

Installation of GDL

The software package GNU Data Language (GDL) can be downloaded at the project's homepage ([link](#)), then follow the instructions for Win / Mac / Linux to install. In common Linux distributions (Ubuntu, Debian, ...) one can use the package management, too:

```
sudo apt-get install gnudatalanguage
```

For the use in the Laboratory Courses the IDL Astro Library is also required. It can be downloaded at:

<http://idlastro.gsfc.nasa.gov/homepage.html>

In the next step the following directories

```
/home/betreuer/opt/gdl-astrolib/astron/
```

should be created. Afterwards the archive (*astron*) can be unpacked there. Furthermore, it is necessary to change the following lines of the file *readfits.pro* in the directory *pro*:

```
Line:          ndata = product(dims,/integer)
replace by:    ndata = dims[0]
```

Additionally create a file *fitsconvert.pro* with the following content:

```
function fitsconvert,image
if n_elements(image) eq 0 then begin
  print,'Usage: converted_image=fitsconvert,original_image'
  return,0
endif
erg=(long(image)+65536) mod 65536
return,erg
end
```

in the directory */home/betreuer/opt/gdl-astrolib/*. Moreover, all routines that are additionally required for C7 (*correl_images.pro*, *newremove.pro*, *newsrcoor.pro* which can be found in the SVN) should be placed here. To use the AstroLib, create an additional start-up script that exports the paths of the libraries. This script can e.g. be saved as hidden file in the home directory (e.g. *\$HOME/.gdl_startup*). If the directory *astron* and the file *fitsconvert.pro* are placed in */home/praktikum/opt/gdl-astrolib*, the start-up script would look like:

```
!PATH=!PATH + ':/usr/bin/'
!PATH=!PATH + ':/home/betreuer/opt/gdl-astrolib/astron/pro'
!PATH=!PATH + ':/home/betreuer/opt/gdl-astrolib'
loadct,0, ncolor=255;
!P.BACKGROUND=255;
!P.COLOR=0;
!X.STYLE=1;
!Y.STYLE=1;
!Z.STYLE=1
```

```
print, '';  
print, '*****';  
print, '** Personal settings are loaded and active **';  
print, '*****';  
print, '';
```

The first line contains the link to the executable gdl file. The second/third line contains the path to the *.pro* files in the *astron* directory and the file *fitsconvert.pro* (adjust paths as needed).

If the start-up script is in the directory */home/betreuer/*, prepare it for the usage in the Bash-Shell by adding the following line

```
export GDL_STARTUP=/home/betreuer/.gdl_startup
```

to the *.bashrc* script in the home directory (on a12 the last step needs to be repeated for the */home/praktikum/* directory).

From: <https://polaris.astro.physik.uni-potsdam.de/wiki/> - **OST Wiki**

Permanent link: https://polaris.astro.physik.uni-potsdam.de/wiki/doku.php?id=en:software:howto_gdl_install&rev=1420759339

Last update: **2015/01/08 23:22**

