

Images of geologic structures served by a relational digital image database

DioGeneS

Digital Images of Geologic & nice Structures

Gerold Zeilinger⁽¹⁾ & Jean-Pierre Burg⁽²⁾
(1) Institute of Geosciences, University of Potsdam, Karl-Liebknecht-Str. 24/25, D-14476 Golm/Potsdam
(2) Geological Institute, ETH Zurich, Leonhardstrasse, 19 /LEB CH-8092 Zurich

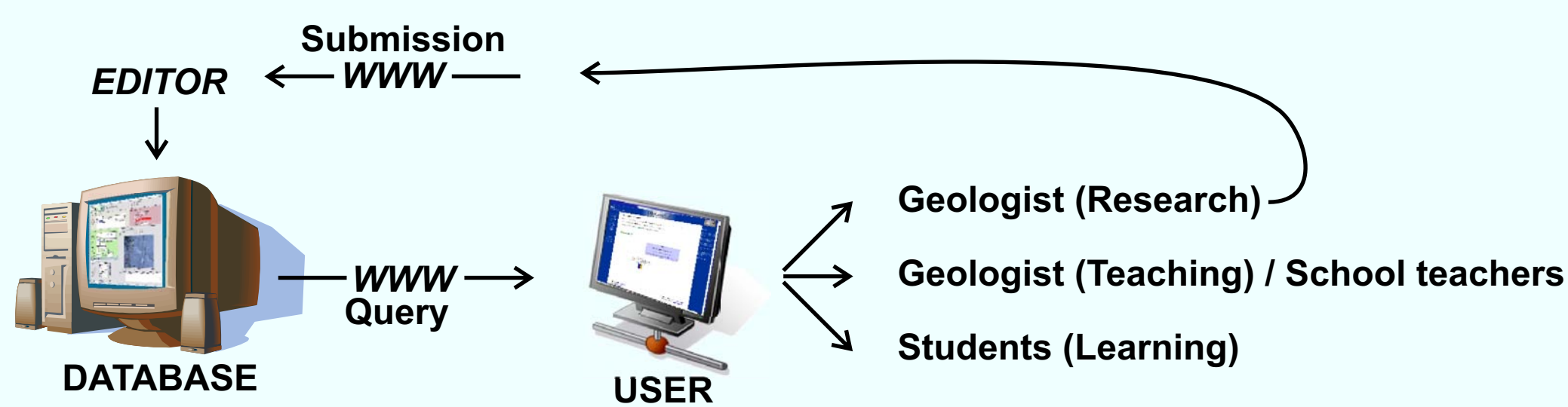
ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich



Introduction

The image database DioGeneS (Digital Images of Geologic & nice Structures) provides an open web based portal that allows finding images of geological structures held by the database. Initiated as an online reference collection for studies done at the Geological Institute, ETH Zurich, it has grown to a database with following aims:

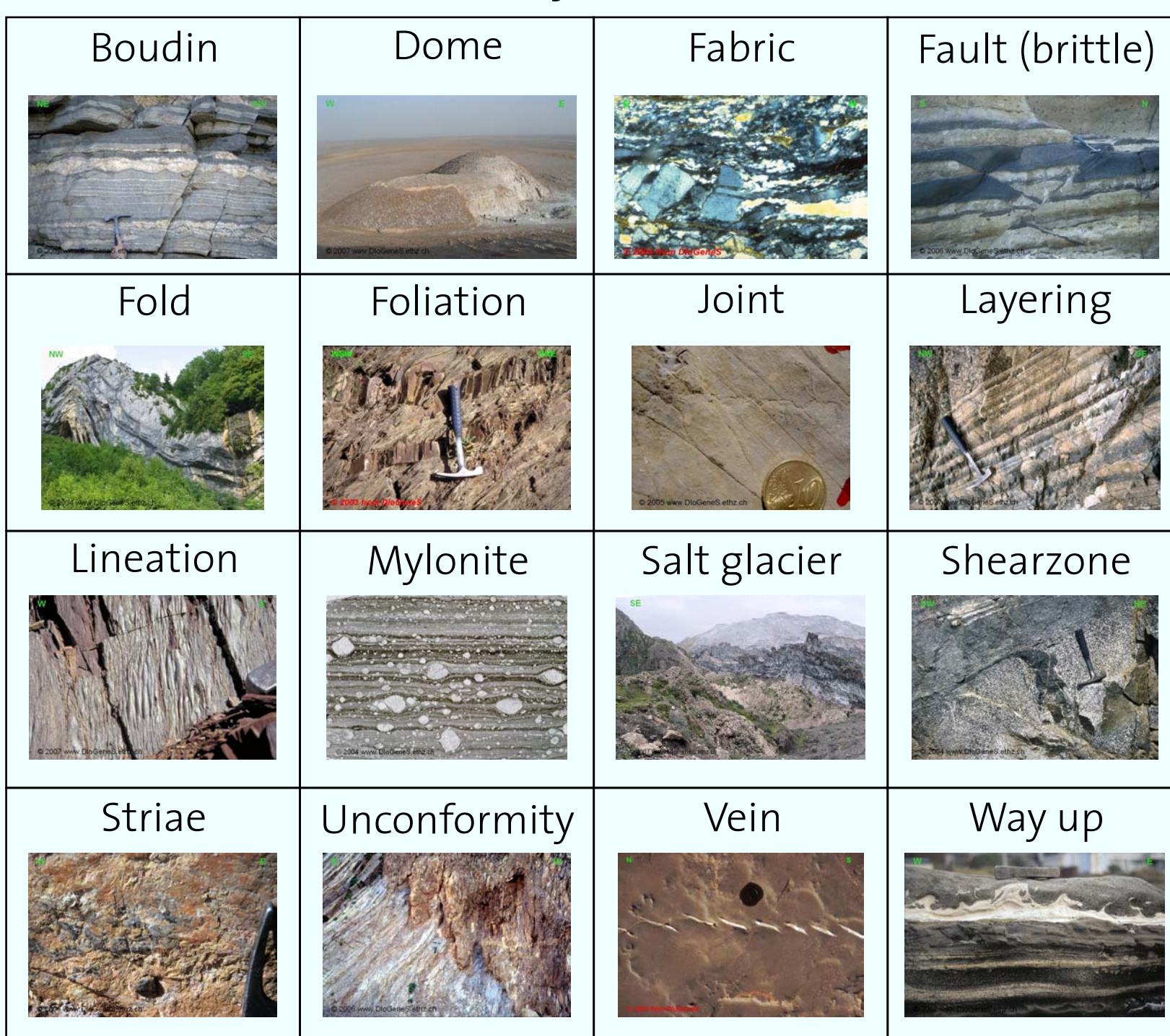
- to simplify structural identification,
- to serve the international geologists community as an interactive archive and
- to provide relevant information on individual structures.



Start page of DioGeneS: www.diogenes.ethz.ch

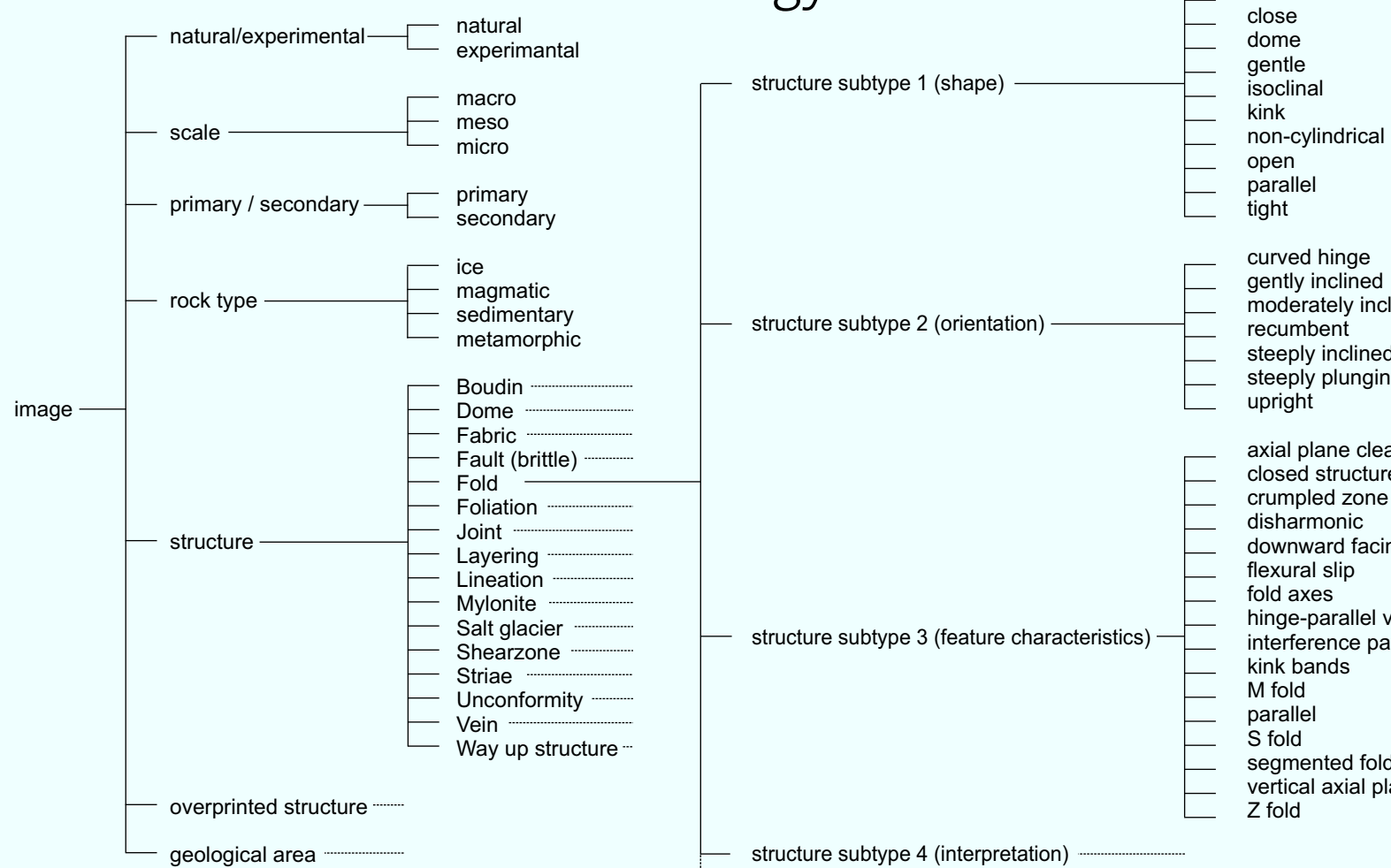


Content of database sort by main structure:



The database contains today approx. 120 images of geological structures. The strength of this database, compared to search engines, is that the images contain various geological attributes and consequently they are easy to find by geological classification.

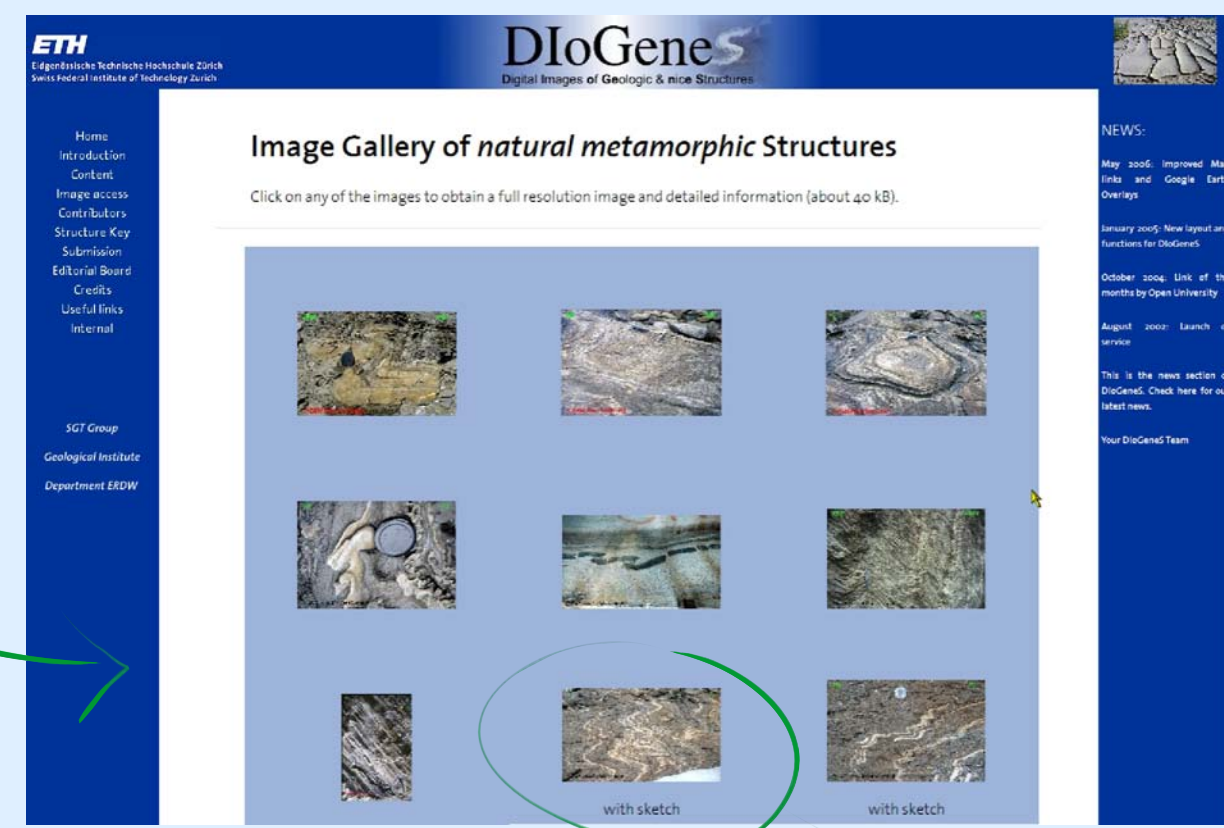
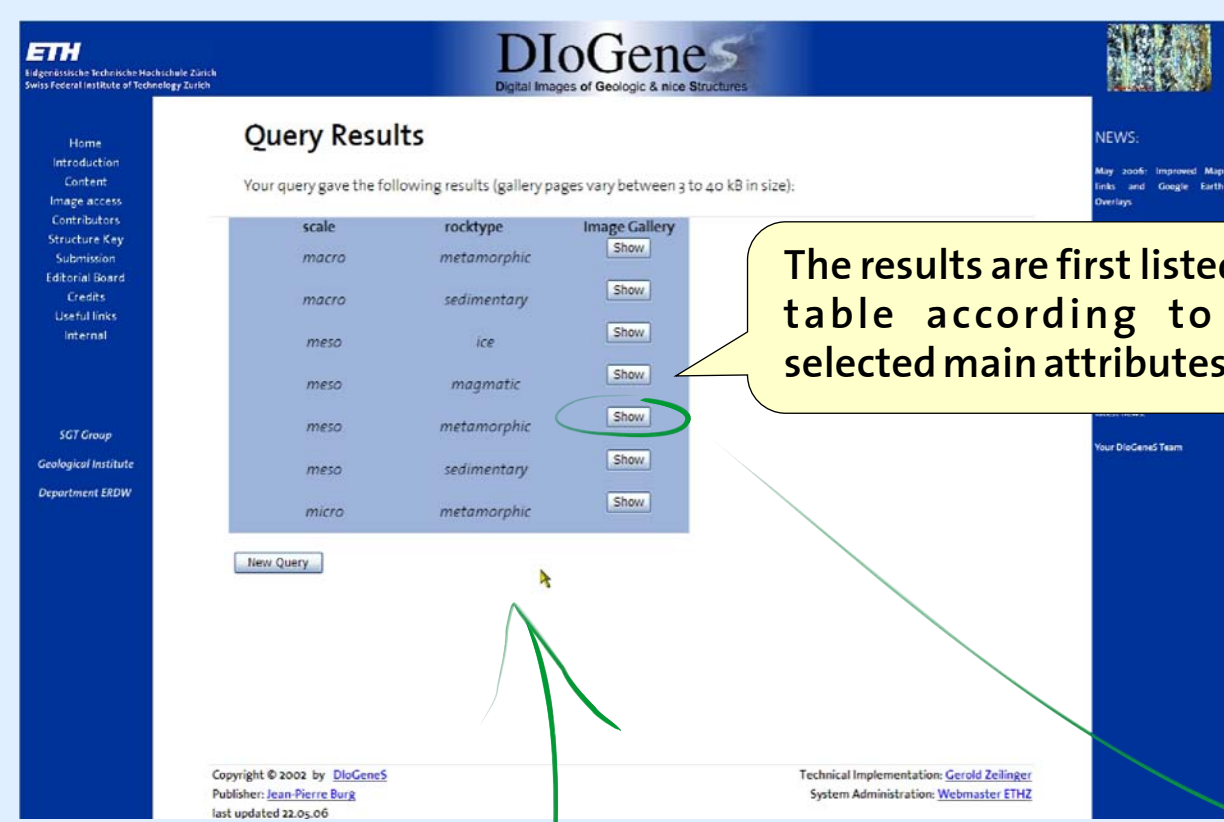
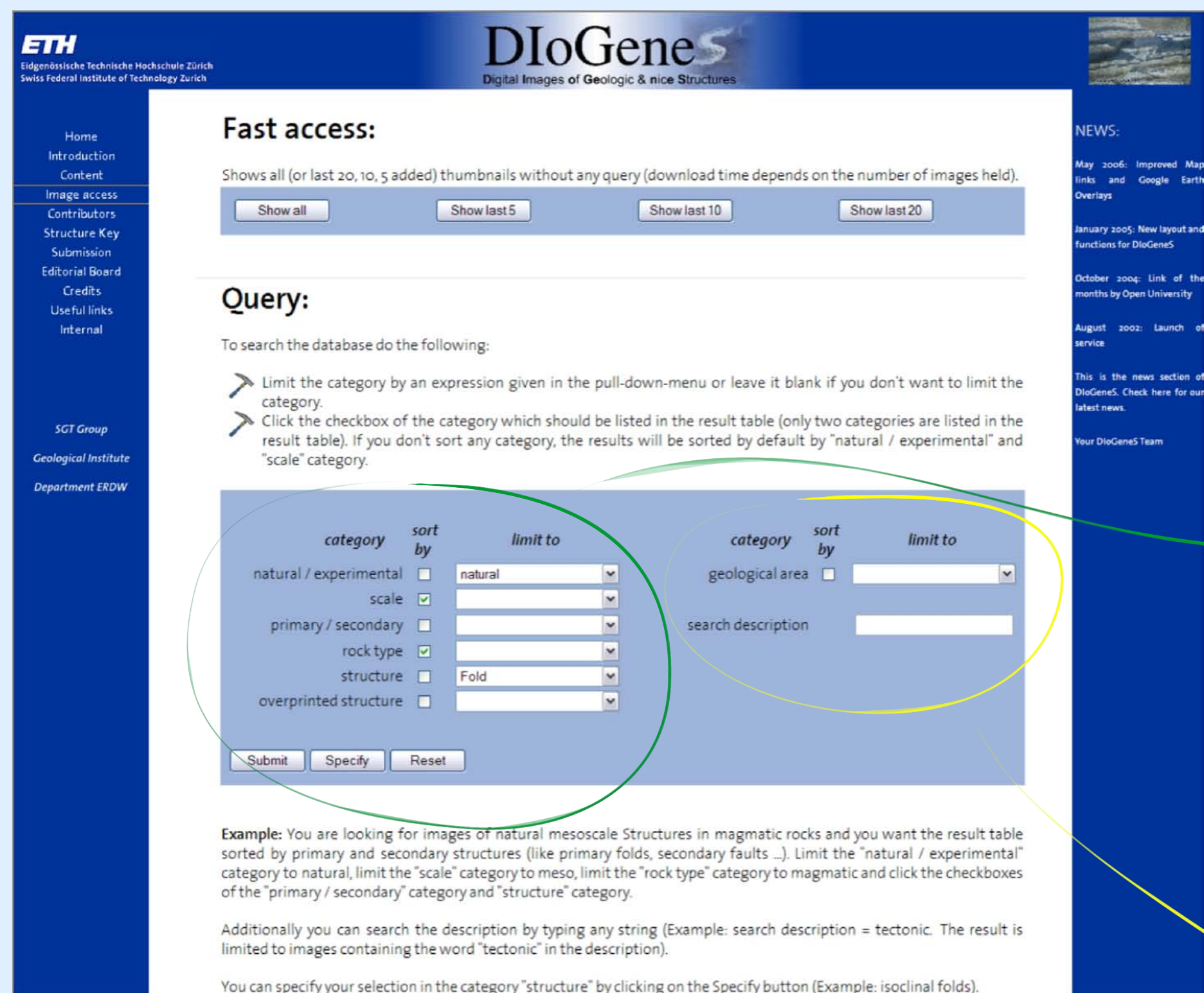
Main attributes are scale, genetic (natural or experimental structure), timing (primary or secondary structure), rock type, structure and overprinted structure. Additional attributes are shape, orientation, feature characteristics, interpretation of structure and lithology.



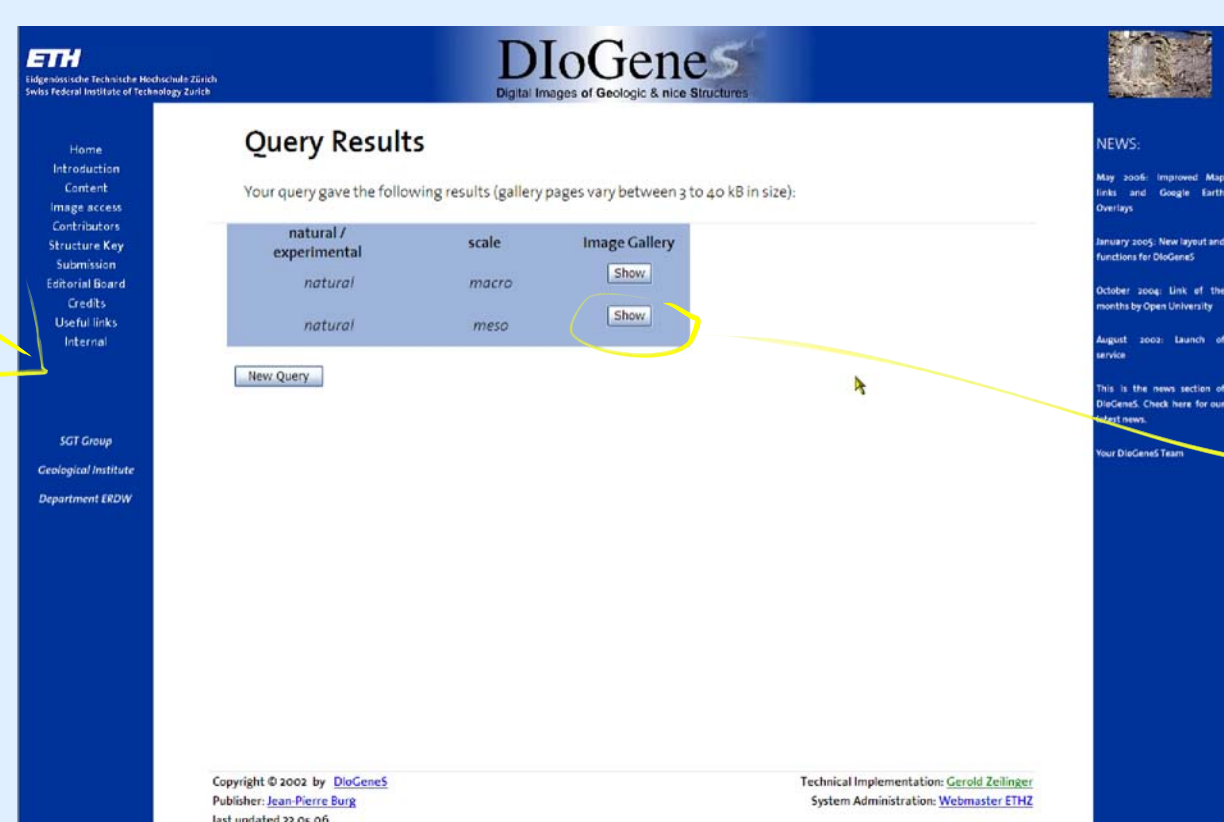
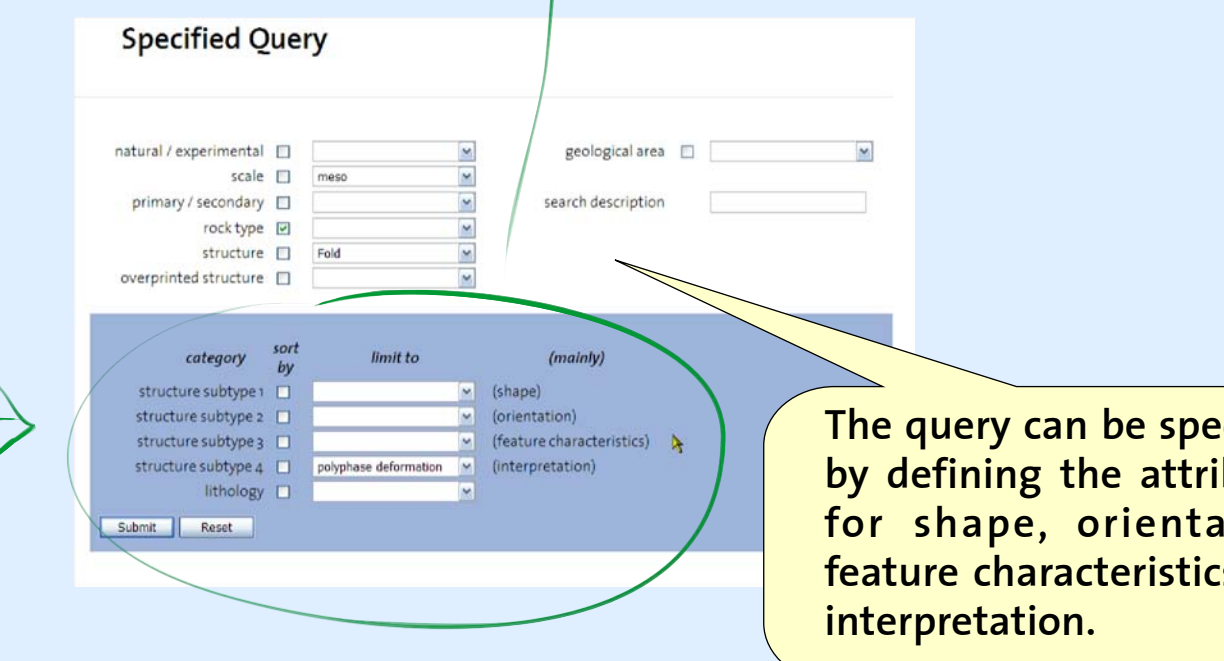
Content

Image access

All attributes can be searched with their specific keywords (e.g.: Boudin, Fabric, Fault, Fold, Foliation, Joint, Layering, Lamination, Mylonite, Shearzone, Striae, Unconformity ... in the attribute structure).



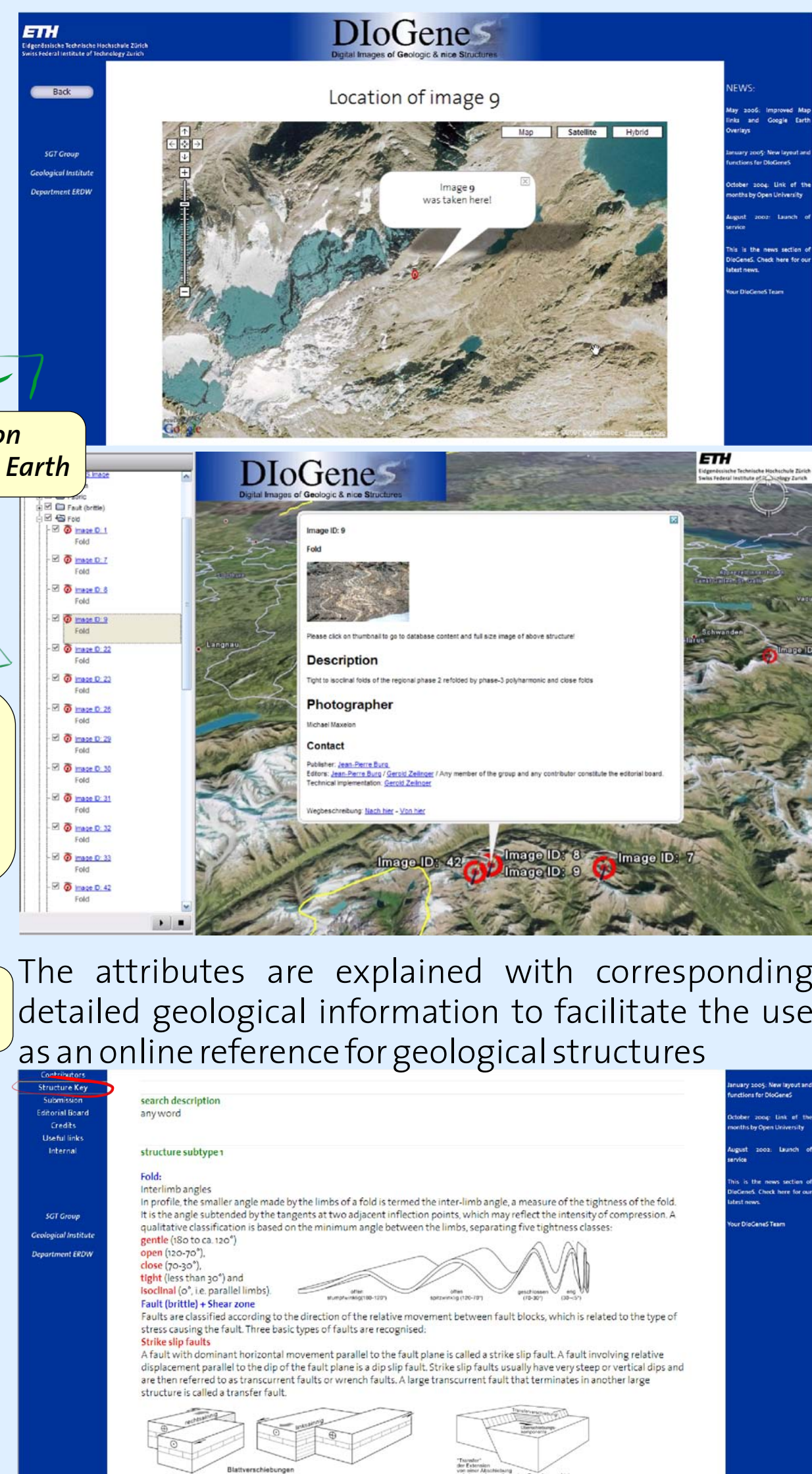
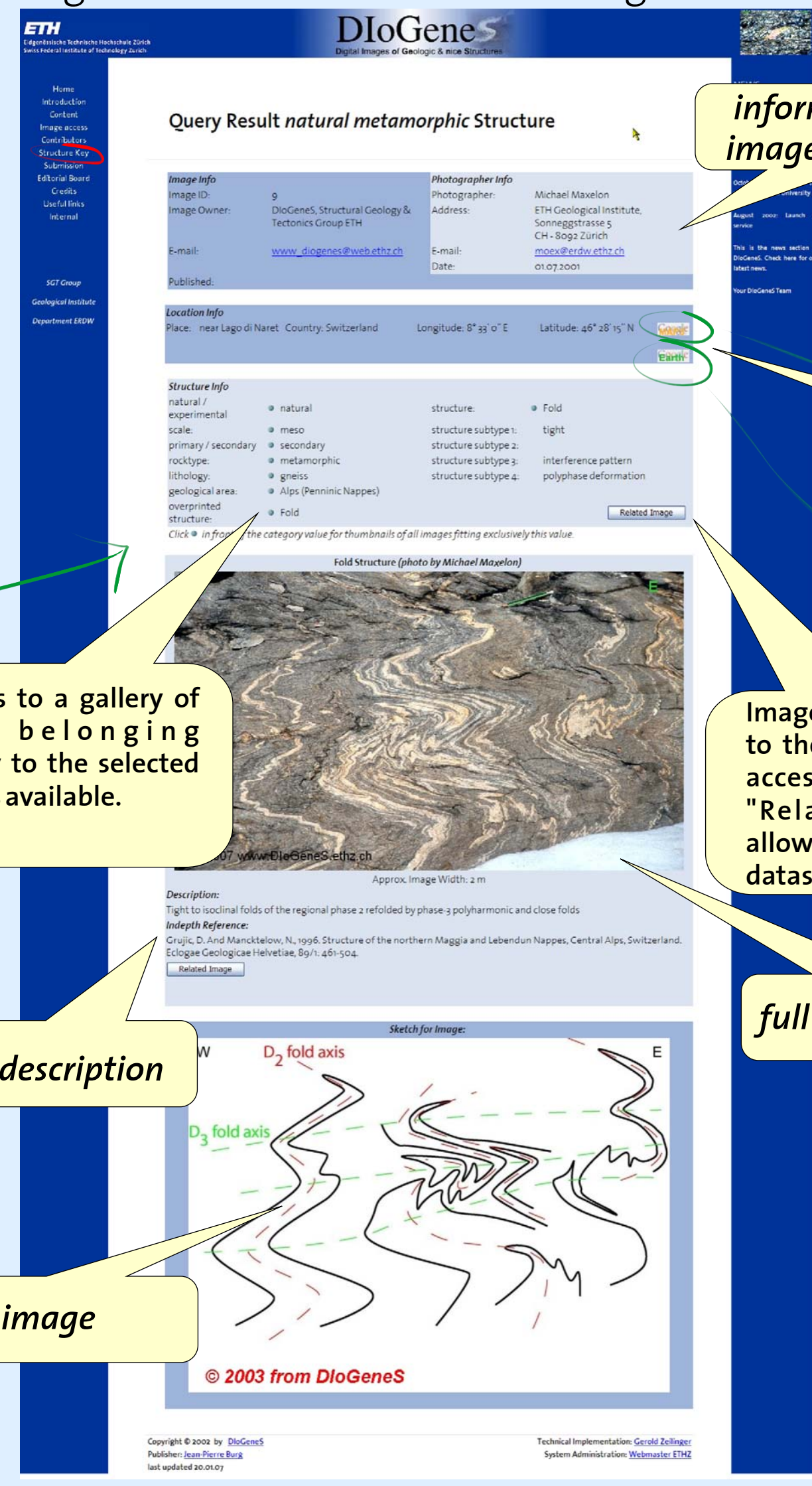
The images belonging to the attributes given in the table can be viewed in a gallery. If a sketch image is available, it is indicated.



Datasets can be alternatively searched by geological area and free text search for words in the description.

By choosing one dataset, a full resolution image is provided along with all attributes, detailed description of the structure, sketch images and information of the image owner.

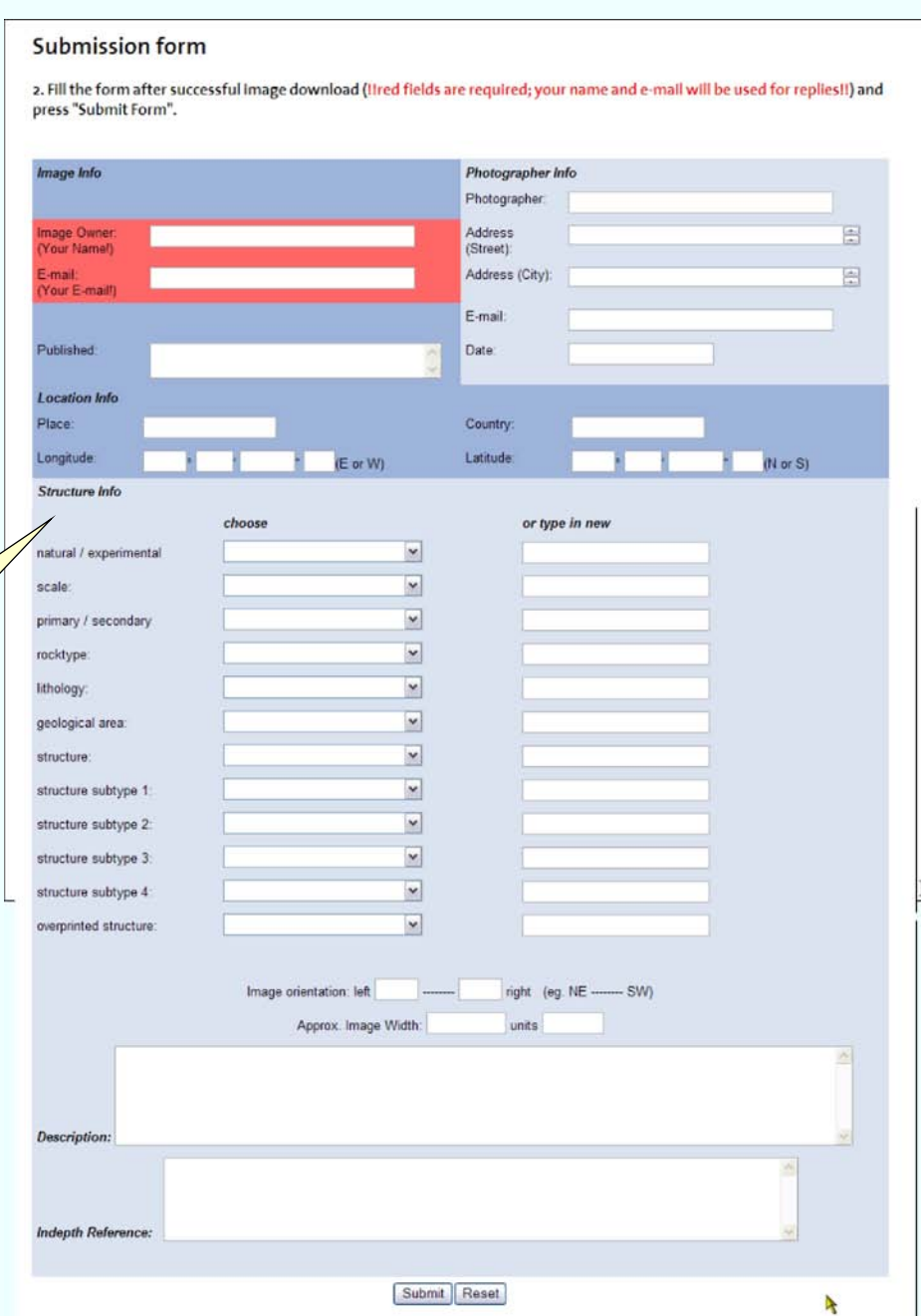
The location of the images is shown in a map/satellite view. In addition all images are available as a Google Earth overlay categorized by the main categories.



Contributions to the database are accepted from everybody in the geologist community and can be done by electronic submission to the editorial board that ensures the quality of images/structures. If you have an image of a very nice geological structure (also sedimentary structures are welcome!) and you want to share it with the community or students, please feel free to submit it to DioGeneS. Submission of the images is done in a few steps only.

1) Upload the image as TIFF or JPEG. You can also provide a sketch explaining the structure.

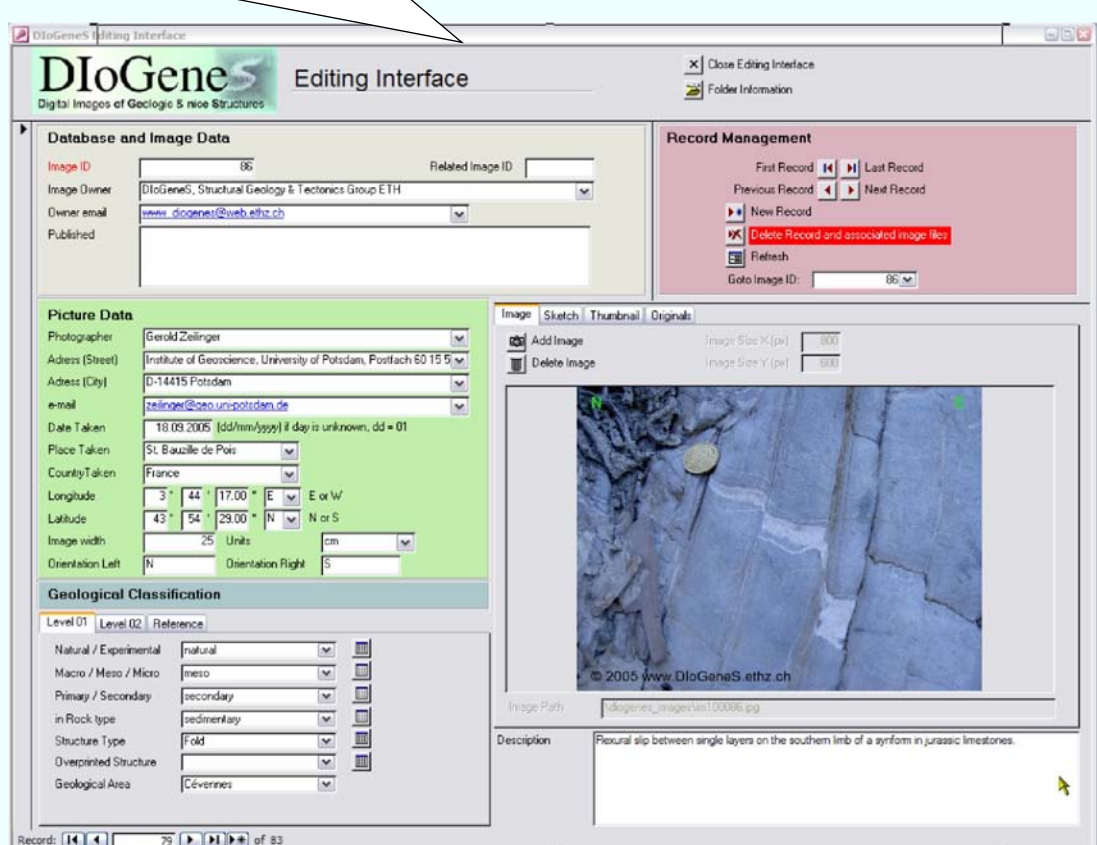
2) Fill the Submission Form. If your structure doesn't fit to the existing classification, you are free to add new attributes. Please provide a detailed description of the structure. Published images will be cited.



3) Editorial check and adding to database.

The structure and the description will be checked by the Editors. You will be informed, when your submitted image is online.

The images are added to the database by automated image processing called from the editing interface running on a Microsoft Access database.



DioGeneS (www.diogenes.ethz.ch) provides a practical and open way of identification of geological structures for students and it is an interactive archive with relevant information on individual structures for teachers and the international geologist community.

Citation: For published images, please, use the original reference as indicated in the database field "Published". For unpublished images please contact the copyright owner. If you publish images based on DioGeneS, we would be grateful if you could acknowledge our effort, by citing DioGeneS.

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DioGeneS Administration: www_diogenes@web.ethz.ch

Contributors to database:

1. Abbas Bahroudi
2. Andrea Cozzi
3. Annette Kimmich
4. Bas den Brok
5. C.J.L. Wilson
6. Erwan Le Guerroué
7. Felix Gnehm
8. Fernando Ornelas Marques
9. Gerold Zeilinger
10. Hugo Bucher
11. Jean Marcoux
12. Jean-Pierre Burg
13. Joseph P. Kopera
14. Luigi Burlini
15. Michael Maxelon
16. Michael Bystricky
17. Pierre Gautier
18. Ralf Hetzel
19. Sandeep Singh
20. Sergey Ziabrev
21. Stefan Heuberger
22. Stefan Schmalholz
23. Stéphane Herbretaux

Conclusion

Submission