

## Preface

The HUN-REN Institute of Earth Physics and Space Science (EPSS) operates a wide range of geophysical and geological observation networks in Hungary (and at some sites abroad) that provide essential information about our natural environment, including the solid Earth, the upper atmosphere and the near-Earth space. These measurements are not only essential for geophysical and geological research, but in many cases they also represent a public service monitoring activity (e.g., the Hungarian National Seismological Network) of general interest to the society, and enables EPSS to be part of major international networks like the Integrated Carbon Observation System (ICOS), the International Real-time Magnetic Observatory Network (INTERMAGNET) or the Global Ionospheric Radio Observatory (GIRO). The importance of this unique and unparalleled monitoring infrastructure is also underlined by the fact that the Hungarian National Research, Development and Innovation Office (NK-FIH) recently recognized the Hungarian National Seismological Network and the Széchenyi István Geophysical Observatory as excellent research infrastructures, while the Zero Magnetic Field Laboratory (at Nagycenk) was recognized as a promising research infrastructure.

The original aim of the Geophysical Observatory Reports (GOR) series was to report on the current state of the permanent measurements at the Nagycenk Geophysical Observatory (NCK), also known as the Széchenyi István Geophysical Observatory (SZIGO), and to publish the recorded data. As these data have become available in digital format, the focus of the GOR has shifted to reporting on developments related to the measurements and the publication of short studies based on the measurement data. The fact that the Tihany Geophysical Observatory (TGO) is now also operated by EPSS has made it necessary to further extend the scope of the GOR series, which now covers all the continuous and campaign measurements carried out by EPSS (except seismological measurements).

The present issue contains a report on the current state of the permanent observations (Observatory Reports 2023–2024), as well as 6 further studies, for example on the meteorological measurements at the NCK, the background of an MT measurement campaign carried out in the Nógrád–Gömör volcanic region and the description of the geodynamic network along the Mur–Mürz fault line.

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