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Stereoscopic observations of solar Type III burst: Spectral pattern, intensity variation and source location

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We study a set of solar Type III radio bursts simultaneously observed by URAP/Ulysses and WAVES/Wind experiments. The combine of both space instruments allows us to cover a frequency range from 14 MHz down to a few kHz. In the data investigation we measure the onset time of each burst, we estimate the corresponding intensity level, and we derive the Langmuir frequency clearly seen on the dynamic spectra recorded by the Ulysses spacecraft. The distances of Wind and Ulysses, with regard to the Sun, were in the order of 1 AU and 2.4 AU, respectively. The Ulysses and Wind spacecraft trajectories where localized, respectively, in the southern hemisphere (i.e. heliographic latitude of about -75°) and in the ecliptic plane. Despite the different locations, the spectral patterns of the selected events are found similar between 1 MHz and 100 kHz. We first discuss in this contribution the variation of the intensity level as recorded by WAVES and URAP experiments. We show that the reception system of each experiment affected the way the Type III burst intensity is measured. Also we attempt to estimate the electron beam evolution along the interplanetary magnetic field where the trajectory is an Archimedean spiral. This leads us to infer on the visibility of the source location with regard to the spacecraft position.