

**Ray-tracing of Infrasonic wave propagation with the eruption of Mt.Asama at 2004 Sep.**

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At September, 2004 , Asama-yama explodes, and infrasonic wave phenomena in connection with this eruption is observed widely over Japan.. About this phenomenon, some analyses are already made, and its actual condition is clarified(ex.,Fujiwara et al.,2004 Autumn meeting of the volcanological society of Japan). Ray-tracing analysis is also done, but there is an assumption of horizontal homogeneity of wind speed, direction and temperature through its analysis. However, as for near Japan, a jet stream exists high up in the sky, for this reason, vertical and horizontal structure is changing a lot, and to take-like 3-dimensional structure into consideration is desired. At the Meteorological Agency, four times weather analyses per day are performed and the 3-dimensional structure of atmosphere is grasped spatially in time. The propagation characteristic and sound wave line analysis of infrasonic wave about the example concerned were tried using this data. Some difference is seen although it does not differ greatly from the analysis assumed that a result is horizontally uniform. It will report for details at presentation hall.