KST UHF operation memorandam for February 21 BY S. Nozawa

(Using Netscape might be in trouble on this page.)

Experiment name: taul2pl (HFLT5423 with the field-aligned-position:(184.0,77.1, 292.9)

pointgeogr (69.014, 19.116, 292.9)

We will make an optical campaign using two digital cameras (NIPR) and 4-wavelength photometer with EISCAT UHF radar. NI(12),

elan files: tau2pl.élan

directory: /kst/exp/tau2pl/tau2pl

Pulse scheme: tau2pl

Start time: 18:30 UT on February 21, 2004 End time: 23:00 UT on February 21, 2004

Participants: Satonori Nozawa, Kazuhiro Adachi, and Hiroyuki Iwahashi.

Before our experiment: tau1(by Finland)

After our experiment: tau2pl (by Finland)

VHF is running (tau0)

Heating is off (since 22:30 ON).

Finland has a (relatively big) campaign during this new moon period. So, we have decided to share EISCAT data with them. Regarding the Feb 19 experiment (19-23 UT), since it was geomagnetically quiet and stormy weather (raining hard!), we did not run EISCAT and Finland took over the time and run their SP.

Note: (time in UT)

February 21

It was cloudy !!!

The sky was cloudy (snowing afterwards). Less moderate geomagnetically activity.

After discussions with Finland team (Thomas), we start the SP at 18:30. Also, according to Thoms, "arc1" was broken. Indeed, they changed the mode.

18:30 START

```
runexp /kst/exp/tau2pl/tau2pl 18:30 cp1 NI 292.9
kir runexp /kst/exp/tau2pl/tau2pl 18:30 cp1 NI
sod runexp /kst/exp/tau2pl/tau2pl 18:30 cp1 NI
```

- 18:31 enablerec; kir enablerec; sod eneablerec
- 18:32 1500 kW (only! This is a bit discouraged. Even using 2 kylstrons.

19:00 Snowing.....

- 21:29 Power off; serious need to be reseted.
 - *** VHF arc_dlayer_v does not work, but it was fixed after 10 mintes.
 - *** VHF arcd on. Changing the position from North to Veritical
- 21:39 recovered. 1468 kW
- 21:44 power down.... (The engineer was busy for changing the antenna position of the VHF radar, so it took long to get recover...)
- 22:00 recovered. 1517 kW

 *** VHF started with Heating ***
- 22:23 1666 kW. Particle precipitation was observed (3X10^11 m-3), but snowing.
- **** 2238-2239 The shutter of the photometer was closed. ***

23:00 stopexperiment

Finland took over the experiment and left it going until 03 UT on Feb 22.

Summary:

Moderate Tx power (about 1500 kW).

Tx is less stable.

Snowing.

Geomagnetical activity was less moderate.
