



# Hydrometeorological Service of Republic of North Macedonia

ICSEED-19  
4<sup>th</sup> November 2021, online

## Hydrometeorological Service of Republic of North Macedonia Activity Report for ICSEED-19

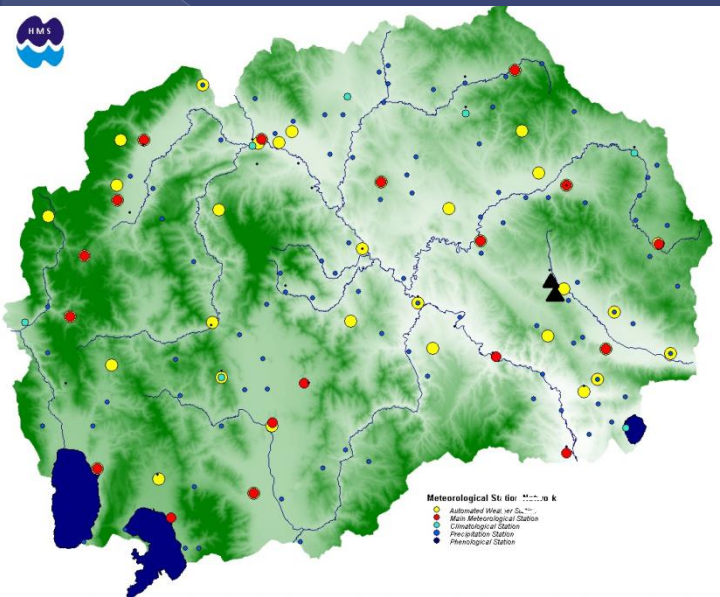
Greatest challenge in the past two years was to maintain continuous observations during the peak waves of the pandemic, with strict movement restrictions, curfews and rotational shifts.

There were many infection and even death cases among the employees.

In 2021 we had changes in the management of HMS twice, in February by the appointment of a new Director and PR, after whose resignation, in August 2021 the Government of Republic of North Macedonia appointed Mr. Agim Murtezanov an Acting Director of HMS and Permanent Representative with WMO and he currently perform these duties.

Recently we performed certain assessments and evaluations of the overall country's capacities for hydromet activities, so jointly with the new EUMETNET Strategy, and especially with the adopted WMO Cg-Ext. Resolutions, we plan to start the discussion on new strategy of our Service

## Measurements, observations, climate



- 186 sites: 9 main, 7 climatological, 24 phenological, 94 precipitation and 46 AMS
- +2 Weather radars (WSR-74 X/S and MRL-5)

### Projects:

#### Improving resilience to floods in the Polog region (April 2019)

(ongoing, UNDP)

#### Macedonia's Fourth National Communication and Third & Biennial Update Report on Climate Change under the UNFCCC

(finalized, UNDP)

#### Ecosystem-based risk reduction of disasters (2017-2022)

(ongoing, JICA Project)

#### Improving Flood Resistance in the Polog Region (ongoing, UNDP)

Pan European Phenology Project PEP725 (EUMETNET, ZAMG, plant phenology data sets for science, research and education)

#### Reducing Vulnerability of Agriculture to Climate Change

(finalized, FAO Project)

During the pandemic years, we still succeeded to maintain the measurements programme, mostly securing the continual and uninterrupted observations, both meteorological and hydrological...

We maintained conventional observations on 19 stations, with many infrastructural interventions, which was very financial and energy demanding task. The same refers to the maintenance of the automated systems of 46 AMS.

### CLIDATA

We upgraded the older version (2.4v from 2014) of the data management system into Ver.2020

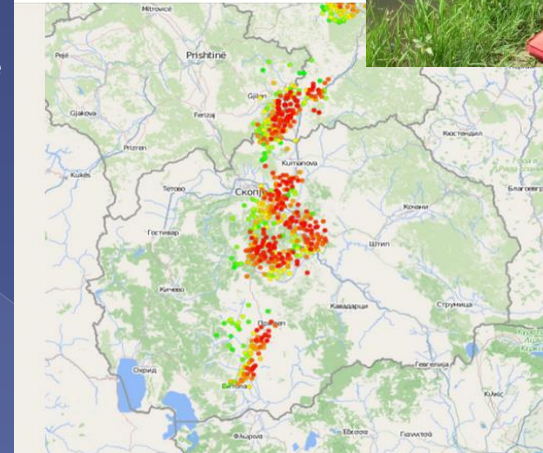
### Climate Services

Continuous provision of data and products to the general public, as well as interested stakeholders

- ❖ Seasonal climate outlooks, in cooperation with the South East European Virtual Centre for Climate Change (SEEVCCC), but missing the RCOF-meetings to discuss the building the Consensus statement for the seasonal climate outlook
- ❖ Annual mezometeorological urban measurements and urban climate for Skopje (EBRD Green Cities)

## Hydrology, Water Quality

- Adaptation to Climate Change through Transboundary Flood Risk Management in the Western Balkans (Drim/Bojana) – (GIZ)
- Revitalization of Hydrological and Meteorological monitoring network in the Polog Region - (UNDP)
- Monitoring Programme for the Strumica River Basin (UNDP)
- Member of the South-East Europe Flash Flood Guidance System SEE FFG System - (WMO)
- Hydrometric measurements for interested parties
- (Supply of Specific Equipment for Water quality Monitoring Information System), IPA2 Programme)
- New Law on Water Quality



## Hail Suppression Programme

Second year of experimental airborne cloud seeding



## Weather Forecasting

- SEE-MHEWS-A  
South-East European Multi-Hazard Early Warning Advisory System (tested CIP platform, ongoing..)
- WMO/VCP  
-New METCAP PLUS visualization software installed

plans: upgrade the warning distribution system, according to the updated CAP, purchase two new Radars, new employments (staff is about to retire in the next few years)