Dear Dr. Oliver S. Boyd,

We thank you for additional suggestions to improve our manuscript SRL-D-20-00335R5 entitled “New Insights into the Lake Erie Fault System from the 2019 ML4.0 Ohio Earthquake Sequence”. We hereby submit a revised version by making corresponding changes.

We thank you again and hope the new version could be further considered for acceptance to SRL.

Best Regards,

Dongdong Yao, Yihe Huang, and Jeffrey L. Fox

**Review Comment 1**: Specify here in the text what velocity model you are using to get the Green's Functions.

**Author Response 1**: We add the following sentence in the main text “…and a 1D velocity model as shown in Table S1.”

TableS1: 1D velocity model used for synthetic seismograms (CUS model)

|  |  |  |
| --- | --- | --- |
| H(km)  Thickness | Vp (km/s)  P velocity | Vs (km/s)  S velocity |
| 1.0 | 5.00 | 2.89 |
| 9.0 | 6.10 | 3.52 |
| 10.0 | 6.40 | 3.70 |
| 20.0 | 6.70 | 3.87 |
| 0.0 | 8.15 | 4.70 |

**Review Comment 2**: Replace “given” with “for” (Line 102)

**Author Response 2**: Done

**Review Comment 3**: Replace “,” with “and” (Line 104)

**Author Response 3**: Done