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SVC070-P43 会場:コンベンションホール 時間:5 月 23 日 16:15-18:45

CTBT 微気圧振動監視施設 (IS30) で観測された微気圧振動波形　－事例：新燃岳の噴火－
Detected infrasound signals in Isumi, Japan - the Eruption of Shinmoe-dake -

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The infrasound observation system is installed in Isumi, Chiba-prefecture (approximately 60 km SE of Tokyo) as a component of the International Monitoring System for CTBT's verification scheme. It is an array observation site and is comprised of six elements. It had been deployed on November 2004. Until now, many interesting infrasound signals were observed.

The infrasound signals generated by the volcanic explosions of Minamidake, Sakura-jima might be the typical examples. Signal made by the large explosions of Sakura-jima were sometimes detected and we are trying to discuss propagation characteristics of infrasound signals by using them, which include dispersion, attenuation, etc.

Shinmoe-dake had minor eruption on 19th of January 2011 and is erupting actively since 26th of January. Furthermore the large explosions occurred several times, whose waveforms at JMA's nearest microphone station had more than 100[Pa]. The observation system detected successive infrasound signals which came from the direction of Shinmoe-dake since 26th of January, and also detected a series of infrasound signals as often as large explosion had occurred. The distance between Shinmoe-dake and the observation site is approximately 950 km. Travel time of infrasound waves was estimated approximately fifty minutes. According to estimated sound speed profile along the propagation path, duct might be established within the troposphere, and a series of infrasound signal seemed to show a tendency of dispersion.

キーワード: インフラサウンド, 火山爆発, 圧力波, 微気圧計
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