

December 12, 2006

KST UHF operation memorandum for the December 12, 2006 experiment

Experiment name: sp_ni_oh and HASK: arc1 (CP1)

pointheight 185.1 77.5 299.6

Today, Swedish time is used for 7 hours.

(Japanese time was used for 7 hours for the Dec 11 run)

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

Pulse scheme: arc1

Start time: 16:00 UT on December 12, 2006

End time: 23:00 UT on December 12, 2006

Heating was on between 20:00 and 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 12, 2006

Cloudy, and 5 deg.

15:48 sod **runexp** /kst/exp/arc1/arc1 **15:55 cp1 SW**

15:48 kir **runexp** /kst/exp/arc1/arc1 **15:55 cp1 SW**

15:56 **runexp** /kst/exp/arc1/arc1 **15:52 cp1 SW**

15:57 sod pointheight 185.1 77.5 220.0

15:57 kir pointheight 185.1 77.5 220.0

16:00 enablerec
sod enablerec
kir enablerec
at EROS4 console (UHF)
rtg
Tx ON

kir webtg
sod webtg

16:03 1500 kW(rtg)

16:11 guisdap -a (at matilda)

16:37 crowbar (big noise)

16:41 crowbar

16:43 recovered

1559 kW (rtg)

16:51 THE IONOSPHERE is VERY ACITIVE (but cloudy here)

17:22 crowbar and Tx down

17:38 Recovered

17:56 crowbar (big noise) and Tx down

18:04 Serious? Ralf went down to see the TX...

18:15 reseted. Count down for 15 min...

18:16 disablerec

kir disablerec

sod disablerec

18:37 Tried to fix the problem...

Windy outside.

19:14 Sky is clear ? Aurora!

19:24 Recovered

It took about 1 and half hours to recover the observation. Shame!!!

22:23 Cloudy?

**The electron density become high around 280 km,
so try to change the remote position**

22:35 kir pointrheight 185.1 77.5 299.6

sod pointrheight 185.1 77.5 299.6

22:37 kir pointrheight 185.1 77.5 282.9

sod pointrheight 185.1 77.5 282.9

At kiruna, "acu Failed to bring ACU on"

Something wrong with the Kiruna antenna

Then, back to the position.

kir pointrheight 185.1 77.5 220.0

sod pointrheight 185.1 77.5 220.0

23:01 stopexp

kir stopexp

sod stopexp

Raining, 2 deg C.

Summary

The activity of the ionosphere was high. Due to the TX problem, the experiment was stopped from 1756 to 1924 UT. After the TX break, the experiment went well. But the weather was not good.

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.

PI: Dr Makoto Taguchi, NIPR

HASK

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

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