

Interactive comment on “The CH-IRP data set: a decade of fortnightly data of $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in streamflow and precipitation in Switzerland” by Maria Staudinger et al.

Anonymous Referee #1

Received and published: 19 August 2020

Major comments: The isotopic compositions of stream water in 23 catchments are indeed interesting to the hydrologists. I also understand the hard work for such collection. However, the main concern for me about this work is that it lacks measured isotopes data of precipitation. Although the authors gave the interpolation values for each catchment, I would love to see measurements of these values. Moreover, the data set did not provide precipitation amount data. As the author mentioned, the data set is useful to estimate mean transit time (MTT) or run catchment hydrological models. However, the precipitation isotopic ratios and amount are the most important inputs for the models. MTT was calculated by modeling the relationship between precipitation as an input and hydrological components as outputs. Consequently, it can not calculate MTT ac-

Printer-friendly version

Discussion paper



curately if there is no accurate input information. From my point, the data set did not support the usefulness which mentioned in the introduction. Minor comments: L40 od should be of L159 Average elevation gradients for each month were calculated. Why the average elevation gradients for each month were calculated? I did not understand this sentence.

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2020-27>, 2020.

Printer-friendly version

Discussion paper

