

**THE ROLE AND PLACE OF SPATIAL ANALYSIS IN EARTH AND  
SPACE SCIENCE INFORMATICS, INCLUDING THE CONTEXT OF  
TECHNOLOGY AND NEW DEFINITIONS OF THE TERMS  
GEOINFORMATICS AND GEOMATICS**

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Earth and space systems science encompasses the application of formal and computational methods, spatial and temporal analyses and all aspects of computer applications to acquire, store, process, exchange and visualise data and information about materials, properties, processes, features and phenomena that occur at all scales and locations in the five components of the Earth system. Terms such as geomatics and geoinformatics are used in the Earth Sciences. This paper attempts to redefine these names, i.e. the use of information systems to analyse and manage spatial data. In order to address the issue of naming, a study of the evolution of the structure of spatial data was carried out, a review of GIS acronyms was conducted, and another study was carried out by means of terminological analogies, comparing definitions of similar, in terms of vocabulary, names relating to other research areas. As a result of the research, 7 terminological postulates were developed to formulate limitations and rules for giving new definitions. The new author's definitions of geomatics and geoinformatics terms are presented at the end of the paper

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