

1.2-P09. Ground-Truth Events from Mining Blasting

In Brazil mining blast are systematically made in different locations with sufficient energy to be detected at distances up to 1000 km. However, the origin time is not accurately measured; because it's not of a mining interest to determine this information. Particularly in the Carajás mine, located in the State of Pará, in northern Brazil at least one big blast is made by month, which could be transformed in a GT0 event if origin time was controlled. This work aims to create conditions to bring these explosions to attend GT0 events requirements by measuring the origin time with the accuracy required by a GT0 event and installing new stations to improve the azimuthal coverage of the Brazilian Seismographic Network in the Amazon region. In this way, we intend to contribute with PTS-CTBTO to increase the number of Ground-Truth events in Brazil and help in the development of a three dimensional velocity model for South America. Consequently, improving the PTS-CTBTO seismic events association and location capability of the IMS seismic network in the South-American continent.

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