

**Additional Table 1: Similarity Matrix for the *luxR* homologs.** Percentage sequence similarity (lower left) and number of nucleotide differences (top right).

	1	2	3	4	5	6	7	8	9	
1	<i>A. hydrophila</i> (X89469)		35	5	32	42	33	105	41	132
2	<i>A. salmonicida</i> (U65741)	95.49		38	24	11	29	107	54	137
3	<i>A. hydrophila</i> ATCC 7966 <sup>T</sup>	99.36	95.14		31	43	32	102	40	133
4	<i>A. bestiarum</i> ATCC 51108 <sup>T</sup>	95.88	96.90	96.04		23	7	105	41	136
5	<i>A. hydrophila</i> CDC 0434-84	94.58	98.58	94.46	97.06		24	111	57	141
6	<i>A. caviae</i> ATCC 15468 <sup>T</sup>	95.74	96.29	95.88	99.11	96.90		106	44	136
7	<i>A. media</i> ATCC 33907 <sup>T</sup>	86.46	86.33	86.84	86.46	85.69	86.46		116	144
8	<i>A. eucrenophila</i> ATCC 23309 <sup>T</sup>	94.71	93.11	94.84	94.71	92.65	94.38	85.19		139
9	<i>A. sobria</i> CIP 7433 <sup>T</sup>	83.01	82.37	82.71	82.50	81.67	82.50	81.47	82.11	
10	<i>A. veronii</i> bt <i>sobria</i> CDC 0437-84	95.41	99.36	95.02	97.06	98.97	96.65	86.46	93.23	82.11
11	<i>A. jandaei</i> ATCC 49568 <sup>T</sup>	96.78	95.02	96.43	95.49	93.93	95.62	86.59	93.56	82.24
12	<i>A. veronii</i> bt <i>veronii</i> ATCC 35624 <sup>T</sup>	96.78	97.69	96.43	98.34	97.06	97.69	86.46	94.38	82.46
13	<i>Aeromonas</i> sp. ATCC 35941 <sup>T</sup>	94.12	95.49	93.69	96.43	94.84	95.74	86.84	92.65	82.37
14	<i>A. schubertii</i> ATCC 43700	92.08	93.11	91.62	93.93	92.21	93.49	85.69	90.17	84.66
15	<i>Aeromonas</i> sp. ATCC 43946	92.52	94.46	92.65	94.12	94.12	94.25	84.16	90.71	79.60
16	<i>A. trota</i> ATCC 49657 <sup>T</sup>	96.04	95.02	95.62	95.74	94.25	95.41	86.46	93.69	81.80
17	<i>A. allosaccharophila</i> CECT 4199 <sup>T</sup>	96.65	95.02	96.29	95.62	93.93	95.49	86.84	93.36	82.50
18	<i>A. encheleia</i> CECT 4342 <sup>T</sup>	96.52	97.55	96.17	99.11	96.90	98.47	86.72	95.14	82.46
19	<i>A. popoffii</i> LMG 17541 <sup>T</sup>	95.28	96.65	94.84	97.69	96.04	97.06	86.08	94.12	81.80
20	<i>A. culicicola</i> MTCC 3249 <sup>T</sup>	83.37	82.71	83.14	82.37	82.11	82.11	81.08	82.50	93.05
21	<i>A. culicicola</i> SH	96.17	97.19	95.74	98.97	96.52	98.58	86.46	94.71	82.24
22	<i>A. culicicola</i> SLH	83.01	83.37	82.46	82.59	82.34	82.12	81.22	81.43	84.79
23	<i>A. caviae</i> AE-11	97.19	94.84	96.78	95.41	93.81	95.49	86.72	93.69	82.58
24	<i>A. veronii</i> bt <i>sobria</i> AE-21	97.19	94.84	96.78	95.41	93.81	95.49	86.72	93.69	82.58
25	<i>A. caviae</i> AE-23	96.29	96.52	95.88	98.08	95.88	97.94	86.59	94.38	82.24
26	<i>A. trota</i> AE-31	97.32	95.14	96.90	95.74	94.25	95.88	86.84	93.81	83.01
27	<i>A. caviae</i> AE-34	86.46	85.43	86.46	85.43	84.65	85.19	93.69	84.04	81.21
28	<i>A. caviae</i> AE-39	97.06	95.14	96.65	95.74	94.25	95.88	86.59	93.81	82.50
29	<i>A. veronii</i> bt <i>sobria</i> AE-41	97.06	94.71	96.65	95.28	93.69	95.41	86.59	93.56	82.46
30	<i>A. schubertii</i> AE-48	96.65	94.38	96.29	94.84	93.36	95.02	86.33	93.36	82.24
31	<i>Aeromonas</i> sp. AE-51	97.32	95.14	96.90	95.74	94.25	95.88	86.84	93.81	83.01
32	<i>A. hydrophila</i> AE-53	97.32	95.02	96.90	95.49	93.93	95.62	86.84	93.81	82.58
33	<i>A. hydrophila</i> AE-55	96.65	94.38	96.29	94.84	93.36	95.02	86.33	93.23	82.11
34	<i>A. hydrophila</i> AE-57	97.32	94.84	96.90	95.49	93.93	95.41	86.72	93.93	82.71
35	<i>A. hydrophila</i> AN-1	97.19	94.84	96.78	95.41	93.81	95.28	86.46	93.81	82.58
36	<i>A. hydrophila</i> AN-2	97.32	95.02	96.90	95.49	93.93	95.41	86.59	93.81	82.71
37	<i>A. hydrophila</i> AN-3	97.32	95.02	96.90	95.49	93.93	95.41	86.59	93.81	82.58
38	<i>Aeromonas</i> sp. AN-24	97.32	94.84	96.90	95.49	93.93	95.62	87.10	93.81	82.71
39	<i>A. hydrophila</i> AN-25	97.19	94.71	96.78	95.41	93.81	95.49	86.84	93.69	82.58
40	<i>Aeromonas</i> sp. AN-30	97.19	94.84	96.78	95.41	93.81	95.41	86.59	93.69	82.46
41	<i>A. hydrophila</i> AN-32	97.06	94.71	96.65	95.28	93.69	95.28	86.46	93.56	82.46
42	<i>A. trota</i> AN-35	83.27	82.50	82.71	81.67	81.67	81.54	80.38	82.24	92.40
43	<i>Aeromonas</i> sp. AN-46	96.90	94.58	96.52	95.14	93.56	95.28	86.59	93.49	82.50
44	<i>A. veronii</i> bt <i>sobria</i> AN-50	96.52	94.25	96.17	94.71	93.23	94.58	85.81	93.11	82.11
45	<i>A. jandaei</i> AN-51	97.19	94.84	96.78	95.41	93.81	95.49	86.72	93.69	82.58
46	<i>A. veronii</i> 211c	96.04	97.32	95.62	98.58	96.65	98.21	86.84	94.58	82.50
47	<i>A. media</i> 345	86.59	85.81	86.46	85.69	85.19	85.44	95.14	84.42	80.50
48	<i>A. veronii</i> CECT 4246	83.01	82.24	82.46	81.41	81.41	81.34	80.63	81.80	93.44
49	<i>A. bestiarum</i> LMG 13448	96.43	97.69	96.04	99.23	97.06	98.58	86.59	95.02	82.58
50	<i>A. bestiarum</i> LMG 13662	96.29	97.55	95.88	99.11	96.90	98.71	86.72	94.84	82.46
51	<i>A. salmonicida</i> CECT 894 <sup>T</sup>	95.41	99.87	95.02	96.78	98.47	96.43	86.46	92.90	82.24
52	<i>Aeromonas</i> sp. Manipal A1	97.19	94.71	96.78	95.41	93.81	95.49	87.10	93.69	82.58
53	<i>Aeromonas</i> sp. BJMC	96.65	94.25	96.29	94.84	93.36	95.02	86.46	93.23	82.37
54	<i>A. hydrophila</i> ATCC 49140	97.55	93.56	97.19	93.93	92.90	94.38	85.43	93.11	81.47
55	<i>A. bestiarum</i> ATCC 13444	95.14	99.11	94.71	96.78	98.71	96.43	86.46	92.90	82.11
56	<i>A. bestiarum</i> ATCC 23211	94.84	98.84	94.46	96.52	98.47	96.17	86.21	92.77	81.67
57	<i>A. bestiarum</i> ATCC 23213	96.17	97.32	95.74	98.71	96.65	98.34	86.46	94.58	82.24
58	<i>A. caviae</i> RK 27611	96.90	94.46	96.78	95.14	93.81	95.28	87.10	93.69	82.50
59	<i>A. caviae</i> RK 65541	86.21	85.44	86.33	85.81	85.31	85.56	92.90	83.75	81.34
60	<i>A. veronii</i> bv <i>sobria</i> RK 43939	82.34	82.59	82.38	82.12	81.56	81.43	80.65	81.35	84.30
61	<i>A. veronii</i> bv <i>sobria</i> RK 77343	83.14	83.49	82.59	82.59	82.46	81.81	81.48	81.56	84.66
62	<i>A. hydrophila</i> RK 217215	96.43	93.93	96.04	94.84	93.11	94.71	86.33	92.90	82.50
63	<i>A. hydrophila</i> RK 70363	97.06	94.58	96.65	95.28	93.69	95.41	87.10	93.56	82.46
64	<i>Aeromonas</i> sp. 1m	97.32	94.84	96.90	95.49	93.93	95.41	86.72	93.81	82.71
65	<i>Aeromonas</i> sp. 12m	97.19	94.71	96.78	95.41	93.81	95.49	87.10	93.69	82.46
66	<i>Aeromonas</i> sp. 13m	98.97	94.71	98.58	95.14	93.81	95.28	86.46	93.93	82.37
67	<i>Aeromonas</i> sp. 15m	97.32	94.84	96.90	95.49	93.93	95.62	86.84	93.81	82.58
68	<i>Aeromonas</i> sp. 17m	99.74	95.49	99.36	95.88	94.58	96.04	86.72	94.71	83.01
69	<i>Aeromonas</i> sp. 19m	97.32	94.84	96.90	95.49	93.93	95.62	87.23	93.81	82.58
70	<i>A. media</i> CDC 0862-83	85.44	84.04	85.43	85.06	84.42	85.31	94.46	83.39	80.18
71	<i>A. culicicola</i> 2238A	83.75	83.01	83.37	82.50	82.24	82.24	80.77	82.58	93.50
72	<i>A. culicicola</i> 3037T	83.37	82.46	83.14	82.11	81.67	81.67	81.08	82.37	93.76





	36	37	38	39	40	41	42	43	44	45	46	47	48
1	21	21	21	22	22	23	130	24	27	22	31	104	132
2	39	39	40	41	40	41	136	42	45	40	21	110	138
3	24	24	24	25	25	26	133	27	30	25	34	105	135
4	35	35	35	36	36	37	141	38	41	36	11	111	143
5	47	47	47	48	48	49	141	50	53	48	26	116	143
6	36	36	34	35	36	37	142	37	42	35	14	114	145
7	104	104	101	102	104	105	151	104	110	103	102	38	149
8	48	48	48	49	49	50	138	51	54	49	42	122	140
9	133	134	133	134	135	135	59	136	139	134	136	150	51
10	41	41	39	40	41	42	134	42	47	40	18	109	137
11	10	10	8	7	8	9	134	9	16	9	26	102	139
12	28	28	28	29	29	30	137	31	34	29	12	107	137
13	43	44	44	45	45	45	137	46	48	44	25	100	137
14	62	63	63	64	64	64	128	65	67	63	46	108	128
15	56	56	55	56	57	58	159	58	62	57	48	129	161
16	14	14	12	11	12	13	133	13	20	13	24	104	136
17	9	9	7	8	9	10	135	8	15	8	29	102	136
18	28	28	28	29	29	30	136	31	34	29	6	105	138
19	40	40	38	39	41	42	136	41	46	41	13	110	138
20	128	128	128	129	130	130	12	131	133	129	133	151	10
21	33	33	31	30	31	32	136	34	39	32	5	106	141
22	130	131	128	127	129	129	120	131	135	129	127	133	123
23	1	3	3	4	3	2	132	4	7	0	33	103	133
24	1	3	3	4	3	2	132	4	7	0	33	103	133
25	26	26	24	23	24	25	137	27	32	25	8	105	140
26	4	4	2	3	4	5	130	5	10	3	30	102	131
27	106	106	103	102	104	105	147	105	111	105	104	45	147
28	10	10	6	5	8	9	132	9	16	9	24	102	137
29	2	4	4	3	2	1	131	5	8	1	32	102	134
30	5	7	7	6	5	4	134	8	11	4	35	105	137
31	4	4	2	3	4	5	130	5	10	3	30	102	131
32	2	2	2	3	2	3	132	3	8	1	32	102	133
33	7	5	7	8	7	8	136	4	9	6	37	106	137
34	4	4	2	3	5	6	132	5	10	5	32	103	132
35	1	3	5	6	4	3	133	6	7	2	35	105	133
36		2	4	5	3	2	132	5	6	1	34	104	132
37	99.74		4	5	3	4	132	5	8	3	34	104	132
38	99.49	99.49		1	4	5	131	3	10	3	30	101	132
39	99.36	99.36	99.87		3	4	130	4	11	4	29	100	133
40	99.62	99.62	99.49	99.62		1	130	5	9	3	32	102	134
41	99.74	99.49	99.36	99.49	99.87		130	6	8	2	33	103	134
42	83.01	83.01	83.14	83.27	83.27	83.27		134	137	132	134	149	8
43	99.36	99.36	99.62	99.49	99.36	99.23	82.58		7	4	33	103	135
44	99.23	98.97	98.71	98.58	98.84	98.97	82.37	99.11		7	40	109	137
45	99.87	99.62	99.62	99.49	99.62	99.74	83.01	99.49	99.11		33	103	133
46	95.62	95.62	96.17	96.29	95.88	95.74	82.58	95.74	94.84	95.74		102	139
47	86.59	86.59	87.10	87.23	86.84	86.72	80.63	86.72	86.08	86.72	86.84		149
48	83.01	83.01	83.01	82.71	82.58	82.58	98.96	82.46	82.37	82.71	82.11	80.63	
49	96.04	96.04	96.04	95.88	95.88	95.74	82.46	95.62	95.28	95.88	99.36	86.46	82.37
50	95.88	95.88	96.17	96.04	95.88	95.74	82.46	95.74	95.14	96.04	99.49	86.46	82.24
51	94.84	94.84	95.02	94.84	94.84	94.71	82.50	94.71	94.12	95.02	97.44	86.08	82.11
52	99.36	99.36	99.62	99.49	99.36	99.23	82.71	99.23	98.58	99.49	96.04	87.35	82.58
53	98.84	98.84	99.11	98.97	98.84	98.71	82.46	98.71	98.08	98.97	95.28	86.33	82.50
54	95.49	95.49	95.74	95.88	95.74	95.62	81.80	95.41	94.71	95.62	94.58	85.56	81.34
55	94.46	94.46	94.71	94.84	94.71	94.58	83.01	94.38	93.69	94.58	97.69	86.33	82.37
56	94.25	94.25	94.46	94.38	94.25	94.12	82.46	94.12	93.49	94.38	97.44	85.81	82.24
57	95.74	95.74	96.04	95.88	95.74	95.62	82.37	95.62	95.02	95.88	99.11	86.21	81.80
58	99.11	99.11	99.62	99.49	99.11	98.97	82.58	99.23	98.34	99.23	96.04	87.10	82.46
59	86.08	86.08	86.46	86.46	86.33	86.21	80.63	86.21	85.44	86.21	86.33	93.69	80.63
60	82.71	82.59	83.14	83.27	83.01	83.01	84.04	82.59	82.25	83.01	83.01	82.46	83.49
61	83.37	83.39	83.37	83.39	83.27	83.27	84.42	83.14	82.71	83.39	83.39	83.01	84.42
62	98.58	98.58	98.84	98.71	98.58	98.47	82.50	98.47	97.81	98.71	95.02	86.33	82.37
63	99.23	99.23	99.74	99.87	99.49	99.36	83.14	99.36	98.47	99.36	96.43	87.35	82.58
64	99.49	99.49	99.49	99.36	99.36	99.23	83.01	99.11	98.71	99.36	95.62	86.72	83.01
65	99.36	99.36	99.62	99.49	99.36	99.23	82.71	99.23	98.58	99.49	96.04	87.10	82.58
66	96.52	96.52	96.78	96.65	96.52	96.43	82.58	96.43	95.74	96.65	95.74	86.46	82.37
67	99.49	99.49	99.74	99.62	99.49	99.36	83.01	99.36	98.71	99.62	95.88	86.84	82.71
68	97.32	97.32	97.55	97.44	97.32	97.19	83.39	97.19	96.52	97.44	96.29	86.84	83.01
69	99.49	99.49	99.74	99.62	99.49	99.36	83.01	99.36	98.71	99.62	96.17	87.23	82.71
70	85.31	85.31	85.56	85.69	85.43	85.44	79.28	85.44	84.53	85.44	84.78	96.52	79.33
71	83.75	83.75	83.75	83.63	83.49	83.49	97.16	83.37	83.27	83.63	83.01	80.63	97.43
72	83.37	83.37	83.37	83.39	83.27	83.27	96.75	83.14	82.71	83.39	82.46	80.77	97.43

	49	50	51	52	53	54	55	56	57	58	59	60	61
1	28	29	36	22	26	19	38	40	30	24	108	137	132
2	18	19	1	41	45	50	7	9	21	43	114	135	128
3	31	32	39	25	29	22	41	43	33	25	107	138	135
4	6	7	25	36	40	47	25	27	10	38	110	140	135
5	23	24	12	48	52	55	10	12	26	48	115	143	136
6	11	10	28	35	39	44	28	30	13	37	112	144	141
7	104	103	106	101	105	113	106	108	106	101	55	150	145
8	39	40	55	49	53	54	55	56	42	49	126	146	143
9	134	135	138	134	137	144	139	141	138	136	145	122	118
10	17	16	4	40	44	49	2	4	18	42	113	135	130
11	31	30	38	9	15	35	39	41	31	9	109	138	135
12	9	10	19	29	33	40	19	21	13	31	111	136	131
13	22	23	36	45	49	61	36	37	26	47	106	126	121
14	43	44	55	63	68	77	57	58	47	66	117	129	125
15	46	47	44	57	61	71	46	48	48	56	133	156	151
16	29	28	38	13	19	41	37	39	29	13	107	134	131
17	30	29	38	10	14	38	41	43	32	10	105	133	130
18	3	4	20	29	33	42	20	22	7	31	108	135	130
19	12	13	27	41	45	52	27	29	15	41	114	142	137
20	131	132	134	130	132	141	133	134	134	131	146	126	120
21	4	3	21	32	36	41	19	23	6	34	109	135	134
22	131	130	128	126	134	143	129	129	131	129	136	14	9
23	32	31	39	4	8	34	42	44	32	6	108	133	130
24	32	31	39	4	8	34	42	44	32	6	108	133	130
25	11	10	26	23	29	40	24	26	13	25	108	136	133
26	29	28	37	3	7	33	39	41	29	5	107	131	128
27	108	107	112	103	109	115	110	114	110	103	10	138	135
28	29	28	37	7	13	33	37	39	29	7	109	136	133
29	33	32	40	5	9	33	41	45	33	7	107	132	131
30	36	35	43	8	12	36	44	48	36	10	110	135	134
31	29	28	37	3	7	33	39	41	29	5	107	131	128
32	31	30	38	3	7	33	41	43	31	5	107	133	130
33	36	35	43	8	12	38	46	48	36	10	111	138	135
34	31	32	41	5	9	34	43	45	33	5	108	134	129
35	32	33	41	6	10	35	44	46	34	8	110	135	130
36	31	32	40	5	9	35	43	45	33	7	109	134	129
37	31	32	40	5	9	35	43	45	33	7	109	135	130
38	31	30	39	3	7	33	41	43	31	3	106	132	129
39	32	31	40	4	8	32	40	44	32	4	105	131	130
40	32	32	40	5	9	33	41	45	33	7	107	133	131
41	33	33	41	6	10	34	42	46	34	8	108	133	131
42	135	135	136	133	135	140	132	135	137	134	149	124	121
43	34	33	41	6	10	36	44	46	34	6	108	135	132
44	37	38	46	11	15	41	49	51	39	13	114	139	134
45	32	31	39	4	8	34	42	44	32	6	108	133	130
46	5	4	20	31	37	42	18	20	7	31	107	133	130
47	106	105	109	99	107	112	107	110	108	101	49	136	133
48	137	138	139	134	136	145	137	138	140	135	149	127	121
49		1	19	32	36	43	19	21	4	34	109	135	130
50	99.87		18	31	35	42	18	20	3	33	108	134	131
51	97.55	97.69		40	44	49	6	8	20	42	113	134	129
52	95.88	96.04	94.84		8	34	42	41	32	4	108	132	127
53	95.41	95.49	94.38	98.97		38	46	48	36	10	112	137	135
54	94.46	94.58	93.69	95.62	95.14		49	53	42	36	117	147	146
55	97.55	97.69	99.23	94.58	94.12	93.69		6	20	44	111	135	132
56	97.32	97.44	98.97	94.71	93.81	93.23	99.23		22	44	117	137	130
57	99.49	99.62	97.44	95.88	95.41	94.58	97.44	97.19		34	111	135	132
58	95.62	95.74	94.58	99.49	98.71	95.41	94.38	94.38	95.62		108	133	130
59	86.08	86.21	85.43	86.21	85.56	85.06	85.69	85.06	85.69	86.21		137	136
60	82.59	82.71	82.71	83.14	82.34	81.22	82.59	82.34	82.59	83.01	82.34		17
61	83.39	83.27	83.37	83.62	82.59	81.35	83.14	83.39	83.14	83.39	82.46	97.81	
62	95.14	95.28	94.12	98.71	98.21	95.41	93.81	93.56	95.14	98.47	85.56	82.34	82.71
63	95.74	95.88	94.71	99.62	98.84	95.74	94.71	94.46	95.74	99.62	86.46	83.14	83.37
64	96.04	95.88	94.71	99.36	98.84	95.74	94.46	94.25	95.74	99.11	86.21	82.71	83.37
65	95.88	96.04	94.84	99.74	98.97	95.88	94.58	94.58	96.04	99.49	86.21	82.71	83.37
66	95.62	95.74	94.84	96.90	96.17	97.06	94.58	94.58	95.62	96.65	85.69	82.12	82.59
67	96.04	96.17	95.02	99.62	99.11	95.74	94.71	94.46	96.04	99.36	86.33	83.01	83.39
68	96.43	96.52	95.62	97.44	96.90	97.81	95.41	95.14	96.43	97.19	86.46	82.59	83.14
69	96.04	96.17	95.02	99.87	99.11	95.74	94.71	94.71	96.04	99.62	86.33	83.01	83.49
70	84.53	84.65	84.16	85.44	85.19	84.29	84.42	83.49	84.42	85.44	92.77	80.21	80.33
71	83.27	83.14	82.71	83.63	83.39	82.24	82.58	82.58	82.71	83.37	81.08	84.17	85.20
72	82.71	82.58	82.50	83.39	83.01	81.67	82.37	82.37	82.50	83.14	81.21	83.63	84.66

	62	63	64	65	66	67	68	69	70	71	72
1	28	23	21	22	8	21	2	21	114	125	128
2	47	42	40	41	41	40	35	40	125	132	135
3	31	26	24	25	11	24	5	24	113	128	131
4	40	37	35	36	38	35	32	35	117	136	139
5	54	49	47	48	48	47	42	47	122	138	141
6	41	36	36	35	37	34	31	34	115	138	141
7	107	101	103	101	106	102	103	100	43	148	147
8	55	50	48	49	47	48	41	48	130	134	137
9	136	135	133	135	137	134	132	134	154	50	48
10	46	41	41	40	40	39	34	39	124	132	135
11	17	6	12	9	27	10	23	8	115	132	135
12	35	30	28	29	29	28	25	28	121	131	134
13	51	46	44	45	52	44	46	44	116	132	135
14	68	65	63	64	67	63	62	63	124	117	120
15	63	57	56	57	64	56	58	56	135	155	158
16	21	10	16	13	33	14	29	12	119	129	132
17	16	9	11	10	30	9	24	9	115	129	132
18	35	30	28	29	33	28	27	28	119	131	134
19	46	40	40	41	43	40	37	40	124	131	134
20	133	130	128	130	133	129	128	129	159	14	17
21	38	31	33	32	34	31	28	31	120	134	137
22	132	126	130	128	134	129	131	127	154	117	120
23	10	5	5	4	26	3	20	3	114	126	129
24	10	5	5	4	26	3	20	3	114	126	129
25	31	22	26	23	31	24	27	22	120	133	136
26	9	4	4	3	25	2	19	2	113	124	127
27	109	101	105	103	106	104	103	102	59	145	144
28	15	4	10	7	25	8	21	6	115	130	133
29	11	4	6	5	27	4	21	4	113	127	130
30	14	7	9	8	30	7	24	7	116	130	133
31	9	4	4	3	25	2	19	2	113	124	127
32	9	4	4	3	25	2	19	2	113	126	129
33	14	9	9	8	30	7	24	7	117	130	133
34	11	4	4	5	27	4	21	4	114	125	128
35	12	7	5	6	28	5	22	5	116	126	129
36	11	6	4	5	27	4	21	4	115	125	128
37	11	6	4	5	27	4	21	4	115	125	128
38	9	2	4	3	25	2	19	2	112	125	128
39	10	1	5	4	26	3	20	3	111	126	129
40	11	4	5	5	27	4	21	4	113	127	130
41	12	5	6	6	28	5	22	5	114	127	130
42	136	131	132	133	134	132	129	132	161	22	25
43	12	5	7	6	28	5	22	5	114	128	131
44	17	12	10	11	33	10	27	10	120	130	133
45	10	5	5	4	26	3	20	3	114	126	129
46	39	28	34	31	33	32	29	30	118	132	135
47	107	99	103	101	105	102	102	100	27	149	148
48	137	134	132	134	137	133	132	133	159	20	20
49	38	33	31	32	34	31	28	31	120	130	133
50	37	32	32	31	33	30	27	30	119	131	134
51	46	41	41	40	40	39	34	39	124	133	136
52	10	3	5	2	24	3	20	1	114	126	129
53	14	9	9	8	30	7	24	7	116	129	132
54	36	33	33	32	23	33	17	33	123	138	141
55	48	41	43	42	42	41	36	41	122	134	137
56	50	43	45	42	42	43	38	41	128	134	137
57	38	33	33	31	34	31	28	31	122	133	136
58	12	3	7	4	26	5	22	3	114	128	131
59	112	106	108	108	111	107	106	107	56	147	146
60	137	132	134	134	140	133	135	133	155	123	126
61	134	129	129	129	135	130	132	128	154	115	118
62		11	9	10	32	9	26	9	118	130	133
63	98.58		6	3	25	4	21	2	112	127	130
64	98.84	99.23		5	27	4	21	4	114	125	128
65	98.71	99.62	99.36		24	3	20	1	114	127	130
66	95.88	96.78	96.52	96.90		25	6	23	119	130	133
67	98.84	99.49	99.49	99.62	96.78		19	2	113	126	129
68	96.65	97.32	97.32	97.44	99.23	97.55		19	114	125	128
69	98.84	99.74	99.49	99.87	97.06	99.74	97.55		113	126	129
70	84.78	85.56	85.44	85.44	84.65	85.43	85.44	85.43		158	157
71	83.27	83.49	83.75	83.49	83.27	83.63	83.75	83.63	79.46		3
72	82.71	83.27	83.37	83.27	82.71	83.39	83.37	83.39	79.60	99.61	