

RHIC-pC Polarimeter Offline Software

RIKEN/RBRC

Itaru Nakagawa

Feb. 17, 2006

Where to get them?

- In `.bashrc`:

```
export CVSROOT=:pserver:e950@cvs.bnl.gov:/data01/CVS
```

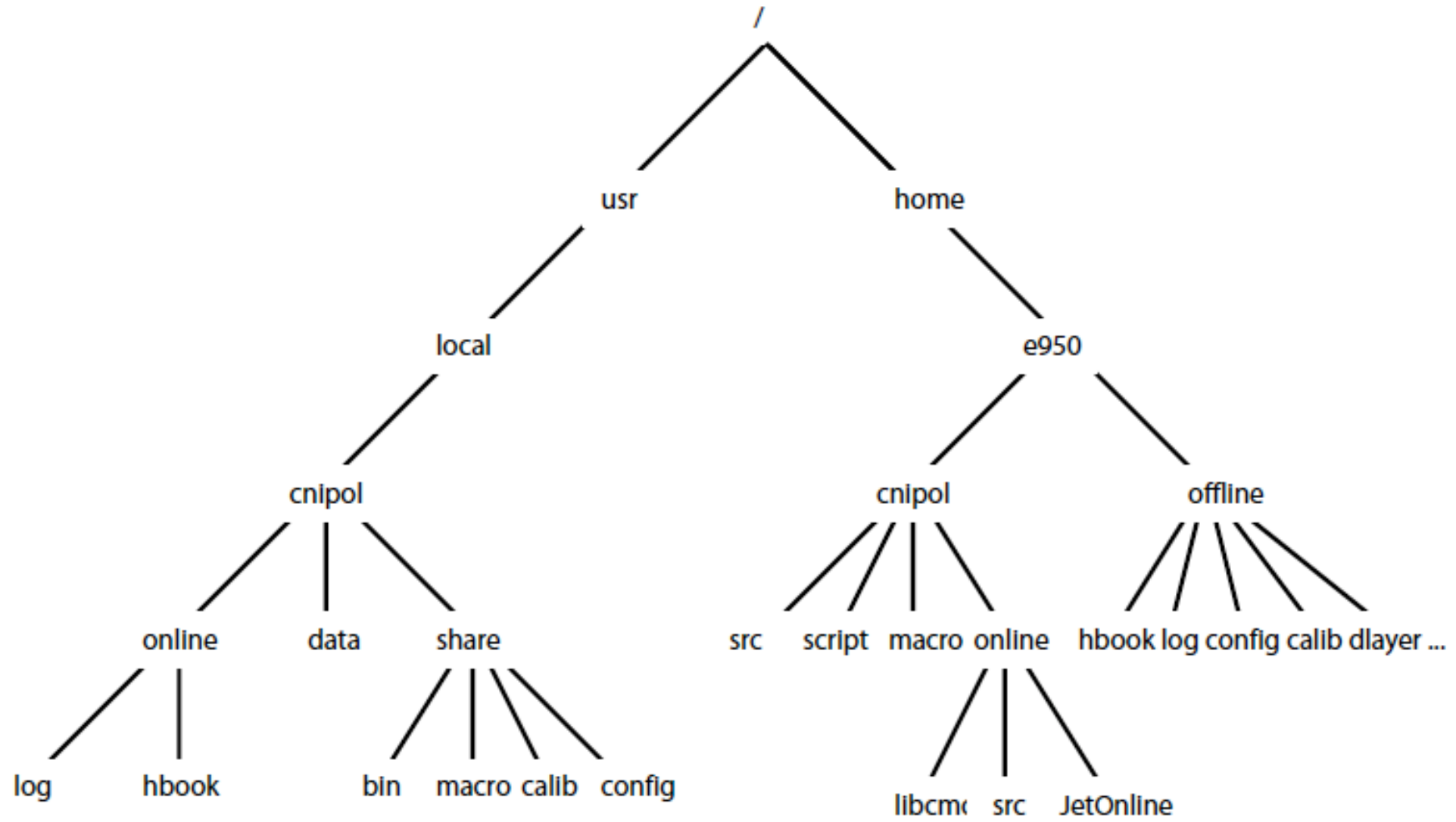
```
% cvs login
```

```
CVS password: (standard e950 password)
```

```
% cvs checkout cnipol
```

```
sources will be downloaded in ./cnipol directory.
```

Directory Structure



Environmental Setup

~/.bashrc

```
export CNILIB=/usr/local/cnipol
export ONLINEDIR=$CNILIB/online
export DATADIR=$CNILIB/data
export SHAREDIR=$CNILIB/share
export CONFDIR=$SHAREDIR/config
export CALIBDIR=$SHAREDIR/calib
export ASYMDIR=$HOME/offline
```

← Working Directory

```
# installation destination
```

```
export INSTALLDIR=$ASYMDIR/bin
export MACRODIR=$ASYMDIR/kumac
```

```
# for developers use followings instead of above two lines
```

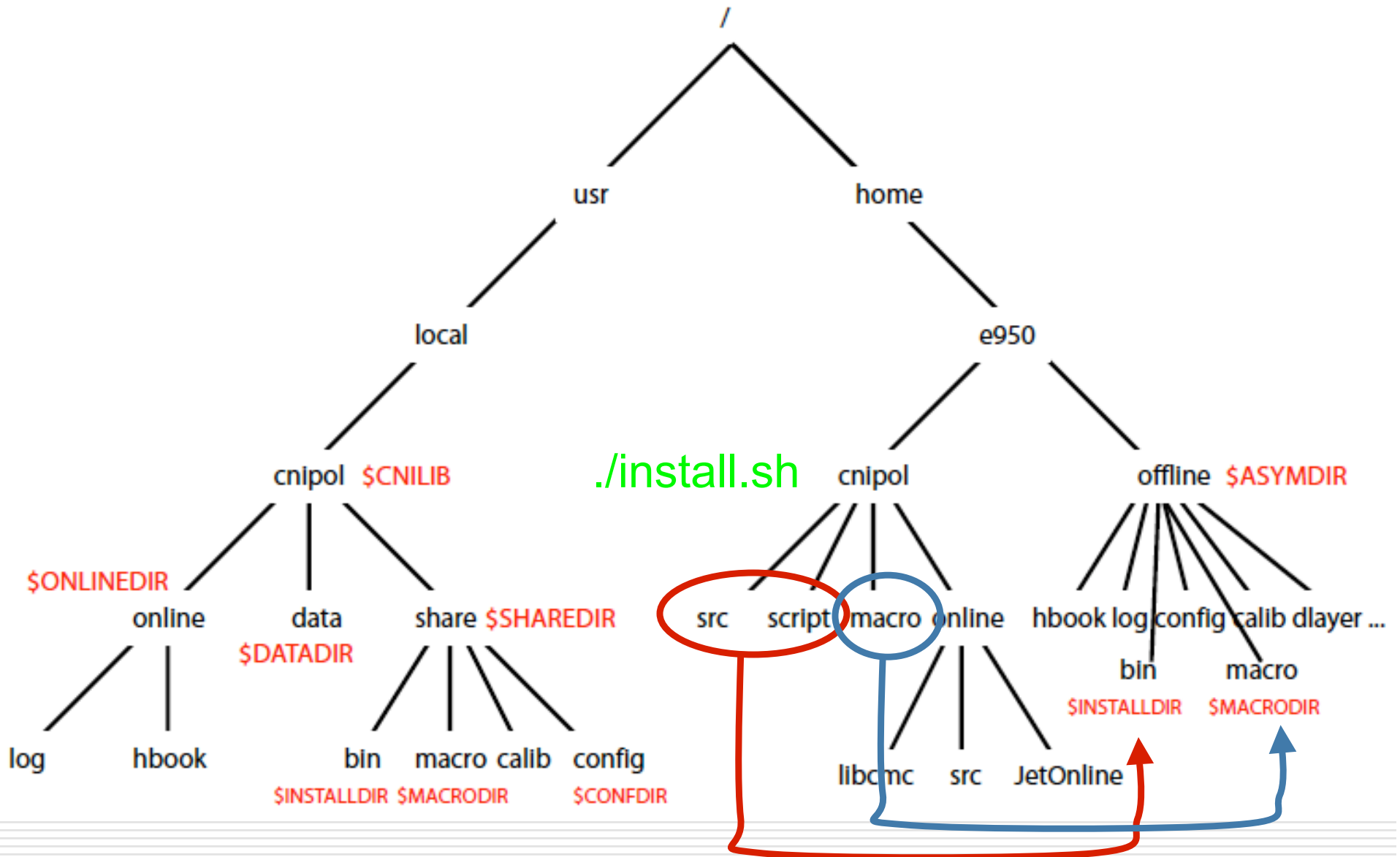
```
# export INSTALLDIR=$SHAREDIR/bin
```

```
# export MACRODIR=$SHAREDIR/kumac
```

```
export PATH=$INSTALLDIR:$PATH
```

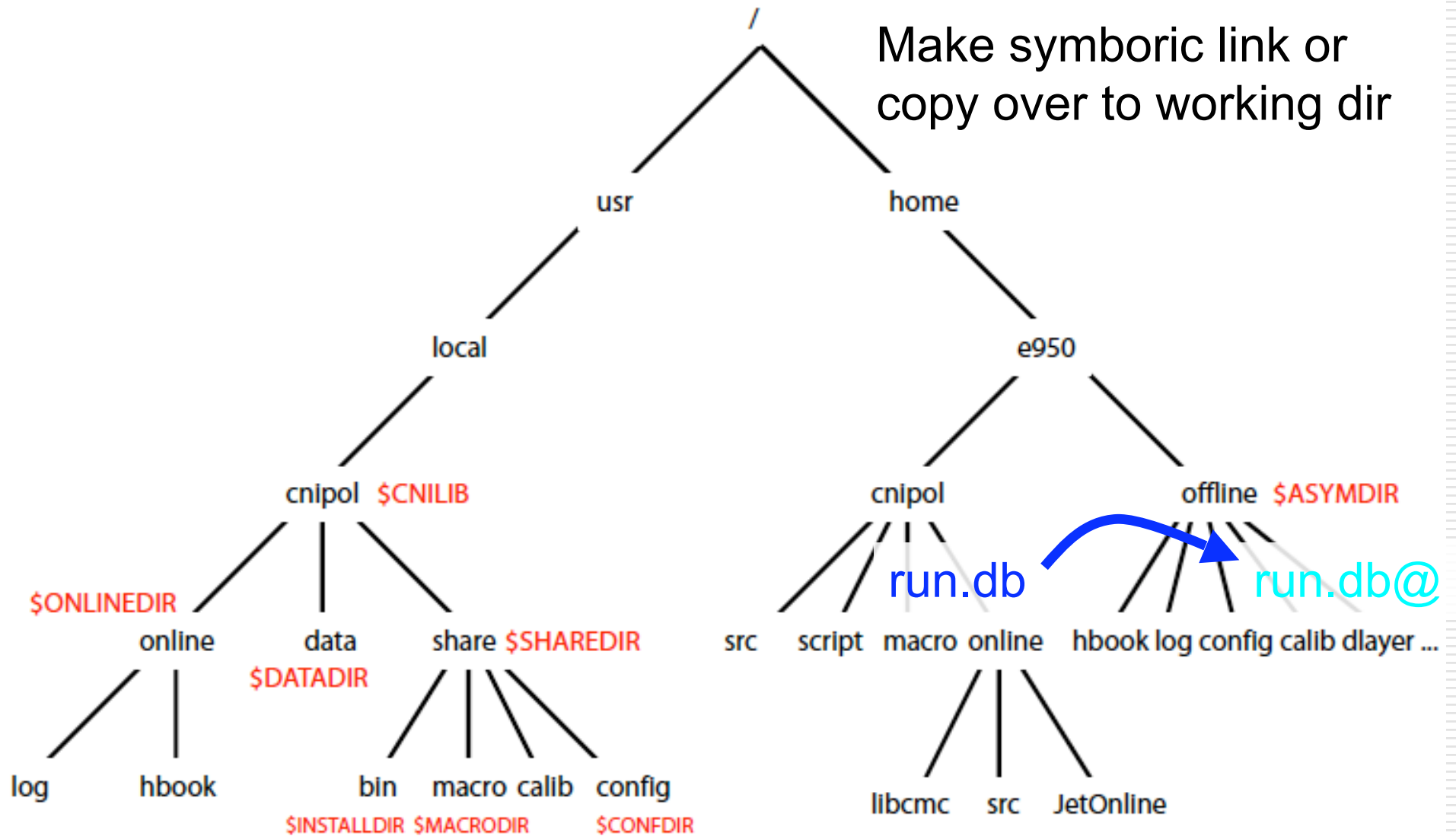
```
export LD_LIBRARY_PATH=$MACRODIR:$LD_LIBRARY_PATH
```

Installing your own executables & macros



run.db

Make symbolic link or copy over to working dir



run.db

Don't forget to update run.db!

```
//=====
//=====                               Run05                               =====
//=====
[6500.001]
  ENERGY_CALIB=blue_calib_0412;
  CONFIG=6935.002.config.dat;
  MASSCUT=3;
  TSHIFT=0;

[6500.101]
  ENERGY_CALIB=yellow_calib_0412;
  CONFIG=6858.113.config.dat;
  MASSCUT=3;
  TSHIFT=0;

//=====
//=====                               Run06                               =====
//=====
[7400.001]
  ENERGY_CALIB=0213.007;
  CONFIG=test_BL.config.dat;
```

See 00README.rundb for syntax

Main Analysis

GUI

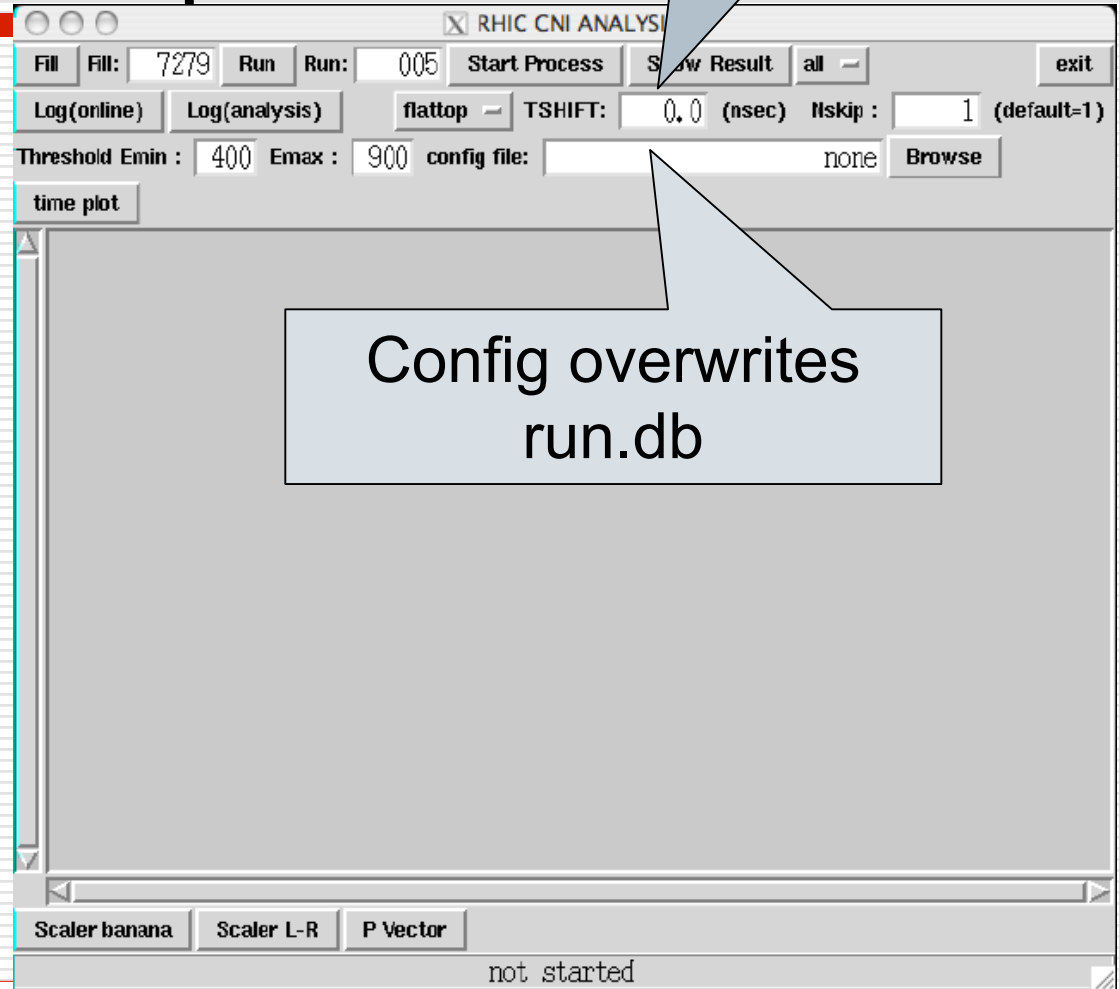
Asym & RHICAna.pl

- ❑ `cd $ASYMDIR`
- ❑ `Asym -f 7423.010`



outsampleex.hbook

Tshift adds up run.db



RHICAna.pl

Energy Calibration

- ❑ If ./calib doesn't exist:
mkdir calib
 - ❑ Calib.pl -f blue_calib_0513c → ./calib
(Try Calib.pl -h for help)
 - ❑ If successful:
cp calib/blue_calib_0513c.temp.dat \$CALIBDIR/.
 - ❑ Update in run.db
[7067.001]
ENERGY_CALIB=blue_calib_0513c;
-

DeadLayer Fit

- ❑ `cd $ASYMDIR`
 - ❑ If `./dlayer` doesn't exist:
 - ❑ `mkdir dlayer`
 - ❑ `dLayer.pl -f 7273.005` → `./dlayer`
(Try `dLayer.pl -h` for more options)
-

Integral Fit

- ❑ `cd $ASYMDIR`
- ❑ If `./integ` doesn't exist:
- ❑ `mkdir integ`
- ❑ `Integ.pl -f 7273.005`
(Try `Integ.pl -h` for more options)

This routine will be omitted soon to make new configuration.

Making Configuration File

- ❑ `cd $ASYMDIR`
 - ❑ If `./config` doesn't exist:
`mkdir config`
 - ❑ `mkConfig.pl -f 7279.005`
(Try `Integ.pl -h` for more options)
 - ❑ `mkConfig.pl -f 7279.005 -D` → will do deadlayer & integral fits
 - ❑ If successful:
`cp config/7279.005.config.dat $CONFDIR/.`
 - ❑ Update in `run.db`
`[7067.001]`
`CONFIG=7279.005.config.dat;`
-

What needs to be done

- Data quality and error checker
 - Spin pattern checker
 - Timing ✓ (feedback)
 - Specific luminosity ✓
 - Bad strip ✓
 - Deadlayer Monitor
 - Plots&Figures modifications
 - Make database
 - Send CDEV
 - Offline analysis daemon
 - Instructions & Documentations
-