

Geological cartography of northern South Shetland Islands – a cooperation between Polish Geological Institute –NRI and Argentinian Geological Survey (SEGEMAR).

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Most of South Shetland Islands is covered with ice. Many of the rare rock outcrops are difficult to access. For this reason, the knowledge of the geological structure of South Shetland Islands is still insufficient. To fulfil white spots in geological cartography of this area, Polish Geological Institute – NRI and Argentinian SEGEMAR began this year geological and geophysical investigations. In the areas covered by ice in the vicinity of Polish and Argentinian Antarctic Stations a high-density magnetic survey was done by the means of drone. The magnetic survey was also performed in ice-free terrain and in the Ezcurra Inlet. In land not covered by ice, measurements of gravity field were performed. Extensive laboratory work on rocks is also planned. A set of samples was taken for U-Pb isotope dating, geochemistry and petromagnetic parameters necessary for the geological interpretation of magnetic data.