



## **Overall Results**

Place	Car Num	Теат	Penalty	Cost Score	Presentation Score	Design Score	Acceleration Score	Skid Pad Score	Autocross Score	Endurance Score	Efficiency Score	Total Score
1	202	McGill Univ		80.7	73.9	150	100.0	70.8	94.4	181.4	97.0	848.2
2	203	Univ of Washington		56.0	67.7	110			107.3	275.0	93.0	708.9
3	217	Univ of Pennsylvania		81.7	59.1	100		20.2	121.8	208.8	87.8	679.5
4	216	Univ of Calif - Davis		89.4	64.2	100			60.4	243.0	93.7	650.7
5	224	Univ of Akron		81.4	44.1	60	30.9	10.5	106.0	168.5	99.5	600.8
6	205	Massachusetts Inst of Tech		82.9	72.8	110	68.8	51.6		110.9	87.4	584.3
7	213	Univ of Texas - Austin	-20	75.8	65.9	110	4.5	8.4	77.8	157.1	93.3	572.7
8	201	Carnegie Mellon Univ		95.0	68.7	130	61.0	75.0	125.0	3		557.6
9	234	Univ of Michigan - Ann Arbor		54.8	71.6	80	27.6	46.0	108.4	8	94.2	490.6
10	223	Univ of Illinois - Urbana Champaign		63.9	51.7	90	4.5		71.5	80.6	90.6	452.8
11	207	Purdue Univ - W Lafayette		51.9	63.1	90				141.8	100.0	446.8
12	204	Univ of Wisconsin - Madison		64.6	49.4	135			106.4			355.4
13	229	Western University		74.6	61.6	110				11	93.0	350.2
14	210	Univ of Manitoba		68.6	75.0	80	4.5	3.5	6.5	5		243.1
15	230	California Polytechnic State Univ-SLO		85.5	49.4	90						224.9
16	214	San Jose State University		73.5	59.3	60						192.8
17	209	Montreal Polytechnique	-20	87.6	51.7	70						189.3
18	227	Univ of Michigan - Dearborn		79.3	59.9	50						189.1
19		Virginia Tech		75.8	50.5	60						186.3
20	215	Univ of Calif - Riverside		66.8	67.7	40						174.5
21	219	Univ of Utah		51.3	60.5	50						161.8
22	233	California Institute of Technology	-20	57.9	74.9	40						152.8
23	236	San Diego State Univ	-10	47.4	47.8	60						145.2
24	212	Kennesaw State University	-20	75.1	20.0	60						135.1
25		Univ of Calif - Santa Cruz	-60	69.7		30						39.7
	208	Universidade Estadual de Campinas			42.1							pres only
		Auburn Univ			68.2							pres only
	218	Vanderbilt Univ										withdrawn
		Portland State Univ										withdrawn
	228	Missouri University of Science and Tech										withdrawn





## Design Event Results

Place	Car Num	Теат	Raw Score	Penalty	Status	Score
1		McGill Univ	150		Final	150
2		Univ of Wisconsin - Madison	135		Final	135
3		Carnegie Mellon Univ	130		Final	130
4 T		Univ of Washington	110			110
4 T		Massachusetts Inst of Tech	110			110
4 T		Univ of Texas - Austin	110			110
4 T		Western University	120	10	Final	110
8 т		Univ of Calif - Davis	100			100
8 т		Univ of Pennsylvania	100			100
10 т		Purdue Univ - W Lafayette	90			90
10 т		Univ of Illinois - Urbana Champaign	90			90
10 т		California Polytechnic State Univ-SLO	90			90
13 т		Univ of Manitoba	80			80
13 т		Univ of Michigan - Ann Arbor	80			80
15		Montreal Polytechnique	70			70
16 T	212	Kennesaw State University	60			60
16 T	214	San Jose State University	70	10		60
16 т		Univ of Akron	60			60
16 т		Virginia Tech	60			60
16 T		San Diego State Univ	60			60
21 T		Univ of Utah	50			50
21 т	227	Univ of Michigan - Dearborn	50			50
23 т		Univ of Calif - Riverside	40			40
23 т		California Institute of Technology	40			40
25	231	Univ of Calif - Santa Cruz	50	20		30
		Universidade Estadual de Campinas				
		Vanderbilt Univ				
	226	Portland State Univ				
	228	Missouri University of Science and Tech				
	232	Auburn Univ				





## **Presentation Event Results**

Place	Car Num	Team	Score
1	210	Univ of Manitoba	75
2	233	California Institute of Technology	74.8
3	202	McGill Univ	73.9
4	205	Massachusetts Inst of Tech	72.8
5	234	Univ of Michigan - Ann Arbor	71.6
6	201	Carnegie Mellon Univ	68.7
7	232	Auburn Univ	68.2
8	203	Univ of Washington	67.7
9	215	Univ of Calif - Riverside	67.7
10	213	Univ of Texas - Austin	65.9
11	216	Univ of Calif - Davis	64.2
12	207	Purdue Univ - W Lafayette	63.1
13	229	Western University	61.6
14	219	Univ of Utah	60.5
15	227	Univ of Michigan - Dearborn	59.9
16	214	San Jose State University	59.3
17	217	Univ of Pennsylvania	59.1
18	209	Montreal Polytechnique	51.7
19	223	Univ of Illinois - Urbana Champaign	51.7
20	225	Virginia Tech	50.5
21	204	Univ of Wisconsin - Madison	49.4
22	230	California Polytechnic State Univ-SLO	49.4
23	236	San Diego State Univ	47.8
24	224	Univ of Akron	44.1
25	208	Universidade Estadual de Campinas	42.1
26	212	Kennesaw State University	20.0
	218	Vanderbilt Univ	
	226	Portland State Univ	
	228	Missouri University of Science and Tech	
	231	Univ of Calif - Santa Cruz	





#### Cost Event Results

Place	Car Num	Team	Adjusted Cost	Price Score (40)	Cost Audit	Discussion Score (40)	Scenario (20)	Penalty	Score
1	201	Carnegie Mellon Univ	\$17,510	40	-3	38	20		95
2	216	Univ of Calif - Davis	\$18,743	35.3	-1	37.1	18		89.4
3	209	Montreal Polytechnique	\$19,856	31.6		38	18		87.56
4	230	California Polytechnic State Univ-SLO	\$21,954	25.5		40	20		85.53
5	205	Massachusetts Inst of Tech	\$22,206	24.9		38	20		82.89
6	217	Univ of Pennsylvania	\$22,682	23.7		38	20		81.71
7	224	Univ of Akron	\$22,827	23.4		38	20		81.36
8	202	McGill Univ	\$23,120	22.7		40	18		80.66
9	227	Univ of Michigan - Dearborn	\$19,072	34.1	-6	33.1	18		79.25
10	225	Virginia Tech	\$20,306	30.2	-10	35.6	20		75.76
11	213	Univ of Texas - Austin	\$21,681	26.3	-4	33.5	20		75.75
12	212	Kennesaw State University	\$24,577	19.5		36.6	19		75.05
13	229	Western University	\$26,049	16.6		38	20		74.57
14	214	San Jose State University	\$26,640	15.5		38	20		73.51
15	231	Univ of Calif - Santa Cruz	\$26,231	16.2		33.5	20		69.74
16	210	Univ of Manitoba	\$29,603	10.8		37.8	20		68.61
17	215	Univ of Calif - Riverside	\$30,769	9.2		37.6	20		66.81
18	204	Univ of Wisconsin - Madison	\$27,930	13.3		33.3	18		64.64
19	223	Univ of Illinois - Urbana Champaign	\$23,043	22.8	-8	31.1	18		63.94
20	233	California Institute of Technology	\$24,389	19.8		33.1	5		57.94
21	203	Univ of Washington	\$39,775			36	20		56
22	234	Univ of Michigan - Ann Arbor	\$38,145	1.3		33.5	20		54.84
23	207	Purdue Univ - W Lafayette	\$33,591	5.8		31.1	15		51.89
24	219	Univ of Utah	\$37,575	1.8		31.5	18		51.34
25	236	San Diego State Univ	\$22,593	23.9	-10	33.5			47.42
	208	Universidade Estadual de Campinas							
	218	Vanderbilt Univ							
	226	Portland State Univ							
	228	Missouri University of Science and Tech							
		Auburn Univ							



236 San Diego State Univ

#### **Acceleration Event Results**



Minimum Time (seconds)

Maximum Time (seconds)

3.687 5.531 150% Cone Penalty (seconds)

2

			F	Run #	:1	F	Run #	2	F	Run #	3	F	Run #	4		Fina	ı l
Place	Car Num	Team	Time	Cones	AdjTime	Time	Cones	AdjTime	Time	Cones	AdjTime	Time	Cones	AdjTime	Best Time	Penalty	Score
1	202	McGill Univ			DNF	4.762		4.762	4.160		4.160	3.687		3.687	3.687		100
2	205	Massachusetts Inst of Tech			DNF	4.138		4.138			DNA			DNA	4.138		68.78
3	201	Carnegie Mellon Univ	4.651		4.651	4.268		4.268	4.890		4.890			DNA	4.268		60.98
4	224	Univ of Akron	5.138		5.138	4.860		4.860			DNA			DNA	4.860		30.85
5	234	Univ of Michigan - Ann Arbor	5.129		5.129	4.933		4.933	5.153		5.153	5.078		5.078	4.933		27.64
6	Γ 223	Univ of Illinois - Urbana Champaign	6.499		6.499			DNA			DNA			DNA	6.499		4.5
6	Γ 213	Univ of Texas - Austin	6.648		6.648	7.433		7.433			DNA			DNA	6.648		4.5
6	Γ 210	Univ of Manitoba	12.121		12.121	9.733		9.733			DNA			DNA	9.733		4.5
	203	Univ of Washington			DNA			DNA			DNA			DNA	DNA		
	204	Univ of Wisconsin - Madison			DNA			DNA			DNA			DNA	DNA		
	207	Purdue Univ - W Lafayette			DNA			DNA			DNA			DNA	DNA		
	208	Universidade Estadual de Campinas			DNA			DNA			DNA			DNA	DNA		
	209	Montreal Polytechnique			DNA			DNA			DNA			DNA	DNA		
	212	Kennesaw State University			DNA			DNA			DNA			DNA	DNA		
	214	San Jose State University			DNA			DNA			DNA			DNA	DNA		
	215	Univ of Calif - Riverside			DNA			DNA			DNA			DNA	DNA		
	216	Univ of Calif - Davis			DNA			DNA			DNA			DNA	DNA		
	217	Univ of Pennsylvania			DNA			DNA			DNA			DNA	DNA		
	218	Vanderbilt Univ			DNA			DNA			DNA			DNA	DNA		
	219	Univ of Utah			DNA			DNA			DNA			DNA	DNA		
	225	Virginia Tech			DNA			DNA			DNA			DNA	DNA		
	226	Portland State Univ			DNA			DNA			DNA			DNA	DNA		
	227	Univ of Michigan - Dearborn			DNA			DNA			DNA			DNA	DNA		
	228	Missouri University of Science and Tech			DNA			DNA			DNA			DNA	DNA		
	229	Western University			DNA			DNA			DNA			DNA	DNA		
	230	California Polytechnic State Univ-SLO			DNA			DNA			DNA			DNA	DNA		
	231	Univ of Calif - Santa Cruz			DNA			DNA			DNA			DNA	DNA		
	232	Auburn Univ			DNA			DNA			DNA			DNA	DNA		
	233	California Institute of Technology			DNA			DNA			DNA			DNA	DNA		

DNA

DNA

DNA

DNA

DNA



## Skidpad Event Results



Minimum Time (seconds)
Maximum Time (seconds)

5.303 6.629 125% Cone Penalty (seconds) 0.125

			Driver 1	Run 1			Driver 1	Run 2			Driver 2	Run 1			Driver 2	Run 2					
Place	Car Num	Team	Time R	Time L	Cones	AdjTime	Time R	Time L	Cones	AdjTime	Time R	Time L	Cones	AdjTime	Time R	Time L	Cones	AdjTime	Best Time	Penalty	Score
1	201	Carnegie Mellon Univ	6.450	6.123		6.286	6.233	6.234		6.233	5.356	5.250		5.303	5.357	5.577	2	5.717	5.303		75
2	202	McGill Univ	5.467	5.254		5.360	6.450			DNF				DNA				DNA	5.360		70.8
3		Massachusetts Inst of Tech	5.357	5.821	2	5.839	5.466	5.577	1	5.646	5.466	5.577	1	DNF	5.357		2	DNF	5.646		51.6
4	234	Univ of Michigan - Ann Arbor	6.014	5.903		5.958	5.907	6.013		5.960	5.793	6.013		5.903	5.793	5.686		5.739	5.739		45.97
5	217	Univ of Pennsylvania	6.450	6.013		6.231				DNA				DNA				DNA	6.231		20.25
6	224	Univ of Akron	8.860	6.450	1	7.780	6.343	6.564		6.453				DNA				DNA	6.453		10.52
7	213	Univ of Texas - Austin	6.670	6.340		6.505	6.230	6.344	2	6.537				DNA				DNA	6.505		8.38
8	210	Univ of Manitoba	7.327	7.107		7.217	6.997	6.450		6.723				DNA				DNA	6.723		3.5
	203	Univ of Washington				DNA	DNA														
	204	Univ of Wisconsin - Madison				DNA	DNA														
	207	Purdue Univ - W Lafayette				DNA	DNA														
	208	Universidade Estadual de Campinas				DNA	DNA														
	209	Montreal Polytechnique				DNA	DNA														
	212	Kennesaw State University				DNA	DNA														
	214	San Jose State University				DNA	DNA		-												
	215	Univ of Calif - Riverside				DNA	DNA		-												
	216	Univ of Calif - Davis				DNA	DNA		-												
	218	Vanderbilt Univ				DNA	DNA		-												
	219	Univ of Utah				DNA	DNA														
		Univ of Illinois - Urbana Champaign				DNF				DNA				DNA				DNA	DNA		
		Virginia Tech				DNA	DNA														
		Portland State Univ				DNA	DNA														
	227	Univ of Michigan - Dearborn				DNA	DNA														
		Missouri University of Science and Tech				DNA	DNA														
		Western University				DNA	DNA														
		California Polytechnic State Univ-SLO				DNA	DNA														
		Univ of Calif - Santa Cruz				DNA	DNA		-												
		Auburn Univ				DNA	DNA														
		California Institute of Technology				DNA	DNA		-												
		San Diego State Univ				DNA	DNA														
			1	1		2.0,1		1		5177			ı	5.0,0				51171	5.00	I	



#### **Autocross Event Results**



2

20

Minimum Time (seconds)
Maximum Time (seconds)

63.236 91.692 145% Cone Penalty (seconds)
Off Course Penalty (seconds)

				Rui	า #1			Rui	n #2			Rur	า #3			Rui	n #4				
Place	Car Num	Теат	Time	Cones	Off Course	AdjTime	Time	Cones	Off Course	AdjTime	Time	Cones	Off Course	AdjTime	Time	Cones	Off Course	AdjTime	Best Time	Penalty	Score
1	201	Carnegie Mellon Univ	65.308			65.308	63.236			63.236	67.375			67.375	63.476			63.476	63.236		125
2		Univ of Pennsylvania	64.672			64.672	63.768			63.768	76.631	2		80.631				DNA	63.768		121.81
3	234	Univ of Michigan - Ann Arbor	80.759	4	1	108.759	70.852	1		72.852	67.729			67.729	66.107			66.107	66.107		108.41
4	203	Univ of Washington	66.310			66.310				DNA				DNA				DNA	66.310		107.3
5		Univ of Wisconsin - Madison	94.543		1	114.543	83.801			83.801	66.480			66.480				DNA	66.480		106.37
6	224	Univ of Akron	67.395			67.395	66.540			66.540			1	DNF	87.363	2		91.363	66.540		106.04
7	202	McGill Univ	68.742			68.742	61.542			DQ	66.919			DQ				DNA	68.742		94.42
8	213	Univ of Texas - Austin				DNF	73.328			73.328	70.165	1		72.165				DNA	72.165		77.75
9	223	Univ of Illinois - Urbana Champaign	98.501	1		100.501	83.256	1	1	105.256	82.177	2		86.177	73.549			73.549	73.549		71.46
10	216	Univ of Calif - Davis	76.105			76.105	75.891		1	95.891				DNA				DNA	76.105		60.44
11	210	Univ of Manitoba	87.892		1	107.892				DNF	84.390		2	124.390	89.717		1	109.717	107.892		6.5
	205	Massachusetts Inst of Tech				DNF				DNF				DNA				DNA	DNA		
	207	Purdue Univ - W Lafayette				DNA	DNA														
	208	Universidade Estadual de Campinas				DNA	DNA														
	209	Montreal Polytechnique				DNA	DNA														
	212	Kennesaw State University				DNA	DNA														
	214	San Jose State University				DNA	DNA														
	215	Univ of Calif - Riverside				DNA	DNA														
	218	Vanderbilt Univ				DNA	DNA														
	219	Univ of Utah				DNA	DNA														
	225	Virginia Tech				DNA	DNA														
	226	Portland State Univ				DNA	DNA														
	227	Univ of Michigan - Dearborn				DNA	DNA														
	228	Missouri University of Science and Tech				DNA	DNA														
	229	Western University				DNA	DNA														
	230	California Polytechnic State Univ-SLO				DNA	DNA														
	231	Univ of Calif - Santa Cruz				DNA	DNA														
		Auburn Univ				DNA	DNA														
		California Institute of Technology				DNA	DNA														
	236	San Diego State Univ				DNA	DNA														



# Endurance Event Results

Minimum Time (seconds) 1701.963 Maximum Time (seconds) 2467.847 145%

2 20 sec

Place	Car Num	Team	Time	Laps	Cones	Off Course	Other Penalty	Adjusted Time	Endurance Score
1	203	Univ of Washington	1681.963	15		1		1701.963	275
2	216	Univ of Calif - Davis	1712.388	15		3		1772.388	243.0
3	217	Univ of Pennsylvania	1718.300	15	3	5	30	1854.300	208.8
4	202	McGill Univ	1895.850	15			30	1925.850	181.4
5	224	Univ of Akron	1961.245	15				1961.245	168.5
6	213	Univ of Texas - Austin	1931.900	15	1	3		1993.900	157.1
7	207	Purdue Univ - W Lafayette	1955.257	15	2	4		2039.257	141.8
8	205	Massachusetts Inst of Tech	1913.473	15	2	8	60	2137.473	110.9
9	223	Univ of Illinois - Urbana Champaign	1937.399	15	3	12	60	2243.399	80.6
	229	Western University	1402.149	11		1	240	DNF	11
	234	Univ of Michigan - Ann Arbor	1096.849	8		2		DNF	8
	210	Univ of Manitoba	1305.840	5	2	7		DNF	5
	201	Carnegie Mellon Univ	309.158	3	1			DNF	3





#### Electric 2019 Energy Efficiency Results

 Minimum:
 113.464 sec
 0.0800 kg
 0.063 T exp: 1

 Maximum:
 164.523 sec
 0.8809 kg
 0.835 E exp: 1

145% = 13.213 / 15

Place	Car Num	Team	Average Adjusted Laptime	Laps Completed	Energy Used (kWh)	Adjusted Energy (kg)	Average Adjusted Energy per Lap	Fuel Type	Fuel Efficiency Factor	Fuel Efficiency Score
1	207	Purdue Univ - W Lafayette	135.950	15	1.847	1.200	0.0800	EV	0.835	100
2	224	Univ of Akron	130.750	15	2.043	1.327	0.0885	EV	0.785	99.5
3	202	McGill Univ	128.390	15	2.668	1.734	0.1156	EV	0.612	97.0
4	234	Univ of Michigan - Ann Arbor	142.106	8	1.621	1.053	0.1316	EV	0.485	94.2
5	216	Univ of Calif - Davis	118.159	15	3.780	2.457	0.1638	EV	0.469	93.7
6	213	Univ of Texas - Austin	132.927	15	3.441	2.236	0.1491	EV	0.458	93.3
7	229	Western University	151.104	11	2.262	1.470	0.1336	EV	0.450	93.0
8	203	Univ of Washington	113.464	15	4.133	2.686	0.1791	EV	0.447	93.0
9	223	Univ of Illinois - Urbana Champaign	149.560	15	3.622	2.354	0.1569	EV	0.387	90.6
10	217	Univ of Pennsylvania	123.620	15	5.084	3.304	0.2203	EV	0.333	87.8
11	205	Massachusetts Inst of Tech	142.498	15	4.502	2.926	0.1951	EV	0.327	87.4

## Formula SAE Electric 2019 Endurance Event Laptimes

School	Car	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Carnegie Mellon Univ	201	100.552	100.460	108.146													
McGill Univ	202	116.701	106.838	109.705	122.794	103.385	109.867	116.627		149.238	149.492	145.586	135.549	131.015	135.309	133.830	129.914
Univ of Washington	203	109.834	109.950	113.527	106.445	112.505	110.453	135.371		119.850	111.637	109.412	113.860	113.719	106.369	103.181	105.850
Massachusetts Inst of Tech	205	106.068	111.902	105.127	109.835	104.195	112.778	108.029		174.174	149.254	138.890	146.682	134.270	135.257	141.937	135.075
Purdue Univ - W Lafayette	207	141.253	136.663	130.572	127.574	125.226	130.457	123.464		137.834	118.924	123.653	127.935	128.951	125.768	131.376	145.607
Univ of Manitoba	210	289.809	185.462	284.947	281.860	263.762											
Univ of Texas - Austin	213	134.034	126.124	132.989	121.515	127.730	131.431	131.277		132.468	144.230	132.897	117.763	120.739	120.406	136.269	122.028
Univ of Calif - Davis	216	120.522	113.483	133.768	114.676	113.208	114.661	121.001		116.233	105.427	111.830	108.516	109.093	109.852	112.030	108.088
Univ of Pennsylvania	217	116.283	114.343	111.238	110.833	111.043	115.214	112.006		103.867	101.059	113.399	108.795	124.347	110.238	121.989	143.646
Univ of Illinois - Urbana Champaign	223	120.822	115.164	113.450	224.736	112.389	116.699	110.351		124.117	114.685	133.623	139.629	128.963	129.265	127.947	125.559
Univ of Akron	224	112.348	110.904	106.134	113.899	115.126	112.476	112.914		158.703	154.274	152.211	139.951	151.506	143.370	137.690	139.739
Western University	229	133.794	144.812	121.887	123.289	120.732	119.147	121.927		141.305	123.483	127.854	123.919				
Univ of Michigan - Ann Arbor	234	152.992	144.140	131.709	132.097	128.832	124.583	126.468		156.028							

Times eliminated for Driver Changes or black flags

Individual laptimes are provided for information purposes only.

Laptimes are taken from the either the Formula SAE Endurance timing system or manual timing logs.

These individual laptimes have not been corrected for cone or off course penalties, and may or may not include time spent in black flag, if applicable.

The individual laptimes are not critical, the Formula SAE Endurance event is scored based on the time to complete all specified laps of the Endurance event, plus penalties and applicable black flag time



## For Information Only Not Validated



## Electric 2019 Team Information

Car Num	Теат	Country	Weight Includes Accumulator?	Weight (kg)	Weight (lbs)
201	Carnegie Mellon Univ	US	yes	221.4	488
202	McGill Univ	CA	yes	181	399
203	Univ of Washington	US	yes	176	388
204	Univ of Wisconsin - Madison	US	yes	212.3	468
205	Massachusetts Inst of Tech	US	yes	221.4	488
207	Purdue Univ - W Lafayette	US	yes	227.2	501
208	Universidade Estadual de Campinas	BR			
209	Montreal Polytechnique	CA	NO	148.3	327
210	Univ of Manitoba	CA	yes	209.6	462
212	Kennesaw State University	US	NO	164.7	363
213	Univ of Texas - Austin	US	yes	264.4	583
214	San Jose State University	US	NO	156.9	346
215	Univ of Calif - Riverside	US	NO	200.5	442
216	Univ of Calif - Davis	US	yes	203.7	449
217	Univ of Pennsylvania	US	yes	198.7	438
218	Vanderbilt Univ	US			
219	Univ of Utah	US	NO	208.2	459
223	Univ of Illinois - Urbana Champaign	US	yes	224.5	495
224	Univ of Akron	US	yes	235.9	520
225	Virginia Tech	US	yes	189.6	418
226	Portland State Univ	US			
227	Univ of Michigan - Dearborn	US	NO	189.6	418
228	Missouri University of Science and Tech	US			
229	Western University	CA	NO	193.2	426
230	California Polytechnic State Univ-SLO	US	yes	198.7	438
231	Univ of Calif - Santa Cruz	US	yes	206.4	455
232	Auburn Univ	US			
233	California Institute of Technology	US	yes	249.5	550
234	Univ of Michigan - Ann Arbor	US	yes	270.8	597
236	San Diego State Univ	US	yes	218.2	481