# Jefferson Lab Alignment Group <br> Data Transmittal 

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DATE: 07 Dec 2010
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## DETAILS:

The DVCS (2010) calorimeter was re-surveyed at 3 positions on December 7, 2010. The data below shows the resulting deltas at the reference angles which are beam right from the straight ahead beam. The calorimeter was at the 1.1 meter nominal distance downstream from the Hall A target center. The reference point for the calorimeter is the upstream face of the PbF2 crystals at a location as shown on drawing A00000-01-14-0900 sheet 2.

The column labeled 'angle' is the angle the rails were set at, beam right of the main Hall A straight ahead beam (decimal degrees). Column 'location' is the ideal distance horizontally from the Hall A target to the reference point. Columns $d x$, $d y$ and $d z$ are the differences from the ideal trajectory along the beam at each angle (millimeters). A +x indicates the location is to the beam left, $a+y$ indicates the location is high, and a $+z$ indicates the component is downstream of ideal. A + dYaw angle is counter clockwise looking from above, $a+d$ itch is ccw looking from the beam right, and $a+d R o l l$ angle is cw looking from upstream.

| Angle | Location | $\mathbf{d x}(\mathbf{m m})$ | $\mathbf{d y}(\mathbf{m m})$ | $\mathbf{d z}(\mathbf{m m})$ | dYaw $^{\circ}$ | dPitch $^{\circ}$ | dRoll $^{\circ}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $14.78^{\circ}$ | 1.1 | -0.04 | -0.49 | -1.24 | 0.0135 | -0.0066 | -0.0135 |
| $17.25^{\circ}$ | 1.1 | -1.59 | -0.59 | -1.65 | -0.1003 | -0.0043 | -0.0372 |
| $19.39^{\circ}$ | 1.1 | -6.24 | -0.68 | -1.82 | -0.3604 | -0.0132 | -0.0467 |

