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1) How to run

At EROS4 terminal

- (1) To check what is going on.

```
printexp
printant
kir printexp
sod printexp
```

- (2) Then start experiment

```
runexp /kst/exp/tau2pl/tau2pl 16:00 cp2 NI
sod runexp /kst/exp/tau2pl/tau2pl 16:00 cp2 NI
kir runexp /kst/exp/tau2pl/tau2pl 16:00 cp2 NI
*** Ask an engineer to power TX on ***
enablerec
sod enablerec
kir enablerec
```

- (3) Analysis

```
at matilda (ssh tana)
guisdap -a
    result path = /analysis/results/AUTO
    display 0 0 0 1 1
```

- (4) Data

Data are stored as follows:

(off course, names changed following experiment name.)

Tromso: matilda /data/tau2pl_u_cp2_1.10HF_NI@uhf /
Kiruna: k2501:/data1/tau2pl_r_cp2_1.10_NI@kir
Sodankyla: s2501:/data1/tau2pl_r_cp2_1.10_NI@sod

2) Make a summary plot

(1) make filelist.dat

```
shcpu1:/EISCAT00/nozawa/gup1   or sh2: /EISCAT01/arc1  
    make_filelist.pro; zmake
```

(2) draw a figure

```
shcpu1:/EISCAT00/nozawa/vizu  
    config_vizu.m; vizu
```

3) GUISDAP analysis: arc1 and tau2pl

```
sh2: /EISCAT01/arc1   (and /EISCAT01/tau2pl_103km)  
    an_tau2pl.m (or similar ones)  
    ./guisdap
```

```
result data: /EISCAT08  
make_filelist.pro  
write_ascii_tau2pl.m
```

4) Analysis of CP-2 data

(1) make it a binary file

```
/EISCAT04/nozawa/DAT  
    dateguisdap  
    t  
    041209  
    no  
    cp2e      (<-- currently “cp2e” used)
```

```
/EISCAT08/041209_100km_100/  
make_bi_guisdap_5.pro (dateguisdap)  
zbi5  
rename file properly:  
mv tr041209cp2e_100km_100.gdat5 tr 041209cp2t_100km_100.gdat5  
copy files to /EISCAT00/wind
```

(2) calculate 3-D velocity

```
/EISCAT00/wind  
mono.date  
041209  
_100km_100  
cp2t  
.gdat5
```

(3) draw a figure of 3-D ion velocity

```
set_plot_vmono_gup.pro  
plot_vmono_gup.pro  
if it is a new experiment, edit cplist.pro and set_cp_time.pro
```

(4) calculate E-field and draw a figure

```
cal_Emono_gup.pro  
plot_Emono_gup.pro
```

(5) calculate wind velocity

```
DATA:  
/EISCAT05/geodata  
/EISCAT08/nden  
/EISCAT05/MSISnozawa
```

at /EISCAT05/MSISnozawa

```
msden1.date  
msden1
```

msden_make_bi.pro

at /EISCAT00/wind
cal_umono_gup.pro
plot_vmono_gup.pro