

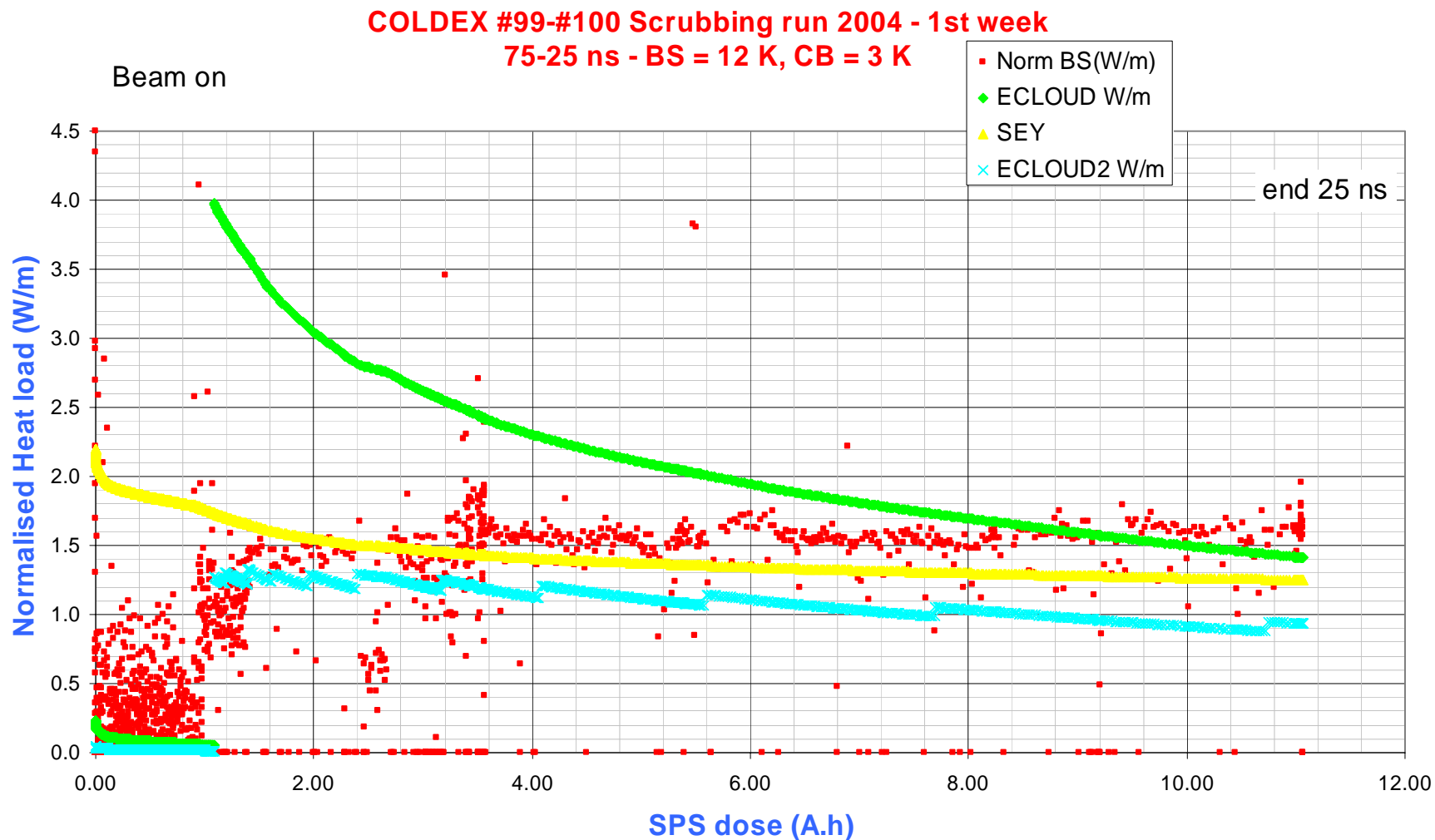
# Some calorimetric measurements performed in 2004 with COLDEX

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# 1<sup>st</sup> week of scrubbing run with 75 ns and 25 ns

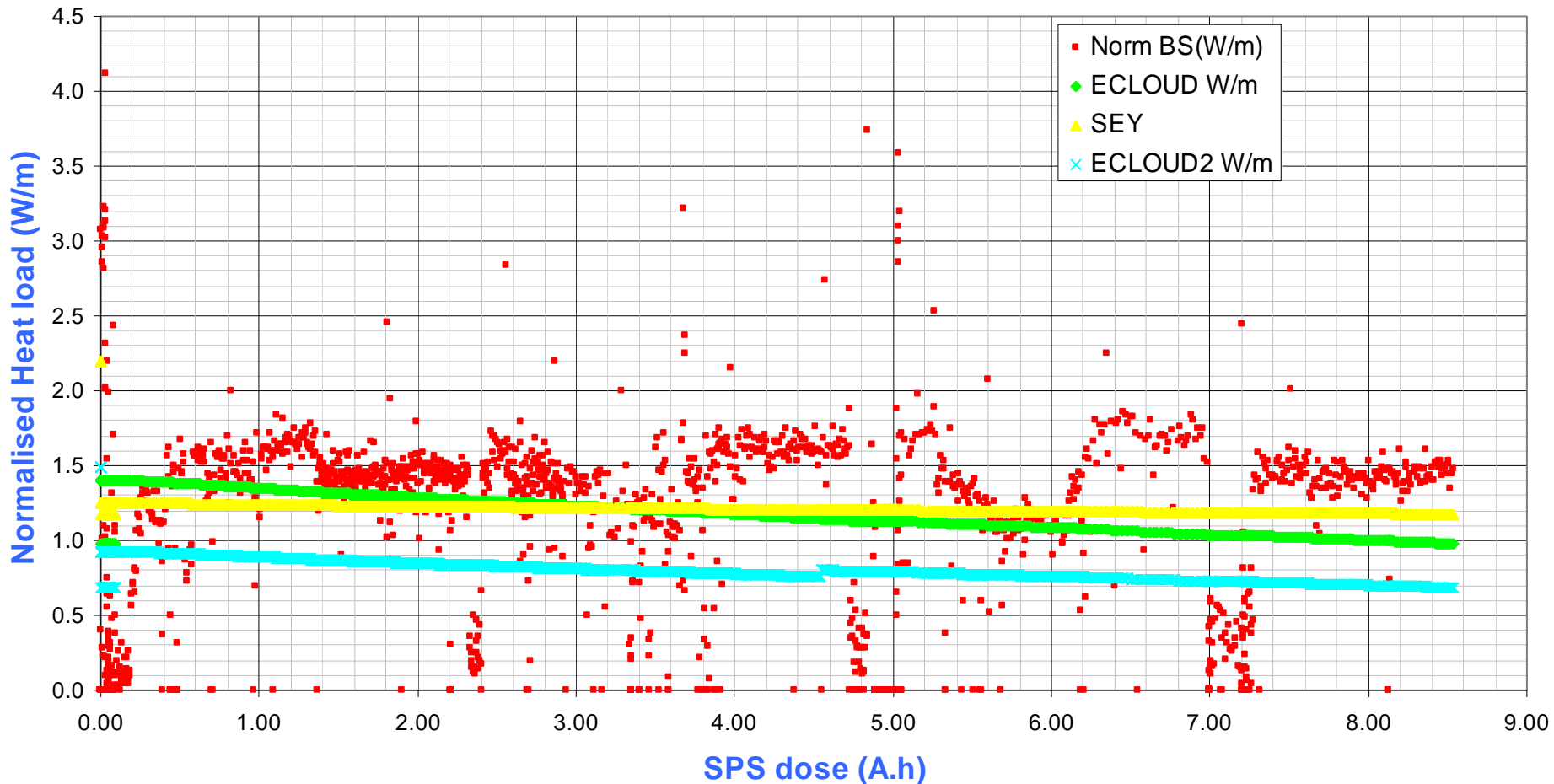
## Normalised heat load and predicted SEY and heat load by ECLOUD



# 2nd week of scrubbing run with 25 ns

## Normalised heat load and predicted SEY and heat load by ECLOUD

COLDEX #101 Scrubbing run 2004 - 2nd week  
25 ns - BS = 12 K, CB = 3 K

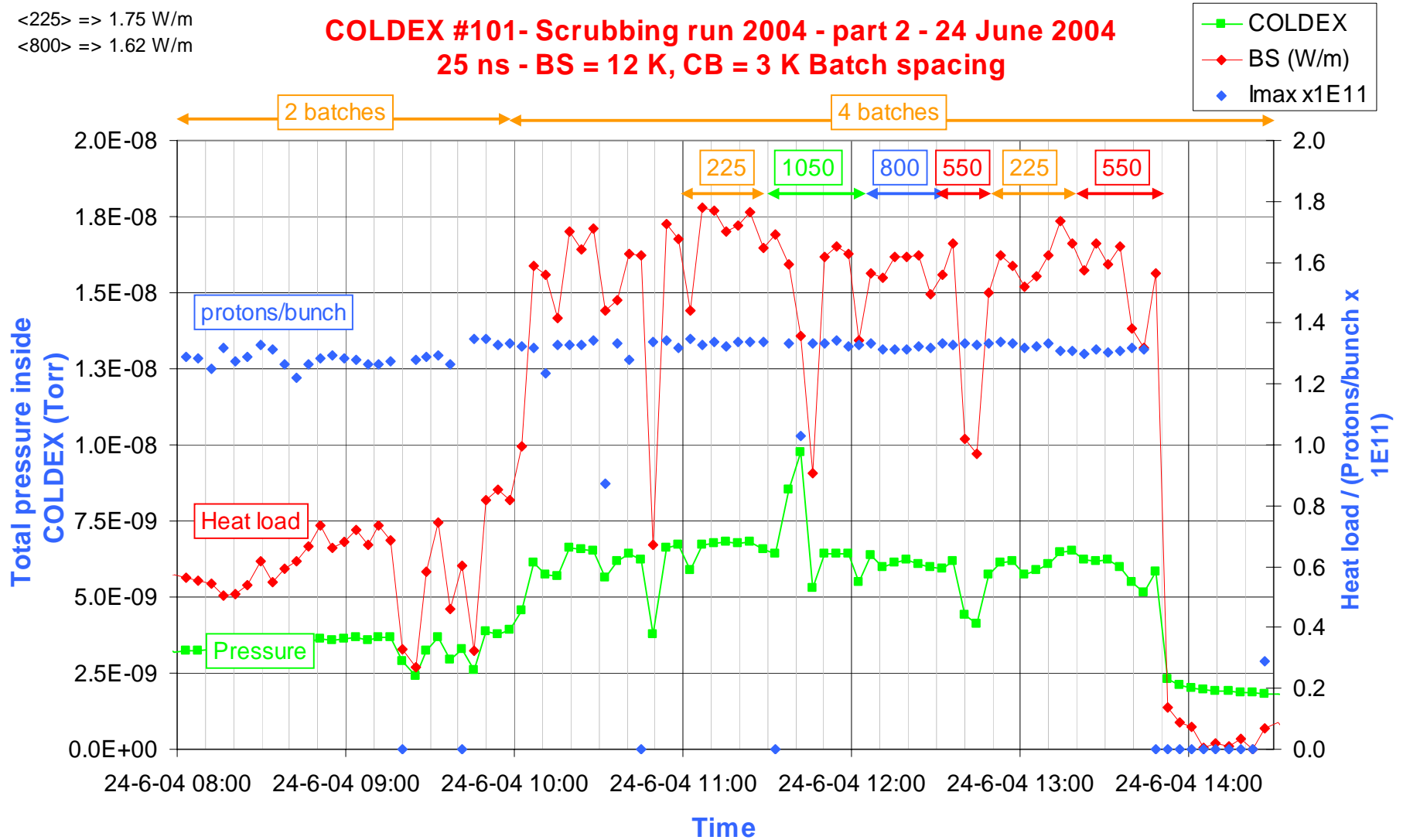


# 2nd week of scrubbing run : batch spacing

## Heat load and pressure

<225> => 1.75 W/m  
 <800> => 1.62 W/m

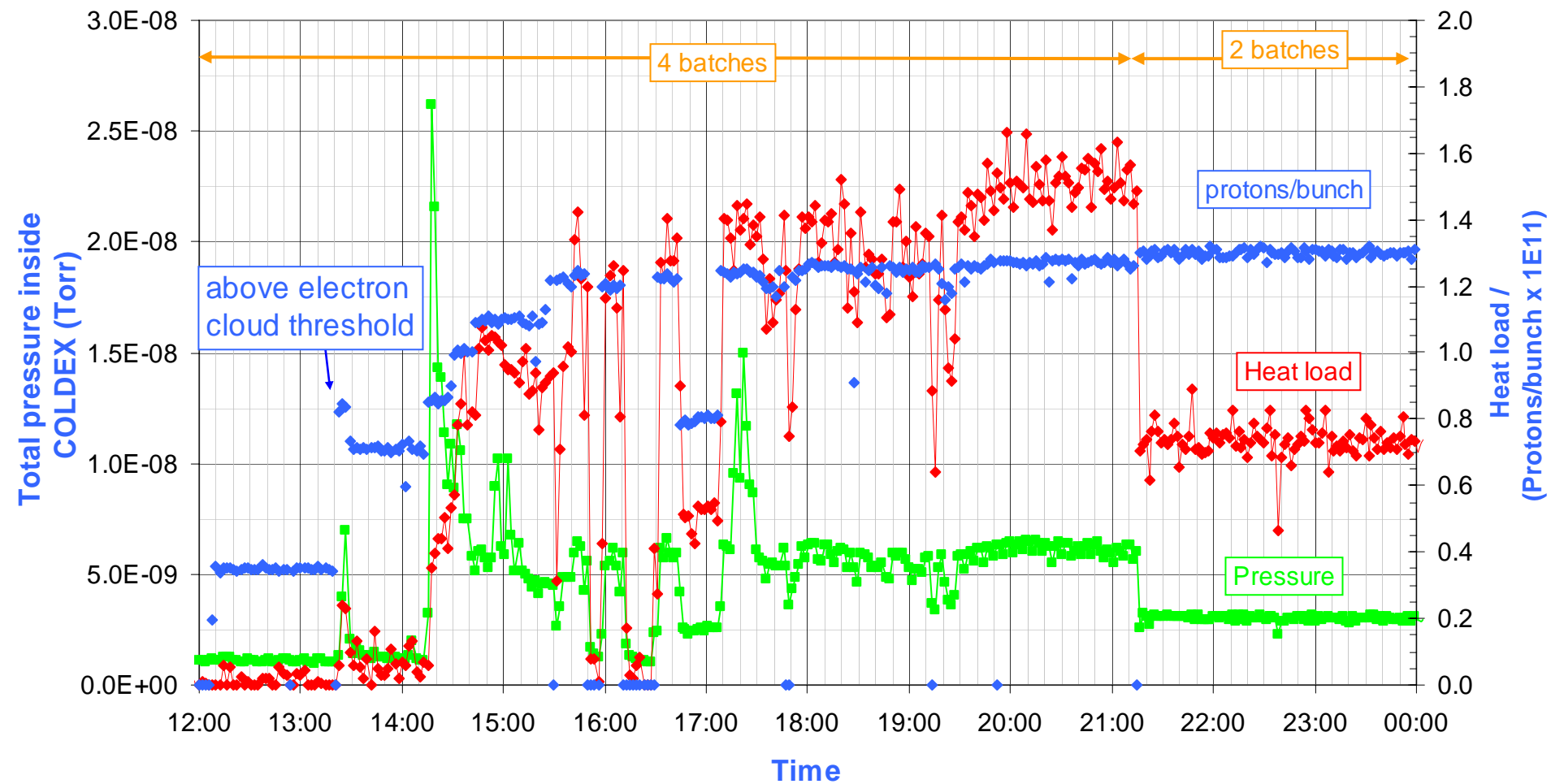
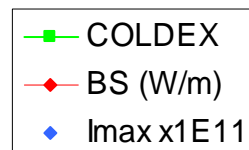
**COLDEX #101- Scrubbing run 2004 - part 2 - 24 June 2004**  
**25 ns - BS = 12 K, CB = 3 K Batch spacing**



# 2nd week of scrubbing run : Intensity scan

## Heat load and pressure

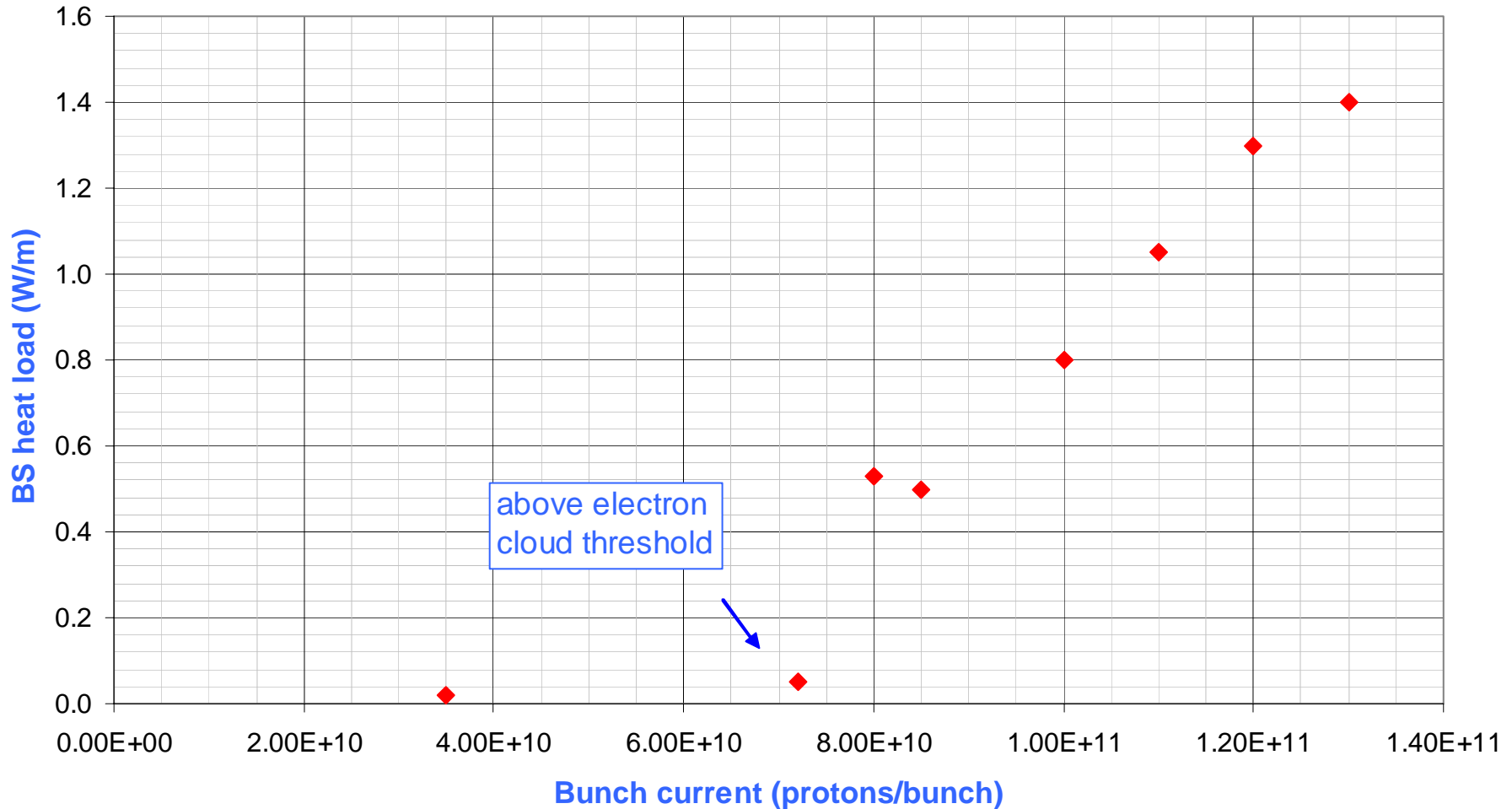
**COLDEX #101- Scrubbing run 2004 - part 2 - 21 June 2004**  
**25 ns - BS = 12 K, CB = 3 K - Intensity scan**  
**Initial irradiation - Pressure correlated to heat load**



# 2nd week of scrubbing run : Intensity scan

## Evidence of a threshold

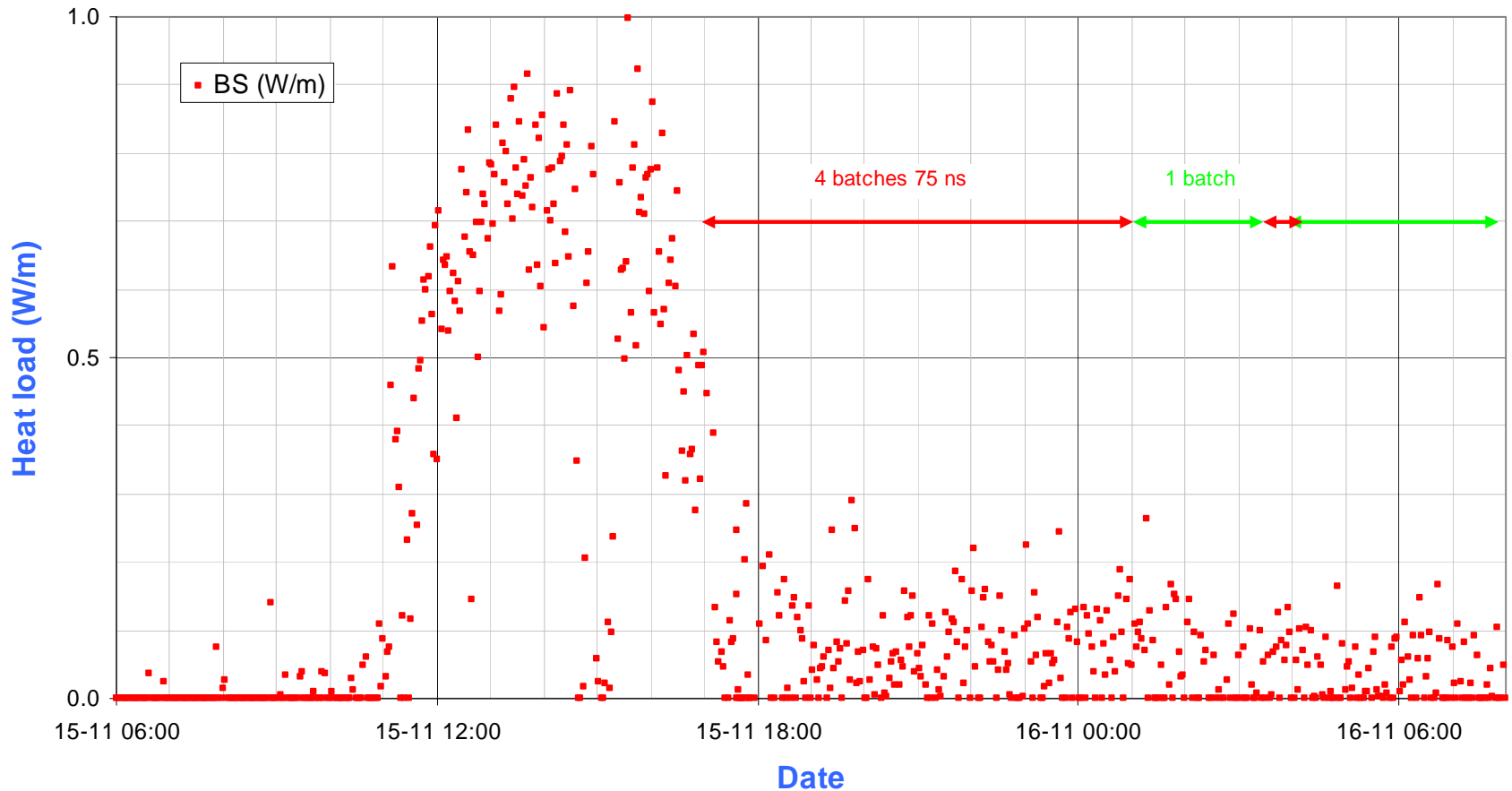
**COLDEX #101- Scrubbing run 2004 - part 2 - 21 June 2004 13:00-16:00**  
**25 ns - BS = 12 K, CB = 3 K - Intensity scan**  
**4 batches**



# MD : 25 ns and 75 ns after the scrubbing run

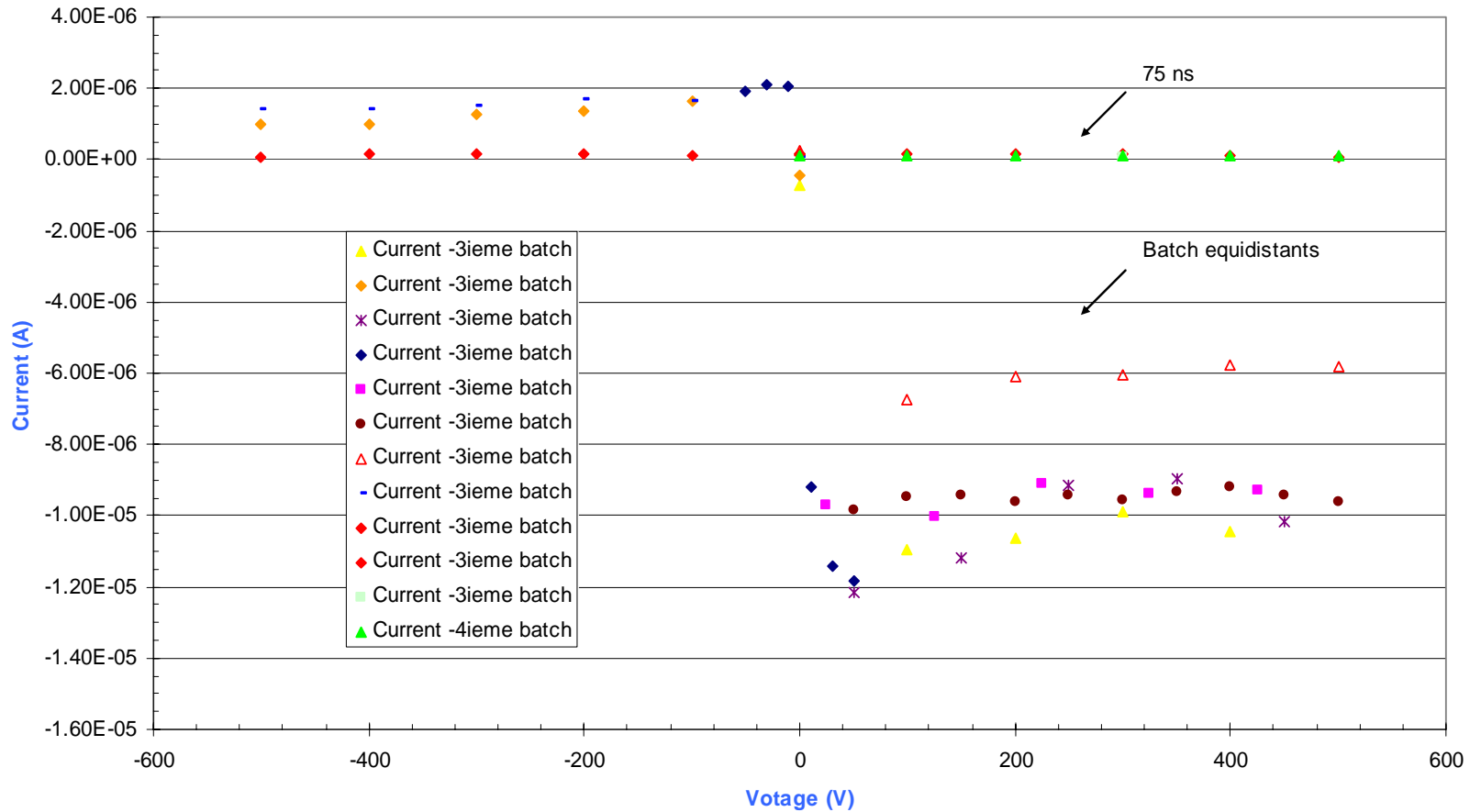
## Evidence of a beam conditioning : 100 mW

COLDEX #105- 270 GeV/c ramp - 15 november 2004  
25 and 75 ns - BS = 12 K, CB = 4.2 K



# MD : 25 ns and 75 ns after the scrubbing run 10 $\mu$ A with 25 ns beam (13 10 $\mu$ A with 4 batches)

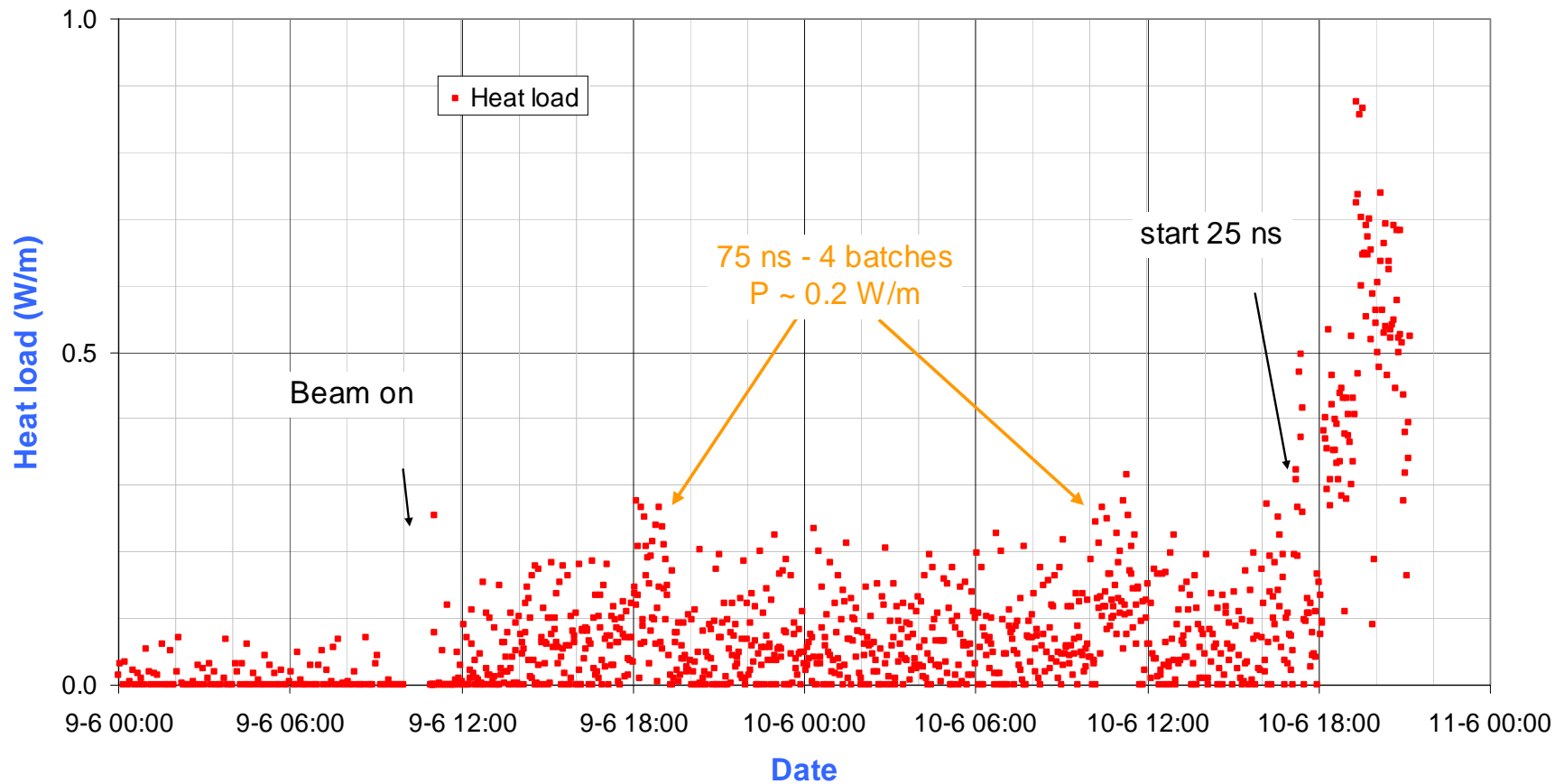
#105 - 15 nov 2004 - 17:10 - 75ns  
25 ns - 270 GeV/c ramp- Electrode Chimney  
4 batches mais mesure sur 3ieme batch car on perd sur le 4





1<sup>st</sup> week of scrubbing run with 75 ns and 25 ns  
200 mW with 4 batches and 75 ns

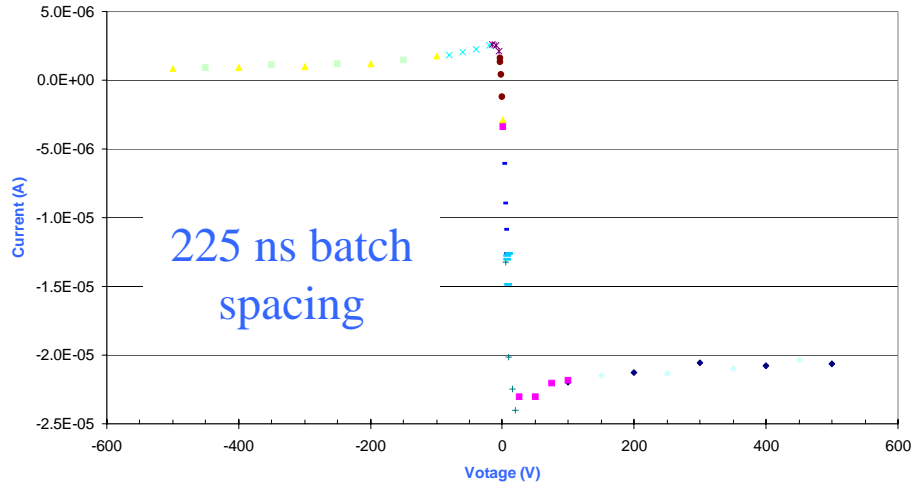
COLDEX #99- Scrubbing run 2004  
75 ns - BS = 12 K, CB = 3 K



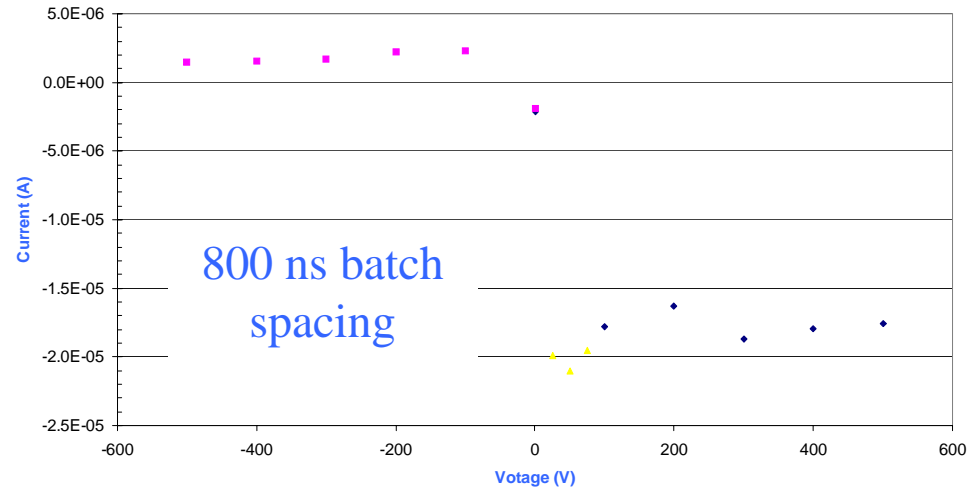
# 1<sup>st</sup> week chimney electrode with 25 ns : 20 $\mu$ A

## 4 batches : the collected current decrease with the batch spacing

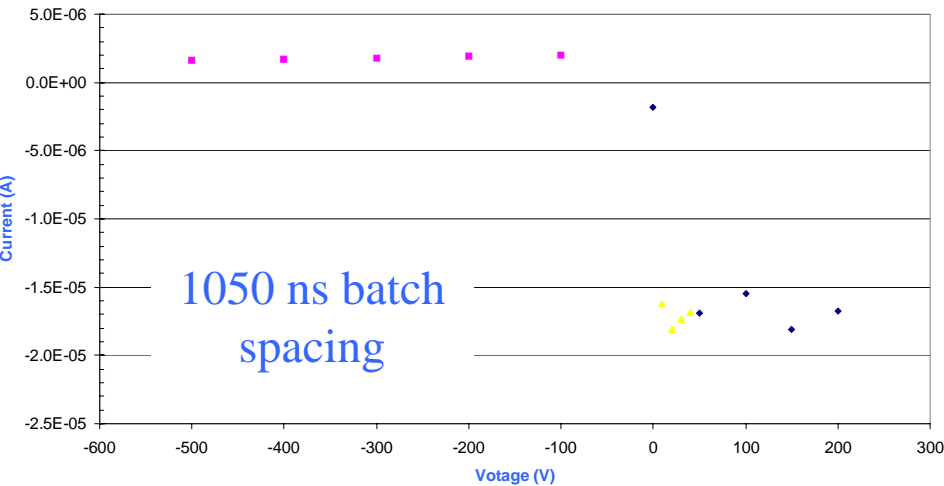
Scrubbing 2004 - 11 June - 13:00  
25 ns - 4 batches - electrode cheminee  
(zero ~ 3e-7 A)



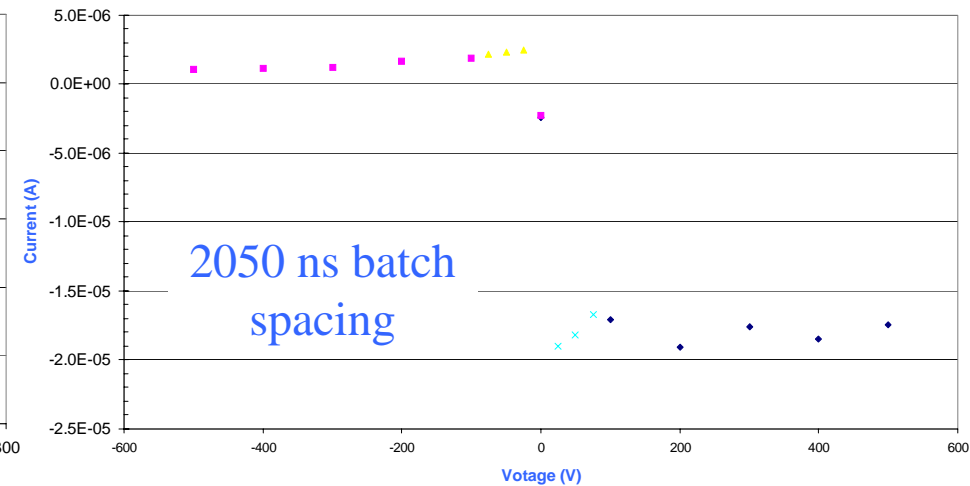
scrubbing 2004 - 11 June - 16:05  
25 ns - 4 batches - electrode cheminee  
Spacing 4 = 800 ns



scrubbing 2004 - 11 June - 14:10  
25 ns - 4 batches - electrode cheminee  
Spacing 2 : 1050 ns



scrubbing 2004 - 11 June - 15:31  
25 ns - 4 batches - electrode cheminee  
Spacing 3 = 2050 ns



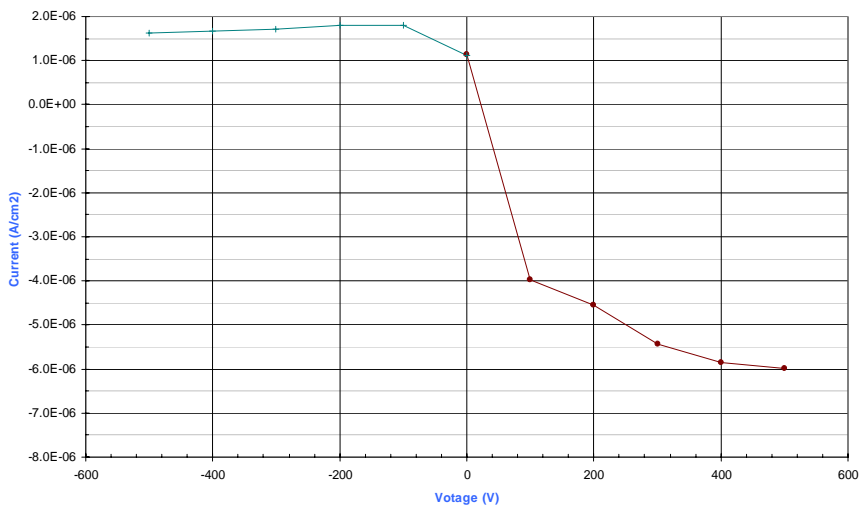
# Comparison of electrodes current

2 batches : the collected current is the same for both electrode

The SPS valves were opened 1day before the measurement  
(a deliberate pressure increase of 1000 at one extremity is not seen in the centre)

## BS electrode

Oct 2004 - 1:04  
25 ns - 2 batch - Electrode BS - 1.2 E11 p/bunch



## Chimney electrode

Octobre 2004 - 5 Octobre - 1:19  
25 ns - 2 batches - electrode cheminee - 0.7 et 1.1 E11 p/bunch

