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Type III-like Bursts in the Frequency Range 18-30 MHz

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Young et al. (1961) and Elgaroy and Rosenkilde (1974) reported about Type III bursts with enormous drift rates in the frequency range 500-900MHz and 310-340MHz correspondingly. The drift rates (>2000MHz/s at frequencies 500-900MHz and >500MHz/s at frequencies 310-340MHz) of these so called Type III-like bursts were several times higher than the drift rates of usual Type III bursts. Sometimes Type III-like bursts exhibited unusual drifts - from low to high frequencies. The durations of these bursts equaled 0.2-0.3 s and were several times less than those of usual Type III bursts at corresponding frequencies. In this paper we report about first observations of more than 100 Type III-like bursts at frequencies 18-30MHz, which were carried out on 28 July, 2002 at UTR-2 radio telescope equipped with new back-end (DSP). The drift rates (5-10MHz/s) and durations (1-2s) of these bursts also differed from corresponding values (2-4MHz/s and 4-10s) for usual Type III bursts at decameter wavelengths. The Type III-like bursts had comparatively low fluxes - 10-50s.f.u. Possible connection of these bursts with relativistic electron beams accelerated in solar flares is discussed.