

KST UHF radar operation memorandum for an experiment on October 13, 2007

[General information]

Experiment name & PI : SP_NI_CON, Satonori NOZAWA
Scheduled start/end time : 19 UT on October 3, 2007 to 02 UT on October 14, 2007
Pulse scheme (so-called type if any such as "CP1") : arc1
elan file : /kst/exp/arc1/arc1.elan

operator(s) : Shin-ichiro Oyama, Takuo Tsuda (Engineer: Hovar?)
experiment before us : /opt/kst/fi/moare/moare.elan
experiment after us :

[Weather information]

partially cloudy

[Heating operation]

N/A

[Co-operated instruments]

- VHF radar
 - Running; looking poleward with a low elevation angle
- ESR 32 m
 - FI SP (looking south)
- ESR 42 m
 - IPY mode
- Optical instruments at Tromsø
 - Photometer, DC, Proton imager

[Description of the experiment]

CP1 run with optical measurements

We will make an optical campaign using aurora cameras, proton imagers and 4-wavelength photometer with the EISCAT UHF radar (CP-1, arc1, tristatic measurements). Clear sky and higher geomagnetic activity are desired. Although we made request for 8 nights, we will run up to 5 nights depending on conditions.

[Memorandum]

18:53 **runexp /kst/exp/arc1/arc1 fm cp1 NI**
18:53 **kir runexp /kst/exp/arc1/arc1 fm cp1 NI**
18:54 **sod runexp /kst/exp/arc1/arc1 fm cp1 NI**
19:00 **enablerec**
19:01 **kir enablerec**
19:01 **sod enablerec**
19:02 peak power is ~1400 kW
19:48 crowbar
19:53 the transmitter was recovered up to 1330 kW
19:54 the peak power is ~1400 kW
19:56 crowbar again.
20:00 the transmitter was temporarily recovered up to ~1400 kW; but unstable yet.
20:04 now the peak power is 1430 kW.
20:59 now the peak power is 1410 kW.
21:35 now the peak power is 1400 kW.
~22:40 small precipitation made E-region enhancements; at that time IMF Bz was negative.
~22:30 The VHF radar detected an equatorward motion of the polar-cap boundary.
00:26 crowbar
00:31 the transmitter was recovered, and the power is ~12229 kW now.
01:59 stopexp 02:00
01:59 kir stopexp 02:00
01:59 sod stopexp 02:00

[Data directory]

- @EISCAT
 - [/data/arc1u_cp1_1.00_NI@uhf](#)
 - [/data1/arc1r_cp1_1.00_NI@sod](#)
 - [/data1/arc1r_cp1_1.00_NI@kir](#)
 -
- @STEL
- @personal HD