

Loop Top Nonthermal Emission Sources Associated with an Over-the-Limb Flare

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The finding of loop-top hard X-ray (HXR) emission sources (Masuda et al. 1994) is one of the most important results achieved with Yohkoh satellite. We studied the M3.7 class flare which occurred on 2005 July 27, in the active region NOAA 10786. This flare is an over-the-limb flare, and the footpoints are occulted with the solar disk. The microwave and the HXR images are obtained with the Nobeyama Radioheliograph in the Nobeyama Solar Radio Observatory, NAOJ, and the RHESSI satellite, respectively, and they clearly show the loop-top emission sources.

We examined the emission sources in detail spatially, temporally, and spectroscopically. As a result, one of the HXR emission sources and the microwave emission source are nonthermal.