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The trigger phenomena are shown in anomalies of geophysical fields, their space-time characteristics. The idea of complex geophysical observations on observatories, networks of stations was and remains fundamental base of the pilot studies. Instrument means of observations it is constantly improved, new sensors on the basis of new available technologies, all-in more difficult instrument decisions are created, it concerns sensors of geophysical fields and methods of processing of primary geophysical signals, use analog of digitizers, the new systems of filing.

The most developed and difficult method of geophysical surveys is seismic. Irrespective of the purpose of observations, it uses fluctuations of trial weight, included in a chain of Mehano - the electric transformations using electrodynamic, capacitive, electroinduction converters.

"Trigger signals" of geosystems, as a rule, are anomalies of morphological characteristics on some "normal"hum noise, or – it is more difficult, combinations of signs of "discernment" of the trigger. Anyway requirements, put forward by a solvable task are imposed to the equipment of geophysical observations. By experience studying of trigger effects in seismic observations, us it is developed and the line of electrodynamic seismoreceivers for observations by single seismic stations, groups of stations with various aperture, sea, land, well devices is improved.

In essence geophysical devices have dual purpose and can be used for the solution of military and applied tasks, to be patentozashchishchenny. The principal specifications of the main types of seismic devices of the 1980th years existing and expected in the long term are compared. In development of devices methodical requirements of problems of studying of trigger effects in dynamics of geospheres, applied and fundamental are considered.