

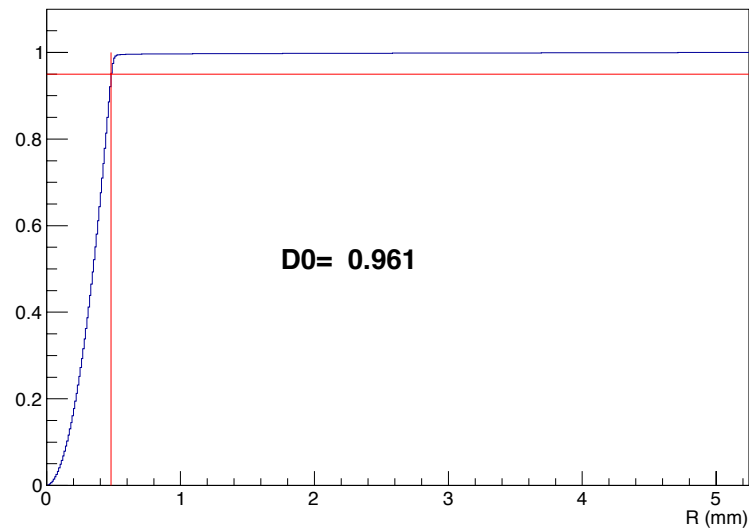
D0 measurements

L. Barion, G. Battaglia, M. Contalbrigo,

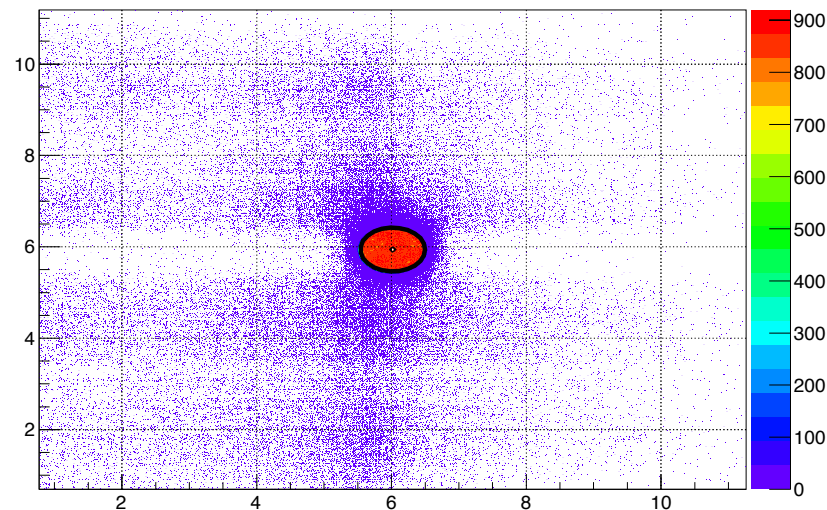
P. Lenisa, A. Movsisyan, I. Balossino

INFN Ferrara

Total Normalized Intensity



Spot 2D Histogram



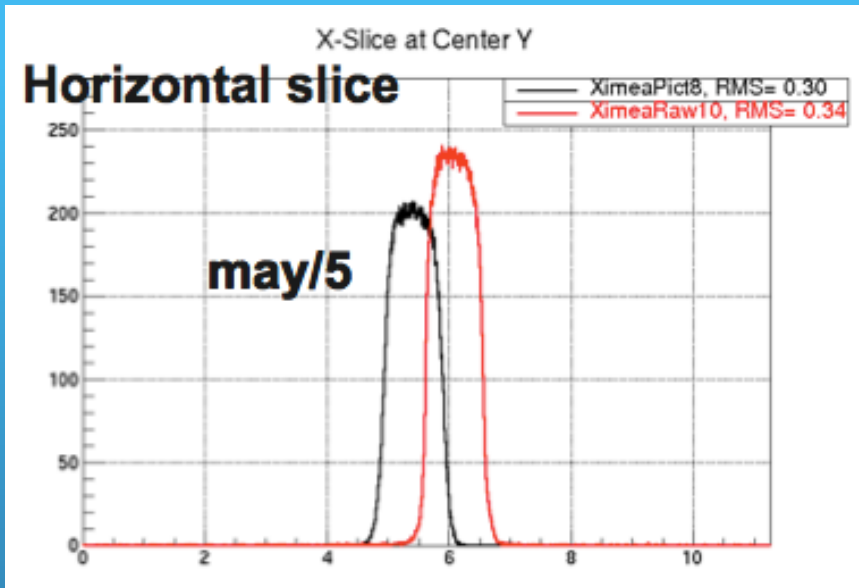
d0

Mirrors:
CMA2
Edmund

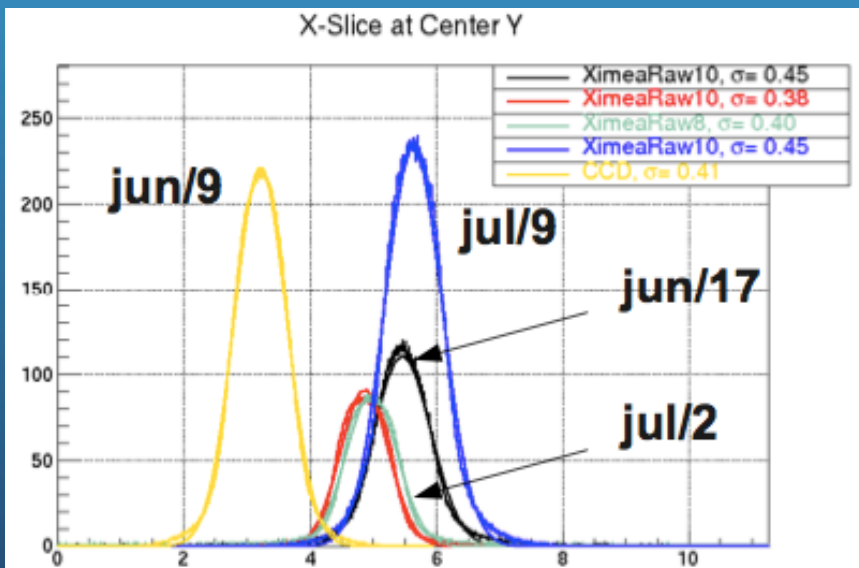
Measurements:
d0 vs exposition time
d0 vs mirror distance

CMA2 Previous measurements

3



May 2015 LNF
d0 1.14 mm



June 2015 Ferrara
d0 2.4 mm

Experimental conditions

CMA2 mirror has been put in the dry cabinet for 1 week.

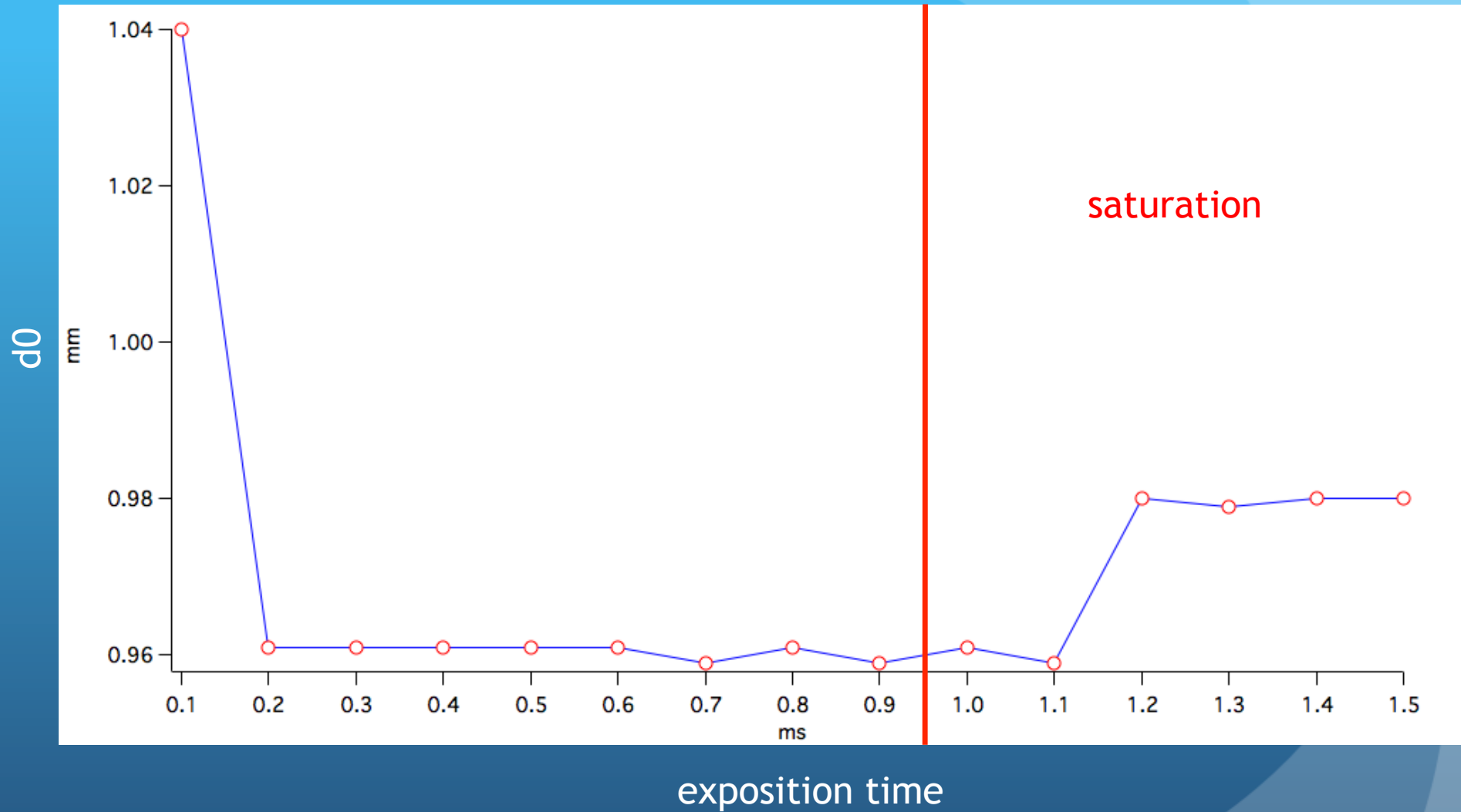
After several background studies we decided to work only with:

- High light intensity,
- Small exposition time.

So there is only electronic background.

edmund : d0 vs exp. time

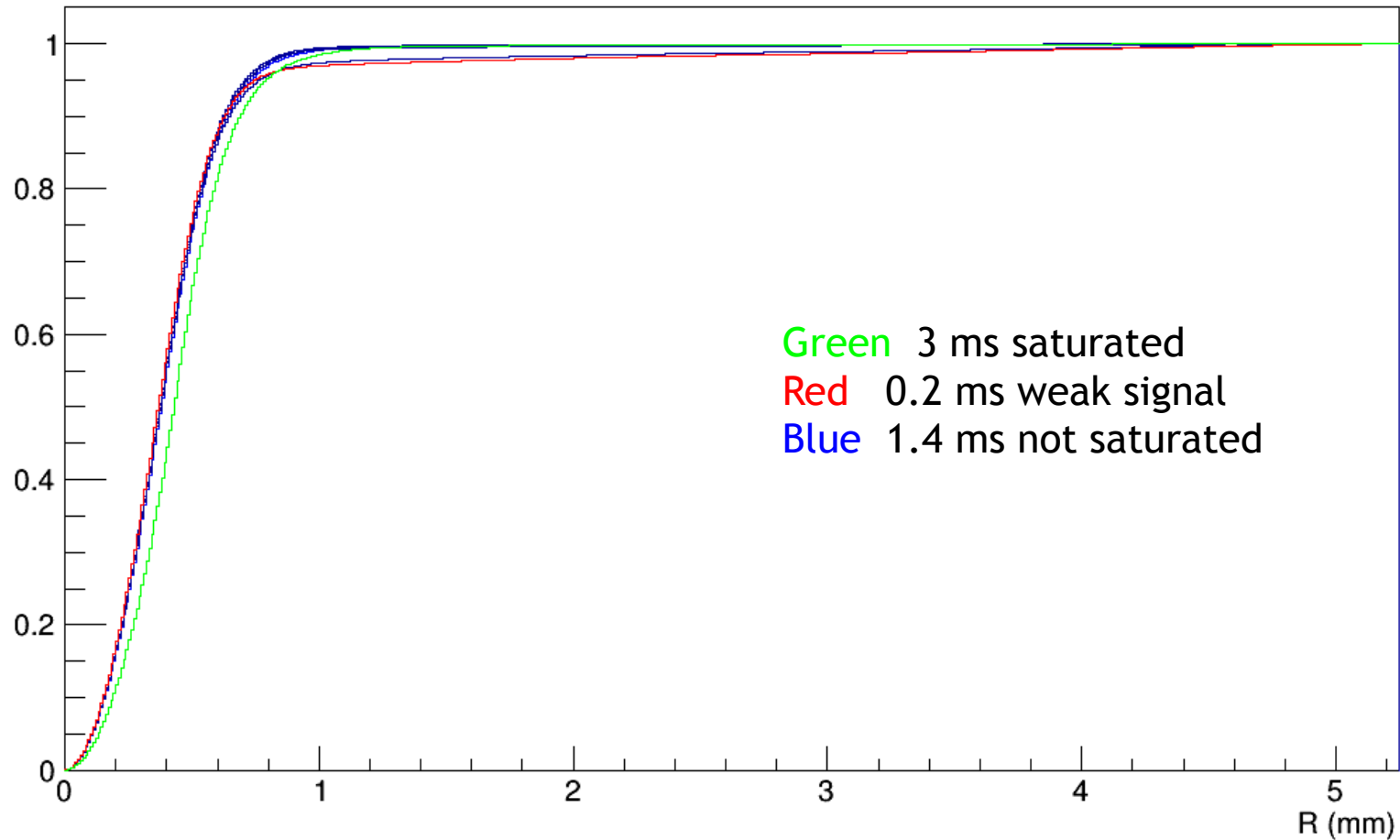
5



CMA2 : d0 vs exp. time

6

Total Normalized Intensity



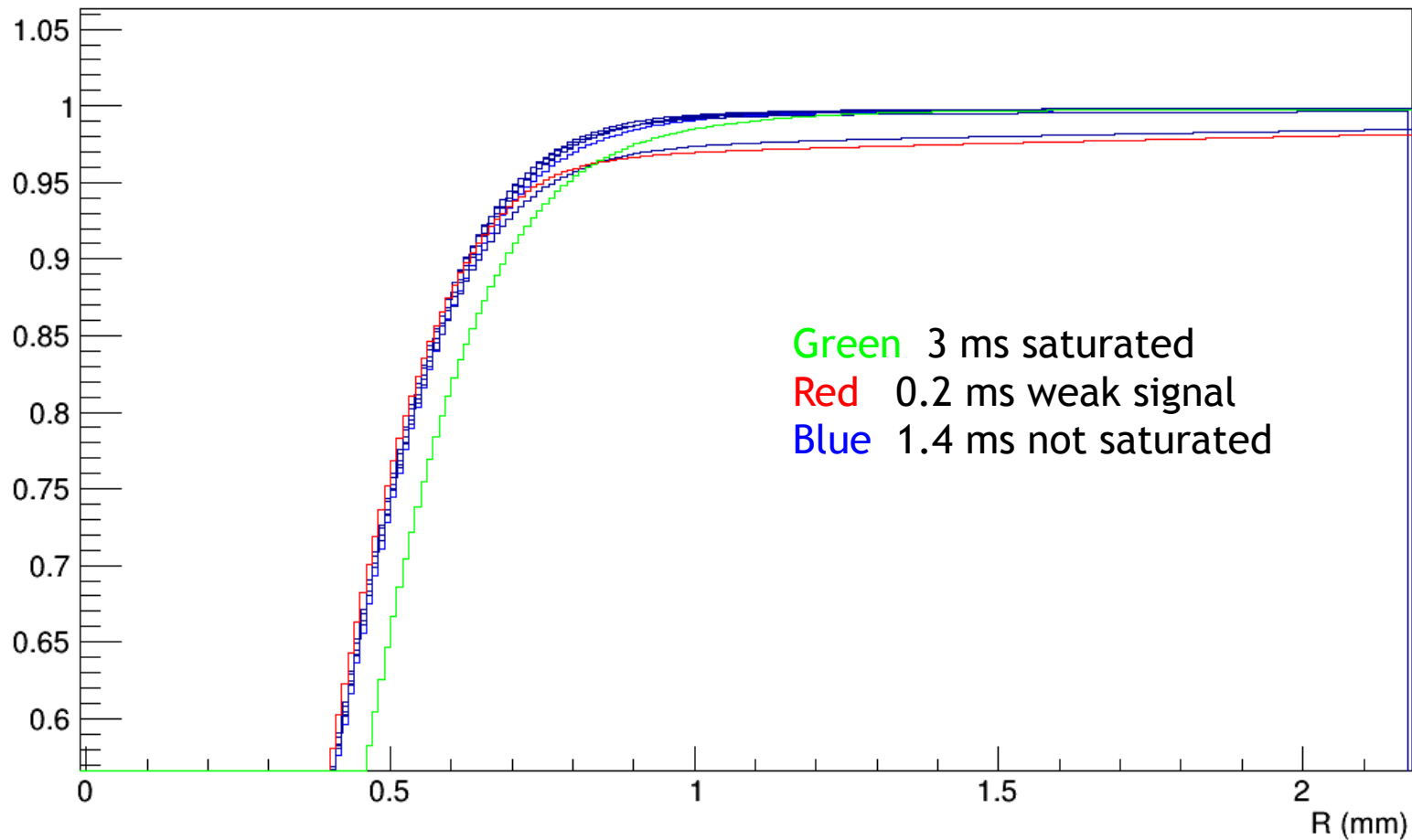
Radius of integration
of the spot

8 Aug 2015

CMA2 : d0 vs exp. time

7

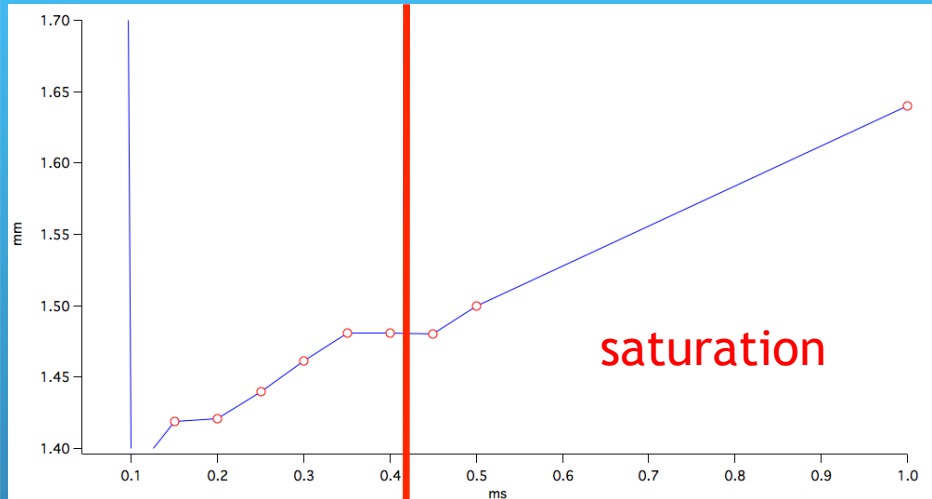
Total Normalized Intensity



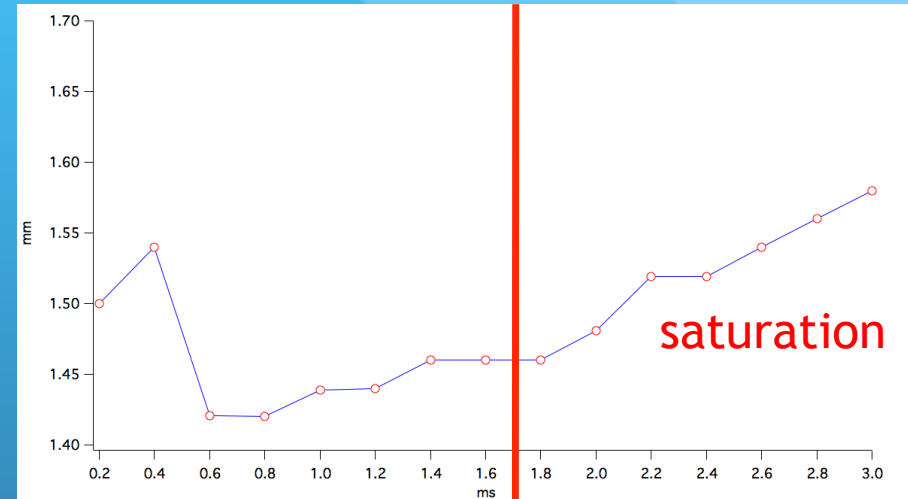
Radius of integration
of the spot

CMA2 : d0 vs exp. time

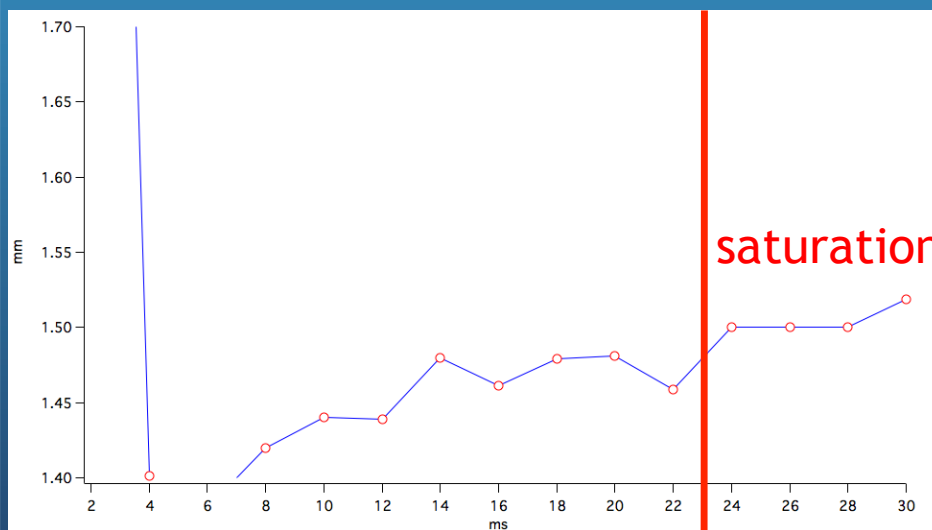
run 1



run 2



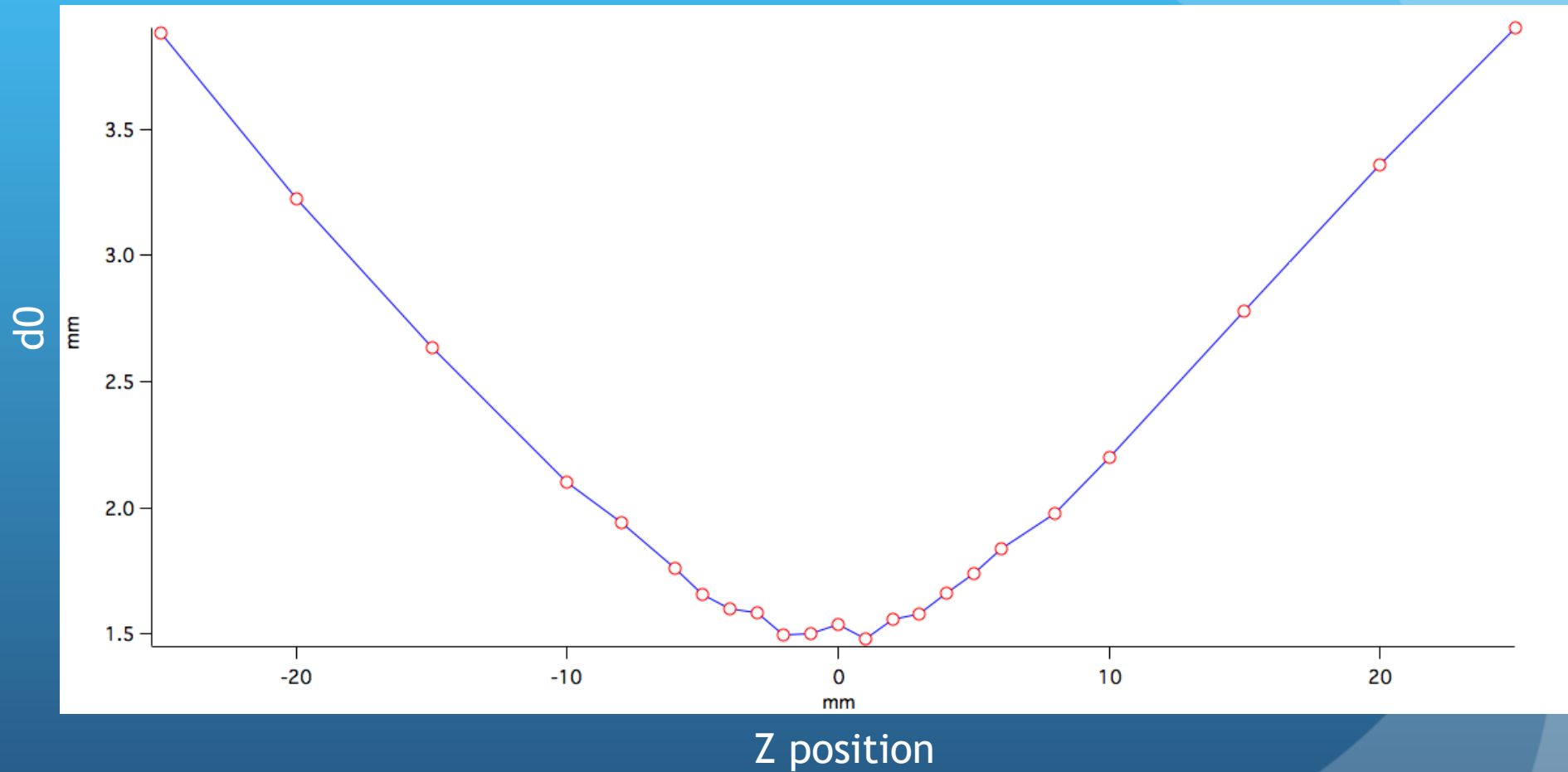
run 3



- Run 1 Light intensity 5
- Run 2 Light intensity 2
- Run 3 Light intensity 1

CMA2 : d0 vs mirror distance

9



Conclusion

10

After 1 week in the dry cabinet the CMA2 has a $d_{0.05}$ of 1.4 to 5 mm

The mirror is sensitive to the humidity since it's not coated.