

Geosci. Model Dev. Discuss., community comment CC1  
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## **Comment on gmd-2021-317**

Ather Abbas

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Community comment on "KGML-ag: a modeling framework of knowledge-guided machine learning to simulate agroecosystems: a case study of estimating N<sub>2</sub>O emission using data from mesocosm experiments" by Licheng Liu et al., Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2021-317-CC1>, 2021

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Dear authors,

Thank you for your work. I have a question about methodology. In lines 215 onwards, you have mentioned that you have calculated feature importance for a four layer GRU neural network. But how exactly this feature importance was carried out. Did you apply a model agnostic method such as SHAP, LIME, perturbation importance etc or you used model-based feature importance as is done for XGBoost, Random Forest or attention based neural network models?

Thank you very much.

Regards,

Ather Abbas