



Interactive comment on ““Gtool5”: a Fortran90 library of input/output interfaces for self-descriptive multi-dimensional numerical data” by M. Ishiwatari et al.

Anonymous Referee #2

Received and published: 13 February 2012

The gtool5 library provides a common interface for a variety of models, post-processing and visualization tools. This simplifies the applicability of codes and problem solutions for scientists. Key to keep in mind is getting a common data model for all.

This is an extremely valuable project. However, two details which are important are either only sparsely described or not at all.

The first point is a missing clear description on the use of the CF-convention and its used version. It is not clear in how far referring to gtool4 is helping the reader in understanding how the inheritance/development has been done or is based upon. Directly related to this issue is the introduction of extensions to the CF-convention which is not

C1612

comprehensible.

The second point is the mentioned parallel support which is not explained in any way. As full-grown GCMs are mentioned as one of the target models, it is inevitable to have a clean perspective of this library component.

As it is not crucial to have performance issues mentioned, it would be nice to get a performance estimated for certain problem sizes.

p3693:

l 22-23 The netCDF library cannot contain metadata but allow adding and manipulation of those.

p3694:

l 8 leave out "the" from "the technical"

l 19 leave out "other" from "other ground processes"

l 26 models can only be validated but not verified as they represent only an approximation of what our understanding of the real world is

p3695:

l 3 grasp sounds a bit like slang: better use understand or realize

l 9 "verify the validity" - see previous remark for p3694 l 26

l 11 see remark for this page's l 3

l 25 see remark for this page's l 3

p3696:

l 5 coordinate variables - information is not needed

l 11 "we need an input/output"

C1613

l 24 netCDF reference needs to be corrected

p3698:

l 2 standard subject name is "computational science" not "informatics"

l 9 replace both occurrences of "outputted" by "written"

l 10 typo, must be "HistoryCreate"

Interactive comment on Geosci. Model Dev. Discuss., 4, 3691, 2011.

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