European Association *of* Archaeologists

31st EAA Annual Meeting 2–6 September 2025 Belgrade Virtual

Abstract Book

31st EAA Annual Meeting (Belgrade Virtual, 2025) - Abstract Book

Names and affiliations are reproduced as submitted by session organisers and/or authors. Language and wording of titles and abstracts have not been revised. When consecutive authors share the same affiliation, the affiliation is listed in brackets after the last author in the group.

The European Association of Archaeologists is not responsible for the content of abstracts and presentations.

This Abstract Book is for personal use only and may not be redistributed without permission.

Technical editing: Magdalena Karabáš (EAA)
Design and layout: Magdalena Karabáš (EAA)
Cover design: Miross Travel Agency

© European Association of Archaeologists, 2025
https://www.e-a-a.org

ISBN: 978-80-88441-10-6
31st EAA Belgrade Virtual Annual Meeting — Abstract Book (online PDF)

Contents

1 A United Europe of Everyday Objects: exploring our intertwined past through medieval material culture (AD 1000-1600) 12

2 But how is that Archaeology? 17

3 Archaeology of the Forgotten: Recovering Erased Pasts 22

5 Out of their element: novel methods of isotope analysis to investigate health and disease in the past 29

6 Ontological and epistemological interpretations intertwining archaeology, landscape and the sky 31

7 Surveying the past, prospecting the future of Balkan archaeological heritage 34

8 Gendering the Balkans-Balkanizing Gender: Archaeological Perspectives 40

9 It is what you make of it: imperial and private images at the borders of the Empire 43

12 Plants, humans and land use in prehistory and early history of southeastern Europe 47

14 Prehistoric Exploitation of Waterscapes and Aquatic Resources 51

15 Contextualizing cremations during the European Late Prehistory and Protohistory 56

16 Archaeology? Good god! What is it good for? (Absolutely nothing?) 62

18 Lepenski Vir and Its World: 60 Years On 62

19 Investigating food storage in archaeology through applied natural science methods: proxies, methods and theories 66

20 Material traces of totalitarian and dictatorial regimes in the 20th century hidden past 68

21 The social life of crafts(people): exploring the interplay between crafts and social structures and norms in 1st millennium BCE Europe 73

22 Shaped Margins: Morphological and Environmental Evolution of Coastal Areas in Long-Inhabited Urban Spaces 80

23 Taming the Balkans: River valleys as communication system for the early farmers settling the Balkan hinterlands 83

24 Actor, Action, and Place: The Propagation and Modification of Cult Practice in the Roman World 88

25 The spread of medieval glaze technologies: Cross-craft and cross-cultural perspectives 90

26 Empowering Heights: the Impact of Human Agency on Ancient Upland Sanctuaries between Nature and Ritual 93

28 Materiality of studying and presenting ancient religion in museums and other secondary settings 98

30 The foundation of Kyiv and the territories of the southern Rus. Current archaeological and historical research and its reception 102

31 From Tradition to Crime Scene: Building Best Practices in Forensic Archaeology 110

32 Entangling the social value of the archaeological record: unruly practices in archaeological heritage management, conservation, and dissemination 113

34 Past moves, present finds: the archaeology of games in their social context 118

35 Grave reopening in the first millennium CE - connecting European regions 122

37 ...and the LORD God formed man of the dust of the ground... Neolithic figurines – production, handling, disposal 127

38 Past ecosystems as drivers of cultural ecology: new approaches in the analysis of the human-palaeoenvironment interactions 132

39 Hearths, ovens and cooking spaces in the Mediterranean from the Late Prehistory to the Middle Ages 140

41 Making a Warrior: The Social Implications of Martial Ideologies in the Past 144

42 Decoding Time: A Transdisciplinary Approach to Address Complex Paleolithic Contexts 146

44 Replicas, copies, and fakes: moving from issue-free to issue-different solutions. New(-ish) ethical challenges in archaeological professions 154

45 The long lasting end of the middle ages between the Mediterranean and the North Sea. Approaches, methods, models 157

46 What can bodies do? The archaeology of experience 160

47 Bioarchaeology of childhood: New Perspectives on children in European Prehistory 165

48 Reflections of Vučedol Culture: Chrono-Cultural and Interdisciplinary Perspectives 171

50 New approaches to archaeoacoustic studies 175

51 Serial Crafters. Tools and Methods for Studying Ancient Seriality and Serial Productions 180

52 Shared roads of intertwined communities: shaping points of contact and divide in Islamicate societies 185

53 Neanderthal-Homo Sapiens Subsistence Differences 60,000 to 40,000 years ago in Central and Southeast Europe 188

54 Cultural heritage, architecture, and archaeology as intertwined practices: From management to alteration and sustainable design 193

55 Networks of Care and Neglect in the Archaeological Record 198

56 Heritage and Archaeology during Late Capitalism 200

57 Reconstructing the Past: Bioarchaeological Approaches in the Levant, Mesopotamia, and Iran 204

58 Digital tools for surface analysis of archaeological artifacts: integrating qualitative and quantitative approaches 206

59 Crafting Identity: A Multidisciplinary Approach to the Relationship Between Material Culture and Gender in the Mediterranean from Prehistory to Us 211

60 Research colonialism and social inequality at frontiers and frontlines 216

61 Moving away from forwards: Analysing the metaphorical structuring of archaeological thought 219

62 Other ways to explore the surface. Spatial technologies applied to territorial analysis in Archaeology .. 221

64 Storytelling Teeth: Insights into Diet, Health, and Lifestyles through Dental Anthropology 229

65 Early nomads of Iron Age around the Black Sea: Networks of exchange and interaction 242

68 Educating for Tomorrow: Pedagogy and Cultural Heritage Dialogues 248

69 Wayfaring and place-making in the Mediterranean Sea 253

70 Prehistoric objects in transition: Cultural transformation in material record 253

71 Beyond Conquest: Environmental and Cultural Impacts of Roman Expansionism 261

72 Facing complexity of the urban stratigraphy 264

73 Houses and Material Culture in the Medieval Mediterranean and Beyond: Domestic Spaces and Social Identity in Multicultural Contexts 268

74 Antiquarian Societies, Quo Vadis? 272

75 Archaeological adventures: the benefits and challenges associated with working in multiple countries and/or systems 275

76 Untangling health and disease status from a multidisciplinary bioarchaeological perspective in European megalithic populations (4th-3rd millennia BC) 279

77 From Fire to Complexity: Kiln Innovations and Socioeconomic Dynamics in Pottery Production 283
79 Worlds of Sensation: the human body, the senses and neuroscience 287
80 Human remains in settlements: burials, non-burials and...what else? 290
81 Connectivity and its impact on Cultural Dynamics during Prehistory 296
82 Jewelry and Grave Offerings as Indicators of Ritual and Identity in Prehistoric and Ancient Balkan Funerary Practices 299
83 (No) fear of the dark, refracted light, reflections and obstructions. Low-visibility challenges for 3D photogrammetric documentation in archaeology 301
87 Intertwined Narratives: Theory and Practice in Communicating Stories 304
88 Reconstructing the history of fire, control and application of thermal energy and its technical, social, symbolic and environmental consequences 309
89 Gender, sexualities and violence in the Ancient World Material Culture 311
90 Hunter-fisher-gatherers in a World Becoming Agricultural: Legacy, Persistence, and/or Resistance of Mesolithic Communities during the European Neolithic? 313
92 Beyond burials and bricks - Interdisciplinary Approaches to Unravel Social Complexity in Pre-industrial Cities and Towns 317
94 Genre, género, Geschlecht...: navigating sex and gender terminology in European archaeologies 320
96 Bridging the Gap Between Bioarchaeology and Cultural Studies in Understanding Transitions in the Past 320
97 Eastern Mediterranean Cities in Transition: New Archaeological Perspectives on Urban Landscape and Public Architecture from the Roman to Byzantine Era 327
100 Caves and Rock Shelters: the Interactions of People and Natural Environment in the Prehistory 331
101 Shifting Paradigms: the Multiple Facets of Mobility in the Bronze Age Balkans 337
102 Legal protection of archaeological heritage in times of crisis and social transformation 340
103 The Amulets, from the objects to the beliefs 340
104 Animal Diet, Reproduction, Mobility, and Health: Insights from Isotope Ratio and Biomarker Analysis 347
105 Grave Goods: Beyond Identities 351
106 Mountain Pastoralism Through Time: Archaeological Insights and Contemporary Connections 358
107 Social transformations along the Danube and adjacent Balkan regions during the 2nd millennium BCE 364
108 Adaptations and Responses to Climate Change on Islands and in Coastal Areas around the Mediterranean 371
109 Voices of the Past, Hands of the Present: Collaborative Pathways in Archaeology and Heritage Interpretation 373
110 Measuring time and open-mindedness: Interpreting radiocarbon data that does not meet our expectations but might change our perspectives 377
111 Let's Address the Other-Than-Human Animal in the Room: Moving Forward with Multispecies Archaeologies of Prehistory 383
112 LiDAR in Mediterranean Archaeology 388
113 All for one, understand human and non-human relationships in coastal and island contexts from an interdisciplinary perspective 393
114 Early Career Archaeologist Workshop: How to build an international career? 396
115 EAA Community for Climate Change and Heritage (CCH) Roundtable 396
117 Beyond Data: Towards Standardized Methods to Identify Archaeological Material 397
118 'Pecunia non olet?' — archaeologies of urban waste management 399
119 Recent developments in HH-pXRF studies and the Global p-XRF Network (GopXRF.net) 402
120 Archaeology and cultural evolution walk into a post-disciplinary bar: How ideas, practices, and artefacts spread in past communities 403
122 Of "Tribes" and "Kingdoms" in the Balkans during the Iron Age: Investigating Patterns of Social Complexity and Political Organization 408
123 From Greece to Gandhara: Alexander's Eastern Campaign and the Interaction of Eastern and Western Material Culture 413
124 Archaeological Tourism and Sustainability for Local Communities 415
125 Interregional perspectives on the 6th-5th millennia BC in the Near East: Understanding societies and technologies 418
126 Longevity secrets of ancient constructions: exploring and being inspired by building materials and construction techniques that have survived the centuries 423
127 Ancient Agroscapes. Exploring the complexity of agrarian communities in a cross-cultural and multi-analytical perspective 427
128 The Production and Diffusion of Obsidian Artefacts: Exploring Socio-Economic and Symbolic Behaviours from a Techno-Functional Perspective 430
129 Urban adaptations to climate change 436
130 Islands and Submerged Landscapes of the Palaeolithic: The Coastal and Continental Areas of the Mediterranean in Interaction 438
132 Disease, Disaster & Death: Exploring responses to health and mortality crises in the past 442
133 Intertwined through Space and Time: Artefact Use and Reuse across Cultural Contexts 445
134 Exploring Emotions in Prehistoric and Historic Contexts through Material Remains 448
135 Shaping techno-traditions at the emergence of the Neolithic between SW Asia and Central Europe 453
136 Aural and Visual Interactions in Medieval and Early Modern Sources: Interdisciplinary Perspectives on the Archaeology of Sound 458
137 Beyond the Cartesian Divide: Alternative Ontologies in Archaeological Epistemology 460
139 Professional Archaeology, Ethics and Society: The European framework 465
142 Plant power: interdisciplinary approaches to the study of non-food plant resources 467
143 Intimate Spaces, Everyday Lives: Archaeologies of Domesticity, Habit, and Home 471
144 Open Science in Textile Archaeology Education: Bridging Research, Outreach, and Engagement 477
145 Stone clocks: diachrony markers among hunter-gatherer lithic assemblages 478
146 Multi-disciplinarian Metalwork: Combining Archaeometallurgy with Cultural History 481
151 "By the vehemence of fire": Exploring Material Culture through Colour 491
152 Archaeology of Stone Sarcophagi around the Mediterranean during Antiquity: Current Research and Approaches 498
153 Dynamics of Greek colonisation: Current Research and New Perspectives 502
154 Archaeology benefitting people and places: What works? What's best? What next? Sharing successes, learning lessons and exploring ideas 507
156 Beyond the Alps: New Frontiers in South European Wetland Archaeology 512
157 Fishing Techniques in River and Freshwater Environments of Northern Europe 516
158 Utilitarian ceramics in the Mediterranean during the first millennium BCE. Simple, functional, and often overlooked 518
159 From Bones to Beliefs: Human resilience in the multi-faith Medieval Islamic Mediterranean 522
160 Frontiers and Interaction Zones. Disentangling Processes of Cultural Exchange in Liminal and Contested Areas 526
162 Tracing long-term transformations: multiscale methods for understanding past landscapes 532
163 Magisteria Minervae: Crafts and Craftworking in the Roman Military 538

164 A mountain of economies: transdisciplinary perspectives on mountain economies and landscape transformations from prehistory to contemporary age ... 541

168 MERC ROUNDTABLE. The Post-medieval Balkans: from Stereotype toward Archaeological Heritage and Science ... 545

169 Late Neolithic/Early Chalcolithic networks of change: the Lower Danubian tellscape transformations ... 545

170 Flax and Linen in Antiquity: a multidisciplinary approach ... 548

171 Understanding Neandertal Mobility: Recent Advances in Research and Dissemination ... 552

172 Exploring the Margins: Archaeology of Remote and Resource-Rich Landscapes ... 556

173 Shaping Tomorrow's Heritage Keepers: The Role of Youth Engagement in Preserving Archaeological Heritage ... 561

174 Current Research in the Americas. Beyond Artifacts: Indigenous Narratives and Archeological Co-creation in the Americas ... 564

175 The war starts over that hill: exploring warfare at the local scale in pre-industrial societies ... 567

176 Materialities of Memorialisation: Spatial Transformations and the Role of Archaeology at Sites of Recent Conflict, Oppression and Violence ... 572

177 Digging deeper: archaeology as a tool for social change ... 577

178 The Power of Public Archaeology to Tackle the Sustainable Development Goals ... 580

179 Dissemination in Archaeology: From Science to the Masses ... 584

180 Identity of Place and Space in Historical and Archaeological Context ... 590

181 Human remains in Museums: bridging narratives among ethics, science, heritage, and community engagement ... 595

182 Invisible economies: food, fibres, textiles, timber, leather, people, and more ... 599

183 Silver in the Copper, Bronze, and Early Iron Ages (c. 4000–600 BCE) across Europe, the Mediterranean, and Western Asia ... 603

184 Give me shelter! Perspectives on Archaeological Shelters: Balancing Conservation, Visitor Engagement, and Sustainability ... 605

187 Investigating ceramic building material (CBM) in different contexts - life cycles of terracotta objects ... 607

188 The Epigravettian World ... 611

189 The Adriatic Sea as a Cultural Corridor during Late Pleistocene and Early Holocene: Mobility and Interregional Contacts ... 616

190 Archaeology, oral tradition and place names – new perspectives ... 619

191 Climate Change and Archeological sites: From Knowledge to Planned Conservation ... 622

192 Water in the City. Multidisciplinary Approaches to Urban Water Management ... 630

195 More Than Megaliths: Beyond Barrows And Henges. A Global Approach to First Monumentality ... 636

196 Steep roads to complexity: cultural adaptation and occupational strategies in Mediterranean mountainous areas, from Late Bronze Age to Roman unification ... 639

197 Textile Tools Made of Hard Organic Materials: New Perspectives on Textile Production in European Protohistory and Roman Period ... 643

198 You can change friends but not neighbours. Intra-community Dynamics and Local Identities in Medieval Europe (5th–15th centuries) ... 646

199 Benefitting people and places: Towards a 'best practice' Manifesto and Guidelines supporting archaeology and archaeologists aspiring to benefit wider society ... 651

200 Human-animal relationships in a connected North Atlantic, AD 500-1500 ... 651

201 Biological and social aspects of infectious diseases in the Common Era: from case studies to population-based studies ... 654

203 Fortified by Nature, Protected by Water: Comparing Fortifications on Natural and Artifical Islands in Lakes Through the Ages ... 658

204 From Code to Cultural Heritage: Advancing AI Integration in Archaeology ... 661

205 Coming together: case studies on community coalescence in Bronze Age and Iron Age Europe ... 665

206 A profession in flux: Archaeology. Conformity vs Non-Conformity, Fear vs Happiness ... Has Popular Culture some answers? ... 668

207 Participatory approaches in archaeology and museums 20 years on from the Faro Convention's Article 12 ... 669

208 Bridging the Gaps: Multi-, Inter- and Transdisciplinary Approaches to Ancient Egyptian Settlements ... 672

209 Celts of the East: A Methodological Approach to Understanding Celtic Presence in the Danubian Area ... 677

210 Burials and Transitions in the Middle Ages ... 679

211 Focus on resilience - Sustainable Tourism and Climate-Adapted Heritage Management ... 684

213 Moving Forward: New Applications and Developments in Archaeological Mobility Studies ... 685

215 Around The Black Sea: Migrations and Mobility through Plains, Mountains and Sea in Early Holocene (c.10 000-4 000 BC) ... 688

217 MERC FORUM. Beyond Boundaries: Interdisciplinary Perspectives on the Future of Medieval Archaeology 692

220 Preventive Archaeology in Europe: Context of Exercice, Methods and Working Conditions, Part 2 ... 693

221 Deconstructing Nature: Archaeology of "Natural Spaces" and the "Modern Visual Regime" in Rural Areas ... 696

223 The rare, the common, and what everybody needs: exploring the value of aesthetics in the material record of Prehistoric Europe ... 699

224 Leave it! Creating ruins. Comparing Abandonment Processes in Europe (500 BCE-500 AD) ... 703

225 The archaeology of Roman peasantry. Looking for new research frameworks, between detection and interpretation ... 707

226 Conceptualising Loss in a Climate Crisis ... 709

228 Sardinia as Praxis: Decolonising European Archaeology through a Joint Feminist-Postcolonial Approach ... 711

229 Cores-on-Flakes during the Middle Palaeolithic and Middle Stone Age: Technology, Raw materials economy and/or functional purposes ... 714

230 What a load of rubbish! Challenges and possibilities on large urban archaeological excavations ... 717

232 Ottoman Archaeology in Europe: Along and Across the Danube ... 719

233 Iron, Pottery, Quernstones: The Political Economy of Production and Trade in the European Middle Ages ... 724

234 Between academic ivory tower, intellectual hedonism, and social responsibility. Debating the wider meaning of archaeological research and heritage management ... 727

235 The archaeology of food processing: Innovative approaches from case studies around the world ... 731

236 Metal Detected Artefacts in the Plough Zone: Information Lost or Found ... 737

237 Roam: How to make room for creative archaeology within the publishing landscape? ... 740

239 From histories of research to histories of knowledge? The status and future perspectives of the history of archaeology ... 740

240 Urbanscape and ruralscape transformation dynamics between the end of the Ancient World and the Middle Ages: new methodological approaches ... 746

242 New developments and perspectives in the methodological approach of Archaeoentomology ... 749

243 Objects, Mobility, and Creating Belonging in Archaeology: narratives revisited ... 752

245 Land use impact on archaeological heritage. What's good, what's not and how to monitor this? ... 755

246 Archaeo-anthropology and building archaeology: what dialogue for what complementarity? ... 757

247 Rural archaeological heritage – a challenge to survive - ... 758
248 Interdisciplinary Approaches to Healing Practices from Prehistory to History ... 760
251 Kinship systems and their impact on past human communities ... 763
252 Transhumance in the Mediterranean world ... 767
253 Tracking the biography of metal jewellery and clothing components: Technology, material, and (re)use ... 771
256 Metallurgy, timber and charcoal ... 775
258 Embracing the extraordinary: managing and modeling non-conforming data ... 778
259 Climate change, settlement adaptation, fluvial responses in piedmont, riverine and estuarine environments ... 779
260 Archaeology and Heritage Science. Research Infrastructure Networks as a path to a sustainable future of the sector ... 783
261 There is life outside the box: Alternative career paths in archaeology ... 785
264 Exploring the building blocks for archaeological training and skill acquisition ... 786
267 Intertwined crop histories: a multidisciplinary approach ... 787
268 Archaeology, artificial intelligence, and image analysis ... 793
269 Keeping together geospatial data and 3D models. How to bridge the gap? ... 795
272 The well-being of Archaeologists ... 798
273 Ceramic Technology and Knowledge Transmission: Analytical Approaches to Understanding Cultural Practices and Social Transformations ... 798
274 General session ... 806
276 Efficient Archaeological Data Management with ArcheoBase: From Digital Data Entry to Analysis and Publication ... 814
Index of First authors, Session Organisers & Speakers ... 816

Abstracts

Abstracts are organised according to the ID of the session which they are associated with. Each entry contains the session abstract, followed by the abstracts of related oral presentations and posters. Oral presentations appear in the order they are scheduled in the conference programme, while poster abstracts are listed at the end of each session.

particularly in the context of trade. The model was further tested by comparing it with other similar regions in northern Italy, such as Lake Como and Lake Garda, to assess its predictive efficacy. The results indicate that the model's performance is not always optimal, possibly due to the incomplete nature of the initial database in certain aspects. The results also suggest that, despite apparent similarities in the natural and geographical characteristics of the regions, human settlement patterns may have been influenced by factors that are not yet fully understood or cannot be implemented in this type of analysis. Unfortunately, the nature of the evidence does not allow for the application of an ethnoarchaeological approach, which in other contexts has proved to be a way of overcoming some of the biases of a purely geostatistical approach.

658. THE SACRED MOUNTAIN FROM THE SKIES: DRONE AND LIDAR SURVEYING IN LA PEÑA DE LO. ENAMORADOS (ANTEQUERA, SPAIN)

Contribution format: Oral
Contribution authors: Jose Ruiz Flores (Universidad de Sevilla) – David Wheatley (Southampton University) – Florian Cousseau (Durham University) – Raquel Montero Artús (Universidad de Sevilla) – Jose Antonio Lozano Rodriguez (Instituto Español Oceanografía (CSIC)) – Alexia Dorkel – Myriam Bensaïd (Université de Genève) – Jakub Niewisiewicz (Umea University) – Marie Besse (Université de Genève) – Leonardo García Sanjuan (Universidad de Sevilla)

La Peña de los Enamorados (Antequera, province of Málaga), is a limestone massif rising 886 m.a.s.l. Included in the UNESCO World Heritage List as part of the Antequera Dolmens Site since July 2016, La Peña stands out both as a remarkable landmark and as a multi-period archaeological complex. In February 2024, a survey campaign was carried out with the aim of synthesising the enormous archaeological record that La Peña de los Enamorados as a whole presents and to create its first preliminary detailed archaeological cartography. As part of the survey work, a high-resolution drone, with photogrammetric, LiDAR and thermal cameras was used, allowing us to obtain, for the f irst time, aerial reconnaissance images of this site. In this paper we will present the results of these flights, including the discovery of new megalithic tombs and settlement areas, not visible at ground level. These new discoveries add to the rich heritage of a high-profile World Heritage site. Legend, archaeology, landscape and now technology come together to give us new perspectives on a unique and yet poorly-understood archaeological site.

728. ELUSIVE LANDSCAPES: REMOTE SENSING IN ADVERSE LOCATIONS IN ATLANTIC IBERIA

Contribution format: Oral
Contribution authors: Rodrigo González Camino – César Parcero-Oubiña – David González-Álvarez (Institute of Heritage Sciences (INCIPIT-CSIC))

Iron Age in the northwest of the Iberian Peninsula is characterised by the study of the castros (Hillforts). This type of settlement is the only one archaeologically recorded for the entire region, with a wide profusion throughout the territory. For this reason, Iron Age studies have tended to focus in the analysis of settlements, in the absence of other forms of evidence related to this period. This work proposes the use of different remote sensing tools, in order to carry out off-site surveys of the castros. This methodology is systematically applied in three working areas selected in three northwestern provinces (Asturias, A Coruña and Ourense), where a significant amount of new archaeological sites are identified, as well as possible structures associated with the Iron Age out of the castros. In this way, new research lines on new forms of materiality are proposed, while at the same time providing experience in the application of this type of methodologies in the northwestern territory.

749. ARCHAEOLOGICAL RECONNAISSANCE IN EASTERN KAZAKHSTAN USING SATELLITE IMAGERY: ON THE WAY TO THE USE OF NEURAL NETWORKS AND MACHINE LEARNING

Contribution format: Oral
Contribution authors: Andrey Pushkarev (East Kazakhstan Regional Museum of History and Local Lore)

East Kazakhstan is one of those unique territories, many parts of which are still 'terra incognita' for archaeologists. The inaccessibility of the mountainous areas and the low level of urbanization of the territory ensured the unique preservation of a large number of archaeological sites. At the same time, these conditions have made it significantly more difficult to investigate these sites using traditional archaeological surveys. As a result, a significant part of the objects remains unknown to researchers. To solve this problem, a program for searching archaeological sites using satellite imagery data was developed. Two sections of the territory of the Abay region of Eastern Kazakhstan were selected for the research, reflecting different landscape zones: Tarbagatai Ridge (mountains) and Saryarka (steppe and hills). At the preparatory stage, the previously identified archaeological sites were mapped. During the search stage, a continuous visual viewing of satellite images was carried out by grid cells. The area of 26,857 sq km was surveyed and 997 new objects with signs of archaeological sites were identified. At the conference, we would like to talk in detail about the work methodology, which turned out to be very effective for searching for archaeological sites using satellite imagery data. Its important feature is the use of free software and open map services, which makes it accessible to most researchers. The accumulated database of archaeological sites allows us to move on to the next step - the use of machine learning technology and neural networks to search for unknown archaeological sites throughout the whole territory of Eastern Kazakhstan. At this stage, we would like to discuss with experts how we can build further research. The research was carried out under the project BR24992916 'Comprehensive historical and archaeological research of the Abay region.'

1133. SPATIAL TECHNOLOGIES USED TO RECONSTRUCT THE ECONOMIC BACKGROUND OF VILLAGES FROM THE LATE MIDDLE AGES TO THE PRESENT DAY

Contribution format: Oral
Contribution authors: Josef Petráš (Archaeological Institute of the Slovak Academy of Sciences)

The paper deals with the use of LiDAR and GIS (Geographic Information Systems) in combination with the study of archival written and cartographic sources to reconstruct the economic background of villages in the early modern and late medieval period. The study examines villages in the area of the former manor of Brtnice in the present-day Bohemian-Moravian Highlands in the Czech Republic and the manor of Krásna Hôrka in present-day Slovakia. Both areas are situated at an altitude of 450 - 600 metres above sea level. The settlement of these areas dates back to the 13th century, when the higher parts of both territories began to be populated with the so-called German colonisation. As these villages were established under German medieval law, the parcelling of the land remained virtually unchanged until the 1950s. In those years, Czechoslovak land was collectivised and individual plots were merged into larger units, destroying the original layout of the land. Aerial photographs taken before collectivisation can be used to reconstruct the original economic background of villages. Other important sources for such studies are cadastral maps from the second half of the 19th century and land registers from the 16th century, as well as LiDAR, which are available for both study areas. Once all this data has been converted into a GIS , it will be possible to create models of the landscape, identify the owners of individual farmsteads from the old land registers and the area of land they owned, and also, thanks to LiDAR, to discover structures that are now invisible. Another output will be the ability to trace the evolution of the landscape and its use over the last 200 years.

766. BIRD'S-EYE VIEW: A PRELIMINARY APPLICATION OF GIS TOOLS AND MACHINE LEARNING MODELS TO CHALCOLITHIC/BRONZE AGE SELECTED SOUTHWESTERN IBERIAN AREAS

Contribution format: Oral
Contribution authors: António Diniz (Universidade de Évora, CHAIA, IN2PAST | Universidade de Évora, CIDEHUS) – Enrique Cuenca (Complutense University of Madrid) – Leonor Rocha – Inês Ribeiro (Universidade de Évora, CHAIA, IN2PAST) – Nelson Almeida (Universidade de Évora, CHAIA, IN2PAST | University of Lisbon, UNIARQ)

Research on the transition from the Chalcolithic to the Bronze Age in the Iberian Peninsula has seen successive updates and developments in recent decades. Several research projects address these issues, and many sites have been added to the repertoire depicting these cultural, social, and demographic changes. However, only in recent years have new technologies been applied to these realities, as resources that allow us to see beyond materiality in its singularity and tools to allow us to perceive the whole, both at a local and regional level. This study aims to present preliminary data on these topics, using GIS tools and Machine Learning models to understand settlement patterns in the Guadiana River (Portuguese and Spanish territories) during the Chalcolithic/ Bronze Age transition. By combining information on the types of settlements, their topography, and resources in the area, we can start assembling a picture of how these communities occupied the landscape and adapted their lifestyle to the new contingencies that they faced between the 3rd and 2nd millennia BCE.

1358. MSTĚNICE, THE CENTRAL SETTLEMENT AND ITS HINTERLAND. MODERN METHODS OF RECONSTRUCTING THE APPEARANCE OF THE SETTLEMENT AND THE CULTURAL-HISTORICAL LANDSCAPE

Contribution format: Oral
Contribution authors: Kamila Hanáková (Institute of Archaeology and Museology, Faculty of Art. Masaryk University)

The deserted medieval village of Mstěnice is located in the Czech Republic, in the Vysočina Region, within the Bohemian-Moravian Highlands, at an elevation of approximately 350 meters above sea level. The main focus of this thesis is a comprehensive analysis of the landscape and settlement, with an emphasis on the deserted medieval village of Mstěnice and its cultural-historical context. The development of this area has been traced primarily during the transition to late medieval settlement and from the village's abandonment in 1468 to the present day. The core of the thesis is focused on the development of settlement and its role within the structure of the manor, political and administrative evolution, transformation of the landscape in the High and Late Middle Ages, and the consolidation of the normative village and its surroundings. A combination of traditional historical records and