Riccardo Farneti

Curriculum Vitae

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Research Summary

My interests are focussed on understanding the Ocean and Earth System, with emphasis on modelling the role of the ocean in climate variability, predictability and change. For my research, I use and develop a suite of ocean and coupled climate models, from global to regional. My research spans a broad range of topics including Southern Ocean physics and dynamics, Atlantic Ocean interannual and decadal variability, Pacific decadal variability and regional dynamics of the Mediterranean and Indian Ocean.

Employment Record

2013-	Research Scientist. Earth System Physics (ESP) Section, ICTP, Trieste, Italy.
2011-2013	Senior Postdoctoral Fellow. ESP Section, ICTP, Trieste, Italy.
2010-2011	Postdoctoral Fellow. ESP Section, ICTP, Trieste, Italy.
2009-2010	Research Scholar. Atmospheric and Oceanic Sciences, Princeton University. NOAA/Geophysical Fluid Dynamics Laboratory (GFDL), USA.
2006-2008	Post-Doc. Atmospheric and Oceanic Sciences, Princeton University, NOAA/Geophysical Fluid Dynamics Laboratory (GFDL), USA.

Education

2024	Italian scientific habilitation (ASN) to associate professor for the field 02/C1- Astronomy, astrophysics, Earth and planetary physics
2001-2005	Ph.D. in Physical Oceanography, National Oceanography Centre, Southampton University, U.K.
1996-2001	Licenciatura Degree (MSc) in Physical Oceanography. University of Las Palmas de Gran Canaria, Spain.

Community Service

· (2015-) Coordinator	ICTP ESP PostGraduate Diploma Programme
· (2018-) Member	Academic Board of the PhD Program in *Earth Science, Fluid Dynamics and Mathematics* at the University of Trieste.
· (2021-) Editor	EGU Journal Geoscientific Model Development
· (2021-2022) Review Editor	Frontiers in Physical Oceanography
· (2017-2021) Editor	Scientific Reports - Nature.
· (2018-2020) Co-Chair	WCRP CLIVAR/CliC/SCAR Southern Ocean Region Panel
· (2018-2020) Chair	ICTP Faculty Board

Supervision

Present Group

2023– Arthur Prigent (Postdoc)
2023– Maria Vittoria Guarino (Postdoc)
2023– Zihan Song (PhD student, Ocean University, China)
2023– Trishneeta Bhattacharya (STEP PhD student, INCOIS, India)
2023–2024 Natalia Tilinina (MHPC student, Russia)
2022–2028 Kunal Chakraborty (ICTP Associate; INCOIS, India)
2019–2025 Hailong Liu (ICTP Associate; China)
2019–2025 Suneet Dwivedi (ICTP Associate; Univeristy of Allahabad, India)

ICTP PostGraduate Diploma Theses

2022 Mariana Salinas: *"Impact of ocean model resolution on the hydrography and dynamics of the Southern Ocean"* (PhD student at MPI, GE)
2021 Amelia Sanchez Perez: *"The Atlantic Warm Pool in CMIP6 models"*
2021 Alejandra Quintanilla: *"The Peru-Chile Eastern Boundary Upwelling System in CMIP6 models"* (PhD student at AWI, GE)
2020 Bizuayehu Addisie Beyene: *"Planetary waves in GFDL-CM4: present day and future scenarios"* (MSc student at U. Calgary, CA)
2019 John Ssebandeke: *"The Angola Eastern Boundary Upwelling System in CMIP6 models"* (PhD student at MPI, GE)
2018 Yoania Povea Perez: *"The Atlantic Warm Pool in the regional climate model RegCM-ES"* (PhD student at LOCEAN, FR)
2017 Michael Ewetola: *"Role of ocean dynamics on the position of the ITCZ"* (PhD student at the Open Univ., U.K.)
Afolabi Fatimo: *"Centennial variability of the Southern Ocean"* (now MSc student at Grenoble Univ., FR)
Kanwal Shahzadi: *"Water mass transformation and subduction"* (PhD student at Bologna Univ., IT)
2016 Andres Aguirre Guzman: *"Heat transport in rotating Rayleigh-Benard convection"* (PhD student at Eindhoven University of Technology, NL)
2015 Ajayi Opeoluwa: *"Hysteresis behaviour of the ACC"* (PhD student at Grenoble Univ., FR)
2013 Daniel Moukiibi: *"Eddy saturation in a QG model"* (PhD awarded by Hamburg Univ., GE)
2012 Elzina Bala: *"Meridional energy transport in present and future climates"*
2011 Nguyen Chien Ngoc: *"Climate change induced by the weakening of the MOC"*

PhD Students

2018–2022 Renè Navarro Labastida (ESFM, Univ. Trieste)
2019–2021 Rafael Reis (STEP, U. Federal Vicosa, Brazil)
2018–2021 Sandeep Narayanasetti (STEP, IITM, Pune, India)
2015–2018 Giorgio Graffino (ESFM, Univ. Trieste)
2011–2014 Marco Reale (ESFM, Univ. Trieste)

Post-Docs

2013–2016 Lina Sitz

ICTP Associates

2015–2020 Elisee Toualy (University of Ivory Coast, Ivory Coast)
2015–2020 Marcelo Barreiro (Univ. de la Rep., Uruguay)
2014–2019 Nancy Villegas Bolanos (Univ. Nacional, Colombia)
2014–2019 Mohamed Elsayed Shaltout (Alexandria University, Egypt)
2013–2015 Suneet Dwivedi (Univeristy of Allahabad, India)

Univ. of Trieste Physics degree Theses

2023 Giovanni Tartaglia: *Stratification in the global ocean*
2022 Alessandro Stiz: *The southeast tropical Atlantic and the Angola-Benguela upwelling system: improvements and persistent biases*
2019 Giacomo Zelbi: *Southern Ocean streamfunction transformations*

Teaching Activities

(2023-) Climate Dynamics (MSc in Physics, Univ. Trieste)
(2020-) Geophysical Fluid Dynamics (MSc in Physics, Univ. Trieste)
(2016-) Physics and Dynamics of the Ocean (ICTP Postgraduate Diploma)
(2012-) Geophysical Fluid Dynamics (ICTP Postgraduate Diploma)
(2015-2022) Global and Regional Climate Change (MSc in Global Change Ecology, Univ. Trieste)
(2010-2011) Introduction to Physics of the Earth System (ICTP Postgraduate Diploma)

Workshops and Meetings Organized

2024 • School and Workshop on *'Polar Climates: Theoretical, Observational and Modelling Advances'*. ICTP, Italy

2023 • 4^{rd} ICTP Summer School on *'Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Atlantic Variability and Tropical Basin Interactions at Interannual to Multi-Decadal Time Scales'*. ICTP, Italy
• ICTP-CLIVAR Summer School on *'Marine Heatwaves: Global Phenomena with Regional Impacts'*. ICTP, Italy

2022 • School on *'From Global to Coastal: Cultivating New Solutions and Partnerships for an Enhanced Ocean Observing System in a Decade of Accelerating Change*. ICTP, Italy

2020 • *'2020 Coastal Ocean Environment Summer School'*. University of Ghana, Accra, Ghana.

2020 • 3^{rd} ICTP Summer School on *'Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Tropical oceans, ENSO and their teleconnections'*. ICTP, Italy

2019 • ICTP-CLIVAR School on *'Oceanic Eastern Boundary Upwelling Systems'*. ICTP, Italy
• 2^{nd} ICTP Summer School on *'Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Convective organization and climate sensitivity'*. ICTP, Italy

2018 • 1^{st} ICTP Summer School on *'Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Multiple Equilibria in the Climate System'*. ICTP, Italy
• *'2018 Coastal Ocean Environment Summer School'*. University of Ghana, Accra, Ghana.

2017 • Workshop on *'The science of climate change: a focus on Central America and the Caribbean' Islands*. Antigua, Guatemala.

2016 • School on *'Earth System Modelling'*. IITM, Pune, India.
• Workshop on *'Teleconnections in present and future climates'*. ICTP, Italy.

2015 • Workshop on *'Decadal Climate Variability and Predictability'*. ICTP, Italy
• School on *'Ocean Climate Modelling: Physical and biogeochemical dynamics of semi-enclosed seas'*. Ankara, Turkey

2014 • Workshop on *'South Atlantic circulation variability and change: integrating models and observations*. Buenos Aires, Argentina.
• School on *'Parallel Programming and Parallel Architecture for HPC and Developer School for HPC applications in Earth Sciences - Symposium on HPC and Data-Intensive applications in Earth Sciences'*. ICTP, Trieste, Italy.

2013 • School on *'Fundamentals of Ocean Climate Modelling at Global and Regional Scales'*. INCOIS, Hyderabad, India.

2012 • Workshop on *'Variability in the western tropical Pacific: Mechanisms, teleconnections and impacts on sub-seasonal, interannual and interdecadal time scales'*. ICTP, Italy.
• Workshop on *'Climate Change in the Mediterranean and Caribbean Seas'*. Guayaquil, Ecuador.

2011 • Workshop on *'Hierarchical Modelling of Climate'*, ICTP, Trieste, Italy.

List of Publications

See also my Google Scholar profile.

† indicates student, postdoc or ICTP associate

Submitted or In Preparation

9. **Farneti, R.**, N. Tilinina†, G. Giuliani, et al. (2025), The Intermediate Complexity Climate Model ICCMv2.0.

8. **Farneti, R.** (2025), The global MOC response to momentum and buoyancy forcing anomalies.

7. **Farneti, R.** (2025), Sensitivity of Southern Ocean water masses to SOFIA freshwater anomalies.

6. Song, Z. H.†, **R. Farneti** (2025), Atlantic freshwater transport sensitivity to anomalous Southern Ocean freshwater discharge.

5. Huang C., H. Liu, R. Yang, J. Cao, **R. Farneti**, F. Wang (2025), More tropical cyclone activity limited to the low latitudes in the North Atlantic since the late 1970s.

4. Hu, A., I. Richter, Y. Okumura, N. Burls, N. Keenlyside, R. Parfitt, K. Bellomo, A. Bellucci, **R. Farneti**, A. Fedorov, B. Ferster, C. He, W. Kim, Q. Li, D. Matei (2025), Unraveling the Complexity of Global Climate Dynamics: ENSO, AMOC, and tropical basin Interactions. *OLAR*.

3. Prigent, A.†, I. Richter, A. Storto, **R. Farneti** (2025), Intercomparison of ocean reanalyses for interannual ocean temperature variability in the tropical Atlantic.

2. Ghoshal P. K., A.P. Joshi, K. Chakraborty, **R. Farneti**, V. Valsala (2025), Future changes in air temperature and precipitation over the Indian sub-continent using downscaled and bias-corrected CMIP6 Earth System Model outputs. *Clim. Dyn.*

1. Prigent, A.†, **R. Farneti**, F. kucharski (2025), An assessment of equatorial Pacific interannual variability in OMIP simulations.

Published

2024

60. Prigent, A.†, **R. Farneti** (2024), An assessment of equatorial Atlantic interannual variability in OMIP simulations. *Ocean Science*, 20, 1067-1086, https://doi.org/10.5194/os-20-1067-2024, 2024.

59. Arumi-Planas, C., S. Dong, R. Perez, M. Harrison, **R. Farneti**, A. Hernandez-Guerra (2024), A multi-data set analysis of the freshwater transport by the Atlantic Meridional Overturning Circulation at nominally 34.5S. *J. Geophys. Res. Oceans*, http://doi.org/10.1029/2023JC020558.

58. Molteni, F., F. Kucharski, **R. Farneti** (2024), Multi-decadal pacemaker simulations with an intermediate-complexity climate model. *Weather Clim. Dynam.*, 5, 293-322, https://doi.org/10.5194/wcd-5-293-2024.

2023

57. Prigent, A.†, R. A. Imbol Koungue, A. S. N. Imbol Nkwinkwa, G. Beobide-Arsuaga, **R. Farneti** (2023), Uncertainty on Atlantic Niño variability projections. *Geophys. Res. Lett.*, 50, e2023GL105000, doi:10.1029/2023GL105000.

56. Swart, N., T. Martin, ..., **R. Farneti**, et al. (2023), The Southern Ocean Freshwater Input from Antarctica (SOFIA) Initiative: scientific objectives and experimental design. *Geosci. Model Dev.*, 16, 7289-7309, https://doi.org/10.5194/gmd-16-7289-2023.

55. Capotondi, ..., **R. Farneti**, et al. (2023), Mechanisms of Tropical Pacific Decadal Variability. *Nat Rev Earth Environ*, 4, 754-769, https://doi.org/10.1038/s43017-023-00486-x.

54. Navarro-Labastida, R.†, **R. Farneti** (2023), The role of shallow and deep circulations in the Tropical Pacific Ocean heat budget. *Front. Mar. Sci. Sec. Physical Oceanography*, 10, doi:10.3389/fmars.2023.1208052.

53. Cainzos, V., A. Hernandez-Guerra, **R. Farneti**, M. D. Perez-Hernandez, L. D. Talley (2023), Mass, Heat and Freshwater Transport from Transoceanic Sections in the Atlantic Ocean at 30S and 24.5N: Single Sections Versus Box Models?. *Geophys. Res. Lett.*, 50, 11, doi:10.1029/2023GL103412

52. Nnamchi, H.C., **R. Farneti**, N. S. Keenlyside, F. Kucharski, M. Latif, A. Reintges, T. Martin (2023), Pan-Atlantic decadal climate oscillation linked to ocean circulation. *Commun Earth Environ*, 4, 121, https://doi.org/10.1038/s43247-023-00781-x.

2022

51. **Farneti, R.**, A. Stiz†, J. Ssebandeke† (2022), The southeast tropical Atlantic and the Angola-Benguela upwelling system: improvements and persistent biases. *npj Clim Atmos Sci*, 5, 42. doi: 10.1038/s41612-022-00264-4

50. Ding R., I-S Kang, **R. Farneti**, F. Kucharski, F. Di Sante, J. Xuan, F. Zhou, T. Zhang (2022), The internal and ENSO-forced modes of the Indian Ocean sea surface temperature. *J. Climate*, 35, 4191-4206. doi: 10.1175/JCLI-D-21-0403.1

49. Arumi-Planas, C., A. Hernandez-Guerra, P. Velez-Belchi, **R. Farneti**, M. R. Mazloff, S. Mecking, K. G. Speer, L. D. Talley (2022), Variability in the Meridional Overturning Circulation at 32S in the Pacific Ocean diagnosed by inverse box models. *Progr. Oceanogr.*, 203. doi: 10.1016/j.pocean.2022.102780

48. Narayanasetti, S.†, S. Panickal, R. Krishnan, **R. Farneti**, F. Kucharski, A. Modi, A.G. Prajeesh, D.C. Ayantika, S. Manmeet (2022), On the weakening association between South Asian Monsoon and Atlantic Multidecadal Oscillation. *Clim. Dyn.*, https://doi.org/10.1007/s00382-022-06224-1.

2021

47. Graffino, G.†, **R. Farneti**, F. Kucharski (2021), Low-frequency variability of the Pacific Subtropical Cells as reproduced by coupled models and ocean reanalyses. *Clim. Dyn.*, 56, 9, 3231-3254.

46. Villegas, N.†, I. Malikov, **R. Farneti** (2021), Sea surface temperature in continental and insular coastal Colombian waters: observations of the recent past and near-term numerical projections. *Lat. Am. J. Aquat. Res.*, 49, 2, 307-328.

2020

45. Reale, M.†, F. Giorgi, C. Solidoro, V. Di Biagio, F. Di Sante, L. Mariotti, **R. Farneti**, G. Sannino (2020), The Regional Earth System Model RegCM-ES: Evaluation of the Mediterranean climate and marine biogeochemistry. *J. Adv. Model. Earth Syst.*, 12, 9, DOI: 10.1029/2019MS001812.

44. Todd, A., L. Zanna, Q. Wu, J. Gregory, **R. Farneti**, R. Navarro-Labastida†, K. Lyu, O. Saenko, D. Yang, X. Zhang (2020), Ocean-only FAFMIP: understanding regional patterns of ocean heat uptake and dynamic sea level change. *J. Adv. Model. Earth Syst.*, 12, 8, DOI: 10.1029/2019MS002027.

43. Narayanasetti, S.†, Panickal, S., R. Krishnan, **R. Farneti**, A. G. Prajeesh, D. C. Ayantika, S. Manmeet (2020), South Asian Monsoon response to weakening of Atlantic meridional overturning circulation in a warming climate. *Clim. Dyn.*, 54, 3507-3524.

42. Rahaman, H., U. Srinivasu, S. Panickal, J. Durgadoo, S. M. Griffies, M. Ravichandran, A. Bozec, A. Cherchi, G. Danabasoglu, **R. Farneti**, K. Getzlaff, M. Ilicak, S.J. Marsland, H. Tsujino, S. Valcke, A. Voldoire, Q. Wang (2020), An assessment of the Indian Ocean mean state and seasonal cycle in a suite of interannual CORE-II simulations. *Ocean Modell.*, 145, 101503.

2019

41. Graffino, G.†, **R. Farneti**, F. Kucharski, F. Molteni (2019), The effect of wind stress anomalies and their location in driving Pacific Subtropical cells and tropical climate. *J. Climate*, 32, 5, 1641-1660.

40. Stammer, D., A. Bracco, L. Beal, N. Bindoff, P. Braconnot, W. Cai, D. Chen, G. Danabasoglu, B. Dewitte, **R. Farneti**, K. Takahashi Guevara, B. Fox Kemper, J. Fyfe, S. M. Griffies, S. Jayne, R. Mathew Koll, A. Lazar, M. Lengaigne, X. Lin, S. Marsland, P. Monteiro, W. Robinson, R. Rykaczewski, S. Speich, I. J. Smith, A. Solomon, J. Vialard (2019), Ocean climate observing requirements in support of climate research and climate information. Proceedings of OceanObs'19, *Frontiers in Marine Science*, doi:10.3389/fmars.2019.00444

39. Newmann, L., P. Heil, R. Trebilco, K. Katsumata, A. J. Constable, E. van Wijk, K. Assmann, J. Beja, P. Bricher, R. Coleman, D. Costa, S. Diggs, **R. Farneti**, S. Fawcett, S. T. Gille, K. R. Hendry, S. F. Henley, E. Hofmann, T. Maksym, M. Mazloff, A. J. Meijers, M. P. Meredith, S. Moreau, B. Ozsoy, R. Robertson, I. R. Schloss, O. Schofield, J. Shi, E. L. Sikes, I. J. Smith, S. Swart, A. Wahlin, G. Williams, M. J. Williams, L. Herraiz-Borreguero, S. Kern, J. Lieser, R. Massom, J. Melbourne-Thomas, P. Miloslavich, G. Spreen (2019), Delivering sustained, coordinated and integrated observations of the Southern Ocean for global impact. Proceedings of OceanObs'19, *Frontiers in Marine Science*, doi:10.3389/fmars.2019.00433

38. Di Sante, F.†, E. Coppola, **R. Farneti** and F. Giorgi (2019), Indian Summer Monsoon as simulated by the Regional Earth System Model RegCM-ES: the role of local air-sea interaction. *Clim. Dyn.*, 53, 759-778.

2018

37. Barreiro, M.†, L. Sitz†, S. de Mello, R. Fuentes-Franco, M. Renom, **R. Farneti** (2018), Modeling the role of air-sea interaction in the impact of the MJO on South American climate. *Int. J. Climatology*, 39, 2, 1104-1116.

2017

36. **Farneti, R.** (2017), Modelling interdecadal climate variability and the role of the ocean. WIREs Clim Change, 8 (1), doi:10.1002/wcc.441

35. Nnamchi, H.†, F. Kucharski, N. Keenlyside, **R. Farneti** (2017), Analogous seasonal evolution of South Atlantic SST dipole indices. *Atmos. Sci. Lett.*, 18(10), 396–402.

34. Reale, M.†, S. Salon, A. Crise, **R. Farneti**, R. Mosetti, G. Sannino (2017), Unexpected covariant behavior of the Aegean and Ionian Seas in the period 1987-2008 by means of a non-dimensional sea surface height index. *J. Geophys. Res. Oceans*, 122, 10, 8020-8033.

33. Sitz, L.†, F. Di Sante, **R. Farneti**, R. Fuentes-Franco, G. Sannino, M. Barreiro†, L. Mariotti, M. Reale†, E. Coppola, F. Giorgi (2017), Description and evaluation of the Earth System Regional Climate Model (Reg CM-ES). *J. Adv. Model. Earth Syst.*, 9, 4, 1863-1886.

32. Molteni, F., **R. Farneti**, F. Kucharski, T. N. Stockdale (2017), Modulation of air-sea fluxes by extratropical planetary waves and its impact during the recent surface warming slowdown. *Geophys. Res. Lett.*, 44, 3, 1494-1502.

2016

31. Reale, M.†, A. Crise, **R. Farneti**, R. Mosetti (2016), A process study of the Adriatic-Ionian system baroclinic dynamics. *J. Geophys. Res. Oceans*, **121**, 5872-5887.

30. Tseng, Y-h., ..., **R. Farneti**, et al. (2016), North and Equatorial Pacific Ocean Circulation in the CORE-II Hindcast Simulations. *Ocean Modell.*, **104**, 143–170.

29. Nnamchi, H.†, J. Li, F. Kucharski, I-S. Kang, N. S. Keenlyside, P. Chang, **R. Farneti** (2016) An equatorial-extratropical dipole structure of the Atlantic Niño, *J. Climate*, **29**, 7295–7311.

28. Kucharski, F., A. Parvin, B. Rodriguez-Fonseca, **R. Farneti**, M. Martin-Rey, I. Polo, E. Mohino, T. Losada, C. R. Mechoso (2016), The teleconnection of the tropical Atlantic to Indo-Pacific sea surface temperatures on interannual to centennial time scales: a review of recent findings. Atmosphere, **7**(2), 29, doi:10.3390/atmos7020029.

27. Danabasoglu, G., ..., **R. Farneti**, et al. (2016), North Atlantic simulations in Coordinated Ocean-ice Reference Experiments phase II (CORE-II). Part II: Interannual to decadal variability. *Ocean Modell.*, **97**, 65-90.

26. Kucharski, F., F. Ikram, F. Molteni, **R. Farneti**, I.-S. Kang, H.-H. No, M. P. King, G. Giuliani, K. Mogensen (2016), Atlantic forcing of Pacific decadal variability. *Clim. Dyn.*, **46**, 7, 2337-2351.

2015

25. **Farneti, R.**, et al. (2015), An assessment of Antarctic Circumpolar Current and Southern Ocean Meridional Overturning Circulation during 1958–2007 in a suite of interannual CORE-II simulations. *Ocean Modell.*, **93**, 84–120.

24. Downes, S., **R. Farneti**, et al. (2015), An assessment of Southern Ocean water masses and sea-ice during 1988-2007 in a suite of interannual CORE-II simulations. *Ocean Modell.*, **94**, 67-94.

23. Sitz, L.†, **R. Farneti**, S. M. Griffies (2015), Simulated South Atlantic transports and their variability during 1958-2007. *Ocean Modell.*, **91**, 70–90.

22. Nnamchi, H.†, J. Li, F. Kucharski, I-S. Kang, N. S. Keenlyside, P. Chang, **R. Farneti** (2015) Thermodynamic controls of Atlantic Niño, *Nat. Comm.*, 6:8895, DOI:10.1038/ncomms9895.

2014

21. **Farneti, R.**, S. Dwivedi†, F. Kucharski, F. Molteni, S. M. Griffies (2014), On Pacific subtropical cell variability over the second half of the 20th century. *J. Climate*, **27**, 18, 7102–7112.

20. **Farneti, R.**, F. Molteni, F. Kucharski (2014), Pacific interdecadal variability driven by tropical-extratropical interactions. *Clim. Dyn.*, **42**, 11–12, 3337–3355.

19. Griffies, S., ... , **R. Farneti**, et al. (2014), Global and regional sea level in a suite of interannual CORE-II hindcast simulations, *Ocean Modell.*, **78**, 35–89.

18. Danabasoglu, G., ... , **R. Farneti**, et al. (2014), North Atlantic simulations in Coordinated Ocean-ice Reference Experiments phase II (CORE-II). Part I: Mean states, *Ocean Modell.*, **73**, 76–107.

2013

17. **Farneti, R.** and G. K. Vallis (2013), Meridional energy transport in the coupled atmosphere-ocean system: Compensation and partitioning. *J. Climate*, **26**, 18, 7151–7166.

16. **Farneti, R.**, S. Salon, A. Crise, R. Martinez. (2013), Climate change in Mediterranean and Caribbean seas: research experiences and new scientific challenges. *Bull. Amer. Meteor. Soc.*, **94**, ES89-ES92.

15. Fŭckar, N. S., S.-P. Xie, **R. Farneti**, E. Maroon, D.W. Frierson (2013), Influence of extratropical ocean circulation on the intertropical convergence zone in an idealized coupled general circulation model. *J. Climate*, **26**, 13, 4612–4629.

14. Kwon, E. Y., S. Downes, J. Sarmiento, **R. Farneti**, C. Deutsch (2013), The role of seasonal cycle in the subduction rates of Southern Ocean mode waters. *J. Phys. Oceanogr.*, **43**, 1096–1113.

13. Kucharski, F., F. Molteni, M.P. King, **R. Farneti**, I.-S. Kang, L. Feudale (2013), On the need of intermediate complexity general circulation models: a "SPEEDY" example. *Bull. Amer. Meteor. Soc.*, **94**, 1, 25–30.

2012

12. Meredith, M. P., A. C. Naveira Garabato, A. McC. Hogg, **R. Farneti** (2012), Sensitivity of the overturning circulation in the Southern Ocean to climate change. *J. Climate*, **25**, 1, 99–110.

2011

11. **Farneti, R.** and G.K. Vallis (2011), Mechanisms of interdecadal climate variability and the role of ocean-atmosphere coupling. *Clim. Dyn.*, **36**, 1, 289–308.

10. **Farneti, R.**, P. R. Gent (2011), The effects of the eddy-induced advection coefficient in a coarse-resolution coupled climate model. *Ocean Modell.*, **39**, 135–145.

9. Griffies, S. M., M. Winton, L. J. Donner, S. Downes, **R. Farneti**, A. Gnanadesikan, L. W. Horowitz, W. Hurlin, H.-C. Lee, J. B. Palter, B. L. Samuels, A. Wittenberg, B. L. Wyman, J. Yin (2011), GFDL's CM3 coupled climate model: Characteristics of the ocean and sea ice simulations. *J. Climate*, **24**, 13, 3520–3544.

8. Downes, S. M., A. Budnick, J. L. Sarmiento, **R. Farneti** (2011), Impacts of wind stress on the Antarctic Circumpolar Current fronts and associated subduction. *Geophys. Res. Lett.*, 38, L11605, doi:10.1029/2011GL047668.

7. Kucharski, F., I.-S. Kang, **R. Farneti**, L. Feudale (2011), Tropical Pacific response to 20th Century Atlantic warming. *Geophys. Res. Lett.*, 38, L03702, doi:10.1029/2010GL046248.

2010

6. **Farneti, R.**, T. L. Delworth (2010), The role of mesoscale eddies in the remote oceanic response to altered Southern Hemisphere winds, *J. Phys. Oceanogr.*, **40**, 10, 2348–2354.

5. **Farneti, R.**, T. L. Delworth, A. J. Rosati, S. M. Griffies, F. Zang (2010), The role of mesoscale eddies in the rectification of the Southern Ocean response to climate change, *J. Phys. Oceanogr.*, **40**, 7, 1539–1557.

2009

4. **Farneti, R.** and G.K. Vallis (2009), An Intermediate Complexity Climate Model (ICCMp1) based on the GFDL Flexible Modelling System, *Geosci. Model Dev.*, **2**, 1, 73-88.

3. Vallis, G. K. and **R. Farneti** (2009), Meridional energy transport in the coupled atmosphere-ocean system: Scaling and numerical experiments, *Quart. J. Roy. Meteor. Soc.*, **135**, 644, 1643–1660.

2007

2. **Farneti, R.** (2007), Coupled interannual Rossby waves in a Quasi-Geostrophic coupled model, *J. Phys. Oceanogr.*, **37**, 5, 1192-1214.

2005

1. **Farneti, R.** and P.D. Killworth (2005), The effects on oceanic planetary waves of coupling with an atmospheric energy balance model, *Tellus*, **57A**, 742-757.

Other publications

3. **Farneti, R.** (2017), La variabilidad interdecadal del Pacifico: el papel del oceano. Boletin Tecnico del Instituto Geofisico del Peru, **4**, 4-7.

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