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Jovian radio emissions observed by Cassini spacecraft during the Jupiter flyby

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We report on an overview of the observations of Jovian radio emissions obtained by Cassini/RPWS experiment during its Jupiter flyby. We study the radio emissions observed in the period from 01st Nov. 2000 to 28th Feb. 2001. In this time interval the closest approach to the planet was on 30th Dec., 2000, at a distance of 137 Jovian radii. The capabilities of this instrument lead in particular to achieve a great sensitivity and a dynamic over large frequency range from 3.5 kHz to 16 MHz. In this bandwidth we investigate the physical observational features like the arc structures and the attenuation band which occur principally in the decametric and hectometric wavelengths. Such features are modulated by the Jovian planetary rotation and the Io's satellite position with regard to the observatory, i.e. Cassini spacecraft. We address in this context questions concerning the way to separate between radio emissions controlled, or not, by the Io-satellite. Also we show in some cases the flux intensity enhancements in the spectral components of the kilometric and the hectometric wavelengths which are interpreted as a signature of the interaction between the solar wind and the Jovian magnetosphere.