

Interactive comment on “Study on Site Amplification Factor Correction for Earthquake Early Warning System” by Quancai Xie et al.

Anonymous Referee #1

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The paper aims to estimate the frequency-dependent site amplification factors for Earthquake Early Warning and design the causal recursive infinite impulse response (IIR) filter to model these factors and to simulate the spectra and accelerograms at target locations and also to evaluate the performance of IIR method. However, the following issues need to be improved, 1. It is suggested that the abstract need to be revised to be as concise and understandable as possible. 2. IIR method is seldom introduced in this article, and the method is the key to this article. What work has the author done on IIR method? 3. Some things are wrong in Table 1 and Table 2. For example, in Table 1 Surface in PGA includes Obs. and Sim., but it only includes Obs. Now. And value 8.3 in the Sim. in Table 1 is calculation error. Please check it carefully. 4. English expression needs improvement, such as, (1) Pay attention to the

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comparative level in English, Line 25, It also shows good performance . . . , should be “It also shows better performance . . .” (2) There is something wrong with the presentation of the month, Line 8, Septemper.1,2000, should be “Sept. 1, 2000” or “September 1, 2000” (3) It’s better to use the third person in the manuscript unless you have done so already, such as Line 9 and Line 11, I selected 673, I selected data, . . . (4) Attention should be paid to the singular and plural forms in English expressions, for example in Line 14, There exists 20 meter . . . it should be “There exists 20 meters . . .” (5) What does “the he M5.2” mean in Line 2 and Line 3 below the table 4? (6) On the basis of the above, it is suggested that the English expression should be re-polished and the author’s innovative work on IIR method should be reflected. It is suggested that the article be revised and retried.

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