

Interactive comment on “Climate resources analysis for use of planning in crop production and rainfall water management in the central highlands of Ethiopia, the case of Bishoftu district, Oromia region” by F. Yemenu and D. Chemed

Anonymous Referee #1

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General Comment: The manuscript deals with climate resources analysis in the central highlands of Ethiopia which is not studied and published much in literatures. And it is generally an interesting idea. Abstracts of the manuscript provide a very good summary of the whole work except key words are missing. The manuscript writing style is very clear and academic. It is also presented with in a logical way. However, it should pay attentions to spelling errors (such as page 3737 “methodology and data analysis”, page 3743 “results and discussions”), and citing references in every page. Introduction

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of the manuscript contains paper review of other works in the area of the problem but it still misses papers that should mentioned here such as the work of Conway et al (2004), Seleshi and Zanke (2004) and Seleshi and Camberlin (2006) . The manuscript has no problem of technical quality. And the method of the study is described clearly. In the result and discussion, it misses citing other works and showing the importance of the work and the result, for example comparing the result with other parts of Ethiopia. I found that the time scale is interesting. Conclusions and discussions are as well written with proper figures and tables. But captions for figures and tables aren't enough. They should be more explanatory. Showing the study area with map is important. And I found that it is confusing to mention the word watershed in the manuscript as it isn't applied for watershed.

Specific comment: Abstract Page 3734 Line 11-12: during the second meteorological decade of which month? Introduction; Page 3735 Line 12: Rockstrom (2003) isn't shown in the reference section; Page 3735 Line 21: (Camberlin and Diop, 2003) isn't mentioned in the reference section Page 3735 Line 22-28: it is mentioned in this paragraph that there are few studies on the issue u dealt with. But you didn't cite some of them in this paragraph; Page 3736 Line 4: correct 2000; Page 3736 Line 26: mention Ati 1995 in the reference; Page 3736 Line 26 and 27: mention both references Awadulla and Hulme in the reference Page 3737 Line 2: try to use the same name in the paragraph and in the reference eg Mersha or Engida. Please use a standard way of writing references; Page 3737 Line 5: mention Mckee et al 1993 in the reference; Methodolgy and data annalysis Page 3737 Line 22: a minimum rainfall of what time scale?...daily, monthly or annual; Page 3737 Line 23: good to show the plot of the rainfall and to mention any previous studies on the trend of the area like Seleshi and Zanke (2004) and Conway et al (2004); Page 3738 Line 1-10: you must show location map using appropriate mapping system; Page 3738 Line 3: change (Yemenu) to (Yemenu 2009); Page 3738 Line 8-10: better to show the growing period of the major crop types in this paragraph; Page 3738 Line 15: is it Mersha 2005 or 2003?; Page 3738 Line 23: Table 1 isn't showing about decades but showing about SPI; Page 3739

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Line 14: is it again Mersha 2005 or 2003? Or mention Mersha 2003 in the; reference Page 3741 Line 20: in the equation, change b to beta; Page 3742 Line 15: include Abramowitz and Stegun (1965) in the reference; Results and discussions Page 3744 Line 22: specify the appropriate season name here. . . .I think it is Belg; Page 3745 Line 18: what is the threshold limit? Please mention this in this line; Page 3745 Line 20: which season? Belg or Kiremt; Page 3746 Line 12: correct the figure number; Page 3747 Line 2: correct the figure number; Tables and figures Generally the captions given for tables and figures are insufficient; Table 1: please indicate the source of this classification; Table 6: caption is missed; Fig 2: define x axis; Include map of the area.

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