

Information
of Ministry of Ecology and Natural Resources of the Republic of Azerbaijan on an early warning
of hazardous hydro meteorological events for the period of June-December 2016

In accordance with its regulation the Ministry of Ecology and Natural Resources provides the population, institutions and organizations with hydrometeorology data, hazardous events warnings, meteorological, marine and agrometeorological forecasts, climatic characteristics data, information on hydrological regime of surface waters, hydrometeorological features of Caspian Sea to warn the population of Azerbaijan about the expected hazardous hydrometeorological events and ensure the access to relevant data.

Ministry of Ecology and Natural Resources ensures preparation of warnings on hazardous and particularly hazardous hydrometeorological events (floods, strong winds, hurricanes, flooding of coastal areas, snow slides, strong frosts, droughts and etc.) and submits this information to state management organizations, relevant organizations and public.

Daily observed weather data and weather forecasts as well as information on flooding, inundation and actual water level of rivers are regularly placed on web page of the Ministry (www.eco.gov.az). 2 to 3 days weather forecasts for different regions of the Republic and Absheron peninsula, warnings about severe changes in weather conditions and river inundations is submitted to state organizations, relevant institutions as well as to the Ministry of Emergency Situations. Specialists of the Ministry of Ecology and Natural Resources are regularly interviewed by press on actual and expected situation.

In 2016 warnings on severe changes of weather conditions and expected short term river floods and inundations the total number of which was 46 of them 9 in June, 7 in July, August and September, 6 in October, 5 in November and December, warnings on severe changes in weather conditions of Baku and Absheron peninsula the total number of which was 26 of them 1 in June, 5 in July, August, September and December, 4 in October, 1 in November as well as warnings on strong winds and waves in Caspian sea are submitted to relevant state organizations, Ministry of Emergency Situations, district authorities and mass media.

Annual forecasts of spring-summer floods and flow forecasts of river inundations has great significance in reducing to minimum of damages which could suffer population and infrastructures. Results of the snow measurement activities carried out by the Ministry of Ecology and Natural Resources to define the snow resources of the country, as well as considering the monthly and seasonal weather forecasts the forecasts of spring-summer floods for April, May, June months and flow forecasts has been prepared and submitted to the relevant state organizations as well as Ministry of Emergency Situations, mass media and placed in the web page of the Ministry for public awareness raising.

Taking into account of perennial observation data the flood map of Azerbaijan has been prepared on the basis of GIS program joint with Geographical Institute of National Academy of Science and printed in the National Atlas of Azerbaijan. Recently new technologies have been applied, actions on modernization have been carried out to strengthen control on hazardous hydrometeorological events resulted from climate change and to improve the early warning system.

During 2016 year 34 modern automatic meteorological station of “VAISALA” company of Finland has been installed and their number reached to 68. In addition both Climate Data Management System which enables safe storage and management of data and modern telecommunication system for collection, transferring and processing of data (GTS Message Switching) have been bought from “COROBOR system” company of France and installed in the same year.

4 automated radiolocation management stations installed in the area of the Republic enables high quality tracking of cloud and atmospheric precipitation and related dangerous hydrometeorological events and prepare their short-term forecasting. With the assistance of automatic radiolocation observation complexes installed in Aghstafa, Shaki, Goygol, and Shamakhi regions the automated observation of torrential rains, floods and hail have been conducted, the population have been provided with short term warnings.

Considering the international experience and guidance the “Metcap+” system that is the modern version of “TURKMETCAP” satellite system is applied to improve the quality of forecasts and warnings. Along with the necessary actual information used in preparation of forecasts this system is also applied to prepare the numerous forecasting maps, to obtain and exchange the results of digital models and satellite information renewed in every 3 hours.

The satellite imagery renewed in every 15 minutes on 12 spectr channel is obtaining by EUMETSAT satellite system. This system assists to track the actual air, air flow trajectory, the mechanism of action of cyclones and anticyclones, distribution of precipitation and etc., and results are used in preparation of daily forecasts.

The system also allows to track the information related to observed and expected intensive precipitation in the country area in the map form on the basis of different models within the project of “Unexpected Inundation Early Warning System ” implemented in Black Sea and Near East region with the support of WMO.

In 2009, the early warning radiological monitoring systems were established in the six frontier regions to control gamma radiation exposure from neighbouring countries. The received data from the stations is stored and controlled by the central server stations which were established in National Environmental Monitoring Department under the Ministry of Ecology and Natural Resources and the Ministry of Emergency Situations.

Information of the Ministry of Emergency Situations of the Republic of Azerbaijan for the period of June-December 2016

- In a country is operational an SMS warning system via the GSM operator (“Bakcell”) in order to aware people of the emergency situations. This work is carried out by the relevant departments of Crisis Management Center of the Ministry of Emergency Situations. The work is carried out to establish similar SMS warning system with other mobile operators in the country.
- Work is also being conducted to notify people of possible future emergency situations. These activities are based on new technologies, sustainable and reliable systems, as well as on the application of the “Cell broadcast” system, which is used in a number of developed countries.
- Information about the events that have taken place in the country and the dangers that could arise is provided to people in 24/7 mode via the Internet website (www.fhn.gov.az) of the Ministry of Emergency Situations. On this site is also posted the information about the rules of conduct in case of danger.
- The Ministry of Emergency Situations regularly monitors the large water reservoirs of the country (except reservoirs in the occupied lands) in order to maintain the determined optimal water level. The Ministry also keeps the fire safety issues in focus and carries out the civil defense activities on a regular basis.