Date: February 27, 1992
To: EISCAT data representatives
From: Peter Collis
Subject: Common programme result tapes

Data from the following experiments have now been analysed and a tape containing results in the standard format will be mailed to you when copies have been made. By popular approval this tape will be written at a density of 6250 bpi.. Plots of system temperature and transmitter peak power during these experiments are enclosed.

(1991)

CP-7-D	28/20 Oct	(1000 - 1600 UT)
CP-4-A	05/08 Dec	(1000 - 1000 UT)

(1992)

CP-2-D	27/29 Jan	(1018 - 1600 UT)
CP-7-D	11/12 Feb	(1000 - 1600 UT)
CP-3-F	13/14 Feb	(1000 - 1600 UT)

Notes

1. CP-7-D, 28-29 October, 1991.

No reported problems.

2. CP-4-A, 5-8 December, 1991.

This experiment was almost problem-free apart from a small number of crowbars and high voltage trips. However, the transmitter experienced a large number of cases of high reflected power after 1730 UT on December 5th, attributable to frequency F6 (930.5 Mhz). In an effort to cure this, this frequency was changed at 1809 UT to F3 but with no improvement, and subsequently to F2 and F9 with the same result. At 1824 UT the frequency was changed to F10 (932.5 Mhz). This improved matters, so this configuration was used to the end of the experiment. By coincidence, this frequency corresponds to the code (9325) on the result tape which is used to identify the results from the average of all the channels in each post-integration period. Thusfrom 1824 UT there are two sets of results with this code for any given time; the first is the average as before, while the last is from measurements at F10.

At 1830 UT on December 7th the radar controller program was changed by issuing the command "GOTO BLOCK 4". This changes the start range of the first gate from 525 km to 600 km je it moves all the gates further out by the equivalent of one gate. These revised ranges were maintained to the end of the experiment.

3. CP-2-D, 27-29 January, 1992.

The start of this experiment was delayed slightly (it was originally scheduled for 10 UT) to allow updating of EROS software. Sodankylä began measurements at 11 UT following a hardware problem in the radar controller.

There are a considerable number of short gaps in the data (from a few minutes to about 15 minutes at worst) caused by transmitter crowbars during this operation. The cause of the fall of 10 K in system temperature just before 10 UT on December 7th and the subsequent irregular behaviour (also seen in the 48-h run of CP-1 immediately following CP-4) is related to variations in the noise injection.

4. CP-7-D. 11-12 Febrary, 1992.

No reported problems. Note that these results have the wrong site code of 72 (Tromsö UHF) instead of the value 74 which should be used for EISCAT VHF results.

5. CP-3-F, 13-14 February, 1992.

This experiment was interrupted twice on 14 February to allow operation of a German special programme. The times affected were 0530-0630 and 1015-1042 UT.

Data were lost in kiruna between 1931 and 1950 UT due to an antenna failure, and in Sodankylä on several occasions for a few minutes around the ends of the cycles at 1530, 1830, 1900, 1930 (13th) and 0730 UT (14th) due to DMA problems. Additionally, there are gaps in the results from Sodankylä between 22 and 02 UT at the southern limits of the scans due to low signal levels.