Centennial of the International Cooperation in Earth and Space Sciences

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The International Union of Geodesy and Geophysics (IUGG) was established in 1919 under the umbrella of the International Research Council (later ICSU, and now the International Science Council) as one of the unions to promote activities of existing associations dealing with geodesy, terrestrial magnetism and electricity, hydrology, meteorology, physical oceanography, seismology, volcanology. This presentation describes the origin and the development of the Union for the last century and until today. During the initial period (1919-1939), the number of member countries increased from nine founding Member countries to 35 Member countries; general assemblies were held every three years, each in a different international venue, and the number of delegates attending the assemblies increased from a few dozen to several hundred scientists. The World War II (WWII) interrupted the cooperation, and international scientific activities were resumed in 1946. The Union continued cooperation with many international scientific organizations of ICSU, and began cooperation with new intergovernmental organizations such as UNESCO and the World Meteorological Organization, and their programs. The technologies developed during the WWII were brought to bear in the extraordinary global scientific effort that was the International Geophysical Year (1957-1958). Changes in the geopolitical landscape brought about changes in the IUGG’s structure. International campaigns encompassing multiple disciplines became commonplace, and international scientific bodies were organized. At the beginning of the 21st century IUGG added an eighth association on cryospheric sciences, developed new grants, science education, and recognition programs, and added new commissions on geophysical risk & sustainability, climatic & environmental change, data & information, and planetary sciences to existing commissions on mathematical geophysics and study of the Earth’s deep interior. IUGG has been initiating, developing, and implementing international cooperative programs, setting scientific standards, developing research tools, educating and building capacity, and contributing to science for policy. Today, IUGG is a vibrant modern scientific union of 72 nations and scientists from all over the world promoting research, linking scientific knowledge to societal needs, and working toward a sustainable Earth.

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