Geophysical Research Abstracts Vol. 15, EGU2013-8964, 2013 EGU General Assembly 2013 © Author(s) 2013. CC Attribution 3.0 License.



Heat flow of Norway and its continental shelf

Christophe Pascal

Ruhr University Bochum, GMG Institute, Bochum, Germany (christophe.pascal@rub.de)

We present new heat flow determinations from Norway and its continental shelf. We revisited previously published results from southern Norway and completed the map with new results from northern Norway and the continental shelf. The present and most recent release of the heat flow map includes data from almost all regions of mainland Norway, Svalbard, the northern North Sea, the Norwegian Margin and the western Barents Sea. We show that most of the determined corrected heat flow values remain in the range from ~ 50 to ~ 60 mW/m2 both onshore and offshore. Local departures from this range of heat flow values in mainland Norway are, in general, related to anomalously high or low content in heat generating elements in the crystalline crust. Interestingly, some of the heat flow sites in coastal areas of northern Norway appear to be unaffected by paleoclimatic signals.