



### **In this issue:**

Naturtejo Geopark in Lisbon International Tourism Fair  
Entrepreneurs from UNESCO Lauhanvuori - Hämeenkangas Geopark review partners of  
Naturtejo Geopark  
International Seminar on Community Tourism takes Geoparks to Guatemala  
...and more!

# **CRUZIANA**

**NATURTEJO UNESCO GLOBAL GEOPARK - E-MAGAZINE**



# MONTHLY ACTIVITIES



**March 1st to 5th – Naturtejo Geopark in Lisboa Tourism Fair.** Naturtejo Geopark attended Lisboa Tourism Fair 2023, in another joint attendance with Portuguese Geoparks.

The BTL is the largest tourism stage in the country, attracting thousands of national and international visitors which, besides being a meeting point for professionals, is an important showcase for a wider and more diversified public.

This year the bet of the Portuguese Geoparks was again on strengthen the Geopark brand, as a Sustainable Tourism destination, and promote tourism products in network, developed with the Tourism of Portugal. Besides the UNESCO Global Geoparks Naturtejo, Arouca, Azores and Terras de Cavaleiros, also attended the territories Oeste, whose application was already presented to UNESCO, and Algarvensis, preparing the application.

Naturtejo Geopark presented its territory and promoted touristic programs 'Tours by Naturtejo Geopark', as well as the Programs 100% Responsible by Geoparks, a differentiating touristic offer, implemented by partner companies of touristic animation, which meet economic, environmental and social sustainability requirements. Naturtejo Geopark was also in the Hosted Buyers Program, dedicated to international buyers, having met several European operators, in the format of 'speed networking'.

The Portuguese Geoparks venue received several official visits, namely the President of the Republic, Marcelo Rebelo de Sousa, the Secretary of State for Tourism, Nuno Fazenda and the President of the Regional Government of the Azores, José Manuel Bolieiro.

The Presidents of the Portuguese Geoparks, Armindo Jacinto, Margarida de Belém and Benjamim Rodrigues, met with the Governor of Rio Grande do Norte, Fátima Bezerra, the Secretary of Tourism, Aninha Costa and representatives of the Seridó Geopark to discuss the creation of a UNESCO Global Geoparks Forum of Portuguese language. According to the Governor Fátima Bezerra: "we will join efforts to work more and more in an integrated way, in order to help each other in several areas". For the President Armindo Jacinto, with this initiative "we will strengthen the Global Geoparks Network in Portugal and Brazil, especially the existing communities in each one of them and their respective cultures". In parallel took place a technical meeting, between Portuguese Geoparks, Tourism of Portugal, the Secretary of Tourism of the State of Rio Grande do Norte (Brazil) and Embratur (Brazilian Agency for Tourism International Promotion) to discuss some of the networking strategies developed in Portugal, aiming to bring closer the work between UNESCO Global Geoparks of Portuguese language.

Along the five days the international brand GEOfood was in great highlight with joint tastings, where Naturtejo Geopark presented the geoproducts Geocakes, Ervas da Zoé, Viladoce, the olive oils RODOLIV and Egitânia and the cheeses Flores, Fonte Insonsa and Vale de Alfaia.

Several partners of Naturtejo Geopark visited the stand for meetings and networking, as the agricultural producers Vale de Alfaia that, besides the sheep cheese, gave to know the new Touristic Experiences in the farm, from the pasture, to the milking... from the olive grove to the cheese factory.... Also Geocakes delighted the visitors with a breakfast from the Bio-Region of Idanha-a-Nova.

During the weekend, the Portuguese Geoparks space promoted several activities for children, in the BTL Kids program, with games, pastimes, challenges and the mascots Judite, the Trilobite from Naturtejo Geopark and Martim from Terras de Cavaleiros Geopark.

The stand promotion was made by a team of 20 people, from which were Carla Jacinto and Joana Rodrigues from Naturtejo Geopark, supported by more around 10 people that ensured the logistic operation and the digital communication during the fair.



**March 3rd - Field Trip "Bio and Geodiversity in the Erges River Canyon, in Segura", as part of the Annual Project "We have a Border at the Door".** The field trip started with a guided visit to the Biodiversity Interpretation Centre "Lands of Idanha", in Segura, where participants could learn more about the living species and different habitats of Idanha-a-Nova's municipality and observe some rock and mineral samples of Segura's village. Then, students made a short walk to Erges River, which marks the border with Spain, to visit the Geomonument "Erges Gorge" area. Along the trail students identified the main fauna species (especially griffon vultures) and flora observed, as well as the rocks.

The field trip was attended by 20 students from the Kindergarden and Primary School of Penha Garcia, accompanied by their educator, teacher and three educational assistants. The instructor of this activity was Manuela Catana.

**March 6th to 8th - Educational resources presented at the International Conference on Technology, Education and Development in Valencia.** INTED2023 - 17th Annual International Technology, Education and Development Conference was held in Valencia (Spain), an event dedicated to teaching and learning methodologies where new trends and technological approaches are annually discussed.

Professor Pedro Silva from the Polytechnic Institute of Castelo Branco presented the communication "MVGEOPARK 360° - The digital to teach Biodiversity, Geodiversity, Historic and Cultural Heritage", resulting from academic work developed in partnership with Naturtejo Geopark.

**March 8th and 9th - Naturtejo Geopark represented in the Computing and New Technologies Forum 2023.**

Naturtejo Geopark participated in INFOTEC - Informatics and New Technologies Forum 2023, which occurred in the Superior School of Technology of the Polytechnic Institute of Castelo Branco. This event gathers annually students, schools and external entities, for the promotion and knowledge sharing in the technology area, with the purpose to provide the students a direct contact with companies of the sector, technological poles and recruiting entities, as well as experts from the business environment.

The program included the presentation of digital tools about the Naturtejo Geopark, developed in partnership with Superior School of Technology.



**March 9th and 15th - Training actions for tourism professionals on Geodiversity in Oleiros.** This year, Oleiros Municipality implements the Blue Flag Program, in partnership with Naturtejo Geopark, whose theme at national level for 2023 is Geodiversity. The first of these initiatives is a cycle of training actions for professionals in the Tourism sector, including municipality technicians, tourism animation companies, accommodation, catering, craftsmen and local producers. The actions integrate both theory and practice, with several field trips to geosites and other points of tourist interest, including infrastructures and services. The sessions have brought together all the agents involved, allowing the debate of ideas and construction of a joint strategy, based on identifying potential threats and taking advantage of existing opportunities. With a character that is intended to be regular throughout the time, the initiative has been lead by Joana Rodrigues from Naturtejo Geopark and Inês Martins from the Municipality of Oleiros.



**March 12th and 13th - Entrepreneurs from UNESCO Lauhanvuori - Hämeenkangas Geopark review partners of Naturtejo Geopark.** A group of entrepreneurs and project managers from the food sector of Lauhanvuori - Hämeenkangas Geopark and the aspiring territory Kraatterijärvi - Impact Crater Lake (Finland) visited the Portuguese Geoparks. The aim of this one-week technical visit was to know the strategies of each Geopark for sustainable food within the GEOfood brand, as well as the joint strategy of national scope, developed in collaboration with the Tourism of Portugal which includes training and qualification, promotion, educational programs and structuring of tourist experiences and products. The first stop of this visit was Naturtejo Geopark, in Monsanto, where the group had the opportunity to know the GEOfood Menu of the GeoRestaurant Petiscos & Granitos and the Monsanto GeoHotel School.

The technical visit included the Geocakes Atelier (Idanha-a-Nova), where business and sustainability strategies were discussed, as well as the geoproducts design process. In Quinta do Vale de Alfaia (Sobral do Campo, Castelo Branco) the delegation knew good practices of agricultural production and the cheese factory in organic production mode.

After Naturtejo Geopark, the group went to Estrela, Terras de Cavaleiros and Arouca, in a week dedicated to good practices, partnerships and networking.



### **March 19th - "Learning so much...in such a short time": teachers in training by Muradal Mountain Range.**

The informal group of sciences teachers known as "Geoapanhados" returned to Naturtejo UNESCO Global Geopark for one more training action. In a day dedicated to the rocks and landscapes of the Muradal Mountain, the group was guided by the geologist Carlos Neto de Carvalho, scientific coordinator of Naturtejo Geopark. About 30 teachers from all over the country visited some of the sites of geological relevance that can be found along the Great Muradal-Pangeia Route, which is included in the International Appalachian Trail. The aim was to "understand geological concepts and processes from the examples that exist in the Muradal Mountains", stressed Carlos Neto de Carvalho welcoming the group in Estreito.

The journey took place through rocks that date back to a time period between 480 and 435 million years ago. Teachers discovered the secrets of the fossils found in Portelo or in Pedreira da Penha Alta and were invited to analyse the "skeleton" of the Muradal Mountain near the Zebro belvedere, nowadays in a process of deserved requalification. After the "snack with geology" at Cabeço Mosqueiro Park, participants walked along the slopes of the national road outside Orvalho searching for fossils and sedimentary aspects that would allow them to understand the evolution of the paleoenvironmental conditions that led to the triggering of an Ice Age 445 million years ago. This was the motto to talk about the mechanisms promoting climate change, in the outcrops where one of the evidences of such an ancient glaciation can be found, next to Zêzere River, already close to the Zêzere Gorge geomonument. The tour ended at sunset in the municipality of Pampilhosa da Serra, at the Santa Luzia Dam.

These educational and geotouristic initiatives for groups and entities have occurred in increasing number in the territory, with the support of Naturtejo, EIM and the municipalities that constitute the UNESCO classified territory. The Muradal Mountain shows a huge potential for this kind of activities and several were the emblematic places of this mountain that were excluded from the visit due to lack of time, such as Fraga da Água d'Alta waterfall. Sure that "Geoapanhados" will come back, it is expressed in the acknowledged words of the organizer of the initiative, Professor Francisco Sousa, the success of this excursion, the usefulness of the training for the attending teachers, but also the much that was left to be seen: "We learned so much...in such a short time!".

### **March 22nd - World Water Day marked by the Portuguese Association of Geologists with the first "Geological Minute" dedicated to Penha Garcia Ichnological Park.**

The "Geological Minute" is a new project that results from the partnership between the Portuguese Association of Geologists and the Portuguese Geoparks. The first "Minute" was dedicated to Naturtejo Geopark and the Ichnological Park of Penha Garcia with two videos directed by Andrea Baucon with the geopark team and the support of 20 students, educator, teacher and 3 assistants from the Kindergarden and Primary School of Penha Garcia. The videos can be found in the social networks of Naturtejo Geopark and APG.



© Marganda Antunes

**March 22nd - World Water Day marked with the presentation of the Hydrogeological Heritage of Naturtejo Geopark.** The Earth Sciences Department of the Science School of University of Minho marked the World Water Day with a meeting dedicated to the importance of the adequate management of this resource. The initiative, in the scope of the Hydrogeology discipline, gathered students and ex-students of the Department who shared professional experiences with students of the Geology and Biology-Geology degrees. Joana Rodrigues presented the Hydrogeologic Heritage of Naturtejo Geopark, as well as the geopark's contribution to achieve the goals of the Sustainable Development Goal 6 - "clean water and sanitation for all". There was time for a water tasting that challenged the senses and the knowledge of the students.

**March 20th, 23rd and 24th - Training actions of the All for All Programme of the Portuguese Tourism Board in partnership with the Portuguese Geoparks.** The Tourism of Portugal, in partnership with the Portuguese Geoparks, promoted a cycle of training actions under the All for All Programme, which aims to make the national tourism offer accessible. This initiative was addressed to tourism professionals from municipalities, management entities of cultural facilities, accommodation and catering, as well as agents of tourism animation and event promoters. The subjects addressed covered several areas, with special emphasis on clarifying the concept of accessible tourism, different types of limitations that the public may present, trends and business opportunities, as well as the existing technical tools to help tourism agents provide adequate service to these clients. The sessions were divided into the following themes: accessibility in cultural facilities, events and bathing areas, accessibility in tourist accommodation and restaurants and accessibility in tourist entertainment and events, including good practices implemented in various territories. It was the case of Moinho do Maneio, partner accommodation of Naturtejo Geopark, with Anabela Martins sharing several strategies that have been recognized, contributing to an accessible tourist experience that starts on the website when choosing and booking the accommodation. All training contents are already available in the Business platform of Tourism of Portugal.

**March 24th - Successful defended Master Thesis on Naturtejo Geopark's hydrogeological heritage.** The Brazilian student Maria Elisa Moura defended her Master thesis at the Faculty of Sciences, University of Lisbon under the theme "Hydrogeological study of the synclinal of Ródão (municipality of Vila Velha de Ródão, Naturtejo UNESCO Global Geopark)". The student was supervised by Professor Dr. Rosário Carvalho with the support of Naturtejo Geopark. The aim of this thesis was to determine the water reserves available in the quartzite aquifer of the Ródão syncline. The excellent results were already shared with the municipality of Vila Velha de Ródão, which will use them in a long term water management plan. Further studies on the main aquifers of the territory were promised, aiming to quantifying the availability of groundwater to mitigate the reduction of water availability resulting from climate change.



**March 23rd to 31st - International Seminar "COSENDER+10: HERITAGE AND COMMUNITY-BASED TOURISM, RESPONSIBLE USE AND CONSERVATION " in Guatemala, with Naturtejo Geopark support.** Naturtejo Geopark embraced the International Seminar on Heritage and Community Tourism organized by the Tourism Academic Committee of the Universidad del Valle de Guatemala. In an initiative that brought the experience of this European Geopark and of the Tuscan Mining Geopark, in Italy, it was discussed the importance of the local, natural, historical and cultural heritage, for the touristic valorisation of the territories. Several projects in Guatemala and in other regions of the Americas were presented and also Carlos Neto de Carvalho was invited to participate in this hybrid meeting to give his testimony about Naturtejo Geopark and the development opportunities that UNESCO Global Geoparks make possible.



**March 25th to 27th - PhD student at Università degli Studi di Torino analyses examples in Naturtejo Geopark.** Andrea Gerbaudo is a PhD student developing work in Geoparks, Education and Sustainable Development and in the scope of the study visit he is doing to the Portuguese Geoparks he intends to analyse in which ways these UNESCO geoparks promote the Goals for Sustainable Development in their educational programmes. In his first visit to Naturtejo Geopark, Andrea Gerbaudo had the opportunity to meet with Carlos Neto de Carvalho and Andrea Baucon in Penha Garcia to discuss the educational programs of Naturtejo Geopark and the new educational resources in development. With Andrea Baucon, the Italian palaeontologist hired by Idanha-a-Nova Municipality to develop new multimedia contents, he visited the Ichnological Park of Penha Garcia and the Barrocal Park, besides the Living Science Forest Center, the main educational resources currently existing in Naturtejo Geopark.



**March 27th and 28th - 49th Meeting of the Coordination Commission of the European Geoparks Network in Hateg, Romania.** The last edition of the Coordination Commission of the European Geoparks Network meetings was an excellent organization of the Hateg UNESCO Global Geopark. The meeting had novelties and was more interactive. Highlight for the working groups, in which Carlos Neto de Carvalho was once again the catalyst of the Working Group for Tourism, with more than 20 participants. Other interactive workshops also took place on a new form of organization of the European Geoparks Network, which collected the enthusiasm of all participants. Naturtejo Geopark was represented by Carlos Neto de Carvalho and Joana Rodrigues.



# IMPACT OF GEOPARK IN MEDIA



## TV & Radio

- March 20th (Rádio Urbana) - Finnish entrepreneurs visit Naturtejo Geopark
- March 21st (Rádio Urbana) - "Learning so much...in such a short time": teachers in training by the Muradal Mountains
- March, 23rd (Rádio Castelo Branco) - Teachers in training by the Muradal Mountain
- March 23rd (Beira Baixa TV) - "Learning so much...in such a short time": teachers in training by the Muradal Mountains
- March 24th (Radio Cova da Beira) - Finnish know food sustainability in the Portuguese Geoparks
- March 26th (Beira Baixa TV) - Teachers in training at the Muradal Mountain

## Newspapers & www

- March 9th (Expresso-Boa Cama, Boa Mesa) – Castelo Branco in the palm of your hand: app invites you to discover the best of the region
- March 11th (nit.pt) – This 16 metre high watchtower has the best view of Talhadas Mountain
- March 11th (nit.pt) – The big showcase was used
- March 20th (<https://feirasdesabores.com/>) – Finnish entrepreneurs visit Naturtejo Geopark
- March 20th (diáridigitaldecastelobranco) – Finnish entrepreneurs visit Naturtejo Geopark
- March 21st (pinhaldigital.com) – Finnish entrepreneurs visit Naturtejo Geopark
- March 21st (diáridigitaldecastelobranco) – "Learning so much...in such a short time": teachers in training by the Muradal Mountains
- March 22nd (passear.com) – Finnish entrepreneurs visit Naturtejo Geopark
- March 23rd (pinhaldigital.com) – "Learning so much...in such a short time": teachers in training by the Muradal Mountains
- March 23rd (presseagence.fr) – EVAZION destinations, more than 60 exceptional spots to put your van
- March 27th (diáridigitaldecastelobranco) – Naturtejo Geopark implements GEOfood brand to value food traditions
- March 27th (lusa.pt) – Naturtejo Geopark implements GEOfood brand to value food traditions
- March 27th (viagens.sapo.pt) – Naturtejo Geopark implements GEOfood brand to value food traditions
- March 27th (Expresso) - Between the Boulders Trail and the giant rocks of Monsanto
- March 27th (Município de Oleiros) – Training for tourism agents in Oleiros
- March 27th (Noticias ao Minuto) – Naturtejo Geopark implements GEOfood brand to value food traditions
- March 27th (Visão) - Naturtejo Geopark implements GEOfood brand to value food traditions
- March 29th (Gazeta do Interior) - Teachers in training at Muradal Mountain
- March 30th (Reconquista) – "Geoapanhados" in training at Moradal
- March 30th (Beiranews) - "Learning so much...in such a short time": teachers in training by the Muradal Mountain

# SCIENTIFIC CONTRIBUTIONS FOR THE GEOPARK AND THE GEOSCIENCES



- P.N. Silva, J. Rodrigues, F.M. Ferreira Melo, J.N. Lemos Ferreira Real - "MVGEOPARK 360° - The digital to teach Biodiversity, Geodiversity, Historic and Cultural Heritage", INTED2023 Proceedings, pp. 3079-3087, 10.21125/inted.2023.0855



# PROMOTION FOR THE GENERAL PUBLIC

**Campanha de Verão 2023**  
26 de junho a 6 de agosto

- Escavações e Prospeção Arqueológicas  
Campo 1: 25 de junho a 9 de julho  
Campo 2: 9 a 23 de julho  
Campo 3: 23 de julho a 6 de agosto
- Curso de Introdução à Avaliação de Impacto Ambiental (AIA) aplicada à Arqueologia (patronato: a definir)
- Conferências sobre AIA  
29 de junho, 15 a 28 de julho
- Visitas de estudo
- Jantares de convívio

Contactos para informações:  
geopark@gmail.com  
www.unesco.cafelab.com/pt/pt/geopark

**2023**  
Proença-a-Nova e o sítio do Paleolítico do Campo Arqueológico de Proença-a-Nova  
Portugal

## UNESCO GLOBAL GEOPARKS

INTERNATIONAL

# MOTHER EARTH DAY

**22 APRIL 2023**

[globalgeoparksnetwork.org](http://globalgeoparksnetwork.org)

## GLOBAL GEOPARKS NETWORK

## PROMOTION FOR THE GENERAL PUBLIC

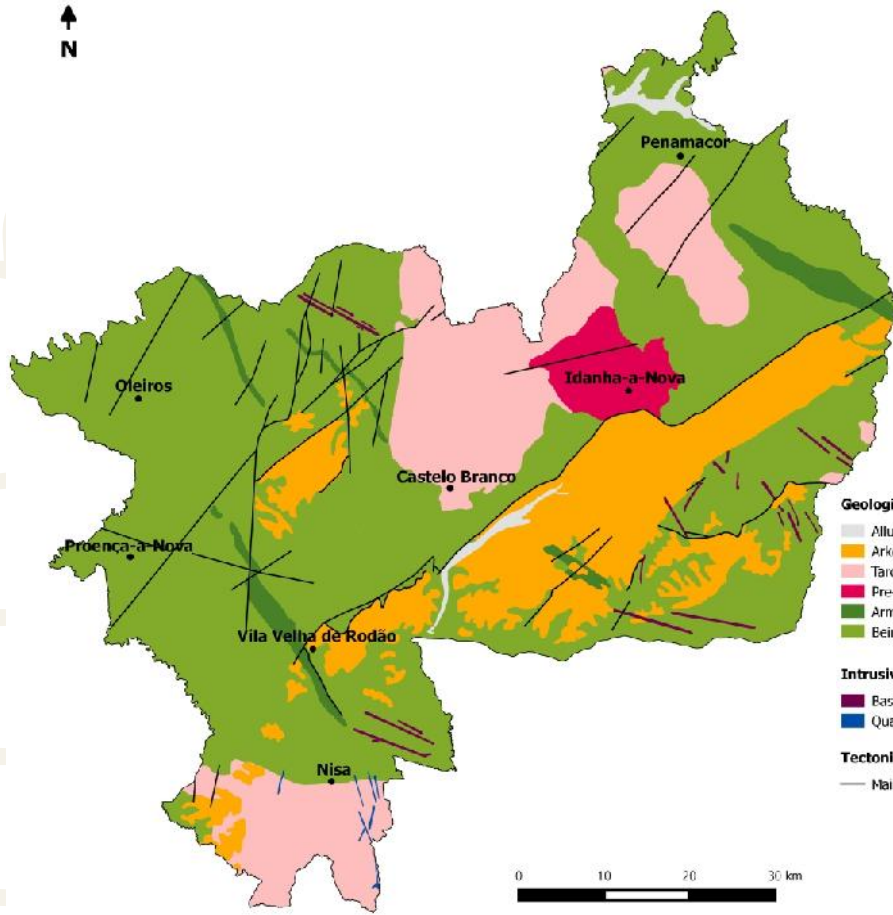


**Mercado Bio-Região**  
IDANHA·A·NOVA  
SÁBADOS  
DAS 08H00 ÀS 12H00  
MERCADO MUNICIPAL  
(PRAÇA)

Logos at the bottom: Municipality of Idanha-a-Nova, Mercado Bio-Região, BIOECO, UNESCO, and others.

### Visite o Geopark Naturtejo em:

-  [www.geoparknaturtejo.com](http://www.geoparknaturtejo.com)
-  [www.facebook.com/geoparknaturtejo.mesetameridional](http://www.facebook.com/geoparknaturtejo.mesetameridional)
-  [www.instagram.com/geopark\\_naturtejo/](http://www.instagram.com/geopark_naturtejo/)
-  [www.youtube.com/geoparknaturtejo](http://www.youtube.com/geoparknaturtejo)
-  [issuu.com/geoparknaturtejo](http://issuu.com/geoparknaturtejo)
-  [https://twitter.com/Geo\\_Naturtejo](https://twitter.com/Geo_Naturtejo)
-  <https://www.linkedin.com/company/geoparknaturtejo/>



**naturtejo**  
GEOPARK

**unesco**  
Global Geopark

**Geological Formations (Ma-Million years)**

- Alluvium and fluvial terraces - Plistocene-Holocene (1Ma-present)
- Arkoses, breccias and conglomerates - Eocene-Pliocene (50-2.6Ma)
- Tardi-Variscan orogenic granites (315-300Ma)
- Pre-Variscan granodiorites (480-472Ma)
- Armorican Quartzite and schists - Ordovician-Lower Silurian (488-435Ma)
- Beiras Group (schists and greywackes) - Neoproterozoic (610-542Ma)

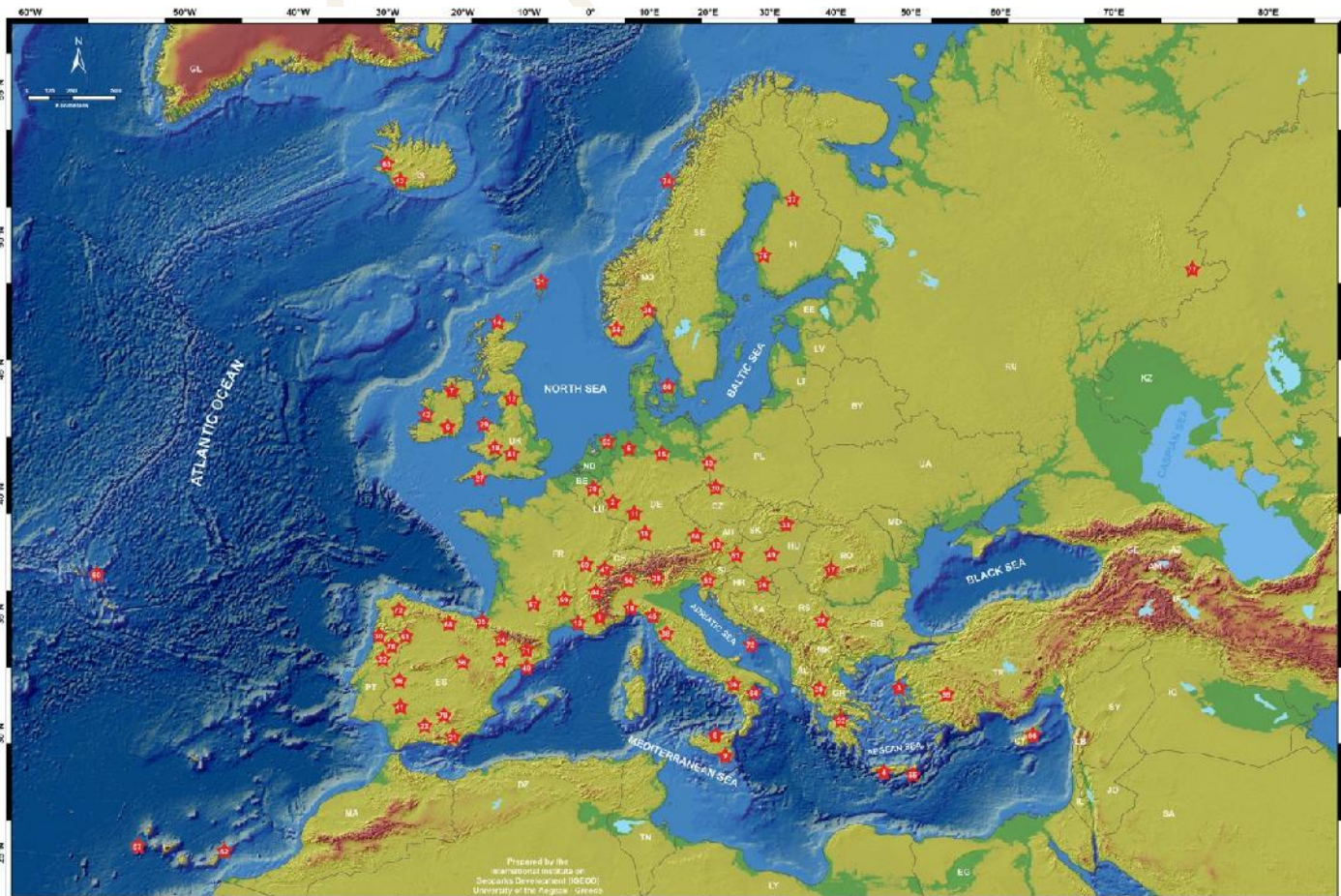
**Intrusive rocks**

- Basic rocks, aplites and pegmatites
- Quartz

**Tectonic**

- Main faults

## Geoparks: Geology with human face





Edition - Geopark Naturtejo, 2023  
Coordination - Carlos Neto de Carvalho  
Textos - Carlos Neto de Carvalho,  
Joana Rodrigues, Manuela Catana,  
Carla Jacinto  
Photos - Carlos Neto de Carvalho,  
Joana Rodrigues, Margarida  
Antunes, Filipe Gonçalves  
Clipping - Carla Jacinto e Alice Marcelo  
Design - Layer [Design and Print Studio]  
Translation - Carla Jacinto  
Production - Joana Rodrigues



**CRUZIANA**

GEOPARK NATURTEJO DA MESETA MERIDIONAL EUROPEAN AND GLOBAL GEOPARK MONTHLY REPORT

[www.geoparknaturtejo.com](http://www.geoparknaturtejo.com)

**NATURTEJO UNESCO GLOBAL GEOPARK - E-MAGAZINE**