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Applied geomorphological mapping (AppGeMa): a working group of the International Association of Geomorphologists

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Geomorphological mapping is the recording of surface form, materials and (inferred) processes. There was an original rise in interest in the late 1950's, with an explosion in application in the 1960's and 1970's. There has been limited work since that time. However, the last decade has seen a resurgence in landform mapping using new technologies and tools such as remote sensing, geographic information systems (GIS), and digital elevation models (DEM). For this reason a Working Group on Applied Geomorphological Mapping (AppGeMa) of the International Association of Geomorphologists has been formed.

The main goals of AppGeMa are to:

- develop and deepen the theoretical basis of applied geomorphological mapping within the new technical context
- develop standards, specific mapping procedures and legend systems
- disseminate the importance and effectiveness of the use of geomorphological mapping as a basic tool for those working with the physical environment
- help bridge scientific and professional communities

Specific Objectives of AppGeMa are to:

- develop a systematic, comparative study of different cartographic methodologies and applications, including different GIS legend systems
- establish a strong dialogue with other IAG working groups such as the Working Group on Planetary Geomorphology
- help foster the inter-professional exchange of applied mapping experiences
- promote standard mapping procedures amongst non-specialists.

Outputs proposed by AppGeMa include:

- A *Professional Handbook of Landform Mapping*, to be published in the Elsevier "Developments in Earth Surface Processes" book series. The table of contents has been developed, with the first full draft expected by the end of 2009.
- A Digital Atlas of Applied Geomorphological Maps, to be published by the end of 2009.
- A pamphlet on *The Importance of Geomorphology in Land Planning and Natural Hazards Prevention* (in the context of the International Year of Planet Earth initiative), to be published by the end of 2008.
- A Special issue of the *Journal of Maps* to be published by summer 2008.

The following web based outputs are also proposed:

- A reference database, to be a multilingual collection of the most important references on geomorphic mapping. This is in progress with completion aimed to be by the end of 2008.
- A Standardised set of symbols, GIS tools and palettes for the creation and use of mapping symbols, to be completed by the end of 2008.
- A collection of digital mapping resources for open source and proprietary mapping software, to be completed by the end of 2008.
- A multilingual Glossary of Geomorphological Mapping Terms by the end of 2009.

Other outputs will include:

- A collection of articles and book chapters on applied geomorphological mapping, where necessary translated into English (further language translations are being considered)
- A collection/library of geomorphological maps to serve as a reference for AppGeMa members.
- A session at the next IAG International Congress in Melbourne, June 2009.
- Summer school/short course open to people working with the environment, to disseminate the understanding, importance, and use of geomorphological maps (2009 or later).

Results achieved so far can be found on the AppGeMa web site (http://www.appgema.org), including access to the working group mailing list.

AppGeMa meetings at the following conferences have been convened or are planned:

- British Society for Geomorphology Annual Meeting, 4-6 July 2007, Birmingham (UK)
- IAG Regional Meeting, Kota Kinabalu, Malaysia, 25-29 June 2007
- Regional IAG, 8-10 September 2008, Braşov, (Romania)
- International Geomorphological Conference, June 2009, Melbourne (Australia). This will include a special session within the conference, as well as an AppGeMa meeting.

For more information go to the AppGeMa web site, or contact one of the following:

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