Physics 1570 Experiment 5 – Accelerated Motion

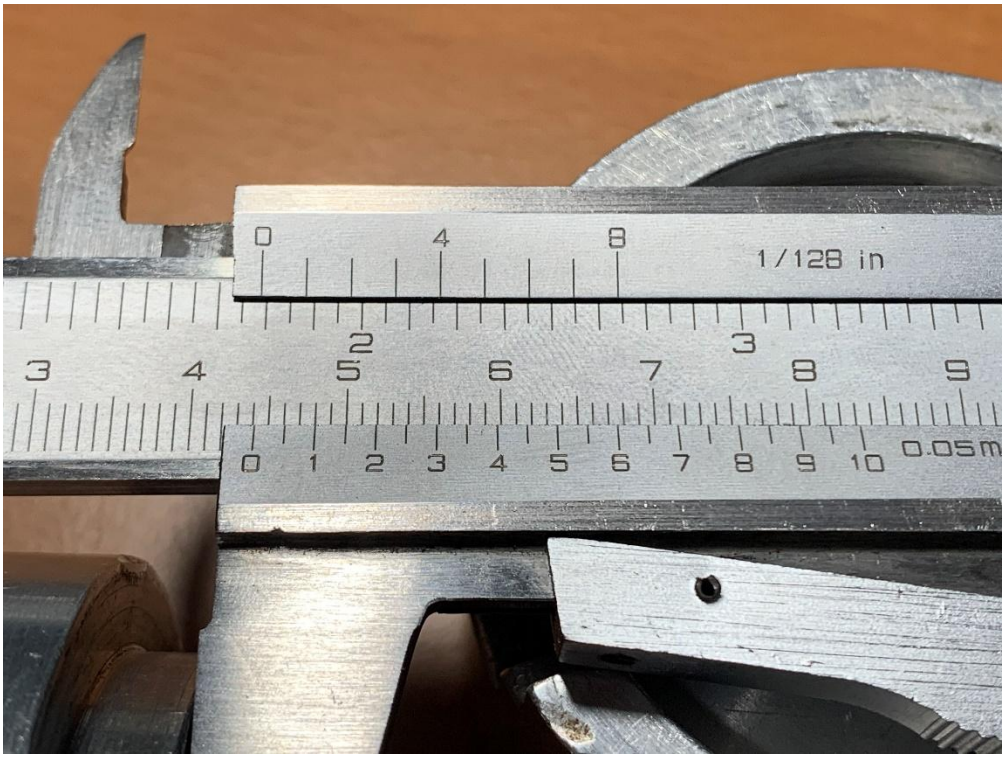
This data was collected with a frequency of 50 Hz, with an error in position of +/- 0.0001 m

Data Point	Position (m)	Data Point	Position (m)
1	0.0012	41	0.2704
2	0.0022	42	0.2828
3	0.0035	43	0.2955
4	0.0051	44	0.3084
5	0.0072	45	0.3217
6	0.0095	46	0.3353
7	0.0120	47	0.3491
8	0.0149	48	0.3632
9	0.0181	49	0.3775
10	0.0215	50	0.3919
11	0.0252	51	0.4068
12	0.0292	52	0.4220
13	0.0336	53	0.4374
14	0.0382	54	0.4532
15	0.0432	55	0.4690
16	0.0484	56	0.4853
17	0.0540	57	0.5017
18	0.0598	58	0.5184
19	0.0658	59	0.5355
20	0.0722	60	0.5528
21	0.0788	61	0.5703
22	0.0857	62	0.5881
23	0.0930	63	0.6062
24	0.1005	64	0.6245
25	0.1084	65	0.6432
26	0.1165	66	0.6621
27	0.1249	67	0.6813
28	0.1335	68	0.7005
29	0.1424	69	0.7202
30	0.1516	70	0.7402
31	0.1610	71	0.7604
32	0.1707	72	0.7808
33	0.1807	73	0.8015
34	0.1909	74	0.8225
35	0.2014	75	0.8439
36	0.2122	76	0.8653
37	0.2234	77	0.8869
38	0.2346	78	0.9089
39	0.2463	79	0.9300
40	0.2583		

Two identical risers were used to elevate the track. *One* riser underneath each foot. Here is a photo of one of the risers in the jaws of a vernier caliper.



Here is a close up on the caliper's movable scale.



Here is a photo taken of the insert for the track's left foot. The camera lens is positioned directly above the left side of the hole. A meter stick was used so those numbers are in units of cm.



Here is a photo taken of the insert for the track's *right* foot. The camera lens is positioned directly above the left side of the hole.

