

## Prerequisite to run PRIDE PPP-AR

The supporting software packages which should be installed prior to PRIDE PPPAR installation includes **gfortran**(subroutine of **gcc**), **wget**, **python3** and **gfzrnrx**. **python3** is unnecessary if you wouldn't use PRIDE PPPAR's plotting toolkit. **gfzrnrx** is also not needed if you don't need multi-day processing functions. You can compile their source code or download their installation packages from the Mac terminal or the Linux shell.

### 1. URLs where you can find the supporting software

**wget**: <https://ftp.gnu.org/gnu/wget/>

**gcc**: <https://ftp.gnu.org/gnu/gcc/>

**gfortran for Mac**: <https://github.com/fxcoudert/gfortran-for-macOS/releases>

**python3**: <https://www.python.org/downloads/source/>

**gfzrnrx**: <https://gnss.gfz-potsdam.de/services/gfzrnrx/download>

Especially, for gfzrnrx, you need to rename the downloaded executable to 'gfzrnrx'. If you want to be able to use this program in any directory, you can move it to the '/usr/bin' directory, such as

```
mv gfzrnrx_1.15-8044_osx_intl64 gfzrnrx
```

```
chmod +x gfzrnrx
```

```
sudo mv gfzrnrx /usr/bin/
```

### 2. Install the supporting software from the Mac terminal

(Bold and italics indicate commands running at the terminal)

Step 1: install 'brew' on your mac

➤ China's domestic mirrors

```
/bin/zsh -c "$(curl -fsSL
```

```
https://gitee.com/cunkai/HomebrewCN/raw/master/Homebrew.sh)"
```

➤ Official mirrors

```
/bin/bash -c "$(curl -fsSL
```

```
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

Step 2 (optional): change permissions to the '/usr/local' directory if necessary

```
sudo chmod -R 777 /usr/local/
```

Step 3: install gcc, wget and python3

```
brew install gcc
```

```
brew install wget
```

```
brew install python3
```

Step 4: Install matplotlib module of python3

```
pip3 install matplotlib
```