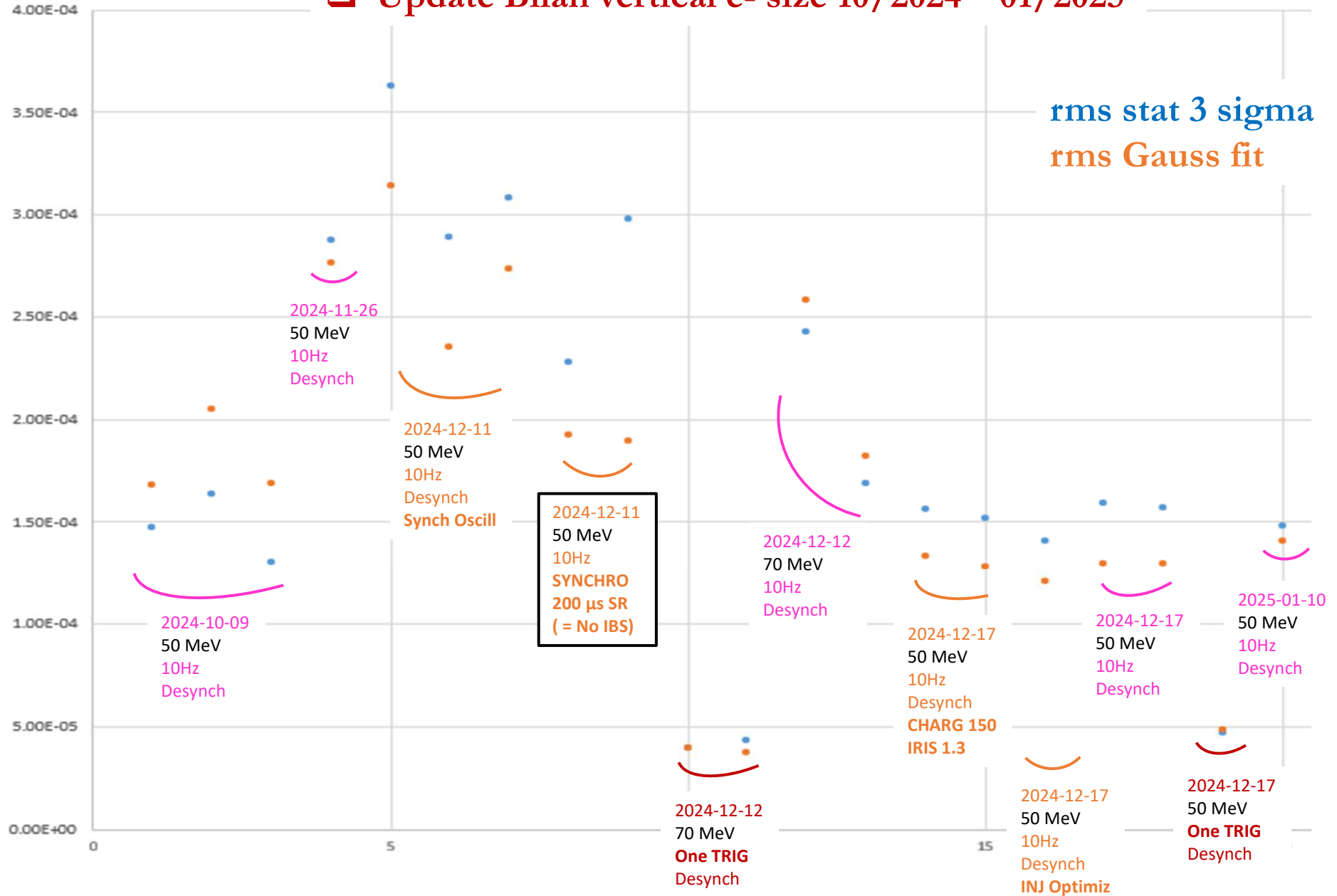


Réunion ThomX - 13 janvier 2025

- Update Bilan vertical e- size 10/2024 – 01/2025**
- Bilan flux SYNCHRO/DESYNCHRO**

Vert. e- size

Update Bilan vertical e- size 10/2024 – 01/2025

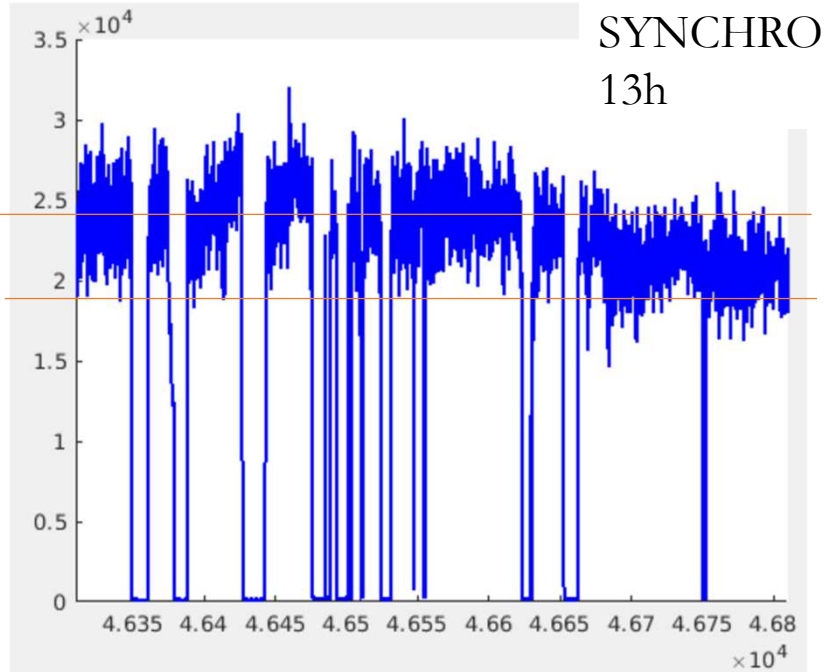


Réunion ThomX - 13 janvier 2025

Update Bilan vertical e- size 10/2024 – 01/2025

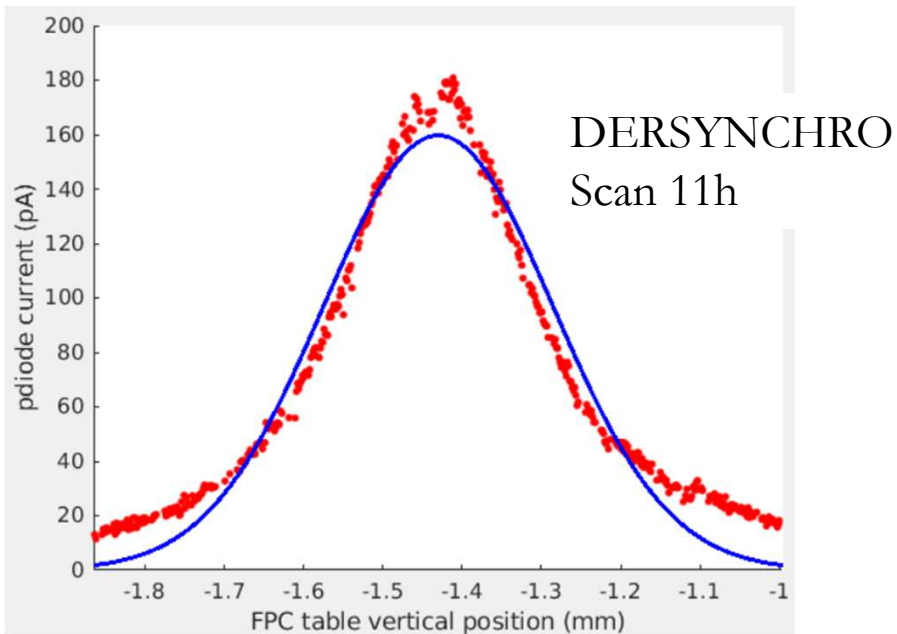
Bilan flux SYNCHRO/DESYNCHRO

2024-12-17

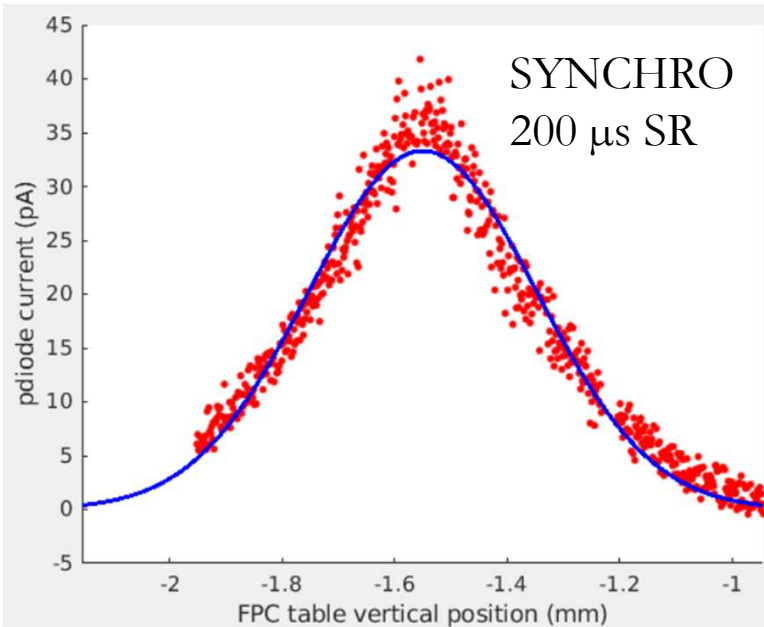


| | |
|------------------|--------------------------------|
| SYNCH | $0.8 - 0.9 \cdot 10^{10}$ ph/s |
| DESYNCH Scan FPC | $0.7 \cdot 10^8$ ph/s |

Fact ~ 121



2024-12-11

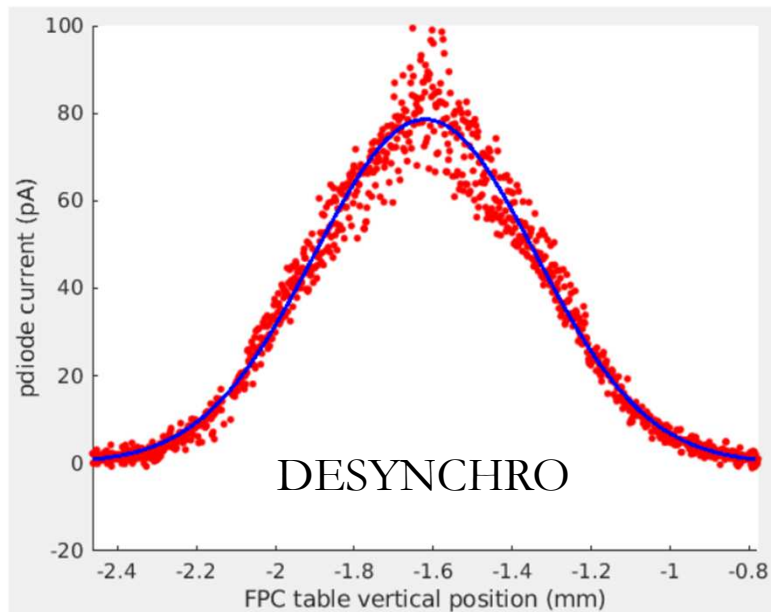


Size 200 at μs vs size at 100 ms

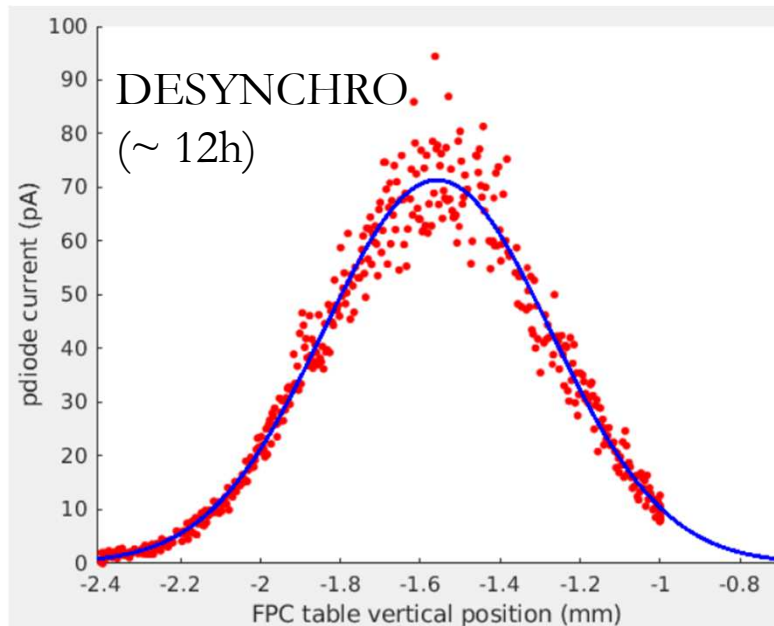
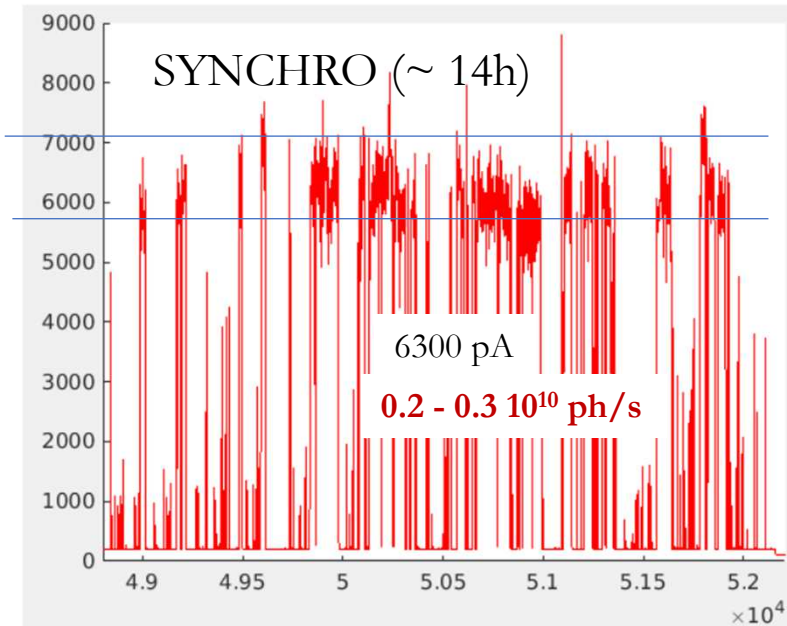
200 μs vs 100 ms

SYNCH $\sim 1.3 \cdot 10^7 * 500 / 1.4 \sim 4.6 \cdot 10^9$ ph/s
DESYNCH Scan FPC $\sim 3.0 \cdot 10^7$ ph/s

Fact ~ 153



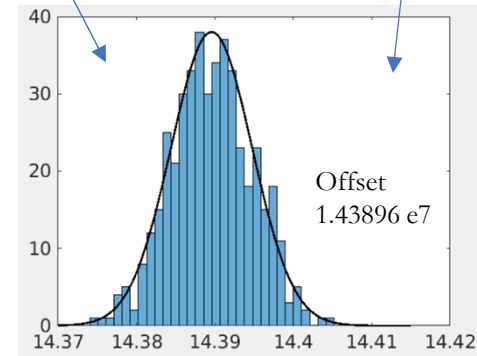
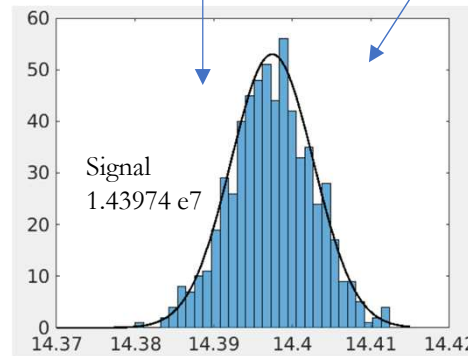
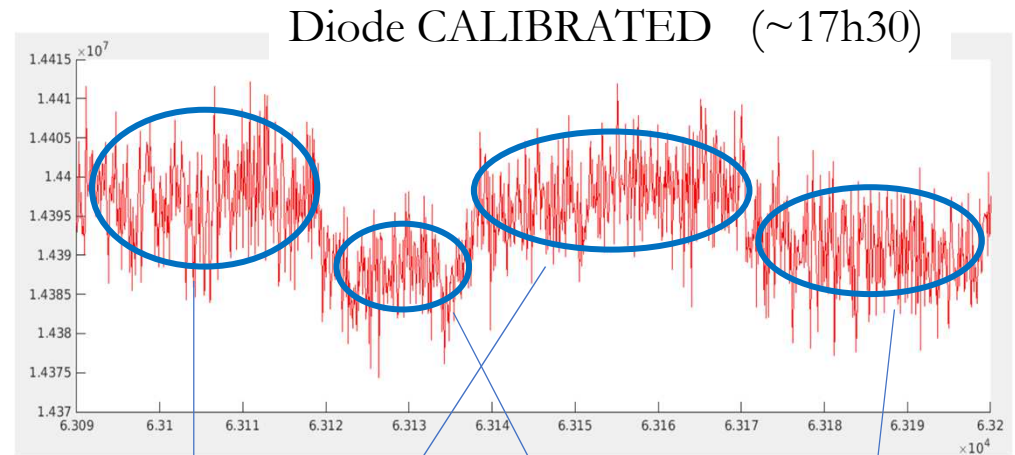
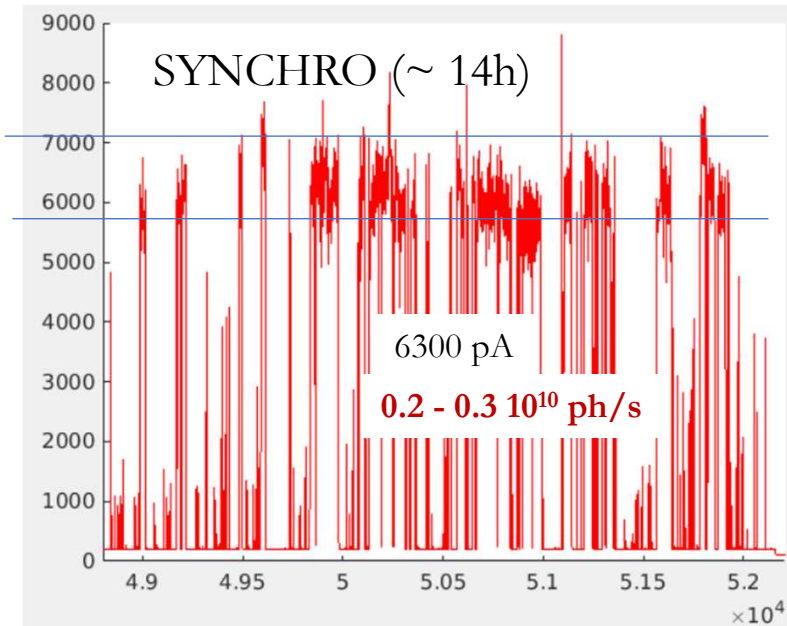
2024-11-26



SYNCH $\sim 0.25 \cdot 10^{10}$ ph/s
DESYNCH Scan FPC $\sim 2.8 \cdot 10^7$ ph/s

Fact=89

2024-11-26



Fluxdet (ph/s) = courant diode (A) / [réponse (A/W)
x (énergie électron en eV)
x (charge électron)]

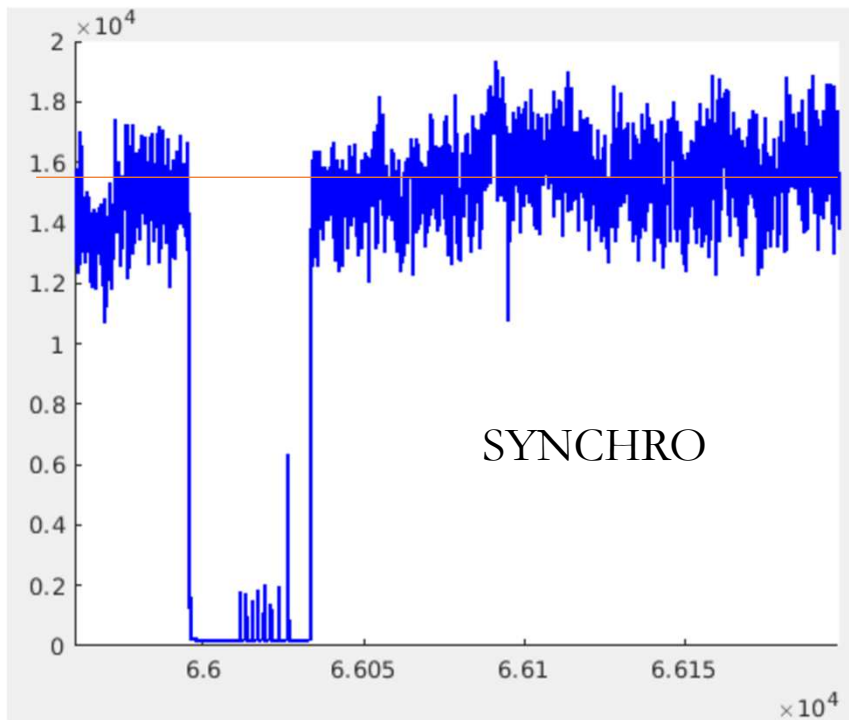
= courant diode (A) *6.94 10¹⁵ pour 45 keV

DETECTEUR :
300 mm² (r=9.77 mm) at 10556 mm
→ Theta = 0.926 mrad

7800 pA → Ftot ~ 0.4 10¹⁰ ph/s

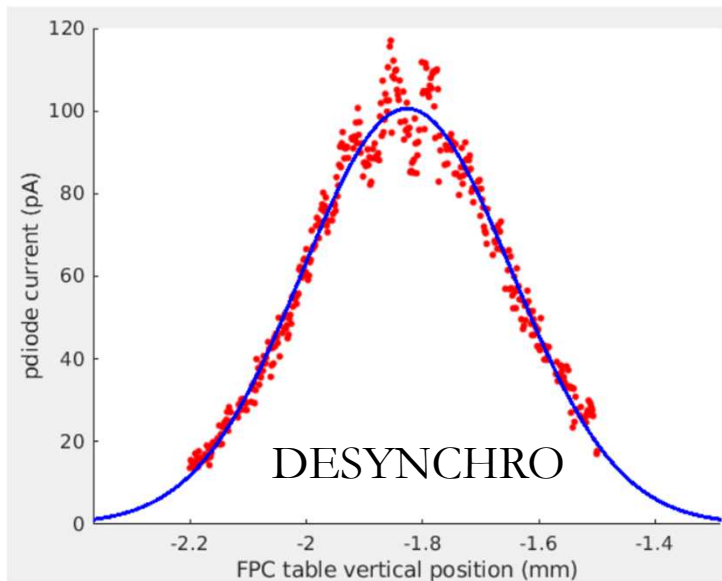
SYNCH Fluo ~ 0.25 10¹⁰ ph/s
Diode CALIB ~ 0.4 10¹⁰ ph/s

2024-10-09



| | |
|------------------|-------------------------------|
| SYNCH | $\sim 0.6 \cdot 10^{10}$ ph/s |
| DESYNCH Scan FPC | $\sim 3.8 \cdot 10^7$ ph/s |

Fact=158



Bilan

Simu (for laser 5 ps)

| | e- length | SYNCH |
|---------|----------------|-------|
| synchro | 5 ps --> synch | 2000 |
| | 10 | 1560 |
| | 15 | 1230 |
| | 20 | 1020 |
| | 25 | 860 |
| | 30 | 735 |
| | 40 | 571 |
| | 50 | 462 |
| | 55 | 424 |
| | 60 | 391 |

| <u>DATA</u> | synch |
|-------------|------------|
| 2024-12-17 | 121 |
| 2024-12-11 | 153 |
| 2024-11-26 | 89 |
| 2024-10-09 | 158 |

? ...