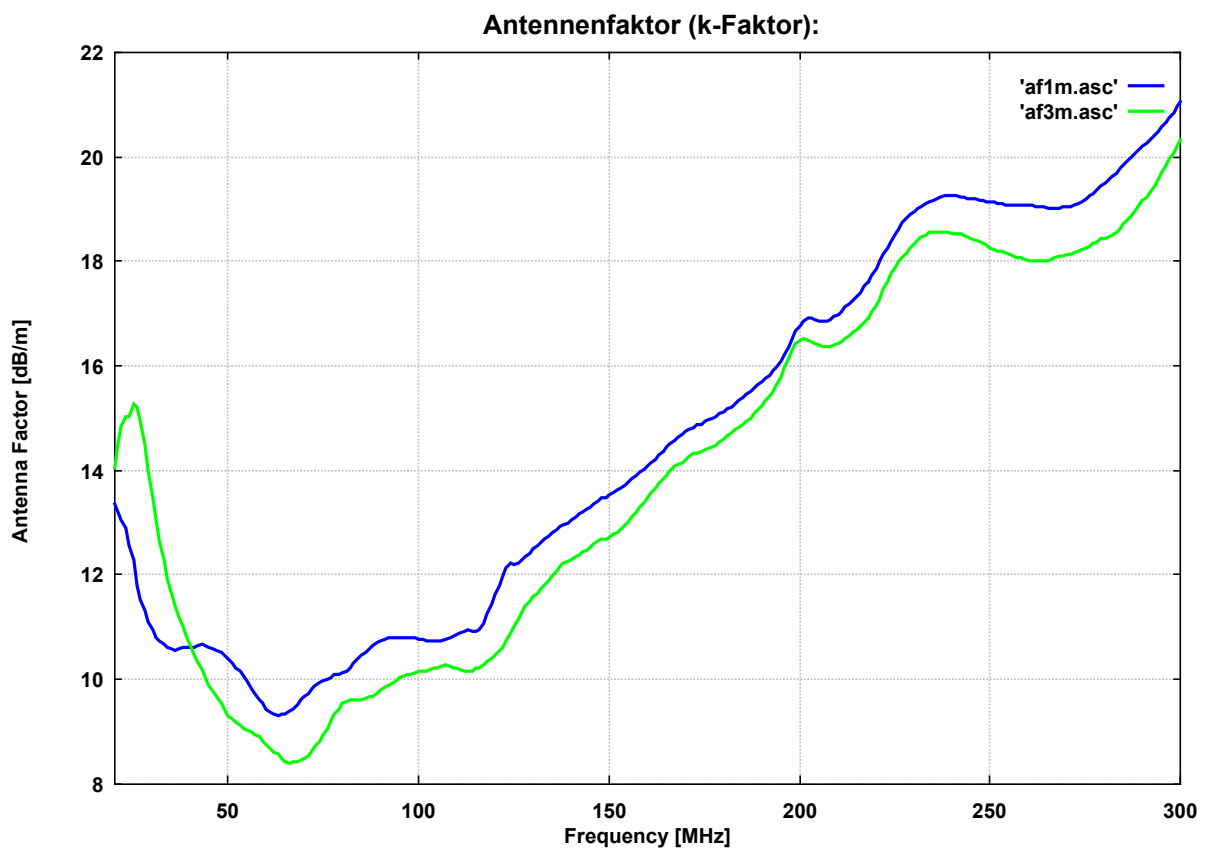
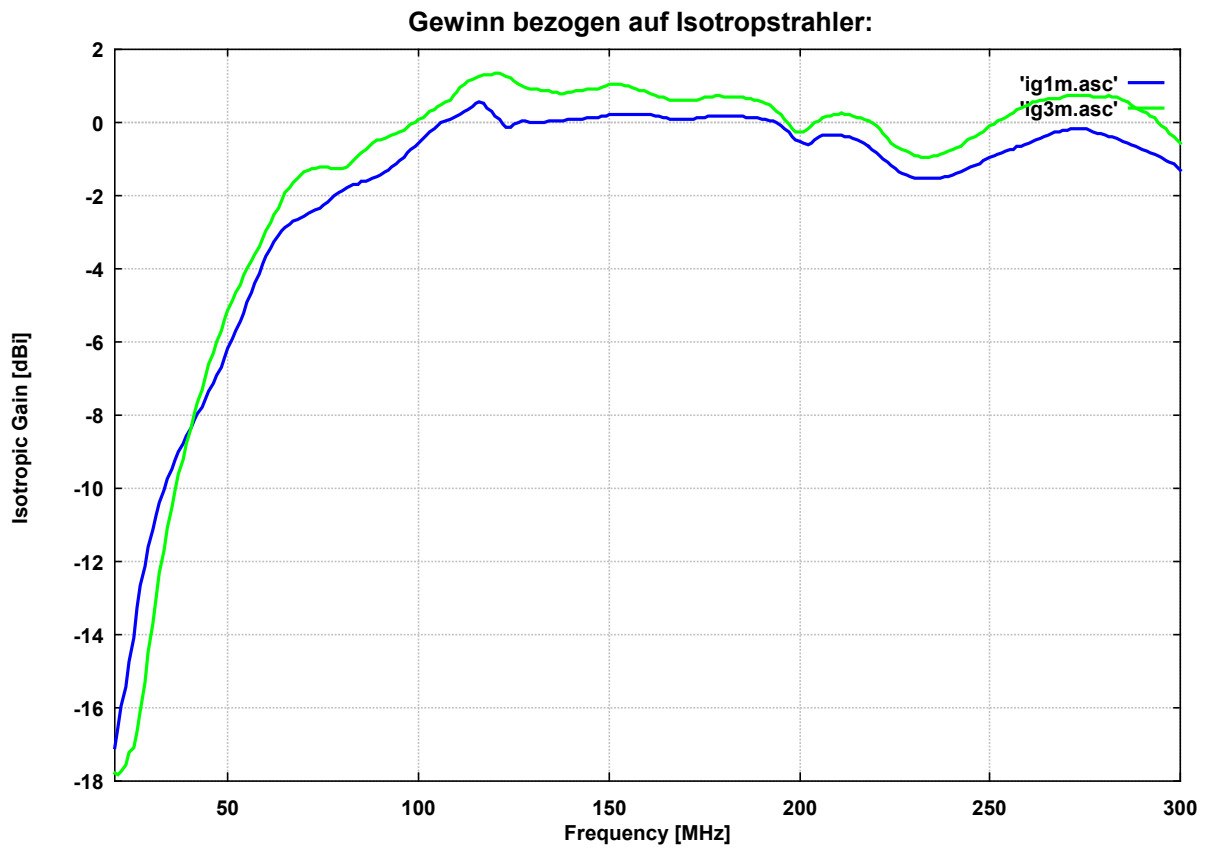


SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177



SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

Frequency	Gain(Isotr.) 3 m	Ant.-Factor 3 m	Gain(Isotr.) 1 m	Ant.-Factor 1 m
MHz	dBi	dB/m	dBi	dB/m
25.00	-17.09	15.27	-14.09	12.27
26.00	-16.68	15.20	-13.27	11.79
27.00	-16.10	14.95	-12.67	11.52
28.00	-15.32	14.48	-12.14	11.30
29.00	-14.51	13.98	-11.63	11.10
30.00	-13.73	13.49	-11.16	10.93
31.00	-13.00	13.05	-10.75	10.80
32.00	-12.32	12.65	-10.39	10.72
33.00	-11.69	12.28	-10.07	10.66
34.00	-11.08	11.93	-9.76	10.61
35.00	-10.53	11.63	-9.47	10.57
36.00	-10.06	11.41	-9.22	10.56
37.00	-9.62	11.21	-8.99	10.58
38.00	-9.20	11.02	-8.78	10.60
39.00	-8.78	10.82	-8.56	10.60
40.00	-8.35	10.61	-8.34	10.60
41.00	-7.98	10.45	-8.14	10.62
42.00	-7.64	10.33	-7.96	10.65
43.00	-7.29	10.18	-7.77	10.66
44.00	-6.94	10.03	-7.56	10.65
45.00	-6.60	9.88	-7.34	10.62
46.00	-6.29	9.76	-7.11	10.59
47.00	-6.00	9.66	-6.90	10.56
48.00	-5.71	9.55	-6.68	10.52
49.00	-5.40	9.43	-6.44	10.46
50.00	-5.12	9.31	-6.18	10.38
51.00	-4.87	9.24	-5.94	10.31
52.00	-4.65	9.19	-5.69	10.23
53.00	-4.41	9.12	-5.46	10.16
54.00	-4.19	9.06	-5.20	10.07
55.00	-4.00	9.03	-4.93	9.96
56.00	-3.80	8.98	-4.65	9.83
57.00	-3.61	8.95	-4.39	9.73
58.00	-3.41	8.90	-4.14	9.62
59.00	-3.19	8.82	-3.89	9.53
60.00	-2.96	8.74	-3.66	9.44
61.00	-2.74	8.67	-3.44	9.37
62.00	-2.53	8.60	-3.26	9.33
63.00	-2.35	8.56	-3.10	9.31
64.00	-2.14	8.48	-2.97	9.32
65.00	-1.93	8.41	-2.86	9.34
66.00	-1.77	8.38	-2.77	9.38
67.00	-1.66	8.40	-2.69	9.43
68.00	-1.54	8.41	-2.64	9.51
69.00	-1.44	8.44	-2.59	9.59
70.00	-1.34	8.47	-2.55	9.67
71.00	-1.29	8.53	-2.49	9.74
72.00	-1.26	8.63	-2.45	9.82
73.00	-1.24	8.73	-2.40	9.89
74.00	-1.22	8.82	-2.35	9.95
75.00	-1.22	8.94	-2.26	9.98
76.00	-1.23	9.06	-2.17	10.01
77.00	-1.25	9.20	-2.09	10.04
78.00	-1.27	9.33	-2.01	10.08
79.00	-1.27	9.44	-1.93	10.10
80.00	-1.25	9.53	-1.84	10.13
81.00	-1.19	9.58	-1.77	10.16
82.00	-1.11	9.61	-1.73	10.22
83.00	-1.02	9.62	-1.70	10.30

SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

Frequency	Gain(Isotr.) 3 m	Ant.-Factor 3 m	Gain(Isotr.) 1 m	Ant.-Factor 1 m
MHz	dBi	dB/m	dBi	dB/m
84.00	-0.91	9.61	-1.67	10.38
85.00	-0.81	9.62	-1.63	10.44
86.00	-0.73	9.64	-1.60	10.51
87.00	-0.64	9.65	-1.57	10.58
88.00	-0.55	9.66	-1.54	10.65
89.00	-0.50	9.71	-1.49	10.70
90.00	-0.47	9.78	-1.43	10.73
91.00	-0.45	9.85	-1.35	10.75
92.00	-0.39	9.89	-1.28	10.78
93.00	-0.33	9.92	-1.20	10.79
94.00	-0.28	9.97	-1.12	10.80
95.00	-0.26	10.04	-1.02	10.79
96.00	-0.21	10.07	-0.93	10.79
97.00	-0.13	10.09	-0.83	10.79
98.00	-0.05	10.09	-0.74	10.79
99.00	0.01	10.12	-0.65	10.78
100.00	0.08	10.14	-0.55	10.77
101.00	0.15	10.16	-0.45	10.76
102.00	0.22	10.17	-0.35	10.74
103.00	0.29	10.19	-0.26	10.74
104.00	0.36	10.20	-0.17	10.74
105.00	0.43	10.22	-0.09	10.73
106.00	0.48	10.25	-0.00	10.73
107.00	0.55	10.26	0.05	10.75
108.00	0.64	10.25	0.10	10.78
109.00	0.74	10.23	0.15	10.82
110.00	0.85	10.20	0.19	10.85
111.00	0.94	10.18	0.24	10.89
112.00	1.04	10.17	0.29	10.91
113.00	1.13	10.15	0.35	10.93
114.00	1.19	10.17	0.43	10.92
115.00	1.24	10.20	0.51	10.92
116.00	1.28	10.23	0.56	10.95
117.00	1.32	10.27	0.53	11.05
118.00	1.33	10.32	0.41	11.25
119.00	1.33	10.40	0.29	11.44
120.00	1.34	10.47	0.18	11.62
121.00	1.34	10.54	0.07	11.81
122.00	1.33	10.62	-0.04	11.98
123.00	1.28	10.74	-0.12	12.13
124.00	1.21	10.88	-0.12	12.21
125.00	1.14	11.02	-0.03	12.19
126.00	1.07	11.16	0.01	12.21
127.00	1.01	11.28	0.03	12.27
128.00	0.98	11.39	0.03	12.33
129.00	0.93	11.50	0.02	12.41
130.00	0.91	11.59	0.01	12.49
131.00	0.91	11.65	0.02	12.55
132.00	0.90	11.73	0.00	12.63
133.00	0.90	11.80	0.02	12.67
134.00	0.88	11.88	0.03	12.73
135.00	0.84	11.98	0.04	12.79
136.00	0.82	12.08	0.04	12.85
137.00	0.79	12.16	0.04	12.91
138.00	0.78	12.24	0.05	12.97
139.00	0.82	12.26	0.08	13.00
140.00	0.85	12.29	0.09	13.05
141.00	0.87	12.33	0.10	13.10
142.00	0.88	12.39	0.11	13.16
143.00	0.90	12.43	0.11	13.21
144.00	0.92	12.47	0.13	13.26

SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

Frequency	Gain(Isotr.) 3 m	Ant.-Factor 3 m	Gain(Isotr.) 1 m	Ant.-Factor 1 m
MHz	dBi	dB/m	dBi	dB/m
145.00	0.92	12.53	0.14	13.31
146.00	0.92	12.59	0.14	13.37
147.00	0.93	12.64	0.15	13.42
148.00	0.95	12.67	0.17	13.46
149.00	1.00	12.68	0.20	13.49
150.00	1.03	12.71	0.22	13.53
151.00	1.04	12.76	0.23	13.57
152.00	1.06	12.80	0.24	13.62
153.00	1.05	12.87	0.24	13.67
154.00	1.02	12.95	0.24	13.73
155.00	1.00	13.02	0.24	13.79
156.00	0.96	13.12	0.23	13.85
157.00	0.92	13.21	0.23	13.91
158.00	0.89	13.30	0.23	13.96
159.00	0.86	13.38	0.23	14.02
160.00	0.84	13.47	0.23	14.07
161.00	0.80	13.56	0.22	14.14
162.00	0.76	13.65	0.20	14.21
163.00	0.72	13.74	0.17	14.29
164.00	0.69	13.83	0.15	14.37
165.00	0.67	13.90	0.13	14.44
166.00	0.63	13.99	0.11	14.52
167.00	0.61	14.07	0.09	14.58
168.00	0.62	14.11	0.09	14.64
169.00	0.62	14.16	0.09	14.69
170.00	0.61	14.22	0.08	14.74
171.00	0.61	14.27	0.10	14.78
172.00	0.62	14.31	0.11	14.83
173.00	0.64	14.34	0.12	14.86
174.00	0.67	14.36	0.14	14.89
175.00	0.69	14.39	0.15	14.93
176.00	0.70	14.43	0.17	14.96
177.00	0.72	14.46	0.19	14.99
178.00	0.75	14.48	0.20	15.03
179.00	0.74	14.54	0.20	15.08
180.00	0.72	14.60	0.20	15.13
181.00	0.71	14.67	0.20	15.17
182.00	0.70	14.72	0.20	15.22
183.00	0.69	14.78	0.19	15.27
184.00	0.69	14.83	0.19	15.33
185.00	0.68	14.88	0.18	15.39
186.00	0.67	14.94	0.16	15.45
187.00	0.65	15.01	0.14	15.51
188.00	0.62	15.08	0.13	15.58
189.00	0.60	15.15	0.12	15.63
190.00	0.57	15.23	0.10	15.69
191.00	0.52	15.32	0.08	15.76
192.00	0.47	15.42	0.05	15.83
193.00	0.41	15.52	0.03	15.90
194.00	0.33	15.64	-0.01	15.98
195.00	0.23	15.80	-0.06	16.08
196.00	0.09	15.97	-0.16	16.22
197.00	-0.05	16.16	-0.27	16.38
198.00	-0.17	16.32	-0.38	16.53
199.00	-0.23	16.43	-0.46	16.66
200.00	-0.26	16.50	-0.53	16.77
201.00	-0.23	16.52	-0.57	16.86
202.00	-0.17	16.50	-0.59	16.92
203.00	-0.10	16.47	-0.56	16.93
204.00	-0.02	16.44	-0.49	16.90
205.00	0.05	16.41	-0.41	16.87

SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

Frequency	Gain(Isotr.) 3 m	Ant.-Factor 3 m	Gain(Isotr.) 1 m	Ant.-Factor 1 m
MHz	dBi	dB/m	dBi	dB/m
206.00	0.12	16.38	-0.36	16.85
207.00	0.17	16.37	-0.33	16.87
208.00	0.20	16.38	-0.32	16.90
209.00	0.22	16.40	-0.32	16.94
210.00	0.23	16.43	-0.32	16.99
211.00	0.25	16.46	-0.34	17.05
212.00	0.24	16.51	-0.37	17.12
213.00	0.22	16.57	-0.40	17.19
214.00	0.19	16.64	-0.43	17.26
215.00	0.16	16.71	-0.47	17.34
216.00	0.14	16.77	-0.51	17.42
217.00	0.11	16.84	-0.57	17.52
218.00	0.06	16.93	-0.64	17.63
219.00	0.00	17.03	-0.72	17.75
220.00	-0.08	17.15	-0.80	17.87
221.00	-0.19	17.30	-0.89	18.00
222.00	-0.31	17.46	-0.98	18.12
223.00	-0.43	17.61	-1.08	18.26
224.00	-0.55	17.77	-1.17	18.39
225.00	-0.63	17.89	-1.26	18.52
226.00	-0.70	18.00	-1.34	18.64
227.00	-0.75	18.09	-1.40	18.74
228.00	-0.79	18.17	-1.45	18.83
229.00	-0.84	18.26	-1.49	18.90
230.00	-0.90	18.35	-1.51	18.96
231.00	-0.91	18.40	-1.53	19.02
232.00	-0.93	18.46	-1.53	19.06
233.00	-0.94	18.51	-1.54	19.10
234.00	-0.95	18.55	-1.54	19.14
235.00	-0.92	18.57	-1.54	19.18
236.00	-0.90	18.57	-1.53	19.21
237.00	-0.85	18.56	-1.52	19.23
238.00	-0.81	18.56	-1.49	19.25
239.00	-0.77	18.55	-1.46	19.25
240.00	-0.72	18.54	-1.43	19.25
241.00	-0.68	18.54	-1.39	19.25
242.00	-0.63	18.53	-1.34	19.24
243.00	-0.57	18.50	-1.29	19.23
244.00	-0.50	18.47	-1.25	19.21
245.00	-0.44	18.45	-1.20	19.20
246.00	-0.38	18.42	-1.16	19.19
247.00	-0.31	18.38	-1.11	19.18
248.00	-0.23	18.34	-1.06	19.17
249.00	-0.16	18.31	-1.01	19.15
250.00	-0.09	18.27	-0.96	19.14
251.00	-0.03	18.24	-0.92	19.13
252.00	0.04	18.21	-0.87	19.12
253.00	0.10	18.18	-0.82	19.11
254.00	0.16	18.16	-0.78	19.09
255.00	0.22	18.14	-0.74	19.09
256.00	0.28	18.11	-0.71	19.09
257.00	0.34	18.08	-0.67	19.09
258.00	0.39	18.06	-0.63	19.09
259.00	0.45	18.04	-0.59	19.08
260.00	0.50	18.02	-0.56	19.08
261.00	0.55	18.00	-0.52	19.07
262.00	0.58	18.01	-0.47	19.05
263.00	0.60	18.02	-0.43	19.05
264.00	0.63	18.02	-0.39	19.04
265.00	0.66	18.03	-0.34	19.03
266.00	0.66	18.05	-0.30	19.02

SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

Frequency	Gain(Isotr.) 3 m	Ant.-Factor 3 m	Gain(Isotr.) 1 m	Ant.-Factor 1 m
MHz	dBi	dB/m	dBi	dB/m
267.00	0.67	18.08	-0.27	19.02
268.00	0.67	18.11	-0.25	19.03
269.00	0.71	18.11	-0.22	19.04
270.00	0.73	18.12	-0.20	19.04
271.00	0.74	18.14	-0.18	19.06
272.00	0.74	18.17	-0.18	19.09
273.00	0.74	18.20	-0.18	19.12
274.00	0.75	18.23	-0.18	19.15
275.00	0.75	18.25	-0.19	19.19
276.00	0.74	18.30	-0.21	19.25
277.00	0.72	18.35	-0.24	19.31
278.00	0.71	18.39	-0.28	19.38
279.00	0.70	18.43	-0.31	19.44
280.00	0.72	18.44	-0.34	19.50
281.00	0.73	18.47	-0.37	19.57
282.00	0.72	18.51	-0.41	19.64
283.00	0.70	18.56	-0.45	19.70
284.00	0.65	18.63	-0.49	19.78
285.00	0.61	18.71	-0.53	19.85
286.00	0.56	18.79	-0.57	19.92
287.00	0.49	18.88	-0.61	19.99
288.00	0.42	18.99	-0.66	20.07
289.00	0.36	19.08	-0.70	20.14
290.00	0.31	19.16	-0.73	20.20
291.00	0.27	19.23	-0.77	20.27
292.00	0.20	19.32	-0.81	20.33
293.00	0.12	19.44	-0.85	20.41
294.00	0.02	19.57	-0.90	20.49
295.00	-0.08	19.70	-0.96	20.58
296.00	-0.19	19.84	-1.03	20.67
297.00	-0.30	19.97	-1.09	20.77
298.00	-0.39	20.10	-1.15	20.86
299.00	-0.49	20.22	-1.23	20.96
300.00	-0.58	20.34	-1.31	21.07
301.00	-0.68	20.47	-1.40	21.19
302.00	-0.80	20.62	-1.49	21.31
303.00	-0.93	20.77	-1.59	21.44
304.00	-1.09	20.96	-1.72	21.60
305.00	-1.27	21.18	-1.88	21.79
306.00	-1.49	21.42	-2.07	22.01
307.00	-1.72	21.68	-2.28	22.24
308.00	-1.93	21.92	-2.51	22.50
309.00	-2.12	22.14	-2.74	22.76
310.00	-2.28	22.33	-2.96	23.01
311.00	-2.37	22.45	-3.12	23.19
312.00	-2.38	22.48	-3.21	23.31
313.00	-2.31	22.44	-3.20	23.33
314.00	-2.15	22.31	-3.11	23.26
315.00	-1.95	22.13	-2.93	23.12
316.00	-1.72	21.94	-2.71	22.92
317.00	-1.50	21.74	-2.47	22.71
318.00	-1.38	21.65	-2.34	22.61
319.00	-1.26	21.55	-2.21	22.50
320.00	-1.13	21.45	-2.07	22.39