Statistics Project 1 :
Statistics - Math 2606

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1 Experiment

2 Results

Our estimates for the standard deviation of the measurements, up to an order of magnitude, are as follows:

$$\sigma_{h_1} = 1\text{cm}$$
$$\sigma_{d_1} = 1\text{dm}$$
$$\sigma_{d_2} = 1\text{m}$$

Measurement #	h_1	d_1	d_2	h_2
1	1.78	1.12	10.86	17.26
2	1.77	1.2	11.04	16.28
3	1.76	1.25	11.57	16.29
4	1.77	1.41	12.41	15.58
5	1.77	1.46	13.49	16.35
6	1.77	1.66	14.76	15.74
7	1.76	1.69	16.18	16.85
8	1.77	1.84	17.72	17.05
9	1.78	1.87	19.34	18.41
10	1.77	2.25	21.02	16.54
mean	1.77	1.575	14.839	16.635

Figure 1: Measurements for iris height (h_1), the distance from the mirror to Will (d_1), the distance from Searles to the mirror (d_2), and the resultant estimate of the height of Searles (h_2). All units are in meters.