

The ATLAS MDT remote calibration centers

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The calibration of the ATLAS MDT chambers will be performed at remote sites, called Remote Calibration Centers. Each center will process the calibration data for the assigned part of the detector and send the results back to CERN for general use in the reconstruction and analysis within 24h from the calibration data taking.

In this work we present the data extraction mechanism, the data transfer mechanism and the structure of the remote calibration centers. A particular focus will be given to the processing techniques in the calibration centers, the failover mechanisms and the process control system, called Local Calibration Data Splitter (LCDS).

The full architecture has been successfully used during the cosmic data taking runs and has been proven to be powerful, robust and stable enough to cope with the real data taking. The preliminary results on the system performance, obtained during the cosmic data taking runs in 2008, will be discussed and the plans for the real data taking period will be presented.

Primary author: DE SALVO, Alessandro (Istituto Nazionale di Fisica Nucleare Sezione di Roma 1)

Co-authors: DI MATTIA, Alessandro (Michigan State University); SERFON, Cedric (Ludwig-Maximilians-Universität München); TIESHENG, Dai (University of Michigan); ORESTANO, Domizia (Terza Università di Roma); DIEHL, Ed (University of Michigan); PASQUALUCCI, Enrico (Istituto Nazionale di Fisica Nucleare); PETRUCCI, Fabrizio (Terza Università di Roma); RAUSCHER, Felix (Ludwig-Maximilians-Universität München); KENNEDY, John (Ludwig-Maximilians-Universität München); MCKEE, Shawn (University of Michigan); VANDELLI, Wainer (Conseil Européen pour la Recherche Nucléaire (CERN))

Presenter: DE SALVO, Alessandro (Istituto Nazionale di Fisica Nucleare Sezione di Roma 1)

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