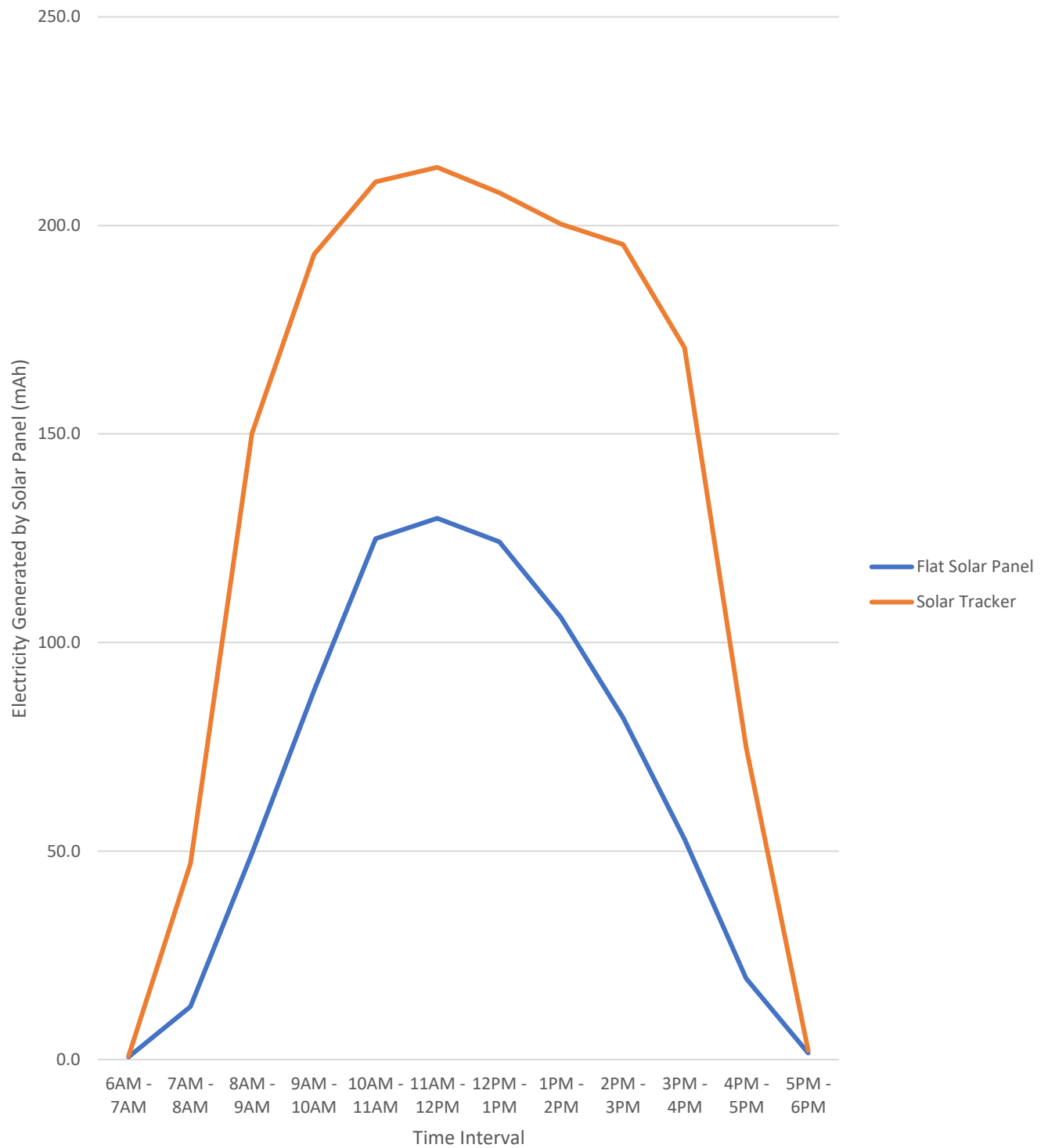
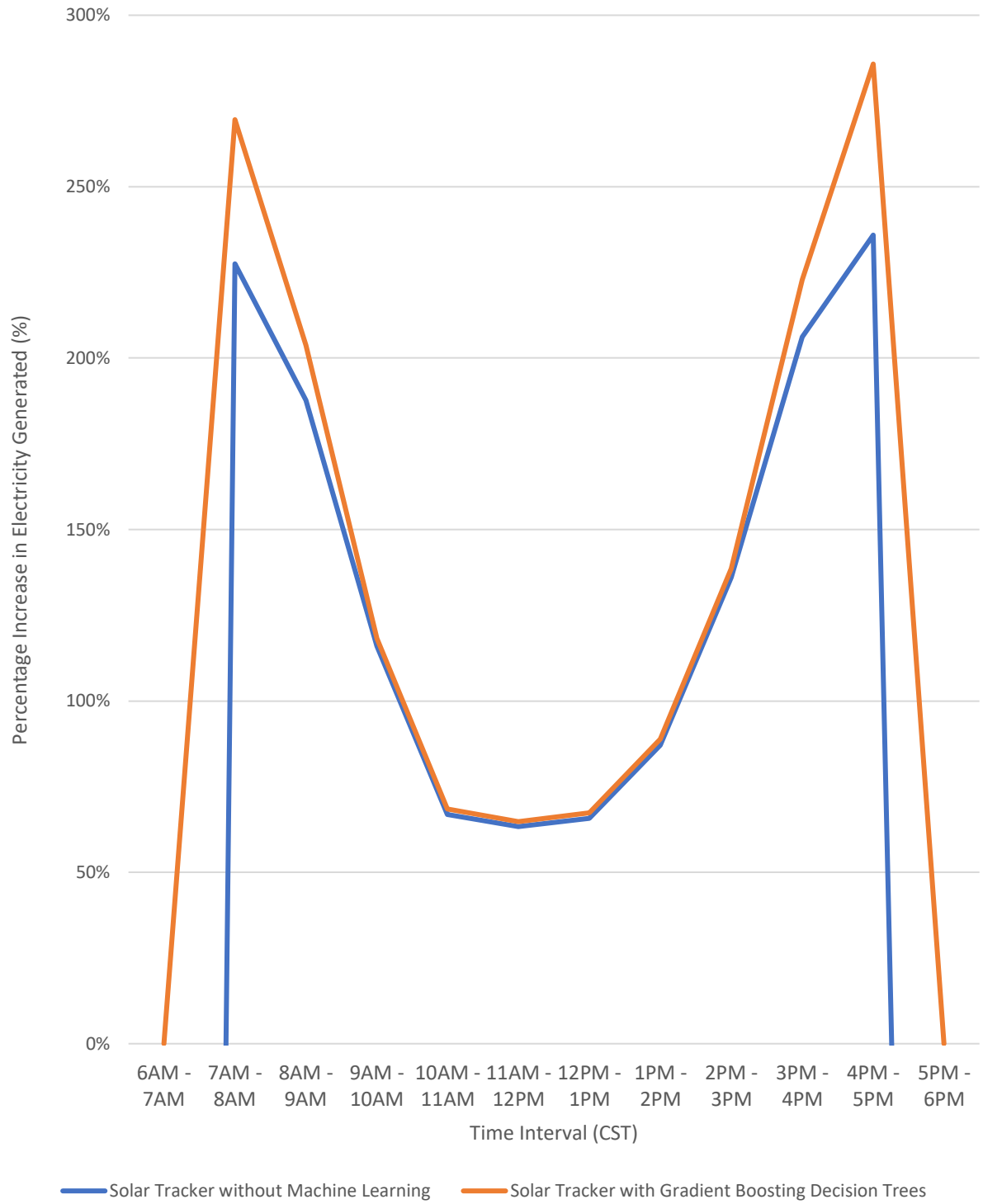


Comparing the Electricity Generated by the Solar Tracker and a Flat Solar Panel



Comparing the Percentage Increase of the Solar Tracker with and without Machine Learning



Data Table #1 - Solar Tracker without Machine Learning

Increasing the Electricity Generated by an Intelligent Dual-Axis Solar Tracker													
	Net Electricity Generated (mAh) - Energy Consumption of Robot is Subtracted												Percentage Increase in Electricity Generated Using the Solar Tracker without Solar Panels
	Flat Solar Panel						Solar Tracker without Machine Learning						
	Time Interval (CST)	11/7/20	11/9/20	11/12/20	11/16/20	11/17/20	Average	11/7/20	11/9/20	11/12/20	11/16/20	11/17/20	
6AM - 7AM	0.6	0.8	0.6	0.6	0.5	0.6	-8.9	-8.8	-9.4	-9.3	-9.4	-9.2	-1577%
7AM - 8AM	13.7	13.9	13.4	11.2	11.3	12.7	46.0	45.2	44.3	34.2	38.3	41.6	228%
8AM - 9AM	49.2	50.3	50.3	48.4	49	49.4	142.3	143.0	144.3	139.7	142.0	142.3	188%
9AM - 10AM	92.3	94.5	93.4	80.4	82	88.5	193.6	193.9	192.3	190.3	185.5	191.1	116%
10AM - 11AM	127.6	126.2	128.2	120.3	122.2	124.9	213.5	211.2	208.2	198.1	211.4	208.5	67%
11AM - 12PM	130.4	132.3	130.2	128.6	127.4	129.8	213.9	213.2	214.3	204.6	213.6	211.9	63%
12PM - 1PM	126	124.5	128.1	120.1	122.2	124.2	208.4	205.4	207.0	200.1	208.3	205.8	66%
1PM - 2PM	105	105.3	109.3	103.4	107.3	106.1	201.1	199.2	200.3	193.3	197.8	198.3	87%
2PM - 3PM	83.4	84.5	85.2	80.2	76.4	81.9	197.5	193.6	193.7	188.2	194.3	193.5	136%
3PM - 4PM	56.2	55.2	53.1	49.8	50	52.9	156.9	162.3	168.3	160.2	161.5	161.8	206%
4PM - 5PM	19.3	20.6	20	18.2	18.9	19.4	70.2	68.2	63.3	60.5	63.6	65.2	236%
5PM - 6PM	1.7	1.8	1.7	1.3	1.2	1.5	-8.7	-8.5	-9.0	-9.0	-8.6	-8.8	-669%

Data Table #2 - Solar Tracker with Machine Learning

Increasing the Electricity Generated by an Intelligent Dual-Axis Solar Tracker													
	Net Electricity Generated (mAh) - Energy Consumption of Robot is Subtracted												Percentage Increase in Electricity Generated Using the Solar Tracker with Gradient Boosting Decision Trees
	Flat Solar Panel						Solar Tracker Using Gradient Boosting Regression						
Time Interval (CST)	11/7/20	11/9/20	11/12/20	11/16/20	11/17/20	Average	11/7/20	11/9/20	11/12/20	11/16/20	11/17/20	Average	
6AM - 7AM	0.6	0.8	0.6	0.6	0.5	0.6	0.6	0.8	0.6	0.6	0.5	0.6	0%
7AM - 8AM	13.7	13.9	13.4	11.2	11.3	12.7	48.4	49.4	50.2	42.4	44.3	46.9	270%
8AM - 9AM	49.2	50.3	50.3	48.4	49	49.4	153.3	149.9	150.2	148.7	148.6	150.1	204%
9AM - 10AM	92.3	94.5	93.4	80.4	82	88.5	195.6	195.9	194.3	192.3	187.5	193.1	118%
10AM - 11AM	127.6	126.2	128.2	120.3	122.2	124.9	215.5	213.2	210.2	200.1	213.4	210.5	69%
11AM - 12PM	130.4	132.3	130.2	128.6	127.4	129.8	215.9	215.2	216.3	206.6	215.6	213.9	65%
12PM - 1PM	126	124.5	128.1	120.1	122.2	124.2	210.4	207.4	209	202.1	210.3	207.8	67%
1PM - 2PM	105	105.3	109.3	103.4	107.3	106.1	203.1	201.2	202.3	195.3	199.8	200.3	89%
2PM - 3PM	83.4	84.5	85.2	80.2	76.4	81.9	199.5	195.6	195.7	190.2	196.3	195.5	139%
3PM - 4PM	56.2	55.2	53.1	49.8	50	52.9	168.9	170.3	174.3	170.2	169.5	170.6	223%
4PM - 5PM	19.3	20.6	20	18.2	18.9	19.4	80.4	77.8	65.3	75.3	75.4	74.8	286%
5PM - 6PM	1.7	1.8	1.7	1.3	1.2	1.5	1.7	1.8	1.7	1.3	1.2	1.5	0%