





International Intensive Course on UNESCO Global Geoparks

Climate Change Adaptation and Geo-hazard Risk Mitigation Case studies

May 31- June 10 2019 LESVOS ISLAND - GREECE

with the support of:



MINISTRY OF SHIPPING & ISLAND POLICY GENERAL SECRETARIAT FOR THE AEGEAN AND ISLAND POLICY

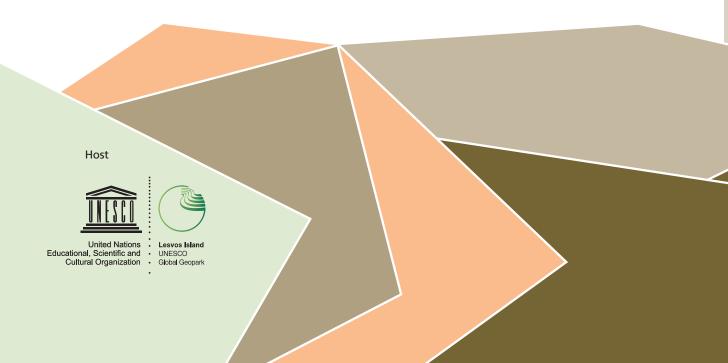




















Climate Change Adaptation and Geo-hazard Risk Mitigation Case studies

May 31st – June 10th 2019 Programme

HOSTED & DELIVERED BY:

UNIVERSITY OF THE AEGEAN NATURAL HISTORY MUSEUM OF THE LESVOS PETRIFIED FOREST

> CO-ORGANIZERS: UNESCO Natural Sciences Sector Global Geoparks Network

SUPPORTERS:

GENERAL SECRETARIAT OF AEGEAN AND ISLAND POLICY REGION OF NORTH AEGEAN UNIVERSITY OF THE AEGEAN NATURAL HISTORY MUSEUM OF THE LESVOS PETRIFIED FOREST

UNESCO and the Global Geoparks Network are co-organizing the 11th session of the International Intensive Course on Geoparks 2019 "Climate Change Adaptation and Geo-hazard Risk Mitigation Case studies".

The Course is hosted and delivered by the University of the Aegean – Department of Geography and the Natural History Museum of the Lesvos Petrified Forest at Lesvos Island UNESCO Global Geopark, North Aegean Region, Greece, one of the first Global Geoparks in the world.

The Course will take place from 31st May to 10th June, 2019.

The Intensive Course on Geoparks 2019 aims to focus on the UNESCO Global Geoparks building and management as well as on their contribution on shared and sustainable outcomes related to climate change adaptation and natural disaster mitigation.

Through the Intensive Course on Geoparks 2019, attendees will have the opportunity to widen their knowledge and expertise on UNESCO Global Geoparks building and management as tools for sustainable development, to cooperate with different disciplines and countries as well as on Geopark activities and contribution on climate change adaptation and natural disaster mitigation for local communities.

The Intensive Course on Geoparks 2019 comprises of theoretical background together with extensive fieldwork.

ECTS Credits

Participants will gain 5 ECTS credits after successful completion of the Intensive course on Geoparks.

SILVER BAY HOTEL

Friday 31st May 2019

St Day

Climate Change Adaptation and Geo-hazard Risk Mitigation Case studies

17:00 - 18:00	Registration	Registration of the participants
18:00 - 20:00	Opening Ceremony	OPENING CEREMONY OF THE COURSE "Climate Change Adaptation and Geo-hazard Risk Mitigation case studies"
		Welcoming speeches
		Presentation of the Course
<mark>20:00 - 22:00</mark>	Welcome Party	



United Nations Educational, Scientific and Cultural Organization



UNESCO Global Geoparks



Saturday 1st June 2019



LECTURES

Silver Bay Hotel Lecture Room

Time	Tutor	Торіс	Thematic	Method
09:00-10:00	Dr. Özlem Adiyaman – Lopes UNESCO International geosciences and geoparks programme (IGGP) and UNESCO Global Geoparks (UGGPs) Division of Ecological and Earth Sciences Natural Sciences Sector, UNESCO	UNESCO Global Geoparks	UNESCO Global Geoparks Global Geoparks Network	Lecture
10:00-11:00	Dr. Guy Martini UGG Council Chair GGN Executive Board EGN Advisory Committee	A strategy to develop a UNESCO Global Geopark	UNESCO Global Geoparks Global Geoparks Network	Lecture
11:00-11:30	Coffee break			
11:30-12:30	Prof. Nikolaos Zouros University of the Aegean Lesvos Geopark Coordinator, Greece GGN President UGG Council Member EGN & APGN Advisory Committee	Collaboration between UNESCO Global Geoparks and the Global Geoparks Network • GGN Structure • GGN Working Groups • GGN Activities • GGN Communication tools	UNESCO Global Geoparks Global Geoparks Network	Lecture
12:30-14:00	Lunch break			
14:00-15:00	Dr. Kristin Rangnes Gea Norvegica UGG Director, Norway GGN Executive Board EGN Coordinator UGG Council Member	The European Geoparks Network: Structure - Activities – Initiatives and Promotional tools	UNESCO Global Geoparks Global Geoparks Network	Lecture
15:00-16:00	Prof. Jianping Zhang China University of Geosciences Beijing, China UGG Council Vice Chair GGN Executive Board APGN Advisory Committee	UNESCO Global Geoparks in China: Activities and Achievements in Geoheritage management	UNESCO Global Geoparks Global Geoparks Network	Lecture
16:00-16:30	Coffee break			
16:30-18:00	Panel Discussion with UGG Council and GGN Executive Board members	Ö. Adiyaman – Lopes, G. Martini, J. Zhang, I. Komoo, X. Jin, K. Rangnes, ML. Frey, N. Zouros UNESCO Global Geoparks - Geoheritage management and Sustainable developement	UNESCO Global Geoparks Global Geoparks Network	Q & A

Sunday 2nd June 2019

LECTURES

Silver Bay Hotel Lecture Room & Boat Field Trip to North Lesvos

Time	Tutor	Торіс	Thematic	Method
09:00-10:00		World Heritage Sites and UNESCO Global Geoparks: Challenges and Opportunities	Geoheritage management in Geoparks	Lecture
10:00-11:00		Development of Global Geoparks in South East Asia	Geoheritage management in Geoparks	Lecture
11:00-20:00		IC FEATURES OF NORTHERN LESVOS I the coastal geo-heritage of North Lesv	05	
11:00	Prof. Nikolaos Zouros University of the Aegean,	Departure from the Hotel to Molyvos castle Visit Molyvos castle – The Lepetymnos volcano observatory		FIELD TRIP
14:00		Lunch		
15:00	Dr. Ilias Valiakos Dep. Director of the Natural	Guided tour to Sykamia by bus Guided tour to Skala Sykamia		FIELD TRIP
19:00	History Museum of the Lesvos Petrified Forest, Greece	Dinner at Petra Women Cooperative restaurant		FIELD TRIP
20:00	Return to the Hotel			

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3 rd _{Day}

United Nations Cultural Organization

Monday 3rd June 2019



LECTURES

Silver Bay Hotel Lecture Room

Time	Tutor	Торіс	Thematic	Method
09:00-10:00	Dr. Özlem Adiyaman – Lopes UNESCO Global Geoparks Programme Division of Ecological and Earth Sciences Natural Sciences Sector, UNESCO	IGGP Initiatives on Geohazards and Climate Change UNESCO Global Geoparks Mentorship and Knowledge transfer Programme	Climate Change Adaptation and Geo-hazard Risk Mitigation case studies	Lecture
10:00-11:00	Prof. Xiaochi Jin Chinese Academy of Geological Sciences, China GGN Vice-President	Geosciences Research in Geoparks as basis for understanding Earth processes and Geo-hazards	Climate Change Adaptation and Geo-hazard Risk Mitigation case studies	Lecture
11:00-11:30	Coffee break			
11.30-12:30	Prof. Emeritus Dato' Dr. Ibrahim Komoo University Kebangsaan Malaysia, GGN Vice-President APGN Advisory Committee	Public Education for Disaster Risk Reduction in Asia Pacific Geoparks	Climate Change Adaptation and Geo-hazard Risk Mitigation case studies	Lecture
12:30-13:30	Prof. Nikolaos Zouros University of the Aegean Lesvos Geopark Coordinator, Greece GGN President UGG Council Member EGN & APGN Advisory Committee	UNESCO Global Geoparks: Climate Change Adaptation and Geo-hazard Risk Mitigation case studies	Climate Change Adaptation and Geo-hazard Risk Mitigation case studies	Lecture
13:30-14:30	Lunch break			
14:30-15:30	Dr. Yuanyuan Zheng Chinese Academy of Geological Sciences, Chinese Geoparks Network Coordinator	The Chinese Geoparks Network Activities on Climate Change Adaptation and Geo-hazard Risk Mitigation	Climate Change Adaptation and Geo-hazard Risk Mitigation case studies	Lecture
15:30-16:15	Konstantina Bentana Head of the Education and Communication Section of the Natural History Museum of the Lesvos Petrified Forest Lesvos UNESCO Global Geopark	Lesvos UNESCO Global Geopark: Educational activities for raising awarness on Climate Change Adaptation	Climate Change Adaptation and Geo-hazard Risk Mitigation case studies	Lecture
16:15-16:45	Coffee break			
16:45-18:30	Panel Discussion with UGG Council and GGN Executive Board members	Ö. Adiyaman – Lopes, G. Martini, J. Zhang, I. Komoo, X. Jin, K. Rangnes, ML. Frey, N. Zouros UNESCO Global Geoparks - Geoheritage management and Sustainable development	Geodiversity management in Geoparks	Q & A

5 th Day Tuesday 4th June 2019 GEOCONSERVATION FIELDTRIP

from Mytilini to Sigri

Time	Tutor	Торіс	Thematic	Method
08:30-09:30	 Prof. Nikolaos Zouros University of the Aegean, Greece Dr. Ilias Valiakos Dep. Director of the Natural History Museum of the Lesvos Petrified Forest, Greece 	 The Lesvos Miocene Volcanoes : Miocene volcanics and Volcanoes Volcanic geosites and landscapes The Vatousa caldera, the post caldera domes and hydrothermal activity Pyroclastic avalanches, lahars, ash fall layers and palaeosoils The Lesvos Petrified Forest : Creating an open air Museum along the Mytilini - Sigri road 	Geodiversity management in Geoparks	FIELD TRIP
11:00-13:30	Prof. Nikolaos Zouros University of the Aegean, Greece Dr. Ilias Valiakos Dep. Director of the Natural History Museum of the Lesvos Petrified Forest, Greece Olga Tsalkitzi Geologist, Researcher at the Natural History Museum of the Lesvos Petrified Forest, Greece	 Boat trip to Nissiopi Marine Park: Guided tour to the Nissiopi island Geosites Conservation activities in the coastal and terrestrial fossil sites Protection measures and visitors' access 	Geodiversity management in Geoparks	FIELD TRIP
13:30-14:30	Lunch break	Light lunch prepared by the Mesotopos Wo	men Cooperative of	Lesvos
14:30-15:30	Prof. Nikolaos Zouros University of the Aegean, Greece	The Natural History Museum of the Lesvos Petrified Forest	Geodiversity management in Geoparks	Lecture
15:30-17:00	Dr. Ilias Valiakos Dep. Director of the Natural History Museum of the Lesvos Petrified Forest, Greece	The Natural History Museum of the Lesvos Petrified Forest • Guided tour in the Museum Permanent Exhibitions • The Sigri Petrified Forest park	Geodiversity management in Geoparks	Guided tour
17:00-17:30	Coffee break	Coffee break and traditional sweet tasting p Cooperatives of Lesvos	prepared by the Wor	men
17:30-19:00	Prof. Nikolaos Zouros University of the Aegean, Greece Dr. Ilias Valiakos Dep. Director of the Natural History Museum of the Lesvos Petrified Forest, Greece	Presenting the facilities of the Natural History Museum of the Lesvos Petrified Forest (seismic simulator) and the educational program on Earthquake disaster mitigation	Geodiversity management in Geoparks	Activity
20:00	Dinner			

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Wednesday 5th June 2019

6 th Day

LECTURES

Silver Bay Hotel Lecture Room

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Time	Tutor	Торіс	Thematic	Method
09:00-10:30	Dr. Guy Martini UGG Council Chair GGN Executive Board EGN Advisory Committee	Evaluation and Revalidation exercise in UNESCO Global Geoparks	UNESCO Global Geoparks Global Geoparks Network	Lecture
10:30-11:00	Coffee break			
11:00-13:00	Guy Martini, Xiaochi Jin, Kristin Rangnes, Jianping Zhang, Nikolaos Zouros UGG Council GGN Executive Board	Evaluation and Revalidation exercise in UNESCO Global Geoparks	Q & A	Workshop
13:00-14:00	Lunch break			
14:00-15:00	Prof. Jianping Zhang China University of Geosciences Beijing, China GGN Executive Board APGN Advisory Committee	Climate change in the geological record. UNESCO Global Geoparks as learning places on climate change adaptation		Lecture
15:00-16:00	Dr. Manuel Schilling Kütralkura Geopark, Chile	The role of Geoparks in Latin America to reduce the risk of geological hazards.		Lecture
16:00-16:30	Coffee break			
16:30-17:30	Participants' presentations Discussion	Geoconservation and Geoparks - Case analysis 1 Discussion with GGN Executive Board Members	Geoconservation in action	Workshop
17:30-18:30	Participants' presentations Discussion	Geoconservation and Geoparks - Case analysis 2 Discussion with GGN Executive Board Members	Geoconservation in action	Workshop





Time	Tutor	Торіс	Thematic	Method
09:00-10:00	Guided tour	Mytilini – Petrified Forest Park	Lesvos UNESCO Global Geopark	Guided tour
10:00-13:00	Prof. Jianping Zhang China University of Geosciences Beijing Dr. Ilias Valiakos Natural History Museum of the Lesvos Petrified Forest Conservation team	Conservation in the Lesvos Petrified Forest Technical work in groups Discussion on the problems	Geo-conservation	Workshop
13:00-14:00	Lunch break	Lunch with traditional dishes from women	cooperatives	
14:00-15:30	Prof. Nikolaos Zouros University of the Aegean Dr. Ilias Valiakos Olga Tsalkitzi Natural History Museum of the Lesvos Petrified Forest Conservation team Prof. Nikolaos Zouros University of the Aegean Prof. Jianping Zhang China University of Geosciences Beijing Dr. Ilias Valiakos Natural History Museum of the Lesvos Petrified Forest	Geo-conservation strategy and techniques Conservation of fossil trees and leaves in the Museum's Laboratory Geopark Collaboration Projects in geoconservation Discussion on the Geoconservation techniques	Geo-conservation	·
16:30-17:00	Coffee break			
17:00-18:00	Prof. Nikolaos Zouros University of the Aegean Dr. Ilias Valiakos Natural History Museum of the Lesvos Petrified Forest	The volcanic structures of Western Lesvos The Pythari Dome		Guided tour
18:00-20:00	Mesotopos Women Cooperative Visit	The Mesotopos Women's Cooperative – Operation and achievements Dinner with traditional dishes		Visit
20:00	Departure to the Hotel			

Pythari Dome

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Friday 7th June 2019



FIELDTRIP ON EROSIONAL AND TECTONIC LANDFORMS

from Mytilini to Plomari

Time	Tutor	Торіс	Thematic	Method
08:30-09:30	Prof. Nikolaos Zouros University of Aegean, Greece	Tectonic landforms on the Northern coast of Gera's Gulf	Geodiversity management in Geoparks	FIELD TRIP
09:30-11:00	Dr. Ilias Valiakos Dep. Director of the Natural History Museum of the Lesvos Petrified Forest, Greece	Visit Plomari, Visit ouzo distillery	o openio	
11:00-13:30	Prof. Nikolaos Zouros University of Aegean, Greece	Erosional and tectonic landforms in the coastal area of Plomari	Geodiversity management in	FIELD TRIP
	Dr. Ilias Valiakos Dep. Director of the Natural History Museum of the Lesvos Petrified Forest, Greece	Landslide in Plomari and the Earthquake of 2017	Geoparks	
13:30-14:30	Lunch break	Light lunch		
14:30-17:30	Prof. Nikolaos Zouros University of Aegean, Greece	The socioeconomic impact of the Olive Grooves in Lesvos. Visit to the Vranas Museum	Geodiversity management in Geoparks	Lecture
17:30-18:00	Return trip to Mytilini			
20:00	Dinner			



9 th Day Saturday 8th June 2019

LECTURES

Silver Bay Hotel Lecture Room

Time	Tutor	Торіс	Thematic	Method
09:00-10:30	Prof. Thanasis Kizos Department of Geography University of Aegean	Cultural Landscapes and Geoparks: understanding and shaping landscape preferences	UNESCO Global Geoparks	Lecture
10:30-11:00	Coffee break			
11:00-12:00	Dr. Manuel Schilling Kütralkura Geopark, Chile	Kütralkura: Ten years of collaborative work to establish the first UNESCO Global Geopark in Chile, southern South America.	Geoparks and sustainable development	Lecture
12:00-13:00	Dr. Charalampos Fassoulas Psiloritis UNESCO Global Geopark EGN Vice-Coordinator Hellenic Geoparks Forum Chair	The GGN/EGN Working Group of Geohazards Initiatives and activities	Geodiversity management in Geoparks	Lecture
13:00-14:00	Lunch break			
14:00-14:50	Konstantina Bentana Head of the Education and Communication Section of the Natural History Museum of the Lesvos Petrified Forest	International Networking and Collaboration in raising public awarness on Geohazards. The National Thematic School Network on "UNESCO Global Geoparks"	Geo-conservation and Sustainable development in Geoparks	Workshop
14:50-15:40	Participants' presentations Discussion	Geoconservation and Geoparks - Case analysis 3 Discussion with GGN Executive Board Members	Geo-conservation and Sustainable development in Geoparks	Workshop
15:40-16:30	Participants' presentations Discussion	Geoconservation and Geoparks - Case analysis 4 Discussion with GGN Executive Board Members	Geo-conservation and Sustainable development in Geoparks	Workshop
16:30-17:20	Participants' presentations Discussion	Geoconservation and Geoparks - Case analysis 5 Discussion with GGN Executive Board Members	Geo-conservation and Sustainable development in Geoparks	Workshop
17:20-18:10	Participants' presentations Discussion	Geoconservation and Geoparks - Case analysis 6 Discussion with GGN Executive Board Members	Geo-conservation and Sustainable development in Geoparks	Workshop
18:10-19:00	Panel discussion with GGN Experts Prof Xiaochi Jin Prof. Jianping Zhang Dr. Charalampos Fassoulas Dr. Ilias Valiakos Prof. Nikolaos Zouros			Q & A

INTERNATIONAL INTENSIVE COURSE ON GEOPARKS 2019

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Sunday 9th June 2019 FIELD TRIP & WORKSHOP:



Contraction and Concernation

Geohazards and Geoconservation

in tectonic active areas

Time	Tutor	Торіс	Thematic	Method
09:00-10:00	Prof. Nikolaos Zouros Lesvos UNESCO Global Geopark GGN President	Visit Agia Paraskevi The Agia Paraskevi Fault geosite and the destructive earthquake of 1867	Geoconservation in active tectonic area	FIELD TRIP
10:00-11:00	Museum Visit	Visit the Olive Oil Museum at Agia Paraskevi	Museum visit	
11:00-12:00	Prof. Nikolaos Zouros Lesvos UNESCO Global Geopark GGN President	The Gulf of Mytilini - Walking at the steps of Aristotles The earthquake of 230 BC and the destruction of Pyrra.		FIELD TRIP
12:00-13:30	Prof. Nikolaos Zouros Lesvos UNESCO Global Geopark GGN President	Polychnitos Hot Springs Active tectonics and Geothermal field The earthquake of 2017 in Lesvos Visit Vrisa Village The active faults in Vatera Pliocene sediments and verterbrate fauna	Geoconservation in active tectonic area	FIELD TRIP
13:30-14:30	Lunch break			
14:30-16:00	Dr. Charalampos Fassoulas Psiloritis UNESCO Global Geopark EGN Vice-Coordinator Hellenic Geoparks Forum Chair	Raising awareness on Natural Hazards and risk mitigation activities through education at the Natural History Museum of Crete	Polichinitos cultural center	Workshop
16:00-16:30	Coffee break			
16:30-18:30	Prof. Nikolaos Zouros Dr. Charalampos Fassoulas	Q & A on Evaluation and Revalidation exercise in UNESCO Global Geoparks	Polichinitos cultural center	Q & A
18:30	Departure to the Hotel			

Day LECTURES (Silver Rev

LECTURES (Silver Bay Hotel Lecture Room) Tutor Thematic Method Time Topic 09:00-10:00 Prof. Nikolaos Zouros UNESCO Global Geoparks and Global Geoparks and Lecture Lesvos UNESCO Global Geoparks Network : Promotion and Sustainable Geopark Visibility Development **GGN** President Prof. Nikolaos Zouros 10:00-11:30 **Evaluation of participants** Geoparks and Lecture **Prof. Jianping Zhang** Sustainable **Dr. Charalampos Fassoulas** Development Dr. Ilias Valiakos **Coffee Break** 11:30-12:00 12:00-13:30 **Prof. Nikolaos Zouros** Intensive Course Evaluation Course Evaluation University of Aegean Closing ceremony Assessment

13:30-15:00 Lunch break

15:00 Departure of the Participants to Mytilini Airport for the flights departing at 16:20 and 22:25 from Mytilini to Athens Intensive Course on Geoparks 2019 Climate Change Adaptation and Geo-hazard Risk Mitigation case studies INVITED LECTURERS

Dr. Özlem Adiyaman - Lopes

UNESCO, Earth Sciences and Geohazard Risk Reduction, Natural Sciences Sector

Dr. Guy Martini

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UNESCO Global Geoparks Council Chair, GGN General Secretary, Advisory Committee of the European Geoparks Network

Prof. Jianping Zhang

University of Geosciences, China UNESCO Global Geoparks Council Vice-Chair, GGN Executive Board, Advisory Committee of the Asian Pacific Geoparks Network

Prof. Emeritus Dato' Dr. Ibrahim Komoo

University Kebangsaan Malaysia, Institute for Environment and Development (LESTARI), GGN Executive Board Vice -President

Prof. Xiaochi Jin

Chinese Academy of Geological Sciences, China, GGN Executive Board Vice-President

Dr. Kristin Rangnes

Director of Gea Norvegica UNESCO Global Geopark, Norway

GGN Executive Board Treasurer, UNESCO Global Geoparks Council Member, Coordinator of the European Geoparks Network

Dr. Marie-Luise Frey

Welterbe Grube Messel gGmbH, Germany, GGN Executive Board, Advisory Committee of the European Geoparks Network, UNESCO Global Geopark Expert

Prof. Yuanyuan Zheng

Chinese Academy of Geological Sciences, Chinese Geopark Network Coordinator, UNESCO Global Geopark Expert

Dr. Charalampos Fassoulas

Psiloritis UNESCO Global Geopark, Greece, EGN Vice-Coordinator, Hellenic Geoparks Forum Chair

Prof. Thanasis Kizos

University of the Aegean, Department of Geography, Greece International Institute on Geoparks Development

(IIGEOD)

Dr. Manuel Schilling

Kütralkura UNESCO Global Geopark, Chile

Dr. Ilias Valiakos

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Olga Tsalkitzi

Natural History Museum of the Lesvos Petrified Forest

International Institute on Geoparks Development (IIGEOD) - Lesvos UNESCO Global Geopark

COURSE DIRECTOR: Prof. Nikolaos Zouros

University of the Aegean, Greece, GGN Executive Board President, UGG Council, Natural History Museum of the Lesvos Petrified Forest Director, Lesvos UNESCO Global Geopark Coordinator



International Intensive Course on Geoparks 2019 Climate Change Adaptation and Geo-hazard Risk Mitigation case studies

CONTRIBUTORS

UNESCO

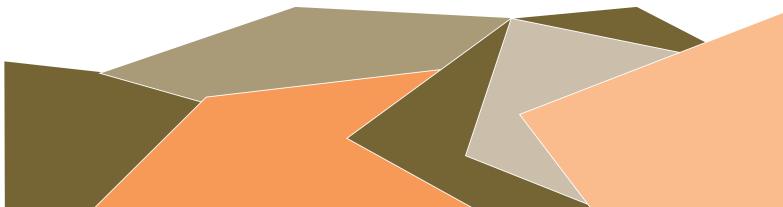
Global Geoparks Network

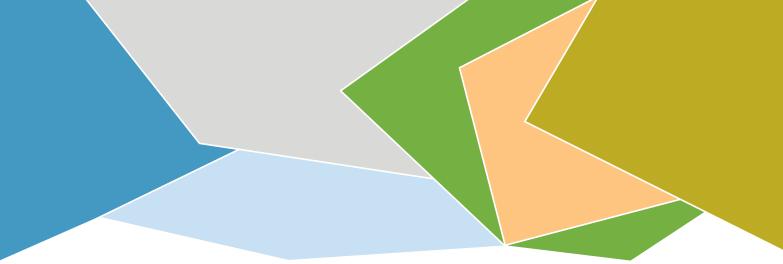
Ministry of Shipping and Island Policy General Secretariat of Aegean and Island Policy

Region of North Aegean

University of the Aegean

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