ET SPB – potential contribution from Poland

Tomek Bulik (UW, CAMK)

Dorota Rosinska (UW)

Mariusz Suchenek, Marek Cieslar, Josiah Ensing, Mateusz

Pietrzak (CAMK)

Marek Biesiada (NCBJ)

Site characterization expertise

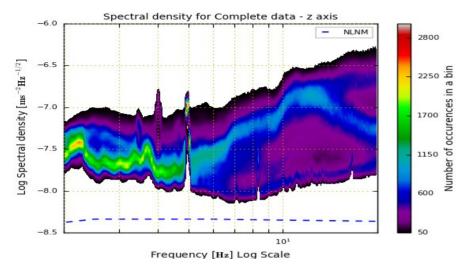
- Instrumentation
 - Geophone based seismometers (MS)
 - Infra sound microphones (MS)
- Data analysis (TB, MS, DR + team)
- General considerations
 - Experience with CTA site selection (TB)



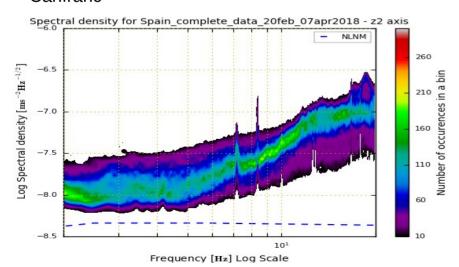
Experience in seismic studies

- Underground networks: Ksiaz (Poland), Canfranc (Spain), Matra (Hungary), Sos Ennatos (Italy)
- Virgo seismic monitoring
- Virgo infra sound monitoring

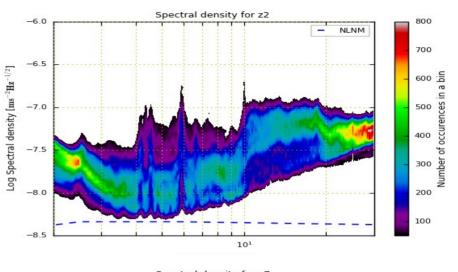
Matra

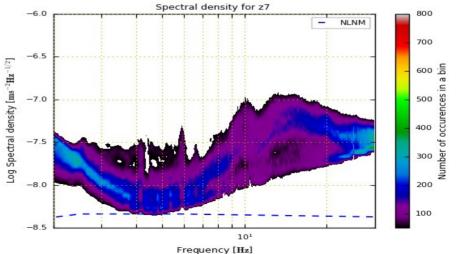


Canfranc



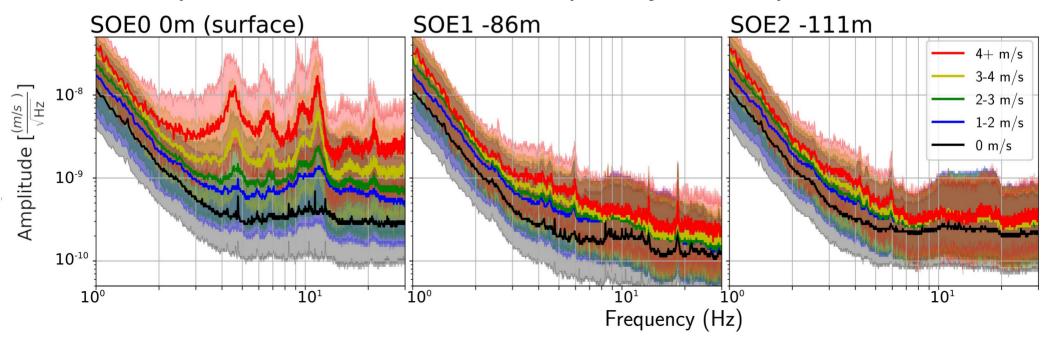
Sos Enattos



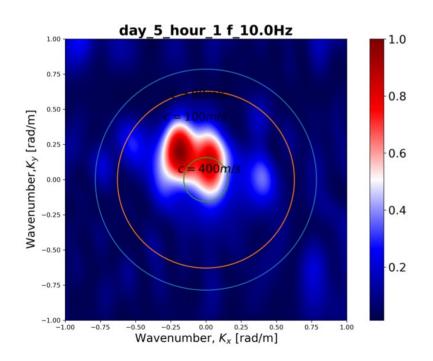


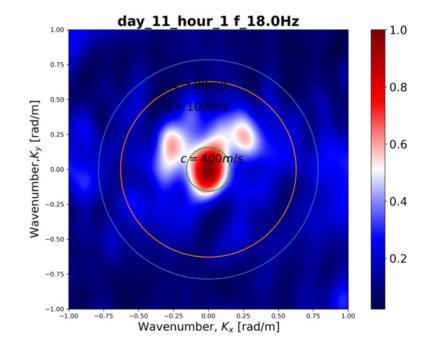
PROBABLISTIC POWER SPECTRAL DENSITY

- Higher wind speeds raise amplitude of seismic noise (1-30Hz)
- Amplitude decreases with frequency and depth



Virgo seismic field analysis





Plans – Sos Ennatos

- Dense underground 3D geophone network
- Infrasound noise level underground
- Testing the models of newtonian noise undeground
- Testing infrasound levels and noise undeground
- Correlation with ground measurements

D4.3: Complete quantification of all the aspects impacting the ET performance for each site

- Work with OSB science cases and requirements
- Identification of factors impacting performance: sensitivity and observation time
- Work with Sardinia and EMR teams measurements and data analysis
- What can/should we do about Saxen site?
- Summary report