

Interactive comment on “Technical Note: A two-sided affine power scaling relationship to represent the concentration–discharge relationship” by José Manuel Tunqui Neira et al.

Renata Romanowicz (Referee)

romanowicz@igf.edu.pl

Received and published: 15 November 2019

General comments

The Authors present a technical note on the parameterisation of concentration–discharge relationships for an electrical conductivity and a number of different solutes, including sodium, sulphate and chloride. The classic one-sided power law parameterisation is substituted by a new, two-sided affine power parameterisation. The authors show that the new parameterisation scheme performs better as judged by the RMSE criterion. The paper is concise and well written. It would gain in scientific merit if the ranges of applicability of the new parameterisation and its predictive uncertainty were

C1

discussed. The number of parameters is increased by one (from two to three), which might not seem to be much but it must introduce more uncertainty to the results.

Specific comments

1. Table 1: The authors use “sulfate” instead of sulphate throughout the whole paper. It is an American spelling and personally I would prefer the classic spelling.
2. Page 8 line 138 ... (a,b) pairs from eq. 3 ...

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2019-550>, 2019.

C2