



The Russian contribution in WDMAM-2011 magnetic anomalies and anomalies of satellite Champ

Tamara Livinova (1) and Vladimir Glebovsky (2)

(1) All-Russian Geological Research Institute (VSEGEI), St Petersburg, Russia; Tamara_Litvinova@vsegei.ru, (2) VNIIOkeangeologia, St Petersburg, Russia

In VSEGEI is created the renovated digital cartographical model of an anomalous magnetic field (AMF) of territory of Russia and adjacent aquatory of scale 1:2 500000 on the basis of the available base summary digital materials prepared at various times by two organizations: VSEGEI and VNIIOkeangeologia. For this purpose uniform technological rules which have provided satisfactory synthesis of digital data files of an anomalous magnetic field in scale 1:2 500000 have been developed and realized. As a result of processing digital data file AMF the divergences reached 200 , have been eliminated. For inclusion in WDMAM-2011 the Russian side the digital model counted on height 1 km on a grid 55 is offered. Anomalous values are designed from normal field VSEGEI of an epoch of 1965. The magnetic grid (5x5 km) within the Russian continental shelf compiled in VNIIOkeangeologia was leveled, adjusted and merged with those created in VSEGEI on shore of Russian Federation. Data processing is made by software Geosoft.

Russian magnetic database in the Arctic Ocean was created as a result of adjusting of all historical and recent magnetic data sets, collected several organizations during the period about 40 years. Within the deep part of the Arctic Ocean this information was leveled, adjusted and combined with all available US magnetic data sets under cooperative project between and US Naval Research Laboratory. A result of this compilation is presented by grid of magnetic anomalies (5x5 km) that was used in the CAMP-GM project.