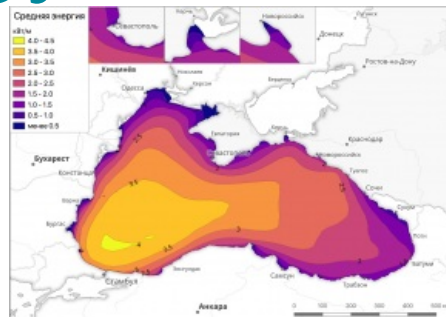
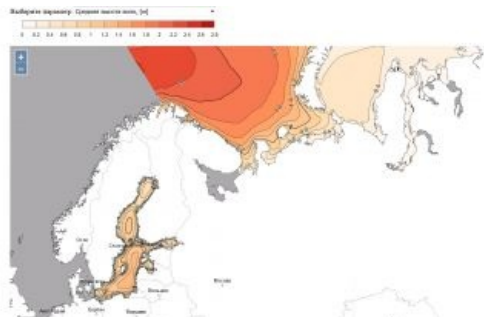


First Version of the Russian Wave Energy Web-atlas



Scientists from Lomonosov MSU (Faculty of Geography) have published the first version of the Russian wave energy web-atlas. The test version of the web-atlas posted at <http://autolab.geogr.msu.ru/wavenergy> in open access. It contains data on the wave energy spatial distribution in the Black, Caspian, Baltic, Barents and the Kara seas. The atlas also contains

information on the basic parameters of wind waves.

Energy Potential of the Wind and Waves

Scientists started developing of the web-atlas in 2018. The basis of the atlas consists of unique data on the energy potential of the wind and waves obtained due to results of the original numerical modelling. Within the framework of the web-atlas project, scientists are also developing the method for calculating the optimal compound of the power devices that use solar, wind and wave energy for the hybrid energy system.

Stable Generation of Electricity

"The created method allow counting the number of the generators of one type or another for the most stable generation of electricity or for its maximum generation over a certain period of time at the pointed location," said Stanislav Myslenkov (the senior researcher from the Oceanology department of the Lomonosov MSU), web-atlas project coordinator.

Studying Renewable Energy

There is an increasing interest trend in the studying of renewable energy all over the world. One of the real options for replacing hydrocarbon resources is the usage of the solar, wind and wave energy. Besides the depletion of resources, there is also another problem: fuel consumption harms the environment. Renewable energy sources are characterized by the inconstancy of distribution in space and time. Therefore, it is necessary to provide detailed estimates of the available "green" (renewable) energy for effective industrial development.



Russian Wave Atlas 2

The web-atlas will be enhanced with other data: wind energy and special statistical functions for seasonal variability of the wave and wind characteristics.