

100-HZ DATA ACQUISITION ON THE APS POWER SUPPLY CONTROL UNITS*

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This paper describes the implementation of an interim system for 100-Hz data acquisition and glitch capture on the existing GESPAC 68000-based power supply control units at the Advanced Photon Source. Detection of millisecond glitches is required to allow identification of faulty power supplies that may be responsible for beam motion and dump. An initial test of the data acquisition and glitch capture software has been performed. This software will be deployed in stages around the storage ring. Implementation details, results of bench measurements of sub-millisecond glitch capture with a 100-Hz sample rate, and implementation status will also be presented.

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