Automatic Magnetic Observatories with AUTODIF

Jean Rasson

1 Institut Royal Meteorologique de Belgique, 2 none

This talk will focus on the automated magnetic observatory and the instrumentation which could be of use there. The main obstacle remaining for automatic operation is the absolute determination of the magnetic Declination and Inclination, which the AUTODIF is able to perform and where up to now a human observer has to manipulate a nonmagnetic theodolite.

We will elaborate on:
- why are automatic observations useful?
- what could be the configuration of an automatic observatory (buildings, land requirements...)?
- description,
- performance and
- commercial availability of the AUTODIF
- seamless integration of magnetic variometer, proton magnetometer and AUTODIF

Keywords: Geomagnetism, Observatory, Absolute observations, Automatic observations