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

Anonymous Referee #2

The paper describes an optimisation tool for the design of a solar still. General comments: - The paper is poorly written, with many language errors, errors in using capital letters (no capitals after point, capitals in the middle of a sentence), abbreviations (e.g introducing once DOE and then always use it), references (not using first name of author, but only last name). So the paper should be proof read by a native speaker. - The introduction is too long, it should be more concised: not starting with very general statements and summarizing the findings of the authors on the design of the solar stills - At the end of the introduction it should be stated what the knowledge gap is and how the paper is going to contribute. - More effort should be made to explain the model - 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) - Avoid redundant information in

the figures, so delete 5a, 6a, 7a. - 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. - The conclusions chapter is too long Specific comments - Line 76-79: delete sentence - Line 80-81: delete sentence - Line 82: How "optimal is defined"? - Line 87: how "inexpensive" is defined? - Line 190: do not use ":" in a title (check rest of paper too) - Line 193-199: references are missing and better explanation is needed in relation to other methods. - Line 216-229: no extra information is given, so delete. - Line 238-249: some overlap exists with 2.1, so merge the two sections - Line 267: not clear what is meant by this sentence.. - 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.