

Auroral activity observed during the SC event on June 22 in 2015

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Auroral activity observed at Syowa Station during the SC event on June 22, 2015 will be analyzed.

Some features of this event are as follows:

(UT)

18:03 Shock arrival at ACE position

18:33 SSC at Kakioka, maximum:+104nT

18:33:30 SC magnetic variation start at Syowa

18:34 Auroral variation appear at lowest horizon

18:40 Poleward expansion of auroral arc

18:40:30 Break of arc, N-S aurora; diffuse spread

19:32 poleward expansion again

19:54 spread from higher latitude to lower latitude

20:30 going back to calm

During this period, following optical instruments were operated at Syowa Station:

- All-sky Monochromatic imagers(427.8,557.7,485.0,480.5nm)

- All-sky panchromatic TV camera

- Multi-color Scanning Photometer

During this period, very bright proton auroral emission over 500 R was observed.

In our presentation, details of temporal variation of auroral activity will be shown..

Keywords: SC event, Shock Aurora, Syowa Station