Computer Programmes for Seismic Interpretation in Foundation Studies

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Abstract: Computer programmes for use, particularly in Civil Engineering studies, have been developed. They generate seismic time-distance curves for the single and multiple reflections, critical refractions, etc., that can arise in a medium of one or two uniform layers overlying a uniform substratum. The layer interfaces are specified numerically and may have any two-dimensional shape. Travel times and ray paths are computed according to the laws of geometrical optics, with an arbitrary headwave refraction hypothesis being used for the generation of headwaves. This paper discusses that a number of programme produced ray path diagrams are displayed together with their corresponding time-distance plots.

Keywords: Computer programmes, civil engineering, seismic, geometrical optics, headwave