

TIRCAM2 has now two modes

- [1] Normal full frame (512x512 pixels) capture mode
- [2] 10mS subarray (32x32 pixels) capture mode (4000 frames)

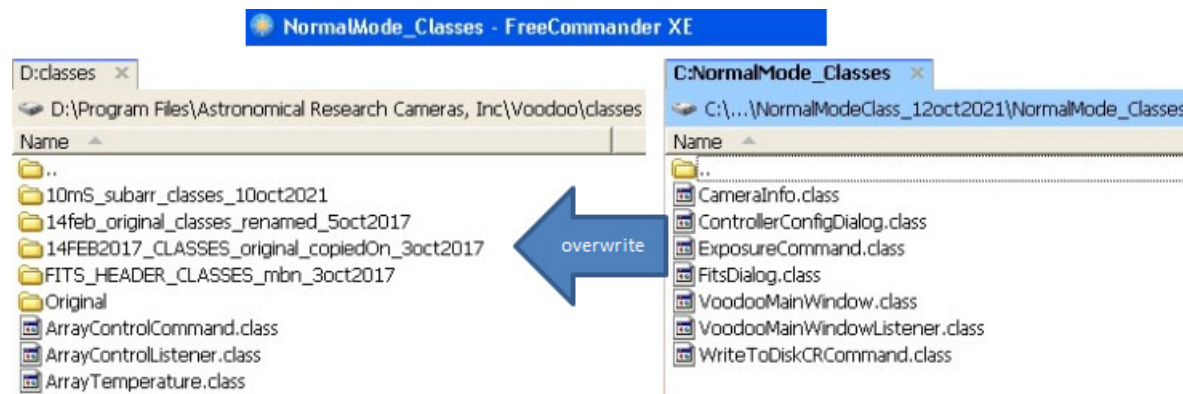
Selection of these modes is done as follows

Do these operation carefully with FileExplorer/Freecommander.  
Make sure correct path selection.

### [1] Normal full frame (512x512 pixels) capture mode

[1A] Copy required classes as follows.

- Copy (overwrite) all class files from  
c:\12oct2021\NormalModeClass\_12oct2021\NormalMode\_Classes  
to  
d:\Program Files\Astronomical Research Cameras, Inc\Voodoo\classes



- Refer TIRCAM2 manual for full frame operation.

### [2] 10mS subarray (32x32 pixels) capture mode (4000 frames)

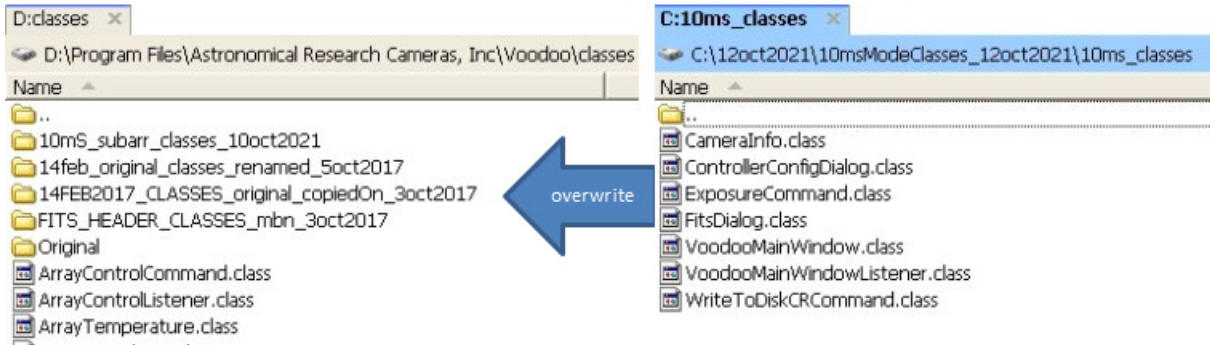
#### [2A] Star position

From **NORMAL full frame** mode get the position of star  
i.e. Box col center and Box row center

#### [2B] Switch to 10mS Mode :Copy required classes as follows.

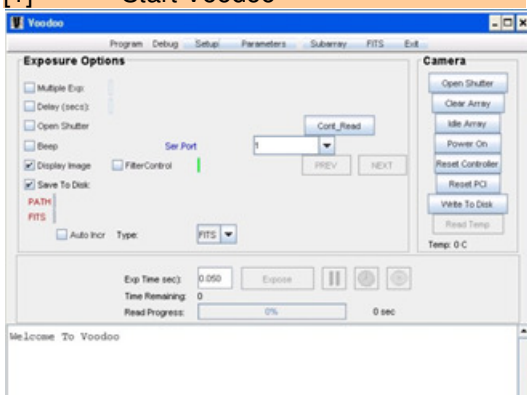
- Copy (overwrite) all class files from  
c:\12oct2021\10msModeClasses\_12oct2021\10ms\_classes\  
to  
d:\Program Files\Astronomical Research Cameras, Inc\Voodoo\classes

10ms\_classes - FreeCommander XE

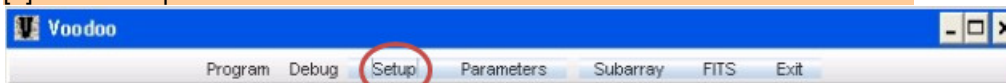


[2C] Data capture

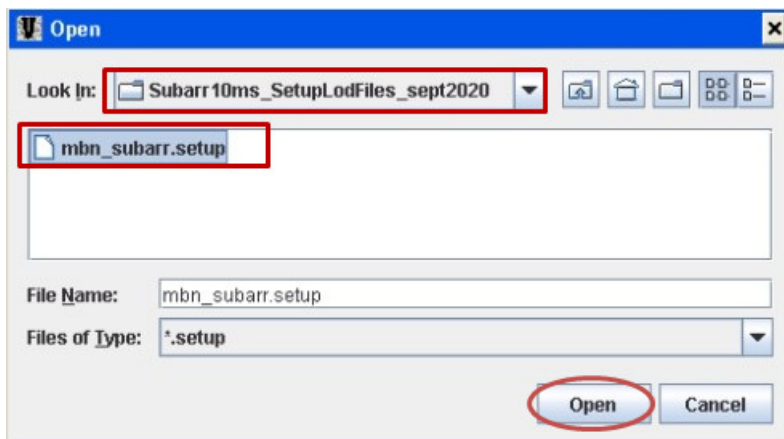
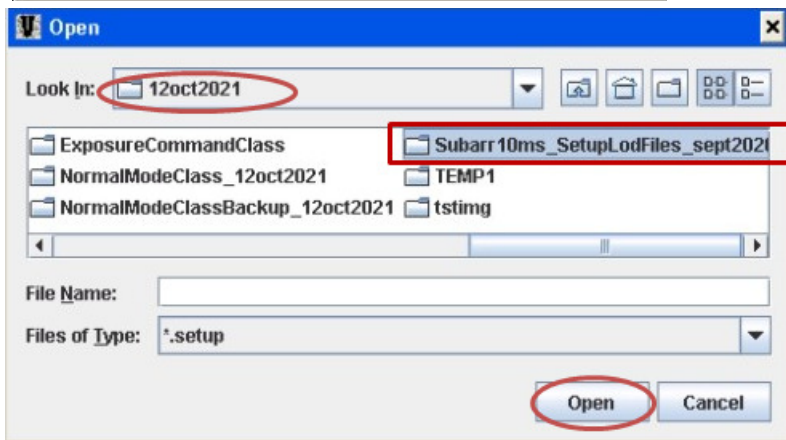
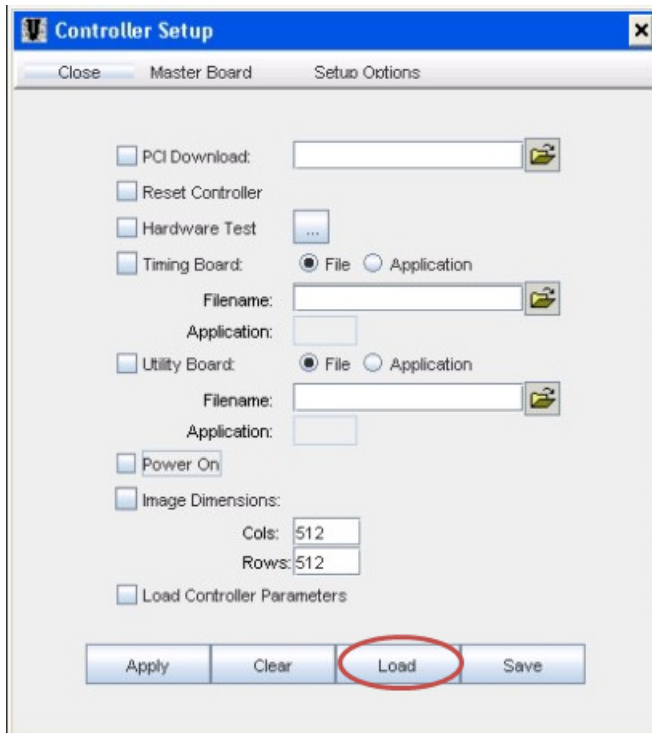
[1] Start Voodoo



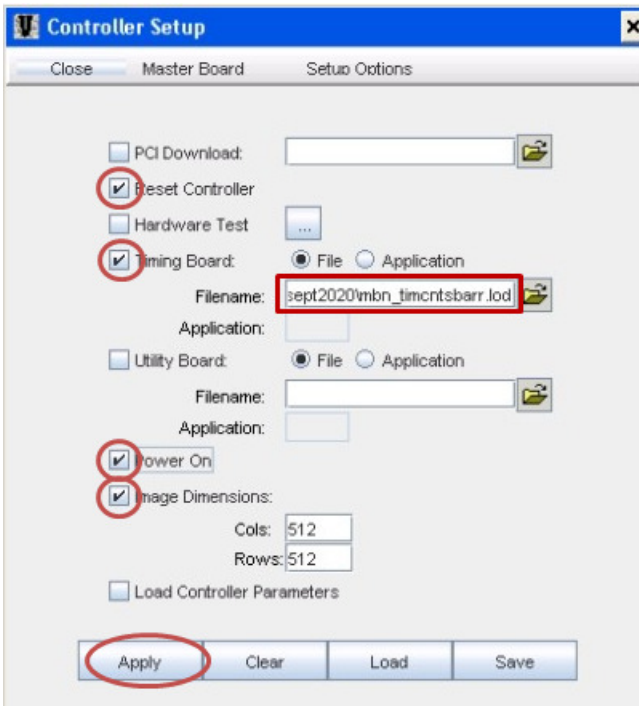
[2] Click setup



Click 'Load' and Select setup file from  
c:\12oct2021\Subarr10ms\_SetupLodFile\_sept2020\mbn\_subarr.setup



Apply setup,

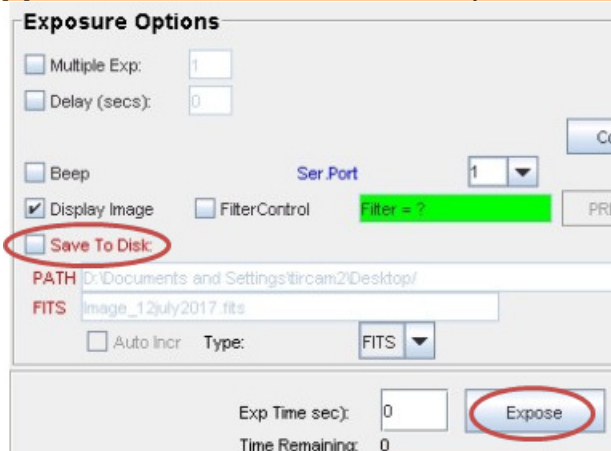


you will get following screen messages

```
Hardware byte swapping off.
Resetting the controller...done.
Stopping camera idle...done.
Checking system id...done.
Loading Timing file...done.
Timing file .. OK.
Doing power on...done.
Setting image dimensions...done.
Checking controller configuration...done.
```

Close 'Controller setup' dialogue box .

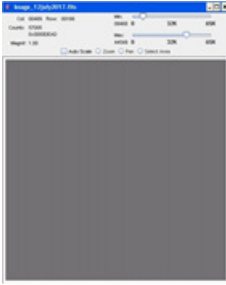
[3] With save **unchecked**, take a dummy 0 sec. full frame exposure



you will get following screen message

```
Setting exposure time...
Displaying image...done.done.
```

You will get image similar to shown below.  
This image is dummy read and will not give detector full frame view.  
Close the image



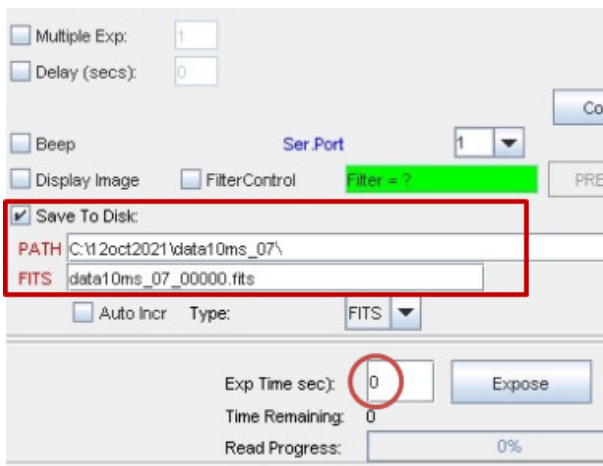
[4]

Enter PATH and FITS name

\* Note PATH should end with \ (as shown in fig.below)

\* Note FITS should end with 00000.fits (as shown in fig.below)

Enter Exp tim 0



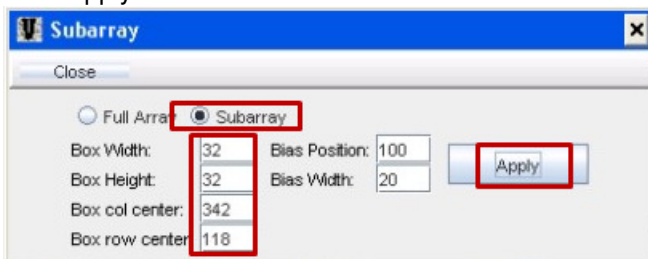
[5] Click Subarray and enter subarray box information



Enter width =32 and box height = 32

Box col center and row center is your target position.

Click Apply.



you will get following screen message

```
Setting image dimensions...done.  
Sending SIZE info to timing board...done.  
Sending POSITION info to timing board...done.
```

Close 'Subarray' dialogue box

[6] Enter parameters and click **Apply Above**.



Select options as image below, Number of Frames = 4000  
click **Apply Above**.

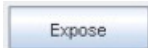


you will get following screen message

```
Setting Frames-Per-Buffer...done.  
Setting Number Of Frames...done.
```

[7] Click expose to start frame capturing.

Click Expose to start exposure



Read progress will be shown as below



After exposure is done, you will get following screen message

```
Starting exposure...done.  
fitsRowSize: 128000  
Total frame count: 4000  
Fits...done.
```

[8] You should get fits file ~ 9.23 MB in your PATH folder.

(shown below is part of the displayed file in DS9, captured using this procedure).



(Above fits was captured on 12Oct2021 at DOT with Remote login  
It shows one of patch of TIRCAM2 camera).

[9] Please use previous help file to split multiframe fits into  
separate fits file.

Thanks.

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