Supplementary Table 2. Dataset DS2 was derived from 17 organisms from the PaxDB database for protein abundances (Wang et al. (2012)). We considered organisms for which protein sequence and relative abundance data are available for more than 50 per cent of the proteome and used integrated datasets for the whole organism whenever possible. The table shows values of amino acid relative abundances, predicted abundances from the genetic code model, genomic GC content and correlation R-values.

Amino acid	% abundance, observed	ln (% abundance, observed)	Cost (ATP)	Cost (ATP/time)	ln (% abundance, predicted)	Organism	Genomic GC content	R % abundance vs Cost (ATP)	R ln(% abundance) vs Cost (ATP)	R % abundance vs Cost (ATP/time)	R ln(% abundance) vs Cost (ATP/time)	R ln(% abundance), observed vs predicted
A	8.2554	2.110867531679689	11.7	11.7	1.177	A. thaliana	0.36	-0.599861165	-0.645163906	-0.81505342	-0.930252745	0.62952057
C	1.226	0.2037568375140196	24.7	741	1.058							
D	5.6055	1.723748258611511	12.7	114.3	1.058							
E	7.263	1.982792966624031	15.3	76.5	1.058							
F	3.9496	1.373614307962516	52	208	1.632							
G	7.6919	2.040167827122005	11.7	11.7	1.177							
H	1.8889	0.635994649055637	38.3	536.2	1.058							
I	5.276	1.663168234855068	32.3	64.6	2.127							
K	7.1432	1.96616085522087	30.3	242.4	1.632							
L	8.505	2.140654225847825	27.3	54.6	2.387							
M	2.2663	0.818148545722748	34.3	445.9	0.611							
N	3.8493	1.347891313586945	14.7	147	1.632							
P	4.7738	1.563142633448797	20.3	60.9	1.177							
Q	3.3873	1.220033143872449	16.3	130.4	1.058							
R	4.7941	1.567385995202231	27.3	109.2	1.813							
S	7.5431	2.020633238108288	11.7	70.2	2.157							
T	5.449	1.695432105600961	18.7	112.2	1.751							
V	7.3239	1.991142972977926	23.3	46.6	1.751							
W	1.0416	4.07579924721678e-2	74.3	891.6	3.7e-2							
Y	2.767	1.017763700804789	50	350	1.632							

A 8.0216 2.082137903227578 11.7 11.7 1.987 T. gammatolerans
0.54 -0.424374844 -0.389432932 -0.744883393 -0.845097919 0.497927686
C 0.5011 -0.690949597016458 24.7 741 1.133

D 5.4069 1.687675915684732 12.7 114.3 1.133

E 8.8216 2.177203259462332 15.3 76.5 1.133

F 3.6787 1.302559428899955 52 208 0.973

G 7.7964 2.053662088692349 11.7 11.7 1.987

H 1.7692 0.570527467012035 38.3 536.2 1.133

I 7.0663 1.955337004871238 32.3 64.6 1.351

K 7.5457 2.020977864589617 30.3 242.4 0.973

L 8.2096 2.105304201205563 27.3 54.6 2.181

M 2.5658 0.942270320833103 34.3 445.9 0.356

N 3.2444 1.176930433214053 14.7 147 0.973

P 4.9656 1.602534136117306 20.3 60.9 1.987

Q 2.2364 0.804867430170353 16.3 130.4 1.133

R 5.3622 1.679374338633264 27.3 109.2 2.341

S 4.0297 1.393691931500327 11.7 70.2 2.232

T 5.0234 1.614106995282363 18.7 112.2 1.826

V 8.7146 2.164999780041422 23.3 46.6 1.826

W 1.3682 0.3134960073447605 74.3 891.6 0.517

Y 3.6726 1.300899858102942 50 350 0.973

A 7.29 1.986503546020567 11.7 11.7 1.284 L. interrogans
0.38 -0.520209085 -0.580932966 -0.79322454 -0.927599949 0.67601055
C 0.747 -0.2916900938493198 24.7 741 1.08

D 5.3931 1.685120358738343 12.7 114.3 1.08

E 7.695 2.040570767290843 15.3 76.5 1.08

F 4.0547 1.399876702093157 52 208 1.57

G 7.4426 2.007220250162842 11.7 11.7 1.284

H 1.617 0.48057258059497 38.3 536.2 1.08

I	7.6019	2.028398216047493	32.3	64.6	2.052
K	8.5321	2.14383552112176	30.3	242.4	1.57
L	8.6561	2.158264274717616	27.3	54.6	2.37
M	2.274	0.821540395328344	34.3	445.9	0.602
N	4.6349	1.533614623812044	14.7	147	1.57
P	3.883	1.35660805074953	20.3	60.9	1.284
Q	3.3046	1.195315437234753	16.3	130.4	1.08
R	4.2217	1.440237890530117	27.3	109.2	1.88
S	6.856	1.925124181295479	11.7	70.2	2.179
T	5.3129	1.670137825533722	18.7	112.2	1.773
V	6.6977	1.901764183879534	23.3	46.6	1.773
W	0.7331	-0.3104731607525962	74.3	891.6	0.113
Y	3.0526	1.115993686498885	50	350	1.57

A	10.3131	2.333414931786485	11.7	11.7	1.906	S. typhimurium
0.52	-0.59048298	-0.630422289	-0.801333794	-0.934277015	0.617765154	
C	0.748	-0.2903523010076598	24.7	741	1.138	
D	5.8981	1.774630265149318	12.7	114.3	1.138	
E	7.0475	1.952672944006131	15.3	76.5	1.138	
F	3.234	1.173719761154915	52	208	1.063	
G	7.8906	2.065672177593837	11.7	11.7	1.906	
H	2.0079	0.697089399792569	38.3	536.2	1.138	
I	5.8181	1.760973747962423	32.3	64.6	1.456	
K	6.4194	1.859324655390479	30.3	242.4	1.063	
L	8.6528	2.157882967986398	27.3	54.6	2.212	
M	2.679	0.985443590562472	34.3	445.9	0.407	
N	3.9441	1.372220791388531	14.7	147	1.063	
P	3.8289	1.342577555674618	20.3	60.9	1.906	
Q	3.9412	1.371485245466183	16.3	130.4	1.138	

R 5.6368 1.729316528604836 27.3 109.2 2.287

S 5.1526 1.639501441648486 11.7 70.2 2.237

T 5.5603 1.715652063641406 18.7 112.2 1.831

V 7.8945 2.066166314479806 23.3 46.6 1.831

W 0.8171 -0.2019937925914754 74.3 891.6 0.482

Y 2.5159 0.922630592420335 50 350 1.063

A 10.2263 2.324962833211645 11.7 11.7 1.853 E. coli
0.51 -0.580904656 -0.629012133 -0.796751974 -0.93316077
0.62554931
C 0.7999 -0.2232685591273609 24.7 741 1.139

D 5.8389 1.764542422934502 12.7 114.3 1.139

E 7.3027 1.988244142785581 15.3 76.5 1.139

F 3.2835 1.18890992664889 52 208 1.119

G 8.1434 2.09720778322378 11.7 11.7 1.853

H 1.9762 0.681175808778725 38.3 536.2 1.139

I 6.0242 1.795784690477676 32.3 64.6 1.521

K 6.4446 1.863242570849919 30.3 242.4 1.119

L 8.5614 2.147263728182447 27.3 54.6 2.231

M 2.6765 0.984509970851299 34.3 445.9 0.436

N 3.8297 1.342786471142956 14.7 147 1.119

P 3.9785 1.380904863835452 20.3 60.9 1.853

Q 3.7862 1.331362877593673 16.3 130.4 1.139

R 5.4459 1.694863031982358 27.3 109.2 2.252

S 4.8497 1.578916847366148 11.7 70.2 2.238

T 5.4613 1.697686856654736 18.7 112.2 1.832

V 8.0204 2.081988295946412 23.3 46.6 1.832

W 0.828 -0.1887421245968774 74.3 891.6 0.457

Y 2.5226 0.925290115670956 50 350 1.119

A 12.3175 2.511021015435981 11.7 11.7 2.376 M.
tuberculosis

0.66 -0.583762167 -0.594926952 -0.759222599 -0.914145768
0.626955147
C 0.5577 -0.583934095586629 24.7 741 1.037

D 6.4482 1.863801022093025 12.7 114.3 1.037

E 6.4772 1.868288318217179 15.3 76.5 1.037

F 2.8656 1.05277775232431 52 208 0.391

G 8.9621 2.19300457452531 11.7 11.7 2.376

H 1.7419 0.554976471501279 38.3 536.2 1.037

I 4.6759 1.542421657581314 32.3 64.6 0.686

K 4.1219 1.416314222106059 30.3 242.4 0.391

L 8.6897 2.162138416241802 27.3 54.6 1.963

M 1.993 0.689641041230658 34.3 445.9 -3.1e-2

N 2.7075 0.996025699893009 14.7 147 0.391

P 5.5531 1.714356330381134 20.3 60.9 2.376

Q 3.3782 1.217343023264108 16.3 130.4 1.037

R 6.0804 1.805070483287727 27.3 109.2 2.609

S 5.3305 1.673445042408393 11.7 70.2 2.135

T 6.2626 1.834595434347367 18.7 112.2 1.73

V 8.6902 2.162195953972184 23.3 46.6 1.73

W 0.9986 -1.4009809156281e-3 74.3 891.6 0.615

Y 2.1481 0.764583730497794 50 350 0.391

A 8.4457 2.133657436108237 11.7 11.7 1.178 S. pombe

0.36 -0.598310321 -0.64744197 -0.838806509 -0.942812005
0.67568717
C 1.2224 0.2008161394301191 24.7 741 1.058

D 5.492 1.703292487905725 12.7 114.3 1.058

E 6.8818 1.928880245633616 15.3 76.5 1.058

F 3.8797 1.35575783105824 52 208 1.632

G 7.0034 1.946395745420026 11.7 11.7 1.178

H 2.0788 0.73179080415215 38.3 536.2 1.058

I 6.0113 1.793641031312719 32.3 64.6 2.126

K	7.0027	1.946295788972395	30.3	242.4	1.632	
L	8.2989	2.116122975899178	27.3	54.6	2.387	
M	2.1517	0.766258227377268	34.3	445.9	0.611	
N	4.3802	1.477094385446329	14.7	147	1.632	
P	4.7254	1.552952213447238	20.3	60.9	1.178	
Q	3.3389	1.205641411426482	16.3	130.4	1.058	
R	4.9995	1.609337907433767	27.3	109.2	1.813	
S	7.1768	1.970853601262937	11.7	70.2	2.157	
T	5.6051	1.723676897578173	18.7	112.2	1.752	
V	7.2858	1.985927248305691	23.3	46.6	1.752	
W	0.9373	-6.4751877229697e-2	74.3	891.6	3.8e-2	
Y	3.0826	1.125773396730482	50	350	1.632	

A	8.0799	2.089379496218794	11.7	11.7	1.555	B. subtilis

0.44 -0.538204421 -0.586500755 -0.789750687 -0.922757869 0.637150686

C	0.6805	-0.384927456890616	24.7	741	1.122	
D	5.3465	1.676442141214574	12.7	114.3	1.122	
E	8.4383	2.132780866518822	15.3	76.5	1.122	
F	3.674	1.301280986792934	52	208	1.384	
G	7.5312	2.019054391664741	11.7	11.7	1.555	
H	2.0501	0.717888572448392	38.3	536.2	1.122	
I	6.7368	1.907585034733645	32.3	64.6	1.831	
K	8.1398	2.096765609688031	30.3	242.4	1.384	
L	8.3242	2.119166935152886	27.3	54.6	2.316	
M	2.607	0.958200134951365	34.3	445.9	0.551	
N	4.1032	1.411767157092922	14.7	147	1.384	
P	3.5767	1.274440587595562	20.3	60.9	1.555	
Q	3.6622	1.298064059725476	16.3	130.4	1.122	
R	4.6948	1.546455513243832	27.3	109.2	2.055	

S 5.5591 1.71543622465645 11.7 70.2 2.221

T 5.4274 1.69146019791149 18.7 112.2 1.816

V 7.7471 2.047318579788993 23.3 46.6 1.816

W 0.7215 -0.326422900768211 74.3 891.6 0.29

Y 2.8999 1.064676253639264 50 350 1.384

A 7.477 2.011831642017778 11.7 11.7 1.402 H. sapiens
0.4 -0.611998049 -0.706060953 -0.771696703 -0.88253305
0.703764059
C 2.2954 0.830907120264431 24.7 741 1.101

D 5.3598 1.678926660953711 12.7 114.3 1.101

E 7.5366 2.019771151939125 15.3 76.5 1.101

F 3.8375 1.344821112913315 52 208 1.494

G 6.8345 1.921983314610571 11.7 11.7 1.402

H 2.2076 0.791905952583209 38.3 536.2 1.101

I 3.9002 1.361027833872003 32.3 64.6 1.962

K 7.0759 1.956694643919554 30.3 242.4 1.494

L 9.3303 2.233267168683148 27.3 54.6 2.348

M 2.0387 0.712312349820956 34.3 445.9 0.585

N 3.7699 1.327048475909181 14.7 147 1.494

P 5.1794 1.644689219446736 20.3 60.9 1.402

Q 4.3717 1.475151949478692 16.3 130.4 1.101

R 4.7851 1.565506923328132 27.3 109.2 1.956

S 7.0607 1.954544196731743 11.7 70.2 2.2

T 5.8144 1.760337599219715 18.7 112.2 1.794

V 6.7645 1.911688349061278 23.3 46.6 1.794

W 1.2269 0.2044906628150002 74.3 891.6 0.193

Y 3.1339 1.142278235320096 50 350 1.494

A 10.6028 2.3611181171797 11.7 11.7 2.405 M. aeruginosa
0.67 -0.592887766 -0.619808344 -0.830046359 -0.947138711
0.487970016
C 0.9587 -4.21770788991862e-2 24.7 741 1.023

D 5.4092 1.688101207617068 12.7 114.3 1.023

E 5.7294 1.745610813202075 15.3 76.5 1.023

F 3.7703 1.327154573890767 52 208 0.335

G 8.113 2.093467713412928 11.7 11.7 2.405

H 1.0258 2.54727959730311e-2 38.3 536.2 1.023

I 6.1249 1.812362429766899 32.3 64.6 0.623

K 4.7423 1.556522250087485 30.3 242.4 0.335

L 8.8773 2.183497456716219 27.3 54.6 1.94

M 2.3828 0.868276266772395 34.3 445.9 -7.2e-2

N 4.3376 1.467321199762264 14.7 147 0.335

P 4.2797 1.4538829136791 20.3 60.9 2.405

Q 4.1635 1.426356066693737 16.3 130.4 1.023

R 5.1598 1.640897819052373 27.3 109.2 2.629

S 6.8403 1.922831590321776 11.7 70.2 2.122

T 5.9117 1.776933438109383 18.7 112.2 1.716

V 7.2046 1.974719710908278 23.3 46.6 1.716

W 0.9185 -8.50133743269566e-2 74.3 891.6 0.616

Y 3.448 1.237794352801447 50 350 0.335

A 8.3471 2.121914173149058 11.7 11.7 1.292 S. cerevisiae
0.38 -0.570184969 -0.608183429 -0.814094037 -0.930356748 0.682447094
C 0.9509 -5.03463744367385e-2 24.7 741 1.082

D 5.7909 1.756287719919802 12.7 114.3 1.082

E 6.8401 1.922802351410631 15.3 76.5 1.082

F 3.9724 1.379370446047067 52 208 1.565

G 6.7993 1.916819665706784 11.7 11.7 1.292

H 1.9844 0.685316601444757 38.3 536.2 1.082

I 6.1477 1.81607802812923 32.3 64.6 2.046

K 8.126 2.095068797565535 30.3 242.4 1.565

L	8.3443	2.121578671031049	27.3	54.6	2.368	
M	1.9355	0.660365691035566	34.3	445.9	0.601	
N	4.7318	1.554305679796051	14.7	147	1.565	
P	4.2877	1.455750458634431	20.3	60.9	1.292	
Q	3.4779	1.246428663362328	16.3	130.4	1.082	
R	4.4848	1.500693901428387	27.3	109.2	1.885	
S	6.8481	1.923971241536559	11.7	70.2	2.18	
T	5.759	1.750763848524535	18.7	112.2	1.775	
V	7.2299	1.978225204816376	23.3	46.6	1.775	
W	0.9429	-5.87950465105055e-2	74.3	891.6	0.118	
Y	2.9994	1.098412268665443	50	350	1.565	

A	8.6446	2.156934848544833	11.7	11.7	1.144	C. elegans
	0.35	-0.624640671	-0.679423862	-0.82849686		-0.94239822
	0.613724157					
C	1.1908	0.1746253501594843	24.7	741	1.051	
D	5.8275	1.762588091927775	12.7	114.3	1.051	
E	7.454	2.008750801057066	15.3	76.5	1.051	
F	3.6902	1.305680657125645	52	208	1.651	
G	6.972	1.941902127657775	11.7	11.7	1.144	
H	2.1177	0.750330594087399	38.3	536.2	1.051	
I	5.425	1.691017899426523	32.3	64.6	2.149	
K	7.7763	2.051080646660853	30.3	242.4	1.651	
L	7.9571	2.074064611867011	27.3	54.6	2.392	
M	2.248	0.810040932031445	34.3	445.9	0.613	
N	4.3176	1.462699692322296	14.7	147	1.651	
P	4.3895	1.479215325384126	20.3	60.9	1.144	
Q	4.2407	1.444728349956918	16.3	130.4	1.051	
R	5.3654	1.67997093061934	27.3	109.2	1.792	
S	6.3341	1.845947735803631	11.7	70.2	2.149	
T	5.4846	1.701944164905691	18.7	112.2	1.744	

V 6.9435 1.937805970157298 23.3 46.6 1.744

W 0.8902 -0.1163091224003831 74.3 891.6 1.3e-2

Y 2.731 1.004667842491568 50 350 1.651

A 8.5558 2.14660941553788 11.7 11.7 1.495 D. melanogaster
0.42 -0.637160481 -0.705206756 -0.830999418 -0.945569421 0.700771716
C 1.273 0.2413763195752694 24.7 741 1.115

D 5.8041 1.758564564370414 12.7 114.3 1.115

E 7.2161 1.976314640757426 15.3 76.5 1.115

F 3.478 1.246457415932091 52 208 1.428

G 6.9697 1.941572182239229 11.7 11.7 1.495

H 1.9788 0.682490600371417 38.3 536.2 1.115

I 5.3257 1.672544158355046 32.3 64.6 1.884

K 7.8746 2.063642389770862 30.3 242.4 1.428

L 8.2715 2.112815871064933 27.3 54.6 2.329

M 2.2067 0.791498186906898 34.3 445.9 0.566

N 4.4719 1.497813374243208 14.7 147 1.428

P 4.5759 1.52080340069186 20.3 60.9 1.495

Q 4.477 1.498953179258828 16.3 130.4 1.115

R 5.4143 1.689043601552014 27.3 109.2 2.016

S 6.4158 1.858763698008529 11.7 70.2 2.214

T 5.347 1.676535655966594 18.7 112.2 1.808

V 6.7783 1.913726333049284 23.3 46.6 1.808

W 0.8047 -0.2172857418300498 74.3 891.6 0.253

Y 2.7609 1.015556713530784 50 350 1.428

A 7.8315 2.05815406253658 11.7 11.7 1.448 M. musculus
0.41 -0.627306028 -0.711157591 -0.821105996 -0.932147955 0.714190769
C 1.6824 0.520221345406353 24.7 741 1.108

D 5.3894 1.684434061470506 12.7 114.3 1.108

E	7.2169	1.976425497821213	15.3	76.5	1.108	
F	3.637	1.291159166004852	52	208	1.462	
G	7.4357	2.006292724774232	11.7	11.7	1.448	
H	2.2143	0.794936326461979	38.3	536.2	1.108	
I	4.8985	1.58892903580256	32.3	64.6	1.924	
K	7.2677	1.983439872852074	30.3	242.4	1.462	
L	8.8486	2.180259254415754	27.3	54.6	2.339	
M	2.4293	0.887603150009901	34.3	445.9	0.576	
N	3.823	1.341035454714276	14.7	147	1.462	
P	5.0688	1.623104103197915	20.3	60.9	1.448	
Q	4.297	1.457917104792858	16.3	130.4	1.108	
R	5.5858	1.720227663086812	27.3	109.2	1.986	
S	6.7039	1.90268944660075	11.7	70.2	2.207	
T	5.3565	1.678310776720476	18.7	112.2	1.801	
V	6.5157	1.874214649164248	23.3	46.6	1.801	
W	0.9851	-1.50121201205035e-2	74.3	891.6	0.223	
Y	2.8128	1.034180428508721	50	350	1.462	

A	7.995	2.078816346285917	11.7	11.7	1.484	B. taurus

0.42 -0.589941664 -0.719449789 -0.753669482 -0.883763224 0.716520906

C	2.3278	0.844923615525739	24.7	741	1.114	
D	5.1828	1.645345450772519	12.7	114.3	1.114	
E	7.6465	2.034248026806041	15.3	76.5	1.114	
F	3.6564	1.296479056797527	52	208	1.436	
G	6.2101	1.826176998875316	11.7	11.7	1.484	
H	2.2243	0.799442259377547	38.3	536.2	1.114	
I	4.6997	1.547498676891571	32.3	64.6	1.894	
K	7.4404	2.006924610840659	30.3	242.4	1.436	
L	9.92	2.294552921296781	27.3	54.6	2.332	

M	2.1788	0.778774266527382	34.3	445.9	0.569	
N	3.4877	1.24924249317342	14.7	147	1.436	
P	5.572	1.717754055917559	20.3	60.9	1.484	
Q	4.608	1.52779392339359	16.3	130.4	1.114	
R	4.0552	1.400000008176003	27.3	109.2	2.009	
S	6.9309	1.935989674899287	11.7	70.2	2.212	
T	5.2381	1.655958837159489	18.7	112.2	1.807	
V	6.6675	1.897244977074032	23.3	46.6	1.807	
W	0.9763	-2.39853627505112e-2	74.3	891.6	0.246	
Y	2.9822	1.09266128317467	50	350	1.436	

A	10.0677	2.309332279451288	11.7	11.7	1.336	S. pyogenes

0.39 -0.573824857 -0.563016107 -0.788632802 -0.921540735 0.587196131

C	0.318	-1.14570389620196	24.7	741	1.09	
D	5.9946	1.790859063984891	12.7	114.3	1.09	
E	7.9177	2.069100759610512	15.3	76.5	1.09	
F	3.3364	1.20489238138532	52	208	1.537	
G	7.6573	2.035659441198921	11.7	11.7	1.336	
H	1.5742	0.453747206726213	38.3	536.2	1.09	
I	6.367	1.851128401034889	32.3	64.6	2.013	
K	8.0933	2.091036558898562	30.3	242.4	1.537	
L	7.9674	2.0753582162422	27.3	54.6	2.361	
M	2.337	0.848868055556721	34.3	445.9	0.596	
N	4.4748	1.498461657990638	14.7	147	1.537	
P	3.3167	1.198970312703145	20.3	60.9	1.336	
Q	3.5511	1.267257414645821	16.3	130.4	1.09	
R	4.4969	1.503388270494403	27.3	109.2	1.913	
S	5.474	1.700009610618487	11.7	70.2	2.188	
T	5.8921	1.773612470622007	18.7	112.2	1.783	
V	7.9199	2.069378579483996	23.3	46.6	1.783	

W 0.556 -0.586986984731555 74.3 891.6 0.148

Y 2.688 0.988797422660903 50 350 1.537

A 8.228 2.107542971790711 11.7 11.7 1.484 G. gallus

0.42 -0.616631184 -0.689509371 -0.819144447 -0.936324673 0.70847817

C 1.4166 0.348259634337385 24.7 741 1.114

D 5.4153 1.689228280580388 12.7 114.3 1.114

E 7.3495 1.994632283699905 15.3 76.5 1.114

F 3.5913 1.278514253943297 52 208 1.436

G 7.7212 2.043969792371583 11.7 11.7 1.484

H 2.0332 0.70961090659061 38.3 536.2 1.114

I 5.2442 1.657122703999511 32.3 64.6 1.894

K 7.5956 2.027569132269125 30.3 242.4 1.436

L 8.5171 2.142075907313452 27.3 54.6 2.332

M 2.442 0.892817375688513 34.3 445.9 0.569

N 3.8641 1.351728795932577 14.7 147 1.436

P 4.85 1.578978704949392 20.3 60.9 1.484

Q 3.9229 1.366831176206626 16.3 130.4 1.114

R 5.4784 1.700813087525231 27.3 109.2 2.009

S 6.6432 1.893593775109323 11.7 70.2 2.212

T 5.3958 1.685620873166388 18.7 112.2 1.807

V 6.5154 1.874168605468773 23.3 46.6 1.807

W 0.9138 -9.01435498529659e-2 74.3 891.6 0.246

Y 2.8622 1.051590559894638 50 350 1.436