

 <p style="text-align: center;"><b>Europass Curriculum Vitae</b></p>	
<b>PERSONAL INFORMATION</b>	
First name / Surname	<b>Sorin CHEVAL</b>
Address	Bucharest (Romania)
Mobile	0040-724248491
E-mails	sorin.cheval@meteoromania.ro; sorincheval@yahoo.com
Nationality	Romanian
Date of birth / Gender	20/09/1970 / male
<b>Scientific title</b>	<b>Ph. D., Prof. Habil.</b>
<b>PROFESSIONAL POSITIONS</b>	
<p>Dates</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p> <p>Name and address of employer</p> <p>Type of business or sector</p>	<p>31/08/2012 to date</p> <p><b>Senior Researcher</b></p> <p>Fundamental and applied research in natural hazards and climatology (urban climate, climate change). Coordination and expert to national and international research projects.</p> <p><b>National Meteorological Administration</b>, 97 Sos. Bucuresti-Ploiesti, Sect. 1, Bucharest, Romania</p> <p>Scientific Research</p>
<p>Dates</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p> <p>Name and address of employer</p> <p>Type of business or sector</p>	<p>09/2020 – 08/2023</p> <p><b>Director for Applied Meteorology (09/2020-03/2023) and Scientific Director (04/2023-08/2023)</b></p> <p>Scientific Research Management</p> <p><b>National Meteorological Administration</b>, 97 Sos. Bucuresti-Ploiesti, Sect. 1, Bucharest, Romania</p> <p>Scientific Research</p>
<p>Dates</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p> <p>Name and address of employer</p> <p>Type of business or sector</p>	<p>2016 to date</p> <p><b>Professor; Vice-Dean of Research (2019-2020)</b></p> <p>Teaching (General Meteorology, Synoptic Meteorology, Aviation Meteorology, Climatology); Scientific Research; Scientific Research Management</p> <p><b>“Henri Coandă” Air Force Academy</b>, 160 Mihai Viteazul str., Braşov, Romania</p> <p>Higher Education and Scientific Research</p>
<p>Dates</p> <p>Occupation or position held</p> <p>Main activities</p> <p>Name and address of employer</p> <p>Type of business or sector</p>	<p>2014 to date</p> <p><b>Associate Professor</b></p> <p>Teaching (Climate Change Policies; Climate Change and Environmental Impacts; Anthropocene)</p> <p><b>University of Bucharest</b>, 1 Nicolae Bălcescu Blvd, Bucharest, Romania</p> <p>Higher Education and Scientific Research</p>
Dates	16/08/2010 - 31/08/2012

Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector	<b>Senior Researcher; Scientific Director</b> (November 2010 – August 2012) Fundamental and applied research in natural hazards and climatology. Submitting proposals and co-ordinating national and international research projects. Scientific Research Management <b>National Research and Development Institute for Environmental Protection</b> , 294, Splaiul Independentei Str., Bucharest, Romania Scientific Research and Management									
Dates Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector	01/05/2004 - 15/08/2010 <b>Senior Researcher</b> Fundamental and applied research in climatology. Submitting proposals and co-ordinating national and international research projects. Deputy-Head of the Dept. of Climatology (2007-2010) <b>National Meteorological Administration</b> , 97 Sos. Bucuresti-Ploiesti, Sect. 1, Bucharest, Romania Scientific Research									
Dates Occupation or position held Main activities Name and address of employer Type of business or sector	15/08/1995 - 15/03/2006 <b>Scientific Researcher</b> Fundamental and applied research in climatology, GIS, natural hazards <b>Institute of Geography, Romanian Academy</b> , 12 D. Racovita str., Bucharest, Romania Scientific Research									
<b>EDUCATION AND TRAINING</b>										
Dates Qualification awarded Principal subjects Organisation	01/10/1997 - 15/10/2004 <b>Ph. D.</b> Natural hazards, Climatology, GIS Institute of Geography, Romanian Academy, Bucharest, Romania									
Dates Qualification awarded Principal subjects Organisation	01/10/1995 - 01/07/1996 <b>M. Sc.</b> Climatology University of Bucharest, Faculty of Geography, Bucharest, Romania									
Dates Qualification awarded Principal subjects Organisation	01/10/1990 - 15/07/1995 <b>B. Sc.</b> Geography University of Bucharest, Faculty of Geography, Bucharest, Romania									
<b>Personal skills and competences</b>										
Mother tongue(s)	Romanian									
Other language(s)	English, French									
Self-assessment	Understanding			Speaking				Writing		
<i>European level (*)</i>	Listening		Reading		Spoken interaction		Spoken production			
English	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user

French	B2	Independent user	B2	Independent user	B1	Independent user	B1	Independent user	B1	Independent user
	(*) <a href="#">Common European Framework of Reference (CEF) level</a>									
<b>Social skills and competences</b>	Work in multicultural environment, excellent coordination and communication skills, flexibility									
<b>EVALUATION EXPERIENCE, ORGANISATIONAL SKILLS AND COMPETENCES</b>	<ul style="list-style-type: none"> <li>• <b>Member of the National Council for Attesting Titles, Diplomas and Certificates (C.N.A.T.D.C.U.), Earth Science Commission (2016 to date)</b></li> <li>• <b>Member of the National Interministerial Committee for Climate Change (Romania) (2022-2023)</b></li> <li>• <b>Member of the WMO Regional Association VI Working Group on Research (2022-2023)</b></li> <li>• <b>Reviewer of the IPCC V, Working Groups I &amp; II. Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX) <a href="http://www.ipcc-wg2.gov/SREX/images/uploads/SREX-All_FINAL.pdf">http://www.ipcc-wg2.gov/SREX/images/uploads/SREX-All_FINAL.pdf</a></b></li> <li>• <b>Member of the EU Expert group on evaluation methodologies for the interim and ex-post evaluations of Horizon 2020</b></li> <li>• <b>Pannonian Basin Experiment (PannEx) (Team Task Leader - Urban Climate and Air Quality) 2018 – 2024</b></li> <li>• <b>Project peer-evaluation:</b> Horizon Europe (2022, 2023); Marie Skłodowska-Curie Actions Postdoctoral Fellowships (2021); Horizon Green Deal Programme (2021); Horizon 2020 EU Programme (2015-2020); Framework Programme 7 (2010); Portuguese Foundation for Science and Technology (2010-2012); Bulgarian National Science Fund (2016-2017); External observer LIFE+ Project GAIA (2012); Romanian National Plan II - Research Projects for Young Research Teams (2015; 2017; 2020); National University Research Council Romania; National Plan for Research, Development and Innovation, Romania</li> <li>• <b>Associate Editor ISI Journal:</b> Urban Climate (2023 to date)</li> <li>• <b>Journal peer-review:</b> Atmospheric Research; Theoretical and Applied Climatology; Physics and Chemistry of the Earth; Urban Climate; Renewable Energy; Journal of Hydrology; International Journal of Digital Earth; Energy Conversion and Management; International Journal of Climatology; Climate Research; Sensors; Remote Sensing; Sustainability; Energies; Geophysical Research Letters; Science of the Total Environment</li> <li>• <b>Member in Doctoral Committees:</b> Babeş-Bolyai University Cluj-Napoca; University of Oradea; West University of Timisoara; “Alexandru Ioan-Cuza” University Iași, Romania; University Transilvania, Braşov, Romania</li> <li>• <b>Member in Habilitation Committees:</b> “Ștefan cel Mare” University Suceava, Romania</li> </ul>									
<b>Technical skills and competences</b>	<ul style="list-style-type: none"> <li>• Expertise in various environmental issues in terms of science, impact, management; Extended experience in coordinating and administrating big research teams and complex research projects</li> <li>• Organizing conferences, workshop and other scientific meetings (e.g. Bucharest Urban Climate Summer School 2017, 2018; 2019; National GIS conferences, Documentation of Mountain Disasters Workshop in Bucharest - 1999, Carpatho-Balkan Conference of Geomorphology - 1998, COST ES601 Management Committee - 2010)</li> </ul>									
<b>Computer skills and competences</b>	<ul style="list-style-type: none"> <li>• Advanced computer skills, including editing, database manipulation, statistics and image processing. Basic skills in programming</li> </ul>									

<p><b>Additional information:</b></p> <p>a) awards; research b) fellowship; c) professional consulting; d) mentorship; e) professional membership; f) research metrics</p>	<p><b>a) Awards</b></p> <ul style="list-style-type: none"> <li>• <b>Romanian Academy “Ștefan Hepites” Award on 2015</b>, for the book Micu D, Dumitrescu A, <u>Cheval S</u>, Birsan MV (2015) <i>Climate of the Romanian Carpathians. Variability and Trends</i>. Springer 213 pp.</li> <li>• <b>Romanian Academy “Ștefan Hepites” Award on 2010</b>, for the book <i>Climate variability and changes in Romania</i> (Pro Universitaria Publ. House, București, 226 pp. In Romanian). Authors: Busuioc A, Caian M, <u>Cheval S</u>, Bojariu R, Boroneant C, Baci M, Dumitrescu A.</li> <li>• <b>Professor Bologna Award 2018</b></li> <li>• <b>Associate Professor of the Year Award, Senate of the University of Bucharest, 2017</b></li> <li>• <b>Medal of Honour for Promoting Meteorology</b>, Henri Coandă Air Force Academy, Brașov, 2021</li> </ul> <p><b>b) Research Fellowship</b></p> <ul style="list-style-type: none"> <li>• <b>Visiting Scientist, Euro-Mediterranean Centre for Climate Change (CMCC)</b>, FEEM Venice, Italy (2008)</li> <li>• <b>Fulbright Visiting Scientist, University of South Carolina</b>, Natural Hazards Lab, U.S.A. (2001-2002)</li> </ul> <p><b>c) Professional consulting and climate services contracts for:</b></p> <ul style="list-style-type: none"> <li>• World Bank: Integrated Development Strategy for Bucharest (2019-2020)</li> <li>• Ministry of Environment, Water and Forests: National Strategy for Desertification (2021-2022)</li> <li>• Ministry of Environment, Water and Forests: National Strategy for Climate Adaptation (2021-20223)</li> </ul> <p><b>d) Mentorship</b></p> <ul style="list-style-type: none"> <li>• Post-doctoral research: 2 (University of Bucharest, Romania) (2019-2020, and 2020-2021)</li> <li>• Doctoral students: 5 (Doctoral School of Geography, Babes-Bolyai University, Cluj-Napoca, Romania) (2021-2024)</li> <li>• Master students: 2 (University of Bucharest, Romania) (2019)</li> <li>• Bachelor thesis: 30 (“Henri Coandă” Air Force Academy, Brașov, Romania) (2019-2021)</li> </ul> <p><b>e) Professional membership</b></p> <p><i>International</i></p> <ul style="list-style-type: none"> <li>• European Geophysical Union (Convener <i>Urban Climate and Biometeorology</i>, 2014-2020)</li> <li>• Society for Urban Ecology (2015 to date)</li> <li>• European Severe Storm Laboratory - Advisory Board member (2017 – 2024)</li> <li>• International Commission on History of Meteorology (ICHM), Area Representative (Europe) (2018-2021)</li> </ul> <p><i>In Romania</i></p> <ul style="list-style-type: none"> <li>• Commission for Renewable Energy of the Romanian Academy (2015-2024); Romanian Meteorological Society (Vice-President, 2012-2016); European</li> </ul>
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Geophysical Union (2014-2017); Romanian Association of Applied Meteorology and Education (2017 to date)

- Member in the Management Committee of the COST Actions: COST Action 719: The use of geographical information systems in climatology and meteorology COST Action ES0601: Advances in homogenisation methods of climate series: an integrated approach (HOME)

**f) Research metrics (10/02/2026)**

- Web of Science / Clarivate Analytics: h-index 26
- Google Scholar Profile: citations 4524, h-index 33, i10-index 69
- Researcher ID: B-4506-2011 (h-index 26)
- Scopus Author ID: 6507295878 (h-index 25)
- ORCID ID: 0000-0001-6412-1918

**SELECTED PUBLICATIONS (2003-2026)**

**BOOKS**

1. Máñez Costa, M., Oen, A. M. P., Schmid Neset, T.-S., Celliers, L., Suhari, M., Huang-Lachmann, J.-T., Pimentel, R., Blair, B., Jeuring, J., Rodriguez-Camino, E., Photiadou, C., Columbié, Y. J., Gao, C., Tudose, N., Cheval, S., Votsis, A., West, J. J. (, Lee, K., Shaffrey, L., ... Schuck-Zöllner, S. (2022). Co-production of Climate Services: A diversity of approaches and good practice from the ERA4CS projects (2017–2021). Linköping University Electronic Press. <https://doi.org/10.3384/9789179291990>
2. Ioja IC, Niță MR, Hossu CA, Onose DA, Badiu DL, Cheval S, Popa AM, Mitincu CG (2020) Green solutions for the cities of Romania (Soluții verzi pentru orașele din România). Ars Docendi, București, 160 pp, ISBN: 978-606-998-097-2.
3. Micu D, Dumitrescu A, Cheval S, Birsan MV (2015) Climate of the Romanian Carpathians. Variability and Trends. Springer 213 pp.
4. Cheval S (2015) Hazarde naturale în Podișul Dobrogei de Sud și litoralul adiacent. (Natural Hazards in the South Dobroudja Plateau and the adjacent coast) Editura. PRINTECH, București, 200 pp ISBN 978-606-23-0408-9.
5. Cheval S. (Ed) (2012) Natural Disasters. InTech, Rijeka, 156 pp.
6. Busuioc A, Caian M, Cheval S, Bojariu R, Boroneant C, Baciu M, Dumitrescu A (2010) Climate variability and changes in Romania. Pro Universitaria Publ House, București, 226 pp. (In Romanian)
7. Bălțeanu D, Busuioc A, Huba M, Pomázi I, Săndulescu M, Witkowski Z, Abrudan I, Balint G, Barka I, Beták J, Bojariu R, Borcos M, Boroneant C, Brožová J, Cheval S, et al (2007) Carpathian Environment Outlook. United Nations Environment Programme (UNEP), Geneva, 236 pp.
8. Bălțeanu D, Stan-Sion A, Cheval S, Trandafir P, Dobre B, Râmniceanu V, Dragne D, Micu M, Damian N, Costache A. 2004. Natural and technological hazards in Romania. A tornado event at Făcaeni, August 12, 2002. Its causes, consequences, perception, and mangement. Edit. Telegrafia, București, 56 p. (In Romanian).
9. Cheval S. (ed.) (2003), Indices and quantitative methods in climatology. Edit. Universității din Oradea, 120 p. (In Romanian)

**PUBLICATIONS IN WEB OF SCIENCE INDEXED JOURNALS**

1. Amihăesei V-A, Sfică L, Raveh-Rubin S, Cheval S, Micu D. (2026) Contribution of Mediterranean cyclones to snowfall accumulation over Romania. Atmospheric Research 332, 108679, <https://doi.org/10.1016/j.atmosres.2025.108679>.
2. Dumitrașcu M, Roznoviețchi I, Sima M, Grigorescu I, Mitrică M, Micu D, Fălcescu V, Bulai A, Cheval S (2026) Public perception of climate change impacts and sectoral adaptation in Romania. Environmental Development 57, 101346. <https://doi.org/10.1016/j.envdev.2025.101346>.

3. Gabrian, I. S., Dinicila, S., Dumitrescu, A., Velea, L., & Cheval, S. (2025). Simulating the Urban Heat Island during heat wave events using WRF urban parameterizations: a case study for Bucharest (Romania). *Geomatics, Natural Hazards and Risk*, 16(1). <https://doi.org/10.1080/19475705.2025.2549490>
4. Falcescu V, Cheval S, Croitoru AE, Hossu CA, Iojă IC (2025). A framework-based assessment of climate adaptation readiness in Romanian cities. *Climate Policy*, 1–18. <https://doi.org/10.1080/14693062.2025.2570741>.
5. Dumitrescu A, Micu D, Guijarro J, Manea A, Cheval S (2025) Long-term homogenized air temperature and precipitation datasets in Romania, 1901–2023. *Sci Data* 12, 1116. <https://doi.org/10.1038/s41597-025-05371-4>.
6. Aghazadeh F, Samadi M, Cheval S, Moshiri S (2025) Impacts of land use, vegetation, and air pollution on surface urban heat island spatiotemporal dynamics: Tehran as a case study. *International Journal of Environmental Science and Technology*. <https://doi.org/10.1007/s13762-025-06561-8>.
7. Onțel I, Amihăesei V, Micu D, Dumitrescu A, Cheval S (2025) Influence of environmental factors on land surface temperature and surface urban heat island. A cross-country analysis in Romania, *Sustainable Cities and Society*, 128, 106454. <https://doi.org/10.1016/j.scs.2025.106454>.
8. Sergio M Vicente-Serrano, (...), Cheval S, (...) (2025) High temporal variability not trend dominates Mediterranean precipitation. *Nature*, 639: 658–666. <https://doi.org/10.1038/s41586-024-08576-6>.
9. Cheval S, Amihăesei VA, Dumitrescu A, Micu DM, Smău R-I (2025) Observed Variability and Future Projections of Urban Heatwaves in Romania. *International Journal of Climatology* 45(2): e8714. <https://doi.org/10.1002/joc.8714>.
10. Nita IA, Radu C, Cheval S, Birsan M (2024) Aviation accidents related to atmospheric instability in the United States (2000–2020). *Theor Appl Climatol*. <https://doi.org/10.1007/s00704-024-04968-w>
11. Falcescu V, Cheval S, Micu DM, et al (2024) Climate services in Romania – an analysis of stakeholders’ perceptions and needs. *Climate Services* 34:100476. doi: <https://doi.org/10.1016/j.cliser.2024.100476>
12. Cheval S, Amihăesei VA, Chitu Z, et al (2024) A systematic review of urban heat island and heat waves research (1991–2022). *Climate Risk Management* 44:100603. Doi: <https://doi.org/10.1016/j.crm.2024.100603>
13. Amihăesei VA, Micu DM, Cheval S, Dumitrescu A, Sfica L, Birsan MV. Changes in snow cover climatology and its elevation dependency over Romania (1961-2020) (2024) *Journal of Hydrology-Regional Studies* 51, doi:10.1016/j.ejrh.2023.101637
14. Ontel I, Cheval S, Irimescu A, Boldeanu G, Amihăesei V-A, Mihailescu D, Nertan A, Angearu C-V, Craciunescu V (2023) Assessing the Recent Trends of Land Degradation and Desertification in Romania Using Remote Sensing Indicators. *Remote Sensing* 15(19):4842. <https://doi.org/10.3390/rs15194842>
15. Cheval S, Dumitrescu A, Amihăesei V, Irașoc A, Paraschiv, M-G & Ghent, D (2023). A country scale assessment of the heat hazard-risk in urban areas. *Building and Environment*, 229, 109892. <https://doi.org/10.1016/j.buildenv.2022.109892>
16. Dumitrescu, A., Amihăesei, V., & Cheval, S. (2023). RoClib– bias-corrected CORDEX RCM dataset over Romania. *Geoscience Data Journal*. <https://doi.org/10.1002/gdj3.161>
17. Tudose NC, Marin M, Cheval S, et al (2023) Challenges and opportunities of knowledge co-creation for the water-energy-land nexus. *Climate Services* 30. doi:10.1016/j.cliser.2023.100340
18. Antal A, Dumitrescu A, Cheval S, Guerreiro PMP (2023) Enhanced precipitation prediction using DEM-based predictors and satellite imagery. *International Journal of Climatology* 43(6): 2504–2520. doi:10.1002/joc.7987
19. Tudose NC, Cheval S, Ungurean C et al (2022) Climate Services for Sustainable Resource Management: the Water—Energy—Land Nexus in the Târlung River Basin (Romania). *Land Use Policy*, 119, 106221. <https://doi.org/10.1016/j.landusepol.2022.106221>
20. Danielescu S, Adamescu MC, Cheval S, Dumitrescu A, Cazacu C, Borcan M, Postolache C (2022) Climate Change Impacts on Hydrological Processes in a South-Eastern European Catchment. *Water* 14(15): 2325. <https://doi.org/10.3390/w14152325>.

21. Cheval, S., Bulai, A., Croitoru, A.-E., Dorondel, Ștefan, Micu, D., Mihăilă, D., Sfică, L., & Tișcovschi, A. (2022). Climate Change Perception in Romania. *Theoretical and Applied Climatology* 149: 253-272. <https://doi.org/10.1007/s00704-022-04041-4>
22. Cheval, S., Dumitrescu, A., Irașoc, A., Paraschiv, M.-G., Perry, M., & Ghent, D. (2022). MODIS-based climatology of the Surface Urban Heat Island at country scale (Romania). *Urban Climate* 41, 101056. <https://doi.org/10.1016/j.uclim.2021.101056>
23. Mustățea, M., Cluiș, M., Tudose, N. C., & Cheval, S. (2022). An enhanced Machado Index of naturalness. *Catena* 212: 106091. <https://doi.org/10.1016/j.catena.2022.106091>
24. Ilona J, Bartok B, Dumitrescu A, Cheval S et al. (2022). Using Long-Term Historical Meteorological Data for Climate Change Analysis in the Carpathian Region. *Atmosphere*;13(11). doi:10.3390/atmos13111751
25. Santos Nouri A, Çalıřkan O, Charalampopoulos I, Cheval S, Matzarakis A (2022) Defining local extreme heat thresholds and Indoor Cooling Degree Necessity for vulnerable residential dwellings during the 2020 summer in Ankara – Part I: Air temperature. *Solar Energy* 242: 435-453, <https://doi.org/10.1016/j.solener.2021.10.059>.
26. Lakatos M, Szentes O, Kalin KC, Nimac I, Kozjek K, Cheval S, Dumitrescu A, Irașoc A, Stepanek P, Farda A et al (2021) Analysis of Sub-Daily Precipitation for the PannEx Region. *Atmosphere* 12, 838. <https://doi.org/10.3390/atmos12070838>.
27. Tudose NC, Marin M, Cheval S, Ungurean C, Davidescu SO, Tudose ON, Mihalache AL, Davidescu A (2021) SWAT Model Adaptability to a Small Mountainous Forested Watershed in Central Romania. *Forests* 12: 860. <https://doi.org/10.3390/f12070860>.
28. Antal A, Guerreiro PMP, Cheval S (2021) Comparison of spatial interpolation methods for estimating the precipitation distribution in Portugal. *Theoretical and Applied Climatology* 145: 1193–1206. <https://doi.org/10.1007/s00704-021-03675-0>.
29. Bates AE, Primack RB, Duarte CM (...) Cheval S, (...) (2021) Global COVID-19 lockdown highlights humans as both threats and custodians of the environment. *Biological Conservation* 109175. <https://doi.org/10.1016/j.biocon.2021.109175>.
30. Matzarakis A, Cheval S, Lin TP, Potchter O (2021) Challenges in Applied Human Biometeorology. *Atmosphere* 12: 296. <https://doi.org/10.3390/atmos12030296>.
31. Micu DM, Amihaesei V, Milian N, Cheval S (2021) Recent changes in temperature and precipitation indices in the Southern Carpathians, Romania (1961-2018). *Theoretical and Applied Climatology*. <https://doi.org/10.1007/s00704-021-03560-w>.
32. Micu DM, Dumitrescu A, Cheval S, Nita I-A, Birsan M-V (2021) Temperature changes and elevation-warming relationships in the Carpathian Mountains. *International Journal of Climatology* 41(3): 2154-2172. <https://doi.org/10.1002/joc.6952>.
33. Cheval S, Haliuc A, Antonescu B, Tișcovschi F, Dobre M, Tătui F, Dumitrescu A, Manea A, Tudorache G, Irimescu A, Birsan M-V, Mock C (2021) Enriching the historical meteorological information using Romanian language newspaper reports: a database from 1880 to 1900. *International Journal of Climatology* 41: E458-E562, <https://doi.org/10.1002/joc.6709>.
34. Cheval S, Popa A-M, Șandric I, Iojă I-C (2020) Exploratory analysis of cooling effect of urban lakes on land surface temperature in Bucharest (Romania) using Landsat imagery. *Urban Climate* 34, 100696. <https://doi.org/10.1016/j.uclim.2020.100696>.
35. Žak M, Niță A, Dumitrescu A, Cheval S (2020) Influence of synoptic scale atmospheric circulation on the development of urban heat island in Prague and Bucharest. *Urban Climate* 34, 100681. <https://doi.org/10.1016/j.uclim.2020.100681>.
36. Cheval S, Dumitrescu A, Amihaesei V-A (2020) Exploratory Analysis of Urban Climate Using a Gap-Filled Landsat 8 Land Surface Temperature Data Set. *Sensors*, 20, 5336. <https://doi.org/10.3390/s20185336>.

37. Andrei S, Andrei MD, Huştiu M, Cheval S, Antonescu B (2020) Tornadoes in Romania-from Forecasting and Warning to Understanding Public's Response and Expectations. *Atmosphere*, 11, 966. <https://doi.org/10.3390/atmos11090966>.
38. Cheval S, Dumitrescu A, Adamescu M, Cazacu C (2020) Identifying climate change hotspots relevant for ecosystems in Romania. *Climate Research* 80: 165-173. <https://doi.org/10.3354/cr01603>.
39. Cheval S, Adamescu MC, Georgiadis, T. Herrnegger M. Piticar A, Legates DR (2020) Observed and Potential Impacts of the COVID-19 Pandemic on the Environment. *International Journal of Environmental Research and Public Health*, 17: 4140, <https://doi.org/10.3390/ijerph17114140>.
40. Dumitrescu A, Brabek M, Cheval S (2020) Statistical Gap-Filling of SEVIRI Land Surface Temperature. *Remote Sensing*, 12, 1423; doi: <https://doi.org/10.3390/rs12091423>.
41. Cheval S, Micu D, Dumitrescu A, Irimescu A, Frighenciu M, Iojă C, Tudose NC, Davidescu Ş, Antonescu B (2020) Meteorological and Ancillary Data Resources for Climate Research in Urban Areas. *Climate*, 8, 37, doi: 10.3390/cli8030037.
42. Dumitrescu A, Cheval S, Guijarro JA (2020) Homogenization of a combined hourly air temperature dataset over Romania. *International Journal of Climatology*, doi: 10.1002/joc.6353.
43. Cremades R, Mitter H, Tudose NC, Sanchez-Plaza A, Graves A, Broekman A, Bender S, Giupponi C, Koundouri P, Bahri M, Cheval S, Cortekar J, Moreno Y, Melo O, Karner K, Ungurean C, Davidescu SO, Kropf B, Brouwer F, Marin M (2019) Ten principles to integrate the water-energy-land nexus with climate services for co-producing local and regional integrated assessments. *Science of the Total Environment* 693: 133662, doi: 10.1016/j.scitotenv.2019.133662.
44. Cheval S, Constantin S (2019) Black Sea impact on its west-coast land surface temperature. *Theoretical and Applied Climatology* 135(3-4): 1583-1593, doi: 1007/s00704-018-2454-0.
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### RESEARCH PROJECTS (2003-2026) AND ROLE IN THE PROJECT

Project title (Acronym) / webpage	Funding agency / Budget (Euro)	Role in the project / Institution	Period
Decision support Tool for Risk Evaluation, management and awareness of tree Failure Disasters ( <a href="#">TREESURE</a> )	European Commission / 229,000	Responsible Expert (National Meteorological Administration)	2025-2028
Climate-Resilient Development Pathways in Metropolitan Regions of Europe ( <a href="#">CARMINE</a> )	European Commission / 10,174,000	Principal investigator (Project coordinator) / National Meteorological Administration	2024-2027
Cross-sectoral Framework for Socio-Economic Resilience to Climate Change and Extreme Events in Europe ( <a href="#">CROSSEU</a> )	European Commission / 3,444,000	Principal investigator (Project coordinator) / National Meteorological Administration	2024-2027
OPTimising FORest management decisions for a low-carbon, climate resilient future in Europe ( <a href="#">OptFor-EU</a> )	European Commission / 4,289,000	Principal investigator (Project coordinator) / National Meteorological Administration	2023-2026
Synergies between Urban Heat Island and Heat Wave Risks in Romania: Climate Change Challenges and Adaptation Options ( <a href="#">SynUHI</a> )	PNCDI PN III (PCE) Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) / 240,000	Principal investigator (Project coordinator) / National Meteorological Administration	2022-2024
Climate Change Initiative extension (CCI+) Phase 2 – new Essential Climate Variables (ECVs) Land Surface Temperature ( <a href="#">LST-CCI</a> )	European Space Agency (ESA) / 40,000	Responsible Expert (National Meteorological Administration)	2023-2025
Climate Change Initiative extension (CCI+) Phase 1 – new Essential Climate Variables (ECVs) Land Surface Temperature ( <a href="#">LST-CCI</a> )	European Space Agency (ESA) / 30,000	Responsible Expert (National Meteorological Administration)	2018-2021
Developing resilience and tolerance of crop resource use efficiency to climate change and air pollution ( <a href="#">SUSCAP</a> )	SusCrop- ERA-NET	Expert (“Henri Coandă” Air Force Academy, Braşov, Romania)	2019-2022
Climate Services for the Water-Energy-Land Nexus ( <a href="#">CLISWELN</a> )	JPI Climate	Expert (National Institute for Research and Development in Forestry “Marin Drăcea”)	2017-2020
Nature-based solutions for increasing cities resilience and sustainability ( <a href="#">NATURB</a> )	PNCDI PN III (PCE) Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI)	Expert (University of Bucharest)	2017-2019
Experimental Methods for Ecosystems Services Assessment of Urban Lakes under Climate Changes ( <a href="#">EMERSA</a> )	PNCDI PN III (PED) Executive Agency for Higher Education,	Expert (University of Bucharest)	2017-2018

	Research, Development and Innovation Funding (UEFISCDI)		
Reducing urban heat island effects to improve urban comfort and balance energy consumption in Bucharest ( <a href="#">REDBHI</a> )	PNCI PN II, Parteneriate	Co-Principal Investigator/ Project Director (National Meteorological Administration)	2014-2017
Urban Heat Island Monitoring under Present and Future Climate ( <a href="#">UCLIMESA</a> )	National-Romanian Spatial Agency (ROSA) / 120,000	Principal investigator/Project Director / National Meteorological Administration	2013-2015
Mitigating Vulnerability of Water Resources under Climate Change ( <a href="#">CC-WARE</a> )	South Eastern Europe Transnational Programme / 104,000	Co-Principal Investigator/ Project Director (National Meteorological Administration)	2012-2014
Promotion and coordination of environmental research in Central and Eastern Europe for a sustainable Development ( <a href="#">PROCEED</a> )	EU-FP7	Co-Principal Investigator (National Institute for Research and Development in Environmental Protection)	2011-2013
Climate of the Carpathian Region ( <a href="#">CARPATCLIM</a> )	JRC	Co-Principal Investigator (National Institute for Research and Development in Environmental Protection)	2010-2013
Hydrometeorological Data Resources and Technologies for Effective Flash Flood Forecasting ( <a href="#">HYDRATE</a> )	FP6	Senior Researcher	2007-2010
Understanding the Dynamics of the Coupled Systems (DYNAMITE)	FP6	Senior Researcher	2005-2006
Integrated Remote Monitoring Techniques for Urban Heat Island (IRMOTUHI)	EUFAR- FP6	Principal Investigator (National Meteorological Administration)	2007-2008
Comfort and energetic efficiency in the buildings by using renewable energy (CEER)	National -CEEX	Co-Principal Investigator (National Meteorological Administration)	2006-2008
Defining, evaluating and zoning of the risk in the Romania's forestry (CLIDOIN)	National -CEEX	Co-Principal Investigator (National Meteorological Administration)	2006-2008
Climate change impact on Holocene and present dynamic of the Alpine environment in the Romanian Carpathians. Consequences in risk and landscape management (MEDALP)	National -CEEX	Co-Principal Investigator (National Meteorological Administration)	2006-2008
Indice sintetic pentru caracterizarea riscurilor climatice prin utilizarea tehnicilor GIS	CNCSIS	Principal investigator (Institutul de Geografie al Academiei Române)	2002-2003