IAF SYMPOSIUM ON INTEGRATED APPLICATIONS (B5) Tools and Technology in Support of Integrated Applications (1)

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PREPARATION OF PROJECT ON REGIONAL NETWORK OF GPS/GLONASS GROUND RECEIVERS IN THE TERRITORY OF THE REPUBLIC OF AZERBAIJAN

Abstract

IAF SYMPOSIUM ON INTEGRATED APPLICATIONS (B5) Tools and Technology in Support of Integrated Applications (1) Author: Prof. Alchin Shirin-zada Azerbaijan National Aerospace Agency, Azerbaijan, alchinshirinzade@gmail.com A.A.Shirin-zada, A.A.Ibadov, N.A.Shirinzada PREPARATION OF PROJECT ON REGIONAL NETWORK OF GPS/GLONASS GROUND RECEIVERS IN THE TERRITORY OF THE REPUBLIC OF AZERBAIJAN Abstract Parameters of earthquakes that have already occurred (magnitude, coordinates and depth) using existing scientific and technical methods and devices are determined with the necessary precision. Currently, the most important issue is to obtain the necessary information about earthquakes that may occur in advance. With the mentioned purpose, currently, the global distribution of the large-scale ionization's structure of the ionosphere, its daily, seasonal and climatic variations have been studied widely. Sufficient material on the morphology of electron concentration excitation has been collected and the effects of ionized homogeneous and non-homogeneous (background) environment during the propagation of radio waves, lithosphere-atmosphere-ionosphere interaction issues have been studied. It is known that interaction processes lead to ionospheric excitation. Currently, one of the serious problems is the determination of ionospheric excitation displacement parameters. A fundamental analysis of the physical mechanisms of electron concentration generation, transport, and distribution is required. One of the important issues ahead is the detection of excitation sources during specific processes. Starting from the last century, the displacement of ionospheric excitation was observed by means of satellite navigation systems, and in 1960, the displacement of ionospheric excitations as a result of the effect of acoustic-gravitational waves was explained for the first time. Since then, with the help of various methods, constant observation of acoustic-gravitational waves in the lower and upper layers of the atmosphere is carried out. During the development of the ionosphere excitation monitoring system in the territory of the Republic of Azerbaijan, global navigation satellite systems terrestrial networks can be performed not only with the help of the GPS system, but also with the use of the GLONASS system. This will increase both the volume of geophysical information received and the reliability of measurements.