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Darkcount rate increase after irradiation

- Not very quantitative. Accidental observation during beamtime
 - JESSICA@FZ-Jülich
 - 2.7 GeV/c proton, $I=10^6$ Hz, defocused over a few cm^2
 - significant increase of darkcount
- 1% of 10^6 for 20 hours $\rightarrow 7 \times 10^8$ MIPs

Time needed to reach that dose in PANDA environment

- Assumption
 - 100 Hz/cm² (full intensity) → 10 Hz / 9mm² (!)
 - 100% duty factor
 - No recovery
- $7 \times 10^8 / 10 / 3600 / 24 \sim 800$ days
- No need to worry??