

IAG WGs Annual report 2025

Name of the WG: Geomorphosites and Heritage Geomorphology

WG description (max. 1/2 page)

*(Please include a brief summary of the objectives & context of the WG. Any new objectives should be detailed. If no change was made since the previous report, please indicate “**no changes since previous report**”)*

Introduction to WG activity

Since the 1990s, a growing interest for the heritage value of geology and geomorphology has been observed in several parts of the world, in relation to geoconservation, geotourism, and geopark issues. In this context, during the 5th International Conference on Geomorphology held in Tokyo in 2001, the International Association of Geomorphologists (IAG) decided to create a specific working group (WG) on Geomorphological Sites, with the aim to improve knowledge and scientific research on the definition, assessment, mapping, promotion and conservation of geomorphological heritage.

In the period 2001-2013 (report), the WG was chaired by Emmanuel Reynard and Paola Coratza, experiences have been shared during several workshops and international conferences, and results have been collected in several special publications. A paper published by the two chairmen (Reynard and Coratza, 2013) showed the improvements on geomorphological heritage studies made by the IAG during the last twelve years, under the impulsion of the WG on Geomorphosites.

During the 2013 IAG Conference held in Paris, the IAG general assembly kindly accepted that the WG on Geomorphosites could continue its activities for a new 4-year period. Chair of the working group for the period 2013-2017 has been assumed by Paola Coratza (University of Modena and Reggio Emilia, Italy) and Fabien Hobléa (University of Savoie, France).

Scientific aims of the group

During the quadrennium 2013-2017, focus of the activities was put on the five following themes:

- Focus on geomorphosites as key sites for **environmental education** (to sustainable development or climate change) for various publics (tourists, school children, in particular); in particular, we plan to develop specific tools on environmental issues based on particularly sensitive geomorphosites (e.g. in coastal, desert or mountain areas).
- Development of specific activities in **developing countries** (geomorphosites as tools for local and regional development). During the first years of activity, the WG was mainly based in European countries. During the last years, we have received several demands from countries from other continents, in particular Asia, Africa and South-America. We plan to focus part of our activities in developing countries.
- Development of teaching activities for advanced students (MSc, PhD), in particular in developing countries. We plan in particular to develop **digital tools for university education**. Such tools could be a good alternative to the book published in 2009, and not easily accessible in developing countries.

- Concentration of part of the activity on **urban geomorphosites**, and in **mountain areas**. In particular, following the creation of the Network on Mountain Geomorphosites in October 2012, the plan is to focus some research on mountain ranges. A collaboration with the Mountain Research Initiative and the ISCAR (Alpine research) will be developed.
- Development of specific research on geoheritage and **geodiversity**, in collaboration with the new *Working Group on Landform Assessment for Geodiversity*.

From 2018 until now, the main improvements of the WG were related to the following topics:

- **definition and conceptualisation of geomorphosites**;
- **selection and evaluation of geomorphosites**, in particular the issue of reducing subjectivity;
- **guidelines for geomorphosite mapping**, in particular in the geotourism sector;
- **interpretation of geomorphological heritage**, in particular the sensitive question of the adequacy of geoproducts with the public needs and previous knowledge;
- **conservation of geomorphological heritage**.

Nevertheless, several questions have not been solved until now, and ***several issues should be addressed in the future***:

- **dynamic aspect of geomorphosites**: the influence of active geomorphological processes on the scientific value of the geomorphosites and on their tourist and educational potential;
- **degradation risk assessment**: theoretical and methodological approaches for the identification and assessment of both natural and anthropic threats to geomorphological heritage;
- **social aspects of geomorphosites research**: e.g. perception of geodiversity, citizen science projects, involving public, how geomorphosites promotion can meet UNESCO's Sustainable Development Goals;
- **developing specific concepts and methods within Heritage Geomorphology**, including a complex characterization and vulnerability/risk assessment to geomorphological heritage as a basis for its conservation, management, and sustainable use in accordance with geoethical principles.

Past activities (max. 1 page)

Provide a list of the main activities and/or events led by the WG since the last Annual Report, accompanied by a short description of the event and a photo/illustration if possible.

Activities/events could include: conferences/lectures/workshops/meetings organised, sessions or field trips organised or chaired at international or regional conferences/workshops, WG meetings, books/special issues published and any other items that are relevant to the objectives of the WG.

N.B.: any financial or other support from the IAG should be specifically mentioned.

Since the 2024 Annual Report, the Chairs have been engaged in the following activities of interest for the geoheritage's scientific community:

Session GM4.5 “The contribution of geodiversity and geoheritage to society - bridging geoscience, education, and community engagement” (organised by the Geomorphosites Working Group of the International Association of Geomorphologists (IAG) and ProGEO, the International Association for the Conservation of Geological Heritage) - EGU 2025, 27 April–

2 May 2025, Vienna and Online. Convener: Vittoria Vandelli and Co-conveners: Lesley Dunlop, Paula Naomi Irapta, Alicja Najwer, Márton Pál

IAG Workshop “Geomorphology, geodiversity and geosites in urban areas”, May 12-15, 2025, Kraków, Poland (organized by the IAG WG on Urban Geomorphology): Invited lecture “Urban geoheritage in danger: How to identify and evaluate the risks and threats to geosites in urban areas” (Lucie Kubalíková, also acted as a member of scientific committee)

Session TS8 “Geodiversity and Geoheritage for sustainable development” (organized by the IAG WG on Geomorphosites and WG on Dynamic geodiversity of critical zones in mountain areas and polar regions DYNAgeoZONES) - IAG Regional Conference on Geomorphology 2025, 16-18 September, 2025 Timisoara, Romania. Chairpersons: Lucie Kubalíková, Paola Coratza, Fabien Hobléa, Zbigniew Zwolinski, Alicja Najwer, Marco Giardino

Session “Heritage Geomorphology: a new branch of geomorphological studies? Concepts, methods and practices” – 11th IAG International Conference on Geomorphology, 2 – 6th February 2026, Christchurch, New Zealand. Conveners: Lucie Kubalíková, Paulo Pereira, Fabien Hobléa, Paola Coratza, Marco Tulio Diniz.

During this dedicated session, the proposal to modify the name of the WG has been approved and then acted by the IAG. From 2026 onwards, the IAG Working Group on Geomorphosites becomes the IAG Working Group on Geomorphosites and Heritage Geomorphology (GHG WG).

Future activities (max. 1/2 page)

List of the main activities or events planned by the WG for the year ahead. You may want to include links to a registration form, your own website or social media, in order to advertise your events (e.g. conferences, workshops).

The working group will be involved in the organisation of the following activities:

EGU 2026, 3-8 May 2026, Vienna and Online. The session GM4.1 “Humans, life, and Earth surface dynamics (in the Anthropocene and beyond)” will be co-organised by the Geomorphosites Working Group of the International Association of Geomorphologists (IAG). Convener: Ronald Pöppel | Co-conveners: Stefan Haselberger, Michal Ben-Israel, Lucie Kubalíková, Florian Betz, Andrea Ferrando, Annegret Larsen

Intensive Course for young geomorphologists “Managing geomorphosites – what’s new? From scientific concepts to field practices and case studies”, 7- 8th September 2026, University of Lausanne, Sion (Switzerland). The intensive course aim to provide a comprehensive overview of recent advances, research topics and directions related to geomorphosites, to define and conceptualise the Heritage Geomorphology, a new branch of geomorphological studies and to enable the discussion and sharing of the experience related to geomorphological heritage management and conservation. The course is divided in two parts: classroom lectures in Sion UNIL Campus on 7th September and fieldwork in the Chablais UNESCO Global Geopark on 8th September 2026.

Conference “Heritage Geomorphology - 25 years of research on geomorphological heritage. A tribute to Prof. Mario Panizza” - 7–12 September 2026, University of Lausanne, Sion (Switzerland).

Special Issue of Earth Surface Processes and Landforms on Heritage Geomorphology (guest editors: Lucie Kubalíková, Fabien Hobléa, Paola Coratza, Emmanuel Reynard, Paulo Pereira)

Special Publication of Geological Society of London: Evolving Perspectives on Geodiversity and Geoheritage: From Natural Landscapes to Urban Geodiversity (Editors: M. Pál, L. Kubalíková, L. Dunlop, F. Hobléa, C. Vergara Daskam, A. Najwer, Z. Zwolinski, M. McHenry) – cooperation of WG on Geomorphosites and Heritage Geomorphology, WG DYNAGEOZONES, and ProGEO (International Association for the Conservation of Geological Heritage).

At the 2026 IAG conference in Christchurch/Ōtautahi, the idea arose to produce a book entitled *Geomorphology of the Dreamtime*, a collective work supervised by the Working Group (contact: Fabien Hobléa), exploring worldwide the relationship between First Nations peoples and the geomorphological component of the landscape, both within their ancestral cosmologies and in their everyday lives today, and their role in protecting and promoting their geomorphological heritage, particularly within UNESCO Global Geoparks. Several potential authors have been approached in Christchurch, and a call for contributions will be issued in 2026, with publication hoped for in 2027.

Committee members

List of the Committee members with their role (e.g. Chairs, Co-Chairs, Secretary, Steering Committee...) at the time the Annual Report is written with contact details for the website. If no change was made since the previous report, please indicate “no changes since previous report”.

Paola Coratza, Fabien Hoblea, Lucie Kubalikova: Chairs