A statistical study on the soft X-ray flare in solar cycles 22 and 23

Juan Guo (National Astronomical Observatories)

Session: SpS6 Science with large solar telescopes

Type of presentation: Poster

We have surveyed 28 year of Solar X-ray flares and sunspot group records supplied by the National Geophysical Data Center (NGDC) to study the dependence of different class Xray flares on the magnetic structure of sunspot groups statistically. It is found that 90.7% X-class flare, 66.4% M-class flare, 37.5% C-class flare, and 15% B-class flare occurred in the sunspot group with delta structure. We confirm that regions with delta structure produce more large flares than other regions.