

Anomaly Magnetic Field of a Northwest Part of the Japan Sea

ZIMIN P.S. Pacific Oceanological Institute, Vladivostok, Russia

New possibilities of processing and using of all data given by hydromagnetic surveys conducted POI FEB RAS for last 13 years has allowed to construct a real map of an anomaly magnetic field on areas applied to Northern Korea and area of the Central Basin.

The analysis of the map allows to make the following conclusions:

- The anomaly magnetic field of the Central Basin basically reflects effects from structures of the magnetic “basement”, mainly of basaltic composition identified with the acoustic basement.

- The submarine volcanos are well expressed in a magnetic field by positive anomalies, among which the group of high intensive anomalies probably connected with last on time a volcanic stage.

- The seamounts “invisible” in a magnetic field are revealed, though by results of dredging were presented basalts on these heights.

- In western part of the area is revealed magnetic anomaly lineation elongated in N direction proving existence of axial structure extended from northern ending of a East-Korean Ridge to central part of the basin.

The character of an anomaly magnetic field can be explained by the development of basaltic covers having a normal or reversed direction of magnetization in the troughs and depressions complicating influence on character of a field of continental blocks having low magnetization, introduction of deep intrusions having high magnetization along coast of Primorye and superimposing of volcanic constructions of a concentric type