

**PREDICTION THE SEA ECOLOGICAL CONDITION SYSTEM
CONSIDERING COSMOGENETIC PROCESSES**

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The quantity and quality diversity of the physico-chemical environmentally external factors surrounding us are great. It's proved that the degree of air humidity, environment temperature, atmospheric pressure, solar light quality etc. cause vibration of many physical, biological and geophysical processes take place on the Earth.

On the basis of the carried out analysis It's stated that the change concurrence of various geophysical processes in time is coordinated with the suggestion of external – “the solar impacts are”, for example, the change of the solar activity process considerably determines some characteristics of earthquake, sea level vibration, volcanic eruption and so on.

The huge actual material confirming of solar activity influence on processes taken place on the earth is accumulated. So there was determined correlation between 11-year's cycles of solar activity and earthquake, sea and lake levels vibrations, atmospheric changes and so on.

Steady growth of oil-gas consumption and expansion of their extraction volumes force to

Increase prospecting and drilling works in various areas of globe, especially, in shelf zones. It is necessary to consider the projecting and development of oil gas deposit problems in close interaction with hydrological parameters and parameters characterizing external impacts with the purpose of regulation of some technological processes of oil extracting.

With this purpose the task of statistic relation determination between the sea level (H), and the quantity of extracted oil from parameters characterizing external impacts (solar activity and solar spot area) was solved.

The researches on determining of solar activity periodicity and sea condition levels of the state indicate the relation between these phenomena, for example, it's proved, “that the reason of the Caspian Sea level changes are stipulated by the vibration of Earth atmosphere circulation regime”. And the Caspian Sea level through atmosphere circulation is the function of solar activity phase. The data on the Caspian sea level changes (H) and Wolf's numbers (W), characterizing the solar activity have been worked out to confirm this conclusion.

As it's seen from the picture the change of investigated parameters carries non-stationary character. Consequently there can be applied mutually correlated analysis used in the theory to the considered temporary series after their stationarization.

The method of sliding average was applied for transforming of initial temporary series in stationary casual sequences. By results of the carried out calculation it's possible to make a conclusion that maximal correlation between the vibration of Wolf's numbers and the Caspian sea levels is 0,9 with late, the level of static relation and the growth of dilate of between W-H indicate that the fact the solar activity impact on geophysical processes and determination of statistical relationship between oil selection changes (Q) the limits offshore oil-gas deposit groups and the vibration of the parameter of solar activity. The analysis of the received results that the vibration of solar activity correlates with the oil selection ones in the offshore deposit groups with high level correlation. The filtered characteristics of layer systems were also estimated with the presense of natural electromagnetic fields and their changes.

The above mentioned proves the necessity of considering account of solar activity estimating the Caspian Sea ecological condition connecting with the work of offshore oil-gas deposit development. It's assumed, that on the basis of the offshore ecological system model considering solar activity more accurate predicting of mail data of offshore oil deposits development and their management will be possible.