

M41a 観測衛星「ひので」が見た一千万度の太陽

Kazunori Ishibashi (NWRA/CoRA)

The X-ray Telescope (XRT) on board Hinode Satellite allows us to detect solar X-radiation at the wide range of temperature ( $10^5 - 10^7$  K). With the proper use of thick X-ray filters (e.g., medium- or thick-Beryllium), it is possible to detect photons shortward of 1 – 1.5 nm in wavelength, or plasma temperature corresponding to  $\approx 10^7$  K.

It is not well understood how hard X-ray plasma at  $T \sim 10^7$  K is being generated and heated continuously in solar corona. While discrete hard X-ray sources appear to be tied with X-ray bright points in Hinode/XRT observations, other diffused, patchy sources may or may not be tied with any active regions. Hence it is desirable to characterize the morphology of hard X-ray plasma. Furthermore it is also crucial to examine hourly, daily or weekly variations of the  $10^7$  K plasma as quantitatively as possible. These are the goals of this particular study on hard X-ray plasma moderately resolved spatially by the Hinode/XRT.