#  <br> Jefferson Lab Alignment Group Data Transmittal 

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DATE: 07/24/2020
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DETAILS:
The Saclay standard target and the solid targets were surveyed February $2^{\text {nd }}$ and $4^{\text {th }} 2020$ respectively. The resulting target locations and IPM2H01 (2/2/2020 only) are shown below.

The ideal and found coordinates are shown in meters relative to the CEBAF coordinate system. The beam following coordinates (millimeters) are also shown and are described as follows: Positive x is to the beam left from ideal beam looking downstream; Positive y is the amount higher than beamline; negative $z$ is amount upstream from the ideal position.

The angular displacements are shown in degrees. Positive yaw is the counter clockwise rotation about the Y axis; negative pitch is the clockwise rotation about the X axis (physics standard); positive roll is the clockwise rotation about the Z axis.

| Ideal Data |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| Component | X[m] | Y[m] | $Z[\mathrm{~m}]$ | Yaw[deg] | Pitch[deg] | Roll[deg] |
| IPM2H01 | -80.60000 | 103.35526 | -392.94580 | 180.0000 | 0.0000 | 0.0000 |
| Target | -80.60000 | 103.35526 | -398.82153 | 180.0000 | 0.0000 | 0.0000 |


| Found Data |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | :--- | :--- | :--- |
| Component | $\mathrm{X}[\mathrm{m}]$ | $\mathrm{Y}[\mathrm{m}]$ | $\mathrm{Z}[\mathrm{m}]$ | $\mathrm{dx}[\mathrm{mm}]$ | $\mathrm{dy}[\mathrm{mm}]$ | $\mathrm{dz}[\mathrm{mm}]$ | dYaw | dPitch | dRoll |
| IPM2H01 | -80.60005 | 103.35497 | -392.62819 | 0.05 | -0.29 | -317.61 | -179.9980 | 0.0138 | -0.0203 |
| Target | -80.59972 | 103.35530 | -398.79173 | -0.28 | 0.04 | -29.80 | -179.9983 | 0.0072 | 0.0026 |
| Solid Target | -80.59966 | 103.35508 | -398.79210 | -0.34 | -0.18 | -29.43 | -179.9986 | 0.0037 | -0.0097 |

