

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_111236
Title of the Manuscript:	CALIBRATION AND VALIDATION OF CROPGRO (DSSAT 4.7) MODEL FOR CHICKPEA CROP IN RAIPUR
Type of the Article	Original Research Article

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u>	Yes Yes No Yes Yes More relevant research background and reference should be provided.	Your comment is correct. I have corrected the modification you suggested.
Minor REVISION comments 1. Is language/English quality of the article suitable for scholarly communications?	The language/English quality of the article is suitable for scholarly communications	Yes
Optional/General comments	1. There is no detailed explanation of coefficient determination and root mean square error (RMSE) abstract and conclusion 2. There is a typo in the word validation in the conclusion 3. There is no explanation regarding the block in the Factorial randomized block design chosen. Factorial randomized block design allows experiments on 2 factors with three treatments placed in each block. For example, if there are 2 block grow environments, then 18 experimental data should be obtained that can be used for calibration and validation. 4. RMSE is calculated incorrectly. RMSE is square root of summation of the differences between predicted and observed values and squared divided by number of data. Here's support link for RMSE formula https://medium.com/@mygreatlearning/rmse-what-does-it-mean-2d446c0b1d0e 5. Please provides more explanation on how input data (The daily weather data viz. maximum, minimum temperature, rainfall, etc) modelled in calibration process to get 3 response variable prediction 6. Due to the small number of samples, it is better to use adjusted r squared rather than r squared as an evaluation of model performance. 7. This article could be further enriched if ANOVA analysis was added to the experimental results. The results of this ANOVA will provide a comprehensive explanation of why the pattern of experimental results for the Vaibhav & JG-14 varieties is the same and why the JG-16 variates are different	1. Explanation added 2. Typo corrected 3. Explanation added 4. The correction done 5. Explanation added

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PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	No