

CTBTの検証制度を担うインフラサウンド観測網でとらえられたシグナル Infrasound wave-trains from the Russian meteorite detected by CTBTO's infrasound observation network

新井 伸夫^{1*}, 岩國 真紀子¹, 石原 吉明², 山本 真行³, 平松 良浩⁴, 古本 宗充⁵
Nobuo Arai^{1*}, Makiko Iwakuni¹, Yoshiaki Ishihara², Masa-yuki Yamamoto³, Yoshihiro Hiramatsu⁴, Muneyoshi Furumoto⁵

¹ 日本気象協会, ² 産業技術総合研究所, ³ 高知工科大学, ⁴ 金沢大学, ⁵ 名古屋大学

¹Japan Weather Association, ²AIST, ³Kochi University of Technology, ⁴Kanazawa University, ⁵Nagoya University

Infrasound is one of four technologies (including seismic, hydroacoustic and radionuclide) the CTBTO (Comprehensive nuclear-Test-Ban Treaty Organization) uses to monitor the globe for violations of the CTBT that bans all nuclear explosions. There are currently 45 infrasound array stations in the CTBTO's network that measure micropressure changes in the atmosphere and data from the stations is sent in near real time to Vienna, Austria, for analysis at the CTCTO/IDC (International Data Centre). And both the raw and analyzed data are provided to all Member States.

Infrasound wave-trains from the meteorite that passed and broke up over Russia on 15 February 2013 were detected by more than 10 infrasound stations in the CTBTO's network.

In the presentation, we introduce all infrasound records observed at stations in the CTBTO's network and try to discuss the estimated energy released and how the meteorite broke up.

キーワード: 核実験監視網, インフラサウンド, 隕石, 衝撃波

Keywords: International Monitoring System, Infrasound, meteorite, shock wave