

# GEM simulation

GEM(緑の部分)

Pitch 0.7mm

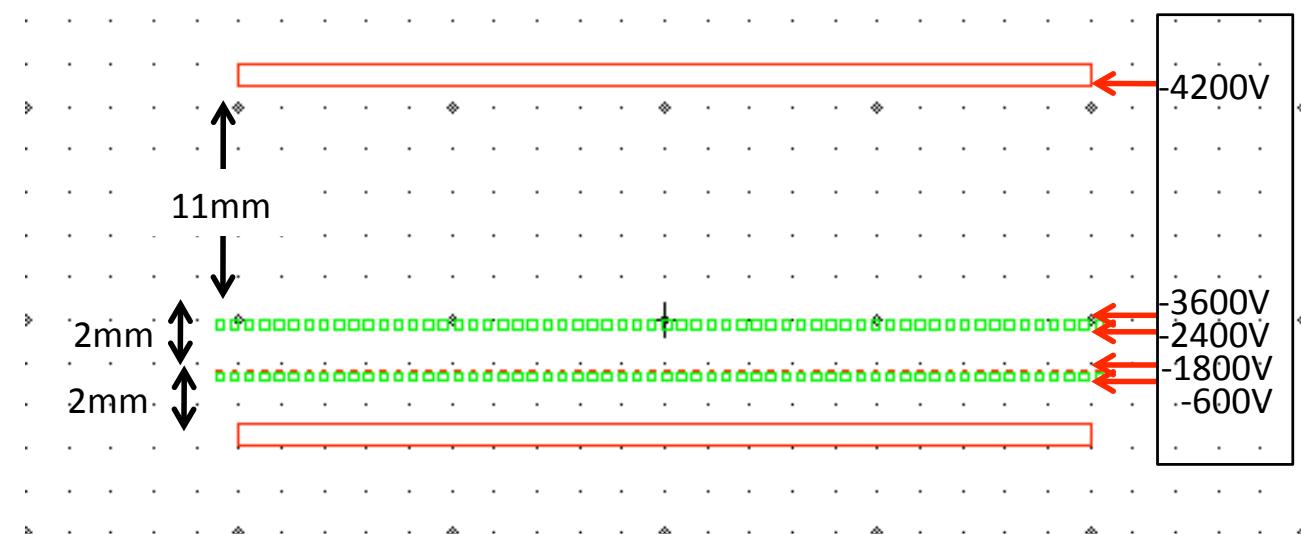
Drilled Hole diameter  
0.3mm

Etched Cu diameter  
0.5mm

Thickness of Cu  
25 $\mu$ m

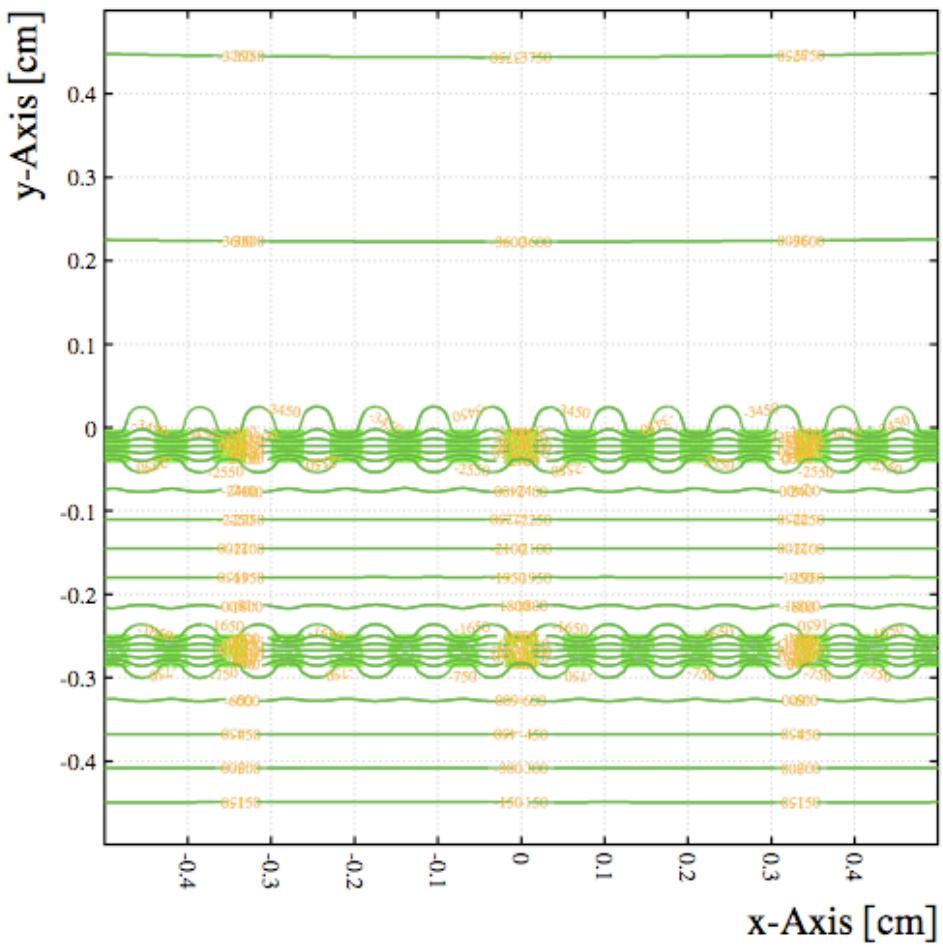
Thickness of G10  
400 $\mu$ m

GEM 600,1200,600,1200,600 の電圧

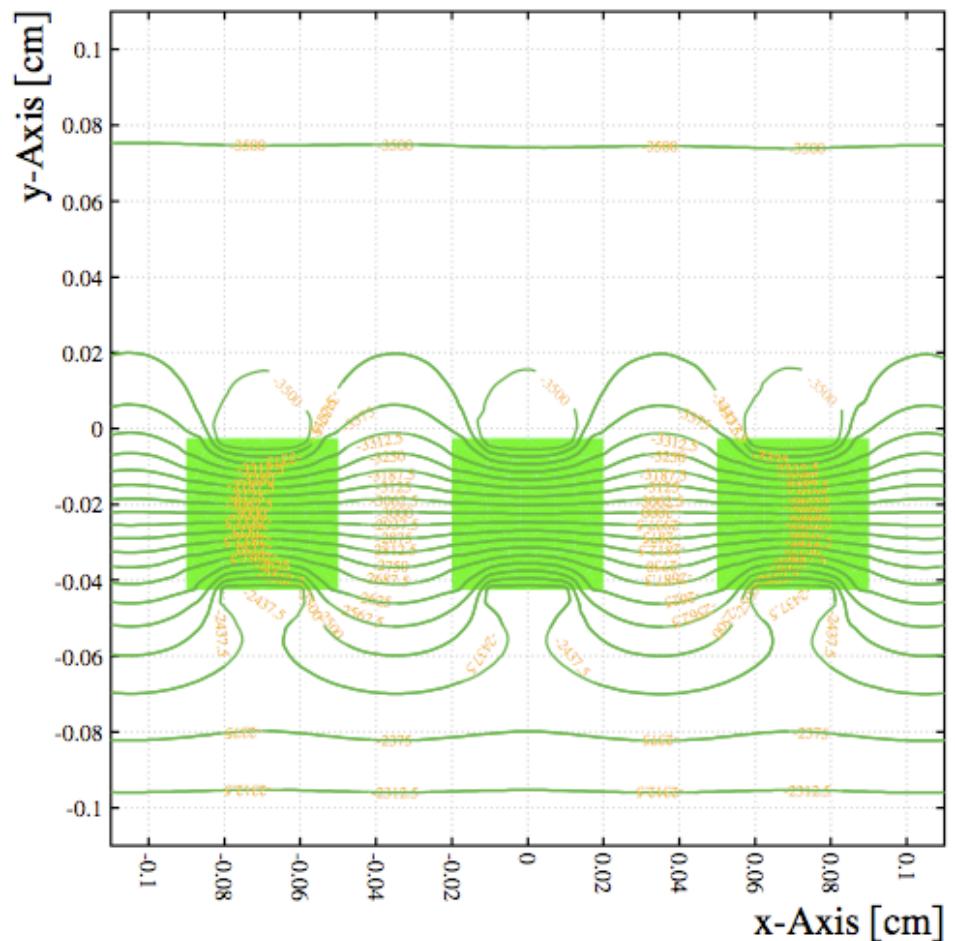


GEM 600,1200,600,1200,600

## Contours of V

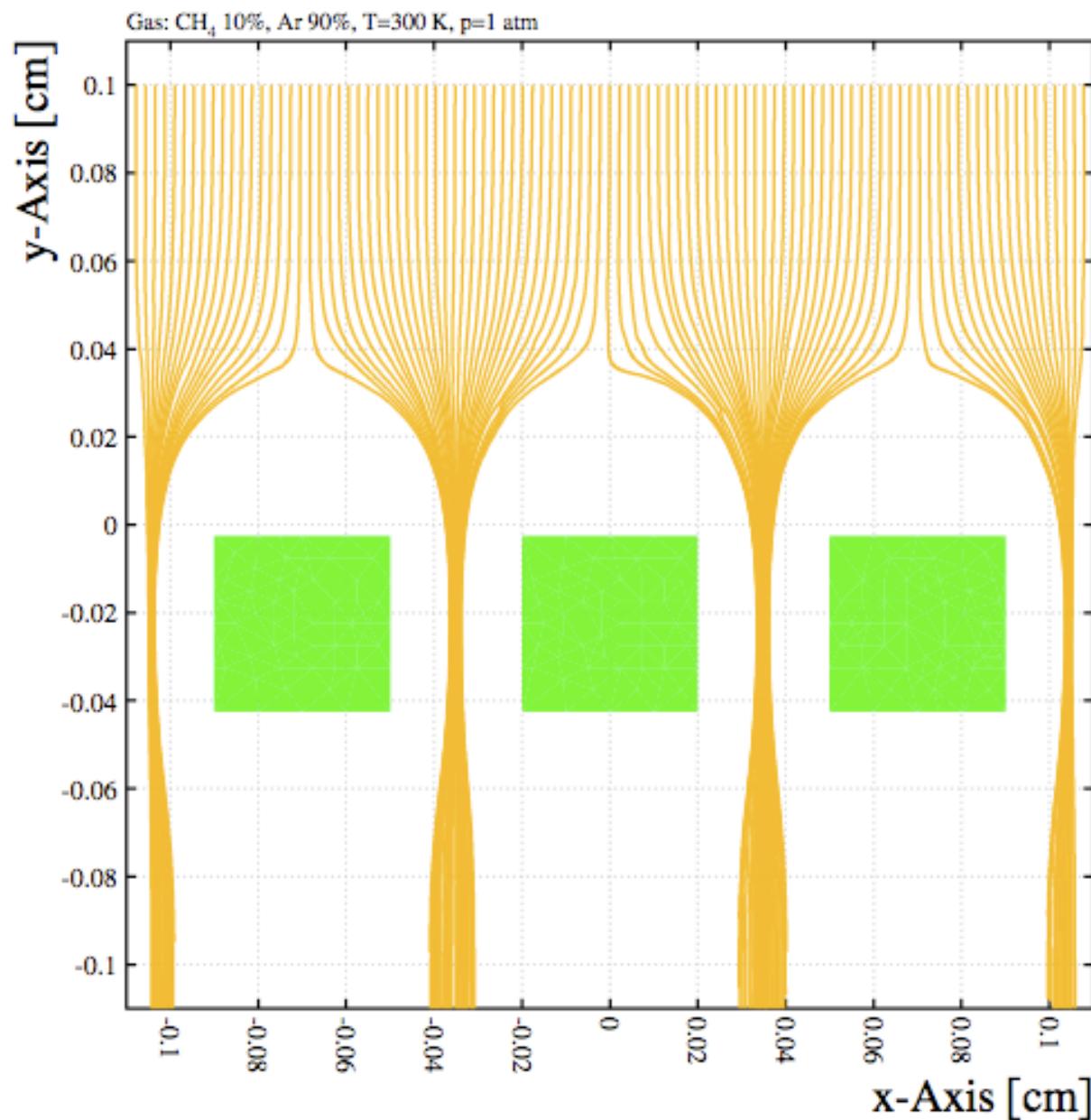


## Contours of V



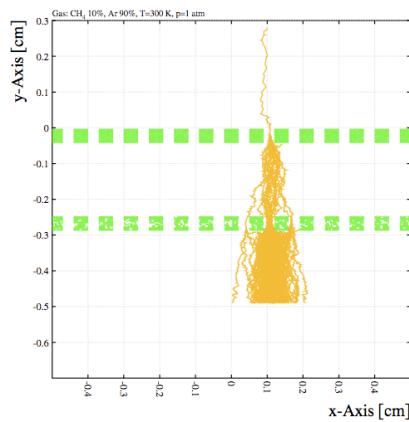
GEM 600,1200,600,1200,600

## Layout of the cell

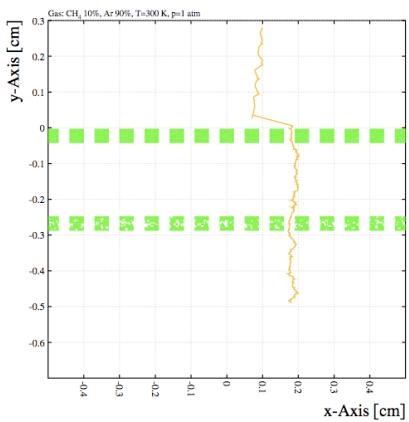


GEM 600,1200,600,1200,600

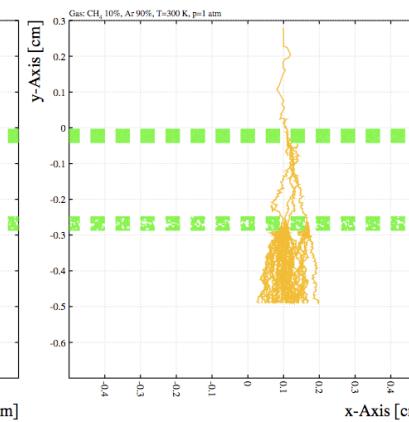
## Layout of the cell



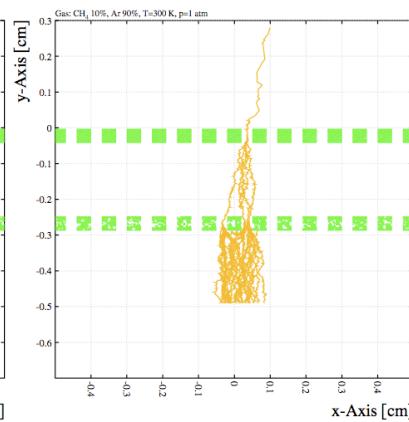
## Layout of the cell



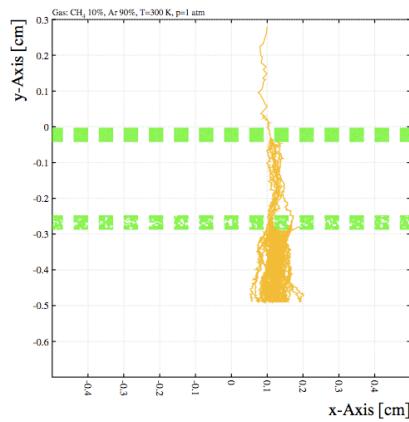
## Layout of the cell



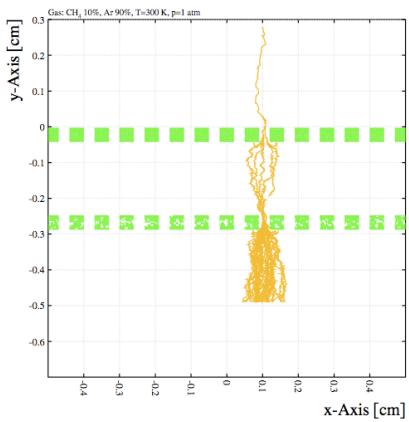
## Layout of the cell



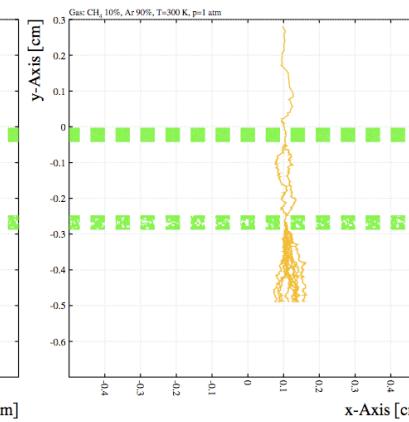
## Layout of the cell



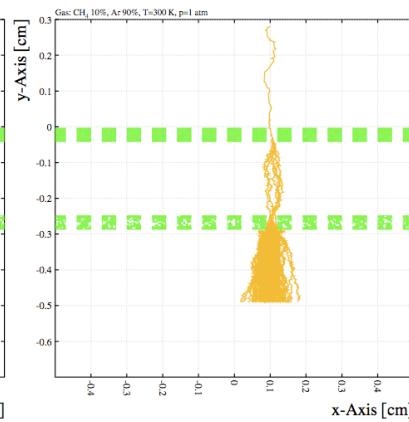
## Layout of the cell



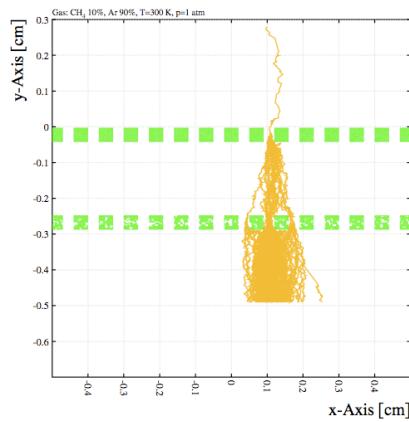
## Layout of the cell



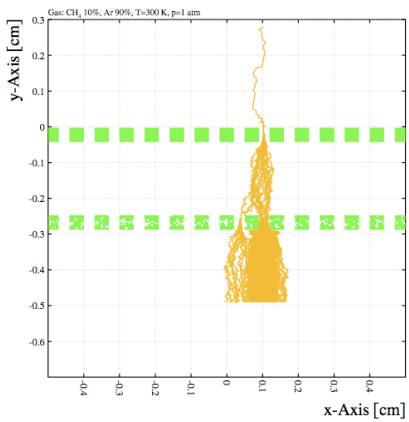
## Layout of the cell



## Layout of the cell

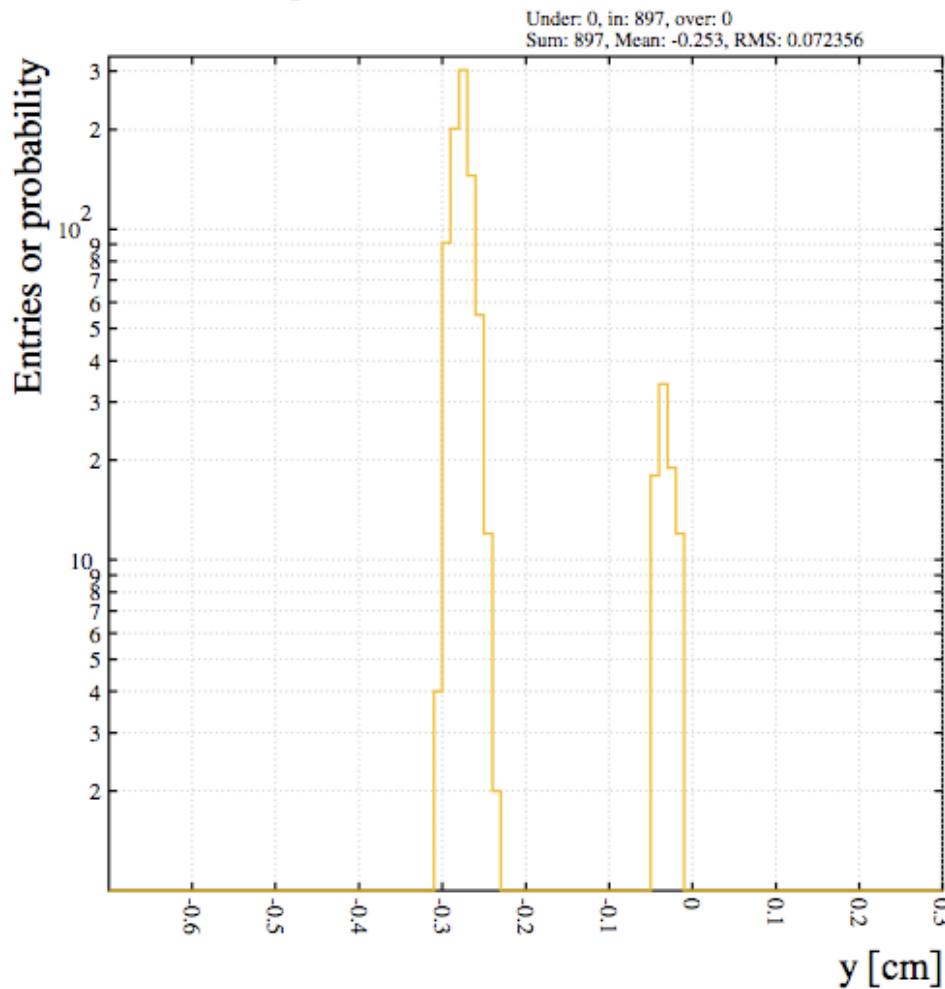


## Layout of the cell

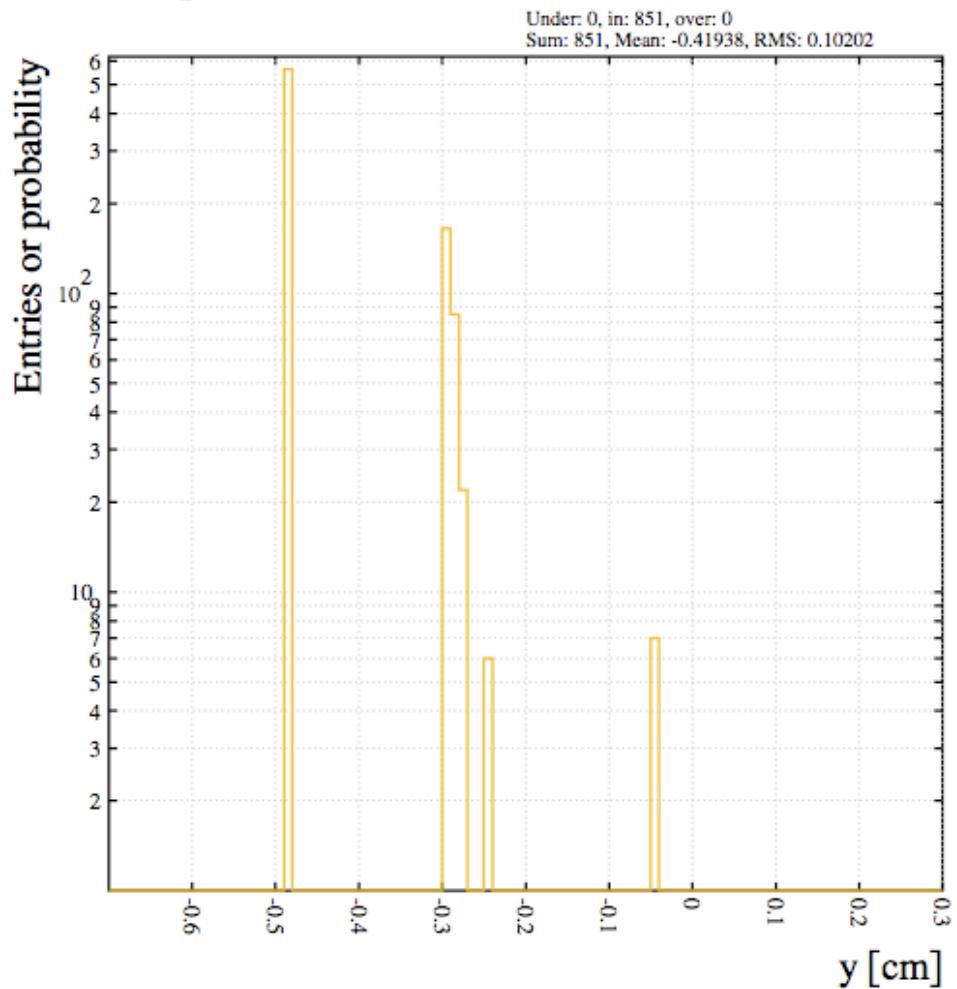


GEM 600,1200,600,1200,600

Production point of electrons



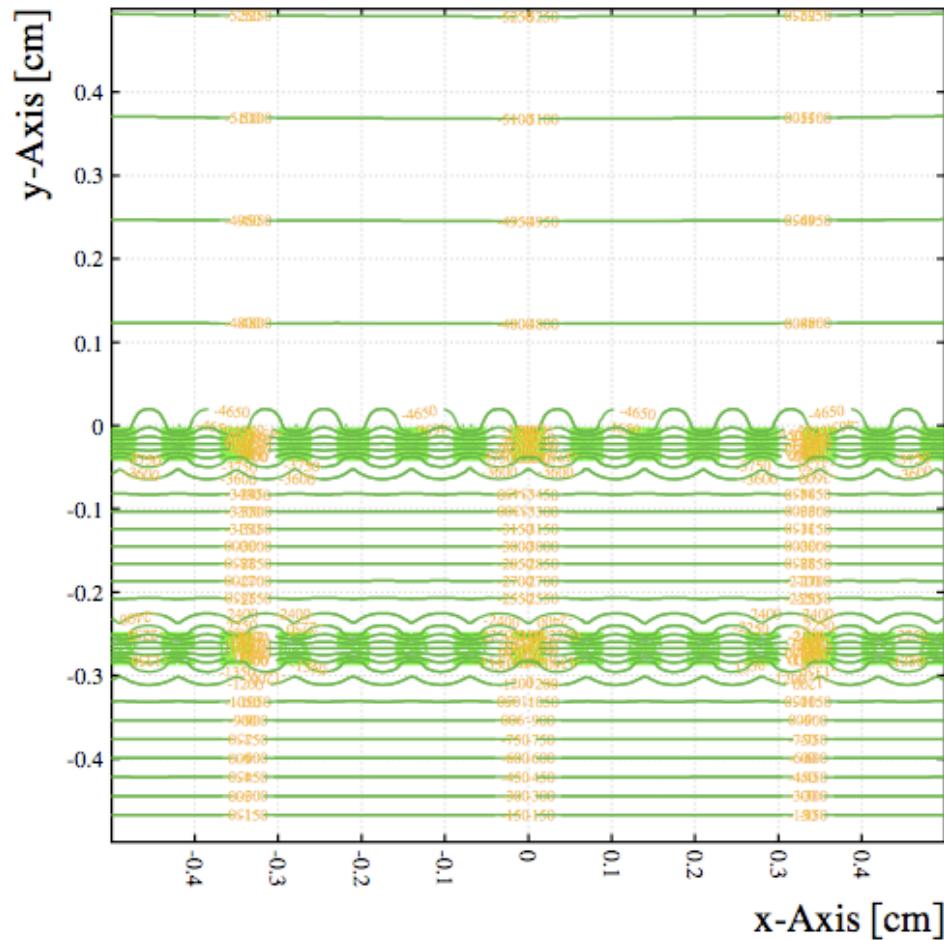
End point of electrons



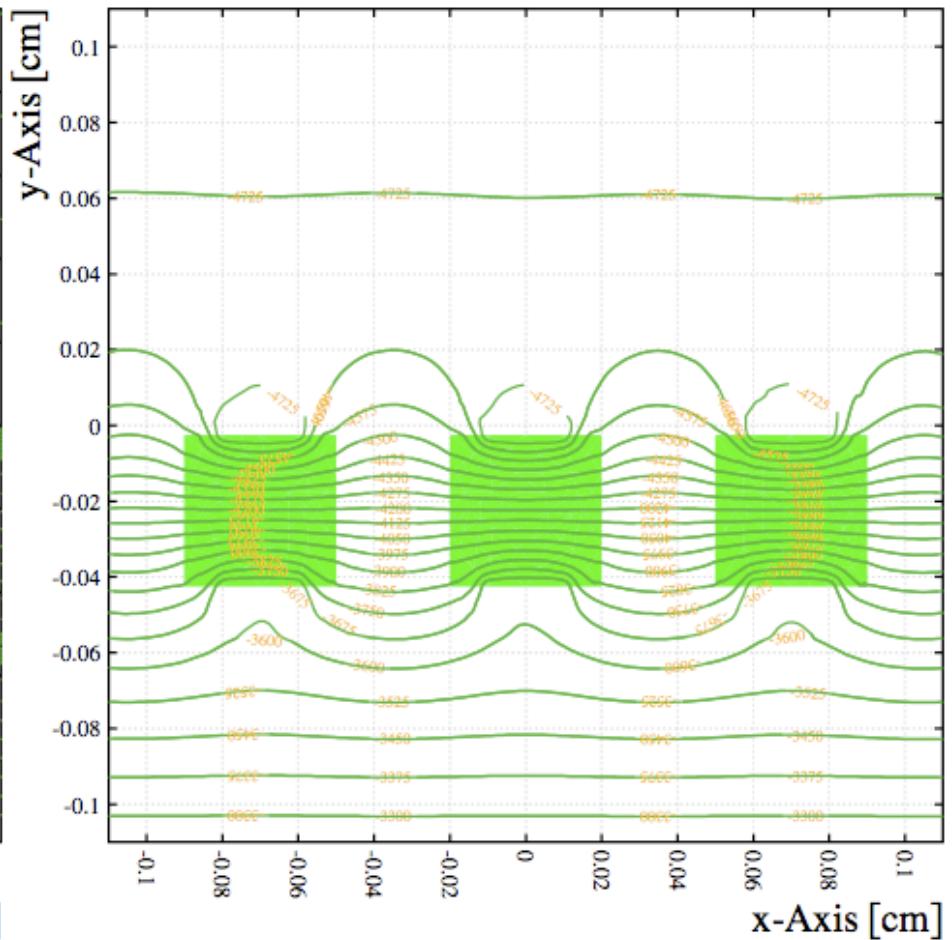
1個の電子は対し平均で約600個にまで増える

GEM 1200,1200,1200,1200,1200

Contours of V

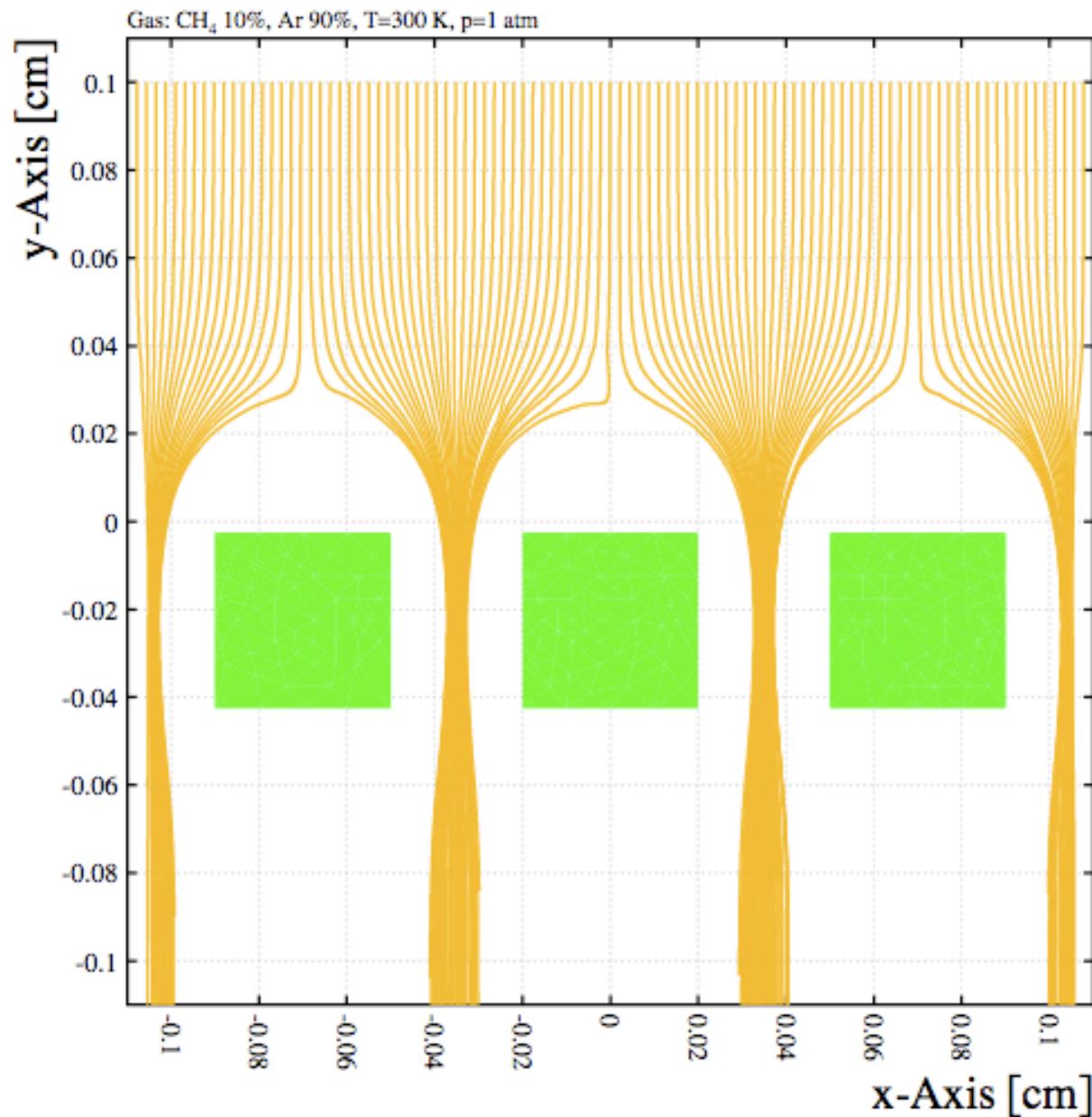


Contours of V

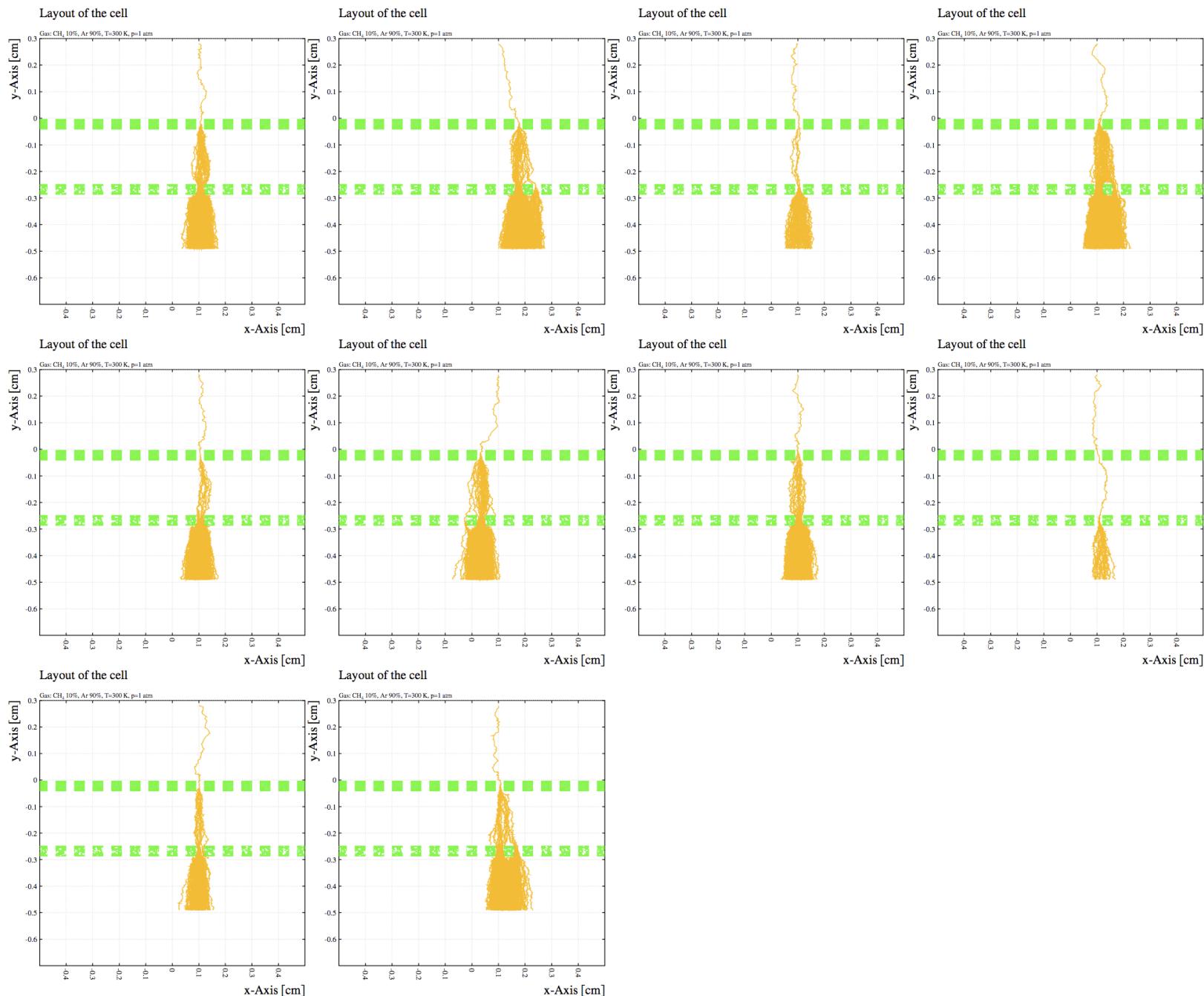


GEM 1200,1200,1200,1200,1200

### Layout of the cell

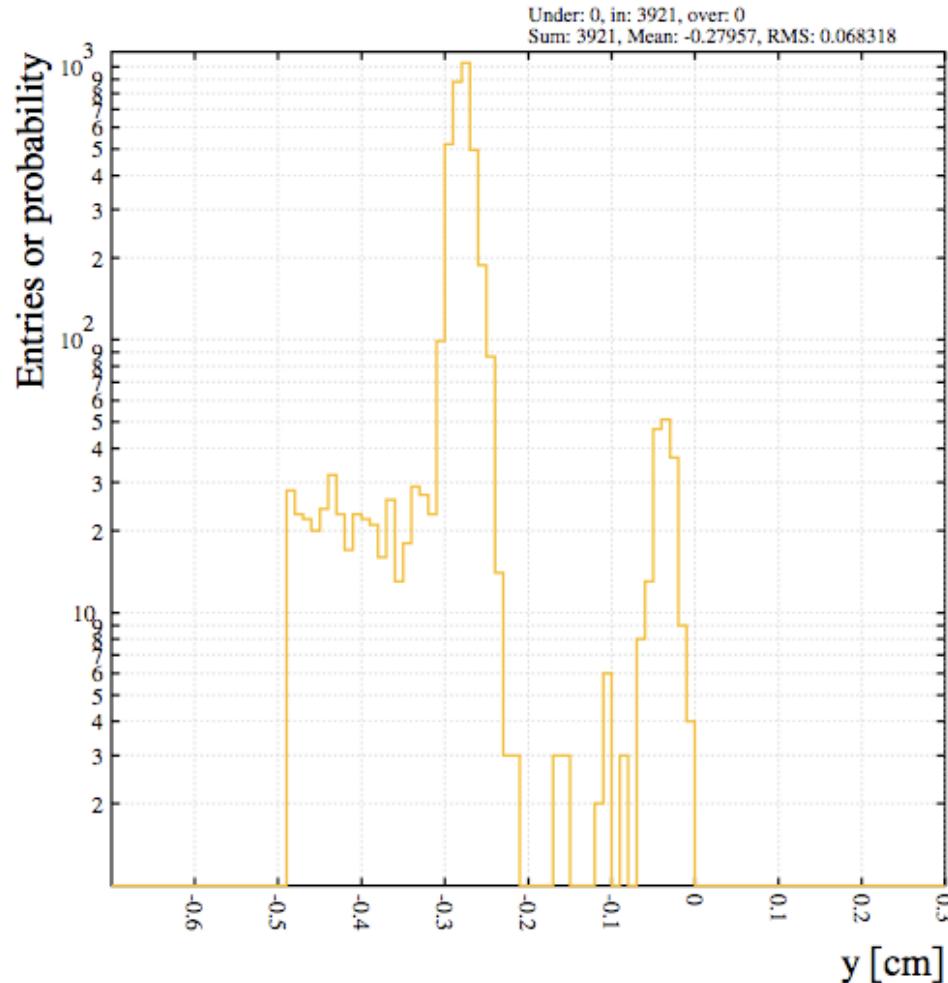


GEM 1200,1200,1200,1200,1200

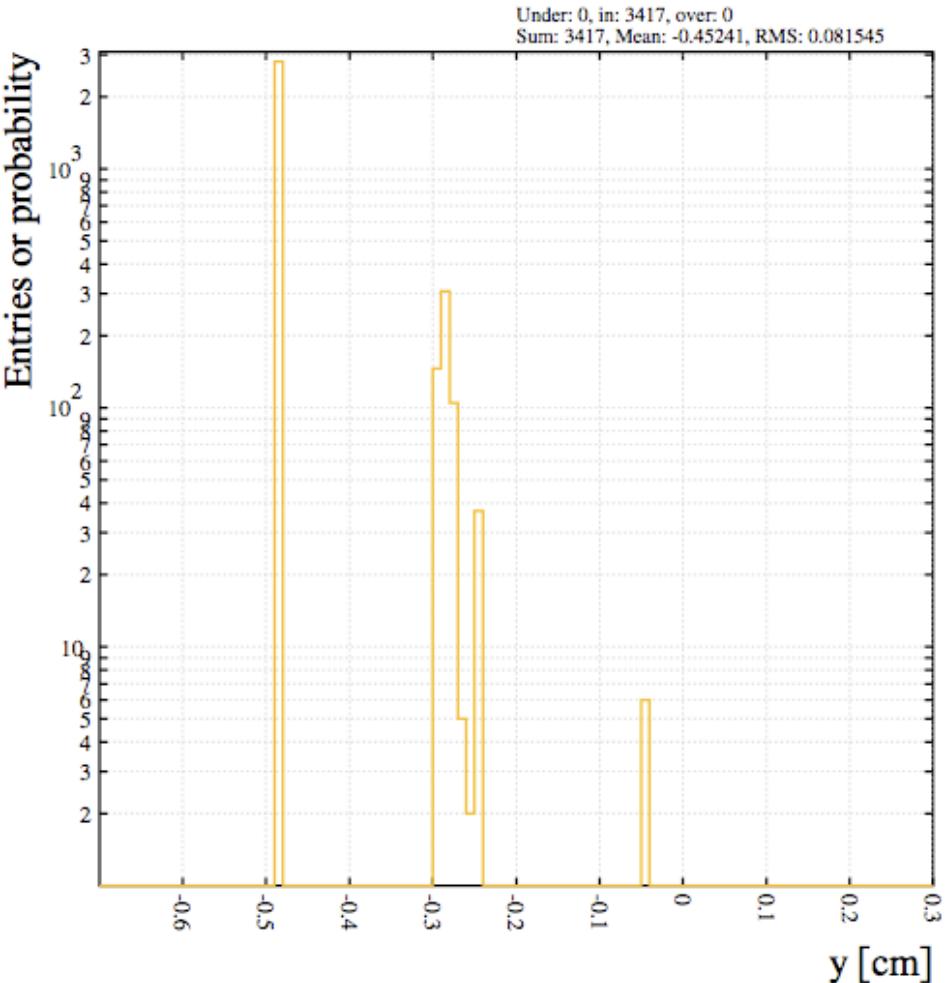


GEM 1200,1200,1200,1200,1200

Production point of electrons



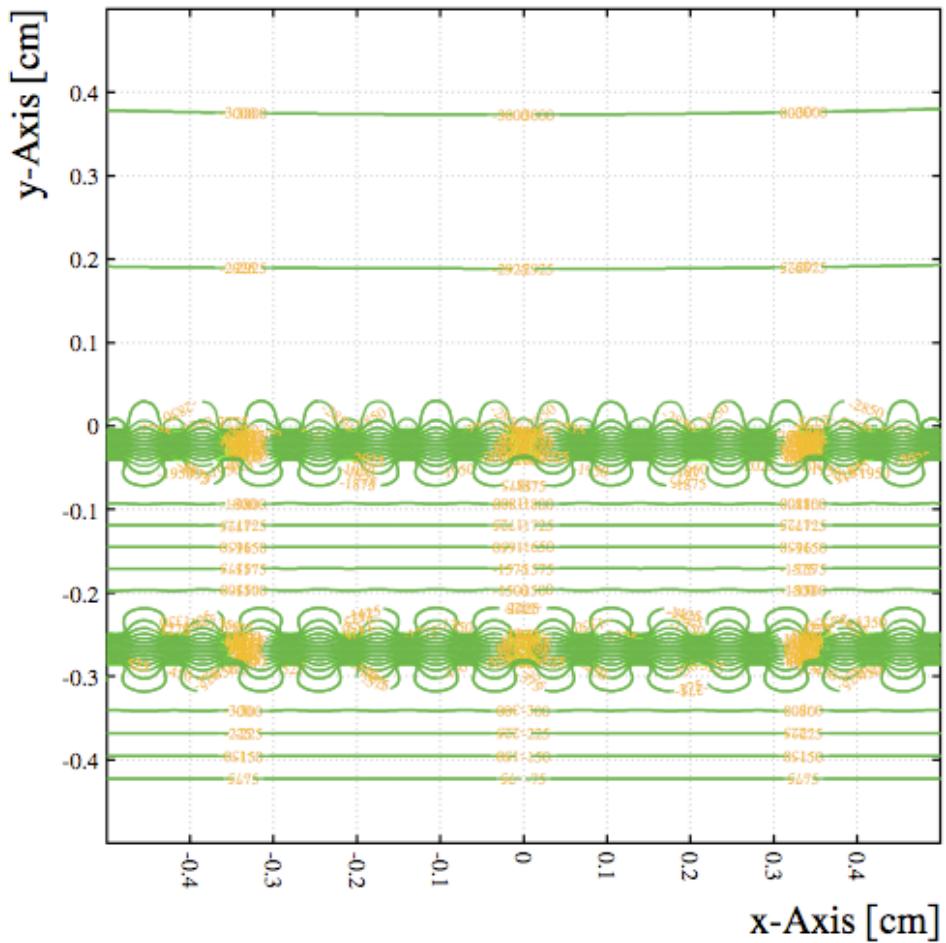
End point of electrons



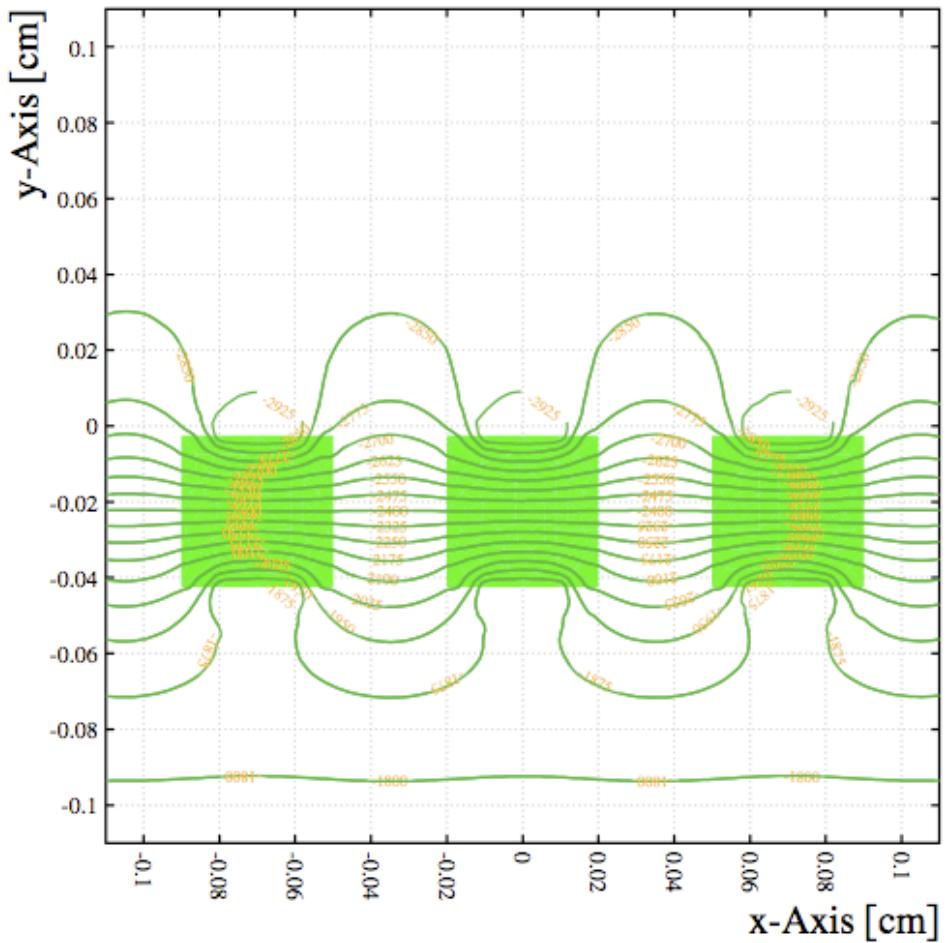
gain (End point of electrons around 0.5) が増加した。  
GEM以外のところでも production が起こってる

GEM 300,1200,300,300,1200

## Contours of V

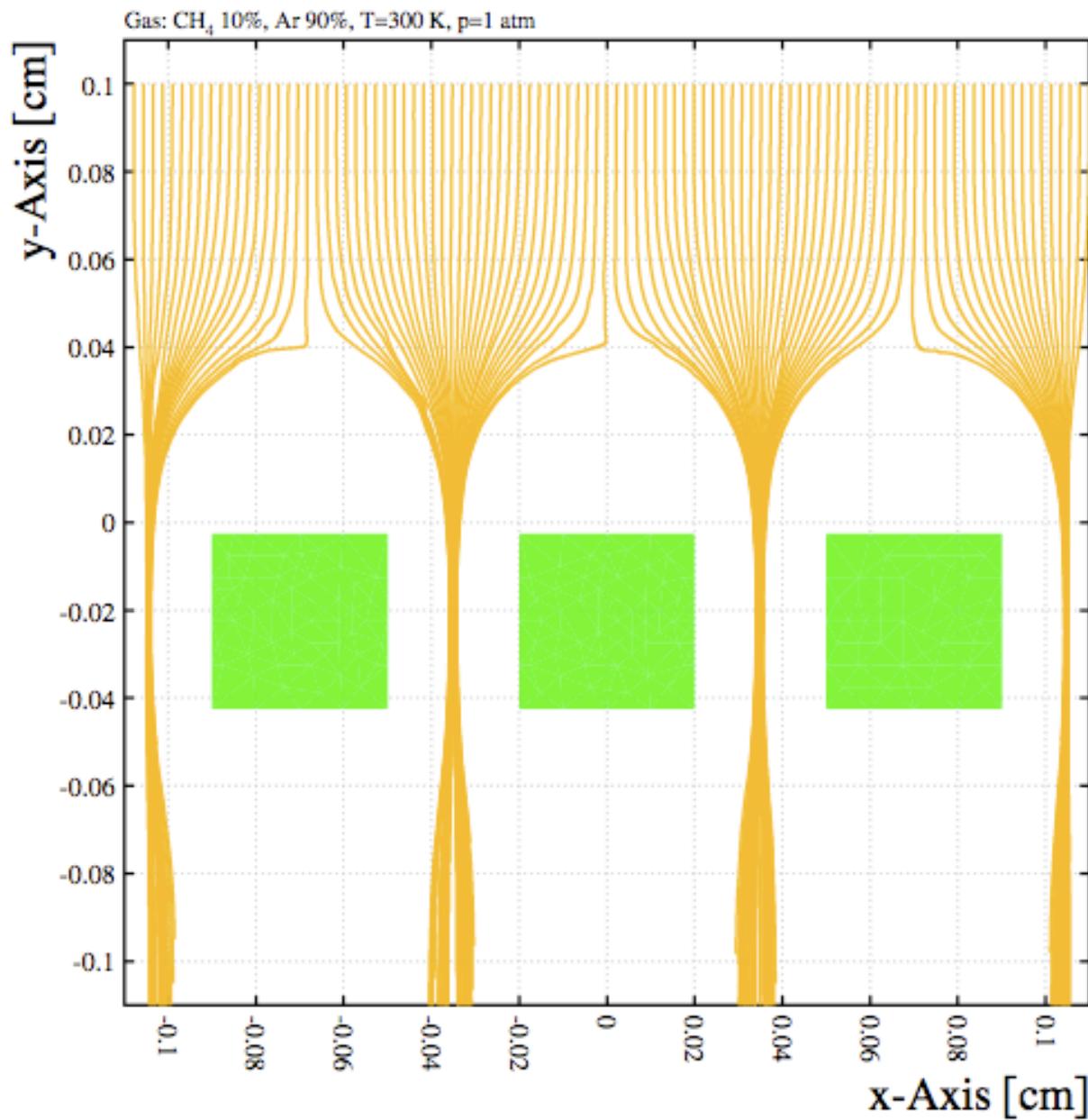


## Contours of V

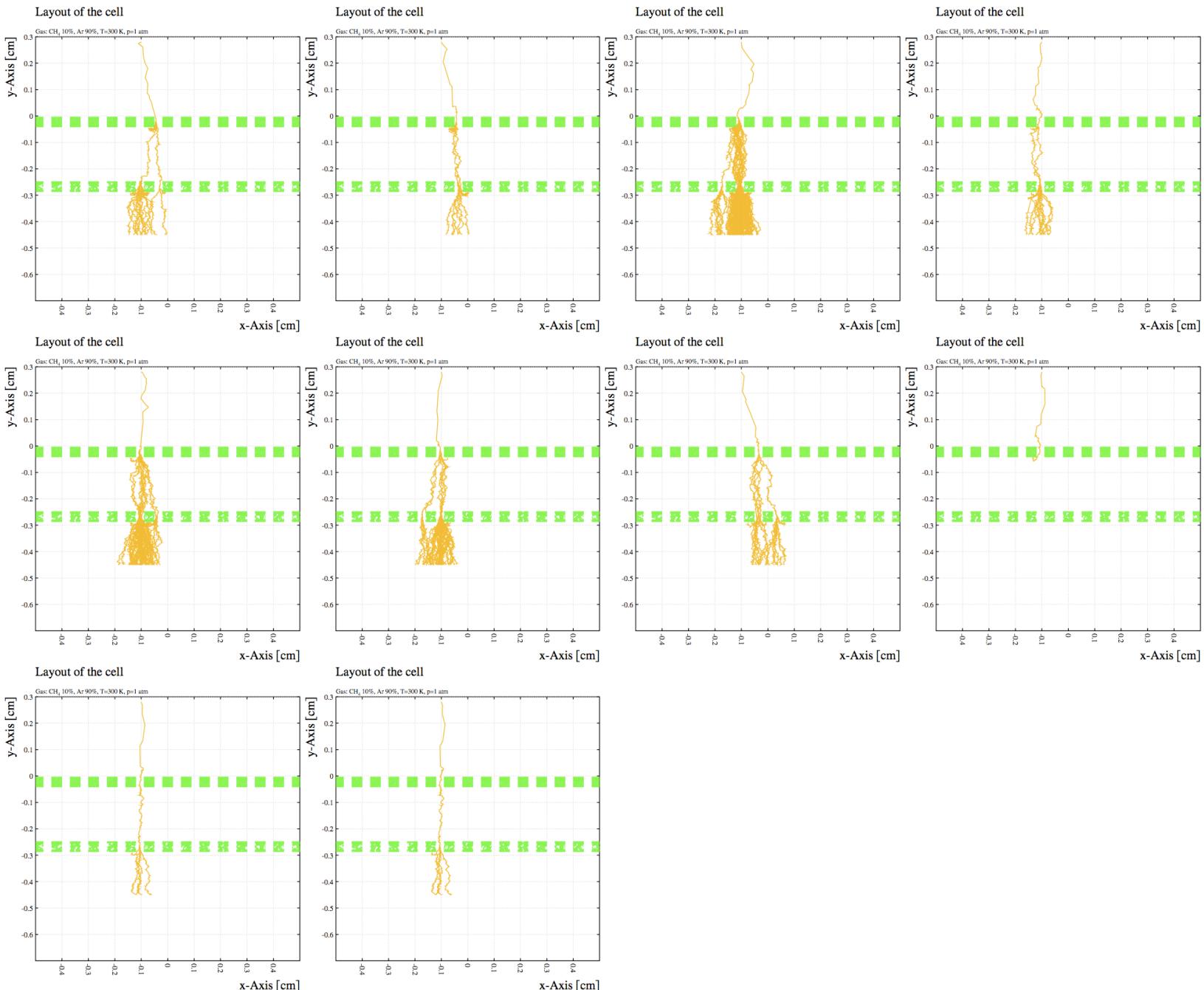


GEM 300,1200,300,300,1200

### Layout of the cell

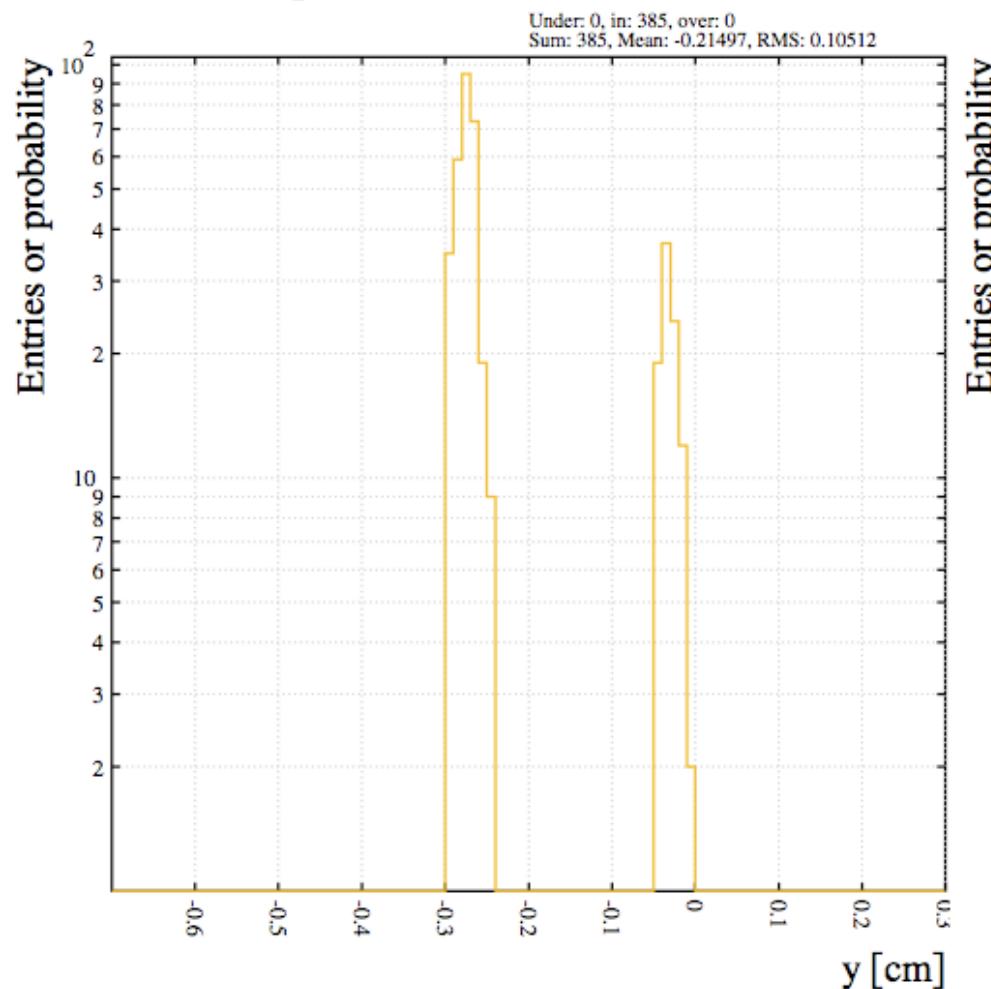


GEM 300,1200,300,300,1200

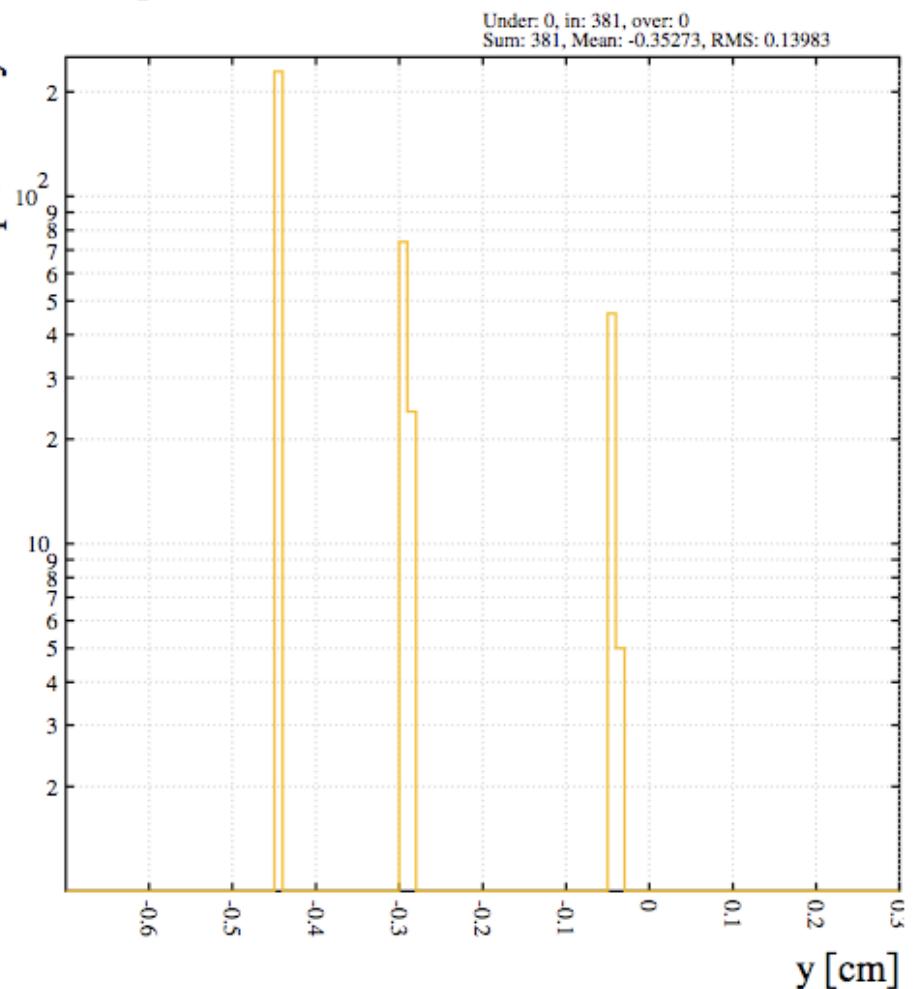


GEM 300,1200,300,300,1200

Production point of electrons



End point of electrons



avalanche は起こる  
gain (End point of electrons around 0.5) が初めのに比べ減少した。

T=0.2mm GEM 600,600,600,600,600

GEM(緑の部分)

Pitch 0.7mm

Drilled Hole diameter  
0.3mm

Etched Cu diameter  
0.5mm

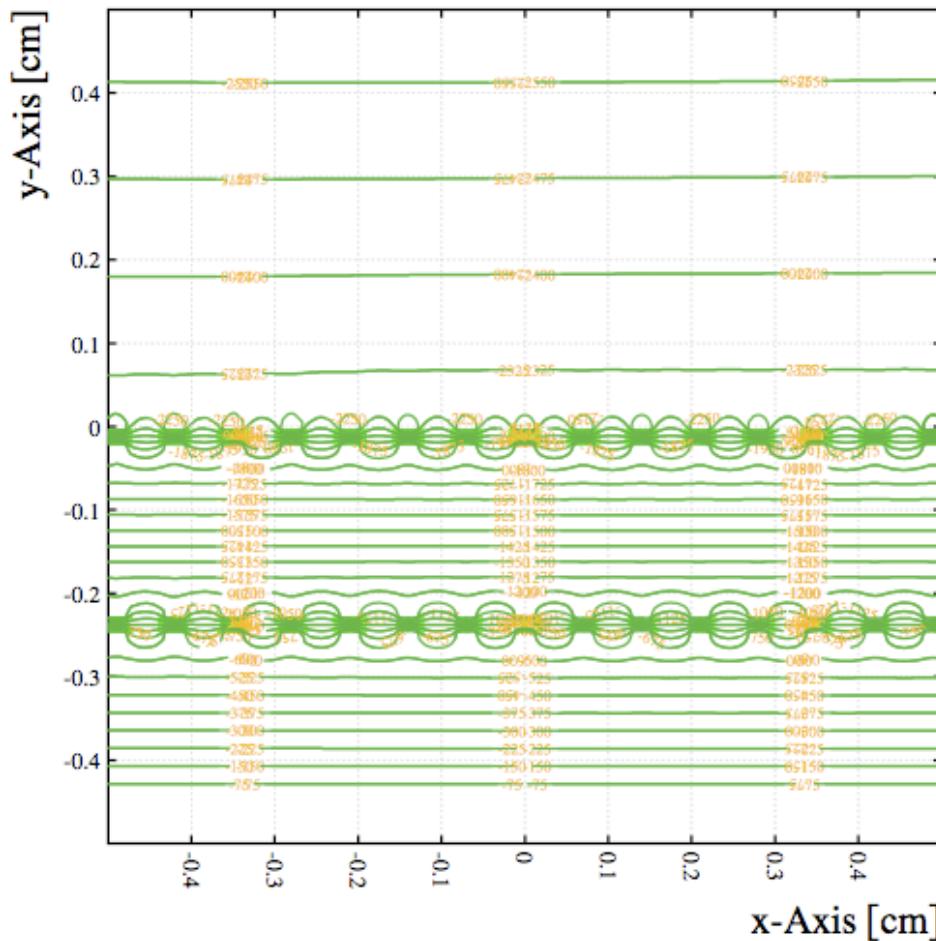
Thickness of Cu  
25 $\mu$ m

Thickness of G10  
200 $\mu$ m

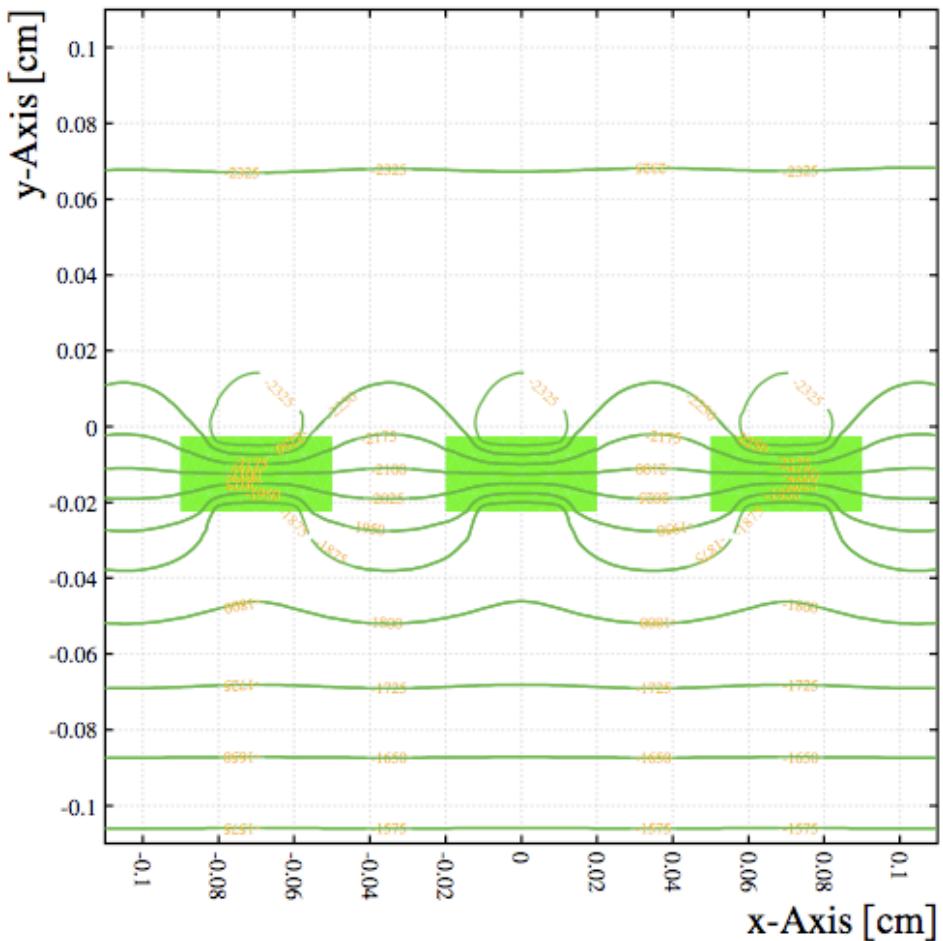


T=0.2mm GEM 600,600,600,600,600

Contours of V

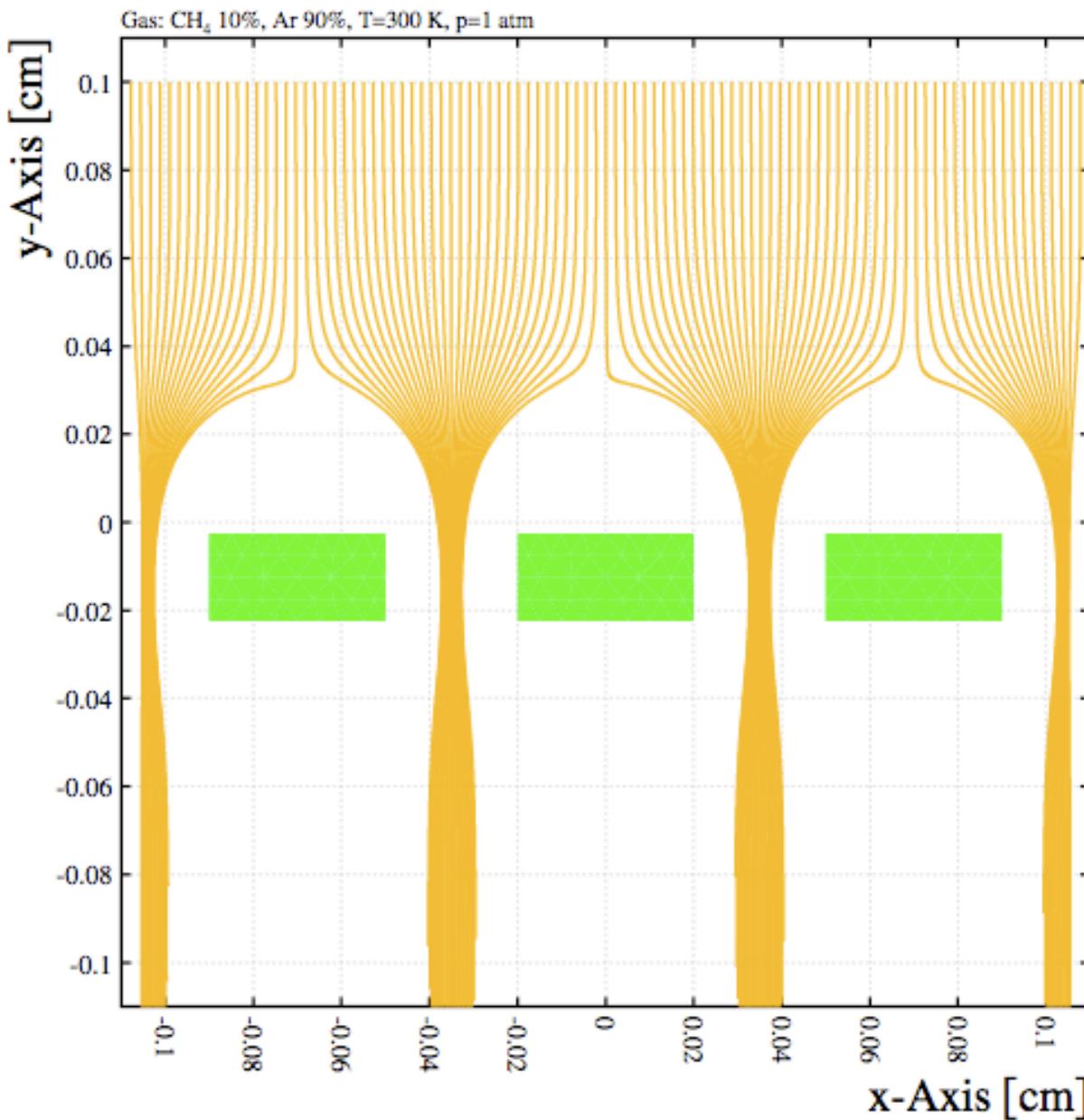


Contours of V

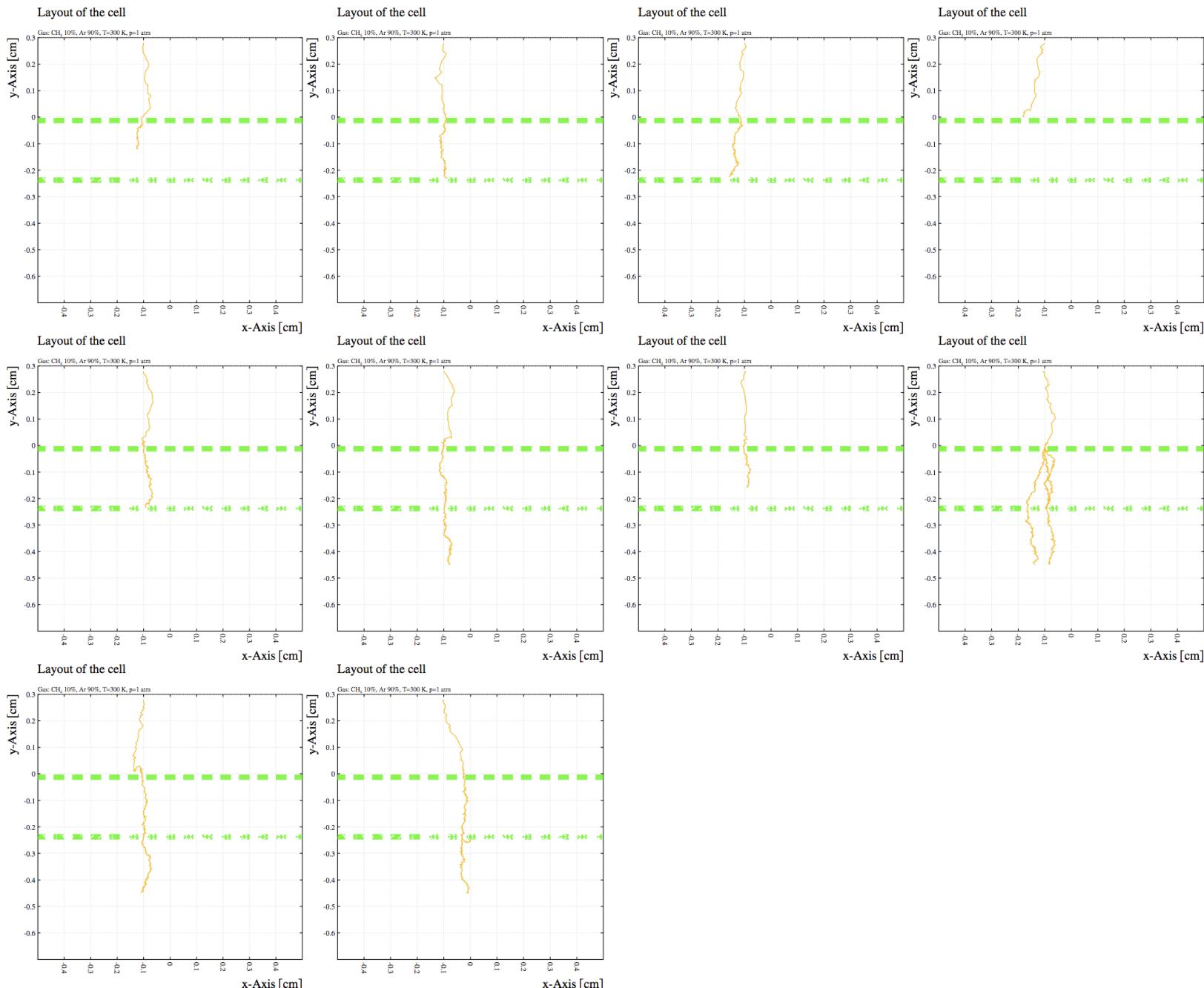


T=0.2mm GEM 600,600,600,600,600

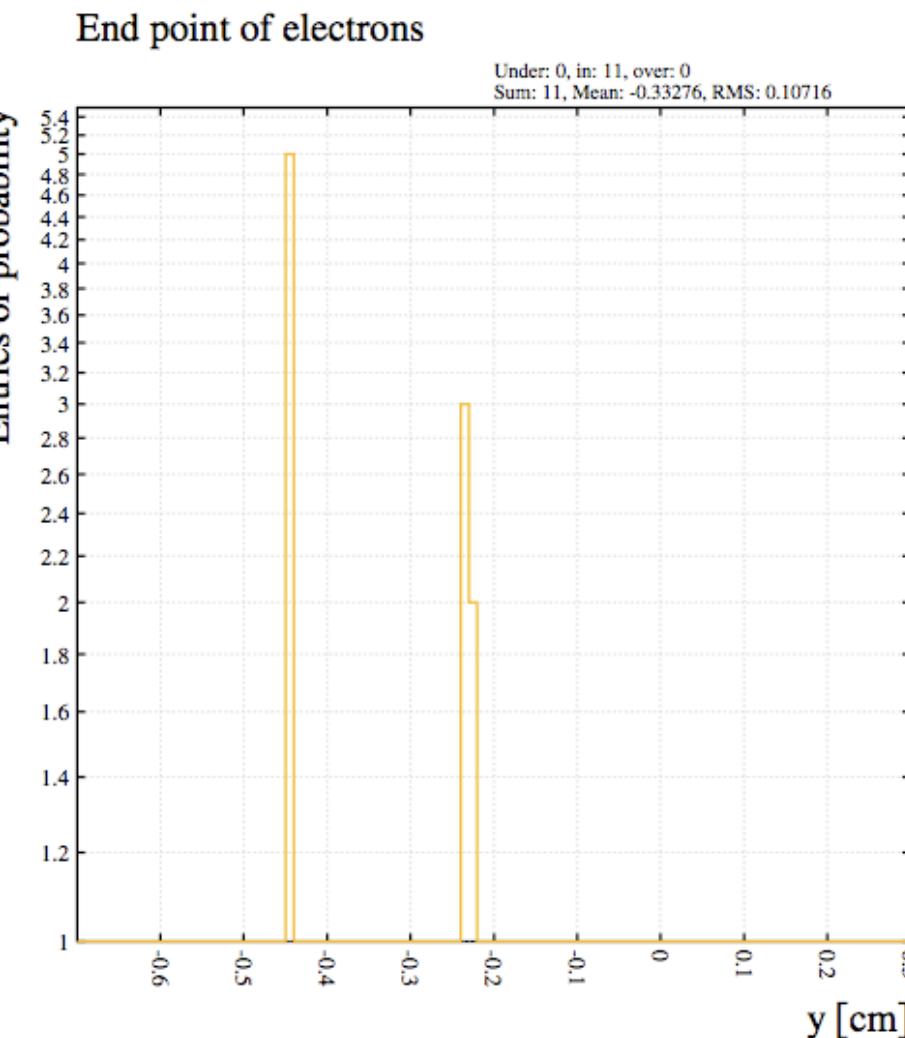
### Layout of the cell



T=0.2mm GEM 600,600,600,600,600



T=0.2mm GEM 600,600,600,600,600



avalanche が起こらなかった