

Dear Dr. Greenfield,

Thank you very much for reviewing our manuscript. In the following paragraphs we reply each of your comments. For each reply we detail what we changed in the manuscript accordingly.

Kind regards,

Sebastian Heimann

I.

Comment: Page 2, Line 4: The sentence starting "In physics..." is awkward. I suggest changing into "Physically..."

Thank you for pointing this out. We decided to go for "In the field of physics, ..." to make the meaning clearer without changing it.

Changed: "In **the field of** physics, ..."

II.

Comment: Page 3, Line 1: the second "let" in the sentence is not required.

Done.

Changed: "... and ~~let~~-f be the force vector ..."

III.

Comment: Page 3, Line 2: I would move the "then" to between "is" and "given"

Done.

Changed: "... ~~then~~ the GF representation is **then** given by ..."

IV.

Comment: Page 12, Line 9: The sentence starting "Yet..." doesn't sound right. I suggest changing it to "In addition..."

Done.

Changed: "In addition~~Yet~~, seismic targets can provide derivatives of the synthetic displacements ..."