

# Heimdall install Memo

Instruction from: <https://sourceforge.net/p/heimdall-astro/wiki/Install/>

Required:

- [Dedisp](#)
- [Thrust](#) version >=1.6
- [Boost](#) version >= 1.49
- [PSRDADA](#)
- [CUDA](#) version >= 4.2

Before install:

```
Mkdir $HOME/linux_64
Mkdir $HOME/opt
```

```
Vi ~/.bashrc
Export LD_LIBRARY_PATH=$HOME/linux_64/lib:/usr/lib:/usr/lib64:/usr/local/lib
Export CUDA_NVCC_FLAGS="-O3 -arch sm_61"
PATH="$HOME/linux_64/bin:$HOME/linux_64/lib:$HOME/heimdall/Applications:$HOME/
opt/dedisp:$HOME/opt/psrdata:$PATH"
```

## 1. Dedisp:

```
sm_arg = 61
CUDA: 8.0
THRUST_DIR ?= $(HOME)/opt/thrust-1.6
INSTALL_DIR = $(HOME)/linux_64
```

```
make && make install
```

## 2. Psrdada:

2.1 cd \$HOME/opt

2.2 the **PSRDADA** CVS repository can be accessed through anonymous (pserver) CVS as follows. First, log in to the CVS server with the following two commands:

```
touch $HOME/.cvspass
```

```
cvcs -  
d:pserver:anonymous@psrdada.cvs.sourceforge.net:/cvsroot/ps  
rdada login
```

When prompted for the password for *anonymous*, simply hit Enter. Finally, check out the software with the following command:

```
cvcs -z3 -  
d:pserver:anonymous@psrdada.cvs.sourceforge.net:/cvsroot/ps  
rdada co -P psrdada
```

2.3 ./bootstrap

2.4 ./configure --prefix=\$HOME/linux\_64 --with-cuda-include-dir=/usr/local/cuda-8.0/include  
--with-cuda-lib-dir=/usr/local/cuda-8.0/lib64

2.5 make && make install

### 3. Boost:

[http://www.boost.org/users/history/version\\_1\\_63\\_0.html](http://www.boost.org/users/history/version_1_63_0.html)

I download boost from the link above.

Use the boost from /boost\_1\_63\_0/tools/build

3.1 sh bootstrap.sh

3.2 ./b2 install --prefix==\$HOME/linux\_64

### 4. Heimdall install:

4.1 git clone git://git.code.sf.net/p/heimdall-astro/code heimdall

4.2 ./bootstrap

4.3 ./configure prefix=\$HOME/linux\_64 --with-thrust-include-  
dir=\$HOME/opt/thrust-1.6 --with-dedisp-dir=\$HOME/linux\_64 --with-psrdada-  
dir=\$HOME/linux\_64 --with-boost=\$HOME/linux\_64 --with-cuda-include-  
dir=/usr/local/cuda-8.0/include --with-cuda-lib-dir=/usr/local/cuda-8.0/lib64

4.4 make && make install

#### run Heimdall:

heimdall -f PM0141\_017A1.fil -dm\_nbits 32 -v -output\_dir . (or ~/linux\_64/bin/heimdall)