



## **Anomaly geomagnetic field in the center part of the Balcan Peninsula**

### **Abstract**

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An analysis of the structure geomagnetic field from the geomagnetic measurements performed in the last decade in the territory of the Republic of Macedonia. The research area is in the center of the Balkan Peninsula. Geological processes led to complex structure both at the surface of the terrain, and below the surface. The diversity of the rocks produce clear differences in the measurements of the magnetic field in this area.

The magnetic field is presented how the sum of two components: Normal and anomalous geomagnetic field. Regional terrain observations implemented from 15 repeat stations, allows us to define both the normal geomagnetic field and the anomalous geomagnetic field from regional aspect. Observation net is not dense, so it is not sufficient to define the local anomalies of the geomagnetic field.

The Correlation between maps of regional local anomaly geomagnetic field and the conclusions are also presented. Regarding the former, there is a good correlation between regional anomalous geomagnetic field and neotectonic regionalization in the area differentiating three zones: Western Macedonian zone, Vardar zone and Eastern Macedonian zone.