

Dr. Monica Ionita

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➤ Personal information

Name: Monica Ionita-Scholz (maiden name: Ionita)
Profession: Senior Scientist at AWI Bremerhaven, Ph.D. in Physics
Date of birth: May 7, 1979
Place of birth: Bucharest, Romania
Nationality: Romania
Marital Status: Married, 1 child
Current Affiliation: Alfred Wegener Institute Helmholtz Center for Polar and Marine Research
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<https://scholar.google.com/citations?user=kBpDjcUAAAAJ&hl=ro>

➤ Scientific interests

Statistical analysis of climate variability and predictability, Arctic and Antarctic sea ice prediction, Climate reconstruction from proxy data, Oceanic circulation and ocean dynamics, Streamflow variability and prediction, Climate variability in observational data, General Circulation Models (GCMs) and Regional Climate Models; Sea level changes and variability, Hydroclimatology.

➤ Professional experience and Education

01.09.2020 – present	Senior Scientist , Alfred Wegener Institute Helmholtz Center for Polar and Marine Research, Bremerhaven, Germany
01.01.2013 – 31.08.2020	Postdoctoral researcher , Alfred Wegener Institute Helmholtz Center for Polar and Marine Research, Bremerhaven, Germany
01.02.2011 – 23.10.2011	Postdoctoral researcher , Alfred Wegener Institute Helmholtz Center for Polar and Marine Research, Bremerhaven, Germany.
01.08.2009 – 31.01.2011	Postdoctoral researcher , Bremen University, MARUM, Bremen, Germany
01.10.2009 – 31.07.2009	Postdoctoral fellowship with DAAD (Deutscher Akademischer Austauschdienst), Bremen University, Bremen, Germany
01.10.2007 – 31.07.2008	Postdoctoral fellowship with DAAD (Deutscher Akademischer Austauschdienst), Bremen University, Bremen, Germany
01.10.2006 – 31.07.2007	Postdoctoral fellowship with DAAD (Deutscher Akademischer Austauschdienst), Bremen University, Bremen, Germany
01.11.2003 – 31.07.2009	Researcher , National Meteorological Administration, Bucharest, Romania
01.03.2003 – 31.10.2003	Research Assistant , National Meteorological Administration, Bucharest, Romania
01.10.2006 – 31.06.2009	Doctoral studies in Physics , Bremen University (Physics Department) and Alfred Wegener Institute, Germany
Dissertation	“Variability and potential predictability of Elbe river streamflow and their relationship with global teleconnection patterns”
Grade	Summa cum laude (top grade)
01.09.2002 – 28.02.2004	Master of Science , Specialization in Meteorology and Atmospheric Physics, Bucharest University, Romania

Master Thesis	"Wintertime temperature variability in Romania in association with the Atlantic-European teleconnection patterns"
Grade	Excellent (top grade)
01.10.1998 – 30.06.2002	Diploma in Physics , Bucharest University, Faculty of Physics, Romania
Thesis	"Decadal variability of the Danube river streamflow in the lower basin and its relation with the North Atlantic Oscillation"
Grade	Excellent (top grade)

➤ Awards

- 2017 *Top cited invited comentary award 2017 - Hydrology needed to manage droughts: the 2015 European case* (Van Lanen H., G. Laaha, D.G. Kingston, T. Gauster, **M. Ionita**, J.P. Vidal, R. Vlnas, L.M. Tallaksen, K. Stahl, J. Hannaford, C. Delus, M. Fendekova, L. Mediero, C. Prudhomme, E. Rets, R.J. Romanowicz, S. Gailliez, W.K. Wong, M.-J. Adler, V. Blauhut, L. Caillouet, S. Chelcea, N. Frolova, L. Gudmundsson, M. Hanel, K. Haslinger, M. Kireeva, M. Osuch, E. Sauquet, J.H. Stagge and A.F. Van Loon (2016), *Hydrol. Process.*, 30: 3097–3104. doi: 10.1002/hyp.10838
- 2017 Alfred Wegener Award for Science Transfer
- 2017 Outstanding contribution in reviewing for Journal of Hydrology
- 2005 "Young Scientist Award" from European Meteorological Society (EMS)
- 2005 "Premiul Societății Meteorologice Române" (Romanian Meteorological Society Award)
- 2003 "Young Scientist Award" from European Meteorological Society (EMS)

➤ Scholarships

- 06.02.2006 – 15.04.2006 **ENSEMBLES Mobility Scholarship** in the framework of the FP6 Project ENSEMBLE: Based prediction climate change and their impacts, Climatic Research Unit, University of East Anglia, Norwich, United Kingdom.
- 18.04.2004 – 12.06.2004 **Junior Scientist Scholarship**, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy

➤ Summer Schools attended

- 19.04.2004 – 30.04.2004 Workshop on Climate Variability in the 20th Century (C20C), Trieste, Italy
- 31.05.2004 – 09.06.2004 Second Workshop on the Theory and use of Regional Climate Models, ICTP, Trieste, Italy
- 01.01.2005 – 28.02.2005 European Research Course on Atmospheres (ERCA), Grenoble, France
- 31.05.2006 – 09.06.2006 Third Workshop on the Theory and use of Regional Climate Models, 31 May-9 June, 2006, ICTP, Trieste, Italy
- 03.09.2007-11.09.2007 Summer school on Extreme Events: Nonlinear Dynamics and Time Series Analysis, Comorova, Romania.
- 16.06.2014 – 20.06.2014 Summer School: "Drought Hazard & Management Challenges in a Changing World, Syros, Greece.

➤ **International and National Projects, project management**

- 01.01.2022 – 31.12.2024 Storyline Scenarios of Extreme Weather, Climate, and Environmental Events along with their Impacts in a Warmer World (SCENIC), **co-PI**, Innovation Pool of the new research program “Changing Earth - Sustaining our Future”.
- 01.11.2021 – 31.10.2024 Compound extreme events: a long-term perspective (LongCEX), INternational Science Program for Integrative Research in Earth Systems (INSPIRES), AWI – **Project manager**
- 01.07.2021 – 30.06.2024 Abrupt Climate Shifts and Extremes over Eurasia In Response to Arctic Sea Ice Change (ACE), **co-PI, BMBF**
- 01.03.2019 – 30.11.2022 Climate extremes from a paleo perspective (PalEX), AWI – **Project Manager**
- 01.07.2020 – 30.06.2021 Langfrist-Abflussvorhersage Elbe – Common project with Hamburg Port Authority – **Project Manager**
- 01.06.2019 – 31.05.2020 Langfrist-Abflussvorhersage Elbe – Common project with Hamburg Port Authority – **Project Manager**
- 01.05.2018 – 31.03.2019 Langfrist-Abflussvorhersage Elbe – Common project with Hamburg Port Authority – **Project Manager**
- 01.04.2017 – 30.03.2018 Langfrist-Abflussvorhersage Elbe – Common project with Hamburg Port Authority – **Project Manager**
- 01.07.2015 – 31.12.2015 ERSTELLUNG VON REGRESSIONSBEZIEHUNGEN ZUR SAISONALEN ABFLUSS-VORHERSAGE AN BUNDESWASSERSTRASSEN (Seasonal prediction of streamflow for the German rivers) – Common project with the German Hydrological Institute – **Project Manager**
- 01.08.2009 – 31.01.2011 Deutsche Forschungsgemeinschaft (*DFG*) Excellence Cluster "The Ocean in the Earth System", MARUM Centre for Marine Environmental Research – **research member** in the section “Seasonal to decadal climate variability from oceanographic data, coral records and model simulations”.
- 01.01.2004 – 31.12.2008 FP6 ENSEMBLE Project - Based prediction climate change and their impacts, RT2B.2 Team - "*Development of new methods for the construction of probabilistic regional climate scenarios*" – **research member** in the Romanian team
- 01.01.2005 – 31.12.2008 FP6 DYNAMITE Project– **research member** in the Romanian team

➤ **Memberships**

- 2019 – present German representative for the Regional cooperation of the Danube countries in the framework of the International Hydrological programme of UNESCO
- 2019 – present Active member of the PAGES-CoralHydro2K group
- 2016 – present Active member of the UNESCO Friend Low-Flow and Drought Group
- 2016 – present Active member of the PAGES-Floods group

➤ **Synergetic activities**

- 2021 – present Deputy Topic Speaker** - Topic 2: Ocean and Cryosphere in Climate, S.T 2.2 – Variability and extremes
- 2021 – present Topic Speaker** - Research Theme 3 “Extreme events across temporal and spatial scales” in the REKLIM (Regional Climate Change and Humans) project
- 2020 – present **Associate Editor** – Hydrological Science Journal
- 2013 – present **Editor for *Climate* (MDPI)**: Guest editor for the *Special issue on “Changes in precipitation and impacts on regional water resources”* in *Climate*, MDPI

➤ Review activities

Nature Climate Change, Climate Dynamics, Journal of Hydrology, Theoretical and Applied Climatology, Journal of the American Water Resources Association, Journal of Climate, Climate of the Past, River Research and Applications, Journal of Hydroclimatology, International Journal of climatology.

➤ Publication list

➤ 2022

Roibu, C., Nagavciuc, V., Ionita, M., Popa, I., Horondic, S.-A., Mursa, A., and Büntgen, U., 2022: A tree ring-based hydroclimate reconstruction for eastern Europe reveals large-scale teleconnection patterns, *Clim Dyn.*, accepted

Dima, M., Lohmann, G., **Ionita, M.** et al., 2022: AMOC modes linked with distinct North Atlantic deep water formation sites. *Clim Dyn.* <https://doi.org/10.1007/s00382-022-06156-w>

➤ 2021

Kwieceń, O., Braun, T., Brunello, C. F., Faulkner, P., Hausmann, N., Helle, G., Hoggarth, J. A., **Ionita, M.**, Jazwa, C., Kelmelis, S., Marwan, N., Nava-Fernandez, C., Nehme, C., Opel, T., Oster, J. L., Perşoiu, A., Petrie, C., Prufer, K., Saarni, S. M., Wolf, A. and Breitenbach, S. F. M., 2021: What we talk about when we talk about seasonality – A transdisciplinary review, *Earth-Science Rev.*, 103843, doi:<https://doi.org/10.1016/j.earscirev.2021.103843>, *accepted*.

Balting, D., A. AghaKouchak, G. Lohman and **Ionita, M.**, 2021: Northern Hemisphere drought risk in a warming climate, *Npj Climate and Atmospheric Science*, 4, 61. <https://doi.org/10.1038>

Ionita, M. and Nagavciuc, V. 2021: Changes in drought features at European level over the last 120 years, *Nat. Hazards Earth Syst. Sci.*, Earth Syst. Sci., 21, 1685–1701, <https://doi.org/10.5194/nhess-21-1685-2021>.

Ionita, M., D.E. Caldarescu and V. Nagavciuc, 2021: Compound hot and dry events in Europe: variability and large-scale drivers, *Front. Clim.*, 3, 58, doi:10.3389/fclim.2021.688991.

Dima, M., Nichita, D.R., Lohmann, G., **Ionita, M.** and M. Voiculescu 2021: Early-onset of Atlantic Meridional Overturning Circulation weakening in response to atmospheric CO₂ concentration. *npj Clim Atmos Sci* 4, 27. <https://doi.org/10.1038/s41612-021-00182-x>

Balting, D. F., **Ionita, M.**, Wegmann, M., Helle, G., Schleser, G. H., Rimbu, N., Freund, M. B., Heinrich, I., Caldarescu, D., and Lohmann, G. 2021: Large-scale climate signals of a European oxygen isotope network from tree rings, *Clim. Past*, 17, 1005–1023, <https://doi.org/10.5194/cp-17-1005-2021>.

Ionita, M.; Nagavciuc, Viorica. 2021: Extreme Floods in the Eastern Part of Europe: Large-Scale Drivers and Associated Impacts. *Water* 13, no. 8: 1122. <https://doi.org/10.3390/w13081122>

Ionita, M., Dima, M., Nagavciuc, V., Scholz, P. and Lohmann, G., 2021: Past megadroughts in central Europe were longer, more severe and less warm than modern droughts. *Commun Earth Environ* 2, 61. <https://doi.org/10.1038/s43247-021-00130-w>.

Rimbu, N., Lohmann, G., **Ionita, M.**, Czymzik, M. and Brauer, A. 2021: Interannual to millennial-scale variability of River Ammer floods and its relationship with solar forcing. *Int J Climatol*. Accepted. doi:10.1002/joc.6715.

Rimbu, N., **Ionita, M.**, and Lohmann, G., 2021: A Synoptic Scale Perspective on Greenland Ice Core $\delta^{18}\text{O}$ Variability and Related Teleconnection Patterns. *Atmosphere*, 12, 294.



❖ 2020

Ionita, M., Nagavciuc, V., 2020: Forecasting low flow conditions months in advance through teleconnection patterns, with a special focus on summer 2018. *Nature Scientific Reports* 10, 13258;

Ionita, M., Nagavciuc, V., and Guan, B., 2020: Rivers in the sky, flooding on the ground: the role of atmospheric rivers in inland flooding in central Europe, *Hydrol. Earth Syst. Sci.*, 24, 5125–5147, <https://doi.org/10.5194/hess-24-5125-2020>.

- Ionita, M.**, Nagavciuc, V., Kumar, R. and Rakovec, O., 2020: On the curious case of the recent decade, mid-spring precipitation deficit in central Europe, *Npj Climate and Atmospheric Science*, **3**, 49.
- Rimbu, N., Lohmann, G., **Ionita, M.**, Czymzik, M. and Brauer, A. 2020: Interannual to millennial-scale variability of River Ammer floods and its relationship with solar forcing. *Int J Climatol*. Accepted. doi:[10.1002/joc.6715](https://doi.org/10.1002/joc.6715)
- Roibu, C.-C., Sfeclă, V., Mursa, A., **Ionita, M.**, Nagavciuc, V., Chiriloaei, F., Leșan, I., Popa, I., 2020: The Climatic Response of Tree Ring Width Components of Ash (*Fraxinus excelsior* L.) and Common Oak (*Quercus robur* L.) from Eastern Europe. *Forests* 2020, **11**, 600;
- Yang, H., Lohmann, G., Krebs-Kanzow, U., **Ionita, M.**, Shi, X., Sidorenko, D., et al., 2020: Poleward shift of the major ocean gyres detected in a warming climate. *Geophysical Research Letters*, **47**, e2019GL085868;
- Vaideanu, P., Dima, M., Pirloaga, R., **Ionita, M.** 2020: Disentangling and quantifying contributions of distinct forcing factors to the observed global sea level pressure field. *Clim Dyn* **54**, 1453–1467;
- ❖ **2019**
- J. Cohen, X. Zhang, J. Francis, T. Jung, R. Kwok, J. Overland, T. J. Ballinger, U. S. Bhatt, H. W. Chen, D. Coumou, S. Feldstein, H. Gu, D. Handorf, G. Henderson, **M. Ionita**, M. Kretschmer, F. Laliberte, S. Lee, H. W. Linderholm, W. Maslowski, Y. Peings, K. Pfeiffer¹, I. Rigor²¹, T. Semmler, J. Stroeve, P. C. Taylor, S. Vavrus, T. Vihma, S. Wang, M. Wendisch, Y. Wu, J. Yoon, 2019: Divergent consensus on Arctic Amplification influence on mid-latitude severe winter weather. *Nature Climate Change*, **10**, 20–29;
- Nagavciuc, V., Kern, Z., **Ionita, M.**, Hartl, C., Konter, O., Esper, J. and Popa, I., 2019: Climate signals in carbon and oxygen isotope ratios of Pinus cembra tree-ring cellulose from the Calimani Mountains, Romania, *International Journal of Climatology*, **40**(5), 2539-2556, doi:<https://doi.org/10.1002/joc.6349>;
- Alawad, K. A., Al-Subhi, A. M., Alsaafani, M. A., Alraddadi, T. M., **Ionita, M.** and Lohmann, G. 2019: Large-Scale Mode Impacts on the Sea Level over the Red Sea and Gulf of Aden, *Remote Sensing*, **11** (19), doi:<https://doi.org/10.3390/rs11192224>;
- Nagavciuc, V., Badaluta, C.A. and **Ionita, M.** 2019: Tracing the Relationship between Precipitation and River Water in the Northern Carpathians Base on the Evaluation of Water Isotope Data, *Geosciences*, **9** (5), 198, doi:<https://doi.org/10.3390/geosciences9050198>;
- Perșoiu, A., **Ionita, M.** and Weiss, H. 2019: Atmospheric blocking induced by the strengthened Siberian High led to drying in west Asia during the 4.2\,ka\,BP event — a hypothesis , *Climate of the Past*, **15** (2), pp. 781-793;
- Ionita, M.**, Grosfeld, K., Scholz, P., Treffeisen, R. and Lohmann, G. 2019: September Arctic sea ice minimum prediction — a skillful new statistical approach, *Earth System Dynamics*, **10** (1), pp. 189-203 . doi:<https://doi.org/10.5194/esd-10-189-2019>;
- Badaluta, C.A., Perșoiu, A., **Ionita, M.**, Nagavciuc, V. and Bistricean, P. I. 2019: Stable H and O isotope-based investigation of moisture sources and their role in river and groundwater recharge in the NE Carpathian Mountains, East-Central Europe. *Isotopes in Environmental and Health Studies*, pp. 1-18;
- Nagavciuc, V., Roibu, C.C., **Ionita, M.**, Mursa, A., Cotos, M.G. and Popa, I. 2019: Different climate response of three tree ring proxies of Pinus sylvestris from the Eastern Carpathians, Romania, *Dendrochronologia*, **54**, 56 – 63;
- Bruno W., JA Ballesteros Cánovas, N. MacDonald, WHJ Toonen, V. Baker, M. Barriendos, G. Benito, A. Brauer, J.P. Corella, R. Denniston, R. Glaser, **M. Ionita**, M. Kahle, T. Liu, M. Luetscher, M. Macklin, M. Mudelsee, S. Munoz, L. Schulte, S. St. George, M. Stoffel and O. Wetter, 2019: Interpreting

historical, botanical, and geological evidence to aid preparations for future floods. *WIREs Water*, 6: null. doi: 10.1002/wat2.1318;

Nagavciuc V., **M. Ionita**, A. Persoiu, I. Popa, N. J. Loader and D. McCarroll, 2019: Stable oxygen isotopes in Romanian oak tree rings record summer droughts and associated large-scale atmospheric circulation patterns over Europe, *Clim. Dyn* 52:6557-6568, doi.org/10.1007/s00382-018-4530-7;

❖ 2018

Cleary D. M., B. P. Onac, I. Tanțău, F.L. Forray, J. Wynn, **M. Ionita** and T. Tămaș, 2018: A guano-derived $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ record of climate since the Medieval Warm Period in north-west Romania. *J. Quaternary Sci.*, 33: 677-688;

Felis T., **M. Ionita**, N. Rimbu, N., G. Lohmann and M. Kölling, 2018: Mild and arid climate in the eastern Sahara-Arabian Desert during the late Little Ice Age. *Geophysical Research Letters*, 45, 7112–7119;

Ionita M., P. Scholz, K. Grosfeld and R. Treffeisen, 2018: Moisture transport and Antarctic sea ice: austral spring 2016 event, *Earth Syst. Dynam.*, 9, 939-954;

Ionita M., C.-A. Badaluta, P. Scholz, and S. Chelcea, 2018: Vanishing river ice cover in the lower part of the Danube basin – signs of a changing climate. *Nature Scientific Reports* 8,7948, DOI 10.1038/s41598-018-26357-w;

Cleary D.M., B.P.Onac, I. Tantau, F.L. Forray, J.C. Wynn, **M. Ionita**, and T. Tamas, 2018: A guano derived $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ record of climate since the medieval Warm Period in north-west Romania, *Journal of Quaternary Science*, 33(6) 677-688;

❖ 2017

Meißner D., B. Klein, and **M. Ionita**, 2017: Development of a monthly to seasonal forecast framework tailored to inland waterway transport in central Europe. *Hydrol. Earth Syst. Sci.*, 21, 6401-6423, <https://doi.org/10.5194/hess-21-6401-2017>;

Cleary D.M., J. G. Wynn, **M. Ionita**, F.L. Forray and B.P. Onac, 2017: Evidence of long-term NAO influence on East-Central Europe winter precipitation from a guano-derived $\delta^{15}\text{N}$ record, *Scientific Reports*, 7 (14095);

Pfeiffer M., and **M. Ionita**, 2017: Assessment of Hydrologic Alterations in Elbe and Rhine Rivers, Germany, *Water*, 9(9):684;

Laaha G., T. Gauster, L. M. Tallaksen, J.-P. Vidal, K. Stahl, C. Prudhomme, B. Heudorfer, R. Vlnas, **M. Ionita**, H. A. J. Van Lanen, M.-J. Adler, L. Caillouet, C. Delus, M. Fendekova, S. Gailliez, J. Hannaford, D. Kingston, A.F. Van Loon, L. Mediero, M. Osuch, R. Romanowicz, E. Sauquet, J.H. Stagge, and W.K. Wong, 2017: The European 2015 drought from a hydrological perspective, *Hydrology and Earth System Sciences.*, 21, 3001-3024, <https://doi.org/10.5194/hess-21-3001-2017>;

Persoiu A., B.P. Onac, J.C. Wynn, M. Blaauw, **M. Ionita**, and Hansson M. 2017: Holocene winter climate variability in Central and Eastern Europe. *Nature Scientific Reports*, 1196: 2045 – 2322, doi: 10.1038/s41598-017-01397-w;

Swierczynski T., **M. Ionita**, and D. Pino 2017: Using archives of past floods to estimate future flood hazards, *Eos*, 98, <https://doi.org/10.1029/2017EO066221>. Published on 13 January 2017;

Ionita M., L.M. Tallaksen, D. Kingston, J.H. Stagge, G. Laaha, H. Van Lanen, P. Scholz, S. Chelcea, and K. Haslinger, 2017: The European 2015 drought from a climatological perspective. *Hydrology and Earth System Sciences*, 21, pp. 1397-1419. doi:10.5194/hess-21-1397-2017;

❖ 2016

Zhang, P., **M. Ionita**, G. Lohmann, D. Chen, and H.W. Linderholm, 2016: Can tree-ring density data reflect summer temperature extremes and associated circulation patterns over Fennoscandia?. *Climate Dynamics*, 49, 2721-2736, doi:10.1007/s00382-016-3452-5;

- Ionita M.**, P. Scholz, G. Lohmann, M. Dima, and M. Prange, 2016: Linkages between atmospheric blocking, sea ice export through Fram Strait and the Atlantic Meridional Overturning Circulation, *Scientific Reports*, 6 (32881). doi:10.1038/srep32881;
- Yang H., G. Lohmann G., W. Wei, M. Dima, **M. Ionita**, and J. Liu, 2016: Intensification and poleward shift of subtropical western boundary currents in a warming climate, *Journal of Geophysical Research-Oceans*, 121, pp. 4928-4945;
- Van Lanen H., G. Laaha, D. Kingston, T. Gauster, **M. Ionita** et al., 2016: Hydrology needed to manage droughts: the 2015 European case. *Hydrological Processes*, doi:10.1002/hyp.10838;
- Rimbu N., M. Czymzik, **M. Ionita**, G. Lohmann, and A. Brauer, 2016: Atmospheric circulation patterns associated with the variability of River Ammer floods: evidence from observed and proxy data. *Clim. Past*, 12, 377-385, doi:10.5194/cp-12-377-2016;
- Ionita M.**, P. Scholz, and S. Chelcea, 2016: Assessment of droughts in Romania using the Standardized Precipitation Index. *Natural Hazards*, pp. 1-16, doi: 10.1007/s11069-015-2141-8;
- ❖ **2015**
- Ionita M.**, P. Scholz, and S. Chelcea, 2015: Spatio-temporal variability of dryness/wetness in the Danube River Basin, *Hydrological Processes*, 29: 4483–4497. doi: 10.1002/hyp.10514;
- Ionita M.**, C. Boroneant, and S. Chelcea, 2015: Seasonal modes of dryness and wetness variability over Europe and their connections with large scale atmospheric circulation and global sea surface temperature. *Climate Dynamics*, 45: 2803. <https://doi.org/10.1007/s00382-015-2508-2>;
- Ionita M.**, 2015: Interannual summer streamflow variability over Romania and its connection to large-scale atmospheric circulation. *Int. J. Climatol.*, doi: 10.1002/joc.4278;
- ❖ **2014**
- Ionita M.**, M. Dima, G. Lohmann, P. Scholz, and N. Rimbu, 2014: Predicting the June 2013 European Flooding based on Precipitation, Soil Moisture and Sea Level Pressure. *J. Hydrometeorology*, 16, 598–614., doi: <http://dx.doi.org/10.1175/JHM-D-14-0156.1>;
- Rimbu N., G. Lohmann, and Ionita M. 2014: Interannual to multidecadal Euro-Atlantic blocking variability during winter and its relationship with extreme low temperatures in Europe, *J. Geophys. Res – Atmospheres*, 119, 13,621–13,636, doi:10.1002/2014JD021983;
- Ionita M.**, S. Chelcea, N. Rimbu, and M-J Adler, 2014: Spatial and temporal variability of winter streamflow over Romania and its relationship to large-scale atmospheric circulation. *Journal of Hydrology*, 519 (B): 1339–1349. DOI: 10.1016/j.jhydrol.2014.09.024;
- Ionita M.**, 2014: The Impact of the East Atlantic/Western Russia Pattern on the Hydroclimatology of Europe from Mid-Winter to Late Spring. *Climate*, 2(4), 296-309; doi:10.3390/cli2040296;
- Ionita M.**, T. Felis, G. Lohmann, N. Rimbu, and J. Pätzold, 2014: Distinct modes of East Asian Winter Monsoon documented by a southern Red Sea coral record. *J. Geophys. Res – Oceans*, 119, 1517–1533, doi:10.1002/2013JC009203;
- Scholz P., D. Kieke, G. Lohmann, **M. Ionita**, and M. Rhein, 2014: Evaluation of Labrador Sea water formation in a global finite-element sea-ice ocean model setup based on a comparison with observational data. *J. Geophys. Res – Oceans*, 119, 1644–1667, doi: 10.1002/2013JC009232;
- ❖ **2013**
- Chelcea, S., and M. Ionita, 2013: Extreme Value Analysis of The Barlad River Time Series. “Ovidius” University Annals of Constanta – Series. *Journal of Civil Engineering*. 273 – 280;
- Rimbu, N., G. Lohmann, G. König-Langlo, C. Necula, and **M. Ionita**, 2013: Daily to intraseasonal oscillations at Antarctic research station Neumayer. *Antarctic Science*, available on CJO2013. doi:10.1017/S0954102013000540;

❖ 2012

Ionita M., N. Rimbu, S. Chelcea, and S. Patrut, 2012: Multidecadal variability of summer temperature over Romania and its relation with Atlantic Multidecadal Oscillation, *Theor. Appl. Climatol.*, 113(1-2): 305-315, doi: 10.1007/s00704-012-0786-8;

Ionita M., G. Lohmann, N. Rimbu, and P. Scholz, 2012: Dominant modes of Diurnal Temperature Range variability over Europe and their relationships with large-scale atmospheric circulation and sea surface temperature anomaly patterns, *J. Geophys. Res. – Atmosphere*, 117, D15111, doi:10.1029/2011JD016669;

Ionita M., G. Lohmann, N. Rimbu, and S. Chelcea, 2012: Interannual variability of Rhine river streamflow and its relationship with large-scale anomaly patterns in spring and autumn, *Journal of Hydrometeorology*, 13, 172–188. doi: 10.1175/JHM-D-11-063.1;

❖ 2011

Ionita M., G. Lohmann, N. Rimbu, S. Chelcea, and M. Dima. 2011: Interannual to decadal summer drought variability over Europe and its relationship to global sea surface temperature. *Climate Dynamics*, 38: 363-377. DOI: 10.1007/s00382-011-1028-y;

Ionita M., N. Rimbu, and G. Lohmann, 2011: Decadal variability of the Elbe river streamflow. *International Journal of Climatology* 31 (1), 22–30. DOI: 10.1002/joc.2054;

❖ 2004 - 2008

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