Name: Isaac Beltran-Cervantes
Date: 4/10/2022
Location: Huntington Park, CA
bucket D1: 5"in
bucket D2: 5"in
D:
$=(5-5) / 2$
$=0 / 2$
$=0$
H: 65 " in
smallest z1: 35.6 degrees
smallest z2: $\mathrm{n} / \mathrm{a}$
$\mathrm{A}=\mathrm{z} 2-\mathrm{z} 1$
$\mathrm{R}=180 * \mathrm{D} /(\mathrm{A} * \mathrm{pi})$

| Time | S | X1 | $\mathbf{L}=\mathbf{S}+\mathbf{X} 1-\mathrm{D}$ | $\boldsymbol{\operatorname { t a n }}(\mathrm{z})=\mathrm{L} / \mathrm{H}$ | $\mathrm{z}=\mathrm{ATAN}(\mathrm{L} / \mathrm{H})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12:30 pm | 39" | 5" | 34" | 0.523 | 27.61 |
| 12:35 pm | $38^{1 / 2}{ }^{\prime \prime}$ | 5" | $3311 / 2$ " | 0.515 | 27.25 |
| 12:40 pm | 38" | 5" | 33" | 0.507 | 26.89 |
| 12:45 pm | $37^{1 / 2}$ " | 5" | $321 / 2$ " | 0.5 | 26.57 |
| 12:50 pm | 37" | 5" | 32" | 0.492 | 26.2 |
| 12:55 pm | $36^{1 / 2}{ }^{\prime \prime}$ | 5" | $311 / 2$ " | 0.485 | 25.88 |
| 1:00 pm | 36" | 5" | 31" | 0.477 | 25.50 |
| 1:05 pm | $36^{1 / 2}$ " | 5" | $311 / 2$ " | 0.485 | 25.87 |
| 1:10 pm | 37" | 5" | 32" | 0.492 | 26.2 |
| $1: 15 \mathrm{pm}$ | $371 / 2$ " | 5" | $321 / 2$ " | 0.5 | 26.57 |

Experiment was a bit tricky to do at times. There would be portions in which it would get cloudy and then sunny suddenly. The cloudiness made the shadows a bit more blurry to measure, but I think I did my best with measuring them. Aside from that, the calculations felt straight forward and not too difficult to complete.

