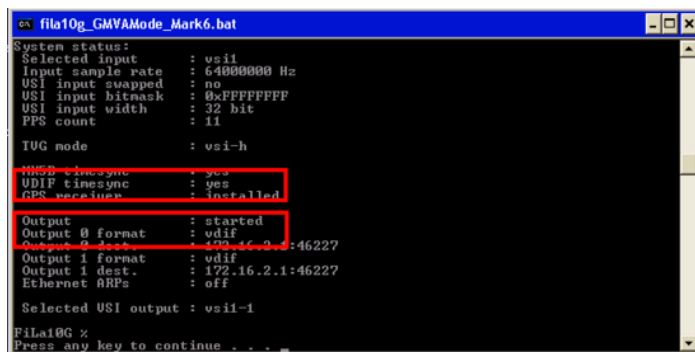


Prerequisites

- Go through the [system-setup](#) and make sure the system is operational.
- Assumption: Fibre cable is connecting the FiLA10G to eth2 of pv-mark6-1
- A single module is loaded and connected into slot 1 of pv-mark6-1
- **Make sure you have loaded the module for recording the GMVA ALMA mode**

FiLA10G Setup

- On the DBBC2 desktop double-click the icon labeled "**fila10g_ALMAMode.bat**". This will setup the FiLA10G for recording on the Mark6, will do the time-synchronisation and will do the required channel re-ordering of the VDIF-data. The icon is a shortcut to the following file: C:\DBBC\bin\fila10g_AlmaMode.bat.
- 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).



```

System status:
Selected input      : vsi1
Input sample rate   : 64000000 Hz
US1 input swapped   : no
US1 input bitmask   : 0xFFFFFFFF
US1 input width     : 32 bit
FPS count           : 11
TUG mode            : vsi-h
VDIF timesync       : yes
GPS receiver        : installed
Output              : started
Output 0 format     : vdif
Output 0 dest       : 100.16.0.1:46227
Output 1 format     : vdif
Output 1 dest       : 172.16.2.1:46227
Ethernet ARPs       : off
Selected US1 output : vsi1-1
FiLa10G %
Press any key to continue . . .

```

- 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 pv-mark6-1 as user oper: `ssh oper@pv-mark6-1`
- execute: `da-client`
- in `da-client`:

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

Mark6 setup

- log-into pv-mark6-1: `ssh pv-mark6-1 -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:

```
group=close:1
```

Otherwise continue with:

```
input_stream=add:DBBC2:vdif:5032:50:42:eth2:::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 Mark6 schedule

- log-into pv-mark6-1 as user oper: *ssh pv-mark6-1 -l oper -X*
- If not already there download 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:

```
<experiment name="a90xx" station="PV" start="2015090003000" end="2015090032200">
  <scan experiment="a90xx" source="3C279" station_code="PV" start_time="2015090003000" duration="420"
scan_name="090-0030"/>
  <scan experiment="a90xx" source="3C279" station_code="PV" start_time="2015090004500" duration="420"
  <scan experiment="a90xx" source="3C279" station_code="PV" start_time="2015090031500" duration="420"
scan_name="090-0315"/>
</experiment>
```

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

```
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:

```
schedule={vexname}pv      (where vexname denotes the basename of the  
vex file: e.g. c171a)
```

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.