

International Lithosphere Program (ILP)

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The Lithosphere is the connection between the deep Earth and the surface, and it forms the basis for society's exploitation of natural resources. The lithosphere is the topic of focused research in geology, geophysics, geochemistry and geotechnology. Experience shows that breakthroughs in the study of the Lithosphere can only be achieved through integration of imaging, monitoring, reconstruction and process modelling.

The International Lithosphere Program (ILP) has since 1980 supported research on the nature, dynamics, origin and evolution of the lithosphere. ILP promotes and directs research on first-order problems in modern integrated Solid Earth Science with focus on the lithosphere by organising international, multidisciplinary geoscience research projects and coordinating committees.

The program seeks to achieve a balance between: "addressing societal needs", e.g. providing information for improved resource exploration and environmental protection, as well as understanding natural catastrophes and other Solid Earth processes that affect the biosphere, and "satisfying scientific curiosity", e.g. through studying the basic processes at the Earth's surface and in the crust and mantle that affect Lithosphere evolution. The projects address topics within the key topics of Geoscience of Global Change, Contemporary Dynamics and Deep Processes, Continental Lithosphere, and Oceanic Lithosphere. The multidisciplinary task forces address their subjects through integrated interpretation of the lithosphere, modelling mantle dynamics, identification of links between the lithosphere and surface processes, and addressing the influence of paleoclimate changes.

I will provide an overview of the development of ILP, some of the major achievements by the programme, and an introduction to the on-going interdisciplinary projects in terms of task forces and regional coordinating committees.