Thank you Sir, for your time and comments. The idea of the work is to check the available different techniques for modeling the H/V curve. As discussed in the text a recent advancement of H/V modeling is suggested by Sánchez-Sesma et al (2011). Who established that one's might invert the H/V curve alone for soil structure Vs profile directly because of the fact that the H/V are linked to Green function, and should be considered as the intrinsic property of the soil. However very recently (5th November, 2016) an article appeared online in the Geophysical Journal International by the Jose Pina Flores, suggested the joint inversion of H/V curve with dispersion curve because of non-uniqueness of the problem (though the H/V curve obtained here is achieved by the Green function analysis).The point I want to make is that If the Green function based modeling of H/V is not capable of Vs retrieval by using the H/V curve alone and it is necessary to include dispersion curve to reduce the non-uniqueness for inversion. In such situation We believe that Rayleigh wave ellipticity approach of H/V modeling is a realistic one because both dispersion and ellipticity curve are attributed to the same wave type (Rayleigh wave) not like The DFA approach which considered all wave type (body and surface waves) contribution for the H/V curve and later its inversion with dispersion curve (which is based on Rayleigh wave only)

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The surface wave as whole and the Rayleigh wave in particular dominated in seismic wave filed, is demonstrated by some of the previous studies perform for noise wave field characterization. We tried to check if we have a control site (borehole) where we could have noise recording and check these different, modeling approach for H/V curve we will be able to see which modeling analysis give a better match with experimental data.

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The Vs profile is given in Fig.5. However I will give the borehole model below as well.

Borehole model.

Thickness (m)	Vp(m/s)	Vs (m/s)	Density (kg/m3)
10	1000	270	1700
18	1600	360	1700
10	2000	455	1700
17	2700	550	1700

bedrock 3500 1300 2000

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Yes the analysis is done for one site because of the unavailability of borehole Vs profiles at our disposal, for the other sites (the Vs measurement were not done at the time of well-logging of the other boreholes), the analysis is done therefore for this site because of Vs measurements availability, which is required to obtain the theoretical ellipticity for the site by forward modeling from the obtained model and compared it with experimental data.

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Regarding the sensitivity analysis of the H/V/ellipticity curve to the soil properties such as Vs,Vp, thickness and density is already done by Wathelet, 2005 and Hobiger, 2013 for the Rayleigh wave ellipticity approach.(As the modeling of the H/V is done with ellipticity of Rayleigh wave, hence the mentioned studies especially the Wathelet 2005 has checked all the parameter which can affect ellipticity curve)

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About the English I am sorry for it I am trying my best in improving it.

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