



Update on Geomagnetic investigations at Virgo site

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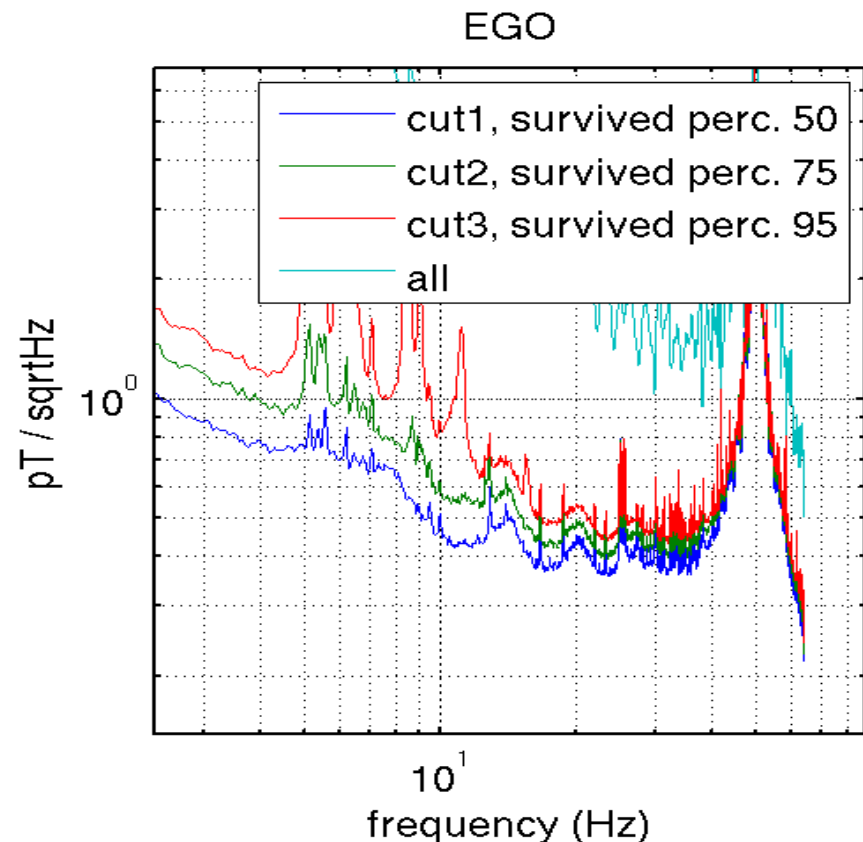
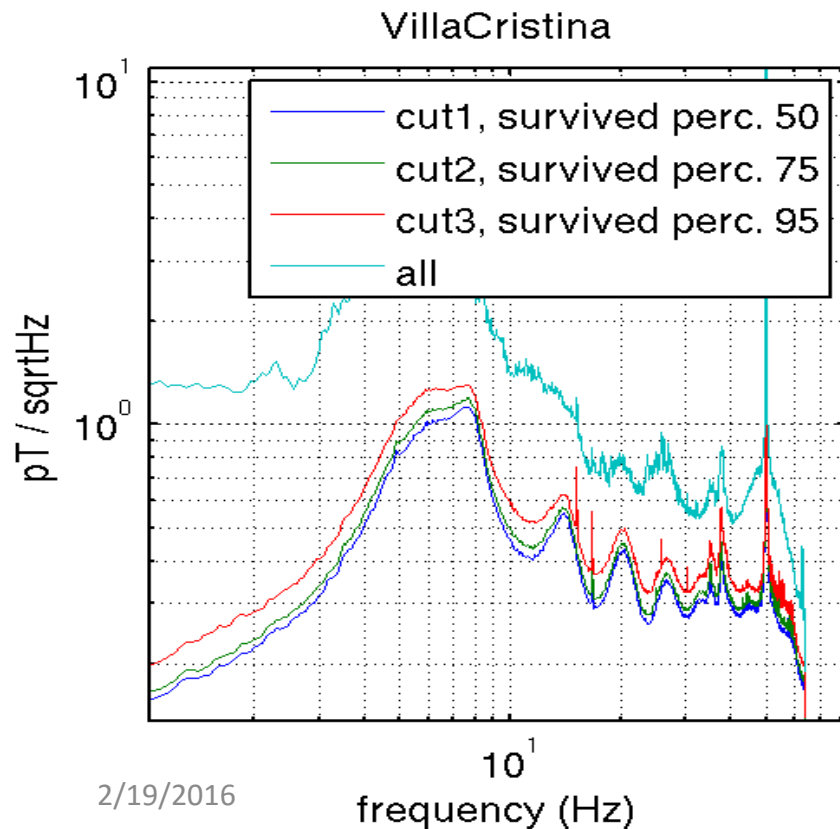
Detchar meeting , 19 Feb. 2016

Test setups

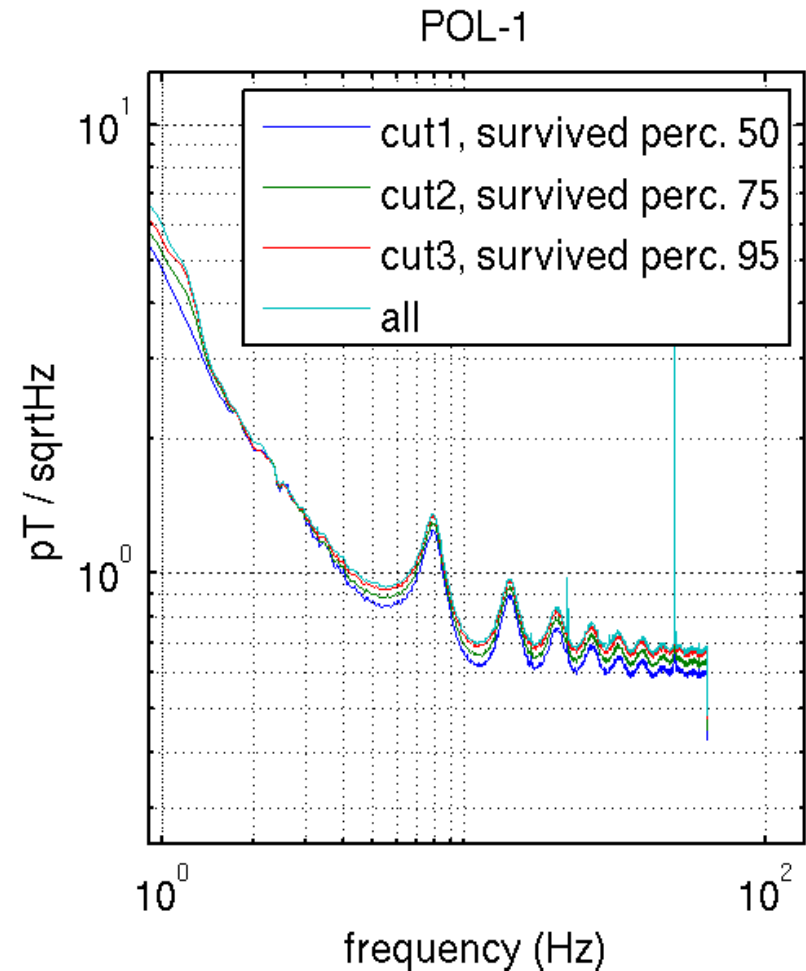
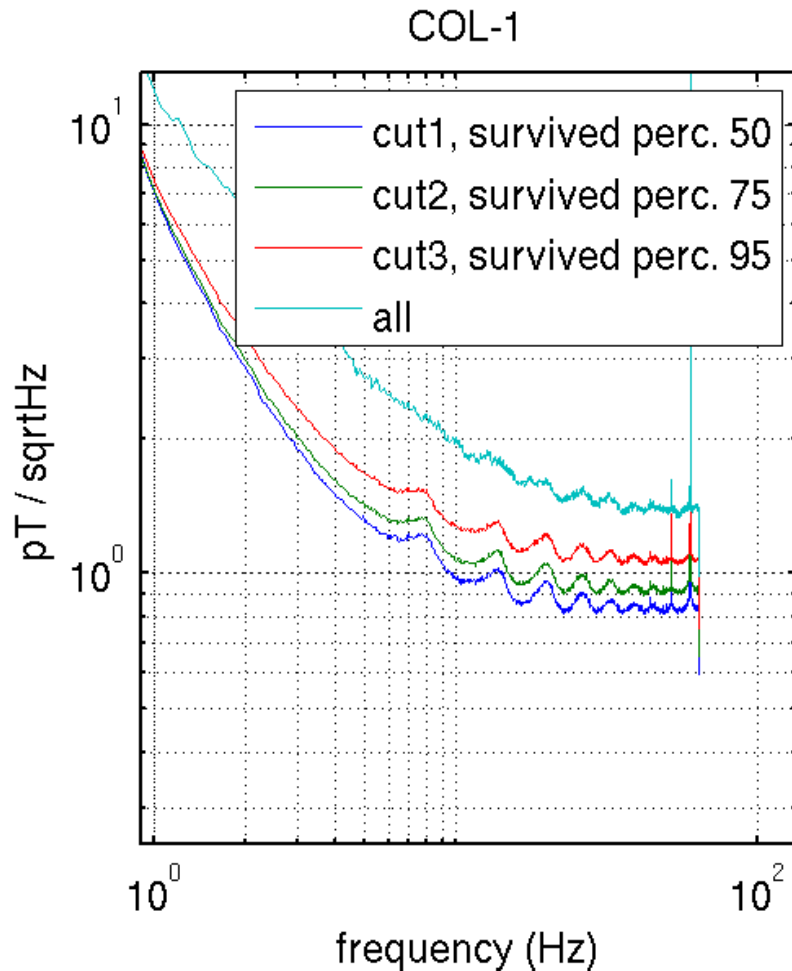
(summer 2015)

- Villa Cristina
(hills, 15km from Virgo)

- Outdoor @Virgo site
(along W-arm road)

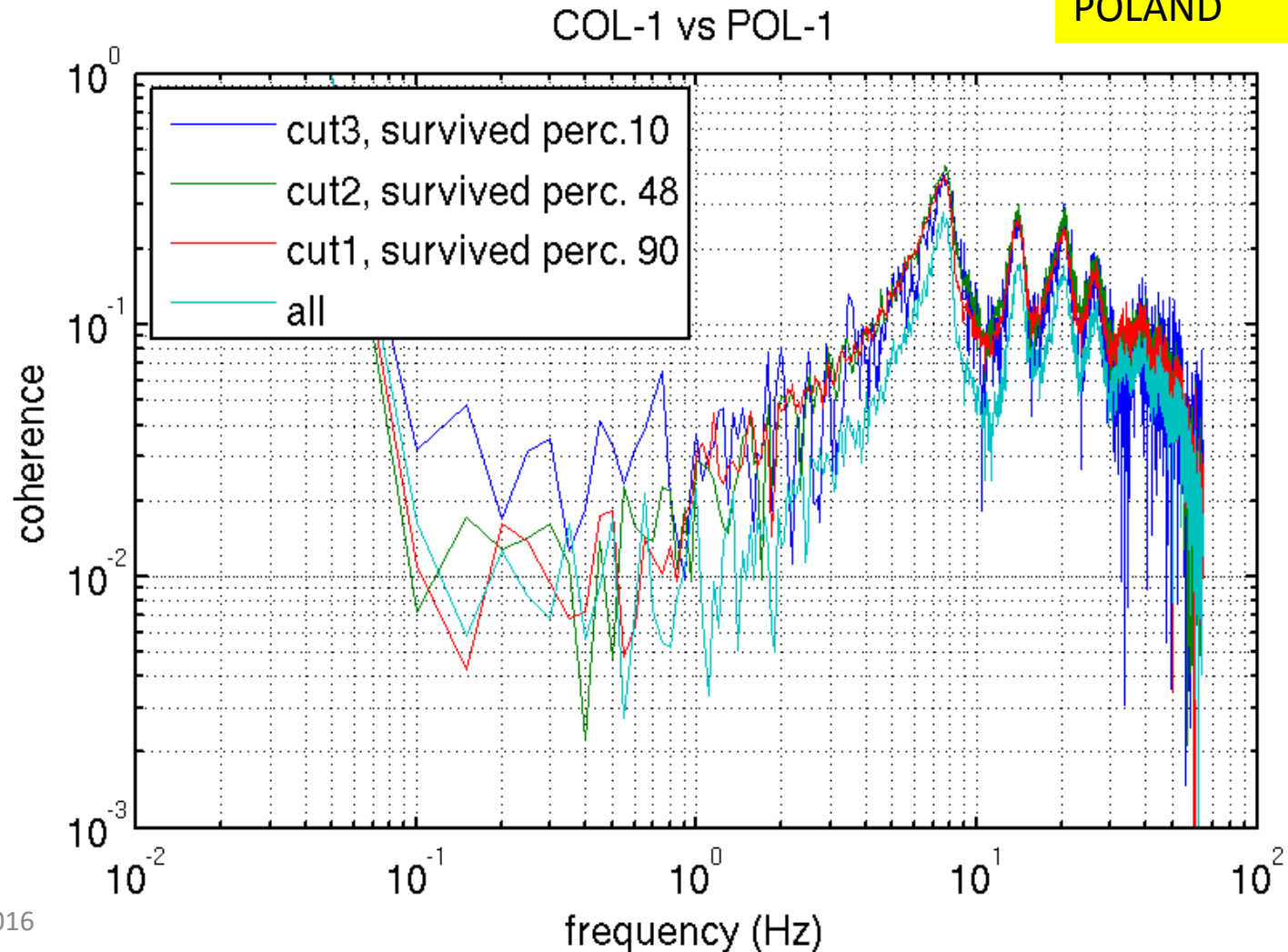


Compare with a “GOLDEN” reference: ELF stations in POLAND and COLORADO by Cracow group



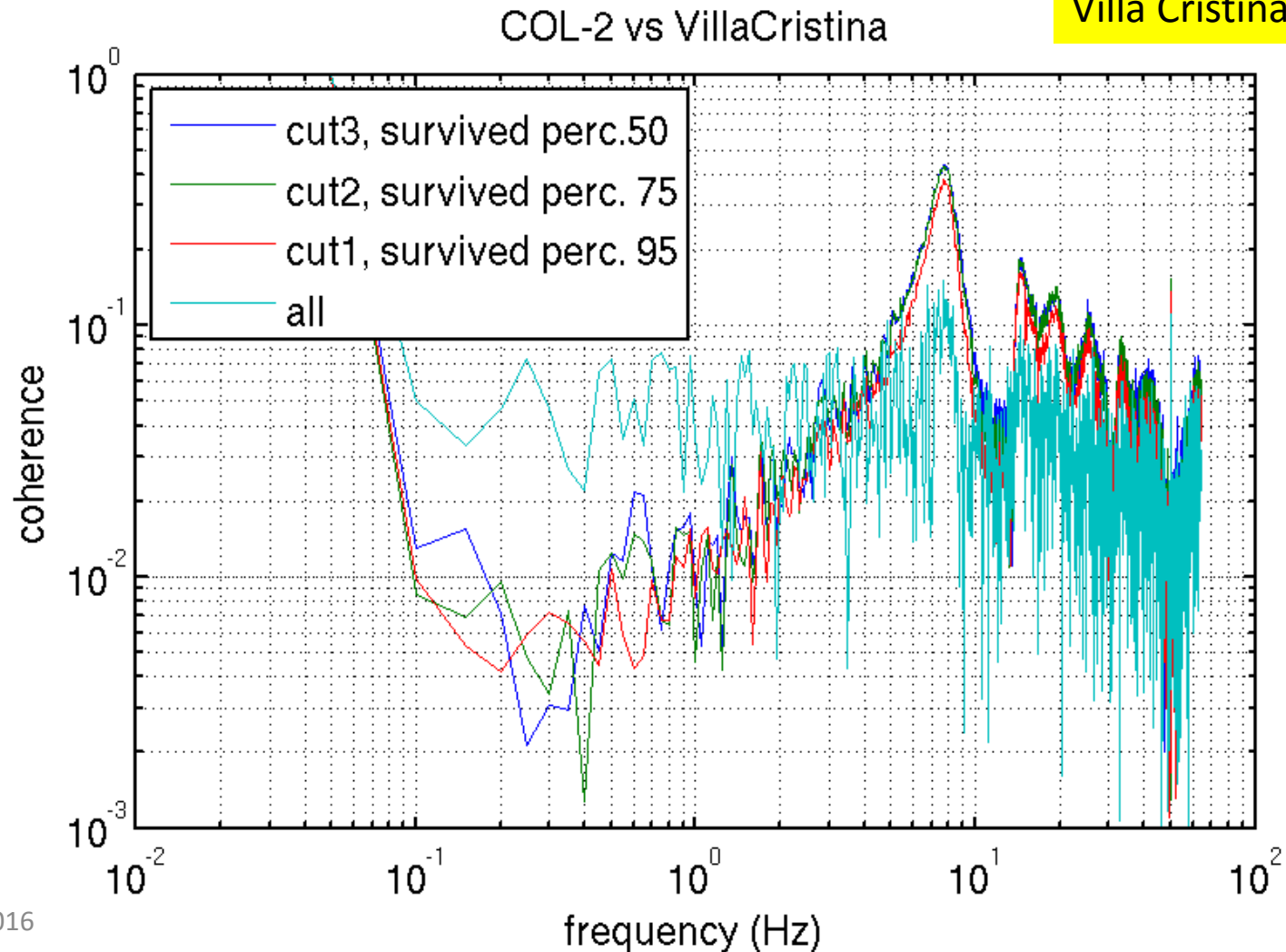
Coherences with “GOLDEN reference”

COLORADO versus
POLAND



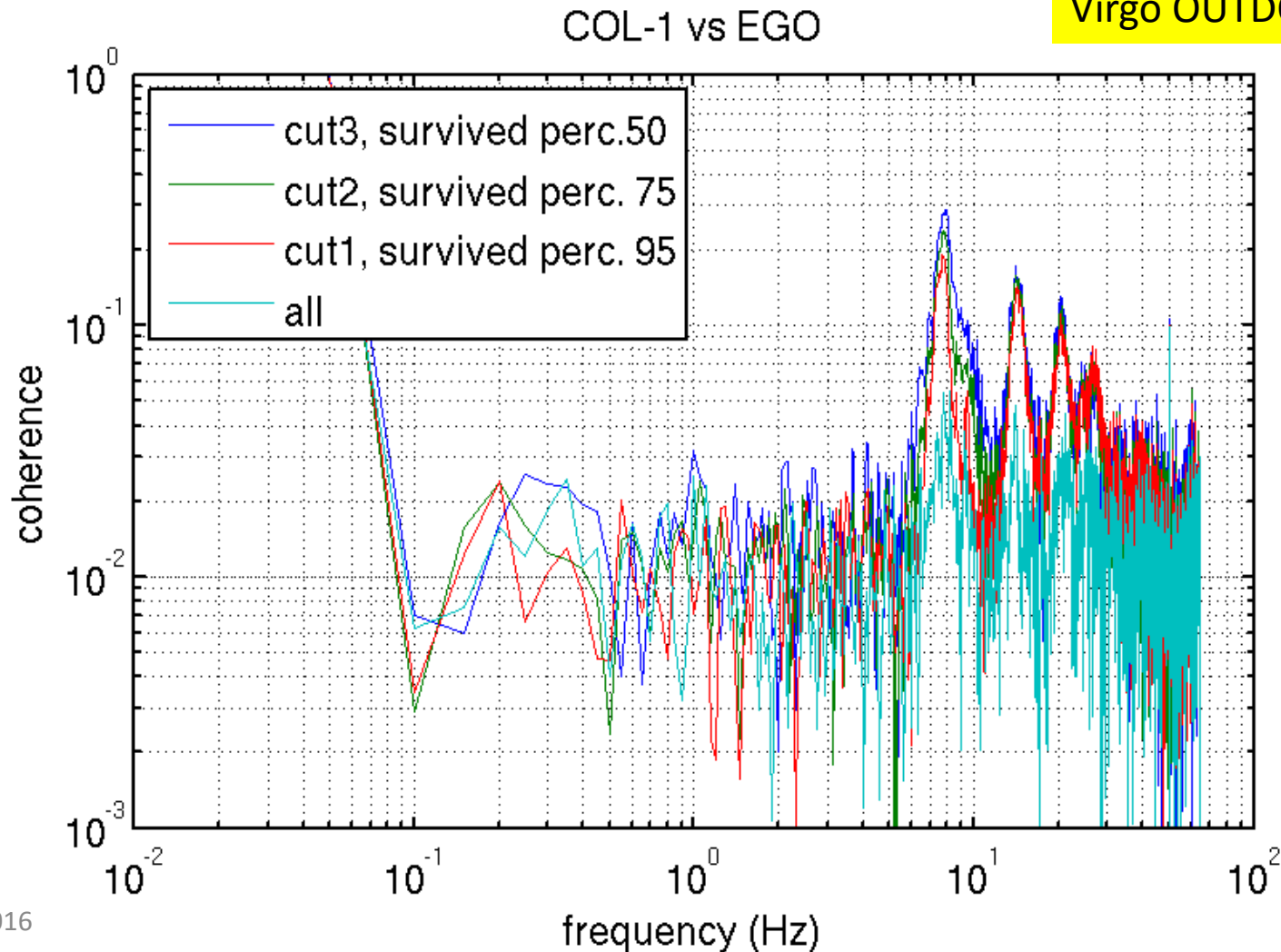
Coherences with “GOLDEN reference”

COLORADO versus
Villa Cristina



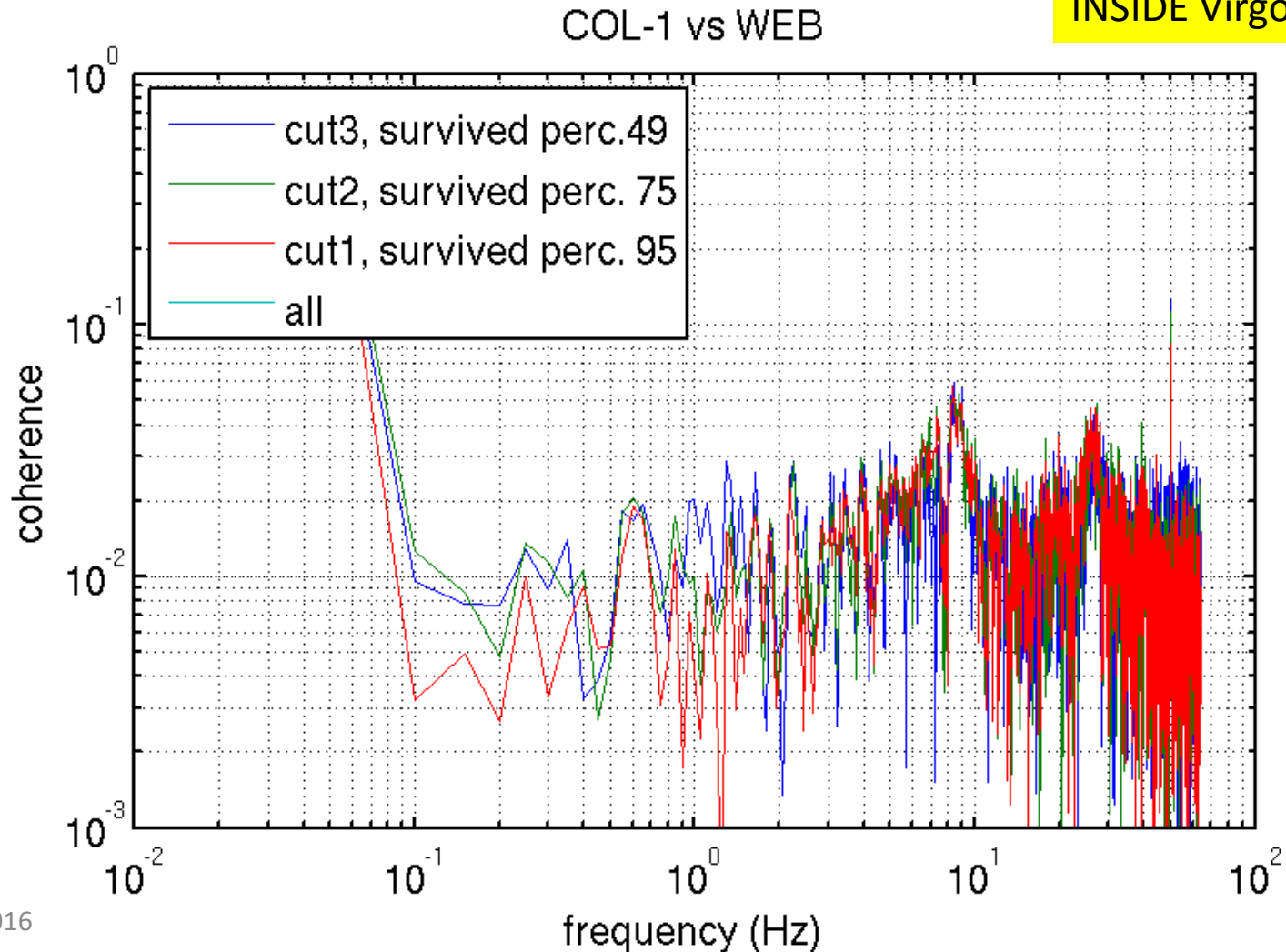
Coherences with “GOLDEN reference”

COLORADO versus
Virgo OUTDOOR



Coherences with “GOLDEN reference”

COLORADO versus
INSIDE Virgo Buildings



Some conclusions and Questions

- Moving one magnetometer “just” outside Virgo buildings allows detecting some global magnetic noise coherent with the USA
- Can we tell this magnetometer will work “ok” as witness sensor for subtracting global magnetic noise?
- What is the role of local magnetic noise?
- Can we devise a test of Wiener filter noise subtraction ...?

Coherence Outdoor vs Indoor

Virgo OUTDOOR vs
INSIDE Buildings

EGO vs NEB

