

# NEW INTERPRETATION OF MAGNETIC FIELDS ABOVE INTRUSIONS CONNECTED WITH LATE PALEOZOIC-MESOZOIC SUBDUCTION PROCESSES ON NORTH MARGIN OF TETHYS (OLEKMA-VITIM MOUNTAINS, EAST SIBERIA)

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These plutons are situated to the north of the Mongolia-Okhotsk fold – the Early-Middle Jurassic suture of Siberia and Mongolia-China continents. The long subduction (Permian-Jurassic) under Siberian plate preceded the origin of this structure. Calc-alkalic and latite granitoid magmatism has taken place together with subduction. Its products are predominantly represented with intrusions on modern surface. Plutons have plate-shaped form and subhorizontal bed. Studying of petrochemical zonation demonstrates that increase of alkalis repeats twice from the south to the north. Isotopic data form two zones too. Ages of rocks grow from the south to the north. It is believed that jumping of subduction zone took place. General interval of intrusion process is 320-140Ma. Analysis of aeromagnetic maps shows that granitoids of different bodies change the sign of magnetization from – 50mOe to +50mOe. Massives with positive or negative fields group chains more or less parallel to the Mongolia-Okhotsk suture. Probably, granitoid intrusions connected with subduction register magnetic polarity of Earth, which had existed at the time of its crystallization like ocean basalts. This supposition is confirmed with paleomagnetic research of granitoid samples from 6 different massives. Vector directions of magnetization of rocks and sign of fields above intrusions conform. Thus the received data show the possibility to establish the facts of magnetic field inversions during development of active continental paleomargins. Adduced data allow to make interesting fundamental and practical geological consequences. Started investigations have to be continued. Unfortunately, we are short of means at present moment.