

For several decades the Geophysical Observatory of the Institute of Geophysics of the Polish Academy of Sciences has been conducting valuable meteorological observations and observations of the Earth's atmospheric electricity: electric field, electric conductivity of air and air pollution. The station monitors both local and global phenomena occurring in the electric environment of the Earth's atmosphere, the so-called Earth's Global Atmospheric Electric Circuit (GEC). From 1957, data from the station were published in the form of monthly summaries. We want to digitise these data series to give atmospheric electric circuit researchers a new look at the global and local electrical activity of the atmosphere as observed at the mid-latitudes Świder region. Our second major goal is to improve the Earth's electric atmospheric circuit model EGATEC. The data from Świder will serve as an observational validation material for the model results. We will develop model solutions for the period 1998-2005, shorter than the Świder ground observations due to the availability of satellite input data, on which the model and its structure of the Earth's electrical circuit are based. We want to finish the project with organisation of an international workshop on GEC modelling.