

Dear editor,

Thank you for your time in reviewing our paper and your thoughtful comments that led to improvements in the current version. The authors have considered the comments and tried to address every one of them. We welcome further constructive comments if there are any.

Below we provide a point-by-point response to each comment.

Sincerely,  
Lars Schall

**Comment 1:**

“The dose corresponding to the proton irradiated chips ( $2 \times 10^{15}$ ) in Bonn and Birmingham.”

**Response:** We added this information at the end of section 2.

*“At the fluence of  $2 \times 10^{15} \text{ n}_{\text{eq}}/\text{cm}^{-2}$  this corresponds to radiation doses of 232 Mrad and 260 Mrad for the Bonn and Birmingham irradiation sites, respectively.”*

**Comment 2:**

“The number of working pixels before and after irradiation.”

**Response:** We added this information to section 3 in form of the percentage of pixels that needed to be disabled after irradiation.

*“Additionally,  $\sim 0.5\%$  of pixels had to be masked due to radiation damage.”*

**Comment 3:**

“The breakdown voltage after irradiation.”

**Response:** We did not observe a breakdown in the I-V characteristics up to 300V after irradiation. To prevent damage to the chip, we deliberately avoided going to higher voltages. This information was added in section 3.

*“Up to 300 V, no breakdown was identified after irradiation, while higher voltages were deliberately avoided to prevent damage to the chip.”*