

Minutes, 3/16/05 Tevatron BPM Upgrade Meeting  
Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

1. Report from Bob and Steve
2. Report from subproject leaders
3. Report from Jim Steimel
4. AOB

1. Report from Bob and Steve

- Steve and Rob Kutschke are giving talks about the project and measurement quality, etc. next week Thursday (March 24) at 2:30 P.M. in the Huddle.

- Absences this month:

- Bob Webber 3/14-3/18
- Jim Steimel, Brian Hendricks, Tim Kasza 3/28-4/1
- Steve on shift 3/25-4/1

- Two crates were installed last week. More crates are being made ready for installation.

2. Reports from L2 Managers

Tim Kasza:

- Echotek board status: 2 boards were sent to Echotek for repairs. 2 other boards are already there (the boards that we had trouble loading firmware).

- All of the timing cards except A3 and B3 have had the diagnostic signal modifications done.

- Bill Barker and others helped out with installation of D3 and E3 last week. So far 13 crates have been assembled and 5 installed in the service buildings.

- Filter failure information has been handed off to Ken Treptow.

Mike Martens:

- Mike continues to closely monitor the performance of the BPMs.
- All of the BPMs pass the one-bump diagnostics.
- Mike has looked carefully at the new BPM orbits and compared them to the old BPM orbits. The results can be found in the BPM logbooks. He believes that offsets or shifts of on order 1 mm between the old and new BPMs is common. The BPM positions seem to be stable in time (this needs to be quantified.)
- On the store that went in Tuesday afternoon the A3 and D3 houses looked fine (injection TBT) but B3, C3 and E3 looked bad (had outlier measurements). This is a big problem for the project and will be discussed below.
- The E3 house has a problem with the profile frames. They look to be 2 frames off, as if 2 TCLKs have been missed. This also is a problem and needs to be fixed.
- No SDA was collected from the old BPM system during the last shot.
- Some of the new alarms are alarming too much and this needs to be cleaned up.

Jim Steimel: TBT problem (and other items)

- The TBT outlier problem showed up on Monday/Tuesday in the C3 house. Once it got in that state it seemed to stay that way. Reloading the front end made it go away.
- Hypothesis is that there is something about resetting/not resetting the Graychip is related to or cause of this problem.
- It has been difficult if not impossible to recreate the problem either on the teststand or in the accelerator. The problem seems to affect all boards in a crate, not individual Echotek boards or channels.
- Even though 3 crates were bad at injection on Tuesday they all looked fine on Wednesday when people trigger TBT during the store.
- Debugging and resolving this problem will be a high priority of the project.

Vince Pavlicek:

- Bob Forster sent mail asking about the order of BPM's in the B0 and D0 houses, because of the need for different attenuation on the short BPMs. We agreed with Bob's proposal to connect the BPM's to the filter boards in a sensible way to get the attenuation correct and therefore lose the strict ring ordering of the BPMs in the crate.

- There is a modification to the timing board to further reduce/eliminate cross-talk between output sync's if that is needed.

- The termination boards are not here yet.

Brian Hendricks:

- Modified W25 to allow work on 1 crate at a time.

- Lin has fixed mapping problems in T39.

- There is a problem in W68 or the frontend where scaled data is showing up correctly but I's and Q's are all 0.

- Lin Winterowd will be Brian's backup when he is away.

Luciano Piccoli:

- Luciano is working on the FTP at 500 Hz.

- Working on an intensity threshold alarm.

- Spending time working on TBT problems.

Rob Kutschke:

- Rob continues to collect data to understand the antiproton measurements.

- Rob and Mark will present calibration DB ideas on Thursday.

4. AOB.

- We will meet Thursday March 17 at 1:30 to discuss calibrations and calibration DB ideas.

- We plan to install no new crates until we have a better handle on the TBT problem and on the E3 2 missed TCLK problem.

- Next week's meeting will be at 11:00 March 23 in the Huddle.