

THE SECOND
100
IUGS GEOLOGICAL
HERITAGE SITES

A UNIQUE
COLLABORATIVE & GLOBAL ENDEAVOR
FOR THE RECOGNITION OF SITES
THAT ARE ESSENTIAL
FOR THE GEOLOGICAL SCIENCES

IGCP - 731





OUR MAIN GOAL

Implementation of a global program led by the **IUGS -International Commission on Geoheritage** for the recognition of geological heritage sites that are essential for the development of Geological Sciences.



WHY IS THIS INITIATIVE NECESSARY?

This initiative gives visibility and **recognition to our science** and to our great contribution to the knowledge of the Earth system and its long history.

This initiative gives **recognition to scientist** that spent all their lives deciphering the secrets of the Earth.

Recognition by IUGS can lead to their **further appreciation**, to their use as educational resources, and, most importantly, to their **preservation**.

This initiative shows the best **spirit of collaboration** in Science.





IUGS GEOLOGICAL HERITAGE SITES

IGCP731

DEFINITION AND MAIN STANDARDS

DEFINITION AND STANDARDS

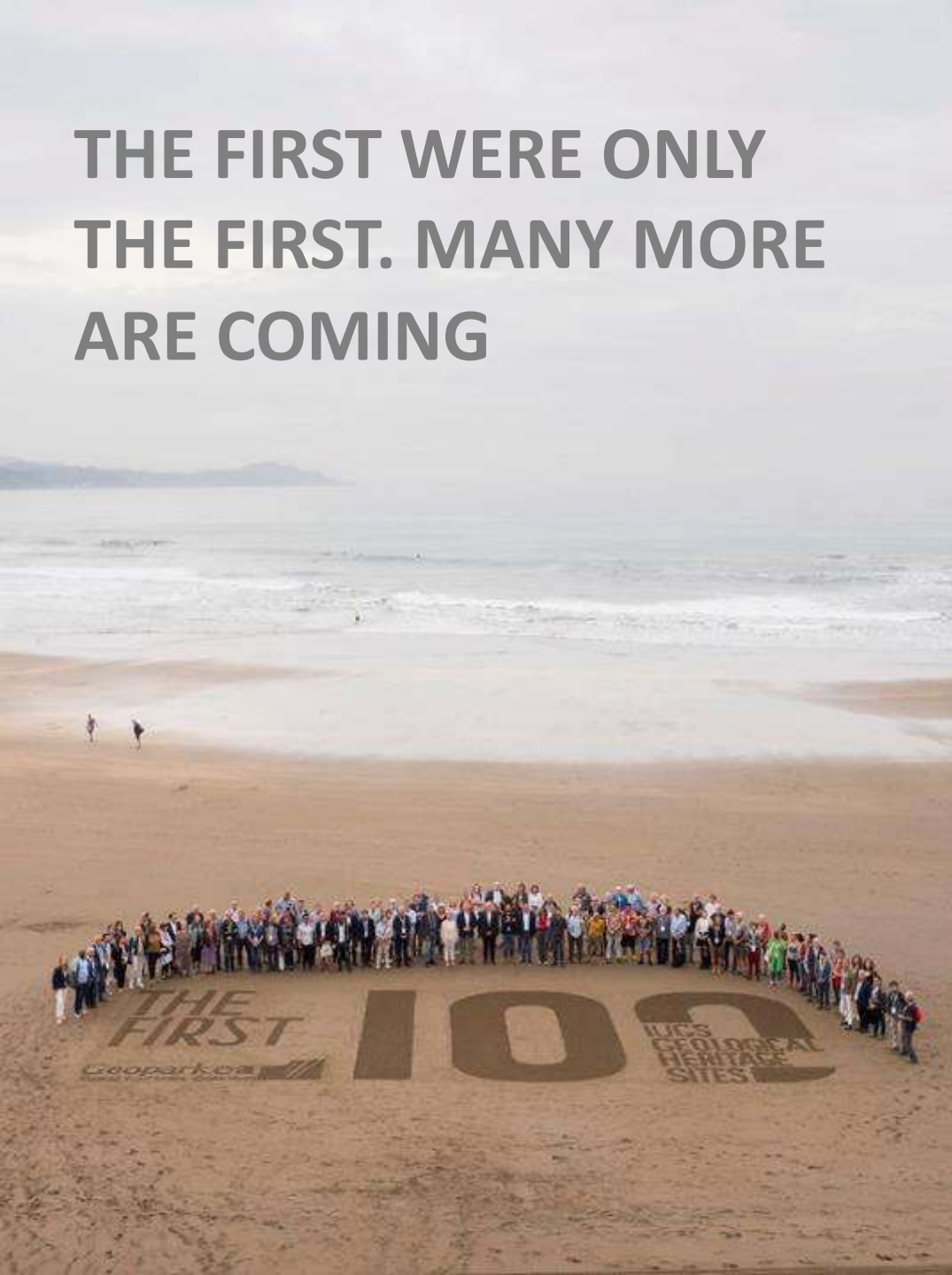
In Sept – Nov 2021 a group of 20 experts discussed and defined the main standards of the program.

<https://iugs-geoheritage.org/selection-process/>

”An *IUGS Geological Heritage Site* is a key place with extraordinary geological elements or processes of the highest scientific relevance, used as a global reference, and/or with a substantial contribution to the development of geological sciences through history “

ZUMAIA. NOV.2021

THE FIRST WERE ONLY
THE FIRST. MANY MORE
ARE COMING



THE FIRST
100
IUGS GEOLOGICAL
HERITAGE SITES

2022



THE SECOND
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HERITAGE SITES

2024

CONSOLIDATION
of a global initiative

HOW DID WE DO IT?

KEEP IT SIMPLE

The IUGS recognition is based on the experience and evaluation of **renowned thematic experts**

Our procedure is simple, transparent and feasible

We try to be effective creating tangible results



INTERNATIONAL & MULTIDISCIPLINARY COOPERATION

17 International organizations covering all geological disciplines participate in the program



TecTask



TGIR

IUGS Task Group on Igneous rocks

International Palaeogeographical Association



174

CANDIDATES

FROM 64 COUNTRIES

were received in September 2023

23 new countries like Bolivia, Venezuela, Iceland, Finland, New Zealand, Vietnam, Tonga, Egypt, Iraq, Israel, Algeria ...

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DISTRIBUTION OF CANDIDATE SITES

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SITES POSTPONED
FROM 2022



63
SITES

Most of the
proposals were
improved

NEW SITES PROPOSED
IN 2023



47
SITES

Submitted by
**international
organizations**

64
SITES

Submitted by
**national
representatives**



EVALUATION PROCESS

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89 experts covering all geological disciplines have evaluated all the proposals. Most of the evaluators have been proposed by the international organizations.

4-5 evaluations / site

Each site has been evaluated by 4 -5 experts with a global representation

714 evaluations have been completed

All the evaluations have been double checked by the IUGS team to ensure a well balanced process.



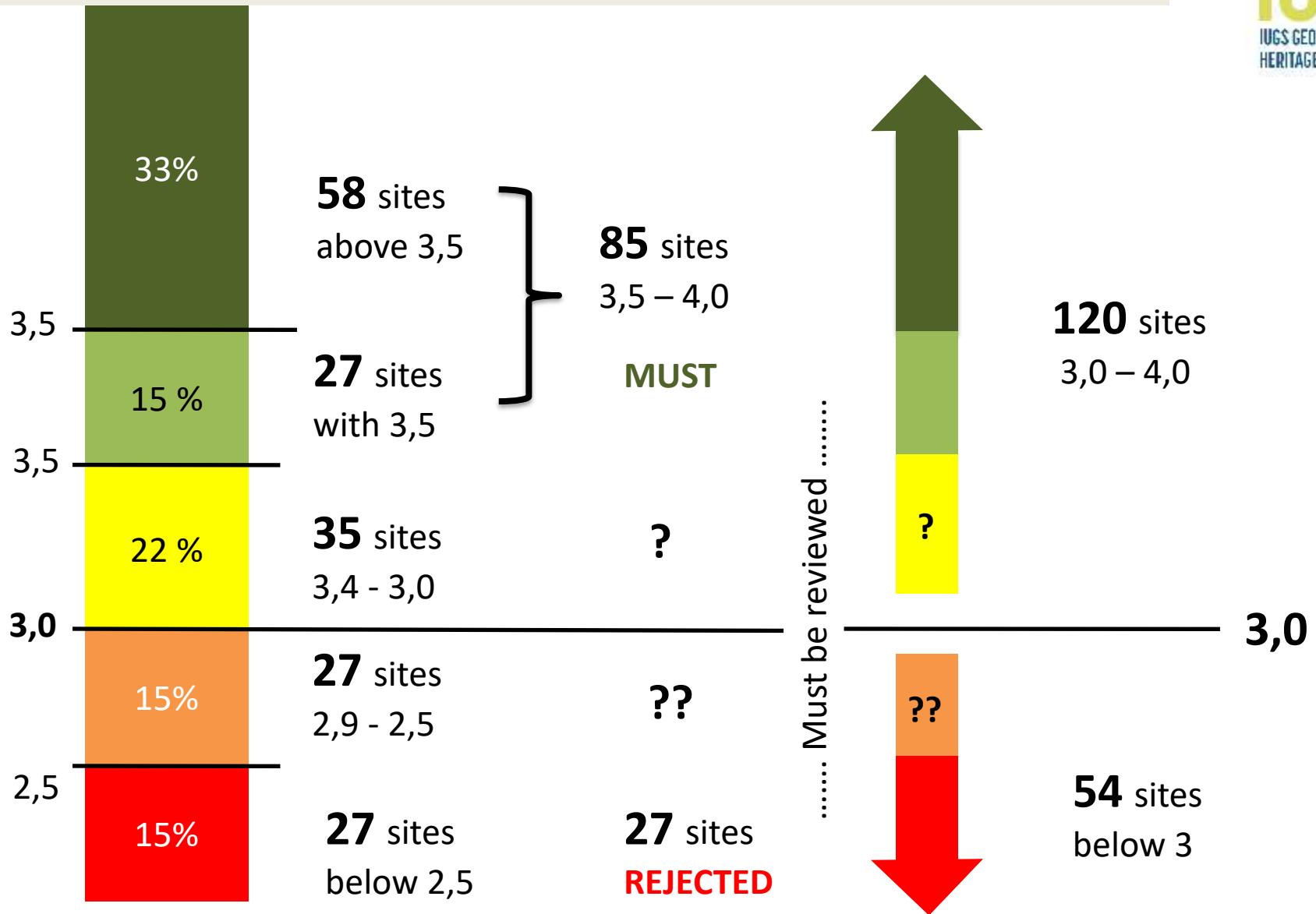
EVALUATION AND SCORING



The evaluation is based on the expert's experience. It is simple and intuitive. :

- 4** The site **clearly fulfils the definition**, it is a global reference of the highest scientific value and should be selected for the Second 100 for **its exemplary / iconic value** for geological sciences.
- 3** The **site clearly fulfils the definition**, it is a global reference of the highest scientific value and could be the selected for the Second 100.
- 2** The site **fulfils the definition partially**. The site has clear international value, but it is **rarely considered as a global scientific reference** or there are other sites of its kind with higher International relevance.
- 1** The sites **does not fulfill the definition**. The site has not international value, but its geological elements or processes are not extraordinary and **can not be considered a global reference** for geological sciences.

SCORING DISTRIBUTION after evaluation



FINAL SELECTION

The final selection has been made by the **IUGS Selection Committee** which discussed the analysis and proposal of the IUGS Advisory Group.

The final selection is based on:

1. Scientific assessment / final score.

This is most important. Only sites scored above 3 can be selected

2. The quality of the proposal in terms of writing and images provided.

3. Geographical distribution.

The final list will try to have a balanced geographic distribution.

4. Typological distribution

The final list will try to represent well all geological disciplines.



FINAL ACCEPTANCE SELECTION COMMITTEE & IUGS EC. Feb.24

THE SECOND 100 IUGS GEOLOGICAL HERITAGE SITES



SELECTION COMMITTEE'S STATEMENT FOR FINAL APPROVAL OF " THE SECOND 100 IUGS GEOLOGICAL HERITAGE SITES"

The Selection Committee for the IUGS Geological Heritage Sites program was constituted in March 2023 by the IUGS International Commission on Geoheritage.

The Selection Committee is formed by one representative from each of the 17 international organizations that participate in the program representing the major disciplines of geological sciences.

The main goal of this committee is 1) to share a common strategy for the development of the program, 2) to drive the active participation of all these organizations and finally 3) to approved the final list of sites to be designated.

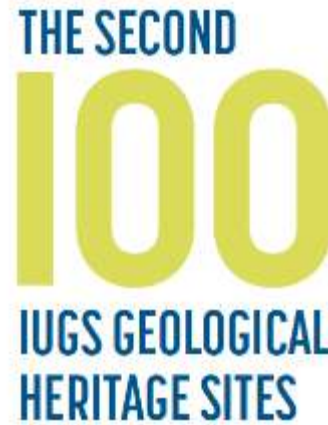


On February 6th the **selection committee** met and accepted the list of The Second 100.

On February 21 the **IUGS Executive committee** ratified unanimously the list of The Second 100"



FINAL SELECTION



	<p>THE SECOND 100</p>		<p>Average final value</p>
3,0	<p>11 SITES THE THIRD 100</p>	<p>ACCEPTED DIRECTLY FOR THE THIRD 100</p>	<p>3,23</p>
	<p>26 SITES POSTPONED</p>	<p>USUALLY FINAL SCORING 2,5 - 3. THEY CANNOT BE ACCEPTED NOW, BUT WE SEE POTENTIAL IF THE PROPOSAL IS IMPROVED FOLLOWING THE COMMENTS OF THE EVALUATORS</p>	<p>2,56</p>
	<p>33 SITES REJECTED</p>	<p>LOWER SCORINGS, USUALLY BELOW 2,5. WE BELIEVE THEY DO NOT FULFILL THE DEFINITION FOR AN IUGS GEOLOGICAL HERITAGE SITES</p>	<p>2,22</p>

TYOLOGICAL DISTRIBUTION

THE FIRST
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1. History of Geo.

2. Strati. & Sed.

3. Paleontology

4. Igneous & Met.

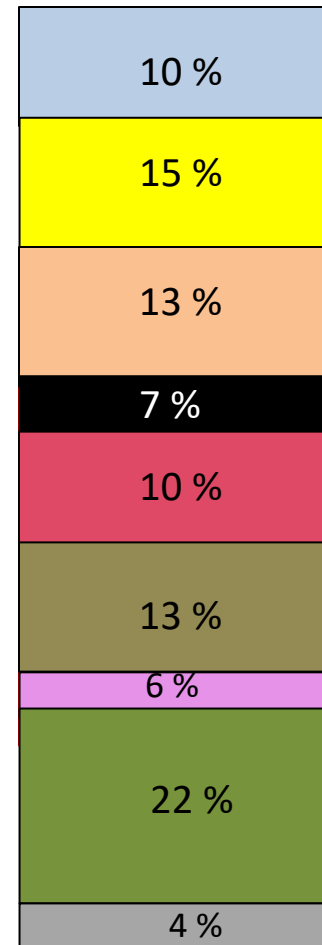
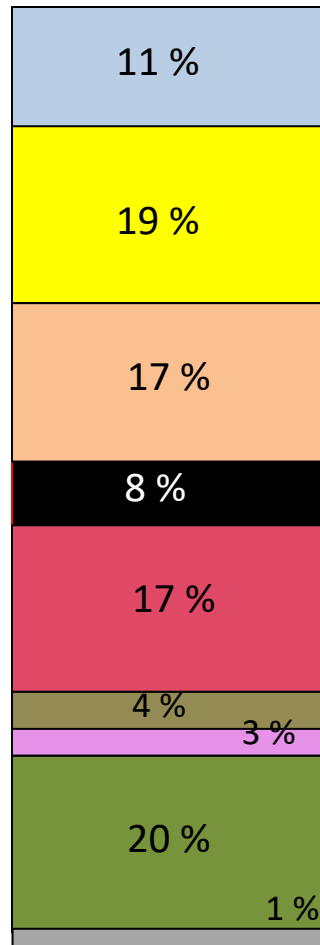
5. Volcanology.

6. Tectonics.

7. Mineralogy.

8. Geomorphology.

9. Impacts



GEOGRAPHIC DISTRIBUTION

53 COUNTRIES

THE SECOND
100
IUGS GEOLOGICAL
HERITAGE SITES

CONTINENT-WORLD REGION / COUNTRY	NUMBER OF SITES
AFRICA (DIF. COUNTRIES = 8)	9
Algeria and Lybia	1
Egypt	1
Ethiopia	1
Ghana	1
Namibia	2
South Africa	2
Tanzania	1

CONTINENT-WORLD REGION / COUNTRY	NUMBER OF SITES
AMERICA (DIF. COUNTRIES = 12)	29
Argentina	1
Bolivia	1
Brazil	2
Canada	4
Chile	1
Colombia	2
Jamaica	1
Mexico	1
Nicaragua	1
Peru	2
United States of America	11
United States of America and Canada	1
Venezuela	1

CONTINENT-WORLD REGION / COUNTRY	NUMBER OF SITES
ASIA-PACIFIC (DIF. COUNTRIES = 8)	16
Australia	2
China	3
India	1
Japan	2
New Zealand	5
South Korea	1

CONTINENT-WORLD REGION / COUNTRY	NUMBER OF SITES
EUROPE (DIF. COUNTRIES = 18)	40
Belgium	1
Bosnia and Herzegovina	1
Cyprus	1
Finland	1
France	3
Germany	2
Greece	1
Hungary	1
Iceland	2
Ireland	1
Italy	7
Norway	4
Portugal	1
Slovenia	1
Spain	4
Sweden	1
Switzerland	1
United Kingdom	7

CONTINENT-WORLD REGION / COUNTRY	NUMBER OF SITES
MIDDLE-EAST (DIF. COUNTRIES = 7)	6
Afghanistan	1
Iran	1
Israel and Jordan	1
Oman	1
Saudi Arabia	1

GEOGRAPHIC DISTRIBUTION

85 COUNTRIES

THE FIRST
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HERITAGE SITES

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OFFICIAL ANNOUNCEMENT AT THE 37TH IGC – BUSAN. 27 AUGUST



MEDIA GLOBAL IMPACT - VISIBILITY

UNESCO



THE SECOND
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IUGS GEOLOGICAL
HERITAGE SITES

THE INTERNATIONAL UNION OF GEOLOGICAL SCIENCES
SUPPORTS THE INTERNATIONAL GEOLOGICAL CONGRESS

CERTIFIED THAT:

**The Pleistocene Al Wahbah
dry maar crater,
Saudi Arabia**

HAS BEEN RECOGNIZED AND INCLUDED IN THE LIST OF
THE SECOND 100 IUGS GEOLOGICAL HERITAGE SITES



THE SECOND
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IUGS GEOLOGICAL
HERITAGE SITES

UNESCO WORLD HERITAGE CENTER

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El CSIC Investigación Innovación y Transferencia Internacional Ciencia y Sociedad Formación

Inicio » Actualidad » Cuatro nuevos enclaves de España, entre los más relevantes del patrimonio geológico mundial

#NATURALEZA #Ecología y territorio #Evolución #Geología

Cuatro nuevos enclaves de España, entre los más relevantes del patrimonio geológico mundial

Con las formaciones geológicas de Monte Perdido (Huesca), el Esla (León), Aliaga (Teruel) y Las Hoyas (Cuenca), son siete los sitios españoles reconocidos a nivel mundial

Fecha de noticia:
Martes, 27 Agosto, 2024

El Instituto Geológico y Minero de España (IGME-CSIC) ha coliderado, como miembro de la Comisión de Patrimonio Geológico de la Unión Internacional de Ciencias Geológicas (IUGS, por sus siglas en inglés), la selección de los 100 nuevos Sitios del Patrimonio Geológico Mundial, entre los que se han sumado cuatro enclaves españoles fundamentales para entender la historia de la Tierra. La selección se ha anunciado durante el 37º Congreso Geológico Internacional (CGI) que se ha celebrado la última semana de agosto en la ciudad de Busan (República de Corea), donde se han reunido especialistas en geología de todo el mundo.



ARTS / CULTURE & LEISURE

Jurassic dinosaur fossils site among latest three Chinese sites listed as IUGS geological heritage

By Global Times

Published: Sep 03, 2024 09:36 PM



A key Scottish site for understanding rapid climate change gains status as Geological Heritage Site

About Us » News

Date: 28 August 2024



A team of academics, including Royal Holloway, have successfully petitioned for a special geological area in the Highlands of Scotland to gain acknowledgment from The International Union of Geological Sciences (IUGS) Geological Heritage Sites.



Photo: Screenshot from CCTV

WE GOT IT!

HUNDREDS OF MEDIA AND SOCIAL MEDIA PUBLICATIONS

HELP US COLLECTING ALL MEDIA IMPACTS



www.iugs-geoheritage.org

+ 70.000
visitors

190
nations

120.000 VISITS

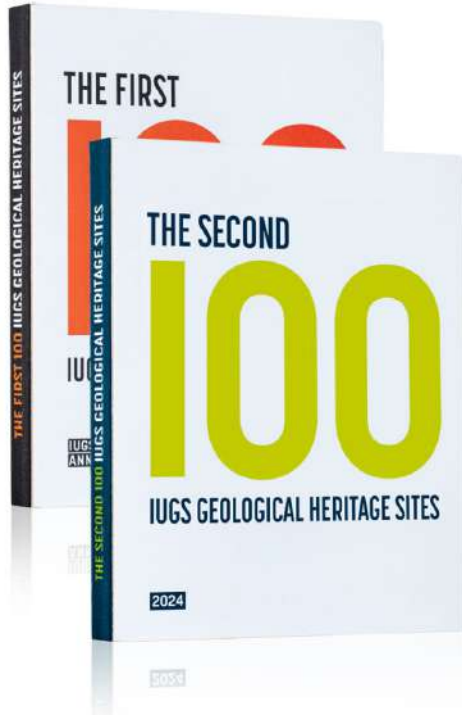


A GLOBAL REFERENCE

FOLLOW US & SHARE!

DISCOVER ALL YOU NEED TO
KNOW ABOUT IUGS **SITES,**
STONES AND GEOCOLLECTIONS

www.iugs-geoheritage.org



ONLINE SHOP

"The Second 100 IUGS Geological Heritage Sites" book (2024) is the continuation of the spectacular collection of sites listed in the "The First 100" (2022). More than 700 experts and authors from 80 different nations have participated in this unique endeavor that showcases some of the most extraordinary geological sites of the world. Don't miss the opportunity to get the full collection. The number of available copies is limited. Place your order here.

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VIEW IT, DOWNLOAD IT AND SHARE IT !

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A GIFT FOR FRIENDS.

SHARE THIS UNIQUE COLLECTION OF

GEOLOGICAL WANDERS



IUGS geological Heritage Sites are world's best demonstrations of geologic features and processes. They are the sites of fabulous discoveries of the Earth and its history. They are sites that served to develop the science of geology.



WHAT IS NEXT ?



TIME TO ENJOY, TIME TO SHARE AND TIME TO THINK ABOUT...

THE THIRD

100

IUGS GEOLOGICAL
HERITAGE SITES

APPLICATION AND EVALUATION PROCESS IN 2025 ANNOUNCEMENT 2026

WE WILL CONTACT YOU AGAIN IN SPRING 2025

APPLICATIONS WILL BE
RECEIVED THROUGH

- 50% AFFILIATED INTERNATIONAL ORGANIZATIONS
- 50% NATIONAL REPRESENTATIVES

THANK YOU!
FOR BEING PART OF THIS
COLLABORATIVE ADVENTURE

www.iugs-geoheritage.org

Asier Hilario, Gonzalo Lozano
and the IUGS team