



SDI Review Form 1.6

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| Journal Name: | Physical Science International Journal |
| Manuscript Number: | Ms_PSIJ_48418 |
| Title of the Manuscript: | Water balance estimation using Integrated GIS-based WetSpass Model; the case of Birki Watershed, Eastern Tigray, Northern Ethiopia |
| Type of the Article | <u>Original Research Article</u> |

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

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) |
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| Compulsory REVISION comments | | |
| Minor REVISION comments | | |
| Optional/General comments | This article uses a hydrological model based on GIS, whose results can only be used to obtain future scenarios for the formulation of water resources management policies. Although the article is well structured, it only shows the application of a particular model, but not its validation. Therefore, the use of its results could lead to undesirable consequences. The type of article is: case study. | Dear Reviewer. Your worry is correct but the model needs stream gauging for validation purpose and this is the main problem in which lacks the watershed, but we simply check the ground water recharge using hand dung wells in the watershed. Also we recommend that for further policy based application the model needs verification. This research study is GIS based hydrological modelling for integrated water resources utilization and management for sustainable and wise use. |

PART 2:

| | 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) |
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| Are there ethical issues in this manuscript? | (If yes, Kindly please write down the ethical issues here in details) | No, there is no any ethical issues in this manuscript, based on the research ethics we try to acknowledge for those ideas taken from different reviewed papers through citation and referencing on the manuscript. |