Date: March 5, 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 as soon as possible. There will be some delay in producing the tape copies as the tape assistant at HQ resigned in August and the post has not yet been filled. The plan is to send out the two CP-5 tapes in the first mailing, with the others to follow when ready. Plots of system temperature and transmitter peak power for all the experiments are enclosed.

All 1989

CP-5-A	30 May - 4 June	(10 UT - 14 UT)
CP-1-I	1-3 August	(13 UT - 16 UT)
CP-2-D	28 August - 1 Sept	(12 UT - 16 UT)
CP-1-I	5-6 September	(10 UT - 13 UT)

Notes

1. CP-5-A, 30 May - 4 June
This experiment, operated as part of the LTCS (lower thermosphere coupling study) campaign, experienced various problems at all sites, leading to loss data.

Significant gaps in Tromso data occurred on :

31 May 24 UT (antenna problems)
01 Jun 20-21 UT (antenna problems)
02 Jun 0-4 UT (computer problems)
03 Jun 0-7 UT, intermittently (transmitter problems)
03 Jun 20-21 UT (computer problems)

In Kiruna, no data were recorded between 1350 UT on 3 June and 0910 UT on 4 June due to a computer problem.

In Sodankyla, a computer disc crash caused loss of data between 1433 UT on 30 May and 1330 UT on 31 May.

.....CP-5-A (continued)

The Tromso antenna problems seem to have affected the pointing accuracy after 21 UT on 1 June. The remote sites observed that the strongest signal was not always centred at the expected range but varied system-atically through each 30 minute cycle. For scan positions close to the vertical in Tromso there was little effect on the data but the signal at the remotes gradually drifted from the expected signal gate for lower transmitter elevations. The remote site data have been analysed in the standard way, which assumes the true signal to be in the centre gate. Hence the derived remote-site electron densities show a steep gradient outwards from the centre of the scans for the remainder of the experiment. The determination of velocities is expected to be reliable, but since the effective snr was

lowered the associated uncertainties are larger than would have been the case in normal operation.

The results from this experiment occupy two 2400' tapes at 1600 bpi. The first contains Tromso results from the start of the experiment until 0400 on 2 June and the second has the remainder of the Tromso results plus all results from the remote sites.

2. CP-1-I, 1-3 August
This operation formed part of a GISMOS campaign. There are two breaks in the results, between 0800 and 0950 UT on 2nd August and between 0700 and 1000 UT on 3rd August, when the VHF radar was running tests. A further short gap occurred just before 12 UT on the 2nd.

3. CP-2-D, 28 August -1 September
Operated as part of a wags campaign.

The results from this experiment required more than two full 2400' tapes at 1600 bpi. The first part of the Tromso results (to 16 UT on 29 August) are contained on the same tape as the CP-1 results from 1-3 August. The second CP-2 tape contains Tromso results from 16 UT on 29 August to 14 UT on 31 August. The remainder of the Tromso results and remote site results for the whole experiment continue on the third tape. The third tape is completed with the CP-1 results from 5-6 September.

The only significant data gaps were in Tromso between 23 and 24 UT on 28 August, caused by a correlator fault, and around 1030 UT on 29 August with ADC problems.

4. CP-1-I, 5-6 September
No reported problems.