Prerequisits

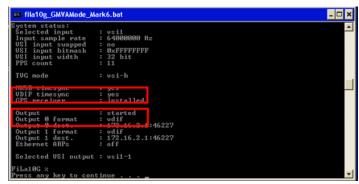
- Go through the <u>system-setup</u> and make sure the system is operational. **Setup should be done in PFB mode.**
- Make sure the Field System is configured for DBBC2 in PFB mode
- Assumption: Fibre cable is connecting the FiLA10G to eth4 recorder1
- A single module is loaded and connected into slot 1 of recorder1
- · Make sure you have loaded the correct module intended for recording the GMVA session

FiLA10G Setup

• On the DBBC2 desktop double-click the icon labeled **"fila10g_GMVAMode_Mark6.bat"**. This will setup the FiLA10G for recording on the Mark6 and will do the time-synchronisation. (The icon is a shortcut to the following file: C:\DBBC\bin\fila10g_GMVAMode_Mark6.bat).

DBBC2_gmvamodemark6.png

• Confirm settings. In the terminal window that has opened the last page lists the output of the *sysstat* command. Inspect the output; in particular check that VDIF timesync is showing "yes" and "Output" is showing "started" (see image below).



• Confirm the time synchronisation as described here.

Mark6 module initialization

- Skip this section if there is already recorded data on the module! The following steps will delete all data on the module!
- log-into recorder1 as user oper: ssh recorder1
- execute: da-client
- in da-client:

```
mod_init=1:8:{VSN}:sg:new
on the module label
group=new:1
replace {VSN} with VSN as indicated
```

Mark6 setup

```
• log-into recorder1: ssh recorder1 -l oper -X
```

• execute: *m6service restart*

• execute: da-client

• in da-client:

```
mstat?1
```

make sure the group is **NOT** in "open" state. If it is in "open" state you must first do:

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```
group=close:1
```

Otherwise continue with:

```
input_stream=add:DBBC2:vdif:5032:50:42:eth4:::1
input_stream=commit
group=open:1
mstat?1
```

The last statement should report the group to be in open:ready state, e.g.:

```
!mstat?0:0:1:1:MPIH%016/48008/4/8:8:8:45160:48008:open:ready:sg;
```

Loading/starting the schedule

- log-into recorder1 as user oper: ssh recorder1 -l oper -X
- Download/copy the vex file into the directory: /home/oper/vex
- · Translate the vex-file

```
cd /home/oper/vex
vex2xml.py -f {vexfile} -s PV
```

• Check the contents of the produced xml-file. It should not be empty and contain several scan entries, similar to this:

NOTE: If the file is empty check that the station code given in the vex2xml.py command matches the station code for Pico Veleta of the vex-file.

- Start the schedule
 - Method 1 (prefered):

```
start gmva.py {xmlfile}
```

where {xmlfile} is the xml-file produced by vex2xml.py (see above).

The script will start the schedule and in the scan gaps will display graphical information about the 16 PFB channels (bandpasses, and 2-bit statistics). The output is also stored in text-format under /home/oper/GMVA/{code}.

Method 2 (backup):

```
M6 CC -f {xmlfile}
```

where {xmlfile} is the xml-file produced by vex2xml.py (see above)

Field system

- log-into mrt-vlbi as user oper
- Download/copy the vex file into the directory: /usr2/sched
- run the vex file through drudg
- if not already running start the field system (click on the "field system icon" on the desktop)
- in the oprin window issue the command:

End of session / Module change

When the session has ended or when a new module needs to be inserted:

• in da-client:

```
group=close:1
group=unmount:1
```

turn the module key off and remove the module.

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