Dear Referee 1. We appreciate your positive comments on the manuscript. I will revise or explain the following three comments one by one.

1. The word "Plane" indicates the meaning of inputting seismic waves in a two-dimensional plane, and of course it is no problem to remove them.

2. We replot the figure 1, changed it to a color picture, and improved the quality. The new figure 1 is as follows:
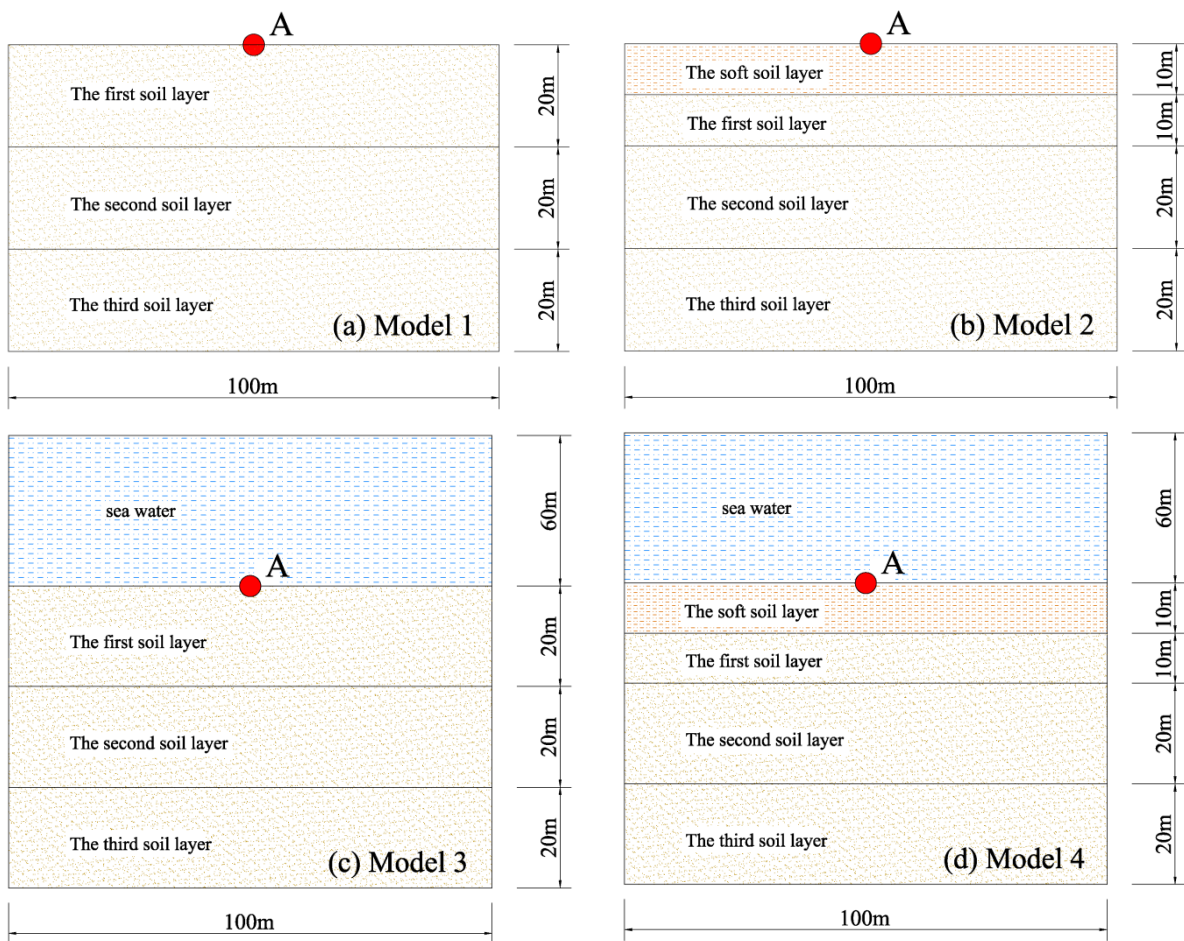

Figure 1. Four typical free field models

3. The Fourier spectra of Kobe and El Centro waves are supplemented in this paper. The new figure 2 is as follows:
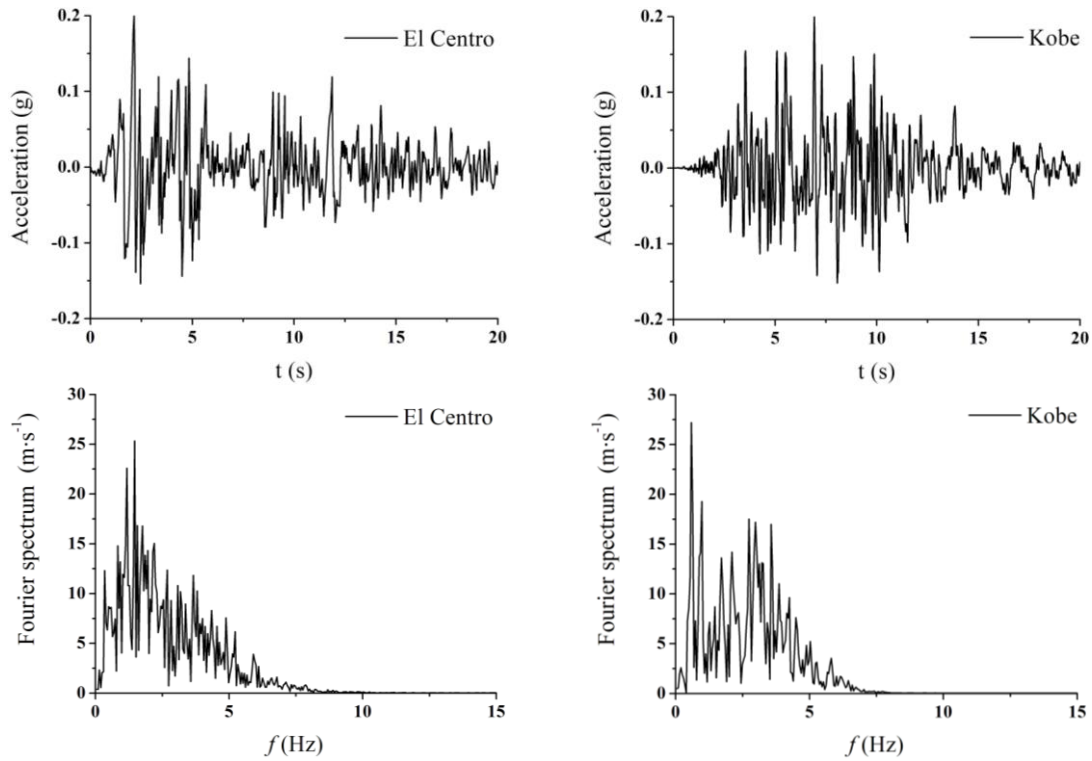
Figure 2. Acceleration time history curve of seismic waves

4. In this paper, the estimation formula of grid size is given in formula 10, $\Delta l \leq (\frac{1}{10} \sim \frac{1}{8})\lambda$. The main reason for the difference between the grid input of SV wave and P wave is that the propagation velocity of SV wave and P wave is different, refer to formula 11, $\lambda = \frac{V}{f}$. Where, Δl is the maximum grid size, λ is the minimum input wavelength, f is the highest frequency of seismic wave, V is the wave velocity of seismic wave. By substituting the soil parameters into the above formula, we can get the value of Δl =3m in the form of SV wave input and Δl =17m in the form of P wave input. In order to improve the simulation accuracy, the mesh size of SV wave input is 2m×2m, and that of P wave input is 5m×5m.

Thank you for providing us with comments and suggestions on our manuscript.