



Type IIIb bursts in frequency band 18-30 MHz

V. N. Melnik (1), H. O. Rucker (2), A. A. Konovalenko (1), N. V. Shevchuk (1), E. P. Abranin (1), V. V. Dorovskyy (1), and A. Lecacheux (3)

(1) Institute of Radio Astronomy, National Academy of Sciences of Ukraine, Kharkov, Ukraine (melnik@ri.kharkov.ua), (2) Space Research Institute, Austrian Academy of Sciences, Graz, Austria, (3) Departement de Radioastronomie, Observatoire de Paris, Paris, France

As known Type IIIb bursts is a chain of short, narrow-band bursts, which slowly drifts from high to low frequencies, in a manner similar to the normal Type III bursts.

This report deals with analysis of Type IIIb bursts, which were observed in frequency band from 18 to 30 MHz on July - August 2002. The main parameters for some tens of Type IIIb bursts such as amount of stria in a burst, duration, frequency width, emission flux, and frequency drift rate were obtained.

Every Type IIIb bursts consists of more than 35 stria-bursts. The time profile of stria is similar to typical Type III burst with fast rise and slower fall. The frequency profile of stria is symmetrical. In all cases the average duration is about 1 – 1,4 s. The average bandwidth of stria is 60 - 80 kHz for all analyzed bursts. There is no any characteristic dependence between radio emission fluxes and observational frequency. Nevertheless radio fluxes of stria-bursts have maximum values at the frequencies 21 - 22 MHz.