

09 Infrasound station routine data analysis and sources from South America

The Infrasound Station I09BR, located in Brasilia, Brazil, was installed in 2001 and has been in operation to this date with four elements of 18m WNRS. The station has some data quality issues and is undergoing major maintenance works planned to be finished in 2018. Until now, the team at the Seismological Observatory of the University of Brasilia actively worked to maintain the station within the minimum required standards of an IMS infrasound station. Recently, the infrasound data was integrated to the routine data analysis at the observatory in synergy with the seismic data. The sources which are commonly detected by the IS09 station are: earthquakes; mine blasting; bolides; supersonic aircrafts; rocket launches from Kourou (French Guiana), South America volcano activity from Ecuador and Chile, big storms, etc. This analysis is important for some sources, like bolide, which are not always detected by the seismic sensors, e.g., the bolide from 26/march/2017 10:55 was felt and reported by many people, initially as a small earthquake, but it was not detected by any seismic station. After the infrasound data analysis, the detection of a signal from the atmosphere clearly indicated the possibility of a bolide, which was later confirmed by AMS.

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