When talking about the climate of the territory we mean an inherent long-term weather patterns. The climate is one of the main non-living components of an ecosystem, which is called climatop. Over the past decade noticeable general planetary climate change, which disturbs all. Therefore there is a need to identify causality phenomenon and to do conclusions. Strangely enough but the huge successes of man in the last two hundred years in the field of technological development does not release him from the available depending on climatic conditions. Moreover, the impact of climate on the multilateral human economic activities, such as agricultural productivity, hydro energetics, the work of all modes of transport, technical maintenance of production and soon, further enhanced. On the other hand, the influence of climate on human health and psycho physical condition. Climatic conditions is acquiring social and even political importance.

So, for the stable development of society, their importance and role have the results of systematic meteorological observations, which are the basis for scientific climatic analysis and solutions of many uncertainties, scientific forecasting, for planning and efficient organization of work in the production and nonproduction spheres, for patterns of economic development. So, considering the above, the work discussed and analyzed the organization of terrestrial weather observations, the reliability of the results of observations, meteorological information as well as problems modern climate studies in the territory of the Republic of Armenia.

To solve these problems in theoretical and information basis become relevant research, reports, statements, prospective development programs, projects, decisions of the government of the Republic of Armenia. As the starting material used actual data of meteorological observations of Armstatehydromet. As a methodological basis used general scientific, geographic methods, characterization techniques, statistical analysis, collation, comparison and analysis.

In recent years greatly increased the demand for meteorological information, which is due to climate change, increased frequency of weather events, a planned development of the economy. In the country carried out and implemented a comprehensive climate research, which highlight and identify a number of questions concerning the scope. However, in these areas there are many unsolved problems and gaps still, that require a lot of effort and finances.

In Armenia the state authorized body as performing hydro meteorological observations is Armstatehydromet. In Armenia meteorological observations carried out since 1843. But they were not systematic. A full range of observations emerged in the 20s of the last century. Maximum number of meteorological stations was about 80. Now 47 meteorological stations operate in Armhydromet service, including three specialized and 34 agrometeorological stations. 5 of them have about 100 or more, and 36 - observations over 50 years. 12 meteorological stations are located at an altitude of 2000 meters or more above sea level, 6 of them are hard-to-reach. The problem lies in the fact that meteorological observations are not carried out at an altitude of 2400-3000 m, which has a negative effect on the results of climate research. So, it is necessary to fill this gap by restoring the previously existing station at this height or opening new. Some hydro meteorological stations are included in the global climate observing system network. Thus, hydro meteorological service has a powerful and rich base for climate research (which contains all the elements of the climate). However, while there are some problems with digital data, with providing continuity of climatic series and uniformity, with the introduction of new programs.

Armhydromet service always promote and strengthen international cooperation, is working on the establishment of new relations. In recent years in the framework of international cooperation, with the assistance of international organizations purchased and deployed a number of specialized instruments and equipment.

Thus, as a result of research we came to the following conclusions and suggestions;

- Increase implementation in the field of meteorological observation and monitoring to enhance climate monitoring network;
- Maintain, strengthen and improve the network system and monitoring of global, regional and local climate observations;
- Create hydro meteorological quantitative and qualitative reliable database at the national, regional and global levels, which would have been available for scientific and practical research, as well as the wider society;
- Develop of data banks management system, equipping it with the latest software;
- Rearm meteorological stations and points with modern devices and technologies (particularly automatic), provide them with technical equipment and modernization of the methodology;
- Introduce new technology for climate data;
- Develop different climate services and their use in the socio economic planning;
• Provide the preparation and retraining of specialists at both the national and the regional and global levels;
• Provide the availability and dissemination of climate information, notification of society knowledge about climate;
• To develop and strengthen mutual communication and cooperation between the units, who prepare and provide climate information and its consumers;
• Assess and address existing needs of users and consumers in relation to information;
• Improve the mechanism for the provision of information and facilitate productive use of climate information;
• Strengthen research climate problems, paying particular attention to climate forecasts.