Interactive comment on “Modular System for Shelves and Coasts (MOSSCO v1.0) — a flexible and multi-component framework for coupled coastal ocean ecosystem modelling” by Carsten Lemmen et al.

Anonymous Referee #1

Received and published: 23 August 2017

In the manuscript ‘Modular System for Shelves and Coasts (MOSSCO v1.0) — a flexible and multi component framework for coupled coastal ocean ecosystem modelling’ the authors present a new modelling platform enabling coupling facilities between various hydrological and biogeochemical models. The papers is well structured and clear but, in my view, it doesn’t fit GMD standards for publication. In particular, the manuscript doesn’t include scientific results or evaluation of the model software\textendash at least quantitative evaluation of the modelling performance. It doesn’t provide namelists or coupling procedures to support statement of modularity. Besides, It mainly relies on former
published softwares.

I do have concerns about the added value of this manuscript since most of the examples of the MOSSCO software have been detailed in independent papers and have been submitted elsewhere. Indeed most of the examples provide in the current manuscript relies on “submitted papers” or “to be submitted papers” without further details. Those examples if detailed might help the reader to understand how the various modules works together in sequential or parallel modes. Without those examples, it is unclear in which case or scientific questions coupled modular shelves-to-ocean models are required.

Specific comments: P5 L4: For historic => historical P5 L12-15: clear a bad example because PISCES and BFM are both coupled to NEMO and other hydrodynamical models like ROMS.