Comment on egusphere-2022-1167
Anonymous Referee #1

Referee comment on "Reduced order digital twin and latent data assimilation for global wildfire prediction" by Caili Zhang et al., EGUsphere, https://doi.org/10.5194/egusphere-2022-1167-RC1, 2022

The paper proposes a digital twin fire model using ROM and deep learning to improve the efficiency of global wildfire predictions. In addition, Latent data Assimilation is used to the prediction process. The work is novel and the problem is also challenging and needed. Forest fires is an area which really needs to be investigated. The proposed digital twin also runs 500 times faster for online predictions than the original JULES-INFERNO model without requiring High-Performance Computing (HPC) clusters. It is a nice work.