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NuMI Beam Muon and Hadron Monitor Data Analysis and Simulation for Neutrino Beam Quality Improvement YIDING YU, PAVEL SNOPOK, Illinois Institute of Technology, KATSUYA YONEHARA, DON WICK-REMASINGHE, Fermi National Accelerator Laboratory, AMIT BASHYAL, Oregon University, TYLER REHAK, PIERCE WEATHERLY, Drexel University, KAROL LANG, University of Texas Austin, NOVA COLLABORATION — With the Main Injector Neutrino Oscillation Search (MINOS) experiment decommissioned, muon and hadron monitors became an important diagnostic tool for the NuMI Off-axis ν_e Appearance (NO ν A) experiment at Fermilab to monitor the Neutrinos at the Main Injector (NuMI) beam. The goal of this study is to maintain the quality of the monitor signals and to establish correlations with the neutrino beam profile. We report here on the progress of the beam data analysis and comparison with the simulation results.

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