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THE PROBLEM OF EARTHQUAKES PREDICTION

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The problem of earthquake predictions is exceptionally difficult and many-sided. Its solution has to do not only with some “trustworthy” precursor for making reliable judgement about the forthcoming event. To the date, tens of such forerunners have been discovered. Yet why does one or another precursor appears or not? How is it connected to the location of the registration point in relation to the earthquake source? What is the inner structure of such forerunner manifestation, and how does it vary depending on the power of the forthcoming event and the distance from it? How do geological peculiarities of a registration point influence behavior of forerunner and its intensity? How, when analyzing information, to allow for these peculiarities and introduce proper adjustments, so several points can be viewed as single observation system? Euphoria from discovering next forerunner passes quite quickly, since it is difficult to use. Moreover, for the majority of countries earthquakes are not a topical problem, and, therefore, unrest arising after each catastrophe quickly calms down, without improving needed researches. So geophysical society gradually comes to the pathways, and an array of sensors at Earth´s surface is the receiver device. Emplacement location of the receiver subsystems on top of geologic wave-guide structures is crucial. Since the nature of precursory signal is as yet unknown for specific seismogenic structures, the sensor assemblage should cover as many as possible signal types to be received and as broad as possible reception wavebands. Short-term forecasting tools of megaseismic events generated by specific seismogenic structures may emerge after a long period of sound experiments in geodynamically active regions. One may expect the validity of such tools not to be universal.