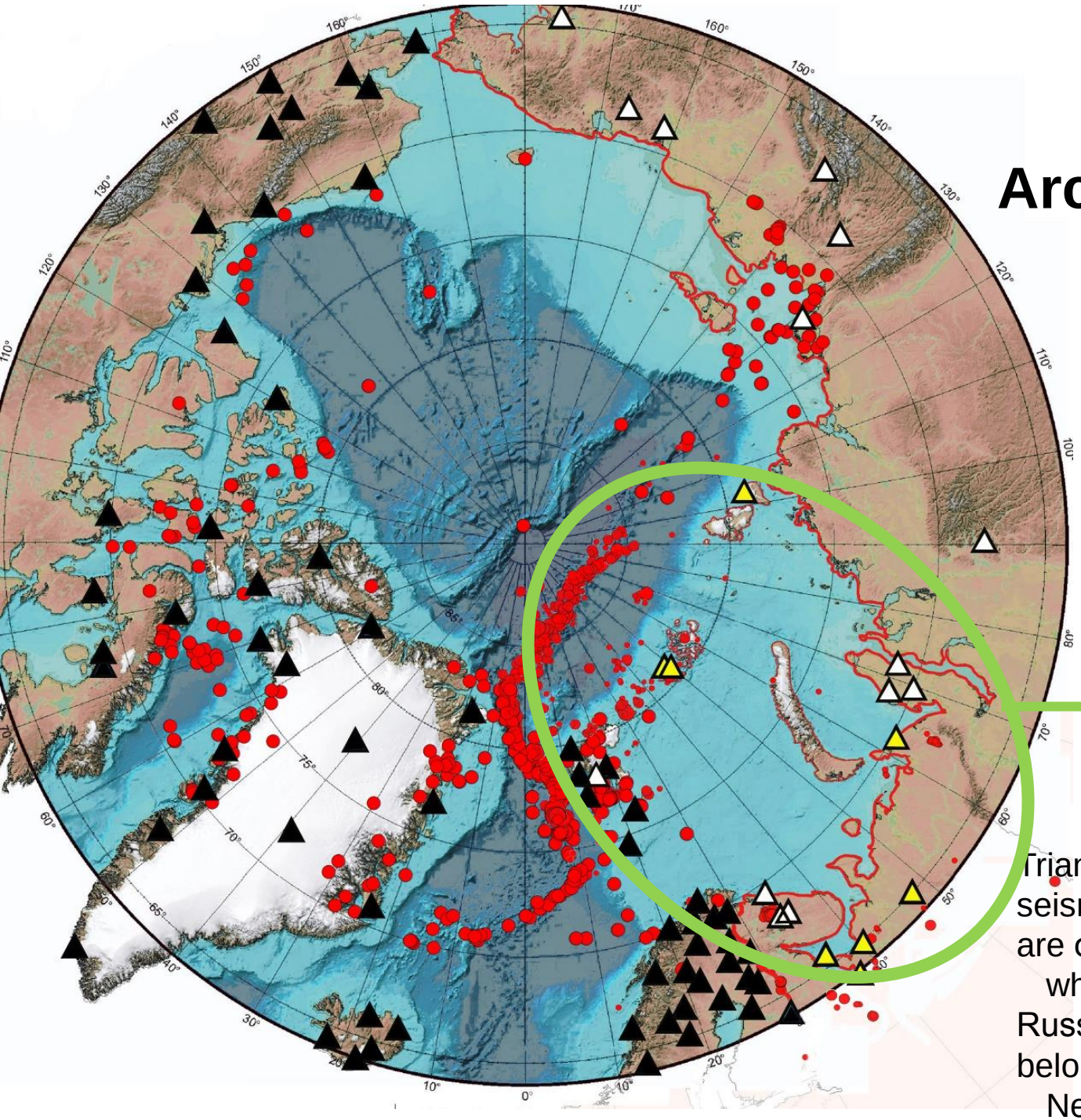
The latest results of seismological, seismotectonic, and paleoseismological investigations in the Karelia-Barents sector of the European Arctic

Evgenii Rogozhin

Schmidt Institute of Physics of the Earth. Russian Academy of Sciences



Arctic Seismicity (2013)

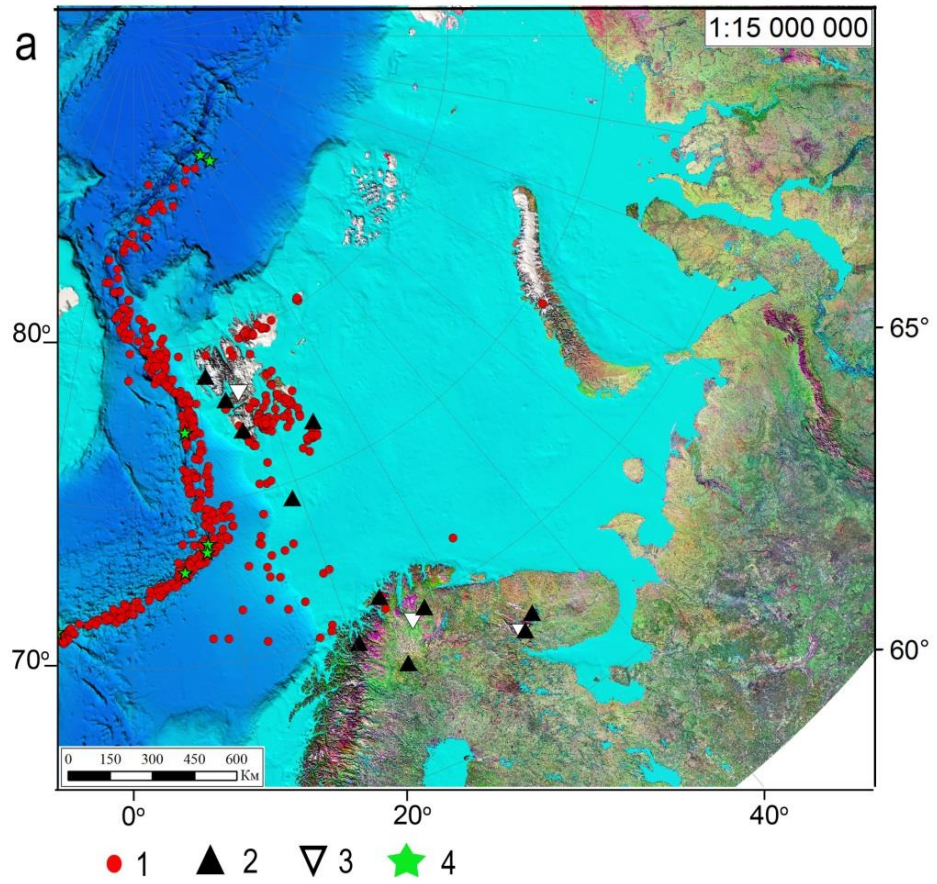
Investigations Region

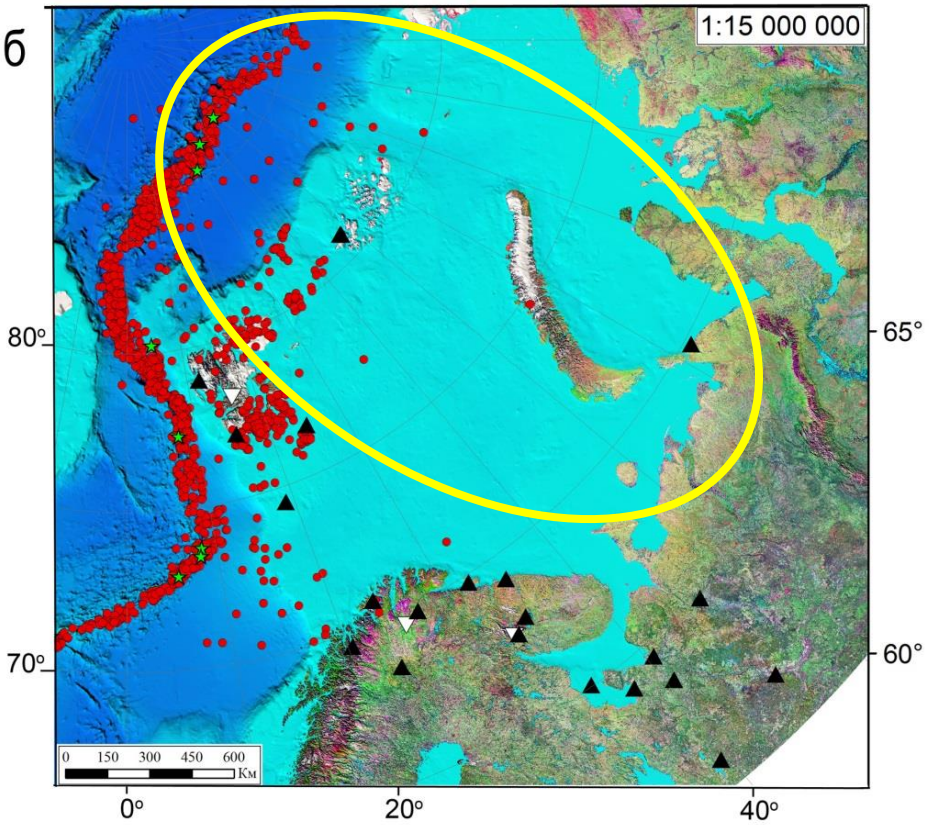
Triangles are permanent seismic stations: black ones are other countries', white ones are the Russian's, yellow ones belong to the New Arkhangelsk network

The role of the Arkhangelsk seismic network in seismic monitoring of European sector of the Arctic

NORSAR, Norway

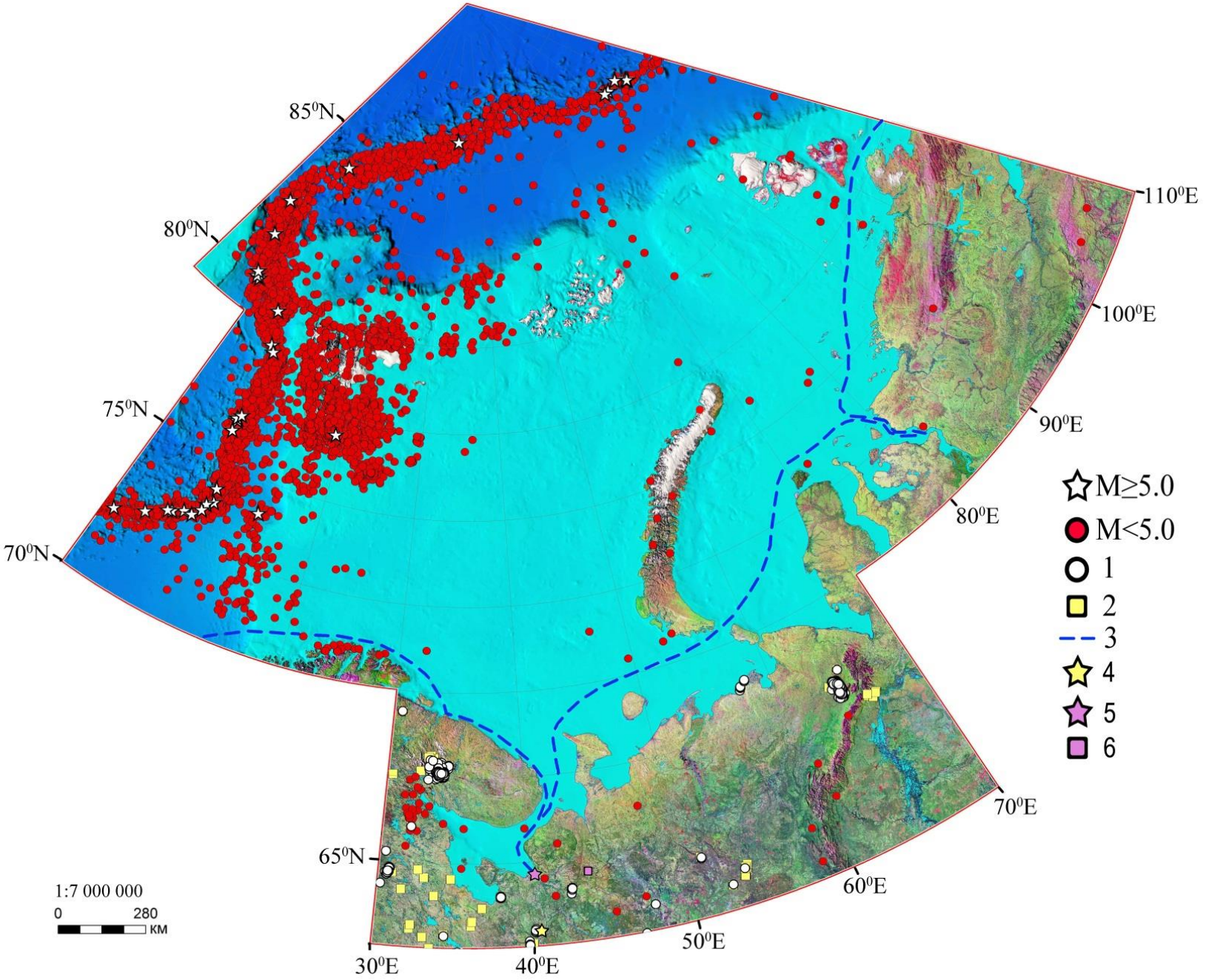
Cooperation of NORSAR and the Arkhangelsk network

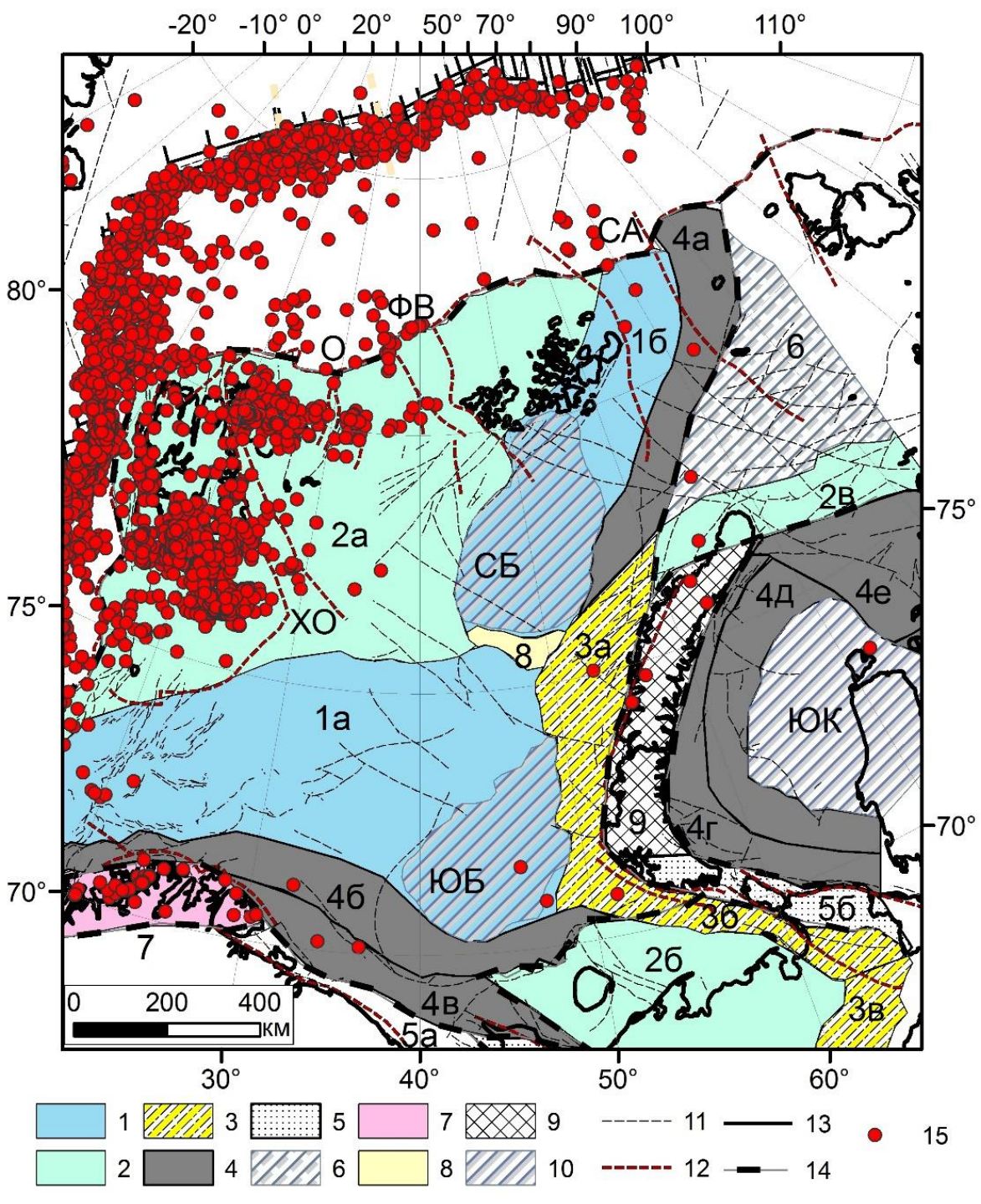




Earthquake epicenters 2012-2015

Map of the seismic events of 2005-2017

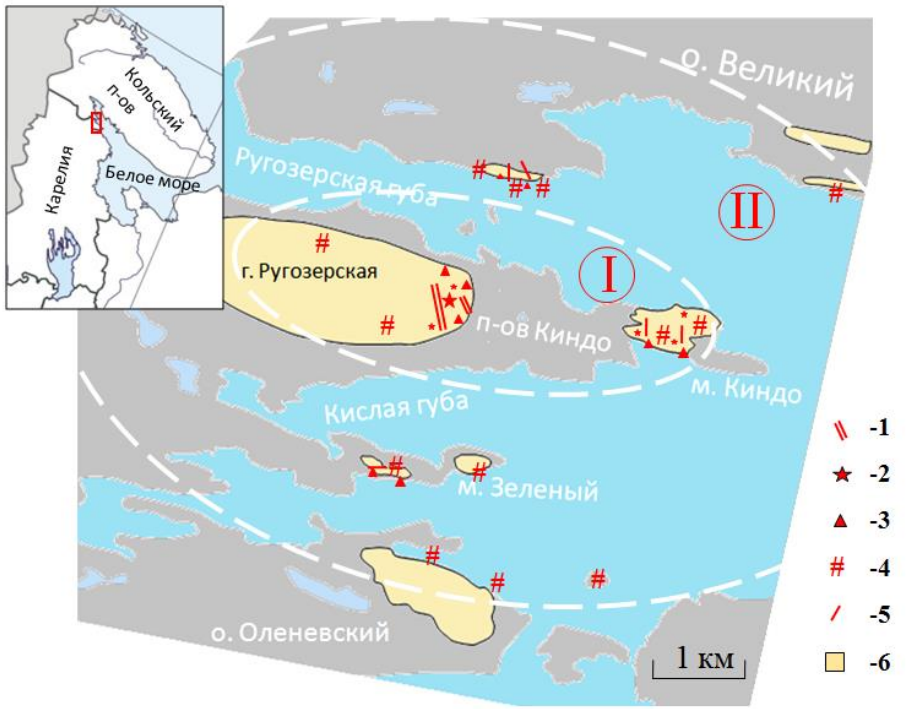




The present day seismicity on the map of the main tectonic structures for the Barents Sea Region

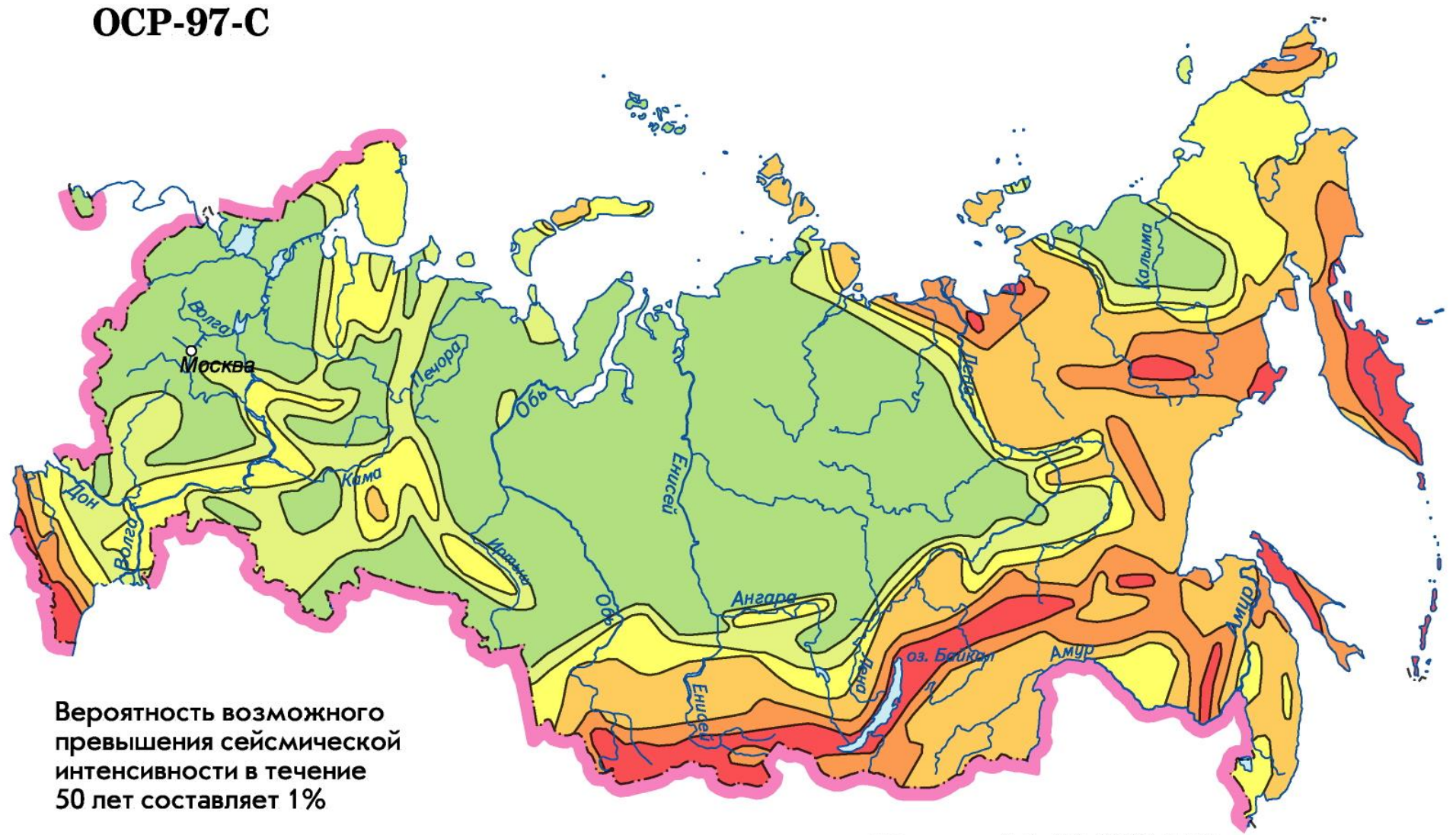
1 – depressions; ***2*** – ancient platforms;
3 – foredeeps; ***4*** – deep depressions slopes;
5 – Baikal folding belts; ***7*** – Scandinavian Chalcedonic folding; ***8*** – ***9*** – Folding of Early Cemerige age; ***10*** – deep depressions; ***11*** – ***12*** – main faults; ***13*** – active Spreading Center; ***14*** – other faults; ***15*** – earthquake epicenters of 1998–2015 ;
СА – Santa Anna graben;
ФВ – France-Victoria graben;
О – Orly trough

Paleoseismic investigations on the Cola Peninsula



Paleoseismic fault and zone of ancient, the Late Holocene earthquake with the intensity of VIII in the Kandalaksha depression

Seismic zoning map of Russia, 1997



Thank You!