

# Presto

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## Installation and Usage

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## Changelog

- 27/01/2015 - Created

## Contact

If you have any issues with installation I can have a go at helping you out, flick me an email:

[gph8292@aut.ac.nz](mailto:gph8292@aut.ac.nz)

Otherwise Scott Ransom was extremely helpful in putting up with my emails during the research project so you can flick an email to him if you are really stuck:

[sransom@nrao.edu](mailto:sransom@nrao.edu)

**NOTE:** Please make sure you watch the video, and check out the [INSTALL](#) file (especially the bottom of that file, TROUBLE SHOOTING) in the [Git Repo of Presto](#)

## Before Installation

You do require **sudo** on the machine that you are installing the software on.

The directory that software was installed into in this instance was **/home/ubuntu/Downloads**, you will need to adjust the commands if you are installing in a different place (or at the very least change ubuntu for the name of your user).

When editing **environment variables** if some of these already exist, try adding them on to the end first. For example you should have a **PATH** variable already.

## Video Installation

[http://youtu.be/f5OJrU\\_gQJE](http://youtu.be/f5OJrU_gQJE)

## Commands

- `sudo apt-get install git libfftw3-bin libfftw3-dbg libfftw3-dev libfftw3-doc libfftw3-double3 libfftw3-long3 libfftw3-quad3 libfftw3-single3 pgplot5 csh automake gfortran libglib2.0-dev libccfits-dev libcfitsio3 libcfitsio3-dev libx11-dev libpng12-dev nvidia-cuda-dev libcuda1-331 -y`
- `cd Downloads`
- `git clone git://github.com/scottransom/presto.git`
- `git clone git://git.code.sf.net/p/tempo/tempo`
- `cd tempo`

- ./prepare
- ./configure
- make && sudo make install
- cp tempo.cfg src/
- cp tempo.hlp src/
- sudo nano /etc/environment
  - TEMPO="/home/ubuntu/Downloads/tempo/src"
  - PRESTO="/home/ubuntu/Downloads/presto"
  - PATH="/home/ubuntu/Downloads/presto/bin:/usr/local/cuda-6.5/bin"
  - PGPLOT\_DIR="/usr/lib/pgplot5"
  - FFTW\_PATH="/usr"
  - LD\_LIBRARY\_PATH="/usr/local/cuda/lib64:/usr/local/cuda/lib:/home/ubuntu/Downloads/presto/lib"
  - PYTHONPATH="/home/ubuntu/Downloads/presto/python:/home/ubuntu/Downloads/presto/lib/python"
- sudo reboot
- cd ~/Downloads/presto/src
- make makewisdom
- make prep
- make
- cd ~/Downloads/presto/bin
- wget [http://www.cv.nrao.edu/~sransom/GBT\\_Lband\\_PSR.fil](http://www.cv.nrao.edu/~sransom/GBT_Lband_PSR.fil)
- readfile GBT\_Lband\_PSR.fil
- rfifind -time 2.0 -o Lband GBT\_Lband\_PSR.fil
- prepfold -n 64 -nsub 96 -p 0.004621638 -dm 62.0 GBT\_Lband\_PSR.fil