Ferret NOAA installation on Ubuntu 22.04

by Sullyandro Guimaraes

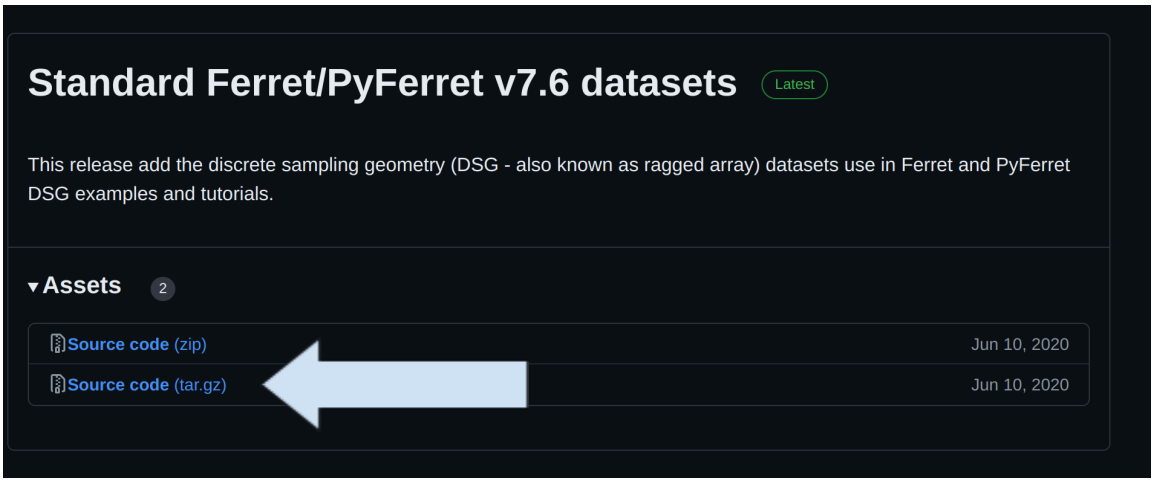
Source page

https://ferret.pmel.noaa.gov/Ferret/downloads/ferret-installation-and-update-guide

1. Download the Ferret datasets package

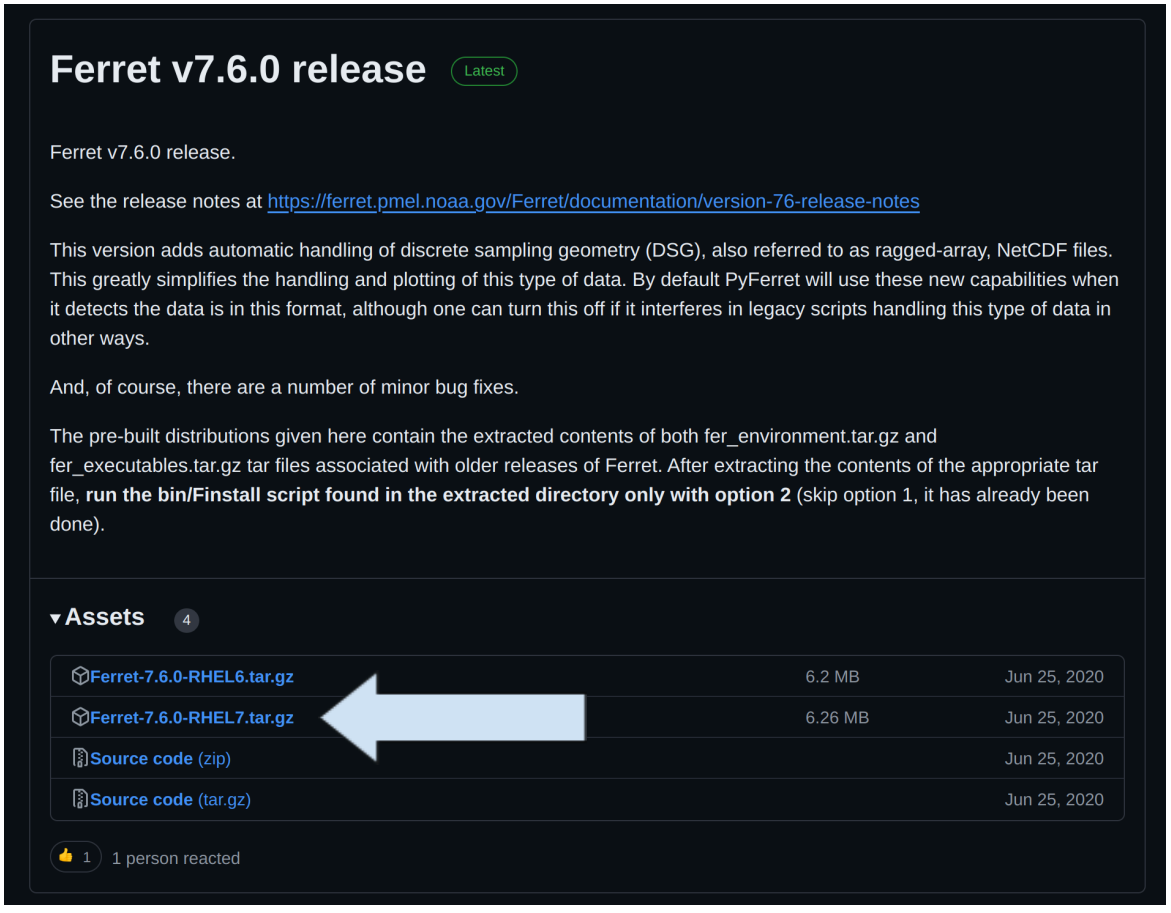
https://github.com/NOAA-PMEL/FerretDatasets/releases

You should click on "**Source code**" to download the **FerretDatasets-7.6.tar.gz**



2. Download the Ferret executables scripts package

https://github.com/NOAA-PMEL/Ferret/releases



3. Installation

Note: "**$user**" referred to in this document should be replaced with your username.

Choose a directory for the installation:

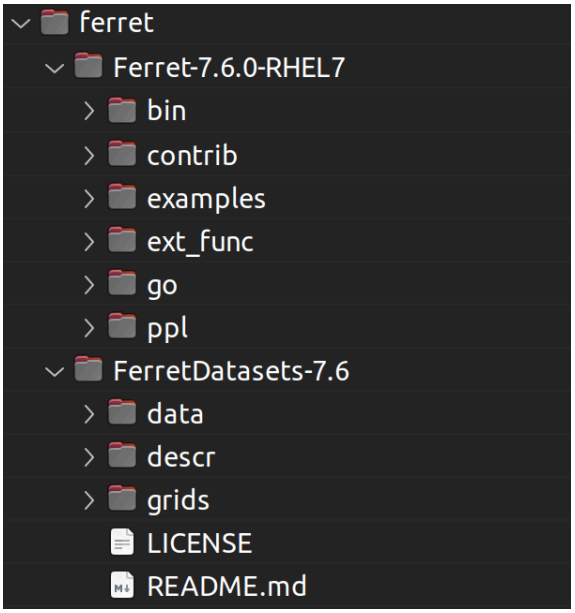
```
$ mkdir /home/$user/apps/ferret
```

Extract both ferret packages downloaded to the following paths:

Ferret-7.6.0-RHEL7.tar.gz **->** /home/**$user**/apps/ferret/Ferret-7.6.0-RHEL7/

FerretDatasets-7.6.tar.gz **->** /home/**$user**/apps/ferret/FerretDatasets-7.6/

```
$ tar xf Ferret-7.6.0-RHEL7.tar.gz -C /home/$user/apps/ferret/
$ tar xf FerretDatasets-7.6.tar.gz -C /home/$user/apps/ferret/
```



Open a terminal and go to /home/**$user**/apps/ferret/Ferret-7.6.0-RHEL7/bin/

```
$ cd /home/$user/apps/ferret/Ferret-7.6.0-RHEL7/bin/
```

Execute the Finstall script:

```
$ bash Finstall
```

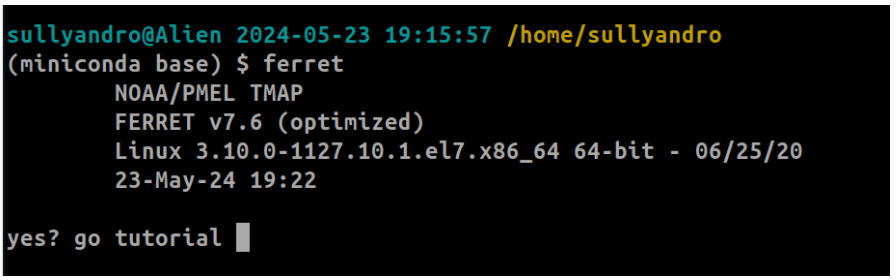
- **(1, 2, 3, q, x) -->** 2
- **FER_DIR --> /home/$user/apps/ferret/Ferret-7.6.0-RHEL7**
- FER_DSETS --> /home/**$user**/apps/ferret/FerretDatasets-7.6
- desired ferret_paths location --> /home/**$user**/apps/ferret
- ferret_paths link to create? (c/s/n) [n] --> s
- (1, 2, 3, q, x) --> q

```
sullyandro@Alien 2024-05-23 19:09:48 /home/sullyandro/apps/ferret/Ferret-7.6.0-RHEL7/bin
(miniconda base) $ bash Finstall

 This script can do two things for you to help install Ferret:

 (1) Install the Ferret executables into FER_DIR/bin from the
     fer_executables.tar.gz file.

     You will want to run this option if you are installing
     Ferret for the first time or if you are updating Ferret
     with new executables.

 (2) Modify the shell scripts 'ferret_paths_template.csh' and
     'ferret_paths_template.sh' to set environment variables
     FER_DIR and FER_DSETS to the directories at your site
     containing the Ferret software and demonstration data.

     The files 'ferret_paths.csh' and 'ferret_paths.sh' are
     created in a directory you choose.  Furthermore, the link
     (shortcut) 'ferret_paths' can be created which refers to
     either 'ferret_paths.csh' or 'ferret_paths.sh'.

     Sourcing one of these files ('source ferret_paths.csh'
     for csh or tcsh, '. ferret_paths.sh' for bash, sh ksh,
     or dash) will set up a user's environment for running
     ferret.

     You will want to run this option if you are installing
     Ferret for the first time or if you relocated where
     Ferret is installed.


 Enter your choice:
 (1) Install executables, (2) Customize ferret_paths files, (3,q,x) Exit
 (1, 2, 3, q, x) --> 2

 Customize ferret_paths files...

 Enter the name of the directory where the 'fer_environment.tar.gz'
 file was installed/extracted (FER_DIR).  The location recommended
 in the Ferret installation guide was '/usr/local/ferret'.

 FER_DIR --> /home/sullyandro/apps/ferret/Ferret-7.6.0-RHEL7

 Enter the name of the directory where the 'fer_dsets.tar.gz'
 file was installed/extracted (FER_DSETS).

 FER_DSETS --> /home/sullyandro/apps/ferret/FerretDatasets-7.6

 Enter the name of the directory where you want to place
 the newly created 'ferret_paths.csh' and 'ferret_path.sh'
 files; for example, '/usr/local'.

 desired ferret_paths location --> /home/sullyandro/apps/ferret

 To duplicate behavior found in older version of Ferret, you can
 create a link (shortcut) 'ferret_paths' that refers to either
 'ferret_paths.csh' or 'ferret_paths.sh'.  This is simply a
 convenience for users and should only be done on systems where
 all Ferret users work under the same shell (such as tcsh or bash).
 The files 'ferret_path.csh' and 'ferret_paths.sh' can always be
 used regardless of the answer to this question.

 ferret_paths link options:
    c - link to ferret_paths.csh (all users work under tcsh, csh)
    s - link to ferret_paths.sh (all users work under bash, dash, ksh, sh)
    n - do not create the link (use ferret_paths.csh or ferret_paths.sh)
 ferret_paths link to create? (c/s/n) [n] --> s

 Created /home/sullyandro/apps/ferret/ferret_paths.csh
 Creating Finstall.log in /home/sullyandro/apps/ferret/Ferret-7.6.0-RHEL7/bin

 Created /home/sullyandro/apps/ferret/ferret_paths.sh

 Created /home/sullyandro/apps/ferret/ferret_paths
     as a link to ferret_paths.sh

 Enter your choice:
 (1) Install executables, (2) Customize ferret_paths files, (3,q,x) Exit
 (1, 2, 3, q, x) --> q
```

Open your /home/**$user**/.bashrc **and write the following in the end:**

```
# ferret
source /home/$user/apps/ferret/ferret_paths
```

Open a new terminal and ferret should be available.



You can find some missing system libraries when running ferret for the first time:

```
$ ferret
```

ferret: error while loading shared libraries: **libreadline.so.6**: cannot open shared object file: No such file or directory

ferret: error while loading shared libraries: **libhistory.so.6**: cannot open shared object file: No such file or directory

To solve it:

```
$ sudo apt-get install libreadline-dev
```

$ sudo ln -s /lib/x86_64-linux-gnu/**libreadline.so.8** /lib/x86_64-linux-gnu/**libreadline.so.6**

$ sudo ln -s /lib/x86_64-linux-gnu/**libhistory.so.8** /lib/x86_64-linux-gnu/**libhistory.so.6**