# Norman J. Steinert

PHD STUDENT

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#### **♣** Profile

Dedicated PhD student in the group "Paleoclimate Modeling and Analysis" at the Department of Earth Science and Astrophysics, Complutense University Madrid. Multiple years of research experience in climate dynamics and interactions at renowned climate research institutions. Bringing motivation, drive, and multiple years of experience in different international research institutions. Record of versatility and fast learning skills in working collaboratively on complex projects. Substantial experience in analyzing problems in climate modeling, climate subsystem interaction, climate dynamics, and big data analysis. Specialization in land-atmosphere/land-climate interactions in Earth System Models and high-latitude ecosystem response to climate change.

#### \* Links

Research Gate Publons GoogleScholar Website

## Education

PhD in Physics, Complutense University Madrid, Madrid, Spain	Oct 2017 – Dec 2021
Master of Science in Meteorology, Free University of Berlin, Berlin, Germany	Oct 2013 – Jul 2017
Bachelor of Science in Meteorology, Free University of Berlin, Berlin, Germany	Oct 2010 - Sept 2013

## **=** Employment

PhD student, Complutense University Madrid, Madrid, Spain.	Oct 2017 – 2021
Research assistant, Global forecasters - CIEMAT, Madrid, Spain	Jun 2017 – Sept 2017
Intern, Reuniwatt, Saint-Pierre, La Reunion, France	Oct 2016 – Apr 2017
Student assistant, Max Planck Institute for Meteorology, Hamburg, Germany	Mar 2015 – Sept 2016
Intern, Alfred-Wegener-Institute, Bremerhaven, Germany	Feb 2014 – Apr 2014
Student assistant, FUB - Institute for Meteorology, Berlin, Germany	Nov 2013 – Jan 2015
Intern, ETH - Institute for Atmospheric and Climate Science, Zurich, Switzerland	Jul 2012 – Sept 2012
Student assistant, German Research Center for Geosciences, Potsdam, Germany	Jun 2012 – Nov 2013

## Skills

Analytical Thinking	Climate Modeling
Coding and Scripting	Creative Mindset
Organization	Quick Learner
■ Languages	
German	English
Spanish	Norwegian

# † Complementary education and outreach activities

Research stay – Utrecht University, Institute for Marine and Atmospheric Research Utrecht, *Utrecht, Netherlands, planned for May 2021* 

Invited talk – Max Planck Institute for Meteorology, Hamburg, Germany, Feb. 2021

Research stay – Max Planck Institute for Meteorology, Hamburg, Germany, Nov. 2020 – Jan. 2021

**EGU General Assembly 2020** – Virtual: Steinert, N., González-Rouco, J. F., Hagemann, S., De-Vrese, García-Bustamante, E., P., Jungclaus, J. H., Melo-Aguilar, C., Lorenz, S., and Navarro, J.: Impact of improved land model depth and hydrology on climate change projections., *Vienna, Austria, Apr. 2020* 

EGU General Assembly 2018 – Oral: Steinert, N., González-Rouco, J. F., García-Bustamante, E., Hagemann, S., De-Vrese, P., Jungclaus, J. H., Melo-Aguilar, C., and Lorenz, S.: Increasing the depth of a Land Surface Model: implications for the subsurface thermal and hydrological regimes., *Vienna, Austria, Apr. 2018* 

International Conference on Terrestrial System Research – Oral: Steinert, N., González-Rouco, J. F., García-Bustamante, E., Hagemann, S., De-Vrese, P., Jungclaus, J. H., Melo-Aguilar, C., and Lorenz, S.: Increasing the depth of a Land Surface Model: implications for the subsurface thermal and hydrological regimes., *Bonn, Germany, Apr. 2018* 

- 1<sup>st</sup> PMIP4 Conference Oral + Poster: Steinert, N., González-Rouco, J. F., García-Bustamante, E., Hagemann, S., De-Vrese, P., Jungclaus, J. H., Melo-Aguilar, C., Lorenz, S., and Navarro, J.: Impact of land model depth on long-term climate variability and change., *Stockholm, Sweden, Sept. 2017*
- **4<sup>th</sup> International Conference on Climate Modelling** Oral: González-Rouco, J. F., Steinert, N., García-Bustamante, E., Hagemann, S., De-Vrese, P., Jungclaus, J. H., Melo-Aguilar, C., Lorenz, S., and Navarro, J.: Impact of land model depth on long-term climate variability and change., *Hamburg, Germany, Aug. 2017*

CLIVAR Open Science Conference – Poster: Steinert, N., Jungclaus, J. H., Haak, H., and Rust, H.: Application of a flow field correction method to the SST biases in the Atlantic Ocean in the MPI-ESM., *Qingdao, China, Sept. 2016* 

**Earth System Modelling School** – Max Planck Institute for Meteorology, *Hamburg, Germany, September* 2015

# Publications

- González-Rouco, J. F., **Steinert, N. J.**, García-Bustamante, E., Hagemann, S., De-Vrese, P., Jungclaus, J. H., Lorenz, S. J, Melo-Aguilar, C., and: *Increasing the depth of a Land Surface Model: Part I: Impacts on the Subsurface Thermal Regime and Energy Storage.*, J. Hydrometeorol., 22(12), 3211-3230, 2021.
- Steinert, N. J., González-Rouco, J. F., De-Vrese, P., García-Bustamante, E., Hagemann, S., Melo-Aguilar, C., Jungclaus, J. H., and Lorenz, S. J.: *Increasing the depth of a Land Surface Model: Part II: Temperature Sensitivity to Improved Subsurface Thermodynamics and Associated Permafrost Response.*, J. Hydrometeorol., 22(12), 3231-3254, 2021.
- Steinert, N. J., González-Rouco, J. F., García-Bustamante, E., Melo-Aguilar, C., García-Pereira, F., and Alexeev, V.: *An adapted framework for a more accurate estimate of the required bottom boundary condition placement in Land Surface Models.*, Geophys. Res. Lett., 48(20), e2021GRL094273, 2021.
- Melo-Aguilar, C., González-Rouco, J. F., García-Bustamante, E., Navarro-Montesinos, J., and **Steinert, N.**: Influence of radiative forcing factors on ground—air temperature coupling during the last millennium: implications for borehole climatology, Clim. Past, 14, 1583—1606, https://doi.org/10.5194/cp-14-1583-2018, 2018.
- Melo-Aguilar, C., González-Rouco, J. F., García-Bustamante, E., **Steinert, N.**, Jungclaus, J. H., Navarro, J., and Roldán-Gómez, P. J.: *Methodological and physical biases in global to subcontinental borehole temperature reconstructions: an assessment from a pseudo-proxy perspective*, Clim. Past, 16, 453–474, https://doi.org/10.5194/cp-16-453-2020, 2020.

# Awards

Utrecht Network Young Researchers Grant - Utrecht Network, April 2021

Top 3 presentations at PhDay Physics Complutense 2019 - *Complutense University Madrid, Madrid, Spain, November 2019* 

Ernst-Reuter-Gesellschaft Conference Travel Grant 2016 - Free University of Berlin, Berlin, Germany, August 2016