

EMERCOM of Russia

The Ministry of the Russian Federation for Civil Defence,
Emergencies and Elimination of Consequences of
Natural Disasters



The Development of the Due Warning
Systems of Emergencies
in the Russian Federation

A structured system of monitoring and disaster prevention on the structure of increased level of risk (SMIS)

The main objects of SMIS control



The transport infrastructure facility



The oil and gas industry



Structures with mass crowding

On-site equipment set



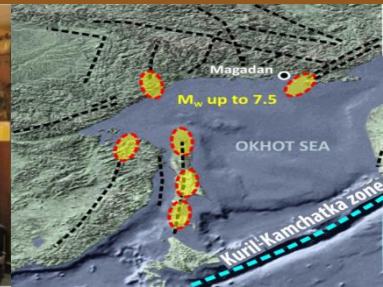
Emergency warning system of meteorological processes in Black Sea coastal zone



Joint civil protection and emergency control system



Structure of tsunami warning SYSTEM (TWS)



TWS infrastructure

- Reference seismic stations (5)
- Support seismic stations (6)
- Automated sea level stations (25)
- ▲ Hydromet stations operating as part of TWS (37)
- ★ Seismic data processing centers and tsunami warning centers (3)
- Hydrophysical stations on the sea floor (2)

Key parameters

Calculation of earthquake parameters
within **7 min**

Calculation of tsunami wave characteristics
within **1 min**

Warning
within **2 min**

Main outcomes

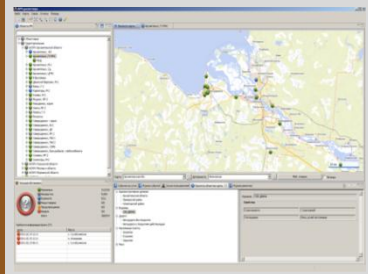
- Reducing false alarms
- Increasing the lead-time of warnings
- Extending the warning coverage

Monitoring systems of the Russian Federation

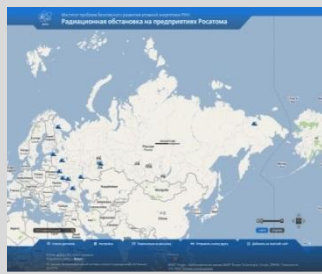
Radiological monitoring

Joint State for System Surveillance of Radiological Situation

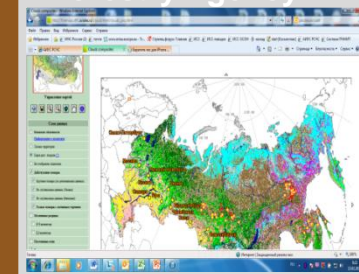
EGASKRO



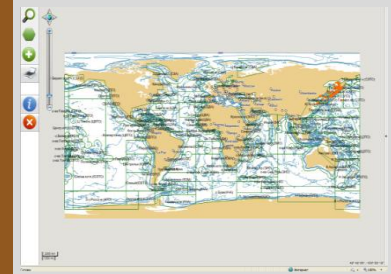
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Data base of Federal Forestry Agency

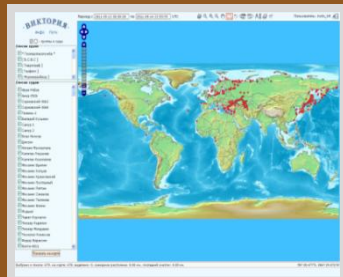


Data base of Federal Agency for Fisheries



Monitoring and data systems of Ministry of Transport

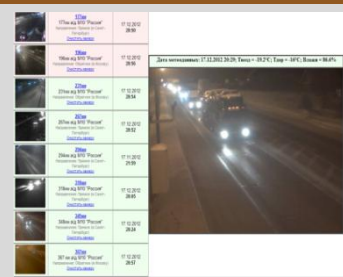
«VICTORIA»



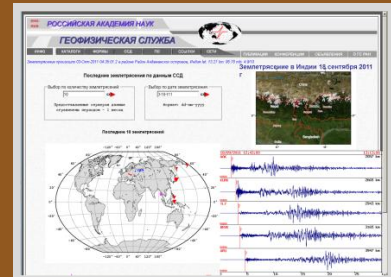
«MoRe»



«Road Traffic»



«SEISMIC»

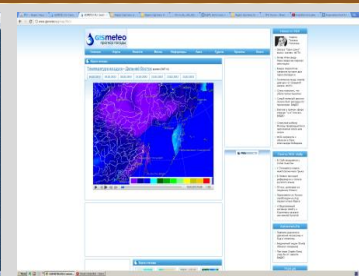


Monitoring systems of Federal Service for Hydrometeorology and Environmental Monitoring

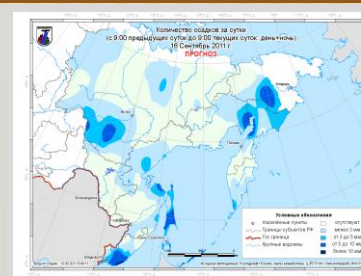
ESIMO



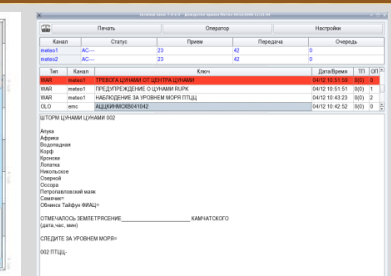
GISMETEO



«STORM»



«TSUNAMI»





Thank you for your attention!