Method	**MAGNETIC**		
Principle	Measured the magnetic flux density of the Earth's magnetic field or its component(s)		
Other information			
Devices	**Cesium magnetometer**	**Proton magnetometer**	**Flux gate magnetometer**
Devices in use	Geometrix G880	– Scintrex MP- 2, EnviMag and EnviMag gradiometer – GEM systems GSM-8 and GSM-9	– Jalander – Askania
Measured components or/and quantities	The total magnetic flux density of the Earth's magnetic field	The total magnetic flux density of the Earth's magnetic field	Anomaly of vertical component of the magnetic flux density of the Earth's magnetic field
Units	nT	nanotesla (nT)	100 nanoteslas (nT)
Reading accuracy	0.5 nT/ 0.5 s 0.005 nT/ 1 s	0.1 nT	10 nT
Measurement accuracy	3 nT absolute	±1 nT	
Other information	Marine magnetometer 4 probes	Measured since 1984	Used until 1985
Measurements	**Total intensity**	**Gradient of total intensity**	**Vertical component**
General	The diurnal variations of the Earth's magnetic field are corrected using a reference magnetic station.	Two sensors at two different altitudes. The diurnal variations of the total field are corrected using a reference magnetic station.	The diurnal variations of the Earth's magnetic field are corrected using reference magnetic measurements on base lines. Method used about until 1985.
Measured quantities	Magnetic flux density (Total magnetic intensity)	Magnetic flux density and its change in vertical direction	Change in vertical component of magnetic flux density
Measuring parameters	Coordinates and the chosen level of the reference station.		
Quality requirement of reading accuracy	Mean error of results < 10 nT		
Control of reading accuracy	Checking of results in the field and in the office		
Mean error of measurements	< 3 nT		

Location	Error of XY: (GPS) < 5 m, < 2 m (Focus-GPS), < 0.5 m (VRS-GPS) Z: not usually measured Typical mean error for station coordinate, 2 m (after correction) Typical mean error for line coordinate, 5 m (after correction)	
Repeat criteria	Measurements are repeated when lateral deviation is greater than half line interval or closure error is greater than point interval.	
Other information	Procedure during magnetic storms, look at Maastotyöohje GMM3 - Q22/1 (working instructions in the field)	Magnetic storms are not taken into consid-eration.