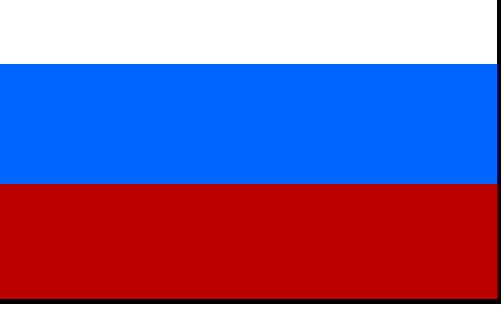


Russian Federation



1

Session 3.3 Country report Russian Federation



World Meteorological Organization
Organisation météorologique mondiale

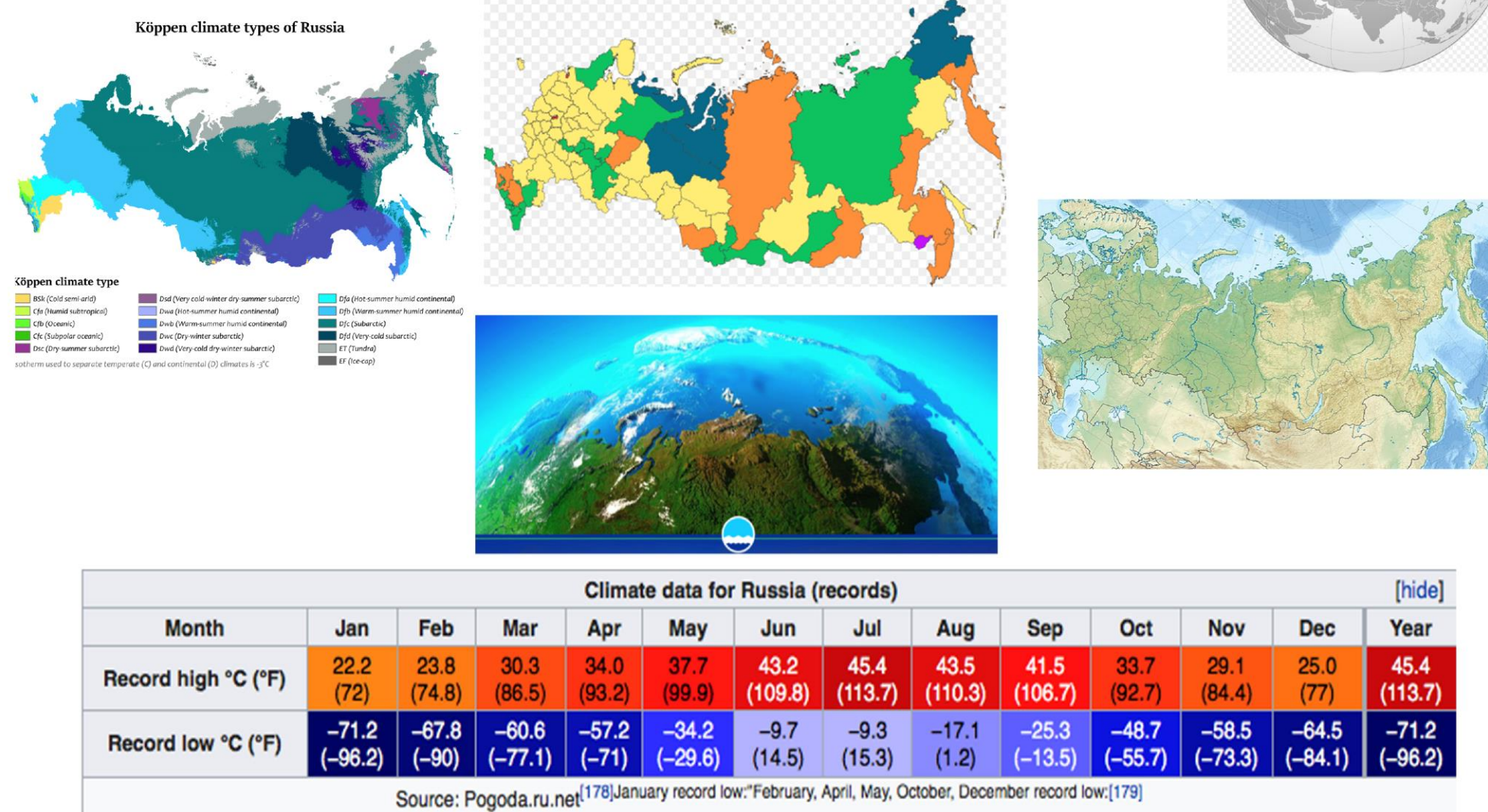
Submitted by Alexander Gusev
WIGOS national coordinator
Russian Federation

RA II WIGOS Workshop
6-9 March 2019, Tokyo, Japan

2

Introduction to the country and the NMHS

17 125 191 square kilometres (6,612,100 sq mi);
about 146.8 million people (2018).



3

Introduction to the country and the NMHS
Russian meteorological service
has been established in 1849

Historically Roshydromet developed as national hydrometeorological service with the inherent integration of observational networks.

Currently, the observation network performs about 30 types of different observations (meteorology, hydrology, agrometeorology, aviation meteorology, oceanography, geophysics, environmental monitoring....)

STAFF – about 30K

HQ+ 25 regional offices +16 research institutes

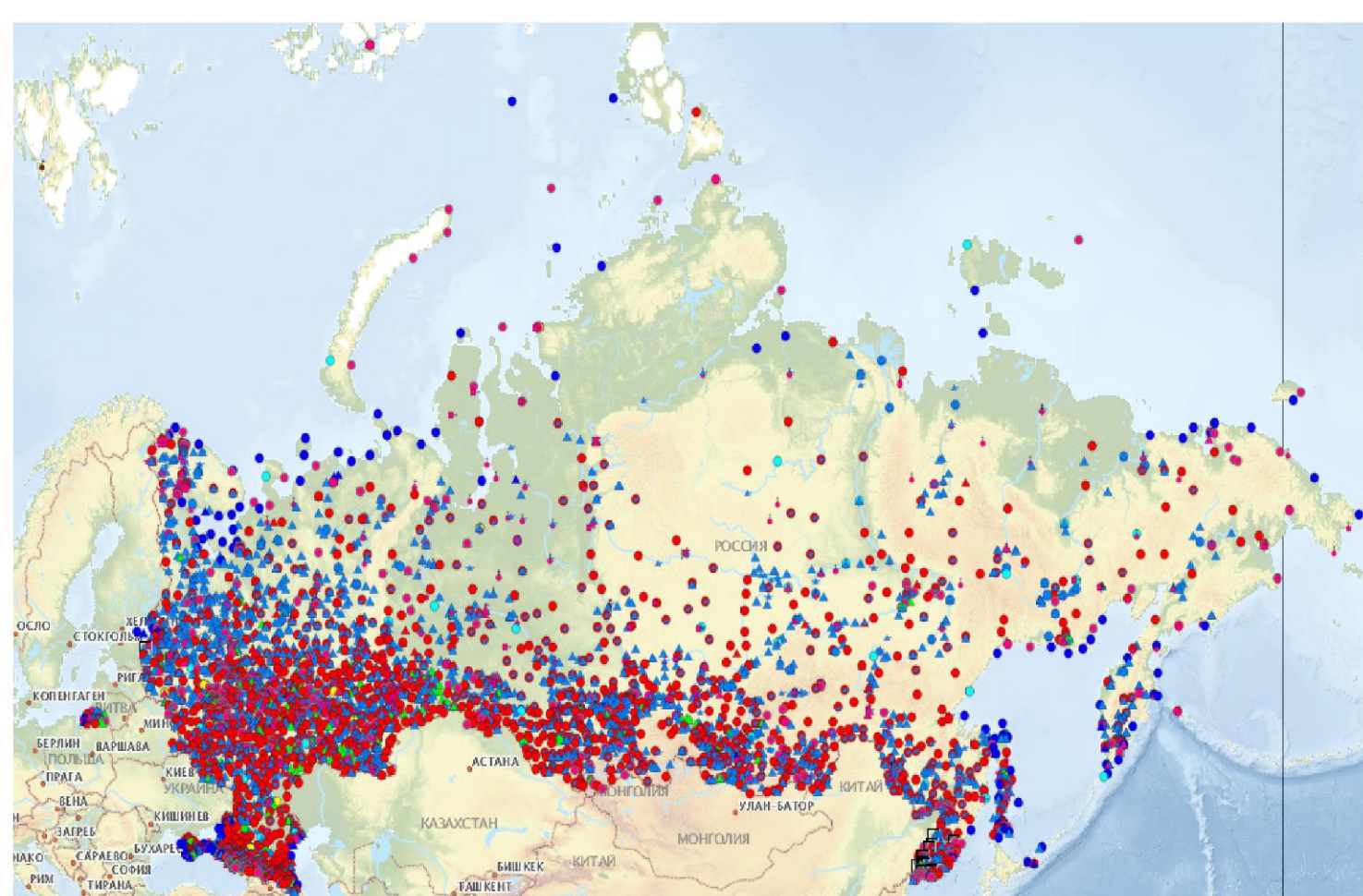
4

Roshydromet observation networks

> 6,700 hydrometeorological stations and posts;
~ 14,000 observation programs.

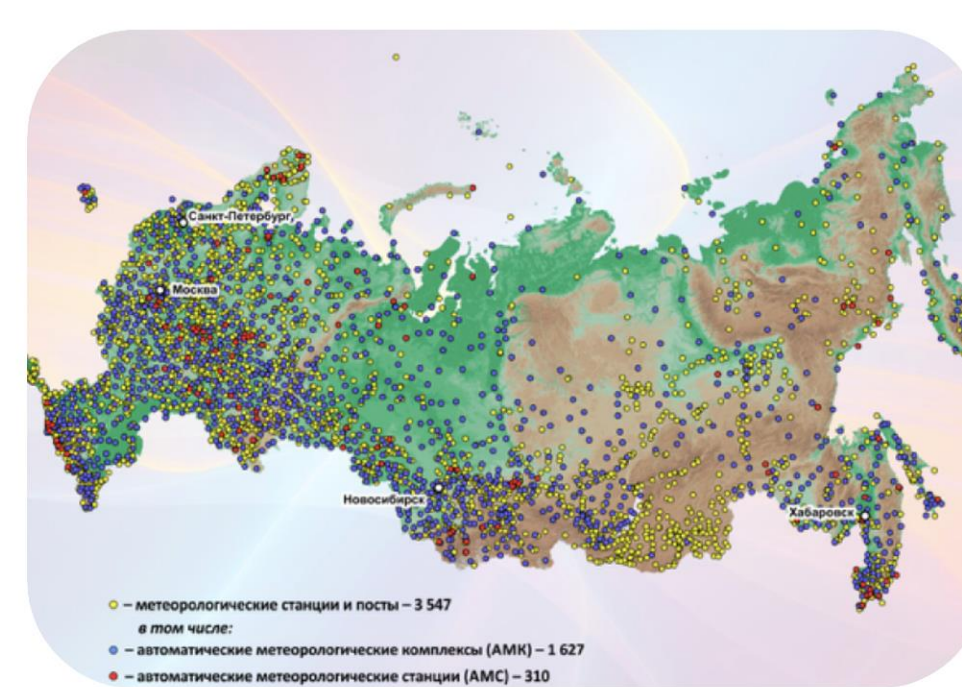
networks need to be managed from the point of view of optimizing and reducing the costs of producing observations.

automated accounting system for keeping record of observation units (AASOU) are developing

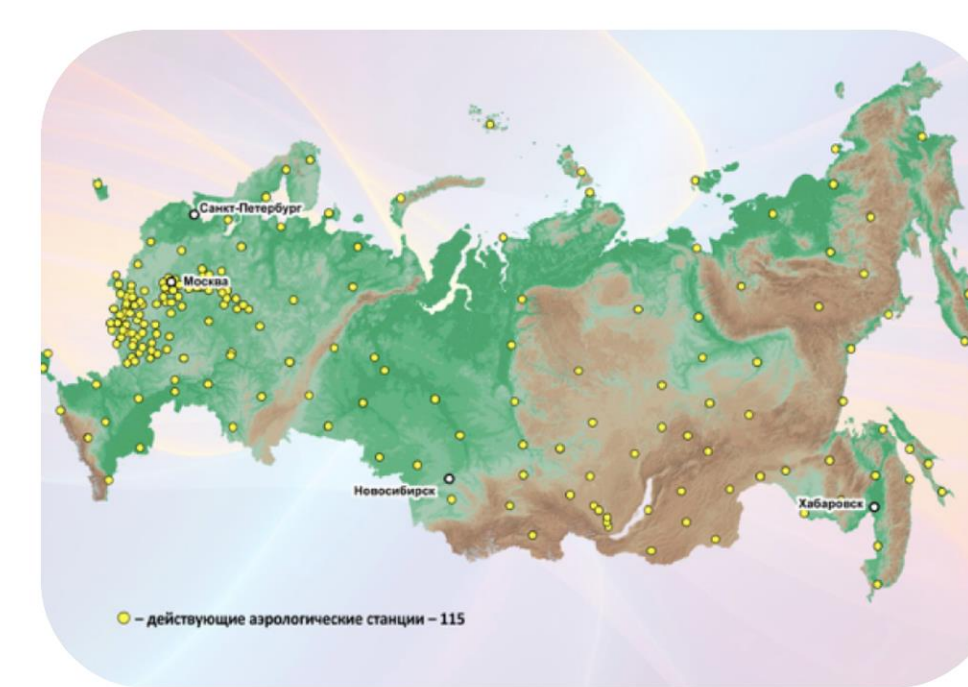


5

Main observation networks



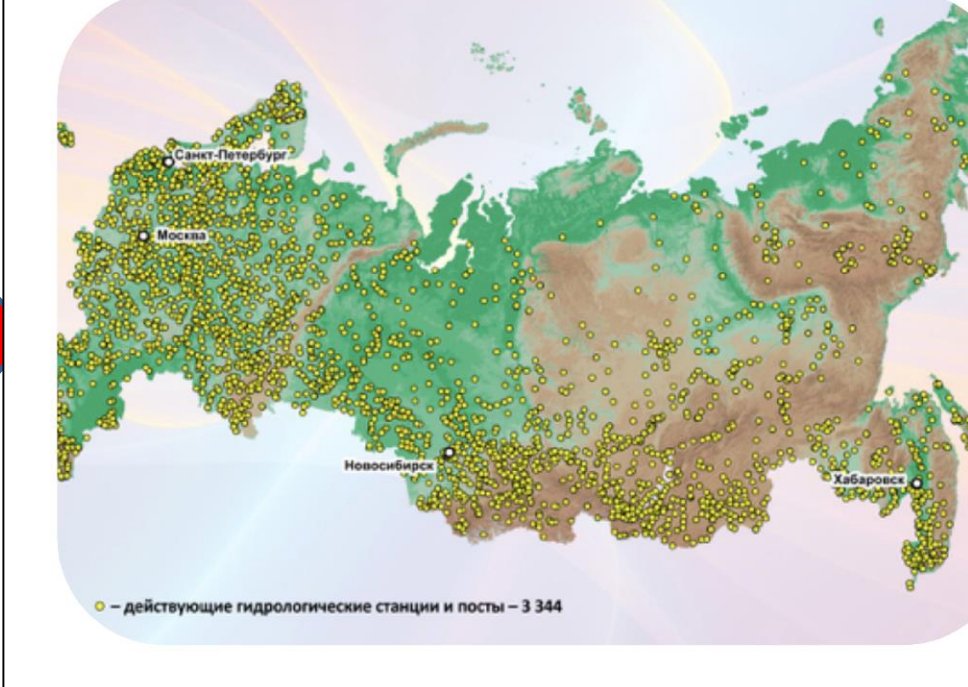
meteo



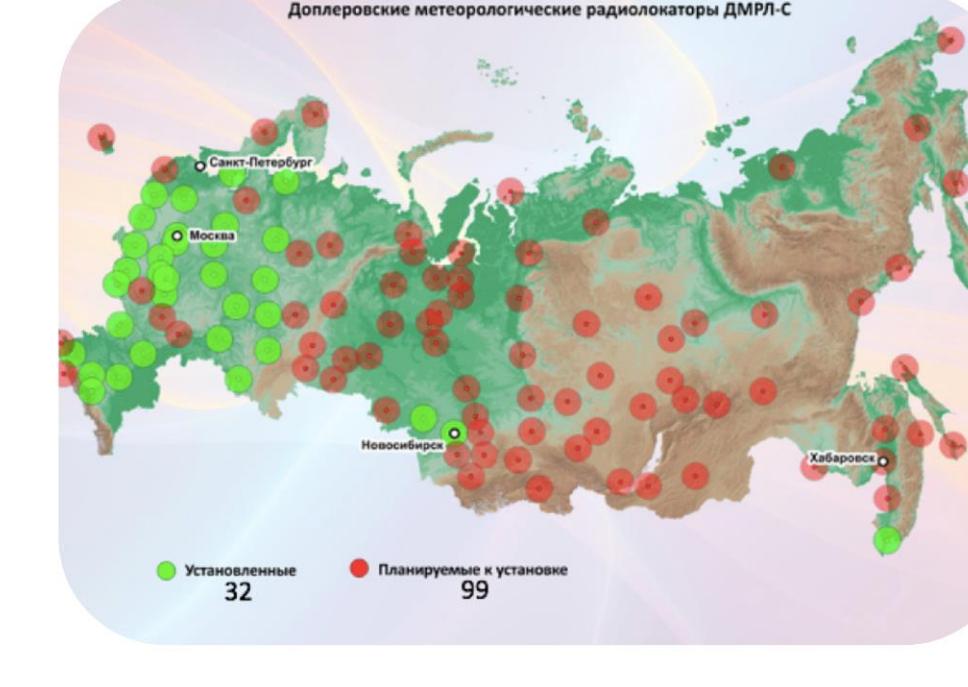
upper-air

6

Main observation networks (2)



hydrology



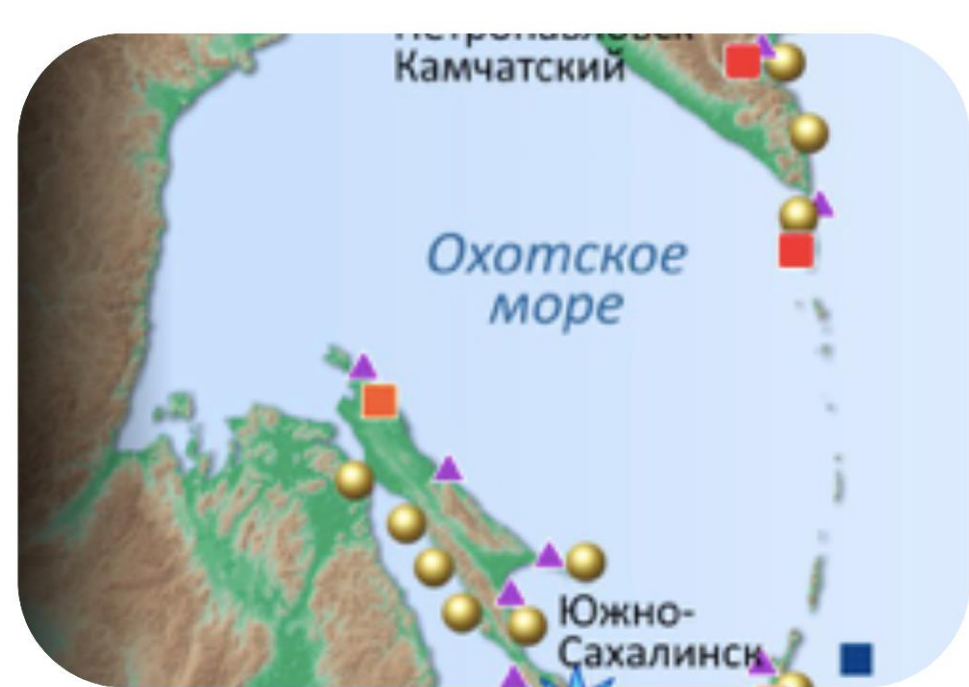
Doppler radars

7

Main observation networks (3)



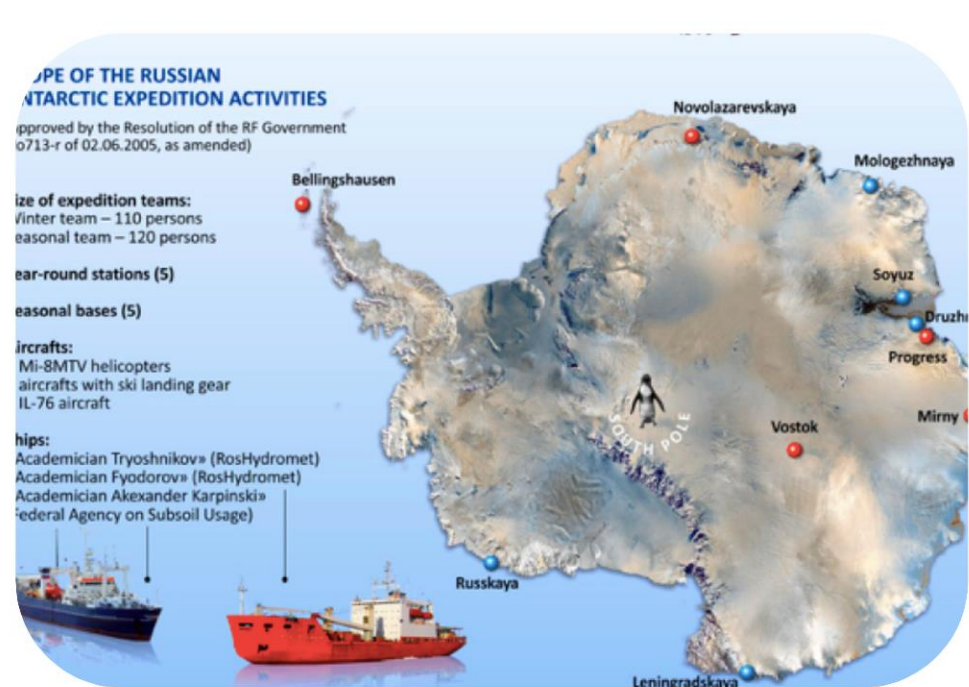
lightning detection



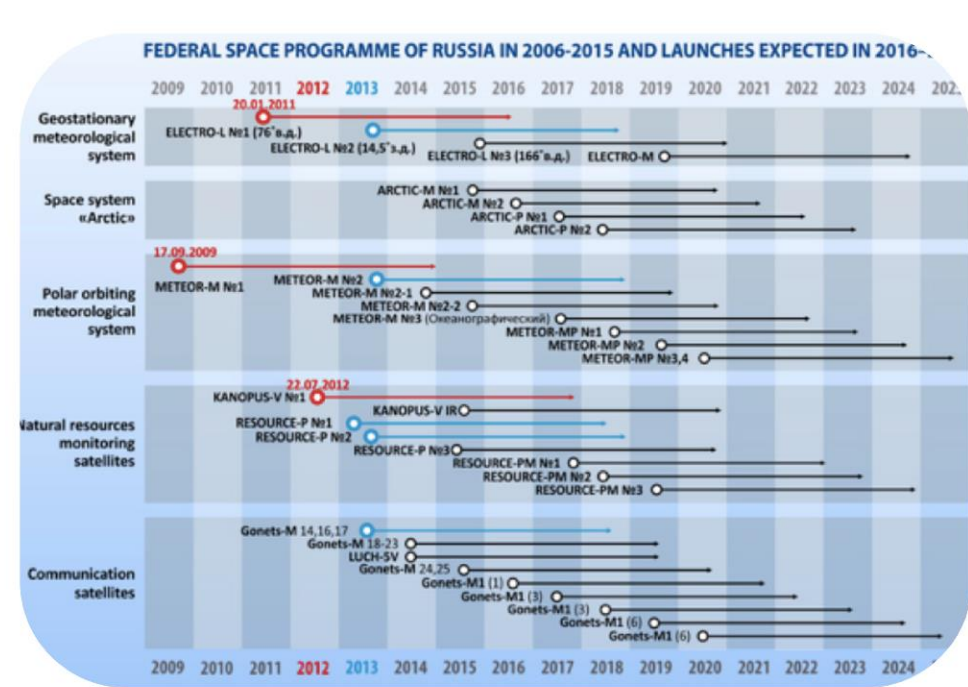
tsunami

8

Main observation networks (4)



Antarctic



satellite

9

National automated accounting system

asunp.meteo.ru

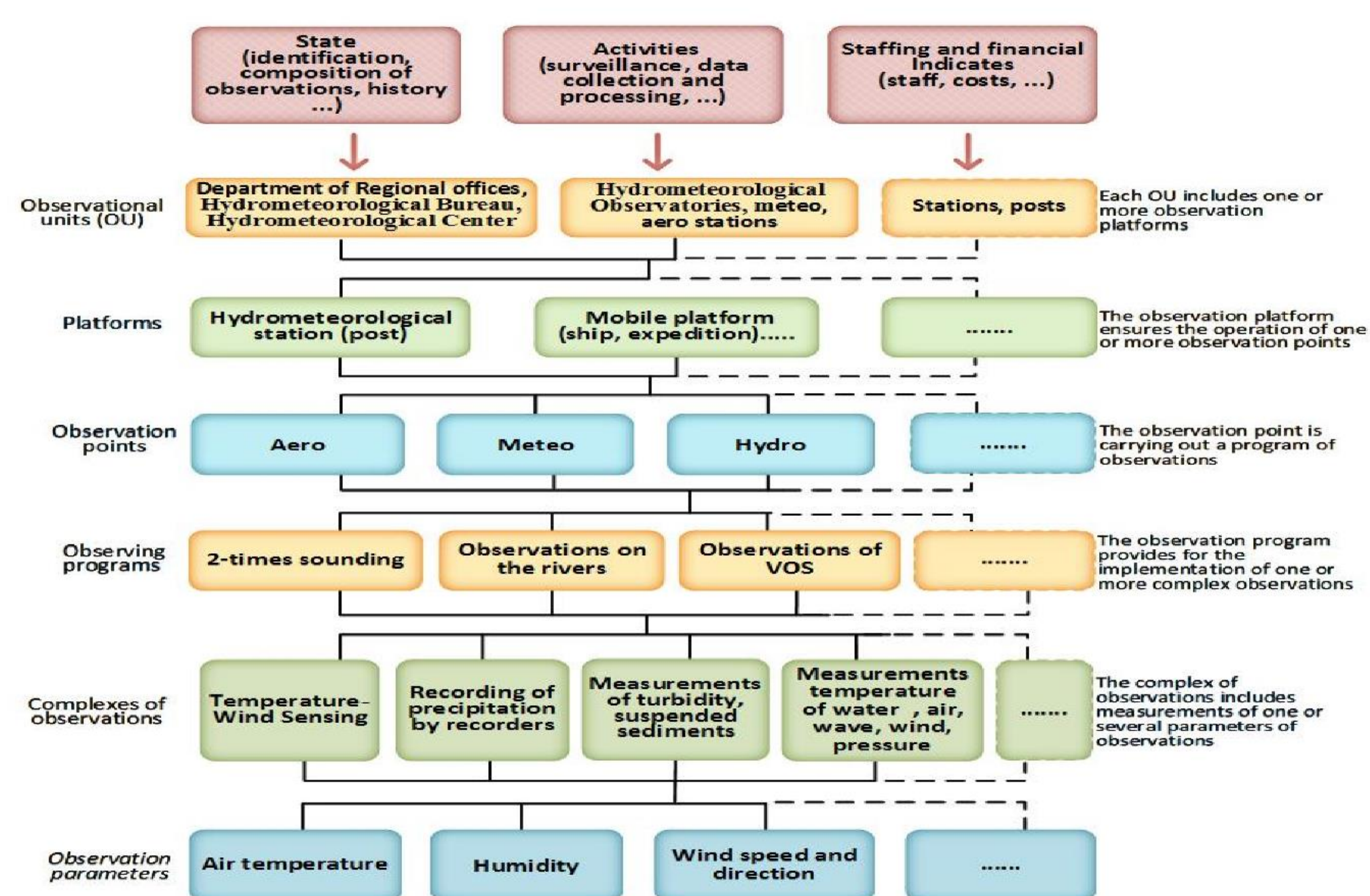
The most important element of management of such an integrated observation network is the system of accounting of its quantitative composition (OSCAR or OSCAR-like systems).

For this purpose, the national automated accounting system for observation units (AASOU), functionally close to the OSCAR system, containing, inter alia, a significant amount of diverse metadata, is used.

10

As an elementary object in the system, the "observation unit" is used as an object of accounting linked to a particular type of observation.

Meteorological and hydrological stations, posts, observatories are described, thus, as a superposition of various "observation points".



11

Basic features

Using "observation units" as elementary object

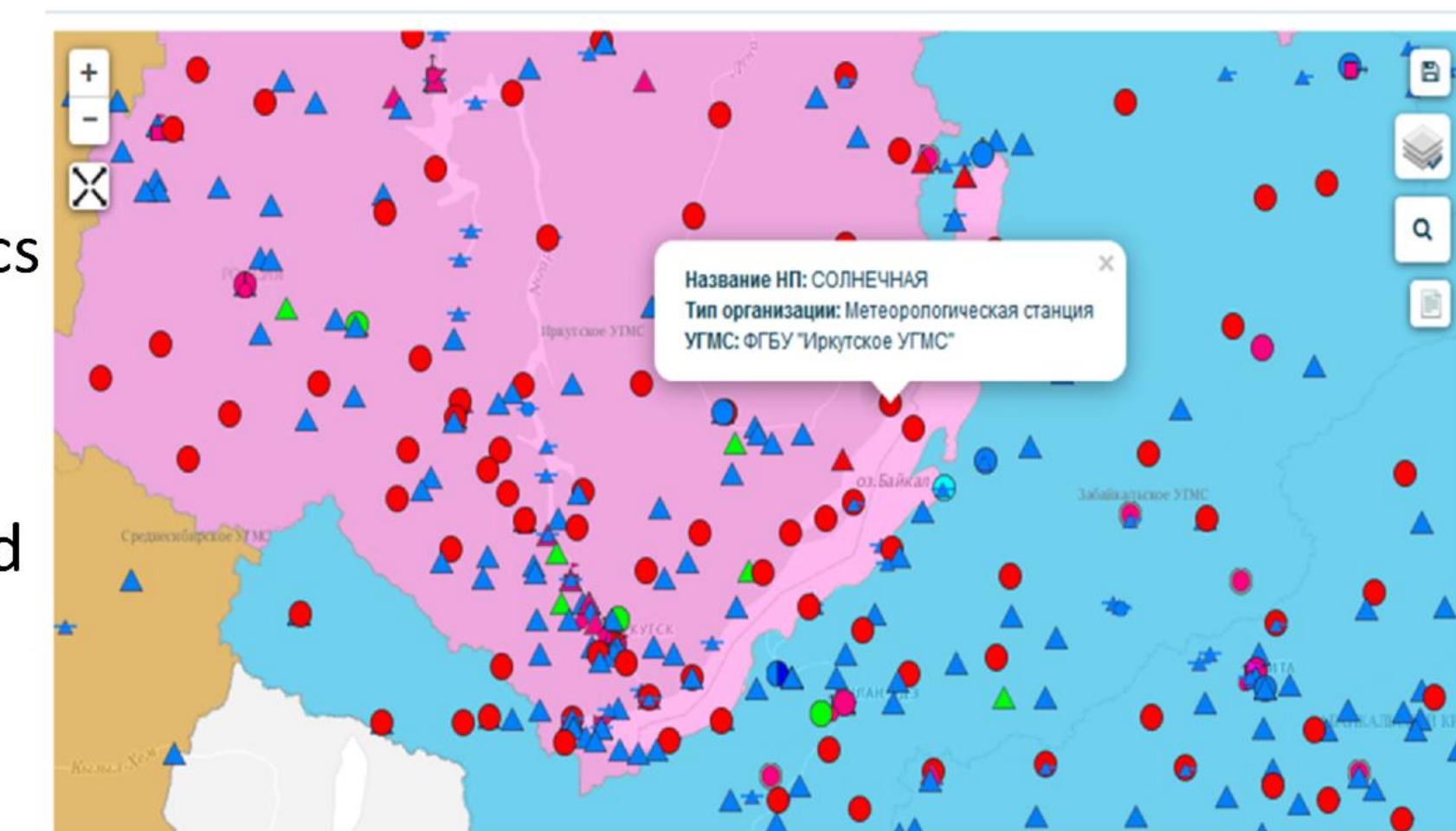
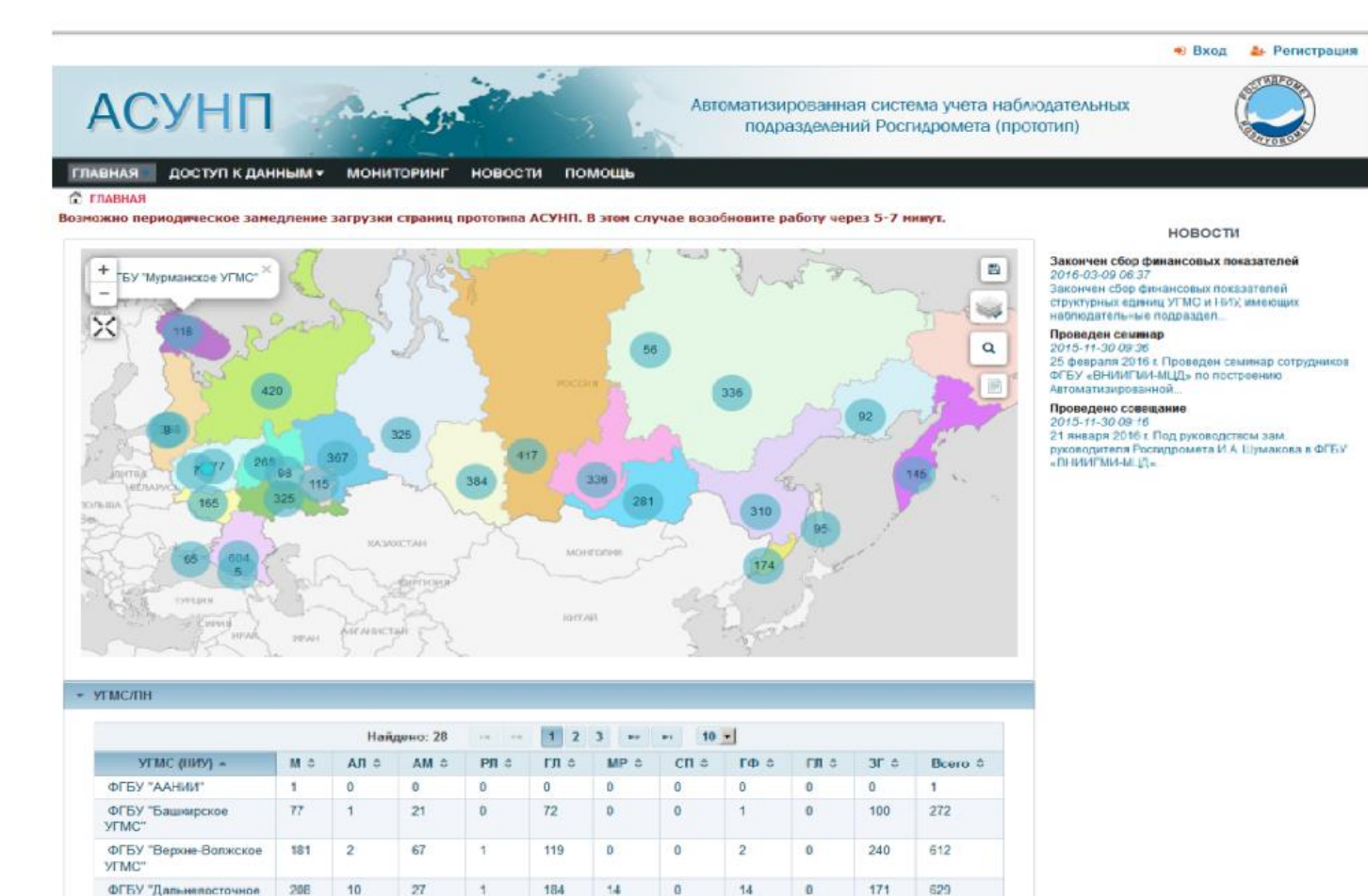
Inclusion of staff and financial information

Remote web-input of information for different users

Standardized reporting on established forms of reports and indicators

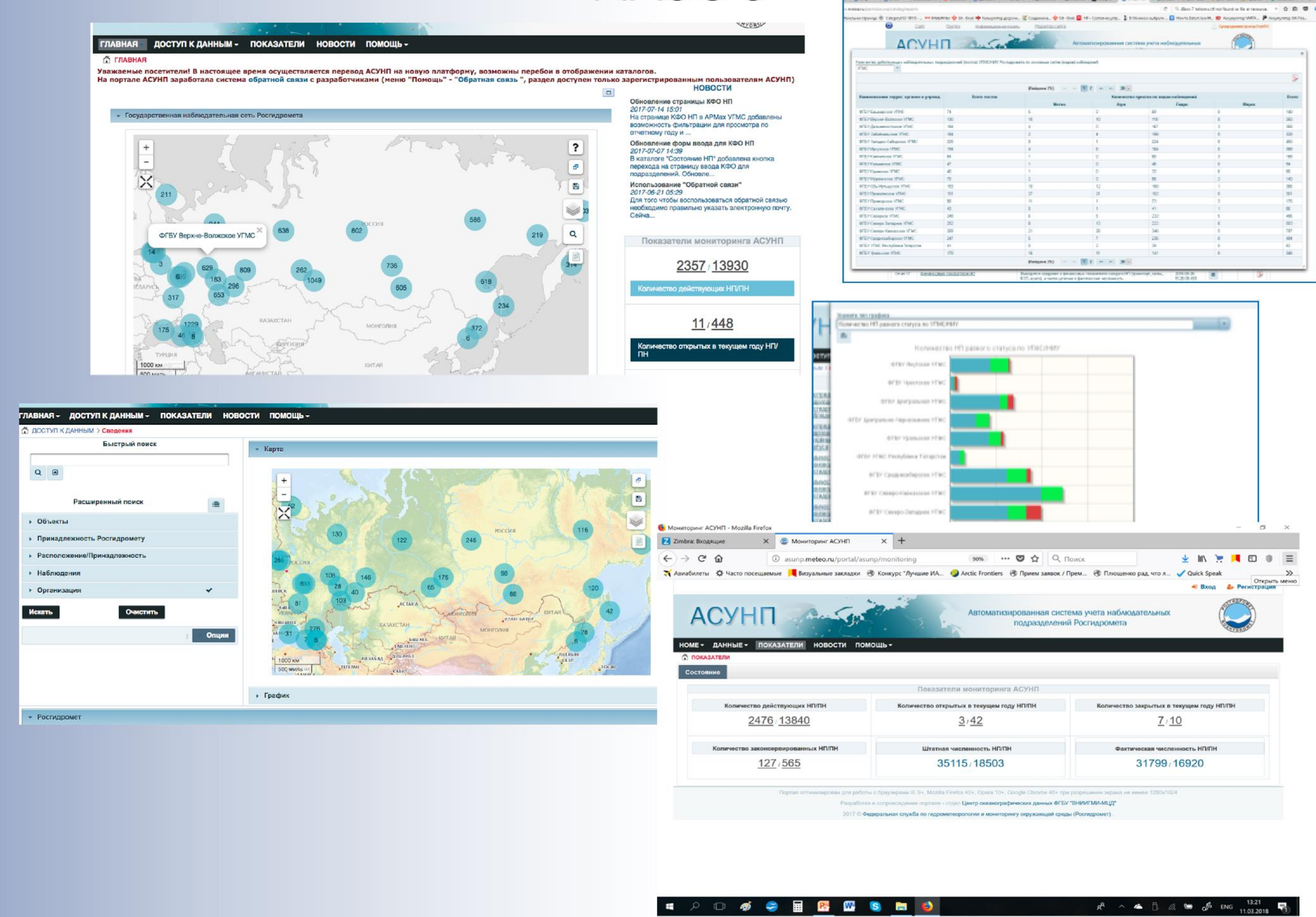
Assessment of the state and dynamics of changes in network indicators

Access to standardized reporting and execution of user requests



12

AASOU



13

System interaction (M2M)

Through machine-to-machine interface is planned to provide a pair of AASOU with the OSCAR system.

The system will be important elements of a plan for Russian-speaking countries of the Regional WIGOS centre.

14

Problems, perspectives

M2M - problem of metadata overlapping WQMS

Future evolution -

(CIS country, Regional WIGOS centre for Russian speaking countries, private and other partners ...)

Motivation to participate in WIGOS project is a key problem

15

Thank you!

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