

GammaLib - How_to_use_gdb - # 4

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How to use gdb?

Running an executable

```
gdb --args ctlike inobs=file.fits ...
```

Getting the backtrace

```
(gdb) where
(gdb) bt
(gdb) bt full
```

Setting break points

```
(gdb) break ctobservation.cpp:129
```

Continuing after a break

```
(gdb) s (or step) # Step to next source line
(gdb) n (or next) # Step to next source line in the current file
```

Inspecting variables

```
(gdb) p obs
(gdb) p obs.m_models
(gdb) p obs.m_models.m_models
(gdb) p **(obs.m_models.m_models._M_impl._M_start)@1 # Print one element of vector
(gdb) p **(obs.m_models.m_models._M_impl._M_start+1) # Print 2nd element of vector
```

Using a core dump

```
$ ulimit -c unlimited
$ ssh root@dirac (or whatever machine)
# sysctl -w kernel.core_pattern=/tmp/core-%e.%p.%h.%t
kernel.core_pattern = /tmp/core-%e.%p.%h.%t
# exit
$ gdb -c /tmp/core-gsrvy.8920.dirac.1596483045 (or whatever the filename of the core dump)
(gdb) symbol-file /home/knodlseder/install/bin/gsrvy (or whatever path to the binary)
(gdb) sharedlibrary
(gdb) where
```