# Jefferson Lab Alignment Group <br> Data Transmittal 

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DETAILS:
Data: m:lalginldatalstep2b|hallalbigbitel060207a
The Hall A Gen 2 experiment Big Bite magnet and detector assemblies were surveyed February $7^{\text {th }}, 2006$. The assembly was located at the ideal angle of $56.5^{\circ}$ clockwise looking downstream from the standard Hall A target. The magnet origin is located 1.1 meters from the hall target and is the front face of the steel core. The origin for the detector is the front face of the assembly. The coordinate system shown is in millimeters with the hall $A$ target center being the origin, $+z$ being the downstream along the main beamline, $+x$ being transverse beam left and $+y$ being up. The angular results are in degrees, with the +yaw being clockwise about the $y$ axis, + pitch is positive counter clockwise about the $x$ axis and +roll is clockwise about the $z$ axis.

|  | Ideal |  |  | Found |  |  | Deltas bfs |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{Z}$ | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ | $\mathbf{X}$ | $\mathbf{y}$ | $\mathbf{d z}$ | $\mathbf{d x}$ | $\mathbf{d y}$ |  |  |  |  |  |
| Magnet | 607.1 | -917.3 | 0.0 | 594.5 | -913.5 | -0.3 | -10.1 | -8.4 | -0.3 |  |  |  |  |  |
| Detector | 1252.8 | -1892.8 | 151.6 | 1255.6 | -1872.6 | 164.8 | -15.3 | 13.5 | 13.2 |  |  |  |  |  |
| Ideal Angles |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Found Angles |  |  |  |  |  |  |  |  |  |  |  | Delta Angles |  |  |
|  | Yaw | Pitch | Roll | Yaw | Pitch | Roll | dYaw | dPitch | dRoll |  |  |  |  |  |
| Magnet | 56.50 | 0.00 | 0.00 | 56.26 | -0.35 | 0.06 | -0.24 | -0.35 | 0.06 |  |  |  |  |  |
| Detector | 56.50 | 10.00 | 0.00 | 56.21 | 10.05 | -0.09 | -0.29 | 0.05 | -0.09 |  |  |  |  |  |

