Investigations of spatially resolved 1.28 GHz Radio Activity associated with Solar X-Ray Micro Flares

H.S. Sawant (1), S. Krucker (2), F.R.H. Madsen (1), S Kane (2), M.Karlicky (3), S. Ananthakrishnan (4) and P. Subramanian (5)

(1) INPE – National Institute for Space Research, Sao Jose dos Campos, Brazil, (2) Space Science Laboratory, University of California, Berkeley, CA, USA, (3) Ondrejov Observatory, Ondrejov, Check Republic, (4) National Centrer for Radio Astrophysics – TIFR, Pune, India, (5) Inter University Centre for Astronomy and Astrophysics, Pune, India (sawant@das.inpe.br / Fax: +55-12-3945-6811 / Phone: +55-12-3945-7202)

On 20 and 22 November 2005 Solar observations at 1280 MHz were carried out from 04:00 to 11:30UT at the Giant Metrewave Radio Telescope – GMRT - with time resolution of 512 ms and spatial resolution of $\sim$ 5 arc sec. During GMRT observation time on both days, micro flares have been observed by RHESSI satellites in the range of (3 – 10) keV. Detailed investigation of the X-ray emission shows the presence of both thermal and non-thermal components. Imaging analysis of one of the micro flares in x ray shows the RHESSI data can produce image with resolution of 7". Here we report an investigation of simultaneous 1.28 GHz radio activity and 3-10 keV X-ray observations of solar X-ray micro flares as observed on 20 November during the interval 08:00-08:30 UT.