

Interactive comment on “Using modelled discharge to develop satellite-based river gauging: a case study for the Amazon Basin” by Jiawei Hou et al.

Jiawei Hou et al.

jiawei.hou@anu.edu.au

Received and published: 21 August 2018

We thank the reviewer for taking the time and effort to review our manuscript thoroughly. The reviewer provided us with valuable comments, which will greatly improve our manuscript. Below please find our response to reviewer’s comments in detail.

Comment #1

“suggest rewriting the abstract, to make it more clear by only summarizing the major results and key conclusions. Your methodology should be described with better clarity.”

Response #1

C1

We thank the reviewer for this constructive suggestion, and will rewrite the abstract as suggested.

We will also add a workflow to explain our methodology better (see response to comment #2 from reviewer #3).

Comment #2

“suggest removing much details in experiment setting, or use tables to list different methods/scenarios, and your calibration/validation periods.”

Response #2

Thank you for these suggestions. We will use two tables to help describe our experiments (Table B and C).

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2018-261>, 2018.

C2

Table B Experiment design (window size) for two methods to develop SGRs

Experiments	I	II	III	IV	V
Optimal Selection	0.15°	0.35°	0.55°	0.75°	0.95°
Window Mean	0.15°	0.35°	0.55°	0.75°	0.95°

Table C Training and validation periods for cross-validation method

Periods	I	II	III
Training Period	2005-2014	2000-2004&2010-2014	2000-2009
Validation Period	2000-2004	2005-2009	2010-2014