

KST UHF radar operation memorandum for an experiment on October 9, 2007

[General information]

Experiment name & PI : SP_NI_CON, Satonori NOZAWA
Scheduled start/end time : 19 UT on October 9, 2007 to 02 UT on October 10, 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
experiment before us : /kst/exp/manda/manda.elan
experiment after us : SW meteor experiment (OptoHeads)

[Weather information]

snowy

[Heating operation]

N/A

[Co-operated instruments]

- VHF radar
 - running
- ESR 32 m
 - FI SP (looking south)
- ESR 42 m
 - IPY mode
- Optical instruments at Tromsø
 - N/A

[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**
19:00 **kir enablerec**
19:00 **sod enablerec**
19:01 crowbar
19:07 transmitter was recovered; but the power level was reduced down to ~960 kW.
19:10 **webtg**, which makes rtg on the web
19:10 **kir webtg**
19:10 **sod webtg**
19:20 beam direction at each site
 U: printant
 ANTENNA (UHF) 09-Oct 19:16:58.0

 offline AE ready Refsite T
 A/E 185.12 77.50 > 185.10 77.50
 Acu 544.31 77.69 > 544.30 77.69
 Range 299.60
 pointrange 185.10 77.50 299.60
 pointgeogr 69.033 19.089 292.90

 U: kir printant
 U: ANTENNA (KIR) 09-Oct 19:17:24.0

 offline AE ready Refsite T

setpol 266 -7 unc 231 -17 ready
 A/E 337.73 62.95 > 337.74 62.97
 Acu 337.60 63.09 > 337.60 63.10
 Range 326.51 Delay 2088+0
 pointrrange 185.10 77.50 299.60
 pointgeogr 69.033 19.089 292.90

U: sod printant
 U: ANTENNA (SOD) 09-Oct 19:17:38.8

 A offline E minor fault A ready E moving Refsite T
 setpol 255 -17 unc 125 -17 ready
 A/E 304.24 36.57 => 304.24 36.58
 Acu 304.22 37.84 => 304.22 37.85
 Range 473.04 Delay 2577+0
 pointrrange 185.10 77.50 299.60
 pointgeogr 69.033 19.089 292.90

19:33	crowbar
19:37	the transmitter was recovered. The power was incremented up to ~1100 kW.
20:15	crowbar
20:18	the transmitter was recovered, and the power is ~1300 kW.
22:00	clear E-region echoes at only two gates of 100 km.
01:59	stopexp 02:00
01:59	sod stopexp 02:00
01:59	kir stopexp 02:00
02:00	webtg stop
02:00	sod webtg stop
02:00	kir webtg stop

[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
 - /EISCAT09/SP-NI-CON
- @personal HD
 - in portable Logitech usb HD