

The authors, three of four affiliated with the University of Calgary, Canada, need to explain a glaring omission in references of Melsen et al. (2025). (<https://doi.org/10.1080/02626667.2025.2475105>). Is it simply the study, on which the discussion paper is based, was substantially completed before the publication of the Melsen et al. Paper?

Melsen et al. (2025) provides a history of the use of NSE. It is focused on societal/community aspects of NSE's proliferation, not the technical aspects and consequences of its use. Our paper was indeed mostly completed before the Melsen paper was published, but even so the relevance of this paper to our work seems a little lower than "glaring omission" implies. There is an interesting argument to be made that Melsen suggests that objective function use is, at least partly, determined by subjective reasoning (see also, Addor & Melsen, 2018, for a similar argument on model use), and we will update the introduction to make this connection.

I've been both amused and amazed, a long lost but recently found Nash-Ding efficiency (NDE; Ding, 1974, Page 65) performs as well as a late comer, the KGE, even numerically, Duc and Sawada (2023, Figure 2). (<https://doi.org/10.5194/hess-27-1827-2023>).

Thank you for bringing this to our attention. We are interpreting this comment as asking why this specific efficiency score was not part of our work. There are many different objective functions in current use, and we had to limit our selection somehow. We will update section 2.1.2 to explicitly mention that there are many metrics out there, provide some examples, and ensure our reasoning for selecting the ones we do use is clear to the reader.

I'm grateful to both my alma mater, the University of Guelph, Canada, and my former employer, Ontario Ministry of Natural Resources in Toronto. Because of their foresight, I found myself, one of three young Government of Ontario engineers, listening to Master Nash delivering his NSE lecture at Guelph, one splendid fall afternoon of 1968.

Whose idea it was to invite Nash of Wallingford, UK, and/or Galway, Ireland, to visit Guelph? Their identity remains buried in archives. The search continues.

PS. This reminiscence has been prompted upon reading the 'little rant' in the last paragraph raised by Keith Beven in CC1 elsewhere.