November 16-19, 2003

KST UHF operation memorandam for November BY S. Nozawa

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

Experiment name: tau2pl (CP2)

This SP (CP2) is a long-run experiment started just after a 5-day CP2 run to make an 8-day window data. Both mainland KST radar and ESR are operated. Four countries are involved such as Japan, Norway, Sweden and Germany.

elan files:tau2pl-elan (just use taul2pl series)

Pulse scheme: tau2pl

Start time: 15:00 UT on November 16, 2003

End time: 14:06 UT on November 19, 2003

(Time period from 09:00 UT to 14:06 UT on November 19 is just compensated for the gaps.)

Participants: Satonori Nozawa, Kazuhiro Adachi and Yuichiro Tanaka

(Yasunobu Ogawa is in charge for ESR operation)

Before our experiment: CP2 (from 9 UT on November 11)

After our experiment: Nothing

IMPORTANT NOTE:

From 12:24 UT on November 17 to the end of experiment (14:06 UT on November 19), we have ran cp2w due to a problem of the rails.

cp2w is modified cp2 scan file where the two eastward positions are mirrored around 180 deg. This is to avoid 160 deg azimuth where there is concrete broken under the rails and one of the wheels dips making noises in the antenna structure.

cp2w: (180.0, 90.0) -> (193.5, 64.0) -> (226.7, 61.6) -> (184.0, 77.1)

Note: (time in UT)

November 16

Raining. It has been very active in the ionosphere over a few days.

STILL CP

14:31 1188 kW Somehing wrong with Sodankyla data (mike said),
but we are not sure.

14:54 stop exp for sod and restart sodnakyla since there was a suspicious that no signal
was received. After the restart the signal was much stronger.

15:00 START (only for Tromsoe: just let remote sites go)

15:02 runexp tau2pl 1500 cp2 SP
eablerec
guisdap –a (<- analysis of data)

16:12 1159 W

17:09 Signals at Sodankyla is weak.. So, restarted the experiment at SOD.
sod stopexp; sod runexp tau2pl 1000 cp2;sod enablerec

19:09 Restarted sodankyla due to its weak signal.
sod stopexp

19:12 sod runexp tau2pl 1912 cp2;sod enablerec

23:39 Restarted sodankyla due to its weak signal.
sod stopexp

23:42 sod runexp tau2pl 2342 cp2;sod enablerec

November 17

00:05 guisdap –a: restarted analysis

02:18 High reflection power ?

02:20 Recovered.

07:41 HRP
07:42 1262 kW

08:02 HRP
08:03 1154 kW

10:51 HRP
10:52 1163 kW
no signal
10:57 1115 kW

***** cp2w is modified cp2 scan file where the two eastward positions are mirrored around 180 deg. This is to avoid 160 deg azimuth where there is concrete broken under the rails and one of the wheels dips making noises in the antenna structure. At the same time HFLT677 plasma line option was started and at 12:27. The LO2 was changed from 122 to 124 MHz (for plasma measurements).**
cp2w: (180.0, 90.0) -> (193.5, 64.0) -> (226.7, 61.6) -> (184.0, 77.1)

12:17 stop experiment
12:24 runexp tau2pl 1224 cp2w SP 292.9 HRFT677
12:25 enablerec

15:09 HRP (interlock)
15:17 recovered, 1120 kW

20:31 HRP
20:33 1222 kW

22:58 HRP
22:59 1272 kW

23:00 HRP
23:02 1087 kW

23:11 1135 kW

November 18

00:00 RECORDING STOP. SERIOUS. We had to restart EROS.

00:07 enablerec (but did not work)

00:10 stopexp

00:16 runexp tau2pl 0018 cp2w SP 292.9 HFLT677

00:20 stop exp. runexp tau2pl 0024 cp2w SP 292.9 HFLT677

00:24 enablerec (but did not work)

00:27 stopexp

00;35 restarted EROS

00:38 runexp tau2pl 0042 cp2w SP 292.9 HFLT677

00:43 enablerec: RECOVERED.

00:50 1237 kW

01:03 Found Sodankyla also stopped.

01:05 sod runexp tau2pl 01:06 cp2w SP 292.9 HFLT677

01:06 sod runexp tau2pl 01:12 cp2w SP

01:12 sod enablerec

08:33 HRP

08:37 1125 kW

09:13 1215 kW

13:57 HRP

14:00 1013 kW

18:01 HRP

18:01 1317 kW

CLEAR SKY!! High activity was going on.

Nice aurora!

20:58 1296 kW

22:01 HRP

22:04 1278 kW

November 19

00:30 HRP

00:31 1294 kW

00:33 HRP

00:34 1260 kW

06:31 HRP

06:32 1249 kW

09:00 This experiment was supposed to be stopped, but Mike and Ingmar kindly gave us an offer that we can extend the experiment by 4-5 hours.

11:37 stopexp: EISCAT people wanted to check the antenna problem.

11:54 startexp tau2pl 1100 cp2w SP 292.9 HFLT677

14:06 stopexp (all sites)