

THE WIND IS BLOWING, THE EARTH IS ROTATING

Moscow , Hydrometeorological Center of Russia

22.02.2005 *It will be possible to forecast any natural or social cataclysm by attentively*

observing the speed of the Earth's rotation and shift of its poles.



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The Earth rotates non-uniformly, its poles move, and the rotation axis fluctuates in space. According to the opinion of N.S. Sidorenkov, Doctor of Science (Physics&Mathematics), knowledge of reasons and regularities of our planet's movement gives the opportunity to forecast with high precision the weather, earthquakes, convulsion of nature and even economic crises, epidemic, political upheavals and wars. The scientist has made such a conclusion after long-term observations of tidal oscillations of the Earth's rotation speed, changes in atmospheric processes and hydrometeorological characteristics.

The speed of the Earth's rotation can be characterized by deviation of the earthday duration from the reference day equal to 86,400 seconds. The shorter the earthday is, the quicker the planet is rotating. In 1879, the Earth rotated at the highest speed when the earthday was 0.003 seconds shorter than the reference day, and in 1903, the speed was the lowest (the earthday exceeded the reference day by 0.004 seconds). There exists annual, seasonal, decennial and even the 60-70-year oscillation of speed of rotation. Contemporary methods of measurement allow to discover even periods being several hours long. Besides, our planet slightly sways relative to the rotation axis, thus shifting points of axis intersection with the earth's surface (instantaneous poles of the Earth). Their mechanical trajectory looks like helix which twists at one moment and untwists at another. The largest instantaneous pole's moving away from the helix center does not exceed 15 meters. Now the poles are untwisting and moving away from their centers, which, in their turn, are also shifting along a complicated zigzag curve. The northern center, for example, is slipping towards America at the rate of about 10 centimeters per year.

The poles' rotation unevenness and movement judder are caused by several processes. They depend on positional relationship of the Earth, the Moon and the Sun, tides, seasonal redistribution of air mass and moisture between mainlands and oceans, and also between the northern and the southern hemispheres. In wintertime, moisture in the form of snow is accumulated on land, and in spring it returns to the world ocean. The air mass above Eurasia in January is by $6 \cdot 10^{15}$ kilograms heavier than that in July. The main reason for seasonal unevenness of the Earth's rotation lies in atmospheric motion. When westerly becomes strong or easterly grows weak, the Earth's rotation slows down. When westerly grows weak or easterly becomes strong, the Earth rotates quicker.

The climate fluctuation can be to some extent forecasted by decennial fluctuations of speed of the Earth's rotation. During the Earth's acceleration periods, the frost mass increases in Antarctica, intensity of zonal air circulation becomes weaker, the northern hemisphere warms up quicker, the sky above the planet gets more cloudy, the catch of food fish in the Pacific Ocean increases. When the Earth's angular velocity drops, everything is vice versa.

According to Sidorenkov's observations, the Earth's rotation regimes coincide with tide fluctuations and

synoptical processes in the atmosphere. Thanks to that, observations of tides and the planet's rotation made it possible to produce very accurate meteorological forecasts for a day and for a period of up to a year. This method differs fundamentally from the ones used by weather forecasters. The forecasts produced with the help of this method prove to be 75 percent correct. The researcher believes that this method can be also used for predicting natural and social cataclysms. To this end, it is necessary to find spatio-temporal tie between various events, scientists in different spheres - physicians, psychologists, historians, astronomers and geophysicists - should be involved in search for this tie. In the meantime, N.S. Sidorenkov together with P.N. Sidorenkov have taken out a patent for a new "Method of Forecasting Hydrometeorological Characteristics".

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