

Notes from 12/01/03 and 12/04/03 Tevatron BPM Upgrade
Hardware discussion. These are kept in BD Doc 906.
Stephen Wolbers

Main Topics: Beam measurements, discussion of hardware options

12/01/03:

Beam Measurements:

- We looked at the signal size of the damper board currently connected in A1. The S/N ratio is much smaller than previous measurements made before the shutdown.
- In the Echotek data there is also some non-understood signal sizes that need to be investigated.
- There has been no scope data yet. Bob is working on that with Vic Scarpene.
- Work will continue on the existing data, both before and after the shutdown. The dedicated proton scan of the aperture will occur once we understand that the equipment is all functioning correctly.

12/04/03:

- Current data. Rob Kutschke brought some new plots looking at the data taken before the shutdown. He showed that there is a slow drift (a few %) in position of the beam. He also showed that the ratio of the A plate antiproton end signal divided by the A plate proton end signal is position dependent. It is not clear whether the reflection on the proton end contributed to this effect and we look forward to analysis of the newer data with the reflections minimized. There is still analysis to do to try to get the proton and antiproton positions measured.
- Echotek. Echotek is sending someone to come and talk

and we will meet on Monday, December 8 at 2:00 P.M. in the Penthouse.

- Technology Choice. We had a long discussion of the choices that we have and how to make a final decision as to which one to use. Clearly there are issues that remain and work that is to be done to answer questions about the capabilities of the boards and their ability to meet the requirements. Work will continue on the bench and in the accelerator to get the information that we need.

We will next meet on Monday, December 8, 2:00 P.M., Penthouse, to talk to Echotek representative.