



Stavros Katsanevas

Stavros & the smart sensors paradigm : tributes to muography (and more...)



Claude Girerd

A journey through greek/latine world



Lyon

CERN

LNGS

Cascina

Thessaloniki

etc etc



Gran Sasso



Pisa

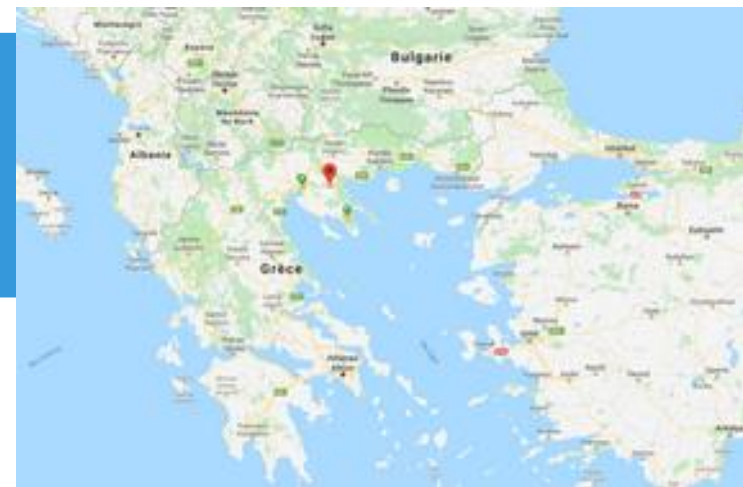


MUSEO DELLA GRAFICA, LUNGARNO GALILEO GALILEI 9, PISA
IL RITMO DELLO SPAZIO
LE RYTHME DE L'ESPACE
THE RHYTHM OF SPACE
INAUGURAZIONE SABATO 12 OTTOBRE ORE 18:00
12 OTTOBRE - 8 DICEMBRE 2019

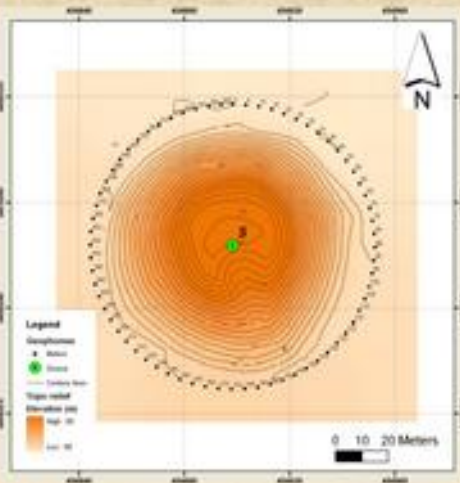
Cascina



A massive “Macedonian-type” tumulus



Tumulus in Apollonia North Greece
Diameter 100 m; Height 24 m. The biggest in Greece?



CHALLENGES OF THE GEOPHYSICAL SURVEYS ON TUMULI

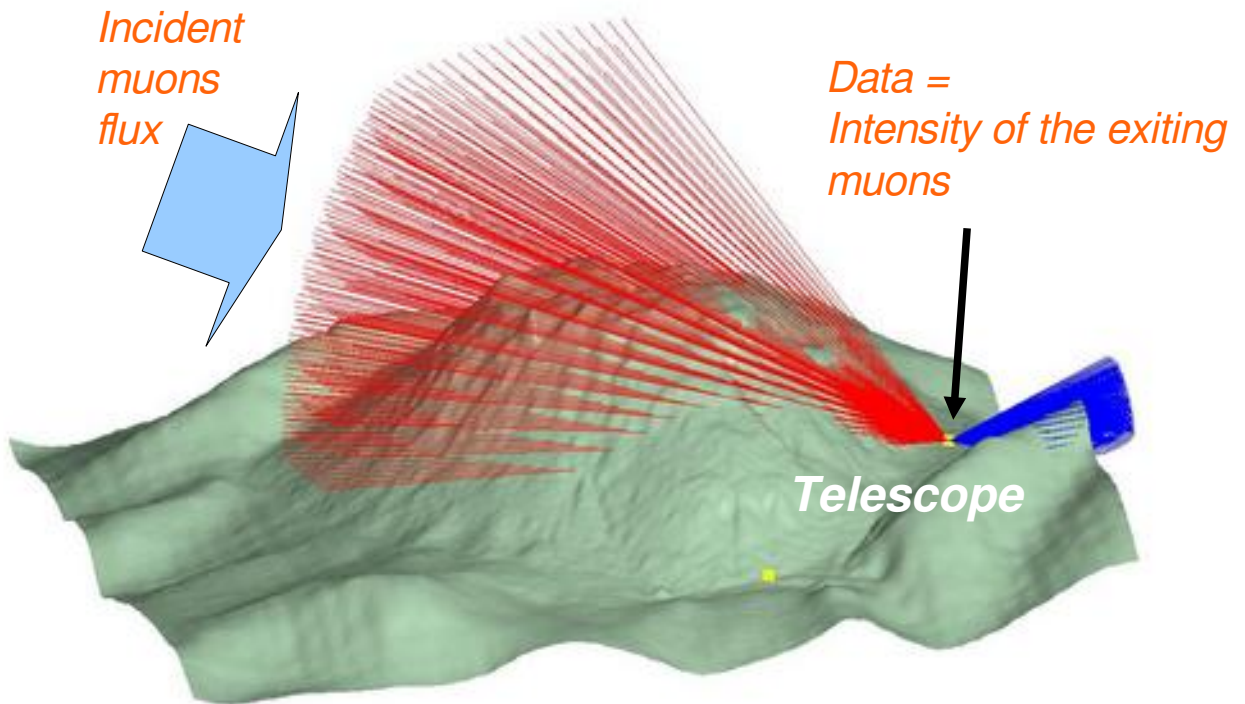
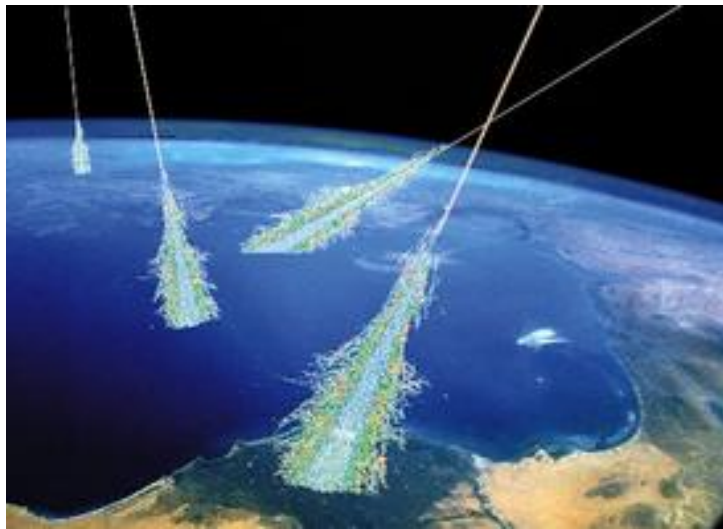
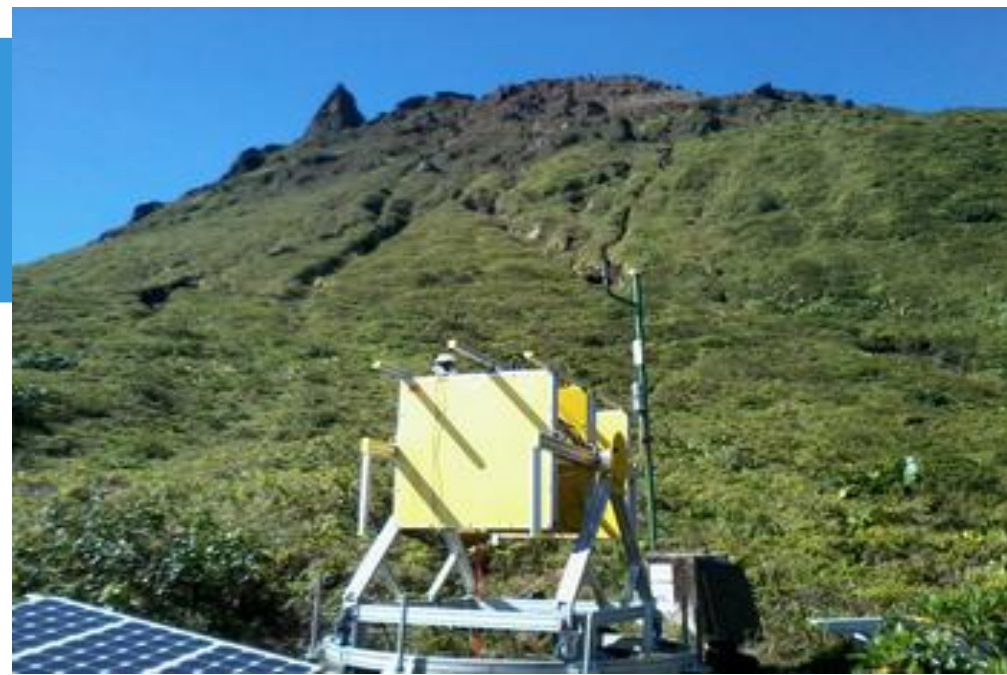
The material of the tumulus might be highly inhomogeneous (a fact that renders difficult the data interpretation). In some cases, stratification of the tumulus infill material has been observed.



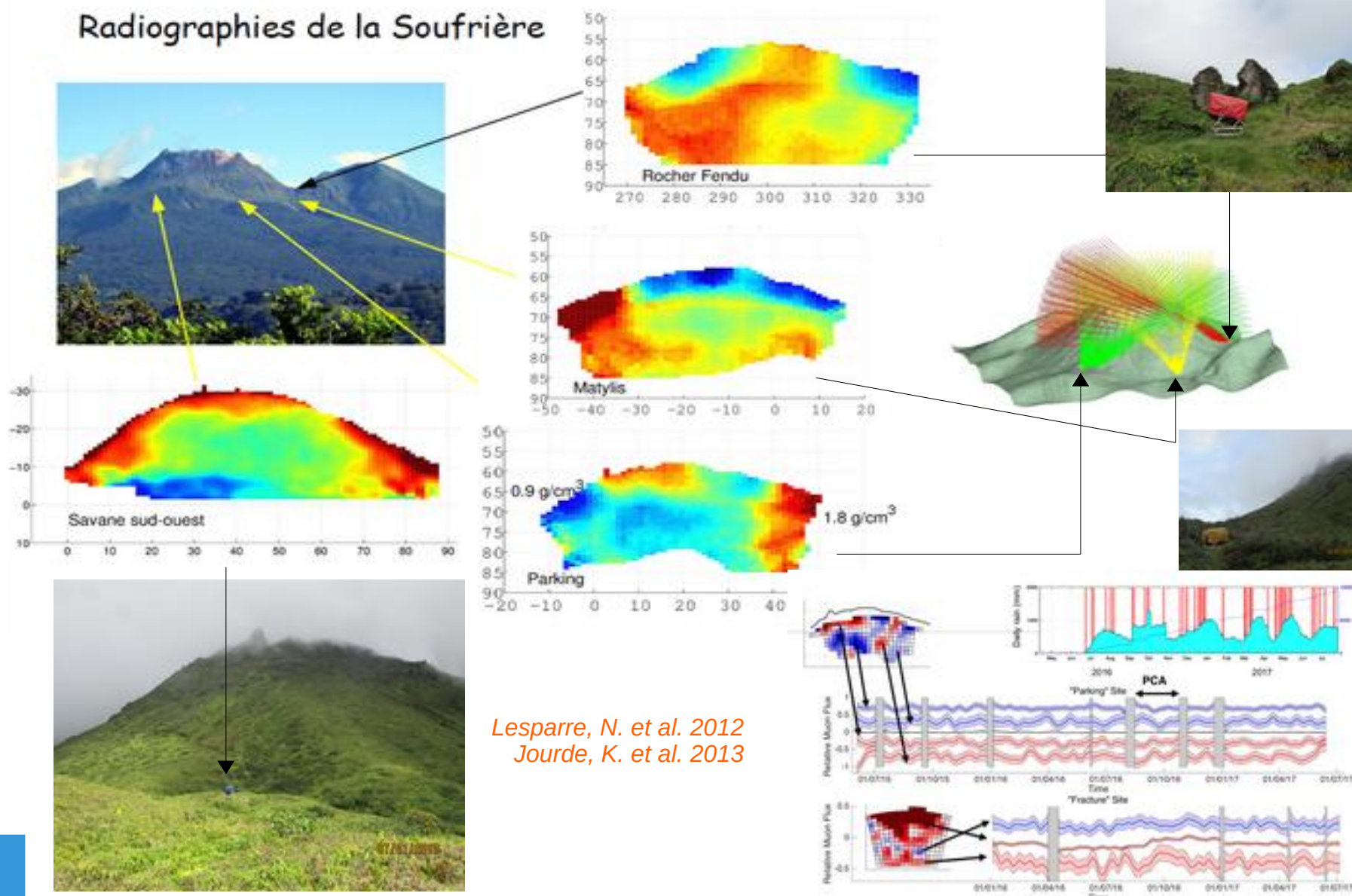
Muography imaging

Basic principles

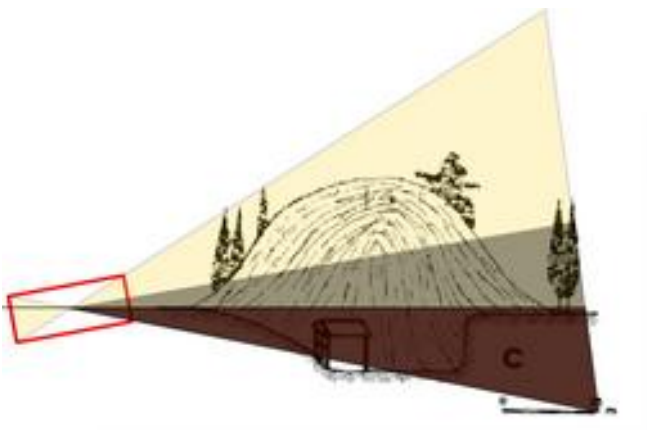
The particles energy loss along their trajectories is controlled by the amount of material encountered
⇒ " clinical radiography " by density contrast



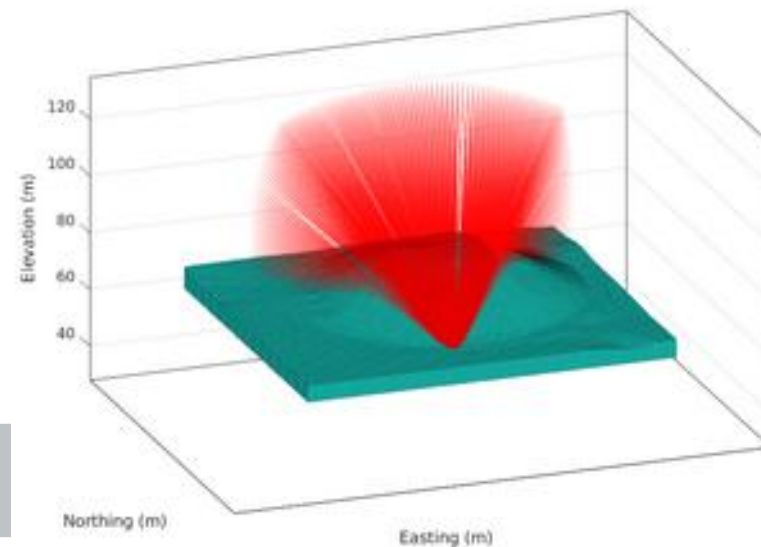
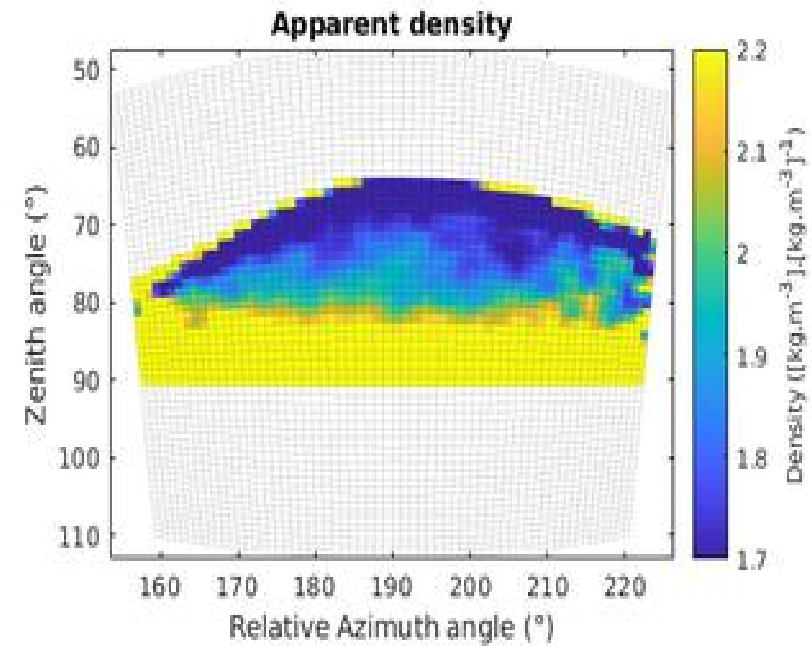
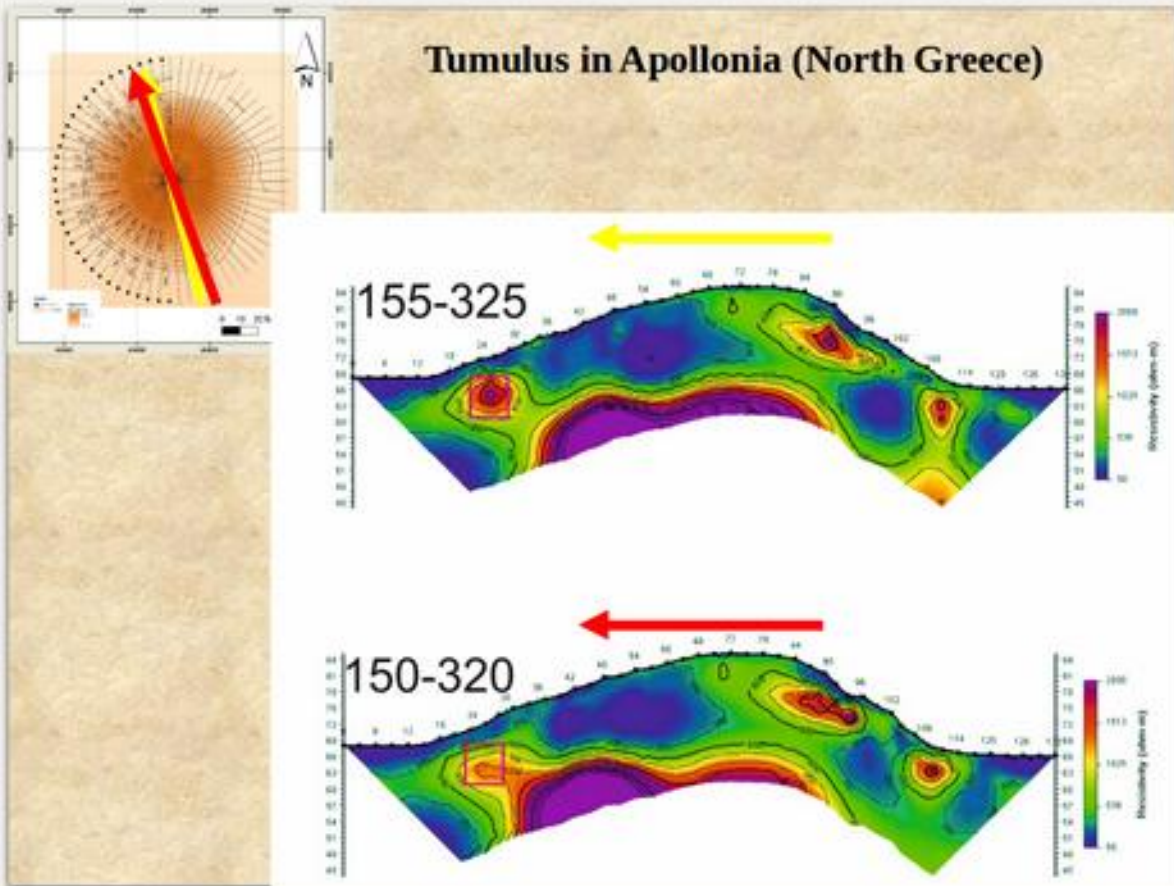
Results: structural & temporal imagery



Tumulus & muon-mobile



Electrical & Apparent density



REINFORCE



REINFORCE
Research Infrastructure For Citizens in Europe

ABOUT ▾

DEMONSTRATORS ▾

NEWS

PROJECT RESULTS ▾



GWITCHHUNTERS

Citizen scientists will look at chunks of Gravitational Wave data and identify the presence of noise which limits the sensitivity of detectors.

READ MORE

DEEP SEA EXPLORERS

Citizens will help to improve neutrino detection algorithms, while gaining a greater insight of the unexplored deep marine environment.

READ MORE

NEW PARTICLE SEARCH AT CERN

Citizens will be engaged in the quest of the Large Hadron Collider of CERN for the discovery of the ultimate structure of matter as well as particle theories beyond the Standard Model.

READ MORE

COSMIC MUON IMAGES

Citizens will help explore the connections across the fields of cosmic ray physics, geology, volcanology and archaeology through the use of data and simple experimental devices.

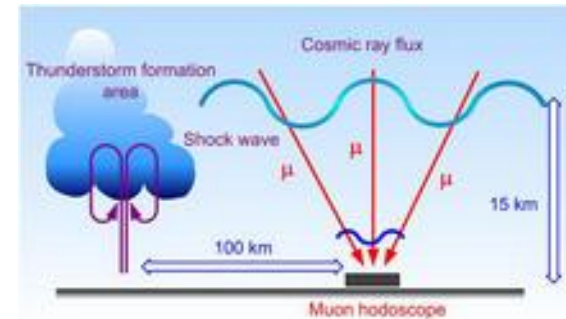
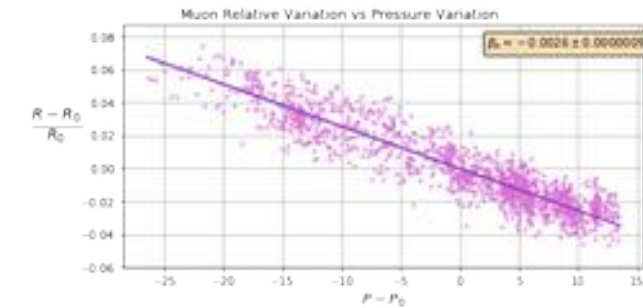
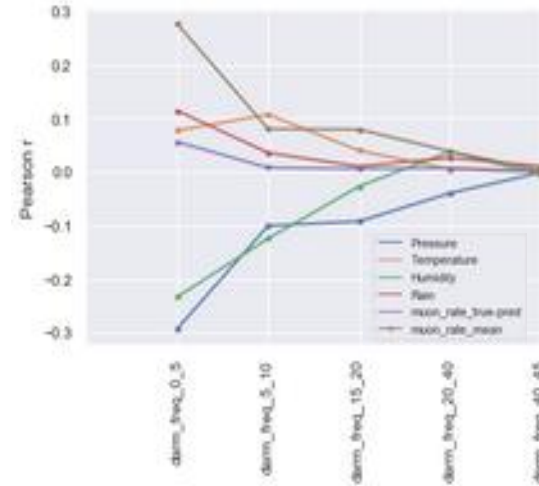
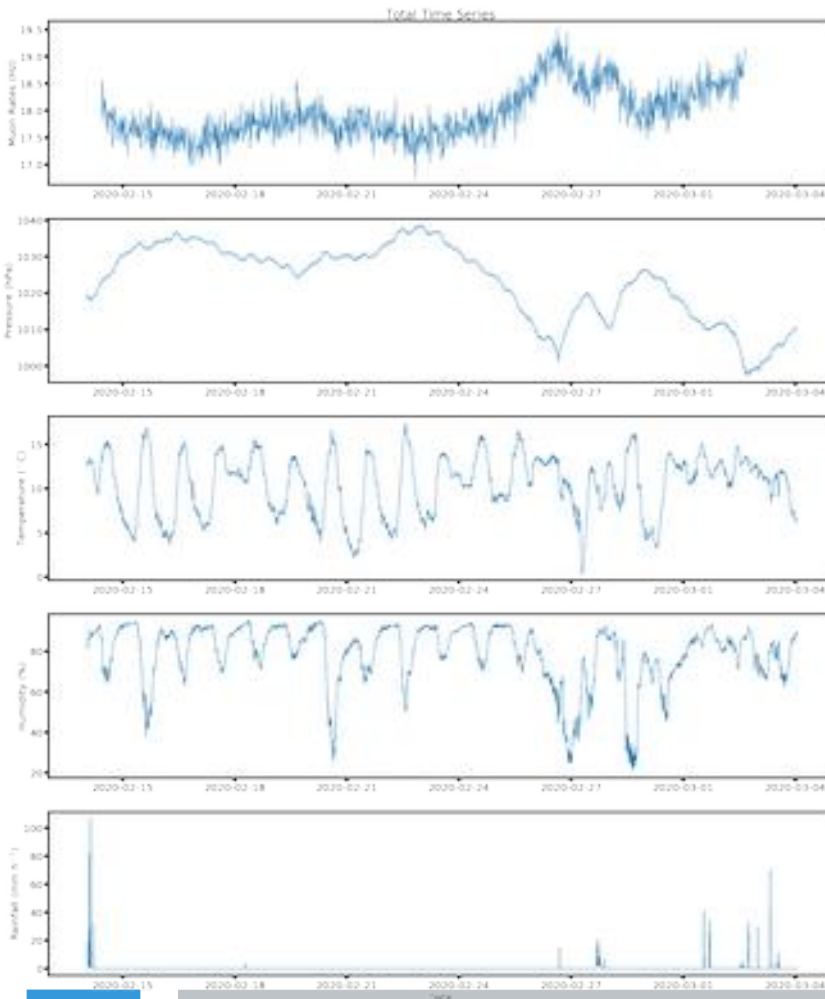
READ MORE

Get in touch with us

Cascina



Investigate correlations: muon rates vs interferometer sensitivity



Results:

- Correlation between muon rates and GW detector,
- Muons monitor atmospheric phenomena ,
- Atmosphere impacts Sensitivity

Greek times

