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Implications from the analysis of meteoric infrasound

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Monitoring of infrasound has been widely applied in the past to detect nuclear tests. The Limited (Partial) Test Ban Treaty of 1963 confined nuclear test explosions to the underground marking the end of the global interest in infrasound. During the negotiation of the Comprehensive Nuclear-Test-Ban Treaty, in 1995-96, it became gradually clear that infrasound monitoring should become one of the four techniques for the treaty's verification system. The global interest in infrasound has increased significantly since the signature of the CTBT. Meteors are one of the few natural sources mimicking a nuclear. Therefore, it is an ideal object to test detection capability, phase identifiers, localization procedures and propagation models of infrasound and their processing techniques. In this presentation, we will show the results of studies on meteoric-generated infrasound and their implications for infrasound as verification technique. In addition, results of the 2007.09.15 meteor in Peru will be discussed which is one of the few meteoroids in recent times leaving an impact crater.