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The results of monitoring of hazardous natural processes in the coastal shelf zone of the gulf of Peter the Great in 2012-2013

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The monitoring of hazardous natural processes In coastal and shelf zone of the gulf of Peter the Great (sea of Japan) in 2012-2013 was made by staff of the Gramberg Institute VNIIOKEANGEOLOGIA .
The complex of field researches are:
- laser scanning beaches (tachometer Leica HDS 3000);
- echosounding underwater coastal slope (sounder-Navigator LCX-37C);
- high-frequency acoustic profiling (GeoPulse Subbotom Profilier);
- hydromagnetic shooting magnetometer SeaSPY Marine Magnetics;
- sonar shooting (complex GEO-CM-MAX);
- research of the water column (sounding and sampling);
- bottom sampling, including gasgeochemical shooting.
The result of this work is the following conclusions:
1. As the shore, and the underwater slope of the district are experiencing the preemptive destruction, the areas of which are quantitative and spatially prevail over the stable and accumulate zones (except the shores of the inland parts of bays and gulfs).
2. The rate of destruction of coast in the Gulf of Peter the Great is 1-20 meters for 100 years, that could pose a serious danger to the population and infrastructure.
3. Number of gasgeochemical anomalies on the shelf of the Gulf of Peter the Great spatially associated with fault lines, limiting blocks of the earth's crust within shelf.
4. Perhaps it is these faults are of the greatest seismic hazard in the moment.
5. Danger of themselves gas emissions
The following significant hazards and risks to the region have been studied: seismic and tsunami destruction of shore, gas emissions, technogenic pollution.