

Kristinn Einarss.
81/01



ORKUSTOFNUN

NATIONAL ENERGY AUTHORITY

GREINARGEINDASAFN

DREIFING RENNSLIS OG HLAUPANDI
MEDALTAL RENNSLIS Í ÞJÓRSÁ VIÐ
URRIDAFOSS 1947/48-1979/80.

Kristinn Einarsson

KE-81/01

Júlí 1981

Greinargerð

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Að beiðni Landsvirkjunar hef ég tekið saman meðfylgjandi myndir og töflur, er sýna annars vegar dreifingu vikurennslis vatnsárin 1947/48-1963/64 og 1964/65-1979/80 og hins vegar hlaupandi meðaltal 2 vikna rennslis vatnsárin 1947/48-1979/80 í Þjórsá við Urriðafoss, vhm.030. Þessar myndir og töflur eru sem hér segir:

Myndir:

- Mynd 1: Dreifing vikurennslis, meðaltal
- Mynd 2: Dreifing vikurennslis, 25% dreifilína
- Mynd 3: Dreifing vikurennslis, 50% dreifilína
- Mynd 4: Dreifing vikurennslis, 75% dreifilína
- Mynd 5: Hlaupandi meðaltal 2 vikna rennslis vatnsárin
1947/48-1979/80

Töflur:

- Tafla 1: Dreifing vikurennslis vatnsárin 1947/48-1963/64
- Tafla 2: Dreifing vikurennslis vatnsárin 1964/65-1979/80
- Tafla 3: Hlaupandi meðaltal 2 vikna rennslis vatnsárin
1947/48-1979/80.



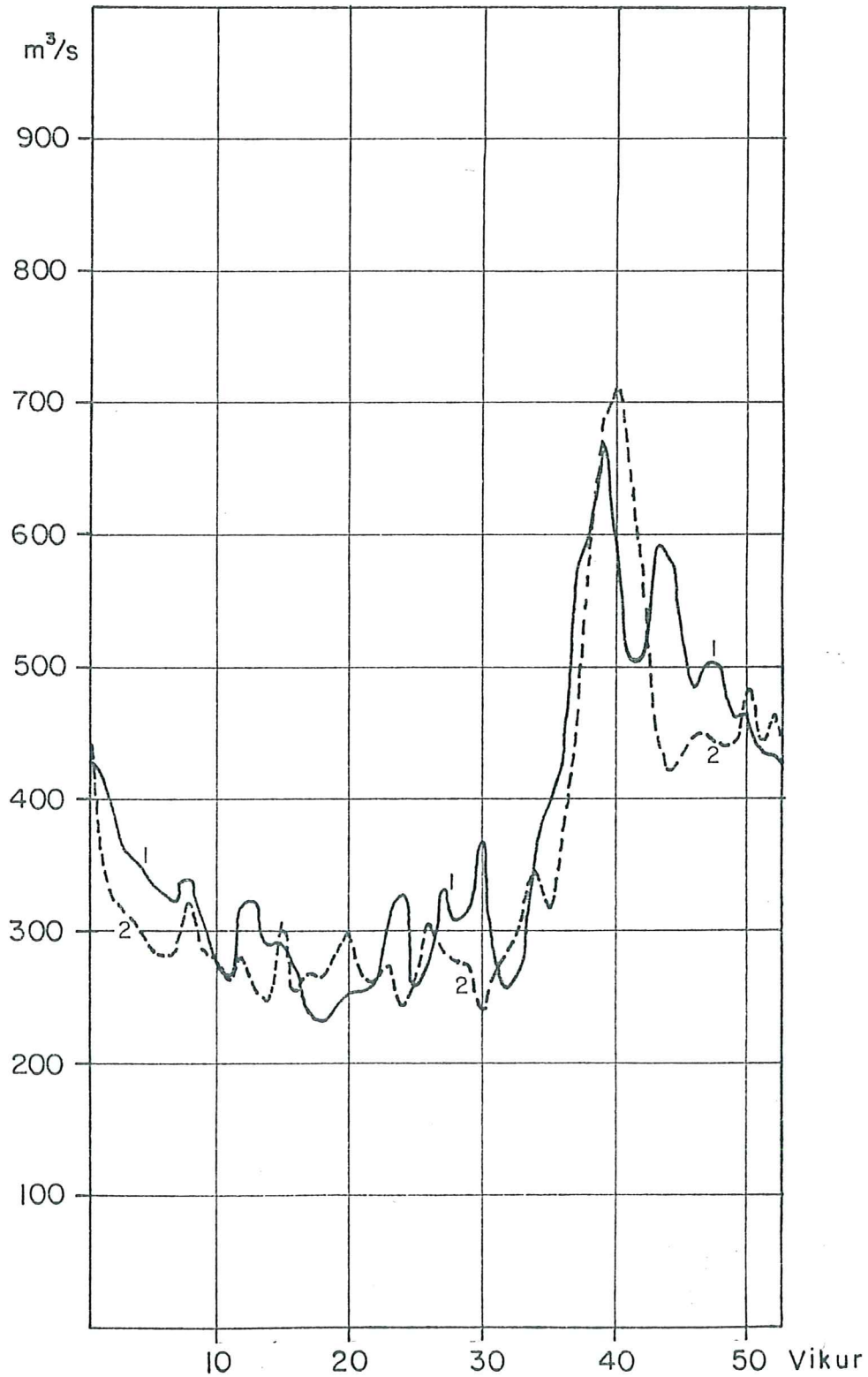
VOD-VV-833. KE
81.06.0807

ÞJÓRSA, URRÍÐAFOSS.

1: 1947/48-1963/64 og 2: 1964/65-1979/80

Dreifing vikurennslis, meðaltal

Mynd I





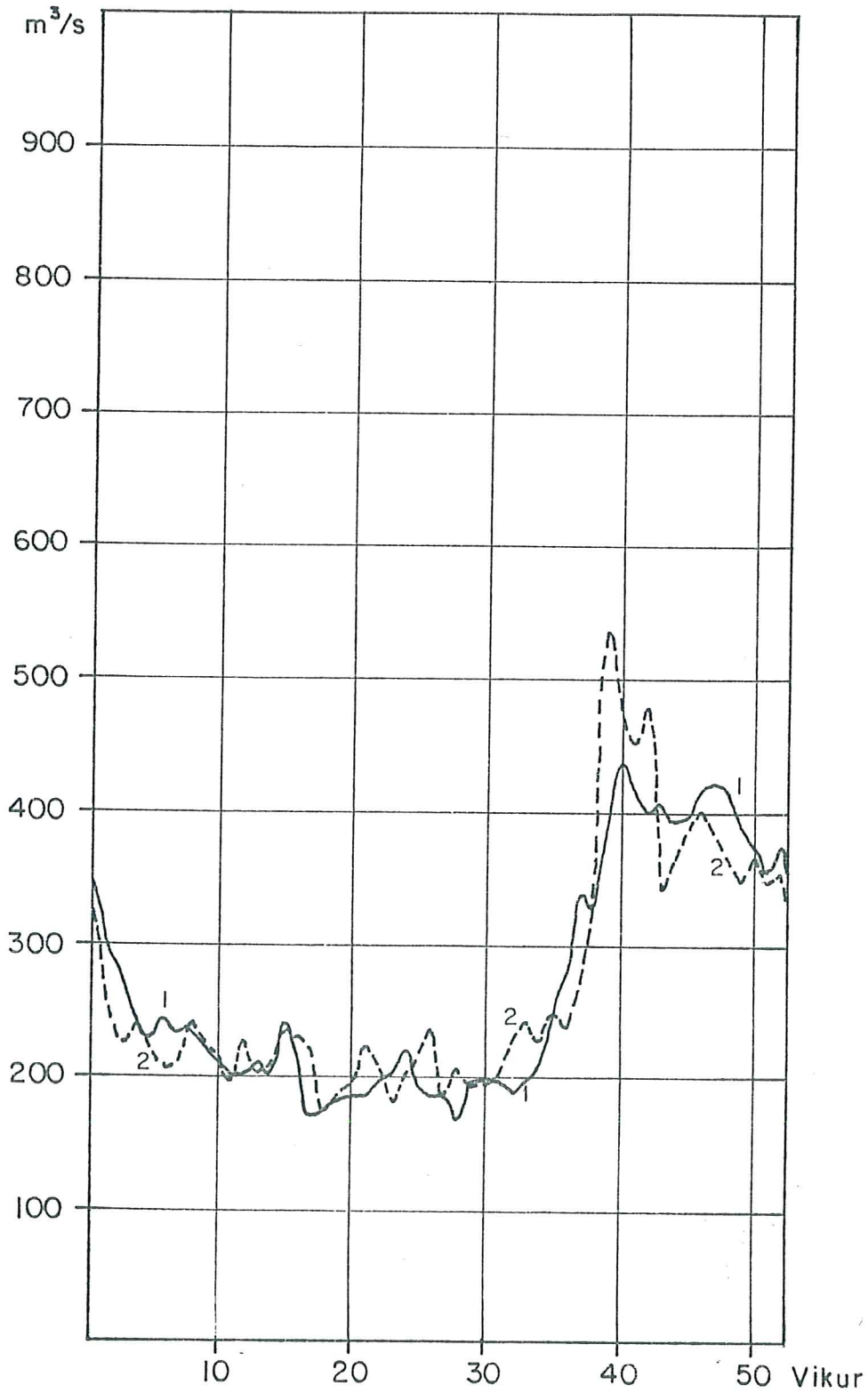
VOD-VV-833. KE
81.06. 0808. Sy.J.

ÞJÓRSÁ, URRÍÐAFOSS

1:1947/48-1963/64 og 2:1964/65-1979/80

Dreifing vikurennslis, 25% dreifilína

Mynd 2





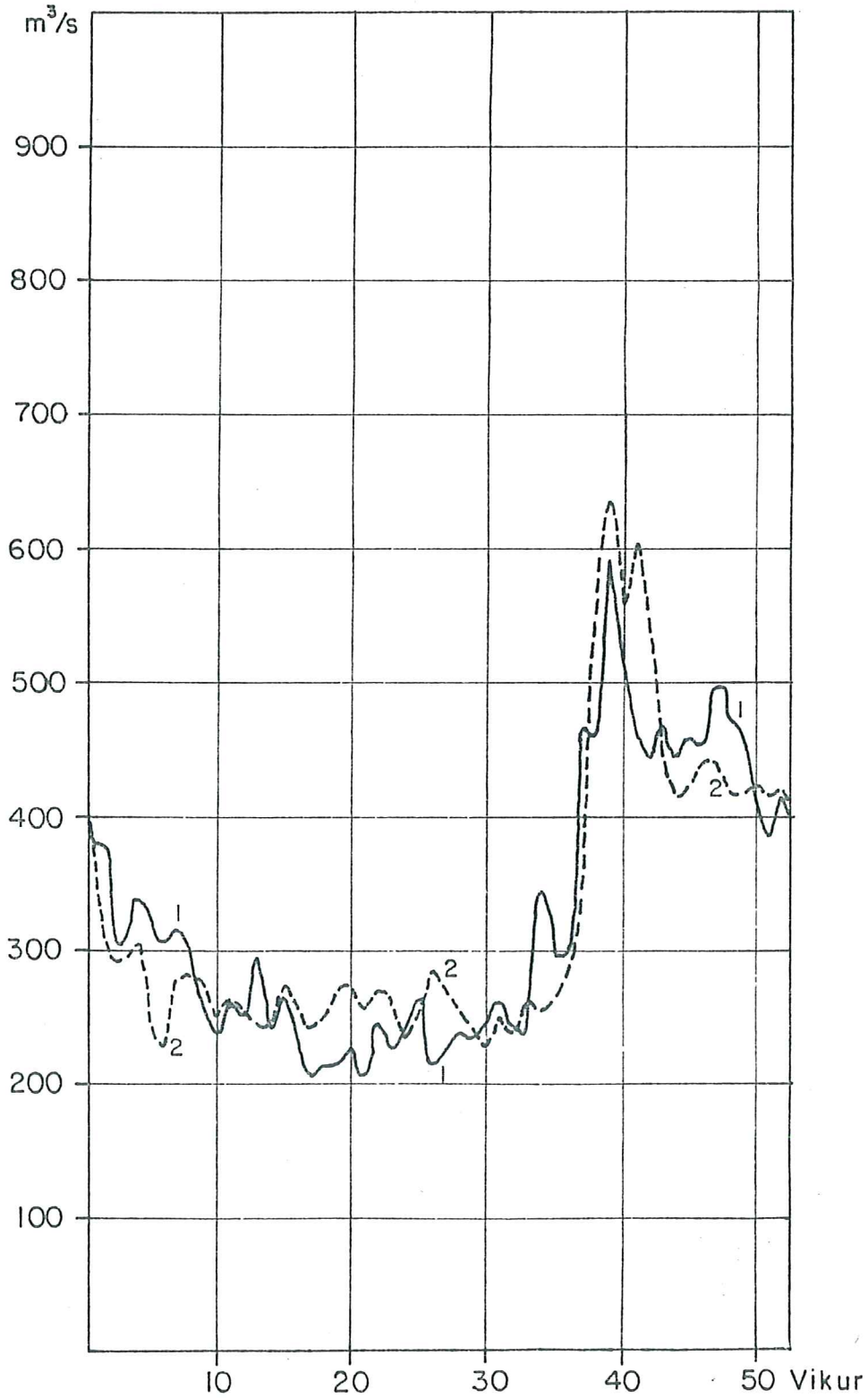
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81.06. 0809 Sy.J.

ÞJÓRSA, URRÍÐAFOSS

1: 1947/48-1963/64 og 2: 1964/65-1979/80

Dreifing vikurennslis, 50% dreifilína

Mynd 3





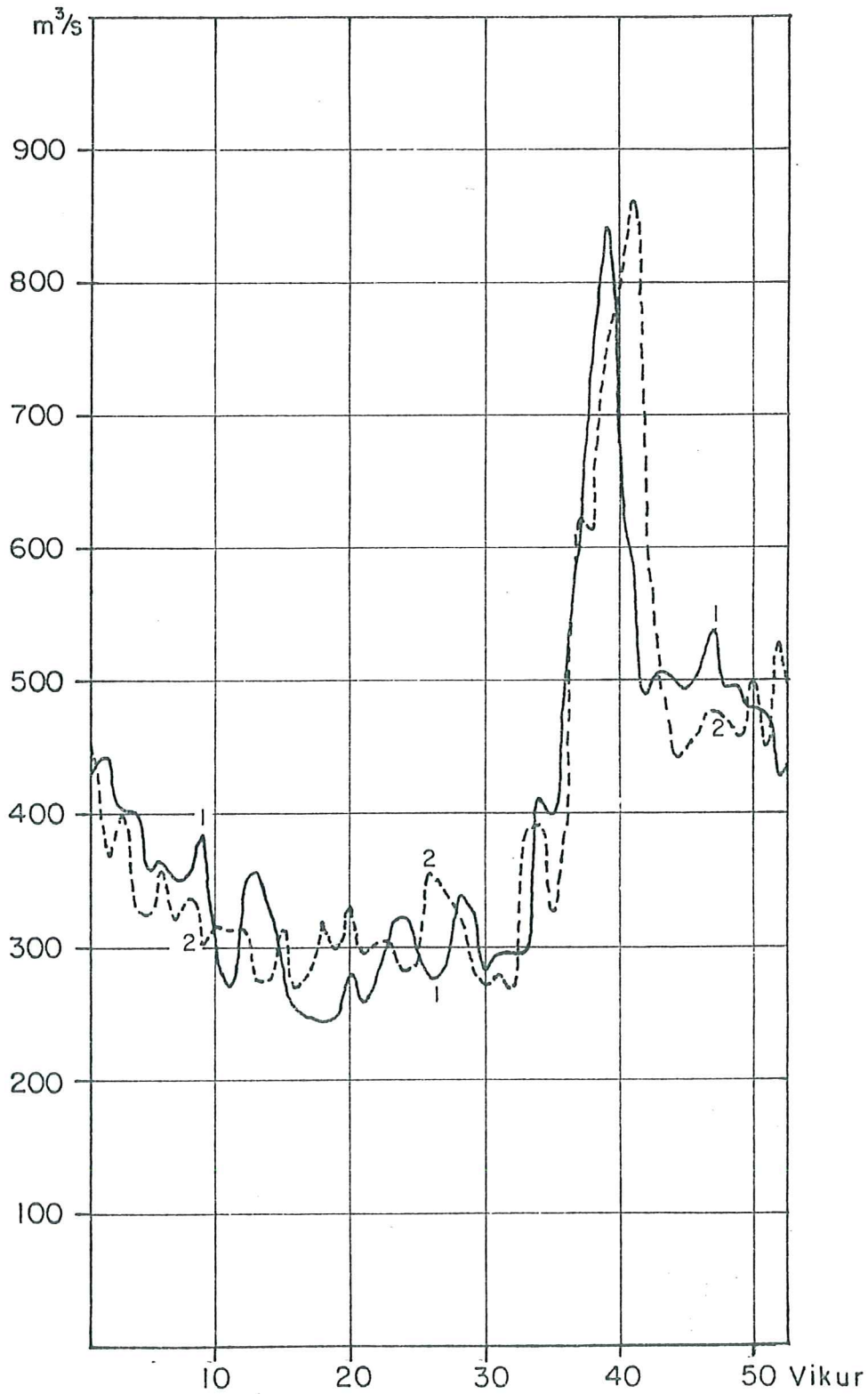
VOD-VV-833.KE
81.06. 0810 Sy.J

ÞJÓRSÁ, URRÍÐAFOSS

1: 1947/48-1963/64 og 2: 1964/65-1979/80

Dreifing vikurennslis, 75% dreifilína

Mynd 4



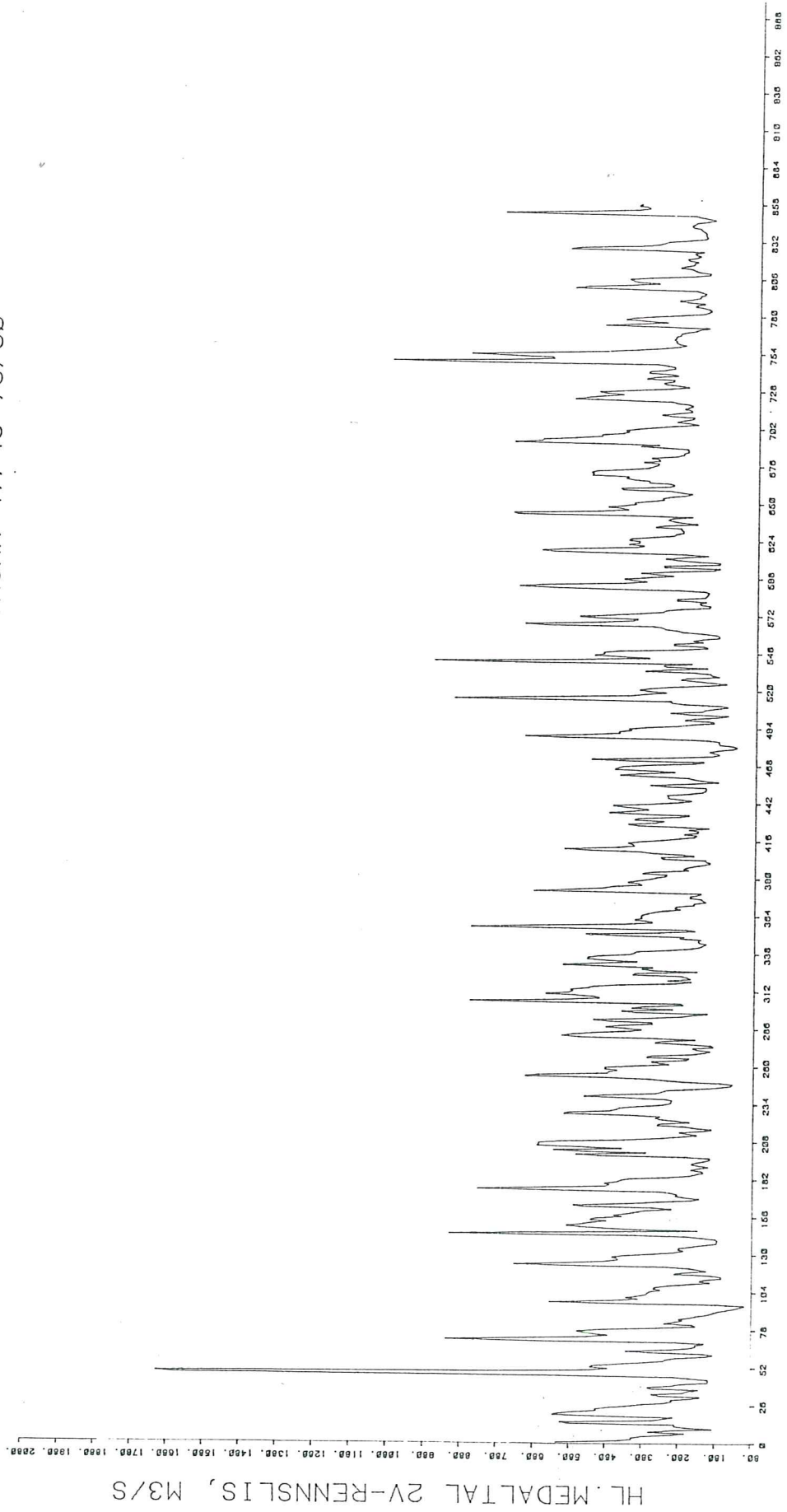
15 V00-VV-833 KE/T

81.07.0816

HL.MEDALTAL 2 VIKNA
YFIR 4 VIKNA TIMABIL

Mynd 5

THJORSÁ, URRIDAFÖSS. VATNSAR 47/48-79/80



2 VIKNA TIMABIL

Tafla 1.
ÞJÓRSA, URRIDAFÖSS.

Dreifins vikurennslis vatnsárin 1947/48 - 1963/64. Allar tölur í m3/s.

KA 1	MEDALTAL	421,76	25%	336,29	50%	380,14	75%	437,29
KA 2	MEDALTAL	396,77	25%	296,43	50%	376,00	75%	442,43
KA 3	MEDALTAL	361,50	25%	274,57	50%	304,29	75%	403,00
KA 4	MEDALTAL	354,82	25%	243,57	50%	338,71	75%	402,43
KA 5	MEDALTAL	337,16	25%	229,14	50%	327,29	75%	358,71
KA 6	MEDALTAL	327,95	25%	244,57	50%	306,43	75%	363,71
KA 7	MEDALTAL	323,58	25%	234,86	50%	314,43	75%	350,57
KA 8	MEDALTAL	340,56	25%	237,71	50%	302,14	75%	352,71
KA 9	MEDALTAL	307,23	25%	221,71	50%	255,00	75%	383,00
KA 10	MEDALTAL	280,25	25%	212,86	50%	238,29	75%	292,14
KA 11	MEDALTAL	267,82	25%	201,71	50%	258,00	75%	270,00
KA 12	MEDALTAL	321,24	25%	202,00	50%	251,43	75%	345,71
KA 13	MEDALTAL	320,61	25%	210,14	50%	294,14	75%	356,29
KA 14	MEDALTAL	289,71	25%	203,29	50%	244,29	75%	325,43
KA 15	MEDALTAL	293,82	25%	241,57	50%	265,29	75%	291,29
KA 16	MEDALTAL	272,97	25%	214,00	50%	236,43	75%	251,71
KA 17	MEDALTAL	238,58	25%	169,71	50%	205,14	75%	246,86
KA 18	MEDALTAL	231,52	25%	177,14	50%	213,86	75%	244,14
KA 19	MEDALTAL	244,21	25%	184,57	50%	215,57	75%	250,71
KA 20	MEDALTAL	250,76	25%	186,29	50%	226,57	75%	279,14
KA 21	MEDALTAL	254,64	25%	179,43	50%	206,86	75%	258,14
KA 22	MEDALTAL	259,35	25%	192,29	50%	244,43	75%	278,86
KA 23	MEDALTAL	305,66	25%	201,57	50%	225,00	75%	315,14
KA 24	MEDALTAL	327,72	25%	221,43	50%	242,00	75%	321,14
KA 25	MEDALTAL	258,07	25%	192,14	50%	263,14	75%	294,29
KA 26	MEDALTAL	279,00	25%	186,00	50%	213,57	75%	274,57
KA 27	MEDALTAL	330,61	25%	187,00	50%	225,14	75%	282,86
KA 28	MEDALTAL	306,86	25%	168,14	50%	239,14	75%	337,00
KA 29	MEDALTAL	315,04	25%	196,00	50%	233,00	75%	328,29
KA 30	MEDALTAL	366,71	25%	198,00	50%	249,14	75%	281,14
KA 31	MEDALTAL	275,20	25%	198,43	50%	260,57	75%	297,71
KA 32	MEDALTAL	257,60	25%	187,43	50%	238,57	75%	296,57
KA 33	MEDALTAL	279,93	25%	198,00	50%	236,43	75%	295,57
KA 34	MEDALTAL	370,95	25%	208,43	50%	344,14	75%	413,29
KA 35	MEDALTAL	396,63	25%	255,14	50%	295,43	75%	400,71
KA 36	MEDALTAL	424,97	25%	278,71	50%	296,43	75%	512,71
KA 37	MEDALTAL	572,76	25%	337,14	50%	465,57	75%	610,00
KA 38	MEDALTAL	602,29	25%	327,86	50%	460,00	75%	762,43
KA 39	MEDALTAL	666,64	25%	397,57	50%	589,43	75%	841,14
KA 40	MEDALTAL	598,98	25%	435,57	50%	511,71	75%	660,00
KA 41	MEDALTAL	505,22	25%	414,86	50%	466,57	75%	590,71
KA 42	MEDALTAL	505,26	25%	399,57	50%	442,57	75%	492,14
KA 43	MEDALTAL	591,03	25%	406,71	50%	466,29	75%	524,86
KA 44	MEDALTAL	574,80	25%	391,71	50%	443,86	75%	503,57
KA 45	MEDALTAL	523,96	25%	394,57	50%	457,14	75%	493,43
KA 46	MEDALTAL	484,76	25%	417,57	50%	454,14	75%	512,00
KA 47	MEDALTAL	502,61	25%	419,00	50%	495,86	75%	539,43
KA 48	MEDALTAL	495,36	25%	413,43	50%	470,86	75%	495,43
KA 49	MEDALTAL	460,87	25%	388,43	50%	460,14	75%	492,29
KA 50	MEDALTAL	462,48	25%	370,86	50%	409,29	75%	479,00
KA 51	MEDALTAL	435,99	25%	361,29	50%	384,43	75%	477,71
KA 52	MEDALTAL	430,93	25%	373,57	50%	413,00	75%	428,57

Tafla 2.
ÞJÓRSA, URRIDAFÖSS.

Dreifing vikurennslis vatnsárin 1964/65 - 1979/80. Allar tölur í m³/s.

IKA 1	MEDALTAL	392,32	25%	309,86	50%	347,57	75%	436,14
IKA 2	MEDALTAL	329,44	25%	248,43	50%	296,14	75%	369,00
IKA 3	MEDALTAL	317,83	25%	226,71	50%	293,29	75%	398,86
IKA 4	MEDALTAL	306,70	25%	239,86	50%	304,43	75%	334,14
IKA 5	MEDALTAL	287,12	25%	223,43	50%	237,71	75%	324,14
IKA 6	MEDALTAL	282,24	25%	207,29	50%	228,71	75%	357,43
IKA 7	MEDALTAL	286,68	25%	209,86	50%	278,00	75%	320,86
IKA 8	MEDALTAL	321,86	25%	246,00	50%	279,57	75%	337,14
IKA 9	MEDALTAL	286,34	25%	224,14	50%	273,57	75%	302,29
IKA 10	MEDALTAL	279,10	25%	218,00	50%	251,14	75%	315,71
IKA 11	MEDALTAL	263,28	25%	195,14	50%	262,14	75%	313,29
IKA 12	MEDALTAL	279,69	25%	227,71	50%	256,57	75%	313,29
IKA 13	MEDALTAL	252,91	25%	203,86	50%	242,29	75%	275,00
IKA 14	MEDALTAL	247,08	25%	211,71	50%	243,29	75%	275,43
IKA 15	MEDALTAL	307,43	25%	235,57	50%	274,43	75%	314,29
IKA 16	MEDALTAL	253,96	25%	230,00	50%	256,43	75%	267,57
IKA 17	MEDALTAL	266,84	25%	218,14	50%	241,29	75%	281,14
IKA 18	MEDALTAL	265,04	25%	174,29	50%	249,57	75%	316,71
IKA 19	MEDALTAL	283,07	25%	188,86	50%	271,29	75%	298,00
IKA 20	MEDALTAL	300,21	25%	196,29	50%	274,71	75%	331,43
IKA 21	MEDALTAL	266,52	25%	223,29	50%	256,00	75%	295,43
IKA 22	MEDALTAL	259,40	25%	207,71	50%	270,43	75%	304,14
IKA 23	MEDALTAL	273,52	25%	181,43	50%	263,86	75%	302,86
IKA 24	MEDALTAL	243,73	25%	203,57	50%	234,71	75%	281,43
IKA 25	MEDALTAL	268,88	25%	219,00	50%	254,71	75%	289,43
IKA 26	MEDALTAL	306,71	25%	237,86	50%	285,00	75%	355,29
IKA 27	MEDALTAL	284,81	25%	184,57	50%	270,14	75%	340,57
IKA 28	MEDALTAL	274,88	25%	207,57	50%	252,29	75%	319,57
IKA 29	MEDALTAL	272,13	25%	193,34	50%	238,00	75%	282,71
IKA 30	MEDALTAL	240,79	25%	195,71	50%	227,29	75%	271,71
IKA 31	MEDALTAL	274,29	25%	203,14	50%	250,57	75%	276,29
IKA 32	MEDALTAL	288,79	25%	231,43	50%	238,43	75%	267,43
IKA 33	MEDALTAL	320,12	25%	242,86	50%	262,57	75%	389,43
IKA 34	MEDALTAL	343,20	25%	228,43	50%	253,86	75%	390,86
IKA 35	MEDALTAL	317,46	25%	248,29	50%	265,71	75%	326,00
IKA 36	MEDALTAL	377,43	25%	235,14	50%	288,29	75%	398,57
IKA 37	MEDALTAL	459,37	25%	277,00	50%	369,43	75%	621,14
IKA 38	MEDALTAL	576,68	25%	344,00	50%	572,43	75%	614,57
IKA 39	MEDALTAL	688,49	25%	536,57	50%	634,29	75%	750,14
IKA 40	MEDALTAL	711,27	25%	471,71	50%	558,14	75%	806,14
IKA 41	MEDALTAL	642,66	25%	451,14	50%	602,86	75%	860,14
IKA 42	MEDALTAL	565,37	25%	477,43	50%	531,71	75%	620,57
IKA 43	MEDALTAL	453,60	25%	342,57	50%	446,43	75%	507,00
IKA 44	MEDALTAL	419,70	25%	366,29	50%	414,86	75%	444,43
IKA 45	MEDALTAL	432,32	25%	387,14	50%	422,29	75%	448,29
IKA 46	MEDALTAL	449,74	25%	400,14	50%	440,00	75%	463,00
IKA 47	MEDALTAL	447,55	25%	380,14	50%	438,57	75%	476,71
IKA 48	MEDALTAL	440,16	25%	364,57	50%	417,57	75%	470,71
IKA 49	MEDALTAL	444,40	25%	348,14	50%	417,71	75%	459,71
IKA 50	MEDALTAL	481,86	25%	364,86	50%	422,43	75%	499,43
IKA 51	MEDALTAL	440,02	25%	347,00	50%	415,00	75%	450,71
IKA 52	MEDALTAL	463,39	25%	354,00	50%	419,86	75%	528,66

Tafla 3.

ÞJÓRSÁ, URRÍÐAFOSS.

Hlaupandi meðaltal 2 vikna rennslis, m³/s,
vatnsárin 1947/48 - 1979/80.

Tekið er meðaltal rennslis hverra 2 vikna og
næstu 2 vikna á undan. Samtals 858 gildi.

KUSTOFNUN
31-06-30

SKRA R030HL.DAT

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2		447.6	52	472.5	102	394.2
3		404.9	53	522.8	103	368.8
4		406.8	54	514.7	104	365.1
5		379.3	55	454.8	105	359.3
6		297.6	56	381.8	106	329.1
7		260.0	57	319.9	107	349.3
8		361.0	58	313.0	108	345.3
9		309.0	59	286.3	109	309.9
10		185.2	60	207.3	110	259.0
11		259.3	61	184.4	111	194.4
12		289.8	62	213.9	112	224.2
13		287.3	63	359.5	113	209.8
14		579.5	64	424.4	114	163.4
15		605.0	65	301.0	115	165.0
16		348.1	66	244.6	116	195.3
17		320.3	67	232.6	117	293.1
18		291.6	68	234.1	118	271.2
19		481.0	69	209.0	119	205.5
20		624.6	70	288.3	120	228.3
21		608.9	71	671.6	121	251.3
22		569.6	72	919.1	122	311.9
23		502.1	73	759.2	123	564.4
24		507.1	74	531.8	124	732.9
25		471.5	75	472.9	125	593.6
26		420.2	76	510.3	126	484.1
27		384.0	77	540.9	127	445.4
28		315.3	78	559.4	128	449.8
29		295.8	79	493.8	129	463.1
30		298.5	80	342.4	130	430.9
31		240.9	81	232.9	131	351.8
32		218.9	82	244.7	132	295.0
33		332.8	83	319.3	133	267.1
34		352.5	84	292.9	134	283.0
35		264.4	85	268.7	135	279.0
36		254.2	86	279.3	136	245.9
37		223.6	87	246.6	137	214.7
38		355.6	88	229.0	138	177.9
39		364.1	89	201.1	139	176.4
40		293.9	90	186.3	140	175.0
41		273.3	91	175.7	141	180.4
42		197.5	92	151.9	142	220.0
43		197.5	93	127.6	143	259.4
44		198.8	94	112.4	144	399.8
45		250.3	95	99.6	145	911.4
46		293.4	96	173.5	146	718.8
47		607.4	97	471.6	147	228.1
48		1667.1	98	635.3	148	397.6
49		1709.4	99	463.9	149	481.1
50		802.4	100	390.2	150	553.1

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52	548,9	202	554,5	252	366,1
53	521,2	203	626,9	253	486,1
54	478,9	204	438,4	254	708,3
55	524,0	205	543,4	255	673,8
56	511,9	206	673,1	256	479,4
57	436,7	207	667,0	257	475,4
58	460,7	208	668,5	258	452,7
59	421,9	209	607,9	259	487,9
60	397,5	210	430,5	260	486,5
61	375,5	211	332,2	261	410,4
62	300,4	212	279,7	262	310,5
63	350,9	213	233,0	263	340,1
64	546,0	214	259,0	264	359,6
65	572,0	215	281,2	265	263,3
66	422,2	216	216,1	266	256,3
67	340,0	217	193,3	267	373,4
68	247,8	218	241,2	268	360,0
69	226,0	219	265,0	269	245,8
70	267,5	220	342,9	270	215,8
71	290,8	221	335,5	271	198,7
72	284,9	222	253,9	272	235,9
73	301,0	223	289,5	273	247,7
74	330,7	224	332,5	274	191,6
75	576,4	225	348,5	275	199,9
76	834,0	226	333,9	276	270,8
77	685,2	227	411,7	277	349,9
78	483,8	228	599,6	278	330,2
79	472,1	229	586,3	279	240,4
80	485,6	230	473,8	280	343,6
81	450,4	231	453,4	281	556,5
82	440,9	232	444,8	282	607,0
83	417,2	233	399,2	283	578,9
84	312,4	234	332,7	284	521,2
85	250,9	235	306,4	285	417,7
86	236,0	236	303,8	286	386,9
87	214,9	237	301,6	287	431,9
88	219,8	238	320,4	288	486,2
89	250,7	239	419,8	289	448,8
90	230,0	240	543,7	290	356,9
91	201,2	241	490,2	291	360,4
92	231,8	242	346,9	292	480,3
93	248,8	243	330,5	293	520,5
94	237,2	244	317,8	294	375,1
95	211,8	245	240,6	295	279,3
96	197,8	246	176,1	296	249,4
97	196,9	247	141,4	297	207,1
98	267,3	248	136,5	298	406,6
99	502,6	249	167,2	299	442,1
0	565,7	250	273,3	300	302,8

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02	384.5	352	542.3	402	216.1
03	273.4	353	344.6	403	216.2
04	284.3	354	243.1	404	334.0
05	647.4	355	268.7	405	338.6
06	860.3	356	580.3	406	248.1
07	594.9	357	858.6	407	279.8
08	503.8	358	694.8	408	363.8
09	516.8	359	431.4	409	397.1
10	570.8	360	359.6	410	533.7
11	652.1	361	376.2	411	605.0
12	588.1	362	408.6	412	461.6
13	577.5	363	388.0	413	411.1
14	584.7	364	392.5	414	416.4
15	534.8	365	389.1	415	429.3
16	521.3	366	376.0	416	396.0
17	448.7	367	357.9	417	333.1
18	290.8	368	332.6	418	289.7
19	252.7	369	283.8	419	248.1
20	317.2	370	300.4	420	241.4
21	254.5	371	294.1	421	276.7
22	265.0	372	245.7	422	238.4
23	281.0	373	248.6	423	236.5
24	413.0	374	213.9	424	264.6
25	404.9	375	223.6	425	208.5
26	236.0	376	226.4	426	277.9
27	361.1	377	259.8	427	404.8
28	388.8	378	257.6	428	429.6
29	357.5	379	234.9	429	352.8
30	489.9	380	227.5	430	331.0
31	605.4	381	431.6	431	412.6
32	506.6	382	689.1	432	401.8
33	400.7	383	582.0	433	289.2
34	485.5	384	495.6	434	262.5
35	539.1	385	470.0	435	388.8
36	536.1	386	390.4	436	483.5
37	508.4	387	399.6	437	419.9
38	420.4	388	429.2	438	374.3
39	407.6	389	401.7	439	400.4
40	400.5	390	368.5	440	447.2
41	308.6	391	350.4	441	472.4
42	254.7	392	324.1	442	367.8
43	228.8	393	321.3	443	293.7
44	221.4	394	389.3	444	256.9
45	212.8	395	366.4	445	287.2
46	232.3	396	262.6	446	321.5
47	236.4	397	277.6	447	319.3
48	227.1	398	266.7	448	323.9
49	286.1	399	246.1	449	262.5
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1
1 218.6 501 253.8 551 228.6
2 216.3 502 186.1 552 309.4
3 217.4 503 157.5 553 309.5
4 321.1 504 267.3 554 229.7
5 370.5 505 317.1 555 257.6
6 263.9 506 228.0 556 233.4
7 182.8 507 221.5 557 185.4
8 225.3 508 191.1 558 184.3
9 252.0 509 159.0 559 193.8
0 267.3 510 180.2 560 230.1
1 366.4 511 276.9 561 287.3
2 453.4 512 315.6 562 298.2
3 404.1 513 314.4 563 334.1
4 302.6 514 580.8 564 341.0
5 365.7 515 912.0 565 365.6
6 468.4 516 721.9 566 661.7
7 458.5 517 428.0 567 717.8
8 445.3 518 384.2 568 508.0
9 371.2 519 327.8 569 419.6
0 249.2 520 373.3 570 408.5
1 223.2 521 402.6 571 524.0
2 440.5 522 372.8 572 567.8
3 531.5 523 315.8 573 475.6
4 320.4 524 212.9 574 400.9
5 201.5 525 163.0 575 340.0
6 181.4 526 204.8 576 331.3
7 194.1 527 243.9 577 288.2
8 209.1 528 289.3 578 212.1
9 186.8 529 272.9 579 209.6
0 143.0 530 184.3 580 237.4
1 132.9 531 205.4 581 241.3
2 144.3 532 209.5 582 221.9
3 181.0 533 256.9 583 302.6
4 184.0 534 386.9 584 303.0
5 181.7 535 322.4 585 224.8
6 214.1 536 216.6 586 220.8
7 336.5 537 331.0 587 217.6
8 607.1 538 338.3 588 214.2
9 716.3 539 259.6 589 223.3
0 549.1 540 712.3 590 293.8
1 454.2 541 967.7 591 504.0
2 458.0 542 577.9 592 649.2
3 422.8 543 375.1 593 734.6
4 430.5 544 447.2 594 676.1
5 382.1 545 526.6 595 444.5
6 294.1 546 499.0 596 385.2
7 255.7 547 502.1 597 421.7
8 196.6 548 458.3 598 447.9
9 207.1 549 286.3 599 381.0
0 277.6 550 217.0 600 312.4

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01	1	352.3	651	421.8	701	447.1
02		401.3	652	377.0	702	417.3
03		318.8	653	339.5	703	371.4
04		201.0	654	344.6	704	320.0
05		184.4	655	320.6	705	247.6
06		337.3	656	276.2	706	270.2
07		339.2	657	263.9	707	308.3
08		187.4	658	292.9	708	289.4
09		183.9	659	320.8	709	262.1
10		248.6	660	454.2	710	258.9
11		303.2	661	458.9	711	320.0
12		335.1	662	324.3	712	349.4
13		282.6	663	311.7	713	305.6
14		218.3	664	322.4	714	265.4
15		280.9	665	382.8	715	268.0
16		470.1	666	381.0	716	287.0
17		639.2	667	426.4	717	274.7
18		674.3	668	445.6	718	264.0
19		589.4	669	437.2	719	272.5
20		410.3	670	539.2	720	306.9
21		394.0	671	534.0	721	320.5
22		435.9	672	540.8	722	463.9
23		406.8	673	527.0	723	587.4
24		404.9	674	434.8	724	555.7
25		435.5	675	384.3	725	513.6
26		428.2	676	370.6	726	453.1
27		369.0	677	357.1	727	498.5
28		311.2	678	353.9	728	520.6
29		305.5	679	397.8	729	421.9
30		286.2	680	351.4	730	327.8
31		285.3	681	356.0	731	274.6
32		291.8	682	376.1	732	299.4
33		292.7	683	304.4	733	339.0
34		363.5	684	288.1	734	344.9
35		341.3	685	286.0	735	317.7
36		247.2	686	273.8	736	315.1
37		288.5	687	274.3	737	392.5
38		313.0	688	277.1	738	372.0
39		328.9	689	331.8	739	304.9
40		316.8	690	406.3	740	323.4
41		261.8	691	354.2	741	385.1
42		422.4	692	535.3	742	385.1
43		742.9	693	751.7	743	338.8
44		753.4	694	677.1	744	313.1
45		524.0	695	672.4	745	314.6
46		438.2	696	585.7	746	334.3
47		453.9	697	512.6	747	360.9
48		494.4	698	513.1	748	818.7
49		447.8	699	452.0	749	1088.9
50		416.1	700	438.4	750	773.4

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1		1		1
645.8	801	555.5	851	584.9
650.8	802	430.5	852	782.4
765.0	803	358.0	853	567.2
872.8	804	418.3	854	416.6
693.8	805	431.9	855	385.0
502.6	806	440.0	856	393.2
415.9	807	379.7	857	417.0
347.8	808	265.8	858	407.4
303.9	809	219.8		
283.6	810	218.5		
304.0	811	251.0		
311.4	812	262.2		
311.0	813	269.1		
317.0	814	301.6		
311.3	815	286.8		
311.8	816	263.2		
298.3	817	265.1		
299.0	818	253.3		
283.1	819	279.0		
255.9	820	282.6		
247.0	821	254.9		
220.8	822	246.7		
342.0	823	259.7		
506.4	824	264.0		
416.4	825	237.4		
335.1	826	365.2		
395.6	827	603.3		
449.5	828	576.0		
431.0	829	409.6		
374.4	830	359.4		
296.4	831	345.3		
232.8	832	330.8		
222.5	833	275.9		
214.8	834	232.5		
221.6	835	228.3		
234.3	836	232.6		
261.0	837	233.6		
253.7	838	231.6		
233.8	839	239.1		
279.5	840	244.3		
304.5	841	248.1		
268.9	842	268.4		
246.1	843	272.3		
247.1	844	264.0		
234.3	845	259.2		
230.2	846	226.5		
243.4	847	206.2		
258.6	848	224.1		
439.9	849	248.6		
589.6	850	262.9		