

Running the Fringe Checker

Once all the RtFC processes are running and the disks are recording, you are ready to fringe test. It is recommended you first check the sampler statistics of the data looking at the cdisco monitoring and then check the correct clock offsets for each observatory. If you are using a config file for ui.pl, you should make sure the values are sensible before you start ui.pl. All fringe testing is run from ui.pl. As this is an interactive program there are many ways to run this. The following is a guide.

Check which observatories are connected:

```
> obs
```

Disable Parkes because it is not tracking yet, and Ceduna as we will do it later once we know we have fringes to other telescopes:

```
> disable Cd  
> disable Pa
```

Check the integration time we are using then set to a sensible value:

```
> int  
> int 0.5
```

Check the clock offsets are similar to those reported by the observatories - not that the values reported by Hobart and Ceduna are the opposite sign of what DiFX uses:

```
> off
```

Set the number of frequency points to create (note incorrect term)

```
> nchan 1024
```

Start a fringe check running for the specified UT time

```
> grab 03:45:34
```

The data will be copied to pam0, the data passed to DIFX and the result plotted using pgplot and put on the web at <http://www.evlbi.atnf.csiro.au/RtFC> (pkpam, if at Parkes).

There is a bit of a delay offset to Mopra. Correct for this and recorrelate the data to ATCA only

```
> offset Mp 3.4  
> obs  
> disable Pa Ho Cd  
> recorr 03:34:34
```

This will use the data already on disk and recalculate the correlation using a different clock offset. Once you have the good clock offsets, its is worth adding them to your "config" file.

Get some Ceduna data now. To save time, change the integration time to 250 msec.

```
> obs
> enable Cd
> disable Pa At Mp Ho
> int 0.25
> grab 03:34:35
```

Set the integration time etc back, and recorr to actually get friges to Ceduna.

```
> int 0.5
> disable Pa At Mp Ho
> recorr 03:34:35
> disable Cd
```

If you get impatient due to a slow download, you can “recorr” before the data has arrived. The correlator will correlate up to the length of the end of the smallest data file.

If a station has a suspected 1 second (or more) offset the “offset” command is not suitable. Use secoffset. You have to “regrab” the data after changing secoffset

```
> secoffset Mp 1
> grab 03:35:99
```

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