

Balloon Fest, 2003

Melanie Silver

Peter Oyler

Danny Lara

Elaine Silver

Keith Tennell

Experimental Plan

We plan to launch a balloon and take readings of the atmosphere. The equipment in the gondola are a thermometer, magnetometer, barometer, and a camera that is set to take pictures periodically throughout the flight.

How Big is Enough?



Instrumentation



Preparing to Launch



Away it goes



View from the top





Bringing It In

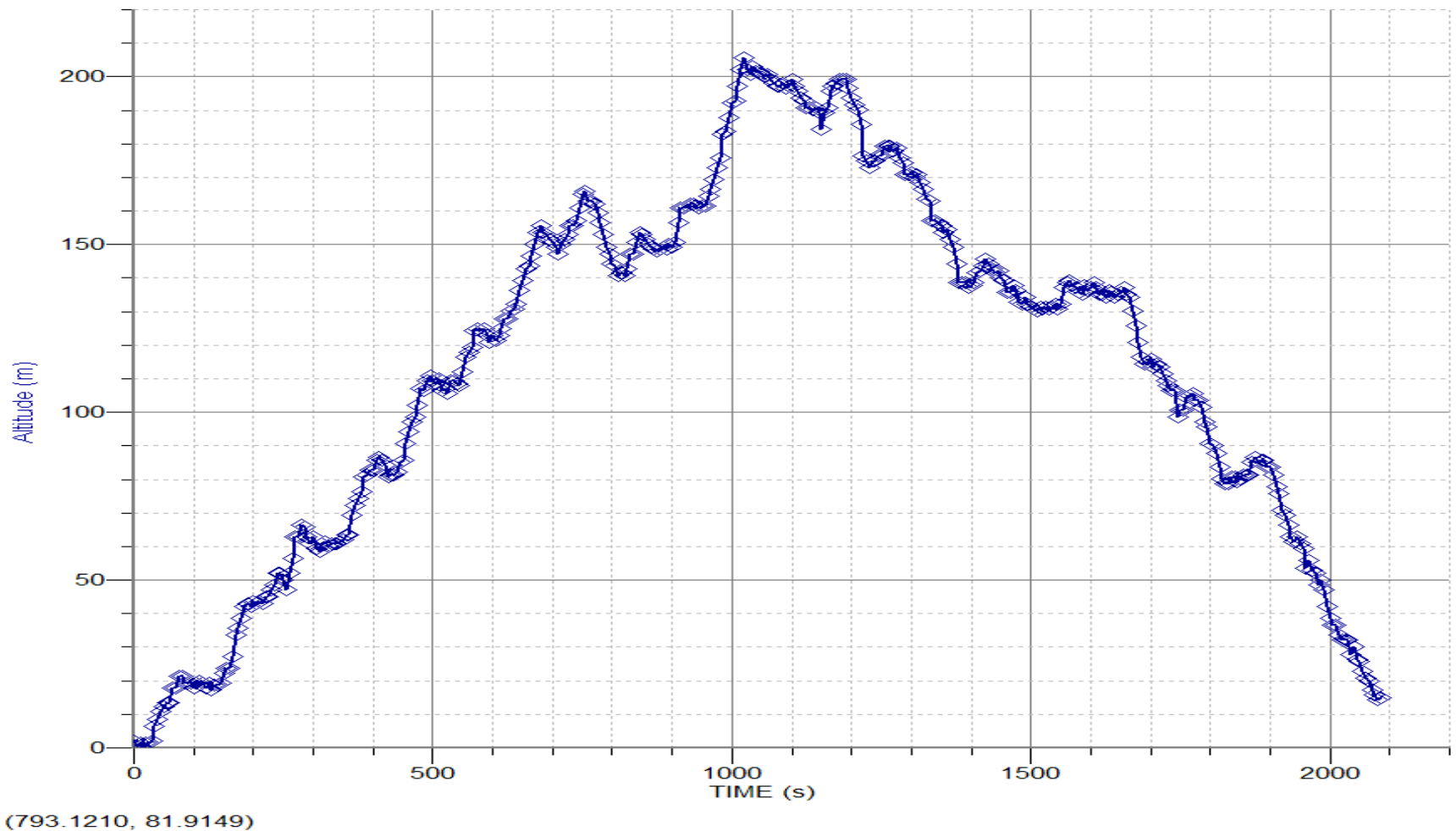


Data

	Run1			
	TIME (s)	TEMP (F)	Altitude (m)	BAROMETER (mmHg)
1	0.000	23.738	2.144	0.294
2	5.000	23.762	0.714	0.437
3	10.000	23.667	1.429	0.365
4	15.000	23.691	0.000	0.508
5	20.000	23.881	1.429	0.365
6	25.000	23.786	1.429	0.365
7	30.000	23.691	2.144	0.294
8	35.000	23.571	6.431	-0.135
9	40.000	23.381	8.574	-0.349
10	45.000	23.214	10.718	-0.564
11	50.000	23.048	12.147	-0.707
12	55.000	22.977	13.576	-0.849
13	60.000	22.773	13.576	-0.849
14	65.000	22.614	17.863	-1.278
15	70.000	22.409	17.863	-1.278
16	75.000	22.364	21.436	-1.635
17	80.000	22.296	21.436	-1.635
18	85.000	22.159	19.292	-1.421
19	90.000	22.046	19.292	-1.421
20	95.000	21.976	19.292	-1.421
21	100.000	21.905	17.863	-1.278
22	105.000	21.833	19.292	-1.421
23	110.000	21.786	20.007	-1.493
24	115.000	21.714	19.292	-1.421
25	120.000	21.738	17.863	-1.278
26	125.000	21.738	19.292	-1.421
27	130.000	21.762	17.149	-1.207
28	135.000	21.786	18.578	-1.350
29	140.000	21.833	18.578	-1.350
30	145.000	21.857	19.292	-1.421
31	150.000	21.881	22.150	-1.707
32	155.000	21.905	23.579	-1.850
33	160.000	21.881	23.579	-1.850
34	165.000	21.905	27.152	-2.207

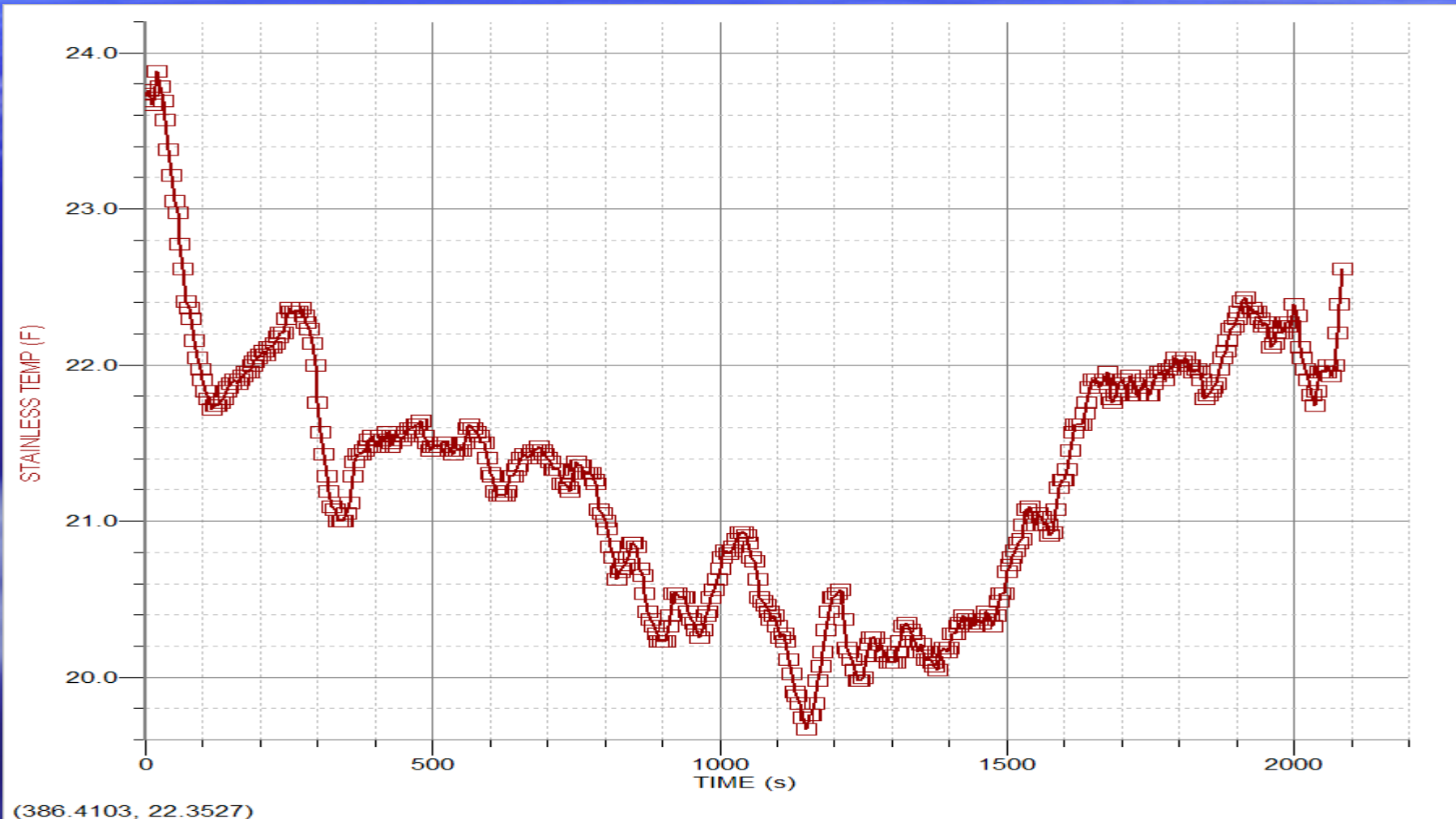
	Run1			
	TIME (s)	TEMP (F)	Altitude (m)	BAROMETER (mmHg)
196	975.000	20.395	172.916	-16.784
197	980.000	20.419	175.774	-17.069
198	985.000	20.512	182.919	-17.784
199	990.000	20.558	183.634	-17.855
200	995.000	20.628	187.921	-18.284
201	1000.000	20.698	192.208	-18.713
202	1005.000	20.767	192.923	-18.784
203	1010.000	20.814	197.210	-19.213
204	1015.000	20.791	202.212	-19.713
205	1020.000	20.814	205.784	-20.070
206	1025.000	20.837	202.212	-19.713
207	1030.000	20.884	200.783	-19.570
208	1035.000	20.930	202.926	-19.785
209	1040.000	20.930	201.497	-19.642
210	1045.000	20.907	201.497	-19.642
211	1050.000	20.860	200.783	-19.570
212	1055.000	20.767	200.068	-19.499
213	1060.000	20.744	200.783	-19.570
214	1065.000	20.628	199.353	-19.427
215	1070.000	20.512	197.924	-19.284
216	1075.000	20.488	197.210	-19.213
217	1080.000	20.465	197.210	-19.213
218	1085.000	20.419	197.924	-19.284
219	1090.000	20.372	196.495	-19.141
220	1095.000	20.395	197.210	-19.213
221	1100.000	20.326	199.353	-19.427
222	1105.000	20.256	197.210	-19.213
223	1110.000	20.279	195.781	-19.070
224	1115.000	20.233	193.637	-18.856
225	1120.000	20.116	192.923	-18.784
226	1125.000	20.023	190.779	-18.570
227	1130.000	19.905	190.779	-18.570
228	1135.000	19.881	190.065	-18.496
229	1140.000	19.833	190.779	-18.570

Altitude vs. Time



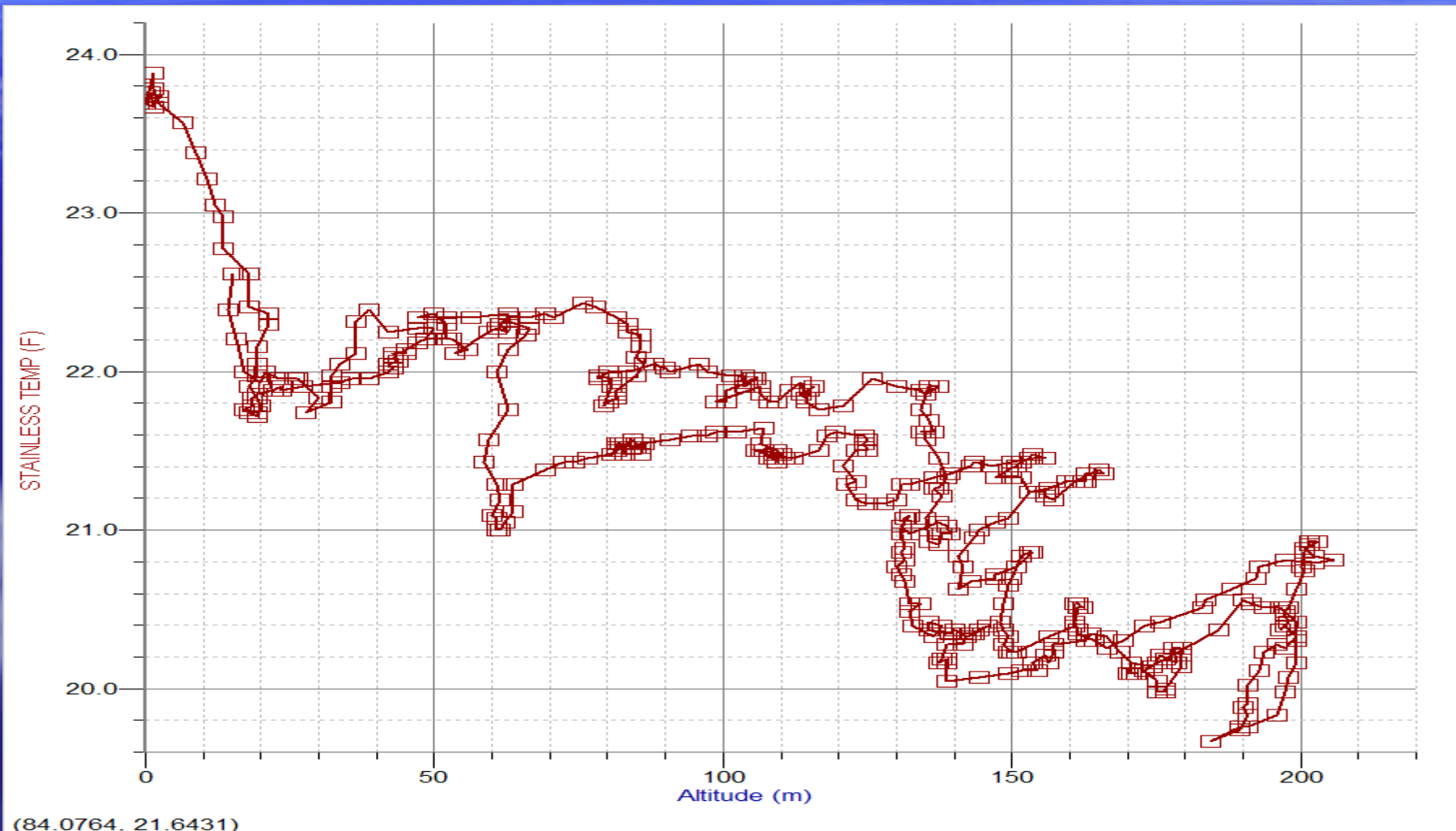
Our Graph is not smooth because of wind changing the altitude of our balloon.

Temperature vs. Time



Our Graph is not smooth because of wind changing the altitude of our balloon.

Temperature vs. Altitude



Our Graph is not smooth because of wind changing the altitude of our balloon.

Conclusion

Our plans didn't quite go as we expected. We had to take the magnetometer off because it wasn't a central part of the experiment. Also, it made the gondola too heavy. Our camera didn't work out like we planned. Our first launch didn't work, none of the data came in. Our second launch was a success.

Thank You

- We would like to thank Mr. Kliewer for helping us and providing the equipment. Also to our parents for their support.
- We would also like to thank Jim Dann, and SCIPP for putting on this event for all of us to enjoy.