

CLM Tag and Physics Version Naming Conventions

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As of July 2014, CLM tag names are of the form: clmX_Y_Z_rN. The first part clmX_Y_Z indicates the scientific version number. X is the major version number (e.g. CLM4). Y is the minor number, typically zero for a primary release and something other than zero for a developmental release (e.g. CLM4_5). An increment in Z means that there has been a change (typically a bug fix) that results in a significant change in the model solution. The last part of the tag name (rN) refers to the specific software tag revision number since the base (clmX_Y) version of the model was created. Any software change to the code base will result in an increment of N.

Note that the majority of tags DO NOT change answers, or if they do, answers are only marginally different (e.g., round-off level changes due to a change in order of operations, minor bug fixes, datasets, etc) and therefore Z remains unchanged.

Any particular tag may include several different 'physics' options. In the case of the clm4_5_Z_rN series, the two main physics options are clm4_0 and clm4_5. Note that in some tags, a developmental physics package may also be an option. For example, in clm4_5_1_r076, there is a physics package option called clm5_0. This is a developmental physics package and is not intended to be used by anyone other than the core development team. Answers can and likely will change with the clm5_0 option from tag to tag until the clm5_0_1_rN tag series is created.

Example using X=4 and Y=5 for purpose of explanation; these are not real tags:

clm4_5_0_r001 CLM4_5 release code

clm4_5_0_r002 code refactor (no answer changes)

clm4_5_0_r003 minor bug fix (insignificant change to model solution)

clm4_5_1_r004 major bug fix (significant change to model solution)

clm4_5_1_r005 clm5_0 physics updates (clm4_5 physics option, answers unchanged; clm5_0 physics option, answers change)

clm5_0_0_r001 CLM5_0 release code