tered. The processing of the photometric and astrometric data allows to determine the period of rotation of the SO and orientation of an axis of rotation or mode of its stabilization in space. For the decision of last task it is necessary to attract modeling of the optic-geometrical parameters of SO for comparison of model's shine with observations. On the basis of this monitoring the databank containing the information about the shine of LEO more than for 20 years of supervision is generated.

The astrometric measurements of a passive SO on low orbits are used for study of interaction of the cosmic body with Earth atmosphere and monitoring of change of atmosphere density at various heights during the increased solar and geomagnetic activity.

Geostationary and high-elliptic objects are observed on a 30-sm telescope with the television camera. The television field with the image of the satellite on a background of stars is quantized and is kept in the computer in a standard graphic format. For finding of coordinates of SO is used the original software. Calculated coordinates of the SO are used for their cataloguing.

RESEARCH OF THE IONOSPHERE DATA FOR STUDYING SOLAR ACTIVITY, EARTH-QUAKE FORECASTING AND CORRECTION GEODETIC INFORMATION GPS RECEIVERS

Bushuev F.I., Obraztsov J.M., Slivinskij A.P., Shulga A.V.

Research Institute "Nikolaev Astronomical Observatory",
bushuev@mao.nikolaev.ua

Received in the Nikolaev Astronomical Observatory (Scientific Research Institute NAO) regular observations of a condition of the D-layer of an ionosphere, with use of a technique of inclined sounding by signals LW radio stations of accurate hour's services and frequencies (DCF-7 Germany), allow, by results of processing and the analysis of the accepted digital signal information which are carried out by a complex, developed in HAO, specialized programs to carry out detailed studying and the control of the current solar activity and its ground

displays, to predict conditions of distribution of radiowaves, etc.[1]. Significant interest, in opinion of authors, represents an opportunity of use given ionosphere observations for search and detection ionosphere forecast of strong earthquakes in areas of the raised seismicity, with use of automatic algorithm, and also an opportunity of the ecological control of anthropogenous influences on an ionosphere.[2]. During the analysis of a file of the saved up data, have been found out as well steady correlations of significant distortions of the data permanent GPS stations NAO and x-ray solar flashes (up to 10 m on range) which adequate account allows to improve accuracy of the geodetic works which are carried out with use GPS of the equipment. Ionosphere data of NAO are registered with an interval in 1 second. Graphic results of the current data processing with 5 minute interval are removed on information site NAO http://www.mao.nikolaev.ua for an opportunity of operative use by consumers. Results of the lead spectral and comparative analysis of an annual file ionosphere data will well be coordinated tothe number,typical for dynamics of number of Volf, and other observable periodicity of solar activity, both on long, and on short intervals of time.[3] Periodicity of processes, annual duration, 112,52, 28, 7, 2 and 1,24 day, and also short-periodic variations with intervals 49.7; 30.3; 21.8; 17.1; 14.6; 11.8; 10.5; 8.8; 7.9 and 7.2 minutes. The assumption that such periods are caused constantly existing oscillations by processes in deep layers of the Sun has been stated. [4].

1. A.P.Mitra. Influence of solar flashes on an ionosphere of the Earth. Mir, 1977, p.370 .

2.Гуфельд И.Л,, Маренко В.Ф., Пономарев Е.А., Ямпольский В.С. “Поиск электромагнитных предвестников землетрясений”, Москва, ИФЗ, 1988.4.

3. H.A.Hill, K.T.Stebbins, T.M.Brown. Phys. Today. 1975.29. p.17.

4. Л.Л.Лазутин, А.М.Новиков, Ю.Ф.РудневН.Г.Скрябин, В.Д.Соколов. Флуктуации космических лучей в полярной стратосфере и радиоизлучение Солнца. Геомагнетизм и аэрономия. 1991. 31, №1, с. 46.