


PROF. DR. JARBAS BONETTI – Short CV

NAME IN PUBLICATIONS:	Bonetti, J.; Bonetti Filho, J.
DATE OF BIRTH:	08/March/1965
NATIONALITY / COUNTRY OF RESIDENCE:	Brazilian-Italian / Florianópolis, SC - BRAZIL
E-MAIL:	jarbas.bonetti@ufsc.br
ADRESS:	Department of Oceanography – CFM Federal University of Santa Catarina Campus Universitário, Florianópolis-SC, Brazil. 88040-900

PROFESSIONAL RECORD:

Period	Employing organization and title/position	Country	Summary
2019-2020	Visiting Researcher at the Istituto di Scienze Marine / Consiglio Nazionale delle Ricerche (ISMAR/CNR)	Italy	 <p>Jarbas Bonetti holds a Ph.D. in Sciences from the University of São Paulo (1996), following his M.Sc. in Oceanography (1995) and a degree in Geography (1987). He currently serves as a Full Professor in the Department of Oceanography at the Federal University of Santa Catarina (UFSC), where he has led the Coastal Oceanography Laboratory for 20 years. Bonetti's research expertise centers on the use of Geomatics (Remote Sensing and Geographic Information Systems) to analyze marine environments, with a particular focus on the integrated oceanographic characterization of sheltered coasts. His work aims to identify sensitive environments and evaluate their sustainability for various uses, addressing two primary areas: 1) Coastal risk and vulnerability assessment to marine hazards, and 2) Geodiversity (sedimentary and morphological characterization of the marine bottom layer). Throughout his career, Bonetti has supervised 24 Master's and 13 Doctoral dissertations in UFSC's post-graduation programs on Physical Geography and Oceanography. He has participated in over 40 funded research projects, resulting in 68 research papers published in local and international journals and 20 book chapters. Bonetti's administrative roles include serving as the Deputy Coordinator of the Graduate Program in Oceanography at UFSC (2021-2023) and the Dean of the Department of Oceanography at UFSC since July 2023. He is also a member of the United Nations Pool of Experts for the elaboration of the 2nd and 3rd Regular Process for Global Reporting and Assessment of the State of the Marine Environment, and of the IOC/Ocean Teacher Global Academy-RTC CONO SUR program of UNESCO.</p>
2019-present	Full Professor at the Federal University of Santa Catarina, Department of Oceanography	Brazil	
2014-2015	Principal Visiting Fellow at the University of Wollongong (UOW)	Australia	
2013-2019	Associate Professor at the Federal University of Santa Catarina, Department of Geosciences	Brazil	
2007-2008	Visiting Researcher at the Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER)	France	
2001-2019	Head of the Coastal Oceanography Laboratory - UFSC	Brazil	
1997-2013	Senior Lecturer at the Federal University of Santa Catarina, Department of Geosciences	Brazil	
1988-1997	Technical Researcher at the Oceanographic Institute, University of São Paulo	Brazil	

EDUCATION:

- 1987: BSc in Geography (University of São Paulo, Brazil)
- 1995: MSc in Oceanography (University of São Paulo, Brazil)
- 1996: PhD in Sciences – Physical Geography (University of São Paulo, Brazil)

LANGUAGE SKILLS:

- **Portuguese:** native; **English:** fluent in speaking, reading and writing; **Italian:** fluent in speaking and reading, intermediate in writing; **French:** fluent in speaking and reading, intermediate in writing; **Spanish:** fluent in speaking and reading, intermediate in writing.

MEMBERSHIP IN SCIENTIFIC ASSOCIATIONS:

- **ABEQUA** - Associação Brasileira de Estudos do Quaternário; Rede **BRASPOR** - Base de conhecimentos Relacionais Aplicados para o Ordenamento do litoral (BR-PT); **CCS-IGU** - Commission of Coastal Systems / IGU; **CERF** - The Coastal Education Research Foundation; **SELPER** - Sociedade de Especialistas Latino-Americanos em Sensoriamento Remoto.

SELECTED PUBLICATIONS (last ten years; full production available at <https://bonetti.paginas.ufsc.br/>):

SCHERER, M. E. G.; SARDINHA, G. D.; SOUZA, V.; GANDRA, T. B. G.; FLOETER, S. R.; LIEDKE, A. M. R.; RODRIGUES, A.; **BONETTI, J.**; GOMES, V.; FERNANDES, L.; FERRARI, D. S.; SILVA, F.; CONTI, L. A.; PEDRESCHI, D. & GASALLA, M. A. 2024. Under Pressure: an integrated assessment of human activities and their potential impact on the ecosystem components of the Southern Brazilian continental shelf. *Ocean Sustainability*, (2024)3:9. <https://doi.org/10.1038/s44183-024-00044-y>

MCQUAID, K. A.; BRIDGES, A. E. H.; HOWELL, K. L.; GANDRA, T. B. R.; SOUZA, V.; CURRIE, J. C.; HOGG, O. T.; PEARMAN, T. R. R.; BELL, J. B.; ATKINSON, L. J.; BAUM, D.; **BONETTI, J.**; CARRANZA, A.; DEFEQ, O.; FUREY, T.; GASALLA, M. A.; GOLDING, N.; HAMPTON, S. L.; HORTA, S.; JONES, D. O. B.; LOMBARD, A. T.; MANCA, E.; MARIN, Y.; MARTIN, S.; MORTENSEN, P.; PASSDORE, C.; PIECHAUD, N.; SINK, K. J.; YOOL, A. 2023. Broad-scale benthic habitat classification of the South Atlantic. *Progress in Oceanography*, 103016. DOI: <https://doi.org/10.1016/j.pocean.2023.103016>

WEISS, C. V. C.; **BONETTI, J.**; SCHERER, M. E. G.; ONDIVIELA, B.; GUANCHE, R.; JUANES, J. 2023. Towards blue growth: multi-use possibilities for the development of emerging sectors in the Brazilian sea. *Ocean and Coastal Management*, 243(2023), 106764. <https://doi.org/10.1016/j.ocecoaman.2023.106764>

LIMA, C. O.; **BONETTI, J.**; GANDRA, T. B. R.; BONETTI, C.; SCHERER, M. E. G. 2023. Multiscale analysis of coastal social vulnerability to extreme events in Brazil. *Natural Hazards*. DOI: <https://doi.org/10.1007/s11069-023-06246-w>

PAZINI, K. C.; **BONETTI, J.**; GOMES, P. & KLEIN, A. H. F. 2022. Spotting areas critical to storm waves and surge impacts on coasts with data scarcity: a case study in Santa Catarina, Brazil. *Natural Hazards*, 5275. <https://doi.org/10.1007/s11069-022-05275-1>

BONETTI, J.; DEL BIANCO, F.; SCHIPPA, L.; POLONIA, A.; STANGHELLINI, G.; CENNI, N.; DRAGHETTI, S.; MARABINI, F. & GASPERINI, L. 2022. Anatomy of Anthropically Controlled Natural Lagoons through Geophysical, Geological, and Remote Sensing Observations: The Valli Di Comacchio (NE Italy) Case Study. *Remote Sensing* 2022, 14, 987. <https://doi.org/10.3390/rs14040987>

LIMA, A. S.; SCHERER, M. E. G.; GANDRA, T. B. R. & **BONETTI, J.** 2022. Exploring the contribution of climate change policies to integrated coastal zone management in Brazil. *Marine Policy*, 143, 143, 105180. <https://doi.org/10.1016/j.marpol.2022.105180>

SIMCOCK, A.; **BONETTI, J.**; CELLIERS, L.; EVANS, K.; GONÇALVES, L.; POLETTE, M.; REYNA, J. & VU, C. T. 2021. Developments in Marine Spatial Planning. In: United Nations. The Second World Ocean Assessment. Vol. II. Chapter 26. Regular Process for Global Reporting and Assessment of the State of the Marine Environment. UN - Division for Ocean Affairs and Law of the Sea (DOALOS), New York, p. 424-439. eISBN: 978-92-1-1-604006-2

OLIVEIRA, A. O. & **BONETTI, J.** 2021. Dynamical descriptors of physical vulnerability to sea-level rise in sheltered coastal systems: a methodological framework. *Estuarine, Coastal & Shelf Science*, 249:1-13, 107118. <https://doi.org/10.1016/j.ecss.2020.107118>

POLONIA, A.; ALBERTAZZI, S.; BELUCCI, L. G.; BONETTI, C.; **BONETTI, J.**; GIORGETTI, G.; GIUGLIANI, S.; CORREA, M. L.; MAYR, C.; PERUZZA, L.; STANGHELLINI, G. & GASPERINI, L. 2021. Decoding a complex record of anthropogenic and natural impacts in the Lake of Cavazzo sediments, NE Italy. *Science of the Total Environment*, 787, 147659. <https://doi.org/10.1016/j.scitotenv.2021.147659>

RANGEL-BUITRAGO, N.; NEAL, W. J.; **BONETTI, J.**; ANFUSO, G. & DE JONGE, V. N. 2020 Vulnerability assessments as a tool for the coastal and marine hazards management: An overview. *Ocean and Coastal Management*, 189. Article 105134. <https://doi.org/10.1016/j.ocecoaman.2020.105134>

RANGEL-BUITRAGO, N.; GRACIA, C. A.; ANFUSO, G. & **BONETTI, J.** 2020. GIS Hazard Assessments as the First Step to Climate Change Adaptation. In: Leal, W.F.; Nagy, G.; Borga, M.; Chavez, D. & Magnuszewski, A. (Eds.). *Climate Change, Hazards and Adaptation Options. Handling the Impacts of a Changing Climate*. Climate Change management Series. Springer, Switzerland, pp. 135-146. <https://doi.org/10.1007/978-3-030-37425-9>

LIMA, C. O. & **BONETTI, J.** 2020. Bibliometric analysis of the scientific production on coastal communities' social vulnerability to climate change and to the impact of extreme events. *Natural Hazards*, 102(3):1589-1610. <http://doi.org/10.1007/s11069-020-03974-1>

LIMA, A. S.; KHALID, A.; MIESSE, T. W.; CASSALHO, F.; FERREIRA, C.; SCHERER, M. E. G. & **BONETTI, J.** 2020. Hydrodynamic and waves response during storm surges on the Southern Brazilian coast: a hindcast study. *Water*, 12, 3538. <https://doi.org/10.3390/w12123538>

FIGUEROA, A. C.; LIMA, A.; SCHERER, M. E. G. & **BONETTI, J.** 2020. How to choose the best category for a protected area? A multicriteria analysis method based on ecosystem services conservation. *Environmental Monitoring and Assessment*, 192. Article 416. <https://doi.org/10.1007/s10661-020-08333-y>

SERAFIM, M. B.; SIEGLE, E.; CORSI, A. C. & **BONETTI, J.** 2019. Coastal vulnerability to wave impacts using a multi-criteria index: Santa Catarina (Brazil). *Journal of Environmental Management*, 230:21-32. <https://doi.org/10.1016/j.jenvman.2018.09.052>

SILVEIRA, Y. G. & **BONETTI, J.** 2019. Assessment of the physical vulnerability to erosion and flooding in a sheltered coastal sector: Florianopolis Bay, Brazil. *Journal of Coastal Conservation*, p.1-12. <https://doi.org/10.1007/s11852-018-0659-0>

CORRAINI, N. R.; LIMA, A. S.; **BONETTI, J.** & RANGEL-BUITRAGO, N. 2018. Troubles in the paradise: litter and its scenic impact on the north Santa Catarina Island beaches, Brazil. *Marine Pollution Bulletin*. 131 (Part A) 572–579. <https://doi.org/10.1016/j.marpolbul.2018.04.061>

MUSSI, C. S.; **BONETTI, J.** & SPERB, R. M. 2018. Coastal sensitivity and population exposure to sea level rise: a case study on Santa Catarina Island, Brazil. *Journal of Coastal Conservation*, p.1-12. <https://doi.org/10.1007/s11852-018-0619-8>

BONETTI, J.; RUDORFF, F. M.; CAMPOS, A. V. & SERAFIM, M. B. 2018. Geoindicator-based assessment of Santa Catarina (Brazil) sandy beaches susceptibility to erosion. SI: Management Strategies for Coastal Erosion Problems. *Ocean & Coastal Management*, 156:198-208. <http://dx.doi.org/10.1016/j.ocecoaman.2017.08.009>

VIANNA, L. F. N. & **BONETTI, J.** 2018. Spatial and multi-criteria analysis in GIS for site selection in marine aquaculture: an integrated approach applied to Baía Sul, Santa Catarina, Brazil. *Aquaculture*, 489:162-174. <https://doi.org/10.1016/j.aquaculture.2017.12.039>

BONETTI, J. & WOODROFFE, C. D. 2017. Spatial Analysis on GIS for Coastal Vulnerability Assessment. In: Bartlett, D. & Celliers, L. (eds.). *Geoinformatics for Marine and Coastal Management*. Chapter 16. CRC Press, Boca Raton, p. 367-396. <http://dx.doi.org/10.1201/9781315181523-17>

KLEIN, A. H. F., SHORT, A. D., **BONETTI, J.**, 2016. Santa Catarina beach systems. In: Short, A. D. and Klein, A. H. F. (eds.). *Brazilian Beach Systems*. Chapter 17. Coastal Research Library 17. Springer. Cham, Switzerland, p. 465-506. ISBN 978-3-319-30392-5. DOI 10.1007/978-3-319-30394-9_17. <http://link.springer.com/book/10.1007/978-3-319-30394-9>

NGUYEN, T. T. X.; **BONETTI, J.**; ROGERS, K. & WOODROFFE, C. D. 2016. Indicator-based assessment of climate-change impacts on coasts: a review of concepts, approaches and vulnerability indices. *Ocean & Coastal Management*, 123:18-43. ISSN: 0964-5691. DOI: <http://dx.doi.org/10.1016/j.ocecoaman.2015.11.022>

PAQUETTE, M. L.; **BONETTI, C.**; BITENCOURT, V. & BONETTI, J. 2016. Spatial patterns of benthic foraminifera as a support to the oceanographic characterisation of Arvoredo Biological Marine Reserve (South Atlantic, Brazil). *Marine Environmental Research* (114):40-50. ISSN: 0141-1136. DOI: <http://dx.doi.org/10.1016/j.marenvres.2015.12.012>

PRADO, M.F.V.; CAMARGO, J. M.; MULER, M.; DALINGHAUS, C.; GOMES DA SILVA, P.; CAMARGO R.S.V.; PORPILHO, D.; ROCHA, R.S.; WESCHENFELDER, J.; **BONETTI, J.** & A.H.F. KLEIN. 2015. Measurement of coastal hazards and determination of future set-back lines in northern of Santa Catarina Island, Brazil. In: *Proceedings of the Coastal Sediments 2015 Conference*, 11 – 15 May 2015. World Scientific Publishing Company, San Diego, p. 1-16. http://dx.doi.org/10.1142/9789814689977_0248

MULER, M. & **BONETTI, J.** 2014. An integrated approach to assess wave exposure in coastal areas for vulnerability analysis. *Marine Geodesy*, 37(2):220-237. <http://dx.doi.org/10.1080/01490419.2014.902886>

RECENT RESEARCH PROJECTS:

IMPACTS OF CLIMATE CHANGE ON COASTAL AREAS: AN INTEGRATED ASSESSMENT (2024-2026). Produtividade em Pesquisa 2023-CNPq (R\$ 75.600,00).

MISSION ATLANTIC (2020-2025). Horizon 2020-BG-08-2019-2 - ALL ATLANTIC OCEAN RESEARCH ALLIANCE FLAGSHIP. European Commission (EUR 11.500.000,00). <https://missionatlantic.eu/>

SPATIAL ANALYSIS APPLIED TO THE ASSESSMENT OF THE IMPACT OF SEA LEVEL RISE IN SHELTERED COASTAL SYSTEMS (2019-2022). Edital Nº 1/2019 - Programa Professor Visitante no Exterior CAPES (EUR 31.645,00) / Produtividade em Pesquisa 2020-CNPq (R\$ 39.600,00).

AANCHOR - ALL ATLANTIC COOPERATION FOR OCEAN RESEARCH AND INNOVATION - Common standards for information and data sharing (2018-2022). Horizon 2020-BG-2018-1 - All Atlantic Ocean Research Alliance Flagship. European Commission (EUR 4.095.892,50) <https://allatlanticocean.org/main>

ROAD-BESM - REGIONAL OCEANIC AND ATMOSPHERIC DOWNSCALING (2017-2022). Edital "Desenvolvimento de Modelagem do Sistema Terrestre 11/2016" - CAPES. (R\$ 995.420,00) <https://road-besm.ufsc.br/>

INCT MAR COI - INTEGRATED OCEANOGRAPHY AND MULTIPLE USES OF THE CONTINENTAL SHELF AND ADJACENT OCEAN (Centro de Oceanografia Integrada) - Geodiversity Network. (2012-2023). Edital Institutos Nacionais de Ciência e Tecnologia No 71/2010. MCT/CNPq/FNCT (R\$ 14.992.339,00) <https://inct.furg.br/>