

Jefferson Lab Alignment Group

Data Transmittal

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DETAILS:

During the first week of January 2005, the alignment group carried out an elevation survey of monuments in the beam switch yard up to and including lines A and C just past the shielding walls, and line B into the Hall itself. The survey tied back to the west arc of the accelerator.

The observations were adjusted using the same fixed points as the 2001 survey (DTM #L657), and the differences between the two surveys were calculated. The results are shown below. For each of the lines the mean is the mean difference between the surveys for those monuments downstream of the shield walls. The max/min values the largest and smallest differences between the surveys for all monuments.

It can be seen that all differences are negative, indicating that these areas have continued to sink relative to the west arc/start of BSY. The largest change at a single monument is -1.71 mm in line B. The Hall B monuments that were measured, have sunk about a millimeter. The line A and C monuments just past the shield walls show changes of -0.40mm and -0.70mm respectively. We will extend the survey into these halls at the next opportunity.

	Mean	Min	Max
LineA	- 0.40	- 0.23	- 0.48
LineB	- 1.49	- 0.09	- 1.71
LineC	- 0.70	- 0.06	- 0.82
HallB	- 0.92	- 0.67	- 1.09