

Interactive comment on “Technical note: Harmonizing met-ocean model data via standard web services within small research groups” by R. P. Signell and E. Camossi

Anonymous Referee #2

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The paper proposes a practical approach for aggregating, storing, searching and pre-viewing model data for small research groups.

The solution is basically a workflow based on a combination of some FOSS packages (THREDDS Data Server, pycsw, Iris, NCTOOLBOX), a proprietary software (Matlab) and some python scripts (e.g. scripts to connect THREDDS and pycsw). The implementation of interoperable web services is a specific requirement.

This paper tackles an important issue which is make simple and sustainable (also for small research groups) the setup of an interoperable model data sharing system. The paper's structure seems quite clear, however there are some issues to solve before it

C1281

can be published.

I think the main issue is the incompleteness of some parts. If I have properly understood the paper's objective, the section 3 should be the main part of the paper which should completely describe the authors' approach. On the contrary, it seems incomplete and not entirely developed.

For instance, the integration between software components might be an interesting topic but the description is limited to what has been introduced in 3.3 (script to crawl THREDDS catalogs) and a few other details are scattered around the paper (e.g. 4.1, 4.2). In this case a more accurate description of the python scripts and their publication as Open Source Software would be very useful.

The sections 3.2, 3.3, 3.4 are not fully explained, it's quite difficult to understand features and strengths of the proposed solution. E.g. the "Data preview" part doesn't describe the features of Godiva2 and the comparison with other WMS Clients.

Other topics that could be addressed to complete the discussion: address possible security issues; description of the real effort to implement and maintain the server; description of the hardware and software requirements; insert a new figure for the section 3 (e.g. schema architecture) in order to highlight interactions between components and between the proposed solution and the users (e.g. researchers).

Some more specific points:

a) The two case studies present differences in some details (e.g. YAML file and python scripts to produce XML files). I think that in this way the proposed solution lacks of generality. The authors could integrate these differences in the section 3 in order to present a more complete solution which would adaptable at both (and more) case studies.

b) The same consideration applies to Ipython Notebook (part 4.1). If it is really convenient (for several reasons), it should be introduced in the section 3 to complete the

C1282

proposed solution.

c) The sentence ".. and Ocean Geospatial Consortium Web Map Service for data preview ..." in the Abstract is not clear. The acronym should be Open (not Ocean) Geospatial Consortium. Furthermore the OGC-WMS is not sufficient as "data preview" solution.

d) Many acronyms are introduced without the specification of their meaning

e) It is not clear why is needed a different approach for "forecast models" (part 3.1)

f) Fix the wrong reference number for CKAN - Fig. 5 It should be Fig. 2

g) In the first case study I don't understand the differences between the approaches (CKAN, Geoserver, GeoNetwork vs. THREDDS, pycsw) and why the second is better.

h) Sometimes it seems the authors structured the article as if the readers all know how TDS works.

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