

## LISTA DE LUCRĂRI

**I. Lucrări relevante pentru realizările profesionale obținute ulterior conferirii titlului de doctor în știință, incluse în format electronic în dosar**

1. Cheval S, Dumitrescu A (2014) The summer surface urban heat island of Bucharest (Romania) retrieved from MODIS images. *Theoretical and Applied Climatology*, doi: 10.1007/s00704-014-1250-8.
2. Cheval S, Busuioc A, Dumitrescu A, Birsan MV (2014) Spatiotemporal variability of meteorological drought in Romania using the standardized precipitation index (SPI). *Climate Research* **60**(3): 235-248, doi: 10.3354/cr01245.
3. Birsan MV, Dumitrescu A, Micu DM, Cheval S (2014) Changes in annual temperature extremes in the Carpathians since AD 1961. *Natural Hazards* 74(3):1899-1910, doi: 10.1007/s11069-014-1290-5.
4. Cheval S, Birsan MV, Dumitrescu A (2014) Climate variability in the Carpathian Mountains region over 1961-2010. *Global and Planetary Change* **118**: 85-96, doi: 10.1016/j.gloplacha.2014.04.005.
5. Bădescu V, Gueymard C, Cheval S, Oprea C, Baciuc M, Dumitrescu A, Iacobescu F, Miloș I, Rada C (2013) Accuracy and sensitivity analysis for 54 models of computing hourly diffuse solar irradiation on clear sky. *Theoretical and Applied Climatology*, **111**(3-4): 379-399, doi: 10.1007/s00704-012-0667-1.
6. Venema VKC, Mestre O, Aguilar E, Auer I, Guijarro JA, Domonkos P, Vertacnik G, Szentimrey T, Stepanek P, Zahradnicek P, Viarre J, Muller-Westermeier G, Lakatos M, Williams CN, Menne M, Lindau R, Rasol D, Rustemeier E, Kolokythas K, Marinova T, Andresen L, Acquafredda F, Fratianni S, Cheval S, Klancar M, Brunetti M, Gruber C, Prohom Duran M, Likso T, Esteban P, Brandsma T (2012) Benchmarking homogenization algorithms for monthly data. *Climate of the Past*, **8**, 89-115. doi: 10.5194/cp-8-89-2012.
7. Cheval S, Baciuc M, Dumitrescu A, Breza T, Legates DR, Chendeș V (2011) Climatologic adjustments to monthly precipitation in Romania. *International Journal of Climatology*, **31**: 704-714, DOI: 10.1002/joc.2099.
8. Parajka J, Kohnová S, Bálint G, Barbuc, M, Borga M, Claps P, Cheval S, Dumitrescu A, Gaume, E, Hlavcová K, Merz R, Pfandner M, Stăncălie G, Szolgay J, Blöschl G. 2010. Seasonal characteristics of flood regimes across the Alpine-Carpathian range. *Journal of Hydrology*, **394**(1-2): 78-89.
9. Cheval S, Dumitrescu A, Bell A (2009) The urban heat island of Bucharest during the extreme high temperatures of July 2007. *Theoretical and Applied Climatology*, **97**: 391-401.
10. Cheval S, Dumitrescu A (2009) The July urban heat island of Bucharest as derived from MODIS images. *Theoretical and Applied Climatology*, **96**(1-2): 145-153.

**II. Teza de doctorat**

Titlu: *Hazarde naturale în Podișul Dobrogei de Sud și litoralul adiacent*; Data susținerii 20.10.2004; Instituție: Institutul de Geografie al Academiei Române; Conducător științific: Prof. Dr. Acad. Dan Bălțeanu

### III. Brevete de invenție

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### IV. Cărți și capitole din cărți

1. Micu D, Dumitrescu A, Cheval S, Birsan MV (2015) Climate of the Romanian Carpathians. Variability and Trends. Springer, 213 pp.
2. Cheval S. (Ed) (2012) Natural Disasters. InTech, Rijeka, 156 pp.
3. Busuioc A, Caian M, Cheval S, Bojariu R, Boroneanț C, Baci M, Dumitrescu A (2010) Variabilitatea și schimbarea climei în România. Editura Pro Universitaria, București, 226 pp.
4. Bălțeanu D, Busuioc A, Huba M, Pomázi I, Săndulescu M, Witkowski Z, Abrudan I, Balint G, Barka I, Beták J, Bojariu R, Borcos M, Boroneanț C, Brožová J, Cheval S, Czernobaj Y, Dumitrașcu M, Enciu P, Gardashuk T, Geicu A, Hanušin J, Ira V, Jurášová E, Kanianska R, Kapusta P, Kirchner K, Kotarba A, Lacika J, Lippert E, Marcinátová L, Maxim I, Minár J, Niewiadomski Z, Pawlowski J, Perzanowski K, Piekos M, Prodanovič H, Prokic S, Ružička T, Šeffler J, Skiba S, Skylnikov D, Stankoviansky M, Szabó E, Szczesny B, Schwagrzyk J, Šimkovicová V, Tasekovich L, Tiner T, Trizna M, Urbánek J, Vološčuk I, Wyzga B, Zentai L. 2007. Carpathian Environment Outlook. United Nations Environment Programme (UNEP), Geneva, 236 pp.

### V. Articole *in extenso* publicate în reviste din fluxul științific internațional principal

1. Cheval S, Dumitrescu A (2014) The summer surface urban heat island of Bucharest (Romania) retrieved from MODIS images. Theoretical and Applied Climatology, doi: 10.1007/s00704-014-1250-8.
2. Cheval S, Busuioc A, Dumitrescu A, Birsan MV (2014) Spatiotemporal variability of meteorological drought in Romania using the standardized precipitation index (SPI). Climate Research 60(3): 235-248, doi: 10.3354/cr01245.
3. Birsan MV, Dumitrescu A, Micu DM, Cheval S (2014) Changes in annual temperature extremes in the Carpathians since AD 1961. Natural Hazards 74(3):1899-1910, doi: 10.1007/s11069-014-1290-5.
4. Spinoni J, Szalai S, Szentimrey T, Lakatos M, Bihari Z, Nagy A, Németh Á, Kovács T, Mihic D, Dacic M, Petrovic P, Kržič A, Hiebl J, Auer I, Milkovic J, Štěpánek P, Zahradníček P, Kilar P, Limanowka D, Pyrc R, Cheval S, Birsan M-V, Dumitrescu, A, Deak G, Matei M, Antolovic I, Nejedlík P, Štastný P, Kajaba P, Bochníček O, Galo D, Mikulová K, Nabyvanets Y, Skrynyk O, Krakovska S, Gnatiuk N, Tolasz R, Antofie T, Vogt, J (2014) Climate of the Carpathian Region in the period 1961–2010: climatologies and trends of 10 variables. International Journal of Climatology, doi: 10.1002/joc.4059.
5. Cheval S, Birsan MV, Dumitrescu A (2014) Climate variability in the Carpathian Mountains region over 1961-2010. Global and Planetary Change 118: 85-96, doi: 10.1016/j.gloplacha.2014.04.005.
6. Bădescu V, Gueymard C, Cheval S, Oprea C, Baci M, Dumitrescu A, Iacobescu F, Miloș I, Rada C (2013) Accuracy and sensitivity analysis for 54 models of computing hourly diffuse solar irradiation on clear sky. Theoretical and Applied Climatology 111(3-4): 379-399, doi: 10.1007/s00704-012-0667-1.
7. Bădescu V, Gueymard C, Cheval S, Oprea C, Baci M, Dumitrescu A, Iacobescu F, Miloș I, Rada C (2013) Accuracy analysis for fifty-four clear-sky solar radiation models using routine hourly global irradiance measurements in Romania. Renewable Energy, 55: 85-103, doi: 10.1016/j.renene.2012.11.037.

8. Venema VKC, Mestre O, Aguilar E, Auer I, Guijarro JA, Domonkos P, Vertacnik G, Szentimrey T, Stepanek P, Zahradnicek P, Viarre J, Muller-Westermeier G, Lakatos M, Williams CN, Menne M, Lindau R, Rasol D, Rustemeier E, Kolokythas K, Marinova T, Andresen L, Acquavotta F, Fratianni S, Cheval S, Klančar M, Brunetti M, Gruber C, Prohom Duran M, Likso T, Esteban P, Brandsma T (2012) Benchmarking homogenization algorithms for monthly data. *Climate of the Past* 8, 89-115. doi: 10.5194/cp-8-89-2012.
9. Bădescu V, Gueymard C, Cheval S, Oprea C, Baciuc M, Dumitrescu A, Iacobescu F, Miloş I, Rada C (2012) Computing global and diffuse solar hourly irradiation on clear sky. Review and testing of 54 models. *Renewable & Sustainable Energy Reviews*, 16: 1636-1656. doi:10.1016/j.rser.2011.12.010.
10. Burcea S, Cheval S, Dumitrescu A, Antonescu B, Bell A, Breza T (2012) Comparison Between Radar Estimated and Rain Gauge Measured Precipitation in the Moldavian Plateau. *Environmental Engineering and Management Journal*, 11(4): 723-731.
11. Cheval S, Baciuc M, Dumitrescu A, Breza T, Legates DR, Chendeş V (2011) Climatologic adjustments to monthly precipitation in Romania. *International Journal of Climatology*, 31: 704-714, DOI: 10.1002/joc.2099.
12. Cheval S, Dumitrescu A, Petrişor AI (2011) The July Surface Temperature Lapse in the Romanian Carpathians. *Carpathian Journal of Earth and Environmental Sciences*, 6: 189-198.
13. Parajka J, Kohnová S, Bálint G, Barbuc, M, Borga M, Claps P, Cheval S, Dumitrescu A, Gaume, E, Hlavcová K, Merz R, Pfaundler M, Stăncălie G, Szolgay J, Blöschl G (2010) Seasonal characteristics of flood regimes across the Alpine-Carpathian range. *Journal of Hydrology*, 394(1-2): 78-89.
14. Cheval S, Dumitrescu A, Bell A (2009) The urban heat island of Bucharest during the extreme high temperatures of July 2007. *Theoretical and Applied Climatology*, 97: 391-401.
15. Cheval S, Dumitrescu A (2009) The July urban heat island of Bucharest as derived from MODIS images. *Theoretical and Applied Climatology*, 96(1-2): 145-153.

## VI. Publicații *in extenso* apărute în lucrări ale principalelor conferințe internaționale de specialitate

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## VII. Alte lucrări și contribuții științifice

1. Vespremeanu-Stroe A, Cheval S, Tătui D (2012) The wind regime of Romania – Characteristics, trends and North Atlantic Oscillation influences. *Forum Geografic* XI(2): 118-126, doi: <http://dx.doi.org/10.5775/fg.2067-4635.2012.003.d>.
2. Cheval S, Bădescu V, Gueymard C, Oprea C, Baciuc M, Dumitrescu A, Miloş I, Rada C, Breza T. 2011. Preparation of a large testing procedure for models of clear sky solar irradiance computation under the climate of Romania. *Annals of the Academy of Romanian Scientists. Series on Science and Technology of Information*, 4(2): 43-50.
3. Petrişor A, Cheval S, Zinevici V, Parpala L. 2011. Geostatistical Analysis of Time Series: An Exploratory Analysis of Climatologic and Ecological Data using a Spatial Instrument. *Journal of Applied Quantitative Methods*, 6(1):
4. Chendeş V, Cheval S, Dumitru S (2010) The Assessment of Some Hydrometeorological Drought Indices in the Bend Subcarpathians and Peripheral Zones. *Research Journal of Agricultural Science*, 42 (3): 60-70.

5. Busuioc A, Dumitrescu A, Baci M, Cazacioc L, Cheval S (2010) RCM performance in reproducing temperature and precipitation regime in Romania. Application for Banat Plain and Oltenia Plain, Romanian Journal of Meteorology, 10(2): 1-19.
6. Margelli F, Rossi S, Cheval S, Georgiadis T (2009) Water and energy interaction in urban planning. Bolletino Geofisico, XXXII(3-4): 55-78.
7. Săndulache C, Cheval S (2009) Precipitațiile atmosferice – fenomen de risc in Munții Parâng. Comunicări de Geografie, XIII: 103-112.
8. Popa I, Cheval S (2007) Early winter temperature reconstruction of Sinaia area (Romania) derived from tree-rings of silver fir (abies alba mill.). Romanian Journal of Meteorology, 9(1-2): 47-54.
9. Zak M, Cheval S, Dumitrescu A, Kveton V (2007) MODIS-based investigations on the urban heat islands of Bucharest (Romania) and Prague (Czech Republic). Joint 2007 EUMETSAT Meteorological Satellite Conference and the 15th Satellite Meteorology & Oceanography Conference of the American Meteorological Society, Amsterdam, The Netherlands, 24-28 September 2007
10. Cheval S, Breza T, Baci M, Bostan D (2006) Precipitații extreme în Podișul Dobrogei de Sud și în spațiul litoral adiacent. Studiu de caz – Ploaia din 28 august 2004. Riscuri și catastrofe, V(3): 83-92.
11. Ernst-Vintila A, Cheval S (2006) Le changement climatique: quel défi pour la psychologie sociale? Analele Stiintifice ale Univ. "Al.I.Cuza" Iasi, Psihologie, XV: 101-110.
12. Dragne D, Cheval S, Micu M (2005) The snow cover in the Romanian Carpathians and the influencing factors. Analele Universității de Vest din Timișoara -Geografie, XIV: 145-158.