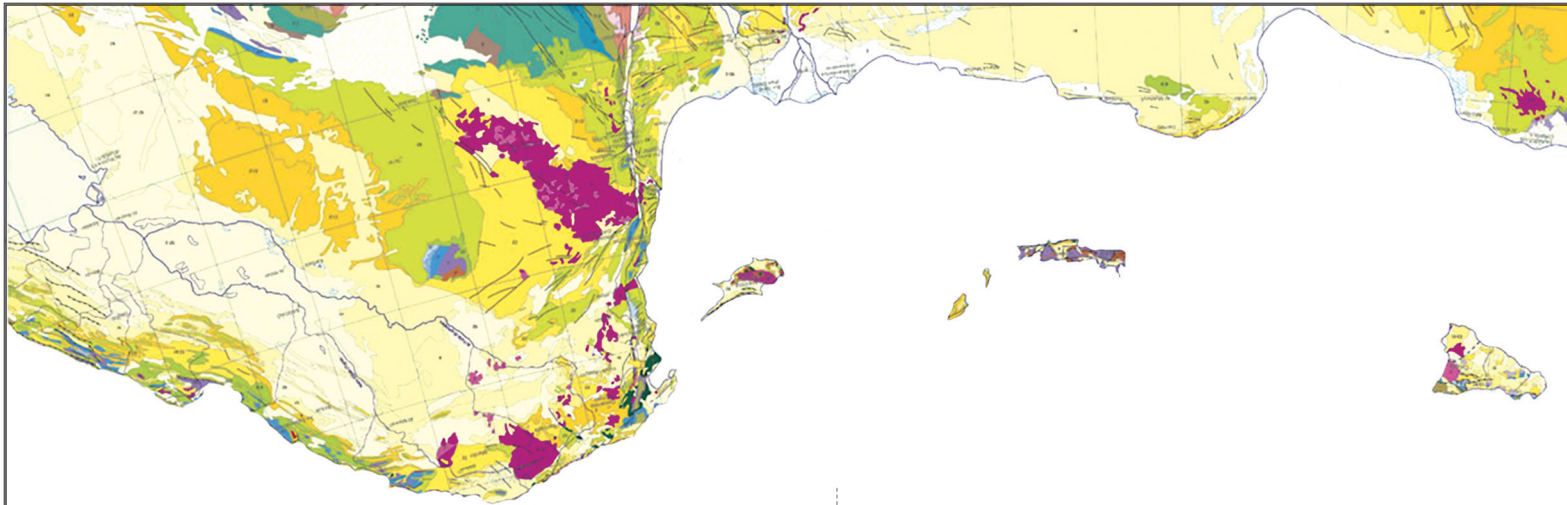


IUGS

Earth Science for the Global Community



International Union of Geological Sciences www.iugs.org

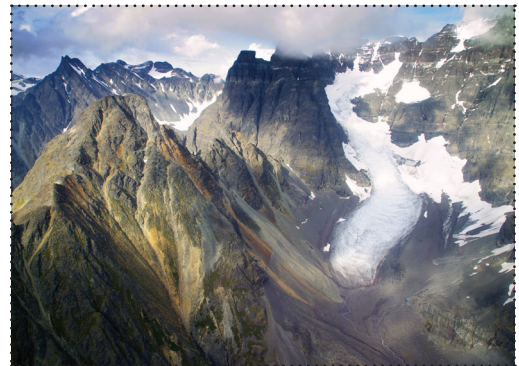


What is IUGS?

The International Union of Geological Sciences (IUGS) is a non-governmental organization representing a global membership of one million Earth scientists through its approximately 120 member countries and almost 50 affiliated organizations. It encourages international co-operation and participation in the Earth sciences with a view to understanding earth processes and earth resources especially in relation to human welfare. Since its foundation in 1961, IUGS has been a member of the International Council for Science (ICSU). Membership is open to countries or defined regions through an adhering organization.

International Geological Congress (IGC)

This Congress is held every four years under the sponsorship of IUGS, which advises and assists the organizers in formulating the scientific program. The joint IUGS-IGC Council meets in conjunction with sessions of the IGC. The main purpose of the Congress is to encourage the advancement of fundamental and applied research in the Earth sciences world-wide. The first IGC was held in Paris in 1878 and future venues include Brisbane in 2012 and Cape Town in 2016.

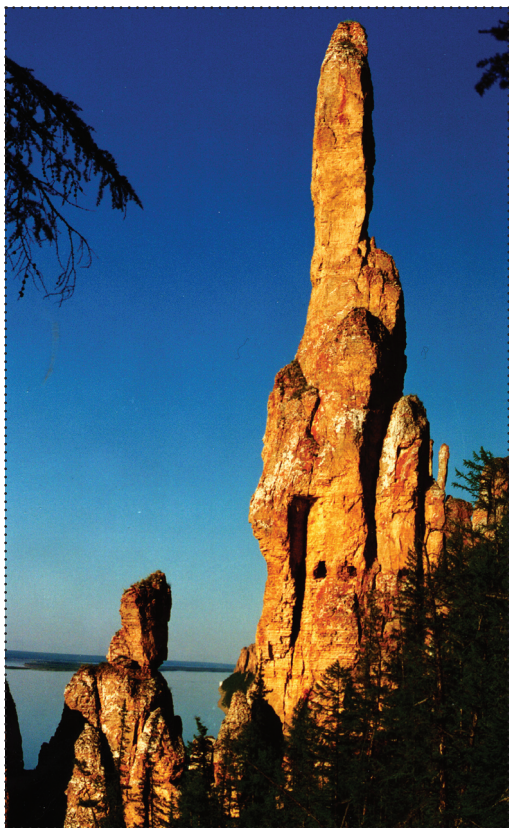
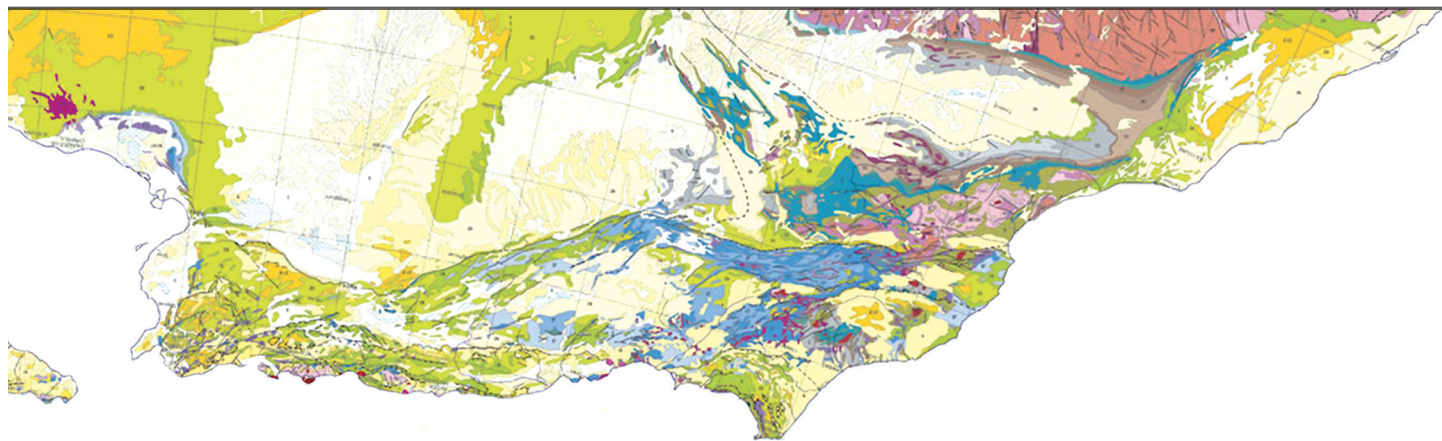


Coast Mountains near Terrace, British Columbia, Canada (D. Huntley)



Devonian reef reconstruction, Royal Tyrrell Museum, Drumheller, Canada (G. Nowlan)

Cover photo: Torres del Paine Mountains from Pehoe Lake, southern Chile, exposing an intrusive complex, dated at 12 Ma, with a granitoid-dominated 20 by 10 km laccolith (white) intruding Cretaceous sediments (grey). Photo: M. Veira.



Lena Pillars (Cambrian strata), Lena River, Siberia, Yakutia, Russia (M. Fedonkin)

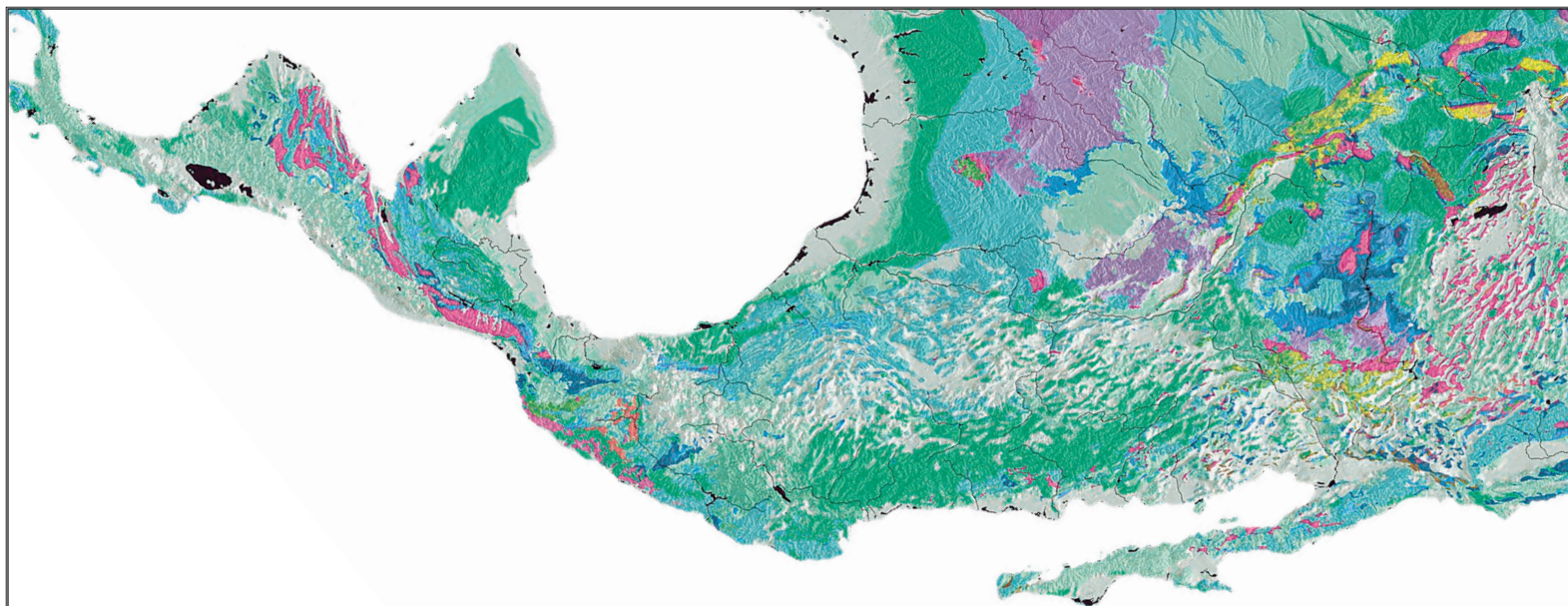
What does IUGS do?

IUGS fosters dialogue and communication among Earth scientists and earth science organizations around the world. It achieves this by organizing international projects and meetings, sponsoring symposia and scientific field trips, and producing publications. IUGS works through its Commissions, Subcommissions, Task Groups, Initiatives and Joint Programs with the support of its international affiliated organizations. A broad range of topics are addressed including fundamental and applied research, establishment of international standards, the economic and social impact of Earth sciences, and environmental, educational and developmental issues.

Looking towards the 50th Anniversary of IUGS

As Earth's population continues to expand and the impact of human activities on the planet's surface increases, it is a responsibility of the Union to make society conscious of the key role of earth science in helping to understand and solve global problems.

The IUGS Council has been actively developing new goals and directions under its evolving strategic plan. As IUGS approaches its 50th anniversary in 2011, the Union is working hard on activities that are of demonstrable relevance to society and is attempting to foster and develop new directions in earth science research. IUGS continues to work collaboratively with other earth science unions and agencies worldwide to achieve a balanced program. Additional high priorities are in the areas of earth science education and technology transfer between the developed and developing countries.



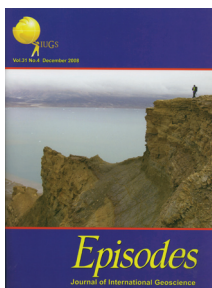
IUGS Communications

IUGS is active in publication and communication of Earth sciences worldwide.

Episodes

IUGS's quarterly science and news journal *Episodes* covers developments of regional and global importance in the Earth sciences and is distributed to scientists in almost 150 countries. It is a fully peer reviewed journal that accepts original scientific articles and review articles as well as opinion pieces on issues of the day and news of Earth sciences in the global arena.

Its SCI Journal Citation Report Impact Factor has risen steadily over time and currently stands between 1 and 2. All back issues are available for download at www.episodes.org.



IUGS Books

IUGS has a special publishing agreement with the Geological Society of London (GSL). Under this agreement, the results of scientific work completed by the various commissions and agencies of IUGS and books arising from sessions at International Geological Congresses are published under the GSL Special Publication series. For more information about publishing opportunities see the IUGS web site and www.geolsoc.org.uk

IUGS Website www.iugs.org

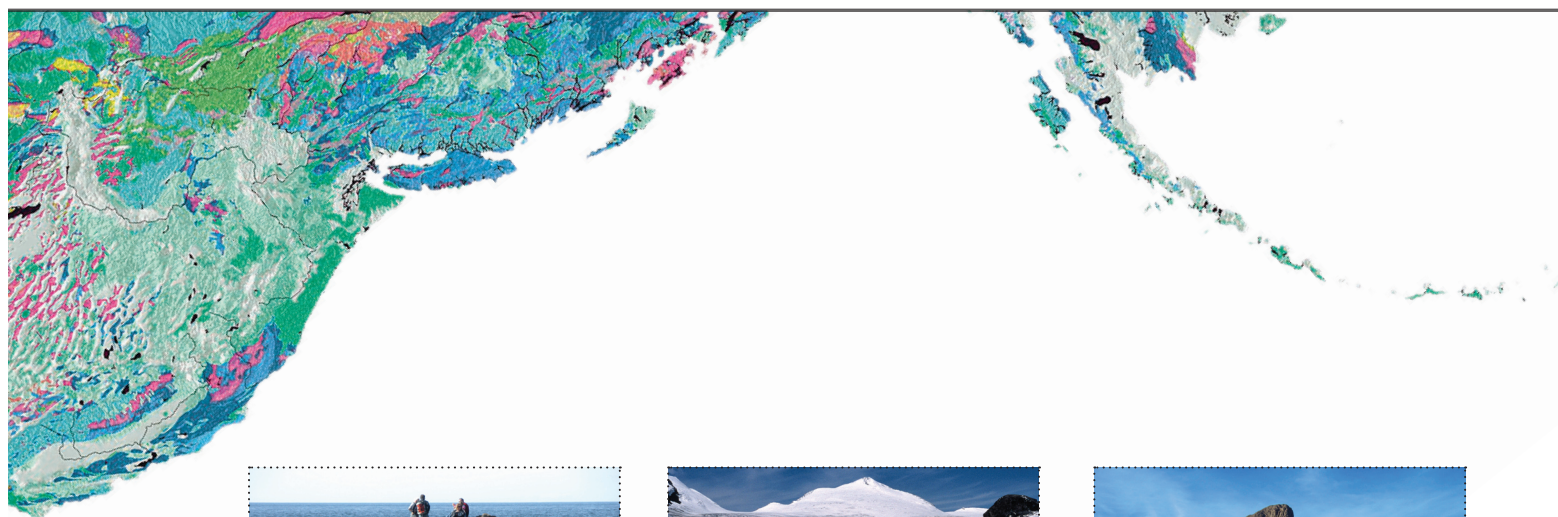
The IUGS web site provides scientists and others around the world with comprehensive, up-to-date information about the Union's history, organization, programs, personnel, publications, news, activities, and accomplishments. It also disseminates reports, policy positions, and other material of interest.

Electronic Bulletin

This bulletin is released several times a year to about 10,000 email addresses worldwide. These short and informal "news bites" briefly convey the activities and accomplishments within the Union and its family of members and countries and are meant to keep Earth scientists and others abreast of changes and events in the IUGS community at large.

IUGS Annual Report

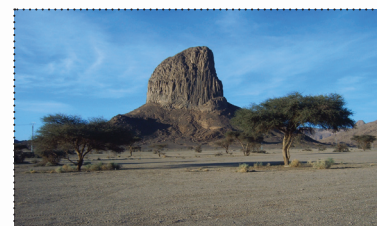
The Annual Report provides scientists and the general public with information about the activities in IUGS. Since 2003 Annual Reports have been released as digital files available for download from www.iugs.org



Columnar basalt, Giant's Causeway, Northern Ireland (G. Nowlan)



Gross Glockner glacier, Austrian Alps (G. Nowlan)



Iharen trachytic neck, Morocco (E. Errami)

The International Year of Planet Earth

www.yearofplanetearth.org



The International Year of Planet Earth (IYPE) is a joint initiative of IUGS and UNESCO that aims to capture people's imagination with the exciting knowledge Earth scientists have about our planet, and to ensure that this knowledge is used to make the Earth a safer, healthier and wealthier place for our children and grandchildren. The tag line is Earth Science for Society.

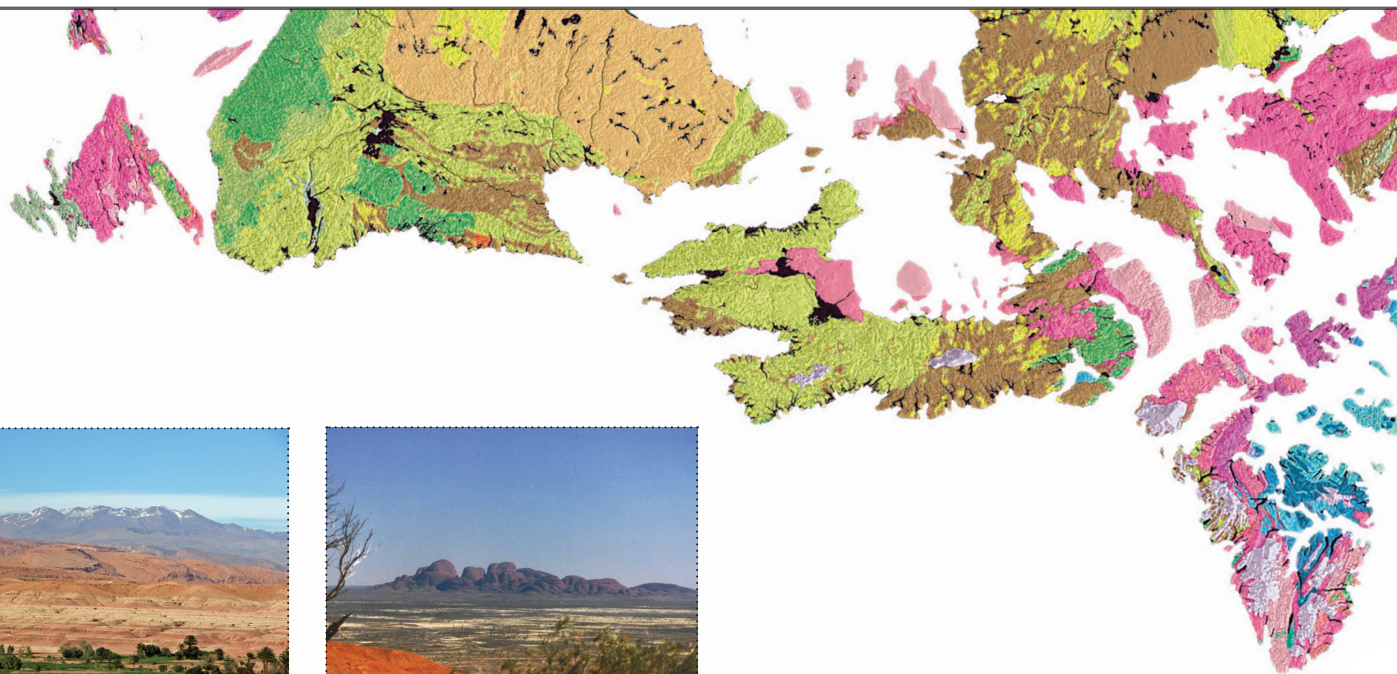
The International Year runs from January 2007 to December 2009, the central year of the triennium (2008) having been proclaimed by the United Nations General Assembly as the UN Year. The UN sees the Year as a contribution to their sustainable development targets as it promotes wise (sustainable) use of Earth materials and encourages better planning and management to reduce risks for the world's inhabitants.

National Committees have been established in some 80 countries and a significant amount of financial and in-kind resources are being used to deliver science and outreach programs in these countries. Launch events have

been held in many countries and the global launch event took place in February 2008. Outreach projects including popular books on Earth sciences, contests for the general public, new web sites, art and song competitions, books of geo-poetry, special tours, exhibitions, rock concerts, choice of national rock, new stamps and coins have been developed in different countries.

In terms of science a significant development is the 1:1 M digital geological map of the globe (OneGeology) supported by geological surveys around the world. Several national and international conferences have featured IYPE themes.

It is hoped that the sum of all these activities will leave a strong legacy of knowledge and information for education of the public and future development of the Earth sciences across the globe



Atlas Mountains, Morocco (G. Nowlan)



The Olgas, central Australia (C. Simpson)

IUGS Joint Programs

International Geoscience Program

The International Geoscience Program (IGCP) is the most successful science program ever conducted in UNESCO, and IUGS has been a full partner since its start. Tens of thousands of Earth scientists from nearly every nation on Earth have been involved in the Program since its launch in 1972. It is a global program of scientific collaboration between working scientists and has developed multidisciplinary projects that have had a lasting impact.

The current focus of the program is on socially and culturally relevant themes including: geoscience of the water cycle, geohazards, deep earth, earth resources/energy, global change and the evolution of life. About 40 IGCP projects are active in any single year and since its inception over 500 projects have been financially supported.

GARS

The Geological Applications of Remote Sensing (GARS) Programme is an international co-operation programme jointly sponsored by UNESCO and the International Union of Geological Sciences (IUGS).

The GARS Program contributes to the advancement of geological research throughout the world and the development of the understanding of the Earth system, in order to address problems of particular relevance to the welfare of the Earth's population with respect to geohazards.

Global Geoparks Network

IUGS with UNESCO is a supporter of the Global Geoparks Network. A Geopark is an area with significant geological heritage that is under a strong management structure and where a sustainable economic development strategy is in place. A Geopark is a community initiative that creates employment opportunities and real economic benefit, usually through the development of sustainable tourism and public education.



Head frame, Giant gold mine, near Yellowknife, NWT, Canada (G. Nowlan)

How IUGS Functions: Its Commissions and Task Groups

IUGS works through its Commissions, Subcommissions, Task Groups, Initiatives and Joint Programmes in order to achieve its goals.

Commissions and Task Groups are developed for the specific needs of the international earth science community and to improve the prosperity of nations and the quality of human life. They work in many different areas:

International Standards

The International Commission on Stratigraphy (ICS)

www.stratigraphy.org

Continuing development of a standard, globally applicable, stratigraphic scale.

Task Group on Isotopes and Geochemistry (TGIG)

Developing standards for isotopic decay constants, isotopic abundances, and uncertainties.

Commission for Geoscience Information (CGI)

www.cgi-iugs.org

Developing digital data standards to enable the global exchange of knowledge about geoscience information and systems.

Education and Culture

Commission on Geoscience Education, Training and Technology Transfer

www.geod.com.au/IUGSEducation

Developing programs to assist developed and developing countries to maintain, expand or introduce better earth science education, outreach and technology transfer.

Commission on the History of Geology

Promoting studies in the history of earth science and fostering the publication of individual and collective works that illuminate the history of the geological sciences.

Task Group on Tectonics and Structural Geology

www.tectonique.net/tectask

Encouraging innovative research and continuing education in tectonics and structural geology, the growth of intellectual capital and hence the impact of science on the wealth of the global society.

Environmental Management and Hazards

Commission on Geoscience for Environmental Management

www.mun.ca/canqua/ceg/

Providing guidance to geoscientists on how best to integrate geoscience into environmental policy and to communicate with policy makers, politicians, environmental organizations, scientists from other disciplines, and the general public.

Task Group on Global Geochemical Baselines

www.globalgeochemicalbaselines.eu

Preparing a global geochemical database, and its representation in map form, to document the concentration and distribution of chemical elements and species in the Earth's near-surface environment.

IUGS, with about 120 Adhering Members and some 50 Affiliated Organizations, is the largest body within the International Council of Science. IUGS maintains a non-political and non-governmental stance and is a non-profit organization. The Executive Committee comprises 10 distinguished scientists from around the world, and this body, in conjunction with a Permanent Secretariat based in Trondheim, Norway ensures that the Union operates as a professional scientific body and that the directions approved for the Union by the Council are carried out.



www.iugs.org

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