



National Institute of Meteorology and Hydrology of the Republic of Bulgaria

Latest developments

What's new

Since 2019 NIMH is under the auspices of Ministry of Education and Science and is no longer in the structure of Bulgarian Academy of Sciences.

NIMH Organization

- ▶ **Governing Body**

Director-General and 4 Deputies on operation activities; international projects; research activities and administrative and financial matters;


- ▶ **Collective Management Bodies**

- General Assembly of Scientists
 - Scientific Council
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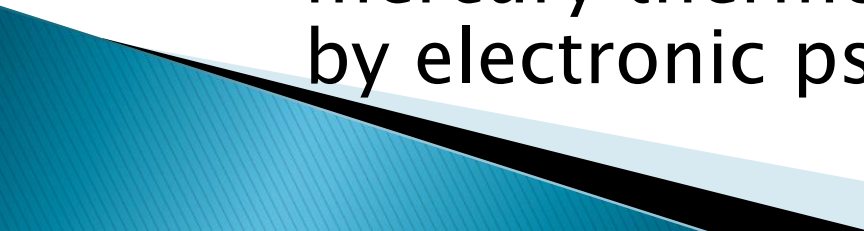
NIMH Organization

- ▶ 4 Departments:
 - Meteorology
 - Forecast and information services
 - Hydrology
 - Measurements, Metrology and IT
- ▶ 4 Branches across the country

Functions of NIMH–Bulgaria

- ▶ Operational hydrometeorological service of the Republic of Bulgaria;
 - ▶ Main Research organization in the area of meteorology (weather and climate), water and hydrology; observation of atmosphere and related environmental sciences;
 - ▶ Education organization providing doctoral studies;
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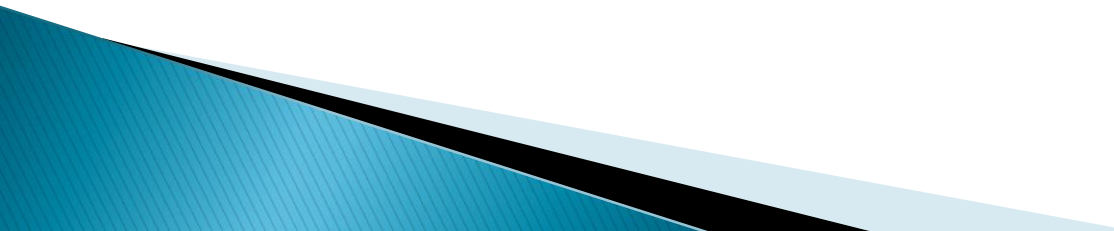
New equipment and instruments

- ▶ In 2019 a complete reconfiguration and technical modernization of the regional and national telecommunication center was carried out.
 - ▶ The automation of meteorological and hydrological networks continues. In all weather stations, mercury thermometers are replaced by electronic psychrometers.
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National partner network

- ▶ **New Bulgarian University** – partnership agreement in the area of research and education;
- ▶ **Agriculture Academy** – partnership agreement in the area of agrometeorology and other related areas;
- ▶ **Bulgarian ports Infrastructure company** – Agreement on joint activities in the area of sustainable development of water transport and ports including eco-mapping in ports

Bilateral relations

- ▶ MoU between NIMH–Bulgaria and Meteorological Service of Islamic Republic of Iran;
 - ▶ MoU between NIMH–Bulgaria and Hydrometeorological service of Republic of Serbia
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International activities

- ▶ NIMH–Bulgaria hosted 41st EWGLAM (EU working group on Limited Area Modelling) and 26th SRNWP (Short Range Numerical Weather Prediction) meetings in Sofia, 30 September–03 October 2019;
- ▶ Bulgaria became member of SAPP (Scalable acquisition and pre-processing) Operational Program of the ECMWF;
- ▶ Active position in WMO activities – updated data in WMO Community platform; participation in main trainings; nominations, climate data provision, etc.

Major RI projects

- ▶ Research infrastructure for sustainable development in the area of marine research (Euro-Argo)
 - NIMH, branch Varna is responsible the creation of a network of anchored meteorological buoys along the Bulgarian Black Sea coast.
- ▶ National Geo-information center for reducing the risks from extreme events including severe weather

Major research projects

- ▶ **Satellite Information Downscaled to Urban Air Quality in Bulgaria (SIDUAQ), ESA**
 - To use the opportunities given by satellite observations for improvement of air quality management at national and local level in Bulgaria for the city of Plovdiv;
- ▶ **DAREFORT–Danube River Enhanced Flood forecasting cooperation**
 - Evaluation and comprehensive overview of all flood and ice forecasting systems in the Danube region. Identification the needs of the individual countries in terms of hydrological data requirements


Major research projects (cont.)

- ▶ FLOODGUARD project, INTERREG program Bulgaria–Greece
 - Evaluation of climate changes in Balkan region and their impact on eventual flooding;
 - Upgrade of early–warning systems and forecast models
- ▶ World Bank assignment for complex research and evaluation of high waters and precipitation for the country as an input for the development of new plans for risk management in case of floods

Major research projects (cont.)

- ▶ Ministry of Environment and Waters
 - analysis and evaluation of existing monitoring surface water network;
 - preparation of concept for development of new hydrological stations with modern measuring instruments
- ▶ National research program on Healthy and Sustainable Food
 - NIMH-BG is leading the project on Adapting agriculture to climate change

Education with Science initiative

- ▶ Agreement with Ministry of Education and Science to develop research-based education program for pupils (5th–7th grades);
 - ▶ Encourage their curiosity and interest in natural sciences;
 - ▶ Variety of activities envisaged – visits; educational movies and materials; games and experiments
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Future-planned activities

- ▶ Adoption of Law of National Institute of Meteorology and Hydrology
 - The document is under public consultation;
- ▶ 2020 – 130 years from the establishment of national meteorological service and 100 years of national hydrological service

**Thank you for your
attention**

Prof. Hristomir Branzov
Director-General