

CA23150 - pan-EUROpean BioGeodynamics network (EUROBiG)

Zoom: <https://us06web.zoom.us/j/78455044451?pwd=3LMpTnbUwudbuuXeDatF14bO4XEbl2.1>

2025 Meeting Program

Sunday, 15 June 2025	
Arrival	

Monday, 16 June 2025	
Session 1: Tectonics & Landscape (Pietro Sternai)	
09:00-09:10	Opening
09:10-09:50	Invited talk 01 – Presenter: Trond Torsvik
09:50-10:30	Invited talk 02 – Presenter: Sean Willett
<i>10:30-10:50</i>	<i>Coffee Break</i>
10:50-11:10	1-min (1-slide) poster presentations
11:10-12:00	Posters
<i>12:00-13:30</i>	<i>Lunch Break</i>
Session 2: Climate & Carbon cycle (Benjamin Mills)	
13:30-14:10	Invited talk 03 – Presenter: Maura Brunetti
14:10-14:50	Invited talk 04 – Presenter: Steve Mojzsis
<i>14:50-15:20</i>	<i>Coffee Break</i>
15:20-15:50	Meeting with speakers in a Round Table discussion
15:50-16:30	Posters
<i>16:30-18:00</i>	<i>Plenary Discussion</i>
Free Evening Program	

Tuesday, 17 June 2025	
Session 3: Life evolution & Biodiversity (Nevena Andrić-Tomašević)	
09:00-09:40	Invited talk 05 – Presenter: Loic Pellissier
09:40-10:20	Invited talk 06 – Presenter: Hélène Morlon
<i>10:20-10:50</i>	<i>Coffee Break</i>
10:50-11:10	1-min (1-slide) poster presentations
11:10-12:00	Posters
<i>12:00-13:30</i>	<i>Lunch Break</i>
Session 4: Geochemistry & Nutrients Cycle (Barbara Kremer)	
13:30-14:10	Invited talk 07 – Presenter: Desiree Roerdink
14:10-14:50	Invited talk 08 – Presenter: Sasha Turchyn
<i>14:50-15:20</i>	<i>Coffee Break</i>
15:20-15:50	Meeting with speakers in a Round Table discussion
<i>15:50-17:20</i>	<i>Plenary Discussion</i>
Meeting dinner:	
19:00-21:00	Meeting dinner - Restaurant Parlament (https://maps.app.goo.gl/UN6voqMDWkZupqzJA)

Wednesday, 18 June 2025	
Session 5: Ultra-long-term Habitability & Human Society (Steve Mojzsis)	
09:00-09:40	Invited talk 09 – Presenter: Marie-Luise Steinmeyer
09:40-10:20	Invited talk 10 – Presenter: Helmut Lammer
<i>10:20-10:50</i>	<i>Coffee Break</i>
10:50-11:10	1-min (1-slide) poster presentations
11:10-12:00	Posters
<i>12:00-13:30</i>	<i>Lunch Break</i>
Compulsory Management Committee meeting	
13:00-17:40	
<i>14:30-15:00</i>	<i>Coffee Break</i>

List of presented invited talks:

- IT01 - Trond H. TORSVIK - *Planetary Habitability and Plate Tectonics*
- IT02 - Sean D. WILLETT, Ao LUO, Yanyan WANG, Zhiheng WANG, Loïc PELLISSIER - *Planetary Habitability and Plate Tectonics*
- IT03 - Maura BRUNETTI - *Climate stability: mechanisms leading to greenhouse and icehouse regimes*
- IT04 - Stephen J. MOJZSIS, Barbara KREMER, Johanna MARIN-CARBONNE, Christoph HEUBECK, Paul MASON - *BIOGEOSPHERE: Multiple sulfur isotopes track the advent of photoautotrophy in the Paleoproterozoic (ca. 3.4-3.5 Gyr ago)*
- IT05 - Loïc PELLISSIER - *Planets and Life: Evolving Together Through Time*
- IT06 - Hélène MORLON - *Studying the evolution of biodiversity in its paleoenvironmental context using phylogenetic diversification models*
- IT07 - Desiree ROERDINK, Paul MASON - *Sulphur cycling on the early Earth: insights from ancient sulphate and sulphide minerals*
- IT08 – Alexandra V. TURCHYN - *The role of epicontinental seas in global nutrient cycles*
- IT09 - Marie-Luise STEINMEYER, C. DORN - *Super-Earths and sub-Neptunes, strange but habitable?*
- IT10 - Helmut LAMMER - *Are “Earth-like Habitats” common?*

List of posters:

Session 1: Tectonics & Landscape

- PP07 – Attila BALÁZS - *Tectonics-surface processes interactions during the Wilson cycle*
- PP09 – Michal ŠUJAN, H. STEFFEN, A. BITINAS, L. GEDMINIENĖ, M. KOVÁČOVÁ, O. DAVYDOV, J. JUILLERET - *Testing the glacial isostatic adjustment as a cause of an Early Pleistocene river network rearrangement in the Baltic area*
- PP12 – Rouxian PAN, Michal ŠUJAN, Rastislav VOJTKO - *New ¹⁰Be-derived catchment-wide denudation rates shed light on the uplift history of the Malá Fatra Mts. (Western Carpathians)*
- PP13 – Oguz Hakan GÖĞÜŞ, DİNÇ Ö. GÖĞÜŞ - *Sea level change and surface uplift in the Aegean controlled by crustal dynamics*
- PP18 – Mehmet Cihat ALÇIÇEK - *Neogene palaeogeography of SW Anatolia inferred from Tectonic-Sedimentation-Climate interactions*
- PP19 – Pietro Sternai, A. Meroni, Bram Vaes, Pasquero C. - *Dynamic Topography and the Mantle Forcing on Climate*
- PP22 – Ioannis BAZIOTIS I., E. MPOSKOS, A. KROHE - *UHP metamorphism in Greece: Petrologic data from the Rhodope Mountains*

- PP25 – Nevena ANDRIĆ-TOMAŠEVIĆ, O. MANDIĆ, R. ŠAMARIJA, K. MUŽEK - *Dynamics of low mountain ranges drove a biodiversity burst in SE during the Miocene-Climatic Optimum*
- PP26 – Mustafa OZAN OZKOK - *Classification of Tectonic Coal Destruction Types Using Convolutional Neural Networks*

Session 2: Climate & Carbon cycle

- PP01 – Laurie MOINAT, Florian FRANZISKAKIS, Christian VÉRARD, Daniel GOLDBERG, Maura BRUNETTI - *Development of a new biogeodynamic tool for exploratory climate modelling*
- PP05 – Robert NEWTON, A. C. ROPER, C. T. S. LITTLE, S. W. POULTON, P. B. WIGNALL, C. V. ULLMANN, - *Sodium incorporation into belemnite and bivalve carbonate: A novel seawater calcium proxy?*
- PP08 – Marie MARTIN - *Geological carbon cycle in digital Earth sisters*
- PP10 – Bram VAES, Pietro STERNAI, Alexis LICHT, Erwan PINEAU, Yannick DONNADIEU - *The impact of palaeogeographic boundary conditions on early Cenozoic climate simulations*
- PP11 – Boce MITREVSKI, Blagoj MITREVSKI - *Hydrogen economy, myth or reality*
- PP14 – Nurinisa ESENBUGA - *From Pastoralism to Geobiology: The Contribution of Animal Life to Earth Surface Dynamics*
- PP15 – Omer Cevdet BILGIN - *Species Diversity in Ecological Balance and Geobiological Feedbacks*
- PP17 – Niklas WERNER, Christian VÉRARD, Maura BRUNETTI, Taras GERVA, Paul TACKLEY - *The Impact of Palaeogeographic Reconstructions on Phanerozoic Climate Simulations*
- PP19 – Pietro Sternai, A. Meroni, Bram Vaes, Pasquero C. - *Dynamic Topography and the Mantle Forcing on Climate*

Session 3: Life evolution & Biodiversity

- PP04 – Ibrahim OZTURK, M. S. DOGRU - *Exploring Biodiversity and Ecosystem Complexity Through AI and Immersive Technologies in Middle-Level Learning Contexts*
- PP06 – Andrej SPIRIDONOV, Shaun LOVEJOY, Simona BEKERAITĖ, Ivona JUCHNEVIČIŪTĖ, Robertas STANKEVIČ - *Megaclimate and differential excitability of diversity — the three time scales of mammalian macroevolution*
- PP14 – Nurinisa ESENBUGA - *From Pastoralism to Geobiology: The Contribution of Animal Life to Earth Surface Dynamics*
- PP15 – Omer Cevdet BILGIN - *Species Diversity in Ecological Balance and Geobiological Feedbacks*
- PP16 – Łukasz KRUSZEWSKI, Iwona DEMBICZ, Adam STEBEL - *(Burning) post-coal-mining waste heaps: a biogeodiversity marker of “Anthropocene”*
- PP21 – Leonid SHUMLYANSKY - *Evidence of Proterozoic life in the Ukrainian Shield*
- PP23 – Esteban ACEVEDO-TREJOS, J. BRAUN - *Modelling the co-evolution of life, climate and landforms*

- PP25 – Nevena ANDRIĆ-TOMAŠEVIĆ, O. MANDIĆ, R. ŠAMARIJA, K. MUŽEK - *Dynamics of low mountain ranges drove a biodiversity burst in SE during the Miocene-Climatic Optimum*
- PP27 – Fatma ÖZGE ÖZKÖK - *CNN-Based Classification of Native Plant Species for Biodiversity Applications*
- PP28 – Bernd PÖLLING - *Living Lab on reforestation on forest disaster areas*
- PP29 – Ofir KATZ, R. F. Moura, M. Sternberg - *Plant silicon drives plant community properties and ecosystem structure*
- PP30 – Ofir KATZ, R. F. Moura, M. Gruntman, M. Sternberg - *Variation in plant ionomes across bioclimatic regions and functional groups*

Session 4: Geochemistry & Nutrients Cycle

- PP03 – Biltan KÜRKÇÜOĞLU, Mehmet TEKİN YÜRÜR, Berivan GÜNEŞ, Tanya FURMAN, Barry HANAN - *The evidences of deep melting processes in xenolith bearing mafic rocks in Southern Thrace region, Türkiye: The new insights for peridotite and the pyroxenite source melting*
- PP05 – Robert NEWTON, A. C. ROPER, C. T. S. LITTLE, S. W. POULTON, P. B. WIGNALL, C. V. ULLMANN, - *Sodium incorporation into belemnite and bivalve carbonate: A novel seawater calcium proxy?*
- PP14 – Nurinisa ESENBUGA - *From Pastoralism to Geobiology: The Contribution of Animal Life to Earth Surface Dynamics*

Session 5: Ultra-long-term Habitability & Human Society

- PP20 – Taras GERGA, Nickolas MOCETI BARDI1, Shun-Ichiro KARATO, Robert STERN, Motohiko MURAKAMI - *Water-induced buoyancy in the mantle transition zone stabilises surface ocean mass on rocky (exo)planets*