

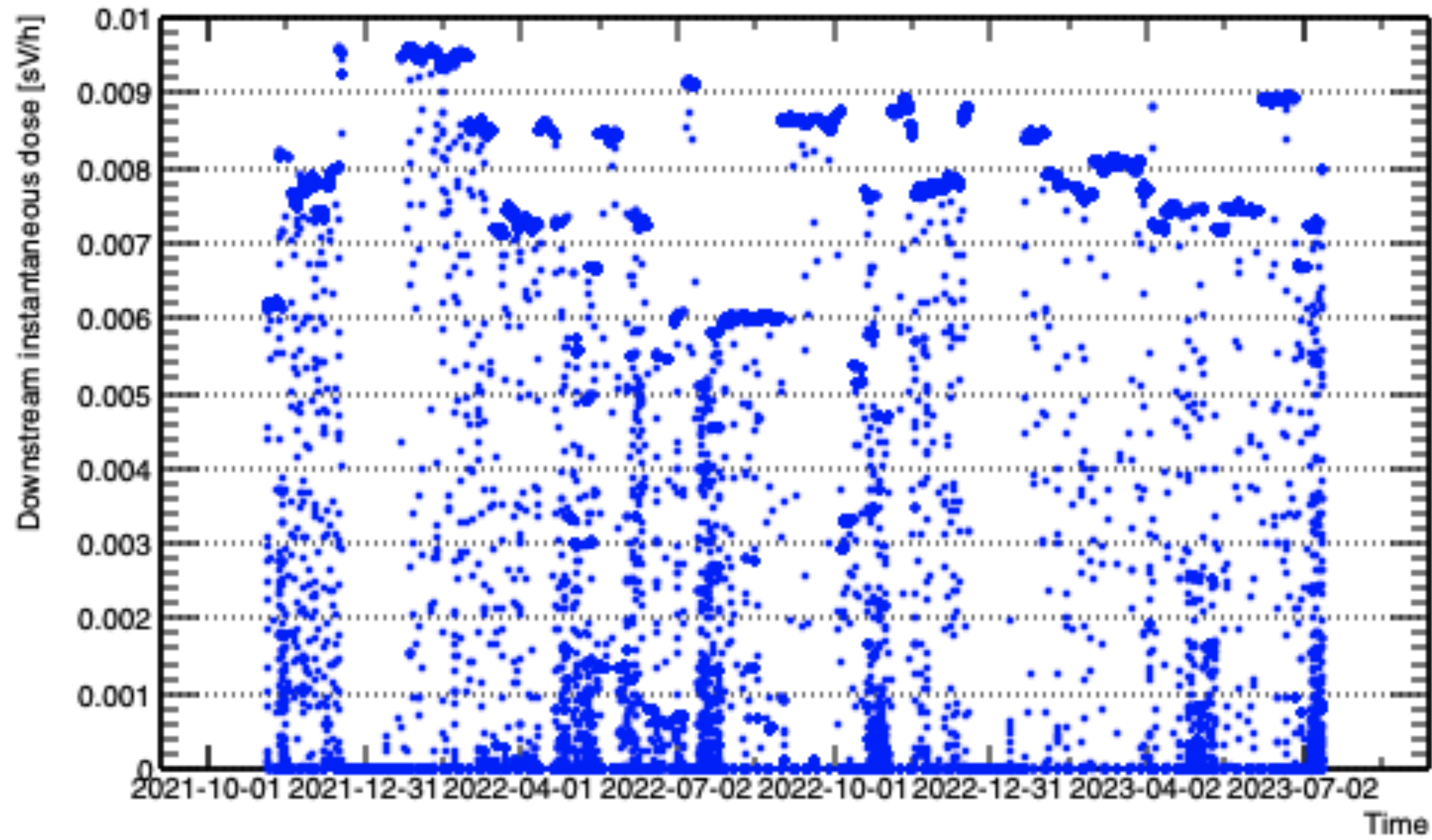
**Dose at GIF++**

**Luca Quaglia, Marco Sessa**

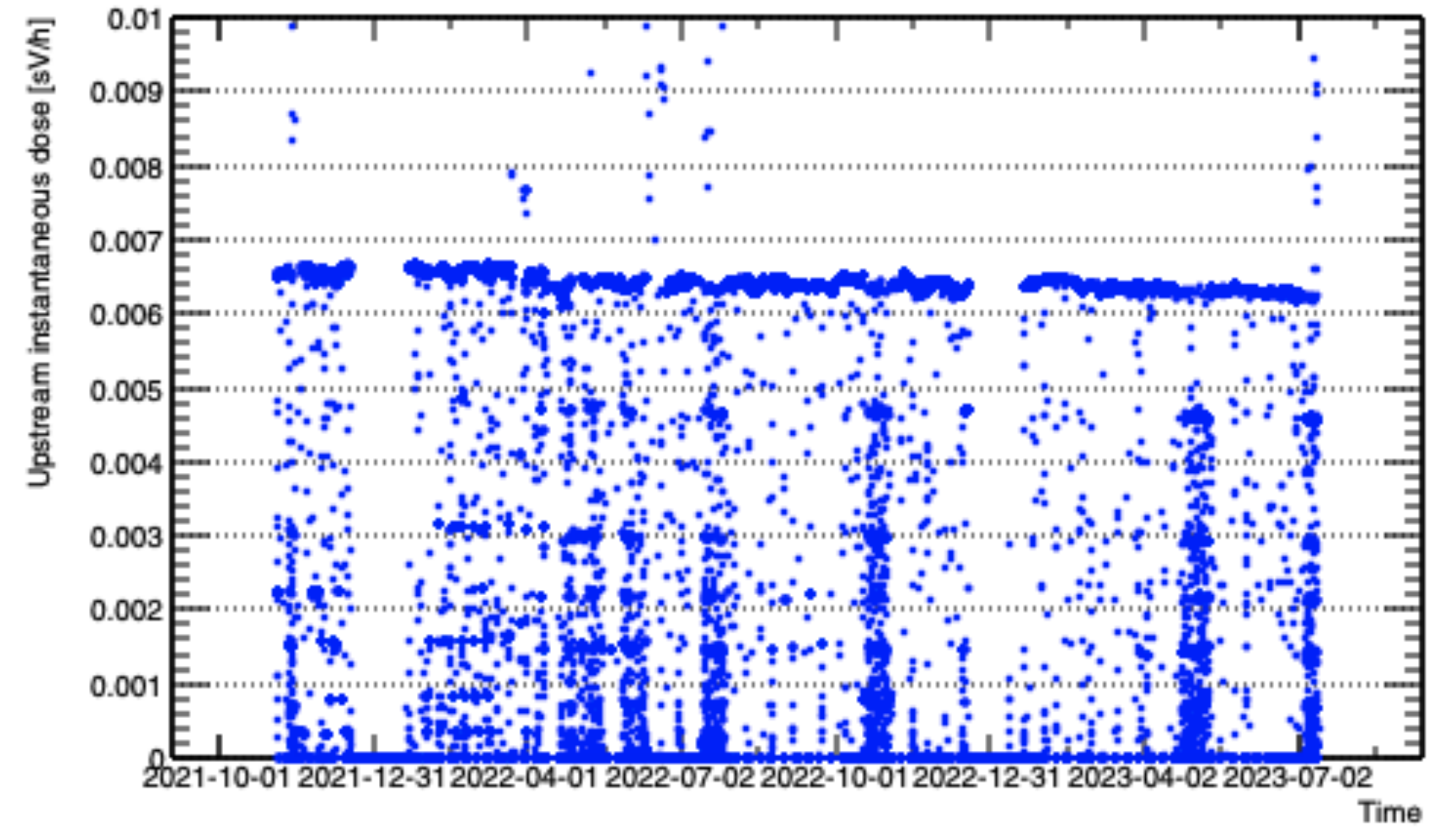
# Instantaneous dose

## 4 November 2021 - 13 July 2023

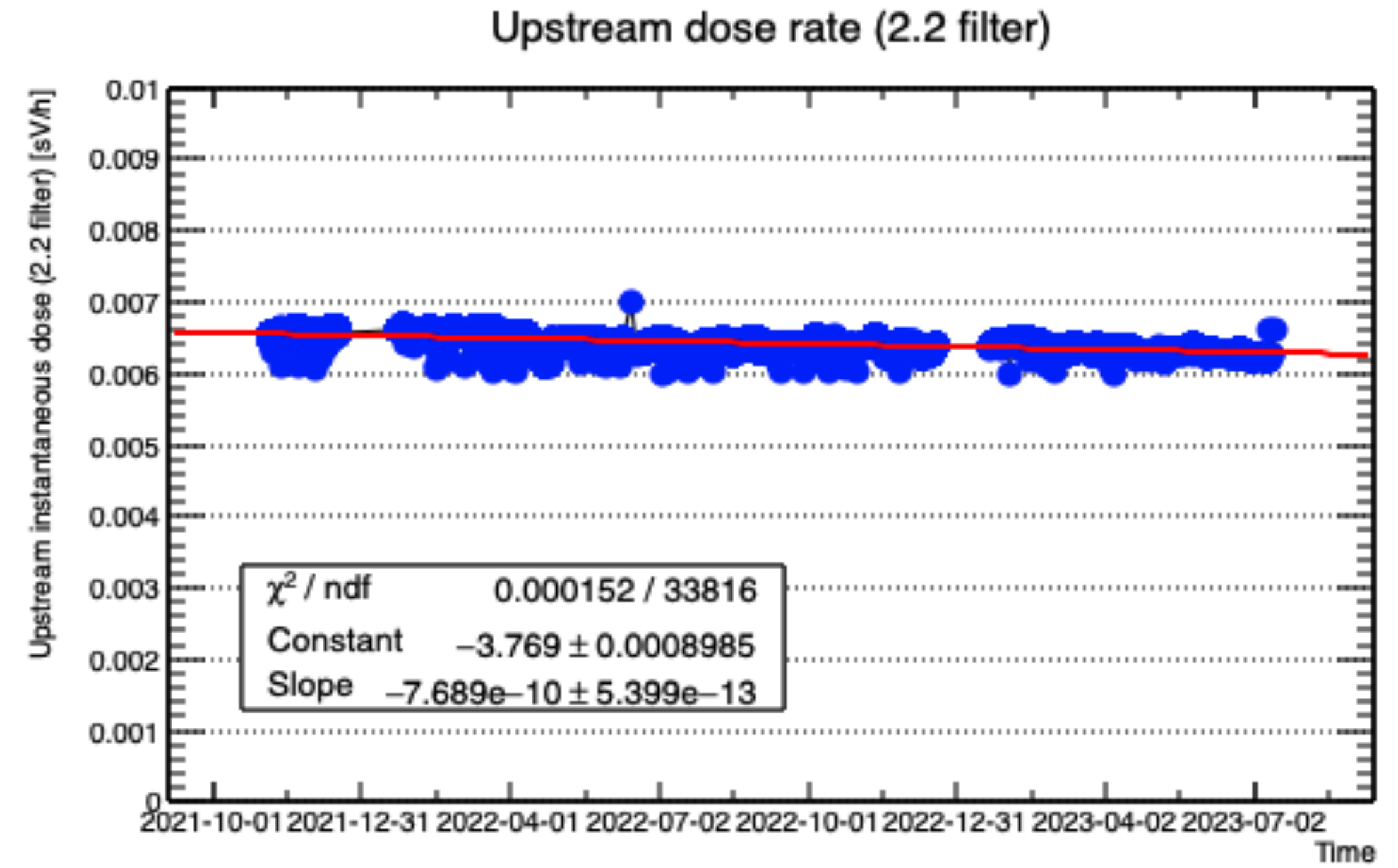
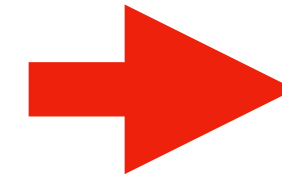
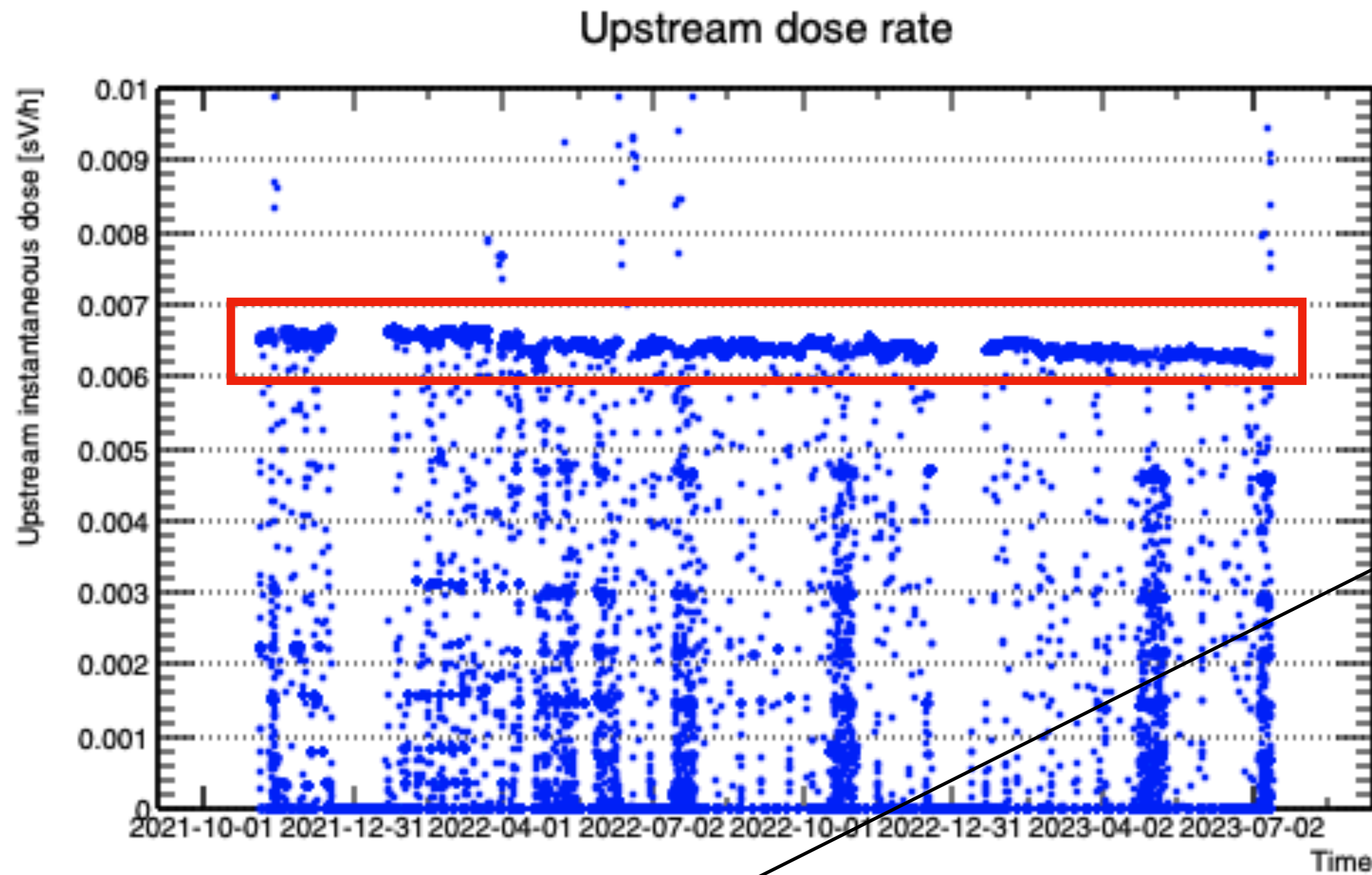
Downstream dose rate



Upstream dose rate



# Instantaneous dose (upstream only)



Raw estimate

Selected all the measurements between 0.006 and 0.007 Sv/h, consistent with 2.2 upstream filter

Measured:  $t_{1/2} = -(1/\text{slope}) * \ln 2 = 28.6$  years

Reference

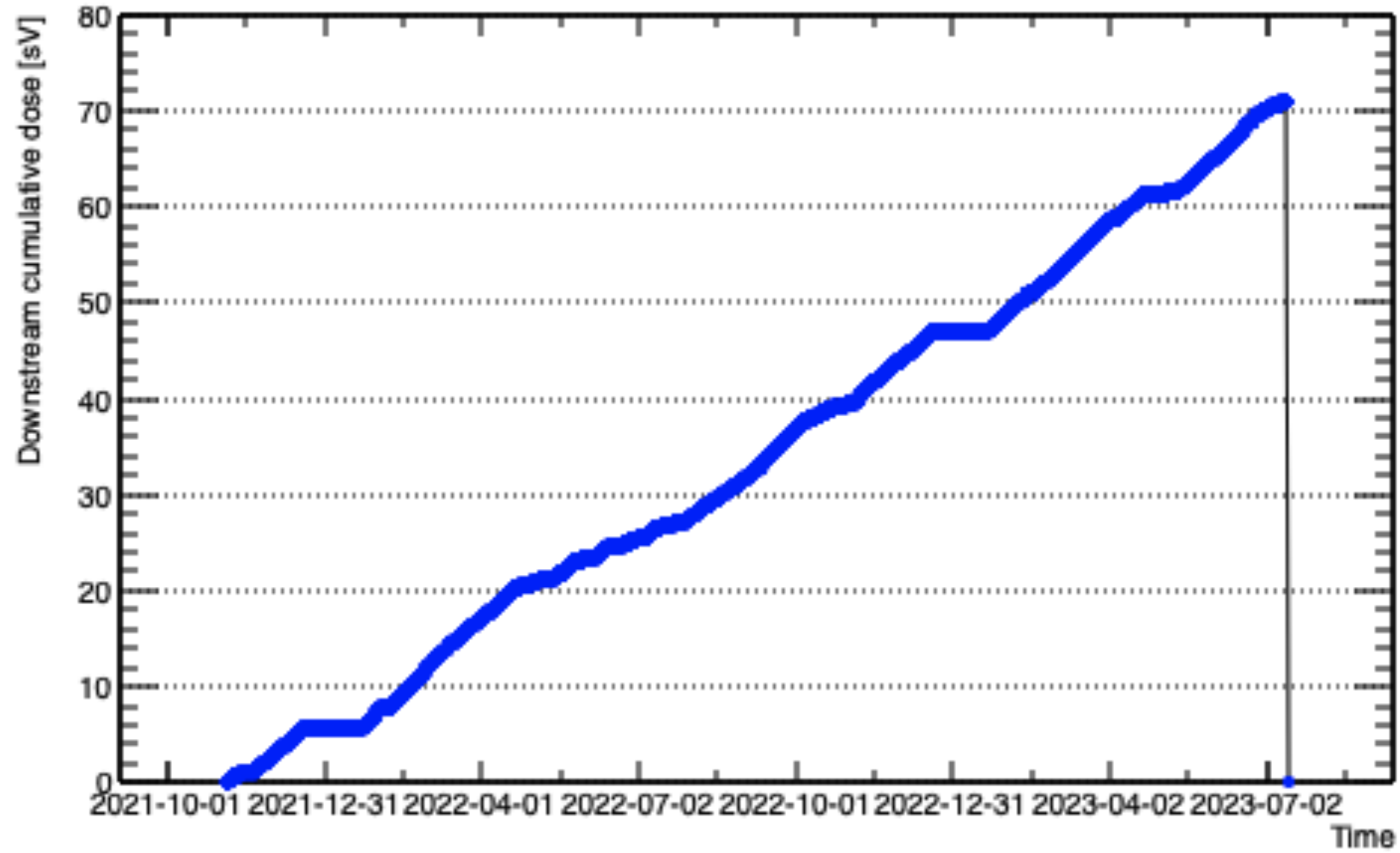
Half-life ( $t_{1/2}$ )

$30.05 \pm 0.08$  years



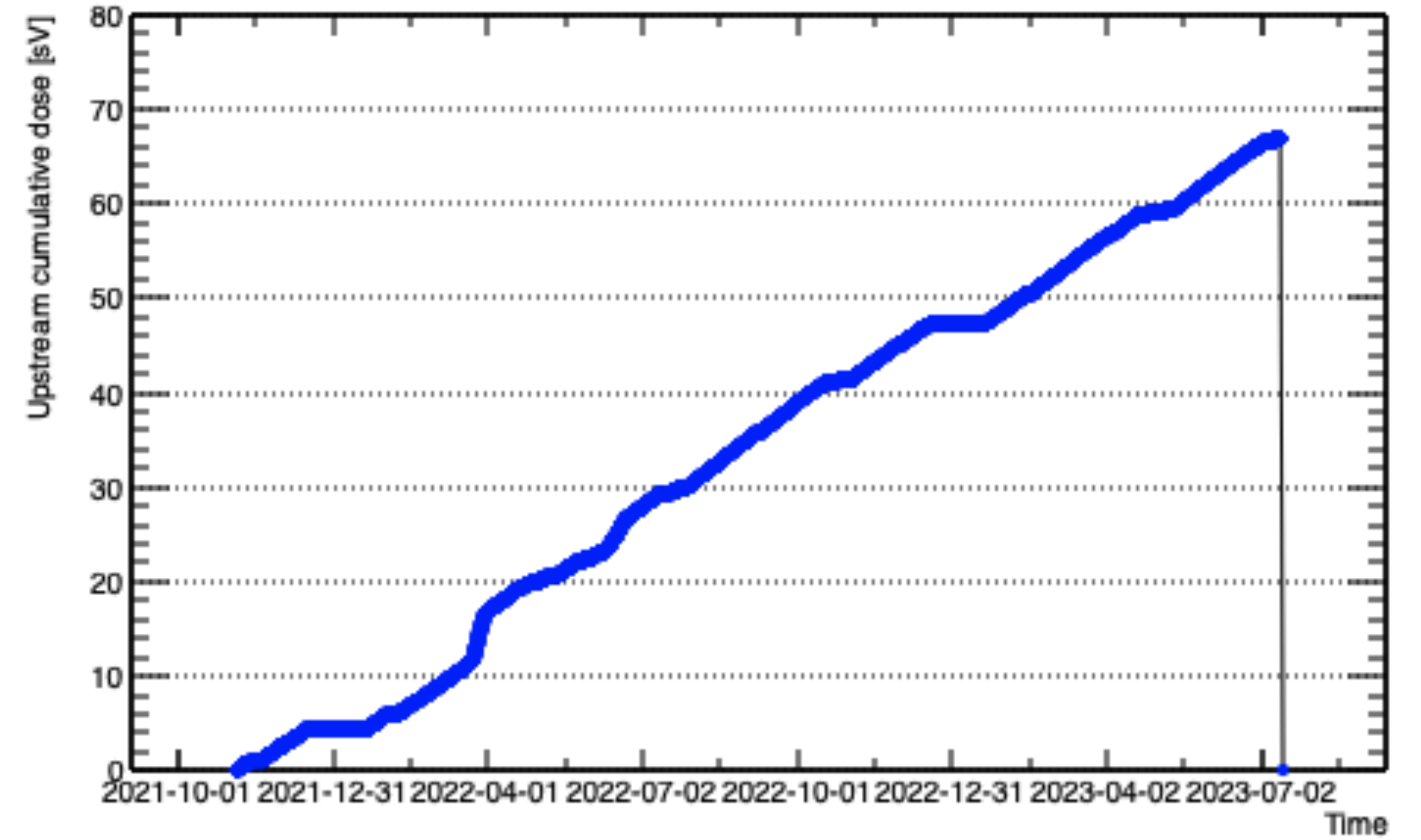
# Integrated dose

## Downstream cumulative dose



**Integrated dose = 70.9 Sv**

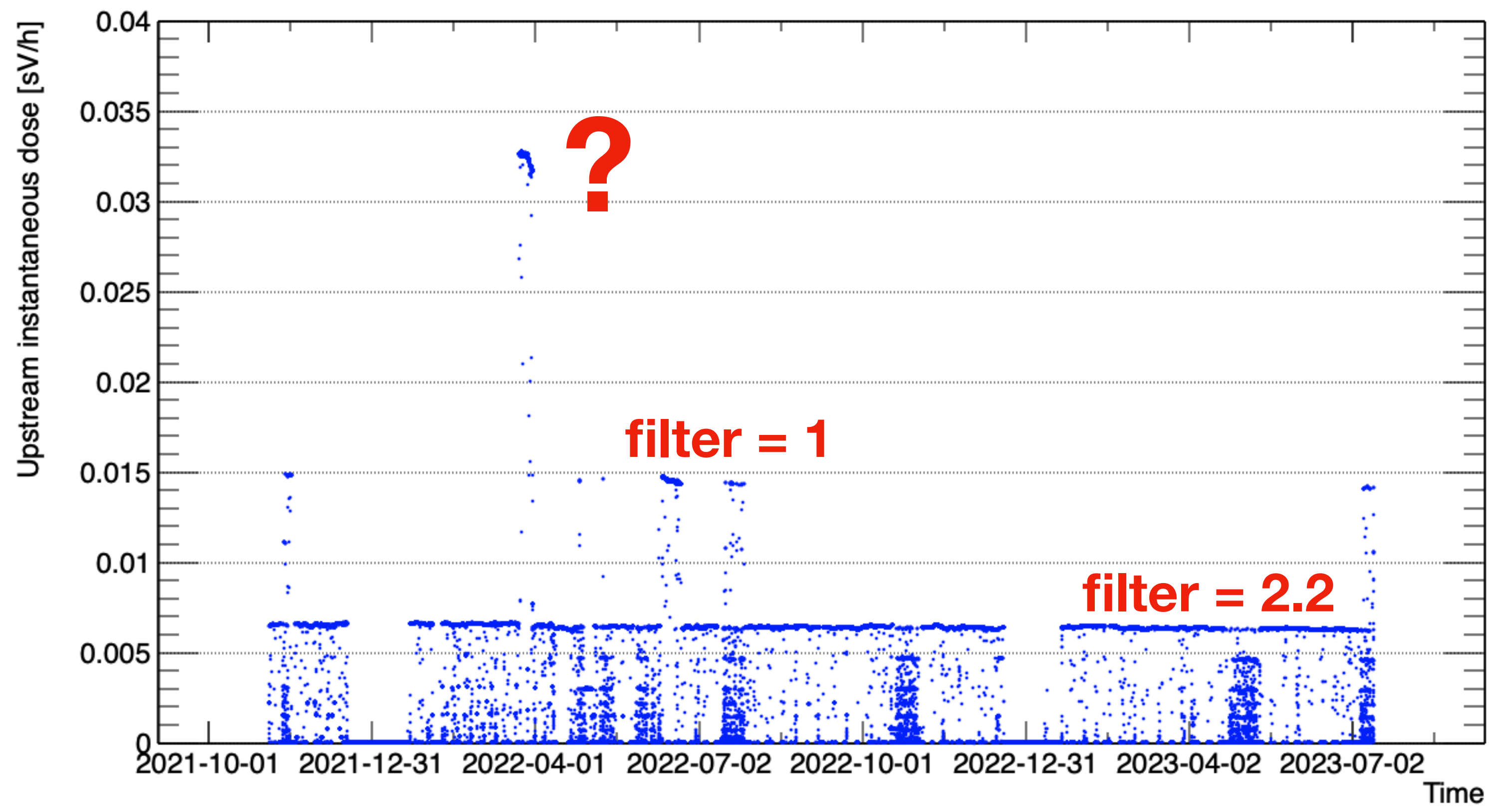
## Upstream cumulative dose



**Integrated dose = 67.0 Sv**

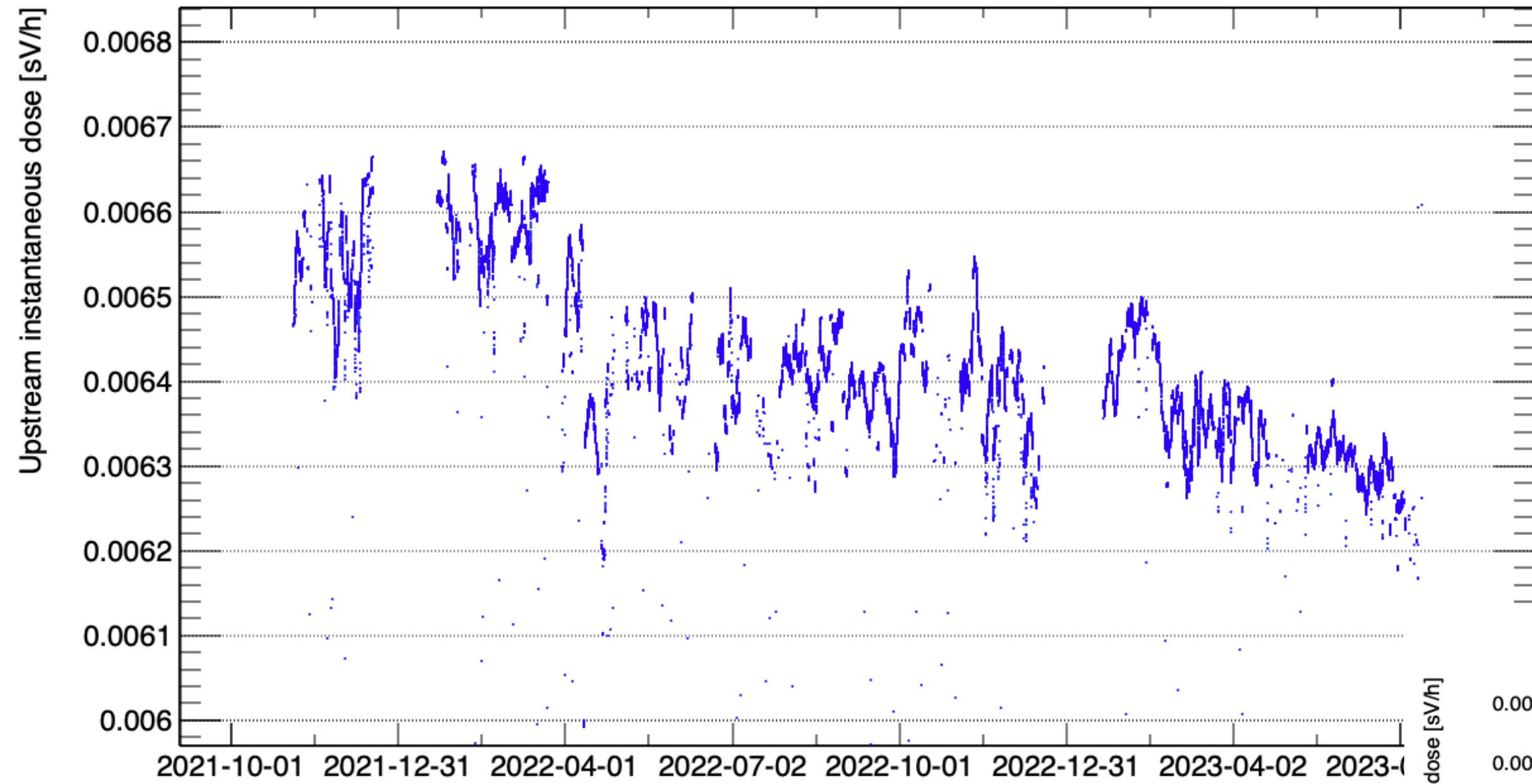
**Back-up slides**

# Upstream dose rate



# Deep zoom

Upstream dose rate



**Sub-structures observed?**

Upstream dose rate

