

Geosci. Model Dev. Discuss., community comment CC1 https://doi.org/10.5194/gmd-2021-409-CC1, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

General and editorial comments on gmd-2021-409 thru Page 13Jack Settelmaier

Community comment on "Inland lake temperature initialization via coupled cycling with atmospheric data assimilation" by Stanley G. Benjamin et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-409-CC1, 2022

It's great to read of such a reduction in errors, from 5-10K to 1-2K. I've seen how lakes often stand out in some of the NWP-based output

our NWS use (e.g. NBM). It's interesting, as well, that some of our lakes dry up to some degree in Texas and the Southwest.

I'm sure you know, but I'm staring at 1-d use, vs 1-D. Is former really correct?

Line 128 (small-lake) vs 137 (small lake)

Line 177 "lake cycling" I'm unfamiliar with, but I assume it's the thermal turning over of the lake water. Maybe add a quick definition?

Line 202 first to mention HRRRv3 rather than just HRRR?

Line 244 FVCOM. How does that relate/differ from FV3 I see more referenced these days?

Line 256 I suppose it's also proper to be specific about Laurentian Great Lakes vs Great Lakes.

Line 279 "20 s" vs 20s vs 20 sec

Line 293 Was GLOFS deined before this mention?

Line 299 I had no idea there was 15" (inch?) MODIS data!?! Wow.

Line 323 "ocean-contiguity" new for me. Meaning connected water?

Line 332 "25-m" but above in 279 you use "20 s" Is that proper? Adjective vs noun I presume

Only reas through Page 13 today.