TOMÁS L. CHOR

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ABOUT ME

I am a PhD candidate at UCLA investigating material transport in the Oceanic Mixed Layer who is very interested in small scale geophysical turbulence in general (both in the ocean and atmosphere) and numerical modelling. I'm also enthusiastic about programming and open-source initiatives.

EDUCATION

Ph.D. Atmospheric and Oceanic Sciences
University of California, Los Angeles — September 2016 —

M.Sc. Environmental Engineering
Federal University of Paraná, Curitiba — March 2012 — March 2014

B.Sc. Environmental Engineering
Federal University of Paraná, Curitiba — March 2008 — January 2012

AWARDS AND SCHOLARSHIPS

Research assistantship — January 2017 — Present

· Awarded by the Gulf Of Mexico Research Initiative to work with oil dispersion in the ocean.

UCLA's Atmospheric and Oceanic department fellowship — Sept 2016 — December 2016

Research scholarship — August 2015 — August 2016

· Micrometeorological data investigation for the Max Planck Institute for Chemistry and INPA's (National Institute for Amazonian Research) Amazonian Tall Tower Observatory (ATTO) project

"Odelar Leite Linhares" award — October 2014

· Best Masters thesis award from the Brazilian Society for Applied and Computational Mathematics.

Full scholarship for masters — March 2012 — March 2014

OTHER RELEVANT ACADEMIC EXPERIENCE

The Burgers Program Research School on Fluid Dynamics — June 2018
Participant — *University of Maryland*

RELEVANT PROGRAMMING/COMPUTER SKILLS

Software developer

· Creator and developer of Pymicra, the Python tool for Micrometeorological Analyses, among other python packages.

Programming languages

· Python, Fortran, Julia, Bash

RELEVANT TEACHING, OUTREACH AND MENTORSHIP

Author of TED-Ed video on Turbulence — April 2019

· Conceived and wrote script for TED-Ed video with the goal or popularizing the topic of Turbulence

Research mentor Fall 2018
UCLA

· Mentored an undergraduate student on a project collecting high-frequency atmospheric data

Teaching assistant Winter 2018 and Fall 2018
UCLA

· Wrote and led discussions and reviews on topics on meteorology

Student Recruitment Chair Fall 2017 to Fall 2018
XEP, UCLA

· Organized recruitment efforts and events for incoming graduate students

PUBLICATIONS

Selected journal publications

Chamecki, Marcelo, **Tomas Chor**, Di Yang, and Charles Meneveau (2019). "Material transport in the ocean mixed layer: recent developments enabled by large eddy simulations". In: *Reviews of Geophysics*. Submitted.

Chor, **Tomas**, Ailín Ruiz de Zárate, and Nelson L. Dias (2019). "A Generalized Series Solution for the Boussinesq Equation With Constant Boundary Conditions". In: *Water Resources Research* 55.4, pp. 3567–3575. DOI: 10.1029/2018WR024154.

Dias-Júnior, Cléo Quaresma, ..., **Tomas Chor**, and Antonio Manzi (2019). "Is There a Classical Inertial Sublayer Over the Amazon Forest?" In: *Geophysical Research Letters* 46.10, pp. 5614–5622. DOI: 10.1029/2019GL083237.

Chor, **Tomas**, Di Yang, Charles Meneveau, and Marcelo Chamecki (2018). "A Turbulence Velocity Scale for Predicting the Fate of Buoyant Materials in the Oceanic Mixed Layer". In: *Geophysical Research Letters* 45.21, pp. 11, 817–11, 826. DOI: 10.1029/2018GL080296.

Chor, **Tomás**, Di Yang, Charles Meneveau, and Marcelo Chamecki (2018). "Preferential concentration of noninertial buoyant particles in the ocean mixed layer under free convection". In: *Phys. Rev. Fluids* 3 (6), p. 064501. DOI: 10.1103/PhysRevFluids.3.064501.

Chor, **Tomás L.**, Nelson L. Dias, Alessandro Araújo, Stefan Wolff, Einara Zahn, Antônio Manzi, Ivonne Trebs, Marta O. Sá, Paulo R. Teixeira, and Matthias Sörgel (2017). "Flux-variance and flux-gradient relationships in the roughness sublayer over the Amazon forest". In: *Agricultural and Forest Meteorology* 239, pp. 213–222. ISSN: 0168-1923. DOI: http://dx.doi.org/10.1016/j.agrformet.2017.03.009.

Chor, **T. L.** and N. L. Dias (2015). "Technical Note: A simple generalization of the Brutsaert and Nieber analysis". In: *Hydrology and Earth System Sciences* 19.6, pp. 2755–2761. DOI: 10.5194/hess-19-2755-2015.

Dias, Nelson L., **Tomás L. Chor**, and Ailín Ruiz de Zárate (2014). "A semianalytical solution for the Boussinesq equation with nonhomogeneous constant boundary conditions". In: *Water Resources Research* 50.8, pp. 6549–6556. ISSN: 1944-7973. DOI: 10.1002/2014WR015437.

Chor, **T.**, N. L. Dias, and A. R. de Zarate (2013). "An exact series and improved numerical and approximate solutions for the Boussinesq equation". In: *Water Resources Research* 49.11, pp. 7380–7387. DOI: 10.1002/wrcr.20543.