ID: Type: **Oral**

2019 July Stromboli volcano paroxysm event: Infrasound long-range detections at IS42 station and other IMS stations.

Stromboli volcano (918 m a.s.l.) is located in a small Italian island of the same name that belongs to the Aeolian archipelago, in the Mediterranean sea. Its continuous explosive activity and persistent degassing since at least 3-7 AD (Rossi et al., 2000) makes it probably the world's best-known volcano due its spectacular basaltic explosions interspersed by lava fountains up to 250 m occurring every ≈10 minutes (Ripepe et al., 2002). On 3rd July 2019 a very strong explosive event (paroxysm) occurred at 14:45:43 UTC associated with two explosions (first one from SW crater and the second from Central crater). This event was detected in various IMS infrasound stations, including IS42, located in the Azores islands in the middle of the North-Atlantic. We present here the IS42 infrasound detections from this event, at a source-to-receiver distance of ≈3,700 km and a back-azimuth of ≈76°, as well as from other IMS infrasound stations and its correlation with the local observations.

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Track Classification: Data Processing and Station Performance