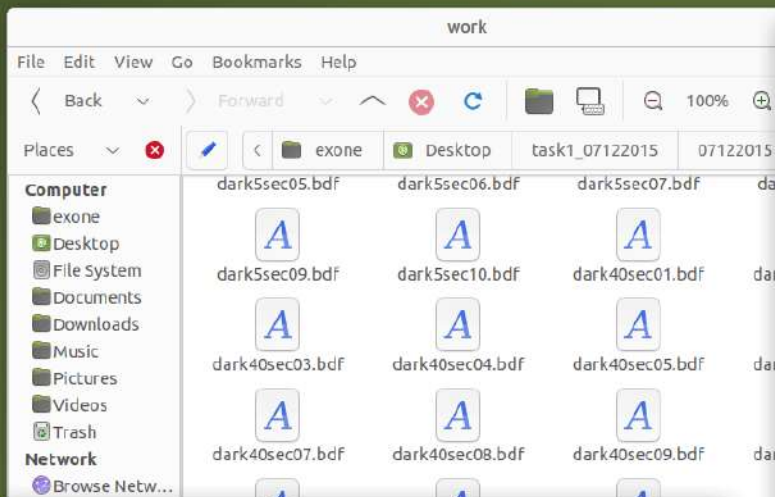
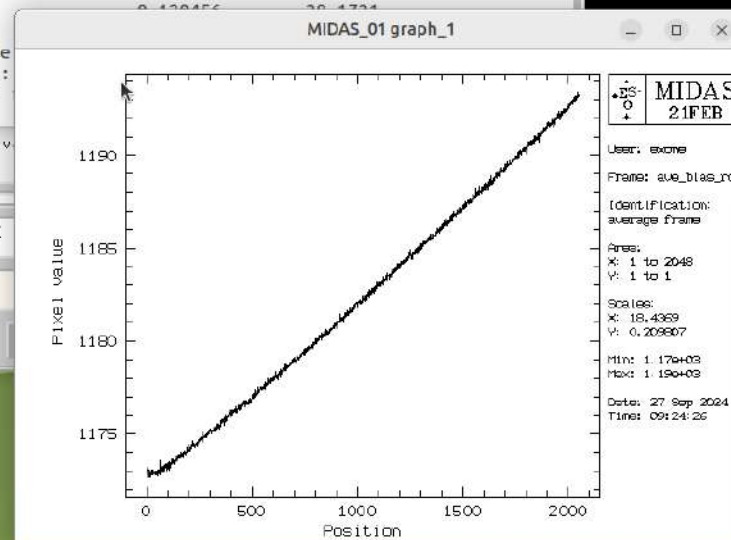
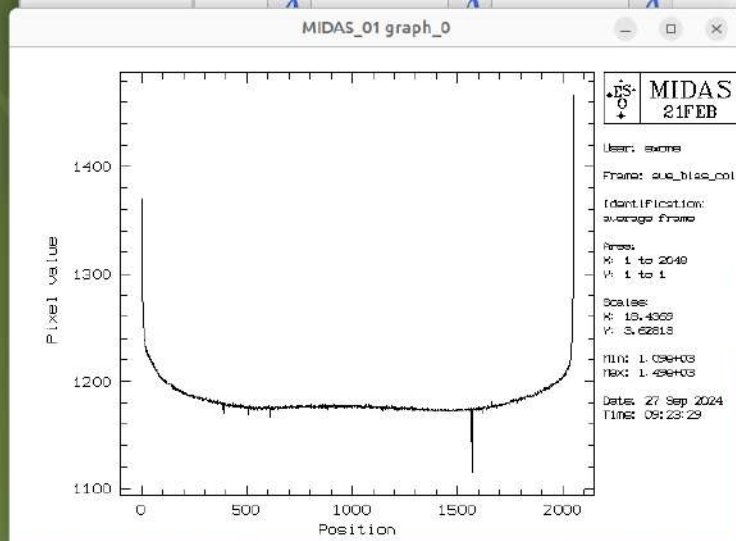


exone's Home

task1\_07122015



```
exone@exone07: ~/Desktop/task1_07122015/07122015/work
File Edit View Search Terminal Help
Midas 009> STATIS/IMAG ave_bias
frame: ave_bias (data = R4)
complete area of frame
minimum, maximum: 1.096000e+03 2.227400e+03
at pixel (174,1569),(62,1658)
mean, standard deviation: 1.182379e+03 1.838371e+01
3rd + 4th moment: 4.54595 50.5149
total intensity: 4.95926e+09
exact median, 1. mode, mode: 1.179100e+03 1.111529e+03 1.178082e+03
total no. of bins, binsize: 256 4.436862e+00
# of pixels used = 4194304 from 1,1 to 2048,2048 (in pixels)
Midas 010> compute/image d1ff_bias01_bias02 = bias01 - bias02
Midas 011> STATIS/IMAG diff_bias1_bias2
frame: d1ff_bias1_bias2 (data = R4)
complete area of frame
minimum, maximum: -1.616000e+03 1.525000e+03
at pixel (1147,1984),(1733,1973)
mean, standard deviation: 1.894023e-01 2.167943e+01
3rd + 4th moment: 0.120456 20.4734
total intensity:
exact median, 1. mode, mode:
total no. of bins, binsize:
# of pixels used = 4194304
Midas 012>
```



### Navigate

Find by Name

Name

CY Aquarius

Resolve Name

Image Options

RA (deg)

339.530756587050

DEC (deg)

1.54328800376137

Scale ("/px)

0.099031675

Update

Drawing Options

☐ Grid

☐ Label

☒ Photometric objects

☐ Objects with spectra

☐ Invert Image

Advanced Options

☐ APOGEE Spectra

☐ SDSS Outlines

☐ SDSS Bounding Boxes

☐ SDSS Fields

☐ SDSS Masks

☐ SDSS Plates

Image Source

+



Selected Object

SDSS ID:

1237678617945767945

ra	339.53176
dec	1.54123
type	STAR
u	14.91
g	15.39
r	11.72
i	11.64
z	13.69

Quick Look

Explore

Recenter

Add to notes / Show notes

Print Image...



exone's Home

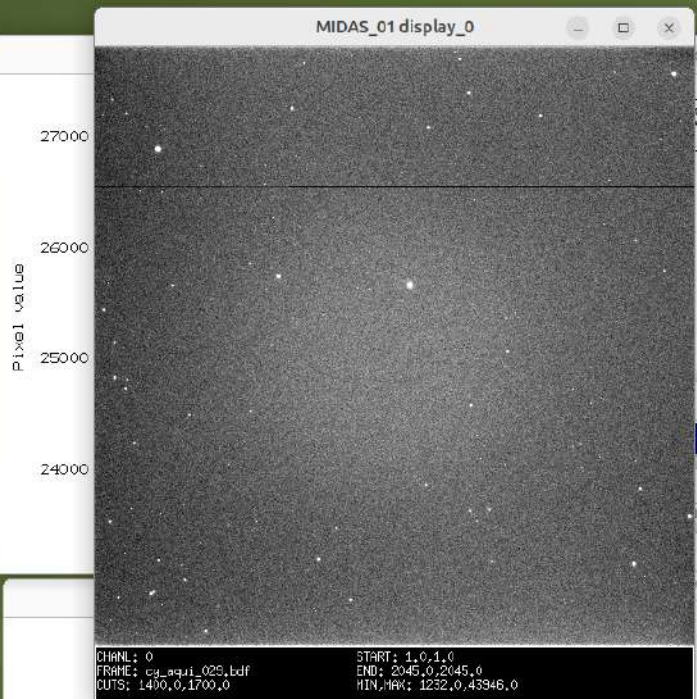
task1\_07122015

bias.png

dark\_current40.png

dark\_current5.png

flatfiled.png



Computer

- exone
- Desktop
- File System
- Documents
- Downloads
- Music
- Pictures
- Videos
- Trash

Network

- Browse Netw...

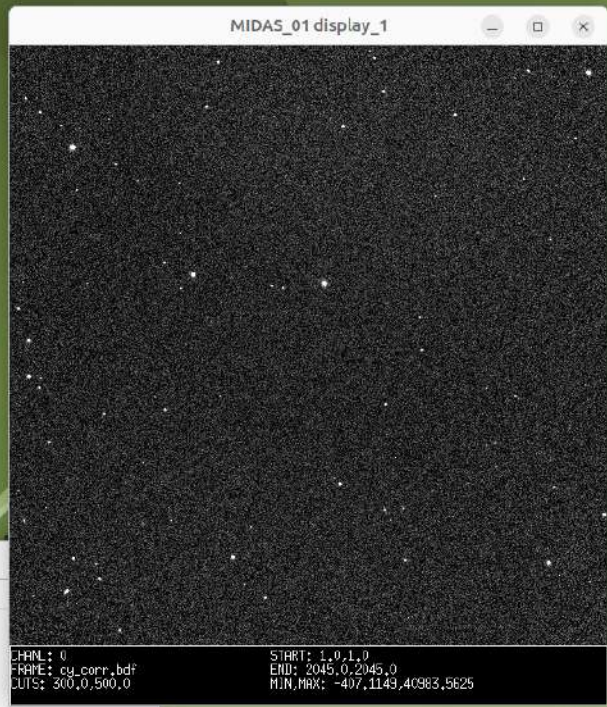
backup

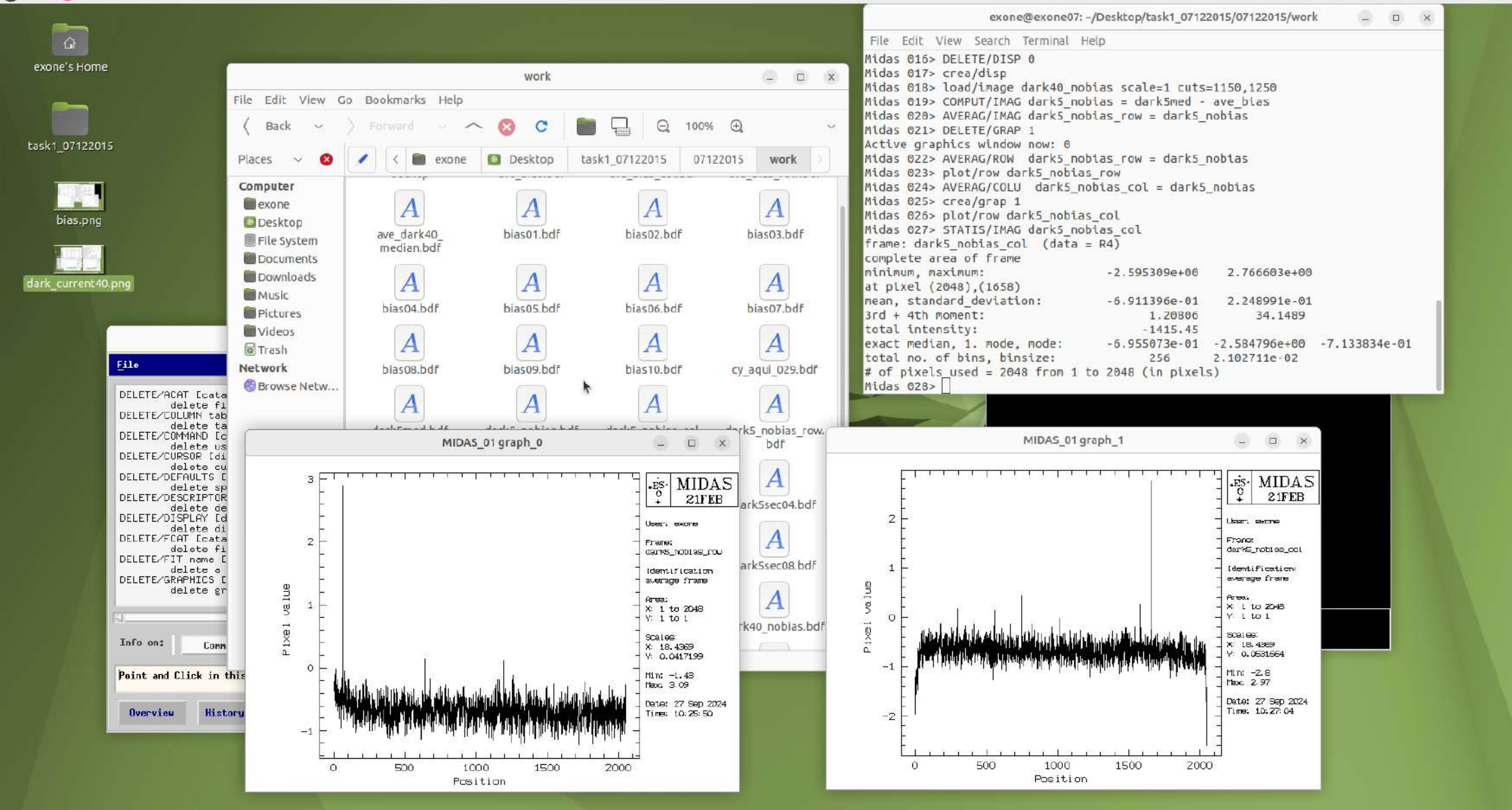
ave\_dark40.bdf

bias03.bdf

bias07.bdf

```
exone@exone07: ~/Desktop/task1_07122015/work
view Search Terminal Help
load/image cy_aqui_029 scale=-4 cuts=1400,1700
delete/disp 1
crea/disp 1
load/image cy_corr scale=-4 cuts=300,500
AVERAG/IMAG ave_dark40 = dark40.cat mean
10 images from catalog to be processed
Midas 106> COMPUT/IMAG cy_corr = (cy_aqui_029 - ave_dark40)/normal_flat_mean
Midas 107> load/image cy_corr scale=-4 cuts=300,500
Midas 108> STATIS/cy_corr
***
Qualifier could not be found... The qualifier of the command you just used
is unknown to MIDAS.
Midas 109> STATIS/IMAG cy_corr
frame: cy_corr (data = R4)
complete area of frame
minimum, maximum: -4.071149e+02 4.098356e+04
at pixel (915,558),(217,1699)
mean, standard deviation: 3.318051e+02 9.044779e+01
3rd + 4th moment: 248.531 81844.2
total intensity: 1.39169e+09
exact median, 1. mode, mode: 3.308345e+02 3.233088e+02 3.233088e+02
total no. of bins, binsize: 256 1.623164e+02
bias08.# of pixels used = 4194304 from 1,1 to 2048,2048 (in pixels)
Midas 110>
```







exone's Home

task1\_07122015

bias.png

## File

DELETE/ACAT [cata  
delete fi  
DELETE/COLUMN tab  
delete ta  
DELETE/COMMAND Co  
delete us  
DELETE/CURSOR [di  
delete cu  
DELETE/DEFAULTS D  
delete sp  
DELETE/DESCRIPTOR  
delete de  
DELETE/DISPLAY [d  
delete di  
DELETE/FCAT [cata  
delete fi  
DELETE/FIT name D  
delete o  
DELETE/GRAPHICS D  
delete gr

Info on: Conn

Setup options and Exit

Overview

History..

Search

## work

File Edit View Go Bookmarks Help

Back Forward 100%

Places exone Desktop task1\_07122015 07122015 work

## Computer

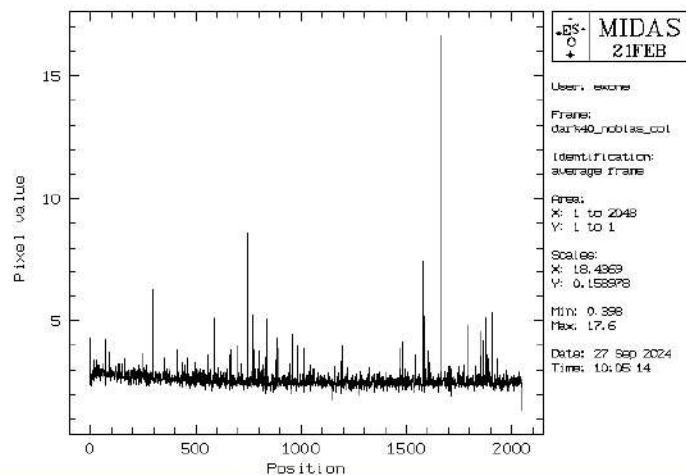
exone  
Desktop  
File System  
Documents  
Downloads  
Music  
Pictures  
Videos  
Trash

## Network

Browse Netw...

bias04.bdf bias05.bdf bias06.bdf bias07.bdf  
bias08.bdf bias09.bdf bias10.bdf cy\_aqui\_029.bdf  
dark5med.bdf dark5sec01.bdf dark5sec02.bdf dark5sec03.bdf  
dark5sec04.bdf dark5sec05.bdf dark5sec06.bdf dark5sec07.bdf

## MIDAS\_01 graph\_1

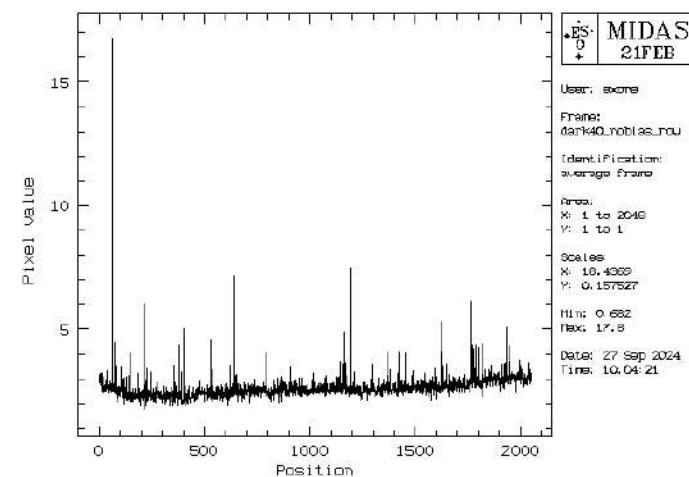


exone@exone07: ~/Desktop/task1\_07122015/07122015/work

File Edit View Search Terminal Help

```
Midas 001> crea/graphics
Midas 002> SET/GRAP xa=auto ya=auto
Midas 003> COMPUT/IMAG dark40_nobias = ave_dark40_median - ave_bias
Midas 004> AVERAG/ROW dark40_nobias_row
wrong syntax - should be: result = ...
Invalid type of parameter... The parameter is not of the type specified in the
DEFINE/PARAM command.
Midas 005> AVERAG/ROW dark40_nobias_row = dark40_nobias
Midas 006> PLOT/ROW dark40_nobias_row
Midas 007> AVERAG/col dark40_nobias_col = dark40_nobias
Midas 008> CREATE/GRAP 1
Midas 009> PLOT/ROW dark40_nobias_col
Midas 010> STATIS/IMAG dark40_nobias
frame: dark40_nobias (data = R4)
complete area of frame
minimum, maximum: -2.782000e+02 2.909160e+04
at pixel (1344,426),(62,1658)
mean, standard deviation: 2.602566e+00 2.070078e+01
3rd + 4th moment: 778.239 974242
total intensity: 1.0916e+07
exact median, 1. mode, mode: 2.400024e+00 9.739254e+00 9.739254e+00
total no. of bins, binsize: 256 1.151757e+02
# of pixels used = 4194304 from 1,1 to 2048,2048 (in pixels)
Midas 011>
```

## MIDAS\_01 graph\_0





DR14

[Home](#) [Help](#) [List](#) [Navi](#) [Explore](#)

Parameters

ra	<input type="text" value="339.45"/>	deg
dec	<input type="text" value="1.53"/>	deg
scale	<input type="text" value="0.79224"/>	"/pix
width	<input type="text" value="512"/>	pix
height	<input type="text" value="512"/>	pix
opt	<input type="text"/>	

Get Image



Use query to mark objects

Drawing options

<input type="checkbox"/> Grid
<input type="checkbox"/> Label
<input type="checkbox"/> Photometric objects
<input type="checkbox"/> Objects with spectra
<input type="checkbox"/> Invert Image
Advanced options
<input type="checkbox"/> APOGEE Spectra
<input type="checkbox"/> SDSS Outlines
<input type="checkbox"/> SDSS Bounding Boxes
<input type="checkbox"/> SDSS Fields
<input type="checkbox"/> SDSS Masks
<input type="checkbox"/> SDSS BL

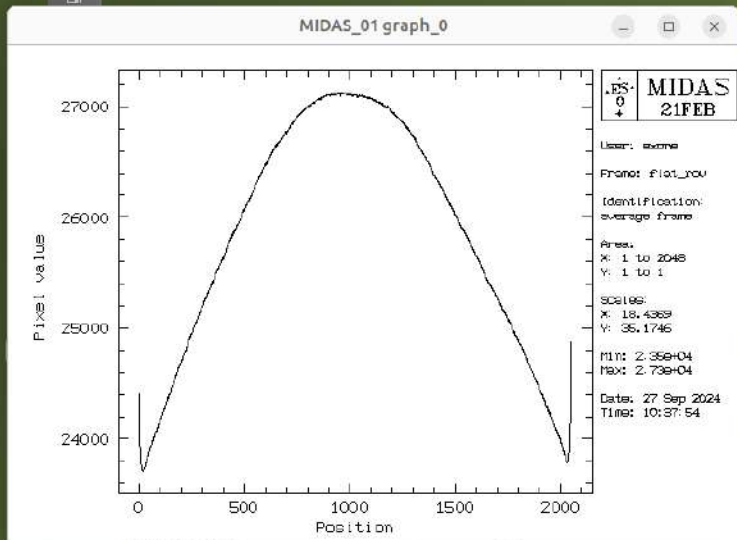


SciServer

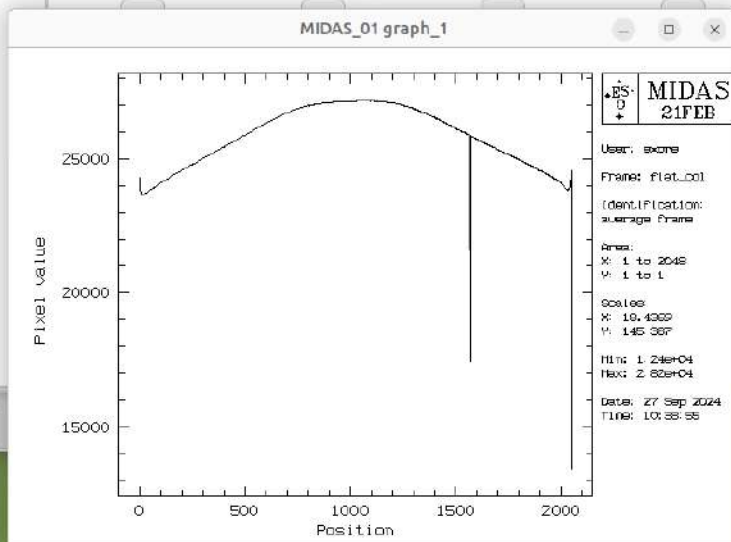
Not logged in

[Help](#)

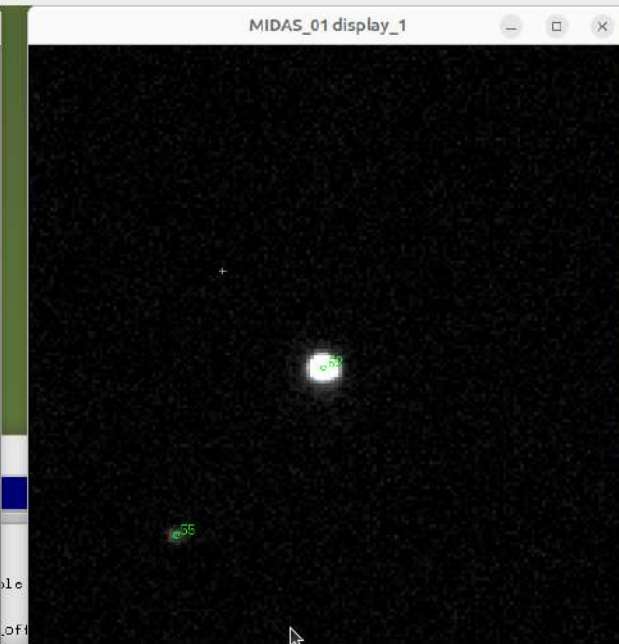
[Login](#)



```
exone@exone07: ~/Desktop/task1_07122015/07122015/work
File Edit View Search Terminal Help
Midas 042> plot/row flat_row
Midas 043> AVERAG/cl flat_col = flatmedian
***
Qualifier could not be found... The qualifier of the command you just used
is unknown to MIDAS.
Midas 044> AVERAG/col flat_col = flatmedian
Midas 045> crea/grap 1
Midas 046> plot/row flat_col
Midas 047> statst
***
Command could not be found... The "command portion" of the command you just
entered, is unknown to MIDAS.
Midas 048> STATIS/IMAG flatmedian
Frame: flatmedian (data = R4)
complete area of frame
minimum, maximum: 1.065160e+04 3.222400e+04
at pixel (2044,2048),(62,1658)
mean, standard deviation: 2.582862e+04 1.619435e+03
3rd + 4th moment: -0.068304 5.26461
total intensity: 1.08333e+11
exact median, 1. mode: 2.557760e+04 1.077850e+04 2.482171e+04
total no. of bins, binsize: 256 8.459765e+01
# of pixels used = 4194304 from 1,1 to 2048,2048 (in pixels)
Midas 049>
```







```
exone@exone07: ~/Desktop/task1_07122015/07122015/cy_aquil
File Edit View Search Terminal Help
Midas 046> @@ starfinder
'Now click on your target and leave'
frame: final.fits (data = R4)
plane_no 1 loaded
cursor #0
frame pixels world coords intensity
665 1273 663.996 1272.00 112.718

Midas 047> crea/grap 2
Midas 048> read/table stars @62
Table : stars

Sequence NUMBER MAG_BEST MAGERR_B BACKGROUND FLUX_MAX X_IMAGE
-----
62 62 12.5520 0.0022 -3.284406 15466.08 664.3173

Sequence Y_IMAGE THETA_ELONGATI ELLIPTIC FWHM_IMA FWHM_WORLD FLA CLASS_
-----
62 1267.0254 -23.88 1.035 0.034 3.78 0.0006298482 0 0.983

Midas 049> comp/table stars :mag_best = :mag_best - (12.5520-11.72)
Midas 050> ASSIGN/GRAP G,2
Midas 051> PLOT/HIST stars :mag_best
Midas 052>
```

CHANNEL: 0  
FRAME: final.bdf  
CUTS: ~300,0,300,0

START: 1.0,4.0  
END: 1901.0,2056.0  
MIN,MAX: ~21.19815,50357.62109  
239, 300, 22

Frame = name of image file  
X\_SC, Y\_SC, X\_OFF, Y\_OFF =  
offset in the x-  
and y-sc, positive  
parameters (world

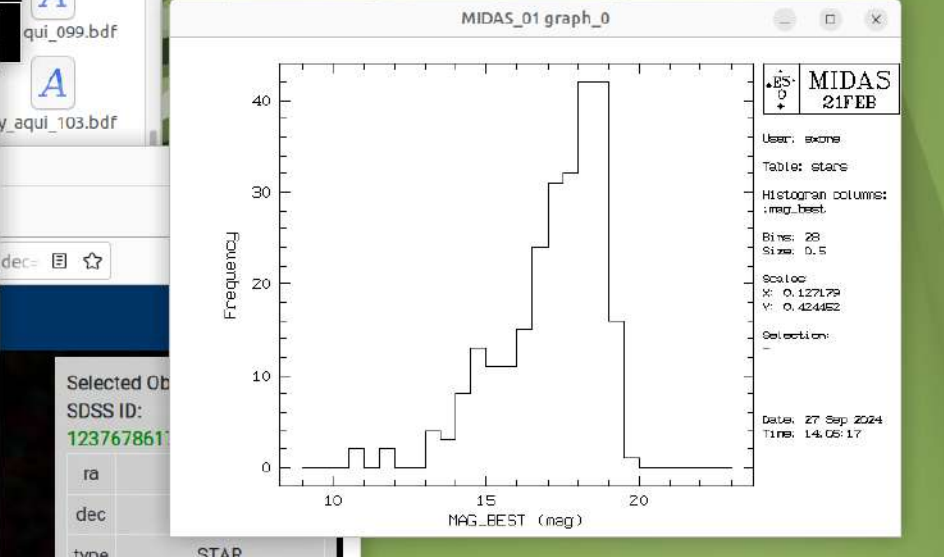
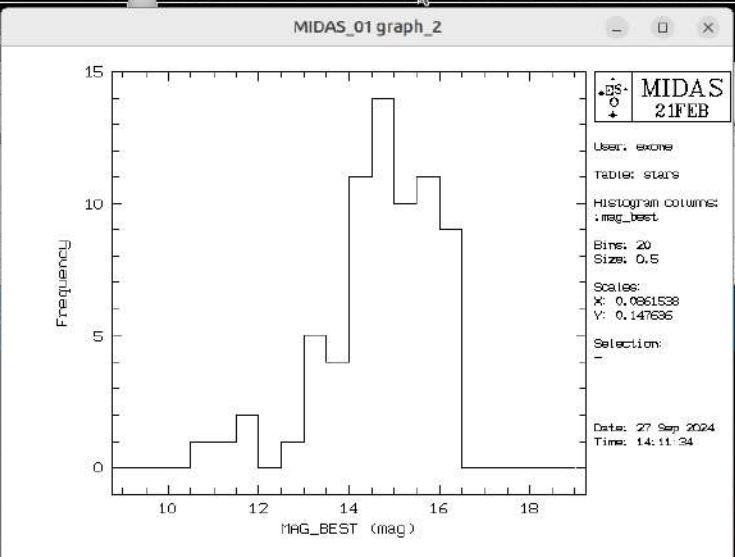
Data Release 18 - SDSS

Home Visual Tools Search Tools

Navigate

Find by Name

Name CY Aquarii





exone's h  
task1\_071  
bias.

Home  
Navig  
Find  
Name

Resolve Name

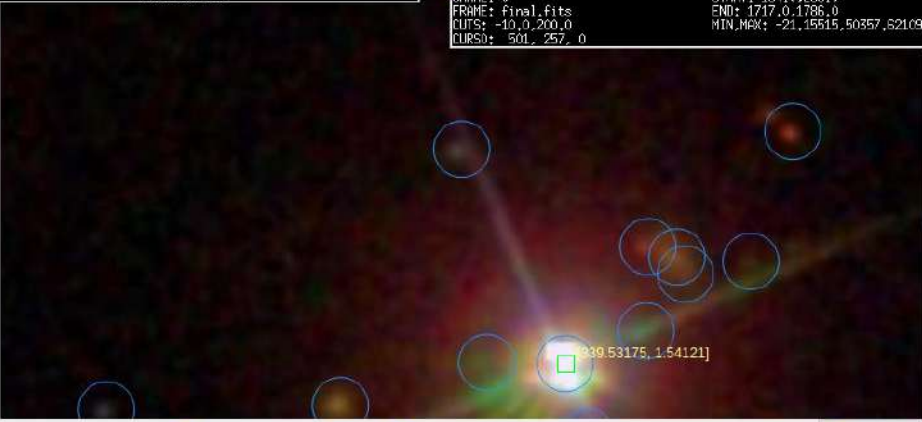
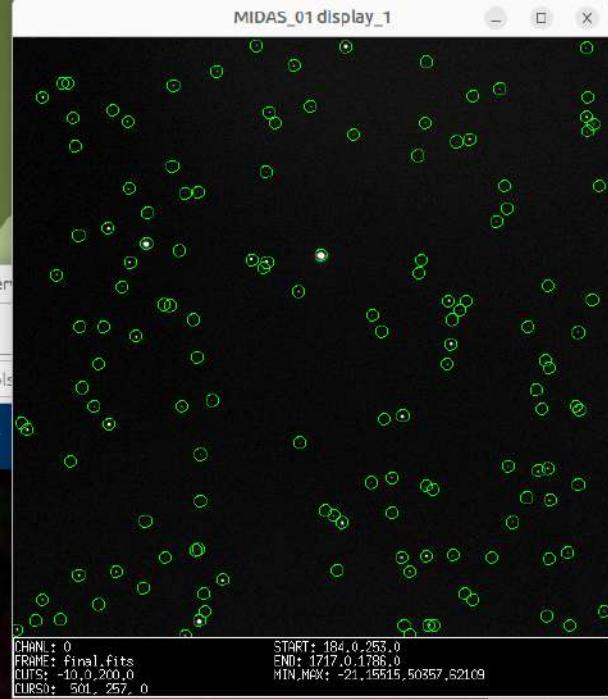
Image Options

RA (deg) 339.53077

DEC (deg) 1.5432742

Scale ("/px) 0.09903

Update



u	14.91
g	15.39
r	11.72
i	11.64
z	13.69

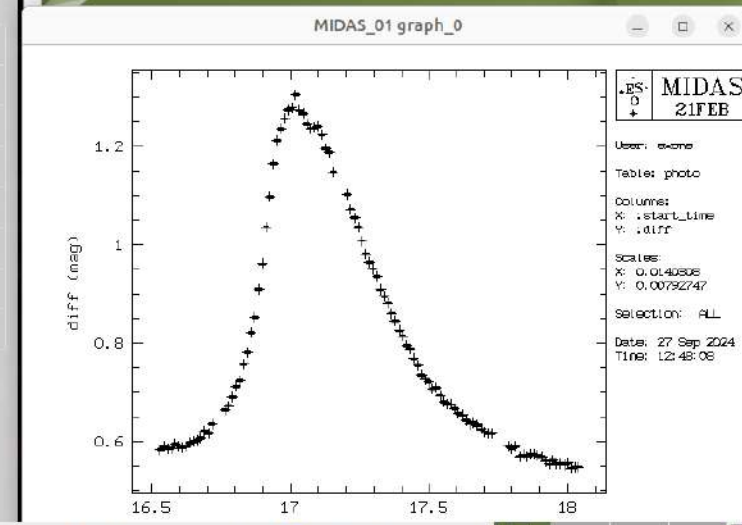


exone@exone07: ~/Desktop/task1\_07122015/07122015/cy\_aqui

```
File Edit View Search Terminal Help
23 LOAD/IMAG cy_aqui_001 scale=-4 cuts=1000,2000
24 LOAD/IMAG cy_aqui_001 scale=-4 cuts=5000,6000
25 LOAD/IMAG cy_aqui_001 scale=-4 cuts=3000,6000
26 LOAD/IMAG cy_aqui_001 scale=-4 cuts=1000,6000
27 LOAD/IMAG cy_aqui_001 scale=-4 cuts=1000,8000
28 LOAD/IMAG cy_aqui_001 scale=-4 cuts=1000,5000
29 @@ starfinder
Midas 030> @@ sexy
1 > $./sex final.fits
----- SExtractor 2.19.5 started on 2024-09-27 at 13:40:59 with 1 thread

from: final.fits
frame" / no ext. header / 1904x2038 / 32 bits (floats)
d: -0.501511 RMS: 2.81307 / Threshold: 8.43922
detected 265 / sextracted 257

0.2 s: 11060.0 lines/s , 1394.7 detections/s)
stars.fits stars.tbl
s.fits converted to: stars.tbl
over
,fits 0 -3 c -10,200
tars :x_image :y_image ? 1 5 4
```



- exone's Home
- task1\_07122015
- bias.png
- dark\_current40.png
- dark\_current5.png
- Flatfiled.png
- CY.png

MIDAS\_01 display\_0

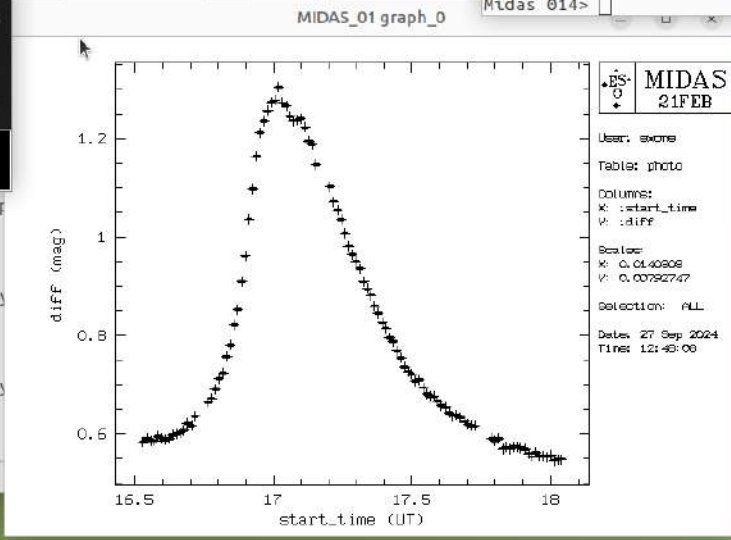
CHNL: 0 START: 256.0,256.0  
FRAME: rcy\_aqui\_105.bdf ENI: 1789.0,1789.0  
CURS: 100.0,2000.0 MIN,MAX: -421.08591,51789.0546  
CURS0: 195, 260, 29 CURS1: 235, 300, 22

Flip.prg FORGRdrs.KEY  
grcy\_aqui\_002.tbl grcy\_aqui\_003.tbl  
grcy\_aqui\_006.tbl grcy\_aqui\_007.tbl

343 items, Free space: 877.2 GB

22015 07122015 cy\_aqui

qui\_099.bdf cy\_aqui\_100.bdf  
qui\_103.bdf cy\_aqui\_104.bdf



exone@exone07: ~/Desktop/task1\_07122015/07122015/cy\_aqui

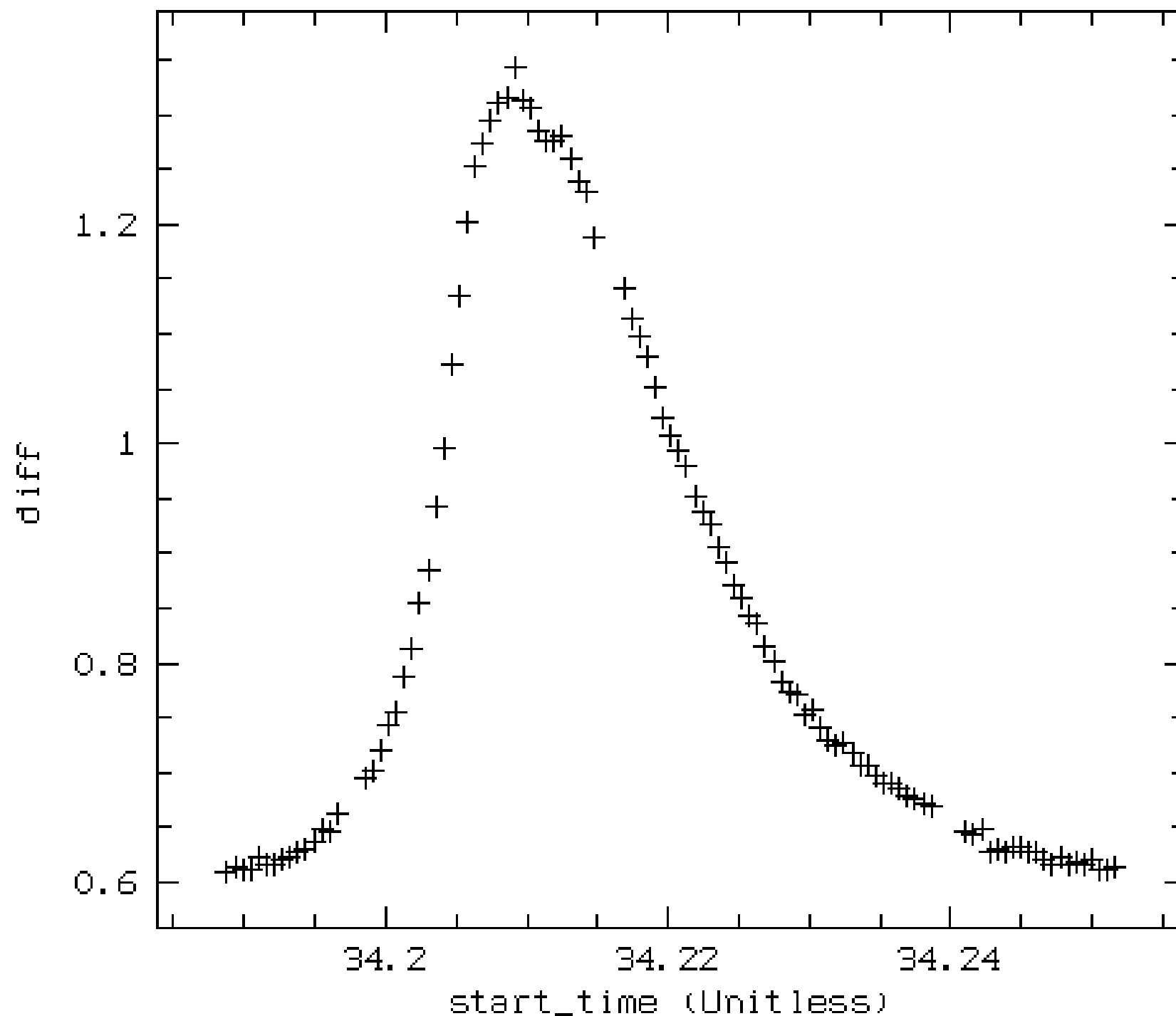
File Edit View Search Terminal Help

2	1.2374548339843750e+03	-3.9802978515624545e+00	
3	1.2372546386718750e+03	-5.2504394531249545e+00	
4	1.2372841796875000e+03	-5.1088378906249545e+00	
5	1.2373654785156250e+03	-1.9735839843749545e+00	

Sequence	ydifff	diff	error
1	2.2314453124181455e-03	5.8260536193847656e-01	3.08193e-03
2	1.3516601562491815e-01	5.8908367156982422e-01	2.49631e-03
3	3.3536132812491815e-01	5.8541870117187500e-01	2.09842e-03
4	3.0582631249991815e-01	5.8551502227783203e-01	2.64280e-03
5	2.2452148437491815e-01	5.9533405303955078e-01	2.25100e-03

Midas 009> plot/tab photo :start\_time :diff  
\*\*\* FATAL: PCOPEN, unknown or unavailable device  
(APP) application error - 3  
use HELP [printers]  
Midas 010> CREATE/GRAP  
Midas 011> plot/tab photo :start\_time :diff  
Midas 012> OVERPL/ERR0 photo :star\_time :diff :error  
(APP) application error - 4  
\*\*\* FATAL: can not find column with this name  
Midas 013> OVERPL/ERR0 photo :start\_time :diff :error  
Midas 014>





ES O +	MIDAS 15FEB
--------------	----------------

User: jheidt

Table: photo

Columns:

X: :start\_time

Y: :diff

Scales:

X: 0.000598301

Y: 0.00769865

Selection: ALL

Date: 23 Feb 2016

Time: 13:12:53

### Navigate

Find by Name

Image Options

RA (deg)

339.477782905548

DEC (deg)

1.53714115429709

Scale ("/px)

0.7922534

Drawing Options

☐ Grid

☐ Label

☐ Photometric objects

☐ Objects with spectra

☐ Invert Image

Advanced Options

☐ APOGEE Spectra

☐ SDSS Outlines

☐ SDSS Bounding Boxes

☐ SDSS Fields

☐ SDSS Masks

☐ SDSS Plates

Image Source



Selected Object

SDSS ID:

1237678617945702444

ra	339.44956
dec	1.53427
type	GALAXY
u	14.07
g	10.75
r	10.76
i	10.75
z	11.04



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