

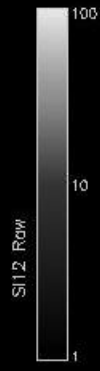
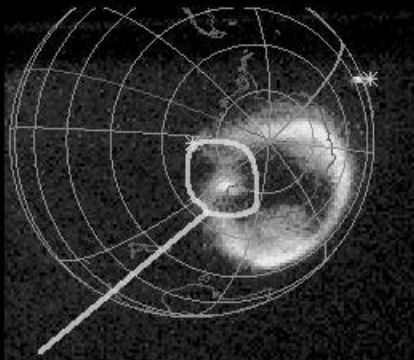
Proton Aurora Activities During the November 2004 Storm Period Observed by IMAGE/FUV

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Two specific proton aurora events occurred during the 2004 November storm period are reported from the IMAGE/FUV observation. The first one is the bright proton aurora spot appeared at higher latitude of the dayside aurora oval, which has been reported to behave according the interplanetary magnetic field (IMF). The aurora images taken from 2004/11/07 18:30 to 22:00 are examined to check the relationship between aurora spots and IMF, along with the HF-radar data. The second event is the subauroral proton aurora associated with the strong solar wind pulse with duration of about 15 minutes. This type of event has been reported to be caused by precipitation of the ring current ions through couplings with the solar wind variation. It is estimated that the total amount of energy precipitated in this event has an insignificant contribution to the change in the ring current total energy.

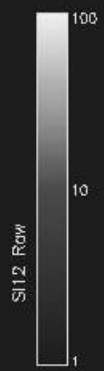
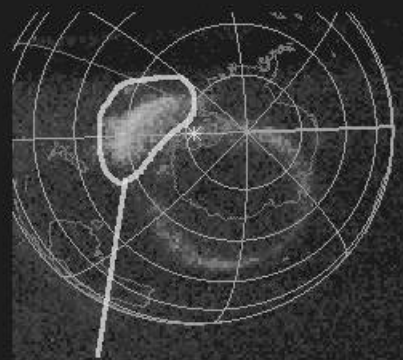
IMAGE-S12, 2004-11-07,19:28:58 UT



Cusp Aurora

SSL, UC Berkeley

IMAGE-S12, 2004-11-11,21:50:05 UT



Sub Aurora

SSL, UC Berkeley