

## DANUBIUS-RI

A new distributed pan-European Research Infrastructure supporting interdisciplinary research on river-sea systems

### Bulgarian participation since 2011: Bulgarian Academy of Sciences

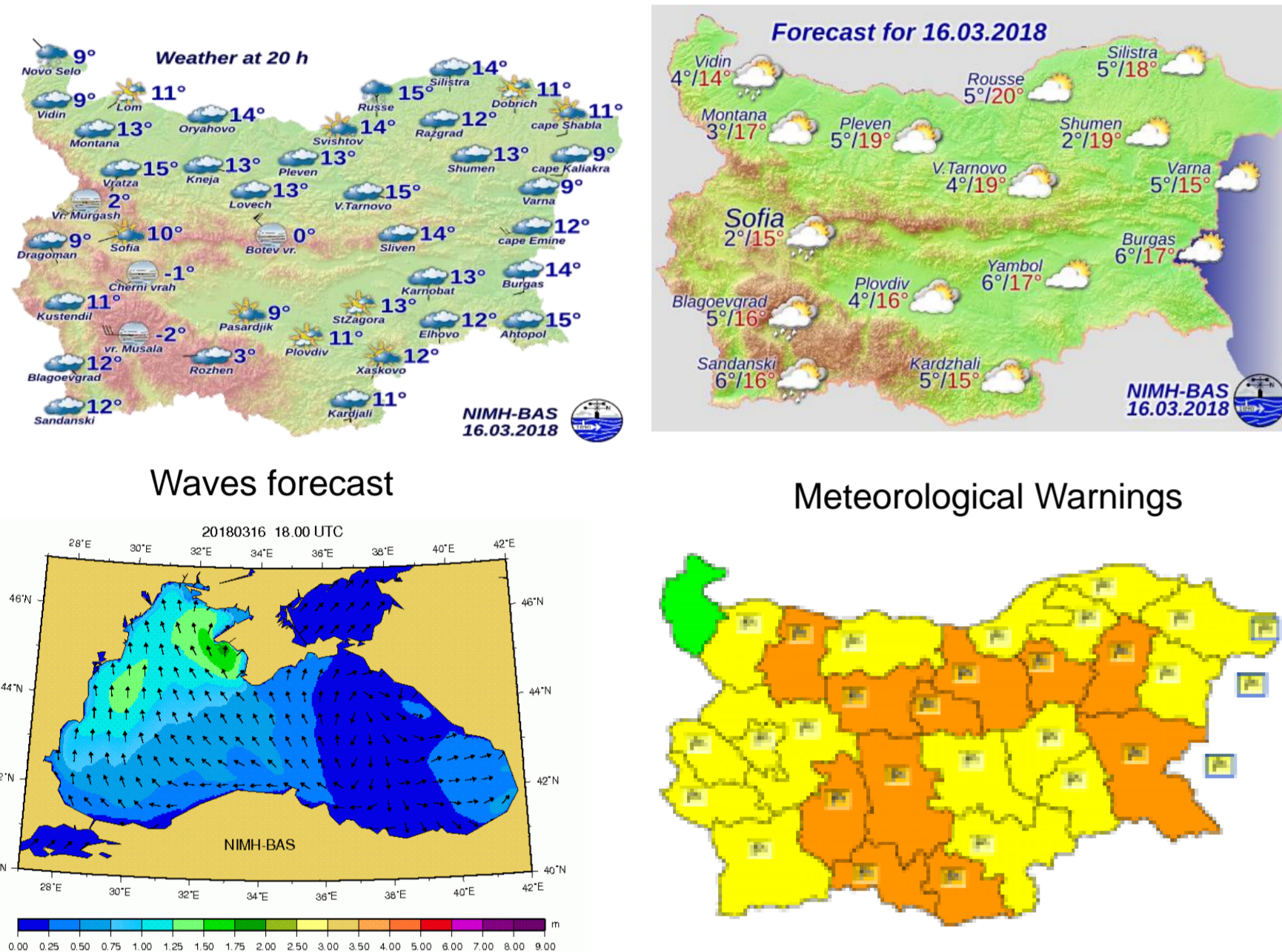
The research in DANUBIUS covers the thematic and mission of several research institutes of the Bulgarian Academy of Sciences (BAS), therefore the central administration coordinates the Bulgarian contribution to the project. When applying for H2020 funding in 2016, the Ministry of Education and Science did send a letter of support for DANUBIUS PP and the future distributed RI. Six institutes of BAS did send letters of interest. Initially, no nodes or super sites are planned for Bulgaria, but development of such in collaboration with the Nestos (Mesta) site can be planned. Bulgarian researchers can also collaborate with those from Romania for sites at Danube river and at the Black Sea. DANUBIUS PP is related to the Bulgarian National Research Infrastructure Road Map through the planned National GEOINFO Centre.

#### National Institute of Meteorology and Hydrology (NIMH-BAS)



<http://www.meteo.bg>

NIMH is Official Representative of Bulgaria to The World Meteorological organization (WMO), the European Centre for Medium-Range Weather Forecasts (ECMWF), The European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), Operational Programme for the Exchange of weather Radar Information (OPERA) of the Network of European Meteorological Services (EUMETNET), International Hydrological Programme to the UNESCO, the International Programme for the Study of the Danube River, etc.

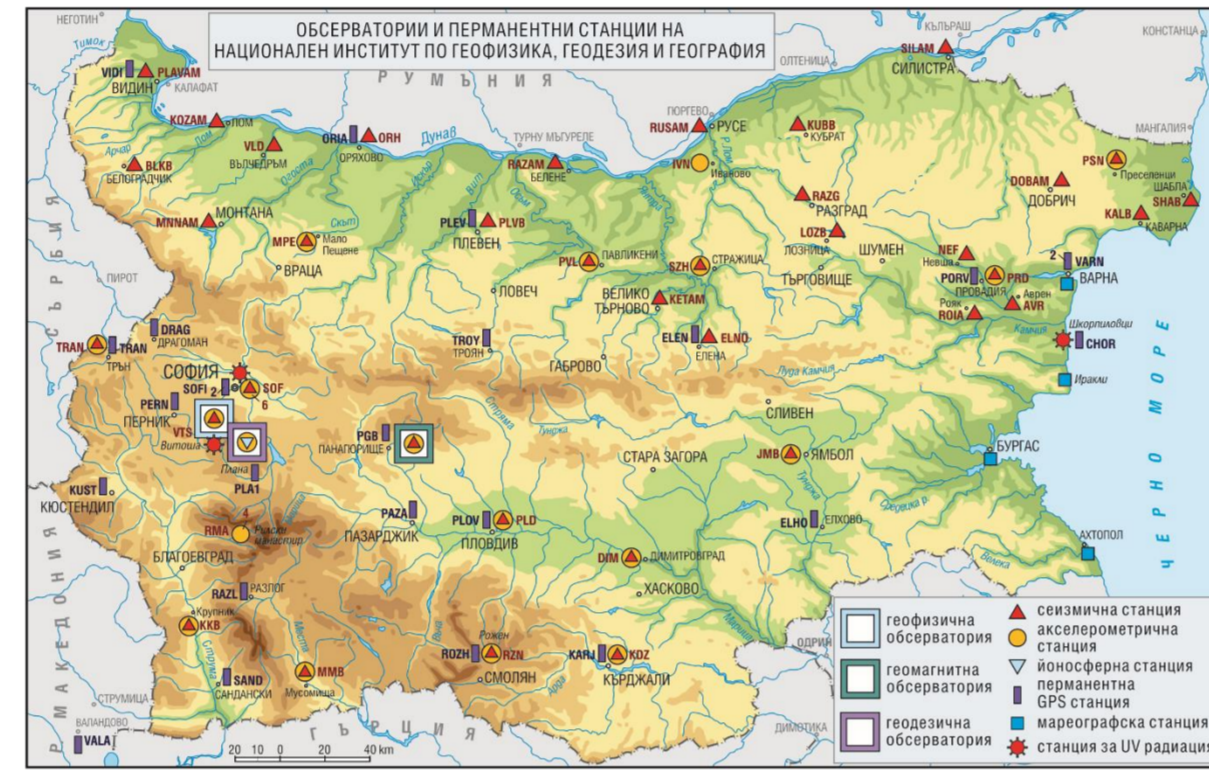


#### National Institute for Geophysics, Geodesy and Geography (NIGGG-BAS)



<http://www.niggg.bas.bg>

The National Institute of Geophysics, Geodesy and Geography carries out fundamental and applied research in the field of geophysics, seismology, earthquake engineering, geodesy, and geography in order to facilitate the sustainable development of the Republic of Bulgaria. The Institute provides scientific services to governmental and non-governmental bodies, including monitoring and expert information, analyses and assessments.



Main priority are the studies of seismic and anthropogenic risks, current Earth's crust movements, seismic safety of buildings, engineering facilities and infrastructure.

Current seismic activity is shown at: <http://ndc.niggg.bas.bg/>



#### Strashimir Dimitrov Institute for Geology (IG-BAS)



<http://www.geology.bas.bg>

The Geological Institute is the largest and most complex Bulgarian research organization in geology. The research activities include fundamental and applied problems in the main branches of the geological science: paleontology, stratigraphy, sedimentology, geotectonics, regional geology, petrology, geochemistry, mineralogy, mineral deposits, hydrogeology, engineering geology and geocology. All projects under development are in close relation to the national priority of the Bulgarian society and the requirements of the sustainable development.



#### Professor Fridtjof Nansen Institute for Oceanology (IO-BAS)



<http://www.io-bas.bg>



The research activities of the Institute are in the field of marine physics, chemistry, geology and archaeology, biology and ecology, coastal dynamics and ocean technologies. It carries out complex monitoring of the Bulgarian part of the Black Sea, develops consulting and expert activities, prepares qualified marine scientists. IO represents BAS as a co-ordinator of most studies in Bulgaria related with the Black Sea and World Ocean by the National Oceanographic Commission (NOC) and successfully directs the research activity and international relations within the frame of the Intergovernmental Oceanographic Commission of UNESCO.

Constructed in 1979, the research vessel AKADEMIK has been operated since 1984 with last repair in 2017 and equipped with contemporary navigational and scientific equipment.

#### Institute for Biodiversity and Ecosystem Research (IBER-BAS)



<http://www.iber.bas.bg>

The Institute has high qualified researchers in theoretical and applied ecology, hydrobiology, conservation biology, environmental genetic, evolutionary biology biodiversity, environmental conservation and sustainable use of biological resources. IBER-BAS provides scientific information and methodic supply to governmental institutions and civil society structures, and represent the country in ERA.

The main priorities of IBER-BAS are:

- Structure and functioning of biotic communities, ecosystems and landscapes.
- Biodiversity of organisms and their ecological and evolutionary relationships.
- Scientific basis for conservation of living nature and methods for sustainable management of protected nature objects.
- Approaches and methods for sustainable management of biological resources.
- Ecology and biology of species of economical and social importance.
- Scientific basis of ecological risk assessment, the quality of environment and impact on it, elaboration of approaches and methods for biodiversity assessment, bio-monitoring and safety systems.

The Institute has well-equipped laboratories : chemical, phytochemical, genetic, karyological, biotechnological, parasitological, ecological microbiology, light-microscope laboratory, GIS-centre. Several experimental field stations are available for field studies and experiments in the are of Sreburna Biosphere Reserve, Kalimok Reserve, in the town of Sozopol, Atanasovsko Ezero Reserve, Beglika locality, Parangalitsa Biosphere Reserve, Plana Mt.

#### Space Research and Technology Institute (SRTI-BAS)

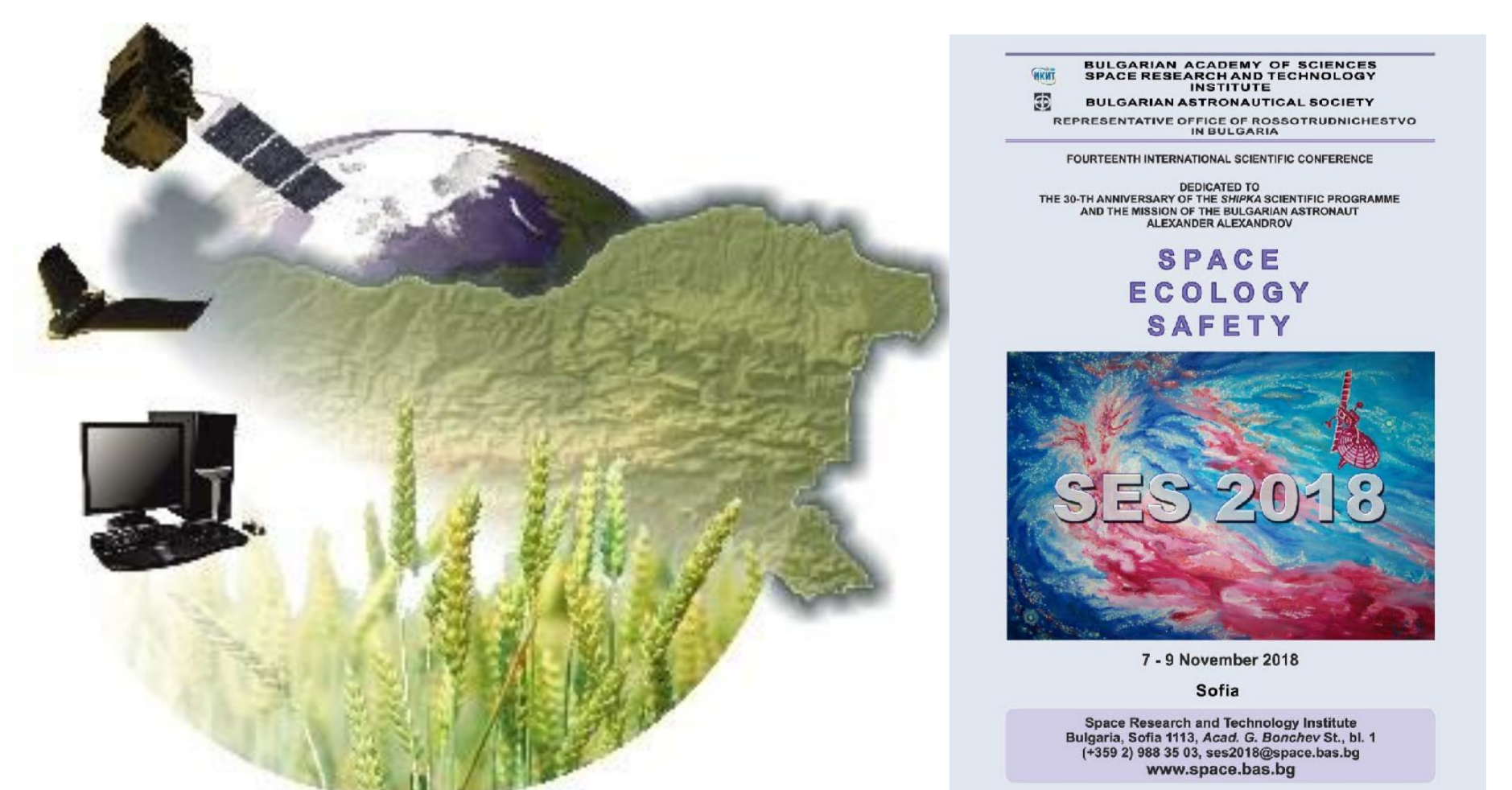


<http://www.space.bas.bg>

The mission of SRTI-BAS is the conduct of basic and applied studies in the field of Space Physics, Remote Sensing of the Earth and Planets, and Aerospace Systems and Technologies.

The priorities of SRTI-BAS are:

- Solar-Terrestrial and Space Physics (solar wind, magnetospheric and ionospheric physics, high and middle atmospheric physics, space weather);
- High-energy astrophysics, galactic cosmic rays;
- Medico-biological studies, space biotechnologies, heliobiology, telemedicine;
- Design, development and transfer of methods, instrumentation and technologies for remote sensing of the Earth, regional and global monitoring of the environment and security;
- Research in the field of obtaining and application of new superhard materials.
- Development of innovative aerospace instrumentation and technologies, as well as their transfer to economy.



### Contacts DANUBIUS PP in Bulgaria

Prof. Ekaterina Batchvarova, National Institute of Meteorology and Hydrology – Bulgarian Academy of Sciences, [Ekaterina.Batchvarova@meteo.bg](mailto:Ekaterina.Batchvarova@meteo.bg)  
Prof. Dimiter Ivanov, Institute for Biodiversity and Ecosystem Research – Bulgarian Academy of Sciences, [Dimiter@bio.bas.bg](mailto:Dimiter@bio.bas.bg)

Flagship conference "RIs beyond 2020 – sustainable and effective ecosystem for science and society"  
22-23 March 2018, Sofia