

# Physics and Software validation for ATLAS

*Tuesday, 24 March 2009 08:00 (20 minutes)*

The ATLAS experiment recently entered the data taking phase, with the focus shifting from software development to validation.

The ATLAS software has to be both robust to process large datasets and produce the high quality output needed for the experiment scientific exploitation. The validation process is discussed in this talk, starting from the validation of the nightly builds and pre-releases to the final validation of software releases used for data taking and scientific results.

A few thousands events are processed every day using the most recent nightly build and physics and technical histograms are processed automatically. New versions of the software are released every 3 weeks and are validated using a set of 100K events that are monitored by people appointed by each of the ATLAS subsystems. Patch version of the software can be deployed at the ATLAS Tier0 and on the grid within a 12-24 hours cycle and a crew of validation shifters continuously monitor bug reports that are submitted by the operation teams.

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