

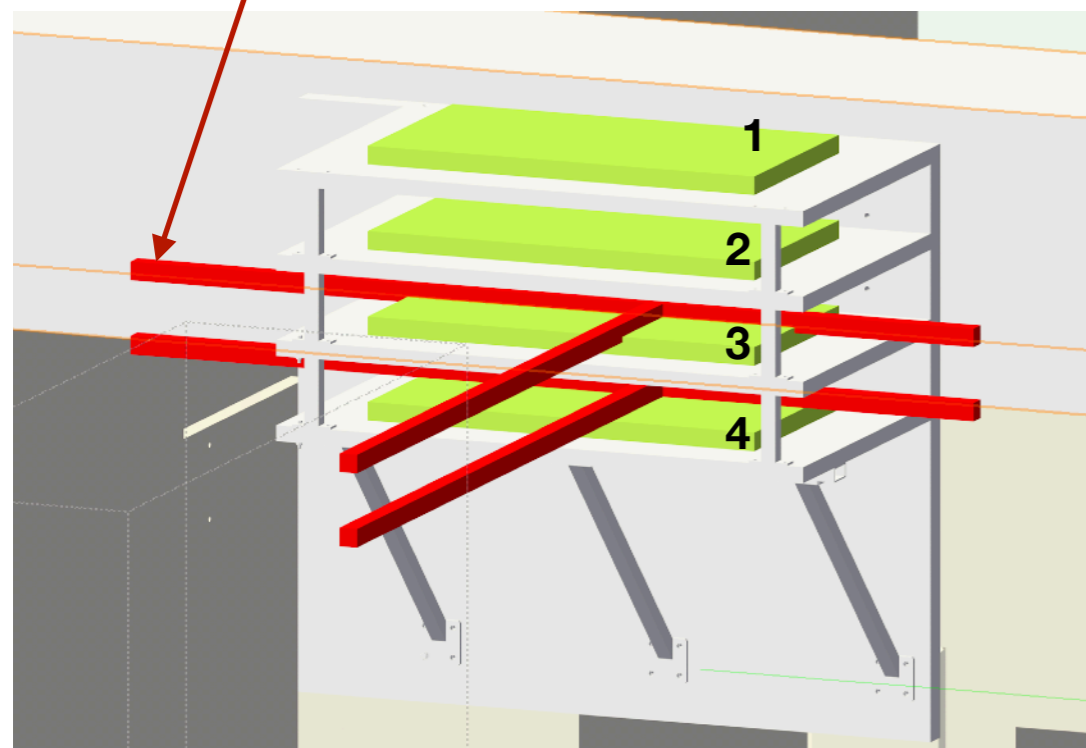
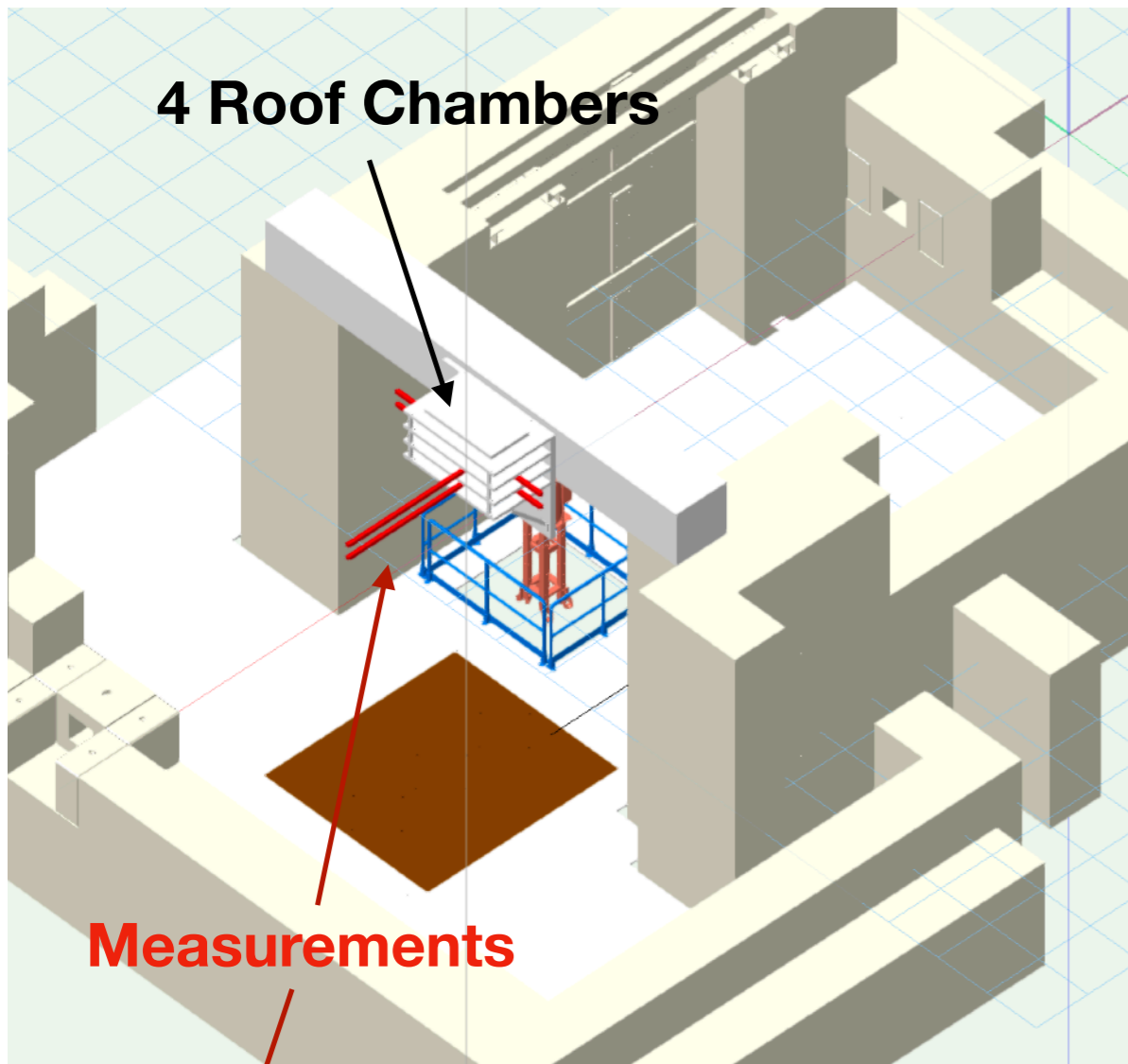


# Cosmic Tracker / Roof Chamber Radiation Background Measurement

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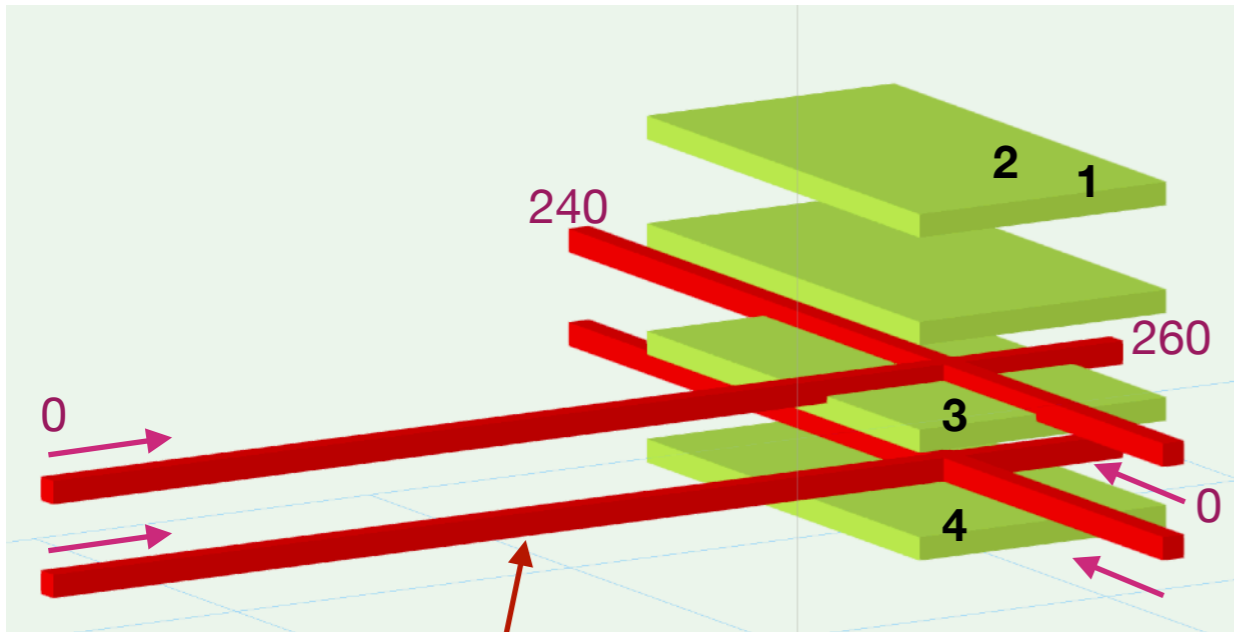
8. June 2018

# Dose Measurements

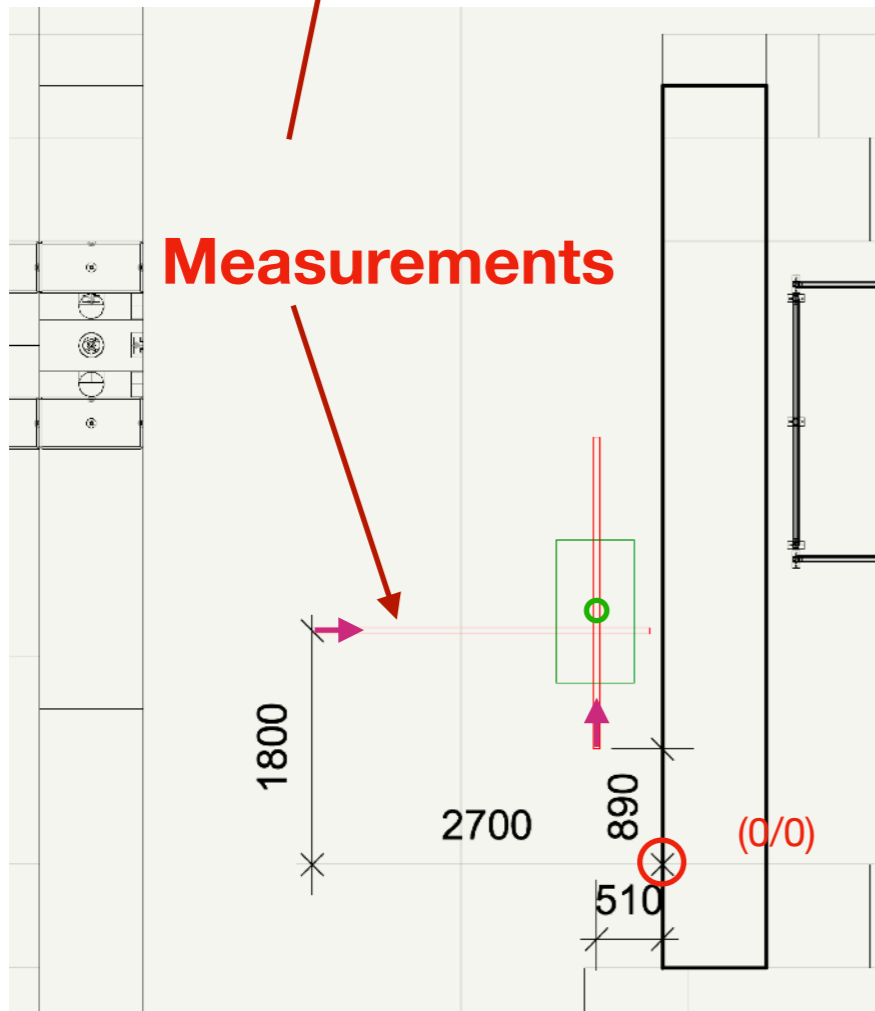


- Probe used : Automess AD6 with external probe (same as field mapping campaign)
- Berthold Geiger counter currently not available. Setup is in transition from old to new readout, now integrated into GifCS.
- 4 measurements with linear stage (red bars) : *Difficult, as bunker is not empty.*
  - At height of lowest chamber (4), and the one above (3)
  - For each height a scan along the support beam has been done, to see the influence of positioning, and also a scan towards the downstream wall to see the effect of the irradiation cone.
- **+ 1 Measurement in geometric center of chamber 3 with different absorption filter settings**

# Dose Measurements



- Coordinate system : (0/0) at corner of Jura side wall and roof concrete beam
- Scan along support beam :  
From (-51/89) cm for **240** cm every 10 cm
- Scan downstream area :  
From (-270/180) cm for **260** cm every 10 cm



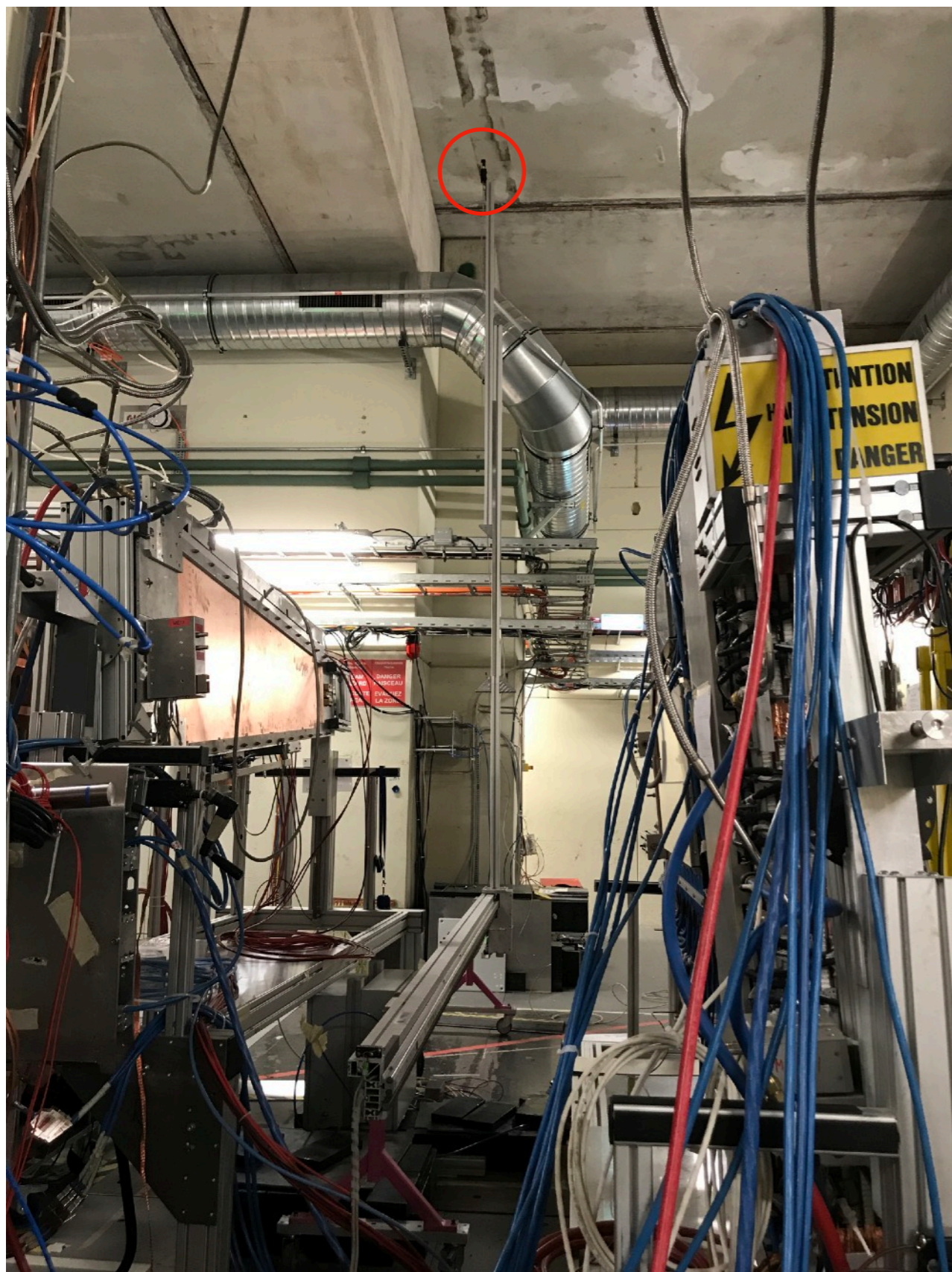
- Measurement near center of Chamber 3 (-50/195) :

Downstream absorber settings	○	μSv/h
1/1		3.2
1/10		0,35
1/100		0,05

Upstream absorption : 46000

Only upstream field open :  $\approx 0.18 \mu\text{Sv/h}$

**Scan along the support beam :**



**Scan downstream area :**



