

HISTORY OF EARTHQUAKE FORECASTING METHODOLOGY

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Abstract: *One of the important problems facing scientists of the world, as well as seismologists of Uzbekistan, is the issue of early detection of earthquakes. Differences of opinion among scientists in the field of earthquake forecasting indicate that the probability of detecting earthquakes in advance is increasing. Uzbek seismologists have been emphasizing that the possibilities of early detection of seismic processes are expanding. This article describes the history of the scientific research of Uzbek seismologists on earthquake forecasting.*

Key words: *earth, earthquake, natural disaster, forecast, oil fields, water, human, disaster, tsunami, thermonuclear, history, seismology, reservoir, nature, society, seismic processes, republic, hypocenter, epicenter, universe, sun.*

Humans have now joined these natural forces that have exerted their influence throughout the entire geological history of the earth. As people use nature for their own needs, they continue to change the face of the earth. The creation of thermonuclear weapons, the opening of new oil fields, and the accumulation of water in large quantities in reservoirs are an additional burden on the earth. As a result, the force that has slowly accumulated over centuries in the interior of the earth sometimes suddenly starts to move - it causes earthquakes.

One of the ways to reduce the damage that can be caused by earthquakes is to accurately study the occurrence of earthquakes in time and plan preventive measures through it.

As a result of years of research, Sokha scientists have gained a lot of experience in studying large and small earthquakes and their causes. Scientists believe that most of the forces that cause earthquakes are usually at great depth, while earthquake hypocenters (epicenters) can also be near the surface. The closer the hypocenter is to the earth's surface, the stronger the earthquake, but it spreads over a smaller area. The deeper the hypocenter is, the greater the force of the earthquake is on the earth's surface and spreads over a larger area. The closer to the epicenter, that is, the hypocenter, the stronger the earthquake is above it. Usually, porous sedimentary rocks are present in the upper parts of the earth, while dense crystalline rocks formed under high pressure and temperature conditions lie in the interior. Cracks appear in places where some of the shells in the earth's crust are broken. Some large or small pieces of the earth's crust (blocks) move along these cracks. Such movement of large pieces can be the main cause of tectonic earthquakes. Such earthquakes are usually very powerful. Over the years, such earthquakes have been recorded day and night by thousands of seismometers on all continents, and opportunities for early detection of earthquakes are being sought.

Another important problem facing the field of seismology is the issue of early detection of earthquakes as a result of research. There are different opinions about this until now. However, today we can see that the probability of detecting earthquakes in advance is increasing. Uzbek seismologists are of the opinion that there is an opportunity to predetermine seismic processes in this matter. Prediction of earthquakes is based on identifying their predictors in advance. According to Sokha scientist B. N. Strakhov, "Earthquake prediction is a stable structure of an unstable whole."

In general, an important task facing the field of seismology is to determine where earthquakes are likely to occur, and most importantly, to predict when an earthquake will occur. Of course, this issue is difficult and complicated. Nevertheless, it is inevitable that this issue will find its solution in time.

Seismological scientists from Uzbekistan have done a lot of work on the issue of early detection of earthquakes as a result of research. The establishment of the Institute of Seismology of the UzFA led to the task of comprehensive study of earthquakes. At the same time, it was necessary to find a solution to the problem of protecting buildings and structures from natural hazards by studying their natural condition by zoning the earthquake-prone areas in front of the institute. To do this, to find out the causes of earthquakes, which have a long history, have affected human life for a lifetime, and have become one of the main problematic issues for them, as well as to determine in advance where, when and with what force, the Republic and the former Soviet Union scientists entered into cooperation. All conditions were created for seismologists to start such a big work. In response, seismologists have been able to study the causes of earthquakes and predict the strength and location of future earthquakes.

USED LITERATURE:

1. Mirzaev V. Earthquakes. - Tashkent, 1966. - pages 4.
2. Ibrokhimov R. After strong earthquakes. - Tashkent, 1982. - pages 13.
3. Institute of seismology named after G. O. Movlonov is 50 years old. - Tashkent, 2017. - pages 83 .
4. Abdullabekov Q. Can earthquakes be avoided? - Tashkent: Uzbekistan, 1992. - pages 40.