

HERA-B Report

- 1) Status of target
- 2) Results from first comm. runs (“dry runs”)
- 3) Requests for beam-time
- 4) Xmas shut-down

1) Status of target

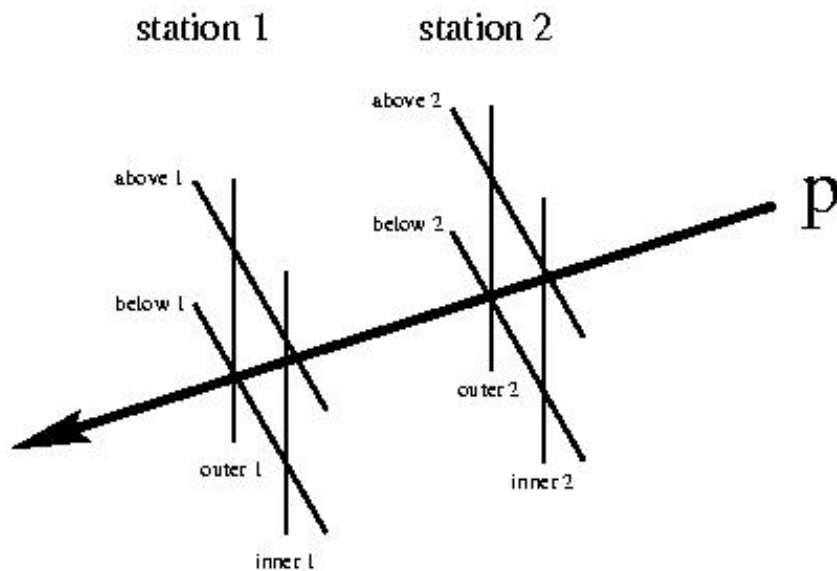
- Completely new target mechanics installed
- New lumi monitors installed
- Everything is working properly

Next steps:

Need 3 shifts to operate all wires with beam, check software and have first look at performance (bx-structure, CB, stability, backgrounds)

At least one dedicated target shift required before lumi period next week, otherwise $\int L dt = 0$.

New target configuration:



Target	Mat.	Shape
above 1	Al	50 μm * 500 μm
below 1	C	100 μm * 500 μm
inner 1	W	50 μm \varnothing
outer 1	Ti	50 μm \varnothing
above 2	Pd	50 μm \varnothing
below 2	Ti	50 μm \varnothing
inner 2	C	100 μm * 500 μm
outer 2	Ti	50 μm \varnothing

2) Results from first comm. runs

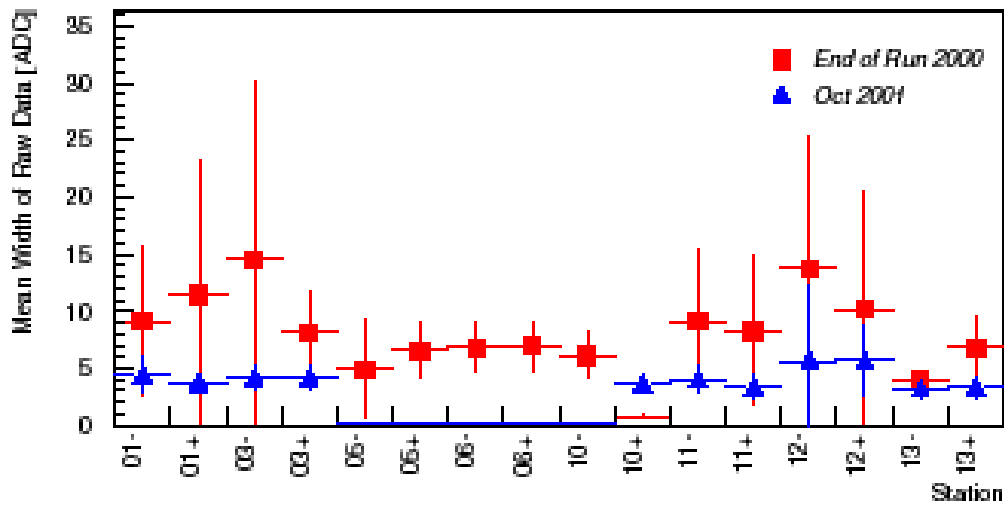
Vertex detector:

- Ready for data taking
- Need 1 shift to test pot movement with beam. Only then we can start to test Si detectors

Inner tracker:

- All stations used in 2000 reinstalled. Readout working properly (except one station).
- Last 4 trigger stations will be installed during Nov. and Dec. access.

Noise runs during Hera operation:



Mean width of raw data distributions

Target rate needed for fine tuning of timing, readout sparsification and HV training

Outer tracker:

- HV training of chambers started. Only e^+ -injection disturbing. Up to now, 9 HV groups lost and 6 more which are problematic. All during first 2 hrs of HV operation.

Outer tracker:

- Establish readout ; 70 TDCs (out of 1000) give problems. Fix during Nov. access.
- First iteration of threshold adjust., synchronization etc. done
- **No progress can be made without target rate** (detailed plan to calibrate and align detector available).
- Optical trigger links are still of a concern. Fraction of unstable links is a bit too large. Needs still lot of work (Xmas break).

RICH:

- Readout commissioned
- First rings seen
- Use Nov. break to commission gas system

ECAL:

Noise situation much improved compared to 2000. No deterioration during HERA operation observed.

MUON:

Essentially all subsystems working as expected. Several minor things will be fixed during Nov. and Xmas access.

3) Requests for beam-time

1. At least one dedicated target shift this week, otherwise we lose the complete Nov. lumi period. Only moderate rates (1.5 MHz) needed.
2. Detailed comm. of target operation requires additional 2 dedicated shifts.
3. One dedicated shift to test VDS pot movements. Check for potential Rf problems.

4) Xmas shut-down

- Complete installation of ITR chambers
- Tune optical links for OTR - FLT connection
- Many, many little details here and there.
- Most likely we will not vent the VDS-vessel to replace individual Si-detectors, **but.....**
- **Fix length of Xmas shut-down and length of access now:**
21.12. - 11.1.02 fine with us.