January 21, 2009

KST UHF operation memorandum for the January 21, 2009 experiment

8th day of DELTA-2 campaign

Experiment name: DELTA2: beata (CP2)

pointrheight 185.8 77.4 299.6

elan files:puny :/kst/exp/beata/beata.elan

Pulse scheme: beata

Start time: 17:00 UT on January 21, 2009

End time:21:30 UT on January 21, 2009

BARMY is run between 21:30 to 0200 UT

Star time: 02:00 UT on January 22, 2009

End time: 05:00 UT on January 22, 2009

Participants: Satonori Nozawa, Yasunobu Ogawa, and Shi-ichiro Oyama.

Before our experiment: Nothing

After our experiment: Nothing

Between, **BARMY was conducted with cp1/beata**

Other instruments.

Photometer, STEL digital camera (1-min interval), STEL proton imager (1-min interval).

Note: (time in UT)

January 21, 2009

Clear sky, and -7 deg.

16:34 **runexp** /kst/exp/ beata/beata **16:48 cp2 NI**

16:50 Tx up

17:00 enablerec

at EROS5 console (UHF)

17:55 1.5 MW

21:29 stopexp

***** BARMY ***cp1/beata**

January 22, 2009

02:00:00 **runexp** /kst/exp/ beata/beata **02:00 cp2 NI**

02:01:14 eablerec

Tx power is about 1.34 MW in the beginning of the SP

04:59:59 stopexp

Summary

The activity of the ionosphere was high for the first interval. To save the SP hours, we did not run the SP between 2130 and 0200 UT. BARMY was conducted instead.

Black Aurora Radar/Optical Measurement Campaign

This is a joint UK/Norwegian campaign to study the black aurora with both radar and optics. The Tromso UHF radar will operate monostatically in CP1 mode. Optical observations will be made from Ramfjord and from other camera sites deployed in the local area. Clear conditions are required, and the experiment is over-booked to allow for some cancellation. The experimenters are happy to give way to the DELTA2 rocket experiment if launch conditions are favourable for the rocket.

cp2 antenna pattern

FA (185.8, 77.4)

E (166.5, 59.4)

EM (133.3, 56.8)

V (180.0, 90.0)