

M01a The NoRH/RHESSI Big Flare Catalogue

Satoshi Masuda (Nagoya University), Säm Krucker (University of Applied Sciences Northwestern Switzerland / University of California, Berkeley / Nagoya University), Stephen White (Air Force Research Laboratory)

Solar flares give us a unique opportunity to make spatially resolved observations to study magnetic energy release and particle acceleration in space plasmas. The most direct diagnostics of electron acceleration are provided through radio and hard X-ray observations where we observe synchrotron emissions in the GHz range and non-thermal bremsstrahlung emissions above typically 10 keV. The two leading solar dedicated observatories in these two wavelength ranges are the Nobeyama Radioheliograph (NoRH) and the Reuven Ramaty High Energy Solar Spectroscopic Imager (RHESSI). We present a statistical study of 35 jointly observed big ($>$ GOES M7) flares. Initial results reveal a linear correlation between the hard X-ray flux above 50 keV and the microwave fluxes at 17 and 34 GHz. These results corroborate earlier findings indicating that the magnetic field strengths in these large flares are all rather similar. In the second part of our talk, we will present imaging results during the flare peak phase to investigate the location of the radio sources relative to the chromospheric footpoints seen in hard X-rays.