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## Operation and performance of the CMS silicon detectors

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The CMS silicon tracking system consists of an inner part with hybrid pixel modules and an outer part with silicon micro-strips. The silicon trackers have been successfully taking data during LHC Run 1 and 2. During Long shutdown 2, the pixel detector underwent an extensive refurbishment program to address the problems encountered during Run 2. The DCDC converters which exhibited failures during power cycles have been replaced. A new innermost barrel layer with improved versions of the ASICs (PROC600 and TBM) has been installed. After the re-installation of the pixel detector in June 2021 a thorough period of commissioning followed for both detectors, including the acquisition of 3.5M cosmic muon track for alignment. This contribution will summarize the refurbishment of the pixel detector during LS2 and the performance of both silicon detectors during early Run 3. The change of detector performance with increasing irradiation will be discussed including an outlook towards the end of Run 3.

### Submission declaration

Original and unpublished

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