

NetCDF installation for C and Fortran libraries:

Follow the instructions below. The commands are denoted by '>>'. The order of the commands is important.

In bash:

Set-up main directories (first line can be any directory you want):

```
>> export ROOTDIR=/dfs2/dabdub/emartins  
>> export SRCNCDF=${ROOTDIR}/srcNETCDF  
>> export INSNCDF=${ROOTDIR}/NETCDF_INST  
  
>> mkdir $SRCNCDF  
>> mkdir $INSNCDF  
  
>> cd $SRCNCDF
```

Download NetCDF source code:

```
>> wget ftp://ftp.unidata.ucar.edu/pub/netcdf/netcdf-4.4.1.1.tar.gz  
>> wget ftp://ftp.unidata.ucar.edu/pub/netcdf/netcdf-fortran-4.4.4.tar.gz
```

Untar the files:

```
>> tar xfvz netcdf-4.4.1.1.tar.gz  
>> tar xfvz netcdf-fortran-4.4.4.tar.gz
```

Install NetCDF-C libraries:

```
>> cd netcdf-4.4.1.1/  
>> export CC=gcc  
>> export CPPFLAGS="-DNDEBUG -DgFortran"  
>> export CFLAGS="-O"  
>> export FC=gfortran  
>> export F77=gfortran  
>> export FFLAGS="-O -w"  
>> export CXX=g++  
>> export BIN=Linux2_x86_64gfort  
  
>> ./configure --prefix=${INSNCDF} --disable-netcdf-4 --disable-dap  
>> make all check install
```

Install NetCDF-fortran libraries:

```
>> cd ../netcdf-fortran-4.4.4  
>> export NCDIR=${INSNCDF}  
>> export NFDIR=${INSNCDF}  
>> export CPPFLAGS=$CPPFLAGS" -I${NCDIR}/include"  
>> export LDFLAGS=$LDFLAGS" -L${NCDIR}/lib"  
>> export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:${NCDIR}/lib  
>> export LIBS=$LIBS" -lnetcdf"  
  
>> ./configure --prefix=${INSNCDF}  
>> make check  
>> make install
```

IOAPI installation

```
>> export IOAPIDIR=${ROOTDIR}/IOAPI
>> cd ${IOAPIDIR}
>> wget --no-check-certificate https://www.cmascenter.org/ioapi/download/ioapi-3.2.tar.gz
>> tar xfvz ioapi-3.2.tar.gz
>> cp Makefile.template Makefile
```

Edit Makefile, in lines 133-135 this way:

```
#BIN      = Linux2_x86_64
BASEDIR   = ${ROOTDIR}/IOAPI
INSTALL   = $(BASEDIR)

>> cd ioapi/
>> cp Makefile.nocpl Makefile
```

Edit ioapi/Makefile in line 81 this way:

```
BASEDIR = ${ROOTDIR}/IOAPI

>> cd m3tools/
>> cp Makefile.nocpl Makefile
```

Edit ioapi/Makefile in line 38 this way:

```
BASEDIR = ${ROOTDIR}/IOAPI

Line 61:
LIBS  = -L${OBJDIR} -lioapi -L${NCDIR}/lib -lnetcdff -lnetcdf ${OMPLIBS} $(ARCHLIB)
$ (ARCHLIBS)

>> cd ..
>> make all
```