

## Geomagnetic data registered at Observatory Prague-Clementinum between 1840 and 1917

IAGA code: PRA

Latitude = 50° 05' N

Longitude = 14° 25' E

Altitude = 191 m

The observatory participated in the Göttingen Magnetic Union. That is why the measurements were scheduled according to the Göttingen mean solar time which is shifted of about 12 hours and 40 minutes against UTC, i.e. 00:00 of Göttingen mean solar time corresponds roughly to 11:20 UTC. Declination was measured on the hour and horizontal intensity 2 minutes later. The number and distribution of observations during a day changed several times in the course of time.

The data files of declination and horizontal intensity are organized in 27 columns. Columns 1 to 3 give year, month, and day. They are followed by 24 hourly values started at midnight (regarding to the Göttingen mean time).

All observations were published in the yearbooks called *Magnetische und meteorologische Beobachtungen zu Prag*, between 1839 and 1871 in the scale units, from 1872 in physical units. The transformation of data to physical units is discussed in the paper *The geomagnetic data of the Clementinum observatory in Prague since 1839*.

### Comments:

From the beginning of the year 1873, the amplitudes of the seasonal variation of the horizontal intensity appear smaller than the amplitudes before this year. It could be only guessed that the procedure being used to eliminate the temperature dependence of the magnetization of the needle in the bifilar device was probably improved considerably in 1870's, the apparent lowering of the amplitude of the seasonal variation being the result.

At first glance, it might seem that the variations of the horizontal intensity in 1902 and 1903 should have been taken with the negative sign. Nonetheless, the corresponding yearbooks do not contain any reference to such change. That is why the data files hold the data in their unchanged form, as they appeared in the original yearbooks.