地震波の曲面屈折

中野正吉

ON THE REFRACTION OF SEISMIC PULSE AT THE CURVILINEAR BOUNDARY

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Synopsis

A theoretical result is obtained about the problem of refraction and reflection of an elastic plane pulse at a cylindrical boundary. It is assumed that the axis of cylinder is situated parallely to the wave front, which makes the problem a two-dimensional one, and that the front be described by a step function, $H(\tau)$. First we treat only SH wave as an incident pulse, and later, take into considerations about the more general case. K. Sassa once noticed the deflection of incident angles of seismic initial disturbances around the Volcano Aso, and discussed the phenomena from a ray theory. The theoretical difference becomes clarified between ray and wave theories, in analysing in detail the actual data at the Aso Laboratory.