

ID: P4.5-038

Type: e-Poster

of the reduction of human activity due to the pandemic in the identification of infrasonic events by I09BR Station

Friday, 2 July 2021 09:00 (15 minutes)

The analysis of infrasonic data from the I09BR station, installed in the vicinity of the city of Brasilia, Brazil, indicated a significant reduction in the level of local noise during the COVID-19 pandemic, allowing us to identify other sources of signals previously masked by cultural noise. Most infrasound signals recorded at the I09BR array are originated from sources located close to the surface due to mainly urban activity (airport, factories) and also by quarry blasts that can be recorded in two IMS technologies: seismology and infrasound. Government decrees to control the movement of people in cities to contain COVID-19 considerably reduced the noise produced by the city, improving the performance of the infrasonic station in detecting distant mine blasts. In this work, data from the infrasound station I09BR were analyzed, to observe the variation in the pattern of infrasonic detection caused by changes in people's routine due to social distancing measures decreed by the Government.

Promotional text

Due to the continuous analysis of the infrasonic station I09BR data, several detection patterns can be observed. With the social isolation measures on account of the Covid-19 pandemic, there was a variation of these patterns.

Primary authors: Mr NERI, Brandow (Seismological Observatory of the Brasilia University, Brasilia, Brazil); Mr BARROS, Lucas (Seismological Observatory of the Brasilia University, Brasilia, Brazil); Ms ASSUNÇÃO, Letícia (Seismological Observatory of the Brasilia University, Brasilia, Brazil); Mr MACÊDO, Arthur (Seismological Observatory of the Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia University, Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia University, Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia University, Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia University, Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia University, Brasilia, Brazil); Ms VON HUELSEN, Monica (Seismological Observatory of the Brasilia University, Brasilia, Brazil)

Presenter: Mr NERI, Brandow (Seismological Observatory of the Brasilia University, Brasilia, Brazil)

Session Classification: T4.5 e-poster session

Track Classification: Theme 4. Performance Evaluation and Optimization: T4.5 - Resilience of the CTBT Monitoring Regime, including Lessons Learned from the COVID-19 Pandemic