Interactive comment on “Inishell 2.0: Semantically driven automatic GUI generation for scientific models” by Mathias Bavay et al.

Anonymous Referee #2

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It’s always challenging to make the scientific models available for reuse, and one of the difficulties is to provide a clear definition of a model and its input/output parameters. The paper presents a tool developed for facilitating the generation of the configuration for models, which I think can be helpful for addressing the issue. However, I have few concerns about this paper:

1) It seems to me that the authors did not adopt the best techniques for the objective. For example, the authors adopted C++/Qt for creating the GUI, which means that the tool is dedicated to the local desktop environment. I was hoping that the tool can be Web based to allow wider and easier access. Another example is about the XML and INI. I understand that INI is more human friendly; however, a better option is YAML, which is also human friendly and better on supporting complex hierarchical structure,
which is important for describing the models.

2) The paper did not provide a clear approach on handling geospatial information, which is quite common for geoscientific models. I noticed that the paper briefly mentioned about the geographical coordinates, but did not mention other forms of geospatial information, such as polygon, raster.

3) It is important to clarify how the tool is compatible with the standards and specifics that are using by the community, such as these from the OGC. Otherwise, it will be a closed system that is hard to adopt by others.

4) The paper has been written like a technical document instead of a research article. It has been focused on presenting the specs of the tool, but not much on the justification of the approach and the scientific contributions the tool can bring to the community, especially on reusing the scientific models.