

Seismo-Acoustic signature of Beirut Port Explosion

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(O2.1-290)

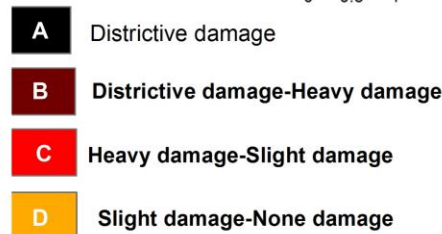
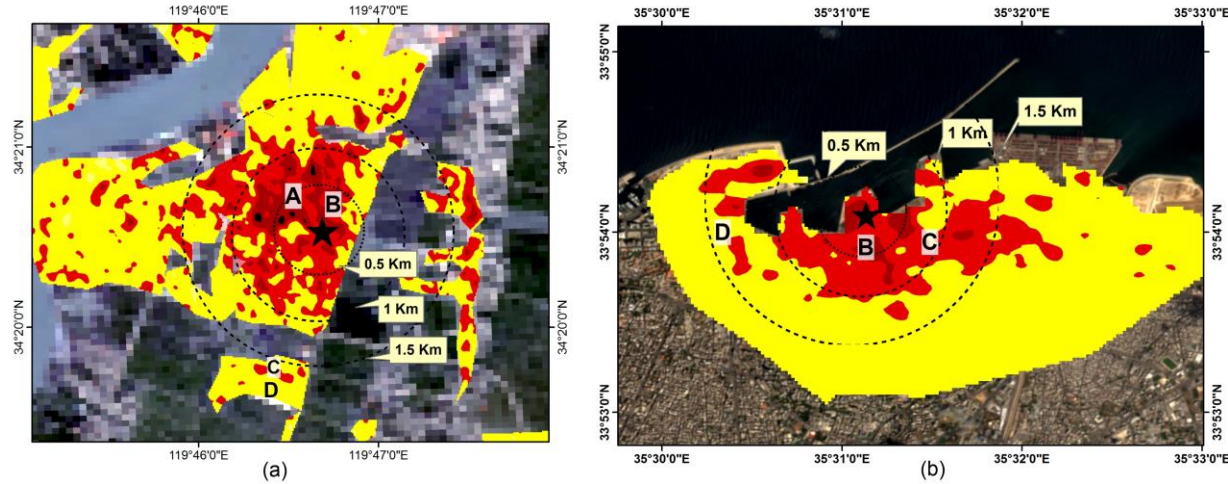


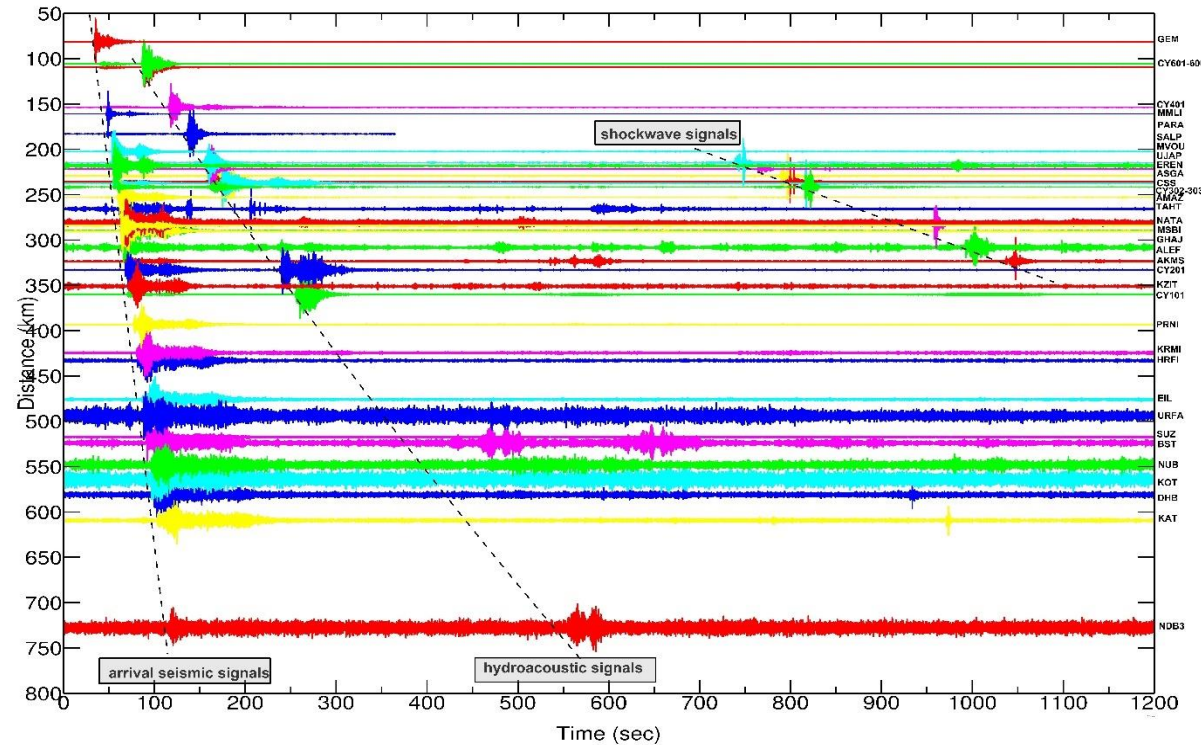
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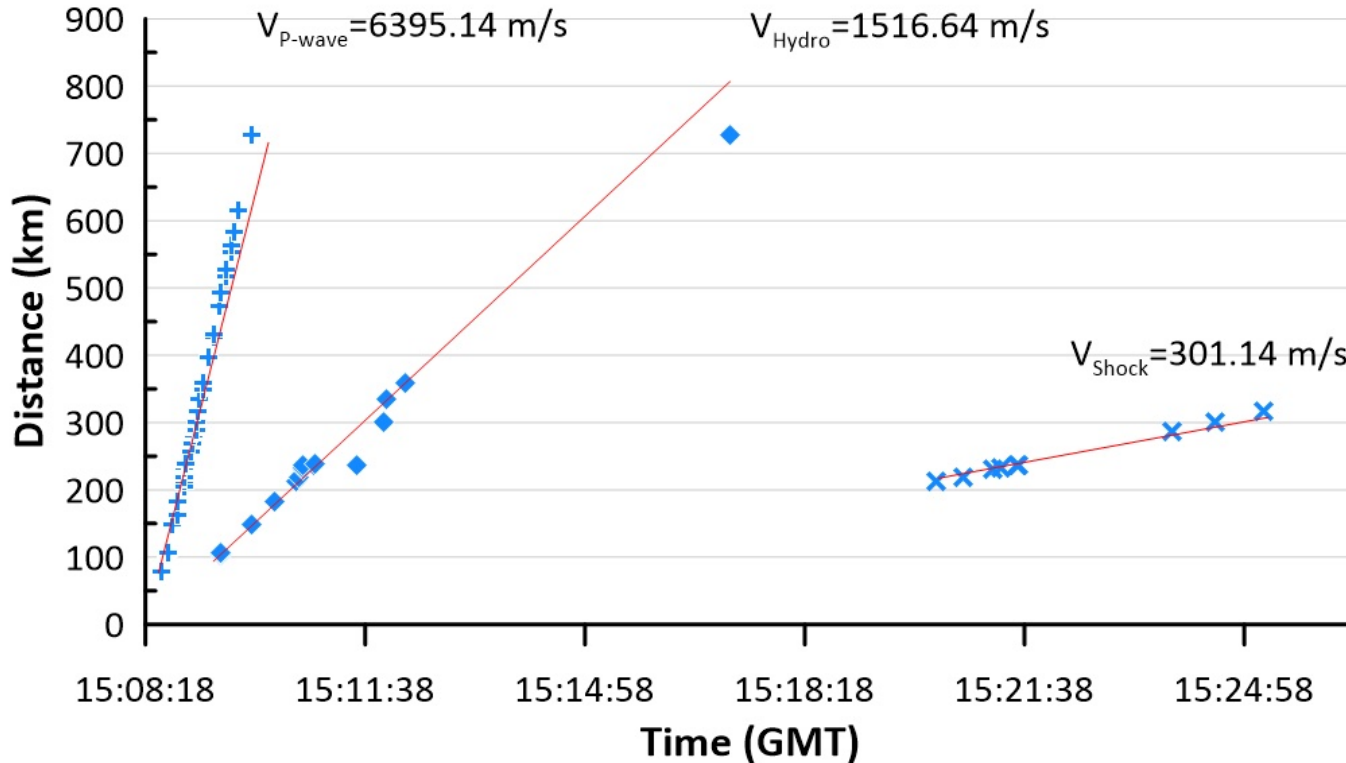
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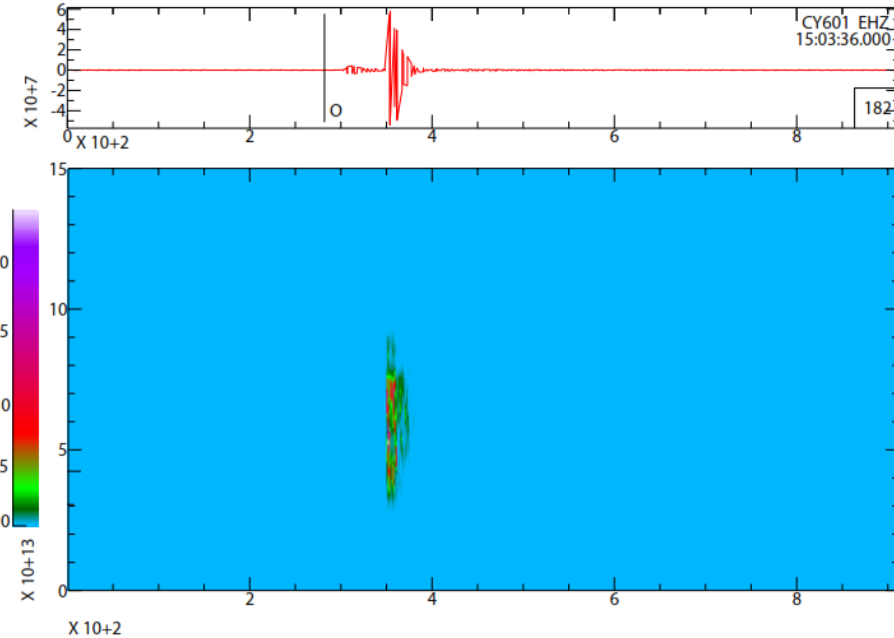
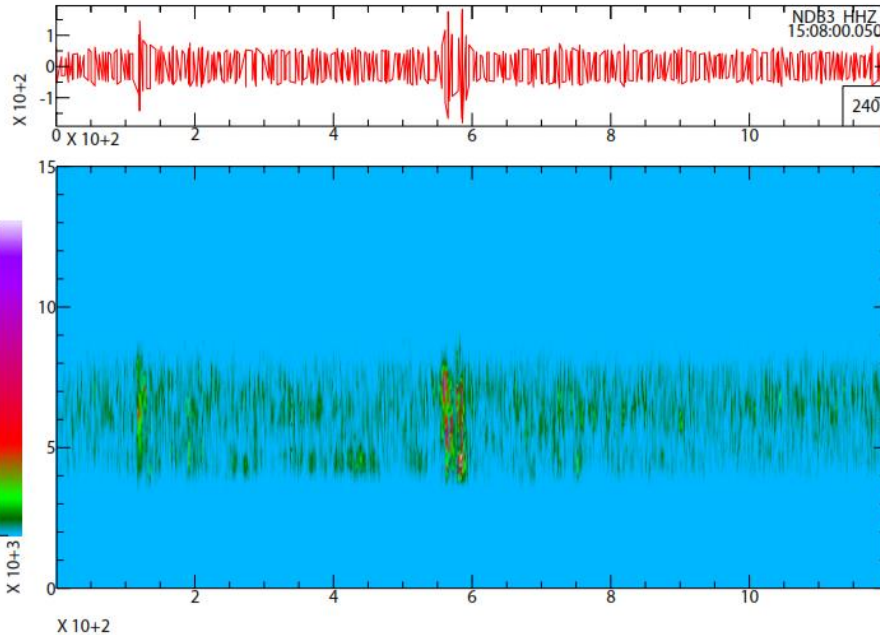


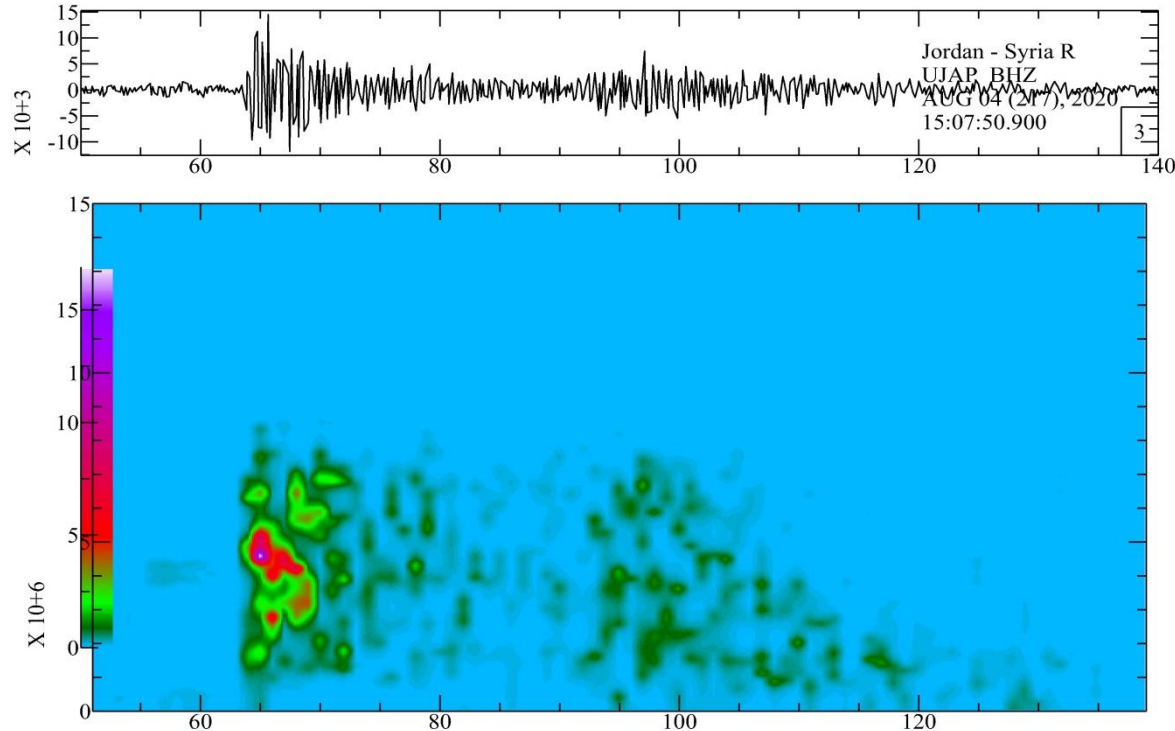




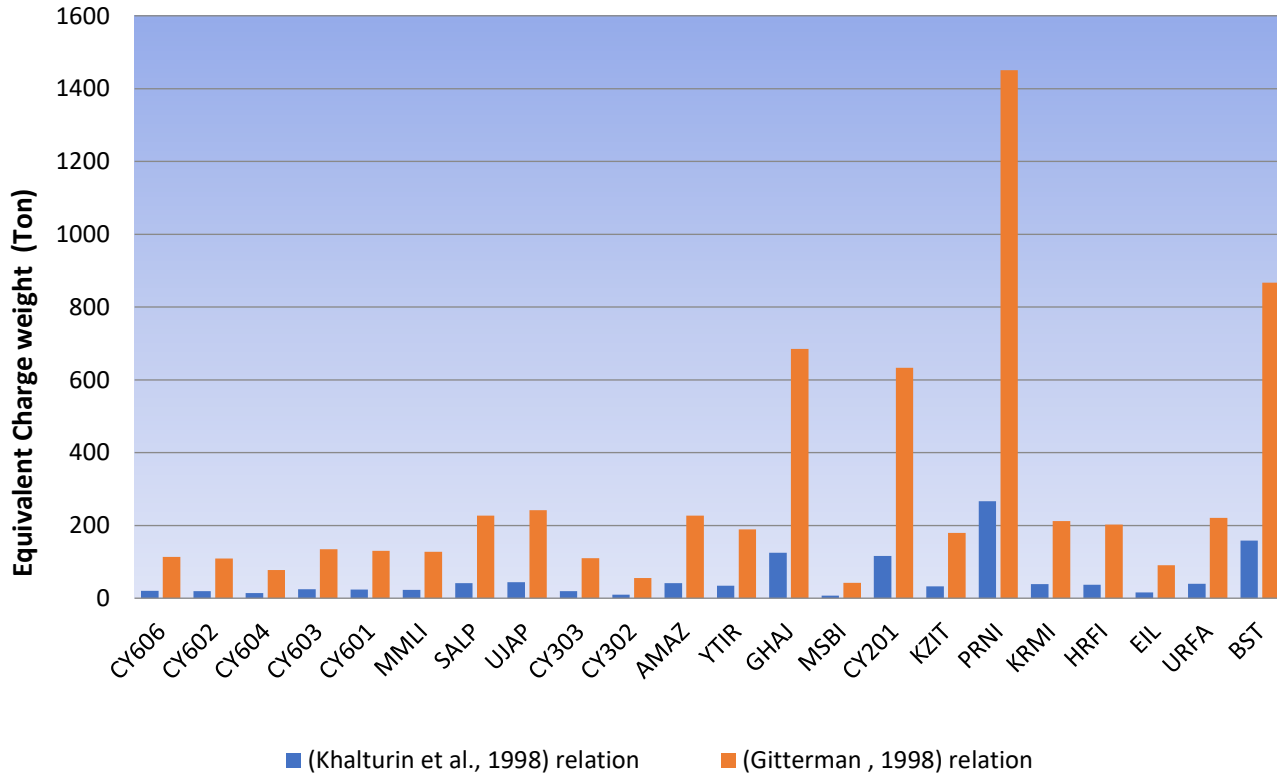






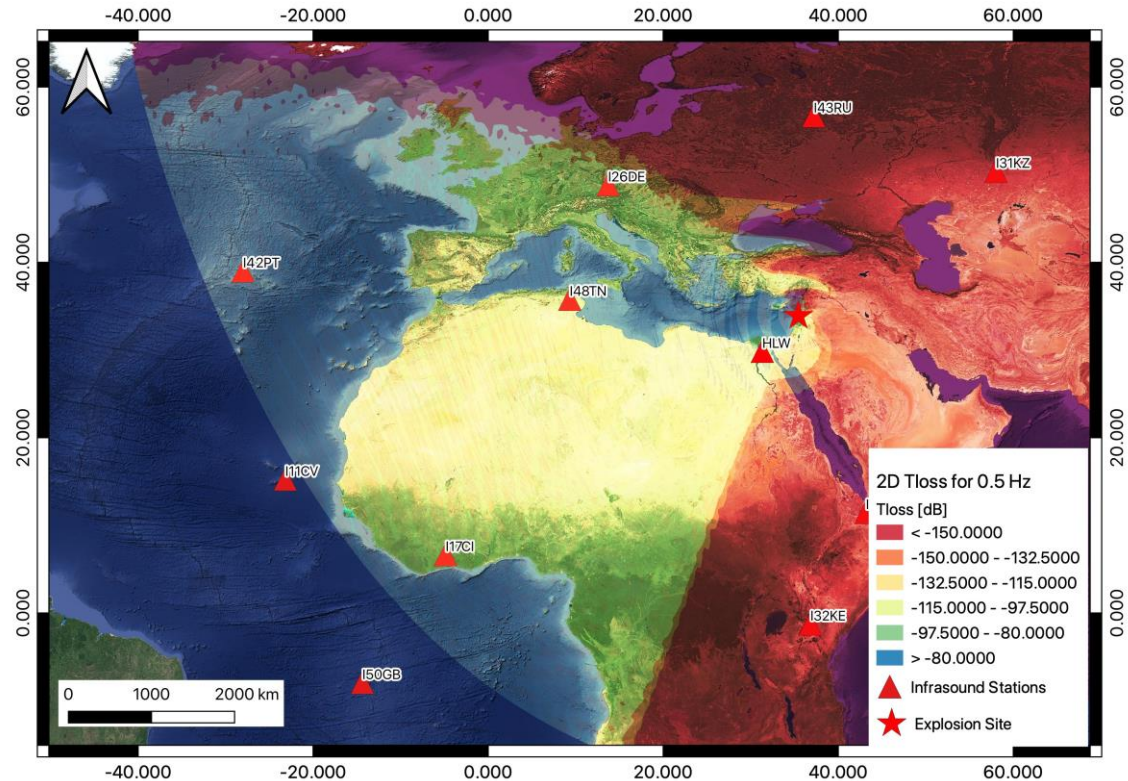


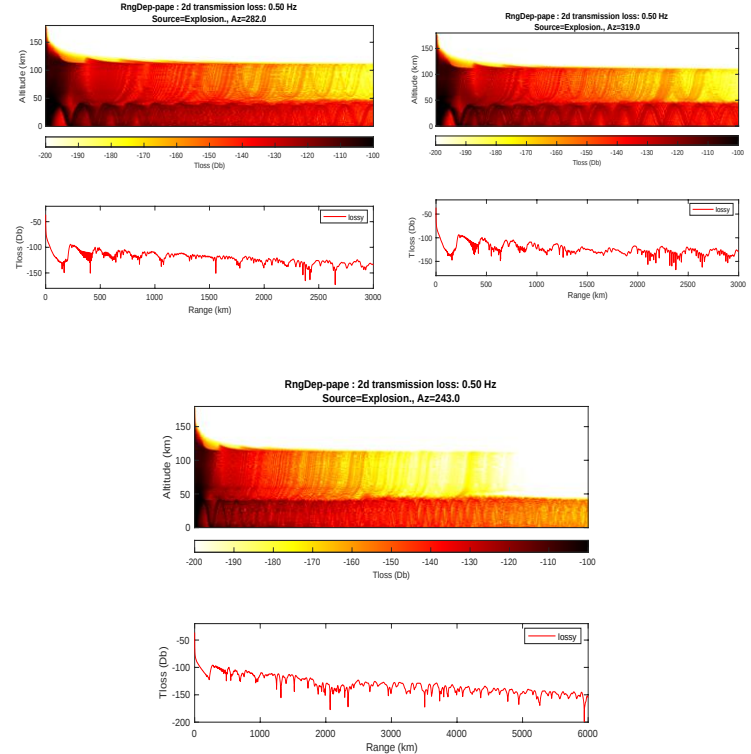
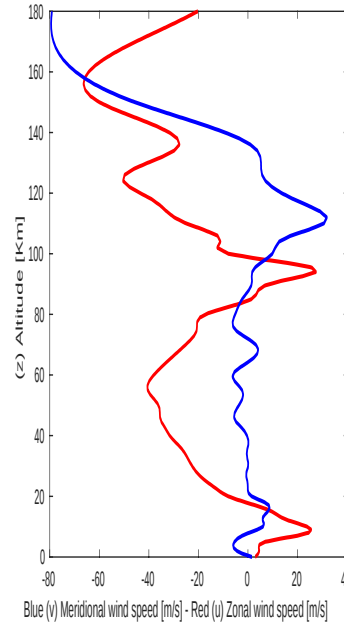
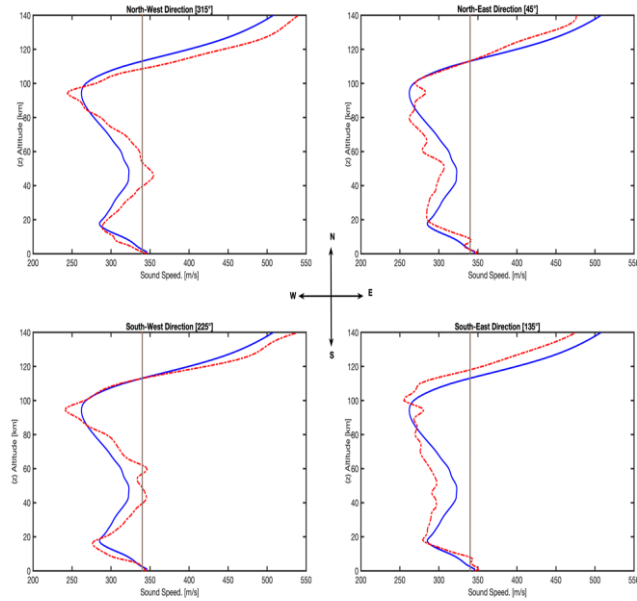
Yield Calculation





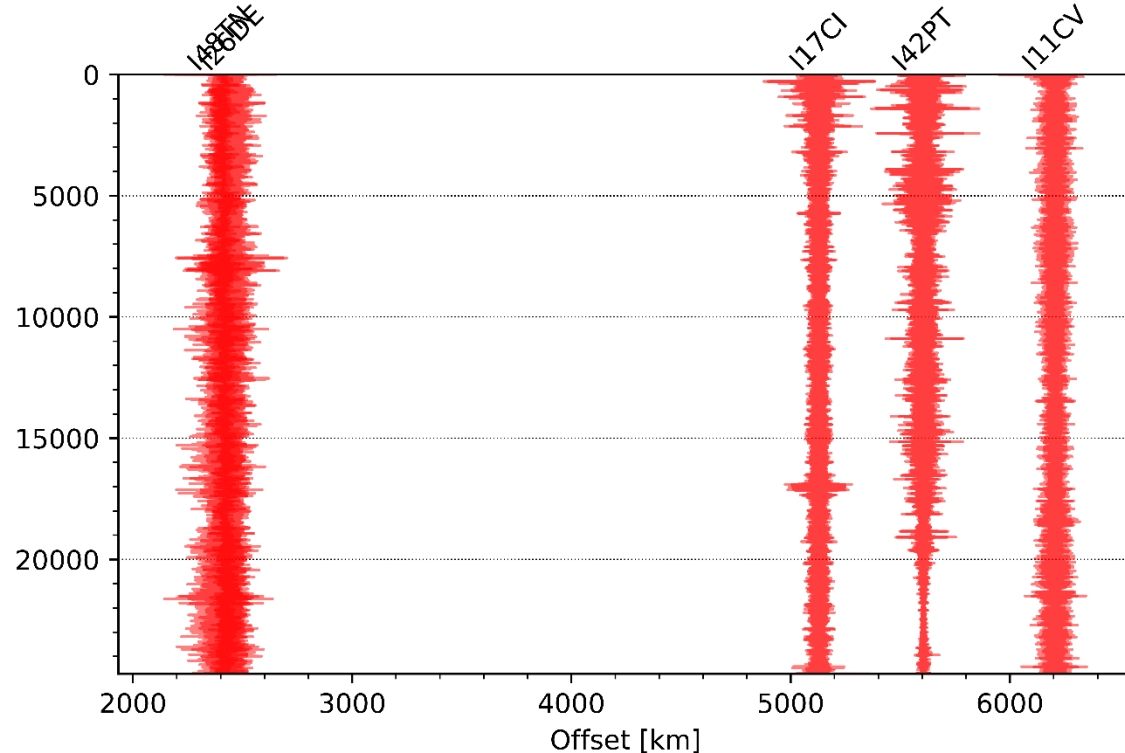
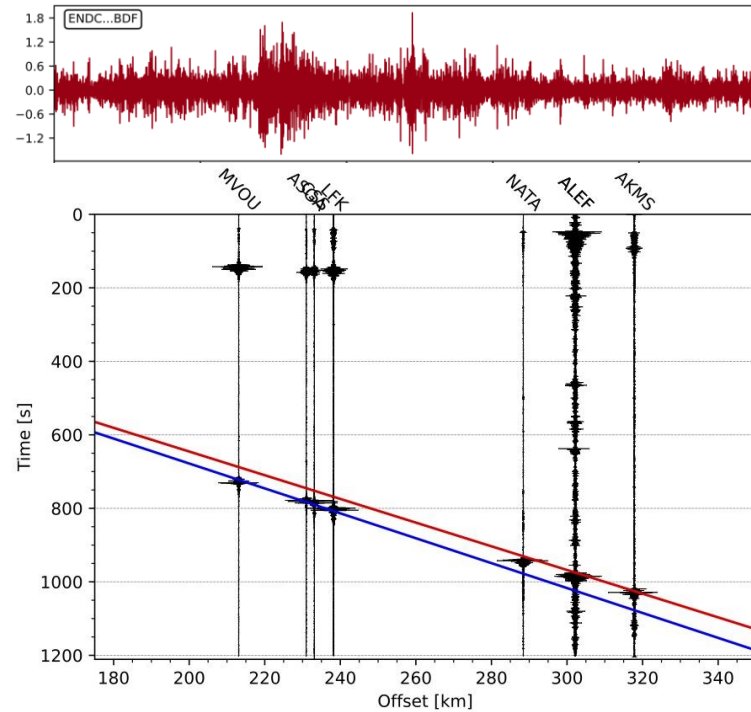
2D Transmission Loss for 0.5 Hz [Normal Modes]



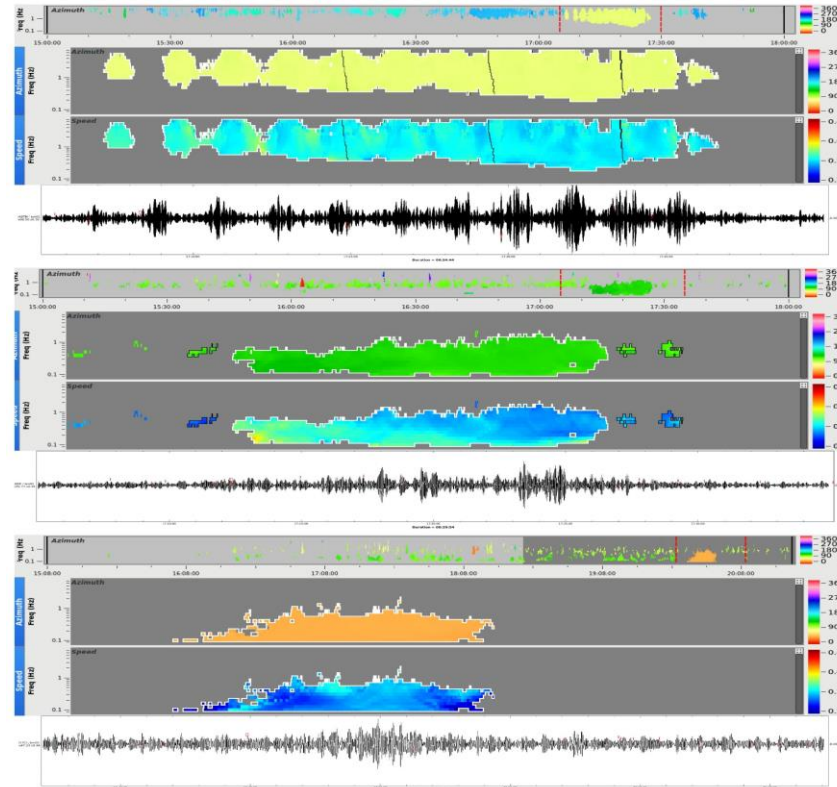




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- The open access seismic stations and Egyptian National Seismic Network recorded have recorded the shock wave in distance up to 316 km, where seismic and hydroacoustic signal has propagated distances up to 727.1 km.
- The average magnitude from 20 stations is 3.6 M_L .
- The estimated explosion equivalent TNT yield ranges from 191 to 230 Ton While, the Ammonium Nitrate equivalent yield is ranging between 1917 to 2301 Ton. The declared amount stored in the port was around 2700 Ton of Ammonium Nitrate.
- The event represents a ground truth event for IMS infrasound for detecting the event
- Further understanding for the hydroacoustic signal is needed



شكرا لحسن استماعكم

Thank You!

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