

## **On rhythmic changes of the cardiovascular disease exacerbation and their relationship to heliogeophysical parameters**

S.N.Samsonov<sup>1</sup>, V.D.Sokolov<sup>1</sup>, A.A.Strekalovskaya<sup>2</sup>, P.G.Petrova<sup>2</sup>

<sup>1</sup> *Yu.G.Shafer Institute of Cosmophysical Research & Aeronomy, 31 Lenin Ave., 677891 Yakutsk, Russia, e-mail: s\_samsonov@ikfia.ysn.ru*

<sup>2</sup> *M.K.Ammosov Yakutsk State University Medical Institute, 36 Kulakovsky Str., 677001 Yakutsk, Russia*

The spectral analysis of disease dynamics of patients having a cardiovascular pathology has been carried out on the basis of statistical data on a hypertensive disease, hypertensive crisis and sick people registered in a dispensary. The medical data have been obtained from the ambulance materials of Yakutsk for 1992 and 1998. Analogously the parameters of solar wind (magnetic field, speed and proton density) and also of geophysical disturbance (K-index and energetic electrons) have been analyzed.

In the geophysical disturbed year (1992) the 30-32 day peaks are observed in medical parameters. The same periodicity is observed in geophysical activity parameters. The maximum peaks of rhythm in solar wind parameters repeat themselves in 29-30 days. In the year of minimum geophysical disturbance (1998) in medical showings the periodicity is manifested weakly and the coincidence with the periodicity in parameters of solar wind and geophysical activity is insignificant.