ID: Type: **Oral**

results of the (Infrasound-Seismoacoustic) ”Ground Coupling Experiment”

The Ground Coupling Experiment was performed in May 2019 at the CTBTO test site near the Conrad observatory in Austria - to study propagation and coupling of mechanical waves above and below ground. Signals were generated by hammer shots, explosives, rockets, steps, and wind. Infrasound was recorded by seismically-decoupled infrasound sensors (4 Hyperion IFS-5111 with wind shielding buckets), and seismoacoustic waves by three-component seismic sensors (99 Fairfield 5Hz geophones) in a 2D-configuration (at ground level and buried). Meteorological conditions were also recorded for the site (temperature, atmospheric pressure, wind speed, and wind direction). The goal is to study the propagation characteristics of the (infrasound and seismic) waves, and how they couple across the surface (infrasound-to-seismic and seismic-to-infrasound). The experiment also serves to optimize the sensor installation. We also determine coupling coefficients, characterize the sources from the measurements, and study the interference from wind. We will report the first results of the experiment.

Primary author: NOVOSELOV, Artemii (University of Vienna)

Presenter: NOVOSELOV, Artemii (University of Vienna)

Track Classification: Data Processing and Station Performance