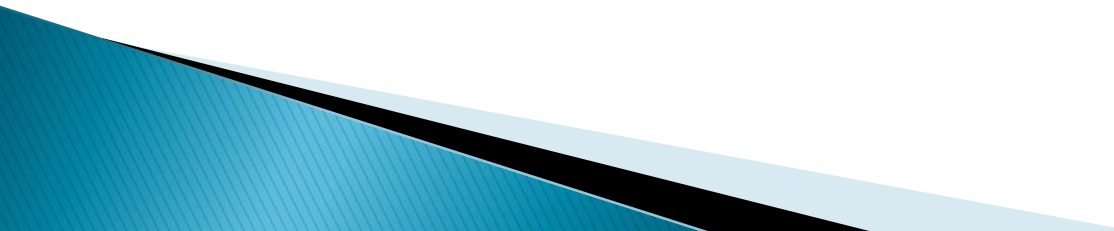




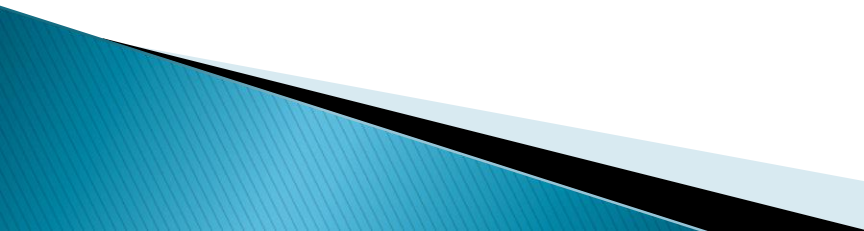
# National Institute of Meteorology and Hydrology of the Republic of Bulgaria

**Latest developments**

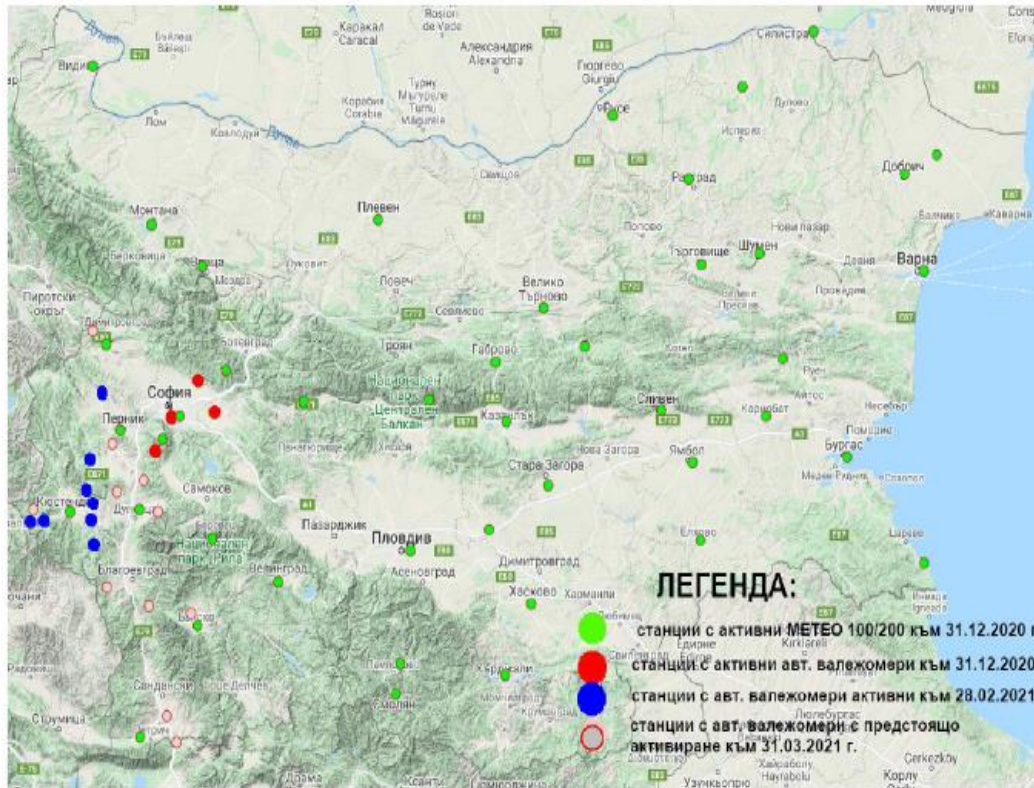
# New equipment and instruments

- ▶ 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 is undergoing. In all weather stations, mercury thermometers are replaced by electronic psychrometers.
- 

# New equipment and instruments cont.

- ▶ In 2020 NIMH negotiated delivery and installation of 270 automatic precipitation meters with telemetry and a system for visualization, accumulation and processing of data from them.
  - ▶ Currently appr. 140 of them are placed and the tendency is that in 2022 in all precipitation stations the manual measurements of the amounts of precipitation will be replaced by automatic measurements.
- 

# New equipment and instruments cont.



- ▶ Some of the synoptic and climate stations were equipped with electronic devices METEO 100 and 200 for measuring temperature and humidity and most of the with telemetry

Synoptic and climate  
stations with telemetry

# New equipment and instruments cont.

- ▶ 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.
  - The system is operational and available online – <http://sea.meteo-varna.net/>

# Major new projects

## ▶ INNOAIR

- INNOAIR is the first Bulgarian project funded by the EU initiative Urban Innovative Actions. INNOAIR will experimentally implement measures in the thematic area of "air quality", in particular "innovative green mobility solutions". The project will test in a real environment new for Bulgaria and Europe transport services and pilot solutions, which will provide citizens travel alternatives and improve air quality.
  - "On-demand green public transportation", formed by a platform with machine learning and advanced analytic capabilities and mini electric busses;
  - Congestion charge model;
  - Low Emission geospatial urban zones, preventing vehicles from entering the city center and certain areas on polluted days;

# Major new projects

- Under National Recovery plan (under evaluation by EC) – **Digitization for integrated management, control and efficient use of waters**
  - Development of a center for hydrometeorological monitoring in NIMH for the purposes of water management. The center must be equipped with modern computing and communication equipment, digital databases and numerical meteorological, hydrological and hydraulic models. The main task of this center will be the real-time service of the state governing bodies in the field of water with quality and up-to-date hydrometeorological information, analyzes and forecasts.

**Thank you for your  
attention**