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Electronics Calibrations for the ATLAS New Small Wheel Upgrade ANNE FORTMAN, Harvard University, ATLAS COLLABORATION — This talk presents an overview of calibrations in the data acquisition system of the New Small Wheel upgrade to the ATLAS detector. The New Small Wheel (NSW) is a new muon detector scheduled for installation for the third data-taking run, or Run 3, at the LHC beginning in 2022. The NSW will be installed to fully take advantage of the increased collision rate offered in Run 3 and beyond, as swift and precise tracking of muons will be critical for identifying interesting and rare collision events amid the vast amount of data to be produced in future LHC runs. The NSW data acquisition electronics will be responsible for carrying data out of the NSW detector at a high rate. The performance of the electronics depends on a number of factors that must be continuously monitored and calibrated. We present the procedures and results of electronics calibrations that address the challenges associated with reading out data at a high rate at the NSW.

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