

Measured currents of the diamonds for the next beam test

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Table of contents I

1 Introduction

2 II6-94

- -600 V
- -1000 V

3 II6-95

- -1000 V

4 II6-96

- -1000 V

5 II6-B2

- -1000 V
- +1000 V

6 II6-97

- +1000 V
- -1000 V

7 Conclusion

Introduction	II6-94	II6-95	II6-96	II6-B2	II6-97	Conclusion
	O	OOO	OO	OO	O	O

Section 1

Introduction

Introduction

- interesting diamonds for the next beam test in August 2016

- ▶ II6-94
- ▶ II6-95
- ▶ II6-96
- ▶ II6-97
- ▶ II6-B2

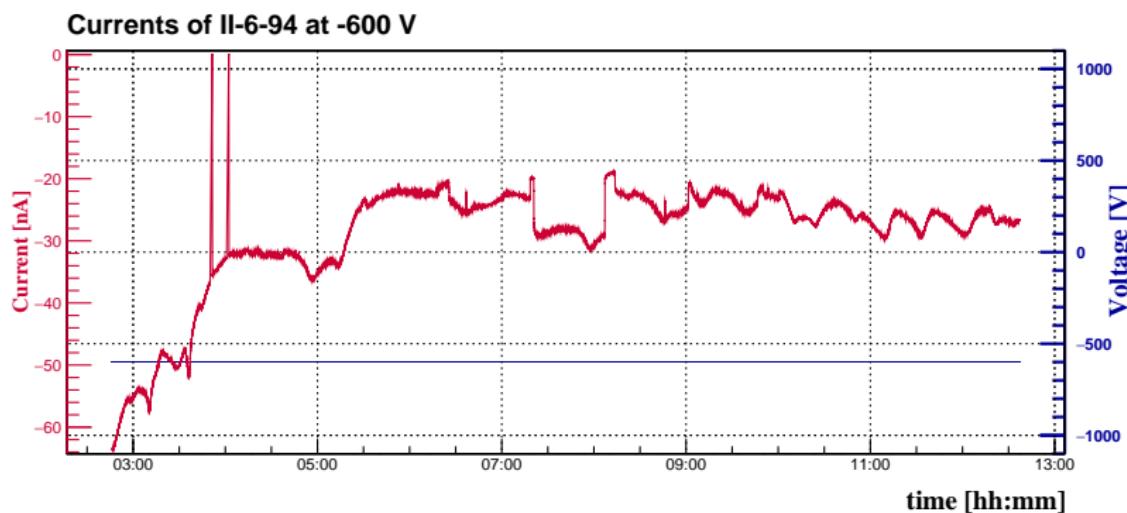
- check their current behaviour from the previous beam tests

Introduction	II6-94	II6-95	II6-96	II6-B2	II6-97	Conclusion
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Section 2

II6-94

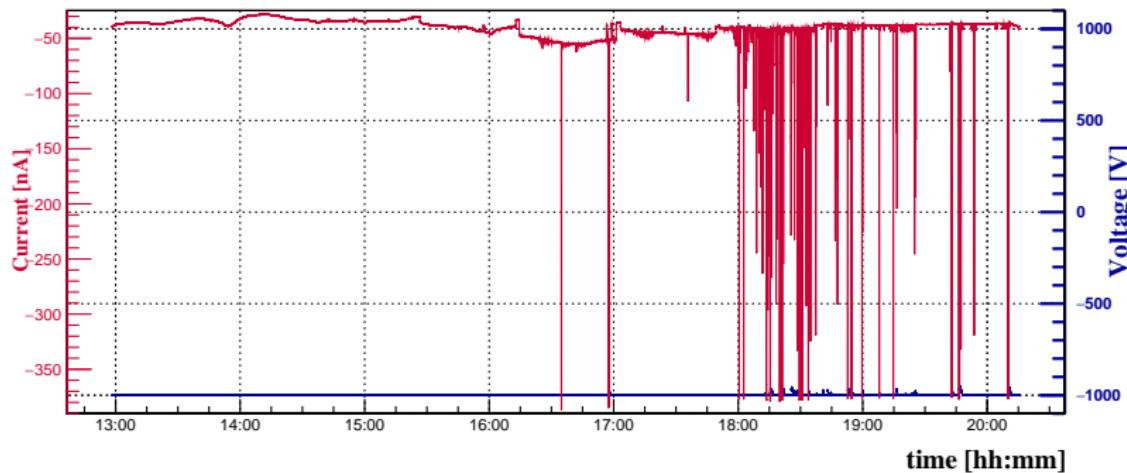
-600 V

-600 V

- rather low currents
- (almost) no spikes to zero as in Oct 15 beam test
 - ▶ no beam interruption due to UCN (Ultra Cold Neutrons)

-1000 V

-1000 V

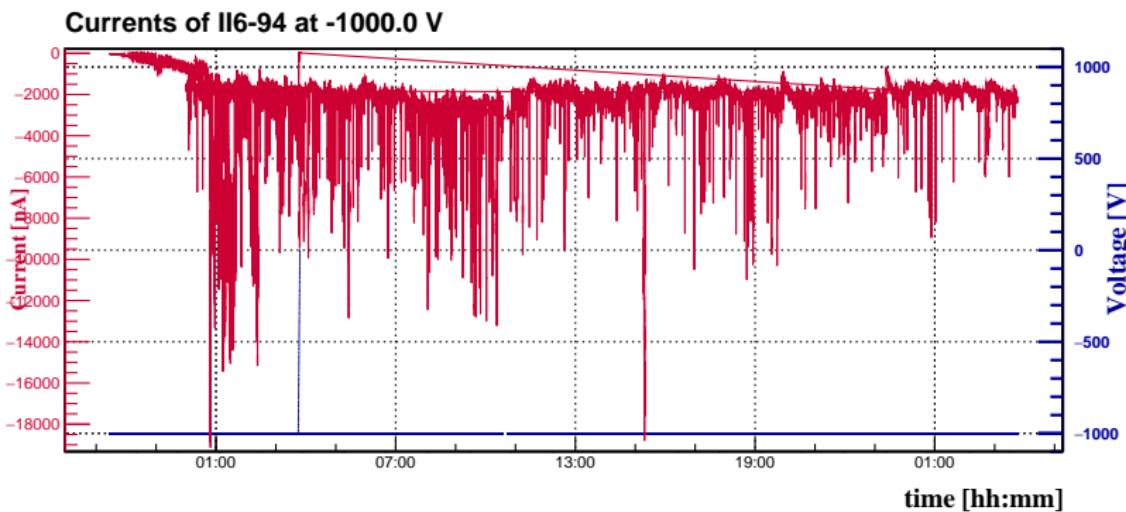
Currents of II-6-94 at -1000 V

- current behaviour normal at the beginning
- at a certain point in time (high rate) diamond current gets unstable

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○●

-1000 V

as Pixel



Introduction	II6-94	II6-95	II6-96	II6-B2	II6-97	Conclusion
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Section 3

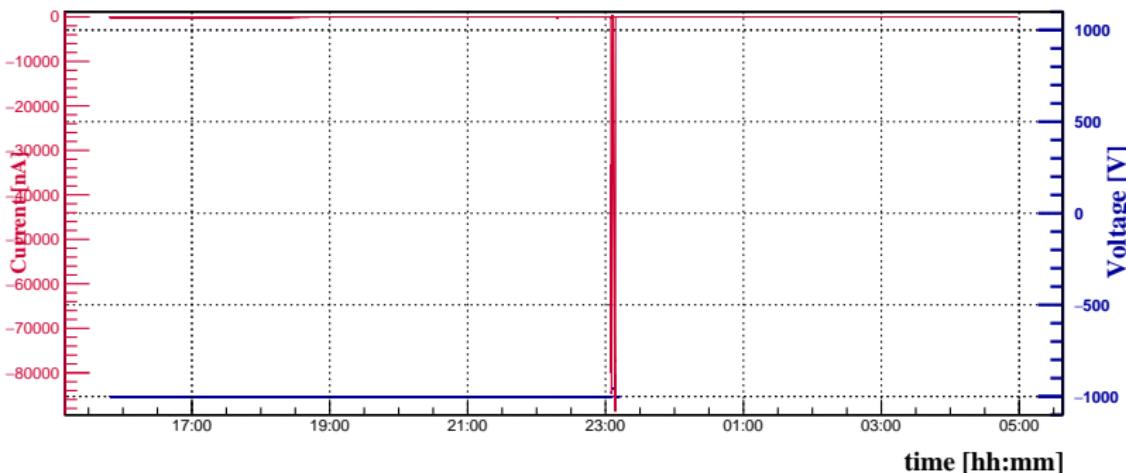
II6-95

○
○○

-1000 V

-1000 V

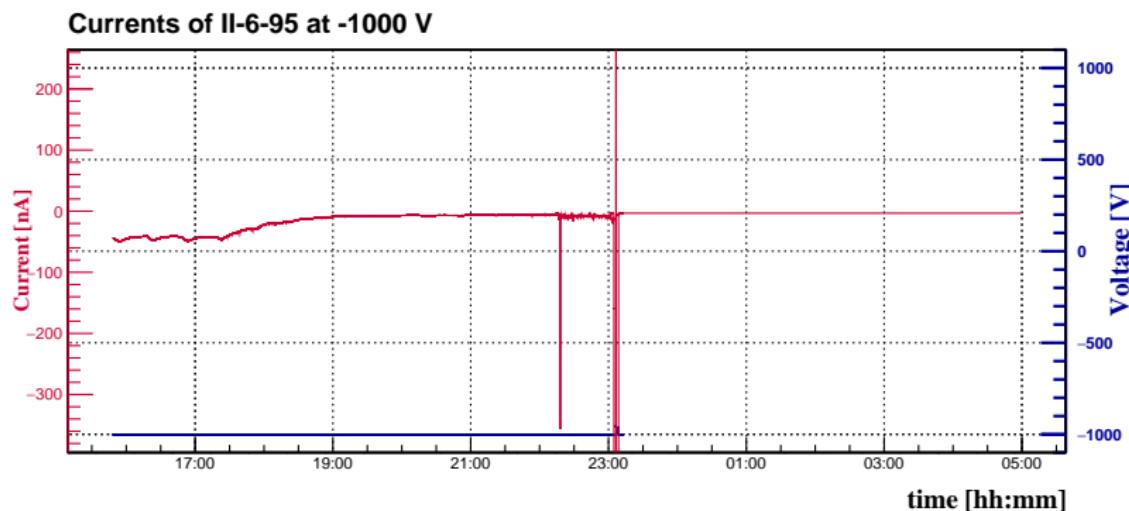
Currents of II-6-95 at -1000 V



- 95 installed together with 96
- at 11pm one of the Keithleys broke and weird positive currents appeared in both diamonds
- change to another Keithley but no monitoring of the current anymore

-1000 V

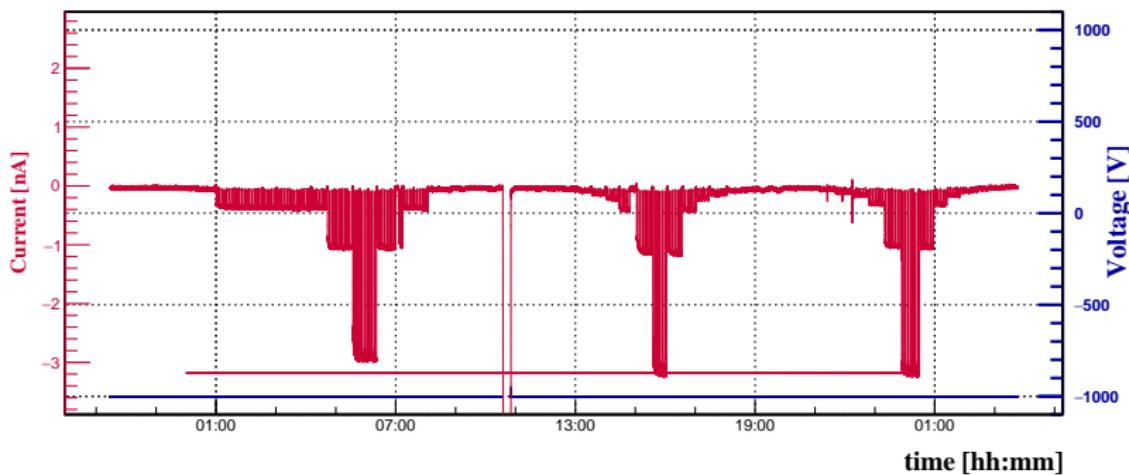
Zoom



-1000 V

as Pixel

Currents of II6-95 at -1000.0 V



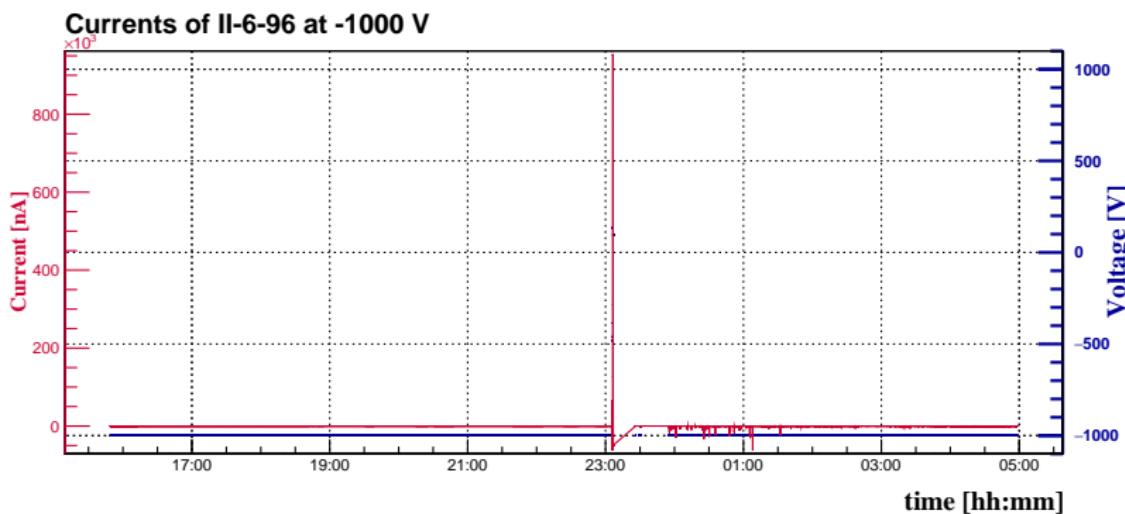
Introduction	II6-94	II6-95	II6-96	II6-B2	II6-97	Conclusion
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Section 4

II6-96

-1000 V

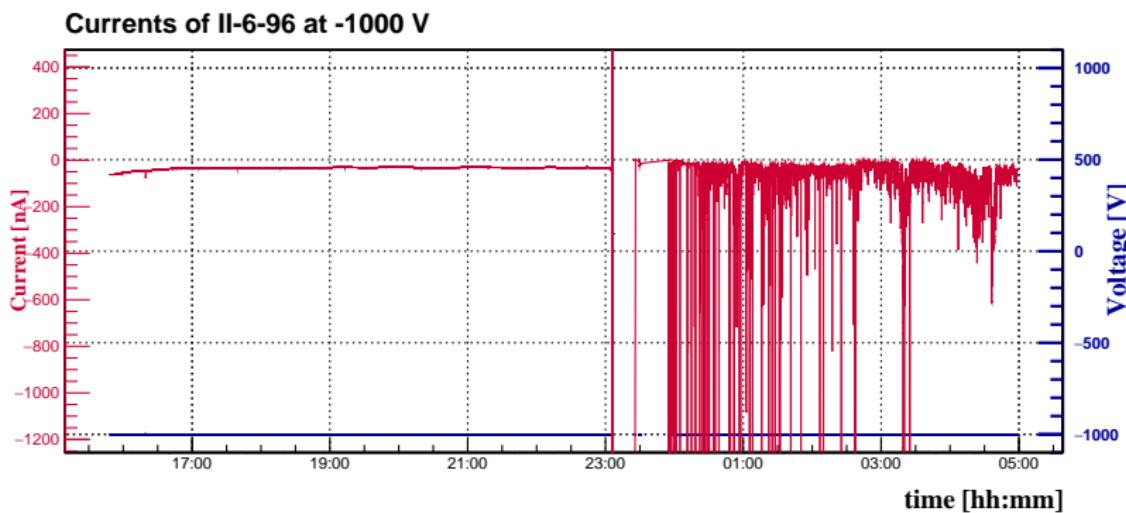
-1000 V



- very high current spikes after the other Keithley broke

-1000 V

Zoom

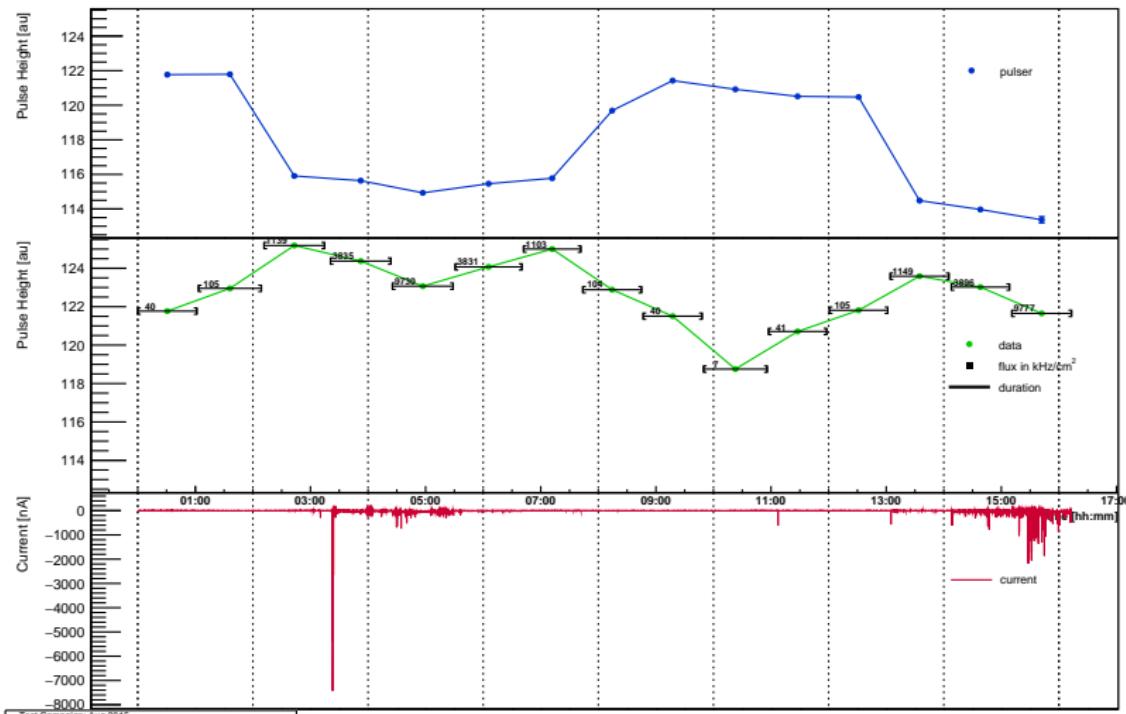


Section 5

II6-B2

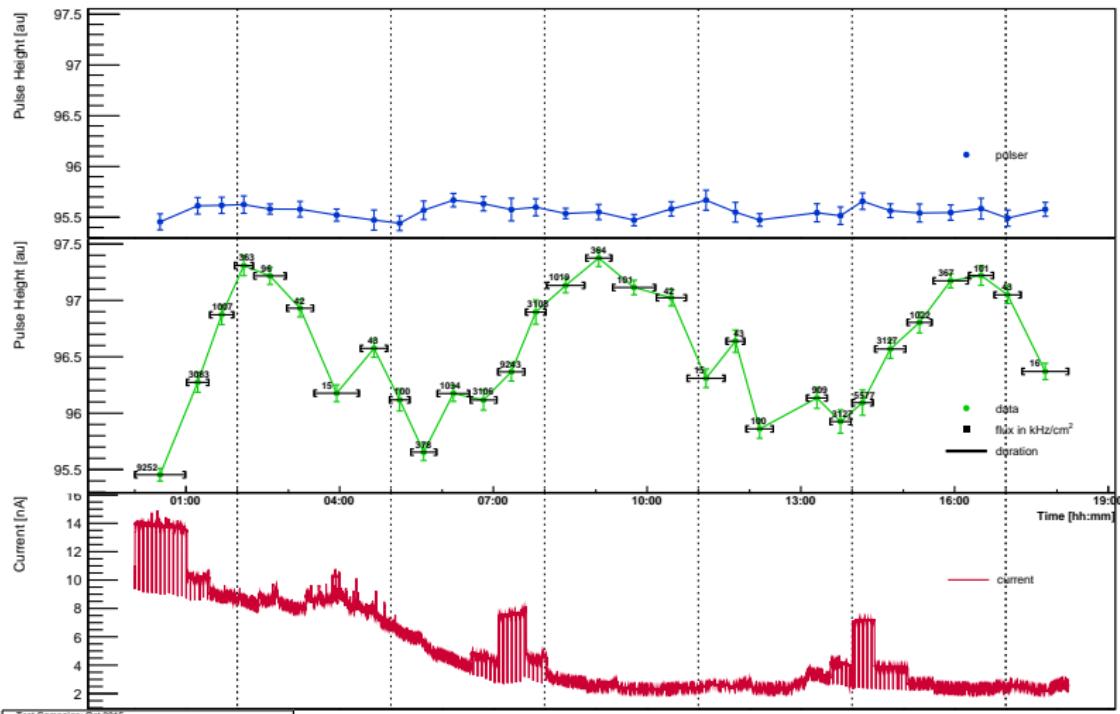
-1000 V

-1000 V August 2015



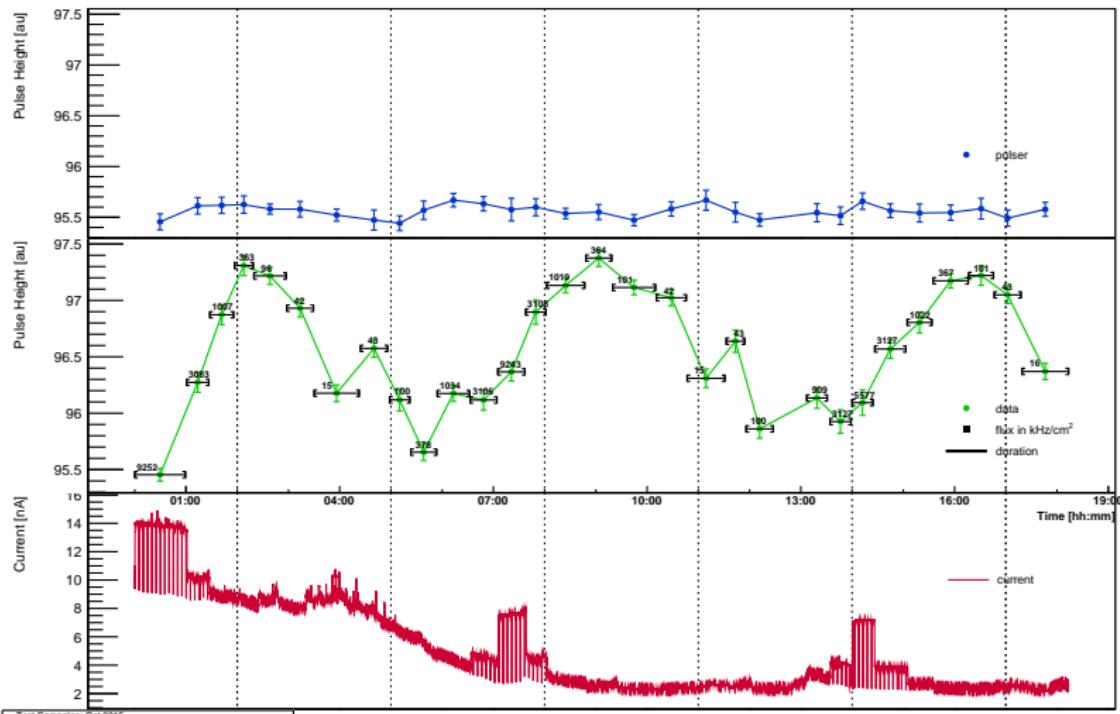
-1000 V

-1000 V October 2015



+1000 V

+1000 V October 2015



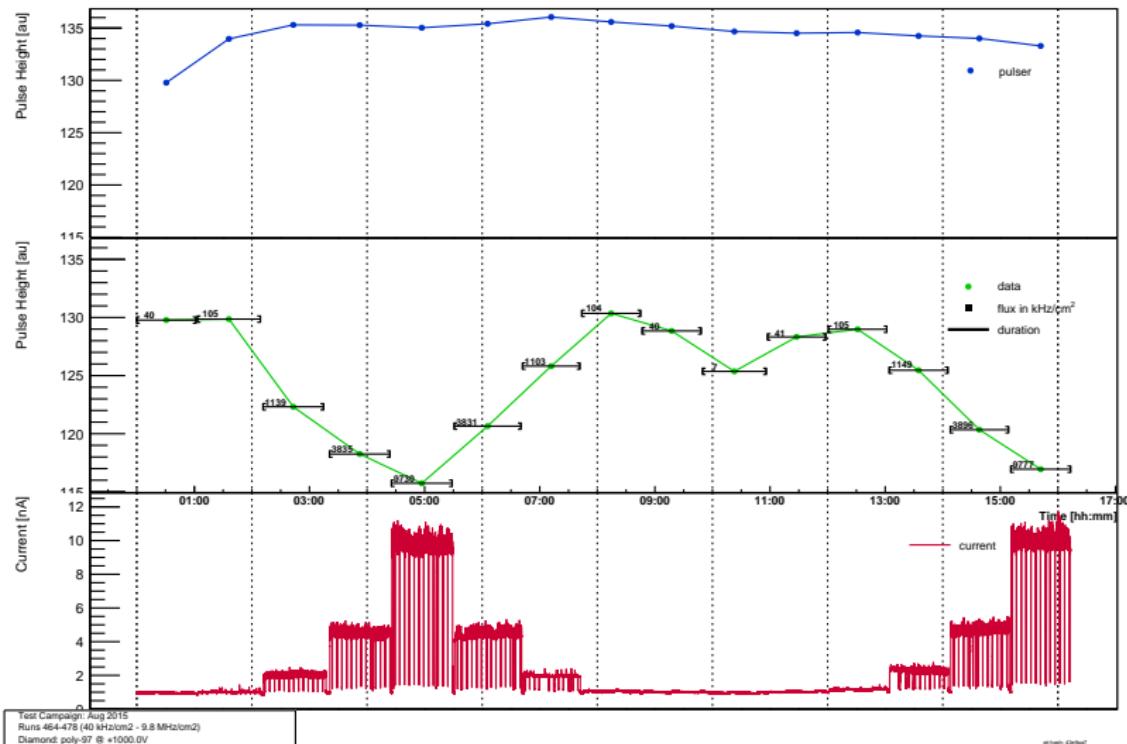
Introduction	II6-94	II6-95	II6-96	II6-B2	II6-97	Conclusion
	O	OOO	OO	OO	O	O

Section 6

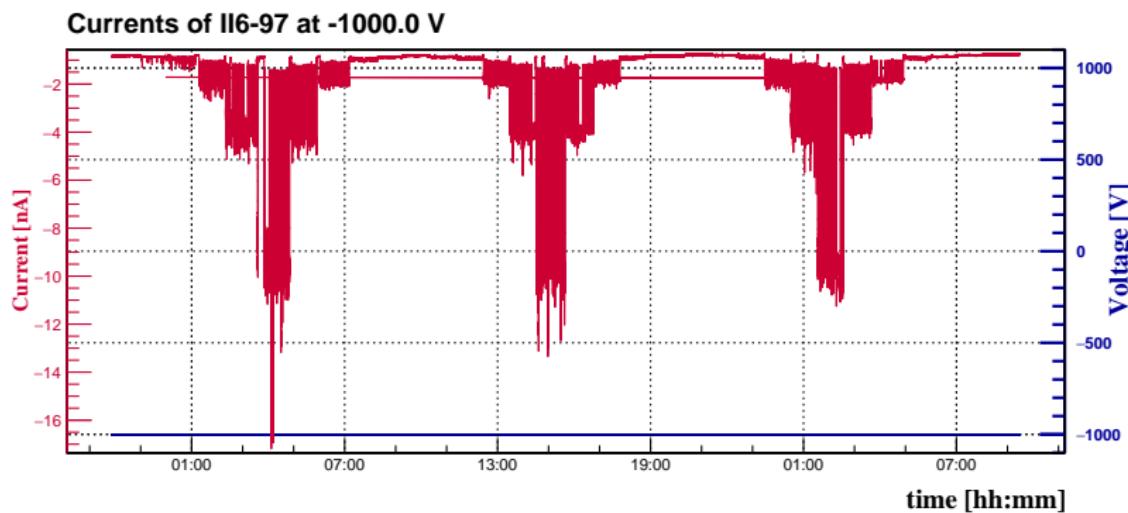
II6-97

+1000 V

+1000 V August 2015



-1000 V

-1000 V October 2015

Introduction	II6-94	II6-95	II6-96	II6-B2	II6-97	Conclusion
	O	OOO	OO	OO	O	O

Section 7

Conclusion

Introduction	II6-94	II6-95	II6-96	II6-B2	II6-97	Conclusion
	O OO	OOO	OO	OO O	O O	

- 94/95/96 show instabilities at -1000 V
- 95 stable as pixel at -1000 V
- 97 and B2 (Oct) stable