



CREATION OF EARLY WARNING SYSTEM IN THE REPUBLIC OF AZERBAIJAN



Geneva - 14-15.12.2023

MODERNIZATION OF THE HYDROMETEOROLOGICAL OBSERVATION NETWORK

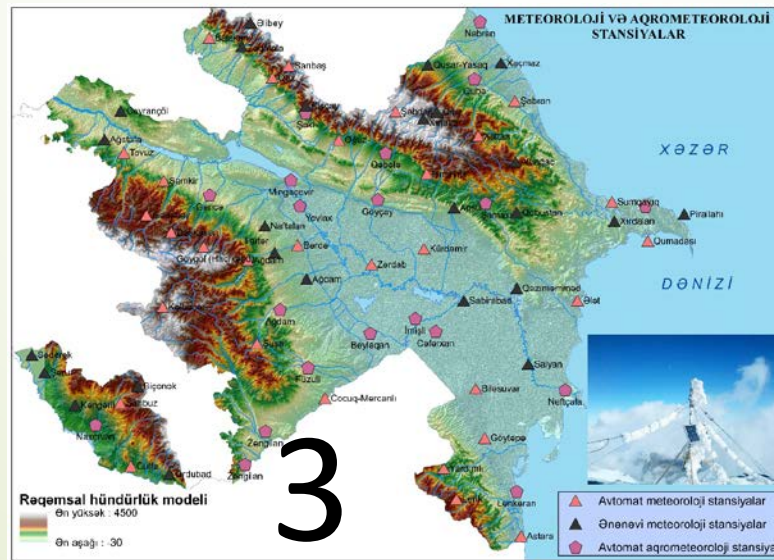
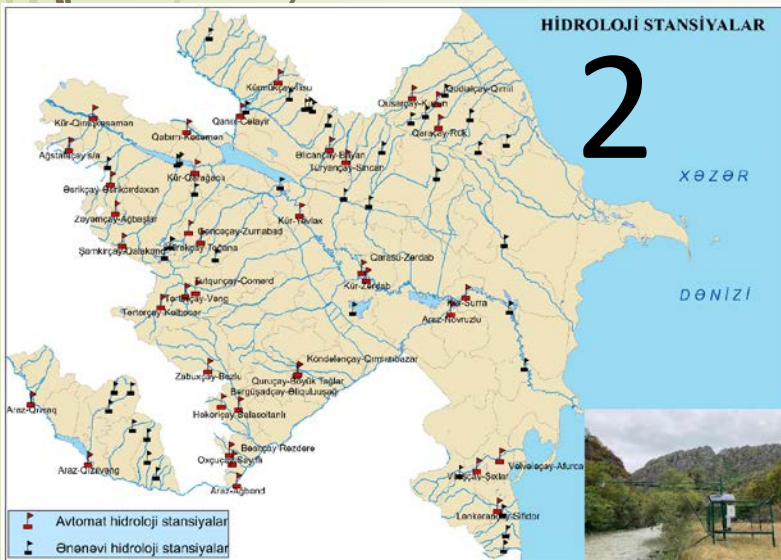
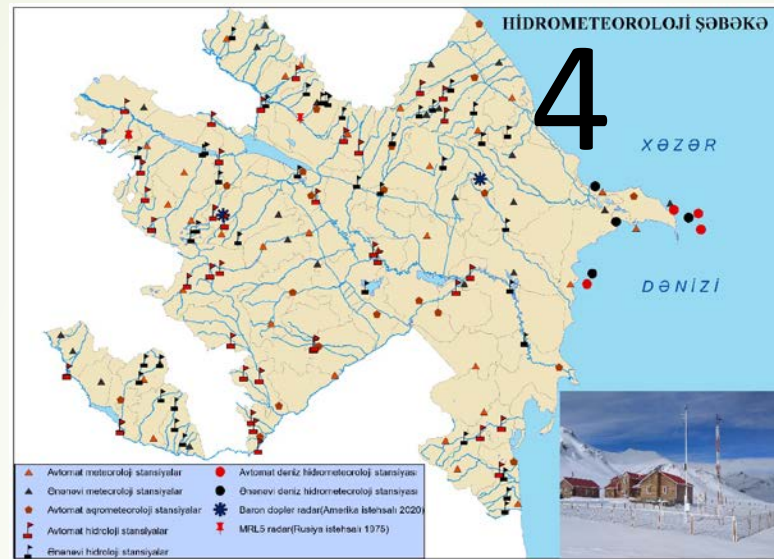
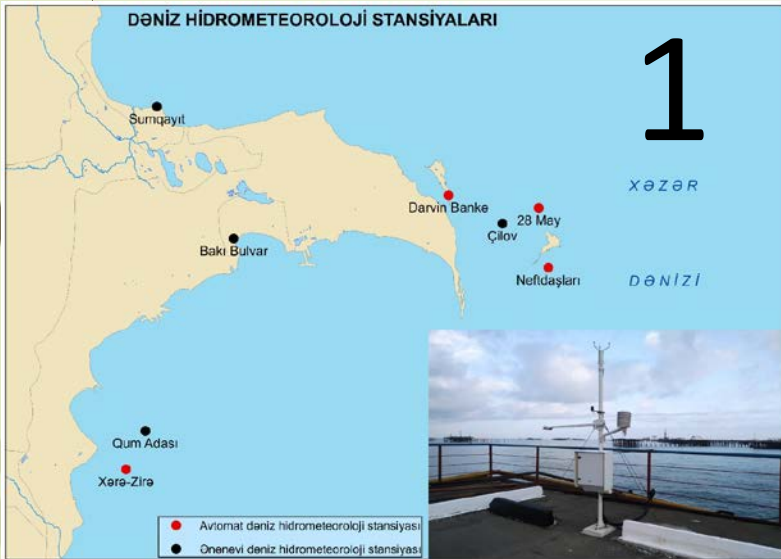


- As a first step, 2 sets of Doppler radars were installed in order to create an Early Warning System for dangerous atmospheric events with state investment.
- A Situation Center was established for the purpose of managing dangerous weather events.
- In the last 3 years, a total of 70 modern automatic observation systems have been installed.
- in the last 2 years, 16 automatic stations were installed in order to restore hydrometeorological activity in our liberated areas.



The observation network of the National Hydrometeorological Service has been rapidly automated since 2020, and new generation automatic stations have been purchased and installed mainly at the expense of state investment. During 2020-2022, the number of automatic meteorological stations was increased from 34 to 51, the number of automatic hydrological stations was increased from 0 to 40, the number of automatic marine stations was increased from 0 to 4, and the number of doppler weather radars was increased from 0 to 2. Until 2020, MRL-5 radars manufactured in Russia (USSR) were used in the surveillance network. It is planned to continue the automation of the hydrometeorological observation network until 2026.

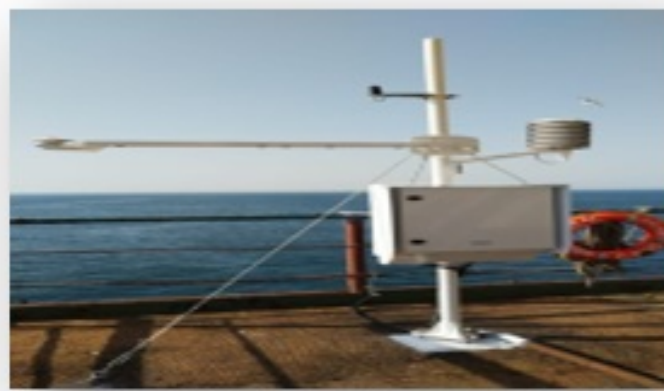
Observations	By 2020	in 2020-2023	in 2023-2026
Meteorological	34	51	77
Hydrological	0	40	55
Marine	0	4	8
Radar	0	2	6
Aqrometeorological	0	5	17
Aerological	0	2	3



HYDROMETEOROLOGICAL OBSERVATION NETWORK

At the figure 1 shows maps of the marine stations, figure 2 of hydrological stations, and figure 3 of meteorological and agrometeorological stations. At the figure 4 presents a map of the general hydrometeorological observation network.

AUTOMATIZATION OF MARINE OBSERVATION NETWORK



Neft daşları



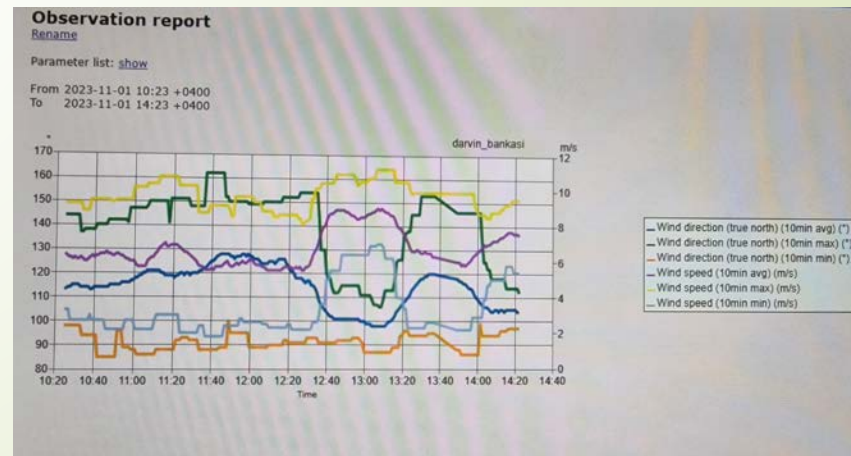
Banka Darvin

28 may



Xəzər Zirə

In 2020, 4 sets of automatic marine stations were installed in the sea area where there are oil deposits in the Caspian Sea. These AWS-430 new generation automatic stations are manufactured by Finnish company Vaisala.



AUTOMATIZATION OF HYDROLOGICAL OBSERVATION NETWORK



Within the framework of "State investment project". In 2021 - 17 sets In 2022 - 11 sets In 2023 - 6 sets Within the EU+ project: In 2021 - 6 sets of automatic hydrological stations were installed. The purchased observation devices are manufactured by the German "OTT Hydromet", Austrian "SOMMER" and the American "Xyleme" companies. Data of automatic hydrological stations

AUTOMATIZATION OF METEOROLOGICAL OBSERVATION NETWORK



In 2022, 17 sets of modern automatic meteorological stations were purchased and installed in the territory of the republic. These stations, in addition to standard parameters such as air temperature, relative humidity, atmospheric pressure, precipitation, wind speed and direction, etc., also automatically observe the meteorological visibility distance and cloudiness and transmit the results to the server in real time.

RESTORATION OF OBSERVATION NETWORK IN LIBERATED AREAS



In 2020, the restoration of the hydrometeorological observation network began in our territories freed from occupation.

Modern automatic stations were installed in place of the old stations.

11 automatic hydrological stations on the Okchuchay, Basitchay, Hekarichay, Zabukhchay, Tartarchay, Tutgunchay, Kondelanchay, Guruchay, Bargushad and Araz rivers;

Automatic meteorological stations were installed and put into use in Agdam, Kalbajar, Zangilan regions, Fuzuli and Shusha cities.

In 2024, it is planned to increase the number of these automatic stations and install a Doppler radar and radiosonde system in those areas.





A Situation Center was established in the administrative building of the National Hydrometeorological Service. It provides centralized collection and analysis of data from radar, automatic meteorological, hydrological, marine stations and air quality monitoring stations.



In the corridor at the entrance of the Situation Center, a museum of the history of the Service has been created, consisting of hydrometeorological observation devices used in meteorological stations, and photographs reflecting our historical activities.





EARLY WARNING SYSTEM





Thank you for attention

**Akbar Asgarov,
Ministry of Ecology and
Natural Resources
Republic of Azerbaijan**