

ABSTRACT

Actuality of theme

At present, the electric field of the atmosphere is a characteristic that is poorly understood. And in vain as this feature can be very useful. At present, there are works that describe that the electric field of the atmosphere can serve as an informative parameter in finding minerals. The main characteristic of the electric field is its intensity. At the moment, the process of measuring the electric field strength of the atmosphere is quite a complex process, as in this case this parameter has very small values that are difficult to fix. And currently there is no automated system for measuring the electric field strength of the atmosphere in the field, for the study of minerals, and in general the influence of various factors on the voltage.

That is why the issue of creating an automated system for measuring the electric field strength of the atmosphere in the field, as well as improving existing methods of such measurement is very important.

The purpose and objectives of the study

The purpose of the study is to improve methods for measuring the electric field strength of the atmosphere, as well as to develop methods for automating this process.

To achieve this goal, the following tasks are **developed**:

- 1) Analysis of all existing methods for measuring the electric field strength of the atmosphere.
- 2) Improving the dynamic method of measuring the electric field strength of the atmosphere.
- 3) Analysis of methods for automating the process of measuring the electric field strength of the atmosphere in the field.
- 4) Development of an automated system for measuring the electric field strength of the atmosphere in the field.

Object of research - is the process of automated measurement of the electric field strength of the atmosphere in the field.

Subject of research - methods of measuring the electric field strength of the atmosphere in the field.

Methods of research are based on the theoretical foundations of measuring the electric field strength of the atmosphere, process automation, the theoretical basis of GPS, as well as the theoretical foundations of computer information processing

Scientific novelty of research:

1) The dynamic method of measuring the electric field strength of the atmosphere has been improved.

Practical value dissertation results:

1) Developed an automated device for measuring the electric field strength of the atmosphere in the field.

Keywords

Atmospheric electric field strength measurement, dynamic method of atmospheric electric field strength measurement, process automation.