

December 11, 2006

KST UHF operation memorandum for the December 11, 2006 experiment

Experiment name: sp_ni_oh and HASK: arc1 (CP1)
pointheight 185.1 77.5 299.6

elan files:puny :/kst/exp/ arc1/arc1.elan

Pulse scheme: arc1

Start time: 16:00 UT on December 11, 2006

End time: 23:00 UT on December 11, 2006

Heating was on from 20:00 UT to 23:00 UT

Participants: Satonori Nozawa, and Taiki Watanabe.

Before our experiment: Nothing

After our experiment: Nothing

Other instruments.

Photometer, STEL digital camera (1-min interval), NIPR digital All-sky camera (30-sec interval), STEL proton imager (1-min interval).

Note: (time in UT)

December 11, 2006

Cloudy, and -1 deg.

15:48 sod **runexp** /kst/exp/arc1/arc1 **16:00 cp1 NI**

15:48 kir **runexp** /kst/exp/arc1/arc1 **16:00 cp1 NI**

15:56 **runexp** /kst/exp/arc1/arc1 **15:57 cp1 NI**

Tx up

16:00 enablerec

sod enablerec

kir enablerec

at EROS4 console (UHF)

rtg

kir webtg

sod webtg

16:05 guisdap –a (at matilda)

17:50 Tx down

17:54 Recovered

18:02 sod pointrheight 185.1 77.5 220

kir pointrheight 185.1 77.5 220

18:35 1584 kW (rtg)

20:09 Tx down (probably due to noises caused by the Heating)

20:16 Recovered

It is 7 deg in the town, and 5 deg here!!!!

Just before 20:00 the ionosphere got active and the weather got better.

21:10 Tx problem. Power p/down

21:19 recoverd

UP/down 3 times. The heating seems to affect badly....

21:46 TX down (crowbar)

21:50 recovered

22:01 TX down (crowbar)

22:04 recovered

at EROS

rtpeek txwg

1476 kW

23:00 **stopexp (all sites)**

stopexp

kir stopexp

sod stopexp

Partly cloudy, 2 deg C.

Summary

The activity of the ionosphere was very low until ~20 UT. Starting at ~20 UT, the ionospheric activity became high and lasted until the experiment. Sky was also bad until ~20 UT, but it was partly clear sky later on.

Descriptions of SPs

sp_ni_oh

We run the UHF radar with CP1/arc1 mode together with NIPR OH spectrometer and other optical instruments. The target is to investigate the influence of the particle precipitation in the upper mesosphere. Clear sky and high activity are desired.

HASK

Heating and ASK by nickolay.ivchenko@ee.kth.se

Optical and heating campaign, focusing on E-region heating and its optical effect