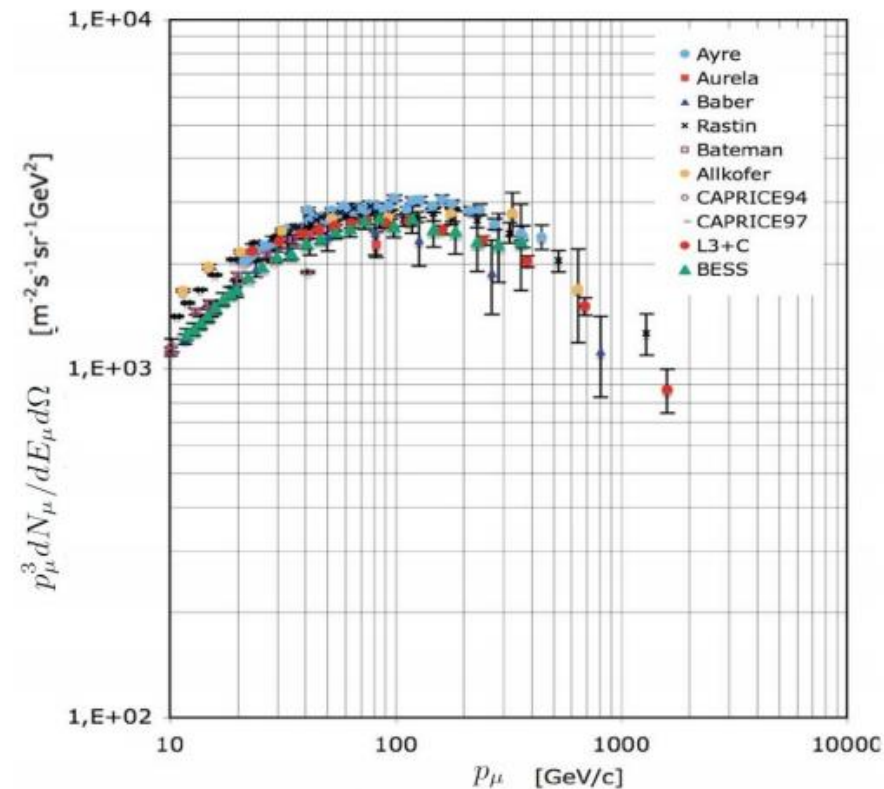
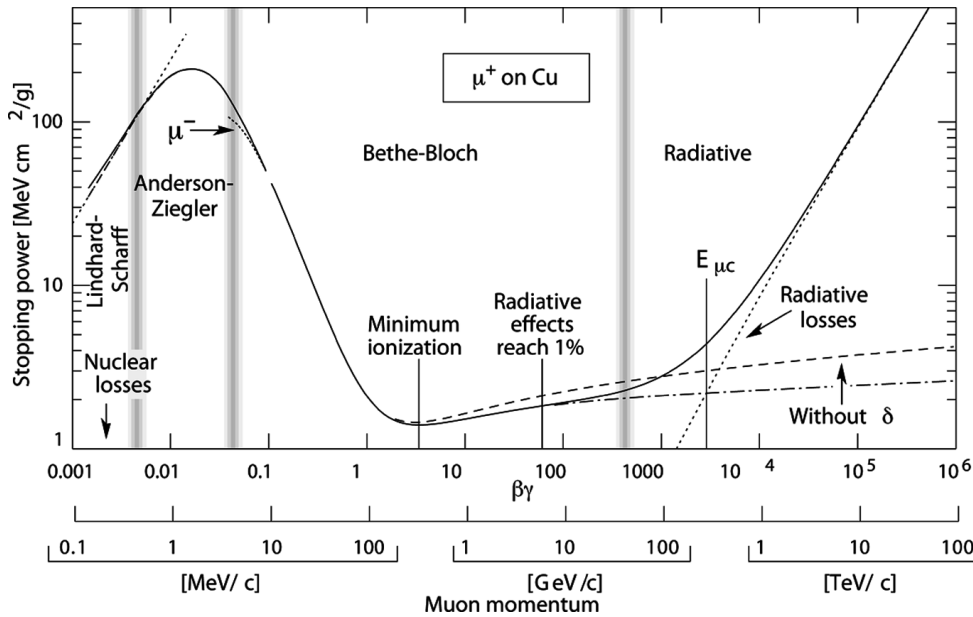


Particle absorption in a medium using a CB detector

Preliminary results

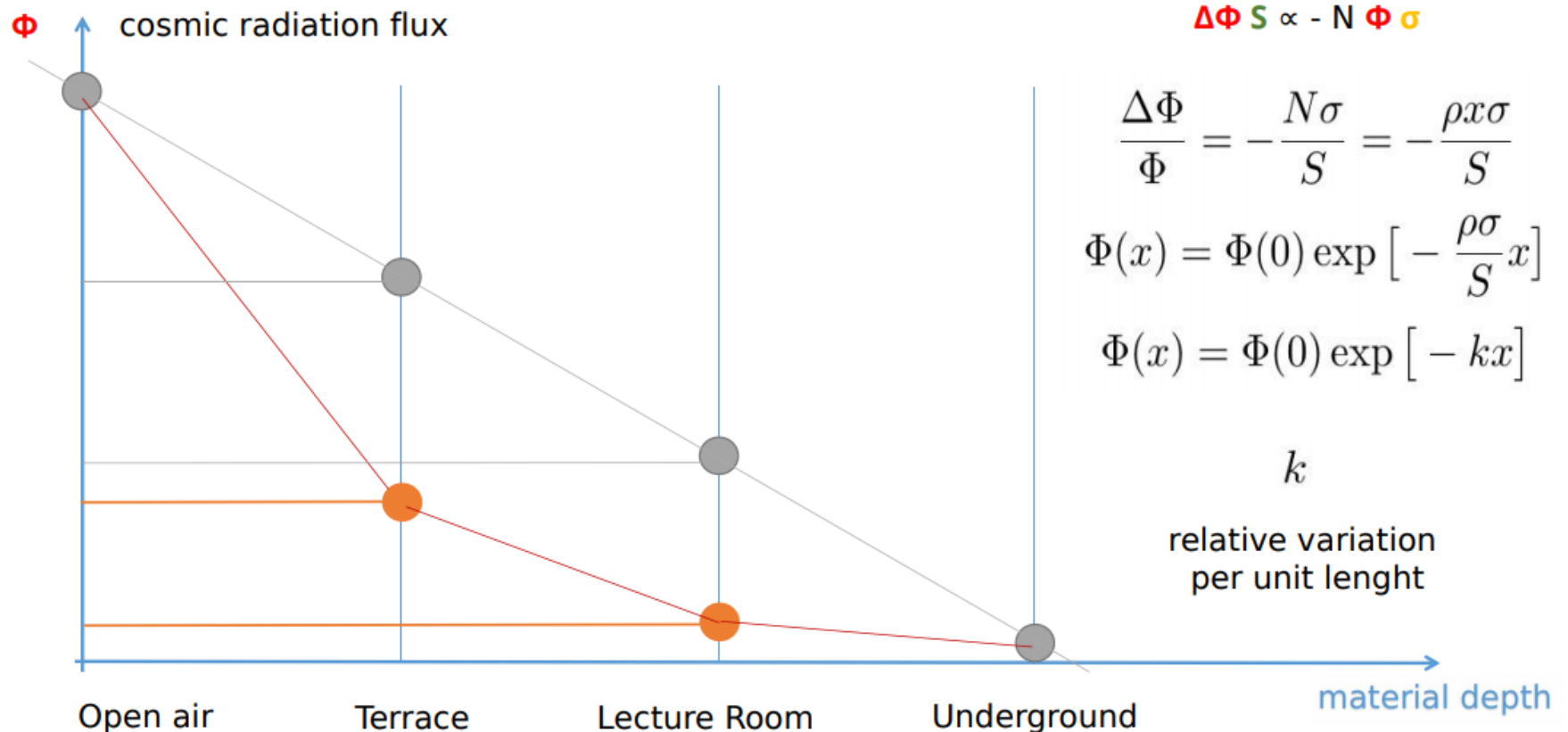
Paola La Rocca

Absorption: a complex process

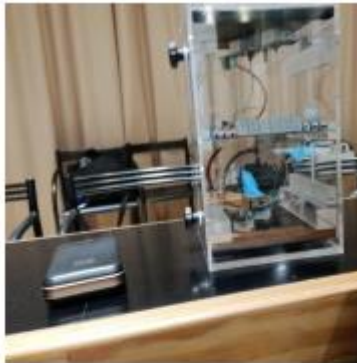


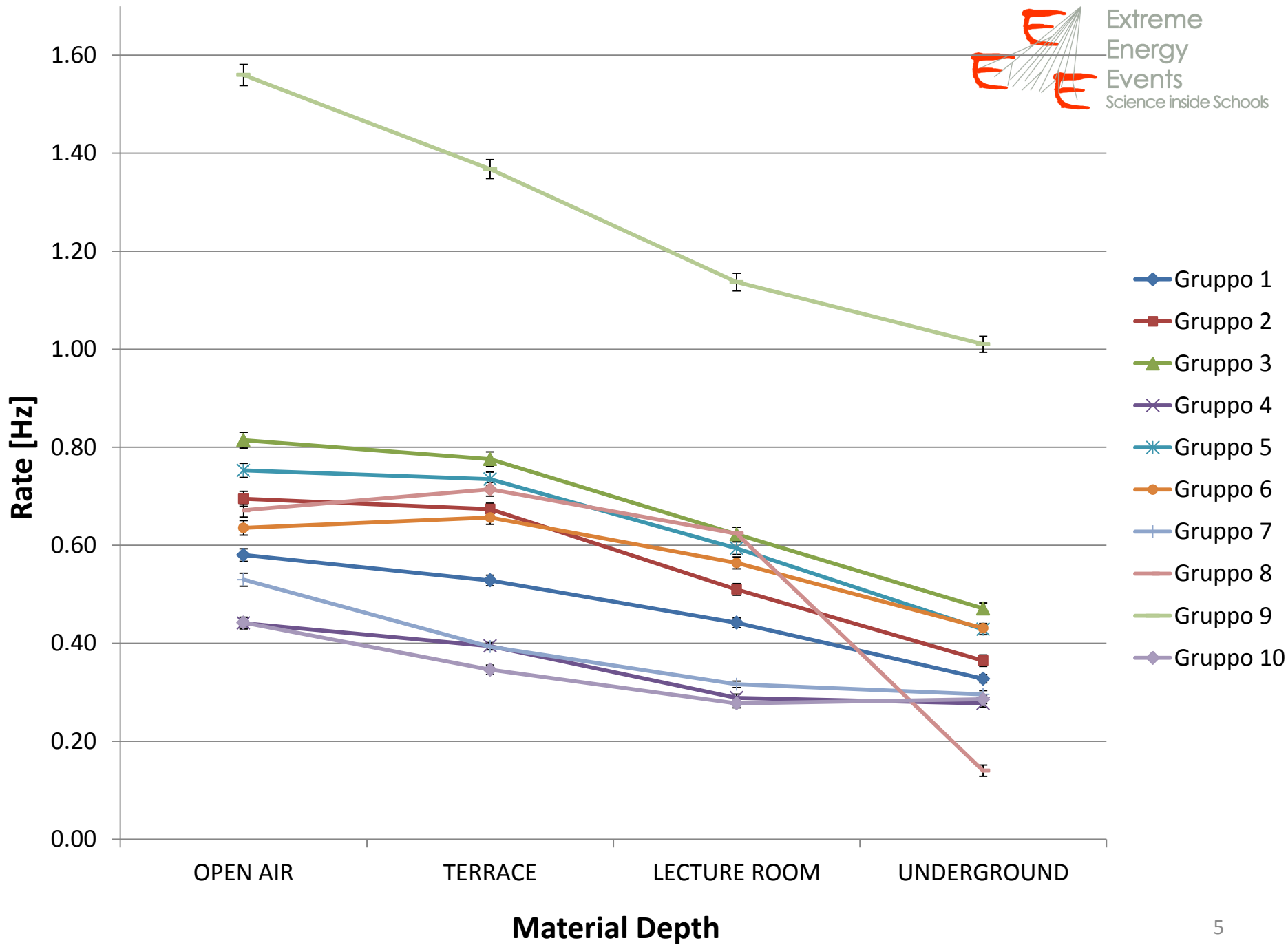
Absorption: a complex process

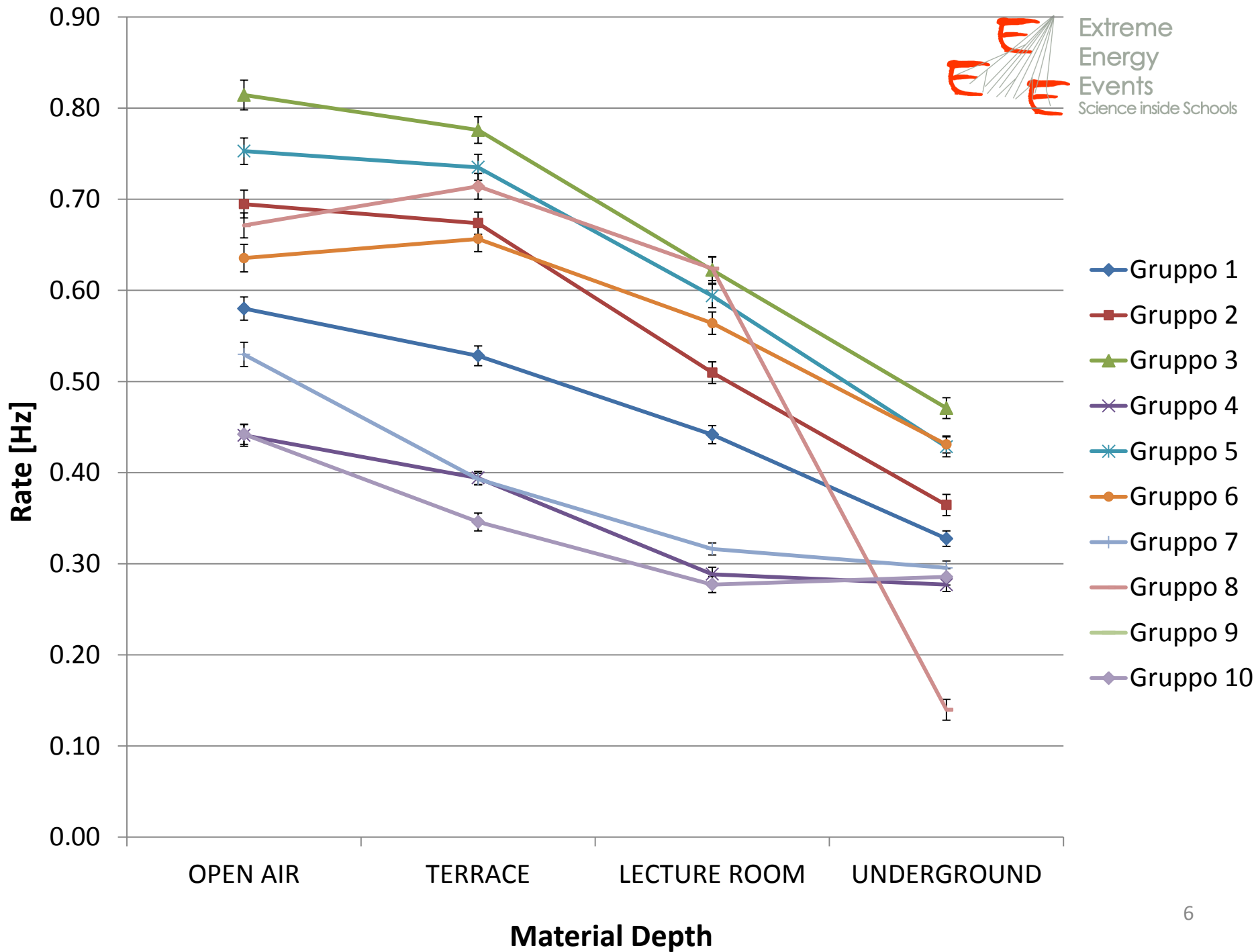
Flux decrease: a (first order) expectation

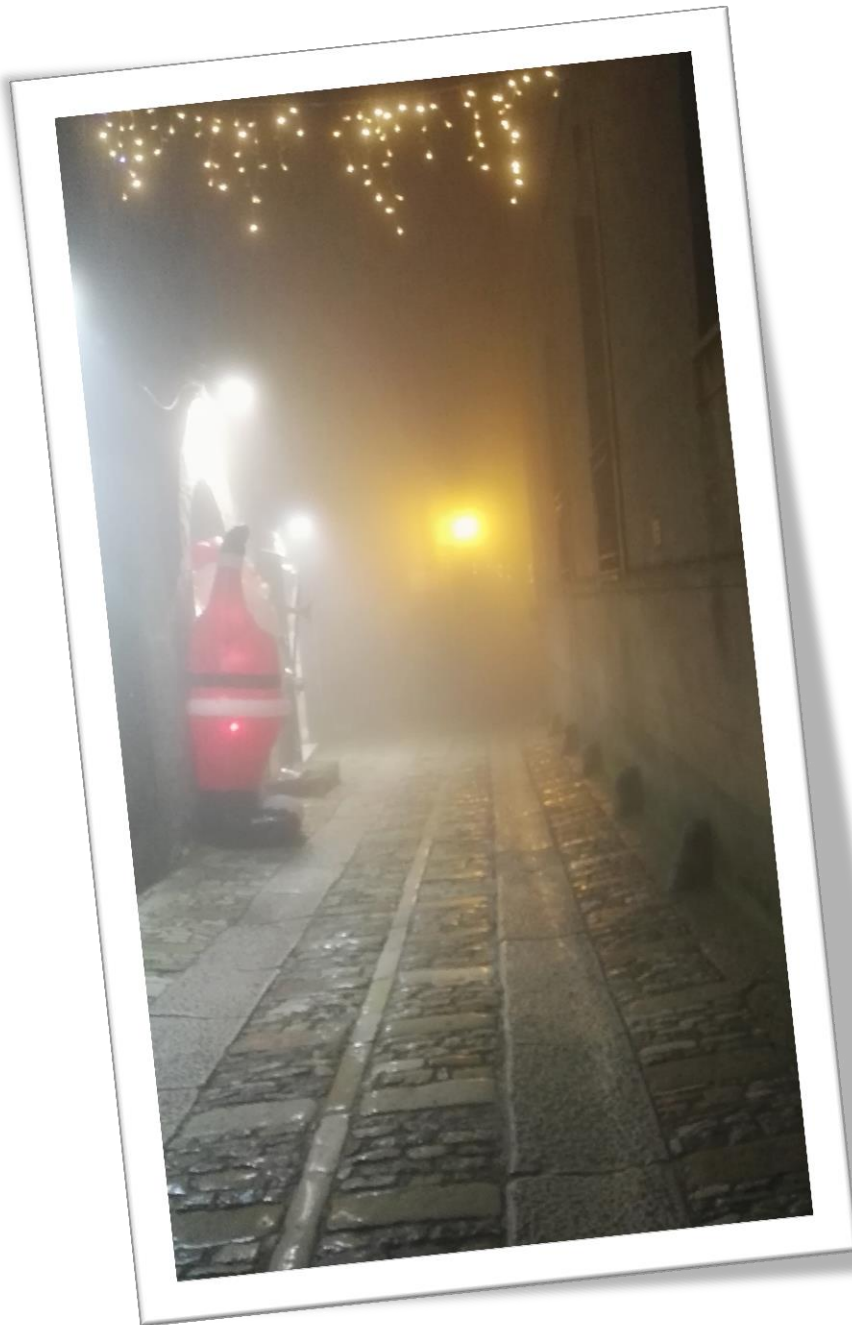


Data taking

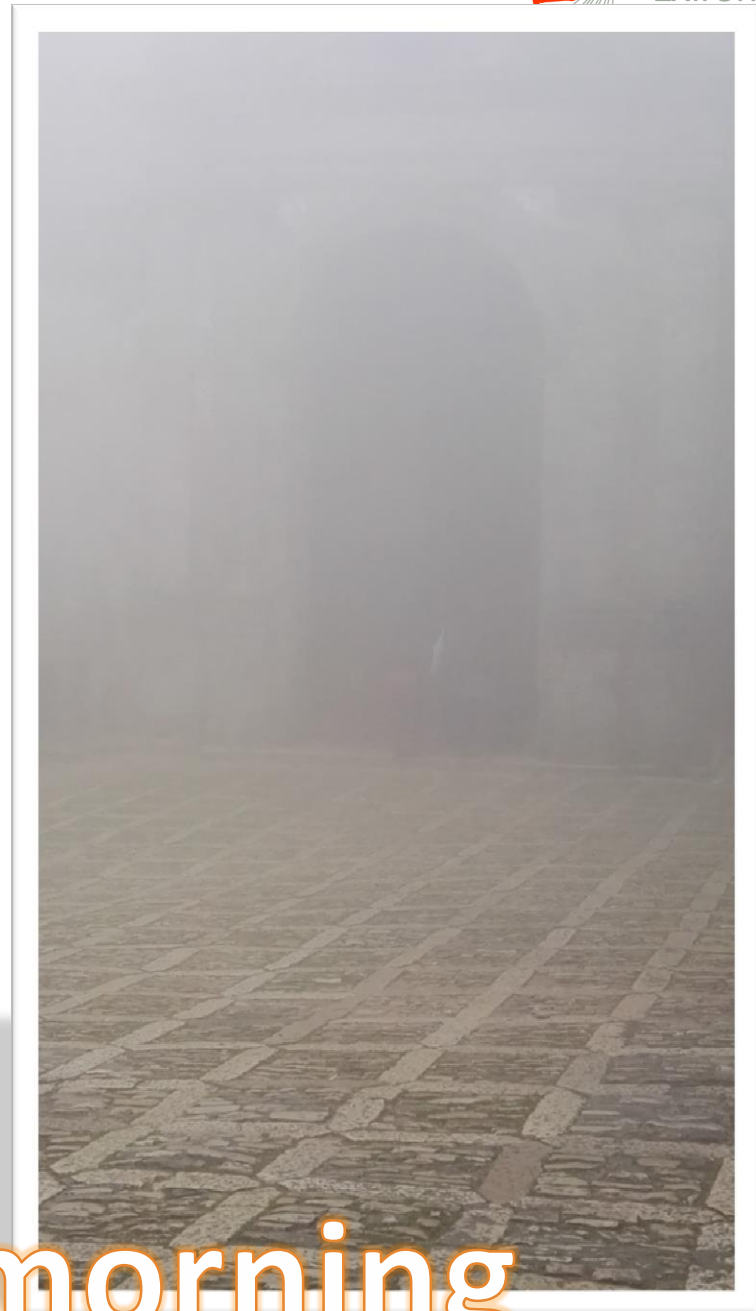
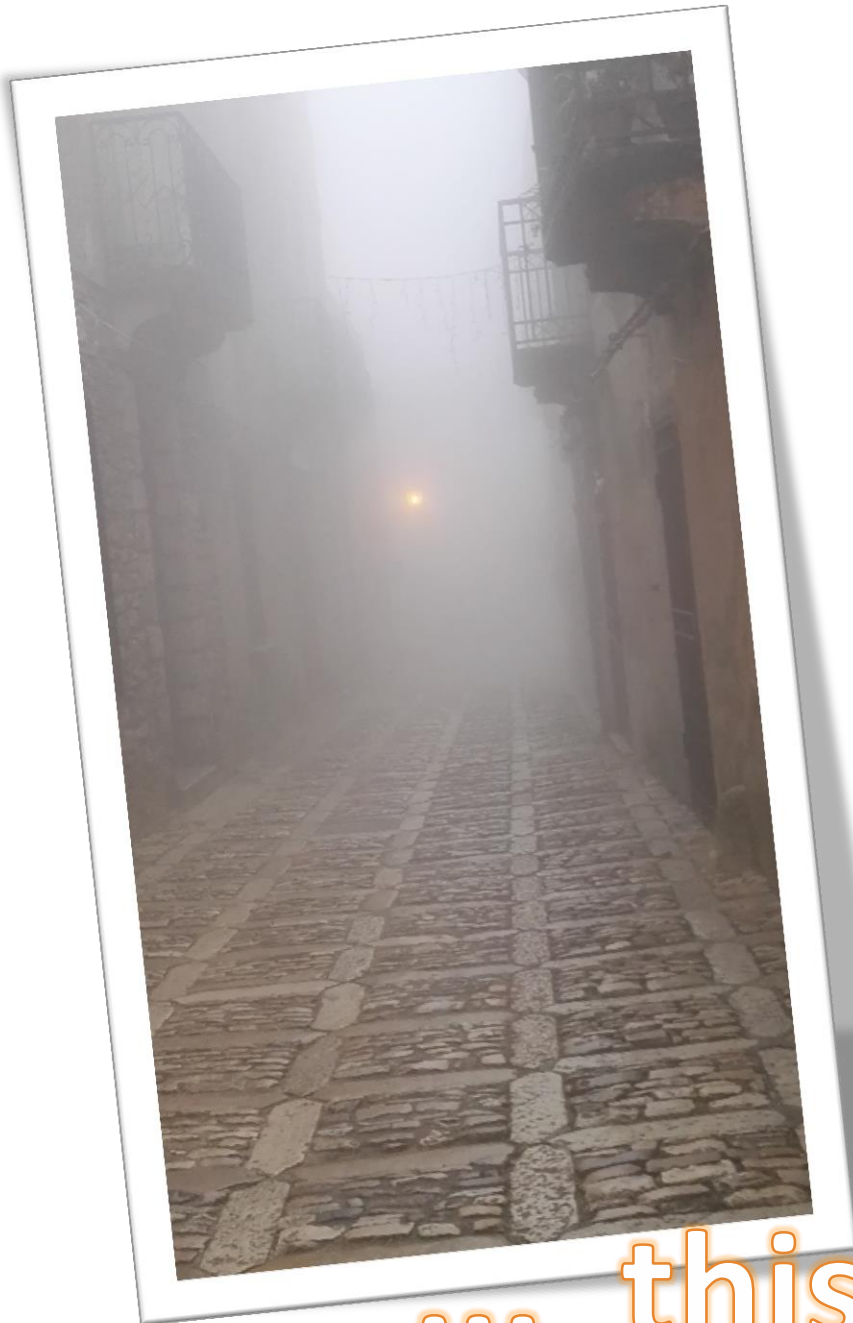




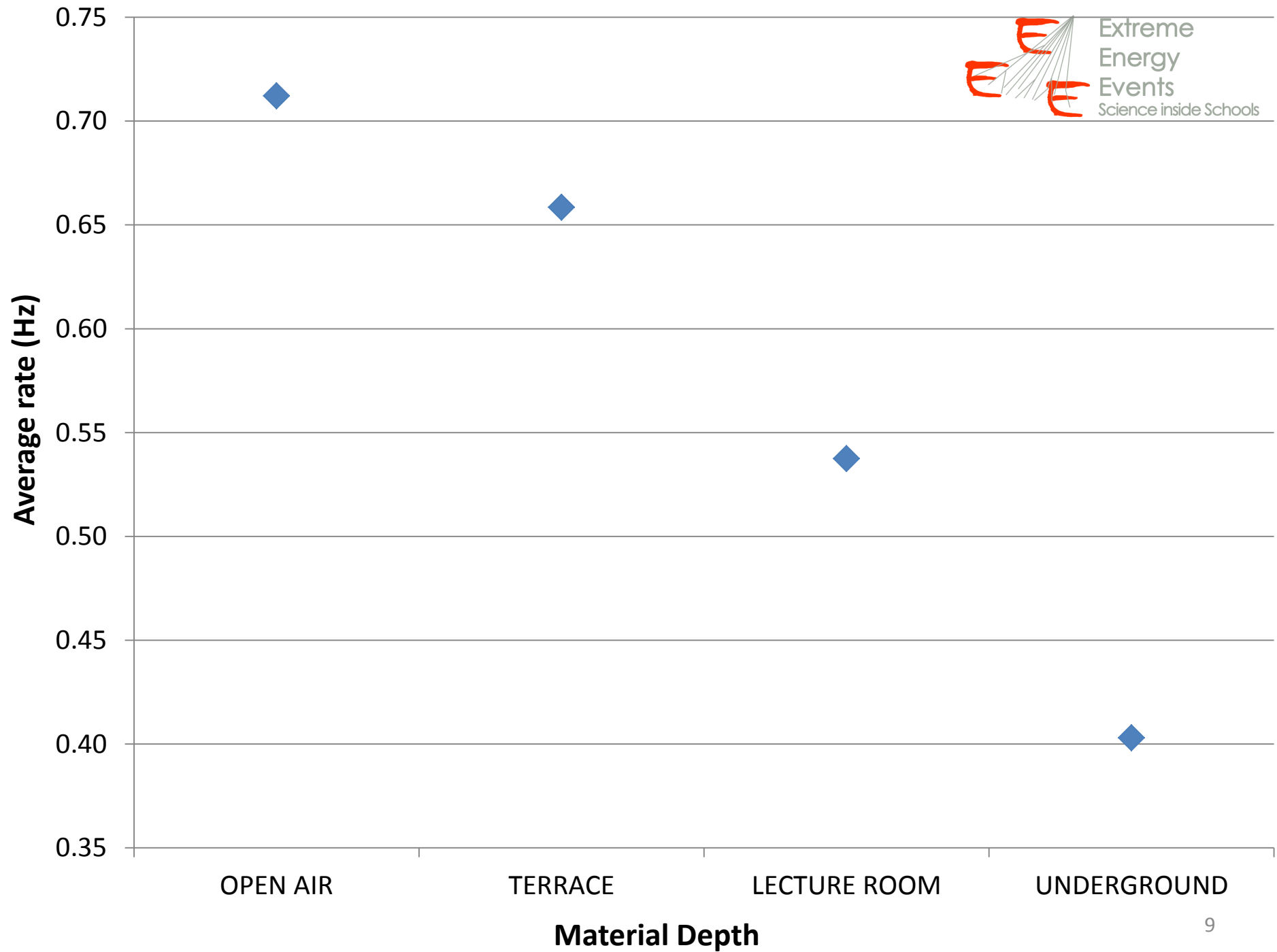


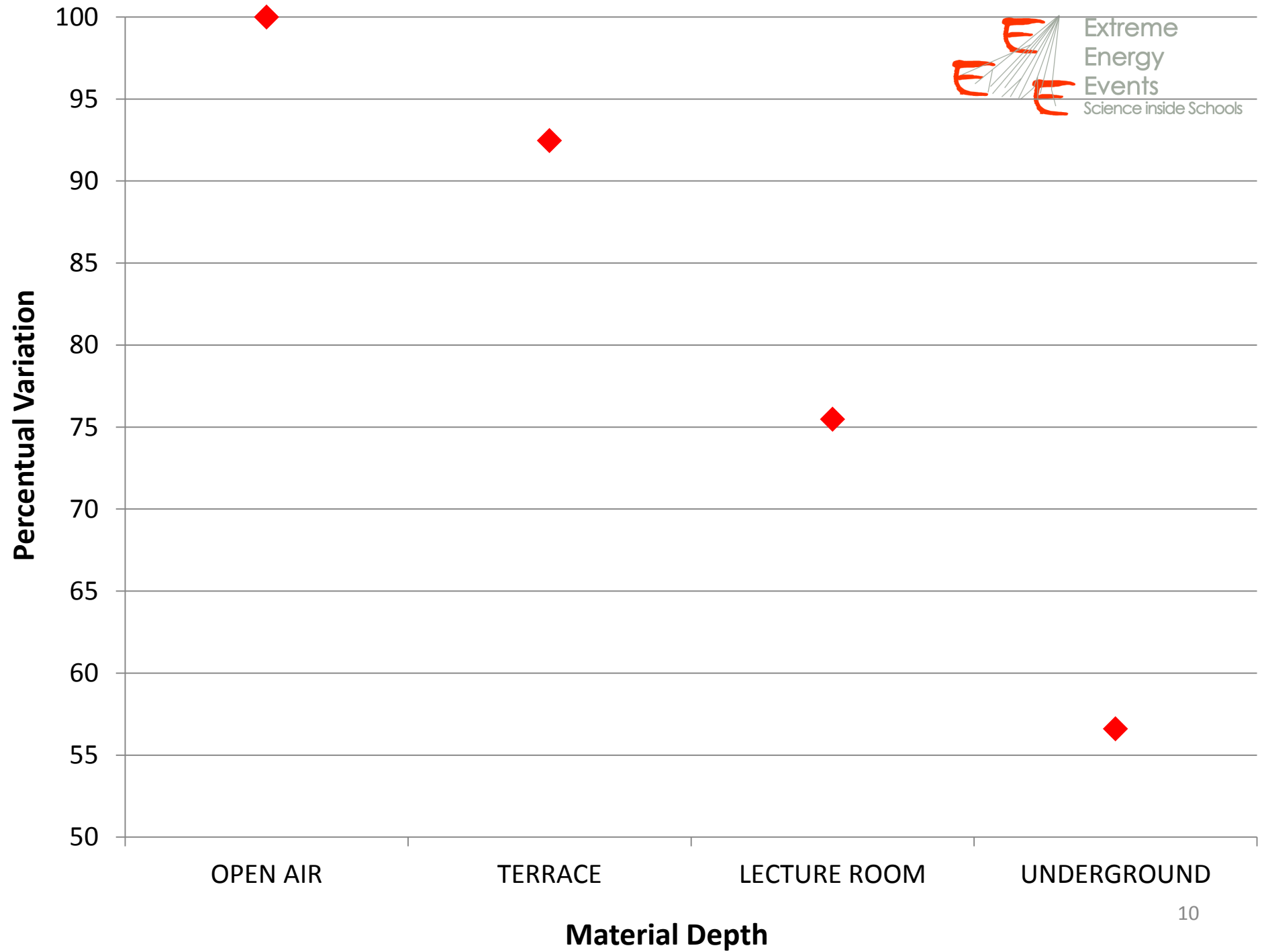


Yesterday
everything
was clear



... this morning

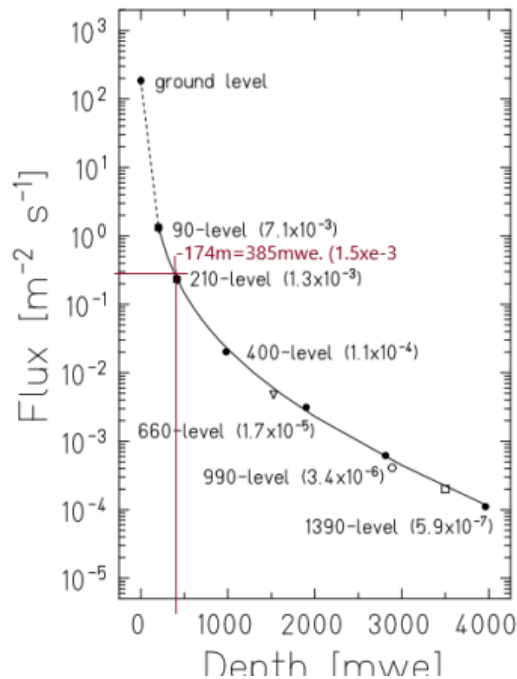




Possible analysis approaches

Test experiment

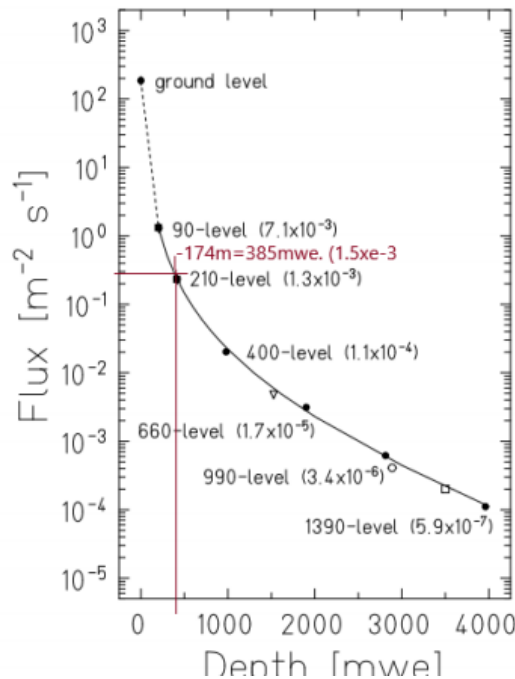
- Material thickness known
- Compare absorption with expectations



Possible analysis approaches

Test experiment

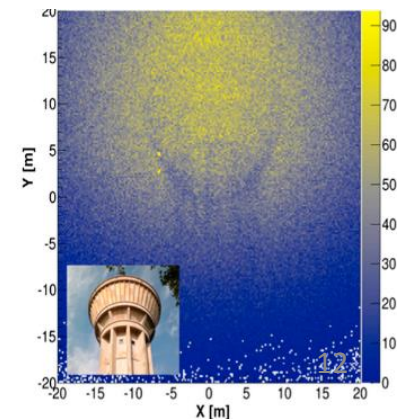
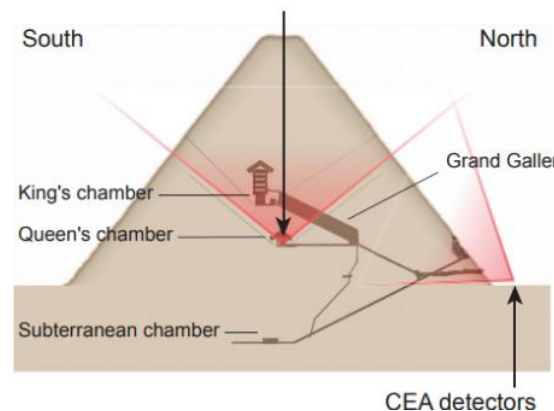
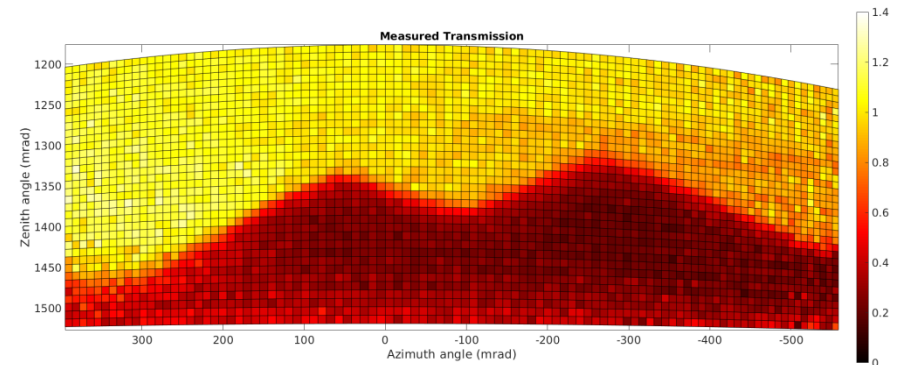
- Material thickness known
- Compare absorption with expectations



VS

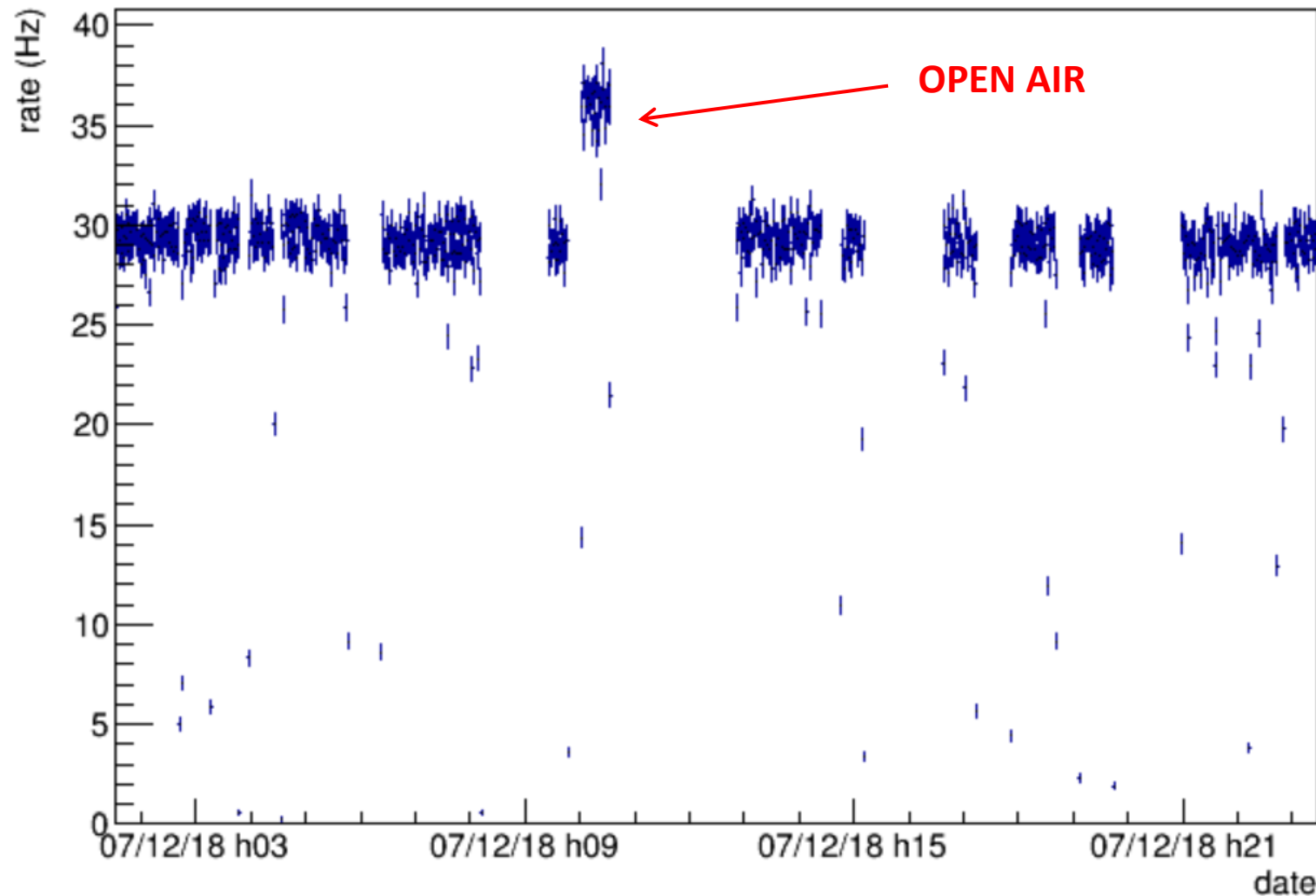
Discovery experiment

- Material thickness unknown
- Building tomography



Predictions for POLAR

Trending Rate



Predictions for POLAR

POLAR	Measurements (HZ)	Predictions (Hz)
Lecture Hall	29,24	
Open air	35,99	38,73 (*)
Sea level	31,3	31,66 (**)

(*) $R_{pred_open_air} = 1/abs(lect_hall) * R_{pola}(lect_hall)$ $abs = 75\%$

(**) $R_{pred_sea_lev} = (1 - abs * 0.730) * R_{pred_open_air}$ $abs = 25\%/km$

Some Golden rules of an experimental work

- Have the control of your experiment

Some Golden rules of an experimental work

- Have the control of your experiment
- Look for uncertainties

Some Golden rules of an experimental work

- Have the control of your experiment
- Look for uncertainties
- Collaborate with each other

Some Golden rules of an experimental work

- Have the control of your experiment
- Look for uncertainties
- Collaborate with each other
- Do not give up!

Some Golden rules of an experimental work

- Have the control of your experiment
- Look for uncertainties
- Collaborate with each other
- Do not give up!
- ...



... ENJOY YOURSELF!