



Features of Sporadic Solar Radio Emission at Decameter Waves

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

(1) Institute of Radio Astronomy, Kharkov, Ukraine, (2) Space Research Institute, Graz, Austria, (3) Observatoire de Meudon, France (melnik@ira.kharkov.ua / FAX: +38 057-7061415 / Phone: +38 057-7061411)

Review of features of sporadic solar radio emission at frequencies 10-30MHz during observations at radio telescope UTR-2 in 2001-2002 is presented.

At first various fine structures of Type III bursts were discovered. Mainly, these structures constitute a consistency of sub bursts with duration about 1s and with frequency drift rates, which differ from the drift rate of parent Type III burst. U- and J- bursts with turning point near 10MHz were observed. They are associated with high ($h \approx R_S$) coronal arches.

Type II bursts have also fine structures, which consist of sub bursts of short duration with Type III frequency drift rate. At first a herringbone structure was analyzed in detail. A wavelike structure of backbone that is connected seemingly with intersecting the coronal structure by shock front was discovered.

Using a big sample of “drift pair” bursts we have analyzed some properties of forward and reverse “drift pairs” such as drift rate, time duration, time delay, intensity via frequency dependence in the frequency range 10-30MHz. A fine structure of these bursts was discovered in some cases.

Properties of S-bursts and spikes in decameter range are discussed.