

# Data Assimilation Research Testbed Tutorial



## Section 2: The DART Directory Tree

Version 2.0: September, 2006

## The DART Code Tree

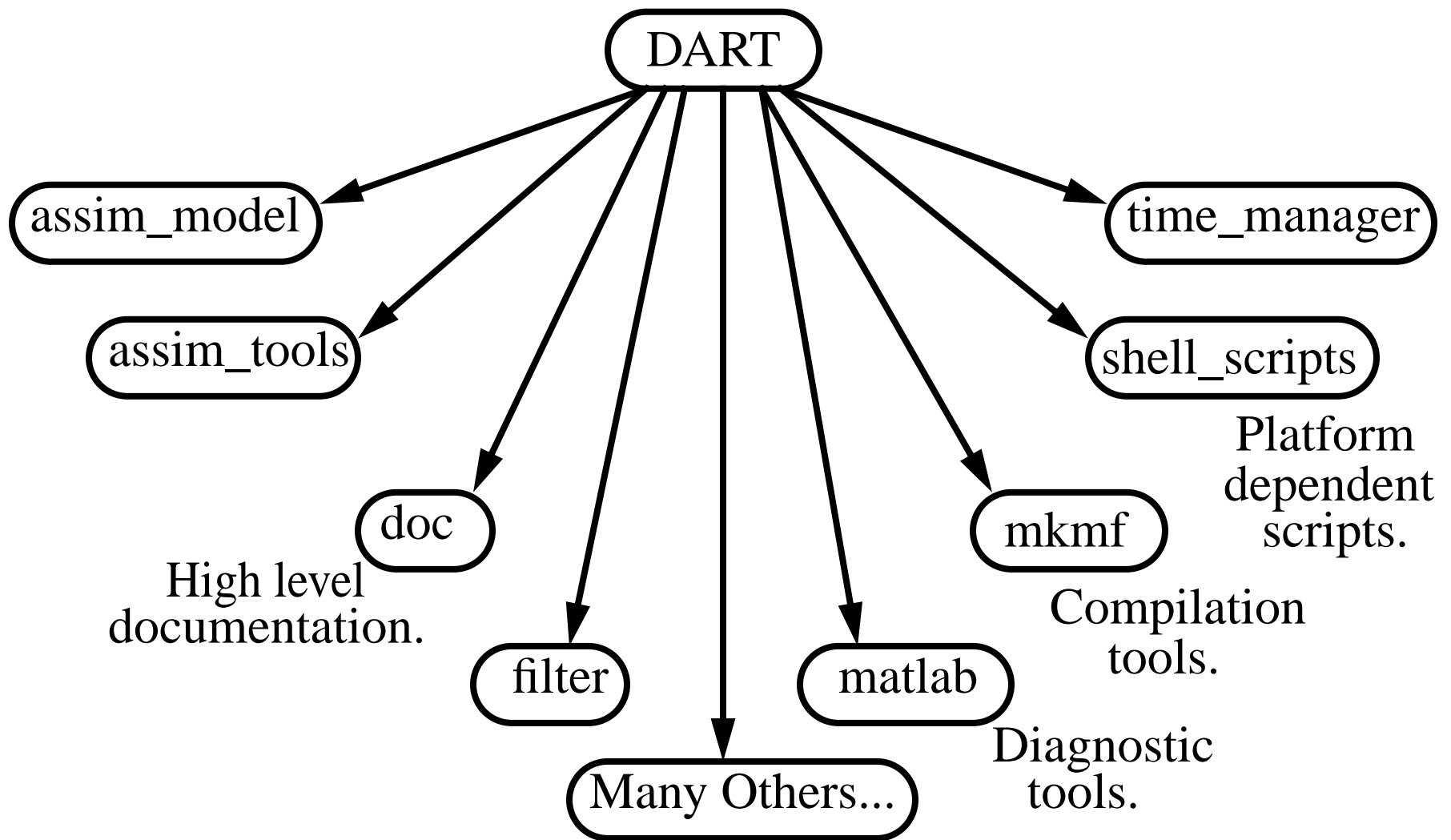
The main portion of DART is implemented as Fortran-90 modules.

Modules are contained in directories under the main DART directory.

DART also contains:

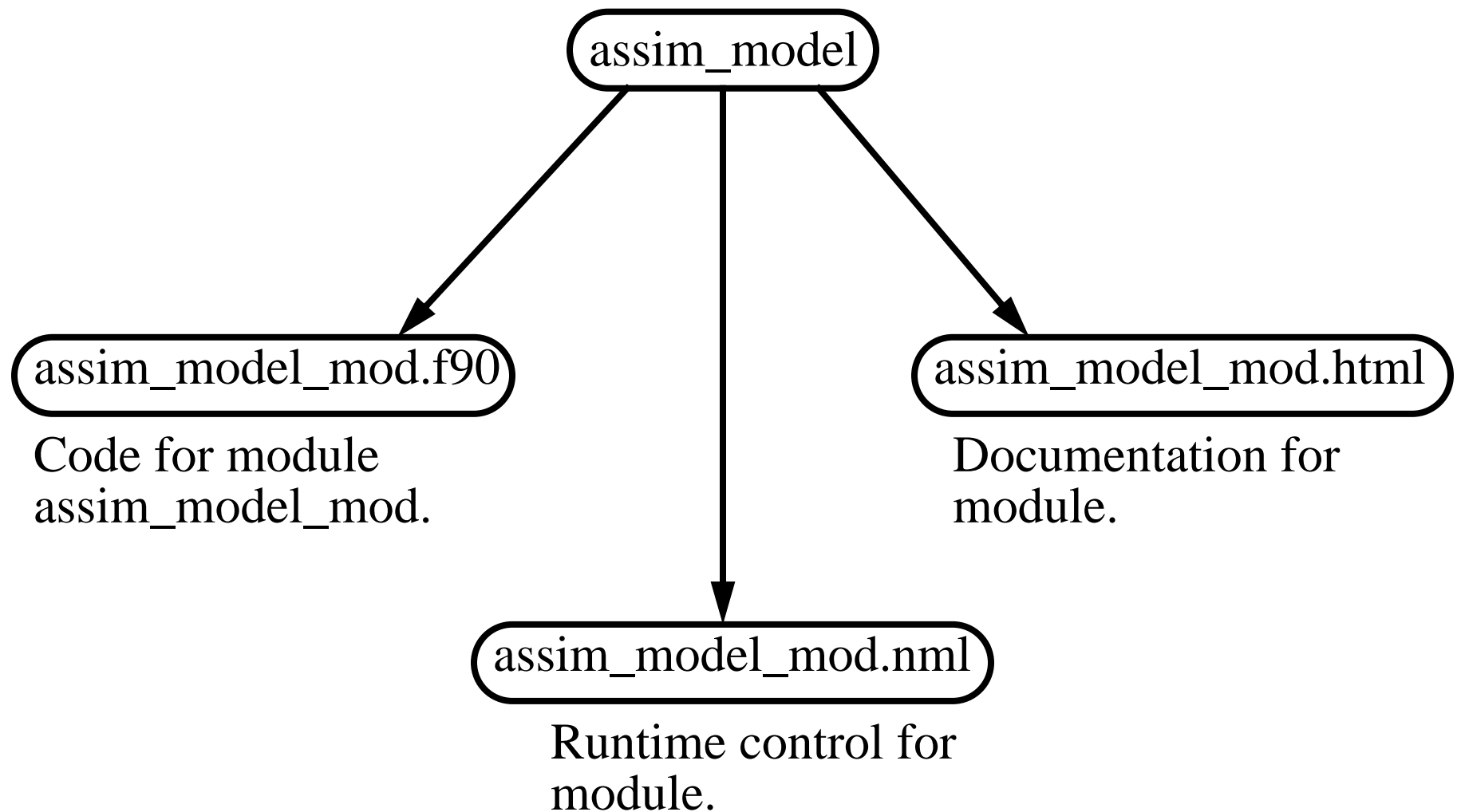
- Documentation (really!),
- Namelist control files,
- Compilation tools,
- Shell scripts for managing large applications,
- Diagnostic tools.

## DART Top level directory structure:

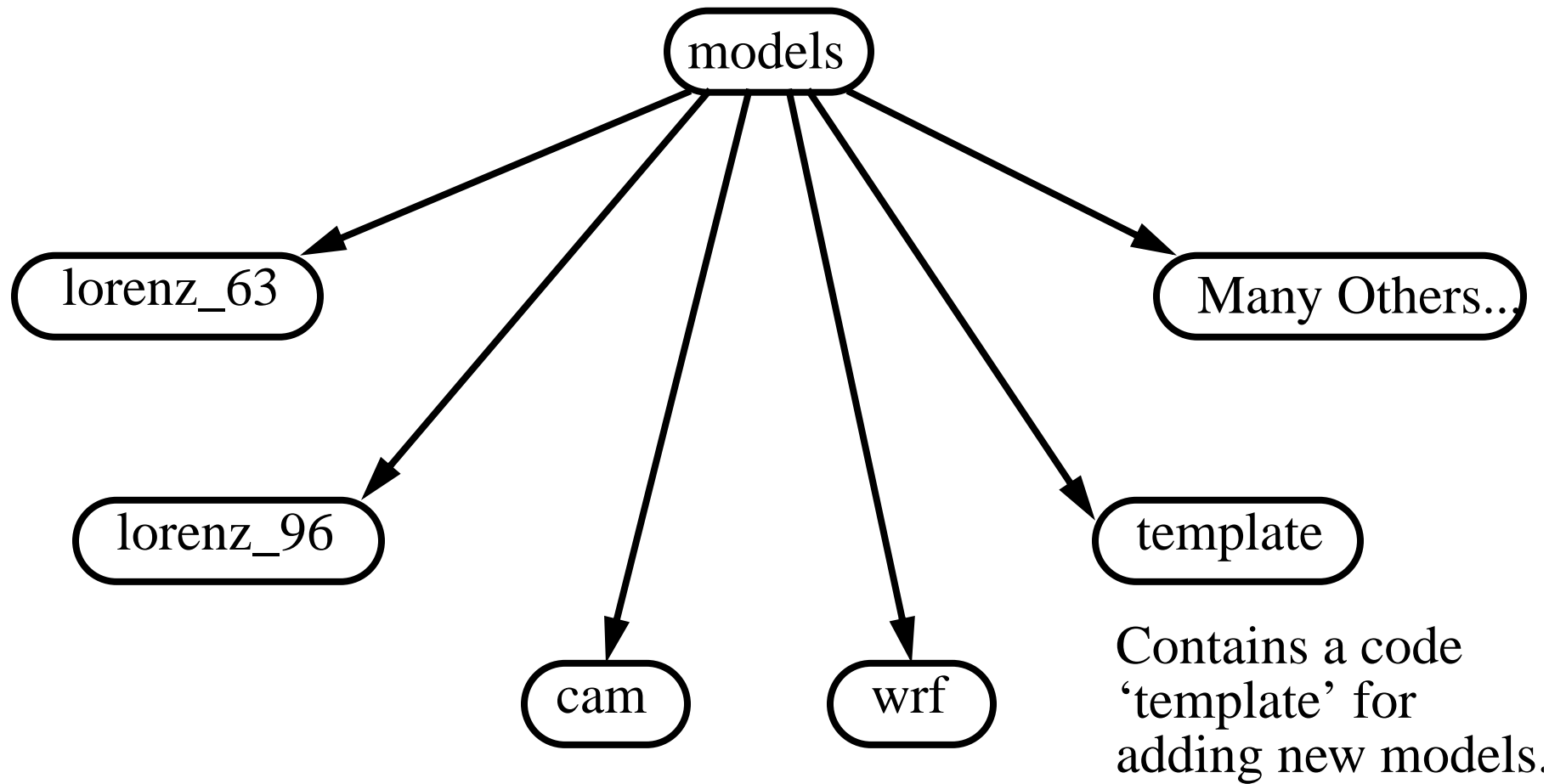


You can see this by perusing your DART subdirectories.

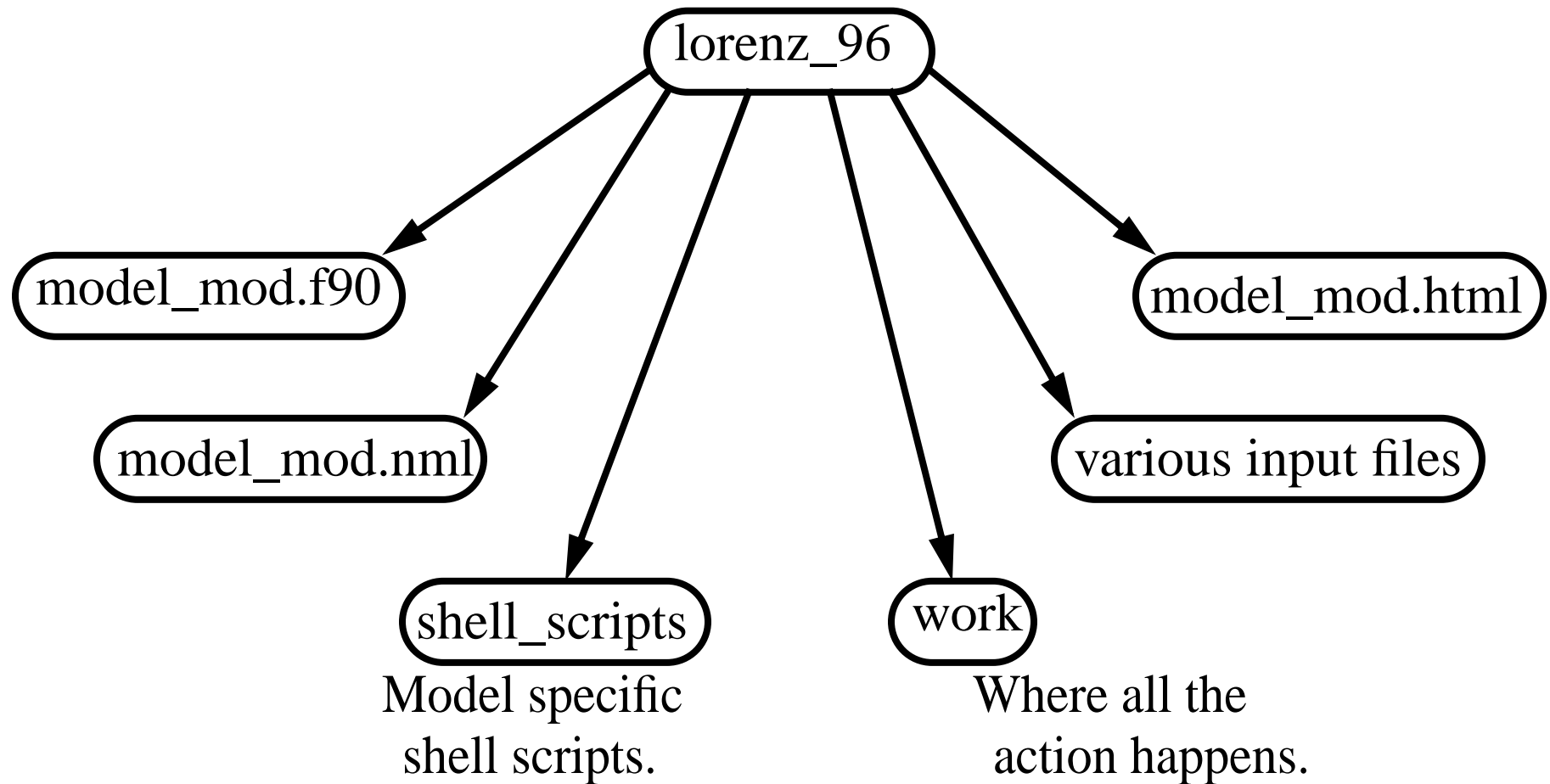
## DART Second level for standard F90 module directory:



## DART models directory:

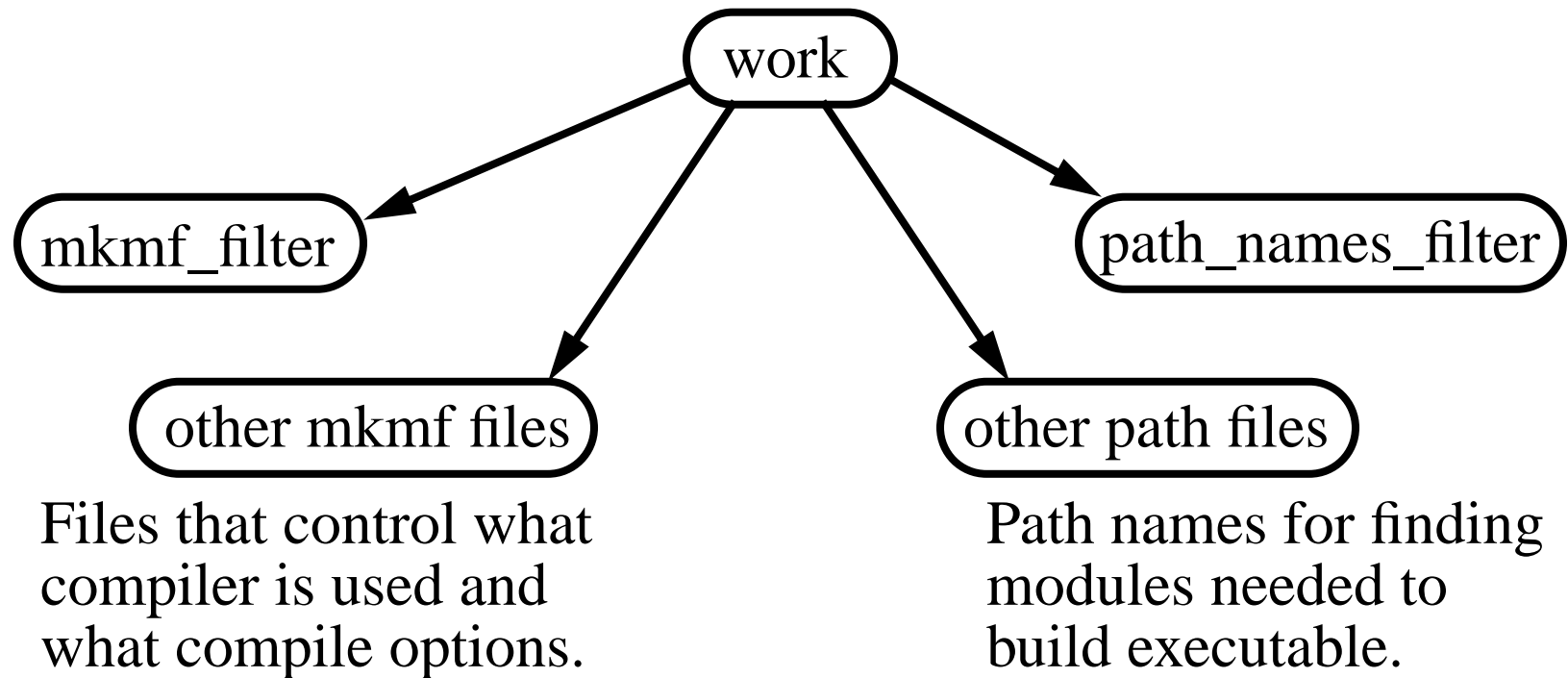


## DART models directory details:



Check out contents of *models/lorenz\_96*.

## DART model work directory details:



Executables are built and run in model work directories.

Makefiles and compiler output files reside here.

Input and output files generally reside here.

Lots of other junk files tend to accumulate here.

Check out contents of *models/lorenz\_63/work*.

## Coding style:

Look at ensemble adjustment filter observation increment subroutine.

In *assim\_tools/assim\_tools\_mod.f90*.

Search for ‘*subroutine obs\_increment\_eakf*’.

Computes update mean (new\_mean).

Computes ratio of updated standard deviation to prior.

Compare to tutorial slides in section 1.