

How to run a mainland experiment at the Tromsø site

16 November 2003 BI

1. To be safe, log out and start from scratch.
2. Logon to the experiment control console (**VHF** or **UHF**) as user **eiscat**.
3. Click on the **log** desktop and make a note in the electronic log.
4. Select the **Eros v** or **Eros u** desktop.
5. Open a terminal window.
6. Logon to the data server as user **eiscat** using **ssh eiscat@t45001** or **ssh eiscat@puny** (**ssh t45001** or **puny** should be enough). The prompt **eiscat@t45001:/home/eiscat>** should appear.
7. Type **Eros u** or **Eros v**. The **EROS console window** will appear. You may get an error message asking about the lock file. If so, follow the instructions.
8. To run the program, from the **EROS console window** (on the Eros u or v desktop) type
> **runexp /kst/exp/progname/progname hh:mm [scan [owner [height]]]**
for example
> **runexp /kst/exp/tau1/tau1 10:00 bore SP** on VHF and
> **runexp /kst/exp/tau2pl/tau2pl 10:00 cp1 SP 300.0** on UHF.
9. Type **printexp** to see that the program has started, then bring up the transmitter.
10. Start data recording using **enablerec** (stop using **disablerec**).
11. The **Correlator window** will tell if the **lag_wrap program** is working in the **u5011** or **v5011** computer in the VME crate.
12. The **Recorder window** should show the **deco_dump** program is working. If not, **stopexp**, reset the VME crate, and **runexp** again.
13. Type **rtg** to start **rtgraph** (see **How to run the mainland RT graph**).
14. Note that the main **rtgraph** window shows how much time remains until the disk is full.
15. To start a UHF remote programme type:
> **kir runexp /kst/exp/progname/progname.elan hh:mm [scan [owner [height]]]**
> **sod /kst/exp/progname/progname.elan hh:mm [scan [owner [height]]]**
where **progname** is again the name of the elan program file you wish to run, which should be the same name as is used in Tromsø.
Use **kir printexp** and **sod printexp** to see that the program has started. If there are questions or problems, call the remote sites.
The **kir** and **sod** prefixes also work for other EROS commands.
16. Remote **rtg** windows may be seen on the web by following the link from **www.eiscat.com**. If there are problems with either **rtg** or the display, call the remote sites.
17. Start the Tromsø analysis from a terminal window on the **ana u** or **ana v** desktop. **ssh eiscat@matilda** (**ssh matilda** should be enough) then type **guisdap -a**.
18. To stop at hh:mm UT type **stopexp hh:mm** (for UHF also **kir stopexp hh:mm** and **sod stopexp hh:mm** if using the remote sites).

Remember that data recording is NOT running as default. Use **enablerec** to start recording!

How to run a mainland experiment at the Tromsø site – part 2

16 November 2003 BI

Common operational modes

For VHF and UHF:

tau1 = **runexp /kst/exp/tau1/tau1 hh:mm bore [CP = default]**

For UHF:

CP1 = **runexp /kst/exp/tau2pl/tau2pl hh:mm cp1 [CP = default]**

CP2 = **runexp /kst/exp/tau2pl/tau2pl hh:mm cp2 [CP = default]**

CP3 = **runexp /kst/exp/tau2pl/tau2pl hh:mm cp3 [CP = default]**

WARNING: Data recording is not reliable and must be checked every hour!

Note that if the analysis stops then recording may have also stopped (see below).

If recording has stopped, go to the Eros window and type “restartdata”.

If that does not work try “stopexp” and “runexp ...” (as above).

If that does not work try exiting Eros and restarting.

If that does not work try rebooting the crate computer (v5011 and u5011).

Analysis may sometimes stop and should also be checked every hour...

Note that if the analysis stops then recorded may have also stopped (see above).

The analysis will stop if there is a long enough data gap (5 min or more).

Also, due to a fault, analysis may stop at midnight UT.

If the analysis has stopped go to the Matlab window (not a terminal window) and type “anacont”.

If that does not work start over using “guisdap -a” as usual, and adjust the date and time in the Guisdap for Dummies window to just before the stop (the analysis does not need to be restarted from the very beginning of operations).