

Here is a typical example of the ASCII file type produced by the fastdaq data acquisition system spreadsheet package and analysed according to the users needs. Variables can be charted in an impressive display.

R-R interval is given in ms

Respiration is obtained from a stethograph which is merely used as an index of respiration

Volume is obtained from the spirometer and is used to assess changes in tidal volume

MAP is mean arterial pressure. Both MAP, Systolic pressure and Diastolic Pressure (mmHg) are obtained on a basis from the Finapres 2300 blood pressure monitor.

Charts can be shown either incorporated into the worksheet or separate

Charts of all variables can easily be produced to enable the user to observe the variation in each other.

The type of chart used is chosen from a menu which can accommodate even the most choosy


system. Data files are imported into the  
to produce both an explanatory and visually

g) are obtained dynamically on a beat to beat

different physiological variables in relation to

7 people.

beat.no	R-R interval	Respiration	Volume	MAP
1	956.9	17.7	89	101
2	854.3	16.9	85.5	101.5
3	825.9	16.4	83.5	105.3
4	842.6	16.4	82.5	111.2
5	984.8	16.6	83	114.9
6	1511.2	17	85.5	110.9
7	1306.1	17.6	87.5	111.1
8	1294.4	18.3	90.5	108.6
9	1217.8	18.4	93.5	108.2
10	1163.5	19	95	107.4
11	1111.2	18.6	96	105.8
12	1078.2	18.3	93	104.2
13	966	17.6	88	103.3
14	889.8	17.6	86.5	102.5
15	893.4	17.3	87	105.4
16	945.7	17.9	88.5	109.8
17	1522.3	18	91.5	107.3
18	1517.3	18.7	93.5	107.8
19	1338.1	18.6	95	105.8
20	1222.8	18.9	96	103.3
21	1155.8	19	97	101.8
22	1104.6	18.9	97.5	101.7
23	1075.6	18.4	94.5	102.4
24	1000.5	17.6	88.5	104.7
25	902.5	17.3	83	106.3
26	857.9	15	74	108.5
27	860.4	11.7	60	110.8
28	916.2	12.9	62	115.5
29	1410.7	18.4	89	112
30	1345.2	18.6	92	112.2
31	1288.8	19.1	93.5	109
32	1223.4	17.9	90	104.2
33	1002	17.1	84.5	101.2
34	917.8	16.7	82	97.2
35	895.9	16.7	80	96.9
36	904.1	16.3	78.5	98.2
37	983.8	16.6	79	99
38	1195.9	16.9	80.5	97.4
39	1199	17.7	82.5	97.8
40	1192.4	17.7	85	97.4
41	1145.7	18	87.5	97.3
42	1097	18.4	89.5	97.4
43	1067	18.4	91	99
44	1106.1	18.6	92.5	100.5



45	1088.8	18.6	93	101.8
46	1081.7	18.3	90.5	101.3
47	985.8	17.7	87.5	101
48	925.4	17.6	85	100.9
49	871.6	17.1	84	103.7
50	860.4	16.6	83.5	108.2
51	935	16.6	86	112.9
52	1473.1	17.3	91	110.1
53	1375.1	18	94.5	112.9
54	1312.7	18.1	97	110.7
55	1251.3	18.1	98.5	109.4
56	1119.8	18.3	98.5	109.1
57	974.6	19	98.5	109.1
58	953.8	18.1	98	107.3
59	980.7	18.3	98.5	106.7
60	998.5	18.4	98.5	105.8
61	995.9	18.3	98.5	104.8
62	1024.9	18	98.5	103.3
63	987.3	18.4	98	102.9
64	961.4	18.3	98	102.4
65	945.2	18.3	98	103.3
66	977.7	18.3	98	104.8
67	1034.5	18.4	98	106.4
68	1093.9	18.1	98	107.6
69	1168	18.3	98	107.8
70	1135	18	98	108.3
71	1048.2	18.4	98	108.5
72	1056.3	18.1	97.5	108.8
73	1023.4	17.4	91.5	110.1
74	905.1	16.6	86	109.9
75	869	16.1	83.5	110.8
76	880.7	15.6	81.5	114.4
77	950.3	15.9	83	117.1
78	1230.5	16.9	86	115.2

Systolic	Diastolic
156	79
149	82
150	84
156	88
162	92
173	89
184	85
178	85
175	84
171	85
168	83
167	82
161	82
153	83
156	82
160	86
166	86
182	83
176	82
168	80
161	81
158	80
156	80
157	83
153	85
151	87
154	92
153	93
166	91
192	88
183	85
172	83
159	80
147	80
143	77
142	76
140	78
146	77
157	76
160	75
161	75
158	75
157	77
160	80

162	80
160	82
158	81
154	81
152	82
151	85
155	88
164	90
183	86
180	87
177	86
174	86
169	86
164	86
162	86
164	84
164	83
163	82
166	81
163	80
162	82
163	83
163	83
166	85
167	85
172	85
169	86
166	88
167	88
163	90
160	91
164	92
169	94
176	94

Here are just a few examples from the chart menu in Excel. Line Charts, Bar Charts. 3D, Pie produced and edited

Line Chart

Bar Chart (axes reversed)

Bar Chart

3D Area Chart

3D Pie Chart

3D Stacked Bar Chart

and Area maps are all available and easily

Area Chart

3D Line Chart



1	956.9	801	89	101	156
2	854.3	769.5	85.5	101.5	149
3	825.9	751.5	83.5	105.3	150
4	842.6	742.5	82.5	111.2	156
5	984.8	747	83	114.9	162
6	1511.2	769.5	85.5	110.9	173
7	1306.1	787.5	87.5	111.1	184
8	1294.4	814.5	90.5	108.6	178
9	1217.8	841.5	93.5	108.2	175
10	1163.5	855	95	107.4	171
11	1111.2	864	96	105.8	168
12	1078.2	837	93	104.2	167
13	966	792	88	103.3	161
14	889.8	778.5	86.5	102.5	153
15	893.4	783	87	105.4	156
16	945.7	796.5	88.5	109.8	160
17	1522.3	823.5	91.5	107.3	166
18	1517.3	841.5	93.5	107.8	182
19	1338.1	855	95	105.8	176
20	1222.8	864	96	103.3	168
21	1155.8	873	97	101.8	161
22	1104.6	877.5	97.5	101.7	158
23	1075.6	850.5	94.5	102.4	156
24	1000.5	796.5	88.5	104.7	157
25	902.5	747	106.3	153	
26	857.9	666	74	108.5	151
27	860.4	540	60	110.8	154
28	916.2	558	62	115.5	153
29	1410.7	801	89	112	166
30	1345.2	828	92	112.2	192
31	1288.8	841.5	93.5	109	183
32	1223.4	810	90	104.2	172
33	1002	760.5	84.5	101.2	159
34	917.8	738	82	97.2	147
35	895.9	720	80	96.9	143
36	904.1	706.5	78.5	98.2	142
37	983.8	711	79	99	140
38	1195.9	724.5	80.5	97.4	146
39	1199	742.5	82.5	97.8	157
40	1192.4	765	85	97.4	160
41	1145.7	787.5	87.5	97.3	161
42	1097	805.5	89.5	97.4	158
43	1067	819	91	99	157
44	1106.1	832.5	92.5	100.5	160
45	1088.8	837	93	101.8	162
46	1081.7	814.5	90.5	101.3	160
47	985.8	787.5	87.5	101	158

48	925.4	765	85	100.9	154
49	871.6	756	84	103.7	152
50	860.4	751.5	83.5	108.2	151
51	935	774	86	112.9	155
52	1473.1	819	91	110.1	164
53	1375.1	850.5	94.5	112.9	183
54	1312.7	873	97	110.7	180
55	1251.3	886.5	98.5	109.4	177
56	1119.8	886.5	98.5	109.1	174
57	974.6	886.5	98.5	109.1	169
58	953.8	882	98	107.3	164
59	980.7	886.5	98.5	106.7	162
60	998.5	886.5	98.5	105.8	164
61	995.9	886.5	98.5	104.8	164
62	1024.9	886.5	98.5	103.3	163
63	987.3	882	98	102.9	166
64	961.4	882	98	102.4	163
65	945.2	882	98	103.3	162
66	977.7	882	98	104.8	163
67	1034.5	882	98	106.4	163
68	1093.9	882	98	107.6	166
69	1168	882	98	107.8	167
70	1135	882	98	108.3	172
71	1048.2	882	98	108.5	169
72	1056.3	877.5	97.5	108.8	166
73	1023.4	823.5	91.5	110.1	167
74	905.1	774	86	109.9	163
75	869	751.5	83.5	110.8	160
76	880.7	733.5	81.5	114.4	164
77	950.3	747	83	117.1	169
78	1230.5	774	86	115.2	176

**TOOLBAR OPTIONS AVAILABLE IN MICROSOFT EXCEL.**

Trigonometric, Logical, Statistical, Financial and standard Mathematical functions are all available quite easily mastered. The ability to format the workspace according to the users needs is also available. Utility and drawing capabilities make creating a report/presentation more of a pleasure than a chore. Customised toolbars according to users needs so buttons can be deleted if not wanted, conversely a list of functions is available to assign specific functions to if Microsoft Excel does not have that particular function.

able and with a little practice are simply achieved plus excellent chore! The toolbars can be of additional buttons is also on in its options.

Excel gives you the option of displaying the workspace in any required format and colour. Column and formula bars, status bars, scroll bars, outline values can all be switched off or just as easily switched



Data can be easily moved around and changed in appearance.

Time	Heart Rate
1	45
2	56
3	68
4	74
5	85



Square roots are its amazing

Square Root=



Data can also be changed and ali effort

nd row headings,  
on.

so easy

7.3484692

e easily copied,  
igned with little or no



beat.no	R-R interval	Respiration	Volume
1	956.9	17.7	89
2	854.3	16.9	85.5
3	825.9	16.4	83.5
4	842.6	16.4	82.5
5	984.8	16.6	83
6	1511.2	17	85.5
7	1306.1	17.6	87.5
8	1294.4	18.3	90.5
9	1217.8	18.4	93.5
10	1163.5	19	95
11	1111.2	18.6	96
12	1078.2	18.3	93
13	966	17.6	88
14	889.8	17.6	86.5
15	893.4	17.3	87
16	945.7	17.9	88.5
17	1522.3	18	91.5
18	1517.3	18.7	93.5
19	1338.1	18.6	95
20	1222.8	18.9	96
21	1155.8	19	97
22	1104.6	18.9	97.5
23	1075.6	18.4	94.5
24	1000.5	17.6	88.5
25	902.5	17.3	83
26	857.9	17	74
27	860.4	17.5	60
28	916.2	18	62
29	1410.7	18.4	89
30	1345.2	18.6	92
31	1288.8	19.1	93.5
32	1223.4	17.9	90
33	1002	17.1	84.5
34	917.8	16.7	82
35	895.9	16.7	80
36	904.1	16.3	78.5
37	983.8	16.6	79
38	1195.9	16.9	80.5
39	1199	17.7	82.5
40	1192.4	17.7	85
41	1145.7	18	87.5
42	1097	18.4	89.5
43	1067	18.4	91
44	1106.1	18.6	92.5

45	1088.8	18.6	93
46	1081.7	18.3	90.5
47	985.8	17.7	87.5
48	925.4	17.6	85
49	871.6	17.1	84
50	860.4	16.6	83.5
51	935	16.6	86
52	1473.1	17.3	91
53	1375.1	18	94.5
54	1312.7	18.1	97
55	1251.3	18.1	98.5
56	1119.8	18.3	98.5
57	974.6	19	98.5
58	953.8	18.1	98
59	980.7	18.3	98.5
60	998.5	18.4	98.5
61	995.9	18.3	98.5
62	1024.9	18	98.5
63	987.3	18.4	98
64	961.4	18.3	98
65	945.2	18.3	98
66	977.7	18.3	98
67	1034.5	18.4	98
68	1093.9	18.1	98
69	1168	18.3	98
70	1135	18	98
71	1048.2	18.4	98
72	1056.3	18.1	97.5
73	1023.4	17.4	91.5
74	905.1	16.6	86
75	869	16.1	83.5
76	880.7	15.6	81.5
77	950.3	15.9	83
78	1230.5	16.9	86



<b>MAP</b>	<b>Systolic</b>	<b>Diastolic</b>
101	156	79
101.5	149	82
105.3	150	84
111.2	156	88
114.9	162	92
110.9	173	89
111.1	184	85
108.6	178	85
108.2	175	84
107.4	171	85
105.8	168	83
104.2	167	82
103.3	161	82
102.5	153	83
105.4	156	82
109.8	160	86
107.3	166	86
107.8	182	83
105.8	176	82
103.3	168	80
101.8	161	81
101.7	158	80
102.4	156	80
104.7	157	83
106.3	153	85
108.5	151	87
110.8	154	92
115.5	153	93
112	166	91
112.2	192	88
109	183	85
104.2	172	83
101.2	159	80
97.2	147	80
96.9	143	77
98.2	142	76
99	140	78
97.4	146	77
97.8	157	76
97.4	160	75
97.3	161	75
97.4	158	75
99	157	77
100.5	160	80

101.8	162	80
101.3	160	82
101	158	81
100.9	154	81
103.7	152	82
108.2	151	85
112.9	155	88
110.1	164	90
112.9	183	86
110.7	180	87
109.4	177	86
109.1	174	86
109.1	169	86
107.3	164	86
106.7	162	86
105.8	164	84
104.8	164	83
103.3	163	82
102.9	166	81
102.4	163	80
103.3	162	82
104.8	163	83
106.4	163	83
107.6	166	85
107.8	167	85
108.3	172	85
108.5	169	86
108.8	166	88
110.1	167	88
109.9	163	90
110.8	160	91
114.4	164	92
117.1	169	94
115.2	176	94