CTBT Science and Technology Conference 2021 (SnT2021)



ID: P2.3-448 Type: e-Poster

Events Location Using Spectrum From Seismoacoustic Data Of Telesiesmic Stations

Wednesday 30 June 2021 11:45 (1 minute)

A series of earthquakes occurred within the year 2020. These earthquakes were felt both on land and sea. IMS stations in Africa, Europe, and North America that were at teleseismic distances from the epicentre recorded these events. The earthquakes of 3 June & 1 September for Chile and 18 June for New Zealand were analysed using data from seismic and hydroacoustic stations at teleseismic distances as well as Infrasound data from local and regional distances. The waves were extracted and studied by methods of spectrum and azimuth. Results from the analysis showed that the spectrum studies could be used to clear pick the shocks and aftershocks of the earthquakes from stations that are at teleseismic distances from the epicentre. The azimuth from the analysed data was consistent with the known azimuth for the events.

Promotional text

Spectral Analysis is a less complex and useful tool to study and record events at teleseismic distances if the background noise is reduced. Understanding spectrum will ease the understanding of the earth complex system.

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Session Classification: T2.3 e-poster session

Track Classification: Theme 2. Events and Nuclear Test Sites: T2.3 - Seismoacoustic Sources in Theory and Practice