

FOURTH INTERNATIONAL CONFERENCE ON GEOMORPHOLOGY - Italy 1997  
 Symposium: Methods and Tools in Geomorphology

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TRENDS IN GEOMORPHOLOGIC MODELLING

This session has been held under the umbrella of Cogeoenvironment, the Commission on Geological Sciences for Environmental Planning of I.U.G.S. (International Union of Geological Sciences).

Cogeoenvironment's mission is to increase awareness of the general public, decision makers and earth scientists on the essential role of the geosciences for Environmental Planning. Such a mission is implemented by several activities such as cosponsoring international symposia and conferences. The geosciences can contribute to urban planning and management as follows:

- finding new water, energy, building materials resources;
- predicting impact of future development on ground stability;
- indicating geohazard potential;
- selecting sites for waste disposal;
- selecting sites for urban expansion;
- monitoring the state of the environment.

This session on methods and techniques in geomorphology is of particular relevance to the area of geohazard potential and represents a precious linkage with the International Association of Geomorphologists.

The topics discussed in the session revolved around methodologies of geomorphologic models, techniques for data capturing, processing and analysis, and integration approaches to predictive mapping (fig. 1).

Each oral presentation and poster of this session (fig. 2) has been distributed in the triangular diagram to show the novelty and originality of the contributions.

It is evident from the illustration that most of the presentations concern techniques and their application for methodology (5, 7, 44, 4, 16, 2) or for integration (3, 4, 15, 17, 13, 10, 8, 9, 12).

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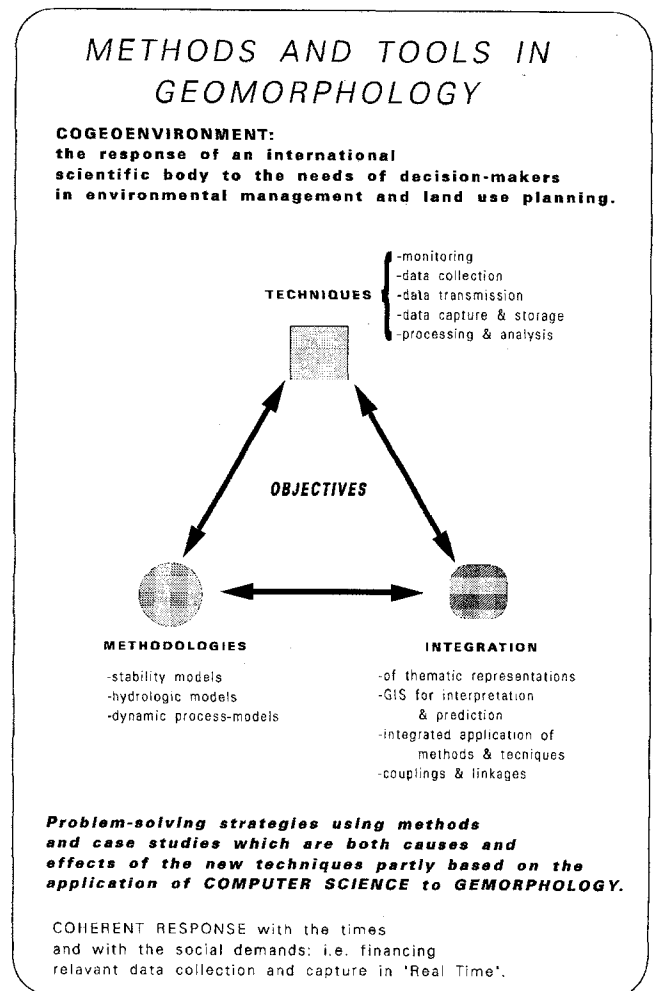


FIG. 1 - Triangular diagram showing the relationships among techniques, methodologies and their integration.

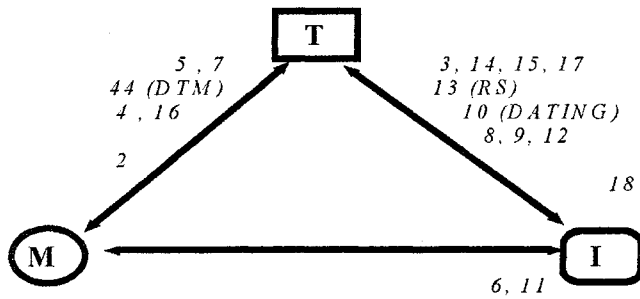


FIG. 2 - Triangular diagram showing the distributions of the oral and poster contributions concerning techniques, methodologies and integration. For the numbers see the list above.

The distribution of the contributions that clusters in the vicinity of the technology corner of the triangular diagram in fig. 2, represents a trend that is a reflection of the present interest of the scientific community.

Particularly innovative are the integration approaches proposed by contributions 6, 11 and 18, which presented analyses with the use of Geographical information systems.

There was no paper on pure methodology. It means that research concerning methodologies must be encouraged.

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