

Data Table

Date: October 30, 2021

Location: Alhambra, CA

bucket D1:

bucket D2:

D: 10 cm

H: 123.5 cm

smallest z1: 48.338

smallest z2: 51.460

$A = z2 - z1$

$R = 180 * D / (A * \pi)$

Time	S	X1	L=S+X1-D	$\tan(z)=L/H$	$z = \text{ATAN}(L/H)$
12:20	131.5 cm	10 cm	141.5 cm	1.146	48.886
12:23	130.5 cm	10 cm	140.5 cm	1.138	48.684
12:26	130.0 cm	10 cm	140.0 cm	1.134	48.583
12:29	129.6 cm	10 cm	139.6 cm	1.130	48.502
12:32	129.1 cm	10 cm	139.1 cm	1.126	48.400
12:35 (True Solar Noon)	128.8 cm	10 cm	138.8 cm	1.124	48.338
12:40	129.0 cm	10 cm	139.4 cm	1.129	48.461
12:45	129.5 cm	10 cm	140.0 cm	1.134	48.583
12:50	130.2 cm	10 cm	140.4 cm	1.137	48.664
12:55	130.9 cm	10 cm	141.1 cm	1.143	48.805