33
31	2017-2018	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	32	4.21
32	2017-2018	AUTUMN	NA69005	DESIGN PROBLEMS IN OCEAN ENGINEERING	2	21	4.14
33	2017-2018	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	33	4.13
34	2017-2018	SPRING	NA60048	PORT & HARBOUR ENGINEERING	4	29	4.44
35	2017-2018	SPRING	NA69004	SYSTEM DESIGN PROBLEMS	2	20	4.39

36	2018-2019	SPRING	NA60022	OCEAN CIRCULATION & WAVE MODELING	3	22	4.08
37	2018-2019	SPRING	NA60048	PORT & HARBOUR ENGINEERING	4	24	4.30
38	2018-2019	AUTUMN	NA69005	DESIGN PROBLEMS IN OCEAN ENGINEERING	2	14	4.66
39	2018-2019	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	29	4.32
40	2019-2020	AUTUMN	NA60021	PHYSICAL & DYNAMICAL OCEANOGRAPHY	3	24	4.40

### 35. Research and Academic activities

The primary research interest of Prof. Prasad K. Bhaskaran is in the field of Ocean Wave Modeling. He is an Oceanographer and made pioneering contributions in the field of Ocean Wave Modeling, Coastal Engineering, and topical studies on air-sea interaction dynamics. He specializes in the area of Physical & Dynamical Oceanography, Numerical modeling of Ocean waves, Coastal processes, Marine Acoustics, Port & Harbour Engineering, Wave climate projections, and Tsunami. His expertise is in the development parameterization for source/sink mechanisms in numerical ocean wave models. The significant contributions include parameterization of rain induced surface roughness and its implementation in third generation ocean wave models, development of parameterization for mud induced wave dissipation, development of parameterization for sea-surface drag under different sea states and formulating its dependence on wave age. Another major contribution is on the effect of varying atmospheric stability on sea-surface drag and its impact on the effective wind-wave growth. In addition, several studies conducted on the air-sea interaction mechanisms having implications on wind-wave growth for the Indian seas as well for other ocean basins. He was a lead member in the preparation of tsunami travel time atlas for the Indian Ocean. He made significant contributions on the application of soft computing techniques for retrieval of oceanographic parameters including tsunami travel time, short-term wave prediction in the Indian Ocean. He contributed in the development of a comprehensive ocean atlas utilizing ARGO data, and in the mixed layer depth and barrier layer thickness for the Indian Ocean region. He carried out numerous studies for tropical cyclones including response of Upper Ocean utilizing ARGO data, coastal vulnerability, assessment of historical cyclone tracks, storm surges and associated coastal inundation for the east coast of India. His research interests also include development of water level prediction system for the head Bay of Bengal region and in the climatic assessment of extreme waves and water levels using coupled wave-hydrodynamic models. He made significant contributions in understanding the bottom boundary layer characteristics for the Hooghly estuary under the combined wave-current interaction and in the development of suspended sediment concentration model over this region. Recently he had carried out significant work on extreme wind-wave climate over the Indian Ocean region and assessment of coastal vulnerability for the east coast of India.

Prof. Bhaskaran is also actively involved in science popularization. Recently his studies had wide coverage in the media and reported by the Press Information Bureau, Government of India. The studies include a novel method that could help detect tropical cyclones for the Bay of Bengal basin earlier than satellites. Another study reported on rising sea levels and its threat to coastal flooding in Lakshadweep Islands. The following are the webpage links that highlighted his research studies:

[https://pib.gov.in/PressReleasePage.aspx?PRID=1725487&fbclid=IwAR27yNUHlgU9JDgXovPQHQGjpKt\\_fHDcmNbCeWZjAVbD6lG-eH3aGtUZU0I](https://pib.gov.in/PressReleasePage.aspx?PRID=1725487&fbclid=IwAR27yNUHlgU9JDgXovPQHQGjpKt_fHDcmNbCeWZjAVbD6lG-eH3aGtUZU0I)

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1728293&fbclid=IwAR00wzu1y-SF1jWX0QAFxlUSbHhgD7WZO8-NhUu6jQADKMHZppOg7SRGF7A>

<https://www.ndtv.com/india-news/rising-sea-levels-threaten-to-flood-lakshadweep-islands-study-2467264?fbclid=IwAR1BLudKaaHcFCaUel5Q2NByuEZ4LU5o1XjCfvWU4hOk6vRzYCgYThCccNw>

<https://www.outlookindia.com/newscroll/climate-change-to-increase-sea-level-in-lakshadweep-will-affect-airport-residential-areas-study/2104932?fbclid=IwAR1hypTKcCdnlft29X6vujbzpg3Xrv59OD5upr2Cuna7yZ8G6AAbSpoTuew>

<http://ddnews.gov.in/sci-tech/climate-change-increase-sea-level-lakshadweep-islands-will-affect-airport-residential-areas?fbclid=IwAR3u0imX0QH6yrBBMJebH7XAAAWnAO9mgN7kk9QvYITcHV0-LzRrY0wp70k>

<https://www.manoramaonline.com/news/latest-news/2021/06/16/lakshadweep-islands-threatening-from-sea-level-rise-climate-change-detailed-report.html?fbclid=IwAR00wzu1y-SF1jWX0QAFxlUSbHhgD7WZO8-NhUu6jQADKMHZppOg7SRGF7TA>

<https://www.youtube.com/watch?v=evAapAf40bc>

<https://india.mongabay.com/2021/06/safeguard-lakshadweep-islands-from-future-sea-level-rise-study/?fbclid=IwAR2o-MPkJMT3waevghy2KdT2ml5p8uLxKqZqG-IY1r2UXiliKlr27cZbnMs>

[https://www.republicworld.com/technology-news/science/scientists-devise-novel-method-for-early-detection-of-tropical-cyclones.html?fbclid=IwAR0AcHaOpb6ekcBpPvJziu8clCNhHhTDY70aS3g0\\_Z1FHiBgZrxDCrTYNUk](https://www.republicworld.com/technology-news/science/scientists-devise-novel-method-for-early-detection-of-tropical-cyclones.html?fbclid=IwAR0AcHaOpb6ekcBpPvJziu8clCNhHhTDY70aS3g0_Z1FHiBgZrxDCrTYNUk)

[https://www.outlookindia.com/newscroll/scientists-devise-novel-method-for-early-detection-of-tropical-cyclones/2098776?fbclid=IwAR1l7p2qRCtnWaX0lft-0OdyXNtO\\_OrMDC-3CQgH-GzHTECqkDD1ZDGs-vE](https://www.outlookindia.com/newscroll/scientists-devise-novel-method-for-early-detection-of-tropical-cyclones/2098776?fbclid=IwAR1l7p2qRCtnWaX0lft-0OdyXNtO_OrMDC-3CQgH-GzHTECqkDD1ZDGs-vE)

Prof. Prasad K. Bhaskaran is recipient of the prestigious James Rennell MoES Young Fellow awarded by the Ministry of Earth Sciences, Government of India during 2013-2014. He is also Adjunct Faculty in the School of Earth, Ocean and Climate Sciences at IIT Bhubaneswar and Member, Board of Studies at Cochin University of Science & Technology (CUSAT), Kochi and Kerala University of Fisheries & Ocean Studies (KUFOS), Kochi. As a part of his research activities, Prof. Prasad K. Bhaskaran has been involved in 27 National/International sponsored and consultancy projects funded by Government and Industry. Prof. Bhaskaran has 251 publications that include 139 peer-reviewed National/International Journal papers; 99 papers in refereed National/International Conferences/Workshops; 09 Book/Book chapters; and 04 Patents/Copyrights to his credit. He has organized prestigious workshops/short-term courses for Government officials from Gujarat and West

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