

Date: October 18, 1990
To : EISCAT data representatives
From : Peter Collis
Subject : Common Program Result Tapes

Data from the following experiments have now been analysed and tapes containing results in the standard format will be mailed to you when copies have been made. Plots of system temperature and transmitter peak power during these experiments are enclosed.

(1990)

CP-3-F 14/16 Aug. (10UT - 10UT)

CP-3-F 20/21 Sept.(10UT - 16UT)

CP-1-I 25/26 Sept.(10UT - 22UT)

CP-1-I 9 Oct. (09UT - 2050UT)

CP-3-F 9/10 Oct. (21UT - 0140UT)

CP-1-I 10/11 Oct. (1130UT - 16UT)

Notes

1. CP-3-F, 14/16 August.

The transmitter was off between 0702 and 0723 UT (15 August) and several short gaps occurred in Sodankyla.

2. CP-3-F, 20/21 September.

This experiment was run together with CP-6-B on VHF and experienced several crowbars causing short data gaps. The VHF experiment was stopped at 0125 UT on 21 September - only one crowbar occurred after that.

3. CP-1-I, 25/26 September.

Crowbars caused several short gaps and two longer ones (about 1 hour each, early on 26 September). Kiruna experienced a power failure between 0100 and 0442 UT on 26 September.

4. CP-1-I/CP-3-F/CP-1-I, 9-11 October.

This operation was planned as CP-1 throughout but encountered various difficulties. At Sodankyla, a data gap occurred between 1400 and 1436 UT on 9 October, then a surge on the mains power lines burned several transformers just after 16 UT and prevented operations for over 1 day.

With the availability of only bistatic operation, it was decided to change to CP-3, which started at 21 UT. However, following a crowbar at 0145 UT on 10 October, no pulsing of the beam could be detected on the oscilloscope monitor and the experiment was eventually stopped. Investigations next day revealed severe arcing damage to a high-voltage bushing. After replacement and tests, CP-1 was restarted at 1130 UT (10 Oct). At 1934 UT (10 Oct), Sodankyla was able to receive again.

In Kiruna, the first half-hour of data were corrupt due to a correlator fault. Then, between 0116 and 0717UT (10 October) the data were again corrupted (in fact, barely changed from dump to dump).

5. UP-1 results (tapes sent out June, 1990)

Further refinements to the UP-1 analysis program have revealed that the electron densities on the distributed result tapes are incorrectly scaled and should be reduced by a factor of two.