

Interactive comment on “A new satellite-derived dataset for marine aquaculture areas in the China’s coastal region” by Yongyong Fu et al.

Anonymous Referee #3

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This study proposed and applied a deep learning based method to the medium spatial resolution images at national scale. In the produced dataset, types and locations of marine aquaculture are described in a detailed way, which fill in the gap of this data in China. The topic of the study is interesting and fits the scope of the journal. However, main innovations of this study should be stated more clearly. And there are still some problems that need more explanation. Here with concerns need to be addressed: Question & Comment 1: Compared with the existing method, such as the other deep learning based methods, what are the differences or improvements in the structure of the proposed methods? It is the core value of this study. Thus, main innovations and contributions should be summarized more clear. Question & Comment 2: Have you considered the similar medium-spatial resolution images that may have more spectrum

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information, such as Landsat or Sentinel? I suggest more description about the data choice. Question & Comment 3: Line 31: The production of marine aquaculture in 2017 should be replaced with the most recent statistical data. Question & Comment 4: Line 190: There are many other state-of-the-art models in the computer vision fields, why choose the above models for comparison? More reasons should be given for such selection. Question & Comment 5: Line 480: I suggest that more obvious differences should be point out in this figure. Question & Comment 6: Line 495: As illustrated in the line 280, this study used the publicly available data to mask out coastal land areas that do not intersect with marine aquaculture areas. Why the table still shows accuracy values of the land area?

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