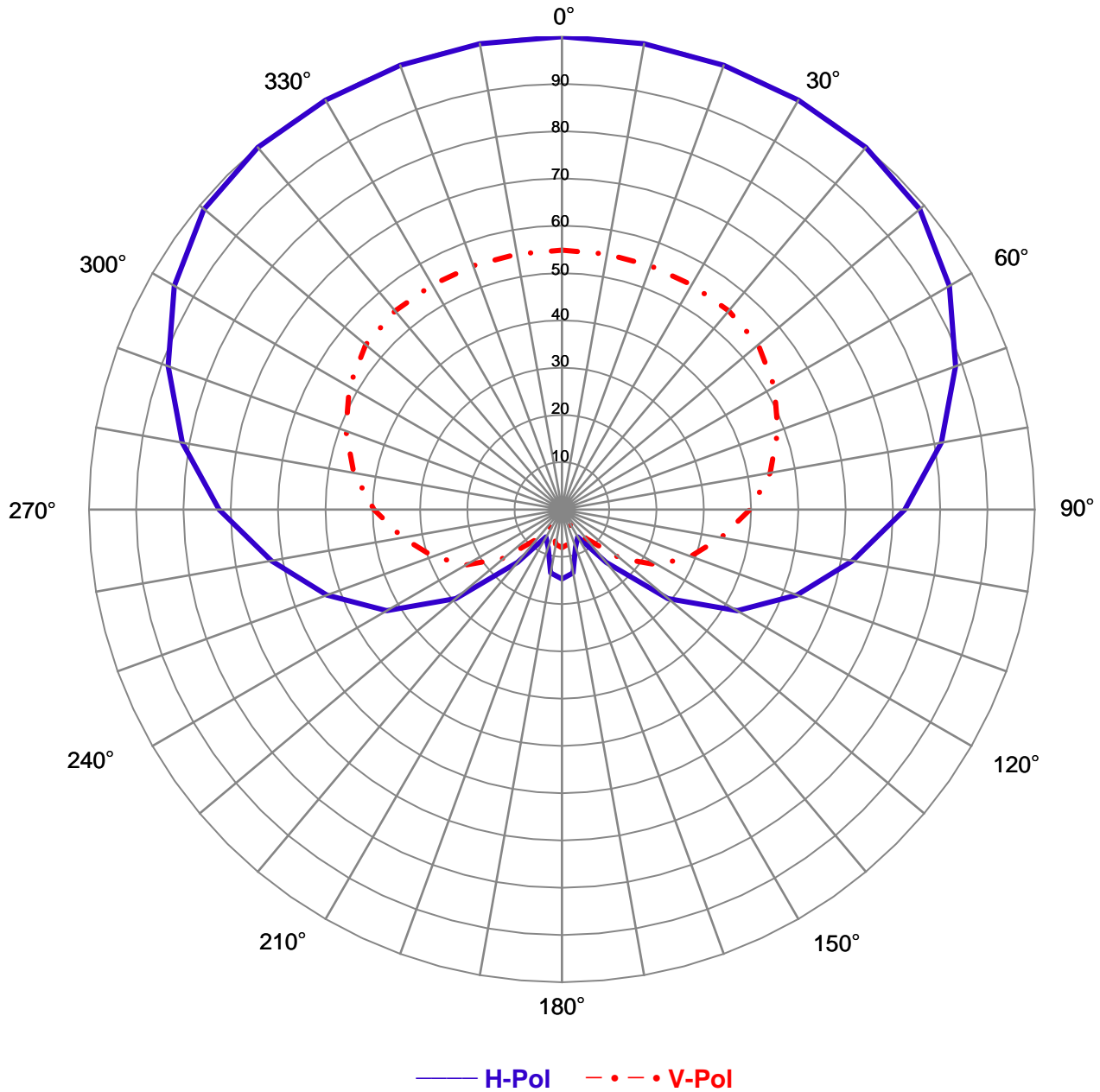




Relative Field Azimuth Plane Pattern



Pattern Type:	Relative Field	Antenna Type:	8-Bay Slot
Antenna Model:	PSILP8AER-15-EP	Channel:	15
Polarization:	Elliptical	Station:	W15DC-D
Gain (h-pol)::	13.43 (11.28 dB)	Location:	Florence, SC
Gain (v-pol):	4.04 (6.06 dB)	Date:	7/28/2023

PROPAGATION SYSTEMS INC.

Relative Field Tabulation

Antenna Model: PSILP8AER-15-EP

Gain (h-pol): 13.43 (11.28 dBd)

Station: W15DC

Angle	Relative Field	Power Gain	Gain dB
0	1.000	13.43	11.28
10	1.000	13.43	11.28
20	1.000	13.43	11.28
30	1.000	13.43	11.28
40	1.000	13.43	11.28
50	0.988	13.11	11.18
60	0.946	12.02	10.80
70	0.886	10.54	10.23
80	0.815	8.92	9.50
90	0.725	7.06	8.49
100	0.624	5.23	7.18
110	0.529	3.76	5.75
120	0.428	2.46	3.91
130	0.293	1.15	0.62
140	0.146	0.29	-5.43
150	0.067	0.06	-12.20
160	0.085	0.10	-10.13
170	0.136	0.25	-6.05
180	0.147	0.29	-5.37
190	0.136	0.25	-6.05
200	0.085	0.10	-10.13
210	0.067	0.06	-12.20
220	0.146	0.29	-5.43
230	0.293	1.15	0.62
240	0.428	2.46	3.91
250	0.529	3.76	5.75
260	0.624	5.23	7.18
270	0.725	7.06	8.49
280	0.815	8.92	9.50
290	0.886	10.54	10.23
300	0.946	12.02	10.80
310	0.988	13.11	11.18
320	1.000	13.43	11.28
330	1.000	13.43	11.28
340	1.000	13.43	11.28
350	1.000	13.43	11.28

PROPAGATION SYSTEMS INC.

Relative Field Tabulation

Antenna Model: PSILP8AER-15-EP

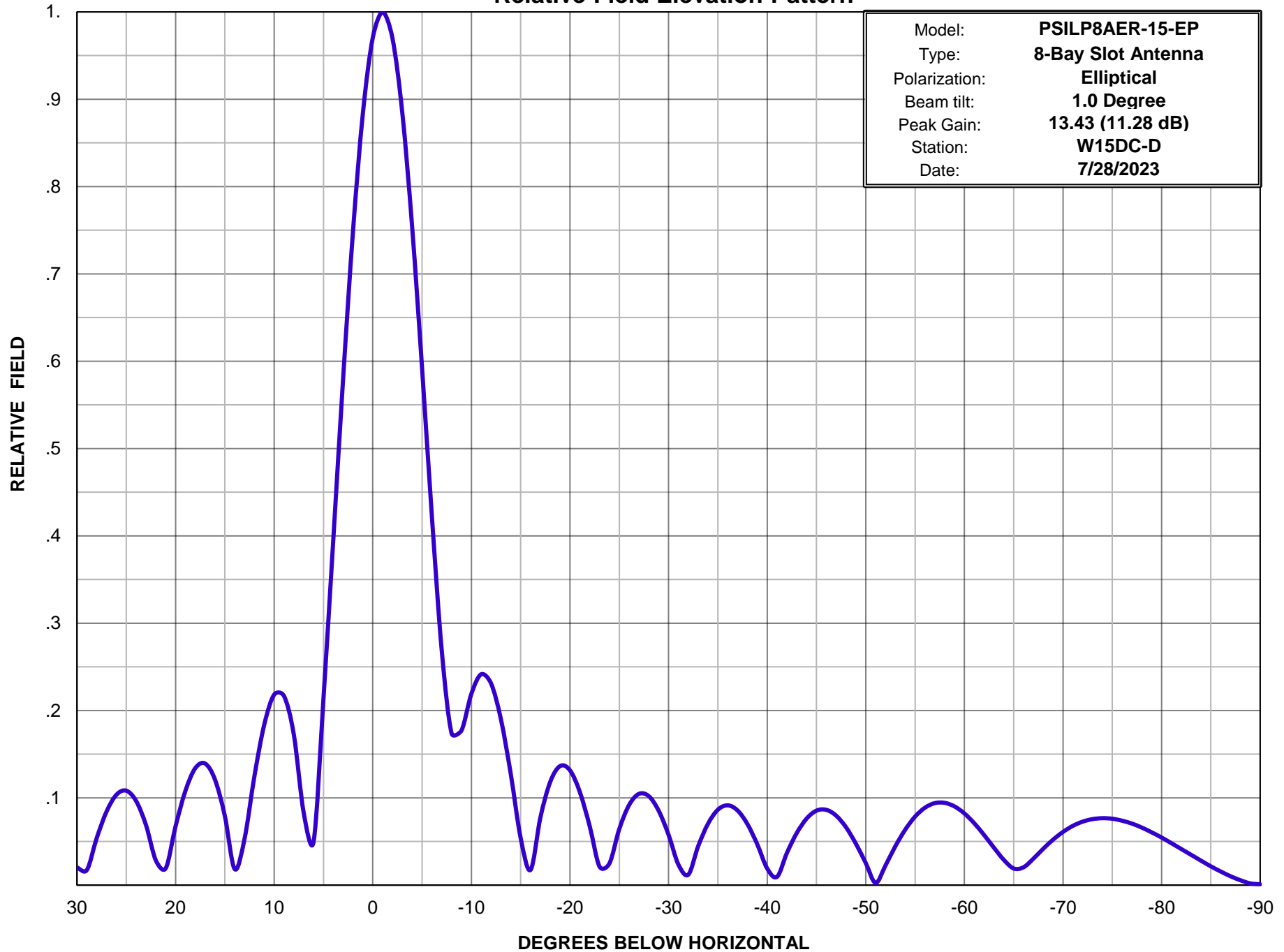
Gain (v-pol): 4.04 (6.06 dBd)

Station: W15DC

Angle	Relative Field	Power Gain	Gain dB
0	0.549	4.04	6.06
10	0.549	4.04	6.06
20	0.549	4.04	6.06
30	0.549	4.04	6.06
40	0.549	4.04	6.06
50	0.542	3.94	5.96
60	0.519	3.62	5.58
70	0.486	3.17	5.01
80	0.447	2.68	4.29
90	0.398	2.12	3.27
100	0.342	1.57	1.97
110	0.290	1.13	0.53
120	0.235	0.74	-1.31
130	0.161	0.35	-4.60
140	0.080	0.09	-10.65
150	0.037	0.02	-17.41
160	0.047	0.03	-15.35
170	0.075	0.07	-11.26
180	0.081	0.09	-10.59
190	0.075	0.07	-11.26
200	0.047	0.03	-15.35
210	0.037	0.02	-17.41
220	0.080	0.09	-10.65
230	0.161	0.35	-4.60
240	0.235	0.74	-1.31
250	0.290	1.13	0.53
260	0.342	1.57	1.97
270	0.398	2.12	3.27
280	0.447	2.68	4.29
290	0.486	3.17	5.01
300	0.519	3.62	5.58
310	0.542	3.94	5.96
320	0.549	4.04	6.06
330	0.549	4.04	6.06
340	0.549	4.04	6.06
350	0.549	4.04	6.06



Relative Field Elevation Pattern





Propagation Systems Inc.

Elevation Pattern Tabulation

Antenna: PSILP8AER-15-EP

Peak Gain (h-pol): 13.43 (11.28 dB)

Beam tilt: -1.0 Degree

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-90.0	0.001	-60.000	-50.0	0.025	-31.937	-10.0	0.219	-13.188
-89.0	0.002	-54.112	-49.0	0.047	-26.480	-9.0	0.177	-15.035
-88.0	0.006	-45.027	-48.0	0.066	-23.581	-8.0	0.174	-15.207
-87.0	0.010	-39.869	-47.0	0.080	-21.988	-7.0	0.268	-11.431
-86.0	0.016	-36.134	-46.0	0.086	-21.289	-6.0	0.422	-7.501
-85.0	0.022	-33.345	-45.0	0.085	-21.381	-5.0	0.592	-4.554
-84.0	0.028	-31.047	-44.0	0.076	-22.360	-4.0	0.753	-2.467
-83.0	0.035	-29.194	-43.0	0.060	-24.481	-3.0	0.884	-1.072
-82.0	0.041	-27.668	-42.0	0.037	-28.679	-2.0	0.970	-0.267
-81.0	0.048	-26.370	-41.0	0.010	-40.404	-1.0	1.000	0.000
-80.0	0.055	-25.265	-40.0	0.019	-34.383	0.0	0.970	-0.260
-79.0	0.060	-24.371	-39.0	0.047	-26.620	1.0	0.884	-1.070
-78.0	0.066	-23.621	-38.0	0.070	-23.117	2.0	0.750	-2.502
-77.0	0.070	-23.042	-37.0	0.085	-21.365	3.0	0.581	-4.711
-76.0	0.074	-22.640	-36.0	0.091	-20.785	4.0	0.397	-8.035
-75.0	0.076	-22.377	-35.0	0.086	-21.273	5.0	0.214	-13.406
-74.0	0.077	-22.308	-34.0	0.070	-23.061	6.0	0.050	-26.021
-73.0	0.076	-22.429	-33.0	0.045	-27.024	7.0	0.082	-21.679
-72.0	0.073	-22.766	-32.0	0.012	-38.438	8.0	0.172	-15.291
-71.0	0.068	-23.365	-31.0	0.023	-32.584	9.0	0.217	-13.290
-70.0	0.061	-24.306	-30.0	0.058	-24.795	10.0	0.218	-13.224
-69.0	0.052	-25.660	-29.0	0.085	-21.396	11.0	0.184	-14.699
-68.0	0.042	-27.604	-28.0	0.102	-19.843	12.0	0.125	-18.062
-67.0	0.030	-30.370	-27.0	0.105	-19.614	13.0	0.053	-25.460
-66.0	0.020	-33.784	-26.0	0.092	-20.741	14.0	0.018	-34.735
-65.0	0.019	-34.383	-25.0	0.064	-23.844	15.0	0.079	-22.037
-64.0	0.029	-30.770	-24.0	0.025	-32.094	16.0	0.121	-18.362
-63.0	0.043	-27.355	-23.0	0.021	-33.468	17.0	0.139	-17.125
-62.0	0.057	-24.818	-22.0	0.068	-23.404	18.0	0.134	-17.462
-61.0	0.071	-22.986	-21.0	0.107	-19.439	19.0	0.108	-19.329
-60.0	0.082	-21.711	-20.0	0.132	-17.620	20.0	0.067	-23.424
-59.0	0.090	-20.901	-19.0	0.136	-17.306	21.0	0.019	-34.315
-58.0	0.094	-20.515	-18.0	0.118	-18.538	22.0	0.028	-30.954
-57.0	0.094	-20.543	-17.0	0.077	-22.222	23.0	0.069	-23.250
-56.0	0.089	-21.048	-16.0	0.017	-35.177	24.0	0.096	-20.322
-55.0	0.078	-22.104	-15.0	0.054	-25.362	25.0	0.108	-19.317
-54.0	0.063	-23.947	-14.0	0.127	-17.926	26.0	0.103	-19.702
-53.0	0.045	-27.024	-13.0	0.190	-14.432	27.0	0.084	-21.489
-52.0	0.023	-32.927	-12.0	0.231	-12.731	28.0	0.054	-25.386
-51.0	0.003	-51.782	-11.0	0.242	-12.341	29.0	0.017	-35.253



Propagation Systems Inc.

Elevation Pattern Tabulation

Antenna: PSILP8AER-15-EP

Peak Gain (h-pol): 13.43 (11.28 dB)

Beam tilt: -1.0 Degree

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-30.0	0.058	-24.795	-10.0	0.219	-13.188	10.0	0.218	-13.224
-29.5	0.072	-22.802	-9.5	0.198	-14.052	10.5	0.205	-13.765
-29.0	0.085	-21.396	-9.0	0.177	-15.035	11.0	0.184	-14.699
-28.5	0.095	-20.446	-8.5	0.165	-15.666	11.5	0.157	-16.084
-28.0	0.102	-19.843	-8.0	0.174	-15.207	12.0	0.125	-18.062
-27.5	0.105	-19.564	-7.5	0.210	-13.562	12.5	0.090	-20.930
-27.0	0.105	-19.614	-7.0	0.268	-11.431	13.0	0.053	-25.460
-26.5	0.100	-19.987	-6.5	0.341	-9.351	13.5	0.017	-35.563
-26.0	0.092	-20.741	-6.0	0.422	-7.501	14.0	0.018	-34.735
-25.5	0.080	-21.971	-5.5	0.507	-5.908	14.5	0.051	-25.916
-25.0	0.064	-23.844	-5.0	0.592	-4.554	15.0	0.079	-22.037
-24.5	0.046	-26.791	-4.5	0.675	-3.416	15.5	0.103	-19.766
-24.0	0.025	-32.094	-4.0	0.753	-2.467	16.0	0.121	-18.362
-23.5	0.002	-52.869	-3.5	0.823	-1.690	16.5	0.133	-17.521
-23.0	0.021	-33.468	-3.0	0.884	-1.072	17.0	0.139	-17.125
-22.5	0.045	-26.965	-2.5	0.933	-0.599	17.5	0.140	-17.106
-22.0	0.068	-23.404	-2.0	0.970	-0.267	18.0	0.134	-17.462
-21.5	0.088	-21.063	-1.5	0.992	-0.067	18.5	0.123	-18.178
-21.0	0.107	-19.439	-1.0	1.000	0.000	19.0	0.108	-19.329
-20.5	0.121	-18.329	-0.5	0.993	-0.065	19.5	0.089	-21.003
-20.0	0.132	-17.620	0.0	0.970	-0.260	20.0	0.067	-23.424
-19.5	0.137	-17.287	0.5	0.934	-0.594	20.5	0.044	-27.173
-19.0	0.136	-17.306	1.0	0.884	-1.070	21.0	0.019	-34.315
-18.5	0.130	-17.701	1.5	0.822	-1.703	21.5	0.005	-45.761
-18.0	0.118	-18.538	2.0	0.750	-2.502	22.0	0.028	-30.954
-17.5	0.101	-19.948	2.5	0.669	-3.494	22.5	0.050	-26.047
-17.0	0.077	-22.222	3.0	0.581	-4.711	23.0	0.069	-23.250
-16.5	0.049	-26.127	3.5	0.490	-6.199	23.5	0.084	-21.474
-16.0	0.017	-35.177	4.0	0.397	-8.035	24.0	0.096	-20.322
-15.5	0.017	-35.253	4.5	0.304	-10.349	24.5	0.104	-19.626
-15.0	0.054	-25.362	5.0	0.214	-13.406	25.0	0.108	-19.317
-14.5	0.091	-20.813	5.5	0.128	-17.833	25.5	0.108	-19.341
-14.0	0.127	-17.926	6.0	0.050	-26.021	26.0	0.103	-19.702
-13.5	0.160	-15.893	6.5	0.023	-32.927	26.5	0.095	-20.404
-13.0	0.190	-14.432	7.0	0.082	-21.679	27.0	0.084	-21.489
-12.5	0.214	-13.400	7.5	0.133	-17.541	27.5	0.070	-23.079
-12.0	0.231	-12.731	8.0	0.172	-15.291	28.0	0.054	-25.386
-11.5	0.240	-12.379	8.5	0.200	-13.986	28.5	0.036	-28.896
-11.0	0.242	-12.341	9.0	0.217	-13.290	29.0	0.017	-35.253
-10.5	0.234	-12.607	9.5	0.222	-13.062	29.5	0.002	-56.391