KST UHF operation memorandam for October 16 BY S. Nozawa

Experiment name: CP1LT (normal cp1lt)

Optical-IS simultaneous observation This SP will be for a simultaneous observation with a multi-wavelengths fixed angle photometer that will be installed at Ramfjord in early October.

elan files: cp1lt.elan, cp1lk.elan, cp1ls.elan (just use cp1lt series)

directory: /kst/exp/cp1lt (cp1lk, cp1ls)

Pulse scheme: cp1lt

Start time: 16:00 UT on October 16, 2001 End time: 01:51 UT on October 17, 2001

Participants: Satonori Nozawa, Masaki Kono, and Kazuhiro Adachi

Before our experiment: Nothing After our experiment: Nothing

VHF radar is being operated simultaneously (CP7 with 2.6 MW)

For test, cp1lt was runned since 15:30 LT and continuted. (before this, tau2 was being tested and its result is not satisfactory. So, I decided to run cp1lt after discussions with Mike and Roger.

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Note: (time in UT)
October 16
16:00
           START (enablerec; kir enablerec; sod eneablerec)
            800 \text{ kW}
16:08
            800 kW
16:10:45
               HRP
16:12
            808 kW
            782 kW
16:50
18:14
              HRP
18:16
           739 kW
18:17
            821kW
18:49
            HRP
18:50:50
             448kW
18:52:30
             615kW
           700 kw
19:10
19:30
           We can see a discrete auroral under conditions of clear sky and new-moon.
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20:19
       706 kW
22:13
        728 kW
                 (Tw engineers were shwithced at 22:00UT)
22:31
        901 kw
22:35
        912 kW
23:00
        HRP
23:01
        911kW
23:16
       HRP
23:18
        766 kW
        kir pointrheight 183.8, 77.1, 253.4 (from 292.9 km) SNR 6-8%
23:39
       sod pointrheight 183.8, 77.1, 253.4 (from 292.9 km) SNR 3-4 %
23:39
October 17
        kir pointrheight 183.8, 77.1, 234.9
00:09
       sod pointrheight 183.8, 77.1, 234.9
00:09
Became worse
        kir pointrheight 183.8, 77.1, 253.4
00:10
       sod pointrheight 183.8, 77.1, 253.4
00:10
Data at sodankyla looks something wrong.
00:16 sod setclockdelay
       then looks fine but still very low SNR (a few %)
01:10, 01:13, 01:19, 01:24 HRP
01:29 600 kW
01:32 HRP
01:33 540 kW
01:33, 0138, 01:43 HRP
01:46 500 kW
01:49 HRP
01:50 HRP
01:52 stop, END
CANCELED 1-hour.
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Summary:

Very low Tx power (500 - 800 kW).

Clear sky in the beggining, but cloudy afterwards.

^{*} HRP = High Reflection Power: 送信電波が規定値以上送電管内で反射される。
