

Tests in Bern

N. Wyrsh, S. Dunand, M. Large, P. Casolaro

Ecole Polytechnique Fédérale de Lausanne (EPFL), Photovoltaics and Thin Film Electronics Laboratory, Neuchâtel, Switzerland

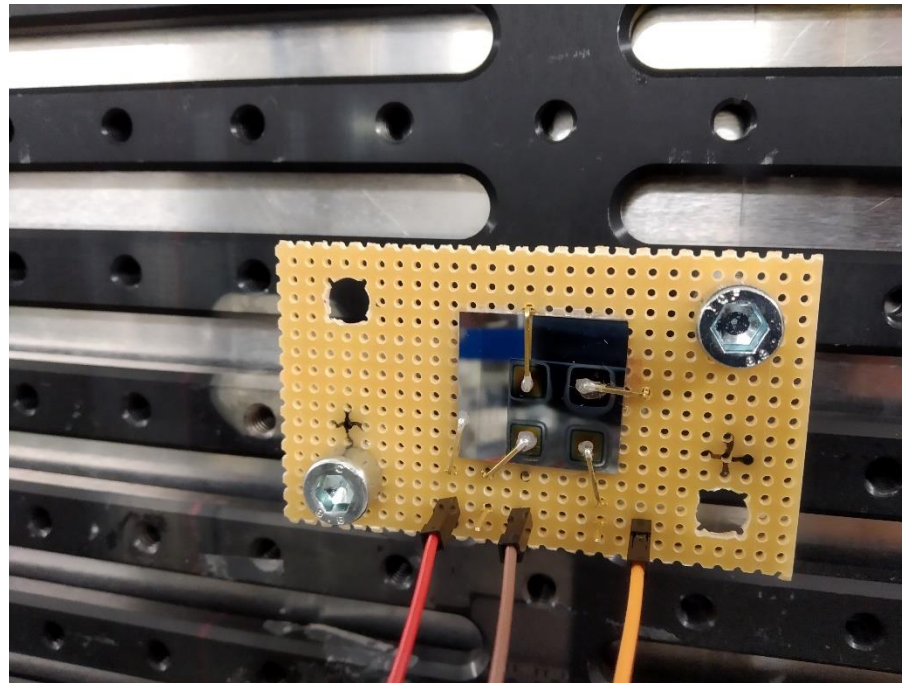
Bern cyclotron



- 18 MeV proton beam

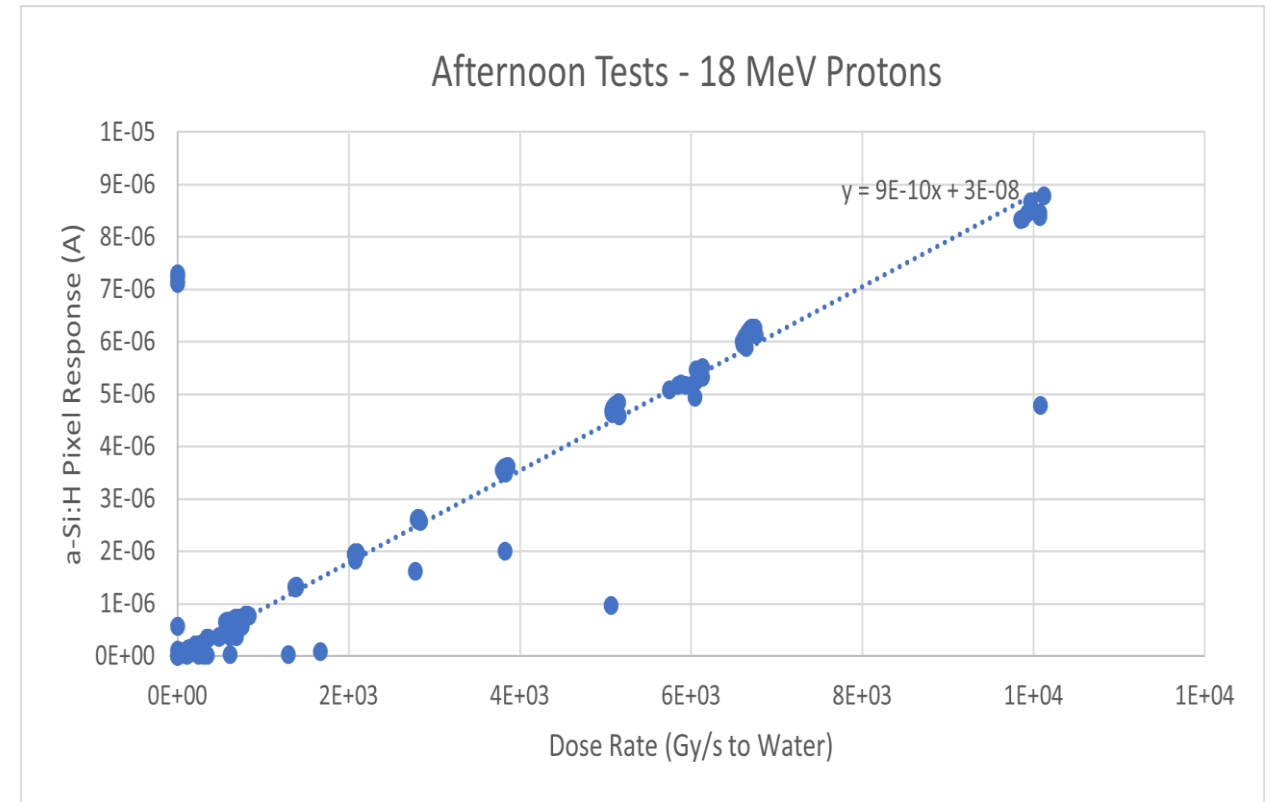
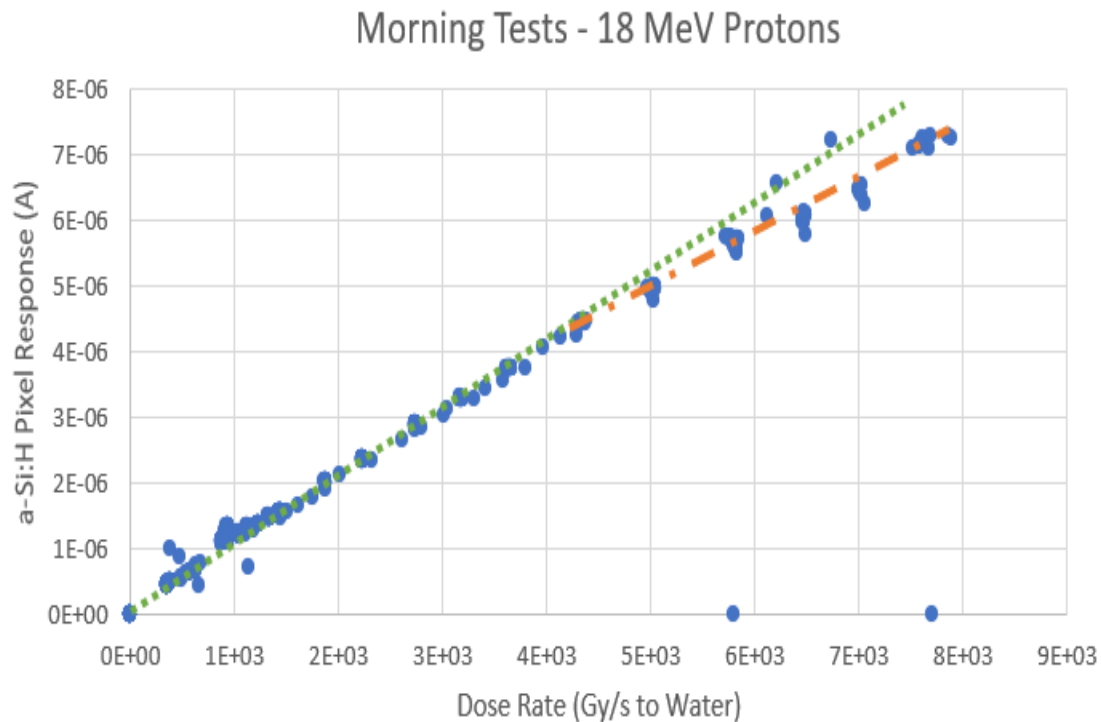
Sample

- 2.5 μm thick n-i-p a-Si:H diode on glass, ITO top contacts, 5x5 mm
- Measurement at -10 V bias
- Beam collimator slightly larger than sample size



Preliminary tests

- Current as a function of dose rate (unfiltered data, top left diode)



Next steps

- Test reproducibility (repeat measurements up to 1-2 kGy/s)
- Assess radiation hardness (look at variation with time at dose rates between 0.5-1 kGy/s)
- Any other suggestion?