

Curriculum Vitae

Edgar Dolores-Tesillos

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Education

- 2018 – 2022 📌 **PhD in Meteorology**
Institute of Meteorology
Free University of Berlin
Date of graduation: October 12, 2022.
- 2015 – 2018 📌 **M. Sc. in Earth Sciences**
Universidad Nacional Autónoma de México
Date of graduation: January 9, 2018.
- 2009 – 2014 📌 **B. Sc. in Atmospheric Sciences**
Universidad Veracruzana
Date of graduation: March 10, 2014.

Professional experience

- 2023 – today 📌 **Postdoctoral Researcher**
Institute of Geography
University of Bern, Switzerland
- 2014 – 2014 📌 **Research Intern**
Instituto de Investigaciones Electricas (IIE, now INEEL)
Cuernavaca, Morelos, Mexico

Teaching

- 📌 Summer 2021, 2022 Teaching assistant, Free University of Berlin
Synoptische Meteorologie (Seminar PC I to B.Sc.)
- 📌 Winter 2020, 2021 Teaching assistant, Free University of Berlin
Synoptische Meteorologie (Seminar PC II to B.Sc.)
- 📌 Summer 2020, 2021, 2022 Teaching assistant, Free University of Berlin
Beobachtungspraktikum (Seminar to B.Sc.)
- 📌 Winter 2018, 2019 Teaching assistant, Free University of Berlin
Klimavariabilität und -Modelle (Seminar to M.Sc.)
- 📌 Summer 2019 Teaching assistant, Free University of Berlin
Modelle für Wetter und Umwelt (Seminar to M.Sc.)

Professional experience (continued)

Courses and training

- Summer School on effective High Performance Computer (HPC) for climate and weather. eciwace. Online. August 23-27, 2021.

Research Publications

- Dolores-Tesillos, E., Teubler, F., and Pfahl, S.: Future changes in North Atlantic winter cyclones in CESM-LE – Part 1: Cyclone intensity, potential vorticity anomalies, and horizontal wind speed, *Weather Clim. Dynam.*, 3, 429–448, <https://doi.org/10.5194/wcd-3-429-2022>, 2022.
- Edgar Dolores, Ernesto Caetano, Luis Clemente López-Bravo & Alan Calheiros (2019). Influence of soil moisture on mesoscale convective initiation in central Mexico, *European Journal of Remote Sensing*, 52:1, 640-652, DOI:10.1080/22797254.2019.1700397

Projects and talks

Technical report

- “Implementación del modelo Regional Atmospheric Modeling System (RAMS) para la zona costera central del Golfo de México”. Juan Matías Méndez Pérez y Edgar Dolores Tesillos. Consejo Nacional de Ciencia y Tecnología. 25 pp. March 2015.
- “Configuración del modelo Regional Atmospheric Modeling System (RAMS) para la generación de series de datos de viento en el Istmo de Tehuantepec”. Edgar Dolores Tesillos, Ubaldo Miranda Miranda y Ramón Lira Argüello. Instituto de Investigaciones Eléctricas. 72 pp. November 2014.

Talks (select)

- “Future changes in North Atlantic winter cyclone dynamics in CESM-LENS”. Dolores Tesillos, E., Pfahl, S., and Teubler, F. Stormtracks2022 : Midlatitude storm-tracks workshop. 29 May-3 Jun 2022, Saint-Pierre-d’Oléron, France.
- “Future changes in North Atlantic winter cyclones in CESM-LENS: cyclone intensity and horizontal wind speed ”. Dolores Tesillos, E., Pfahl, S., and Teubler, F. EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-8926, <https://doi.org/10.5194/egusphere-egu21-8926>, 2021.
- “Influencia de la humedad del suelo en la iniciación convectiva en regiones llanas de México” (invited talk). Virtual seminar, Licenciatura en Ciencias Atmosféricas, Universidad Veracruzana, September 2021.
- “A Composite Perspective on Precipitation and Intensity Changes of Extratropical Cyclones in a Warming Climate ”. Edgar Dolores-Tesillos, Stephan Pfahl and Lisa Schielicke. Poster. 19th Cyclone Workshop. Seon, Bavaria, Germany. From 29 September to 4 October 2019.
- “Detection of soil moisture impact in convective initiation in the central region of Mexico”. Edgar Dolores and Ernesto Caetano. Poster. General Assembly 2017 of the European Geosciences Union. Vienna, Austria. From 23 to 28 April 2017.

Projects and talks (continued)

Thesis

- Dolores-Tesillos E., 2022. “*Changes in Extratropical Cyclone Dynamics in the North Atlantic in a Warming Climate*”. **PhD in Meteorology**. Freie Universität Berlin.
- Dolores-Tesillos E., 2018. “*Detección del impacto de la humedad del suelo en la iniciación convectiva en México*”. **M. Sc. in Earth Sciences**. Universidad Nacional Autónoma de México.
- Dolores-Tesillos E., 2014. “*Perfil termodinámico característico para un evento de Norte en el Puerto de Veracruz*”. **B. Sc. in Atmospheric Sciences**. Universidad Veracruzana.

Thesis advisor

- Rosiles Barrios Linda. “*Caracterización climatológica en superficie y en altura de eventos de “surada” del Golfo de Tehuantepec al centro del estado de Veracruz*”. **Licenciatura en Ciencias Atmosféricas**. Universidad Veracruzana. (03.02.2021).
- Frederike Monte. “*Correlation of Cyclones and Precipitation Extremes - A Comparison Study of Present and Future Events based on CESM Large Ensemble Data*”. **B. Sc. in Meteorology**. Fachbereich Geowissenschaften. Free University of Berlin. (19.09.2019).

Skills

Coding

- Python, Matlab, GrADs, Fortran 77/90, Unix/Linux Shell and L^AT_EX.

Software

- NinJo, ArcGIS 10.5 and Microsoft Office.

Languages

- Spanish.
- English.
- German (Intermediate).

Atmospheric Models

- CESM, WRF, RAMS and MM5.

Areas of interest

Atmospheric Dynamics

Atmospheric Modeling

Renewable Energies

Clouds and Convection

Physical and Applied Climatology