Interactive comment on “Factorial design of experiment (DOE) for modeling solar still parameters” by Malik Al-Abed Allah et al.

Malik Al-Abed Allah et al.

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Dear Editor and Reviewer, The authors will like to appreciate the reviewers for taking the time to constructively critique the manuscript in order to enhance its quality suitable for the research community.

Comment 1 - The paper is poorly written, with many language errors, errors in using capital letters (no capitals after a point, capitals in the middle of a sentence), abbreviations (e.g. introducing once DOE and then always use it), references (not using the first name of the author, but only last name). So the paper should be proofread by a native speaker

Action: It has been reviewed and modified.
Comment 2: The introduction is too long, it should be more concise: not starting with very general statements and summarizing the findings of the authors on the design of the solar stills Action: It has been reviewed and modified

Comment 3: At the end of the introduction it should be stated what the knowledge gap is and how the paper is going to contribute. Action: It has been reviewed and modified

Comment 4: Figures 3 is too obvious and the results can be better summarized in a table (the lines between the measuring points do not have a meaning) Action: We think figure 3 is the most important to show the significant, insignificant factors on the model (there is a proportional relationship between the slope of the line and the effect of the parameters on the responses. As the inclination of the lines increase, the effect of the factors on the responses will be significant), So showing the results using this style is more stable for the reader. All published research has disapplied the results using this technique

Comment 5: Avoid redundant information in the figures, so delete 5a, 6a, 7a. Action: It has been reviewed and added

Comment 6: Give units on the axes of the Figures - Discussion of the results are not given and should, based on literature, be incorporated in the results chapter Action: It has been reviewed and added

Comment 7: The conclusions chapter is too long Specific comments - Action: It has been reviewed and added

Comment 8: The conclusions chapter is too long Specific comments - Line 76-79: delete sentence - Line 80-81: delete sentence Action: It has been reviewed and added

Comment 9: Line 82: How “optimal is defined”? Action: Optimal: mean the most suitable ways to produce fresh water regardless of how far the place is

Comment 10: Line 87: how “inexpensive” is defined? Action: solar still’s materials are relatively cheap and don’t need running cost.

Comment 11: Line 190: do not use “:” in a title (check
rest of paper too) - Line 193-199: references are missing and a better explanation is needed in relation to other methods. Action: It has been reviewed and added Comment 12: Line 216-229: no extra information is given, so delete. - Line 238-249: Action: It has been reviewed and added Comment 13: Line 238-249: some overlap exists with 2.1, so merge the two sections Action: It has been reviewed and added Comment 13: Line 279-280: rather obvious statement, so delete. - Line 286-288: How does this relate to literature (discussion) and combine this with the results of the model. - Line 297-300 and 303-305: Is this the same as what is observed in Figure 3? See comment on line 286-288 - Line 367-373: delete sentences - Line 379-380: Statement is not clear, since it is not totally clear how the model looks like. Action: It has been reviewed and added