Solar Activities in the Current Solar Cycle (cycle 24)

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The number of sunspots changes approximately periodically, going from minimum to maximum and back to minimum again nearly every 11 years. Solar activities, such as flares and filament eruptions, which have various effects to the Space Weather, occur near sunspots (in active regions).

The last solar cycle (cycle 23) started in 1996, reached the maximum around 2001, and

entered the decaying phase. The first sunspot which belongs to the new solar cycle, appeared on January 4, 2008. We reported the news on our web-site (http://www.kwasan.kyoto-u.ac.jp) using an image obtained with Solar Magnetic Activity Research Telescope (SMART) in Hida Observatory, Kyoto University. The topic was introduced by many newspapers and web-news sites in the context with the Earth climate and solar activity. In autumn, some newspapers reported the news that number of sunspots was still small after starting new solar cycle.

In this talk, we report solar activities in the new cycle, such as the sunspot number, flares, etc., comparing with activities in previous cycles. We also introduce various images of the Sun obtained with SMART and solar satellites.