

Interactive comment on “Understanding of Morphometric Features for an Adequate Water Resources Management in Arid Environments” by Mohamed Elhag et al.

S. Boteva (Referee)

silvenab@abv.bg

Received and published: 13 May 2017

Dear Editors, Dear Authors, In the following letter I will submit my comments as follows:

General comments The submitted article "Understanding of Morphometric Features for an Adequate Water Resources Management in Arid Environments" is in the scope of the journal and represents a very interesting approach for water resources management. It contains all the necessary parts for a scientific article. The authors clearly prove the benefits of using ASTER GGDEM not only for water but also for other natural resources management, which is supported with detailed analysis. There are some sentences that should be rewritten for better understanding: - Page 1 "The drainage density of the basin has been found very high indicates...." - Page 10 "The variation in-

C1

terpreted that the irregularities of the lithological and geological development within the watershed" - Page 11 "The relation between hydrological characteristics and geological structures..." and "The correlation value of drainage density and stream frequency..." Specific comments Introduction I think there should be one or two more sentences linking the review information between soil properties and hydrological parameters. Materials and methods Part 2.3. Soil sampling – If a method for soil sampling is used it should be cited. Part 2.3. Physical and Chemical soil analysis - it would be better if the methods used for soil analyses are given. Conclusions The last two paragraphs of the conclusion are appropriate for example: the first for description of the site and the second - for the Results and discussion part.

Technical comments Comments concerning the English language: It should be written: - Page 3 Morphometric characteristics aim... - Page 3 The conducted results of the current study discuss that... - Page 5 Map accuracy and quality depend on... - Page 9 aspects of the basin were analysed... - Page 12 which represents that ... Sentences where verb is missing: It should be written for example: - Page 1 "characteristics and is also.. " - Page 3 "Several parameters including slope, aspect, stream network, and upstream flow areas Grohmann et al., 2007; Elhag, 2015)" - Page 7 "which is acquired on June... " - Page 7 "These results are often... " - Page 8 "of rocks which are exposed... " - Page 9 "which is formed by ancient... " - Page 9 "channel of this area is characterized... " Technical corrections: - Page 14 - citation (Elhag and Elhag) - not correct - All years in the References part should be given in brackets As a whole, I recommend this article to be published because of its high scientific and practical value. All my comments aim to improve its quality and to meet all the requirements of the journal.

Yours sincerely,

Silvena Boteva

28, 2017.

C3