Avem deosebita plăcere să vă adresăm invitația de a participa la manifestările prilejuite de:
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SEMINARUL GEOGRAFIC INTERNAȚIONAL

„DIMITRIE CANTEMIR”

Ediția a XLVI-a

23 - 25 Octombrie 2026

Universitatea „Alexandru Ioan Cuza” din Iași
Facultatea de Geografie și Geologie
Departamentul de Geografie

Iași, 2026

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Programul conferinței / Conference programme / Programme du colloque

Secțiunea/ Session	Ziua/Day/ Jour	Sala / Room / Salle	Ora /Hour/ Heure
Deschiderea conferinței / Conference opening / Cérémonie d'ouverture	23.10.2026	Amfiteatrul B8 (Building B, 3rd floor)	9^{00}-9^{30}
Comunicări în plen / Plenary communications / Conférences plénières	23.10.2026	Amfiteatrul B8	9^{30}-13^{30}
Comunicări pe secțiuni / Parallel sessions / Sessions parallèles	23.10.2026	Building B	14^{30}-16^{30} 17^{00}-19^{00}
SS 01. Dincolo de decalajul de gen. Costurile economice și sociale ale inegalității / Behind the Gender Gap. Economic and Social Costs of Inequality	23.10.2026	B 621	14^{30}-16^{30} 17^{00}-19^{00}
SS 02. Hazard, vulnerabilitate și risc de dezastre la intersecția dintre Geografia fizică și Geografia umană / Hazard, vulnerability și disaster risk at the intersection of Physical and Human Geography	23.10.2026	B 622	14^{30}-16^{30}
SS 03. Les transitions énergétique et numérique peuvent-elles sauver les territoires non métropolitains ou périphériques	23.10.2026	B 660	17^{00}-19^{00}
SS 04. Explaining Uneven Local Development: the Role of Accessibility, Local Agency, and Collaboration Networks	23.10.2026	B 662	14^{30}-16^{30} 17^{00}-19^{00}
ST 01. Geomorfologie și pedologie / Geomorphology and pedology / Géomorphologie et pédologie	23.10.2026	B 658	14^{30}-16^{30}
ST 02. Riscuri climatice și Gestiunea resurselor hidrologice/ Climatic risks and Water resources management / Risques climatiques et Gestion des ressources en eau	23.10.2026	B 657	14^{30}-16^{30} 17^{00}-19^{00}
ST 03. GIS aplicat în geografie / GIS applied in geography / SIG appliqué en géographie	23.10.2026	B623	14^{30}-16^{30}
ST 05. Turism, patrimoniu si biodiversitate / Tourism, Heritage, Biodiversity / Tourisme, Héritage, Biodiversité	23.10.2026	B 8	14^{30}-16^{30} 17^{00}-19^{00}
ST 06. Geografia așezărilor / Géographie de l'Habitat / Geography of Settlements	23.10.2026	B 660	14^{30}-16^{30}
ST 07. Geografia populației / Geography of Population / Géographie de la Population	23.10.2026	B 627	14^{30}-16^{30} 17^{00}-19^{00}
ST 08. Geografie economică / Economic geography / Géographie économique	23.10.2026	B 658	17^{00}-19^{00}
ST 10. Didactica geografiei / Didactics of Geography / Didactique de la Géographie	23.10.2026	B 664	14^{30}-16^{30} 17^{00}-19^{00}
WORKSHOP - DATA TO DECISION	23.10.2026	B 629	11^{30}-19^{00}
WORKSHOP - GEN Z SI VIITORUL TURISTIC AL DESTINAȚIEI IAȘI	23.10.2026	B 627	11^{30}-13^{30}
Prezentări Postere / Posters presentations / Session d'affiches	23.10.2026	Corp / Building / Bâtiment B	14^{30}-19^{00}
Aplicație de teren / Field application /Sortie terrain	24.10.2026		8^{00}-20^{00}
Tur ghidat / Guided tour / Visite guidée	25.10.2026		10^{00}- 13^{00}

Vineri / Friday /Vendredi 23.10.2026

9^{00} – 9^{30}	**Alocuțiuni de deschidere / Opening statements / Allocutions d'ouverture, Amfiteatrul B8 (Building B, 3rd floor)** **Prof. univ. dr. Corneliu IAȚU,** Președinte Comitet organizare - Universitatea „Alexandru Ioan Cuza" din Iași **Prof.univ.dr. Liviu MAHA**, Rectorul Universității "Alexandru Ioan Cuza'' din Iași **Costel ALEXE,** Președintele Consiliului Județean Iași **Mihai CHIRICA,** Primarul Municipiului Iași **Conf. univ. dr. Adrian URSU,** Decanul Facultății de Geografie și Geologie, Universitatea „Alexandru Ioan Cuza" din Iași **Conf. univ. dr. Ionuț MINEA,** Directorul Departamentului de Geografie, Universitatea „Alexandru Ioan Cuza" din Iași
9^{30} – 11^{00}	**Comunicări în plen / Plenary communications / Conférences plénières - Amfiteatrul B8 (Building B, 3rd floor)** *Moderator / Moderator / Modérateur:* ***Prof. univ. dr. Corneliu IAȚU*** **Corneliu IAȚU** (Université Alexandru Ioan Cuza de Iași): *Descriptio Moldaviae – după trei secole. Moștenirea geografică a lui Dimitrie Cantemir și provocările secolului XXI/ Descriptio Moldaviae – Three Centuries Later. Dimitrie Cantemir's Geographical Legacy and the Challenges of the 21st Century/ Descriptio Moldaviae – Trois siècles après. L'héritage géographique de Dimitrie Cantemir et les défis du XXIe siècle* **Hans WESTLUND** (KTH Royal Institute of Technology, Sweden): *Making places and regions attractive: Towards a better understanding of amenities* **Lise BOURDEAU-LEPAGE** (Université de Lyon, France): *Repenser l'attractivité territoriale sous contraintes. Des facteurs d'attractivité aux capacités territoriales effectives*
11^{00} - 11^{30}	**Pauză de cafea / Coffee break / Pause café** *Corp / Building / Bâtiment B, etaj / floor / étage 3*
11^{30} – 13^{30}	**Comunicări în plen / Plenary communications / Conférences plénières - Amfiteatrul B8 (Building B, 3rd floor)** *Moderator / Moderator / Modérateur:* ***Prof. univ. dr. Corneliu IAȚU*** **Christine PLUMEJEAUD-PERREAU**, Ruby JANIN-PENROSE, Camille HOCHEDEZ (Université de Poitiers, France): *Evolution de la présence britannique dans les espaces ruraux français de la Nouvelle-Aquitaine* **Întâlniri editoriale / Book Presentations / Rencontres autour du livre** ▪ *Prof. univ. dr. Alexandru Ungureanu,* ***Străzile din Iași,*** *Editura Universității „Alexandru Ioan Cuza" din Iași*. **Invitați / Guest speakers / Intervenants:** Prof.univ.dr. Ionel Muntele și Doru Munteanu.

	▪ *Jean-Paul Carrière,* ***Renaissance,*** *Éditions L'Harmattan, Paris, 2026*. Roman despre depopularea rurală, atașamentul față de locuri și revitalizarea comunităților / A novel about rural depopulation, place attachment, and community revitalization / Un roman sur la dépopulation rurale, l'attachement aux lieux et la revitalisation des communautés. Regards croisés autour de Renaissance – Un dialogue entre Jean-Paul CARRIÈRE et Corneliu IAȚU ▪ **Fotogeografica***, Regina – volum in honorem arhitectei României Mari/Queen – volume in honorem the architect of Great Romania/ La Reine – ouvrage in honorem à l'architecte de la Grande Roumanie.* Prezentare de carte/ Book Presentation/ Présentation d'ouvrage: Corneliu Iațu
13^{30} – 14^{30}	**Pauză de prânz / Lunch break / Pause déjeuner** *Corp / Building / Bâtiment B, etaj / floor / étage 3*
14^{30} – 16^{30}	**Comunicări pe secțiuni / Parallel sessions / Sessions parallèles** **Departament Geografie / Department of Geography / Département de Géographie,** *Corp / Building / Bâtiment B, etaj / floor / étage 3*
16^{30} - 17^{00}	**Pauză de cafea / Coffee break / Pause café** *Corp / Building / Bâtiment B, etaj / floor / étage 3*
17^{00} – 19^{00}	**Comunicări pe secțiuni / Parallel sessions / Sessions parallèles** **Departament Geografie / Department of Geography / Département de Géographie,** *Corp / Building / Bâtiment B, etaj / floor / étage 3*
20^{00} - 22^{30}	**Serată festivă / Festive dinner / Soirée festive** *,,Casa Universitarilor" din Iași (CUI)*

Sâmbătă / Saturday /Samedi 24.10.2026

08^{00} –20^{00}	**Aplicație de teren / Field application/ Sortie terrain** *Județul Iași / Iași County / Le département de Iași*

Duminică / Sunday / Dimanche 25.10.2026

10^{00}–13^{00}	**Tur ghidat în aria centrală a Municipiului Iași / Guided tour in the central area of Iași / Visite guidée dans la zone centrale de Iași**

SS 01. Dincolo de decalajul de gen. Costurile economice și sociale ale inegalității / Behind the Gender Gap. Economic and Social Costs of Inequality

Moderatori/Moderators/Modérateurs: Lect. univ. dr. Marinela ISTRATE, Lect. univ. dr. Raluca-Ioana HOREA-ȘERBAN

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 621

1. Octavian GROZA, Alexandru RUSU (”Alexandru Ioan Cuza” University of Iași), Sorina VOICULESCU, Daniel LUCHEȘ, Margareta Amy LELEA, Ioan Sebastian JUCU (West University of Timișoara): *Gender and Human Trafficking in Romania, 2015–2025*

2. Victoria BUZA: *Cine contestă și cât câștigă? Inegalități de gen, mediu și teritoriu în contestațiile la Evaluarea Națională*

3. Haralambie ATHES (”Alexandru Ioan Cuza” University of Iași), Ioana BACIU (”Gheorghe Asachi” Technical University of Iași): *Gender Stereotypes in the (Postmodernist) Mirror. A Case-Study in the Reality of Music: Lolita Cercel*

4. Raluca-Ioana HOREA-ȘERBAN, Marinela ISTRATE (”Alexandru Ioan Cuza” University of Iași): *Which countries are best for women? An analysis of the Women, Peace and Security (WPS) Index*

5. Haralambie ATHES, Anca Luisa VIUSENCO, Marinela ISTRATE (”Alexandru Ioan Cuza” University of Iași): *Feminist Ventures into Ecotopia. The Pragmatics of Rights*

Moderatori/Moderators/Modérateurs: Prof. Univ. dr. Octavian GROZA, Lect. univ. dr. Haralambie ATHES

17^{00} – 19^{00}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 621

6. Marinela ISTRATE, Raluca Ioana HOREA-ȘERBAN, Haralambie ATHES (”Alexandru Ioan Cuza” University of Iași): *Professional reintegration – an obstacle course for women in Romania*

7. Vicențiu-Robert GABOR (”Alexandru Ioan Cuza” University of Iași), Ciprian-Constantin IFTIMOAEI (Petre Andrei University of Iași): *Gender Disparities and Territorial Patterns of the Doctorate-Holding Population in Romania*

8. Bianca-Sofia TEODORU (”Alexandru Ioan Cuza” University of Iași): *Urban public space at the intersection of gender and development: the socio-economic costs of inequality in representation in the municipality of Galați*

9. Atanasia BĂRLĂDEANU (”Alexandru Ioan Cuza” University of Iași): *Gender and Forms of Heroism in Joseph Conrad's Lord Jim*

10. Sebastian TROFIN (”Alexandru Ioan Cuza” University of Iași): *Disparități din cadrul sistemului educațional românesc: analiza spațială a rezultatelor examenului de bacalureat prin prisma inegalităților socioeconomice și de gen.*

SS 02. Hazard, vulnerabilitate și risc de dezastre la intersecția dintre Geografia fizică și Geografia umană / Hazard, vulnerability și disaster risk at the intersection of Physical and Human Geography

Moderatori / Moderators / Modérateurs: Asist. univ. dr. Cosmina ALBULESCU, Prof. Univ. dr. Adrian GROZAVU, Conf. Univ. dr. Ionuț MINEA, Lect. univ. dr. Marinela ISTRATE

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 622

1. Andreea-Daniela FEDOR, Andrés RODRÍGUEZ-POSE, Alexandra SANDU (London School of Economics): *Compounding Stressors and Shocks: Vulnerability of the Agricultural Workforce in Romania's Nord-Est Region amid the Twin Transition*

2. Andrei-Ionuț PAVĂL, Dumitru MIHĂILĂ, Petruț-Ionel BISTRICEAN, Vasilică-Dănuț HORODNIC (”Ștefan cel Mare” University of Suceava): *Incendiile de vegetație. Rezultate ale evaluării susceptibilității terenurilor din județul Mehedinți la acest hazard*

3. Denisa-Ștefania BOGDAN, Adrian GROZAVU (“Alexandru Ioan Cuza” University of Iași): *Vulnerabilitatea socială la inundații și cutremure: o analiză a literaturii științifice internaționale*

4. Anca-Maria CHIRILĂ, Adrian GROZAVU (“Alexandru Ioan Cuza” University of Iași): *Emergency Response Accessibility and Road Network Vulnerability in Iași County: A Multi-Scale Analysis*

5. Delia-Teodora BELEUZ (“Alexandru Ioan Cuza” University of Iași): *Riscurile hidrogeologice asociate resurselor de apă subterană din Subcarpații Moldovei dintre râurile Bistrița și Trotuș*

6. Cristina MILEA, Andrei ENEA ("Alexandru Ioan Cuza" University of Iași): *Analiza geo-spațială a expunerii și vulnerabilității la inundații în Municipiul Tecuci*

Posters:

7. Andra-Cosmina ALBULESCU, Ionuț MINEA ("Alexandru Ioan Cuza" University of Iași): *Hazard or by-product of conflict? An LLM-based quantification of drone crushes and their impacts in SE Romania*

8. Marinela ISTRATE ("Alexandru Ioan Cuza" University of Iași): *Women's Underemployment and Risk of Poverty: An Empirical Analysis of Their Determinants in Romania*

9. Ana-Maria ANASTASIEI, Lilian NIACȘU ("Alexandru Ioan Cuza" University of Iași): *Seismic Risk-Informed Geoconservation Priorities for Urban Geosites in Iași, Romania*

10. Mariata SOW, Adrian GROZAVU ("Alexandru Ioan Cuza" University of Iași): *Analyse spatiale de la vulnérabilité des mangroves de Somone face aux aléas climatiques : apport de la télédétection pour une gestion adaptative.*

SS 03. Les transitions énergétique et numérique peuvent-elles sauver les territoires non métropolitains ou périphériques

Moderatori / Moderators / Modérateurs: Professeur Jean-Paul CARRIERE, Professeur Abdelillah HAMDOUCH, Professeur Corneliu IAȚU

17^{00} – 19^{00}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 660

1. Mario CARRIER (Université Laval), Abdelillah HAMDOUCH (Université de Tours), Hyppolite DOSSA DANSOU (Université Laval): *Le rôle des transitions technologiques dans les nouve*

2. Jean-Paul CARRIÈRE (Université de Tours): *La désertification médicale, enjeu d'une politique régionale, intégrée, d'aménagement du territoire. Réflexions à partir du cas de la Région Centre-Val de Loire*

3. Marion PICKER, Christine PLUMEJEAUD-PERREAU (Université de Poitiers): *Faire lieu commun par la carte. Reclus et son projet d'un grand globe immersif*

SS 04. Explaining Uneven Local Development: the Role of Accessibility, Local Agency, and Collaboration Networks

Moderatori / Moderators / Modérateurs: Lect. univ. dr. Mihail EVA, Asist. Univ. dr. Alexandra CEHAN, Lect. Univ. dr. Ema CORODESCU-ROȘCA

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 662

1. Elena SOCHIRCĂ, Silvia SUVAC, Vitalie MAMOT, Anatolie PUȚUNTICĂ (Ion Creangă State Pedagogical University of Chișinău): *Demographic Vulnerability, Mobility and Access to Essential Services in Climate-Exposed Rural Communities of the Republic of Moldova*

2. Oliver-Valentin DINTER ("Alexandru Ioan Cuza" University of Iași), Abdelillah HAMDOUCH (Université de Tours), Corneliu IAȚU ("Alexandru Ioan Cuza" University of Iași): *Spatial-Demographic Mismatch in Post-Socialist Peri-Urban Growth: Evidence from Poland and Romania*

3. Alexandru RUSU, Octavian GROZA, Mihail EVA ("Alexandru Ioan Cuza" University of Iași): *Measuring airports' accessibility at global scale using OSRM (Open Source Routing Machine) - technical challenges and key-findings*

4. Sebastian TROFIN ("Alexandru Ioan Cuza" University of Iași): *Educational Inequalities in Romania: Using Accessibility Models to Map Performance Divides in Baccalaureate Results*

5. Bogdan-Constantin IBĂNESCU, Alexandra GHEORGHIU ("Alexandru Ioan Cuza" University of Iași): *Beyond close vs far: perceived access to services and the geography of territorial injustice*

Moderatori / Moderators / Modérateurs: Lect. univ. dr. Mihail EVA, Asist. Univ. dr. Alexandra CEHAN, Lect. Univ. dr. Ema CORODESCU-ROȘCA

17^{00} – 19^{00}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 662

6. Ema CORODESCU-ROȘCA, Alexandra CEHAN, Mihail EVA ("Alexandru Ioan Cuza" University of Iași): *How local agency operates in growing vs. declining small towns? Insights from two Romanian cases – Beclean and Bicaz*

7. Alexandra CEHAN, Ema CORODESCU-ROȘCA, Mihail EVA ("Alexandru Ioan Cuza" University of Iași): *Local Stakeholder Networks' Role in the Development of Small Towns*

8. Mihail EVA, Alexandra CEHAN, Ionel MUNTELE Alexandru RUSU ("Alexandru Ioan Cuza" University of Iași): *The Romanian atlas of local development: preliminary results*

9. Vitalie MAMOT, Anatolie PUȚUNTICĂ, Elena SOCHIRCĂ, Silvia SUVAC (Ion Creangă State Pedagogical University of Chișinău): *Impactul manifestării fenomenelor meteorologice de risc asupra mobilității, accesibilității și vulnerabilității populației în regiunea Ungheni - Călărași. Studiu de caz: orașul Cornești și coridorul R1*

Posters:

10. Mihaela IRIMIA ("Alexandru Ioan Cuza" University of Iași): *Using unsupervised classification algorithms in the analysis of country development typologies: the effect of distance and linkage algorithms on observation clustering*

ST 01. Geomorfologie și pedologie / Geomorphology and pedology / Géomorphologie et pédologie

Moderatori / Moderators / Modérateurs: Prof.univ.dr. Petru URDEA, Prof. univ. dr. Dan DUMITRIU, Conf. Univ. Dr. Cristian Dan LESENCIUC

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 658

1. Petru URDEA (West University of Timișoara), Sanda ROȘCA (Babeș-Bolyai University): *Muntele Mare -caracteristici geomorfologice*

2. Dan DUMITRIU ("Alexandru Ioan Cuza" University of Iasi): *Categories, overlaps, and misclassifications in natural hazard analysis: geological, geomorphological, and hydrological*

3. Cristian Dan LESENCIUC, Cristian-Vasilică SECU, Andrei URZICĂ, Marina IOSUB ("Alexandru Ioan Cuza" University of Iasi): *Dinamica stresului termic asociat abrupturilor calcaroase din Masivul Rarau*

4. Ionuț-Costel CODRU, Roxana IONAȘCU (Research and Development Station for Soil Erosion Control "Mircea Motoc" Perieni), Andrei ENEA, Lilian NIACȘU ("Alexandru Ioan Cuza" University of Iași): *Identification and mapping of sheet erosion on arable lands of Barlad Plateau using Google Earth Engine and Sentinel-2 spectral indices*

Posters:

5. Nicușor NECULA ("Alexandru Ioan Cuza" University of Iași): *Local-scale geohazards assessment using EGMS products*

6. Ana-Maria ANASTASIEI, Lilian NIACȘU ("Alexandru Ioan Cuza" University of Iași): *Forensic Geomorphology in Romania and the Interpretation of Disturbed Ground*

ST 02. Riscuri climatice și Gestiunea resurselor hidrologice / Climatic risks and Water resources management / Risques climatiques et Gestion des ressources en eau

Moderatori / Moderators / Modérateurs: Lect. univ. dr. Andrei ENEA

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 657

1. Daniel BOICU, Ionuț MINEA (”Alexandru Ioan Cuza” University of Iași): *Utilizarea fluctuațiilor nivelului freatic în identificarea tiparelor de asociere ale reîncărcării*

2. Ștefana-Miruna GROSU, Ionuț MINEA, Daniel BOICU, Oliver-Valentin DINTER (”Alexandru Ioan Cuza” University of Iași): *Low-flow Variability between 1950 and 2020. A Case Study: Jijia River Basin*

3. Adrian CIBOTARI, Ana JELEAPOV (Moldova State University): *Evaluation of the hydromorphological status of water bodies in the Salcia Mica River basin (the Republic of Moldova)*

4. Cristina MILEA, Andrei ENEA, Cristian-Constantin STOLERIU (”Alexandru Ioan Cuza” University of Iași): *Analiza geospațială a expunerii și vulnerabilității la inundații în Municipiul Tecuci*

Moderatori / Moderators / Modérateurs: Lect. univ. dr. Pavel ICHIM, Conf.univ.dr. Dumitru MIHĂILĂ

17^{00} – 19^{00}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 657

5. Elias-Andrei CĂLUGĂRU, Robert HRIȚAC, Lucian SFÎCĂ, Pavel ICHIM (”Alexandru Ioan Cuza” University of Iași): *Climatology of Synoptic Patterns Associated with Convergence Lines in Romania (2004 – 2024)*

6. Andrei MIHALACHE, Dumitru MIHĂILĂ, Petruț-Ionel BISTRICEAN, Simona-Petronela SCRIPCĂ (University of Suceava): *Physico-geographical and anthropogenic factors generating weather-climate hazards in the North-East Region, Romania*

7. Vasilică ISTRATE (”Alexandru Ioan Cuza” University of Iași), Ionuț-Lucian LAZĂR (Legendary Team Security SRL), Florentina ISTRATE (Sports High School Focșani), Florin LUPU, Adrian PANȚUȘ (Legendary Team Security SRL), Lucian SFÎCĂ (”Alexandru Ioan Cuza” University of Iași): *Climatic favorability for precipitation enhancement in south-eastern Romania*

8. Aurelian-Nicolae ROMAN (”Alexandru Ioan Cuza” University of Iași), Emese CSIKI (Liceul Teologic Romano-Catolic Segítő Mária): *The state of coral reefs in the Hurghada area (Egypt) in the context of climate change and anthropogenic pressure*

Posters:

9. Marius-Victor BÎRSAN, Laura LUPU, Diana DOGARU (Romanian Academy): *Projected bioclimatic conditions for grapevine development in Romania and the Republic of Moldova modelled with MRI-ESM2-0*

10. Roxana-Patricia IONAȘCU, Crina-Loredana TURCU, Adrian PETREA (“Mircea Moțoc” Soil Erosion Research and Development Station): *Sustainable Management of Erosion-Prone Agricultural Land through Soil and Water Conservation under Climate Change*

11. Ionela TONU, Oana-Elena CHELARIU (”Alexandru Ioan Cuza” University of Iași): *Vulnerability to hydroclimatic risks and challenges in water resource management: A case study – the Pârcovaci Reservoir*

12. Iuliana-Ionela PUIU, Oana-Elena CHELARIU (”Alexandru Ioan Cuza” University of Iași): *Spatiotemporal dynamics of flood events in the Jijia River catchment (1990–2022)*

13. Andrei URZICĂ, Cristian-Constantin STOLERIU, Alin MIHU-PINTILIE, Dan LESENCIUC (”Alexandru Ioan Cuza” University of Iași): *Long-term hydrological patterns and spatial dynamics in Romania*

14. Carmen Alexandra VASILIU, Paul Sebastian CIOBANU, Pavel ICHIM, Alexandru-Constantin COROCĂESCU (”Alexandru Ioan Cuza” University of Iași): *How do Local Climate Zones shape Surface Urban Heat Island patterns in small towns? A comparison of Pașcani and Târgu Neamț, Romania*

15. Daniela POPESCU, Marius-Victor BÎRSAN (Romanian Academy): *Projected streamflow responses to climate change in the Buzău and Putna river basins (Southeastern Carpathians)*

16. Gabriel-Andrei ANDRONIC, Ramona-Alexandra CIAUȘU (”Alexandru Ioan Cuza” University of Iași), Ionuț-Alexandru CHELARU, Dorel URECHE (”Vasile Alecsandri” University of Bacău), Mircea Nicușor NICOARĂ (”Alexandru Ioan Cuza” University of Iași): *Toxicity of Non-steroidal Anti-inflammatory Drugs at Environmentally Relevant Concentrations, in Relation to the Developmental Stage of Danio rerio*

17. Ramona-Alexandra CIAUȘU (”Alexandru Ioan Cuza” University of Iași), Ionuț-Alexandru CHELARU, Dorel URECHE (”Vasile Alecsandri” University of Bacău), Gabriel-Andrei ANDRONIC, Alin Stelian CIOBICA, Mircea Nicușor NICOARĂ (”Alexandru Ioan Cuza” University of Iași): *Behavioral Alterations Induced by Ceftriaxone and Polystyrene Microplastics in Zebrafish*

ST 03. GIS aplicat în geografie / GIS applied in geography / SIG appliqué en géographie

Moderatori / Moderators / Modérateurs: Lect. Univ. Dr. Vasile JITARIU, Conf. univ. dr. Adrian URSU

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 623

1. Ioana CHIRIAC, Angela CANȚÎR, Olga CRIVOVA, Stela CURCUBAT, Ghennadi SIRODOEV (Moldova State University), George-Marius CRACU, Gabriela NICOARĂ, Mirela PARASCHIV, Andrei SCHVAB, George SECĂREANU, Natasa VAIDIANU, Igor SIRODOEV (Ovidius University of Constanta): *Mapping Land-Use Stability and Transformation in Southeastern Part of the Republic of Moldova: A Change Detection Approach, 1976–2023*

2. Sara AHARON (”Alexandru Ioan Cuza” University of Iași): *Cloud-Based Monitoring of Twenty Years of Shoreline Change on Ko Phi Phi Don, Thailand, Using Google Earth Engine and Multi-Temporal Satellite Imagery*

3 Vasile JITARIU, Ștefania-Lavinia URECHE, Adrian URSU (”Alexandru Ioan Cuza” University of Iași): *Monitoring Seasonal and Interannual Reed Cover Dynamics in Natura 2000 Wetlands of Northeastern Romania (2017–2025) Using Sentinel-2 Imagery*

4. Boubaker KHALLEF, Yamina BISKRI (Université de Verha Abbas Sétif 1): *Cartographie des vides urbains à partir des images Sentinel-2 et de l'algorithme Random Forest: une approche d'aide à la décision spatiale pour la réhabilitation urbaine – le cas de la ville de Sétif (Algérie)*

Posters:

5. Elena-Diana BOBRIC, Alexandra-Petronela STOLERIU, Iuliana-Gabriela BREABĂN (”Alexandru Ioan Cuza” University of Iași): *Spatial variability of soil organic carbon stocks in a mountain environment: a case study from the Eastern Carpathians*

6. Andreea-Florina STOLERIU, Alexandra-Petronela STOLERIU, Elena-Diana BOBRIC, Iuliana-Gabriela BREABĂN (”Alexandru Ioan Cuza” University of Iași): *Research trends in Remote Sensing for water quality monitoring: a bibliometric analysis (2015–2025)*

7. Georgiana CREȚU-VĂCULIȘTEANU, Silviu-Costel DORU, Mihai NICULIȚĂ (”Alexandru Ioan Cuza” University of Iași): *Could CORINE Land Cover (CLC) Data Be Used for Downscaling Analysis? A Case Study from NE Romania*

8. Miruna Cosmina ZAHARIA (”Alexandru Ioan Cuza” University of Iași): *Dinamica utilizării terenurilor în Municipiul Constanța în perioada 2000 – 2025*

9. Andrei-Cosmin OLARIU, Andrei ENEA, Ionuț-Costel CODRU, Lilian NIACȘU (”Alexandru Ioan Cuza” University of Iași): *Abordări metodologice integrate în modelarea eroziunii solului. Studii de caz în Podișul Moldovei*

ST 05. Turism, patrimoniu și biodiversitate / Tourisme, Héritage, Biodiversité / Tourism, Heritage, Biodiversity

Moderatori / Moderators / Modérateurs: Lect. univ. dr. Oana Mihaela STOLERIU, Lect. univ. dr. Florentina-Cristina MERCIU

14^{30} – 16^{30}, Vineri/Friday/Vendredi 23.10.2026

Sala: B 8

1. Nicolaie HODOR (Babeș-Bolyai University): *Florile, mândrele și horile in folclorul maramuresean. Valorificare turistica*

2. Oana-Mihaela STOLERIU, Teodora-Georgiana MIHĂILĂ (”Alexandru Ioan Cuza” University of Iași): *Visitor feedback as a tool for sustainable management of wildlife attractions*

3. Cosmin-Gabriel CIORNEI, Alexandra CEHAN (”Alexandru Ioan Cuza” University of Iași): *Tourism Development and the Transformation of Lipovan Russian Cultural Identity*

4. Daria SURPEȚEANU, Florentina-Cristina MERCIU (University of Bucharest): *Local perceptions as a resource for heritage planning: evidence from Pitar Moș protected urban area, Bucharest*

5. Teodora-Georgiana MIHĂILĂ, Mihai BULAI (”Alexandru Ioan Cuza” University of Iași): *Exploring the Online Tourism Image of Iași County through Instagram*

6. Sabina-Maria LUPU-ȘTEFAN (”Alexandru Ioan Cuza” University of Iași): *Contribuția folclorului la creșterea atractivității turistice a județului Maramureș*

Moderatori / Moderators / Modérateurs: Lect. univ. dr. Oana Mihaela STOLERIU, Lect. univ. dr. Florentina-Cristina MERCIU

17^{00} – 19^{00}, Vineri/Friday/Vendredi 23.10.2026

Sala: B 8

7. Florentina-Cristina MERCIU (University of Bucharest), Martin OLARU (University of Oradea), George-Laurențiu MERCIU (University of Bucharest): *Reading Romanian industrial heritage through visual imagery: narratives, values and meanings*

8. Viorel-Alin MARIN (University of Bucharest): *Spatial accessibility and tourist perception of monastic sites in Prahova County. An analysis based on online reviews*

9. Maria-Cristina CIMPOEȘU, Lucian-Ionuț ROȘU, Adrian GROZAVU (”Alexandru Ioan Cuza” University of Iași): *Safety in Mountain Hiking: Tourist Behaviour and Accidents in the Ceahlău Massif*

10 Vadim CUJBĂ, Lilia CONSTANTINOV (Ion Creangă State Pedagogical University of Chișinău), Valentin CONSTANTINOV (Moldova State University): *Contemporary dimensions of religious tourism in the Republic of Moldova*

11. Teodora-Georgiana MIHĂILĂ, Oana-Mihaela STOLERIU (”Alexandru Ioan Cuza” University of Iași): *Geospatial identification and analysis of tourism clusters in Romania based on Instagram data. Case study: #visitiasi vs. #visittimisoara*

12. Elena-Gina NICA (”Alexandru Ioan Cuza” University of Iași): *Greek data on Romanian outbound tourism to Greece: The case of the Institute of the Greek Tourism Confederation (INSETE)*

13. Gina BORDEA, Corneliu IAȚU (”Alexandru Ioan Cuza” University of Iași): *Between tourism experience and winemaking tradition: a comparison of the Vrancea and Rheingau wine regions*

Posters:

14. Sabina BLAJ, Oana-Mihaela STOLERIU (”Alexandru Ioan Cuza” University of Iași): *From mass tourism to sustainable tourism: policy responses to overtourism in Southern Europe*

15. Iustina-Maria VECHIU, Alin MIHU-PINTILIE (”Alexandru Ioan Cuza” University of Iași): *Perspectives de développement de l'écotourisme fondées sur le potentiel biogéographique des aires naturelles protégées de Roumanie : le cas du Parc Naturel Vânători-Neamț*

16. George PASCAL (”Alexandru Ioan Cuza” University of Iași): *Distribuția spațială a obiceiului Caloianul în Ținutul Covurlui: indicator cultural al adaptării la variabilitatea climatică în Antropocen*

17. Liliana Gabriela ANIȚEI, Elena-Diana BOBRIC (”Alexandru Ioan Cuza” University of Iași): *Diversitatea florei spontane și relația acesteia cu indicatorii ecologici ai solului în bazinul râului Bahlui*

18. George PASCAL (”Alexandru Ioan Cuza” University of Iași), Daniel Gabriel KEREKES (Babeș-Bolyai University): *Pestelca din ținutul Covurlui și zadia din Țara Năsăudului ca mărturie a transhumanței și schimburilor culturale*

19. Teodora DUCA, Cristian-Constantin STOLERIU (”Alexandru Ioan Cuza” University of Iași): *Turismul culinar în orașul Iași*

ST 06. Geografia așezărilor / Géographie de l'habitat / Geography of Settlements

Moderatori / Moderators / Modérateurs: Conf. univ. dr. Andreea-Loreta CERCLEUX

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 660

1. Ana CERNENCO, Mihai HACHI (Academy of Economic Studies of Moldova): *Impactul dezvoltării periurbane a Municipiului Chișinău asupra dezvoltării spațiale durabile: abordare metodologică și cadru integrat de indicatori*

2. Andreea-Loreta CERCLEUX (University of Bucharest), Radu SĂGEATĂ (Romanian Academy), Elena BOGAN (University of Bucharest): *Reading the urban landscape: A semiotic analysis of building names and commercial signs in Bucharest's city center*

3. Vadim CUJBĂ (Moldova State University), Rodica SÎRBU (Technical University of Moldova): *Assessing Local Development in the Southern Region of the Republic of Moldova: Territorial Disparities and Implications for Administrative Amalgamation*

ST 07. Geografia populației / Geography of Population / Géographie de la Population

Moderatori / Moderators / Modérateurs: Prof. univ. dr. Ionel MUNTELE, CS. dr. Dorin LOZOVANU

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 627

1. Florin POP (Colegiul National ”Unirea”, Târgu Mureș), Ștefan DEZSI (Babeș-Bolyai University), Andreea-Maria CRĂCIUN (Scoala Gimnaziala ”Mihai Viteazul”, Târgu Mureș): *Analysis and Evaluation of the Population Aging Phenomenon in the Mountain and Marginal Contact Area of Mureș County between 1992–2024. Trends and Implications for Public Policy Design*

2. Ionel MUNTELE (”Alexandru Ioan Cuza” University of Iași): *Dinamica geodemografică globală (1950-2025). De la divergență regională la convergență structurală*

3. Radu-Ionuț DIMITRIU (”Alexandru Ioan Cuza” University of Iași), Petru BUNDUC (Moldova State University): *Noi nuanțe ale migrațiilor internaționale: nomadismul digital, migrațiile pensionarilor, migrațiile pentru naștere, migrațiile confesionale și spirituale, migrațiile etno-rasiale*

4. Andreea-Daniela FEDOR, Corneliu IAȚU (”Alexandru Ioan Cuza” University of Iași): *Romania's Electoral Geography between the Annulled 2024 and 2025 Presidential Elections: Territorial Persistence and Reconfiguration at the ATU level*

5. Dorin LOZOVANU (Moldova State University): *Diversitatea etno-culturală în Regiunea de Sud a Republicii Moldova conform ultimelor recensăminte*

6. Ionel BOAMFĂ (”Alexandru Ioan Cuza” University of Iași): *Cultural-linguistic, historical-geographical and political-electoral particularities highlighted by Thracian onomastics*

Moderatori / Moderators / Modérateurs: Prof. univ. dr. Ionel MUNTELE,

Lect. Univ. dr. Radu Ionuț DIMITRIU

17^{00} – 19^{00}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 627

7. Ionel MUNTELE, George PASCAL (”Alexandru Ioan Cuza” University of Iași): *Distribuția spațială a numelor de familie și identitatea regională în România: o analiză geostatistică asupra peisajului antroponimic*

8. Andreea Mădălina COZMA (căs. GANIA) (”Alexandru Ioan Cuza” University of Iași): *Demographic polarization in Romania's North-East Region: between population concentration and depopulation*

9. Ionel BOAMFĂ (”Alexandru Ioan Cuza” University of Iași): *Again, about the Romanian Electoral Geography Atlas (REGA)*

10. Emmanuel-Andrei DUMAS (”Alexandru Ioan Cuza” University of Iași): *Studenții francezi și francofoni de la Iași: o populație străină recentă*

11. Radu-Ionuț DIMITRIU (”Alexandru Ioan Cuza” University of Iași): *Aspecte privind evolutiile migratiilor internationale ale populatiei din Moldova in perioada post-COVID*

Posters:

12. Cosmin-Gabriel CIORNEI, Alexandra CEHAN (”Alexandru Ioan Cuza” University of Iași): *Spatial Patterns of Ethnocultural Diversity in Dobrogea: A Quantitative Assessment*

13. Ioana BEJENARU, Bogdan-Constantin IBĂNESCU, Lucian ROȘU, Corneliu IAȚU (”Alexandru Ioan Cuza” University of Iași): *Smart Urban Development and Quality of Life: A Sustainability Perspective on Iași, Romania*

14. Constantin Laurențiu POPA, Marina IOSUB (”Alexandru Ioan Cuza” University of Iași), Alina Elena OLENIC (Colegiul Național “Ștefan cel Mare” Hârlău): *Mapping territorial disparities in South-West Romania: A LISA-based analysis of demographic and socio-economic patterns*

15. Lucian BRATU (”Alexandru Ioan Cuza” University of Iași): *Analiza bibliometrică a migrațiilor forțate*

ST 08. Geografie economică / Economic geography / Géographie économique

Moderatori / Moderators / Modérateurs: Lect. Univ. dr. Alexandru BĂNICĂ

17^{00} – 19^{00}, Vineri/Friday/Vendredi 23.10.2026

Sala: B 658

1. Andrés RODRÍGUEZ-POSE, Alexandra SANDU (London School of Economics and Political Science): *When disadvantage constrains capacity: Left-behind regions and the Twin transition in Europe*

2. Alexandru BĂNICĂ, Ramona ȚIGĂNAȘU, Cristian-Manuel FOȘALĂU (”Alexandru Ioan Cuza” University of Iași): *The role of territorial capital in shaping green transition in Central and Eastern Europe*

3. Cristian-Manuel FOȘALĂU (”Alexandru Ioan Cuza” University of Iași), Fernando RUBIERA-MOROLLÓN (University of Oviedo), Corneliu IAȚU (”Alexandru Ioan Cuza” University of Iași): *Has the Market Redrawn the Map? Sixty Years of Economic Specialisation Across Romania's Urban Hierarchy*

4. Ionuț ȘOREA, Corneliu IAȚU (”Alexandru Ioan Cuza” University of Iași): *Au-delà de la proximité des immeubles de bureaux : centralité, accessibilité et localisation intra-urbaine des entreprises IT étrangères ou à capital mixte à Iași, Roumanie*

Posters:

5. Constantin-Alexandru STOIAN: *One Union, many experiences: the uneven geography of EU funding, development and trust*

ST 10. Didactica geografiei/ Didactics of Geography / Didactique de la Géographie

Moderatori / Moderators / Modérateurs: Prof. dr. Mihaela LESENCIUC, Prof. dr. Viorel PARASCHIV

14^{30} – 16^{30}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 664

1. Mihaela LESENCIUC (Inspectoratul Școlar Județean Iași): *Profesorul de geografie din Iași – între sala de clasă, aplicațiile de teren și cercetare*

2. Cornelia Mihaela FISCUTEAN, Dorin FISCUTEAN, Anca-Iuliana ȘIPOTEANU (Colegiul Național Iași): *Evaluarea elevilor pe bază de competențe*

3. Viorel PARASCHIV (Liceul Tehnologic Economic de Turism, Iași): *Turismul ca prioritate economică in statele emergente - Studiu de caz: China și VietNam*

4. Nicușor NECULA, Mihai NICULIȚĂ ("Alexandru Ioan Cuza" University of Iași): *Active landslides on the Copou hillslope: a field-based and InSAR-supported didactic itinerary*

5. Vitalie SOCHIRCĂ, Natalia COZMA (Moldova State University): *The National Geography Curriculum in the Republic of Moldova as Perceived by 12th-Grade School Students*

6. Stefania Lăcrămioara CUCUTEAU (Colegiul Tehnic "Gheorghe Asachi" Iași): *Geografia în școală - de la PISA la GreenComp*

7. Paula NEGRU (Colegiul Tehnic "Gheorghe Asachi" Iași): Analiza potențialului turistic sportiv și recreativ al zonei montane a județului Bacău

8. Daniel RADUIANU (Colegiul Național Pedagogic "Vasile Lupu" Iași): *Jurnal de teren în Norvegia: fiorduri, relief glaciar și adaptare umană*

Moderatori / Moderators / Modérateurs: Prof. dr. Mihaela LESENCIUC, Prof. dr. Viorel PARASCHIV

17^{00} – 19^{00}, Vineri / Friday / Vendredi 23.10.2026

Sala: B 664

9. Ionuț MINEA ("Alexandru Ioan Cuza" University of Iași): *GIS în Geoștiințe - program de formare și dezvoltare profesională continuă*

10. Simona Elena ALBĂSTROIU (Liceul Tehnologic Economic de Turism Iași): *Amenințarea microscopică din ape: Cultivarea responsabilității în rândul elevilor*

11. Cătălina VIERIU (Școala Gimnazială "Gheorghe Ciobanu" Andrieșeni, Iași): *Geografia în era inteligentei artificiale? De la metode tradiționale la lecții interactive*

12. Teodor IOSEF (Colegiul Tehnic ”Mihail Sturdza” din Iași): *Rolul și importanța studierii geografiei la liceele tehnologice*

13. Constantin GHEORGHIȚĂ (Liceul Tehnologic de Electronică și Telecomunicații ”Gheorghe Mârzescu”, Iași): *Sud-Estul Braziliei între celebritate și necunoscut*

14. Crina Aurelia ELEFTERIU (Colegiul Tehnic de Căi Ferate „Unirea” Pașcani): *Proiectul pilot ”Unirea 4.0”*

15. Anca Mihaela GHIURCO, Viorel PARASCHIV (Liceul cu Program Sportiv Iași, Liceul Tehnologic Economic de Turism, Iași): *Didactica pașilor activi. Cum transformi Via Transilvanica într-o resursă educațională completă*

16. Iulian Petru RUSU (Editura IULIAN, Chișinău): *Descrierea succintă a setului de hărți murale produse pe material sintetic flexibil (pânză sintetică flexibilă și rezistentă), ce ține de geografia țărilor, a continentelor, a oceanelor și a lumii în ansamblul ei*

Posters:

17. Bianca-Andreea POPA, Oana-Mihaela STOLERIU (”Alexandru Ioan Cuza” University of Iași): *Educational Tourism for Preschoolers: The Value of Didactic Trails*

WORKSHOP DATA TO DECISION

From Data to Informed Decisions: Governing Climate Resilience in Metropolitan Regions

Organisers: Prof. Univ. dr. Sorin CHEVAL, Prof. Univ. dr. Adina CROITORU, Prof. Univ. dr. Cristian IOJĂ, Prof. Univ. dr. Mihai Răzvan NIȚĂ, Conf. Univ. dr. Lucian SFÎCĂ

11^{30} – 19^{00}, Vineri/Friday/Vendredi 23.10.2026

Iași, UAIC, building B, floor 3, room B 629





Description: Metropolitan regions are increasingly exposed to the impacts of climate change, including heatwaves, flooding, droughts, and other climate-related hazards. At the same time, these territories concentrate population, infrastructure, economic activities, and governance functions, making resilience-building a key priority for sustainable development.

This thematic workshop explores how scientific knowledge, spatial data, and digital technologies can support more informed and effective climate governance in metropolitan regions. Particular attention will be given to the role of **digital twins, integrated decision-support systems (IDSS), vulnerability assessment tools, GIS-based analyses, and living labs** in bridging the gap between research and policy implementation. The workshop builds on experiences and lessons learned from the **CARMINE**, **MOBCLIM**, and **P2R-TR** projects, which have developed innovative approaches to climate resilience through interdisciplinary collaboration, co-creation, and stakeholder engagement.

Structure: The event will be structured around five interconnected sections:

- **DATA**, focusing on how data are generated and collected;
- **MODELING**, exploring methods and tools that can enhance the value and usability of meteorological and environmental data at fine urban scale;
- **PARTICIPATORY**, examining how participatory approaches can support data production, validation, and co-creation;
- **POLICY**, addressing the integration and use of data in policy design and decision-making; and
- **PRACTICE**, investigating data needs and applications for the co-creation and implementation of nature-based solutions.

WORKSHOP PROGRAM

11:30–11:40 | Opening Session

- Welcome from the organizers
- Presentation of the workshop objectives and five thematic sections

11:40–12:30 | Session 1. Data Production

Section 1. Data Production – from observation to the useful climate data

Core question: *What makes climate data fit for decision-making?*

0. **Sorin Cheval – Introduction in the section 1**
1. **Sorin Cheval - ANM**
   CARMINE and Beyond: Connecting Cities, Risks and Ecosystems for a Climate-Resilient Europe
2. **Maria-Julia Petre, UBB**
   Data Availability Challenges for Urban Thermal Stress Assessment in Romania
3. **Alexandru Ovedenie UB**
   From Earth Observation to Decision-Relevant Urban Climate Indicators: A Multi-Source Framework for Bucharest
4. **Ștefănel-Claudiu Crețu, UAIC**
   Disaggregation of Land Surface Temperature Data: Implications for Urban Climate and Mitigation Strategies
5. **Sara Crăciun, UBB**
   Analiza și validarea acurateții spațio-temporale a mesajelor de avertizare privind temperaturile extreme asociate valurilor de căldură din România

12:30–13:30 | Session 2. Modeling

Section 2. Modeling – From data to simulation, scenarios and risk assessment

Core question: *How much spatial and methodological complexity is necessary for an informed decision?*

0. **Lucian Sfîcă – Introduction in the section 2**
1. **Iuliana Maria Pârvu - CNC**
   An Interactive Tool for Assessing Flood Damage in Built-Up Areas Using High-Resolution Geospatial Data
2. **Pavel Ichim - UAIC**
   ENVI-met Modelling as a Tool to Support Urban Climate Adaptation Decisions
3. **Zsolt Magyari-Sáska - UBB**
   Spatial Resolution as a Policy Variable: Translating Heat and Heavy-Rain Risk into Metropolitan Decisions in Cluj-Napoca
4. **Robert Hrițac - UAIC**
   From High-Resolution Urban Climate Modelling to Climate-Resilient Planning: A PALM-4U Case Study for Iași, Romania
5. **Ecaterina Pintilie - UAIC**
   Thermal Discomfort and Its Bioclimatic Impact on Mortality in the Municipality of Iași

13:30–14:30 | Lunch Break and Networking

14.30 – 14.45 | Poster section

1. **Vlăduț Ștefan Fălcescu – ANM**
   Adaptation Frameworks for Climate-Resilient Metropolitan Areas
2. **Petru-Mihai Cristodulo – UAIC**
   Implementing the 3-30-300 Rule through Satellite Data and Deep Learning: A Planning Tool for Urban Green Equity and Climate Adaptation

14:45–15:15 | Cross-Session Dialogue: Data Production and Modeling

Guiding questions:

- How should uncertainty be managed and communicated?
- What spatial and temporal resolution is sufficient?
- How can the limitations of data and models be made transparent?
- Which results can public administrations realistically use?
- How can data and models be better connected to metropolitan decision-making?

15:15–16:30 | Session 3. Participatory Approaches

Section 3. Participatory – from consultation to co-creation and impact

Core question: *How can participation move from consultation to measurable impact?*

0. **Cristian Iojă – Introduction in the section 3**
1. **Cristian Iojă, UB**
   From Participation to Impact: Outcomes and Practical Value of the Brașov Living Lab for Climate Resilience and Nature-Based Solutions
2. **Lucian Sfîcă, UAIC**
   Synthesis Report for Stakeholders on the Assessment of Cold and Hot Areas in Main Cities of North-Eastern Romania through Diverse Methodological Approaches Using Mobile Measurements as Source of Input Data
3. **Ana-Maria Popa - UB**
   Online Petitions as Indicators of Public Engagement in Urban Planning
4. **Maria-Alexandra Calotă - UB**
   Multidimensional Youth Inclusion in Climate Adaptation and Water Governance
5. **Diana Andreea Onose - UB**
   Participatory Planning of Urban Parks: The Youth Perspective

16:30–17:00 | Coffee Break

17:00–17:45 | Session 4. Policy and Governance

Section 4. Policy – from evidences to governance and implementation

Core question: *What institutional conditions are needed to translate evidence into implementation?*

0. **Adina Croitoru – Introduction in the section 4**
1. **Adina-Eliza Croitoru - UBB**
   Co-Designing Climate Resilience and Heat-Health Early Warning Services: From Stakeholder Knowledge to Local Action

2. **Athanasios-Alexandru Gavrilidis - UB**
   Behavioural Patterns in Modern Dwellings: Implications for Sustainable and Resilient Urban Transitions
3. **Cristina-Gabriela Mitincu - UB**
   Pathways to Climate Change Adaptation: Assessing Metropolitan Strategic Planning Through the ISO 14090 Framework
4. **Cristian Iojă - UB**
   Empowering Climate Adaptation through Citizen Science Competitions: Lessons from the ScienceUs Experience

17:45–18:30 | Session 5. Nature-based Solutions

Section 5. Nature-based Solutions – from urban nature assessment to intervention in urban green infrastructure

Core question: *How can Nature-based Solutions be spatially targeted, socially accepted, and institutionally supported?*

0. **Mihai Răzvan Niță – Introduction in the section 5**
1. **Mihai Răzvan Niță - UB**
   The Use of Virtual Tools in Building Climate-Resilient Urban Nature
2. **Csaba Horvath - UBB**
   Connecting Climate Data to Urban Decisions: The B-CONNECT Approach
3. **Cristina-Gabriela Mitincu - UB**
   Stakeholders' Perceptions of Risk and NbS Acceptance in Diverse Urban Settings
4. **Alexandru-Constantin Corocăescu - UAIC**
   From Land Surface Temperature to Informed Green Infrastructure Decisions: Assessing Urban Park Cooling for Climate-Resilient Planning

18:30–18:50 | Cross-Session Dialogue: Participation, Policy and Nature-based Solutions

Guiding questions:

- How can stakeholder knowledge influence policy and spatial interventions?
- What makes participatory outcomes institutionally relevant?
- How can Nature-based Solutions move from pilot projects to mainstream implementation?
- How should vulnerable groups and environmental equity be integrated into climate adaptation?
- What governance arrangements are needed at the metropolitan level?

18:50–19:00 | Final Remarks

WORKSHOP

GEN Z SI VIITORUL TURISTIC AL DESTINAȚIEI IAȘI

Organizatori: Lect. Univ. dr. Lucian Rosu, Lect. Univ. dr. Mihai Bulai

Sala: B 627 | **Data și interval orar**: Vineri, 23.10.2026, 11^{30} – 13^{30}

Ce fel de destinație vor căuta generațiile Z și Alpha și cum construim Iașul pentru ele?

Studenții sunt deja una dintre forțele care fac să funcționeze economia turistică a Iașului, chiar dacă rareori sunt văzuți așa. Ei umplu cafenelele, festivalurile și spațiile culturale ale orașului. Ei sunt motivul pentru care părinții, frații și prietenii vin în vizită, iar fiecare început de an universitar sau sesiune de absolvire aduce în oraș un flux de vizitatori. Ei sunt și publicul care oferă vizibilitate locurilor de interes ale Iașului: cafenelele, barurile și spațiile urbane care apar tot mai des în imaginile de pe rețelele sociale. Cercetarea pentru Strategia de Turism a Județului Iași 2027–2036 arată că aproape opt din zece studenți care au răspuns la chestionar vin din afara Municipiului Iași. Arată însă și că Iașul este ales mai ales pentru că este aproape de casă dar și pentru energiile pe care le oferă.

Pentru strategie, studenții de azi sunt mai mult decât un public actual: sunt locuitorii, consumatorii de cultură și turiștii Iașului de mâine. În 2036, generația Z va avea între 24 și 39 de ani și vor fi în centrul pieței turistice, ca tineri profesioniști, tineri părinți, organizatori de evenimente sau antreprenori. Jumătate dintre studenții chestionați spun că vor rămâne în Iași după absolvire.

Tinerii pot deveni și cei mai credibili ambasadori ai destinației. Fiecare student este legat de două locuri: localitatea de origine și Iașul -oraș al studenției. Acasă, poate face cunoscut orașul în care studiază. Mai târziu, în mobilități Erasmus, la stagii, la conferințe sau după ce se mută în alt oraș ori în altă țară, poate duce mai departe povestea Iașului. Cercetarea arată că decizia de a vizita Iașul se bazează în primul rând pe recomandarea personală, mult înaintea site-urilor oficiale sau a centrelor de informare. De aceea, o rețea de tineri care vorbesc firesc și convingător despre oraș și județ poate valora mai mult decât multe campanii. Miza workshopului este să înțelegem cum putem construi o cultură a promovării locului, în care fiecare student să știe ce merită arătat din Iași și din județ, să se simtă îndreptățit să o facă și să aibă instrumentele necesare.

Obiectivele workshopului:

- Să înțelegem ce înseamnă Iașul azi pentru generația Z: ce găsesc tinerii atractiv în oraș și în județ, ce le lipsește și ce resurse consideră nevalorificate.
- Să imaginăm destinația Iași pentru generațiile Z și Alpha: produsele, experiențele și infrastructurile turistice de care vor avea nevoie orașul și județul în următorii zece ani.
- Să definim rolul studenților ca ambasadori ai Iașului și ai localităților de origine, acasă, în mobilități și după ce pleacă din oraș, și să identificăm ce sprijin ar avea nevoie pentru acest rol.
- Să transformăm vocea studenților în contribuții la strategie: propuneri concrete care vor fi analizate de echipa strategiei, în cadrul procesului de consultare.

Workshopul face parte din procesul de elaborare a Strategiei de Turism a Județului Iași 2027–2036, documentul care va orienta dezvoltarea turistică a orașului și a județului în următorii zece ani. Strategia se construiește pe baza unor dovezi colectate din mai multe surse: analiza datelor statistice privind activitatea turistică, cercetarea de teren în localitățile județului, aproximativ 30 de interviuri cu actori din turism și din domeniile conexe, un chestionar cu peste 1.000 de răspunsuri și un audit al imaginii digitale a destinației. Rezultatele au fost discutate cu instituțiile publice și cu mediul privat, în dezbateri dedicate. Acestor voci li se adaugă acum perspectiva generației Z. Ideile, observațiile și propunerile studenților vor fi analizate de echipa strategiei și integrate în procesul de consultare.

APLICAȚIE PRACTICĂ DE TEREN | PRACTICAL FIELD TRIP

”Dealul Mare-Hârlău”

Sâmbătă / Saturday 24.10.2026, 08:00h – 20:00h

[RO] O călătorie prin peisajele, patrimoniul și comunitățile din Dealul Mare-Hârlău, de la cultura Cucuteni și patrimoniul medieval ștefanian până la arhitectura tradițională, gastronomia locală și tradiția vitivinicolă a Cotnariului.

08:00 Plecare din fața Corpului A al UAIC
09:30 Drumeție pe Dealul Cătălina (în funcție de vreme)
10:15 Vizită satul Zlodica, com. Ceplenița (Biserica din Lemn, beciul unui vechi han)
11:15 Vizita Bisericii Sf. Gheorghe, ctitorie Ștefaniană, și a ruinelor Curții Domnești
12:00 Vizionare spectacol folcloric la Centrul cultural Deleni
12:45 Hanul Deleni – proiect de salvgardare al unui monument istoric
13:15 Turul Conacului Polizu Maxut, com. Deleni
13:30 Prânzul la Conacul Polizu
15:00 – 16:30 Masă rotundă cu actori locali din zona „Dealu Mare – Hârlău” la Sala de Conferințe a Conacului Polizu
17:00 Degustare vinuri din soiuri autohtone la Crama Axinte, Casa de Vinuri Cotnari
18:15 Plecare spre Iași
19:30 Sosirea la Iași

[EN] A journey through the landscapes, heritage, and communities of Dealul Mare-Hârlău area - spanning from Cucuteni culture and the medieval heritage of Stephen the Great to the traditional architecture, local gastronomy, and the winemaking tradition of Cotnari.

08:00 Departure from UAIC Building A
09:30 Hike on Cătălina Hill (depending on weather)
10:15 Visit to Zlodica village, Ceplenița commune (wooden church and the cellar of an old inn)
11:15 Visit to St. George’s Church, founded during the reign of Stephen the Great, and the ruins of the Princely Court
12:00 Traditional folk performance at the Deleni Cultural Centre
12:45 Deleni Inn – a heritage conservation project for a historic monument
13:15 Guided tour of Polizu Manor in Maxut, Deleni commune
13:30 Lunch at Polizu Manor
15:00–16:30 Roundtable discussion with local stakeholders from the “Dealu Mare–Hârlău” area, in the conference room at Polizu Manor
17:00 Wine tasting featuring local grape varieties at Axinte Winery, Cotnari Wine House
18:15 Departure to Iași
19:30 Arrival in Iași

REZUMATE/ABSTRACTS/RÉSUMÉS

Cloud-based monitoring of twenty years of shoreline change on Ko Phi Phi Don, Thailand, using Google Earth engine and multi-temporal satellite imagery

Sara AHARON

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Coastal environments on tropical islands are increasingly threatened by the combined impacts of natural coastal processes, climate change, and rapidly expanding tourism. Reliable long-term monitoring of shoreline dynamics is therefore essential for supporting sustainable coastal management and protecting environmentally sensitive regions. This study investigates shoreline change on Ko Phi Phi Don, Thailand, between 2004 and 2024 using freely available satellite imagery processed within Google Earth Engine (GEE). All images were acquired during the dry season (November–May) to minimize cloud cover and ensure consistent shoreline visibility under comparable environmental conditions. The specific scenes used were: 11 April 2004 (Landsat 5/USGS), 2 February 2014 (Landsat 8/USGS), and 15 February 2024 (Sentinel-2/Copernicus).

Shorelines were extracted using the Normalized Difference Water Index (NDWI), applying a fixed threshold of 0 to generate binary water–land classifications, which were then vectorized to delineate the shoreline boundary for each reference year. Geographic Information Systems (GIS) were used to quantify erosion and accretion patterns and evaluate spatial changes over time.

The analysis revealed pronounced spatial variability in shoreline dynamics across the island. The greatest shoreline retreat occurred along the western, northeastern, and southwestern coasts, with maximum retreat reaching approximately 117 m. In contrast, shoreline accretion was limited to small, localized sectors of the northwest coast. Area-based analysis showed that approximately 1.01 km² of coastal land experienced erosion during the twenty-year study period, whereas only 0.25 km² exhibied shoreline advance, indicating a clear net trend toward coastal retreat. Although natural marine processes remain the dominant drivers of shoreline change, the observed erosion hotspots coincide with areas of intensive tourism development, suggesting that human activities may increase coastal vulnerability.

Areas of intensive tourism development, identified using the Global Human Settlement Layer (GHS-BUILT-S), showed a 42.2% increase in built-up surface between 2005 and 2025, concentrated around Ao Ton Sai and Loh Dalum Bay, coinciding with the observed erosion hotspots.

Results were validated by comparison with published research on coastal erosion in karst-landscape islands in the region, supporting the reliability of the observed shoreline retreat and advance patterns.

The proposed cloud-based workflow demonstrates how freely available Earth observation data and Google Earth Engine can provide an efficient, reproducible, and cost-effective approach for long-term shoreline monitoring. The findings contribute to improved understanding of coastal dynamics in tropical island environments and provide valuable information to support sustainable tourism planning, coastal conservation, and evidence-based environmental management.

Hazard or by-product of conflict? An LLM-based quantification of drone crushes and their impacts in SE Romania

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Drone incursions and crashes in the SE of Romania have grown increasingly frequent over the past two years against the escalating Russo-Ukrainian conflict. While drone incursions and crashes do not constitute hazards in themselves, they are a recurrent feature of contemporary international armed conflicts, which are classified as societal hazards in the UNDRR-ISC Hazard Information Profiles (2025). Despite this, little research has been directed at understanding their direct and indirect impacts, highlighting a notable gap in the knowledge on conflict-related threats at border regions.

This study aims to investigate drone incursions and crashes in the SE of Romania between January 2025 and September 2026 by establishing a timeline of occurrence, quantifying the number of such cases, and characterising their direct and indirect impacts. To this end, we employed an LLM-based extraction methodology to elicit information on the type of drone incident, its source, the affected or crash areas, and the associated impacts from 214 news reports published by a prominent Romanian online news platform (i.e., Digi24). Drawing on the extracted data, we developed a timeline and a map of these drone incidents. Adhering to the human-in-the-loop approach, the reliability of the extracted elements was verified through manual cross-checking against the news reports in order to mitigate the uncertainty inherent in automated extraction.

Documenting the timeline and impacts of drone incursions and crashes lays the groundwork for anticipating and managing a threat that is likely to persist as long as the regional conflict does. These insights can inform preparedness and response planning in border regions.

Seismic risk-informed geoconservation priorities for urban geosites in Iași, Romania

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Urban geosites associated with historic buildings and monuments can preserve geological information through their building stones while also reflecting geomorphological setting, cultural history and urban development. This study develops a seismic risk-informed geoconservation framework for urban geosites in Iași, Romania, building on a field-verified inventory of 105 sites, 36 of which were previously classified as degraded. The framework conceptually distinguishes seismic hazard, exposure, physical seismic vulnerability and potential consequences. Documented technical assessments and intervention histories are incorporated where available, and no official seismic risk class is inferred where such evidence is absent. Current conservation status is treated as baseline evidence rather than as a proxy for seismic vulnerability or risk. Geological and geomorphological context is represented through building stone provenance, local relief, topographic position and site-landscape relationships. Potential loss of geoheritage value is characterised through geological significance, rarity, availability of compatible replacement stone, cultural and geotouristic relevance, and post-event recoverability. The integrated assessment focuses on 15 previously characterised geosites and compares condition-based with seismic risk-informed geoconservation priorities. The framework provides a transferable basis for prioritising detailed seismic assessment and geoconservation action in historic urban environments.

Forensic geomorphology in Romania and the interpretation of disturbed ground

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Geomorphology is already present in forensic terrain investigation, even when its contribution is not explicitly recognised as such. Site accessibility and selection, surface form, the thickness and distribution of surficial materials, drainage, ground stability, post-excavation change and the evolution of disturbance all depend on relationships between landform, process and time. In Romania, relevant competences are distributed across soil analysis, archaeology, geology, geophysics and topography, while

geomorphology is not separately identified within the current framework of judicial technical expertise. This paper addresses that discrepancy by defining the geomorphological reasoning that is already implicit in terrain investigation. A surface disturbance cannot be interpreted from its present form alone. Excavation or burial may produce depressions, local mounds or drainage changes, but comparable forms may also result from compaction, erosion, subsidence, runoff or earlier land use. Moreover, processes operating after disturbance progressively modify its morphology and may superimpose the effects of several natural and anthropogenic episodes. The role of geomorphology therefore extends beyond the recognition of disturbed ground. It contributes to establishing the genesis of an observed form, evaluating the processes responsible for its subsequent modification, and distinguishing between alternative explanations. In this sense, forensic geomorphology does not represent the introduction of another investigative technique, but the explicit recognition of a mode of geographical reasoning already required when terrain itself becomes evidence.

Toxicity of Non-steroidal Anti-inflammatory Drugs at Environmentally Relevant Concentrations, in Relation to the Developmental Stage of Danio rerio

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Non-steroidal anti-inflammatory drugs (NSAIDs) are widely used medications that are continuously released into aquatic ecosystems and frequently detected in surface waters. Their potential effects on non-target aquatic organisms have raised growing ecotoxicological concerns. However, existing studies vary considerably regarding exposure concentrations, duration and the developmental stages investigated. This review aims to synthesize the literature on the toxicological effects of selected NSAIDs - including diclofenac, ibuprofen, naproxen and ketoprofen - in zebrafish (Danio rerio), focusing on environmentally relevant concentrations and developmental stage-dependent responses. Published studies were analyzed across embryonic, larval and adult stages, focusing on morphological, developmental and behavioral endpoints. Literature data indicate that NSAID exposure can induce developmental abnormalities, impaired hatching and edema in embryos, behavioral and locomotor alterations in

larvae, and biochemical effects, oxidative stress, reproductive disorders and tissue-level alterations in adult zebrafish. Overall, the analyzed evidence highlights the importance of developmental stage and exposure duration in assessing NSAID toxicity and supports the use of integrated endpoints - morphological, behavioral and biochemical - to evaluate the ecological risks associated with pharmaceutical contamination of aquatic ecosystems.

Diversitatea florei spontane și relația acesteia cu indicatorii ecologici ai solului în bazinul râului Bahlui

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Flora spontană reprezintă o componentă esențială a ecosistemelor terestre, iar distribuția și structura acesteia reflectă variabilitatea condițiilor ecologice locale. În acest context, studiul urmărește caracterizarea comportamentului ecologic al speciilor de plante spontane din bazinul râului Bahlui în raport cu principalii indicatori de mediu, respectiv troficitatea, temperatura, umiditatea și reacția solului. Analiza are la bază conspectul taxonomic al florei vasculare spontane și încadrarea speciilor în categorii ecologice corespunzătoare preferințelor acestora față de factorii analizați. Inventarierea floristică a evidențiat o diversitate ridicată, fiind identificate peste 1.600 de specii și taxoni infraspecifici, aparținând unui număr de 115 familii și 538 de genuri botanice. În raport cu troficitatea solului, speciile eutrofe dețin ponderea cea mai ridicată (29,59%; 346 specii), fiind urmate de speciile mezotrofe (24,55%; 287 specii), oligotrofe (16,43%; 192 specii), oligo-mezotrofe (13,61%; 159 specii) și mezoeutrofe (12,91%; 151 specii), în timp ce speciile euritrofe reprezintă 2,91% (34 specii). Analiza preferințelor termice evidențiază predominanța speciilor termofile (44,21%; 550 din 1.244 de specii), urmate de cele moderat termofile (23,31%; 290 specii), mezoterme (18,49%; 230 specii) și amfitolerante (13,99%; 174 specii). Din perspectiva regimului de umiditate, spectrul ecologic este dominat de speciile hidro-higrofile (30,22%; 408 din 1.350 de specii), urmate de speciile mezofile (22,59%; 305 specii), xeromezofile (19,92%; 269 specii), xerofite-mezofite (15,13%; 204 specii), xerofite (8,37%; 113 specii) și eurifite (3,77%; 51 specii). În ceea ce privește reacția solului, predomină speciile slab acid-neutrofile (34,14%; 481 din 1.229 de specii), urmate de speciile eurionice (29,37%; 361 specii), acid-neutrofile (19,21%; 236 specii) și slab acid-neutrofile-neutrobazifile (12,28%; 151 specii). Distribuția speciilor în raport cu cerințele ecologice evidențiază heterogenitatea condițiilor de habitat existente la nivelul bazinului râului Bahlui și capacitatea florei spontane de a reflecta variațiile proprietăților mediului edafic. Rezultatele susțin utilizarea compoziției floristice și a spectrelor ecologice ca instrumente de bioindicație pentru caracterizarea condițiilor de mediu și evaluarea relațiilor dintre covorul vegetal și proprietățile solului. O astfel de abordare poate furniza informații relevante pentru

evaluarea stării ecologice a ecosistemelor și pentru fundamentarea măsurilor de conservare și management durabil al biodiversității la nivelul bazinului hidrografic Bahlui.

Feminist Ventures into Ecotopia. The Pragmatics of Rights

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In a world where vulnerability is gendered and accountability is gender-neutral, within an immensely complicated natural environment we have yet to understand, any discussion of women's rights starts from a biased perspective, as the two dominant attributes of human existence seem to be anthropocentrism and patriarchy. Consequently, the conceptual outline of ecofeminism finds itself right at the centre of two ideological clashes, men versus women and nature versus culture. Ecofeminism does not represent a re-gendering of a problematic side in humanity's approach to nature, but a re-positioning according to the realities of today's world. Women are the first victims of environmental deterioration. The climate crisis humanity is currently facing, for instance, disproportionately impacts women in the rural areas of developing nations, where they are most reliant on natural resources for survival. In such regions of gendered vulnerability, women are largely still assigned farming duties, water and fuel collection duties etc, therefore an increase in the frequency of droughts or floods significantly lower their quality of life. Women have been at the forefront of the resistance against ecological degradation. Their efforts have, however, often been disregarded. For decades, ecofeminism, alongside the green movement, has been stressing the need to act upon the imbalance we have been causing. While traditional Western systems often value momentary profit over long-term balance, ecofeminism advocates for sustainability instead of endless resource extraction and mindless growth, arguing that, unless we aim for a complete transformation of our society-nature interaction, where production is organized in ways which takes into account natural rhythms and limits, the rift between nature and humanity will worsen, with devastating consequences for human health, climate disruption, and irretrievable biodiversity loss. An ecologically sustainable narrative would include a shift in focus from the commodification of nature to a deeper understanding of the intrinsic value of the natural environment, on the one hand, and a fair distribution of rights and decision power between genders, on the other.

Gender Stereotypes in the (Postmodernist) Mirror. A Case-Study in the Reality of Music: Lolita Cercel

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In Postmodernism, or The Cultural Logic of Late Capitalism, Frederic Jameson (1991) remarks on "the heterogeneity and profound discontinuities of the work of art, no longer unified or organic" as a staple of the postmodernity(23), raising several questions about how cultural products are multiplied and consumed. The case study proposed, AI-generated artist Lolita Cercel, further complicates the debate by its reliance on racial difference. Displaying a Roma-coded persona whose music is an artificial collage of real musical genres (traditional Romanian music such as lăutărească, romanță, manele influences combines with more modern pop and hip-hop, sometimes jazz), Lolita becomes the center of a debate about cultural appropriation, authenticity, classism, the ethics of AI and of cultural consumption. Beyond the musical aspect, the paper will examine whether the creation of AI artist Lolita Cercel perpetuates gender stereotypes, as any depiction of racially othered femininity (Roma, in this case) is fraught ideological territory: as Lolita sings of heartbreak and longing, the expression of her desire is framed by societal caveats shaped around gender and race. In a typically postmodernist fashion, the audience becomes the ultimate creator of the spectacle, then music naturally becomes the most vocal channel for the individuals to shout their fantasies. Resorting to cultural studies, gender research and the arguably postmodern condition of today's social dynamics, the present paper tries to answer this question, focusing on a rather recent episode in Romanian music as case-study; we will also try to determine whether the surface of the lake reflects gender stereotypes and to what extent could the waves wash a collective consciousness from racial biases.

The role of territorial capital in shaping green transition in Central and Eastern Europe

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This study investigates the alignment between EU-funded green investments and the territorial capital across 238 NUTS3 regions in former communist EU Member States. It addresses a key challenge of the European Green Deal: ensuring that decarbonisation and environmental modernisation promote territorial cohesion rather than exacerbate environmental, socio-economic, institutional, and spatial inequalities. This issue is particularly salient in Central and Eastern Europe (CEE), where carbon-intensive industrial legacies, fossil-fuel dependence, uneven development, demographic decline, and weak administrative capacity may shape both access to green funding and the capacity to translate it into sustainable development trajectories. The analysis utilises georeferenced Cohesion Policy project data from Kohesio for the 2014–2020 and 2021–2027 programming periods. Kohesio offers project-level information on eligible expenditure, EU co-financing, intervention categories, thematic objectives, funds, and project locations, enabling aggregation at the NUTS3 level. Green investments are evaluated based on project counts, per capita funding intensity, and thematic profiles encompassing the low-carbon transition, environmental protection and resource efficiency, and climate adaptation and risk prevention. Territorial capital is operationalised across environmental, social, economic, infrastructural, and institutional dimensions, using data from the OECD, Eurostat, and other sources. Entropy-weighted multi-criteria analysis constructs composite indices of territorial capacity, while principal component analysis and clustering identify territorial-capital configurations and green-investment profiles. Geographically weighted regression assesses local relationships between investment profiles and territorial assets, controlling for development level, urbanisation, institutional capacity, and political discontent. The results indicate significant subregional heterogeneity. Some counties show coherent pathways, as green investments strengthen endogenous capabilities. Conversely, other regions exhibit low funding intensity or project portfolios that lack alignment with local assets and transition requirements. The study identifies territorial mismatches, underutilised potential, and areas susceptible to green marginalisation, thereby informing more place-sensitive Cohesion Policy strategies in Central and Eastern Europe.

Gender and Forms of Heroism in Joseph Conrad's Lord Jim

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Joseph Conrad's Lord Jim is primarily concerned with the idea of heroism and with Jim's desire to construct himself according to an idealized image of courage, honour, and exceptional action. His heroic identity, however, is repeatedly tested by concrete circumstances, most significantly during the crisis aboard the Patna, when the discrepancy between imagined heroism and actual conduct becomes impossible to ignore. This paper proposes a reconsideration of heroism in the novel by comparing Jim's self-conscious pursuit of the heroic ideal with the less explicitly recognized courage displayed by Jewel. It argues that the two characters can be read as representing contrasting forms of heroism: Jim's is largely abstract, shaped by an imagined heroic identity and by ideals of honor, reputation, and fidelity to a particular conception of the self, whereas Jewel's emerges through concrete situations requiring practical judgment, protection, care, and relational responsibility. Through comparative close reading, the paper examines how these different forms of courage are constructed within the novel. Central to the analysis is the question of why these forms of courage are not equally recognizable as heroism. Rather than simply identifying Jewel as an alternative hero, the paper asks what qualities make an action recognizable as heroic and whether these criteria are influenced by gender. It therefore considers whether conventional ideas of heroism, centered on honor, individual achievement, and self-sacrifice, make certain forms of courage more readily recognizable as heroic than others, particularly those expressed through practical action, care, responsibility toward others, and the preservation of life.

Smart Urban Development and Quality of Life: A Sustainability Perspective on Iași, Romania

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This study explores whether citizens in Iași, Romania, use smart initiatives and perceive them as improving their quality of life. We conducted a city-scale semi-structured survey to assess participants' views on the sustainability of the implemented smart initiatives and their impact on their quality of life. The results show perceptions of smart

initiatives and their usefulness differ substantially by age, indicating an emerging generational shift with medium- and long-term consequences. More than 80% of respondents are satisfied with their quality of life, and nearly 60% consider that their quality of life has improved as a result of the implementation of smart initiatives in the city. However, only 50% consider Iași to be developing sustainably, and more than 70% report that the expansion of green areas, eco-friendly transportation, improved recycling methods, and better air quality are important to them. A structured questionnaire was our main tool for data collection. To complement this data, several spatial datasets were used to support the territorial and thematic analysis of Iași. Gridded population density data from the GISCO-Eurostat repository were used to map population distribution across the municipality, thereby identifying the unequal density patterns. Land-use and land-cover data from the Urban Atlas products of the Copernicus Land Monitoring Service described Iași's urban space, including residential areas, green spaces, commercial zones, and infrastructure.

Riscurile hidrogeologice asociate resurselor de apă subterană din Subcarpații Moldovei dintre râurile Bistrița și Trotuș

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Lucrarea intitulată „Riscurile hidrogeologice asociate resurselor de apă subterană din Subcarpații Moldovei dintre râurile Bistrița și Trotuș” are ca scop principal analiza resurselor de apă subterane din arealul Subcarpaților Moldovei, pentru a oferi o înțelegere mult mai clară asupra tuturor parametrilor fizico – geografici cu privire la cantitatea, calitatea și aspectele hidrogeologice.

Cadrul natural și hidrologic al zonei de studiu, prin prezentarea componentelor hidrologice și naturale, creează prima bază solidă pentru analiza tuturor riscurilor hidrogeologice asociate apelor subterane.

Alegerea acestui subiect a fost motivat de diversitatea și complexitatea tuturor elementelor naturale și antropice existente în acest areal care influențează regimul resurselor de apă din subteran.

Scopul lucrării a fost de a identifica cât mai multe surse ce pot perturba apa subterană și de evidențiere a gradului vulnerabilității acviferelor, dar și a elaborării și evaluării tuturor măsurilor de protecție și de monitorizare a acestora.

Projected bioclimatic conditions for grapevine development in Romania and the Republic of Moldova modelled with MRI-ESM2-0

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This study assesses the projected changes over Romania and Republic of Moldova for 13 biometeorological indices — particularly relevant to grapevine development — under three of the latest climate scenarios, at fine spatial resolution (~0,5km²), for the near (2041–2070) and the distant (2071–2100) future. The following indices (computed from daily data) were extracted from the CHELSA database: mean annual air temperature, mean diurnal air temperature range, isothermality, annual precipitation amount, precipitation amount of the wettest month, mean monthly precipitation amount of the warmest quarter, frost change frequency, growing degree days heat sum above 10°C, growing season length, accumulated precipitation amount within the growing season, mean temperature of the growing season, snow cover days, snow water equivalent. The three SSP (Shared Socio-economic Pathways) climate scenarios used in the study are: SSP1-RCP2.6, SSP3-RCP7.0 and SSP5-RCP8.5.

The projections are based on the MRI-ESM2-0 model, developed by the Meteorological Research Institute (MRI) of Japan for CMIP6. It couples an atmospheric model (ta ~120 km resolution and 80 vertical levels) with an ocean model (~0.5° resolution, 61 levels), sea ice, and a land-surface scheme linked to river routing. What makes it an Earth System Model rather than a standard climate model is its interactive biogeochemistry: ocean and land carbon cycle components track carbon storage and exchange, while an atmospheric chemistry and aerosol scheme handles aerosol-radiation and aerosol-cloud interactions.

The poster highlights the preliminary analysis of these projections, focusing on anticipated shifts in thermal and moisture regimes across the region. Ultimately, the broader implications of these bioclimatic changes for regional viticulture, providing a necessary foundation for future climate adaptation strategies in the wine sector of Romania and the Republic of Moldova are discussed.

This research was done within the framework of the project «Changes in climate suitability of Romanian vineyards» (CARVE), code PN-IV-P1-PCE-2023-1875, funded by UEFISCDI (the Executive Agency for Higher Education, Research, Development and Innovation Funding).

From mass tourism to sustainable tourism: policy responses to overtourism in Southern Europe

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Over the past decades, tourism has become one of the main drivers of economic development in Southern Europe, but also one of the main challenges to the region's sustainability. The continuous growth of tourist flows has generated an increasingly visible phenomenon, widely discussed in both the specialized literature and public discourse — overtourism — which simultaneously affects the quality of life of local communities, the integrity of natural and cultural heritage, and the visitor experience itself. In this context, interest in sustainable tourism, as a viable alternative to the quantitative mass tourism model, has grown significantly among both researchers and decision-makers at the European, national, and regional levels.

Southern Europe is a very popular tourist destination, attracting approximately 40% of total international arrivals recorded across the continent (according to Eurostat data). The evolution of tourist flows between 2009 and 2024 was marked by a dramatic decline during the COVID-19 pandemic, followed by a spectacular recovery in subsequent years, with the overall trend of European tourism remaining steadily upward. This growth dynamic, combined with increasingly intense tourist pressure on major destinations, has produced negative effects on both residents' quality of life and the quality of the tourist experience offered to visitors, highlighting the need for public policy strategies oriented toward sustainability.

This paper pursues two main objectives. The first is to delineate the profile of mass tourism in Southern Europe in order to highlight the main problems affecting tourism in the region. The second aims to identify the main regional and national policies designed to manage mass tourism and develop sustainable tourism in Southern Europe, as well as to assess their degree of implementation. To achieve these objectives, the study relies on statistical data provided by Eurostat, corroborated with policy documents formulated at the European, regional, national, and local levels.

Methodologically, the research combines a quantitative analysis of statistical data with a qualitative analysis of strategies regarding mass tourism (overtourism) in Southern Europe for the period 2019–2026. The sources used include academic research, official reports from the European Union, the European Commission for Tourism, the World Tourism Organization (UNWTO), reports from regional programs in Southern Europe — particularly Interreg Mediterranean — as well as media materials. Based on these sources, a synthesis was carried out of the relevant tourism policies applied in the region, analyzing their implementation status, priority areas of action, and the main factors obstructing the transition toward a sustainable tourism model. The quantitative component of the study was based on data from Eurostat and the World Tourism

Barometer, regarding the number of tourist arrivals, the density and seasonality of flows, resident protest messages, water resource and waste management crises, etc.

The research results show that tourism in Southern Europe continues to record sustained growth, with this region experiencing the sharpest increase in international arrivals in all of Europe, up 43% in 2025. The highest tourist density is recorded in Spain (e.g. Barcelona, Mallorca), Greek islands, Venice, Croatia, Lisbon, and other major urban centers. The region is thus facing a pronounced overtourism phenomenon, generating serious social problems, infrastructure congestion, pollution, and severe climate consequences. Although tourism contributes significantly to the GDP of countries in the region, with a share between 12% and 20%, the research reveals a paradoxical effect when an area's economy becomes almost exclusively dependent on tourism activity — economic and social vulnerability increases in proportion to the degree of dependency. The most problematic practice identified is tourism oriented exclusively toward quantity and immediate economic benefits, to the detriment of experience quality and the destinations' carrying capacity.

Tourism activity in Southern Europe is characterized by high intensity and pronounced seasonality, concentrated in the May–October period. Among the regions with the highest intensity and seasonality are the Greek islands (Rhodes, Kos, Mykonos), the Ionian Islands, Crete, the Adriatic coast of Croatia, various areas of Italy, Spain's Balearic Islands, Corsica (France), and Portugal's Algarve region. The causes fueling an increasing number of anti-overtourism protests are multiple and interconnected. They include tourist behavior, growing pressure on the accommodation sector, deterioration of natural and cultural heritage, destinations exceeding their carrying capacity, residents' access to real estate market, local governance shortcomings, and shifting tourism preferences.

Regarding the implementation of sustainable tourism policies, the research highlights that this requires active governance and differentiated support mechanisms, tailored to each region's specific profile and vulnerabilities. At the European level, the current legislative framework targets the transition to sustainability by 2030, with the European Agenda for Tourism 2030 integrating objectives related to climate resilience, social inclusion, destination resilience, crisis preparedness and management, and innovation. The tourism policies identified address five key challenges: local population dissatisfaction, degradation of the tourist experience due to saturation, overload of infrastructure and basic services, growing environmental impact, and threats to local culture and heritage.

The study shows, however, that sustainable tourism policies are being implemented with difficulty in Southern Europe, and the scale of social discontent demonstrates that tourism in the region are still on their way to reaching a truly sustainable form. Effective implementation of these policies must place emphasis on local communities' quality of life, and sustainable tourism strategies must address both immediate problems and

propose long-term solutions. Among the measures analyzed, the most rapidly implemented ones were those targeting the housing crisis, large tourist flows to cultural sites, and transport-related problems, although these issues remain unresolved, as confirmed by the high number of anti-tourism protests recorded in the region. Policies aimed at the transition to a green economy are still at an early stage and require longer implementation periods. Likewise, policies on reducing fuel consumption in the aviation and maritime sectors are already partially functional but require additional measures, advanced technology, and substantial investment. Identifying new destinations for resilient tourism, educating tourists, and integrating circular economy principles represent other strategic policy directions for the future.

In conclusion, decision-makers show genuine interest in implementing sustainable tourism in the Southern Europe region, but the complexity of the identified problems requires sustained and coordinated efforts at all levels of governance. Among the priority solutions identified are: finding effective ways to decongest overburdened destinations; promoting new, attractive destinations built on circular economy and ecotourism formulas; and continuously educating tourists — through online channels or more personalized forms of communication — about the importance of sustainable development in tourism and about accepting ecotourism-type offers. Educating tourists and rethinking the current tourism model thus become essential conditions for protecting affected regions and ensuring a quality tourism experience, both for visitors and for host communities.

Cultural-linguistic, historical-geographical and political-electoral particularities highlighted by Thracian onomastics

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This material follows an older documentation, carried out in 2017 (published in 2018), Thracian onomastics is a true (re)source of information in terms of geographical perspective. There is an overflowing diversity of themes about which the names of our ancestors can provide information. The launch, last year, of the inventory of these names has already led to numerous findings related to the past of our people.

The inventory of names was based, first of all, on Dan Dana's post-doctoral thesis, Onomasticon Thracicum, along with which, we used, as documentary sources, materials published by Michel le Quien (1740), N. A. Constantinescu (1963), Sorin Olteanu (2011), etc. The data were entered into the computer, in the Microsoft Excel program, where they were processed, with a view to mapping. For the cartographic representation, taking into account, first of all, the fact that more than three quarters of the onomastic information is attested in the 1st-3rd centuries AD, we developed three map funds, both

at the level of Roman provinces (two map funds, at a more general level – of the provinces from the 2nd-3rd centuries, and at the more detailed one, of the provinces that emerged from/after 284), and at the level of urban territories (as subdivisions of the imperial provinces), for the same interval of the first three centuries of the Christian era. For the cartographic representation of the onomastic information, we used both the ascending hierarchical classification and the spatial distribution coefficients.

For the inventory, processing and mapping of the onomastic data, we had to overcome several problems. The first refers to the fact that, quite often, the bearers of certain names were attested, both geographically and temporally, in different spatial units and/or historical intervals. Although it is not the best solution, but possibly the least bad, we opted for recording these names in both (or all) spatial units and/or in all periods in which they appear. Such a decision increased the total number of occurrences, in terms of geographical location, by approximately 10% (in the over 8 thousand attestations) and by approximately 250 in the case of "double" temporal attestations. From this point of view, since a good part of the onomastic attestations are not made with chronological precision, not even annual or secular (appearing expressions such as "Hellenistic period", or "I-III centuries"), we have grouped the names into (several) intervals of (at least) three centuries: XIII-VII, VI-IV, III-I BC. I-III, IV-VI, VII-IX, X-XII AD.

Regarding the realities highlighted by the Thracian onomastics, we recall a few elements brought to the fore: the revelation of some phonetic particularities of the Romanian language, which entered the language with the Romanization through Christianization of the Thracian-Dacians (achieved, to a large extent, in the IV-VI centuries AD): the rotacization of intervocalic l (general for all dialects of the Romanian language), the preservation, as a Thracian relic, of the pronunciation with ș instead of č, before e/i (preserved both in the west of the area with speakers of the Daco-Romanian dialect – Băceano-Banato-Timocean, and in the eastern one – Moldavian), the rotacism of intervocalic n (based on a substrate influence of the Celtic Pannons, assimilated by the Thracian-Dacians, a characteristic particularity of the speakers of the western, rotacizing "dialect", existing for a millennium now and determined by the philologist Gh. Ivănescu) and others.

Other elements, related to the preservation of some suffixes, are highlighted, especially if we refer to the onomastics that use the suffix -iσκ(η)/-isc(a), considered by specialists – A. Graur (1927), Iorgu Iordan (1963) – as autochthonous and underlying the current Romanian variants of the suffix(es) -escu, for anthroponymy, respectively -ești, for toponyms. On the other hand, Thracian onomastics highlights the preservation of some themes from the substrate in Romanian names: Baci, Mocan, Moș, Mușat, Măceș and others.

Although it may seem surprising, names of Thracian origin also contributed to the shaping of a political-electoral specificity of the space inhabited by the Thracian-Dacians. Thus, confirming the takeover of some political-administrative elements from

the ancient Greeks – Sfatul Bătrânilor/the Council of Elders and/or from the Romans – the village jude/judge, the duke, as a military leader, the native anthroponymy highlights the presence of several local leaders, both in the Thracian-Macedonian areas, and especially in the Moeso-Dacian Balkan-Danubian ones. In addition, several of the Thracian-Dacians became military leaders, with the title of dux = duce/duke, later also present in the Romanian medieval titulature and onomastics. Affected by the Greco-Byzantine influence, dux/ducis became duca, frequently attested in Romanian anthroponymy (including of some rulers, such as Gheorghe Duca), but, through its translation into Slavic, it became a generic term – voivode = voievod/vodă, used in the titulature of the rulers in Wallachia and Moldavia – mare voievod și domn = great voivode and lord, where the great voivode was also the most important military leader, but also had the meaning of supreme commander of the army.

Again, about the Romanian Electoral Geography Atlas (REGA)

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A few years ago, we signaled the intention to create the Romanian Electoral Geography Atlas (AGER). We return with new information, related both to its structure and to the elements that will be included, insisting especially on the new elements.

Thus, after the Introduction, in which we will insist both on the methodological aspects, the problems encountered and the solutions found to overcome them, as well as on the sources of documentation, the historical-electoral periodization and the use, for data comparability, of some timeless map funds, both for the Romanian space and, at a broader level, for the Carpathian-Balkan space, there will follow a first chapter regarding the chrono-spatial distribution of some electoral variables in the Carpathian-Balkan space in antiquity and in the Middle Ages.

The transition to the analysis of the chrono-spatial distribution of electoral variables in the modern and contemporary eras (the last almost two centuries) will be made after a chapter related to European geopolitical landmarks (1830-2025) and another related to the Construction of the Romanian state territory and the evolution of political life.

Then, the first element analyzed will refer to the Chrono-spatial distribution of voter turnout (1831-2025). From this point of view, we have information from the regulatory period (for parliamentary elections, and, after the Union of the Principalities, from local elections, but also from plebiscites organized at that time), after 1989 information, even very detailed (at the municipal level) referring also to the presidential elections and, from/after 2007, to the European Parliament elections. We also took into account, after 1989, the evolution of voter turnout (at district and even communal levels) in the elections organized in the Republic of Moldova.

The chapter on the Chrono-spatial Distribution of Voters' Political Options in the Parliamentary Elections in the Romanian Principalities (1831-1862), Romania (1862-2004) and the Republic of Moldova (1990-2025) follows. The preferences of the electorate are analyzed both at the level of political formations (parties) and at a more general level, by political families. In Romania, during the periods in which it existed, this information is also analyzed for the Senate (1864-1939, 1990-2024). Closely related to this is the next chapter, The Chrono-Spatial Distribution of Legislative Mandates in the Carpathian-Balkan Space (1200 BC-1500 AD), the Romanian Countries (1500-1830), the Romanian Principalities (1831-1862), Romania (1862-2024) and the Republic of Moldova (1990-2025). Based on the data, incomplete in many cases, we have reconstructed the chrono-spatial distribution of the dignitaries who were part of the Royal Assemblies/Councils of the Thracian-Dacian states, of the Roman Senate and, later, of the Transylvanian Diet and of the Princely Council of Moldavia and Wallachia. After the Union of the Principalities, we have complete information, so that, in addition to the deputies and senators elected by vote, we were able to add the senators by right (for the period 1864-1940). In fact, we have allocated a special chapter to this chamber – The Election of the Senate in Romania (1859/1864-2024).

Another legislature, but at a supranational level, is the European Parliament, for which, starting from the country's accession to the European Union, the Romanian electorate regularly elects, from/after 2007, the delegation of MEPs who represent us at this level. These particularities are highlighted in the chapter The European Parliament Elections in Romania (2007-2024).

Regarding the elective designation of the leaders of the Romanian states, we have an old tradition, which comes from the medieval era. Thus, the voivodes of Maramureș were elected by an Assembly of Princes, for a one-year term, and could be re-elected or not. The tradition was rarely maintained, but we can cite, in this sense, the election as ruler of Moldavia, of Ștefan cel Mare, by the Assembly of the Country, on the field of Direptate (1457) or that of Constantin Brâncoveanu, as ruler of Wallachia, by the Princely Council (1686). The Organic Regulation, drawn up for both Principalities, provided for the election of the ruler by an Extraordinary Public Assembly, but this provision was applied only once, with the election of Gheorghe Bibescu, in Wallachia (1842). However, the same measure was also maintained in the Paris Convention (1857), on the basis of which the Elective Assemblies of Iași and Bucharest elected Alexandru Ioan Cuza as prince (1859). After separation from Russia, Bessarabia, proclaimed the Moldavian Democratic Republic (1917), elected, through its legislature, the Country Council, Ion Inculeț as president. Also, the election of the head of state is provided for in Romania since the communist period and in the Republic of Moldova, after its separation from the former Soviet Union. All these elements are provided for in the chapter Election of state leaders in the Carpathian-Balkan space (before 1830) and in the Romanian space (1842-2025).

A separate chapter is also dedicated to local elections – Voting and political representation at regional and local levels in the Carpathian-Balkan space (before 1830). Local elections in the Romanian Principalities (1831-1862), Romania (1862-2024) and the Republic of Moldova (1995-2025). As we are talking about elections of autonomous structures, we have highlighted this aspect for the medieval era, both in Transylvania and in the extra-Carpathian and even some southern Danubian lands

An important aspect, which is also linked to the future conduct of electoral competitions, from the European Parliament and national levels, to the regional (county) and local levels, is addressed in the chapter Administrative reform and citizen representation. We submit to debate proposals for administrative reform, necessary in Romania, also correlated with possible voting and political representation options, at all levels (from local to national and European).

A synthesis chapter follows – Chrono-spatial distribution of electoral variables in the Romanian space (1831-2025), in which, based on weighted averages, on "electoral five-year periods", we highlighted both the distribution of voter turnout and voter preferences, at the level of political families, at the county level, for the Romanian space. For the period after 1989, we also highlighted these aspects for local elections – only in Romania and the Republic of Moldova, at the communal level.

As an example, taking into account the long political-electoral activity in this area, we also added the chapter – Peculiarities of electoral geography at the local level. Case study: Țara Oltului/The Olt Country. The electoral data in the mentioned area span more than seven centuries, since there is information about the (elected) members of the Scaunul celor 12 jurați/The Seat of the 12 Jurors, represented by the boyars from the villages of the Olt Country (such elections were also held after the establishment of Habsburg rule, until the middle of the 18th century), after which we have information related to the elections from the dualist period (from/after 1867), as well as after the Union of Transylvania with Romania.

We have not forgotten the Romanians remaining outside the country's borders, the chapter Parliamentary representation of Romanians in regions near the Romanian states, referring to the elected, ethnic Romanians, from the Habsburg/Austro-Hungarian, Tsarist/Soviet, Ukrainian, Yugoslav/Serbian, Croatian, Albanian and/or Greek legislatures.

On the other hand, taking into account that, following the legislative elections, a (new) executive power results, we also dealt with the chrono-spatial distribution of dignitaries in Romanian governments, in the chapter Origin of Prime Ministers and Ministers in Romanian States (1831-2025). We took into account both the executives from Iași and Bucharest, before their unification (1862), and those from 1917-1920 in the regions that united with Romania in 1918, those of the Moldavian (A)SSR (1924-1990) and of the Republic of Moldova, in addition to the governments in Bucharest.

A final chapter refers to Particularities of the chrono-spatial distribution of dignitaries, in which their distribution is analyzed by historical eras and periods, both at the level of the Carpathian-Balkan space and the Romanian space. By dignitaries, in this case, we mean both members of various assemblies, as well as heads of state (monarchs, presidents) and members of various executives (governments).

(Instead of) conclusions, we have included an analysis regarding the Particularities of the Electoral Behavior of Voters in the Romanian Space (1831-2025), in which, through multivariate analysis (principal component analysis) we try to determine the profile of voters, depending on different socio-demographic and cultural-economic variables.

We have also provided an appendix, which will include both the Romanian Historical-Geographical Time Scale (starting from antiquity, until the present day), and the Political-Electoral Time Scale (from the last two centuries). We have brought them together here, because understanding the political-electoral specifics, both in general (at the European and/or World level), and in particular (Romanian) cannot be done without understanding its historical-geographical evolution.

Spatial variability of soil organic carbon stocks in a mountain environment: a case study from the Eastern Carpathians

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Soil organic carbon (SOC) is an important indicator of soil quality, with a major role in soil fertility, carbon cycling and ecosystem functioning. It also contributes to carbon storage in soils and is therefore relevant in the context of climate change. The spatial distribution of SOC can vary considerably, especially in mountain areas, where soil characteristics, relief and land use influence the accumulation of organic matter. The aim of this study was to analyze the spatial distribution of SOC stocks in the Dorna Candreni area, located in the northern part of the Eastern Carpathians, Romania.

The study was based on 25 soil samples collected from the upper soil layer (0–30 cm). The area is mainly covered by Eutric Cambisols, while Fluvisols and Dystric Cambisols are also present. Laboratory analyses included total carbon (TC), total inorganic carbon (TIC) and total organic carbon (TOC), measured using an Analytik Jena multi N/C 2100 analyzer equipped with an HT 1300 module. SOC stocks were calculated using the organic carbon content, bulk density and the thickness of the analyzed soil layer. The values ranged from 10.96 to 122.68 t C ha^{-1}, showing important differences in carbon storage within the study area.

The spatial distribution of SOC stocks was analyzed using ordinary kriging in ArcGIS. An experimental semi variogram was used to examine the spatial relationship between the sampling points, and the spherical model showed the best fit for the analyzed data. Based on this model, a continuous map of SOC stocks was obtained, showing areas with both high and low carbon values. Differences were also observed between the main soil types, indicating that soil characteristics, together with local geomorphological conditions and land use, have an important influence on SOC distribution.

The results indicate that soil organic carbon (SOC) stocks exhibit a non-uniform spatial distribution in the Dorna Candreni area. The combination of laboratory analyses, geostatistical methods and GIS made it possible to identify the main spatial differences in soil carbon storage. The results can be useful for soil monitoring, the assessment of carbon storage potential and the sustainable management of mountain areas.

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Vulnerabilitatea socială la inundații și cutremure: o analiză a literaturii științifice internaționale

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Vulnerabilitatea socială reprezintă o componentă importantă în analiza efectelor hazardurilor naturale, reflectând diferențele existente între indivizi și comunități în ceea ce privește expunerea, capacitatea de răspuns și posibilitățile de recuperare în urma producerii unor evenimente extreme. Diversificarea cercetărilor dedicate acestei problematici evidențiază necesitatea unei analize sistematice a literaturii de specialitate, care să permită conturarea stadiului actual al cunoașterii și identificarea principalelor preocupări științifice din domeniu.

Studiul de față are ca obiectiv analiza literaturii științifice internaționale privind vulnerabilitatea socială asociată inundațiilor și cutremurelor, două dintre hazardurile naturale cu impact socio-economic semnificativ asupra comunităților. Cercetarea are la bază publicații indexate în Web of Science, supuse unui proces succesiv de selecție,

filtrare și clasificare în vederea delimitării lucrărilor relevante pentru problematica analizată.

Analiza urmărește caracterizarea cercetărilor dedicate vulnerabilității sociale în raport cu cele două tipuri de hazard, evidențierea principalelor teme abordate în literatura de specialitate și observarea modului în care acest domeniu s-a dezvoltat în timp. Rezultatele obținute vor permite conturarea unei imagini de ansamblu asupra stadiului actual al cercetării și vor contribui la fundamentarea etapelor ulterioare ale studiului vulnerabilității socio-economice la inundații și cutremure în municipiul Bacău.

Utilizarea fluctuațiilor nivelului freatic în identificarea tiparelor de asociere ale reîncărcării

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Evaluarea caracteristicilor de reîncărcare a apelor subterane și a legăturii acestora cu variabilitatea hidroclimatică este esențială pentru gestionarea durabilă a resurselor de apă subterană în contextul schimbărilor climatice. Acest studiu analizează reîncărcarea apelor subterane din nord-estul României utilizând metoda fluctuației nivelului freatic (WTF) și evaluează variabilele hidroclimatice asociate statistic cu reîncărcarea, pe parcursul unor perioade distincte, la 37 de foraje hidrogeologice. A fost aplicat un model de regresie multiplă segmentată pentru a identifica tipare persistente de asociere a reîncărcării, luând în considerare cadrul hidrogeologic local și variabilitatea temporală. Modelele de regresie au generat valori R^2 (la nivel de segment, pentru eșantionul analizat) cuprinse între 0,3 și 0,9. Am grupat modelele în funcție de predictorii individuali și combinați în patru clase principale de asociere a reîncărcării: asociată cu precipitațiile, cu topirea zăpezii, cu debitul râurilor și cu o combinație între precipitații și topirea zăpezii. Umiditatea solului și evapotranspirația au fost tratate ca factori hidroclimatici care modifică aceste asocieri statistice, nu ca surse independente de reîncărcare. La nivelul zonei de studiu, echivalentul în apă al stratului de zăpadă și debitul râurilor au fost asociați mai frecvent cu reîncărcarea estimată prin metoda WTF decât cu precipitațiile, pe parcursul perioadelor analizate. Aceste tipare au variat de la un foraj la altul și au reflectat diferențe în condițiile hidrogeologice și geologice locale, care pot influența modul în care semnalele hidroclimatice sunt transmise către acvifer. O diminuare a semnalelor legate de reîncărcare în perioadele recente a coincis cu o scădere a echivalentului în apă al stratului de zăpadă și a debitului râurilor, în timp ce precipitațiile nu au prezentat o tendință clară, iar evapotranspirația a crescut. Aceste relații trebuie interpretate ca asocieri statistice și nu demonstrează contribuția fizică a surselor individuale de reîncărcare.

Between tourism experience and winemaking tradition: a comparison of the Vrancea and Rheingau wine regions

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Wine regions are areas with a distinct territorial identity where viticultural activities, local heritage, and tourism offerings combine to shape unique visitor experiences. In this context, the Vrancea wine region—one of Romania's key wine-producing areas—and the Rheingau region in Germany provide a relevant framework for a comparative analysis of visitor profiles and the factors influencing interest in wine tourism.

This study aims to compare the sociodemographic characteristics, motivations, and behaviors of visitors to these two regions, seeking to identify similarities and differences regarding tourism preferences, destination choice factors, and modes of participation in wine tourism activities.

The research relies on empirical data collected via questionnaires, covering respondents' sociodemographic profiles, visit motivations, and tourism behaviors. The comparative analysis seeks to highlight the relationships between respondent characteristics, travel motivations, and behaviors related to wine and tourism experiences.

Analiza bibliometrică a migrațiilor forțate

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Această analiză bibliometrică examinează în mod sistematic evoluția cercetării științifice privind migrația forțată între anii 1974 și 2025. Utilizând date extrase din baza de date Scopus și procesate prin pachetul Bibliometrix din R, studiul investighează traiectoriile publicațiilor, modelele de colaborare internațională și evoluțiile tematice din ultimele cinci decenii. Analiza urmărește identificarea principalelor direcții de cercetare, a autorilor și instituțiilor influente, precum și a noilor orientări conceptuale din acest domeniu geografic divers. Rezultatele indică o creștere constantă și substanțială a producției științifice, cu o rată anuală de creștere de 9,41% și o medie de 15,56 citări per document, reflectând relevanța globală tot mai mare a deplasărilor ca provocare socială, politică și umanitară. Rețelele de colaborare evidențiază legături academice puternice între Europa, America de Nord și anumite regiuni din Asia, deși persistă disparități regionale semnificative, în special în zonele puternic afectate de migrația forțată, dar slab reprezentate în producția academică. Gruparea tematică și Analiza Corespondențelor Multiple (ACM) relevă trei câmpuri majore de cercetare: determinanții și guvernanța migrației, răspunsurile umanitare și deplasările generate de

conflicte, precum și tipologiile și traiectoriile migrației forțate. Aceste rezultate clarifică peisajul conceptual al domeniului și subliniază necesitatea unei implicări internaționale mai largi și a creșterii contribuțiilor științifice din regiunile insuficient studiate. Analiza oferă o bază structurată pentru cercetări viitoare și sprijină dezvoltarea unor abordări mai informate și sensibile la context în înțelegerea dinamicilor contemporane ale deplasărilor forțate.

Cine contestă și cât câștigă? Inegalități de gen, mediu și teritoriu în contestațiile la Evaluarea Națională

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Contestarea notelor la Evaluarea Națională este mai mult decât o procedură administrativă: ea reflectă asumarea riscului, aspirațiile educaționale și miza competiției pentru locurile la liceele considerate performante. Lucrarea analizează dimensiunile geografice și de gen ale acestui comportament în România, în perioada 2015–2025, pe baza microdatelor la nivel de candidat din surse deschise. Rezultatele sunt cartografiate la nivel de unitate administrativă și de județ, pentru a identifica structuri spațiale, grupări locale și regionale ale propensiunii de a contesta, precum și diferențele dintre mediul urban și cel rural.

Analiza arată că teritoriul și mediul de rezidență diferențiază comportamentul de contestare mai puternic decât genul. Relația dintre sexe nu este constantă: ea se schimbă între urban și rural, ceea ce sugerează că așteptările de mobilitate educațională și intensitatea competiției locale modelează diferit decizia elevilor. În schimb, câștigul obținut în urma contestației diferă foarte puțin între fete și băieți, iar geografia câștigului se suprapune doar parțial peste cea a propensiunii de a contesta: un teritoriu în care se contestă mult nu este neapărat unul în care se și câștigă mult. Evoluția în timp este marcată, de asemenea, de schimbările metodologice care au modificat riscul asociat reevaluării.

Multidimensional youth inclusion in climate adaptation and water governance

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Today's youth are increasingly aware of the growing risks associated with climate change, and this elevated awareness often contributes to feelings of concern and stress. At the same time, this sense of vulnerability is often reinforced by limited involvement in substantive climate decision-making. Although they are prominent and active voices in public discussions, their engagement is frequently confined to symbolic or consultative roles, where established institutions may challenge their perspectives and constrain their influence. Closing this gap requires recognizing youth participation not simply as a discretionary choice, but as a core element of intergenerational fairness. Moving beyond surface-level consultation toward genuine collaboration allows institutions to strengthen these often marginalized voices and transform shared vulnerability into collective resilience and a more inclusive vision for sustainability.

This study examines the Brașov Living Lab carried out within the CARMINE project, which addressed water scarcity as the region's main climate risk through the participation of over 400 students from 9 high schools. Using a youth-led, participatory research design, it assessed climate vulnerability and risk awareness among young people in Brașov. The workshops included three components: capturing students perceptions of local climate change by using a survey, identifying impacts and proposing adaptation measures for water scarcity using the PESTLE framework, and presenting educational materials to support open discussion on local and global climate issues.

This study utilizes a two-part analytical approach. First, a statistical analysis of survey data evaluates high-school students observations of recent climate change, their perceived urgency of adaptation, personal readiness, and expectations of emergency support.

Second, an analysis of the PESTLE mapping activity examines how students conceptualize these complex problems in terms of observed impacts and mitigation and adaption measures. The results reveal that students primarily associate water scarsity with direct ecological consequences such as biodiversity loss, rivers decline, and soil degradation. Economic and social dimensions also represent substantial proportions of the responses, frequently linked to agricultural disruptions (e.g., crop drying, food price inflation) and human well-being (e.g., sanitation failures, health crises). In the same time, the technological dimension emerges as a highly prominent category in this mitigation phase, reflecting the student's recognition of engineered and infrastructural

solutions, including water filtration systems, reservoir development, and smart irrigation. The social dimension also maintains a vital presence, driven largely by strategies centered on public education and awareness campaigns.

Climatology of Synoptic Patterns Associated with Convergence Lines in Romania (2004 – 2024)

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Atmospheric instability may be released under a synoptic setting favorable to convective initiation. In many cases, this process is associated with surface convergence lines, which support the development of convective cells. The formation of such convergence lines is closely linked to intense diabatic heating and a well developed convective boundary layer (CBL) during the warm season (April–September) and may be further sustained by positive vorticity advection, which enhances upper-level divergence.

The present study aims to provide a scientific framework for improving the understanding and operational forecasting of convective convergence lines. To this end, 496 convergence lines occurring during the warm season between 2004 and 2024 were identified using synoptic materials produced by the German Meteorological Service. For each analyzed case, a subjective synoptic analysis was carried out using ERA5 and NCEP/NCAR reanalysis datasets, based on both surface and upper-air synoptic charts. The analysis was further validated with satellite imagery from Meteosat Second Generation (MSG) satellites. Composite maps centered on Romania were also produced, illustrating the distribution of mean sea-level pressure, 500 hPa geopotential height, atmospheric circulation at the 700 hPa geopotential level, and the mean daily precipitation associated with each synoptic pattern. As a result, five synoptic patterns relevant to the formation of convergence lines and convective initiation along them were identified. The methodology was further validated through an automated k-means classification of atmospheric circulation patterns.

These classifications highlight the importance of blocking circulation regimes, particularly those associated with anticyclones positioned over Scandinavia or the East-European Plain, in generating severe weather events linked to atmospheric instability over Romania. At the same time, the results highlight the differences between prefrontal and independent convergence lines, the latter being associated mainly with heavy rainfall and flash floods. To emphasize the complex relationship between synoptic patterns and mesoscale processes associated with convergence lines, we added a case study regarding the Mesoscale Convective System (MCS) developed in Galați and Vaslui counties in the morning of 14 September 2024, which produced severe pluvial flash floods there.

Transition énergétique et stratégies de développement régional : les exemples des filières de l'éolien et des batteries électriques au Québec

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La communication s'appuiera sur une recherche en cours basée sur l'hypothèse que la transition énergétique, en particulier, offre un terrain d'étude pertinent et révélateur de l'impact de cette transition sur le développement des régions. L'évolution des filières de l'éolien et des batteries électriques au cours des 25 dernières années au Québec servira de base empirique à la démonstration. Des régions périphériques comme la Gaspésie ou le Bas-Saint-Laurent, des régions non -métropolitaines mais plus proche des grands centres, comme la Mauricie ou le Centre-du-Québec, ainsi que des territoires ayant un caractère métropolitain ou péri-métropolitain appartenant à des régions telles que la Montérégie ou les Laurentides seront montrés en exemple de ce phénomène. Différentes questions touchant au développement régional et territorial seront traitées à travers les cas évoqués, telles que : la réindustrialisation vs la diversification économique, la place des villes petites et moyennes dans ce renouveau régional, les partenariats public- privé-communautés locales, l'acceptabilité sociale de ces filières industrielles, le retour de l'effectivité des facteurs d'attractivité industrielle jugés dépassés il n'y a pas longtemps encore, l'enchevêtrement des stratégies par le haut et par le bas dans les nouvelles économies régionales.

Local Stakeholder Networks' Role in the Development of Small Towns

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Stakeholder collaboration can play a significant role in shaping development processes in small towns, although its effects vary according to how networks are organized, who occupies central positions, and what forms and objectives collaboration takes. This study explores these dynamics through a comparative analysis of stakeholder networks in Beclean and Darabani, two Romanian small towns with similar population sizes and post-socialist trajectories, but contrasting levels of accessibility, development paths, and socioeconomic conditions. The analysis combines semi-structured interviews with stakeholders representing different areas of local activity, Social Network Analysis, and statistical methods. The findings point to two distinct patterns of local governance.

Despite the relatively centralized structure of both networks, the actors driving collaboration and the outcomes associated with these relationships differ substantially. In Beclean, the local administration represents the main hub of collaboration, facilitating access to external funding, supporting major local initiatives, and connecting public institutions with private actors. In Darabani, a local NGO occupies a similarly central network position, but its influence derives primarily from its capacity to bring community stakeholders together around a prominent cultural event, producing considerable social and some economic effects. By comparing these contrasting configurations, the study demonstrates how different stakeholder arrangements can shape local development trajectories and contribute to emerging forms of urban governance. The findings also underline the importance of considering local context when developing territorial policies and governance approaches for small towns.

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Reading the urban landscape: A semiotic analysis of building names and commercial signs in Bucharest's city center

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The present study investigates building names and commercial signs as components of urban semiotics within Bucharest's city center, and their correlation with place identity, an area of research that remains insufficiently explored for Bucharest, yet is vital from a spatial identity perspective. The empirical focus extends from the second half of the 19th century to the contemporary era, capturing over 150 years of profound socio-economic transformations. The importance of this study lies in integrating building names and commercial signs within the urban analysis of Bucharest's city center - categories generally overlooked in Romanian urban semiotics - while diagnosing their discontinuities and current status, ranging from preservation to indifference and physical loss. Consequently, the research addresses the following questions: How have building names and commercial signs endured over time in Bucharest's city center? What are their characteristics and spatial distribution? Do they participate in constructing place identity? Relying on a methodological framework that combines documentary analysis

with field research, as well as the consultation of spatial planning initiatives and legislation, the study establishes a typology of field-identified case studies and demonstrates how these components of urban semiotics evolved in response to multiple factors: planning policies, legislation, functional space use, and preservation actions. Ultimately, this research highlights the vital role of local stakeholders in preserving this component of urban spatial semiotics and underscores the need for active collaboration in mapping, categorizing, and safeguarding old commercial signs that are integral to place identity.

Impactul dezvoltării periurbane a municipiului Chișinău asupra dezvoltării spațiale durabile: abordare metodologică și cadru integrat de indicatori

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Dezvoltarea periurbană a municipiului Chișinău reprezintă un proces multidimensional de reconfigurare teritorială, în care dinamica demografică, extinderea suprafețelor construite, transformările economice, mobilitatea cotidiană, presiunile asupra infrastructurii și terenurilor, precum și capacitatea instituțională se manifestă în mod interdependent. Articolul are drept scop elaborarea unei abordări metodologice integrate pentru evaluarea impactului acestor transformări asupra dezvoltării spațiale durabile. Demersul valorifică literatura de specialitate privind interfața urban-rural și peisajele periurbane și integrează metodologia gradului de urbanizare, Global Human Settlement Layer (GHSL), aria urbană funcțională (Functional Urban Area – FUA) și indicatorul 11.3.1 al Obiectivelor de Dezvoltare Durabilă, adaptând aceste instrumente particularităților teritoriale ale municipiului Chișinău. Analiza diferențiază municipiul administrativ, orașul Chișinău propriu-zis, centrul urban definit prin GHSL și aria urbană funcțională și propune un cadru operațional alcătuit din 24 de indicatori grupați în șase dimensiuni: demografică, economică, socială, spațial-funcțională, ecologică și funciară, precum și instituțională. Selecția indicatorilor ține cont de aplicabilitatea empirică, prin combinarea datelor statistice, administrative și geospațiale cu informații colectate prin chestionare, interviuri semi-structurate și focus-grupuri.

CARMINE and Beyond: Connecting Cities, Risks and Ecosystems for a Climate-Resilient Europe

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Europe's climate resilience strongly depends on its capacity to connect cities, infrastructure, ecosystems and the territories that sustain them. Three Horizon Europe projects coordinated by Romania — CARMINE, CROSSEU and OptForEU — offer complementary perspectives on how this transformation can be achieved, combining climate science, innovative services, stakeholder co-creation and place-based solutions across Europe.

At the centre of this contribution is CARMINE, which develops pathways towards climate-resilient European metropolitan regions. Through its network of Living Labs, the project brings together researchers, public authorities, businesses and communities to translate climate information into practical adaptation strategies. CARMINE considers the complex relationships between urban areas, their surrounding regions, critical infrastructure, natural resources and socio-economic dynamics.

This perspective is strengthened by CROSSEU, which addresses interconnected, cascading and cross-sectoral climate risks, revealing how disruption in one system can propagate across sectors and territories. OptForEU complements the urban and systemic perspectives by focusing on climate-smart forest management and the contribution of resilient forests to adaptation, mitigation, biodiversity and ecosystem services.

Together, the three projects create a unique bridge from cities to forests and from individual climate hazards to complex, interconnected risks. Their combined experience demonstrates why future adaptation must move beyond sectoral and administrative boundaries and towards anticipatory, integrated and actionable resilience pathways.

The presentation will showcase CARMINE Living Labs, climate services and co-creation approaches, enriched by selected examples from CROSSEU and OptForEU. It will also highlight how Romanian-coordinated Horizon Europe research is connecting European knowledge, territories and communities, contributing to a new generation of solutions for climate-resilient cities, landscapes and societies.

Mapping Land-Use Stability and Transformation in Southeastern Part of the Republic of Moldova: A Change Detection Approach, 1976–2023

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This study analyzes long-term land use dynamics over a 50-year period across three districts (Anenii Noi, Căușeni, and Ștefan Vodă) by intersecting a digitized 1976 topographic map with the Corine Land Cover (CLC) 2023 dataset. While 75% of the total territory remained unchanged, indicating overall landscape stability, significant category-specific shifts occurred. Arable land showed the highest instability, primarily shifting to "Heterogeneous agricultural areas" (a class absent in the 1976 baseline) and "Transitional woodland-scrub," signaling localized land abandonment. Reductions were also noted in vineyard coverage (a consequence of the late 1980s Soviet anti-alcohol campaign) and in protective forest shelterbelts. At the same time, built-up areas expanded, while orchards and pastures remained stable. Cartographic analysis revealed two primary hotspots of change in the Anenii Noi district: the reclassification/expansion of forest and shrublands, and the emergence of new perennial crops south of Anenii Noi town. These findings highlight the combined impact of socio-economic shifts, historical policy legacies, and urban growth on regional land cover in the Republic of Moldova over the last half-century.

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Emergency Response Accessibility and Road Network Vulnerability in Iași County: A Multi-Scale Analysis

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Emergency response effectiveness depends on both the spatial accessibility of intervention units and the functionality of the road network. This study presents a multi-scale spatial analysis of fire and rescue service operations in Iași County, Romania,

drawing on real operational data from 2024–2025, comprising over 29,000 intervention records from both firefighting and SMURD medical emergency units.

At the county level, response time isochrones were generated from all operational structures using real road network routing and subsequently validated against recorded arrival times from operational logs. The comparison reveals pronounced spatial disparities in service performance between urban and rural areas, with certain zones consistently falling outside acceptable reach. Intervention hotspot analysis identifies where emergency demand is most concentrated, exposing a spatial mismatch between theoretical service coverage and actual intervention frequency.

At the municipal level, the study turns to road network vulnerability within Iași Municipality. A hexagonal tessellation was overlaid on the city, and each cell was blocked iteratively to measure the resulting increase in overall travel time to all destinations — a method that systematically identifies which road segments and junctions are most critical to maintaining response capacity. These findings carry direct operational relevance in light of ongoing construction works disrupting key corridors across the city.

All analyses are complemented by interactive web-based maps that enable real-time scenario testing, allowing users to simulate network disruptions and observe the effect on response isochrones. The methodology is built entirely on open-source tools and is designed to be transferable to other Romanian counties.

Behavioral Alterations Induced by Ceftriaxone and Polystyrene Microplastics in Zebrafish

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The increasing occurrence of pharmaceutical residues and microplastics in aquatic environments raises concerns about their potential effects on aquatic organisms, particularly when these contaminants coexist. Ceftriaxone (CEF), a widely used cephalosporin antibiotic, and polystyrene microplastics (PS-MPs) may occur simultaneously in contaminated aquatic systems, yet their combined behavioral effects

remain insufficiently investigated. This study evaluated the individual and combined effects of CEF and PS-MPs at concentrations of 50 μg L^{-1} and 1 mg L^{-1}, respectively, on adult zebrafish (Danio rerio) behavior using the novel tank test. Behavioral responses were assessed through video-tracking analysis, including locomotor activity (distance traveled and velocity), mobility states, anxiety-related behavior assessed by thigmotaxis, top- and bottom-dwelling patterns, and rotational activity. Exposure to CEF and PS-MPs, both individually and in combination, resulted in significant alterations in several behavioral parameters compared with controls. Increased thigmotaxis and reduced locomotor activity, reflected by decreased distance traveled and velocity, indicated alterations in exploratory and anxiety-related behavior. Changes in mobility states, rotational activity, and vertical distribution within the tank further demonstrated disruption of normal behavioral patterns. Notably, combined exposure produced more pronounced behavioral alterations than individual treatments, suggesting that co-occurring contaminants may exert enhanced effects on zebrafish behavior. These findings highlight the importance of considering pharmaceutical residues and microplastics as combined environmental stressors and support the inclusion of behavioral endpoints in the assessment of the ecotoxicological risks associated with emerging aquatic contaminants.

This work was supported by a grant of the Ministry of Education and Research, CCCDI - UEFISCDI, through the project Center of Excellence in water management, materials, by-products and waste valorisation for circular bioeconomy implementation, proposal number PN-IV-P6-6.1-CoEx-2024-0056, contract 6 CoEx/02.06.2026.

Evaluation of the hydromorphological status of water bodies in the Salcia Mica River basin (the Republic of Moldova)

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T This study presents an assessment of the hydromorphological status of surface water bodies within the Salcia Mica River basin (situated in the Republic of Moldova), with emphasis on the key components controlling river ecosystem functioning and ecological integrity. Methodological framework is undertaken from Governmental Decision 709/2024 and 657/2024 for evaluation of water bodies hydromorphological changes, and for assessing the anthropogenic impact on water bodies, as well as recommendations of the EU Water Framework Directive guidelines. Hydrological and hydromorhological monitoring is absent in the basin. The evaluation considers hydrological regime, river continuity, channel morphology, bank structure, riparian vegetation, and the degree of anthropogenic modification. The assessment integrates field observations and relevant hydromorphological indicators to characterize the extent of deviation from natural or

reference conditions. The results indicate varying degrees of hydromorphological alteration among the investigated water bodies, reflecting the cumulative influence of human activities Majority of water bodies were evaluated as heavily modified mainly to river training and spread of irrigation channels. Dams and reservoirs do not have a great impact on river longitudinal continuity; dykes influence the water bodies lateral connectivity mainly in the limits of the lower part of the basin. Riparian buffers are absent for all water bodies. During 4 research expeditions, performed in different seasons of 2025-2026, many water bodies have been identified as dry, and only in spring 2026, recurrence of water flow was identified. The study contributes to a better understanding of hydromorphological degradation within the Salcia basin and provides scientific support for integrated river basin management, ecological restoration, and the development of measures aimed at improving the ecological status of surface waters in accordance with the principles of the EU Water Framework Directive.

Safety in mountain hiking: tourist behaviour and accidents in the Ceahlău Massif

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Incidents during tourist activities in mountain regions are a constant concern for public safety organizations worldwide, and Romania is no exception, given the growing number of tourists visiting its mountain areas. Understanding tourists' behavioural intentions is therefore essential for developing effective communication and risk management strategies, particularly since tourists' awareness of tourism risk influences their behaviour. In Romania, the Ceahlău Massif is a well-known hiking area, attracting numerous tourists each year. The research focuses on tourist behaviour in this massif, where accessibility has been identified as an indicator with two components: the place, with its morphological and morphometric characteristics, and the person, who wishes to reach that place.

The main aim of the study is to investigate the behavioural factors that contribute to the occurrence of hiking accidents in the Ceahlău Massif, in order to improve safety measures and support future prevention efforts. The study also seeks to analyse the threats associated with accidents occurring during hikes in this area.

The research combines quantitative and qualitative methods, based on a questionnaire administered to tourists, the results of which were interpreted through mathematical statistics.

The findings point to the main threats that tourists face on the mountain trails in the area. These can contribute to improving safety measures and supporting better-informed hiking practices.

Tourism development and the transformation of Lipovan Russian cultural identity

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Considering the socio-cultural and behavioral shifts of the 21st century, the development of cultural tourism and agritourism has played a bivalent role regarding the promotion of rural communities and the attraction of foreign capital investors. Viewed from another perspective, this type of tourism, which relies almost exclusively on the tangible and intangible resources of local communities, has led over time to cultural commodification. For the case of Jurilovca, this cultural commodification is reflected in the transformation of some of these resources strictly into consumer goods for tourists, such as the "Fish Soup Festival" (Festivalul Borșului), the "kokoșnik" (cacușnik), the "storceag", etc.

In order to outline a comprehensive and complex perspective on the tourism phenomenon in Jurilovca Commune, the present study pursued three objectives:

1.To assess how tourism development shapes the dynamics, preservation, and transformation of tangible and intangible cultural identity markers within the Lipovan Russian community of Jurilovca Commune.

2.To analyze the relationship between demographic dynamics (1930–2021) and the evolution of the local tourism profile (2015–2025), Jurilovca ranking 6th in the Danube Delta by tourist arrivals in 2025.

3.To identify and examine forms of cultural adaptation and commercialization (cultural commodification) across local ethnographic, architectural, and culinary heritage.

The paper's methodology relied on qualitative methods, specifically on a semi-structured interview consisting of 11 questions grounded in three theoretical frameworks: "Cultural commodification theory" (Greenwood, 1977), "Social identity theory" (Tajfel & Turner, 1979), and "Place Attachment theory" (Altman & Low, 1992). The interview was administered to a target group of 15 ethnic Lipovans from Jurilovca Commune across diverse occupations, genders, and age groups, outlining a clear and nuanced perspective on local cultural tourism. Additionally, quantitative methods were employed (statistical, cartographic, etc.), utilizing datasets provided by the National Institute of Statistics to ensure the scientific rigor required for a comprehensive analysis.

The results of the study reveal that, although tourism has revitalized the commune and the community, Jurilovca's cultural heritage hinges on a fragile balance between the spectacle offered to visitors and the preservation of authentic community intimacy, an

idea directly reflected in the locals' answers: "these changes are natural, we could not remain isolated... of course there are losses, but there are also gains".

Spatial patterns of ethnocultural diversity in Dobrogea: A quantitative assessment

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Considering the socio-cultural and behavioral shifts of the 21st century, the Ethnic diversity in Dobrogea has represented for centuries one of the most prominent demographic and cultural themes for scholars across socio-cultural disciplines such as history, geography, sociology, and psychology being frequently analyzed through multidimensional approaches. Furthermore, Dobrogean ethnocultural diversity reflects and preserves a unique paradigm of interethnic coexistence and tolerance within the majority-minority dynamic, representing a centuries-old model distinct within the Balkan and Pontic landscapes.

This study provides a detailed, comprehensive demographic assessment of Dobrogea's multiethnic phenomenon at the micro-regional scale, identifying primary clusters of spatial concentration and assessing regional cultural vitality across six national minorities residing in Tulcea and Constanța counties. The research pursued two primary objectives:

1.To identify and map the spatial distribution patterns of the six main ethnic minorities (Turks, Tatars, Lipovan Russians, Ukrainians, Greeks, and Roma) at the LAU2 level, highlighting geographic polarization and regional disparities shaped by historical and geographical factors.

2.To quantify levels of cultural vitality and diversity through specialized cultural indices, thereby differentiating between mere statistical presence and active identitarian expression in the territory.

The methodology relied exclusively on quantitative methods, with statistical and cartographic analyses serving as the primary analytical tools, based on official data from the 2021 Population and Housing Census. Statistical assessments utilized the Simpson Index to quantify cultural identity across three core dimensions (ethnicity, religion, and mother tongue). This index revealed pronounced ethnic polarization in the Danube Delta, where a value of 0.68 for C.A. Rosetti commune indicates an approximate 70% probability that two randomly selected individuals belong to different ethnic groups. The index yields values between 0 and 1, where 0 denotes complete dominance by a single group and 1 reflects absolute fractionalization without a dominant group, indicating balanced coexistence.

The findings also demonstrate that language is the most vulnerable component, with only 13% of Dobrogea'a communes recording an index value above 0.18. To synthesize the three pillars of cultural identity, a Composite Multiculturalism Index based on the Herfindahl-Hirschman Index (HHI) was applied, where the dominant group accounts for 90% and the minority group accounts for 10% (the sociological benchmark at which minority collective rights are institutionalized).

The study concludes that only 18% of administrative-territorial units (LAU2) retain a pronounced minority cultural identity across all three analyzed dimensions. Furthermore, mother tongue emerges as the most vulnerable dimension to demographic contraction, whereas peaceful Dobrogean coexistence remains a stable regional benchmark.

Identification and mapping of sheet erosion on arable lands of Barlad Plateau using Google Earth Engine and Sentinel-2 spectral indices

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Sheet erosion is one of the most widespread forms of soil degradation, affecting arable land, progressively removing the fertile topsoil and exposing underlying calcareous horizons. According to the research conducted by Perieni Research Station in Romania, more than 60% of the soil loss occurred through sheet erosion, clearly outranking other forms of erosion such as gully erosion or erosion caused by landslides. On arable land, the areas affected by sheet erosion can be identified by the white / near-white surface patches caused by the exposure of calcium carbonate as a result of topsoil erosion. Identifying and delineating these affected areas is essential for prioritizing soil conservation measures, in order to guide sustainable land management policies, and support agricultural decision-making.

This study depicts a methodological workflow for detecting and extracting sheet-affected areas on arable land using Sentinel-2 multispectral imagery. The approach relies on band combinations derived from the Blue, Red, Green and Shortwave Infrared bands to enhance the spectral contrast between eroded soil and surrounding vegetated and non-eroded bare soil.

Results enable the construction of a spatial inventory of erosion-affected parcels, quantifying the extent and intensity of sheet erosion across the Barlad Plateau. This

inventory provides a practical, replicable, and cost effective tool for identifying priority zones requiring soil conservation intervention, contributing to more land targeted strategies, and efficient land management practices in agricultural landscapes affected by erosion.

From land surface temperature to informed green infrastructure decisions: assessing urban park cooling for climate-resilient planning

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The analysis builds on the assessment of 240 urban parks across eight major Romanian cities using Landsat 8/9 thermal observations, spatial information on urban parks and their surroundings, and complementary land-cover and vegetation data. Park cooling is evaluated through indicators describing cooling intensity, spatial extent and efficiency, allowing individual parks to be compared within and between cities. The results reveal substantial differences in thermal performance across the analysed park stock. Median cooling intensity is approximately 0.39 °C, while around 80% of parks remain below 1 °C. Cooling increases non-linearly with park area, indicating that park size alone does not determine thermal performance. The analysis also highlights the importance of vegetation structure and internal landscape configuration, suggesting that thermal benefits may be improved not only by creating or extending green spaces, but also by optimising existing park vegetation and spatial structure.

From a decision-making perspective, these indicators can be translated into spatially explicit information for municipalities and metropolitan authorities. LST and park-cooling maps can help identify thermally vulnerable neighbourhoods, compare the performance of existing parks, prioritise areas for new green infrastructure, and distinguish locations where extending a park may be preferable to improving canopy structure within its existing footprint. Repeated assessments can additionally provide a consistent basis for monitoring the thermal effects of green-space interventions over time.

The proposed approach therefore illustrates how Earth observation and GIS can bridge the gap between urban climate research and operational planning, providing public authorities with comparable and reproducible evidence for climate-resilience strategies. Nevertheless, LST represents radiative surface conditions rather than near-surface air temperature; consequently, satellite-based assessments should complement, rather than replace, field observations when evaluating pedestrian-level thermal comfort.

How local agency operates in growing vs. declining small towns? Insights from two Romanian cases – Beclean and Bicaz

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Local agency is crucial in supporting development of small towns, affected by deindustrialization, depopulation and political isolation. The present paper traces the development path of two post-socialist small towns in Romania: a growing one (Beclean) and a declining one (Bicaz), in order to compare the actors and forms of agency operating across different phases of development in these two contrasting cases. The theoretical framework is based upon Trinity of Change Agency (TCA) and Opportunity Spaces (OS) frameworks and takes an integrated perspective on local development, including economic, educational and healthcare dimensions. Empirical work is grounded on extensive fieldwork including 55 interviews with local actors, accompanied by local statistics and additional materials from desk research. Qualitative analysis shows considerable difference in local agency, with consequent different development phases in the two case studies, despite a similar national context. The declining and peripheral mono-industrial city of Bicaz displayed a delayed transition to market-economy and structural maintenance operated instead of other forms of agency for the first decade after 1990. The second phase evolved in maintenance agency logic for 15-20 years, with isolated elements of change-oriented agency after 2015 that paved the way for synchronized change agency following the 2020 pandemic. On the contrary, the dynamic and accessible city of Beclean benefits from early privatization of local economy and quick adaptation of public sector to the new political landscape, sustaining a change-oriented agency during the three following phases dominated by place-based leadership. Some key general findings also arise from the two cases. Time and actor specific opportunity spaces appear more important than region-specific opportunity spaces for local development. Also, the same actors play different roles across time and agencies go beyond their formal role (eg. private actors in Bicaz practice institutional entrepreneurship and social innovation, beyond their entrepreneurial role, while public actors in Beclean become innovative entrepreneurs in order to foster transition from industry to tourism). Finally, integration in multi-level governance networks catalyze the local change by relying on external resources. These findings inform policy design in both the private and public sector, as they pinpoint the importance of change-oriented agency, flexibility in roles played across development phases and extra-regional collaborations in making peripheral small towns survive demographic decline.

Demographic polarization in Romania's North-East Region: between population concentration and depopulation

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During the last few decades, the North-East Region of Romania has been experiencing significant demographic changes through population movements and different development in demographic structures. Low birth rates, negative natural population increase, an aging population and increased territorial mobility have had a great influence on the creation of territories with specific demographic developments. Thus, whereas some territories in the region are experiencing a population concentration, others register demographic depletion.

The present paper aims to highlight the main forms of demographic polarization in the North-East Region of Romania by analyzing the population trends and their natural and migratory components. The research aims to identify territories with demographic growth or stability compared to those with depopulation, and to analyze the contribution of natural increase and migration to these territorial differences.

To achieve these objectives, statistical data provided by the National Institute of Statistics are used, covering a period that allows for the analysis of major demographic trends and spatial changes across the region. The analysis includes total population, birth rate, mortality rate, natural increase, net migration and population growth or decline. These indicators allow for an assessment of the contribution of natural change and migration to the spatial differentiation of population dynamics within the North-East Region.

The study also examines spatial differences in demographic dynamics, with particular attention to the contrast between areas experiencing population growth or relative stability and those affected by population decline. Differences between urban and rural areas, as well as between the counties of the North-East Region, are considered in order to identify distinct territorial patterns. Comparing the natural and migratory components may help determine whether population decline in particular areas is primarily associated with negative natural change, out-migration, or a combination of both.

Thus, the study is designed to identify the specificity of demographic dynamics in the North-East Region as well as the appearance of territorial differentiation between concentrated and depopulated territories. This approach allows us to gain a better insight into the processes of demographic development in the region through the prism of the link between population dynamics and their territorial distribution.

Analiza și validarea acurateții spațio-temporale a mesajelor de avertizare privinid temperaturile extreme asociate valurilor de căldură din România

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Valurile de căldură reprezintă unul dintre fenomenele meteorologice extreme cu impact major asupra populației, iar creșterea frecvenței și intensității acestora evidențiază importanța unor sisteme eficiente de avertizare timpurie. Studiul de față evaluează acuratețea spațio-temporală a avertizărilor meteorologice pentru temperaturi extreme emise în România în sezoanele calde (iunie–septembrie) din perioada 2021–2025. Analiza a inclus 488 de coduri meteorologice și observații zilnice ale temperaturii maxime provenite de la 135 de stații meteorologice distribuite în toate cele 41 de județe analizate.

Pragurile de temperatură și intervalele de valabilitate au fost extrase din avertizările oficiale emise de Administrația Națională de Meteorologie și comparate cu temperaturile maxime observate, utilizând o procedură de validare semi-automatizată, implementată în Python. Performanța avertizărilor a fost evaluată atât la nivel județean, cât și național, inclusiv prin intermediul unui indicator al gradului de îndeplinire, utilizat pentru cuantificarea concordanței spațiale dintre zonele avertizate și condițiile observate.

Rezultatele arată că 12,1% dintre avertizări au fost validate complet, 76,0% au fost validate parțial, iar 11,9% nu au fost validate. Gradul anual de îndeplinire a crescut de la 0,47 în 2021 la 0,67 în 2025. Analiza spațială evidențiază diferențe regionale importante, cu rate de validare de peste 77% în unele județe din vestul și sudul țării și valori sub 41% în județe montane precum Brașov și Harghita.

Rezultatele evidențiază influența complexității topografice asupra acurateței avertizărilor și susțin necesitatea dezvoltării unor sisteme de avertizare pentru temperaturi extreme mai bine adaptate particularităților spațiale și climatice locale.

Disaggregation of land surface temperature data: implications for urban climate and mitigation strategies

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This study investigates Land Surface Temperature (LST) dynamics in the city of Iași, Romania, through the disaggregation of thermal satellite imagery. In remote sensing, spatial and temporal resolution are inherently linked: finer spatial detail typically comes at the cost of revisit frequency, and vice versa. Sentinel-2, for example, provides optical bands at 10–60 m resolution with a 5-day revisit cycle, while MODIS offers daily revisits but coarser spatial resolution, ranging from 250 m in the visible/near-infrared bands down to 1,000 m in the thermal infrared (TIR) domain – the resolution at which LST is retrieved. This spatial mismatch limits the use of thermal data for analyzing fine-scale urban phenomena such as hotspots. To address this, the study applies a thermal image disaggregation technique that combines the high spatial resolution of Sentinel-2 optical data with MODIS thermal data, sharpening LST estimates from 1,000 m down to 10 m. This finer resolution enables a more accurate, block-level characterization of thermal heterogeneity across the urban fabric of Iași. Beyond improving LST retrieval, the resulting high-resolution products offer direct practical value: by revealing intra-urban hotspots invisible at coarser scales, they can support the targeted design of urban climate mitigation strategies, such as prioritizing green infrastructure, cool-surface interventions, or shading in the most thermally vulnerable neighborhoods.

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Could CORINE Land Cover (CLC) Data Be Used for Downscaling Analysis? A Case Study from NE Romania

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CORINE Land Cover (CLC) is one of the most used land databases intended for pan-European-scale analysis. Despite periodic updates, the data suffer from generalization, subjectivity, and inconsistent local knowledge, leading to a distorted representation of reality. In this study, we raise awareness of the use of CLC data in local analysis, for

which it was never intended. Our study investigates whether incorporating auxiliary spatial data and local geographical knowledge can yield a higher-accuracy CLC product, without departing from the official CLC definitions and standards. We critically remapped polygon by polygon the 1990, 2000, and 2006 CLC layers, for Iași County (NE Romania), using topographic maps (1972–1989), aerial imagery (1978–2008), and satellite data (1980–2006), and compared it to the original CLC, through change detection analysis. The new maps revealed several issues imposed by (a) generalization—cartographical omissions among settlements, due to the application of a 25 ha minimum mapping unit and a 100 m minimum mapping width; (b) confusions between land cover and land-use classes, such as pasture and wetlands, especially under varying climatic conditions, or imposed by landforms, where we suggest the use of complementary data, such as a Digital Elevation Model (DEM); and (c) the inconsistencies of mapping between successive CLC editions. Our results indicate that the CLC should not be used for downscaling analysis. Therefore, the authors advocate integrating multiple temporal remote sensing layers to achieve a more accurate assessment of land cover classes, thereby compensating for the data's top-down character. Based on these findings, we propose an error classification approach to serve as a reference for risk mitigation in downscaled spatial analysis. We emphasize the need for CLC data users to validate their data against ground truth to mitigate analytical uncertainties.

The study concludes that the applied remote sensing method successfully identifies the NDVI trend of IGS, supporting their management and ensuring a continuous and sustainable monitoring.

Implementing the 3-30-300 rule through satellite data and deep learning: a planning tool for urban green equity and climate adaptation

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Urban areas are increasingly exposed to heat stress as a result of climate change and uneven green infrastructure distribution, highlighting the need for operational tools that can support climate-resilient and sustainable urban planning. The 3-30-300 rule has recently emerged as a policy-relevant framework for improving urban green equity; however, its implementation remains largely conceptual and is rarely supported by quantitative and spatially explicit evidence. This paper proposes an integrated remote sensing and deep learning-based framework to operationalize the 3-30-300 rule by assessing urban tree canopy visibility, canopy coverage and accessibility. Automated

detection and segmentation of urban tree canopy are performed using high-resolution satellite imagery and deep learning techniques to quantify the "3" component, representing the visibility and presence of trees from the urban environment. The same tree canopy detection and segmentation approach is used to operationalize the "30" component by quantifying the proportion and spatial distribution of tree canopy cover within defined urban neighbourhoods. The "300" component is evaluated through network-based accessibility analysis, estimating residents' walking distances to the nearest accessible green spaces. By integrating high-resolution tree canopy information with spatial accessibility and thermal characteristics of the urban environment, the proposed framework provides a transferable and data-driven approach for assessing urban green infrastructure in relation to heat stress and climate adaptation. The results support the operationalization of the 3-30-300 rule as an evidence-based planning instrument for evaluating urban green provision and identifying areas where green infrastructure interventions may contribute to improved climate resilience.

Co-designing climate resilience and heat-health early warning services: from stakeholder knowledge to local action

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Stakeholders and the community play a central role in ensuring that climate resilience planning and early warning services respond effectively to local needs.

The presentation focuses on two study cases: (i) Within the Pathway to Resilience for Teleorman County project, their active involvement supports the development of the Climate Resilience Strategy, the Action Plan and the Investment Plan. Local and county authorities, public health institutions, emergency services, utilities, businesses, farmers, civil society organisations, researchers and communities contribute complementary knowledge on climate risks, vulnerabilities, development priorities and implementation capacities. (ii) This participatory approach is particularly relevant when addressing heat-related risks. Building on the experience and objectives of the SCEWERO project, stakeholder engagement can support redesigning early warning services by integrating health data with population perceptions of heat stress. Health-sector actors can help identify heat-related health impacts and vulnerable population groups, while surveys and community consultations can reveal how people perceive warnings, which information they trust, and what practical barriers prevent protective action. These

insights are essential for developing warnings that are not only technically accurate, but also understandable, actionable and targeted to those most at risk.

Through workshops, consultations, and sectoral working groups, stakeholders can validate priority hazards, identify suitable adaptation measures, and define realistic responsibilities, timelines, and financing needs. Their contribution is equally important for prioritising investments in heat-health protection, resilient public services, green infrastructure and community preparedness. By connecting climate evidence, health impacts and citizens' experiences, the process strengthens local ownership, improves the relevance and legitimacy of resilience measures, and increases the long-term effectiveness of both strategic planning and early warning services.

Contemporary dimensions of religious tourism in the Republic of Moldova

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Religious tourism today involves motivations that go beyond pilgrimage based mainly on faith. Cultural heritage, peace, reflection, and well-being also influence the way religious destinations are perceived and visited. Against this background, the study explores the contemporary dimensions of religious tourism in the Republic of Moldova, focusing on visiting practices, travel motivations, destination choice, and perceived psycho-emotional benefits.

The study is based on the results of the survey "Questionnaire on Pilgrimage and Religious Tourism Experiences". A total of 454 anonymous responses were collected online and through face-to-face interviews. Data analysis included descriptive statistics, the chi-square (χ^2) test, Cramér's V, and the Kruskal–Wallis test.

The results show that visitors to religious sites do not form a homogeneous group. In terms of visitor profiles, 33.7% identify themselves as spiritual visitors, 32.6% as pilgrims, 24.0% as cultural tourists, and 9.7% as occasional visitors. Prayer and spiritual reflection are the main motivation for 42.3% of respondents, followed by the search for peace and an escape from everyday stress (29.5%), and an interest in culture, history, or architecture (22.5%). There is a statistically significant association between visitor profiles and the main motivation for visiting ($p < 0.001$; $V = 0.463$).

Another finding concerns the perceived psycho-emotional benefits of these visits. Almost two-thirds of respondents (65.9%) believe that such visits contribute to a great or very great extent to their well-being and emotional balance. Differences between

visitor groups are statistically significant (Kruskal–Wallis: $H(3) = 44.44$; $p < 0.001$), with the highest values among pilgrims and spiritual visitors. The effect size ($\varepsilon^2 = 0.092$) indicates a moderate magnitude of these differences.

Respondents gave the highest priority to access infrastructure (76.2%), followed by visitor facilities (46.3%), information services (39.9%), and pilgrim comfort (33.3%). Digitalisation (16.7%) and the diversification of commercial services (18.5%) were mentioned less often.

Overall, the results highlight the multiple dimensions of religious tourism in the Republic of Moldova, where pilgrimage coexists with cultural interest, spiritual experiences, and the need for peace and personal well-being. The identified visitor profiles show that the experience of religious sites cannot be reduced to religious motivation alone. Respondents' priorities also point to the need to improve accessibility and visitor facilities while preserving the spiritual character of these places.

This study was conducted within the framework of the Erasmus+ project SacredTravels4Growth (Project No. 101238053), co-funded by the European Union.

Assessing local development in the southern region of the Republic of Moldova: territorial disparities and implications for administrative amalgamation

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This study assesses local development and territorial disparities across 210 local administrative units in the Southern Region of the Republic of Moldova, using data for 2024. The Local Human Development Index (LHDI) combines indicators grouped into five dimensions: economy, demography, infrastructure, education and health. After calculating the initial index, entropy-based weights were applied to obtain the corrected LHDI, which serves as the main model of the study. Separately, an alternative index excluding selected indicators with high variance inflation factor (VIF) values was calculated to examine the sensitivity of the index results.

The initial LHDI placed the largest number of administrative units, 74, in its middle class. In the distribution of the entropy-weighted index, the largest class contains 81 units, while the middle class contains 52. Values of the corrected LHDI range from 0.161 to 0.664, indicating substantial differences in local development.

The five dimensions of the corrected LHDI, including demography, formed the input for hierarchical cluster analysis using Ward's method. The six resulting clusters were mapped and interpreted as territorial development profiles. The largest cluster comprises 54 units with particularly low infrastructure and education scores. Another cluster, comprising 38 units, combines a moderate demographic profile with economic and infrastructure deficits. The maps reveal the distribution of these and other development profiles across the region.

The corrected index identifies differences in overall development, while the cluster typology shows the distinct combinations of strengths and vulnerabilities behind those scores. These findings can support the identification of local investment priorities and inform discussions on administrative amalgamation. Assessing specific amalgamation options would also require an analysis of accessibility, functional links between settlements and administrative capacity.

Noi nuanțe ale migrațiilor internaționale: nomadismul digital, migrațiile pensionarilor, migrațiile pentru naștere, migrațiile confesionale și spirituale, migrațiile etno-rasiale

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Este manifest faptul că ultimul deceniu a adus în societatea umană multiple schimbari vizibile atât pe plan economic, social, dar și de perspectivă individuală și de grup, toate pe fondul unui avans tehnologic informațional fără precedent. Era doar o chestinu de timp (și nu lung) până când toate aceste valuri succesive și concomitente ale schimbărilor să afecteze, într-un fel sau altul, migrațiile internaționale ale populației.

Desigur, noile forme de migrație decrise în titlul prezentării noastre sunt încă destul de versatile și de riscant de analizat, mai ales din cauza lipsei unor date statistice capabile să susțină un astfel de demers. Cu toate acestea diferite organizații încep să ofere celor interesați o serie de informații cantitative, poate parțiale, poate incomplete, dar care au rolul de a face o oarecare lumină asupra acestor realități. Plecând de la aceste considerente am considerat a fi oportună o analiză pe acest plan, demers capabil să releve o serie interesantă – zicem noi – de caracteristici ale noilor forme de migrații internaționale ale populației.

Aspecte privind evolutiile migratiilor internationale ale populatiei din Moldova in perioada post-COVID

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Perioada care a urmat pandemiei cauzate de COVID - 19 a înregistrat multiple schimbări la nivel social, economic și chiar psihologic, modificări imposibil de anticipat, chiar și cu numai câțiva ani mai devreme. Recalibrarea produsă de acest trist eveniment a marcat - cu siguranță - și migrațiile internaționale ale populației, inclusiv ale celei din Moldova (România). Restricțiile de circulație impuse de autorități combinate cu dificultățile financiare ale unei părți însemnate de populație (generate ca efect secundar de măsurile sanitare adoptate) au făcut ca aceste migrații să evolueze într-un eșichier ce nu poate fi regăsit în nici o etapă anterioară. Cu un comportament migratoriu deja asumat, populația din parte de est a Româniein a încercat să se adapteze acestei noi realități, studiul de față încercând să creioneze principalele caracteristici ale acestui fenomen.

Spatial-demographic mismatch in post-socialist peri-urban growth: evidence from Poland and Romania

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Post-socialist urbanisation has generated extensive peri-urban transformation across Central and Eastern Europe, yet the extent to which built-up expansion has corresponded to demographic growth remains insufficiently examined at the intra-urban scale. This study investigates spatial-demographic mismatch in six second-tier cities in Poland and Romania between 1990 and 2020: Szczecin, Bydgoszcz, Lublin, Timișoara, Cluj-Napoca, and Iași. Using a harmonised 1 km² grid extending 20 km from each city centre, we combine Global Human Settlement Layer data on built-up footprint, built-up volume, and population to compare construction and demographic trajectories independently of administrative boundaries. We introduce the Post-socialist Sprawl Penalty (PSP), defined as the difference between the growth rates of estimated built-up surface and population, to identify areas where physical expansion has outpaced demographic change.

The results reveal a marked divergence between the two national trajectories. Median PSP reaches 87.7 percentage points in the Romanian cases compared with 37.7 in Poland, with all three Romanian urban regions exceeding their Polish counterparts. This difference is primarily peri-urban: the strongest divergence occurs within the 5–15 km

transition zone, while urban cores display more similar trajectories. Romanian cities also contain a substantially higher proportion of problematic trajectories characterised by severe spatial-demographic mismatch or expansion without demographic support (53.6%, compared with 24.1% in Poland). Even where population increased, Romanian peri-urban development became progressively more land-intensive towards the outer belts.

The findings demonstrate that built-up expansion in post-socialist urban regions cannot be interpreted as a simple response to population growth. They further show that spatial-demographic mismatch is strongly differentiated within metropolitan space and can be obscured by city-level averages. The contrasting Polish and Romanian trajectories are consistent with the interpretation that different ownership restructuring, land restitution, and planning pathways mediated common post-socialist development pressures.

Turismul culinar în orașul Iași

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Cercetările documentare indică existența unui patrimoniu gastronomic important la Iași, care a fost analizat în istoriografia română, dar care nu este suficient valorificat în oferta turistică actuală. Restaurantele din Iași favorizează preparatele internaționale în defavoarea identității culinare regionale, iar ingredientele importate sunt mult mai prezente decât cele locale. Această lucrare pornește de la ipoteza că gastronomia din Iași poate deveni un factor important al identității regionale, adaptându-se la cerințele turismului modern.

Obiectivele acestui studiu sunt următoarele: realizarea unui inventar al ofertei culinare actuale a restaurantelor din orașul Iași; caracterizarea restaurantelor în funcție de oferta culinară a meniurilor lor și de ingredientele fiecărui preparat; identificarea rețetelor locale specifice. Metodologia combină analiza documentară a surselor istorice, un studiu de teren realizat pe 52 de restaurante și cartografierea acestora în ArcMap, o analiză matricială a 195 de rețete extrase din lucrarea lui Kogalniceanu și Negruzzi, un chestionar adresat rezidenților, turiștilor și persoanelor care locuiesc în apropierea orașului Iași, precum și reprezentări grafice ale florei sălbatice cu valoare culinară.

Rezultatele obținute sunt următoarele : Analiza restaurantelor confirmă predominanța bucătăriilor internaționale, ingredientele locale fiind puțin prezente în oferta culinară. Analiza istorică evidențiază o bucătărie moldovenească boierească, distinctă și sofisticată în același timp, marcată de influențe franceze, austro-ungare și otomane. Chestionarul relevă un interes real al publicului pentru un turism gastronomic autentic.

În concluzie, această lucrare aduce mai multe elemente noi: o analiză sistematică a ofertei restaurantelor din Iași, punerea în valoare a utilizării florei sălbatice în gastronomie și propuneri strategice pentru dezvoltarea turismului gastronomic în orașul Iași.

Studenții francezi și francofoni de la Iași : o populație străină recentă

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În contextul mondializării și al emigrației constante ce caracterizează populația românească, propunem în comunicarea noastră un studiu al unei populații urbane străine de dată recentă, alcătuită din studenții francezi și francofoni care locuiesc în Iași de mai mulți ani. Este vorba despre o migrație orientată în direcția inversă, din afara spre interiorul țării, cu durată determinată, pe care o vom numi expatriere universitară. Durata determinată cuprinde perioada studiilor lor universitare de medicină generală, dentară sau veterinară, care este una de cel puțin 6 ani. Ne propunem să studiem această populație tânără de la începuturile apariției ei în Iași, care coincid cu crearea filierei în limba franceză a Universității de Medicină și Farmacie „Gr. T. Popa" în 2009, și până în prezent. Potrivit datelor pimite de la Rectoratul UMF (obținute în urma unor demersuri de informare), în anul universitar 2025-2026, numărul studenților francezi înscriși la această universitate este de 1153, cărora li se adaugă 162 de marocani, 63 de tunisieni, 29 de belgieni, 10 elevețieni și aproximativ alți 10 studenți francofoni de alte naționalități din Africa. Pe de altă parte, la Facultatea de Medicină veterinară de la Universitatea de Științele Vieții din Iași sunt înscriși, de asemenea, 290 de studenți francezi (potrivit informațiilor obținute de la Rectoratul acestei universități). Aceste cifre fac din comunitatea studenților francezi cea mai numeroasă populație străină din Uniunea Europeană din universitățile și din orașul Iași.

Din punct de vedere al metodologiei de cercetare, ne vom folosi de metoda cartografierii datelor obținute din mai multe surse și mai ales în urma efectuării a numeroase anchete de teren cu chestionar (chestionar deja utilizat pe un eșantion de 100 de studenți francezi și francofoni în 2024 și 2025). Aceste anchete pe bază de chestionar au fost însoțite de interviuri cu studenți francezi și francofoni, aleși în funcție de o serie de criterii pertinente, interviuri individuale și colective. Datele obținute în felul acesta au fost coroborate cu altele, obținute cu ajutorul metodei observației participative (specifică antropologiei: Maisonneuve, 1988), care a constat în inserarea noastră în cadrul activităților subiecților studiați, prin participarea efectivă, alături de ei, la numeroase activități și întâlniri socioculturale. Alte date au fost obținute în urma consultării conturilor din rețelele de socializare ale numeroși studenți francezi și francofoni și ale asociațiilor lor, unde sunt menționate și prezentate în detaliu activități culturale, turistice, sportive etc.

Ne propunem în comunicarea noastră un studiu de geografie a vieții cotidiene a acestei populații urbane de origine străină, franceză și francofonă, care să conțină identificarea și descrierea zonelor urbane preferate, o analiză a dinamicii acestei populații tinere, a originilor socioculturale ale studenților, a habitatului lor formal și informal, a mobilității lor urbane, a activităților lor (culturale, sportive, turistice), a prezenței și rolului lor în cadrul vieții sociale, culturale și economice a orașului Iași, a aportului lor economic. Totodată, vom sublinia și faptul că prezența acestei populații urbane recente de tineri francezi și francofoni continuă o tradiție francofonă cu trecut îndelungat a orașului nostru universitar.

Categories, overlaps, and misclassifications in natural hazard analysis: geological, geomorphological, and hydrological

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Accurate assessment of natural hazards is a fundamental stage in risk management and spatial planning. However, current scientific and applied practice frequently exhibits conceptual overlap and rigid or erroneous classification of phenomena at the intersection of geology, geomorphology, and hydrology. This paper examines the causes and consequences of these taxonomic confusions, focusing on the tendency to assign certain hazards to a specific category in a simplified manner, without a comprehensive analysis of the underlying processes.

The conceptual framework of this study stems from defining core domains: geomorphology investigates the processes of erosion, transport, and deposition of Earth materials. Consequently, all hazards directly involving this triad of processes naturally belong to the geomorphological domain. In practice, however, boundaries become blurred due to the overlap of triggering and response factors:

- Geological–Geomorphological Overlap: Seismic or volcanic hazards involve visible processes of erosion, transport, and deposition (e.g., earthquake-triggered landslides, pyroclastic flows, or lahars). This raises a methodological question: where does the endogenic geological hazard end, and where does the derived geomorphological process begin?

- Hydrological–Geomorphological Overlap: Floods are traditionally assigned to hydrology, yet a flood wave never transports merely "clean water." During extreme hydrological events, intense processes of vertical and lateral erosion, massive sediment transport (both suspended and bedload), and deposition occur, radically reconfiguring active channels and floodplains—manifestations that are strictly geomorphological.

A reductive approach overlooks the systemic nature of the environment, wherein a hydrological or seismic factor acts as a trigger, the geological framework provides the structure and lithology, and the actual spatiotemporal expression constitutes a distinct geomorphological process. This paper argues for moving beyond conventional classifications toward a rigorous genetic-processual analysis. Clarifying these distinctions is essential for the accuracy of risk mapping, predictive modeling, and spatial planning strategies.

The Romanian atlas of local development: preliminary results

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Romania's economy and society have undergone considerable transformation over the last 35 years, with significant territorial consequences. European integration, economic restructuring, various global crises, along with a dominant neoliberal order and the subsequent increasing importance of private capital and local agency have transformed the geography of local development. In parallel, the importance of local development for designing national policy and investment programs has generated a considerable and increasing amount of research, stemming both from academia (especially from the Bucharest sociological school under the coordination of professor Dumitru Sandu), the Romanian Government (e.g. The Territorial Observatory, or The Atlas of Urban Marginalised Communities), and from international organisations such as the World Bank (e.g. The 2016 Atlas of Marginalized Rural Areas and Local Human Development in Romania). The works have significantly contributed to understanding territorial patterns of development in Romania, and some of them (namely the Local Human Development Index by Dumitru Sandu) are now a benchmark for understanding local development in Romania. However, multidimensional territorial profiles of local development, and the relationships between accessibility to development opportunities and long-term local development trajectories remain insufficiently integrated within a common geographical framework.

At the same time new datasets have become accessible for researchers, but such datasets are currently fragmented and insufficiently harmonised, with data for various development dimensions and for older moments in time still to be processed and brought together. Consequently, a geographical atlas of long term development trajectories and multidimensional local development profiles is still missing. Adding a temporal dimension to the analysis of local development, as well as understanding it from a multidimensional perspective is particularly important as recent research has shown, on the one hand, that national growth could hide strong territorial polarisation, and, on the other hand, that various dimensions of development could actually be dissociated (e.g. performing economically, but lagging socially).

The current atlas goes beyond development hierarchies and static maps, to focus instead on understanding multidimensional local development profiles, development trajectories of various types of territories over long periods of time, and the territorial polarisation process. Furthermore, from a theoretical and methodological standpoint, The Romanian Atlas of Local Development follows a human-centric assessment of local development, inspired by Amartya Sen's capability approach. As such, local development is assessed as people's accessibility to development opportunities (healthcare, education, jobs), as well as the corresponding concrete outcomes (health status, educational attainment, local income). This distinction between opportunities and outcomes is important to understand when and where development opportunities translate (or not) into concrete developmental outcomes. Finally, the atlas aims at contributing to understanding development trajectories of various places seen as nodes inside regional, national and international transportation networks that connect settlements to services of general interest. The rise of the network society and economy, as predicted by Manuel Castells in the 1990s, could no longer be ignored: relative position inside networks could nowadays be as important as local resources in explaining development outcomes.

The atlas is designed as an interactive and user-friendly decision-support tool for general public, local authorities and stakeholders, allowing them not only to visualise results of scientific research (updated territorial typologies, drivers of development, local trajectories of development), but also to interactively generate new insights based on data from TEPS Research Project (www.geo.uaic.ro/teps) and from other sources. The atlas is designed to communicate the geography of local development at village, communal and county levels, for 1912-2021. Results to be presented at the Dimitrie Cantemir International Conference cover the period of the last 35 years.

Adaptation frameworks for climate-resilient metropolitan areas

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Metropolitan areas concentrate population, infrastructure and economic activity exposed to intensifying climate hazards, yet they remain insufficiently addressed by existing climate adaptation frameworks. Climate risks increasingly unfold across functional urban regions that extend beyond municipal boundaries, while the competences, financial resources and planning instruments required to address them remain fragmented across municipalities and higher levels of government.

This work examines the role of metropolitan-scale governance frameworks in translating climate knowledge into coordinated adaptation action. It draws on research

conducted in Romanian urban and metropolitan contexts and on work undertaken within the Horizon Europe CARMINE project, where an adaptation framework was co-designed with stakeholders across eight European metropolitan case study areas.

The analysis focuses on three interrelated dimensions: vertical integration across levels of governance; horizontal and cross-sectoral coordination; and the institutional position of the metropolitan scale. It also considers how stakeholders and local communities are involved into adaptation processes and how information on climate hazards, exposure and vulnerability is translated into priorities, responsibilities and implementable measures.

Particular attention is given to persistent implementation gaps, including weak monitoring and evaluation mechanisms, limited consideration of financing pathways, fragmented institutional responsibilities and the continuing disconnect between strategic policy objectives and municipal practice. Building on these challenges, the contribution identifies the governance and operational conditions required for metropolitan adaptation frameworks to move beyond strategic guidance and function as effective mechanisms for coordinated, evidence-based and implementable climate action.

Compounding stressors and shocks: vulnerability of the agricultural workforce in Romania's Nord-Est region amid the twin transition

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This paper examines how North-East Romania's digital and green transition shapes vulnerability among agricultural workers, rather than treating the transition as background context. Long-term pressures and vulnerabilities, including an ageing rural population, fragmented institutions, and reliance on EU rather than domestic funding, interact with acute shocks, such as recurrent droughts, the COVID-19 pandemic, and the war in Ukraine. These pressures do not affect farms and workers evenly. Their effects are shaped by unequal access to mechanisation, digital tools, and green-transition funding, reflecting inequalities that existed before the transition but have been intensified by it.

The analysis draws on 20 semi-structured interviews with members of the public, practitioners, sector stakeholders, and local policymakers, together with a multi-stakeholder focus group, all framed by the region's ongoing digital and green transition. Across the data, the pandemic, the war in Ukraine, and drought appear as overlapping pressures rather than separate disruptions. Rising input costs, supply chain disruption,

and falling grain prices reinforced one another and, in some cases, contributed to farm closure. This pattern informs the paper's analytical framing.

The findings suggest that this unevenness is shaped by weak monitoring of skills provision, slow and fragmented policy processes, unequal access to mechanisation and digital tools across age, education, and farm size, and environmental rules that constrain smallholders' capacity to adapt during shocks. We argue that skills mismatches, the displacement of unskilled workers through mechanisation, and unequal access to green-transition funding are key mechanisms through which the twin transition creates vulnerability. These mechanisms influence which farms and workers can absorb external shocks and which remain more vulnerable.

Romania's electoral geography between the annulled 2024 and 2025 presidential elections: territorial persistence and reconfiguration at the ATU level

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This paper examines the dynamics of Romania's electoral geography between the 2024 presidential election, subsequently annulled, and the 2025 presidential election, drawing on electoral results available at the level of administrative-territorial units (ATUs). The study seeks to identify patterns of territorial continuity, rupture, discontinuity, and reconfiguration in electoral voting, with particular emphasis on the major spatial cleavages shaping electoral preferences, notably the rural–urban and core–periphery divides. The two electoral moments are examined comparatively in order to assess both the persistence of established territorial structures of electoral support and the emergence of new spatial configurations.

The analysis is based on electoral data aggregated at the level of administrative-territorial units (ATUs) and integrates spatial analysis and GIS methods, global and local measures of spatial autocorrelation, specifically Moran's I and Local Indicators of Spatial Association (LISA). The comparative analysis focuses on three main dimensions: electoral turnout, the territorial distribution of voting patterns, and the magnitude of changes in electoral behaviour between the two electoral moments under examination.

Global and local spatial autocorrelation techniques enable the identification of clusters of electoral persistence, emerging cores of territorial reconfiguration, and areas of spatial discontinuity within the national electoral landscape.

By developing a typology of administrative-territorial units, the study seeks to capture the diversity of local electoral trajectories and to assess the extent to which the 2025

election preserved previously established geographical patterns of voting or generated new territorial configurations.

The findings indicate that the annulment of the 2024 election did not neutralise the centrifugal forces shaping Romania's political space but instead acted as a catalyst with measurable spatial effects. It contributed to a redistribution of protest electoral support and to the reconfiguration of local electoral bases in ways that point to an increasingly pronounced spatial decoupling between economically integrated territories and those characterised by structural vulnerability.

The proposed approach contributes to understanding the recent dynamics of Romania's electoral space from a geographical and multiscalar perspective, providing a replicable analytical framework for the comparative study of electoral behaviour in contexts of institutional instability and political reconfiguration.

Has the market redrawn the map? Sixty years of economic specialisation across Romania's urban hierarchy

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The location of economic activities in Romania is shaped by two forces that geography has been emphasising for a long time: the size of the settlement where a firm locates, and its distance from a major urban centre. This study divides Romania's local administrative units into twelve categories according to their size and their distance from a major metropolitan area, with the aim of providing a clearer understanding of how economic activity locates across the settlement hierarchy. For 19 sectors and sub-sectors of economic activity, we describe and interpret how specialisation, measured through location quotients, varies across these twelve categories of settlements. Three distinct patterns emerge from this analysis: (1) a hierarchical distribution, most visible in knowledge-intensive services, where specialisation rises quickly with city size and location; (2) a contained deconcentration pattern, typical for the manufacturing sector, where activity favours medium-sized cities close to major urban centres; and (3) an unbounded deconcentration pattern, characteristic to primary activities, where specialisation grows as cities get smaller and as distance from metropolitan areas increases. To further study these patterns, we complement the descriptive analysis with a statistical model that isolates the separate effects of settlement size, central or peripheral position, and distance to the nearest metropolitan area, while controlling for a wide set of geographical factors. The results largely validate what the descriptive picture suggests, and reveal that settlement size plays a key role than the central-peripheral distinction in explaining where Romanian economic activity locates, a pattern

that stands out compared to what has been documented in larger Western European countries. A historical extension of this model, tracing primary, secondary and tertiary employment shares from 1966 through 2021, further shows how these spatial patterns have shifted from the planned dispersion of the socialist period toward a more market-driven concentration of activity, particularly around the largest metropolitan areas. Looking at economic activity through this geographical lens offers valuable insight, not only into the current profile of Romania's regions, but also into their past, into how they have evolved, and what should be considered in current territorial planning policies.

Gender disparities and territorial patterns of the doctorate-holding population in Romania

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Near numerical parity between female and male doctorate holders at the national level can coexist with pronounced territorial and disciplinary differences. This study examines this configuration in Romania, assessing the extent to which the aggregate gender balance is reflected in county-level representation and patterns of doctoral specialisation.

The research draws on data from the 2021 Population and Housing Census for Romania's 42 county-level territorial units. Statistical and cartographic analyses integrate population counts, the proportion of doctorate holders within the tertiary-educated population of the same sex, and female-to-male ratios. Territorial specialisation is assessed using location quotients for six fields of doctoral study, calculated separately for women and men against their respective national disciplinary distributions. Differences between these quotients enable comparisons of relative specialisation between the two populations. Hierarchical cluster analysis synthesises disciplinary profiles into separate territorial typologies for each sex.

The results reveal substantial geographical concentration alongside differences in gender representation and disciplinary composition. Of the 59,851 doctorate holders, 49.2% resided in Bucharest and the counties of Cluj and Iași. Women accounted for 49.2% of the national total but constituted a majority in only nine territorial units. Doctorate holders represented 1.74% of tertiary-educated women and 2.25% of tertiary-educated men, with the highest proportions for both sexes recorded in Iași and Cluj. Across disciplines, women accounted for 61.5% of doctorate holders in biological and biomedical sciences, compared with 34.2% in engineering. The territorial typologies complement these aggregate differences by identifying groups of counties with similar specialisation profiles within each population.

The study demonstrates that national numerical parity does not imply similar territorial and disciplinary representation of women and men. Its contribution lies in jointly examining geographical concentration, representation within the tertiary-educated population, and relative specialisation, providing a territorial interpretation of gender disparities among the resident population holding doctoral qualifications.

Behavioural patterns in modern dwellings: Implications for sustainable and resilient urban transitions

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Cities worldwide increasingly pursue sustainability and environmental resilience in response to escalating global challenges and mounting anthropogenic pressures. Although these objectives are commonly operationalized through the development of policies, strategies, and regulatory frameworks, urban residents often exhibit limited willingness to modify entrenched behavioural routines, which are frequently perceived as integral to higher standards of living. Against this backdrop, the present study examines whether regulatory efforts aimed at sustainability and environmental resilience are accompanied by corresponding shifts in citizens' consumption and behavioural patterns, or whether they instead coexist with persistent - or even countervailing -practices. To address this question, a structured survey instrument assessing behavioural patterns and housing conditions was administered to urban residents in Romania, yielding a dataset spanning 21 cities. To evaluate the relationship between housing conditions, environmental perceptions, and lifestyle choices, we applied an integrated multivariate statistical framework. This multi-stage quantitative workflow combined latent index construct development, household behavioural typology segmentation, and hierarchical structural path modelling to account for spatial nesting across urban contexts. The findings suggest that local planning and governance contexts substantially condition behavioural and consumption patterns, often in ways that are not conducive to the realization of sustainable and environmentally resilient urban settlements. In particular, housing constraints and planning designs appear to incentivize comparatively less sustainable practices, thereby contributing to a systematic gap between policy objectives and their effective implementation at the household level.

The Didactics of Active Steps. How to Turn Via Transilvanica into a Complete Educational Resource

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This paper presents how the Via Transilvanica trail (1,400 km, 10 counties) can be integrated into geography classes as a practical tool for active learning, connecting the school curriculum with environmental education and civic spirit. By incorporating this project into the school syllabus, students can more easily grasp concepts of physical geography (landforms/physiographic units, rock types such as the milestone andesite), human geography (cultural diversity), and economic geography (slow travel). Lessons are complemented by modern observation methods, such as section-based case studies (e.g., Bucovina) and GIS analyses of elevation profiles and forested areas. Furthermore, the text promotes civic and environmental education through hands-on activities based on the Leave No Trace principles, local volunteering (trail cleanups, trail marking), and sustainable development, turning abstract concepts into a real-world experience that fosters youth responsibility toward the environment and the community.

Low-flow variability between 1950 and 2020. A case study: Jijia river basin

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Jijia River is located in the northeastern part of Romania and it is an important tributary of the Prut River; being characterized by strong seasonal variability in water availability. This study looks into the long-term variability of river discharge and low-flow conditions in the Jijia River Basin over the period 1950-2020. The analysis is based on monthly discharge data, represented by monthly mean and minimum discharge values, aiming to determine the temporal variability of the river flow regime and identify changes in its low-flow conditions.

This study's main purpose is to identify and characterize low-flow periods using statistical and threshold-based approaches, with flow percentiles used to account for the rivers's seasonal fluctuation. The analysis examines how often and to what extent discharge falls below the selected thresholds, providing an understanding of the frequency of low-flow conditions throughout the study period.

Furthermore, trend analysis is used to detect whether significant changes occurred in mean and minimum discharge during the study period. By combining the analysis of general discharge variability with the assessment of low-flow conditions, this study's focus is to offer a better understanding of the long-term evolution of water availability in the Jijia River Basin.

The results are expected to provide useful information for the evaluation of changes in regional water resources. The study also highlights the importance of differentiating naturally occurring low-flow conditions from hydrological drought when observing long-term streamflow variability.

Gender and human trafficking in Romania, 2015–2025

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The most widespread perception of human trafficking is usually structured around two main dimensions: its cross-border nature and its focus on women. Our presentation aims to explore areas that are less prominent in public consciousness, specifically human trafficking within Romania's borders, the multi-gender dimension of the phenomenon, and the issue of minors. We seek to identify trends differentiating the issue at national and international scales, and characterise spatial patterns between Romanian regions.

Step-by-step, we analyse statistical data provided in 2026 by the National Agency Against Human Trafficking (ANITIP). Although the county-level aggregation of statistical data does not allow for a spatial analysis in the strict sense, we use descriptive cartography to discern spatial patterns. During the corona-virus pandemic, there was a decline in human trafficking involving Romanian citizens. More recently there has been an up-tick in cases. While some say that the increase is the result of a failure of national and international policies to combat trafficking, it may also be attributable to improved effectiveness of public services combating the phenomenon. Another observation concerns the different total number, gender, age, and exploitation characteristics at national and international levels. For example, the trafficking of minors for sexual exploitation is more prevalent within national borders (75.2% for girls and 96.1% for boys) compared to transnational trafficking (10.9% and 79.4%, respectively).

In conclusion, our results offer insights for policy makers, scholars and practitioners so that they may formulate more place-specific interventions and enact more effective public policies.

Florile, mândrele și horile în folclorul maramureșean. Valorificare turistică

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Florile și horile in folclorul maramuresean. Valorificare turistica. Ca formă a culturii tradiționale românești, folclorul maramureșean prezintă o bogăție și o varietate deosebită, atât din punct de vedere muzical cât și poetic. Pe lângă aceste caracteristici specifice, prezența scenică a performerilor este amplificată de portul popular de o rară frumusețe și originalitate, de un grai arhaic și de obiceiuri ancestrale. Horile maramureșene se disting în mod deosebit prin diversitate și armonie. De foarte multe ori, mândrele și florile reprezintă teme ale horilor. Asocierea dintre acestea, uneori pentru asemănare și comparație, creează un plus de valoare pentru folclor. Mândrele sunt prezentate în versuri ca florile. Iubirea de mândre și iubirea de flori sunt tratate împreună. Exista și prenumele „Floare" sau „Florica" la fete, ceea ce întărește ideea exprimată mai înainte. Sunt cunoscute versurile "Horiți fete horile, Că sunteți ca florile" sau expresia din cântec "Mândruliță, floare albă", precum și refrenul colindelor "Florile dalbe de măr". Prin frumusețea lor, horile și colindele maramureșene sunt mereu în atenția turiștilor, la pensiuni, la spectacole, nedei, festivaluri, sărbători, serbări etc. Acestea se cântă copiilor din leagăn, la Botejune, la nuntă, la alte evenimente ale vieții și la sărbătorile de peste an. Ele se constituie ca un brand al Maramureșului.

Which countries are best for women? An analysis of the Women, Peace and Security (WPS) Index

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Gender equality and women's well-being are topics that have attracted considerable interest in recent years, being regarded as reliable measures of a country's social, economic and political development. Although the recent improvement in women's position in society is undeniable, their access to education, employment and justice remains uneven, being highly dependent on a country's level of development and institutional capacity. These premises raise a significant and pragmatic question: which countries provide the best conditions for women to live and thrive?

One reliable way to address this question is the Women, Peace and Security (WPS) Index, developed by Georgetown Institute for Women, Peace and Security. Using 13 indicators covering three dimensions (women's inclusion, justice and security), the index provides a comprehensive assessment of women's well-being across countries.

The scores range from 0.279 (the case of Afghanistan) to 0.939 (Denmark), revealing significant disparities in women's living conditions worldwide.

The rankings highlight the dominant position of Europe among the countries worldwide, with European countries occupying the first 9 positions. Northern Europe, in particular, clearly sets the global benchmark for women's well-being, reflecting its inclusive legislations and high level of security.

By contrast, the poor scores of the countries at the bottom of the ranking (such as Yemen and Afghanistan) are imputable to their political and military instability, long term humanitarian crises (which disproportionately affect women) and high level of gender-based violence.

With a score of 0.801, Romania ranks 43rd, which seems to represent a comfortable position. However, when compared to other former European communist countries, Romania appears to perform less well. This situation can be attributed to several persistent shortcomings, such as women's political participation, access to justice and economic inclusion.

Besides analysing the regional disparities in the distribution of the values of this indicator, our paper is also intended to examine the factors that enable certain countries to be more successful than others and to become safer, more inclusive and more supportive environments for women.

Connecting climate data to urban decisions: The B-CONNECT approach

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Climate-resilient urban governance increasingly depends on the capacity to transform heterogeneous environmental observations into information that can directly support planning and decision-making. The B-CONNECT – Bio-centric Communities: Navigating nature, Embracing Ecosystems, Championing Technology project addresses this challenge by developing an integrated framework in which environmental monitoring, spatial analysis, citizen-generated information and nature-based solutions are connected within a common decision-support process.

A central component of this approach is B(reeze)-Net, a multi-source environmental data network integrating fixed meteorological monitoring, mobile air-quality sensors, low-cost and citizen-operated sensors, Earth Observation data, traffic information and crowdsourced observations within a GIS-based framework. In Bistrița, these data are complemented by urban-climate analyses, including the identification of heat-related spatial patterns and environmental hotspots, as well as assessments of citizens' perceptions of the urban environment.

B-CONNECT shows how such a distributed data infrastructure can support the transition from environmental observation to informed urban decisions. Particular attention is given to three interconnected stages: the generation and integration of heterogeneous urban environmental data; their transformation into spatial indicators relevant to climate vulnerability and urban planning; and their use in the design, evaluation and monitoring of nature-based solutions.

From high-resolution urban climate modelling to climate-resilient planning: A PALM-4U case study for Iasi, Romania

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High-resolution urban climate modelling can provide spatial information that is difficult to obtain from conventional monitoring networks but highly relevant for climate-resilient urban planning. This presentation summarizes a preliminary PALM-4U modelling experiment conducted for central Iași, Romania, during a clear, cold winter day without snow cover. A nested modelling configuration was used to simulate near-surface air temperature and local airflow at high spatial and temporal resolution, with results compared against observations from the MOBCLIM monitoring network.

The simulation reveals substantial microclimatic variability within the urban area. Building geometry, shading, solar exposure, topography, and local ventilation strongly influence daytime warming and the spatial distribution of cold conditions. During the morning, the lowest temperatures occur mainly in shaded and poorly insolated locations, while sun-exposed façades and surfaces warm rapidly. Around midday, differences of several degrees develop over short distances, followed by progressive cooling and renewed atmospheric stabilization toward evening. The model also reproduces the development and daytime erosion of a shallow temperature inversion.

From a stakeholder perspective, these results demonstrate how high-resolution modelling can identify thermally critical locations that are not adequately represented by standard meteorological observations. Such information can help evaluate how building configurations, street orientation, open spaces, vegetation, and ventilation corridors influence pedestrian thermal exposure and neighborhood-scale climate conditions.

Combined with field observations, PALM-4U therefore provides a useful framework for translating urban climate data into spatially explicit information for planning and decision-making. Its application can support the assessment of future development scenarios, identification of climate-sensitive areas, and design of urban interventions aimed at reducing thermal exposure and strengthening metropolitan climate resilience.

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Beyond close vs far: perceived access to services and the geography of territorial injustice

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This paper examines how perceived access to services structures territorial justice, wellbeing, and the emergence of left-behindness. Moving beyond approaches that either aggregate all services into a single index or rely exclusively on objective distance-based indicators, we conceptualise access as the perceived travel time required to reach services and distinguish between two major categories of services: basic services (markets, primary and lower-secondary schools, family doctors, and recreation spaces) and specialised services (high schools and universities, advanced and emergency health services, cultural venues). Using a latent class approach, we identify four accessibility classes (H_Acc, S_mod, S_far, L_Acc) that explain how service access is experienced as a configuration. The methodology was applied on Romanian territory using a national representative survey. The results show that the class with the most favourable accessibility to both basic and specialised services (H_Acc) is more prevalent in medium-sized cities rather than in large metropolitan areas. Accordingly, the idea that the largest cities represent the primary "sweet spots" of accessibility is partially called into question. Rural areas and small towns remain the most disadvantaged for both types of accessibility. This typology replaces binary framings (close/far; present/absent) with graded categories of perceived distance, providing a policy-relevant framework.

ENVI-met modelling as a tool to support urban climate adaptation decisions

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Cities are increasingly affected by high temperatures and increasing thermal discomfort, while local authorities need to identify effective solutions to reduce these effects. Urban microclimate modelling can contribute to this process by evaluating existing conditions and testing different solutions before their implementation. However, the practical use of modelling results requires an evaluation of model performance and the selection of an appropriate spatial resolution according to the purpose of the analysis.

This study investigates the use of ENVI-met as a tool to support the assessment of urban microclimatic conditions, using a frequently crowded urban area in Iași, Romania, as a case study. ENVI-met simulations were performed at four spatial resolutions of 1, 2, 4 and 6 m, in order to evaluate the influence of spatial resolution on the modelling results. For validation, field measurements were carried out above asphalt and grass surfaces. Air temperature was monitored at heights of 0.9, 1.5 and 2 m, together with measurements of the active surface temperature. Simulated values are extracted from each model at locations and vertical levels corresponding to the observations and compared with measured data. Model performance is evaluated by analysing the temporal variability and using statistical indicators that quantify the differences between simulated and observed values.

Results indicate differences in model performance depending on spatial resolution, measurement height and surface type. Higher-resolution simulations tend to better reproduce the observed microclimatic variability, particularly close to the active surface and in areas with changes in surface cover. As spatial resolution decreases, these local differences tend to become smoother, although this does not result in a proportional decrease of model performance in all situations. The comparison of the simulations therefore suggests a trade-off between spatial resolution, accuracy of the results and the computational resources required. Identifying a resolution that maintains a satisfactory representation of microclimatic conditions while reducing computational requirements could facilitate the use of ENVI-met for testing different adaptation solutions and provide local authorities with useful information for selecting interventions before their implementation.

Empowering climate adaptation through citizen science competitions: Lessons from the ScienceUs experience

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Citizen science is increasingly recognized as a powerful approach for generating knowledge, engaging citizens in climate action, and supporting evidence-based decision-making. However, many initiatives face challenges related to long-term sustainability, stakeholder engagement, scalability, and policy uptake. This presentation draws on the experience of the ScienceUs Open Call, a Europe-wide competition designed to identify, support, and scale citizen science initiatives contributing to climate change adaptation.

The ScienceUs competition attracted 60 applications from 29 countries and implemented an innovative support pathway combining competitive funding, mentoring, training, networking, and transnational collaboration. Rather than funding new projects, ScienceUs focused on strengthening existing initiatives with demonstrated results and growth potential. The competition enabled the identification of high-impact projects addressing challenges such as biodiversity monitoring, water resources, urban resilience, coastal adaptation, sustainable mobility, and energy vulnerability.

The presentation highlights the main outcomes of the competition, including the development of stronger stakeholder networks, increased organizational capacity, enhanced policy relevance, and improved opportunities for scaling citizen science initiatives. Particular attention is given to the added value of combining financial support with capacity building and mentorship, which proved essential for transforming local initiatives into projects with broader societal and policy impact.

The ScienceUs experience demonstrates that dedicated citizen science competitions can serve as effective instruments for identifying innovative initiatives, fostering collaboration, strengthening governance capacities, and accelerating the contribution of citizen science to climate adaptation. The lessons learned provide valuable insights for future funding programmes, public authorities, and organizations seeking to maximize the societal impact of citizen science across Europe.

From participation to impact: outcomes and practical value of the Brașov living lab for climate resilience and nature-based solutions

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Living Labs are increasingly recognized as collaborative innovation environments that help bridge the gap between knowledge generation and climate adaptation practice. Yet their value is often questioned in terms of the concrete results they deliver. Drawing on the experience of the Brașov Living Lab, developed within the Horizon Europe CARMINE project, this presentation explores how participatory and co-creative processes can generate actionable outcomes for urban climate resilience.

The Brașov Living Lab brought together local authorities, researchers, civil society organizations, businesses, vulnerable groups, and citizens to jointly explore climate risks, identify adaptation priorities, and discuss nature-based solutions. Beyond facilitating dialogue, the process produced tangible outputs, including a shared understanding of local climate challenges, stronger stakeholder networks, increased awareness of adaptation options, and evidence-based recommendations for urban planning and governance. It also enabled the integration of scientific knowledge, local experience, and diverse stakeholder perspectives into discussions on climate resilience.

The presentation examines the different types of outcomes generated, ranging from knowledge creation and social learning to institutional collaboration and policy support. Particular attention is paid to their practical utility for municipalities seeking more inclusive, legitimate, and implementable adaptation pathways. The Brașov experience illustrates that Living Labs can function not only as participation platforms but also as catalysts for capacity building, collective action, and the co-creation of locally relevant solutions. The lessons learned offer valuable insights for cities and regions aiming to strengthen climate resilience through collaborative governance and stakeholder engagement.

Sustainable management of erosion-prone agricultural land through soil and water conservation under climate change

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Soil erosion is one of the major land degradation processes affecting agricultural areas in hilly regions, and its impacts are increasingly intensified by climate variability and the growing frequency of high-intensity rainfall events. This study presents the results

of a multiannual experimental programme conducted between 2024 and 2026 at the Research and Development Station for Soil Erosion Control "Mircea Moțoc" Perieni, Vaslui, Romania. Runoff and soil erosion were monitored on standard 100 m² experimental plots equipped with calibrated collection systems. A total of 16 high-intensity rainfall events, with individual precipitation amounts ranging from 7.5 to 55.4 mm, were analysed.

On the bare fallow control plot, annual soil losses ranged from 8.488 to 10.660 t ha^{-1}, while surface runoff varied between 75.995 and 249.722 m^3 ha^{-1}. No-tillage maize reduced soil losses to 0.248–0.358 t ha^{-1}, representing reductions of approximately 96–98% compared with the control, whereas soil losses under no-till pea decreased to only 0.028 t ha^{-1}. Total nitrogen losses reached 8.681–12.719 kg ha^{-1} on the control plot but only 0.159–1.146 kg ha^{-1} under no-tillage treatments. Similar reductions were observed for phosphorus and potassium losses.

The year 2024 was characterised by a positive temperature anomaly of +2.6°C relative to the long-term average and an extreme rainfall event of 157.6 mm recorded in September. From a productive perspective, the yield gap between conventional tillage and no-tillage maize decreased from 20.0% in 2024 to 15.0% in 2026, while no-tillage wheat exceeded conventional production by 43.8% in 2025.

The results demonstrate that conservation soil management systems can substantially reduce losses of soil, water and nutrients and represent an effective strategy for increasing the resilience of agricultural ecosystems in hilly regions and supporting climate change adaptation.

Using unsupervised classification algorithms in the analysis of country development typologies: the effect of distance and linkage algorithms on observation clustering

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Unsupervised classification methods are applied when the analyzed dataset does not present a prior grouping of the statistical units. Therefore, the similarity or dissimilarity between the analyzed statistical units can be determined based on distance metrics. This paper analyzes and evaluates the performance of two unsupervised classification methods: Hierarchical clustering and K-means clustering. In the case of hierarchical classification, in addition to the distance metrics (Euclidian, Manhattan, Maximum, Canberra, and Minkowski), the performance of three linkage algorithms is analyzed and evaluated: single linkage, complete linkage, and wardD2 linkage, with the aim of assessing the differences. The dataset used in the study contains information regarding

a series of economic, demographic, and environmental indicators. The obtained results show that both the distance calculation method and the linkage algorithm used in hierarchical classification influence the structure and shape of the clusters. The evaluation of the classification quality was performed using the average Silhouette coefficient. Comparing the classification results obtained through hierarchical methods with those obtained from the K-means algorithm shows differences in grouping concordance. These findings suggest that the classification structure is sensitive to the distance metric and linkage algorithm used.

Women's underemployment and risk of poverty: an empirical analysis of their determinants in Romania

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The vulnerability of women in the Romanian labor market remains a multidimensional phenomenon, shaped by structural, institutional and socio-economic factors. Despite legislative progress on gender equality, persistent disparities continue to affect labor market participation, the quality of employment, career progression and income distribution. Using data provided by the National Institute of Statistics, Eurostat and the OECD, this paper aims to analyze the challenges faced by women in the labor market and to highlight the factors that account for Romania's specific situation at the European level (the cumulative interaction between occupational segregation, the gender pay gap, the unequal distribution of unpaid care work, limited access to leadership positions, and territorial disparities between urban and rural areas, etc.). The results show that a significant proportion of the female workforce is not part of the labor force (Romania has approximately 1.4 million housewives), that the female employment rate is one of the lowest in the EU (just 59%), that women in Romania spend 230% more time on childcare than men, and that returning to work is very difficult. Low incomes and career breaks linked to care responsibilities contribute substantially to the feminization of poverty in Romania. Reducing this vulnerability requires integrated public policies that promote equal opportunities in employment, pay transparency, affordable childcare services, work-life balance measures, lifelong learning and inclusive labor market governance. Such interventions are essential for strengthening gender equality, labor market resilience and long-term socio-economic development.

Professional reintegration – an obstacle course for women in Romania

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Work-life balance challenges have long been identified as a significant barrier to gender equality in the labor market. Women, in particular, are disproportionately affected by the dual burden of paid employment and unpaid caregiving responsibilities. In this context, professional reintegration is a particularly important challenge for women, especially those aged 30–45, a period when family and professional pressures tend to overlap. Using data from the Women's Reintegration Barometer in Romania (2025), the OECD (Reviews of Labour Market and Social Policies: Romania 2025) and Eurobarometer no. 2974 (Gender stereotypes, December 2024), our study shows that women's reintegration into the labour market in Romania is hampered by a series of objective barriers, such as the lack of care infrastructure or reduced access to transport and vocational retraining courses, to which are added the psychological dimensions of reintegration, such as anxiety, decreased self-confidence or difficulty explaining the professional break to employers. The average duration of the professional break for women in Romania is 2.9 years, and extended parental leave and limited access to childcare institutions contribute to women's low participation in the workforce. The conclusions highlight that women want to work, and that giving up work/profession to dedicate to the family (raising children and caring for the elderly) is no longer as popular. For women with higher education, in particular, work represents a source of intrinsic satisfaction and prestige and self-confidence, not just income. Women want to combine family life and career, which means a convergence of life plans between women and men; professional reinsertion is not just an individual problem, but a challenge with economic, social, and institutional implications, as well as a consistent effort of government thinking and coordination.

Climatic favorability for precipitation enhancement in south-eastern Romania

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The increasingly frequent and severe droughts affecting south-eastern Romania (consecutive episodes of 22–30 months in 2018–2021 and 2022–2023) and regional climate projections (RCP4.5/RCP8.5), which point to a worsening precipitation deficit across southern and south-eastern Romania, justify a scientific assessment of climatic

favorability for artificial precipitation enhancement as a complementary tool for water resource management in agriculture. This study analyzes the climatological favorability for cloud seeding in the Vrancea–Prahova–Buzau region, based on ERA5 reanalysis data (2000–2025), with reference to the main methods used internationally: ground-based generators and balloons using silver iodide (AgI), and aircraft-based platforms.

The physical-geographical analysis shows that the region's position at the contact between the Curvature Carpathians, the Subcarpathians and the Siret and Baragan plains, combined with extensive agricultural surfaces, generates surface–atmosphere thermal contrasts and orographic forcing favorable to convection initiation.

For the warm season, the distribution of Convective Available Potential Energy (CAPE) reveals a well-defined convective season (April–October), peaking in June–July (150–250 J/kg) and characterized by a moderate, recurrent rather than extreme convective potential — a thermodynamic regime considered optimal for the effectiveness of seeding processes. Relative humidity fields (50–65%) and wind speed (9–21 km/h) at 700 hPa indicate convergence zones at the hill–plain contact, favorable to the development of cumuliform clouds with precipitation potential.

For the cold season, a synthetic climatological favorability index was constructed, integrating temperature, relative humidity, wind speed at 700 hPa, and total column liquid and solid water content. The results indicate maximum favorability in December–January, concentrated in the Subcarpathian sector, where lower temperatures at 700 hPa support the efficiency of mixed-phase microphysical processes (the Bergeron–Findeisen mechanism), essential for the development of cold stratiform clouds.

The results highlight the existence of recurrent, physically grounded climatological windows favorable to both summer convective and winter stratiform processes, supporting the hypothesis that the Vrancea–Prahova–Buzau region has real climatic potential for precipitation enhancement. These findings provide a scientific basis for evaluating weather modification measures as a tool for adapting to climate risks and supporting water resource management in agriculture in south-eastern Romania.

Monitoring seasonal and interannual reed cover dynamics in Natura 2000 wetlands of Northeastern Romania (2017–2025) using Sentinel-2 imagery

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Wetlands support biodiversity, regulate hydrological processes, and maintain water quality, while reed beds provide feeding, breeding, and refuge habitats for birds and fish and contribute to water filtration and nutrient retention. This study examines seasonal and interannual changes in reed cover within Natura 2000 wetlands in Iași and Botoșani

counties, northeastern Romania, during 2017–2025. Sentinel-2 multispectral imagery was analysed for two seasonal windows: March–May, representing early vegetation development, and June–September, corresponding to mature reed growth and peak cover. Images were processed in Google Earth Engine and QGIS 3.34, and reed cover was delineated through spectral thresholds, classification, and spatial filtering using NDVI, NDMI, and MNDWI. The analysis focused on protected sites, including ROSPA0049, ROSPA0042, and ROSPA0169, to assess reed distribution and changes within their boundaries. The approach provides an accessible framework for regional reed-bed monitoring, with changes in cover potentially reflecting climatic and hydrological variability, including drought and fluctuating water levels. Satellite-based monitoring can therefore support habitat assessment and inform wetland conservation and management across northeastern Romania.

Diversitatea etno-culturală în Regiunea de Sud a Republicii Moldova conform ultimelor recensăminte

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Actuala structură etnică, lingvistică și confesională a populației din sudul Republicii Moldova în mare parte coincide cu cea conturată în prima jumătate a sec. 19, care include populații existente anterior, în primul rând moldovenii/românii, plus unele comunități mai mici de romi, ruși-lipoveni, la care s-au adăugat comunitățile etnice așezate cu traiul pe parcursul sec. 19, venite din Balcani (bulgari, găgăuzi, albanezi, greci), din Europa centrală (germani, cehi, polonezi, evrei) sau din interiorul Imperiului Rus (ucraineni, ruși și alte etnii). Cu excepția populației germane, care a căzut victimă circumstanțelor nefaste din timpul celui de-al doilea război mondial și practic a dispărut din peisajul etnic al regiunii, restul etniilor atât la general cât și la nivelul răspândirii pe localități au păstrat continuitatea până în prezent.

Din punct de vedere a regionării etnogeografice, regiunea de sud a Republici Moldova poate fi împărțită în câteva subregiuni distincte: subregiunea Prutului inferior, unde predomină majoritatea absolută a populației moldoveni/români, cu unele localități de etnici bulgari enclavate (raioanele Leova, Cantemir și partea de vest a raionului Cahul); subregiunea Bugeac, carese distinge cu ca mai mare mozaicare etnică și concentrează majoritatea absolută a localităților cu etnici găgăuzi și bulgari, multe localități cu populație mixtă și periferic localități cu majorități de moldoveni/români și ucraineni (UTA Găgăuzia, raioanele Taraclia, Basarabeasca și partea de est a raionului Cahul; subregiunea Nistrului inferior cu majoritatea absolută de moldoveni/români și doar unele enclave de localități cu populație de bulgari, ucraineni, ruși și găgăuzi (raioanele Ștefan Vodă și Căușeni). Aparte de aceste trei subregiuni este raionul Cimișlia, situat central-nordic, cu majoritate absolută de moldoveni/români, însă formând o continuitate

cu populația din regiunea de centru a Moldovei și puntea dintre subregiunile menționate ale regiunii de sud. Ca rezultat al proceselor etno-politice în regiune și ținând cont de răspândirea relativ compactă a găgăuzilor a fost acordat statutul de autonomie pe criterii etnice pentru găgăuzi, în 1994 sub forma Unității Teritorial-Administrative Găgăuzia (Gagauz Yeri).

Această regiune este cea mai eterogenă și diversă din punct de vedere a structurii etnice și lingvistice a populației, cu specific la nivel de raioane, comune și localități. Per ansamblu pe Regiunea de Sud structura etnică a populației la recensământul din 2024 se prezintă în felul următor: moldovenii / românii, în număr de 263585, reprezintă 64,24%, urmați de găgăuzi – 90661 sau 22,09%. Celelalte etnii sunt: bulgari (30176 sau 7,35%), ucraineni (11486 sau 2,8%), ruși (11248 sau 2,74%), romi (1197 sau 0,29%), alte etnii (1552 sau 0,38%, dintre care pot fi menționați cehi, polonezi, evrei, turci, azeri, germani, albanezi etc.). Comparativ cu recensământul din 2014, a crescut ponderea celor declarați ca moldoveni / români (de la 63,06% la 64,24%0, găgăuzi (de la 20,62% la 22,09%), însă a scăzut atât numărul cât și ponderea bulgarilor (de la 7,56% la 7,35%), ucraineni (de la 3,14% la 2,8%) și mai ales ruși (de la 3,35% la 2,74%).

La nivel de raioane, populația declarată ca moldoveni predomină în 6 raioane, după cum urmează: Ștefan Vodă (89,9%), Căușeni (87%), Leova (88,5%), Cimișlia (88,7%), Cantemir (83,3%), Cahul (71,3%) și Basarabeasca (66,9%). Dacă însă analizăm obiectiv, însumând cei care s-au declarat ca moldoveni cu cei declarați etnic români, atunci avem o majoritate și mai impunătoare: Ștefan Vodă (95,6%), Căușeni (92,4%), Leova (84,8%), Cimișlia (84,7%), Cantemir (90,6%), Cahul (82,9%) și Basarabeasca (72%). În raionul Taraclia majoritatea o formează etnicii bulgari (66,1%), iar în UTA Găgăuzia etnicii găgăuzi (83,8%).

Structura lingvistică în mare parte depinde de structura etnică, însă există și o serie de particularități și discrepanțe. Astfel, raportul dintre cei care au declarat ca limbă maternă moldovenească și română este altul decât cei declarați ca moldoveni și români, procentul celor care s-au declarat etnic moldoveni dar au declarat limba română fiind în creștere. În plus limba rusă are o pondere mult mai mare decât etnicii ruși, ca urmare a statutului acesteia de lingua franca / limbă de comunicare interetnică în regiune în ultimele două secole.

Structura confesională însă nu prezintă un specific aparte față de celelalte regiuni ale Republicii Moldova, toate etniile reprezentative fiind în majoritate absolută de religie creștin-ortodoxă. În toate raioanele și UTA Găgăuzia majoritatea absolută a populației s-a declarat de religie creștin-ortodoxă, peste 96%. Alte comunități confesionale reprezentative sunt baptiștii, adventiștii și penticostalii. Baptiștii sunt într-un număr mai mare în raioanele Cahul (3,9 mii), Ștefan Vodă (2 mii) și UTA Găgăuzia (1,2 mii). Adventiștii au comunități mai numeroase în raioanele Cahul (1,5 mii), UTA Găgăuzia (0,9 mii) și Cimișlia (0,6 mii), iar penticostalii în Cahul (0,5 mii), Căușeni (0,4 mii) și UTA Găgăuzia (0,3 mii). Dintre alte confesiuni existente în regiune sunt Martorii lui

Iehova (în raionul Cahul 0,4 mii și între 100 și 200 în raioanele Căușeni, Cantemir, Ștefan Vodă, Taraclia și UTA Găgăuzia), catolicii, creștinii evanghelici, creștini staroveri (staroobreadți), musulmanii și iudeii (câteva zeci de persoane pe fiecare confesiune per raion). Diversitatea confesională în ultimele trei decenii crescut, în special prin cultele neoprotestante, dar și islam (mai evident în UTA Găgăuzia). Caracteristicile ce țin de structura etnică, lingvistică și confesională conferă regiunii de sud a Republicii Moldova un specific isorico-geografic distinct și complex, în mare parte influențând și alte aspecte ce țin de individualizarea și regionarea acestui spațiu.

The contribution of folklore to enhancing the tourist attractiveness of Maramureș County

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This paper explores the contribution of folklore to the tourism appeal of Maramureș County, based on the premise that traditions, customs, and authentic cultural expressions can serve as strategic resources for sustainable tourism development. The topic was chosen out of a desire to better understand how intangible cultural heritage - especially that which is still actively practiced - shapes tourist perceptions and contributes to a destination's success.

The research seeks to answer essential questions: Which cultural elements most effectively attract visitors? How can folklore be promoted without losing its authenticity? And what role do local communities play in preserving and transforming their heritage into a tourism asset?

The main objective is to analyze the interdependence between cultural authenticity and meaningful tourist experiences. The study examines both tangible heritage and intangible elements, highlighting how these elements work together to create a unique cultural landscape.

A mixed-methods approach was employed, combining qualitative tools - such as field observations, interviews with local stakeholders, and case studies of cultural events - with quantitative data analysis, including tourist flows, seasonal trends, and reviews from online platforms.

The findings confirm the initial hypothesis: folklore plays a crucial role in enhancing the tourism appeal of Maramureș. Visitors are not only drawn by the natural beauty of the area but also by the living culture, where traditions are not just preserved, but performed and shared.

The conclusions emphasize the importance of promoting folklore responsibly, with a focus on preserving its authenticity while integrating it into sustainable tourism strategies. Several recommendations are offered, including the development of authentic tourism packages, partnerships between authorities and local actors, and innovative approaches to presenting traditions in contemporary formats.

Despite some limitations - such as restricted access to certain data and the challenges of long-term impact assessment - the research contributes valuable insights into the role of intangible heritage in cultural tourism. Maramureș emerges not only as a picturesque region but as a living cultural space that transforms its heritage into a meaningful and compelling tourism resource.

Spatial resolution as a policy variable: translating heat and heavy-rain risk into metropolitan decisions in Cluj-Napoca

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Climate-risk information is often produced at regional scales, while many adaptation decisions are taken at the level of municipalities, neighbourhoods, infrastructure networks or individual urban interventions. This contribution argues that spatial resolution is therefore not merely a technical property of climate data, but a policy variable that directly influences which risks become visible, which areas are prioritised, and which institutions can effectively use the results. The Cluj-Napoca Metropolitan Area is used to illustrate this issue through two climate risks with contrasting spatial characteristics: extreme heat and heavy rainfall. For temperature-related risks, the transition from regional climate-model information at 0.11° resolution to 1-km observational gridded data substantially improves the differentiation of heatwave conditions across the metropolitan area and enables indicators to be calculated at local administrative-unit level. This finer representation reveals spatial contrasts that are masked by coarse regional averages and provides a more appropriate basis for identifying heat hotspots, vulnerable areas and locations where cooling, shading and green-blue infrastructure can be prioritised. For heavy rainfall, the analysis moves beyond uniform precipitation thresholds by combining high-resolution rainfall information with local pluvial-flood susceptibility. Imperviousness, building density, proximity to water and wetlands, and green areas are used to spatially differentiate susceptibility, while a reference threshold of 70 mm/24 h is locally adjusted so that more sensitive areas receive lower critical thresholds.

The results demonstrate that increasing spatial detail has value only when it is connected to institutional responsibilities and concrete decisions. For Cluj-Napoca City Hall,

detailed risk maps can support stormwater management, land-use regulation and the spatial targeting of blue-green infrastructure; for the Cluj Metropolitan Area, they provide a common evidence base for coordinating priorities across municipalities. Water authorities and utilities can use them to identify drainage and infrastructure pressure points, while emergency services can better target preparedness and response. Meteorological and public-health services can similarly use spatially differentiated heat information to refine warning and protection measures for vulnerable populations.

The case study therefore suggests that metropolitan climate policy should move from asking simply whether climate data are available to asking whether their spatial resolution matches the scale of the decision, the responsible institution and the adaptation measure.

The impact of hazardous meteorological phenomena on population mobility, accessibility, and vulnerability in the Ungheni–Călărași region. Case Study: Cornești town and the R1 corridor

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This study examines the impact of hazardous meteorological phenomena on population mobility, accessibility, and vulnerability in the Ungheni–Călărași region, with a particular focus on the town of Cornești and the R1 Chișinău–Ungheni–Sculeni road corridor. The research investigates the relationship between the occurrence of weather-related hazards, the reduced functionality of transport infrastructure, and the territorial consequences for population access to medical, educational, administrative, and economic services. The methodological framework combines the analysis of meteorological and institutional data with Geographic Information Systems (GIS) tools. Spatial analyses were conducted in ArcGIS Pro at a reference scale of 1:50,000, while the Network Analyst extension was used to model the transport network and to calculate routes, travel times, and population accessibility under normal conditions and disruption scenarios. Two representative meteorological events were analyzed: the heavy snowfall and icy road conditions of January 2024 and the extreme precipitation event of May 2026. These events highlighted the functional vulnerability of the Cornești sector and the possibility of simultaneous disruption of both road and railway infrastructure. The results show that the impact of hazardous meteorological phenomena is determined not only by the intensity of the hazard, but also by network configuration, topographic conditions, the availability of alternative routes, and the population's dependence on mobility. Reduced transport capacity may lead to longer travel times, decreased accessibility, and increased social vulnerability, particularly among elderly people, households without private vehicles, and populations dependent on public transport. The

study emphasizes the need to integrate climatic, infrastructural, and socio-territorial analyses when assessing transport network resilience and designing climate change adaptation measures.

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Spatial accessibility and tourist perception of monastic sites in Prahova County. An analysis based on online reviews

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The present study analyzes online reviews written by visitors regarding the main monastic sites in Prahova County to evaluate the degree of accessibility and how it is perceived by the public. The research identifies the elements that facilitate or limit access, highlighting how these conditions influence the visiting experience and the attitude of pilgrims and tourists. Methodologically, the approach combines specific accessibility assessment techniques with data processing and graphical representation to highlight trends. Complementarily, a qualitative content analysis of reviews from digital platforms was conducted to identify the specific opinions and issues reported by visitors. The results indicate that the public experience is significantly influenced by factors such as the condition of the road infrastructure, the availability of parking spaces, the quality of signage, and local facilities. In this regard, the analysis allowed for the delineation of three main dimensions: infrastructural accessibility, which addresses travel conditions and connectivity; inclusive accessibility, referring to the use of spaces by people with disabilities or families with children; and informational accessibility, associated with the clarity of online data regarding visiting hours and regulations. Overall, the research demonstrates that online reviews constitute a valuable empirical source for identifying malfunctions that are difficult to capture through traditional methods. The systematic utilization of this feedback can directly contribute to substantiating infrastructure improvement measures, increasing inclusion, and enhancing the administrative and tourism management of monastic sites in Prahova.

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Reading Romanian industrial heritage through visual imagery: narratives, values and meanings

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Historical postcards and photographs provide a valuable methodological resource for interpreting the narratives and values associated with cultural heritage. By combining visual, textual and symbolic information, these sources enable both qualitative and quantitative approaches to the study of urban and industrial transformation. Their use is particularly relevant for documenting industrial heritage, as archival imagery can reveal changes in architectural form, spatial context, social meaning and public representation over time.

The aim of this study is to decode the narratives and heritage values of Romanian industrial heritage through the analysis of historical postcards and photographs. Rather than being treated as isolated aesthetic representations, visual images are examined as complex cultural documents embedded in specific historical, political and social contexts. The research is based on documentation and content analysis, focusing on the visual, textual and symbolic elements contained in postcards, including the names of represented places and buildings, captions, handwritten messages, editorial inscriptions and postal stamps.

Historically, postcards frequently promoted places and buildings considered new, representative or symbolically important, such as churches, public squares, libraries, railway stations and industrial facilities. Produced and circulated during particular historical periods, they contributed to the construction and dissemination of public images of cities and landscapes. In this sense, postcards functioned not merely as decorative objects, but as instruments through which knowledge about the past, local identity, modernization and technological progress was produced and communicated.

The study argues that visual representations may also reflect official or dominant discourses by selecting particular buildings, places and perspectives for mass circulation. Through this process, postcards contributed to shaping public perceptions of urban modernization and industrial development.

The results demonstrate the relevance of postcards and historical photographs as methodological tools for decoding narratives associated with official representations and for assessing the heritage values of Romanian industrial architecture across different historical periods.

Geospatial identification and analysis of tourism clusters in Romania based on Instagram data. Case study: #visitiasi vs. #visittimisoara

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Social media has transformed how tourism destinations are represented and perceived, with user-generated content increasingly contributing to destination image formation. However, the role of Instagram in representing Romanian urban destinations remains relatively underexplored. This study aims to analyse and compare the online tourism image of Iași and Timișoara, using Instagram posts associated with #visitiasi and #visittimisoara.

A mixed-method, comparative and longitudinal approach was employed, integrating descriptive statistics, temporal analysis, content analysis and geospatial analysis. The data were collected from Instagram using Apify and subsequently filtered according to criteria related to data availability, post type, geolocation and geographical relevance.

The results reveal distinct patterns between the two cities. Timișoara records higher average engagement, while Iași shows a more gradual temporal evolution of Instagram activity. Thematic analysis associates Iași predominantly with cultural and architectural heritage and urban landscapes, whereas Timișoara shows stronger links with transport and regional connectivity. Spatially, both destinations display strong concentrations of posts around central and historically significant areas.

Overall, the findings demonstrate the value of integrating social media content with temporal and geospatial analysis to understand how urban tourism destinations are represented online. The results may serve as a basis for promotion and marketing plans for both cities.

Exploring the Online Tourism Image of Iași County through Instagram

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Social media and user-generated content increasingly influence how tourism destinations are represented and perceived. However, their potential for understanding tourism patterns beyond established urban attractions remains insufficiently explored. This study investigates the online tourism image of Iași County, Romania, using Instagram posts associated with #visitiasi, with particular attention to visitor interests, destination attractiveness, spatial patterns, and emerging trends.

The analysis is based on 3,209 posts selected from an initial dataset of 10,026 posts collected through Apify. The posts where slected by specific criteria including: the type of post, visibility of engagemnt metrics, presence of location in posts etc. A mixed analytical approach combining descriptive, textual, temporal, and spatial analyses was applied using Excel, RStudio, and ArcGIS Pro.

The results indicate that the destination image is strongly shaped by cultural, historical, architectural, and religious heritage, with the Palace of Culture acting as its most prominent landmark. Instagram activity is highly concentrated in Iași municipality, while much of the surrounding county remains underrepresented. At the same time, the analysis reveals an increasing interest in contemporary urban experiences, particularly cafés and HoReCa venues, visually appealing spaces, accommodation facilities, and secondary cultural attractions, alongside the established heritage landmarks.

The findings suggest that Iași's established cultural identity is gradually diversifying through contemporary urban and "Instagrammable" experiences. This diversification could support a more integrated tourism image, combining the city's established cultural attractions with emerging urban spaces and less visible attractions located outside Iași municipality.

Physico-geographical and anthropogenic factors generating weather-climate hazards in the North-East Region, Romania

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In this study, we analyzed the component of climate hazards amplified or generated by physical-geographic factors (particularly relief, through its characteristics) and anthropogenic factors (especially urban areas) in the North-East Region of Romania (RNER). From a physical-geographic perspective, the primary factor amplifying climate hazards is the relief. Altitudes in Romania's North-East Region drop below 100 meters in the east, while the highest elevations—exceeding 2,000 meters—are found in the west. The branch of the Eastern Carpathians situated in the western part of the study area—due to its altitude, massiveness, fragmentation, and slope orientation—acts as an orographic barrier to oceanic air masses arriving from the west and to continental air

masses most frequently advected from the east-northeast. In the depressions and along the Carpathian valleys, during the cold season when anticyclonic conditions prevail, the phenomenon of temperature inversion occurs, resulting in very low recorded temperatures (below -20°C, or even below -30°C).

The anthropogenic component plays a crucial dual role in both the generation and development of weather and climate hazards and their mitigation. Over time, humans have left their mark on the landscape through land-use practices of varying sustainability. With the spatial expansion of urban areas, and against the backdrop of global warming and the increasing frequency and intensity of heatwaves, temperatures at the land surface and in the air are rising steadily during the warm season. Urban heat islands demonstrate how urban settlements are becoming increasingly hot, with temperatures exceeding 50°C. By analyzing Land Surface Temperature (LST) using 458 LANDSAT/SENTINEL satellite images, we identified the heat islands of the county seat cities in the RNER region (Suceava, Botoșani, Piatra Neamț, Iași, Bacău, and Vaslui); in most of these cities, industrial areas are where the heat islands are most intense. These findings were validated through in-situ measurements taken at 9,077 points using the MeteoTracker mobile station.

Analiza geospațială a expunerii și vulnerabilității la inundații în Municipiul Tecuci

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Cercetarea a fost realizată prin utilizarea tehnicilor de analiză spațială GIS, având ca principal obiectiv evaluarea expunerii și vulnerabilității Municipiului Tecuci la riscul de inundații. În cadrul analizei au fost utilizate date vectoriale referitoare la clădiri, rețeaua rutieră, utilizarea terenurilor și punctele de interes din municipiu. Aceste date au fost analizate în raport cu probabilitatea producerii inundațiilor, pe baza curbelor de inundabilitate aferente diferitelor scenarii de risc.

Rezultatele evidențiază distribuția spațială a elementelor analizate, precum și tipologia acestora, permițând identificarea zonelor caracterizate printr-un grad ridicat de expunere la riscul de inundații. Analiza evidențiază spațiile în care se concentrează cele mai multe construcții, segmente ale rețelei rutiere, categorii de utilizare a terenurilor și puncte de interes expuse.

Scopul analizei este de a evidenția principalele zone vulnerabile la inundații din Municipiul Tecuci și de a oferi o bază pentru fundamentarea unor măsuri de prevenție și reducere a efectelor acestui risc.

Pathways to climate change adaptation: Assessing metropolitan strategic planning through the ISO 14090 framework

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Effective climate change adaptation demands seamless integration across multiple governance tiers and diverse policy sectors. While metropolitan areas serve as pivotal arenas for building resilience, strategic planning frequently suffers from a disconnect between high-level commitments and local implementation.

This study evaluates how strategic planning documents relevant to metropolitan areas embed adaptation principles, using the ISO 14090:2019 standard (""Adaptation to climate change — Principles, requirements and guidelines"") as an analytical benchmark, applied to the Brașov Metropolitan Area, Romania.

A corpus of 34 sector-specific planning documents was systematically assessed against the core criteria of the standard. The findings reveal emerging yet uneven progress; while numerous adaptation initiatives are actively underway across the metropolitan area, advancements remain fragmented. Many tangible local achievements fall outside the scope of ISO 14090:2019, reflecting the framework's somewhat rigid structure and its limited historical application within public policy contexts. Furthermore, adaptation mainstreaming remains heavily concentrated in environmental and climate-specific sectors, lagging considerably behind in domains such as social services and civil infrastructure.

To close the gap between strategic planning and operational delivery, metropolitan authorities must build stronger institutional capacity, attach realistic cost assessments to adaptation measures, broaden stakeholder engagement across all policy stages, and refine monitoring and evaluation metrics. Ultimately, while ISO 14090:2019 offers a rigorous and credible management framework, adopting it with greater operational flexibility will be crucial to making strategic planning genuinely climate-resilient.

Stakeholders' perceptions of risk and NbS acceptance in diverse urban settings

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Nature-based solutions (NbS) are practical approaches that support urban adaptation to climate change while simultaneously providing multiple ecosystem services. However, recent studies have raised concern about NbS practices, emphasizing the challenges of ensuring human welfare, social justice, and ecosystem integrity. This study aims to evaluate the perceptions of stakeholders of climate risks and NbS acceptance, along with issues of inclusivity and individual values to support evidence-based decision-making for more inclusive NbS in four case studies: Amsterdam, Brussels, Bucharest, and Turin. A standardized online questionnaire was administered from May to December 2025, targeting both professional and non-professional stakeholders involved in climate change and NbS. A snowball sampling approach was used in each city. The questionnaire included the following sections: (i) socio-demographic profile, (ii) societal challenges and exposure to climate risks, (iii) preference for and acceptance of NbS, (iv) aspects of inclusivity and social equity, (v) environmental values in relation to NbS. A total of 489 valid questionnaires were analyzed using descriptive statistics. Respondents identified air pollution, heatwaves, and traffic congestion as the most relevant urban challenges. Heatwaves and rising temperatures were perceived as the most intense climate risks across cities, while heavy rainfall and flooding were major concerns in Amsterdam and Brussels. We further found that professionals generally perceived climate risks as more severe than non-professionals, indicating differences in risk awareness linked to expertise and professional background. Many respondents reported negative impacts on health and well-being, such as thermal discomfort, stress, and reduced quality of life. Based on these results, differences in risk perception between professionals and non-professionals highlight the importance of integrating professional expertise with citizen perspectives to support the co-production of NbS. The emphasis on health and quality of life underlines the need to acknowledge citizens' values and ensure inclusive NbS processes. Furthermore, the relevance of interconnected urban challenges supports the need for co-creation approaches, cross-sectoral partnerships, and evidence-based decision-making.

Dinamica geodemografică globală (1950-2025). De la divergență regională la convergență structurală

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Analiza principalilor indicatori demografici referitori la dinamica populației globale, furnizați de ultimul raport al ONU ”World Population Prospects” în anul 2024 evidențiază tendințe de convergență care transced clasica dihotomie dintre țările dezvoltate și cele în curs de dezvoltare. Diferențele se mențin la un nivel semnificativ prin inerție structurală dar, globalizarea a impus, în special după 1990, o aplatizare a acestora, pe fondul mobilizării fără precedent a fluxurilor migrației internaționale care au ca efect transferul de vitalitate demografică sau, în sens invers difuziunea unor modele de comportament demografic denatalist. Analiza se limitează la o introspecție descriptivă a celor mai reprezentativi indicatori, exprimată printr-o serie de tipologii care evidențiază traiectoriile principalelor modele de evoluție. Poate servi ca bază pentru o analiză mai elaborată care să includă corelații cu factori social-economici sau cultural consacrați, utilizând modele de analiză multivariată.

Distribuția spațială a numelor de familie și identitatea regională în România: o analiză geostatistică asupra peisajului antroponimic

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Acest studiu propune o analiză a distribuției, tipologiei și frecvenței numelor de familie din România prin utilizarea unei metodologii care combină geografia culturală și analiza geostatistică cu elemente de onomastică. Utilizând o bază de date masivă (numele a 153 670 persoane) studiul identifică frecvența în profil teritorial și gradul de similaritate între cele 42 județe prin tehnici de clusterizare ierarhică. Rezultatele demonstrează existența unor tipare regionale cu un indice semnificativ de specificitate, dovadă a unei amprente culturale distincte. Dincolo de particularitățile regionale se manifestă o relativă unitate a sistemului onomastic românesc. Particularitățile regionale rezultă din influențele provenite din sistemele onomastice ale altor grupuri etnice (maghiarii în Transilvania de exemplu). Cea mai mare diversitate caracterizează județ-ele care au fost principalii atractori ai migrației interne în perioada comunistă (Constanța, Timiș, Brașov și municipiul București). Studiul conchide că peisajul antroponimic contemporan poate fi

privit ca o „fosilă culturală”, oferind argumente empirice riguroase pentru definirea individualității teritoriale, a specificului regional în cadrul spațiului românesc.

Local-scale geohazards assessment using EGMS products

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Since their publication in mid-2020, the European Ground Motion Service products have been seen as a breakthrough in InSAR applications for the analysis and monitoring of natural and man-made hazards on Earth's surface. The EGMS measurements reliable InSAR measurements of ground deformations and include three types of products: (i) Basic (Level 2A) which provides line-of-sight velocity maps in ascending and descending orbits referenced to a local point; (ii) Calibrated (Level 2B) provides GNSS-calibrated full-resolution velocity and displacement time series for the ascending and descending orbits; (iii) Ortho (Level 3) calculated displacement vectors in the vertical and E-W directions, resampled to a 100 x 100 m grid. These datasets are available for five-year periods, except for the 2015-2020 period, which constitutes the EGMS baseline, followed by the 2018-2022 and 2019-2023 periods, and will continue to be updated until 2027, according to the official reports, providing continuity to existing datasets.

Their versatility makes them useful for a wide range of analyses and investigations of many geological and geomorphological processes, including slope-related processes, land subsidence, sinkholes, volcanic activity, and more. Also, their availability enables the assessment and monitoring of structural and infrastructure displacements, aiming to mitigate potential hazards that could affect society. Although the products clearly increased the use of InSAR across many studies, their full potential remains to be unlocked. Their underuse is mainly limited by the interpretability of the ascending and descending orbit measurements, which are not always straightforward, whereas the Ortho products average deformation velocities, making them unfit for local-scale investigations such as landslide and building monitoring.

In this work, we aim to minimise this shortcoming by developing a command-line workflow in the R environment that computes displacement vectors in the vertical and east-west directions at a measurement-point level. Basically, every single calibrated ascending or descending InSAR measurement point (MP) is considered for the computation of displacement components by searching for its nearest neighbour from the other orbit. For the identified pair of points, the middle point is computed, and for that point, the mean velocity and displacement time series for the vertical and East-West components are calculated. The resulting synthetic points, along with time series and mean velocity for the vertical and east-west directions, will significantly improve

understanding of local deformations. We tested our approach on sinkholes, slope-related deformations, and mining activity in different environments, delivering results that would have provided important information before the event.

Active landslides on the Copou hillslope: a field-based and InSAR-supported didactic itinerary

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Landslides are a common geomorphological hazard on the Moldavian Plateau, including in urban areas such as Iași. The Copou hillslope, which is becoming increasingly more urbanised and heavily visited, shows clear evidence of active slope instability and offers an accessible natural laboratory for teaching. This study documents the active landslides of Copou by combining geomorphological field mapping, DEM-based geomorphometric analysis, Sentinel-1 InSAR time series from the European Ground Motion Service (EGMS), and photography comparing 1970s images with present-day views. InSAR measurement points rovided through the European Ground Motion Serviice (EGMS) were analysed at their native resolution to estimate displacement rates and seasonal behaviour, showing velocities of up to 2 cm/year in the most active parts of the landslide. The effect of displacements is seen in the building walls, the damages to the road and utility network, but also in the stabilization infrastructures built to reduce the scarp reactivations. The results are integrated into a field itinerary with several stops designed for geography and geology students, showing evidences of decadal displacements, but also pointing out some of factors that maintain an active state of the landslide. This approach is easily transferable to other urban slopes of Iasi (e.g., Galata hillslope, Bucium hillslope) and supports hazard-aware geoeducation.

Greek data on Romanian outbound tourism to Greece: The case of the Institute of the Greek Tourism Confederation (INSETE)

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Tourism constitutes a particularly important sector of the Greek economy, representing, on average over the last decade,10.67% of GDP, 9.14% of employment, and 66.9% of exports (https://insete.gr/bi/the-contribution-of-tourism-to-the-greek-economy/?lang=en). The present paper contributes to the study of a relatively under-researched tourism market for Greece, namely the Romanian market, with particular emphasis on the last decade. Romania is by no means an insignificant source of tourism

for Greece, which has consistently ranked among the three most popular destinations for Romanian tourists over the last decade (TEMPO, TUR109c). Furthermore, Romania ranks first among the Balkan and Eastern European tourism source markets for Greece (INSETE 2026).

Based on the above, it would be of considerable research interest to examine the factors that influence Romanian tourist flows to Greece. For this purpose, in addition to collecting data through primary quantitative and qualitative research, it is necessary to make systematic use of existing reliable statistical data provided by official bodies, such as the Organisation for Economic Co-operation and Development (OECD 2010–2026), as well as national institutions, such as the Romanian National Institute of Statistics (cf. NIS 2026) and the Institute of the Greek Tourism Confederation (INSETE· https://insete.gr/intelligence/?lang=en).

With particular regard to the latter, it should be noted that INSETE essentially constitutes the most important source of processed data and information on the evolution and current state of Greek tourism in general, and of Romanian outbound tourism to Greece in particular. These data and resources are freely accessible primarily through INSETE Intelligence.

The aim of this paper is to present and critically discuss the data provided by INSETE Intelligence concerning Romanian outbound tourism, with a view to examining past, present, and future trends and developments in relation to a range of socio-economic and cultural factors. In addition, the contribution of Romanian tourism to specific Greek regions in which the Romanian market appears to constitute an important source market will be examined, together with the factors that appear to make particular regions or destinations more or less accessible and/or desirable to Romanian tourists.

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TEMPO, TUR109C = Number of Romanian tourists taking part in external tourist actions organized by travel agencies, by destination country (http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table)

The use of virtual tools in building climate-resilient urban nature

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The development of climate-resilient urban nature as a response to societal challenges has become an increasing focus of the urban planning process. Their development requires not only sound ecological studies, but also tools allowing various stakeholders to explore and co-create urban nature in alternative futures.

Building on the living labs developed in the projects CARMINE (water scarcity in the Brasov Metropolitan Area) and GREEN-INC (inclusive climate actions in Tei-Toboc area of Bucharest), this presentation examines how virtual tools can support planning and governing climate-resilient urban nature in European cities.

In CARMINE's GeoDesign approach, stakeholders from the Brasov Metropolitan Area worked in September 2026 with an interactive GIS-based tool to identify climate challenges, locate vulnerable areas and especially map the areas in which nature-based solutions can be developed or strengthened. The activity allowed participants to explore at spatial level the alternative adaptation and mitigation pathways and select the suitable NBS from a predefined catalogue developed earlier in the Brașov Living Lab. In the GREEN-INC project, the digital twin technology provided a 3D virtual environment in which alternative scenarios of urban nature for the Tei-Toboc area were visualized, discussed and co-designed with local stakeholders in a workshop in May 2026. The activity focused of connecting the effectiveness of NBS with their inclusive dimension in a neighborhood which important social issues, therefore the digital twin was not only a technical replica of the area, but more a participatory planning tool which made otherwise abstract trade-offs of NBS more relatable.

Starting from these concrete examples developed in two Romanian cities, we can understand how virtual tools can support the implementation of a co-creation approach in the planning process, making complex climate and environmental information more accessible to the regular user and support stakeholder participation.

Abordări metodologice integrate în modelarea eroziunii solului. Studii de caz în Podișul Moldovei

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Această lucrare prezintă o metodologie integrată pentru evaluarea eroziunii solului în patru bazine de recepție din Podișul Moldovei: Cuibul Vulturilor, Tungujei, Hălceni și Poșta Elan. Abordarea combină date climatice gridate cu baze de date agricole și algoritmi geospațiali, fiind structurată pentru a fi implementată în ecuația RUSLE și în modelul WaTEM/SEDEM.

În prima etapă, datele climatice zilnice din setul național ROCADA sunt prelucrate pentru a calcula Indicele Fournier Modificat (MFI) (Arnoldus, 1980). Valorile obținute sunt transformate în factorul de erozivitate pluvială (R) folosind ecuațiile stabilite de Renard și Freimund (1994), a căror aplicabilitate în spațiul est-carpatic au fost validate în studii de referință anterioare (Stângă, 2011). Deoarece seriile multianuale aduc o mare variabilitate a regimului de precipitații, fluxul de lucru folosește valoarea de 55 mm drept prag condițional: sub acest prag se aplică o ecuație de putere, iar pentru valori egale sau mai mari se folosește o ecuație polinomială.

De asemenea, metodologia include prelucrarea datelor vectoriale pentru parcelele agricole vectorizate și înregistrate la APIA (2025). Prin corelarea orientării versanților cu geometria parcelelor, se determină direcția de arat pentru fiecare unitate agricolă. În acest sens, un unghi de sub 45° indică o orientare deal-vale, primind valoarea maximă posibilă a factorului P, în timp ce un unghi mai mare de 45° corespunde lucrărilor executate de-a lungul curbelor de nivel, cărora li se atribuie valoarea minimă în ecuația RUSLE și modelul WaTEM/SEDEM. Prin cuplarea acestor factori, metodologia propusă urmărește să ofere o bază solidă pentru estimarea riscului de eroziune din estul României.

Participatory planning of urban parks. The youth perspective

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International regulations as the SDGs and the Habitat Agenda are currently supporting the implementation of justice aspects in the urban planning process. Distributive, procedural and recognitional justice are key to building sustainable and inclusive cities, their aim being to ensure that all groups of users are heard and taken into account in the planning process.

The aim of the current research is to understand the vision and needs of one vulnerable group - youth - regarding the planning of urban parks. We chose for our study a sample of four parks with different characteristics related to their history, surface, location and already implemented planning solutions. Each park was analyzed by three groups composed of 4-6 young people. The study was planned in three steps: an individual profile of the participants assessing their behavior when visiting urban parks, a group profile focusing on the aspects they appreciate or not inside parks and a mapping stage where groups were provided with a brief history and a map of their assigned park encouraging them to plan it according to their desires and vision.

The results showed heterogenous behaviors related to the visitation of urban parks, but common ground related to aspects this group appreciates or not. They showed a great flexibility when planning the parks, introducing new elements inspired from good practices in Natur-basd Solutions (NbS) planning worldwide. Moreover, they took into consideration the local aspects and proposed solutions meant to solve neighboring problems. Their vision for planning urban parks integrated other visitor groups, of main concern being children, elderly people and bicyclists. The differences between the current planning of the parks and the visions resulted from this exercise show the lack of youth involvement in the planning process. As resulted from the research, the low participation is mainly caused by a lack of awareness regarding the possibility of actively participating in and impacting decision-making. City halls should invest more time and resources in personalizing ways to encourage participation of different visitor groups in the planning process – on-site meetings, online and social media advertising, online surveys and more.

From earth observation to decision-relevant urban climate indicators: A multi-source framework for Bucharest

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Earth Observation (EO) data are becoming increasingly abundant and diverse, offering new opportunities to characterize environmental and climatic conditions across a wide range of spatial and temporal scales. However, transforming these observations into information that can effectively support urban climate assessment and decision-making requires the integration of heterogeneous data sources, the selection of fit-for-purpose indicators, and methods capable of addressing scale-related limitations. This study explores how multi-source EO data, including satellite observations, in-situ measurements, meteorological stations and sensors, can be transformed into climate-relevant variables and indicators for urban applications.

The study pursues three objectives. O1 - First, it identifies and classifies EO-derived climate-relevant variables and indicators according to their data sources, spatial and temporal characteristics, and potential applications in urban climate assessment. O2 - Second, it critically examines their fitness for purpose by considering their benefits, limitations, uncertainties and relevance for climate-resilience decision-making. Particular attention is given to issues of spatial and temporal resolution, data availability, comparability between sensors and the transferability of indicators across different urban contexts. O3 - Third, the study explores how multi-source data integration and spatial downscaling can improve the usability of climate information at fine urban scales. As a demonstrative application, Land Surface Temperature (LST) derived from Landsat satellite products is downscaled using Sentinel predictors and other auxiliary datasets to obtain a finer spatial representation of urban thermal patterns for the metropolitan area of Bucharest.

The proposed framework follows a data-to-decision perspective, linking observation, integration, indicator development, evaluation and spatial enhancement. The preliminary results are intended to support the development of a broader methodological framework for urban climate analysis and climate-resilience applications within metropolitan regions.

Tourism as an economic priority in emerging economies: China and Vietnam case studies

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As classified on the basis of the MSCI Index emerging economies are developing countries whose economic indicators demonstrate patterns of economic and social growth, albeit at levels that remain below those recorded in developed economies. Over the past decade, several emerging economies have provided substantial support for the development of tourism, including Brazil, Thailand, the United Arab Emirates, China, Indonesia, India, Mexico, the Philippines, Vietnam, Egypt, and Argentina. Vietnam acquired emerging-market status in 2025, while China is approaching formal recognition of this economic status. The two case studies examined in this article confirm that tourism has been accorded strategic priority in both countries, particularly with a view to attracting international tourist flows. This objective has been pursued through sustainable investment in infrastructure and service quality, alongside the adoption of contemporary marketing strategies and competitive pricing policies. The examples supporting the study's conclusions encompass a broad range of tourism infrastructure, attractions, itineraries, and distinctive tourism practices.

An interactive tool for assessing flood damage in built-up areas using high-resolution geospatial data

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Urban areas are increasingly exposed to flood hazards as a result of climate change, urban densification, and continued urbanization. High-resolution photogrammetric datasets provide detailed spatial information that can be used to identify areas at risk during extreme events, such as intense rainfall and urban flooding. Furthermore, flood hazard simulations can provide a more accurate assessment of potentially affected areas, supporting the implementation of preventive and mitigation measures and, consequently, increasing the resilience of cities to natural hazards.

The study focuses on a built-up area in Brașov County, Romania, a region that has experienced severe flooding episodes. The study environment is based on a 3D model generated from high-resolution airborne photogrammetric datasets acquired in 2025. To support a comprehensive assessment, the analysis integrates 3D building models, a digital terrain model, the road network, hydrographic networks, and land-cover

information. Flood simulations under different water-level scenarios will be performed, and their impacts on population, buildings, infrastructure, and land use will be assessed.

The resulting virtual replica of the built-up area will be implemented in a web-based platform, enabling decision-makers and citizens to interact with the digital twin and access relevant information for data-driven decision-making. By combining detailed 3D geospatial data, flood hazard simulations, and an interactive digital environment, the proposed approach aims to support more effective risk management and contribute to enhancing climate resilience and the quality of life in the study area.

Pestelca din ținutul Covurlui și zadia din Țara Năsăudului ca mărturie a transhumanței și schimburilor culturale

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Studiul analizează transhumanța ca fenomen socioeconomic și cultural, evidențiază rolul ei esențial în modelarea identității românești. Practicată ca deplasare sezonieră a turmelor între munte și câmpie, transhumanța a generat rețele de drumuri pastorale, care au devenit ulterior importante axe comerciale și culturale. Aceste rute au facilitat intense schimburi culturale între comunități, contribuind la consolidarea legăturilor sociale și economice. Se evidențiază influențele transhumanței asupra portului tradițional din ținutul Covurlui, în special asupra elementului acestuia – pestelca, comparată cu zadia năsăudeană. Analiza relevă similitudini structurale între aceste elemente, dar și diferențe semnificative privind cromatica, ornamentica și tehnicile de broderie, determinate de specificul regional, preferințele estetice locale și disponibilitatea de materiale. Transhumanța, considerată ca un vector al transferului cultural, contribuie la schimbul reciproc de motive textile, tehnici și ornamente între diferite comunități, formând un patrimoniu cultural românesc unitar. Deși pestelca din ținutul Covurlui, în comparație cu zadia Țara Năsăudului, are o răspândire mai limitată și o valoare identitară mai puțin pronunțată, ea reflectă adaptarea locală și demonstrează păstrarea formelor arhaice și sinteza influențelor externe.

Distribuția spațială a obiceiului Caloianul în Ținutul Covurlui: indicator cultural al adaptării la variabilitatea climatică în Antropocen

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Studiul analizează ritualul agrar Caloianul, practicat în ținutul Covurlui, situat la intersecția spațiului cultural moldo-valah și dobrogean, Covurluiul reprezintă un teritoriu de sinteză culturală, unde tradițiile au funcționat ca mecanisme de coeziune și reziliență identitară.

Obiceiul care implică modelarea unei figurine din lut, organizarea unui ritual funerar și invocarea ploii poate fi înțeles ca un marker al interacțiunii istorice dintre comunitate și mediul fizico-geografic, reflectând modul în care oamenii înțeleg și răspund la condițiile si riscurile climatice.

Caloianul, consemnat în numeroase sate din jumătatea sudică a Moldovei, Oltenia, Muntenia și Dobrogea, reprezintă o tradiție ce a funcționat atât ca mecanism simbolic de reglare a relației cu natura (secetă, fertilitate), cât și ca fenomen de coeziune socială.

Studiul de față explorează continuitatea și transformarea obiceiului în condițiile Antropocenului—o eră marcată de schimbări climatice accelerate, depopulare rurală, îmbătrânire demografică și un intens proces de globalizare.

Incendiile de vegetație. Rezultate ale evaluării susceptibilității terenurilor din județul Mehedinți la acest hazard

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Studiul de față urmărește evaluarea susceptibilității incendiilor de vegetație prin elaborarea unui Indice al Susceptibilității la Incendii (ISI), destinat cuantificării și integrării unei multitudini de variabile cu relevanță pentru manifestarea și extinderea acestor fenomene. Analiza are ca areal de studiu județul Mehedinți, situat în partea de sud-vest a României, teritoriu caracterizat printr-o diversitate semnificativă a condițiilor fizico-geografice, prin influențe climatice submediteraneene și printr-un grad important de antropizare. Interacțiunea acestor particularități teritoriale reprezintă unul dintre factorii care contribuie la frecvența și distribuția spațială a incendiilor de vegetație.

Din punct de vedere metodologic, studiul a presupus prelucrarea și integrarea, în cadrul Sistemelor Informaționale Geografice (SIG), a unei serii de straturi geospațiale tematice,

reprezentând principalii factori susceptibili să influențeze apariția și propagarea incendiilor de vegetație. Printre variabilele analizate se numără expoziția și panta versanților, altitudinea, utilizarea terenurilor, distanța euclidiană față de cursurile de apă, rețeaua rutieră și așezările umane, precum și o serie de parametri climatici, respectiv temperatura, precipitațiile, viteza vântului și umiditatea aerului.

În etapa de prelucrare a datelor, straturile tematice au fost reclasificate, fiecărei categorii fiindu-i atribuit un scor cuprins între 1 și 5, în funcție de nivelul de susceptibilitate asociat producerii și propagării incendiilor de vegetație. Ulterior, importanța relativă a variabilelor a fost stabilită prin intermediul Procesului Ierarhic Analitic (AHP), permițând astfel ponderarea factorilor și integrarea acestora într-un model spațial unitar de evaluare a susceptibilității la incendii. Utilizarea tehnicilor specifice SIG a facilitat procesarea, analiza și corelarea datelor, precum și elaborarea unor reprezentări cartografice relevante pentru evidențierea distribuției spațiale a nivelurilor de susceptibilitate.

Rezultatele obținute evidențiază faptul că 45.1% din suprafața totală a județului Mehedinți se încadrează în clasele de susceptibilitate ridicată și foarte ridicată. Această valoare este susținută de analiza distribuției spațiale a incendiilor de vegetație înregistrate în perioada 2012–2025. Astfel, 80.7% dintre incendiile identificate pe baza datelor furnizate de satelitul Suomi National Polar-orbiting Partnership (Suomi NPP), echipat cu senzorul VIIRS (Visible Infrared Imaging Radiometer Suite), cu o rezoluție spațială de 375 m, s-au produs la nivelul arealelor caracterizate prin susceptibilitate ridicată și foarte ridicată. Concordanța dintre distribuția claselor de susceptibilitate și localizarea incendiilor detectate satelitar evidențiază relevanța modelului elaborat pentru caracterizarea spațială a susceptibilității la incendii de vegetație a județului Mehedinți.

Data availability challenges for urban thermal stress assessment in Romania

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Urban thermal stress assessment requires meteorological data with sufficient temporal and spatial detail, as well as the variables needed to calculate biometeorological indices such as the Universal Thermal Climate Index (UTCI). However, data availability does not necessarily mean that the available information is suitable for a specific analysis or for supporting local decision-making. This contribution discusses several data-related challenges identified through ongoing research on thermal stress in Romanian cities. Particular attention is given to temporal resolution, as daily maximum values do not

capture the duration and persistence of stressful conditions, and to variable completeness, since UTCI calculation requires information on several meteorological parameters. Additional challenges arise when meteorological information is combined with health and population perception data collected at different spatial and temporal scales.

A key issue is the spatial representativeness of meteorological observations within heterogeneous urban environments. Standard meteorological stations provide essential, quality-controlled and comparable observations, but a single location may not capture the full range of thermal conditions across a city. An ongoing case study using hourly observations from an urban monitoring network provides an opportunity to examine the added information obtained from multiple monitoring locations. More spatially distributed observations, strategically located across different urban environments, could improve the characterisation of intra-urban thermal stress and provide more locally relevant information for heat-risk assessment, adaptation planning and warning services.

Faire lieu commun par la carte. Reclus et son projet d'un grand globe immersif

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Face aux multiples menaces auquel nous – «nous» au sens le plus large – devons faire face aujourd'hui, il est d'une importance primordiale que la science (et avec elle l'université) se réinvente comme lieu de partage. Le projet «Lieux communs» vise à contribuer à l'ouverture de la science, certes en s'interrogeant sur les modalités souvent trop axées sur les moyens purement technologiques, mais surtout en promouvant de nouveaux ressorts pour une science ouverte: il s'agit d'amener chacun.e à considérer le monde comme un lieu commun, comme un espace à protéger, à partager et à vivre ensemble. Parmi les outils de communication et de mise en commun proposés, ce que nous appelons la «cartographie transactionnelle» (Plumejeaud-Perreau, Picker, Irnaten 2024 ; Plumejeaud-Perreau, Zwer, Picker 2026) occupe une place de choix. Afin de donner une double assise historique et théorique à la «cartographie transactionnelle», nous proposons de nous pencher lors sur les aspects «transactionnelles» de l'un des derniers grands projets du géographe visionnaire Élisée Reclus pour l'«Exposition universelle» de Paris de 1900: son globe en relief d'environ 127 mètres de diamètre devait être logé dans un globe encore plus grand. Le «Grand globe» pouvait ainsi être considéré comme une préfiguration de l'«espace intérieur du monde» [«Weltinnenraum»], un terme que Rainer Maria Rilke utilisera quelques années plus

tard dans l'un de ses poèmes. La mise en scène théâtrale d'un globe à l'intérieur d'un autre globe réunit donc des objectifs esthétiques et affectifs, pédagogiques et politiques.

Thermal discomfort and its bioclimatic impact on mortality in the municipality of Iași

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This study aims to analyze urban bioclimatic conditions and their potential influence on public health status. In recent years, thermal discomfort has become an increasingly debated issue, particularly in urban settings where built-up surfaces, vehicular traffic, high building density, and the reduction of green spaces alter air temperatures and amplify the urban heat island effect. Iași Municipality serves as an appropriate study area for such an analysis, exhibiting significant contrasts between central and peripheral areas in terms of topography, built density, and the spatial distribution of green infrastructure.

At the municipal scale, urban climate research in Iași has demonstrated a well-defined urban heat island core, along with substantial thermal disparities between densely built-up zones and the urban periphery, underscoring the critical role of local topoclimatic features. At the European scale, heat- and cold-attributable mortality has been documented across numerous cities, with empirical evidence indicating that warm seasons generate a high burden of heat-related fatalities, predominantly impacting older adults. Concurrently, research on urban green infrastructure demonstrates that mitigating thermal exposure yields direct health benefits, while recent epidemiological investigations corroborate the strong association between ambient temperature extremes and adverse cardiovascular and respiratory outcomes.

Within this framework, this study analyzes the relationship between bioclimatic conditions and urban mortality by leveraging high-resolution UCLARIS climate data alongside mortality records from the city's Catholic community. Rather than establishing strict causality, the primary objective is to highlight statistically and geographically meaningful spatio-temporal associations.

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Evolution de la présence britannique dans les espaces ruraux français de la Nouvelle-Aquitaine

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Depuis les années 1990, l'Ouest rural de la France est devenu un espace prisé par les citoyens du Royaume-Uni, en particulier la Nouvelle-Aquitaine qui accueille en 2021 plus du quart des migrants d'origine britanniques en France (Plumejeaud-Perreau et al., 2026). De précédentes études (Bullet et Hoggart, 1994 ; Benson, 2011) ont souligné les motivations de cette migration dans les espaces ruraux visant un nouveau style de vie considéré comme plus authentique, mais aussi ses effets sur le foncier en ruralité (Saumon et Tommasi, 2018). Notre intérêt se porte sur le mode de vie des résidents britanniques, notamment sous le prisme de leur activité entrepreneuriale, pour mieux comprendre les effets potentiels ou avérés des crises des dix dernières années, entre la Covid-19 et le Brexit voté en 2016 et acté en 2021.

Cette étude s'appuie sur le dépouillement de magasines locaux adressés à un lectorat anglophone, et s'enrichit des retours d'un entretien avec les propriétaires d'un de ces magazines. Ce dernier conforte certains éléments connus de la bibliographie (INSEE, 2020 et 2021), tout en précisant la situation des ressortissants britanniques et les difficultés qu'ils doivent anticiper. Cette approche mixte, combinant des données qualitatives et quantitatives, est consolidée par l'analyse du recensement national produites par l'INSEE à l'échelle des communautés de communes. Il en ressort que les effets du Brexit sur les britanniques vivant en France sont à reconsidérer du fait des effets collatéraux du vieillissement de cette population.

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Analysis and evaluation of the population aging phenomenon in the mountain and marginal contact area of Mureș County between 1992–2024. Trends and implications for public policy design

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Our study started from the premise that demographic indicators represent essential instruments for substantiating public policies and for evaluating socio-economic dynamics at national, regional, and local levels. The population, together with its age structure and the evolution of demographic dependency indicators, constitutes key reference elements in the process of developing strategies regarding the pension system, social protection, education, and the allocation of financial resources from public budgets. At the same time, the analysis of demographic changes makes it possible to identify trends related to population aging, declining birth rates, and the intensification of migration phenomena, aspects that directly impact economic and social sustainability. In this context, the aim of this study is to analyze the evolution of relevant indicators for the demographic potential of the mountain and marginal contact area of Mureș County, identifying the evolution of the population by age groups, the demographic dependency ratio, and the old-age and youth dependency rates, as well as assessing these indicators for the substantiation of public policies. The analysis was carried out based on data provided by the National Institute of Statistics, using statistical methods of graphical and tabular representation for a clearer and more coherent interpretation of the results. The conclusions highlight the intensification of the demographic aging process and its implications for regional and local socio-economic development, thus enabling public authorities to establish local demographic development strategies and adopt measures aimed at mitigating the negative effects of demographic aging.

Online petitions as indicators of public engagement in urban planning

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Public participation is increasingly recognised as an essential component of urban planning, contributing to more transparent, inclusive and responsive decision-making processes. While formal participation mechanisms such as public consultations and hearings have received considerable scholarly attention, less is known about the role of online petitions as expressions of civic engagement in planning-related issues.

This study explores the characteristics of online petitions addressing urban planning issues in Romania and examines their potential as indicators of public engagement in urban governance. The analysis focuses on petitions collected from online petition platforms and civic campaigning websites, covering a range of topics including urban development projects, green spaces, mobility, heritage protection and other planning-related concerns. Using a qualitative content analysis approach complemented by descriptive statistics, the study investigates the thematic focus of petitions, levels of public mobilisation, types of demands articulated by citizens and references to vulnerable social groups.

The research aims to answer three questions: (1) What are the main characteristics of online petitions related to urban planning issues? (2) What levels of public mobilisation do these petitions generate? and (3) To what extent do they reflect concerns associated with vulnerable groups? By examining online petitions as a form of digitally mediated civic action, the study contributes to a better understanding of how citizens engage with planning-related decisions beyond formal participatory arenas.

The findings are expected to provide insights into the opportunities and limitations of online petitions as tools for expressing urban concerns and as complementary indicators of public engagement in planning processes. The study also discusses the implications of these forms of participation for more inclusive urban governance.

Mapping territorial disparities in South-West Romania: A LISA-based analysis of demographic and socio-economic patterns

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Territorial disparities remain a major challenge for regional development, particularly in areas affected by demographic decline, uneven access to services, and contrasting socio-economic conditions. This study investigates the spatial patterns of demographic and socio-economic disparities within Romania's South-West Development Region (South-West Oltenia) at the level of local administrative units (LAU). The analysis considers a set of indicators describing population distribution and dynamics, demographic ageing, education, access to primary healthcare, unemployment, and economic dependency. The methodological framework combines GIS-based thematic mapping with Local Indicators of Spatial Association (LISA) to identify statistically significant clusters of territorial advantage and disadvantage.

The results reveal a strongly differentiated spatial structure. Population and population density are concentrated around the main urban centers, with High–High clusters particularly associated with Craiova, Râmnicu Vâlcea and other major regional cities, while extensive Low–Low clusters characterize rural, peripheral and mountainous areas. Natural population change is predominantly negative across the region, although a more favorable High–High cluster emerges in the north-east, particularly in Vâlcea County. Migration displays a more fragmented spatial pattern and partially counterbalances natural population decline, with local clusters of positive migration around Craiova and Drobeta-Turnu Severin. Demographic ageing also exhibits marked spatial clustering, with High–High concentrations in the northern, north-eastern and western parts of the region. Socio-economic indicators further reveal distinct territorial inequalities. Low–Low clusters of school enrolment occur particularly in the south-western Dolj–Mehedinți area, whereas access to family physicians shows a contrasting pattern, with High–High clusters concentrated mainly in Mehedinți County. Registered unemployment presents one of the clearest patterns of spatial vulnerability, with extensive High–High clusters in Dolj and Mehedinți. Overall, the results demonstrate that territorial disparities in South-West Oltenia are not randomly distributed but form spatially coherent clusters, highlighting the persistence of demographic and socio-economic contrasts between urban-influenced areas and rural and peripheral territories.

Educational tourism for preschoolers: The value of didactic trails

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Educational tourism can be understood as a form of tourism that combines travelling and visiting different attractions with learning activities. With preschool children, it can complement kindergarten activities by providing situations in which children can directly observe and discover elements of the natural and cultural environment. The scientific importance of this topic comes from the possibility of using the tourism resources of a city in activities designed for preschool children.

The study has a scientific component, approaching the relationship between tourism, geography, and education, and a practical component, through the proposal of a trail that can be used in activities with preschool children.

From this perspective, Iași City has various natural and cultural resources that can be used for educational purposes. Parks, gardens, cultural attractions, and other urban spaces can become places where children learn through observation, exploration, and participation. The "Anastasie Fătu" Botanical Garden, for example, allows children to observe plants and flowers, while information about them can be presented in a simple way through games.

The aim of the study is to identify and analyze the tourist and cultural resources of the municipality of Iași that are suitable for educational activities aimed at preschool children and to develop an educational trail model based on observation, exploration, and discovery.

The scientific importance of the study also includes assessing the importance of appropriate open air themed activities for preschool education.

A first objective was to identify tourist and cultural resources suitable for preschool children. To this end, we evaluated the perceptions of teachers and parents regarding the usefulness and feasibility of educational tourism activities, and defining safe and attractive activities adapted to the children's age.

Another objective was to create an educational trail model and identify ways in which it can be included in educational and cultural activities carried out in kindergartens and within the local community. Such an educational trail needs to take into account the children's age, attention span, and their active participation. For this reason, visits to different attractions are combined with stories, games, observation, and practical activities. In this way, tourist attractions become starting points for educational activities.

The study was carried out using a diversified methodology involving data collection, identification and classification of data, data interpretation, and data analysis. Several methods specific to geographical research were used, including the geographical method, cartographic method, quantitative method, analytical method, and synthesis method.

An important part of the research was the questionnaire applied to preschool education teachers. It was used to identify their opinions on educational tourism activities and the key characteristics of a trail suitable for children. The collected data was analyzed and used in developing an appropriate trail based on local tourist resources. The questionnaire highlighted a clear preference for interactive activities, direct contact with nature, and tours lasting approximately 1–2 hours.

The research results showed that educational tourism activities are positively appreciated by teachers and they should definitely be included in the educational process. At the same time, activities outside kindergarten are only organized occasionally, which shows that there is a need and opportunities for their development and diversification.

Based on these initial results, the trail "Discovering Iași through Play and Story" was proposed. It combines visits to attractions in Iași with activities suitable for preschool children. The trail is based on the idea that children can understand information more easily when it is presented through stories, games, and examples that they can observe directly.

The trail's purpose is to familiarize children with elements of the natural and cultural environment of Iași through activities that develop curiosity, imagination, and observation skills. As regards transportation, it combines walking with another means of transport. The trail includes attractions such as Eminescu's Linden Tree and the "Anastasie Fătu" Botanical Garden.

At Eminescu's Linden Tree, the activity begins with a short story about the poet and his connection with Iași. Children will listen to a short poem and discuss the natural elements around them. At the ""Anastasie Fătu"" Botanical Garden, attention is mainly directed towards plants, flowers, colors, and shapes. Activities include the identification of different elements of nature as well as taking part in simple observation and recognition activities.

The trail includes discovery and exploration games, stories about the visited places, observation activities, creative activities, and a treasure hunt with simple clues. The guide presents information in a language suitable for children and encourages them to take part in the activities.

Simple materials can also be used, such as observation sheets, pictures, cards, clues, and materials for creative activities. These materials help children remain involved throughout the trail and make it easier for them to remember what they have observed.

The proposed trail closely follows the preferences highlighted through the questionnaire as regards duration, contact with nature, interactive activities, and direct observation. In this way, the visiting experience is adapted to the characteristics of preschool children rather than being organized as a conventional guided tour.

In conclusion, we can say that there is a common positive perception about the usefulness of educational tourism activities. Most preschool teachers consider these activities very useful for the children's development, confirming their key role within the educational process. At the same time, the study results indicate a low frequency of activities outside kindergarten, thus underlining the opportunities for their development and diversification.

The proposed trail can be a model for further applications capitalizing local natural and cultural resources in interactive educational activities for preschool and older children. By combining visits to attractions with games, stories, and direct observation, a themed trail can turn a simple visit into an attractive educational activity that contributes to building a sense of community and reinforcing local brands.

Projected streamflow responses to climate change in the Buzău and Putna river basins (Southeastern Carpathians)

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This study evaluates how future climate scenarios will impact the hydrological regimes of the Buzău and Putna river basins in the Romanian Curvature Carpathians. Using the conceptual HBV model, simulations were driven by three gridded meteorological datasets (E-OBS, EMO, and NMA), with potential evapotranspiration estimated via the Hargreaves–Samani and Oudin methods. The model was calibrated (1991–2016) and validated (2017–2021) against observed streamflow using Monte Carlo and Genetic Algorithm–Powell (GAP) optimization. Future streamflow was then simulated through 2100 using bias-corrected projections from the Restore4Life (DanubeCliB) dataset under SSP2-4.5 and SSP5-8.5 scenarios. While the model effectively captured general streamflow dynamics—demonstrating better transferability for the Buzău basin—it substantially underestimated extreme high flows, particularly in the Putna catchment. Climate projections indicate significant seasonal shifts in both basins, characterized by increased winter and early spring discharge, alongside altered frequencies of high- and

low-flow events. Notably, the Putna catchment exhibits greater sensitivity to projected climate changes than Buzău. These findings provide critical baselines for regional water management while emphasizing the necessity of accounting for model limitations when assessing future flood risks.

This research was done within the framework of the project «Changes in climate suitability of Romanian vineyards» (CARVE), code PN-IV-P1-PCE-2023-1875, funded by UEFISCDI (the Executive Agency for Higher Education, Research, Development and Innovation Funding).

Spatiotemporal dynamics of flood events in the Jijia River catchment (1990–2022)

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This study investigates the spatiotemporal variability of flood events along the Jijia River from 1990 to 2022, based on hydrometric data recorded at the principal gauging stations within the catchment. The analysis characterizes flood events through the assessment of key hydrological parameters, including baseflow discharge (Q_b), peak discharge (Q_max), flood amplitude (ΔQ), rising time (T_c), recession time (T_d), and total flood duration (T_t), with particular attention to the differences between the upper, middle, and lower river sectors.

The results indicate that flood events on the main course of the Jijia River were driven by a combination of heavy precipitation, tributary contributions, and the river channel's morphological characteristics. The year 2010 had the highest recorded values across all analyzed parameters: at Andrieșeni gauging station, peak discharge reached 148 m^3/s, with a flood amplitude of 145.33 m^3/s and a total flood duration of 768 hours. At Chiperești station, in the lower sector, the total duration of the 2010 event extended to 1,032 hours, reflecting the prolonged downstream propagation of the flood wave. Comparative analysis of the hydrological parameters reveals an asymmetric flood hydrograph structure, with rapid rising limbs followed by markedly slower recession phases; in most events examined, the recession time exceeded the rising time.

The state of coral reefs in the Hurghada area (Egypt) in the context of climate change and anthropogenic pressure

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Coral reef ecosystems in the Giftun Islands (Red Sea) face severe threats from climate change and intensifying anthropogenic pressure. Rising sea surface temperatures drive thermal stress and coral bleaching events, while mass marine tourism, anchor damage, physical contact, and coastal development exacerbate structural reef degradation. Evaluating these combined stressors requires continuous monitoring to track structural resilience and ecological transformation.

This study evaluates how recreational and scientific scuba diving, paired with underwater unmanned systems—specifically Underwater Unmanned Vehicles (UUVs) and Remotely Operated Vehicles (ROVs)—can enhance marine conservation frameworks. While scuba divers provide high-resolution, targeted assessments of coral bleaching, disease, and benthic coverage in shallow zones, underwater unmanned systems offer non-invasive, large-scale spatial mapping, deep-water reef imaging, and long-term parameter monitoring across broader bathymetric gradients. Integrating community-based scuba monitoring with robotic autonomous surveying creates an actionable multi-tier framework for tracking coral health, mitigating human impacts, and supporting adaptive marine protected area management in the Red Sea.

Measuring airports' accessibility at global scale using OSRM (Open Source Routing Machine) - technical challenges and key-findings

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The concept of airport accessibility is a topic of major interest in regional planning and geography of transportation, as proved by the numerous case studies available in the literature. However, at larger scales (national, continental and global) the quantity of studies is extremely limited and descriptive. The main challenge in evaluating the airport's accessibility at global scale is related to the definition of functional airports and flows, the availability of networks used for distances assessment and the methodological options needed to perform the calculus. Our approach focuses on the definition of a sound work frame that will enable the researcher to perform an accessibility analysis using only open-source tools, models and data. The airports integrated in the analysis are extracted from Our Airports platform

(https://ourairports.com/), the Worl demographic grid is provided by World Pop Hub, in 2026, (https://hub.worldpop.org/) and the time distance evaluation is the output of OSRM. Each World population grid data centroid was linked to the nearest airports available in 250 km and a distance matrix was extracted. The process was replicated for all the points available in the dataset, allowing us to elaborate a synthetic accessibility map, at global scale. As the usual GIS tools fail to accomplish these tasks, we used Python scripts to accelerate the process. These scripts were build using AI prompting and support replicability of data, contexts, territories etc. The overall data quality check of the results indicate that the performance of the model is highly dependent on two factors - roads coverage and demographic density.

When disadvantage constrains capacity: Left-behind regions and the Twin transition in Europe

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EU cohesion policy assumes that building regional capacity for the green and digital transitions will reduce left-behindness. We examine the reverse relationship: whether left-behind status constrains the capacity to decarbonise and digitalise. Using a panel of 232 NUTS2 regions across the EU27 (2014–2024), we relate a composite left-behind index, combining economic, social and sectoral vulnerability, to companion indices of green and digital transition capacity, and test moderation by institutional quality. Left-behind status is associated with lower capacity in both transitions, but the two constraints differ in persistence and shape. Left-behind status in 2014 appears to predict lower green capacity in 2024, net of initial capacity; no comparable long-run association exists for digital capacity. Institutional quality moderates the green association unexpectedly: the gap between left-behind and other regions is wider where governance is stronger, consistent with weak institutions capping green capacity for all regions alike. For digital capacity, institutional moderation is weak and not robust to controls. Spatial Durbin estimates reveal opposite spillovers: neighbours' disadvantage is associated with higher local green capacity but lower local digital capacity, suggesting competition for green transition but spatial clustering of digital disadvantage.

Synthesis report for stakeholders on the assessment of cold and hot areas in main cities of north-eastern Romania through diverse methodological approaches using mobile measurements as source of input data

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The proposed presentation provides a synthesis of two urban climate studies (Ichim et al., 2026, Frontiers in Climate; Hrițac et al., 2026, submitted), based on more than 150 mobile transects conducted across the county-seat cities of north-eastern Romania under synoptic conditions representative of the thermal and atmospheric circulation characteristics of the winter and summer seasons. Building on the large volume of collected data, which were processed and statistically homogenized using distinct methodological approaches, persistently warm and cool areas along the measurement routes were identified for the summer season using Getis-Ord statistics implemented in ArcGIS, highlighting the general spatial features of the urban heat island. For the winter season, given the challenges associated with spatializing air temperature under temperature-inversion conditions, a mapping approach based on machine-learning techniques was applied to identify cold-pool-like areas within and around the analyzed cities.

The results enabled the identification of thermally critical areas, as well as areas of concern for future residential development, where further urban expansion could increase population exposure to high temperatures during summer or very low temperatures during winter. The findings can therefore support climate-resilient urban development by providing a detailed spatial representation of these critical areas. Based on these findings, the presentation also summarizes the main recommendations for stakeholders, with particular emphasis on reducing thermal exposure and supporting climate-sensitive urban planning.

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Demographic Vulnerability, Mobility and Access to Essential Services in Climate-Exposed Rural Communities of the Republic of Moldova

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Rural communities in the Republic of Moldova are increasingly affected by the combined pressure of demographic ageing, territorial isolation, limited access to essential services and climate-related disruptions. This paper examines the relationship between demographic vulnerability, everyday mobility and access to services in selected rural communities exposed to climate risks. The study is based on an integrated methodological approach, combining local statistical indicators with survey data collected among residents of vulnerable settlements.

The analysis focuses on several dimensions of population vulnerability: age structure, demographic dependency, settlement size, population density, daily and occasional mobility, access time to medical, educational, commercial and administrative services, and residents' experience of climate-related mobility disruptions. Special attention is given to the way extreme weather events, such as heavy snowfall, torrential rainfall, floods, storms and heatwaves, affect road accessibility and the capacity of residents to reach essential services. The survey also includes Likert-scale items measuring perceptions of road vulnerability, perceived impacts on medical access, trust in local authorities, community preparedness and willingness to adapt mobility behavior during extreme weather conditions.

The results are expected to highlight how demographic vulnerability and weak territorial accessibility reinforce each other in rural areas. Communities with ageing populations and higher demographic dependency may be more sensitive to road disruptions, especially when access to health care, administrative services or regional markets depends on vulnerable transport connections. By integrating statistical, spatial and perception-based evidence, the paper contributes to a more comprehensive understanding of climate-related social vulnerability in rural Moldova. The findings may support better prioritization of infrastructure interventions, local adaptation measures and service accessibility planning in climate-exposed rural territories.

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The National Geography Curriculum in the Republic of Moldova as Perceived by 12th-Grade School Students

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The aim of the study: to analyze the 2019 National Geography Curriculum of the Republic of Moldova based on the perceptions of 12th-grade high school students, using a questionnaire.

Methods of analysis used: questionnaire; statistical; analytical. A 56-items questionnaire was administered to a sample of 614 12th-grade students from various schools in the Republic of Moldova. The items were developed as part of the research project "School Curriculum Monitoring: Concept and Methodology", conducted by Moldova State University under the auspices of the Ministry of Education and Research, with the involvement of approximately 30 geography teacher-monitors.

Results. The main findings regarding students' assessment of the National Geography Curriculum are: 1) Alignment with expectations and interests: 78.0% of students consider that the Geography syllabus meets their learning needs; 2) Collaborative and cooperative activities: 83.5% of respondents confirm the inclusion of group activities, case studies, and cooperative work during lessons; 3) Development of critical thinking: 69.5% of students feel the subject stimulates their critical thinking and problem-solving skills in various contexts; 4) Interdisciplinarity: perceived positively by 82.0% of students; 5) Content volume: 72.5% of students consider the subject matter to be overloaded. Furthermore, 81.0% of respondents support reducing the number of subjects in the timetable, while 68.5% advocate for integrating related subjects (e.g., Mathematics + Computer Science; Geography + Biology, etc.). The main sources of dissatisfaction regarding Geography lessons are: the heavy homework load (34.0%); the large volume of information presented during lessons (31.0%); and the complex nature of the textbook content (22.0%), among others. Regarding opinions on the quality of Geography textbooks: the average rating given by students is 6.14 out of 10, with significant room for improvement in terms of clarity and accessibility (only 38.5% consider the textbook material to be largely understandable to them). Geography studies excel at fostering civic awareness and a systemic understanding of the surrounding world (with both aspects rated above 83%), yet they lag behind in developing entrepreneurial/economic skills (44.0% of students report little to no training in this area). There is also a strongly positive perception regarding the subject's utility and teaching methodology: 78% of students consider the material relevant to their interests, and 83.5% confirm the use of modern collaborative and teamwork activities. A critical issue, however, is information overload: 72.5% of students report that the curriculum is excessively extensive.

Conclusion: Geography successfully fulfils its educational and formative role by fostering strong competencies in understanding the world, active citizenship, and critical thinking. The main challenges identified include information overload, a heavy homework load, an excessive density of abstract concepts in textbooks, and limited time allocated for practical application and working with atlases or digital resources.

Au-delà de la proximité des immeubles de bureaux : centralité, accessibilité et localisation intra-urbaine des entreprises IT étrangères ou à capital mixte à Iași, Roumanie

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Les villes secondaires sont devenues des nœuds importants de l'économie numérique européenne, mais les conditions intra-urbaines qui soutiennent leur consolidation restent encore insuffisamment étudiées. Cet article analyse la manière dont l'infrastructure de bureaux, la centralité urbaine et l'accessibilité des transports structurent la localisation des implantations d'entreprises IT étrangères ou à capital mixte à Iași, en Roumanie, pôle technologique émergent et important centre universitaire.

L'étude repose sur une base de données géocodée comprenant 2 187 localisations d'entreprises IT, dont 256 localisations d'entreprises étrangères ou à capital mixte et 1 925 localisations d'entreprises roumaines/locales, analysées en relation avec 76 immeubles de bureaux cartographiés. Les résultats préliminaires mettent en évidence une forte sélectivité spatiale : 43,75 % des localisations d'entreprises étrangères ou à capital mixte sont situées à l'intérieur d'un immeuble de bureaux cartographié, tandis que leur distance médiane au plus proche immeuble de bureaux est de 72,91 mètres, contre 433,87 mètres pour les entreprises roumaines/locales. Les immeubles de classe A/A+ et le pôle de bureaux Palas - Sf. Lazăr - Tudor jouent un rôle particulièrement important.

À partir de ces résultats, l'article dépasse l'analyse fondée sur des pourcentages calculés selon des seuils de distance en examinant la distribution complète des distances entre les entreprises et les immeubles de bureaux et en testant si la proximité de l'infrastructure de bureaux demeure significative après prise en compte de la distance au quartier central des affaires (Central Business District - CBD), de l'accessibilité au principal pôle de bureaux et aux centres secondaires, de l'offre de transports publics, de la qualité des bureaux et de variables observables servant d'indicateurs indirects des coûts d'occupation. L'analyse combine des indicateurs d'accessibilité fondés sur les SIG, des distributions cumulées des distances, des comparaisons non paramétriques et des modèles multivariés. Elle prend également en compte la chronologie de l'ouverture des immeubles de bureaux et de l'enregistrement des entreprises afin d'évaluer la

manière dont les vagues successives de développement immobilier tertiaire ont interagi avec l'expansion spatiale du secteur IT.

L'article contribue aux recherches sur le développement régional des villes secondaires en établissant un lien entre la micro-localisation des entreprises et l'environnement bâti. Il montre que la consolidation des pôles technologiques dépend non seulement des compétences, des universités et de l'attraction des investissements, mais aussi des infrastructures de bureaux, de transport et d'accessibilité à travers lesquelles les activités économiques internationalisées s'organisent à l'échelle intra-urbaine.

Analyse spatiale de la vulnérabilité des mangroves de Somone face aux aléas climatiques : apport de la télédétection pour une gestion adaptative

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Les mangroves de la lagune de Somone, situées sur la Petite Côte du Sénégal, constituent un écosystème essentiel pour la stabilité du littoral, la biodiversité et les activités socio-économiques locales. Leur rôle dans la protection contre l'érosion, la régulation hydrologique et le soutien aux pêcheries en fait un milieu particulièrement sensible aux transformations environnementales. Depuis plusieurs décennies, ces mangroves sont confrontées à des aléas climatiques croissants, notamment l'élévation du niveau marin, la variabilité pluviométrique et l'augmentation des températures. À ces pressions naturelles s'ajoutent des dynamiques humaines intenses liées à l'urbanisation, au développement touristique et aux modifications des usages du sol qui accentuent leur vulnérabilité.

Ce travail propose une analyse spatiale de l'état et de l'évolution des mangroves de Somone en mobilisant des données de télédétection et des outils SIG. L'approche combine l'interprétation d'images satellitaires, la cartographie diachronique de l'occupation du sol et l'identification des principales pressions anthropiques. L'approche développée a pour objectif de dégager les tendances d'évolution de la mangrove et de localiser les secteurs où les interactions entre facteurs climatiques et pressions humaines pourraient accroître la vulnérabilité. L'analyse spatiale permet de mettre en évidence les zones les plus exposées aux aléas climatiques.

L'ensemble de ces éléments offre des pistes pour une gestion adaptative de la mangrove, fondée sur la connaissance fine des pressions, la localisation des zones sensibles et l'anticipation des tendances futures. Ce travail contribue ainsi à éclairer les stratégies locales de préservation et de résilience face aux changements climatiques.

One Union, many experiences: the uneven geography of EU funding, development and trust

Constantin-Alexandru STOIAN

European integration pursues territorial cohesion through substantial investment in less developed regions, yet public confidence in the Union does not map neatly onto where that investment goes. Recent research suggests that trust in the EU and Eurosceptic voting are influenced not simply by funding levels, but also by economic change. In particular, stagnation among middle-income regions has been associated with lower levels of support for the European Union.

This study offers an exploratory cartographic comparison of three dimensions of integration: financial intervention, territorial development and public trust in the European Union. Using Eurobarometer data together with indicators of socio-economic development and European Commission data on Cohesion Policy, this study compares patterns of EU funding with levels of trust in the EU and perceptions of the benefits of EU membership. Particular attention is given to change over time and to regions where substantial European investment coexists with relatively low levels of trust or stronger Eurosceptic attitudes.

The study does not test causality. It provides a visual comparison of the material and perceptual experience of European integration and considers what these patterns may tell us about the future of Cohesion Policy in the 2028–2034 budget framework.

Visitor feedback as a tool for sustainable management of wildlife attractions

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Animal sanctuaries are institutions focused on protecting, rehabilitating, and providing long-term care for animals affected by human activities, placing animal welfare and conservation at the center of decision-making, with tourism serving only as a complementary source of funding and education. The field remains theoretically fragmented: there is no unified framework for "sanctuary tourism," and the term is sometimes misused by commercial attractions lacking genuine welfare principles. A central tension is balancing conservation/welfare with economic viability, since visitor revenue is needed for animal care, yet repeated human-animal contact can affect animals' behavior and physiological state. Visitor management (flow, group size, distance, rules) and guides are therefore essential for safety, education, and minimizing impact. Sanctuaries also serve educational, social/therapeutic, and ethical functions,

distinguishing themselves from exploitative attractions by banning performances and prioritizing animal welfare.

The study uses the Zărnești Bear Sanctuary as a case study, analyzing visitors' online feedback to examine the relationship between sanctuary management, visitor management, and sustainable tourism. The feedback reveals emotional, aesthetic, and interpretive dimensions of the experience, the quality/authenticity of animal encounters, and the key role of guides in conveying information about welfare, rehabilitation, and conservation.

Research trends in remote sensing for water quality monitoring: a bibliometric analysis (2015–2025)

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Remote sensing has become increasingly important for water quality monitoring, providing information over large areas and allowing changes in aquatic environments to be observed over time. In parallel, the development of new satellite missions and data analysis methods has led to a rapid increase in the number of studies addressing water quality from Earth observation data. This study examines the main research trends in this field through a bibliometric analysis of scientific publications from 2015 to 2025.

Bibliographic data were collected from the Web of Science Core Collection using a search strategy that included terms related to remote sensing, water quality, Sentinel-2, chlorophyll-a, turbidity, total suspended matter, lakes and machine learning. The final dataset included 33,363 articles and was analyzed using the Bibliometrix package (Biblioshiny) in R. The analysis focused on the annual evolution of scientific production, geographical distribution of publications, international collaboration and the frequency and evolution of keywords.

The results show a clear increase in scientific production during the analyzed period, particularly after 2019, with the highest number of publications recorded in 2025. China had the largest contribution to the scientific output, followed by the United States and several European countries. The collaboration network also showed strong connections between these main research centers, while contributions from Asia, Australia, South America and Africa indicate the global development of the field.

Keyword analysis showed the increasing importance of data-driven approaches, with terms such as machine learning, model, prediction, classification and random forest frequently occurring in the analyzed publications. Remote sensing, Sentinel-2, water quality, temperature and pollution were also among the relevant topics. The thematic evolution shows that machine learning and random forest were already present during 2015–2019 and became more strongly connected with remote sensing in the following periods. More recently, climate change has also appeared among the identified themes, suggesting a broader direction of research.

Overall, the analysis shows the rapid development of remote sensing applications for water quality monitoring and the increasing role of machine learning methods within this field. The results provide an overview of the main research directions and their evolution over the last decade.

Local perceptions as a resource for heritage planning: evidence from Pitar Moș protected urban area, Bucharest

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This paper examines community perceptions of cultural heritage in the protected urban area of Pitar Moș, Bucharest, from a heritage planning perspective. As one of the city's historically and architecturally significant protected areas, Pitar Moș offers a relevant case for exploring the relationship between local communities, heritage awareness, and the social dimensions of urban conservation. Based on a questionnaire survey of 84 respondents, the study assesses residents' awareness of the area's protected status, attachment to local heritage, participation in cultural activities, and perceptions of current urban transformations. Results show a relatively high level of awareness of the area's historical and architectural value and meaningful symbolic attachment, but limited direct involvement in heritage protection initiatives. Respondents also expressed concern about inappropriate urban interventions and identified Pitar Moș Church, Casa Universitarilor (University House), and Școala Centrală (Central School) among the most valuable local landmarks. The paper argues that community perceptions can inform more responsive heritage planning and concludes that stronger public education, participatory mechanisms, and cooperation between authorities and residents are needed to transform awareness into active civic engagement.

Urban public space at the intersection of gender and development: the socio-economic costs of inequality in representation in the municipality of Galați

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In the urban environment not merely as a matter of symbolic representation, but as a factor with a direct impact on local economic and social dynamics. Taking the municipality of Galați as a case study, the research assesses how the underrepresentation of women in memorial geography (street toponymy, monuments) correlates with broader socio-economic disparities and affects community cohesion.

The methodology integrates a mixed-methods approach based on GIS spatial analysis of three georeferenced databases: the toponymic nomenclature, demographic and employment indicators of the population (2021 Population and Housing Census/INS), and data on urban infrastructure.

The results highlight a dual marginalization of female identity – both quantitatively and spatially, through the allocation of female names predominantly to secondary streets. The study demonstrates that an exclusionary urban memory both reflects and perpetuates tangible social costs (such as the low level of representation in local decision-making) and economic costs (such as the underutilization of human and tourism potential), providing spatial planning directions aimed at equitable urban development.

Vulnerability to hydroclimatic risks and challenges in water resource management: A case study – the Pârcovaci Reservoir

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Northeastern Romania faces high hydroclimatic vulnerability, characterized by alternating episodes of extreme drought and prolonged hydrological stress, accompanied by flash floods triggered by torrential rainfall. This variability places enormous pressure on hydrotechnical infrastructure and water resource management, necessitating a reassessment. This paper analyzes climate risks and their impact on the hydrological dynamics of the Pârcovaci reservoir, located in the upper basin of the Bahlui River.

The main objective is to assess the interaction among climate variability, the hydrological regime, and changes in the reservoir's storage capacity, and to highlight the main hydroclimatic risks affecting its operation.

The analysis used climatic and hydrological data, reservoir technical parameters, and photointerpretation and GIS methods to assess changes in water surface area and siltation.

Using an integrated methodology, the study identified changes in the lake and associated water-supply risks. The results show a reduction of over 35% in the usable volume at NNR and approximately 54% in water surface area, driven by accelerated siltation and increased evapotranspiration from rising temperatures. These changes have caused major operational disruptions, including water restrictions (e.g., in the summer of 2024).

The study highlights that hydroclimatic variability and the degradation of the reservoir's storage capacity affect the availability and security of water resources; thus, the results support an approach based on monitoring water levels and flows, periodically assessing storage capacity, and adapting operational procedures to hydroclimatic conditions. To mitigate these effects, implement urgent measures to reduce siltation risk, modernize infrastructure through real-time digital monitoring (the WATMAN system), and optimize restriction plans to ensure water security for downstream communities.

Disparități din cadrul sistemului educațional românesc: Analiza spațială a rezultatelor examenului de bacalureat prin prisma inegalităților socioeconomice și de gen

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Performanța școlară în Romania este un subiect intens dezbătut, însă există o lacună semnificativă în cuantificarea spațială a fenomenului. Consensul academic indica că manifestarea disparităților educaționale se conturează prin prisma inegalităților socioeconomice dintre rural și urban. Astfel, luând în considerare dezvoltarea inegală a României, lucrarea propune cartografierea acestor disparități.

Pentru a realiza acest obiectiv studiul analizează dispunerea geografică a rezultatelor examenului de bacalaureat în perioada 2019-2024. Rezultatele examenului, agregate la nivel de UAT, au fost analizate utilizând metode cantitative precum: indicele Moran, Getis-Ord General, analize de grupare și tip hot-spot, cât și prin regresii liniare multiple.

Rezultatele lucrări indică că diferențele performanței școlare dintre rural și urban au cauze structurale. Analiza spațială a rezultatelor relevă o dispunere de tip mozaic. Corelarea mediului de proveniență cu performanța elevilor la examenul de bacalaureat

explică doar 30% din valori. Însă, dispunerea ofertei educaționale și a genurilor completează imaginea de ansamblu a acestor inegalități. Filierele teoretice, ce înregistrează cele mai bune performanțe indiferent de mediu, sunt localizate predominant în mediul urban. Iar, filierele tehnologice, ce înregistrează cele mai slabe performanțe, sunt aflate majoritar în mediul rural.

De asemenea, analiza relevă o inegalitate accentuată între genuri. În medie, genul feminin obține note mai mari cu 0.38 decât cel masculin. Însă, această discrepanță de gen crește sau descrește în funcție de filiera și profilul liceului. Profilurile și specializările care pregătesc elevi pentru meserii tehnice sau fizice sunt predominate de genul masculin. Iar, specializările precum învățător-educatoare, coafor-stilist, design vestimentar sau, în general, cele asociate stereotipic genului feminin sunt alcătuite în proporție de peste 80% din acesta.

Astfel, discrepanțele performanței dintre urban și rural sunt definite de inegalități de gen, cauzate, cel mai probabil, de stereotipuri și de probleme structurale din cadrul filierelor și specializărilor liceelor. Cauza acestor probleme structurale este neclară. Natura multidisciplinară a problemei indică necesitatea continuări cercetărilor în direcția factorilor calitativi. Efectele politicilor locale și naționale cât și a proveniență sociale a elevilor sunt necesare pentru dezvoltarea înțelegeri holistice a problemei.

Educational inequalities in Romania: Using accessibility models to map performance divides in baccalaureate results

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The Romanian educational system has constantly dealt with steep educational performance inequalities over the last decades. The large divide in academic achievement between technological and theoretical high-schools and rural and urban localities are but just a few of the issues it currently struggles with. In academic literature, the causes have been largely attributed to structural socioeconomic disparities spurred by uneven development and concentrated investments in regional urban economic centres such as: Bucharest, Timișoara, Iași and Cluj-Napoca. Still, current research mainly focuses on qualitative and regional scale studies. Countrywide analyses of educational performances remain relatively sparse.

This study aims to quantitatively assess nationwide academic achievement manifestation at a locality level by using baccalaureate results from 2019 to 2026 as a benchmark. The exam results were collected from the Romanian's government open data initiative website and centralized at a Territorial Administrative Unit level by using SIRUTA codes. Locality averages and locality educational typologies were created from the centralized dataset.

In order to map countrywide baccalaureate performance a gravitational based potential accessibility model was implemented using ArcGIS Pro. The hypothesis was that academic performance gradually decreases from regional urban centres as economic opportunities lessen. However, results indicate that the divide manifests along the spatial distribution of the high-school profiles rather than socioeconomic factors. Thus, a categorical link between grade results and proximity to economic poles cannot be done.

Muntele Mare - caracteristici geomorfologice

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Muntele Mare, a treia unitate montană din Munţii Apuseni ca altitudine, se face remarcaţi prin caracteristici geomorfologice particulare în raport cu celelalte unităţi monane din vecinătate. Aspectul său de cupola largă ca un dom, cu altitudinea maximă de 1825 m, contrastează cu aspectul celorlalte unităţi montane de peste 1800 m, Munţii Bihorului (1849 m) şi Munţii Vlădeasa (1836 m). Dacă în masivele înalte vecine elementele modelării glaciare sunt prezente, circurile glaciare reprezentând un anumit mesaj paleogeografic, aici nu avem decât o slabă amprentă crio-nivală. Elementele morfologice majore sunt suprafeţele de nivelare de tip peneplenă, aşa cum au fost ele definite de către Emmanuel de Martonne încă de acum 100 de ani şi detaliate de către Robert Ficheux în teza sa de doctorat. În opinia noastră evoluţia întregului masiv poate să fie interpretată şi prin Teoria treptelor de piemont - „Die Piemonttreppen Theorie" (A. Penck, 1924). Analiza morfologiei de detaliu indică o modelare în regim periglaciar, cu nişe şi depresiuni de nivaţie, ocupate de mlaştini mezzo- şi oligotrofe, cu toruri granitice spectaculoase precum Pietrele Cântătoare, cu terase de altiplanaţie şi soluri poligonale. Prezenţa acestora pune problema existenţei permafrostului montan şi a unui anumit tip de modelare.

Long-term hydrological patterns and spatial dynamics in Romania

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Romania's hydrological system, spanning 115,000 km of river network across a national territory of 232,193 km², lies almost entirely within the lower Danube hydrographic basin. Managing flood hazards across its 11 Hydrographic Basin Administrations (HBAs) requires understanding long-term spatial dynamics and historical frequency patterns. This research examines multi-century hydrological events across Romania from 1234 to 2024, focusing on historical event timing, intensity, and magnitude to establish a comprehensive overview of national flood behavior and regional vulnerability.

Historical records reveal a long-term upward trend in flood occurrence, with summer floods constituting the primary seasonal hazard nationwide. Topographical influences are significant; the Carpathian Mountain system serves as a major geographical control, particularly driving spring snowmelt floods in the river basins of western Romania.

Spatial distribution highlights pronounced regional variations in hazard exposure and human impact across the national territory. RO10 (Siret HBA) and RO3 (Olt HBA) emerge as the most frequently impacted river basin administrations. Furthermore, historical human casualties are heavily concentrated in specific catchments, with RO7 (Mureș HBA) and RO10 (Siret HBA) recording the highest impacts.

By synthesizing long-term hydrological events and spatial dynamics, this work advances the understanding of historical flood regimes in Central and Eastern Europe. These insights provide a essential baseline for integrated river basin management, regional disaster risk reduction, and future climate adaptation strategies.

How do local climate zones shape surface Urban Heat Island patterns in small towns? A comparison of Pașcani and Târgu Neamț, Romania

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The main objective of this study is to compare the spatial characteristics of the surface urban heat island (SUHI) in Northeastern Romania, Pașcani and Târgu Neamț. High-resolution land surface temperature (LST) mapping is used to identify and compare the spatial distribution and intensity of thermal hot spots within the two urban areas. Pașcani city is the larger of the two towns, with a population of 30,766 inhabitants and an administrative area of approximately 75.42 km2, while Târgu Neamț city has 18,029 inhabitants and covers approximately 47.31 km2. According to the 2021 census, their population densities are relatively similar, at 407.9 inhabitants/km2 in Pașcani and 381.1 inhabitants/km2 in Târgu Neamț.

The methodology is based on a cloud-based workflow implemented in Google Earth Engine (GEE) to generate high-resolution land surface temperature (LST) maps. MODIS LST data are used as the thermal reference, while Sentinel-2 imagery provides higher-resolution information on surface characteristics. A Local Climate Zone (LCZ) classification was used to provide a standardized framework for comparing the thermal characteristics of similar urban structures and land-cover types across the two towns. The analysis covers the summer months (June-August) over 2020-2026 period, allowing the spatial and interannual variability of the SUHI in Pașcani and Târgu Neamț to be assessed.

The results reveal clear spatial differences in LST between the two towns, with daytime thermal patterns strongly related to LCZs Characteristics. The highest surface temperatures are associated with densely built-up and industrial areas, while densely vegetated areas and water bodies display the lowest LST values. Build-up LCZs form the main thermal hotspots, whereas LCZs characterized by a higher proportion of vegetation and previous surfaces show a clear cooling effect. Despite differences in their size and urban structures, Pașcani and Târgu Neamț show comparable thermal responses with similar LCZ classes, highlighting the strong influences of urban morphology and land cover on the spatial configuration of the SUHI.

Perspectives de développement de l'écotourisme fondées sur le potentiel biogéographique des aires naturelles protégées de Roumanie : le cas du Parc Naturel Vânători-Neamț

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L'écotourisme constitue une forme de tourisme responsable fondée sur la découverte des milieux naturels et culturels, visant à concilier conservation de la biodiversité, sensibilisation environnementale et développement socio-économique local. À l'échelle internationale, il représente un outil de valorisation durable des ressources et de conservation des écosystèmes. En Europe, les aires protégées, notamment à travers le réseau Natura 2000, jouent un rôle majeur dans la préservation de la biodiversité. En Roumanie, le développement de formes de tourisme compatibles avec les objectifs de conservation constitue ainsi un enjeu important. Dans ce contexte, le Parc Naturel Vânători-Neamț, comprenant plusieurs sites Natura 2000, présente un territoire pertinent pour l'analyse du potentiel écotouristique fondé sur ses ressources biogéographiques et culturelles.

Le présent travail vise à évaluer le potentiel écotouristique du Parc Naturel Vânători-Neamț, en mettant l'accent sur ses ressources naturelles et culturelles ainsi que sur leurs possibilités de valorisation dans une perspective de développement touristique durable. Une attention particulière est accordée à la visibilité et à l'image du parc, dans l'espace physique et numérique, en tant que facteurs influençant son attractivité et son positionnement. Sa diversité de milieux et d'écosystèmes lui confère une richesse biologique remarquable (34 espèces de flore et de faune protégées, 14 habitats d'intérêt communautaire, 50 raretés botaniques), notamment à travers des espèces emblématiques telles que le bison d'Europe (Bison bonasus), dont la conservation et la valorisation éducative et touristique peuvent renforcer l'identité territoriale.

L'étude analyse les conditions d'intégration des ressources naturelles et culturelles dans une stratégie cohérente de développement écotouristique, en tenant compte des contraintes liées à la conservation, aux infrastructures, à l'accessibilité et à la visibilité. Elle propose plusieurs orientations pour renforcer l'offre et l'attractivité écotouristiques, notamment par l'amélioration de l'interprétation et de la sensibilisation environnementale, l'installation de panneaux éducatifs et la création ou la diversification d'itinéraires de randonnée et de cyclotourisme. L'amélioration de la communication et de la présence numérique est également envisagée à travers le repositionnement de l'image du parc, la modernisation de son identité visuelle,

l'actualisation de sa présence en ligne et l'adaptation des actions de communication aux différents publics.

Ainsi, les orientations proposées visent à contribuer à un modèle de développement écotouristique fondé sur la valorisation raisonnée du potentiel biogéographique et culturel du Parc Naturel Vânători-Neamț, tout en préservant l'intégrité des écosystèmes, en favorisant l'éducation à l'environnement et en soutenant les dynamiques socio-économiques locales. Cette approche pourrait renforcer son attractivité et son positionnement comme destination écotouristique reconnue en Roumanie et favoriser, à plus long terme, son intégration dans les réseaux européens du tourisme durable.

Dinamica utilizării terenurilor în Municipiul Constanța în perioada 2000 - 2025

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Utilizarea terenurilor se referă la legătura dintre activitățile umane și terenuri, care de obicei nu este direct vizibilă, în timp ce acoperirea terenurilor descrie vegetația și construcțiile artificiale care acoperă suprafața terenului, ca elemente direct vizibile (Anderson et al., 2009; Călina et al., 2025). Pe scurt, acoperirea terenurilor reflectă acoperirea biofizică, în timp ce utilizarea terenurilor arată modul în care terenul este utilizat de comunitățile umane (Petrișor, 2015). Schimbările produse în utilizarea și acoperirea terenurilor sunt declanșate de procesele sociale, economice și politice încorporate în societățile umane (Napton et al., 2010).

Utilizarea și amenajarea terenurilor a fost studiată pe larg și în România. Modificările produse asupra utilizării și amenajării terenurilor reflectă dinamici caracteristice țărilor de tranziție foste socialiste, modele similare fiind observate și în țări precum Polonia și Ungaria (Cegielska et al., 2018; Kukulska-Kozieł et al. 2019).

Astfel, începând cu anul 1990, în România, schimbările socio-economice, politice și instituționale cauzate de căderea regimului comunist au provocat modificări semnificative în utilizarea și acoperirea terenurilor, cum ar fi suburbanizarea zonelor metropolitane, conversia terenurilor agricole în zone construite, fragmentarea și abandonarea terenurilor agricole, defrișări și fragmentarea pădurilor determinată de restituirea proprietății, cu impact asupra peisajului agricol și forestier, a biodiversității și a degradării habitatelor naturale (Kucsicsa et al., 2018; Petrișor et al., 2020).

Scopul lucrării de față este evidențierea transformărilor spațiale produse în utilizarea și acoperirea terenului în Municipiul Constanța, având în vedere faptul că subiectul nu este atât de frecvent abordat pentru zona litorală românească. De asemenea, monitorizarea

utilizării și acoperirii terenurilor este extrem de importantă pentru orașele costiere deoarece dezvoltarea economică rapidă are un impact negativ asupra funcțiilor ecosistemului costier (Xin et al., 2023).

Demersul își propune să aducă o nouă contribuție în domeniu, folosind diverse baze de date spațiale, precum Corine Land Cover, Corine Land Cover Coastal Zones, Corine Land Cover Plus, Urban Atlas și Esri Land Cover.

Zona de studiu este reprezentată de orașul Constanța, reședință a județului cu același nume și localitate urbană de rang 1, cu statut de municipiu, cu un intravilan ce cuprinde atât și stațiunea turistică Mamaia și satul Palazu Mare (Posea et al., 2005). Dezvoltarea economică a Constanței s-a bazat mereu sub semnul activităților portuare și turistice, iar expansiunea imobiliară necorelată cu planificarea urbanistică este specifică marilor orașe românești.

Abordarea metodologică se bazează pe integrarea unor seturi de date geospațiale care acoperă o perioadă totală de 25 de ani, din 2000 până în 2025, fapt ce a permis surprinderea, într-o măsură acceptabilă, a schimbărilor în modul de utilizare și acoperire a terenurilor.

Astfel, a fost realizată o analiză comparativă cu ajutorul datelor provenite de la 5 produse satelitare: Corine Land Cover (2000 – 2018), Corine Land Cover Coastal Zones (2012 – 2018), Corine Land Cover Plus Backbone (2018 – 2023), Urban Atlas (2012 – 2021) și Esri Land Cover (2018 – 2025).

În ceea ce privește limitarea metodologică trebuie menționată diferența de rezoluție a modelelor utilizate, care poate genera discrepanțe prin subestimarea transformărilor la scară mare. De asemenea, starea atmosferică și intervalul temporal pot aduce modificări în interpretarea imaginilor (Lam, 2008). În plus, nu există date specifice pentru analiza unor tipuri speciale de utilizare a terenurilor din zonele de coastă, cum ar fi nămolurile sau acvacultura, care sunt adesea clasificate drept terenuri neutilizate și corpuri de apă (Zhai et al., 2025).

Rezultatele acestei lucrări prezintă faptul că datele Corine (Land Cover, Coastal Zones și Plus) sunt mai amănunțite în ceea ce privește caracteristicile naturale recunoscând vegetația de pe malul Lacului Siutghiol și Lacul Tăbăcăriei, dar și îmbinarea spațiului urban cu cel industrial și comercial din centrul orașului, în timp ce datele Esri, datorită rezoluției, nu au putut identifica diferențe mari în modul de utilizare a terenurilor.

Spre deosebire de datele Corine (Land Cover, Coastal Zones și Plus), Urban Atlas este specializat pe recunoașterea categoriilor urbane, iar în ciuda intervalului de timp redus acoperit de Urban Atlas, setul de date prezintă extinderea spațiului urban, prin conversia spațiului natural sau semi-natural ori agricol. Distribuția spațială indică dezvoltarea cea mai accentuată în zona Mamaia și malul Lacului Siutghiol.

În ceea ce privește baza de date Esri, nu se constată diferențe notabile datorită rezoluției scăzute, nerecunoscând nici apariția Autostrăzii A4, ci doar modificări în zona sudică a orașului prin dispariția unor terenuri agricole.

Modelele Corine și Urban Atlas detectează schimbări în zona Mamaia, în zona periferică a Municipiului Constanța, a Lacului Siutghiol cât și apariția autostrăzii A4. De asemenea, toate bazele de date analizate (Urban Atlas, Corine, Esri) au în comun depistarea procentului ridicat al arealelor construite și conturarea unor noi direcții de dezvoltare rezidențială și comercială, către Nord și Nord – Vest, dar și o zonă industrială care înconjoară orașul și face legătura cu portul.

Din rezultatele prezentate, se observă faptul că Municipiul Constanța a trecut printr-un proces de transformare a acoperirii și utilizării terenurilor, prin creșterea suprafețelor construite în detrimentul celorlalte tipuri de folosință. Astfel, în intervalul 2000 - 2025, anumite clase au trecut prin conversii, în timp ce altele s-au modificat semnificativ ca suprafață sau chiar au dispărut. Pentru perioada analizată, în Municipiul Constanța spațiul construit s-a extins, în principal, pe seama terenurilor agricole iar pentru aprecierea acestui proces la nivel de oraș, cel mai potrivit model se dovedește ar fi Urban Atlas, întrucât acest model este realizat special pentru orașe și evită supraestimările, având valori mici, dar precise.

Articolul contribuie la evidențierea evoluției utilizării și acoperirii terenurilor din Municipiul Constanța pe baza unei metodologii de analiză și comparare a datelor satelitare provenite de la bazele de date Corine, Urban Atlas și Esri. În ciuda diferențelor de detaliu, aceste modele arată aceeași direcție generală de transformare a spațiului prin expansiunea urbană, pierderea vegetației și presiunea asupra terenurilor naturale.

Se poate concluziona că rezultatele obținute evidențiază caracterul extrem de dinamic al peisajului din Municipiul Constanța, supus unei transformări intense, cu o creștere a suprafețelor artificiale rezultată prin expansiunea necontrolată din zona periferică și din zona Mamaia, prin transformarea terenurilor agricole și a celor cu vegetație naturală în cartiere rezidențiale sau infrastructură turistică. Astfel, aceste tipare se aliniază tendințelor generale de schimbare a destinației terenurilor, subliniind necesitatea unei planificări teritoriale eficiente.