

Markku Poutanen
Finnish Geodetic Institute

From Maupertuis to GRACE. Finnish contribution to the global geodesy

Abstract

Measurements of Pierre Louis de Maupertuis in the Valley of the Tornio River in Finnish Lapland solved the question on the shape of the Earth in 18th century. This was the first time Finland was recognized in the geodetic community. A century later, the great work of Friedrich Georg Wilhelm Struve, nowadays known as the Struve Geodetic Arc, meant a great impulse on the geodesy and surveying in Finland. In both expeditions also Finnish researchers were participated.

Establishment of the Finnish Geodetic Institute in 1918, exactly 90 years ago, and examples of previous centuries, led to a new generation of geodesists in the golden era of geodesy when new theories and techniques were developed to research the size, shape and gravity of the planet Earth. Among these geodesists were Ilmari Bonsdorff, Yrjö Väisälä, Weikko Heiskanen, Tauno Honkasalo, T.J. Kukkamäki and Juhani Kakkuri. Their great lucky was to collaborate with many world-class scientists in Europe and North-America, and this way give their contribution to the global geodetic community. In this presentation we will give a short overview on their work, from past to present. At the same time the 90-year Finnish Geodetic Institute congratulates Prof. Helmut Moritz on his 75-year anniversary. Prof. Moritz is one of the key persons in this golden era collaboration.