CV

June 2022

First name: **Mihai**
Last name: **Dima**
Date/Place of birth: 11.01.1968, Bucharest
Civil status: Married/ 1 child
Web: **http://mihai.dmn.ro**

Studies

1982-1986 – **National College Gheorghe Lazar**, Bucharest

1987-1992 – **Faculty of Physics**, University of Bucharest

1992-1997 - **Faculty of Cybernetics**, Academy of Economic Studies, Bucharest

1996-2000 – Doctoral program**, Faculty of Physics**, University of Bucharest

Research interests

- **Separation of internal and solar from anthropogenically induced climate variability**
- **Physical mechanisms of interannual-to-millennial climate variability**
- **Reconstruction and understanding past climate variations based on proxy records**
- **Climatic impacts on the human society**

Scientific publications **42**

Citations ISI **>1260**
(https://publons.com/researcher/2824210/mihai-r-dima/publications/)

Books/Chapters in books **11**

Professional track

- 1986 - 1990 - **Physicist**
  University of Bucharest, Faculty of Physics, Romania

- 1990 - 1991 - **Master of Science in Atmospheric Physics**
  University of Bucharest, Faculty of Physics, Romania

- 1991 - 1996 - **Economist**
  Academy of Economic Studies
  Faculty of Cybernetics, Bucharest, Romania

- 1992 - 1999 - **Scientific and Teaching Assistant**
  University of Bucharest, Faculty of Physics, Romania

- 1996 - 2000 - **Ph.D**.
  University of Bucharest, Faculty of Physics, Romania
  Department of Atmospheric Physics

- 1997 - 2001 - **Visiting Scientist** (three-month stages each year)
  Max-Planck Institut fur Meteorologie, Hamburg, Germany

- 2000 - 2003 - **Lecturer**
  University of Bucharest, Faculty of Physics, Romania

- 2002 - **PostDoc**
  University of Bremen, Geoscience Department, Germany

- 2004 - 2006 - **Humboldt Fellow**
  University of Bremen, Geoscience Department, Germany
  Alfred-Wegener Institute for Polar and Marine Research,
  Paleoclimate Dynamics Department, Germany

- 2007 - 2008 - **Lecturer**
  University of Bucharest, Faculty of Physics, Romania

- 2009 - **Associate Professor**
  University of Bucharest, Faculty of Physics, Romania

- 2013 - **Habilitation for supervision of Ph.D. students**
  University of Bucharest, Faculty of Physics, Romania

- 2014 - **Full Professor**
  University of Bucharest, Faculty of Physics, Romania

- 2007 - 2022 **Associated member**
  Alfred Wegener Institute for Polar and Marine Research, Germany

Reviewer for scientific journals/organizations

- **Journal of Climate**
- **Climate Dynamics**
- **Geophysical Research Letters**
- **Journal of Geophysical Research**
- **International Journal of Climatology**
- **Climate of the Past**
- **Climatic Change**
- **Nonlinear Processes in Geophysics**
- **Geology**
- **Remote Sensing**
- **NPJ Climate and Atmospheric Science**
- **International Panel for Climate Change**
- **Humboldt Foundation**
- **National Science Foundation (USA)**

Science management/policy

- **Chair** of **Interdisciplinary School of Doctoral Studies**, Romania (2018-2022)
  University of Bucharest

- **Secretary of State** for **Scientific Research and Innovation**, Romania (2016)

- Elected **president** of the **National Research Council**, Romania (2013)

- **Member** of the **National Research Council**, Romania (2011-2012)
  President of the **Earth Sciences** commission

- **Member** in **National Council for Validation of University Titles, Diploma and Certificates**, Romania (2011-2012)
  Panel: **Mathematics and Natural Sciences**
  Commission: **Earth Sciences**

- **CNCS's Deputy** at **European Science Foundation**, France (2012)
  Commission: **Life, Earth and Environmental Sciences**

Awards

- 2004: **Humboldt Fellow** at University of Bremen and Alfred-Wegener Institut for Polar and Marine Research, Bremerhaven, Germania, with the project "Studying climate variability through observational data, proxy records and General Circulation Models"

Courses

- **Mechanics**
- **Thermal Physics**
- **Introduction in Environmental Physics**
- **Physics of the Climate System**
- **Climatic hazards and risk**
- **Statistical Methods for Climate Data Analysis**
- **Conceptual approaches in scientific research**

Foreign languages

- **Englich – very good**
- **German - medium**
- **French - medium**

Selected publications

1. **AMOC modes linked with distinct North Atlantic deep water formation sites,** **Dima, M.**, Lohmann, G., Ionita, M., Knorr, G., Scholz, P., **Climate Dynamics**, DOI: 10.1038/S41612-021-00182-X, https://doi.org/10.1007/s00382-022-06156-w , 2022.

2. **Early-onset of Atlantic Meridional Overturning Circulation weakening in response to atmospheric CO_2 concentration**, **Dima, M.**, Nichita, D. R., Lohmann, G., Ionita, M., Voiculescu, M., NPJ Climate and Atmospheric Science, 4(27), 1-8, https://doi.org/10.1038/s41612-021-00182-x, 2021

3. **Past megadroughts in central Europe were longer, more severe and less warm than modern droughts,** Ionita, M., **Dima, M.**, Nagavciuc, M., Scholz, M., Lohmann, G., **Communications Earth & Environment**, DOI: 10.1038/S43247-021-09130-W, 2021.

4. **Distentangling and quantifying contributions of distinct forcing factors to the observed global sea level pressure field,** Vaideanu, P., **Dima, M.**, Pirloaga, R., Ionita, M., **Climate Dynamics**, DOI: 10.1007/S00382-019-05067-7, 2020.

5. **An interactive visual tool for investigating teleconnections in climate simulations,** Antonov, A., Lohmann, G., Ionita, M., **Dima, M.**, Linsen, L., **Environmental Earth Sciences**, DOI: 10.1007/S12665-019-8295-Z., 2019.

6. **Atlantic Multidecadal Oscillation footprint on global high cloud cover,** Vaideanu, P., **Dima, M.**, Voiculescu, M., **Theoretical and Applied Climatology**, DOI: 10.1007/S00704-017-2330-3, 2018.

7. **North Atlantic versus Global Control on Dansgaard-Oeschger Events,** **Dima, M.**, Lohmann, G., Knorr, G., **Geophysical Research Letters**, DOI: 10.1029/2018GL080035, 2018.

8. **Large-scale modes impact on Iraq climate variability,** Al-Khalidi, J., **Dima, M.**, Stefan, S., **Theoretical and Applied Climatology**, DOI 10.1007/s00704-017-2180-z, 2017.

9. **North Atlantic and Indian Ocean links with Iraq Climate,** Al-Khalidi, J., **Dima, M.**, Vaideanu, P., **Atmosphere**, 8(2), 235, 2017.

10. **Global patterns of solar influence on high cloud cover,** **Dima, M.**, Voiculescu, M., **Climate Dynamics**, 47, 667-678, 2016.

11. **Intensification and poleward shift of subtropical western boundary currents in a warming climate,** Hu, Y., Lohmann, G., Hu, Y.,Wei, W., **Dima, M.**, Ionita, M., Liu, J. **Journal of Geophysical Research**, 121(7), 4928-4945, 2016.

12. **Linkages between atmospheric blocking, sea ice export through Fram Strait and the Atlantic Meridional Overturning Circulation,** Ionita, M., Scholz, P., Lohmann, G., **Dima, M.**, Prange, M., **Scientific Reports**, 6, 32881, 2016.

13. **Possible North Atlantic origin for changes in ENSO properties during the 1970s,** **Dima, M.**, Lohmann, G., Rimbu, N., **Climate Dynamics**, 44, 925-935, 2015.

14. **Predicting the June 2013 European Flooding Based on Precipitation, Soil Moisture, an Sea Level Pressure,** Ionita, M., **Dima, M.**, Lohmann, G., Scholz, P., Rimbu, N., **Journal of Hydrometeorology**, 16, 598-614, 2015.

15. **Pteropod time series from the North Western Mediterranean (1967-2003): impacts of pH and climate variability,** Howes, E. L., Stemmann, L., Assailly, C., Irrison, J. O., **Dima, M.**, Bijma, J., Gattuso, J. P., **Marine Ecology-Progress Series**, 531, 193-206, 2015.

16. **Distinct modes of internal variability in the Global Meridional Overturning Circulation associated with the Southern Hemisphere westerly winds,** Wei, W., Lohmann, G., **Dima, M.**, **Journal of Physical Oceanography**, 42(5), 785-801, 2012.

17. **Interannual to decadal summer droght variability over Europe and its relationship to global sea surface temperature**, Ionita, M., Lohmann, G., Rimbu, N., Chelcea, S., **Dima, M.**, **Climate Dynamics**, doi: 10.1007/s00382-011-1028-y 2011.

18. **Hysteresis behavior of the Atlantic ocean circulation identified in observational data**, **Dima, M.**, Lohmann, G**.**, **Journal of Climate**, 24(2), 397-403, 2011.

19. **Evidence for Two Distinct Modes of Large-Scale Ocean Circulation Changes over the Last Century**, **Dima, M.**, Lohmann, G., **Journal of Climate**, 23, 5-16, 2010.

20. **Subtropical coral reveals abrupt early 20th century freshening in the western North Pacific Ocean**, Felis, T., Suzuki, A., Kuhnert, H., **Dima, M.**, Lohmann, G. and H. Kawahata, **Geology**, 37(6), 527-530, 2009.

21. **Conceptual model for millennial climate variability: a possible combined solar-thermohaline circulation origin for the ~1500-year cycle**, **Dima, M.**, and G. Lohmann, **Climate Dynamics**, 32(2-3), 301-311, 2008.

22. **Rapid 20th Century increase in coastal upwelling off northwest Africa**, McGregor, H. V., **Dima, M.**, Fischer, H. W., Mulitza, S., **Science**, 315, 637-639, 2007

23. **A mechanism for the Atlantic Multidecadal Oscillation**, **Dima, M.**, Lohmann, G., **Journal of Climate**, 20(11), 2706-2719, 2007

24. **Distinct modes of interdecadal variability identified in a climate reconstruction of the last centuries from a South Pacific coral**, **Dima, M.**, Felis, T., Lohmann, G., Rimbu, N., **Climate Dynamics**, DOI 10.1007/s00382-005-0043-2, 2005.

25. **Seasonal prediction of Danube flow variability based on stable teleconnection with sea surface temperature**, Rimbu, N., **Dima, M.**, Lohmann, G., Musat, I., **Geophysical Research Letters**, 32, 21, L21704 10.1029/2005GL024241, 2005.

26. **Solar induced and internal climate variability at decadal timescales**, **Dima, M.**, Lohmann, G., Dima, I**., International Journal of Climatology**, 25(6), 713-733, 2005.

27. **Fundamental and derived modes of climate variability. Concept and application to interannual variability**, **Dima, M.**, Lohmann, G., **Tellus A**, 56A, 229-249, 2004.

28. **Impacts of the North Atlantic Oscillation and the El Nino-Southern Oscillation on Danube river flow variability**, . Rimbu, N., **Dima, M.**, Lohmann, G., Stefan, S., **Geophysical Research Letters**, 31, doi:10.1029/2004GL020559, 2004.

29. **Climate signature of solar irradiance variations: Analysis of long-term instrumental and historical data**, . Lohmann, G., Rimbu, N.,. **Dima, M.**, **International Journal of Climatology**, 24, 1045 - 1056. doi: 10.1002/joc.1054, 2004.

30. **Decadal variability of the Danube river streamflow in the lower basin and its relation with the North Atlantic Oscillation**, Rimbu, N., Boroneant, C., Buta, C., **Dima, M.**, **International Journal of Climatology**, 22, 1169-1179, 2002.

31. **Arctic Oscillation variability generated through inter-ocean interactions**, **Dima, M.**, Rimbu, N., Dima, I., **Geophysical Research Letters**, 29(14), 22:1-4, 2002.

32. **Quasi-Decadal Variability in the Atlantic Basin Involving Tropics-Midlatitudes and Ocean-Atmosphere Interactions**, **Dima, M.**, Rimbu, N., Stefan, S., Dima, I., **Journal of Climate**, 14(5), 823-832, 2001.

33. **Interdecadal variability generated by interactions between Pacific and Atlantic oceans**, **Dima, M.**, Stefan, S., Dima, V., Borsan, D., **Geophysical Research Letters**, 28(23), 4459-4462, 2001.

34. **The Role of Indian Ocean SST in Forcing East African Rainfall Anomalies during December-January 1997/98**, Latif, M., Dommenget, D., **Dima, M.**, Grötzner, A., **Journal of Climate**, 12(12), 3497-3504, 1999.

Carti/Capitole in carti

1. **Causes and Consequences of the Late 1960s Great Salinity Anomaly,** **Dima, M.**, Lohmann, G., in **Global Warming Challenges and Opportunities for Policy and Practice**, ISBN 978-953-307-733-8, edited by Elias G. Carayannis (2011). http://www.intechopen.com/articles/show/title/causes-and-consequences-of-the-late-1960s-great-salinity-anomaly

2. **Physics of Climate Changes**, **Dima, M.**, Stefan, S., Ars Docendi Publishing House, Bucharest, 200 pp. (2008).

3. **Visual FoxPro 5.0 The Basics**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 182 pg., ISBN 973-601-859-8 (1999).

4. **Software Hand-book for Third High-School Year Students - Applied software**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 296 pg., ISBN 973-601-754-0 (1998).

5. **Software Hand-book for Fourth High-School Year Students - Computer Programming (software systems)**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 296 pg., ISBN 973-601-754-0 (1998).

6. **Computers Textbook, Computers programming**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 182 pg., ISBN 973-601-859-8 (1998).

7. **Editing Documents in Word 6 for Windows**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 296 pg., ISBN 973-601-754-0 (1996).

8. **FoxPro 2.5, 2.6 for DOS**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 539 pg., ISBN 973-276-X (1995).

9. **FoxPro 2.6 for Windows**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 510 pg., ISBN 973-601-193-3 (1995).

10. **FoxPro Through Menus and Windows**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 267 pg., ISBN 973-601-140-2 (1994).

11. **FoxPro (2.0. version)**, Dima, G., **Dima, M.**, TEORA Publishing House, Bucharest, 456 pg. ISBN 973-601-117-8 (1993).

4.06.2022