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List

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Durchmusterung Lists.

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Checks.	α 1855	α 1871	Mag.	Sig 1855	Sig 1871	Checks	α 1855	α 1871	Mag.	Sig 1855	Sig 1871
	h m s	h m s		(50)ⁱ	'		h m s				
XX	0 0 18.7	0 1 9	8.0	+24.3	29.6	XX	0 17 7.1	17 58	9.8	56.5	61.8
XX	0 33.8	1 24	8.9	-7.5	-2.2	XX	17 17.4	18 8	8.4	-4.5	0.8
	0 44.1	1 35	9.1	11.1	16.4	XX	17 31.9	18 22	9.1	46.3	51.6
	1 3.7	1 54	8.8	36.0	41.3	XX	18 27.1	19 17	8.6	15.7	21.0
XX	1 40.0	2 31	8.9	1.4	6.7	XX	18 31.9	19 22	8.2	28.7	34.0
XX	2 16.6	3 7	9.0	-3.4	1.9	XX XX	19 57.6	20 42	8.4	39.6	44.9
XX	2 20.1	3 11	8.0	36.8	42.1	XX	20 3.0	20 54	9.0	6.7	12.0
X	2 34.5	3 25	8.4	0.0	5.3	XX	21 21.6	22 13	9.1	29.8	35.7
X	2 43.0	3 34	8.0	4.8	10.1	XX	24 34.7	25 25	7.1	56.0	61.3
	3 15.4	4 6	8.6	22.5	27.8	XX	24 38.2	25 29	8.6	18.1	23.4
XX	3 25.7	4 16	8.8	47.1	52.4	X	25 16.3	26 7	8.8	52.4	57.7
XX	3 48.3	4 39	8.9	2.5	7.8	XX	26 14.1	27 5	8.4	11.8	17.1
XX	4 16.7	5 7	8.0	10.7	16.0	XX	26 39.3	27 31	8.8	39.2	44.5
X	4 19.0	5 10	8.6	40.6	45.9	XX	27 0.7	27 52	9.5	54.1	59.4
XX	4 20.2	5 11	8.4	-8.1	2.2	XX	27 41.3	28 33	9.0	3.0	8.3
XX	5 16.9	6 7	8.6	41.0	46.3	XX X	27 52.4	28 44	9.3	51.5	56.8
XX	6 18.7	7 8	8.5	44.3	49.6		28 16.1	29 8	9.2	58.8	64.1
XX	7 4.8	7 55	8.4	48.9	54.2	XX	29 3.0	29 55	9.0	-5.6	-1.2
XX	7 8.9	7 59	9.4	44.5	52.8	XX	30 0.5	30 53	9.0	26.2	31.5
XX	10 3.2	10 54	6.4	38.1	43.4	X	30 7.5	30 59	9.0	39.9	44.9
XX	10 11.4	11 2	8.9	16.3	21.6	XX	30 23.9	31 16	7.4	28.3	33.6
XX	11 17.7	12 8	7.2	-6.6	-1.3		30 43.2	31 35	8.4	85.9	41.2
XX	12 8.4	12 59	8.4	-3.4	1.9	XX X	31 5.5	31 57	8.4	13.9	19.2
XX	12 35.2	13 26	8.3	31.9	-2.6	X	31 6.8	31 59	8.8	40.0	45.3
XX	15 26.8	16 17	8.4	57.9	63.2	X XX	31 54.4	32 47	8.9	-1.9	3.4
XX	15 31.9	16 22	8.8	33.6	28.9	X XX	32 15.4	33 7	9.2	2.0	7.3
XX	16 6.3	16 56	8.8	31.0	36.3	XXX	32 51.6	33 44	8.7	11.3	16.6
XX	16 20.3	17 11	8.7	8.5	10.8	XXX	0 35 26.2	36 19	8.4	59.2	64.5

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Checks	α 1855	α 1871	mag.	Sun 1855	Sun 1871	Checks	α 1855	α 1871	mag.	Sun 1855	Sun 1871
	h m s						h m s				
	36 17.0	37 10	9.6	8.7	14.0		48 57.7	49 52	9.5	36.0	41.7
	38 8.0	39 1	9.0	45.8	57.1		49 5.4	50 0	8.4	37.9	43.2
	38 32.4	39 26	8.8	54.0	59.3		49 23.0	50 18	9.4	18.4	23.4
	39 2.4	39 55	8.3	-8.5	-3.2		50 32.0	51 27	9.2	-5.8	-0.5
	39 15.9	40 9	8.2	4.5	23.8		51 3.8	51 58	8.4	18.9	24.2
	39 20.4	40 14	8.3	18.4	24.0		51 47.2	52 42	8.5	36.0	41.3
	39 30.5	40 24	8.4	-1.4	-0.4		51 57.4	52 52	8.4	49.3	54.6
	39 48.4	40 42	9.8	39.2	44.0		52 16.4	53 11	8.5	31.9	37.2
	39 57.5	40 45	9.6	0.2	5.5		52 33.4	53 28	7.6	5.9	11.2
	40 39.5	41 33	5.2	10.5	15.4		52 57.8	53 51	9.0	-7.9	-2.6
	41 52.1	42 44	8.9	25.0	30.3		53 24.5	54 20	8.3	15.6	20.4
	41 52.3	42 46	8.9	28.4	34.0		53 54.2	54 59	6.2	15.2	20.5
	42 1.4	42 56	9.0	32.5	38.8		54 15.5	55 11	9.1	14.4	19.4
	42 10.2	43 4	9.4	-9.4	-4.1		55 13.9	56 9	9.2	22.4	27.4
	42 13.8	43 8	8.0	-9.4	-4.1		55 29.6	56 25	9.4	23.4	28.4
	42 30.6	43 25	9.2	8.4	44.0		55 56.3	56 51	8.3	26.4	32.0
	42 41.4	43 36	6.7	43.1	48.4		56 18.4	57 14	6.8	13.8	19.1
	43 18.4	44 13	6.7	46.9	52.2		56 40.6	57 36	8.8	8.8	14.4
	43 20.1	44 19	8.3	24.4	29.4		57 21.3	58 17	8.4	32.8	38.1
	43 30.6	44 30	9.2	-8.9	-3.6		58 30.9	59 26	9.3	-8.9	-4.6
	43 40.9	44 35	7.4	-0.8	4.5		59 54.4	0 50	9.4	41.2	46.5
	48.4 42.8	44 37	4.4	48 58.6 -3.4	3.9		h 1 0 45.8	1 41	7.4	-3.5	1.8
	43 59.0	44 53	9.5	48 58.6 +1.4 60.36.1	41.3		0 59.5	1 55	8.5	48.2	53.5
	44 58.2	45 53	8.4	4.7	10.0		1 33.4	2 29	7.3	58.1	63.4
	45 59.4	46 54	6.9	2.2	7.0		1 59.4	2 54	8.9	-5.9	0.6
	46 18.9	47 13	7.4	54.4	62.7		2 1.3	2 57	7.1	14.3	19.6
	46 40.6	47 35	8.6	25.0	30.2		2 15.4	3 11	9.0	53.8	59.1
	48 38.2	49 33	8.4	36.7	42.0		3 9.9	3 57	9.5	40.5	50.8

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Checks	a 1870	d 1870	May	Sun	Sun	Checks	a 1871	d 1871	May	Sun	Sun
	h m s	h m					h m s	h m			
X	3 42.9	4 3	8.2	4.7	5.4	XX	28 56.6 5.7	1 29	55 8.9	-8.2	-3.3
XX	4 16.7	5 13	7.0	5.3	5.6	XXX	31 22.0 5.7	32 21	9.0	11.7 0	16.1
XX	4 36.9	5 33	8.9	19.2	24.5	XX	31 41.0 5.1	32 40	8.8	16.2	21.1
X	4 52.4	5 49	8.7	16.1	21.4	XXX	32 202 5.0	33 19	9.0	4.7	5.6
XX	6 48.6	7 45	7.1	5.8	6.3	XX	33 38.8 5.1	34 38	8.0	9.7	14.6
XX	7 2.6	7 59	9.2	46.5	51.8	XXX	34 307 5.2	35 30	7.0	4.7	5.3
	7 6.7	8 03	8.5	6.2	11.5	XX	34 36.0 5.2	35 35	9.0	-2.4 5.6	+3.5
XX	8 46.9	9 44	9.5	10.5	15.8	XXX	34 44.7 5.2	35 45	7.8	-.1	-2.2
XX	10 11 0.9	10 58	8.0	5.3	5.6	XX	35 22.5 5.4	36 22	9.6	22.3	27.2
X	10 35.9	11 33	9.2	2.3	7.6	XXX	37 49.1 5.6	38 49	9.0	23.5	28.4
XX	11 56.6	12 54	6.5	5.5	5.8	XX	37 57.6 5.6	38 57	8.6	4.9	5.8
XX	12 56.8	13 54	8.8	19.8	25.1	XXX	38 6.5 5.6	39 06	8.6	7.9	12.8
XX	13 18.8	14 16	8.0	-9.2	-4.9	X	38 10.3 5.6	39 10	8.8	24.3	29.2
XX	14 57.6	15 55	8.0	48.0	54.3	XX	38 21.2 5.6	39 21	8.2	1.4	6.3
XX	15 24.9 5.4	16 22	8.0	-8.8 +5.1	-3.7	XXX	38 111 5.7	40 11	8.9	36.0	40.7
X	15 26.5 5.4	16 24	7.0	24.8	29.9	XX	38 21.4 5.7	40 21	9.6	28.8	28.7
	15 45.7 5.4	16 43	7.6	2.8	7.9	XXX	41 39.2 5.8	42 34	8.8	42.1	46.9
XX	16 30.6 5.5	17 28	8.8	53.5	60.6	XX	42 29.9 1 0.0	43 30	9.8	7.3 +4.8	12.1
XX	18 9.1 5.7	19 07	8.0	37.7	42.7	X	42 41.1 6.0	43 41	8.9	28.6	33.7
XX	18 10.6 5.7	20 08	8.0	14.7	19.7	XX	42 57.9 6.1	43 58	6.1	4.9	4.5
XX	18 31.7 5.8 0	20 30	8.8	-2.5	+2.5	XXX	43 36.1 6.2	44 36	6.6	40.5	50.3
X	19 45.7 5.9 1	20 44	8.6	55.5	60.5	XX	45 3.7 6.4	46 4	8.5	41.7	46.5
XX	20 9.1 5.9 2	21 7	6.8	56.0	61.0	XX	45 23.8 1 0.5	46 26	8.0	2.35 4.8	2.83
XXX	21 54.8 6.1 4	22 53	8.5	-4.8	+0.2	XXX	45 40.0 1 0.5	46 41	8.8	8.1	13.9
XXX	23 38.0 6.3 5	24 36	8.7	4.7	9.6	XX	46 26.0 1 0.1	47 27	7.3	5.3	6.1
XX	24 48.3 6.4 6	25 45	8.4	53.8	60.7	XX	47 19.8 0.7	48 20	8.8	-.5	-0.3
X	27 58.5 6.7	28 57	8.8	+31.0	35.9	XX	47 46.9 0.7	48 47	8.2	1.40	18.6
	28 5.1 6.7	29 08	8.9	3.50	39.9	XX	47 52.7 0.7	48 53	8.6	4.1	8.9

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Checks	a 1855	a 1871	may	1855	1871	Checks	a 1855	a 1871	may	1855	1871
	h m s						h m s				
XX	1 48 00 0.8	1 49 1	9.2	13.3	18.1	++	2 1 40 5 2.2	2 2 42.7	8.4	55.3	60.0
XX	1 48 14.9 0.8	49 15	9.0	25.2	30.0	++	1 59 5 2.4	3 1.7	8.8	-4.9	-0.2
XX	48 27.0 0.8	49 28	9.0	-5.7	-0.9	XX	2 8.7 2.3	3 11.0	8.9	-2.3	2.4
XX	48 41.6 0.8	49 42	9.4	13.2	18.0	++	3 59.4 2.5	5 1.9	6.9	23.4	25.1
XXX	49 31.9 0.4	50 33	8.4	10.3	15.1	+XX	4 45.1 2.6	5 47.7	8.7	-5.3	-4.6
XX	50 7.0 1.0	51 8	9.0	-6.5	-1.7	++++	5 48.8 12.7	6 51.5	9.0	3.3	8.4
++	50 18.9 1.0	51 20	8.8	-6.3	-1.5	XX	6 58.1 2.8	7 55.9	9.3	49.7	57.4
XXX	50 34.9 1.0	51 33	8.8	40.5	45.3	XX	6 58.2 2.8	7 57.0	8.9	5.0	61.7
XX+X	50 36.9 1.0	51 38	8.4	-6.0	-1.2		7 12.6 2.8	8 15.4	9.8	51.2 4.6	55.8
XX	51 48.3 1.1	52 49	9.2	58.0	62.8	++	8 5.3 2.9	9 8.2	9.0	-9.4	-4.5
XXXX	51 52.4 1.1	52 53	9.0	-4.3	+1.5	+X	8 11.4 2.9	9 14.3	9.0	11.6	17.2
XX	52 36.8 1.3	53 38	8.0	35.0	39.7	XX	9 3.6 3.0	10 6.6	8.4	13.4	18.0
XX	53 1.8 1.3	54 3	9.4	35.7	40.4	X	9 22.5 3.0	10 25.5	9.4	-9.7	-5.1
XX	54 3.7 1.4	55 5	7.6	57.2	61.9		9 41.6 3.1	10 44.6	8.4	-9.2	-4.6
XXXX	54 21.8 1.4	55 23	9.0	57.3	56.0	++	10 33.0 3.1	11 36.1	7.0	16.8	21.5
XXX	54 54.5 1.5	55 56	8.4	51.6	64.3		9 43.0 3.1	10 46.1	9.4	-9.9	-5.3
XX XX	55 32.2 1.6	56 34	9.3	34.0	38.7	/XXX	10 49.2 3.2	11 52.4	9.0	5.4	55.0
X	55 32.3 1.6	56 34	9.0	37.7	42.4	++	11 49.4 3.3	12 52.7	8.6	3.3	41.9
XX	55 38.5 1.6	56 37	8.9	15.1	19.8	XXX	12 [illegible]16 3.3	13 4.9	8.8	42.8	47.1
XXX	56 4.2 1.7	57 6	7.6	-3.5	2.2	++	13 17.1 3.3	14 20.4	8.4	22.1	26.7
/XXXX	56 55.6 1.8	57 17	8.4	38.0	42.7	++	13 56.4 3.4	14 39.8	9.0	36.9	41.5
XX	57 16.1 1.8	57 18	8.8	4.9	52.6	++	14 39.9 3.4	15 11.3	8.8	14.1	18.7
+++	57 21.4 1.8	58 23	9.0	58.3	60.0	++	15 41.7 3.5	16 45.2	9.0	34.8 4.6	39.3
XX	57 35.6 1.8	58 37	9.4	38.6	43.3	++	15 53.8 3.5	16 57.3	8.4	-9.7	-5.2
XX XXX	58 13.2 1.9	59 15	9.4	24.3	29.0	XX	16 13.3 3.5	17 16.8	9.0	5.1	55.0
++	59 40.5 2.0	00 42.5	8.4	28.1	27.8		16 13.4 3.5	17 16.9	9.0	-4.5	-2.0
XX	2 0 27.2 2.1	1 2.3	9.0	58.8 4.7	63.2	+++X	18 3.8 3.7	19 7.5	9.0	4.6	52.1
X X	1 40.5 2.2	1 12.7	7.2	22.0	26.7	X XX	18 10.6 3.5	19 14.3	6.8	-5.0	-0.5

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Checks	a 1855	a 1871	may	Shift 55	Shift 71	Checks	a 1855	a 1871	may	Shift 55	Shift 71
	2h m s	2h 19m 19.9	85A	14.5	21.9		2h 37m 25.5	2h 38m 31.3	9.0	49.8	52.9
	18 50.0	19 53.7	9.0	37.7	42.1		38 0.0	39 5.8	76A	56.7	60.8
	20 63	21 10.2	85A	35.1	39.5		38 81	39 8.7	92B	26.9	31.0
	20 14.7	21 18.6	9.0	47.9	52.3		38 11.5	39 21.3	92B	55.8	59.9
	20 18.0	21 21.9	84A	56.5	60.9		38 21.0	39 26.8	92B	56.0	60.1
	20 82.4	21 36.3	84A	29.8	34.2		38 80.2	39 36.0	78A	16.7	20.8
	20 47.5	21 51.5	88	−5.2	−0.9		41 8.0	42 13.9	81	12.3	16.4
	21 30.7	22 34.8	86A	40.2	44.5		43 8.6	44 14.7	93B	26.3	30.4
	25 21.8	26 26.2	80B	33.6	37.3		43 13.9	44 20.0	81A	26.0	30.1
	28 20.7	29 25.4	85A	14.0	18.3		44 17.8	45 14.0	65A	34.0	38.1
	28 23.9	29 28.6	66A	−8.8	−4.5		44 52.6	45 58.8	85A	23.1	27.2
	28 57.0	30 1.8	82A	7.6	11.9		45 22.7	46 28.1	80A	28.4	32.8
	29 23.1	30 27.9	89A	8.4	13.7		46 43.0	47 49.2	65A	40.3	44.3
	29 46.3	30 51.2	89B	6.6	10.9		46 42.8	47 50.0	85A	12.0	16.0
	30 29.0	31 34.0	85A	5.2	63.7		47 2.4	48 8.6	89	16.2	20.2
	30 38.5	31 43.5	85A	21.8	64.0		47 57.7	48 12.0	90	24.5	28.5
	31 11.8	32 16.9	80	53.1	57.3		47 58.5	49 4.8	92B	22.7	26.7
	31 56.1	33 4.3	99B	28.5	32.7		48 31.6	50 38.1	89B	47.6	51.5
	32 32.7	33 37.9	82A	0.9	5.1		51 56.1	53 3.2	86	51.9	55.8
	32 47.2	33 52.5	82A	−9.6	−5.4		52 44.0	53 50.8	90	12.6	16.5
	33 34.5	34 39.9	84A	53.1	57.3		52 56.5	54 3.3	86	54.4	55.3
	33 41.0	34 46.4	88	−1.8	2.4		53 44.1	54 51.4	87	22.9	26.7
	34 19.9	35 25.4	85	36.9	40.1		54 20.0	55 27.0	88B	47.7	51.5
	34 51.7	35 57.2	99B	−53	−1.1		54 20.4	55 27.4	90	2.6	6.4
	35 0.5	36 6.0	84A	1.4	10.6		55 59.0	57 6.2	90	32.1	35.9
	35 26.8	36 32.4	85	58.0	62.2		56 2.5	57 9.8	88	26.3	30.1
	35 45.1	36 50.7	90A	−0.5	3.6		58 10.8	59 18.2	70A	35.8	39.6
	36 2.3	37 31.0	81A	0.7	4.9		2 59 5.1	0 13.0	83A	1.0	4.7

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hrs	α 1855 − α 1871		mag	S 1855 − S 1871		hrs	α 1855 − α 1871		mag	S 1855 − S 1871	
	h m s						h m s				
3	0 1 84	3z 1m 15.9	9.8B	225 3.7	26.2	3	18 1 141 8.8	+3z 19m 22.9	9.0B 7.7H	225 −4.0	−0.5
	0 19 8 9.5	1 27.3	8.7	54.9	58.6		19 39 0 8.9	20 47.9	8.9	51.0	54.5
	1 6 7.6	2 14.3	9.0	46.4	50.1		20 15 2 9.0	+21 24.2	8.6	31.6	35.1
	1 12 7.6	2 19.7	8.8	31.4	35.1		20 39 4 9.0	21 38.4	7.0B	−1.2	2.2
	2 5 10 9.7	3 38.7	9.0	52.8	56.5		21 19 8 9.1	22 28.9	8.0B	−5.1	−0.7
	2 53 0 7.7	4 0.7	9.2B	−5.6	−1.9		21 47 0 9.2	22 56.2	9.0A	55.9	59.3
	5 6 8 7.9 ?	6 14.7	9.2A	58.3	62.0		21 54 5 9.2	23 3.7	9.0	10.0	13.4
	5 11 9 7.9	6 19.8	8.5A	22.6	26.3		21 58 0 9.2	23 7.2	9.0	59.4	2.8
	5 29 2 7.9	6 37.1	6.7A	24.9	28.6		23 38 2 9.3	24 47.5	9.0	5.2	8.6
	5 49 3 7.9	6 57.2	8.9A	53.1	56.8		24 15 0 9.9	25 24.4	9.0	14.0	17.4
	5 57 4 7.9	6 57.6	6.0A	23.5	27.2		30 5 26 9.8	32 0.4	7.8A	20.7 13.2	24.0
	6 2 62 8.0	7 34.2	7.6A	40.5	44.2		31 0 54 9.8	32 10.2	8.7	48.2	51.5
	6 49 9 8.0	7 57.9	9.2A	38.6	42.2		31 55 3 9.9	33 9.2	7.5A	42.3	45.6
	8 4 0 8.2	9 12.2	8.0B	1.2	4.8		32 3 55 9.9	33 45.4	9.0	21.7	25.0
	9 4 24 8.3	10 50.7	7.0B	26.3	29.9		32 4 20 10.0	33 52.0	8.7A	53.0	56.3
	10 5 59 8.5	11 44.3	9.0	27.9	31.5		33 3 80 10.1	34 48.1	9.0	−1.0	−6.7
	11 4 6 8.4	12 13.0	8.5A	57.5	61.1		34 4 4 10.1	35 14.5	7.3B	4.7	8.0
	11 34 5 8.4	12 42.9	8.8A	34.2	37.8		34 18 5 10.1	35 28.6	9.5B	0.2	3.5
	13 1 10 8.5	14 19.5	8.6	8.4	12.0		35 15 9 10.2	36 26.1	8.7	−2.7	+0.6
	13 5 15 8.5	15 0.0	9.0	7.7	+1.9		35 58 4 10.2	37 8.6	9.0	45.0	48.3
	15 8 29 8.5	16 41.2	7.6A	53.6	57.2		36 3 6 10.3	37 13.9	9.2B	41.7	44.9
	15 8 20 8.6	16 46.6	9.0	50.8	54.3		36 56 8 10.3	38 7.1	9.5B	43.3	46.5
	16 1 21 8.7	17 20.8	7.5A	19.7	23.2		37 1 6 10.4	38 12.0	8.4A	−5.7	−2.5
	16 19 4 8.7	17 28.1	9.0	20.1	23.6		37 55 5 10.4	38 49.9	6.0A	16.7	19.9
	16 38 7 8.7	17 42.4	8.9A	0.5	3.0		37 55 5 10.4	39 5.7	7.0A	53.8	57.0
	16 44 6 8.7	17 53.3	9.0	21.8	25.3		37 51 9 10.4	39 8.3	9.0A	23.7	26.9
	17 15 4 8.8	18 24.2	9.4B	50.4	53.9		38 1 28 10.4	39 23.2	7.1A	23.7	26.9
	17 38 5 8.8	18 43.3	8.1B	25.8	29.3		38 16 5 10.4	39 26.9	8.7A	14.9	18.1

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Checks a 1855	a 1871	May 1855	1871	Checks a 1855	a 1871	May 1855	1871
3 38 32.8	3 39 34.2	87B	-3.4	-0.6	3 56 50.1	3 58 1.3	8.0	24.8	32.6
38 42.3	39 52.2	80A	28.8	31.9	57 86	58 20.0	80A	9.6	13.4
38 59.8	40 10.3	88A	4.49	48.0	57 35.3	58 46.2	7.7B	33.0	35.8
39 25.2	40 35.2	80A	18.7	21.8	57 54.2	59 5.7	85A	52.8	55.6
40 25.3	41 35.9	8.0	54.5	57.6	4 0 12.2	1 23.9	8.6	-4.6	-1.8
40 26.0	41 36.6	85A	39.7	42.2	1 41.9	2 53.5	80A	47.2	49.4
41 24.8	42 35.4	7.7A	20.4	23.4	1 42.4	2 54.0	8.0	34.1	36.8
41 41.9	42 52.5	8.8	56.0	59.0	2 15.0	3 26.6	8.8	-3.3	-0.6
42 14.0	43 24.6	7.4A	36.6	39.6	2 31.8	3 43.5	8.7A	4.8	7.5
42 57.8	44 8.4	83A	8.08	33.8	3 2.9	4 14.6	80A	6.1	8.8
42 57.9	44 8.6	87	-4.0	-1.0	3 42.6	4 54.3	9.4B	19.2	21.9
43 32.4	44 43.1	85	-1.0	+2.0	3 58.6	5 10.4	88	5.20	87.7
43 51.3	44 2.0	87A	16.3 +2.9	19.3	4 7.5	5 19.3	7.4A	18.6	21.3
44 3.3	45 14.0	85	-5.2	-2.3	4 16.3	5 28.1	9.2A	29.1	31.8
46 32.6	47 43.3	8.0	25.9	28.8	4 22.1	5 33.9	88B	28.0	31.7
49 2.4	50 13.3	8.3B	28.5	31.4	5 4.2	6 16.1	9.2A	28.2	30.9
49 50.0	51 0.9	87A	47.6	50.5	5 24.9	6 36.8	9.1A	22.1	24.8
49 57.4	51 2.6	80A	50.3	53.2	5 41.4	6 53.3	9.0A	14.8	17.5
50 50.0	52 0.7	8.0	18.5	21.4	6 16.8	7 28.8	7.0A	29.9	32.6
51 3.0	52 14.0	80A	18.5	16.4	6 35.5	7 47.5	9.2A	26.9	29.6
51 51.7	52 16.1	8.4B	4.0	6.9	6 40.7	7 52.1	9.0A	30.5	33.2
52 20.7	53 31.8	86A	11.8	14.7	7 2.2	8 34.3	4.8A	-4.0	-1.3
52 58.6	54 7.7	8.5B	25.5	28.4	8 17.9	9 30.1	8.2A	59.7	62.4
53 57.8	55 9.0	9.0	40.1	43.0	9 13.5	10 25.7	6.1A	33.7	36.4
54 18.4	55 29.6	8.0	40.3	43.1	9 44.2	10 56.5	8.5A	4.6	48.3
54 47.2	55 58.4	8.6B	21.5	24.3	9 59.4	11 11	7.8B	1.3	4.1
55 49.4	57 0.7	4.2A	-2.7	+0.1	9 59.7	11 12	8.5	49 55.0	57.6
55 56.8	57 8.1	8.3A	10.6	13.4	10 5.3	11 17	7.8	49 53.9	56.6

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Checks	a 1855	a 1871	may	S 1855	S 1871	Checks	a 1855	a 1871	may	S 1855	S 1871
	4 10 56.8	12 8	9.5 B	36.2	38.8		4 33 35.4	34 48	8.0 A	15.2	17.3
	11 5.6	12 18	8.8 A	40.0	42.6		35 15.8	36 29	7.7 A	49.4	51.5
	12 22.3	13 34	8.8	26.2	28.1		35 30.8	36 44	8.1 A	56.1	58.2
	13 32.9	14 45	6.9 A	30.2	32.8		35 36.4	36 49	7.8 B	49.5	51.8 −5.1
	13 51.2	15 05	8.8 A	30.1	32.4		36 28.9	37 43	8.0 A	17.5	19.5
	14 47.2	15 59	8.8	59.4	62.3		36 38.8	37 52	8.9 A	56.4	58.4
	15 3.1 1 12	16 15	9.0	10.2 2.6	12.8		36 55.9	38 9	8.2 A	27.3	29.3
	15 56.3	17 08	7.9 A	52.4	55.0		37 28.8	38 42	8.8 A	21.6	23.5
	15 59.2	16 12	9.0 A	21.6	24.2		37 29.9	38 43	9.1 B	40.8	42.7
	16 26.5	17 37	8.6 A	23.0	25.6		38 41.6	39 56	9.0 A	9.3	11.2
	16 34.4	17 46	8.5 A	55.3	57.8		39 32.9	40 47	8.0 A	8.9	10.8
	17 1.4	18 31	9.0 A	21.2	23.7		40 6.0	41 20	9.2 A	13.4	15.6
	17 22.9	18 36	9.0	56.8	59.3		40 40.0	41 54	9.2 A	15.9	17.7
	18 30.1	19 43	8.6 A	16.8	19.3		40 59.4	42 13	8.7 B	54.4	56.2 −3.8
	19 21.9	20 35	9.0 B	49 54.0	49 56.4 −3.6		41 2.7	42 16	8.8	38.5	40.7
	19 36.4	20 49	9.1 B	49 54.1	56.5 −3.5		41 15.5	42 29	8.4	82.1	39.7
	22 10.4	23 23	7.5 A	43.9	46.3		42 31.8	43 46	8.4	21.8	23.4
	22 40.1	23 53	9.0	46.6	50.9		42 44.9	43 59	8.8	21.4	23.3
	23 34.0	24 47	7.5 A	41.2	43.5		44 11.9	45 26	8.9 A	17.2 1.7	18.9
	24 45.8	25 57	8.9 B	18.1	20.4		45 53.2 1 14	47 07	8.0 A	56.3	58.0
	28 32.8	29 46	8.1 A	54.9	57.1		46 32.9	47 47	8.8 A	64.4	66.4
	28 33.6	29 47	9.4 B	56.5	58.7		46 37.5	47 51	9.0	−1.0	+0.4
	29 6.4	30 20	8.0 A	49.2	51.4		49 6.3	49 20	8.4 A	0.4	2.1
	30 31.9 1 13	31 45	9.0 A 49	55.2 2.1	57.3 −2.7		49 34.0	50 48	9.0	55.5	57.2
	31 7.9	32 21	9.1 B	47.6	49.7		50 11.8	51 26	8.5 A	2.1	3.8
	32 8.4	33 21	8.9	29.6	31.7		50 28.0	51 42	9.0	30.3	32.0
	32 11.8	33 25	8.7 B	30.6	32.7		50 40.4	51 54	8.9	47.3	49.0
	33 26.2	34 39	8.4 A	5.1	7.2		50 57.0	52 11	8.5 A	2.1	3.7

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Checks	a 1855.	a 1871	May	Since 1855	Since 1871	Checks	a 1855	a 1871	May	Since 1855	Since 1871
	h m s										
	4 51 12,0	52 36	£0	15,6	17,2		12 21,9	13 37	8,8	8,02	3,85
	51 30,4	52 44	£0	16,4	20,0		12 38,2	13 53	8,7	1,94	2,95
	51 38,6	53 51	8,6	23,3	24,9		13 31,3	14 50	8,3	5,03	5,15
	52 7,0	53 21	8,0	48,2	47,8		13 57,4	15 08	8,2	1,37	1,48
	52 10,1	53 24	8,9	24,1	25,6		14 46,5	16 01	8,2	5,30	5,44
	53 2,7	54 16	8,0	17,2	16,7		15 26,5	16 41	8,4	8,5	9,5
	53 32,9	54 44	8,5	7,7	7,2		16 29,1	17 44	8,9	+1,0 1,3	0,3
	54 0,4	55 14	8,2	40,5	50,0		16 49,6	18 05	8,4	21,1	22,1
	54 20,9	55 35	8,1	−9,3	−7,8		17 5,5	18 20	8,3	28,1	29,1
	54 46,9	56 01	8,1	−8,6	−7,8		17 7,8	18 22	8,7	49,4	50,3
	55 47,3	57 01	9,1	24,0	22,4		20 27,0	21 42	8,1	15,3	16,2
	58 32,4	56 46	8,8	−3,0	−1,6		20 31,7	21 47	7,0	5,39	5,48
	56 12,9	57 27	8,1	5,3	6,7		21 38,3	22 54	8,2	26,2	27,0
	56 10,4	57 24	8,8	−8,4	−7,0		22 28,2	23 43	8,2	0,2	1,0
	56 45,2	57 59	8,0	26,2	27,6		24 12,3	25 27	8,8	10,2	11,0
	57 14,4	58 28	8,3	34,7	36,1		24 13,1	25 28	8,0	−4,7	−4,0
	57 11,6	3 26	8,4	51,8	53,2		26 56,8	28 12	8,0	25,6	26,3
	3 37,3	4 51	8,0	44,0	45,4		26 58,8	28 14	8,0	59,9	60,6
	4 28,3	5 44	7,7	23,0	24,4		27 8,9	28 24	8,3	53,4	54,0
	4 33,7	5 48	8,2	59,5	60,9		27 10,7	28 26	8,0	58,1	58,7
	4 51,4	6 05	8,2	25,7	27,1		27 16,9	28 32	8,0	52,5	53,1
	6 5,3	7 19	8,2	25,7	27,0		27 23,6	28 39	8,0	16,0	16,7
	7 47,1	9 01	8,1	31,8	33,1		27 54,2	29 09	9,2	−2,2	−1,6
	8 31,2	9 45	8,0	51,0	52,3		32 3,6	33 19	7,0	8,72	8,78
	9 34,9	10 49	8,5	28,2	29,5		28 58,5	30 08	8,8	+0,6 4,7	−4,1
	9 56,0	11 10	8,0	14,0	15,3		32 48,6	34 03	8,0	43,0	43,5
	11 3,7	11 18	8,1	20,8	22,1		33 48,0	35 04	8,8	39,6	40,2
	12 16,1	13 30	8,2	4,9	6,1		34 29,0	35 44	8,4	34,0	34,6

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Checks	a 1855	a 1871	May.	Sss 55	Sss 71	Checks	a 1855	a 1871	May.	Sss 55	Sss 71
	5 42 36 8.3	37 18 7.1 B	1.5 +7.4	1.9		5	57 17.0	58 32	9.0 57 B	22.2 −2.8	−2.8
	36 57.6	38 13 8.5 A	57.8	58.2			57 3.4	58 18	8.0 A	45.0	45.0
	37 48.9	39 03 9.0 B	33.0	33.4			57 22.9	58 38	9.2 B	58.1	58.1
	37 49.6	39 05 8.7 A	2.2	2.6			57 41.7	58 57	8.0	52.8	52.8
	38 26.6	39 42 8.0	24.1	24.5			58 44.4	5 59 56	8.5	10.5	10.5
	39 31.6	40 48 9.2 B	8.3	39.7		6	1 5.6 1.5	6 2 21	8.3	−1.7 −0.0	−1.7
	41 2.0	41 17 9.4 B	35.3	35.7			1 21.2	2 36	8.7 B	37.9	37.9
	40 55.0	42 10 8.0	22.8	23.2			3 8.4	4 23	8.8 A	49.4	49.4
	41 10.8	42 26 8.5 A	43.5	43.9			9 17.4	10 32	8.8	2.1	2.1
	41 47.8	43 03 8.3 A	15.4	15.8			11 48.8	13 05	8.0	28.0	28.0
	42 20.9	43 36 8.0 A	7.6	7.9			11 59.1	13 14	7.8 A	49.8	49.8
	42 31.6	43 47 8.3 A	41.9	42.3			12 3.0	13 18	8.5 A	58.9	58.9
	44 6.4	45 22 8.0	0.5	0.8			12 40.8	13 56	8.0	5.5	5.5
	44 42.5	45 57 8.0	31.6	31.9			12 50.9	14 06	8.9	5.0	4.9
	45 52.5 1.5	47 07 8.8	19.9 +0.3	20.2			14 2.1	15 17	8.5	52.2	52.1
	48 7.7	49 23 6.0 A	−5.7	−5.4			14 16.9	15 32	8.9 A	10.9	10.8
	49 5.4	50 20 8.0 A	−1.7	−1.4			16 48.4 1.5	18 03	8.0	13.8 −0.3	13.6
	52 20.7	53 36 8.5 B	36.4	36.6			17 2.4	18 17	8.0	20.7	20.5
	49 53.0	51 08 8.8 A	−1.7	−1.5			18 48.3	19 58	8.0	−9.2	9.4
	51 24.6 52 27.1	52 49 6.0 A 9.0 A	−7.7 14.3	−7.5			18 45.7	20 01	9.3 B	59.5	59.2
	52 57.7	54 13 8.7 A	−6.7	−6.5			20 24.0	21 39	8.5 A	47.7	48.4
	53 22.2	54 37 8.0	54.2	54.3			20 41.0	21 56	8.0 A	44.8	44.5
	53 28.1	54 43 8.0	44.5	44.6			22 56.8	24 12	8.8	−3.8	−4.1
	53 29.5	54 44 8.8 A	−9.1	−9.0			26 24	26.8 36.3	8.9 A	−1.3	−1.6
	55 8.4	56 50 8.2 A	4.2	4.3			24 26	26.8	8.9 A	7.1.4	+11.1
	55 28.7	56 44 8.5 A	−7.7	−7.6			26 35.7	27 57	8.5 B	53.9	53.4
	55 52.6	57 08 8.3 A	−2.4	−2.4			27 0.7	28 16	7.9 A	39.7	39.2
	56 43.4	57 58 8.2 B	35.4	35.4			27 45.4	29 00	9.3 B	33.4	33.2

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	6 29 34.3	30 48	8.0	~~150~~ −1.6	14.4		6 ~~53 27.0~~ 6 46 2.4		6 47 16		~~7.5 H 33.6~~ 8.9 5.0	4.0
	80 1 38 14	31 18	8.5	11.5 −.7	10.8		~~53 51.5~~ 50 17.2		51 31		~~6.7 H 48.9~~ 9.0 9.0	8.0
	80 46.0	32 00	9.5 B	~~45.7~~	45.0		~~55 0.5~~ 57 1.4		52 18		~~8.7 H 16.4~~ 8.5 H 1.6	0.5
	30 49.9	32 04	9.4 B	45.6	44.9		~~55 28~~ 51 5.9		52 20		~~8.8 H 51.9~~ 8.5 H 17.3	16.2
	30 50.6	32 05	8.6	~~26.7~~	26.7		~~55 25.0~~ 51 20.3		52 34		~~9.3 H 54.3~~ 8.5 H 51.5	50.7
	30 50.9	32 05	9.2 B	−3.9	−4.6		~~57 9.5~~ 57 32.9		52 47		~~9.2 H 65.3~~ 9.0 29.3	28.1
	31 13.7	32 28	9.0 B	45.4	44.7		~~95.7 25.0~~ 51 35.9		52 50		~~8.4 3.4~~ 8.6 H 9.5	8.3
	31 45.8	33 00	8.9	~~27.4~~	26.7		10 1 5.2 52 15.5		63 39		~~7.2 H 13.3~~ 9.0 21.2	20.0
	31 53.9	33 08	8.5	11.5	10.8		1 ~~46.6~~ 53 4.9		54 19		~~9.4 H 6.4~~ 9.0 9.0	7.8
	31 57.8	33 12	8.5	~~82.3~~ 77	−8.4		2 ~~18.5~~ 54 35.3		55 49		~~9.1 H 48.3~~ −1.3	47.0
	32 32.3	33 46	8.2 B	17.1	16.4		55 21		56 16		9.5 B 49 53.0	51.7
	35 6.3	36 20	7.3 H	31.4	30.6		56 32.5		57 46		8.5	31.3	30.0
	35 37.3	36 51	8.8 B	8.5.2	54.4		57 32.8		58 47		8.9	−1.4	−2.7
	38 18.8	39 33	8.8 H	−9.1	−9.9		58 34.0		6 59 48		9.5 B	58.1	58.8
	38 ~~28.6~~	39 43	8.0 B	5.9.9	59.1		58 52.0		7 0 03		9.0	−6.4	−7.7
	38 ~~7~~ 8.3	40 32	8.7 B	46.4	45.6		59 12.9		0 27		9.4 B	21.9	20.6
	38 18.4	40 32	8.8	17.9	17.1		69 13.4		0 27		8.0 H	9.4	8.0
	38 40.9	40 56	9.46	44.9	44.1		69 57.2		1 11		7.5 H	7.9	6.5
	40 1 82 14	41 22	8.5 B	41.9 −.8	41.1		70 21.9 1 14.2		1 36		9.4	37.5 −1.4	36.1
	~~42 23.1~~ 41 2.5	42 26	~~7.5 H~~ 8.3	~~17.1~~ 56.2	49.4		0 52.3 14.2		2 06		7.0 H	1.0 1.4	−0.4
	~~42 25.6~~ 41 17.9	42 32	~~7.5 H~~ 9.1 B	~~25.3~~ 6.0	5.2		0 57.8 14.2		2 12		9.0	33.4 1.4	32.0
	~~42 32.6~~ 43 21.4	44 35	~~9.3 B~~ 7.5.2	~~12.9~~ 11.4	10.5		1 48.8 14.2		3 03		9.0 H 49	52.2 1.4	50.8
	~~42 37.1~~ 43 56.5	45 10	~~8.4 H~~ 8.2 H	~~38.2~~ 48.3	44.4		2 10.7 14.1		3 25		8.6 H	10.3	8.9
	~~45 ~~ 45 14.6	46 29	~~9.1 H~~ 9.0 H	~~58.4~~ 23.3	21.4		2 29.1 14.1		3 43		8.2 H	48.0	46.5
	~~46 14.8~~ 45 32.0	46 46	~~6.7 H~~ 9.4 B	~~30.8~~ 10.0	9.1		4 33.8 14.1		5 48		9.0 H	2.5	1.0
	~~49 48.0~~ 45 35.6 14.4	46 50	~~7.0 H~~ 9.0 B	~~44.9~~ 21.3	20.3		4 58.9 14.1		6 13		8.3 H	20.7	19.2
	~~50 25.5~~ 45 39.5	46 53	~~8.7 H~~ 9.1 B	~~40.0~~ 11.3	10.3		7 7.0 14.0		8 21		9.4 B	20.0	18.5
	~~51 8.5~~ 45 42.3	46 56	~~8.9 H~~ 9.1	~~48.4~~ 44.8	43.8		7 11.1 14.0		8 25		7.8 H	48.2	43.7

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	7 8 26.1	14.0	7 9 46	8.4 A	−4.8	−6.5		7 31 10.3	13.0	7 32 23	8.3 A	5.38	2.1	5.17					
	8 27.1	13.9	8 41	8.7 B	4.6	3.0		31 37.5	13.0	32 50	8.9 A	2.94	2.1	2.73					
	10 13.6	13.9	11 27	9.3 B	16.7	15.0		33 47	12.9	34 18	5.8 A	4.55	2.2	4.33					
	10 42.3	13.9	11 56	8.6 A	3.0	1.3		34 53.5	12.8	36 08	9.2 A	1.60	2.3	1.43					
	11 10.3	13.9	12 24	7.2 B	2.52	2.35		36 18.9	12.7	37 31	8.7 A	2.67	2.3	2.44					
	11 44.0	13.9	12 58	9.0 A	2.0	0.3		36 58.2	12.7	38 06	9.4 A	3.29	2.3	3.16					
	13 31.8	13.8	14 45	8.8 A	10.3	8.5		37 30.7	12.7	38 43	7.1 A	4.1	2.3	1.8					
	14 17.1	13.8	15 31	8.3 A	−3.9	−5.7		39 29.4	12.6	40 42	8.6 A	5.69	2.4	5.45					
	15 07	13.8	16 14	~~8.3 A~~ 9.0	~~5.67~~ +3.7	3.59		40 17.5	12.6	41 30	8.1	1.9	2.4	−0.5					
	16 44.2	13.8	17 58	9.0	−2.9	−4.7		41 25.3	12.5	42 38	7.5 A	0.6	2.4	−1.8					
	17 35.8	13.8	18 49	8.3 A	4.08	3.90		41 37.5	12.5	42 50	8.9 A	3.16	2.4	2.92					
	17 58.3	13.7	19 12	8.3	2.42	2.24		42 20.9	12.4	43 33	8.5 L	3.47	2.5	3.62					
	18 45	13.7	19 18	9.0	−3.4	−5.2		43 35.6	12.4	45 08	7.5 B	0.94	2.5	0.9					
	18 39.8	13.7	19 48	9.0	1.47	1.29		44 18.6	12.4	45 31	9.0 B	0.82	2.5	0.7					
	18 35.2	13.7	19 49	9.0	5.79	5.71		45 12.9	12.3	46 25	8.4 A	5.52	2.6	5.24					
	18 51.8	13.7	20 05	8.8	1.53	1.34		45 59.2	12.3	47 12	8.1 A	−.32	2.6	−.58					
	18 57.5	13.6	20 11	6.0	−2.6	−4.5		47 22.0	12.2	48 34	8.0 A	1.50	2.6	1.24					
	19 16.0	13.6	20 30	8.0	1.62	1.43		47 30.3	12.2	48 44	8.7 A	8.83	2.6	8.57					
	19 37.5	13.5	20 51	7.8 A	1.43	1.24		48 10.0	12.1	49 22	8.0 A	−6.3	2.6	−6.9					
	19 51.3	13.5	21 05	9.4 A	5.81	5.62		48 28.0		49 41	7.5 B	4.38	2.6	4.12					
	20 23	13.5	21 16	7.8 A	3.05	1.86		48 38.8	12.1	50 11	8.0 A	~~5.37~~ −6.2	2.6	~~5.08~~ −6.4					
	20 59.3	13.5	22 13	8.0 A	2.60	2.40		53 38.8	11.8	54 50	8.5	3.09	2.8	2.81					
	22 22.9	13.4	23 36	9.0 A	2.74	2.54		53 50.7	11.8	55 02	8.5 A	5.01	2.8	4.73					
	25 43.2	13.4	26 57	9.1 A	4.91	4.71		53 57.4	11.8	55 09	8.0 A	3.89	2.8	3.61					
	26 38	13.3	27 17	8.9 A	5.33	5.33		56 18.5	11.7	57 30	8.0 A	1.91	2.8	1.62					
	27 23.2	13.3	28 36	9.1 A	−.38	−.58		56 40.1	11.7	57 52	8.9	−.12	2.8	−.41					
	28 20.8	13.2	29 34	7.2 A	5.01	4.80		57 18.1	11.7	58 30	7.1 A	3.34	2.8	3.05					
	30 20.7	13.2	31 34	9.5 B	4.0	1.9		57 59.3	11.6	59 11	8.4 A	1.8	2.8	1.9					

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						50°													
	8 1	12.3	11.6	8 2 24	9.0	0.5	2.7	−2.2		8 32	40.1	9.6	8 33 50	8.4	31.2	3.2	28.0		
	1	61.1	11.6	3 03	7.7	25.5	2.7	22.8		35	58.1	9.3	37 07	8.5	32.8	3.2	29.6		
	5	19.2	11.4	6 31	8.3	11.8	2.7	9.1		37	36.7	9.1	38 46	8.3	48.9	3.2	45.7		
	5	22.0	11.4	6 33	8.4	20.7	2.7	18.0		38	28.8	9.0	39 38	7.9	−1.8	3.3	−5.1		
	7	8.0	11.1	8 16	9.0	33.0	2.7	30.3		39	08	9.0	40 10	9.3	−0.2	3.3	−3.5		
	8	28.2	11.0	9 39	8.0	−6.5	2.7	−9.2		39	25.4	9.0	40 44	9.0	−0.8	3.3	−4.1		
	9	3.8	11.0	10 15	8.1	44.2	2.8	41.4		40	06.6	8.9	41 35	8.2	−7.3	3.3	−10.6		
	11	10.7	10.9	12 21	8.7	46.9	2.9	44.1		41	43.7	8.9	42 52	8.3	56.3	3.4	52.9		
	11	51.3	10.9	13 02	9.1	23.7	2.8	20.9		42	21.8	8.9	43 31	7.7	29.5	3.4	26.1		
	11	53.3	10.9	13 04	8.0	−4.0	2.8	−6.8		42	79.1	8.8	43 38	8.9	54.5	3.4	51.1		
	12	2.5	10.8	13 13	9.2	−7.3	2.8	−10.1		43	3.2	8.8	44 12	9.3	43.0	3.4	39.6		
	12	29.8	10.8	13 41	8.9	35.0	2.9	32.1		43	6.7	8.7	44 15	9.3	34.0	3.4	30.6		
	13	32.8	10.8	14 43	8.5	36.6	2.9	33.7		44	22.1	8.7	45 31	9.1	26.9	3.4	23.5		
	14	16.2	10.7	15 27	9.2	46.4	2.9	43.5		44	33.2	8.7	45 42	8.5	48.6	3.4	45.2		
	14	18.3	10.7	15 29	8.5	11.3	2.9	8.4		45	25.8	8.6	46 35	8.1	23.9	3.3	20.4		
	16	27.1	10.7	17 38	7.5	2.4	2.9	−0.3		49	34.7	8.3	50 43	8.7	17.5	3.5	14.0		
	16	44.4	10.6	17 55	8.0	24.1	2.9	21.2		50	43.1	8.3	51 51	8.8	26.3	3.5	22.8		
	17	10.9	10.6	18 21	8.8	16.2	2.9	13.3		51	26.2	8.3	52 34	8.2	17.1	3.6	13.5		
	17	50.2	10.6	18 01	7.8	10.8	2.9	7.9		51	26.6	8.3	52 35	8.5	20.6	3.6	17.0		
	18	38.4	10.5	19 49	9.0	39.6	3.0	36.6		52	52.9	8.3	54 01	7.2	31.9	3.6	28.3		
	18	38.0	10.5	19 49	8.5	5.3.6	3.0	−0.6		52	58.7	8.2	54 02	9.3	36.0	3.6	32.4		
	20	10.0	10.3	21 20	8.0	46.1	3.0	43.1		53	20	8.1	54 10	9.2	39.1	3.6	35.5		
	22	56.5	10.2	24 07	9.0	42.6	3.0	39.6		54	27.8	8.0	55 36	9.4	5.3.1	3.7	−10.5		
	24	28.9	10.1	25 39	8.5	66.6	3.1	53.6		54	36.7	8.0	55 45	9.1	47.0	3.6	43.4		
	24	38.1	10.0	25 49	8.4	52.6	3.1	49.5		55	19.2	8.0	56 27	8.5	54.2	3.5	50.6		
	26	17.4	9.9	27 37	7.3	−7.5	3.1	−10.6		55	27.2	8.0	56 35	8.1	52.4	3.6	48.8		
	29	53.7	9.8	31 03	8.5	20.4	3.1	17.3		56	15.8	8.0	57 24	7.5	12.0	3.6	8.4		
	30	2.8	9.8	31 12	9.3	20.5	3.2	17.3		58	47.0	7.8	59 55	8.2	−6.4	3.7	−10.1		

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	8 58 54	59	0 03	7.5	A	-6.4	-10.1		9 28 19.7	5.1	9 29 25	8.9	A	-1.5	-1.0
	8 59 47.5	7.6	9 0 55	7.7	H	25.3	21.6		28 38.9	5.1	29 44	8.0	A	32.3	6.5
	9 1 4.2	7.5	2 12	9.0	A	47.9	44.2		28 57.7	5.0	30 03	8.0	A	54.0	49.8
	2 18	7.4	3 9	9.1	A	28.6	24.9		31 15.9	4.8	32 21	9.0	A	-5.3	-9.5
	2 51.8	7.4	3 59	9.2	A	21.4	17.7		31 46.0	4.8	32 51	9.2	A	0.6	-3.6
	3 25.4	7.3	33	9.1	A	3.6	-0.1		32 31.3	4.9	33 36	8.8	A	0.7	-3.5
	10 31.2	6.8	11 38	8.9		13.0	9.2		34 10.2	4.6	35 15	9.0	A	58.7	54.5
	10 34.8	6.8	11 42	8.9	A	-3.8	-7.6		34 43.4	4.6	35 48	8.5	A	4.6	0.4
	11 34.6	6.7	12 41	9.3	B	42.6	38.8		39 37.7	4.2	40 42	8.6	A	51.2	46.9
	12 36.4	6.6	13 43	6.8	A	+1.8	-2.1		41 47.7	4.2	42 52	9.2	A	43.0	38.7
	14 49.7	6.8	15 56	7.5	A	53.9	50.0		42 23.1	4.1	43 27	7.5	A	17.1	12.8
	14 51.6	6.2	15 58	8.9	B	47.5	43.5		42 25.5	4.1	43 30	7.5	A	25.3	21.0
	16 16.7	6.2	17 23	9.1	A	13.6	9.6		42 32.6	4.1	43 37	9.3	B	12.9	8.6
	17 3.4	6.1	18 9	8.0	A	19.5	15.5		42 37.1	4.1	43 41	8.4	A	38.2	33.8
	17 30.0	6.1	18 36	9.1	A	4.1	0.1		45 24.7	3.9	46 29	9.1	A	58.4	53.9
	18 43.2	6.0	19 49	9.3	A	30.2	26.1		46 14.8	3.8	47 18	5.6	A	30.5	26.0
	19 5.7	5.9	20 12	9.0	A	42.5	38.4		49 18.0	3.6	50 22	7.0	A	49.9	45.3
	19 6.4	5.9	20 12	7.7	A	39.1	35.0		50 21.5	3.5	51 29	8.4	A	40.0	35.4
	21 32.4	5.7	22 38	9.1	A	53.0	48.9		51 8.5	3.5	52 12	8.9	A	45.4	40.8
	21 47.2	5.7	22 53	9.2	A	31.6	27.5		53 27.0	3.2	54 30	7.5	A	33.6	29.0
	22 54.7	5.6	24 00	8.9	A	47.4	43.3		53 57.5	3.1	54 55	6.7	A	48.9	44.3
	23 22.3	5.5	24 28	6.8	A	4.6	0.5		55 0.5	2.8	56 03	8.7	A	16.4	11.8
	23 58.8	5.5	25 04	9.1	A	14.1	10.0		55 28	2.8	56 05	8.8	A	51.9	47.3
	25 20.2	5.3	26 26	8.8		54.4	50.3		55 75.0	2.7	56 28	9.3	A	54.3	49.7
	25 30.6	5.3	26 36	9.1	A	37.2	33.1		57 9.5	2.5	58 11	9.2	A	55.3	50.7
	25 53.1	5.3	26 58	9.1	A	43.1	39.0		9 57 35.0	2.5	9 58 37	8.4		8.4	-1.2
	27 31.9	5.2	28 37	9.2	A	13.6	9.4		10 1 06.2	2.1	10 2 1	7.2	A	13.3	8.7
	27 45.3	5.2	28 51	8.4	A	-3.8	-8.0		1 46.6	2.1	2 49	9.4	A	6.4	1.8

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	10	2	18.5	1.0	10	3	20	8.8d	7.8	4.7	3.1		10	89	166	58.0	40	15	9.8B	41.7	5.0	36.7
		2	28.5	1.0		3	29	6.8d	11.4	4.7	6.7			42	36.8	58.8	43	34	9.1d	11.1	5.0	6.1
		3	5.9	1.0		5	1	9.2d	44.0	4.7	39.1			43	18.5	57.7	44	16	8.9d	5.4.3	5.0	49.3
		5	11.3	0.9		6	12	8.9d	29.1	4.7	~~19.6~~ 24.4			44	57.8	57.7	45	55	7.5d	0.2	5.1	4.9
		8	47.8	0.8		9	48	7.3d	17.6	4.7	12.9			45	11.5	57.6	46	05	8.8d	42.0	5.1	36.9
		11	8.4	0.8		12	9	9.2B	~~5.7~~ -0.5	4.7	-5.2			45	19.3	57.5	46	17	9.1d	0.2	5.1	5.3
		13	36.5	0.8		14	37	9.2d	51.9	4.7	47.2			47	30.6	57.0	48	28	9.4B	24.5	5.1	19.4
		14	44.0	0.7		15	45	8.5d	19.5	4.8	14.7			50	29.8	57.3	67	27.2	9.2d	9.1	5.1	4.0
		14	52.2	0.6		15	53	8.2d	~~10.2~~ -9.8	4.8	-14.6			52	30.1	57.1	53	27	9.3d	21.0	5.1	15.7
		15	53.5	1.0		16	56	8.8d	-5.3	4.8	-10.1			52	46.8	57.1	53	44	9.1d	16.2	5.1	11.1
		16	28.4	0.4		17	29	9.0d	8.1	4.8	3.3			53	13.9	56.9	54	10	9.1d	23.5	5.2	18.3
		21	58.5	0.1		22	59	8.4d	24.4	4.8	19.6			57	24.9	56.4	58	21	6.8d	56.9	5.2	51.7
		23	49.8	0.0		24	50	9.2d	4.7	4.8	-0.1			57	56.8	56.8	58	53	9.3d	52.5	5.2	47.3
		24	14.7	59.9		25	12	8.8d	-5.3	4.8	-10.1		10	59	18.6	56.3	11	00	12	8.4	-2.2	5.2	-7.4
		24	55.0	59.8		25	55	7.0d	-5.3	4.8	-10.1		11	2	19.5	56.0	3	15	8.9d	10.9	5.2	5.7
		25	15.0	59.6		26	15	9.2d	5.4.0	4.8	49.2			2	24	53.9	2	58	9.5	-8.4	5.2	-13.6
		25	30.4	59.5		26	30	6.9d	-9.8	4.8	-14.6			2	59.4		3	54	9.4d	5.9.8		40.6
		26	4.0	59.4		27	3	9.2d	5.1.0	4.8	46.2			4	18.8		5	14	9.3d	47.8		42.6
		27	59.3	59.3		28	59	8.5d	-6.8	4.8	-11.7			4	55.0		5	50	8.8d	14.5		9.3
		29	50.7	57.0		30	50	8.2d	~~5.7.6~~ -2.4	4.8	-7.3			5	33.8		6	29	7.2d	8.9		34.5
		31	7.6	59.1		32	6	9.3B	21.5	4.9	16.6			8	30.5		9	25	6.0d	16.0		10.8
		33	23.9	58.8		34	22	8.9	20.2	4.9	15.3			8	45.3		9	40	8.9	44.8		39.6
		35	11.1	58.6		36	10	6.6B	33.5	4.9	28.6			9	22.6		10	28	9.0d	21.4		16.2
		35	14.3	58.5		36	13	8.9d	11.1	4.9	6.2			10	62.9		11	50	8.1d	45.4		40.2
		35	45.4	58.5		36	44	9.2d	54.9	5.0	49.9			11	24.7		12	20	9.4d	44.9		39.7
		35	57.2	58.4		36	50	7.8d	12.1	5.0	7.1			11	28.5		12	23	9.5B	42.4		37.6
		36	56.2	58.3		37	55	8.5d	14.6	5.0	9.6			11	28.6		12	24	8.6d	16.5		11.1
		37	10.8	58.2		38	09	8.0d	11.1	5.0	6.1			13	45.1	55	14	40	9.2d	27.5		22.1

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11	14	49.2	15	44	9.3	A	38.1	32.7		49	19.3	50	13	9.0	17.5		11.9
16	1.6		16	57	8.5	A	11.0	5.6		50	11.9	51	06	9.0	57.3		46.7
17	13.7		18	19	7.8	A	10.0	4.6		50	28.4	51	22	8.9	A	43.3	37.7
21	12.4		22	08	9.8	B	5.9	0.5		51	37.5	52	31	9.5	B	31.4	25.8
21	22.0		22	17	9.0	A	1.6	−3.8		52	38.8	53	53	8.3	A	23.6	18.0
24	37.6		25	33	9.4	A	12.5	7.1		55	44.1	56	38	9.2	B	12.1	6.5
24	55.5		25	50	8.1	A	18.0	12.5		11	58 21.3	59	15	8.4	A	29.1	23.5
25	15.9		26	11	8.8	A	14.0	8.5		12	2 39.5	12 3	32	9.1	A	33.9	28.3
25	49.6		26	45	8.5	A	36.4	30.9		3	32.8	4	35	9.0	A	58.3	52.7
26	49.9		27	45	9.3	A	17.5	12.0		4	38.8	5	28	8.4	A	18.0	12.4
27	44.9		28	40	9.0	A	29.8	24.3		5	14.4	6	07	8.4	B	56.5	50.9
29	4.0		29	57	9.5	B	40.7	35.2		7	41.6	8	34	9.1	A	57.2	53.6
29	7.9		30	3	9.1	A	28.6	18.1		8	32.9	9	25	8.9	A	36.1	30.5
30	1.6		30	56	7.8	A	86.0	31.0		13	6.7	13	59	9.5	B	8.7	3.1
30	13.8		31	08	8.4	A	25.9	20.4		15	23.50	15	52	9.2	A	17.6	12.0
31	32.9		32	27	9.4	A	1.1	−4.5		15	96.50	15	59	9.2	A	59.9	54.3
35	1.4		35	56	7.8	A	45.7	40.1		15	449.50	16	35	8.8		52.5	44.9
36	0.9		36	55	8.9	A	57.3	48.8		16	16.7.50	17	07	9.0		23.1	17.5
36	54.9		37	49	9.1	A	41.9	36.4		17	150.45	18	04	9.3	B	56.7	51.1
36	56.0		37	51	9.1	A	45.3	39.8		18	348.45	19	24	8.4	A	41.9	36.3
38	8.7		38	58	9.2	B	40.1	34.6		18	459.45	19	35	9.4	A	14.6	9.0
40	10.3		41	05	9.0	A	38.1	32.5		19	211.45	20	10	9.2	A	17.6	12.0
42	12.9		43	07	8.7	A	2.1	−3.4		20	11.1.45	21	00	9.2	A	39.6	34.0
42	24.1		43	19	8.9	A	11.5	6.0		21	420.45	22	31	7.3	A	26.7	21.1
44	1.5		44	56	9.4	B	50.9	45.4		24	40.7.45	25	28	9.5	B	22.6	17.0
44	38.1.54		45	33	9.2	A	44.8	39.2		26	24.8.48	27	13	7.7	A	5.9	−0.7
45	16.4		46	10	9.1	A	12.5	7.0		28	24.5.45	29	12	9.0	A	55.9	50.3
46	22.8		47	26	9.0	A	1.6	−4.0		29	18.3.50	30	06	8.8		10.1.5		4.5

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	12 29 37.4	418.4	12 30 26	9.4	B	56.6	51.0		12 59 15.9	179.8	13 00 00	8.5		14.8	9.3
	30 24.0	44.2	31 12	9.0	A	52.9	47.3		13 01 18.4	44.6	2 03	8.8	A	16.7	11.2
	31 10.8	48.1	31 59	9.0	A	1.2	-4.1		2 41.9		3 26	8.1	A	13.8	8
	32 01	47.8	32 48	9.4	B	24.0	18.4		3 40.7		4 25	9.0	A	28.4	23
	34 43.6	47.6	36 31	6.5	A	5.5	0.0		4 17.9		5 02	9.4	A	17.7	13
	34 54.0	47.5	35 41	9.4	A	26.5	22.9		10 42.8		11 28	8.2	A	27.1	22
	36 16.0	47.3	37 03	9.0	A	2.3	-3.3		11 22.7		12 08	7.7	A	32.9	27
	36 56.7	46.2	37 44	9.3	A	29.1	23.5		11 56.9		12 21	9.2	A	0.9	-4
	39 17.9	46.3	40 04	9.0	A	36.7	31.1		12 51.2		12 50	5.0	A	26.6	21.2
	40 39.3	46.8	41 26	9.1	A	55.9	50.3		16 49.5	48.0	17 32	9.4	A	18 5.4	-3.6
	41 11.2	46.7	41 58	6.5	A	56.9	51.3		18 31.9		19 15	9.0	A	45.0	39.6
	41 32.6	46.7	42 19	9.2	A	42.6	37.0		22 14.4		22 57	9.0	A	7.2	1.8
	42 16.4	46.6	43 03	9.0	A	52.5	47.0		22 32.2		23 16	9.3	A	4.8	-4.6
	42 34.3	46.6	43 21	9.2	A	10.0	4.4		23 12.5		23 55	9.1	A	12.9	7.4
	44 41.4	46.4	45 28	7.5	A	8.3	-2.2		23 37.7	42	24 22	8.5		5.6 4.3	51.1
	45 52.5	+46.4	46 39	9.1	A	9.8 5.5	4.3		25 06.7		25 42	9.0	A	8.9	3.4
	47 7.9	46.2	48 54	9.0	A	6.3	0.8		27 11.3		27 53	8.8		14.7	9.4
	47 46.0	46.0	48 32	9.5	B	31.1	25.6		28 19.4		29 01	9.0		56.5	51.2
	48 27.9	45.9	49 23	8.5	A	14.2	8.7		29 44.0		30 26	8.4	B	23.9	18.6
	49 56.0	45.8	50 42	9.4	A	7.3	1.8		30 19.4		30 55	8.9	A	12.9	7.4
	50 52.7	45.7	51 38	9.0	A	20.7	15.2		30 44.9	41	31 26	6.5	A	13.7 5.3	8.4
	51 22.0	45.6	52 08	9.0	A	31.0	29.5		32 18.9		32 55	9.4	B	46.2	40.9
	51 57.4	45.5	52 43	9.4	B	3.1	-2.4		36 27.4		37 08	8.7	B	14.7	13.4
	52 41.0	45.5	52 50	9.4	A	37.3	31.8		37 12.3	40	37 52	7.5	A	46.0	40.7
	52 63	45.5	52 52	9.3	B	3.2 -4.6	-2.3		37 26.9		38 06	7.7	A	14.2	12.9
	54 18.0	45.2	55 03	8.7	A	24.1	18.6		40 20.5		41 00	9.5	B	8.9	-1.4
	57 54.2	44.9	58 39	7.8	B	57.0	45.5		41 49.8		42 30	2.0	A	8.1	-2.2
	58 22.7	44.7	59 07	8.5	B	26.3	20.8		42 15.9	28	42 54	7.2	A	5.7 5.4	5.1

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	13 43 32.5	13 44 11	8.1	54	3.4		14 26 40.9	14 27 20	8.0	1.8	4.6	9.2
	46 17.0	46 56	8.3	39.8	34.8		26 50.3	27 24	8.9	56.1		52.0
	46 57.8	47 37	8.9	43.4	38.4		27 57.3	28 25	9.2	23.9		19.4
	49 47.5	50 26	8.5	45.6	40.6		29 11.5	29 45	9.4	58.5	4.5	46.0
	52 49	52 44	8.6	24.2	19.2		29 16.8	29 57	8.8	39.4		34.9
	55 23.9	56 02	8.0	10.9	5.9		29 35.5	30 09	5.9	5.6		-3.9
	55 48.7	56 28	8.4	57.5	45.5		30 11.5	30 45	8.8	25.1		20.6
	58 58.4	59 36	9.2	3.0	-2.0		31 27.0	32 01	7.8	9.5		6.0
	1 40 45.3	1 23	7.8	30.9	16.0		32 20.9	32 55	9.2	37.4		32.9
	2 51.5	3 29	5.8	9.4	4.5		37 22.6	38 07	9.0	43.5		39.0
	3 29.4	4 07	8.6	2.5	-2.4		38 30.5	39 03	9.0	5.9		-1.4
	3 57.0	4 29	9.0	7.4	2.5		39 32.1	40 06	9.5	2.9		24.6
	4 9.0	4 47	9.0	15.9	14.0		39 44.0	40 17	8.4	17.5		1.3.0
	5 13.4	5 51	8.5	7.9	3.0		40 54.4	41 27	8.0	58.9		45.6
	5 44.2	6 22	8.5	56.0	51.2		41 4.1	41 37	9.3	54.8		50.4
	6 22.0	7 00	8.9	29.2	22.4		41 22.3	41 55	9.5	54.0		49.6
	10 53.8	11 31	7.5	57.0	46.3		42 53.6	43 26	8.0	10.1		5.7
	12 54.9	13 37	9.0	15.4	10.7		43 44.7	44 18	9.0	22.3		17.9
	13 10.8	13 48	9.0	30.2	25.5		44 27.5	45 00	8.2	27.1		22.8
	15 25.6	16 02	8.3	30.5	28.8		46 44.8	47 18	8.9	44.1		39.8
	18 22.9	18 59	7.3	2.9	-1.8		51 4.0	51 37	8.1	4.1		37.4
	18 44.6	19 24	8.4	32.5	27.8		51 36.5	52 07	6.0	12.5		-8.2
	18 54.4	19 30	7.3	11.5	7.1		53 35.8	54 09	8.0	40.4		36.4
	19 7.2	19 43	8.5	55.0	50.3		54 45.6	55 19	8.0	18.2		13.9
	21 7.2	21 43	8.8	52.1	47.4		54 58.8	55 32	9.0	31.4		27.4
	22 34.4	23 10	7.0	2.5	-2.2		55 2.2	55 34	8.3	24.5		20.2
	23 37.6	24 14	5.8	30.2	26.5		55 8.0	55 40	7.5	0.6		-3.7
	24 25.3	25 01	9.0	51.9	47.4		57 21.8	57 53	8.3	44.5		40.2

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	14 59 33.5	15 00 04	8.8	29.6	36.6		15 27 12.6	15 27 42	8.7 A	37.6	34.2			
	31			−4.0										
	14 59 58.2	00 29	9.3 B	5.9	1.9		28 8.4	29 10	8.9	25.3	21.9			
	15 00 44.8	01 16	9.0	52.0	48.0		29 8.4	29 37	8.1	38.9	35.5			
	0 45.6	1 16	8.5 A	13.6	9.6		30 20.4	30 49	9.1 A	27.0	23.6			
	0 69	1 38	8.8	2.2	−1.8		29			3.4				
	3 44.7	4 16	6.8 A	36.6	32.7		30 8.9	31 24	6.7 A	29.3	28.9			
				3.9			30 8.2	31 24	7.0 A	9.6	6.2			
	5 21.3	5 52	9.2 B	49.2	45.3		31 23.8	31 53	8.5 A	51.7	48.3			
	6 7.2	6 38	9.0	38.0	34.1		31 37.8	32 26	8.2 A	33.4	30.1			
	7 0.5	7 31	9.4 B	27.0	23.1		32 09.8	32 39	9.3 A	18.0	14.7			
										3.2				
	8 26.8	8 57	9.2 B	19.5	15.7		32 38.8	33 09	8.5 A	59.6	56.3			
				3.8										
	9 30.5	10 01	9.5 B	45.1	41.3		33 40.8	34 10	9.3 A	33.9	30.6			
	9 57.8	10 29	8.4 A	25.6	21.8		34 21.0	34 50	6.0 A	58.4	55.1			
	10 44.9	11 16	8.5 A	16.1	12.3		35 19.7	35 49	9.2 A	14.6	11.3			
	14 55.8	15 27	7.0 A	44.2	40.4		36 16.3	36 39	8.5 A	18.2	15.0			
										3.2				
	17 31.8	17 03	8.7 A	57.6	53.9		37 1.1	37 30	8.5 A	40.0	36.8			
	30			3.7										
	17 28.4	17 58	8.8 A	37.2	33.5		39 23.2	39 52	9.0 A	57.2	54.0			
	18 36.4	19 06	8.5	9.1	5.4		42 0.3	42 29	8.0 B	13.4	10.2			
	18 39.6	19 10	8.3 A	42.7	39.0		43 11.5	43 40	8.8 A	45.3	42.1			
	19 15.8	19 46	8.1 A	46.7	43.1		43 20.7	43 29	8.0 A	20.1	16.9			
				3.6										
	19 25.3	19 55	8.3 A	2.2	−1.4		43 55.6	44 24	7.6 A	27.4	24.2			
	21 28.4	21 53	8.9	19.1	15.5		44 26.1	44 54	8.3 A	15.9	12.7			
	22 58.7	23 24	8.8	11.6	12.1		45 48.2	46 16	9.2 B	48.4	45.3			
				3.5						3.1				
	23 18.8	23 49	7.3 A	49.7	46.7		47 20.1	47 48	8.8	14.6	11.5			
							28							
	23 43.4	24 13	8.5	16.0	12.5		48 26.9	48 55	9.0	7.7	4.6			
	23 57.2	24 27	8.6	9.6	6.1		48 47.5	49 15	8.6 A	51.8	48.7			
	24 41.3	25 11	8.5 A	56.2	52.8		50 20.3	50 48	9.0 A	22.1	19.0			
				3.4										
	25 04.3	25 34	9.2 A	57.6	54.2		50 35.1	51 04	9.0	26.3	23.2			
	25 14.4	25 44	9.1 A	45.7	42.3		50 52.0	51 20	8.3 A	16.7	13.6			

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	15 33 55.24	55 4.24	9.9d	58.4	55.7		16-21 9.9	21.36	7.6	47.0	45							
	54 25.3	55 03	9.0	40.5	37.5		21.53.0	22 19	8.0	38.0	36							
	54 57.2	55 27	6.0 G	19.1	16.1		22 1.6	22.28	9.3	1.2	-1							
	55 56.4	56 24	9.0 G	15.3 3.0	12.3		23 19.0	23.45	8.5	17.2	15							
	55 58.2	56 26	8.3 G	19.6	16.6		24 58.1	25.24	9.3	57.6	57							
	57 25.3	57 52	9.2d	23.3	20.3		28 19.6	28.46	9.5	11.5	3							
	57 54.3	58 21	9.3 B	40.3	37.3		28.42.1	29. 8	8.8	27.7	28							
	59 02.2	59 29	9.2d	19.6	16.6		29.8.4	29.34	6.8	26.4	24							
	59 48.4	16 00 15	8.8d	58.4	50.1		30.59.0	31.25	9.2	44.2	42							
	16 0 10.4	0 38	8.7d	54.2 2.9	51.3		31.41.3	32.7	9.2	17.0	15							
	5 12.0	5 39	9.2d	22.6	19.7		35.43	35 30	9.1 B	14.3	12							
	5 15.1	5 42	8.5	9.6	6.7		36.18.4	36.44	9.4 B	59.9	58							
	7 27.0	7 54	9.2d	18.0 2.4	15.2		37.14.1	37.40	9.3 B	34.9	33							
	7 44.1	8 11	8.6d	20.8	18.0		38.37.7	39 5	6.5 A	13.6	12							
	8 49.9	9 17	9.0	47.8	45.0		39.58.9	40.24	8.2	26.4	24							
	10 9.8	10 37	8.8	8.4 2.7	0.7		40.19.5	40.45	9.0	52.5	51							
	10 12.8	10 39	8.5	26.8	24.1		40.41.6	41.13	7.3	9.6	8							
	10 18.8	10 42	8.9	11.3	8.6		42.24.9	42.50	9.0	35.5	34							
	10 48.2	11 15	9.5	55.2	52.5		42.37.3	43 2	9.3	59.8	58							
	12 17.9	12 45	9.5	19.3 2.6	16.7		44.25.5	44.51	8.4	34.2	32							
	13 20.0	13 47	9.1	22.4	19.8		44.28.6	44 54	8.1	16.5	15							
	13 21.7	13 49	9.0	58.2	55.6		44.56.8	45.22	9.0	36.5	35							
	14 09.4	14 36	9.5	51.7	49.1		49.4.3	49.29	8.8	26.8	25							
	16 04.0	16 30	9.0	35.1 2.5	32.6		50.32.3	50.57	9.1	43.7	42							
	16 44.4	17 10	8.6	8.8	6.3		52.25.7	52.50	6.5	17.0	15							
	17 44.8	18 10	9.0	44.4	41.9		52.52 36.7	53.12	9.0 8.8	21.6 12.8	11							
	19 14.5	19 40	9.5 B	40.9	38.4		54.11.5	54.37	9.2	7.2	5							
	20 05.2	20 31	8.6 B	32.2	29.7		54.33.4	54.58	7.5	54.2	52							

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16	54	55	55	9	9.4	24.2	23	17	28	39.3	29.2	8.9	29.7	29
	58	30	59.2		7.1	31.0	30		29	16.5	29:30	9.1	58.1	57
	59	30.1	59.54		9.3	13.3	12		29	14.3	29 37	9.1	55.8	55
17	2	31.9	2.56		8.3	28.4	27		29	40.4	30.04	9.4	37.6	37
	5	9.1	5.34		9.0	51.7	57		30	8.6	30.31	9.4	56.3	54
	6	40.7	7	5	9.4	4.7	4		33	21.4	33 44	8.6	13.2	12
	11	3	11	27	8.6	11.5	11		33	54.4	34.17	8.1	45.3	44
	11	57	11	29	9.3	31.0	30		34	59.8	34.23	8.5	32.6	32
	12	39.1	13	4	9.3	54.2	57		37	25.8	37.49	9.4	4.0	3
	13	5.3	13	29	7.8	46	245		38	14.9	38.38	6.8	33.6	33
	14	27.0	14	51	8.9	42.7	43		38	32.8	39.16	8.8	39.9	39
	14	35.2	14	59	8.8	1.6	1		39	22.8	39.46	9.0	18.7	18
	16	31.9	16	56	9.0	46.2	45		40	18.9	40.32	9.2	8.0	7
	17	22.7	17.47		8.8	12.5	12		40	7.4	41.20	9.1	3.3	2
	17	41.5	18	6	8.3	59.4	58		41	22.1	41.45	7.5	6.0	6
	17	51.7	18.16		9.2	3.7	3		41	38.8	42.2	8.9	19.0	18
	19	3.5	19.28		8.8	32.1	31		42	18.3	42.41	7.8	14.2	13
	20	51.4	21.15		6.8	37.5	34		42	56.9	43.20	9.0	43.1	42
	20	57.0	21.21		9.4	15.1	14		45	9.3	45.32	9.2	14.3	13
	21	6.4	21	30	7.0	51.8	49		45	28.9	45.52	9.5	35.4	35
	24	21	24.41		8.8	41.0	40		45	37.1	46.0	8.0	5.5	5
	25	22.0	25	45	9.2	23.5	23		48	5.6	49.20	8.0	25.1	24
	25	29.2	25	52	6.8	51.7	49		49	33.6	49.57	8.8	8.7	8
	25	30.1	25.53		7.3	12.2	11		49	39.5	50.2	8.9	18.2	17
	25	56.4	26.19		9.0	23.6	23		50	03	50.23	9.0	2.3	2
	26	3.5	26.27		8.4	41.1	40		52	22.9	52.46	9.2	57.0	56
	27	21.4	27.44		8.4	11.2	10		52	32.3	52.55	6.6	30.0	29
	28	4.2	28.27		7.5	48.4	47		52	57.4	53.14	8.8	17.5	17

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	h										h						
	17	54	30.3	17	54	53	8.3	20.0	20		18	19	1.7	18	19	24	9.2 A	14.1	24
			+23					+.0.0										1.3	
		56	21.5		56	44	8.8 B	39.4	39			20	6.7		20	29	8.5	44.0	44
		56	36.6		56	57	8.0 B	55.7	56			21	19.1		21	42	8.7 B	23.3	24
		56	54.2		57	11	9.2 A	34.4	34			21	30.3		21	53	9.0	27.5	28
		59	34.9		59	37	8.0 A	3.9	4			21	52.4		22	15	9.0	25.4	26
	h	59	38.2	18	0	11	8.2 A	41.9	42			21	56.1		22	21	9.0	17.0	17
	18	0	55.7		1	18	8.5 A	47.4	47			22	24.4		22	47	8.9 A	14.6	15
			23					.0											
		1	5.1		1	28	8.6 S	52.0	52			22	24.4		22	47	8.9	4.2	5
		2	19.5		2	42	8.3	20.6	21									0.4	
		3						−0.4											
			1.9																
		3	19.7		3	42	8.8 B	26.9	27			24	0.0		24	23	9.1 A	20.5	21
		3	26.9		3	49	6.5 A	46.9	49			24	34.1		24	57	7.6 A	56.6	57
		4	19.6		4	42	8.2 A	51.9	52			24	34.5		24	57	9.2 A	38.0	38
			23																
		6	9.8		6	32	7.0 A	21.6	22			25	58.6		26	21	9.0 A	29.9	30
		7	27.5		7	50	8.8 A	35.5	35			26	57.0		27	20	8.5 A	4.8	5
		7	37.6		8	00	8.5 A	45.5	45			27	4.1		27	27	8.7 A	0.1	1
		9	3.9		9	26	9.0	26.5	26			28	5.7		28	28	8.7	28.5	29
		9	58.8		10	21	8.7 A	58.3	58			30	29.0		30	50	8.8 R	51.3	52
													23.0					0.4	
		10	0.9		10	23	8.7 A	29.6	30			30	55.4		31	18	7.4 A	59.9	60
								0.2											
		11	10.1		11	33	8.0 A	12.1	12			32	48.9		33	11	9.0 R	39.9	40
		11	53.9		12	16	7.5 L	55.9	56			33	44.0		34	07	8.4	10.2	11
		12	32.2		12	55	6.8 A	29.3	29			35	44.8		36	07	8.3 A	7.5	8
		12	49.3		13	12	8.3 A	10.1	10			36	26.9		36	49	8.4	57.9	58
		12	57.7		13	20	7.6 B	33.8	34			36	28.0		36	51	9.0 A	4.0	5
		12	58.3		13	27	8.7 B	49.0	49			37	3.9		37	26	8.7	40.9	41
																		0.8	
		13	45.0		14	08	8.8	59.9	60			37	37.9		38	00	7.7 L	04.2	35
		16	22.9		16	45	9.3 B	57.5	58			38	16.7		38	39	7.8 L	59.2	60
			+23					+0.3											
		17	38.0		18	01	8.5 A	30.9	31			38	32.1		38	55	9.0	10.8	11
		18	2.0		18	25	8.6 A	18.5	19			39	41.8		40	04	7.8 B	27.4	28
		18	40.3		19	02	8.5 A	56.2	57			41	28.2		41	51	9.0	51.4	52
													23.8					1.1	

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	18	4	3	25.5	18	43	48	8.8	26.0	27		14	7	17.2	7	41	8.6	16.0	18
			23.						1.1					24				+1.9	
		45	20.5			45	43	9.0	39.6	41			9	38.5	10	02	8.8	53.3	55
		46	50.9			47	13	8.2A	58.4	59			9	59.7	10	23	8.3	39.7	41
																		1.7	
		46	53.8			47	16	8.9A	33.9	35			11	8.0	11	32	9.0	53.7	55
		46	57.4			47	20	8.5A	43.7	45			11	30.8	11	54	8.8	15.9	17
		47	7.8			47	30	8.9	25.6	27			12	10.9	12	34	8.7	32.7	34
		47	55.8			48	18	7.9A	53.4	54			12	19.2	12	43	9.3B	37.1	39
		48	18.9			48	41	8.8A	47.9	49			12	46.8	13	10	9.0	15.6	17
		49	38.4			50	1	5.2A	32.0	33			13	1.6	13	25	8.5	23.4	25
																		1.8	
		49	39.9			50	2	8.0A	29.0	30			13	6.3	13	30	8.8	31.7	33
		50	41.0			51	4	9.4A	24.3	25			13	6.7	13	30	8.7	42.0	44
		50	46.9			51	9	8.8A	24.1	25			14	1.8	14	25	8.9	13.3	15
		51	34.3			51	57	8.9A	43.7	45			14	28.8	14	52	9.0B	55.0	57
		52	12.4			52	35	8.6A	22.3	23			14	52.2	15	16	8.0B	36.5	38
		54	8.3			54	31	8.8	51.7	53			15	14.3	15	38	8.5	36.7	38
														24				1.8	
		55	24.0			55	47	6.2L	36.7	38			16	3.3	16	27	8.8	26.4	28
		56	34.7			56	57	4.8A	20.1	21			16	44.5	17	08	7.1	4.2	6
		59	10.0			59	33	8.9B	27.2	28			19	20.1	19	44	8.3	45.6	47
			23.																
		59	21.6			59	44	8.9R	2.1	3			22	5.3	22	29	7.8A	33.8	35
																		1.9	
		59	54.1			60	17	8.8	40.0	41			22	13.8	22	37	8.8A	36.6	38
	h																		
	19	0	8.2			60	31	8.9	2.5	04			22	22.6	22	46	8.1A	17.0	19
			23					24	1.8									21	
		3	51.4			4	15	8.6B	26.4	28			22	38.2	23	03	8.1A	41.5	44
			24											25				2.2	
		4	2.9			4	26	8.8	43.4	45			23	27.8	23	52	8.6A	33.3	35
		4	30.7			4	54	9.2A	4.7	6			23	31.5	23	56	8.5R	6.3	8
		4	48.3			5	12	8.6A	1.5	3			23	48.2	24	13	8.9	7.9	10
		4	51.2			5	15	7.4A	8.1	10			24	2.4	24	27	8.5A	26.5	29
									1.6										
		6	16.4			6	40	9.0A	46.7	48			26	9.3	26	34	8.9	42.8	45
		6	20.0			6	44	9.0	11.5	13			27	26.1	27	51	9.1B	7.2	9
		7	8.9			7	32	8.3A	29.1	31			28	0.2	28	25	8.9	45.7	48
														25				2.2	

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	19	28	13.8	28	38	8.4	25.5	27		43.	11	45.2	8.3	38.5	41
			25				22			43	32	+26		+2.5	
	29	10.0		29	35	8.8	37.3	40		43	11	9.1	8.2 A	1.6	4
												43			
	30	34.1		30	59	6.0 A	55.9	58		43	32	41.7	9.0	58.2	61
												43			
	31	10.8		31	35	9.0	41.7	44		44	07	48.5	8.9	45.5	48
												43			
	31	14.3		31	39	8.4 A	18.1	20		44	22	56.4	8.1 A	58.6	61
												43			
	31	19.3		31	44	9.5 B	53.7	56		44	41	15.0	8.5 A	52.2	55
	33	36.0		33	01	9.0	15.9	18		44	42	16.0	8.7	17.2	20
				34											
	34	24.8		34	49	7.7 A	54.7	57		44	42	16.3	9.0	28.1	31
	34	26.6		34	51		47.9	50		48	02	36.0	7.2 A	16.8	19
	35	15.2		35	40	8.0 A	46.1	48		48	03	37.2	7.3 A	24.6	27
	35	41.5		36	06	8.8 A	48.1	50		48	13	47.9	8.0 A	8.6	11
	35	44.0		36	09	8.9	31.6	34		48	17	50.0	9.4 B	22.9	25
							2.3					27			
	37	19.5		37	44	7.9 G	2.5	5		49	11	44.6	8.1 B	39.4	42
	37	52.7		38	17	8.8	54.0	56		49	45	18.0	8.1 B	41.1	44
	37	57.8		38	22	6.3 G	11.6	14		50	11	44.8	8.9 B	1.2	4
														2.6	
	38	0.2		38	26	6.2 B	11.0	13		50	17	50.0	7.8 B	46.5	49
		26													
	38	6.1		38	32	9.0	18.9	21		51	23	56.1	9.4 B	30.6	33
	38	13.7		38	39	9.0	26.5	29		50	33	50 7.8	8.9	51.0	54
	38	53.2		39	19	9.0	1.1	3		51	24	58.1	7.3 G	26.6	29
	39	53.0		40	19	7.9 B	43.2	46		51	46	20.7	8.7	35.9	38
							2.4				27	20.2			
	40	8.5		40	38	9.1 B	32.4	35		52	57	52 31.8	8.9 B	24.6	27
	40	12.2		40	38	8.0 A	33.6	36		53	12	52 46.7	6.2 A	31.1	34
	40	26.4		40	52	8.5	27.9	30		54	11	53 45.8	7.9 A	54.8	57
	40	34.7		41	00	8.6	46.6	49		54	39	54 13.7	8.8	41.8	44
	40	38.2		41	14	9.1 B	54.4	53		54	40	54 14.0	8.8	37.7	40
	40	52.6		41	18	8.3	10.7	13		55	33	55 7.8	7.2 A	16.1	19
	40	57.8		41	23	7.9 B	26.1	28		56	14	55 48.8	8.0 A	10.8	13
	41	33.1		41	59	8.2	24.1	26		56	7	56 0.5	8.7 B	15.7	18
	42	28.5		42	54	8.6	36.5	39		56	48	56 21.2	9.0	23.6	26
		26					2.5					7.7		2.5	

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	19	56	32.3		56	59	8.0A	15.9	19		20	12	9.6	12.	36	9.0	45.0	48
			25					28					27				31	
		56	46.5		57	13	9.2B	35.3	38			12	35.8	13	2	9.0	27.8	31
		57	59.6		58	26	7.8A	9.0	12			13	7.4	13	34	9.3B	7.8	11
		59	3.8		59	30	9.5B	45.8	49			13	27.0	13	57	7.3A	42.1	45
		59	8.6		59	38	7.1A	3.6	7			14	37.8	15	4	7.8A	26.9	30
	20	0	16.0	20	0	43	7.4A	52.7	55			15	0.2	15	27	7.8A	26.1	29
			27					28										
		0	37.9		1	04	9.2B	51.0	54			15	20.5	15	47	8.7A	47.3	50
		1	13.1		1	40	7.6A	2.5	8			15	50.9	16	18	9.1B	37.1	40
													27				31	
		1	41.1		2	08	8.1B	36.9	40			15	52.8	16	20	8.9A	57.5	60
		3	4.7		3	31	8.6	55.3	58			15	54.0	16	21	8.3A	48.4	51
		4	34.8		5	2	6.8A	9.8	12			16	3.1	16	30	8.7A	48.4	57
		4	35.0		5	2	8.7	50.2	53			16	40.0	17	7	9.0	10.1	13
		5	26.2		5	53	9.4B	56.5	59			16	50.0	17	17	8.8A	3.8	7
		5	31.5		5	58	9.0	8.4	11			17	19.5	17	46	8.7A	21.7	25
		5	41.5		6	9	9.4B	16.1	19			17	57.4	18	24	6.7A	4.8	8
		5	43.8		6	11	9.0A	59.5	62			18	2	18	52	9.0	10.6	14
		5	45.9		6	13	8.6A	54.1	57			19	14.0	19	41	8.0A	20.0	23
		5	54.1		6	21	9.0	53.7	57			19	33.8	20	0	8.7A	57.7	61
		5	59.0		6	26	8.8	58.5	61			19	39.4	20	6	8.7A	26.1	29
		6	3.3		6	30	8.3A	58.9	59			19	44.8	20	12	9.0	41.0	44
		8	37.1		9	4	9.2B	44.9	8			19	45.7	20	13	9.3B	50.6	54
		8	57.4		9	24	8.8B	43.4	46			19	53.8	20	21	8.8	30.0	33
		9	10.8		9	38	8.4A	12.2	15			19	54.8	20	22	9.0B	23.9	24
		9	12.7		9	40	8.9	33.4	36			20	31.6	20	59	8.8A	52.6	56
		9	20.9		9	48	9.0	47.0	50			20	35.3	21	2	7.9A	8.3	12
		9	42.0		10	9	7.1A	48.0	57			20	37.0	21	4	9.4B	50.6	54
		10	6.0		10	33	9.1B	35.0	38			20	38.7	21	6	7.7A	49.7	53
		11	48.0		12	15	8.8	42.3	45			20	46.0	21	13	8.8	33.0	36
		12	4.7		12	32	8.5	37.8	41			21	24.5	21	51	9.0	4.9	8
			27					28					23				23	

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48	20	22	19.0	22.46	8.7	2.7	63	20	38	22.7	38.51	7.9 B	30.3	34
31		22	24.9	22 52	7.3A	37.8	41		38	47.7	39 10	8.0 B	37.3	41
11		23	0.1	23.27	8.6A	32.1	35		38	54.9	39 [illegible].23	9.0	31.6	35
45		23	25.2	23 52	8.6A	29.8	33		38	59.0	39.27	9.0	8.2	12
30		23	40.6	24 8	9.2A	9.9	13		39	20.7	39.49	8.4	40.5	44
29		23	45.4	24 12	8.9A	33.4	36		39	31.5	39.59	8.7A	10.2	14
50		24	17.9	24 45	8.5A	10.1	13		39	57.2	40.25	9.0	16.6	20
40		24	36.0	25 3	8.6	42.4	46		39	59.9	40.28	8.9	52.7	56
60		24	44.7	25 12	8.8B	53.4	57		40	5.9	40.34	8.4	30.2	34
51		25	45.4	26 12	8.7	4.0	7		40	46.1	41.14	9.0	40.5	44
51		26	32.2	26 57	8.3	21.3	24		41	1.8	41.30	9.0	15.3	19
13		28	57.8	29.25	9.0	57.2	60		41	14.1	41.42	7.0A	8.5	12
7		29	7.0	29 34	9.0	10.8	14		41	23.6	41.52	8.7A	13.9	17
25		29	26.6	29 56	9.0	15.4	19		41	47.1	42.15	9.3A	32.3	36
8		29	45.5	30 13	9.0	44.6	48		42	49.4	43.17	9.0A	14.9	18
14		29	45.5	30 13	9.5B	58.5	62		43	10.9	43.39	8.2A	13.3	17
23		31	20.6	31 48	8.5A	6.9	10		43	24.5	43.52	8.6A	24.6	28
6		31	36.4	32 4	8.4A	13.0	17		44	19.6	44.48	9.2A	34.3	38
29		31	45.8	32 14	9.0A	59.0	62		45	2.7	45.31	7.3A	14.4	18
44		32	2.6	32 31	8.4	38.4	42		45	6.0	45.34	8.8A	0.6	4
54		32	7.8	32 36	9.0	26.9	30		45	9.9	45.34	6.3A	46.6	50
33		32	21.1	32 49	7.7A	22.9	26		45	30.7	45.59	9.0A	51.8	55
24		32	37.6	33 5	8.9	13.5	17		46	37.9	47.7	7.2A	52.6	56
56		32	56.0	33.19	9.0	39.4	43		47	32.7	48 2	9.4A	44.7	48
12		33	27.9	33 56	8.2A	57.3	61		47	47.7	48.17	8.6B	5.3	9
54		33	54.0	34.22	8.8A	35.4	39		48	24.6	48.54	8.6A	4.9	8
53		34	33.7	35 2	8.8A	42.6	46		49	21.2	49.50	8.8	42.3	46
36		34	38.4	35 6	8.5A	34.7	38		50	0.5	50.30	9.0	57.5	61
8		34	53.4	35.21	8.5A	47.7	57		51	39.1	52 18	6.2A	30.9	34

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	h	m	sec												
	20	51	50.8		52	19	5.5 A	10.4	14		21	16	45.5	17 17	8.2 A	13.0	17
			29					38					32			43	
		52	49.8		53	19	9.3 A	30.4	34			16	54.0	17 26	9.2 A	11.9	16
		53	28.7		53	58	8.4 A	18.6	22			16	54.3	17 26	8.9 A	12.6	17
		54	16.0		54	45	9.5 B	6.9	11			17	11.2	17 43	9.1 A	11.1	15
		56	26.2		56	54	8.7 A	47.7	51			18	15.3	18 47	9.0 A	7.8	12
		56	28.0		56	57	9.1 A	49.1	53			18	23.6	18 56	8.6 B	2.8	7
		56	32.9		57	1	9.0	16.4	22			19	38.8	20 01	8.7	45.6	50
		57	40.0		58	9	9.4 B	17.8	22			19	51.9	20 23	8.8	12.4	17
		57	48.9		58	18	9.0	50.4	54			20	8.0	20 40	9.0	44.5	49
		58	40.1		59	9	7.7 A	13.8	18			20	26.6	20 58	7.3	30.0	35
		59	52.2	21	0	21	8.1 A	12.6	17			21	14.0	21 46	9.0	28.4	33
	h	m	sec														
	21	0	34.0	21	1	05	8.5	34.2	38			23	26.0	23 58	8.8 A	21.7	26
			21					4.0									
	2	1.5		2	32		7.4 B	50.4	54			23	44.8	24 17	8.5 A	11.2	16
	2	45.2		3	16		8.0 B	54.7	59			23	52.0	24 24	8.3 A	28.5	33
	3	36.2		4	07		9.0	9.5	14			24	39.5	25 12	8.7 A	36.5	41
	5	15.7		5	47		8.8	57.1	61			25	18.9	25 51	8.8	32.8	37
	7	7.7		7	39		9.2 B	3.0	7			25	40.2	26 12	9.0	14.4	19
	8	46.5		9	17		8.7	19.9	19			26	9.0	26 41	8.7	36.8	41
	9	24.8		9	56		8.8 B	44.1	48			26	33.6	27 06	9.0	59.8	64
	10	21.2		10	52		7.7 A	48.7	53			27	42.0	28 14	8.7	35.9	40
	10	24.7		10	56		7.0 B	40.8	45			28	52.0	29 24	8.8	6.1	11
	10	39.6		11	11		8.9	8.2	12			29	51.5	30 23	9.0	44.2	49
	11	21.0		11	52		9.0 A	7.2	11			30	44.7	31 18	8.8 A	8.0	12
													34			45	
	11	44.0		12	15		9.0	40.2	44			31	7.8	31 40	7.3 A	2.3	7
	13	4.0		13	35		7.8 A	35.7	40			32	8.9	32 43	9.0	11.1	15
	13	23.0		13	54		9.1 A	41.1	45			32	11.7	32 45	7.7 B	42.8	47
	14	1.5		14	32		9.1 A	25.4	30			32	12.7	32 45	7.1 B	24.8	29
	14	5.2		14	36		9.2 A	2.7	7			32	40.7	33 15	8.1 A	51.0	55
	16	34.4		17	06		9.3 A	22.7	27			33	14.0	33 48	8.8 A	49.9	52
			33					4.3									

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17	21	33	30.1 39	34	04	8.5B	28.1 45	33	21	51	25.3 37	52	02	8.0B	52.9 4.7	57
16		34	49.8	35	24	6.6B	49.3	64		51	28.8	52	05	8.5	44.8	48
17		34	55.6	35	30	8.2B	54.0	58		51	34.1	52	11	9.0	50.3	55
15		35	37.9	36	12	8.9	51.1	55		52	13.5	52	50	8.7A	9.0	14
12		35	40.4	36	14	8.2B	40.0	44		52	26.5	53	03	8.6A	9.0	14
7		35	46.9	36	21	8.5	45.7	50		52	28.9	53	05	8.2B	20.5	25
50		36	56.3	37	30	5.1G	31.5	36		52	33.6	53	10	8.7	38.3	43
17		37	10.5	37	45	7.1A	11.9	16		52	38.4	53	15	8.9	11.7	16
44		38	5.0	38	39	8.0A	20.9	25		52	45.1	53	22	8.4B	55.8	60
35		38	20.2	38	54	9.4A	15.5	20		53	51.6	54	28	8.7A	8.5	14
33		38	40.1	39	14	8.7A	15.4	20		54	44.1	55	21	7.6B	47.4	54
6		38	59.8	39	34	9.2B	32.3	37		54	57.1	55	34	8.5A	54.6	59
16		39	15.4	39	49	8.9A	24.6	30		55	25.3	56	02	8.3A	32.3	37
33		40	47.2	41	21	9.0	14.4	20		55	36.1	56	13	8.7A	35.5	40
11		40	48.7	41	23	7.4B	0.4	5		56	13.5	56	50	8.5A	38.0	43
37		41	45.2	42	19	9.3A	48.5	53		56	14.1	56	51	9.3B	23.8	28
9		41	51.9	42	26	9.3A	42.2	46		56	20.5	56	57	8.8A	38.0	43
11		42	46.5	43	21	7.6A	37.0	61		56	22.4	56	59	9.0	6.1	5
17		43	25.6	44	00	8.6A	56.2	60		57	2.5	57	39	8.9	16.1	21
10		45	15.9	45	51	7.2A	19.2	23		57	20.9	57	57	8.8	5.8	10
1		45	41.1 36	46	17	8.7	42.9 4.7	46		57	26.5	58	03	8.6A	12.2	17
49		46	32.7	47	09	9.0	13.1	18		59	1.4	59	38	9.1B	42.4	47
2		46	51.9	47	28	8.3B	45.1	50		59	40.9	22	0 17	7.3G	59.9	64
1		48	8.2	48	44	8.8	43.0	48		22	0 1.6	0	38	8.6	26.1	31
5		48	10.4	48	46	8.5	46.9	54		0	7.3 0 40.8	0	45	9.0 9.3B	34.9 23.2	35
7		48	46.5	49	22	8.6	57.1	62		1	9.7	1	47	9.0	13.1	15
29		50	2.9	50	40	8.7	19.0	24		1	52.5	2	30	9.0	15.9	20
25		50	40.1	51	16	8.7A	25.0	29		1	54.9	2	32	8.5A	59.8	64
22		50	50.2	51	26	8.7A	21.9	27		2	0.7	2	35	9.0	15.5	20

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h			h					h			h				
22	2	21.1	2	59	9.0 A	43.1	48	22	11	59.5	12	37	7.8 A	35.8	40
	2	30.3	3	08	8.5 A	54.8	59		12	8.0	12	46	8.8 A	14.2	19
	2	30.5	3	08	9.2 B	47.7	52		12	25.7	13	03	8.8	47.9	52
	3	4.9	3	42	9.0 A	50.0	55		12	39.6	13	17	9.5 B	14.1	19
	3	26.2	4	04	9.1 A	1.3	6		13	4.6	13	42	9.0	38.4	43
	3	29.9	4	07	9.1	20.2	25		13	6.9	13	44	8.2 A	4.1	9
	3	31.9	4	09	8.6 A	4.0	9		13	13.5	13	51	8.5	29.2	34
	4	12.0	4	50	9.2 A	25.7	30		13	45.5	14	23	9.0	46.5	51
	4	30.4	5	08	9.1 B	12.6	17		14	19.5	14	57	8.4	31.1	36
	4	39.8	5	17	8.5 A	17.1	22		14	43.3	15	21	8.9 B	16.1	21
	4	43.2	5	21	8.7	8.9	13		14	55.7	15	33	6.5 B	15.1	20
	4	57.4	5	35	8.4 A	5.6	10		14	58.0	15	36	9.0	51.0	56
	5	12.1	5	50	8.9 A	57.8	62		15	15.0	15	53	8.5	21.2	26
	5	32.9	6	10	6.0 A	6.6	11		15	34.4	16	12	9.1 B	18.8	23
	6	24.8	7	02	8.6 B	35.6	40		15	51.4	16	29	8.4 A	43.7	48
	7	21.7	7	59	9.0	5.5	10		16	43.5	17	21	8.8	45.5	50
	7	21.7	7	59	8.0 B	28.4	33		16	45.2	17	23	8.7 A	29.8	35
	8	32.2	9	10	9.1 B	7.3	12		17	23.5	18	01	9.0	17.0	22
	8	33.7	9	11	8.0 A	43.1	48		17	28.6	18	06	8.2 A	49.4	54
	9	8.4	9	46	9.0 A	4.0	9		17	49.0	18	27	7.7 A	53.2	58
	9	26.2	10	04	7.5 A	46.0	51		17	51.6	18	29	7.2 A	28.1	33
	9	41.3	10	19	9.5 B	32.9	37		17	53.4	18	31	9.1 B	21.6	26
	9	41.6	10	19	8.5 A	41.8	44		19	16.3	19	54	7.0 A	30.8	36
	9	45.5	10	23	8.7	20.6	25		19	34.9	20	12	9.4 B	0.6	5
	10	40.8	11	18	8.3	22.2	27		20	5.1	20	43	9.2 A	37.4	42
	10	42.9	11	20	7.8 B	17.1	22		20	9.0	20	48	8.6 A	0.1	5
	11	28.9	12	06	9.0 B	11.1	16		20	21.4	21	00	8.7	6.0	11
	11	38.4	12	16	8.2 A	5.0	10		20	23.8	21	02	8.7	26.2	31
	11	39.1	12	17	9.0	14.7	19		20	26.2	21	05	8.7 A	33.8	38

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40	XX	22 21	36.1	22	15	8.7	21.2	26
19	XX	21	55.5	22	34	7.3A	45.4	50
52	XX	22	6.2	22	45	7.0A	50.4	55
19	XX	22	27.3	23	06	9.1B	8.4	13
43	XX	22	36.3	23	15	7.7A	34.1	39
9	XX	23	7.6	23	46	8.5	13.3	18
34	XXXX	23 (39)	13.6	23	52	7.5A	(.5.1) 46.1	51
51	XX	24	8.2	24	47	8.8A	37.6	42
36	XX	24	45.5	25	24	9.0	28.1	33
21	XX	25	9.9	25	48	9.0	46.3	51
20	XX	25	21.3	26	00	7.6A	7.5	12
56	XX	25	30.8	26	09	8.2A	22.7	28
26	XX	25	45.7	26	24	8.0A	29.9	35
23	XX	27	4.7	27	43	9.0	28.1	33
48	XX	27	11.6	27	50	9.3B	26.8	31
50	XX	28	56.9	29	35	8.6	14.7	20
35	XX	30	55.9	31	36	9.1B	10.4	15
22	X	30 (41)	58.0	31	39	~~5.2~~ 8.0A	(5.2) 21.9	27
54		31	16.6	31	51	8.5A	32.1	37
58		31	16.8	31	61	8.5A	15.9	21
33	XX	31	27.0	32	08	5.5G	48.2	53
26	XX	32	28.0	33	09	8.8A	19.8	24
36	XXX	33	8.9	33	49	8.8A	24.7	29
5	XX	33	31.0	34	12	7.5A	24.0	29
42	XX	33	40.6	34	21	9.4B	31.7	36
5	X	33	56.3	34	37	9.2B	19.7	24
11	XXX	34	5.1	34	46	8.5A	50.8	55
31		34	17.6	34	58	7.8A	47.8	52
38	XXX	34	41.1	35	21	9.0A	18.3	23

h 22

XX	34	48.3	35	30	9.1A	37.8	43
XXX	35	(42) 24.0	36	06	8.3G	(5.2) 10.3	15
XXX	36	41.6	37	23	8.8	17.4	22
	36	46.5	37	28	8.5A	1.0	6
	36	59.4	37	41	9.2A	55.7	61
	37	14.6	37	56	8.5A	42.9	48
XX	37	59.4	38	41	8.2A	3.1	8
XX	38	3.5	38	45	9.5B	21.3	26
XXX	38	12.6	38	54	7.5A	41.2	46
XX	39	17.1	39	59	8.0A	43.5	48
XXX	39	28.4	40	11	7.8A	33.3	38
XX	41	37.2	42	19	9.2A	24.8	29
XXX	42	42.6	43	24	9.2A	8.9	14
XX	43	7.7	43	49	7.1A	12.9	15
XX	43	8.0	43	50	9.4B	43.1	48
XXX	43	53.2	44	35	8.6A	54.7	60
XX	44	2.0	44	44	8.9A	30.4	35
XX	44	29.0	45	11	8.3A	20.9	26
XX	44	43.6	45	25	7.6A	50.8	56
XX	45	51.9	46	34	9.0	29.0	34
XXX	46	(43) 0.6	46	43	~~5.5~~ 9.4R	(5.3) 55.3	60
XXX	47	18.8	48	01	8.0A	45.3	49
XX	47	45.8	48	28	9.5B	7.7	13
XX	48	32.4	49	05	8.6A	11.1	16
XX	48	39.6	49	22	8.8A	12.9	15
XX	48	43.7	49	26	9.0B	45.2	50
XX	49	11.2	49	54	8.9	49.2	54
XX	50	31.8	51	14	9.1B	46.1	51
XXX	51	12.4	51	55	8.7A	53.3	58

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h								h	m	sec					
22	51	24.6	52	07	8.6	41.2	46	23	3	1.0	3	46	9.0 A	14.4	19
		43				5.4				45				5.5	
	52	17.0	53	00	8.0A	50.5	55		4	16.5	5	01	8.7	41.8	47
	52	26.0	53	09	8.5R	14.4	19		4	40.4	5	25	8.3 A	47.2	52
	52	39.4	53	22	8.0A	38.5	43		5	23.5	6	08	9.0	55.0	60
	52	40.0	53	23	9.0A	31.3	36		6	55.8	7	40	9.3A	44.1	49
	53	11.7	53	54	9.4B	30.2	35		7	55.2	8	40	8.7A	43.2	48
	53	14.0	53	57	8.2A	14.4	19		9	24.0	10	09	9.0	3.8	8
									10	14.6	11	2	9.0	13.3	18
	54	22.4	55	05	8.2A	14.2	19		10	45.9	11	30	8.0A	2.2	7
	55	25.5	56	08	7.5G	4.4	9		11	4.3	11	49	9.2A	3.2	8
	55	26.5	56	06	9.4B	19.4	24		12	6.7	12	51	9.0B	35.3	40
	55	31.9	56	14	9.0A	34.5	39		13	0.6	13	45	9.0A	53.3	58
	55	52.6	56	35	9.0A	52.0	57		13	53.8	14	38	9.0	42.4	47
	55	54.0	56	27	8.7A	48.2	53		14	59.4	15	44	8.0A	29.4	34
	56	38.2	57	21	8.7A	59.8	64		16	3.9	16	49	7.4A	15.1	20
										46			5.6		
	56	39.1	57	22	9.0A	30.5	35		16	11.2	16	57	9.0A	14.1	19
	57	54.2	58	27	9.0A	44.1	49		16	35.7	17	21	9.1A	5.6	10
	58	23.6	59	06	8.6A	55.5	60		18	16.6	19	02	9.0A	12.0	17
	59	40.9	23	0	33	9.1B	23.7	29		18	26.7	19	12	9.0	38.6	43
	59	43.1		0	36	9.0	59.5	65		21	23.1	22	09	7.7B	34.0	39
23	0	5.7		0	50	7.9.2	17.8	23		21	43.8	22	29	8.8	16.5	21
		45				5.5									
	0	7.4		0	52	8.5A	39.2	44		21	54.7	22	37	8.9	11.3	16
	0	56.0		1	41	8.9A	50.1	55		22	29.4	23	15	9.5B	25.3	30
	1	46.6		2	33	8.1A	25.0	30		22	40.8	23	26	8.0A	52.9	58
	2	26.0		3	11	9.0A	16.5	22		23	42.3	24	28	9.0A	10.7	16
	2	28.2		3	13	9.5B	36.1	41		23	44.1	24	30	9.0	14.4	19
	2	39.7		3	24	9.0A	10.4	15		23	55.6	24	41	9.0A	19.1	24
	2	41.6		3	26	8.8A	45.3	50		24	44.5	25	30	9.0A	17.6	22
	2	56.0		3	41	8.5A	56.6	62		25	41.6	26	27	8.4A	11.7	16
	3	0.7		3	45	9.0	20.0	25		26	30.2	27	16	8.7A	2.2	7

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	h								h						
	23	27 4.5	27	51	9.0B	47.0	52		23	40 7.8	40	56	8.8	5.7	11
		47				5.5				44				5.6	
		27 5.3	27	52	9.3B	28.8	33			42 5.7	42	54	8.8	12.5	17
		27 8.4	27	55	8.8B	47.0	52			42 50.2	43	34	9.5B	0.7	6
		27 25.4	28	12	8.3B	48.8	53			43 9.2	43	56	6.8G	49.0	54
		27 44.6	28	31	8.2A	34.4	39			43 46.1	44	35	7.9A	35.6	41
		28 45.9	29	32	7.0A	27.9	32			43 56.4	44	45	8.0A	31.9	37
		28 52.5	29	39	9.0	40.4	45			44 18.9	45	07	8.4A	43.1	48
		28 56.4	29	43	9.0B	42.9	47			46 17.2	47	07	9.1A	41.7	47
										50			5.6		
		29 11.6	29	58	9.3A	24.1	29			46 19.3	47	09	7.0A	42.7	48
		29 31.9	30	18	8.8	48.3	53			48 2.1	48	52	8.4A	55.4	60
		29 34.2	30	21	8.9A	19.8	24			48 4.3	48	54	8.7	4.2	9
		30 24.9	31	12	8.8A	9.7	14			49 17.8	50	07	9.0	12.2	17
		48			5.6										
		30 48.5	31	36	9.1A	7.6	12			49 18.8	50	08	8.7A	41.1	46
		31 2.8	31	50	8.0A	26.6	31			50 44.5	51	34	8.4	1.8	6
		31 49.7	32	37	9.0	43.0	48			50 49.2	51	39	8.7	13.8	19
		32 32.0	33	30	9.0A	32.3	37			51 3.6	51	53	Var β	34.9	40
		33 3.2	33	51	9.0	45.9	51			51 13.5	52	03	9.0β	31.0	36
		33 22.4	34	10	9.0	55.8	61			52 11.4	52	01	7.2L	1.6	6
		34 11.7	34	54	8.0A	53.0	58			52 49.2	53	39	8.9	28.6	33
		34 48.0	35	36	9.0	53.6	58			53 28.5	54	18	9.0	0.3	5
		35 5.6	35	53	9.1B	57.1	62			53 31.2	54	21	8.8R	52.2	57
		35 37.8	36	35	7.3A	37.5	42			55 15.5	56	05	7.8A	40.1	45
		36 19.2	37	07	7.6A	6.3	11			57 13.4	58	03	8.5	12.6	18
		36 34.0	37	22	9.0	28.1	33			57 18.1	58	08	8.2	43.5	49
		37 41.5	38	29	8.4A	6.5	11			57 30.5	58	20	8.2β	22.6	28
		38 9.2	38	57	8.9	3.3	8			58 44.6	59	34	8.4A	33.8	39
		38 59.7	39	37	9.0	28.2	33			59 20.4	1	10	9.0	57.5	63
		39 48.5	40	36	7.4A	25.7	31								
		39 56.0	40	44	8.4B	45.2	50								

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2125 observations in zone 50° Oct-31 1872 checked.
287 " " unchecked (to 2412)
2412

In zone 50°-51° = 1794 stars.
checked " " = 2558 Sept. 1 1873
unchecked " " 287
Total 2845 Sept 1 1873

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Zone 51° – 52°

Checker	a 1855	a 1871	Mag	S 1855	S 1871	Checker	a 1855	a 1871	Mag	S 1855	S 1871
	h m s	N or S					h m s				
	2 1 01.21	2 02 02	8.9	6.7 +4.5	11.2		2 21 31.7 4.7	2 22 36	9.0	39.4	43.8
	1 39.2 2.1	2 41	9.0	27.3	31.8		21 52.8 4.4	22 57	9.4	40.2	44.6
	4 26.2 2.3	5 27	8.8	33.9	38.4		23 24.3 4.5	24 29	6.5	39.7	44.1
	4 48.4 2.3	5 51	8.6	38.2	42.7		23 34.7 4.5	24 39	9.5	39.4	43.8
	5 49.2 2.4	6 52	6.8	49.5	54.0		24 4.4 4.5	25 9	8.5	57.8	64.2
	6 29.8 2.5	7 32	8.2	11.4	16.9		24 25.2 4.5	25 30	9.1	48.1	52.4
	6 34.4 2.5	7 37	9.2	36.8	41.3		24 36.3 4.6	25 41	9.3	19.9	24.2
	6 41.8 2.6	7 44	8.8	53.2	57.7		25 44.7 4.6	26 49	9.2	39.2	43.5
	7 12.3 2.7	8 15	9.1	13.2	17.7		26 2.4 4.6	27 7	9.1	39.7	44.0
	7 39.2 2.7	8 42	9.1	49.1	53.6		26 12.3 4.7	27 17	8.5	50.9	55.2
	8 20.9 2.8	9 23	8.2	6.6	11.1		26 57.8 4.7	27 56	7.0	20.3	24.6
	8 54.0 2.9	9 57	9.2	33.8	38.2		27 16.2 4.8	28 21	8.9	35.8	40.0
	9 30.8 3.0	10 34	9.4	9.1	13.5		28 5.0 4.9	29 10	9.0	3.7	7.9
	9 54.2 3.0	10 57	7.0	52.5	56.9		28 22.7 4.9	29 37	8.8	26.4	30.6
	11 24.7 3.2	12 28	8.8	47.6	52.0		29 37.2 5.0	30 42	9.4	12.4	16.6
	13 16.9 3.4	14 20	8.5	53.2	57.6		32 2.9 5.0	33 8	8.4	31.6	35.8
	13 38.3 3.5	14 39	6.9	25.4	29.8		32 15.8 5.0	33 21	9.0	48.6	52.8
	13 59.7 3.5	15 03	8.5	41.6	46.0		32 26.6 5.0	33 32	8.8	9.9	14.1
	14 48.5 3.7	15 53	8.3	40.4	44.8		32 34.0 5.0	33 39	9.0	16.0	20.2
	15 7.7 3.7	16 12	9.0	13.3 4.4	17.7		33 31.7 5.1	34 37	9.5	47.5	51.7
	15 21.8 3.8	16 25	8.8	43.7	48.1		33 56.7 5.1	35 02	8.7	19.6	23.8
	16 44.4 4.0	17 48	8.4	2.9	7.3		34 36.9 5.2	35 42	8.5	40.6	44.8
	16 57.8 4.0	17 56	9.0	24.4	28.8		36 44.9 5.4	37 50	9.3	24.2	28.4
	17 56.7 4.1	18 01	9.4	12.9	17.3		36 45.8 5.4	37 51	9.0	36.2	40.4
	18 9.7 4.3	19 14	8.6	53.5	57.9		37 03 5.5	38 6	8.8	31.3	35.4
	18 16.2 4.2	19 20	9.0	2.0	6.4		37 41.5 5.5	38 47	8.5	42.6	46.7
	19 36.7 4.3	20 41	8.5	46.1	50.5		38 56.5 5.7	40 02	9.0	2.3	7.4
	21 24.7	22 29	9.0	45.6	50.0		39 17.8	40 24	9.0	22.4	26.5

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2	39	20.4	2	40	26	8.9	2.1	6.2	2	5	43.5	6	51	7.8	1.4	5.0
	40	23.0		41	30	9.1	13.4	17.8		7	7.6	8	16	9.2	10.7	14.2
	40	23.8		41	30	7.5	40.0	44.1		7	18.2	8	26	8.3	20.4	24.3
	41	13.4		42	29	8.3	49.5	53.6		8	56.3	10	05	9.1	20.8	24.4
	41	52.2		42	58	8.3	36.8	40.9		9	39.2	10	48	8.6	32.2	35.8
	42	45.5		43	51	9.0	5.5	5.5		9	55.5	11	04	7.6	5.3	8.4
	43	40.0		44	46	8.9	28.4	32.4		10	46.4	11	53	8.8	58.5	62.1
	43	46.0		44	52	9.0	0.8	4.8		10	49.8	11	58	8.3	2.9	6.5
	44	28.2		45	34	9.3	58.6	62.6		11	27.7	12	36	9.1	49.3	52.4
	45	10.4		46	17	9.2	40.3	44.3		11	56.6	13	05	8.2	8.3	13.4
	45	45.2		46	51	8.9	5.9	9.9		12	45.5	13	54	9.3	43.8	47.4
	47	5.1		48	11	8.0	54.4	58.6		12	54.4	14	06	8.7	37.6	41.2
	47	6.6		48	13	9.1	53.6	57.5		13	7.2	14	16	9.2	46.9	50.4
	49	4.6		50	53	8.0	2.0	5.9		13	11.8	14	20	7.8	14.0	17.5
	50	33.4		51	40	5.7	47.4	51.3		13	43.5	14	52	9.0	59.3	62.8
	52	35.5		53	42	9.0	40.1	44.0		15	3.2	16	12	9.3	30.2	33.7
	53	40.2		54	4.4	9.0	56.5	60.3		15	12.3	16	21	9.0	49.9	53.4
	55	5.5		56	02	8.5	0.0	3.8		16	35.5	17	17	8.0	12.9	16.4
	56	5.6		58	13	8.8	4.4	7.2		16	49.4	17	58	8.8	39.2	42.7
	56	23.4		58	31	8.4	37.6	41.4		21	47.3	22	57	8.6	34.0	37.5
	57	41.2		58	48	6.8	38.4	42.5		22	7.4	23	17	9.1	24.3	30.7
	58	43.6	2	59	51	9.0	32.2	36.0		22	44.6	23	53	9.5	23.2	26.6
	1	18.5	3	2	26	7.3	37.6	41.2		23	3.0	24	12	9.6	4.4	48.8
	2	9.2		3	17	9.4	16.5	20.2		23	3.8	24	13	8.3	48.4	51.8
	2	23.6		3	31	9.1	54.4	62.1		29	46.4	30	53	9.1	57.6	55.0
	2	24.5		3	32	8.3	27.3	31.0		29	47.8	30	58	8.8	33.9	36.4
	3	24.4		4	32	7.8	14.6	18.3		29	51.3	31	01	9.2	18.1	21.5
	4	22.4		5	30	8.6	2.3	6.0		30	48.3	31	58	8.9	2.3	4.4

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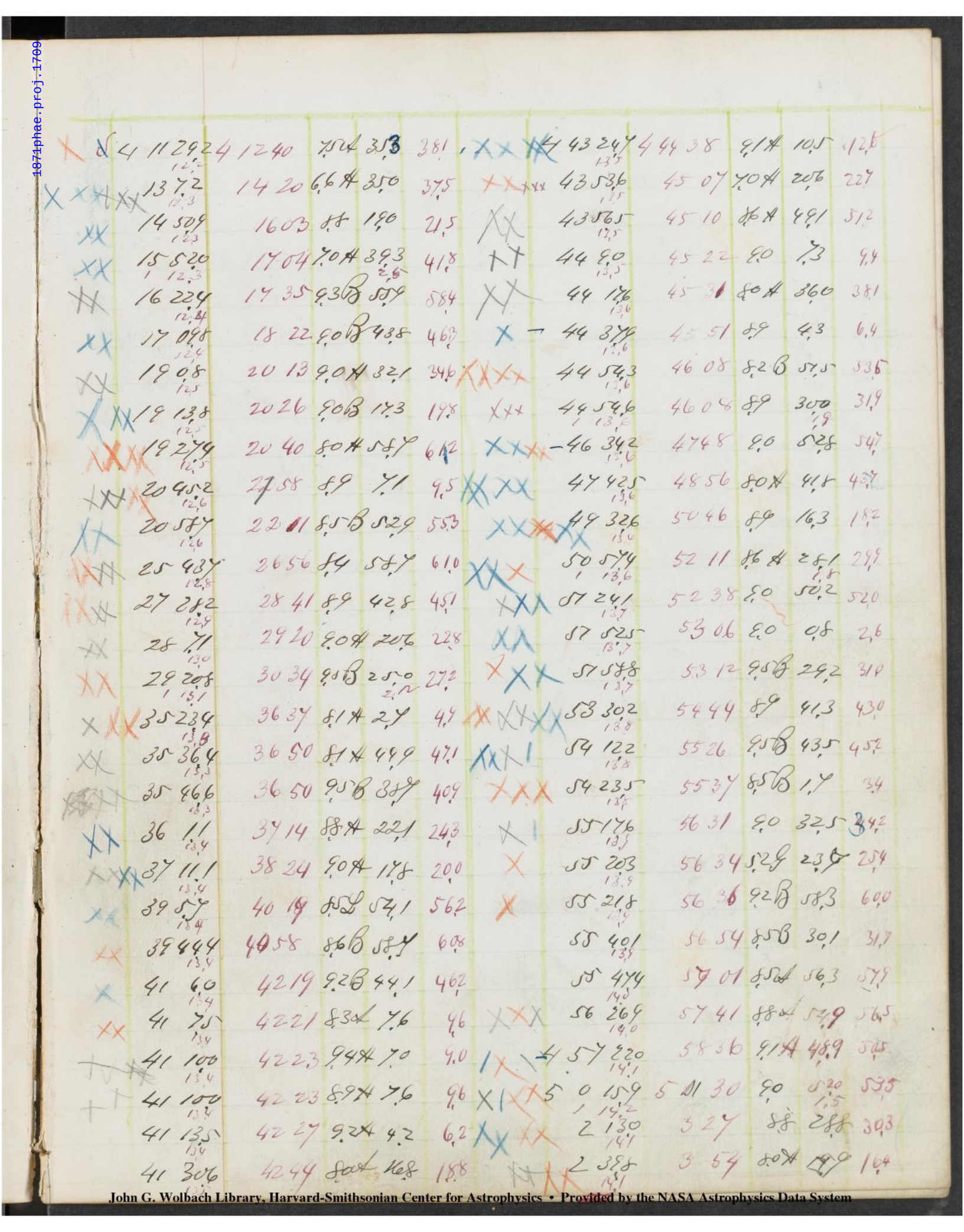
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	31 48	9.5	39 54	7.5	8.4	5.7	3.7	53.3		53 44	36.4	11.0	49 44	9.0	5.8	6.2
	32 20	9.8	33 31	8.3	12.0			15.7		44	47.3	11.0	49 58	9.3	14.0	16.9
	32 37	9.7	33 47	9.4	8.3			6.5		50	47	11.1	51 16	8.5	44.8	47.7
	33 30	9.9	34 41	8.8	20.2			23.4		51	14.9	11.2	52 26	8.9	14.4	17.8
	35 58	10.1	36 16	9.0	5.6			5.9.6		51	43.5	11.2	52 55	8.9	44.0	46.8
	35 86	10.0	36 19	9.1	1.8.1			21.2		52	34.8	11.3	53 46	9.1	26.6	29.4
	35 40	10.1	36 51	9.2	5.9.3			6.2.4		52	35.8	11.3	53 47	9.3	8.9.6	44.4
	36 24	10.1	37 35	6.5	14.9			18.0		52	40.1	11.3	53 51	8.4	43.0	45.8
	36 54	10.2	38 05	7.0	4.4			7.5		52	50.4	11.4	54 02	8.5	29.3	32.1
	37 27	10.2	38 38	9.2	1.8			4.8		54	10.4	11.5	55 22	9.3	35.0	37.8
	37 32	10.3	38 43	8.3	20.3			38.3		54	55.8	11.5	56 04	9.0	36.0	38.8
	37 50	10.4	39 01	7.8	22.1			25.7		55	57.0	11.5	57 02	9.0	42.5	45.3
	37 58	10.5	39 09	8.2	30.4			33.7		56	16.4	11.6	57 28	8.6	13.9	16.7
	39 35	10.4	40 46	9.5	5.7.3			60.3		56	50.3	11.6	58 02	7.8	8.2	8.7
	41 59	10.5	43 10	8.9	2.3			5.3		59	14.8	11.7	4 0 30	9.5	25.5	28.2
	42 9.0	10.5	43 19	8.2	48.9			51.9	3	59	41.2	11.7	0 53	9.5	5.3	8.0
	43 26	10.6	44 37	8.1	6.7			9.7	4	1	37.4	11.7	2 49	9.3	51.7	54.4
	43 54	10.6	45 05	7.8	5.8.5			62.5		1	50.2	11.7	3 02	9.2	52.6	55.3
	44 13	10.6	45 24	9.0	5.8.0			61.0		2	42.3	11.8	3 54	9.2	52.4	55.1
	44 18	10.6	45 29	9.0	3.2			6.1		3	4.6	11.8	4 16	8.3	21.4	24.1
	44 44	10.7	45 55	8.9	4.9.5			52.4		3	8.1	11.8	4 20	8.5	2.1.0	24.7
	44 44	10.7	45 55	6.5	47.3			50.2		5	33.5	12.0	6 45	8.6	0.3	5.0
	44 48	10.7	46 02	8.9	5.6.1		2.9	54.0		6	42.4	12.1	7 55	9.1	5.4.0	5.6.7
	46 29	10.7	47 40	9.1	44.6			47.5		7	26.8	12.1	8 39	7.3	3.9.2	41.5
	47 26	10.8	48 13	8.0	4.2.0			44.1		8	42.4	12.2	9 55	9.0	4.4.3	46.9
	47 18	10.8	48 29	8.0	18.3			21.2		8	49.5	12.2	10 02	9.0	5.4.6	5.6.8
	48 03	10.8	49 13	7.8	4.7			7.6		11	21.0	12.2	12 33	8.8	2.1.5	30.1
	48 32	10.9	49 43	9.5	3.4			6.3		11	25.4	12.3	12 39	8.4	14.9	17.5

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	5	8	36.2	143	5	4	5	8.5	9.5	10.9		5	35	15.5	14.9
		4	38.5	144		5	53	8.0	48.0	49.4	not seen			35	22.0
		5	0.5	144		6	15	9.0	29.0	30.4				35	30.3
		7	11.5	144		8	26	8.2	55.4	56.7				35	33.0
		9	45.3	145		11	00	9.0	16.0	17.3				37	13.6
		10	22.0	145		11	37	7.8	20.0	21.3				38	23.0
		10	41.3	145		11	56	9.5	57.4	52.6				38	25.9
		11	14.2	145		12	29	8.0	4.5	5.7				39	27.0
		12	16.2	14		13	31	9.5	0.1	1.3				43	1.1
		13	16.0	146		14	31	9.0	29.8	30.4				43	58.0
		13	59.9	146		15	14	8.9	28.9	29.8				44	34.2
		17	27.5	14.7		18	42	8.4	3.0	3.9				44	43.7
		19	21.8	14.7		20	36	8.6	11.2	12.1				44	44.8
		19	45.8			21	00	7.5	9.8	10.6				45	20.9
		19	48.8			21	03	9.2	11.1	11.9				45	24.0
		20	33.5			21	48	9.6	16.7	17.4				46	44.2
		20	34.6			21	49	7.5	6.1	6.8				48	38.0
		21	32.8			22	47	9.0	14.9	15.5				48	46.5
		21	47.1			23	02	9.2	28.7	29.3				48	57.2
		21	48.3			23	03	8.2	20.3	20.8				49	31.0
		22	17.7			23	32	9.2	12.6	13.1				51	12.4
		22	36.7			23	57	9.0	16.9	17.4				51	42.1
		23	3.7			24	18	8.0	4.8	5.3 / 4.9				53	1.0
		23	22.6			24	37	9.0	10.5	11.0				54	7.7
		26	4.6			27	14	8.8	17.9	18.4				54	27.6
		26	34.9			27	49	9.2	15.5	16.0				54	36.7
		26	53.9			28	08	7.6	20.7	21.2				55	59.2
		28	5.6			29	20	8.4	14.9	15.4				56	6.9

	5	36	30	9.3	24.0	+0.5	24.5								
		36	37	8.8	2.0		2.5								
		36	45	8.6	23.4		23.9								
		36	48	6.4	26.2		26.6								
		38	29	8.1	6.1		6.5								
		39	38	8.2	18.3		19.7								
		39	41	8.8	11.4		11.8								
		40	42	6.3	28.2		28.6								
		44	16	9.0	45.3		45.7								
		45	13	8.3	5.4		5.8								
		45	49	8.8	50.3		50.7								
		45	58	8.5	3.0		3.4								
		46	00	7.0	45.4		45.7								
		46	35	8.5	3.1		3.4								
		46	39	8.5	44.0	+0.3	44.3								
		47	59	8.8	6.1		6.9								
		49	53	9.0	24.9		25.3								
		50	02	6.7	2.7		2.4								
		50	12	8.9	6.2		6.4								
		50	46	8.8	4.1		4.3								
		52	27	9.0	4.5		4.7								
		52	57	8.1	14.4		14.6								
		53	16	6.3	34.6		34.7								
		55	23	8.5	53.0		53.1								
		55	43	8.5	27.9		27.8								
		55	52	8.8	32.0		32.1								
		57	14	8.7	58.5		58.6								
		57	22	9.2	21.4		21.5								

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	5 56 6.9		5 57 22		8.5 A	25.2	25.2		6 31 47		6 32 14		8.9		140		13.4		
	57 8.9		59 08		8.0 A	32.1	32.1		32 36		33 51		4.3 A		35.6		35.0		
	5 59 23.3		6 00 38		8.0 B	16.4	16.4		34 46		36 01		8.2 B		58.1		57.5		
	6 1 12.4		2 27		8.0	41.8	41.8		35 22.9		36 37		9.1 B		48.8		49.2		
	1 18.2		2 33		8.9	47.9	47.9		36 8.8		37 20		8.5 B		55.8		55.2		
	2 20.4		3 35		6.0 A	11.9	11.9		37 43.8		38 58		9.0		32.1		31.4		
	2 58.3		4 13		8.3 A	11.5	11.4		39 20.5		40 35		8.6		45.9		45.2		
	3 13.1		4 28		8.5	26.2	26.1		39 36.1		40 50		8.9 B		18.2		17.5		
	4 6.6		5 27		9.3 A	34.5	34.4		41 22.0		42 36		9.3 A		46.2		45.4		
	8 26.4		9 41		9.0	1.6	1.5		41 26.3		42 41		9.0 A		34.4		33.6		
	9 40.0		10 55		8.9 A	47.2	47.0		41 59.8		43 14		9.3 A		48.2		47.4		
	10 38.8		11 55		8.9 A	50.6	50.4		42 3.0		43 17		7.5 A		40.4		39.6		
	11 54.3		13 09		8.2 B	37.1	36.9		42 7.8		43 22		8.2 A		48.1		47.2		
	12 58.8		14 14		7.0 B	8.6	8.4		42 25.8		43 40		8.3 A		39.9		39.0		
	13 43.9		14 59		7.4 A	41.8	41.6		44 12.3		45 27		9.3 B		14.0		13.1		
	14 20.9		15 36		8.9 B	56.8	56.5		44 28.8		45 43		8.8 A		53.2		52.3		
	14 28.3	14.7	15 38		9.2 B	56.9	56.6		45 34.1		46 48		9.1 A		59.1		58.2		
	18 24.9		19 40		8.0 A	27.6	27.3		45 37.9	14.4	46 52		8.0 A		9.6	1.0	8.6		
	19 7.2		20 22		8.0 B	52.0	51.7		47 24.9		48 39		8.0 B		32.1		31.1		
	19 35.9		20 51		8.8 A	46.9	46.4		47 48.3		49 03		7.9 A		0.6		0.4		
	21 12.2		22 27		7.5 A	3.9	3.3		49 39.9		50 54		8.8 A		56.5		55.4		
	22 27.2		23 42		9.0	6.5	6.1		50 2.2		51 17		8.1 A		56.8		55.7		
	23 1.9		24 17		8.0 A	11.8	11.4		50 4.5		51 19		9.2 B		1.3		16.2		
	23 52.6		25 08		9.0	53.5	53.1		50 7.9		51 22		8.8		3.0		32.8		
	25 8.5		26 23		9.4 B	45.9	45.4		50 27.8		51 52		8.6 A		28.6		27.4		
	25 10.8		26 28		8.9 A	32.9	31.9		50 89.5		51 54		8.8 A		57.6		50.4		
	25 58.3		27 06		9.0	37.5	37.0		50 55.8		52 10		7.5 A		4.6		44.4		
	26 42.9		27 58		8.0 A	18.8	18.3		50 56.6		52 11		9.3 B		3.4		30.2		

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	57	38.3	52	54	8.5A	36.9 −1.1	35.8		27	41.9	28	55	9.1A	30.2	28.1
	57	33.6	53	47	9.0	46.3	45.2		29	8.9	30	20	9.3A	29.2	27.2
	52	38.8	53	52	9.1A	16.8	15.7		30	10.9	31	24	8.3A	47.6 −2.1	45.5
	52	43.8	53	57	7.7A	28.6	27.5		30	19.4	31	31	8.5A	16.0	13.4
	53	58.8	55	07	9.4B	9.6	8.4		31	23.9	32	37	8.7A	36.5	34.4
	55	43.3	56	54	8.9	37.5	36.3		32	46.6	34	00	9.2A	2.4	0.4
	56	28.2	57	42	9.3B	25.5	23.3		33	1.8	34	14	9.3B	26.8	24.8
	57	11.7	58	25	7.8A	35.9	34.7		34	3.1	35	16	8.0A	11.3	9.3
	58	58.3	00	12	9.0	39.0	37.8		35	11.8	36	25	7.5A	22.5	20.3
	59	13.0	00	26	8.2A	17.0	15.8		35	31.7	36	44	9.2A	17.3	16.1
	0	46.4	02	00	8.8	37.5 −1.8	36.2		36	30.8	37	43	9.1B	9.2	7.0
	2	5.4	3	18	6.9A	39.0	37.7		38	27.5	39	40	9.0A	14.9	12.6
	2	40.5	3	59	8.4A	36.8	35.3		39	13.5	40	26	9.3B	32.5	30.2
	3	17.3	4	30	9.4B	1.3	1.0		39	28.8	40	41	8.2A	43.4	41.1
	4	13.5	5	27	7.5A	40.7	39.4		39	51.4	41	04	8.5A	28.1	25.8
	5	44.6	6	58	9.2A	20.0	18.6		41	2.2	42	15	8.5A	59.2	56.5
	6	26.5	7	46	8.3A	54.3	52.9		41	59.2	43	12	9.3A	48.0	45.6
	8	4.1	9	18	7.7A	44.6 −1.4	43.2		42	11.3	43	24	9.5R	18.7	16.3
	9	30.6	10	44	9.1A	9.3	7.9		42	18.7	43	31	8.2A	40.1	37.6
	10	35.0	11	48	9.0A	19.3	17.9		43	28.4	44	41	9.1R	5.8	3.3
	10	59.6	12	13	8.9A	33.3	31.8		44	29.7	45	42	8.8A	53.9	51.4
	17	14.0	18	28	8.9B	7.2 −1.6	5.6		45	21.3	46	34	8.7A	32.5 −2.6	29.9
	17	54.6	19	08	9.0A	2.2	0.6		47	11.4	48	24	8.0A	43.9	41.3
	18	33.1	19	47	9.3B	7.5	5.8		47	15.0	48	27	9.0B	34.2	31.6
	18	38.8	19	52	8.6A	66.5	54.8		48	2.1	49	14	9.0	25.0	22.3
	20	12.3	21	26	8.8A	49.6	47.8		48	29.0	49	41	9.3B	30.7	28.0
	22	42.5	23	56	6.5L	36.8	33.7		49	35.8	50	48	8.0A	8.3	0.5
	23	27.0	24	41	8.1L	50.3	48.4		57	15.9	52	28	9.2A	41.4	38.6

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	6	53 46.4	6	54 58	8.3	19.7	17.0		8	21 51.4	8	23 02	9.4	5.3	5.2
		56 35.5		57 47	9.0	14.7	16.0			22 9.6		23 20	8.8	15.3	12.2
		57 44.2		58 21	9.1	50.0	47.4			22 18.3		23 28	8.6	7.8	4.7
		57 33.5		58 45	5.7	55.3	52.5			22 23.3		23 34	9.1	5.3	5.0
		58 9.8		59 21	8.2	43.5	40.7			22 52.6		24 3.	8.8	30.1	26.9
		58 25.9		59 37	8.7	21.4	18.6			24 27.1		25 3.7	9.6	10.4	7.2
	8	3 20.2	8	4 31	9.1	16.0	13.2			28 4.9		29 15	8.8	58.9	55.7
		4 59.2		6 18	8.6	14.6	11.8			28 15.3		29 25	8.7	9.9	6.7
		4 34.9		8 46	9.1	54.6	51.8			28 30.2		29 40	8.5	58.9	55.7
		8 42.2		9 54	8.8	47.7	44.9			30 7.9		31 18	7.0	56.1	52.9
		8 58.9		10 07	9.0	84.4	31.6			31 47.1		32 5.7	8.8	10.2	7.0
		9 10.7		10 22	8.0	43.2	40.4			33 5.5		34 15	9.1	53.9	50.7
		9 32.0		10 43	9.0	28.9	26.1			35 17.1		36 27	9.1	20.6	17.4
		9 34.2		10 45	8.7	46.2	43.4			35 57.5		37 7	8.7	50.7	47.4
		10 33.2		11 44	9.4	43.3	40.5			37 48.7		38 58	8.8	42.9	39.6
		12 16.2		13 27	9.0	24.5	21.6			38 34.4		39 44	9.2	89.4	36.0
		12 49.1		14 00	8.7	41.1	38.2			38 58.7		40 8	8.1	18.2	7.8
		12 50.4		14 01	8.5	7.6	4.7			44 4.8		45 14	8.9	46.8	43.3
		14 52.4		16 03	9.3	88.9	31.0			46 57.6		48 00	7.2	17.6	14.1
		17 1.5		18 12	8.3	84.6	31.1			47 31.6		48 40	8.6	42.4	38.4
		17 5.3		18 16	8.0	21.5	18.6			47 33.1		48 42	8.7	39.2	35.7
		18 54.6		20 05	9.2	48.6	45.7			48 30.3		49 39	9.0	23.6	20.0
		18 56.4		20 07	9.5	24.6	21.7			49 3.7		50 12	8.5	43.9	40.3
		18 59.0		20 10	9.0	48.9	46.0			49 41.5		50 50	9.0	43.4	39.8
		19 4.5		20 15	8.5	32.6	30.6			50 25.6		51 33	8.5	29.0	25.5
		19 7.0		20 18	8.4	7.4	4.4			53 54.2		54 5	9.3	6.7	5.1
		21 7.5		22 18	7.8	11.4	8.4			55 5.1		56 13	6.8	28.9	20.2
	18	21 21.0		22 31	7.5	6.9	3.4			56 5.1		57 13	9.4	82.9	29.2

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8 56 25.6 (4.5)	8 57 33	8.5 A	12.7 (3.7)	9.0	9 33 10.5 (4.7)	~~9 33 10.5~~ 9 34 15	8.0 B	14.8 (4.2)	10.6
58 40.3 (7.0)	59 53	8.0 A	22.6 (2.7)	14.9	33 36.0 (4.8)	34 41	9.5 B	18.0 (4.2)	13.8
9 0 24.7 (4.5)	1 32	9.3 A	37.6 (−3.7)	33.9	37 55.1 (4.4)	38 59	8.5 B	37.4 (4.3)	33.1
0 54.3 (4.5)	2 01	9.1 A	53.6 (3.7)	49.9	39 11.7 (4.2)	40 16	9.1 A	33.4 (4.3)	29.1
48.7 (4.4)	2 56	6.5 A	2.8 (3.7)	−0.9	39 47.2 (4.2)	40 51	9.2 A	17.6 (4.4)	13.2
4 27.6 (7.2)	5 35	9.0	2.8 (3.7)	−0.9	40 23.9 (4.1)	41 28	8.8 A	47.8 (4.4)	43.4
6 2.1 (7.1)	7 9	8.6 A	16.1 (3.8)	12.3	40 28.4 (4.1)	41 32	9.0 A	36.4 (4.4)	32.0
6 59.8 (7.1)	8 07	9.0	54.9 (3.8)	51.1	41 27.7 (4.0)	42 32	9.0 A	41.9 (4.4)	37.5
9 52.7 (6.9)	10 59	8.5	4.7 (3.9)	0.8	43 41.3 (3.6)	44 45	7.0 A	18.6 (4.4)	14.2
10 38.4 (6.8)	11 45	6.5 A	53.3 (3.9)	49.4	44 19.7 (3.6)	45 23	8.9 A	23.5 (4.4)	19.1
10 58.7 (6.8)	12 05	8.2 A	54.6 (3.9)	50.7	44 31.7 (3.6)	45 35	8.2 A	12.7 (4.5)	8.2
neb. 11 58.2 (6.7)	13 05		35.1 (3.9)	31.2	45 26.9 (3.5)	46 30	9.5 B	59.7 (−4.5)	55.2
12 25.7 (6.7)	13 32	8.3 A	37.4 (3.9)	33.5	46 22.0 (3.4)	47 25	8.4 A	53.0 (4.5)	48.5
12 37.7 (6.6)	13 44	8.4 A	13.2 (3.9)	9.3	49 25.0 (3.1)	50 28	9.0	21.0 (4.6)	16.4
13 9.2 (6.5)	14 16	9.1 A	23.5 (4.0)	19.5	49 40.0 (3.1)	50 43	8.5	40.8 (4.6)	36.2
13 38.0 (6.5)	14 44	9.4 B	55.7 (4.0)	51.7	50 49.3 (3.0)	51 52	8.3 B	55.8 (4.6)	51.2
14 43.2 (6.4)	15 49	9.0	48.3 (4.0)	44.3	50 57.3 (3.0)	51 54	8.6 B	18.5 (4.6)	13.9
14 43.3 (6.3)	15 50	8.5	31.9 (4.0)	27.9	52 26.3 (2.8)	53 29	7.5	11.6 (4.6)	7.0
15 44.7 (6.2)	16 51	9.3 A	9.7 (−4.0)	5.7	55 37.1 (2.6)	56 40	9.3 B	30.4 (4.6)	25.8
16 16.7 (6.1)	17 23	9.4 A	58.2 (4.0)	54.2	55 50.5 (2.6)	56 53	7.0 A	14.6 (4.6)	10.0
21 33.7 (5.7)	22 39	9.0 A	2.8 (4.1)	−1.3	56 23.4 (2.5)	57 26	7.5 A	38.8 (4.6)	34.2
25 56.2 (5.3)	27 01	9.1 A	8.7 (4.2)	4.5	59 48.4 (2.3)	10 00 50	7.1 A	32.9 (4.6)	28.3
26 17.5 (5.2)	27 23	9.4 A	44.8 (4.2)	40.6	10 0 31.7 (2.1)	1 34	9.1 B	43.4 (−4.6)	38.8
26 52.1 (5.3)	28 7	9.4 A	15.1 (4.2)	10.9	10 3 46.7 (2.1)	4 49	9.1 A	1.2 (4.6)	−3.4
27 49.8 (5.2)	28 55	8.9 A	22.0 (4.2)	17.8	4 0.8 (2.0)	5 03	9.0 B	31.9 (4.7)	27.2
31 31.2 (5.0)	32 36	8.9	33.5 (−4.2)	29.3	4 28.4 (2.0)	5 30	6.5 A	12.7 (4.7)	8.0
31 54.3 (5.0)	32 59	9.0	34.4 (4.2)	30.2	4 35.9 (1.9)	5 37	5.5 A	0.7 (4.7)	−4.0
32 56.1 (4.9)	34 01	4.5 B	55.6	51.4	6 39.6	7 41	8.6 A	29.9 (4.7)	25.2

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	6	42		10	744	8.2	A	36	−1.1		10	57	149	105	212	7.6	B	41	38.9
	11	68		12	8	9.2	A	512	46.5			51	225	52	19	9.9		08	−4.4
	11	57		12	59	9.2	A	160	11.3			54	276	55	24	9.3	A	10	−4.2
	12	110		13	12	9.0	A	5	0.9			57	243	58	20	8.5	A	365	31.3
	13	219		14	23	8.0	A	136	8.8			58	575	59	47	9.5		550	49.8
	15	396		16	40	9.4	B	546	49.8			59	88	11	015	9.4	B	189	13.7
	17	245		18	25	8.9	A	482	43.4		11	1	540		250	9.5		4	38.5
	21	105		22	10	6.6	B	447	39.9			3	508	4	46	9.0	A	526	47.3
	21	150		22	15	6.2	A	187	9.9			4	128	5	08	9.2	A	51.1	4.58
11	24	571		25	57	9.0	A	30.4	−1.4			4	464	5	42	9.0	A	258	20.5
	25	56		26	06	9.2	A	85	3.6			3	216	6	17	8.8	A	58.9	5.39
	25	392		26	39	9.3	B	48	−1.1			4	434	8	39	9.0	A	258	17.5
	27	585		28	58	8.8	A	242	14.3			8	593	9	55	8.7	A	57.2	5.18
	27	593		28	59	8.8	A	274	22.5			9	219	10	16	9.0		82	−2.2
	28	230		29	22	8.4	A	195	14.6			13	499	14	45	9.0	A	293	23.8
	34	44		35	03	6.5	A	338	28.8			17	108	18	06	7.5	A	175	12.0
	38	250		39	23	9.0	A	284	18.4			18	71	19	02	9.3	B	9.0	3.5
	40	76		41	06	8.0	A	229	17.9			21	01	21	55	9.4	B	8.5	26.0
	41	329		42	31	9.4	B	61	1.1			21	84	22	03	8.4	A	8.6	−2.0
	42	425		43	40	9.0		482	38.1			21	408	22	36	9.0	A	0.1	−5.4
	42	548		43	52	8.3	A	17	−3.4			29	154	30	10	7.3	A	57.3	51.8
	43	250		44	22	8.9		586	48.5			30	19	30	55	6.0	A	259	20.3
	43	324		44	30	6.2	A	18	−3.8			30	100	31	05	9.5	B	11.0	5.4
	44	338		45	31	8.9	B	472	42.1			35	298	36	25	9.0		744	18.8
	46	378		47	25	8.2	B	412	36.1			36	335	37	28	9.1	A	57.6	49.0
	48	235		49	20	9.5	B	179	12.8			37	598	38	55	9.1	A	87.3	31.7
	49	287		50	25	9.0		294	24.3			38	259	39	21	7.3	A	21.9	16.3
	50	308		51	33	9.0		462	41.1			38	460	39	41	8.9	A	29.8	19.2

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38	56.0	54.4	11	39	50	9.3	B	57.9	52.3	12	21	58.6	49.6	12	72	48	9.0	A	7.3	1.7
39	31.9	54.2	40	26		9.3	A	35.3	29.7	23		48.1	49.4	24	37		7.9	B	47.0	41.4
44	18.8	54.9	45	12		9.0	A	2.2	−3.4	26		17.3	49.0	27	06		8.6	A	53.8	48.2
44	32.4	50.9	45	26		9.0	A	25.3	19.7	30		51.0	48.4	31	39		9.4	A	3.2	−2.4
47	54.9	53.6	48	48		8.0	A	49.1	43.5	31		48.7	48.3	32	32		9.2	B	38.4	32.8
49	11.4	53.4	50	05		9.0	A	25.4	19.8	31		49.8	48.3	32	38		8.4	A	53.4	47.8
52	19.9	53.30	53	13		9.0	A	5.6	46.0	31		57.1	48.2	32	39		8.4	A	40.2	34.6
57	7.0	51.6	58	00		9.5	B	52.3	46.7	32		58.5	48.1	33	46		9.2	A	47.3	41.7
57	7.4	51.6	58	00		9.0	A	2.2	−3.4	34		34.8	47.9	35	22		8.8	A	13.2	7.6
57	35.2	52.6	58	28		8.2	A	5.6	0.0	34		35.5	47.9	35	23		8.7	A	1.9	−3.7
58	8.2	53.4	59	24		8.2	A	4.5	0.9	35		13.3	47.7	36	01		9.5	B	53.2	48.4
12	1	32.6	52.1	2	24		9.0	A	12.1	6.5	44		9.8	46.8	44	56		9.2	B	9.4	3.8
	1	49.1	52.0	2	41		9.8	B	1.8	−3.8	44		12.7	46.8	44	59		9.0	A	35.0	29.4
	2	7.2	51.9	2	59		9.4	B	50.1	44.5	44		15.3	46.7	45	02		9.0		16.6	11.0
	3	22.6	51.8	4	24		7.8	R	21.0	15.4	45		45.7	46.7	46	32		8.0	B	4.3	−1.3
	4	24.8	51.7	5	16		7.9	B	38.9	33.3	46		14.4	46.7	47	01		8.8	B	54.5	53.9
	4	40.9	51.0	5	33		9.0		57.2	45.6	50		1.6	46.3	50	48		8.9		52.0	46.4
	5	24.2	50.8	6	17		8.4	B	5.2	−0.4	56		30.8	45.6	57	16		7.4	A	48.3	42.7
	11	17.3	52.3	12	09		9.4	A	26.4	20.8	56		58.4	45.6	57	44		8.4		4.3	−1.2
	11	47.9	52.4	12	40		9.2	A	58.2	52.6	58		24.6	45.8	59	10		7.8	A	58.2	52.6
	14	24.6	53.9	15	18		9.5	A	23.5	−3.3	12	59	8.3	45.1	13	00		8.8	A	46.8	41.3
	19	28.0		20	22		9.4	B	80.2	24.6	13	0	41.8	45.0	1	27		9.0		40.9	35.4
	19	57.1		20	45		7.3	A	59.5	53.9	13	1	50.4	44.9	2	35		9.0		40.9	35.4
	19	52.8		20	47		9.2	A	2.3	−3.3		3	6.8	44.7	3	51		7.5	A	54.9	49.4
												3	36.3	44.6	4	21		9.0		27.4	22.0
												7	8.3	44.2	7	52		8.4		53.9	48.4
												8	3.4	44.1	8	47		9.5	B	42.7	37.2
												9	19.8	44.0	10	04		8.0	A	35.5	30.1

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	13 10 26.8	48.9	11 10	8.3d	20.6	15.3		13 45 30.7	38	13 46 09	9.0	28.3	5.3	23.0
	11 56.7	43.7	12 32	7.8d	12.7	7.4		46 21.3		46 59	7.9d	5.9		46.6
	18 41.9	45.5	14 25	8.5d	12.3	7.0		46 47.2		47 25	8.5d	2.9		−2.4
	14 16.7	43.3	15 00	8.7d	11.8	6.5		48 7.3		48 45	8.5d	5.3.2		47.9
	17 14.9	43.0	17 58	8.6d	9.8	4.5		50 2.9		50 41	8.0d	5.5.8		50.5
	17 23.5	42.0	18 06	9.0d	5.0	44.7		51 4.5		51 26	8.9d	9.9		4.6
	40.4	48.9	19 23	8.7d	5.4.2	48.9		51 38.9		52 17	8.3d	14.9		9.6
	18 54.6	42.9	19 37	8.8d	5.3.4	48.1		53 5.2.2		54 30	8.6d	2.6.8		21.5
	20 8.2	42.7	20 51	9.0d	22.1	16.8		53 5.8.0		54 36	8.6d	12.9		7.6
	20 11.3	42.6	20 54	9.4B	3.8.7	33.4		13 57 37.5		58 15	6.0d	40.8		35.5
	20 48.6	42.6	21 31	9.3B	2.8.1	2.2.8		14 0 5.2.6	37	14 1 30	9.5B	11.8	4.9	6.9
	22 1.4	42.3	22 44	8.8d	11.8	6.5		3 31.4		4 08	8.3	18.9		14.0
	22 18.9	42.3	22 58	7.5d	19.7	14.4		5 2.0		5 39	9.4B	4.6.9		41.5
	22 47.8	42.2	23 30	6.7d	2.1.5	23.3		7 36.8		8 14	8.8d	8.4		−1.5
	25 2.4	42.7	25 44	9.2d	22.6	17.4		7 40.8		8 18	7.5	24.3		19.4
	27 8.1.8	41.8	28 16	8.3d	5.8.5	45.3		8 26.5		9 03	8.3d	5.8.3		53.4
	27 5.7.4	41.8	28 39	8.1d	41.5	36.3		9 23.3		10 00	9.0	26.4		21.5
	31 5.4.1	41.6	32 36	6.5.8	26.6	21.4		10 2.8		10 40	8.3	44.9	4.8	40.1
	32 8.4	41.6	32 45	9.2d	4.8.3	43.1		10 11.3		10 48	9.5d	7.9		2.6
	32 15.5	41.6	32 57	8.0d	4.2.0	36.8		10 29.7		11 07	8.2	40.3		35.5
	34 27.9	41.4	35 01	7.0d	15.7	10.5		10 49.3		11 25	8.9	4.7.2		42.4
	34 56.9	41.3	35 38	8.7d	33.0	27.8		11 7.8		11 44	8.0	11.9		7.1
	36 12.6	41.0	36 53	9.0d	8.9.0	33.8		11 53.2		12 29	8.5	40.3		35.5
	37 34.0	40.9	38 15	9.3B	18.6	13.4		12 12.3		12 48	6.8d	5.8.8		54.0
	38 22.4	40.8	39 03	9.0	5.6.1	50.9		13 44.0		14 20	9.4B	5.7.0		52.7
	40 8.0.9	40.6	41 31	9.1d	14.2	9.0		14 19.8		14 56	9.0d	5.8.1	4.7	53.4
	41 7.9.9	40.4	42 10	9.0	3.1.0	25.8		16 5.5.5	36	17 31	8.2d	4.7.2		42.5
	44 3.4.8	39.9	45 14	8.3	4.5.1	−0.7		17 7.6.0		18 02	9.3d	5.7.4		52.7

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14	19 59	9.4	14	20 34	7.9	35.9	38.2		14	52 50	7.4	14	53 22	5.1	5	36.2	4.1	22.1
	20	8.5		20	43	9.0	46.2	41.5			53	28.7		54	59	9.0		30.8	26.7
	21	43.4		22	18	9.0	23.5	18.8			53	53.8		56	27	7.3		8.9	4.8
	21	67.3		22	26	8.4	3.5	−1.2			55	54.9		56	31	7.9	5	22.9	18.8
	25	48.8		26	24	9.5	26.5	21.8			14	57 23.3	14	57	54	8.9		13.8	9.8
	26	49.6		27	25	8.4	33.3	28.6			15	01 40.6	15	2	12	9.2	5	8.9	6.9
	26	52.2		27	27	7.8	40.3	36.6				2	54.7		3	31	9.0		28.8	24.8
	27	33.8		28	09	8.4	27.9	23.4				8	40.6		4	12	9.0		13.9	9.9
	28	41.8		29	17	9.0	34.8	30.3				4	35.9		5	07	9.3		35.1	31.1
	29	40.7		29	18	8.8	17.8	13.3				4	46.5		5	17	8.9		40.8	36.5
	30	11.4		30	45	8.7	37.7	33.4				5	30.2		6	01	9.5		40.3	36.3
	30	56.3		31	30	9.0	9.6	5.3				6	45.3		7	16	9.0		16.1	12.3
	30	58.4		31	32	8.7	30.5	26.2				10	22.3		10	53	9.4		17.9	16.1
	31	34.3		32	08	7.8	54.2	49.9				11	25.3		11	56	6.3		21.6	24.8
	33	36.7		34	11	8.8	42.9	38.6				11	33.1		12	03	5.7		28.2	24.5
	33	51.5		34	25	8.9	57.2	52.9				1	55.7		2	35	8.9		57.7	54.0
	34	41.7		35	16	8.1	37.9	33.6				16	36.9		17	06	9.4		11.6	13.9
	35	37.8		36	12	8.9	35.4	31.1				17	44.3		18	14	9.0		41.9	38.2
	39	1.8		39	36	8.6	13.8	9.5				20	32.8		21	03	5.2		43.3	39.6
	39	39.5		40	13	9.3	2.8	−1.5				21	11.9		21	42	7.0		6.0	2.3
	41	40.3		42	13	7.0	0.0	−4.3				21	45.3		22	16	8.9		5.2.9	48.9
	42	18.8		42	51	9.0	24.8	20.5				22	25.8		22	56	9.1		9.1	5.6
	42	58.3		43	26	8.3	2.9	−1.9				22	41.2		23	11	9.5		29.8	25.8
	43	34.2		44	07	8.9	51.9	47.6				22	58.3		23	23	6.8		6.6	3.1
	44	50.7		45	24	6.3	58.9	54.6				23	48.2		24	18	9.3		4.1	+0.7
	45	54.7		46	28	8.8	54.7	50.4				24	53.5		25	23	9.1		23.6	28.2
	48	21.3		48	54	8.8	13.9	9.6				25	22.8		25	62	8.2		1.1	−2.3
	50	0.3		50	33	8.8	13.9	9.1				26	36.1		27	06	9.0		30.5	27.1

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XX	15 33 20.3	15 33 49	9.0	43.4	40.0	XX	16 15 11	16 15 47	9.0	42.1	9.6
	+29			-3.4				+26			-2.5
XX	38 42.9	39 12	9.4B	29	-1.0	XX	15 57.7	16 24	8.4A	58.1	55.6
XXX	39 04.3	39 24	8.8	58.7	50.8	XX	15 57.9	16 24	8.9	54.7	52.2
XX	40 02.3	40 31	8.4B	22.0	18.6	XX	16 58.7	17 20	9.4B	26.7	24.2
XX	41 35.0	42 04	9.0A	8.7	6.3	XX	17 24.5	17 50	8.0	57.4	48.9
XX	42 21.5	42 50	8.3A	14.3	10.9	XX	17 27.1	17 53	8.4	40.5	38.1
										-2.4	
XX	44 07.5	44 37	7.8	24.1	20.7	XX	17 35.2	18 01	8.4	15.1	12.7
XX	46 10.5	46 38	8.0B	19.2	16.1	XX	18 33.2	18 59	9.3B	19.1	16.7
	-2.8			-2.1							
XX	47 12.0	47 40	8.2B	16.2	13.1	XX	19 2.4	19 28	8.4	6.2	3.9
XX	49 31.9	50 00	8.1B	52.8	49.7	XXX	19 58.2	20 19	9.0	44.5	42.2
XX	54 13.2	54 41	9.5B	51.1	48.6	XX	20 43.3	21 09	9.3B	8.6	6.3
										-2.3	
XXX	54 24.1	54 52	8.8A	7.2	4.1	XX	21 49.6	22 16	7.0	28.1	25.8
XX	54 44.5	55 12	9.2B	14.6	11.5	XX	22 34.6	23 01	9.4B	1.4	-0.9
XX	55 05.2	55 33	7.8A	4.1	1.0	XX	22 89.9	23 07	9.2A	43.9	41.6
XX	55 36.3	56 24	8.1A	12.1	9.0	XX	24 [illegible]	24 27	9.0	32.5	30.2
XX	55 59.7	56 28	9.0B	34.8	31.7	XX	24 22.1	24 48	7.3A	54.1	51.8
XXX	56 36.6	57 05	8.0A	14.1	11.0	XXX	25 1.2	25 27	6.2A	45.4	43.1
XX	57 54.7	58 23	8.3A	45.4	42.3	XXXXX	25 21.0	25 46	7.7	5.4	3.1
XX	15 59 20.2	15 59 47	9.4A	5.2	2.3	XXX	27 2.3	27 27	9.5B	46.5	44.2
	-2.7			-2.9							
XX	160 42.0	160 109	9.0	52.1	49.2	XX	27 33.6	27 59	8.0B	26.5	24.3
XX	4 8.2	4 35	8.8	6.2	3.3	XX	30 4.3	30 32	8.8	49.0	46.8
							-2.5			-2.2	
XX	4 39.1	5 06	8.5	33.0	30.1	XX	30 23.8	30 49	7.5A	16.1	13.9
X	4 58.9	5 21	8.5B	14.6	11.7	XX	31 20.0	31 45	9.0	11.6	9.4
XXX	5 11.2	5 38	8.0A	4.1	4.2	XX	31 43.7	32 09	9.0	33.5	31.3
XXX	7 19.3	7 46	9.0B	12.0	9.1	XX	33 39.9	34 05	8.0A	87.7	20.5
XX	11 6.0	11 33	9.4B	49.4	46.5	XX	35 14.0	35 44	7.0A	6.4	4.2
XX	12 34.1	13 01	8.4A	57.4	54.5	XX	35 23.0	35 48	8.9A	21.3	19.1
XX	14 49.9	15 17	9.0	40.5	37.6	XX	38 37.5	39 02	7.3B	29.1	26.9

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	46	40	10.9	40.36	7.3		49	47		17	17		17.27	9.5	B	40.4	38
		41		41.26	9.5	B		21			18		19.0	9.0		33.0	31
		41		41.40	8.5	A	4.4	2			18		19.17	8.7			−1
		41		41.46	8.3	A	40.2	38			19		20.12	8.3	A	41.4	39
		47		47.45	7.9	A		21			21		22 10	8.8		11.1	9
		47		45.10	7.7	A		0			22		22 28	8.1	B	37.3	35
		49	40.2	50.5	8.9		22.3	20			25		25.35	7.5	A	28.0	26
		50	22.2	50.46	8.0	A	16.4	13			25		26.0	7.3	A		34
		50	43.0	51.7	8.3		34.3	32			26		26.31	9.1	A		10
		52	24.4	52.48	8.7			19			33		33.37	7.9			10
		52	44.2	53.8	8.9			53			33		33.42	7.5		5.3	3
		52	59.3	53.23	8.5		41.1	39			33		33.59	9.3	B	15.4	13
		53		53 59	9.0	A		11			33		34 3	8.8	A	46.1	44
		59		59.30	7.3		7.1	5			34		34.52	8.8		27.0	25
		17		0.38	8.3		27.0	25			35		36.1	8.3	A		45
		2		2 41	9.4	B	34.3	32			37		37.43	8.8		41.1	39
		2		3.7	8.8		6.1	4			37		38.22	7.9	B		31
		3		3.32	8.6		44.4	42			38		38.27	6.0		33.3	37
		3		3.53	8.8		5.1	3			39		39.38	8.5	A	20.0	18
		4		5.8	6.5	A		0			39		39.43	8.4	R	41.4	39
		6		7.8	8.9	A		23			40		41.19	7.8	A		49
		7		7.48	9.0			36			41		41.51	8.8			56
		7		7.49	8.4	A		28			41		42 15	8.4	A		3
		7		8.18	7.2			57			43		43.32	9.0			25
		8		8.27	8.8	B	33.1	31			44		45.13	9.1	B	38.1	36
		12		12.58	7.9			57			45		45.32	8.6	A		43
		15		15.34	8.0	A		3			46		46.2	8.9			29
		16		17.10	8.0		49.4	47			46		47.15	9.2	A	26.0	23

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47.47.1	13.5	47.37	7.5A	17.0	15	
47.46.3		48.8	9.0	15.5	14	
48.1	10.7	48.33	9.2B	4.4	2	
48.1	13.8	48.36	7.9A	9.3	7	
48	46.3	49.9	9.3B	3 24	30	
50	2.8	50.26	8.4A	38.4	36	
50.1	13.7	50.37	9.0	57.7	56	
50.45.1		51.8	9.5R	31.8	30	
57.44.0		52.7	9.0A	28.7	27	
51.	19.5	52.13	8.2B	31.2	29	
53.16.4		53.36	2.2A	31.5	30	
54	54.1	54.23	8.0A	11.7	10	
54.48	17.4	55.11	8.7	59.6	58	
55.	47.6	56.11	8.8A	13.1	11	
55.53.2		56.16	8.5A	54.7	53	
56.	8.5	56.32	8.5A	50.9	49	
56.23.4		56.46	9.0A	12.4	10	
57.	3.8	57.27	9.3A	2.9	−1	
57.	37.5	58 1	9.0	14.4	12	
58	39.8	59.3	8.9	10.7	9	
58.52		59.15	8.4A	26.9	25	
58.	56.8	59.20	7.0A	38.3	36	
18.0.58.2		1.21	8.8B	32.4	35	
1.	26.5	1.50	8.2A	51.6	50	
2.13.3		2 36	6.7A	55.4	54	
4.29.3		4.52	7.7A	59.9	58	
5.34.0		5.57	8.6	10.2	8	
5.43.3		6.6	8.6R	20.2	18	

18	6 15.2	18	6 38	8.5	11.9	+0.1	12
	6 15.8		6 38	6.3A	50.6		51
	6 55.9		7 18	7.5A	52.9		53
	7 25.5		7 48	8.5A	27.4		27
	7 30.8		7 53	9.2B	37.8		38
	7 42.9		8 05	7.0A	42.3		42
	8 22.9		8 45	9.1A	30.9		31
	8 33.3		8 56	8.6A	7.6		8
	9 14.8		9 37	9.0A	56.2		56
	9 52.4		10 15	9.0	45.8		46
	10 49.4		11 12	9.2B	27.1	0.3	27
	11 55.2		12 18	9.0	8.2		8
	12 19.3		12 42	7.7A	33.8		34
	12 20.9		12 43	9.5B	44.0		44
	12 46.7		13 11	8.5A	15.5		16
	13 24.7		13 47	7.6A	10.2		10
	13 44.8		14 07	8.8R	23.8		24
	15 9.4		15 32	8.5	29.4		30
	15 27.1		15 50	8.8	27.3		28
	15 40.8		16 03	9.0	40.2	0.4	41
	16 2.3		16 25	9.1A	3.9		4
	16 33.7		16 56	6.2A	10.4		17
	16 59.9		17 22	9.5R	31.5		32
	18 6.4		18 29	6.8A	12.8		13
	18 22.3		18 45	9.0	32.7		33
	18 49.8		19 12	6.8A	28.3		29
	19 44.4		20 07	5.9A	24.4		25
	20 23.6		20 46	6.0A	33.3		34

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	20	52.1	18	21	15	8.5A	26.3	27		18	48	47.4	18	49	10	9.0	10.8	12
	21	41.6		22	4	8.8A	31.2	32			48	57.2		49	20	8.2A	52.8	54
	22	26.8		22	49	9.1R	2.5 +0.5	3			49	11.6		49	34	8.9	23.5	25
	22	54.4		23	17	8.7A	54.8	55			49	19.6		49	42	9.0	25.0	26
	23	13.8		23	36	8.4A	53.5	54			50	14.7		50	37	9.0	18.4	19
	24	2.6		24	25	8.4	4.9	5			50	22.2		50	45	9.4B	29.7	31
	24	6.5		24	29	8.4	39.3	40			50	55.1		51	18	8.9A	42.4	43
	24	10.6		24	33	7.9A	32.7	33			51	23.1		51	46	7.9A	7.2	8
	25	22.5		25	45	7.6A	50.6	51			53	32.1		53	55	7.7A	15.4	19
	27	11.1		27	34	8.5	17.9	18			53	37.0		54	00	7.3A	31.5	33
	27	37.7		28	00	8.9R	6.8	7			55	5.8		55	28	9.4B	14.0	15
	30	0.8 23		30	23	9.0	43.7 +0.7	44			55	8.1		55	31	8.4L	58.5	60
	30	31.0		30	54	8.2A	37.1	38			55	16.3		55	39	9.0R	38.7	40
	31	10.5		31	33	6.9A	40.8	41			56	38.2		57	01	9.0	22.6	24
	32	2.8		32	25	8.5A	5.8	6			57	28.5		57	51	8.8	7.3	8
	33	9.1		33	32	8.0A	45.8	46			57	41.0		58	04	8.8	0.7	2
	34	19.2		34	42	7.7A	49.2 0.8	50			57	48.4		58	11	9.2B	49.0	50
	40	6.5		40	29	9.0R	29.3	30			59	27.6		59	50	8.2S	22.8	24
	40	8.8		40	31	8.9R	16.4	17			59	47.8		60	10	8.4L	18.0	19
	41	3.9		41	26	8.9	24.9	25			19	0 2.1 24		0	26	9.4B	26.5 +1.5	28
	41	22.7		41	45	8.5A	51.8 9	52			0	28.6		0	52	9.0	37.2	39
	41	25.8		41	48	9.0	9.5	10			2	22.1		2	46	9.0A	50.2	52
	43	8.3		43	31	8.8	32.5	33			3	34.5		3	58	7.5L	26.4	28
	44	52.9		45	15	8.5	31.5	32			3	46.9		4	10	7.7P	8.9	10
	46	53.1 23		47	16	8.7	10.0 1.1	11			3	48.2		4	12	8.9A	49.3	51
	47	8.5		47	31	8.0L	42.1	43			4	23.9		4	47	7.5A	52.9	54
	47	58.4		48	21	8.5A	39.1	40			5	5.7		5	29	9.2A	53.9	55
	48	8.5		48	31	8.7	5.8	7			5	20.8		5	44	9.1A	53.9 1.6	55
	48	39.0		49	2	8.5S	9.4	10			6	23.2		6	47	9.0	10.1	12

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	19	7	23.8		7	47	8.7	43.3	45		19	32	22.3		32	47	8.4 A	45.5	47
		7	24.7		7	48	8.0 A	7.3	9			33	2.1		33	27	8.7 A	12.8	15
		7	43.1		8	07	7.3 A	47.2	49			33	22.5		33	47	8.9	38.0	40
		10	29.7		11	12	8.8	9.0	11			33	34.9		33	59	7.9 A	58.5	61
		12	50.3		13	14	8.2 B	9.1	11			34	2.4		34	27	8.8	25.6	28
		13	22.9		13	46	8.8	58.5	60			34	45.4		35	10	9.0	51.2	53
		13	55.8		14	19	7.4 B	5.0	7			35	8.7		35	33	8.2 A	30.2	32
		14	54.1		15	18	8.9	44.4	46			35	16.4		35	41	9.0	12.9	15
		15	10.1		15	34	8.0 A	59.1	61			35	33.4		35	58	9.2 B	7.4	10
		15	23.6		15	47	9.0	18.2	20			36	1.3		36	26	9.0	36.2	38
		16	12.8		16	34	8.7	3.9	5			36	4.2		36	30	8.9	42.7	45
		16	12.1		16	36	8.7	39.3	41			36	15.5		36	41	8.4 A	45.4	48
		16	19.1		16	43	8.8 B	14.2	16			37	57.1		38	23	8.9	31.6	34
		16	19.7		16	43	9.0	49.9	51			38	16.0		38	42	9.2 A	40.7	43
		16	36.1		17	00	8.7	29.8	31			38	20.1		38	46	8.7 A	40.8	43
		17	53.3		18	17	9.3 B	24.9	26			38	58.9		39	24	9.3 B	15.1	17
		18	46.0		19	10	7.6 A	50.7	52			39	50.9		40	16	9.0 A	38.9	41
		22	59.6		23	23	9.0	8.0	10			42	7.4		42	33	9.0 A	13.0	15
		23	50.9		24	14	9.4 B	14.3	16			42	19.6		42	45	8.2 A	18.4	21
		24	52.4		25	16	8.2 A	24.0	26			43	44.1		44	10	8.8 A	42.4	45
		25	20.1		25	44	9.3 B	26.0	28			44	1.0		44	27	9.3 B	6.9	9
		25	42.5		26	16	9.0	57.0	53			44	4.7		44	30	8.2 B	32.3	35
		26	2.9		26	26	4.0 G	25.4	27			44	24.0		44	50	9.2 A	45.7	48
		29	27.9		29	31	9.4 B	25.7	28			44	29.6		44	55	8.8	16.5	19
		29	50.7		30	14	8.6	43.4	45			45	7.7		45	33	8.9 A	40.9	43
		30	4.8		30	29	7.8 B	48.5	51			45	11.6		45	37	9.0 B	56.7	59
		30	33.2		30	58	8.7	30.8	33			46	4.0		46	30	9.4 A	40.5	43
		30	37.1		31	02	9.0	26.6	29			47	27.0		47	53	9.0	35.3	38
		31	24.8		31	49	8.1 A	1.3	3			48	18.3		48	44	7.8 A	37.5	30

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	19	48 23.1		48	49	7.0	54.9	57		h 20	6 58.5	7 25		8.7 A	43.7	46
		48 44.3		49	10	9.0	55.5	58			7 45.6	8 12		8.2 A	14.7	17
		50 34.9		51	00	9.0	28.5	31			7 59.5	8 26		9.0 A	43.9	46
		50 48.2		51	14	8.9	58.8	61			8 19.2	8 46		8.7 A	51.1	54
		51 41.4		52	07	9.0	6.4	9			8 29.8	8 56		6.1 A	2.0	5
		54 24.7		54	50	9.0	2.8	5			8 58.1	9 25		8.9 A	49.0	52
		54 39.7		55	05	9.2 B	42.8	45			9 20.3	9 47		9.0 A	21.0	24
		55 12.7		55	38	9.1	53.7	56			9 22.6	9 49		8.3 A	24.7	27
		55 15.6		55	41	8.6	36.3	39			9 23.0	9 50		7.7 A	3.4	6
		55 24.5		55	50	6.5 G	40.0	43			10 0.5	10 27		9.1 A	28.4	31
		55 56.2		56	22	9.0 B	16.3	19			12 13.5	12 40		9.4 B	20.0	23
		55 58.9		56	24	8.4 L	52.8	55			12 15.0	12 42		7.5 L	33.1	36
		56 3.0		56	29	7.3 L	45.1	48			12 22.8	12 49		7.6 L	39.5	42
		56 44.4		57	10	9.0 B	33.0	35			12 28.8	12 55		8.9 R	42.2	45
		56 58.5		57	24	9.0	27.7	30			12 36.4	13 03		9.0 B	2.9	5
		57 35.2		58	01	9.0	41.1	43			12 37.2	13 04		7.8 G	56.6	59
		58 25.8		58	51	8.5	46.5	51			12 55.3	13 22		9.0	47.0	50
		59 29.7		59	55	8.0 L	19.9	22			13 10.4	13 27		9.3 B	34.0	37
	h 20	m s 0 1.9	sec 27	0	28	9.0 B	5.7	60			13 44.7	14 11		8.9	54.4	57
		0 18.4		0	45	8.7 L	21.1	24			14 0.8	14 27		9.0	41.7	44
		0 50.4		1	17	8.2 L	9.6	12			14 2.4	14 29		9.0	0.2	3
		1 10.0		1	37	8.5	52.7	55			14 14.2	14 41		7.9 B	24.9	27
		1 10.8		1	37	6.2 A	25.3	28			14 20.8	14 47		9.5 B	11.7	15
		4 10.6		4	37	8.6 A	18.1	21			14 46.3	15 13		9.2 B	43.1	49
		5 29.8		5	56	7.8 A	15.0	18			14 49.2	15 16		9.1 B	45.1	49
		5 31.9		5	58	7.9 A	50.6	53			14 51.8	15 18		9.0	53.3	57
		5 54.5		6	21	9.0 A	18.1	21			14 59.1	15 26		8.1 A	31.4	35
		6 32.5		6	59	9.2 R	22.8	25			15 24.1	15 51		9.3 B	55.6	59
		6 38.3		7	15	7.5 A	57.1	60			15 56.3	16 23		8.5 A	0.6	4

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	h								h								
	20	15	57.8	16	24	8.5A	2.1	5	20	35	2.7	35	30	8.4A	16.2	19
		16	3.4	16	30	9.2A	5.1	8		38	15.2	38	43	8.8	17.2	20
		16	27.6	16	54	8.5	25.7	29		38	33.7	39	01	8.2B	35.0	36
		17	4.8	17	31	8.9A	14.6	18		38	42.3	39	10	8.5	49.9	52
		17	13.1	17	40	7.5A	56.7	60		38	46.2	39	14	7.2A	46.4	49
		17	38.8	18	05	8.1A	46.8	50		38	49.6	39	17	9.0	50.3	53
		18	16.1	18	43	8.3A	32.1	36		38	57.0	39	25	8.2B	19.7	22
		18	36.6	19	03	8.8A	40.2	43		39	6.1	39	34	9.0	2.2	5
		18	58.8	19	25	8.5A	6.0	9		39	12.8	39	40	8.9	45.1	48
		19	24.2	19	51	9.4B	39.1	42		39	58.9	40	26	8.5	12.0	15
		19	44.3	20	11	8.7A	2.5	6		40	34.9	41	02	9.0	30.0	33
		20	55.8	21	22	9.0A	55.8	59		42	25.6	42	53	8.3	38.1	41
		21	0.4	21	27	9.1A	19.2	22		42	51.0	43	19	7.7A	15.7	18
		24	12.2	24	39	8.8	12.3	15		43	33.9	44	01	6.0A	52.9	56
		24	22.5	24	49	9.4B	29.5	33		44	19.9	44	47	6.0A	22.4	25
		26	19.1	26	46	7.1G	48.8	52		46	44.0	47	12	6.8A	50.9	54
		26	52.0	27	19	8.5	28.9	32		46	59.8	47	28	9.0A	22.4	26
		27	12.5	27	39	6.0G	49.1	52		47	11.6	47	40	9.4B	52.9	56
		27	38.2	28	05	9.0B	49.0	52		47	30.4	47	59	9.2A	21.6	25
		29	36.5	30	04	8.9	4.9	8		52	17.4	52	46	8.5A	21.6	25
		30	24.2	30	52	9.4B	32.3	36		53	42.0	54	11	8.4A	57.7	61
		30	36.8	31	04	6.3A	21.6	25		54	21.6	54	50	8.0A	45.8	49
		30	39.1	31	07	9.3B	12.7	16		56	41.0	57	04	7.0A	34.2	38
		30	45.6	31	13	9.5B	53.4	57		h 21	0	3.5	0	32	7.3G	49.3	53
		30	48.1	31	16	9.5B	32.2	36			1	3.8	1	32	9.0	47.9	51
		30	50.8	31	18	9.0A	53.2	56			2	14.3	2	44	8.4	25.1	28
		33	20.1	33	48	8.5A	4.7	8			2	45.3	3	14	9.0	27.7	31
		33	52.9	34	20	7.2A	29.6	33			2	57.9	3	29	7.2G	0.0	3
		34	8.5	34	36	7.2A	52.1	56			4	6.5	4	35	9.0A	12.3	16

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	h	m	sec								h	m	sec						
	21	4	23.0	4	54	9.1A	10.5	14			21	26	35.4	27	09	6.5A	58.9	63
			31				40						34				45	
		5	41.5	6	12	7.8A	50.0	54				26	35.8	27	09	9.5B	59.5	64
		7	4.1	7	35	8.4A	25.8	30				27	8.9	27	42	7.5L	14.9	19
		8	5.4	8	36	7.9A	13.9	18				29	28.1	30	02	6.4G	3.2	7
		9	8.4	9	39	8.8	58.0	62				29	30.5	30	04	9.1A	37.6	42
		9	25.3	9	56	8.7A	20.8	25				29	51.9	30	25	9.3A	40.4	45
		11	42.3	12	13	8.3A	52.4	56				29	54.4	30	28	8.5A	38.3	44
		11	51.9	12	22	8.7A	55.8	60				30	22.8	30	56	9.0A	31.2	35
		11	56.6	12	27	8.9A	52.4	56				31	6.5	31	40	9.4B	50.4	54
		12	25.6	12	57	9.2B	54.7	58				31	11.3	31	45	8.3A	0.6	4
		13	5.7	13	36	8.3A	27.0	31				32	29.7	33	02	8.2A	0.5	4
		13	11.1	13	42	7.4A	51.8	55				32	51.0	33	25	9.3A	2.0	6
		13	55.0	14	26	9.0A	24.6	28				32	53.6	33	27	8.8	21.9	26
		14	3.8	14	34	9.2A	37.2	41				33	50.3	34	24	8.0A	51.4	55
		14	40.7	15	11	7.2A	42.7	46				34	12.0	34	46	9.0A	9.1	13
		15	10.5	15	43	9.5A	37.7	41				34	17.8	34	51	7.3A	42.5	47
			23				4.3											
		16	48.0	17	21	9.1A	30.4	34				34	46.2	35	20	8.8A	22.0	26
		17	39.6	18	12	8.5B	40.8	44				35	14.0	35	48	9.4B	57.5	61
		17	41.8	18	14	8.8	41.4	45				35	18.7	35	52	9.1B	37.8	41
		17	55.5	18	28	8.8	36.1	40				35	41.6	36	15	9.1A	26.3	30
		19	6.5	19	39	9.3B	6.9	11				37	2.4	37	36	7.1A	37.7	41
		19	7.1	19	40	6.7G	2.3	6				37	26.5	38	06	9.1B	4.9	8
		19	15.3	19	48	8.8	27.1	31				38	14.3	38	48	7.7G	44.5	49
		19	17.0	19	50	8.2A	49.7	53				39	37.2	40	11	9.0A	8.1	12
		19	50.8	20	23	9.0A	52.7	56				40	7.2	40	41	7.1G	36.0	40
		20	19.6	20	52	8.4A	51.2	55				40	19.6	40	53	8.8L	43.5	48
		24	10.8	24	43	8.2	27.8	31				41	18.9	41	52	9.1A	9.6	14
		24	58.6	25	31	9.0B	13.0	17				41	25.4	41	59	8.3L	50.3	54
		26	23.9	26	56	6.8G	33.0	37				41	27.4	42	03	7.5G	27.4	32
													32				47	

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	h							h						
63	21	41	56.7	42	28	9.0	42.6	47	22	0	55.2	1	33	8.8A	9.7	14
64		42	35.7	43	05	8.7	15.1	19		1	12.6	1	56	7.0A	6.0	11
19		42	36.2	43	06	8.7	10.5	15		1	48.5	2	26	8.7A	55.6	60
7		42	53.9	43	25	9.0	41.7	45		2	2.5	2	40	8.8A	0.7	6
42		42	57.9	43	27	9.0	3.2	7		2	55.9	3	33	8.9	37.5	42
45		43	48.3	44	18	8.6	48.5	53		5	29.7	6	07	8.5L	41.8	47
44		48	35.2	49	05	9.4B	19.6	24		5	33.1	6	11	8.5A	27.9	33
35		48	54.4	49	24	8.7	4.8	9		5	44.0	6	22	8.7A	26.6	31
54		48	56.8	49	26	8.3B	38.8	43		5	46.5	6	24	8.0A	36.0	41
4		49	25.1	49	55	8.8	21.7	25		6	9.8	6	47	7.7A	43.0	48
4		50	18.8	50	48	7.6L	50.4	54		6	28.9	7	06	8.8B	31.1	36
6		51	5.5	51	35	9.0	25.3	29		6	55.2	7	33	9.0	9.7	15
26		51	9.5	51	39	9.2B	26.8	30		6	59.3	7	37	9.0	59.9	65
55		51	20.9	51	50	8.3	50.3	54		7	54.2	8	32	8.8	34.5	39
13		52	2.4	52	32	9.0	10.7	15		8	4.1	8	43	8.0S	50.8	55
47		52	35.1	53	05	9.0	2.0	6		8	5.3	8	44	9.5B	47.6	54
16		52	47.9	53	17	8.9	52.0	56		8	9.7	8	48	8.0G	40.2	45
61		52	57.8	53	27	8.6A	33.5	37		8	52.4	9	31	7.3G	47.5	52
41		53	26.7	53	56	9.0A	44.5	48		10	3.0	10	42	8.5A	8.9	14
30		53	56.1	54	26	8.7A	42.4	46		10	34.4	11	13	8.8B	46.5	51
41		54	17.9	54	47	8.8A	41.3	45		10	46.9	11	25	8.8A	7.5	12
8		54	30.6	55	10	8.8	8.3	12		10	51.2	11	29	8.8	59.8	64
49		54	53.9	55	23	9.4B	12.7	16		11	59.3	12	38	9.2B	33.8	38
12		55	26.2	55	56	8.4A	51.0	55		12	24.5	13	03	8.9	22.3	26
40		55	51.4	56	21	8.2A	23.6	27		12	26.5	13	05	9.0	46.4	52
48		57	25.7	57	55	9.1A	48.7	52		13	3.1	13	42	7.5A	55.9	61
14		59	5.8	59	35	9.0	57.0	62		13	18.0	13	57	8.5A	18.0	23
54		59	53.0	0	23	8.5B	39.8	44		13	28.7	14	07	8.2A	57.0	62
32		59	55.5	0	35	9.0	34.3	39		13	29.4	14	08	8.5B	23.7	29

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	h															
	22	13	31.3	38	14	09	8.9A	10.4	5.0	15	XX	23	7.5	39	23	46	9.2B	21.0	5.1	26
XX		13	54.2		14	22	9.4B	9.8		15	+++	23	45.7		24	24	8.5A	38.0		43
XX		14	13.8		14	51	7.5A	16.6		21	X	23	47.0		24	26	8.0L	45.2		50
XX		14	15.1		14	53	9.0A	33.8		39	XX	24	7.0		24	46	6.7A	40.0		45
XXX		14	25.5		15	03	8.4A	2.1		7	+++	25	27.2		26	06	9.5B	30.1		35
		14	37.9		15	15	9.0A	34.8		39	XX	26	3.0		26	42	8.7	52.1		57
		14	43.7		15	22	7.5A	7.9		13	XX	26	29.0		27	08	8.8	10.7		15
+++		16	12.4	38	16	56	8.9A	58.7	5.0	63	XX	28	9.4		28	48	9.0	54.3		59
		16	45.9		17	23	8.8	54.1		59	XX	29	22.5		30	01	8.8	10.5		15
		16	58.7		17	36	9.4A	7.9		13	XX	29	48.9		30	27	8.7	59.5		64
		17	0.1		17	38	8.5A	11.8		17	XX	30	51.0	41	31	32	9.4B	43.9	5.2	49
XXX		17	29.9		18	07	9.0	27.8		33	XX	31	11.7		31	52	8.4R	8.9		14
		17	51.7		18	29	4.7A	30.1		35	XX	31	51.6		32	32	9.0	55.9		61
		17	55.3		18	33	8.5	44.5		49	XX	32	1.7		32	42	9.0	17.9		23
XX		18	27.9		19	05	8.6A	22.4		27	XX	32	25.7		33	06	9.0A	37.4		42
+XX		18	34.6		19	12	8.8	37.7		42	X	32	26.2		33	07	9.5A	36.9		42
XX		18	40.1		19	18	8.5A	57.5		56	XX	32	51.9		33	32	9.0B	4.1		9
XX		18	54.1		19	32	8.9A	20.8		26	XX	33	44.7		34	25	8.8A	19.7		25
		19	7.7		19	45	8.5A	9.7		15	XX	34	5.1		34	46	9.1B	58.2		63
		19	8.8		19	46	8.4A	24.1		29		34	21.6		35	02	8.8A	31.2		36
+XX	X	19	35.4		20	13	8.9A	6.3		11	XX	35	2.9		35	43	7.1A	0.2		5
	XX	19	59.2		20	37	8.2A	42.0		47	XXX	36	9.2		36	56	8.5A	48.5		53
	X	20	47.6		21	25	8.2A	36.9		42	XX	36	25.6		37	06	8.3A	26.0		31
L++		21	41.9		22	19	9.4B	52.2		57	X	37	6.9		37	47	9.5B	49.6		54
	X	21	47.2		22	25	8.0A	13.9		19	XXX	37	20.4		38	01	8.7A	27.7		32
		21	54.9		22	32	9.0A	40.0		45	XXX	38	16.3		38	57	9.3B	25.9	3	31
		22	16.2		22	54	8.6	27.6		33	X	38	33.4		39	14	9.0	59.1		64
		22	26.8		23	04	8.9A	9.9		15	XXX	38	37.5		39	18	8.8	51.7	8.4A	57
+++		22	27.1		23	05	9.5B	10.3		15		38	48.3		39	29	7.0G	7.0	45.1	51

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	h								h						
	22	39	46.5 41	40	27	9.0	45.6 5.2	51	22	56	33.3 42	57	15	9.2 B	25.1 5.3 30
		40	2.3	40	43	8.0 A	20.3	25		57	1.9	57	43	9.3 A	1.9 7
		40	54.2	41	35	9.1 B	26.0	31		57	54.3	58	36	8.9 A	20.6 26
		41	3.0	41	44	8.9 B	21.9	27		58	14.0	58	56	8.8	40.0 45
		41	28.6	42	09	8.8 A	10.4	15		59	55.5	23	9 37	8.0 A	22.0 27
		41	43.2	42	24	9.0 A	57.8	63	h	m	sec 5.2 44		1 49	9.4 B	48.0 5.5 54
		41	47.1	42	28	7.8 A	12.3	17	23	1	12.2		3 56	9.0 A	19.8 25
		42	42.4	43	23	8.9 A	6.2	11		3	30.1		4 14	8.7 A	10.9 16
		42	54.3	43	35	8.6 A	11.4	16		4	25.4		5 09	9.0 A	8.5 14
		43	32.3	44	13	9.2 B	49.5	54		5	19.2		6 03	9.1 B	35.1 40
		44	34.4	45	15	7.2 A	16.7	32		5	40.4		6 24	8.5 A	9.6 15
		44	55.5	45	36	7.3 A	30.1	35		5	50.3		6 34	7.5 A	26.3 32
		46	1.0 42	46	43	9.4 B	15.4 5.3	21		6	7.6		6 59	8.0 A	6.7 11
		47	11.1	47	53	8.7 A	57.2	62		8	8.1		8 49	8.8 L	19.5 24
		47	22.0	48	05	9.2 A	51.7	57		8	37.2		9 29	8.2 A	34.0 39
		47	23.8	48	06	8.5 A	55.1	60		8	39.4		9 23	8.7	21.3 26
		49	1.3	49	43	9.3 B	6.4	12		10	57.7		11 41	9.0	30.6 36
		49	14.2	49	56	8.0 A	51.5	57		14	18.7		15 02	9.0	46.3 52
		49	48.6	50	30	9.0 A	40.7	46		15	13.9 46		15 59	9.4 A	20.2 5.5 26
		50	22.5	51	04	9.0	17.4	25		16	36.6		17 22	8.0 A	18.3 24
		50	28.1	51	10	9.1 A	39.8	45		16	51.9		17 37	8.4 A	15.9 21
		51	29.1	52	11	9.5 B	42.8	48		16	57.7		17 43	8.1 A	54.9 60
		51	35.9	52	17	8.8	56.6	62		18	53.9		19 39	9.2 B	53.2 58
		52	53.8	53	36	6.0 G	51.8	57		22	7.5		22 53	9.0	40.8 46
		52	55.0	53	38	7.0 G	32.6	38		22	7.9		22 53	9.2 B	27.6 33
		53	17.8	53	59	8.7 B	38.3	44		22	36.9		23 22	8.5 A	52.5 58
		53	43.3	54	26	8.8	36.6	42		22	47.0		23 33	8.7 A	47.5 53
		54	21.4	55	03	8.9 A	6.7	12		23	30.5		24 16	9.5 B	51.5 57
		55	17.3	55	59	9.0	40.8	46		23	58.1		24 44	9.5 B	7.5 13

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51

h	m	sec							h	m	sec					
23	24	27.4	25	13	7.3 L	36.6	42		23	33	45.1	34	33	7.3 B	46.4	51
		46				5.5					48				5.6	
	25	5.8	25	51	8.5	44.1	49			33	48.1	34	36	8.9	55.8	61
	25	23.8	26	09	9.0	6.7	12			34	20.7	35	05	8.4 A	37.9	43
	25	56.3	26	42	8.4 A	51.3	10			34	53.6	35	41	8.9	13.9	19
	26	5.1	26	51	8.2 A	14.7	20			35	21.3	36	09	8.8 A	34.6	40
	26	34.7	27	20	8.2 A	22.2	27			35	42.4	36	30	9.0 A	29.2	34
	26	45.2	27	31	8.9	54.3	59			36	0.7	36	49	6.5 A	8.0	13
											49					
	27	43.1	28	29	8.8 A	17.3	22			36	9.3	36	58	7.6 A	26.3	32
	27	52.6	28	38	7.9 L	48.5	54			39	50.2	40	39	9.5 B	9.0	14
	27	58.0	28	41	8.9	13.2	18			40	43.5	41	32	8.8	5.6	11
	28	0.2	28	46	8.5 L	52.9	58			40	50.0	41	39	8.6	1.8	7
	28	3.0	28	50	8.5 A	5.0	10			41	44.5	42	33	9.0	1.3	6
		47														
	28	3.3	28	50	8.4 A	1.5	6			42	22.4	43	11	8.8	50.8	56
	28	11.6	28	58	9.0	59.2	64			42	35.9	43	24	9.1 R	58.5	64
	28	23.1	29	10	8.5 G	35.4	50			42	46.8	43	35	8.7	18.5	24
	28	31.0	28	15	6.5 G	29.2	34			43	28.4	44	17	9.0	6.0	11
	28	34.6	29	38	9.1 B	59.1	64			43	46.2	44	35	8.5 L	25.1	30
	28	55.1	29	42	8.7 B	48.9	54			43	56.5	44	45	8.4 A	16.9	22
	29	5.2	29	52	9.0	50.2	55			46	19.1	47	09	8.0 A	7.7	13
											50				5.6	
	29	32.0	30	19	9.0	22.0	27			46	51.7	47	41	9.1 R	58.0	64
	29	34.7	30	21	9.0	49.3	54			48	15.3	48	05	6.5 A	56.0	62
	29	58.6	30	45	8.1 B	29.0	34			49	39.6	50	29	8.1 B	21.4	27
	30	2.9	30	50	9.4 B	29.1	34			49	49.1	50	39	9.4 B	5.3	11
		48				5.6										
	30	40.9	31	28	9.5 B	49.1	54			51	33.4	52	23	8.5 R	1.2	6
	30	45.5	31	33	8.7 L	26.4	31			53	2.5	53	52	8.7 R	7.5	13
	30	55.1	31	43	8.1 L	52.5	57			53	37.9	54	27	9.0	27.5	33
	31	8.0	31	56	8.9	18.9	24			53	38.5	54	28	8.8	18.2	22
	32	3.0	32	51	7.8 g	27.8	33			53	43.0	54	33	9.0	48.4	54
	33	8.7	33	56	9.0	12.4	17			54	19.7	55	09	9.0	24.5	30

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	h 23						
XXX	54	22.5 37	55	13	9.0	58.3 5.6	64
XX	54	56.3	55	47	8.6	46.7	52
XX	55	6.9	55	57	8.8R	1.3	7
XX	55	42.7	56	33	8.2d	39.5	45
XX	57	4.7	57	55	9.1A	1.4	7
	57	25.4	58	16	9.0A	10.3	16
XXX	57	28.4	58	19	8.9	26.4	32
XX	58	50.7	59	41	9.0	50.5	56
	59	5.7 12	59	57	8.8B	27.6 5.7	33
	59	30.9	0	22	9.0	11.2	17

1460 Stars in this Zone
4 126
1586

1782 Obs. Oct. 2, 1872
2786 " Sept. 1 1873

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51°

h	m	sec											
0	0	2.7	52	0	57	8.9	51.3 5.6	57	0	16	47.9 54	17	41	9.3 B	48.7 5.6	54
	0	8.3		1	00	7.6 L	58.2	64		17	2.4	17	56	9.0 A	5.9	11
	0	56.3		1	50	7.8 B	31.7	37		17	50.6	18	44	9.0	11.9	17
	1	56.0		2	48	9.0	12.1	18		18	42.4	19	36	8.7	38.3	44
	2	12.8		3	04	8.0 R	13.3	19		21	46.1	22	40	9.3 B	30.1	36
	2	19.6		3	11	8.8 R	14.0	19		21	55.8	22	49	8.5	49.0	54
	2	43.7		3	35	7.1 A	26.7	32		22	18.6	23	12	8.6	42.8	48
	2	57.2		3	49	8.2 L	6.5	12		22	36.7	23	30	8.7	1.1	7
	3	1.5		3	53	7.9 A	30.9	36		23	23.8 55	24	18	9.5 B	20.6 5.6	26
	3	25.3		4	17	8.8 A	38.5	44		24	27.6	25	22	8.5	17.0	22
	3	51.0		4	43	8.9	16.1	22		25	3.6	25	58	8.8 A	3.4	10
	5	12.7		6	04	9.0 A	34.2	40		25	8.3	26	03	8.9 A	53.3	59
	5	14.3		6	06	8.4 A	7.8	13		25	44.8	26	39	9.2 A	51.7	57
	5	39.2		6	31	8.0 A	1.6	7		27	15.2	28	10	7.8 A	2.8	8
	6	8.2 53		7	01	8.6 B	51.2 5.6	57		28	56.9	29	51	9.5 B	34.9	40
	6	28.0		7	21	8.7 A	29.8	35		29	26.8	30	21	9.1 A	27.2	33
	7	26.1		8	19	7.6 L	50.3	56		29	39.1	30	34	8.6 A	11.1	17
	7	53.2		8	46	9.0 A	13.6	19		29	49.0	30	44	9.1 A	11.3	17
	9	14.1		10	07	9.3 B	38.5	44		30	8.4 56	31	04	9.3 A	27.8 5.6	33
	9	18.6		10	11	9.0	47.1	53		30	47.0	31	43	8.9 A	50.3	56
	10	3.4		10	56	8.7 B	8.6	14		31	28.9	32	24	8.7 A	46.1	52
	10	30.5		11	23	8.5 A	36.8	42		32	1.2	32	57	7.7 L	5.1	11
	11	13.7		12	06	7.8 A	22.2	28		32	34.4	33	30	8.6	9.2	15
	12	18.4		13	11	8.9 B	5.2	11		33	7.9	34	03	7.0 G	24.2	30
	12	48.2		13	41	9.0	18.8	24		33	12.2	34	08	8.9 A	51.7	57
	14	41.3		15	34	8.8 B	24.9	30		33	38.6	34	34	8.5	21.0	26
	15	16.5 54		16	10	8.9	22.3 5.6	28		33	59.9	34	55	8.0 B	10.5	16
	15	34.8		16	28	8.6 L	54.8	60		34	31.0	35	27	7.0 G	33.0	38
	16	26.6		17	20	6.0 A	13.0	18		34	45.6	35	51	8.5 L	38.2	44

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h								h	m	sec					
0	34	51.0	35	47	8.4	7.1	13	0	56	8.6	57	06	9.2A	5.9	11
	35	45.7	36	35	8.9	27.0	32		59	24.1	0	22	8.5A	52.0	57
	37	12.1	38	09	9.0	18.0	23	1	0	41.6	1	40	8.6A	49.8	55
	38	57.6	39	54	8.5	43.3	49		1	25.6	2	24	9.0	6.5	12
	39	49.0	40	46	8.5L	29.0	34		1	26.4	2	25	7.5A	15.7	21
	39	54.1	40	51	8.8	33.4	39		1	57.6	2	56	7.0L	21.4	27
	40	28.6	41	25	7.0L	18.5	24		2	13.7	3	12	9.0	54.0	60
	41	20.0	42	17	9.0	9.1	15		2	57.4	3	56	8.7	56.7	62
	42	48.6	43	45	8.7A	30.1	36		3	11.1	4	10	8.5	54.7	60
	44	24.4	45	21	8.5	56.9	62		4	14.6	5	13	9.0	17.5	23
	44	26.8	45	23	7.9A	29.4	35		4	45.9	5	44	9.0	49.8	55
	44	32.2	45	29	8.8	1.9	7		6	33.6	7	32	9.0A	37.6	43
	44	51.7	45	48	8.5A	5.3	11		6	42.5	7	51	9.0A	0.5	6
	45	7.8	46	05	8.8A	32.1	38		8	48.4	9	57	8.5A	34.3	40
	45	14.2	46	12	9.3A	33.8	44		9	19.5	10	18	8.9A	37.4	43
	45	27.6	46	25	6.3B	54.0	60		10	5.9	11	04	9.2B	10.6	16
	47	52.9	48	50	8.4A	42.1	48		11	16.5	12	15	8.0A	54.1	60
	48	57.8	49	55	7.3B	27.3	33		11	26.7	12	25	7.0L	22.1	28
	49	33.0	50	31	7.2A	21.1	27		11	40.1	12	39	6.8A	4.1	10
	50	33.1	51	31	7.8B	44.1	50		12	13.5	13	12	7.2A	13.4	19
	51	56.1	52	54	7.6L	21.3	27		13	43.1	14	52	7.7A	1.0	6
	52	48.6	53	46	7.5L	16.5	22		14	24.7	15	23	7.9B	58.7	64
	54	19.9	55	17	9.0	9.2	15		15	36.1	16	37	9.0	50.7	36
	54	26.6	55	24	7.1L	1.1	6		17	8.3	18	9	8.6	38.0	43
	54	59.2	55	57	8.9A	21.0	26		18	45.3	19	46	7.8A	3.0	8
	55	14.2	56	12	9.2A	25.3	31		19	51.1	20	52	8.5A	7.8	13
	55	32.6	56	30	6.0A	43.3	49		19	57.9	20	56	8.5	29.3	35
	55	54.0	56	56	8.6A	41.1	47		21	40.8	22	41	8.8A	20.5	25
	55	56.1	56	58	9.1A	2.0	7		22	47.6	23	48	8.2B	52.4	58

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	h	m						
	23	1.4	24	2	7.8 L	43.3	59	
X	25	5.3	26	6	8.9	55.2	60	
XXX	25	13.5	26	14	8.8 A	5.2	10	
	25	39.2	26	40	9.0	50.4	56	
	25	46.1	26	47	8.8	24.6	30	
X X	26	9.5	27	10	9.0 A	5.4	11	
	26	35.7	27	36	7.7 A	25.2	31	
XXX	27	38.4	28	39	7.5 A	0.4	6	
XXX	28	21.5	29	22	8.9	53.5	59	
XX	29	32.5	30	33	8.5 B	41.7	47	
	29	36.7	30	37	9.0 A	46.9	52	
XX	29	36.8	30	37	8.6 A	51.8	56	
	29	38.2	30	39	8.7 A	58.1	64	
+	30	8.2	31	11	9.2 B	33.0	38	
	30	10.9	31	13	8.7	5.0	10	
	30	25.9	31	28	7.6 A	31.9	39	
XX	30	46.3	31	49	8.5 A	54.5	60	
XXX	30	51.2	31	54	9.1 A	38.0	44	
	31	13.9	32	16	8.6	7.6	13	
XX	31	21.6	32	24	8.4 B	47.6	53	
X+	31	56.2	32	59	9.1 B	11.0	16	
XXX	32	26.0	33	29	9.3 A	51.8	56	
	33	16.0	34	19	9.1 A	39.5	45	
XX	33	26.7	34	29	9.2 A	26.3	32	
XX	33	32.1	34	35	9.0 A	55.2	61	
	34	10.3	35	13	9.2 A	37.8	43	
XX	34	19.7	35	22	9.0	18.9	24	
XX	34	56.2	35	59	9.0 A	48.1	54	
DX	35	28.8	36	31	9.5 R	22.9	28	
	35	29.3	36	32	9.0 A	4.5	10	
	35	52.2	36	55	9.2 A	37.1	42	
XX	36	11.4	37	14	9.3 A	41.8	47	
+XX	36	34.0	37	37	9.5 B	51.6	57	
XX	37	7.7	38	10	8.3 A	17.5	23	
XX	38	47.1	39	50	8.8	9.7	15	
X+	41	12.9	42	15	9.0 A	14.5	20	
X+	41	21.7	42	24	9.4 B	48.2	53	
	41	38.1	42	41	8.7 A	53.2	58	
X	41	43.5	42	46	6.3 A	12.6	18	
	41	51.5	42	54	8.9	29.1	34	
XX	42	21.5	43	24	8.6 A	5.0	10	
	42	42.8	43	45	8.5	38.3	43	
XX	43	51.6	44	54	9.3 B	51.0	56	
XX	44	2.0	45	5	9.1 A	57.0	62	
XX	44	4.5	45	7	9.4 B	55.9	61	
X	44	59.4	46	02	8.3 A	56.2	61	
√X	45	47.0	46	52	8.7 A	31.4	36	
XX	46	5.2	47	10	9.2 A	39.5	45	
XX	47	12.7	48	17	9.2 B	48.4	53	
	47	15.9	48	20	8.6 A	36.7	42	
XX	47	29.1	48	34	7.7 A	46.5	52	
	47	31.7	48	36	9.5 B	48.3	53	
XXX	49	3.6	50	8	8.0 A	10.7	16	
XX	49	8.4	50	13	9.1 R	55.2	60	
XX	51	10.6	52	15	9.0	53.2	58	
XX	51	47.5	52	50	9.1 B	36.2	41	
XX	52	30.9	53	35	8.3 L	57.2	62	
XX	52	44.2	53	47	9.0 R	17.9	23	

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		53	0.3	55	5	9.1B	58.0	55
			5				5.1	
42	XX	54	5.9	55	10	9.1A	0.8	6
47	XX	54	45.5	55	46	6.7A	15.8	21
57	XX	56	58.3	58	03	8.7A	44.4	50
23	XX	57	57.9	59	02	8.6A	26.1	31
15	XXX	59	2.4	h 2 m 0	07	9.1A	35.2	40

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Zone 52°–53°

1853–1872 1853–1872

6h	29	15.7	6	30	37.7	7.4	A	6.4	5.7		6	53	22.9	54	42	8.8	B	3.3	2.1
	30	17.4		31	36	9.0		41.6	40.8			53	45.8	55	05	8.9		51.9	50.7
	32	8.3		33	27	8.9		15.5	14.8			54	7.0	55	26	9.2	A	4.3	3.1
	33	0.1		34	19	8.4	A	52.8	52.1			54	7.6	55	27	6.7	A	5.1	5.5
	34	7.7		35	24	9.0		14.5	13.7			54	11.5	55	30	8.3	A	7.9	6.6
	34	26.0		35	45	8.5		22.4	21.6			55	59.6	57	19	8.8	A	1.7	0.4
	35	6.9		36	26	9.0	B	14.2	13.4			56	49.7	58	09	8.5	A	5.5	5.1
	36	22.2		37	41	8.8		23.4	22.9			58	1.0	59	20	8.5	A	16.8	15.4
	36	47.7		38	07	8.8		16.5	15.7		6	58	52.4	7 60	11	9.4	A	14.7	13.3
	37	29.0		38	48	9.0		54.0	53.2		7	0	2.0	7	1 26	8.9	A	3.2	3.0
												1	18.8					1.5	
	37	36.5		38	55	8.5	B	38.0	37.2			1	58.3	3	17	8.9	A	5.4	5.2
	37	50.5		39	09	9.0		7.7	6.8			2	11.4	3	30	9.4	A	5.8	5.4
	39	26.8		40	46	9.0	A	19.9	19.0			2	32.1	3	51	9.5	B	16.7	15.2
	40	30.6		41	50	8.0	A	8.5	7.6			3	20.3	4	39	7.0	A	4.1	4.7
	40	52.8		42	12	8.5		40.5	39.6			4	4.2	5	23	9.0		8.2	6.6
	41	18.5		42	37	8.2	B	50.3	49.4			5	12.3	6	31	7.7	A	1.6	1.0
	41	41.0		43	00	8.5		38.5	37.6			6	9.8	7	28	6.2	A	2.1	2.0.5
	42	17.2		43	36	9.0		41.6	40.7			6	25.8	7	45	9.0	B	12.6	11.0
	44	38.5		45	57	9.0		25.2	24.2			6	40.2	7	59	9.3	A	2.5	0.1
	46	8.7		47	28	9.2	A	26.3	25.3		8	6.8		9	25	8.0	A	1.2	10.5
		1.9.0						1.0										1.7	
	47	14.9		48	24	7.7	A	3.1	2.1		9	18.0		10	37	8.9	A	4.5	2.5
	48	13.9		49	33	6.8	A	44.4	43.4			9	31.5	10	50	8.2	A	3.0.9	29.2
	53	1.0		54	20	9.0		5.8	4.8		10	13.6		11	32	8.6	A	8.0.2	28.7
	53	21.3		54	40	9.0		5.7.0	56.0			10	39.4	11	41.8	8.5	A	1.4.7	12.7

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	7	10	46.3	7	12	03	9.2	A	328	31.0		7	32	41.8	33	59	8.5	A	59.3	5.41
		11	6.4		12	23	9.3	A	15.4	13.9			33	1.9	34	19	9.3	B	56.9	5.47
		11	50.4		13	07	7.8	A	82.4	30.6			35	15.4	38	32	8.9	B	87.4	35.1
		13	10.3		14	27	8.9	A	58.8	57.0			37	50.3	39	07	8.0		57.5	49.2
		13	28.3		14	45	9.1	A	8.9.7	37.9			38	4.3	39	21	8.8		8.1	0.7
		13	37.8		14	54	6.1	B	9.8	7.9			38	6.7	39	24	8.7	B	8.8	6.4
		14	31.9		15	48	9.1	A	58.8	56.9			38	32.9	39	50	8.3		59.3	56.9
		16	29.3		17	46	8.7	A	38.2	36.8			41	29.2	42	46	9.2	A	1.7.6	15.0
		19	25.2		20	42	9.0	A	17.3	15.4			41	36.3	42	53	9.2	A	17.7	14.6
		19	39.3		20	56	7.0	A	16.7	14.7			43	52.8	45	09	8.7	A	9.2	6.5
		19	54.2		21	11	9.3	A	14.6	12.6			49	46.1	51	03	8.9	A	6.1	3.4
		20	5.8		21	23	8.9	B	8.5.9	5.3.9			51	2.9	52	20	9.9	A	4.1	1.4
		21	18.7		22	30	9.0	A	8.5.5	5.3.4			51	28.2	52	45	9.0		17.7	15.0
		23	14.8		24	32	8.4	A	14.3	12.3			58	4.9	55	05	8.9	A	8.3.3	30.5
		24	15.8		25	33	8.2	L	30.7	28.3			54	8.3	55	48	9.1	A	58.3	58.5
		24	22.3		25	34	9.3	A	25.0	22.9			55	28.2	56	40	9.2	B	52.2	29.4
		24	49.3		26	06	9.4	B	10.0	7.9			56	1.3	57	28	8.8	A	24.0	21.2
		25	59.9		27	17	8.5	A	80.9	28.8			56	31.8	57	47	8.7	A	8.9.7	36.9
		26	12.8		27	30	9.1	A	8.2.0	4.9.9			57	42.3	58	59	9.3	B	16.8	12.9
		26	50.9		28	08	9.0	A	15.7	13.6			58	24.0	59	41	9.4	A	8.0.3	27.4
		27	6.2		28	22	8.0	A	24.4	22.3		7	59	43.8	8	1	00		33.0	30.1
		27	13.8		28	30	7.7	A	10.2	8.1		8	0	4.3	1	20	8.7	A	12.5	9.4
		27	53.7		29	13	7.3	A	5.2.9	5.0.7			0	22.0	1	38	8.2	A	27.1	24.2
		28	42.4		29	59	9.0	A	5.7.9	5.5.7			0	54.9	2	11	8.4	A	11.2	8.3
		29	52.4		31	09	8.6	L	48.0	46.8			2	32.0	3	48	8.8	A	11.2	8.2
		30	54.9		32	12	9.0	B	26.3	24.1			3	4.9.3	5	05	9.1	A	32.1	29.1
		31	10.6		32	28	8.0	A	37.8	35.6			4	7.8	5	24	9.3	A	8.9.0	30.9

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	8	5	172	8	6	33	7	14	478	448		8	57	522	8	53	05	9.4	822	285
		5	201		6	36	9.4		864	334			52	257		53	38	8.5	455	418
		6	50		7	21	9.3		493	463			52	278		53	40	8.2	504	467
		7	191		8	35	9.4		20	-1.9			53	388		54	46	9.0	9	4.9
		8	63		9	22	9.2		556	525			54	102		55	23	9.4	226	188
		12	258		13	41	9.4		203	172			56	568		58	09	9.3	127	8.9
		13	06		14	16	8.5		01	-3.0			58	878		59	50	8.5	118	8.0
		15	434		16	59	9.1		230	199			58	591	9	00	11	9.3	200	16.1
		18	140		19	29	8.8		61	29			59	409		00	53	8.9	29	-1.0
		18	512		20	06	8.5		316	284			59	492		1	01	8.9	06	-3.3
		19	353		20	50	9.4		399	367			59	587		1	10	8.0	58	5.4
		23	102		24	25	9.3		218	185			59	3		4	23	9.1	84	4.5
		24	198		25	34	9.3		209	176			58	877		9	49	9.0	84	3.7
		24	285		25	43	9.1		412	379			9	81		10	14	8.2	143	10.3
		25	308		26	45	9.1		401	368			11	122		12	23	9.4	842	30.1
		27	17		28	16	9.4		226	198			14	523		16	03	6.9	120	9.9
		29	353		30	50	9.2		179	146			15	143		16	25	9.0	223	18.1
		29	454		31	00	7.8		160	126			19	307		20	41	8.9	107	6.5
		31	22		32	16	8.9		337	303			20	142		21	19	9.0	492	4.50
		33	303		34	44	8.8		068	533			23	67		24	16	3.0	208	16.6
		86	16		37	15	9.1		41	06			24	526		26	02	5.0	425	38.1
		37	240		38	37	9.0		392	357			24	550		26	04	9.0	82	1.1
		41	243		42	38	9.1		127	91			28	392		29	48	9.5	82	3.8
		42	347		43	48	6.8		043	507			29	126		30	32	8.0	587	543
		43	40		44	14	9.3		03	-3.3			30	106		34	20	9.1	114	7.0
		45	183		46	31	9.0		201	164			30	573		32	06	9.3	04	-4.0
		47	455		48	58	8.8		519	482			31	332		32	42	8.2	469	424
		48	163		49	24	8.0		324	289			34	422		35	50	9.0	15	-3.0

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	9 34 5		36 00		8.8	29	-1.6		8 49	8	10 9	55	8.0 A	31.4	26.4
	35	2.4	36 11		8.6 A	430	38.4		9 45	9	10	51	6.7 A	7.7	2.7
	35 5	23	37 2		9.0 A	332	28.6		12 59	0	14	04	8.5 A	10.9	6.8
	40 23	5	41 31		8.0 B	50	0.4		14 50	5	15	55	9.0 A	39.5	34.4
	41 1	71	42 35		8.5	420	37.3		16 9	6	17	14	9.0 A	54.1	49.0
	42 17	7	43 25		8.5	160	11.3		18 37	1	19	31	9.4 B	42.0	36.9
	43 5	90	45 7		8.8	406	35.9		21 0	3	22	4	8.0 A	59.9	54.8
	45 55	8	47 03		9.5 B	9.0	4.2		21 38	5	22	41	8.7 B	8.6	3.5
	46 26	9	47 28		7.2 A	7.8			22 17		23	05	8.3 A	33.5	28.4
	48 35	6	49 43		9.0	490	44.2		23 35	0	24	38	8.3 A	35.0	29.9
	48 44	6	49 51		8.0 A	15.6	10.8		25 42	0	26	45	8.5 A	53.6	48.4
	48 39	9	49 47		9.4 B	6.3	1.5		27 0	3	28	03	9.0 A	4.2	-1.0
	49 3	5	50 11		9.3 B	8.9	4.1		27 18	0	28	21	6.9 A	57.6	46.4
	49 13	7	50 21		8.0 B	40.6	40.8		29 32	6	30	35	9.3 B	11.2	6.0
	49 30	9	50 38		8.8	38.9	38.0		29 46	4	30	49	9.4 B	15.7	10.4
	51 27	8	52 34		8.2 A	36.8	31.9		32 57	0	33	59	9.0 A	22.1	16.8
	52 15	4	53 22		9.0 A	49.5	44.6		33 26	5	34	29	9.4 A	26.1	20.8
	52 24	9	53 31		8.9 A	32.3	27.4		37 58	0	39	00	9.0 A	33.5	27.2
	58 7	4	54 14		9.2 A	40.7	40.2		39 9	0	40	11	9.3 A	34.0	28.7
	55 25	8	56 32		9.0 A	14.4	9.5		41 28	0	42	30	8.4 A	1.2	-4.2
	56 8	3	57 15		7.7 A	6.4	1.5		41 59	2	43	01	8.1 A	34.5	29.1
	57 33	3	58 40		9.2 A	52.4	47.5		42 46	0	43	47	9.2 A	45.3	39.9
	57 42	7	58 43		9.4 A	10.0	5.1		42 56	0	44	00	9.0 A	50.7	46.3
	9 57 47	4	58 54		9.3 A	19.6	14.7		43 57	0	44	58	6.7 A	49.8	44.4
	10 [illegible]		4 41		9.3 A	12.7	7.8		45 39	0	46	35	4.0	5.4	0.0
	4 36	3	5 42		9.1 A	1.8	-0.32		46 20	1	47	21	7.8 A	53.6	48.2
	5 15	5	6 21		9.3 A	33.3	28.3		48 7	0	49	8	7.5 A	58.0	52.6
	6 21	4	7 27		9.0	50.1	45.1		49 22	0	50	23	7.8 A	19.8	9.4

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10	50	4	20	0.5	10	51	42	6.0	A	8.9	9	34.5		11	36	14	3	55.1	
	57	8	26	0.4		52	53	6.3	A	15.8		10.3			38	40	8	54.9	
	51	55	9	0.3		52	56	9.2	A	12.7		7.3			43	11	0	54.4	
	52	56	2	0.2		53	56	8.0		58.2		52.8			44	6	3	54.0	
	57	22	2	59.8		58	22	8.0	B	3.8	2	32.8			47	26	5	53.8	
	57	47	9	59.7		58	47	9.8	B	8.1		27			52	21	7	58.3	
	57	58	7	59.7		58	58	8.6	A	9.1		3.7			52	22	7	58.3	
	58	36	6	59.5		59	36	8.3	A	3.2		-2.2			52	29	3	58.3	
	10	05	4	59.4	11	0	50	7.2	A	9.8		4.4			54	52	1	58.1	
	11	3	28	59.2		4	28	8.5	A	5.3	4	48.0			57	36	8	52.8	
	11	10	44	58.4		11	43	8.4	A	5.8		0.4			58	12	0	52.7	
	12	47	6	58.1		13	46	7.2	A	3.3	4	27.9			59	30	0	52.6	
	15	27	1	57.6		16	25	8.0	A	15.6		10.1		12	1	0	3	52.3	
	15	39	0	57.5		16	38	7.3	A	5.0	1	44.6			2	45	8	52.1	
	16	22	3	57.4		17	20	9.2	A	4.8	0	42.5			3	34	4	52.0	
	17	48	6	57.2		18	46	7.2	A	5.4	5	49.0		12	5	30	5	51.8	
	20	45	3	56.9		21	42	9.5	B	18.0		12.5			6	22	7	51.6	
	23	24	5	56.6		23	59	8.9	A	7.6		2.1			8	10	8	51.5	
	24	55	8	56.3		25	52	8.5	A	3.3	5	28.0		12	8	12	5	51.0	
	26	9	9	56.1		27	06	9.4	B	28.9		23.4			12	34	2	50.9	
11	26	40	3	56.0		27	36	8.5	A	3.2	1	26.6			16	20	8	50.8	
	26	46	8	56.0		27	43	8.0	A	4.2		41.7			17	02		50.7	
	29	23	9	56.0		30	20	9.0		26.1		20.6			19	17	2	50.5	
	30	7	7	56.0		31	04	8.8	A	5.6	5	46.0			22	54	9	50.1	
11	31	31	8	55.6		32	27	7.8	A	5.9	5	53.9			23	13	2	50.0	
	33	41	9	55.6		34	37	8.3	A	4.8	2	42.6			23	15	2	50.0	
	35	13	4	55.4		36	09	8.3	A	4.3	9	38.3			23	36	4	49.9	
	11	36	4	55.3		37	00	8.9	A	4.7	2	41.6			26	58	3	49.6	

11	37	14	9.6	B	11.5	5.5	13.0												
	39	36	7.5	A	4.3	9	38.4												
	44	16	7.3	A	12.9	3.5	8.4												
	48	00	8.7	A	4.9	5.5	42.4												
	48	10	8.3	A	5.4	5.6	39.8												
	53	15	9.3	B	4.4	5.6	38.8												
	53	16	8.9	A	2.3	5.6	18.7												
	53	23	8.5	A	8.4	5.6	24.3												
	55	45	8.4	A	7	5.6	3.3												
	58	29	8.6	A	3.0	5.6	-2.3												
	59	05	7.2	B	4.4	5.6	38.8												
12	00	22	9.0		3.3	5.7	27.5												
	1	53	9.0	A	4.9	5.7	-1.0												
	3	38	8.5	A	5.4	5.7	1.7												
	4	26	7.0	A	3.6	5.7	30.4												
	6	22	8.0	B	4.4	5.7	34.8												
	6	54	8.7		7.0	5.7	1.3												
	8	10	8.3		4.8	5.7	42.3												
	13	22	9.4	B	2.3	5.7	17.6												
	13	25	9.4	B	1.9	5.7	11.3												
	17	12	9.3	A	5.1	5.7	52.0												
	17	51	8.2	A	2.0	5.7	18.7												
	20	08	9.4	A	8.1	5.7	4.4												
	23	45	8.4	A	2.2	5.8	19.0												
	24	03	6.5	A	2.0	5.8	14.2												
	24	05	9.0	A	4.9	5.8	40..												
	24	26	8.4		3.1	5.8	-2.5												
	27	28	8.4	B	2.0	5.8	-2.9												

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XX	12 26 49.5		12 37 38	9.0	B	2.6	−2.9		13 12 37		13 12 47	8.4	B	15.7		10.3
		49														
XX	28 57		28 54	7.7	A	10.0	4.5		16 57.1		17 30	9.7	A	23.8		18.4
										43				−6.4		
X	29 16		29 50	8.0	A	2.5	−3.0		22 28.5		23 11	9.2	A	10.9		6.5
XX	29 28.0		30 17	8.0	A	18.9	13.4	X	22 32.2		23 15	5.7	A	38.0		32.6
XX	30 45.6		31 33	9.5	B	21.9	20.4	/	24 23.7		25 07	9.0		18.8		13.4
		48.4				5.5										
XX	31 27.1		32 15	8.0	A	7.2	1.7	/	26 47.3		27 30	8.3	A	46.8		41.4
XXX	33 55		33 53	7.8	A	31.7	26.2	XX	28 29.1		29 12	8.0	A	40.9		36.5
XX	33 10.7		33 59	8.9	B	23.1	17.6	X/	30 49.0		31 30	7.3	A	11		−4.2
										41				5.3		
XXXX	33 48.1		34 36	8.3	A	16.5	11.0	XX	32 55.2		33 36	9.4	B	20.2		14.9
XXX	37 6.5		37 54	9.2	A	10.2	4.7	XX	X 33 31.6		34 13	6.8	B	32.1		26.8
XX	37 39.2		38 26	7.2	B	33.6	28.1	XX	35 37.1		36 18	9.2	A	33.5		28.2
		47														
XX	38 30.1		39 17	9.0	A	32.2	26.7	XXX	38 7.7		38 49	8.9	B	11.9		6.7
XX	39 7.6		39 54	9.3	A	17.0	11.5	XX	38 16.2		38 57	6.2	A	46.3		41.2
XX	40 10.1		40 57	7.4	A	23.7	18.2	/XX	38 55.7		39 37	9.3	A	31.9		25.9
XX	43 7.6		43 54	9.0	A	19.5	14.0	/XXX	40 50.4		41 31	8.6		42.9		37.8
XXX	45 16.2		46 03	8.8	A	38.6	33.1	XXX	43 36.1		44 14	8.9	A	12.5		7.4
		46.4				5.5										
	54 13.0		55 00	9.0		12.0	6.7	XX	46 21.5		46 59	8.8		19.4		14.3
										38				5.7		
XX/	12 56 9.7		57 33	8.3	A	29.3	23.8	XXX	46 49.0		47 27	9.4	B	52.0		46.9
/	13 0 33.7		1 19	9.0		47.5	42.0	/XXXX	48 36		48 42	7.2	B	49.7		44.6
	0 38.5		1 20	9.1	A	1.2	−4.3	XXXX	49 6.8		49 45	9.0		1.3		−3.8
		44.6				−5.5										
XX/	1 29.2		2 14	7.5	A	34.7	28.6	XXXX	52 11.6		52 49	8.4	B	42.1		37.0
XX/	3 18.8		4 04	8.1	A	56.0	50.5	XXXX	52 57.4		53 37	9.0		3.7		−1.4
	3 23.9		4 09	9.0		36.4	30.9	XX	54 18.8		54 56	7.5	A	37.9		16.8
XX/	4 10.1		4 55	9.1	A	24.3	18.8	XX	54 29.0		55 06	8.9	A	53.0		47.9
X XX/	6 38.7		7 23	7.1	B	40.2	34.7	XX	54 48.2		55 25	8.8		45.1		40.4
		43														
XXX/	8 16.9		9 01	8.8		22.7	17.2	XX	56 39.9		57 17	9.5	B	36.8		31.8
	11 27.1		12 11	8.8		10.2	4.7	XX	58 52.8		59 14	8.5	A	8.9		3.9
	11 31.4		12 15	9.0		7.4	1.9		59 14.7		59.52	8.4		2.3		−2.7
										37				4.8		

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1401	485	1422	8.0	5.40	4.9	49.1	1441	1442	9.0	10.4	6.1
	37						42	44			
3	11.5	3	48	8.3	16.8	11.9	43	44	8.9	8.3	-1.0
4	44.0	5	26	7.7	5.4.9	50.0	46	63	46	39	8.1	7.8	3.5
								33				4.3	
4	59.3	5	36	8.5	47.0	42.1	47	20	47	35	9.1	5.7.9	53.6
5	20.8	5	58	9.0	42.1	37.2	49	32	50	06	8.6	5.3.3	49.0
8	17.5	8	58	4.5	27.3	22.4	50	10	50	43	8.3	20.4	16.1
10	57.0	11	24	9.0	4.8	40.0	53	74	53	40	9.0	9.9	5.6
					4.8								
11	3.5	11	40	4.5	2.3	-2.6	53	15	53	49	8.5	3.1	26.8
11	5.5	11	41	8.5	2.9	-1.9	54	24	54	58	8.6	41.9	41.6
12	40.0	13	16	7.0	31.6	26.8	54	54	55	28	9.4	27.3	23.0
13	27.2	14	03	7.3	4.3.1	38.3	56	24	56	57	8.8	58.2	54.0
15	20.8	15	57	8.5	21.4	16.7	58	12	58	34	7.3	12.0	8.0
	36				4.7								
15	23.2	15	59	8.0	5.1.4	46.7	1455	44	1459	15	8.8	43.6	39.6
15	53.2	16	29	8.9	15.0	10.3	1550	42	1601	14	8.8	3.5.2	31.2
								31				4.0	
19	14.0	19	50	9.2	6.0	1.3	2	12.8	2	44	8.3	5.1.0	47.0
19	53.8	20	30	8.9	47.6	42.9	3	7.8	3	39	8.3	48.6	44.6
	35												
20	16.7	20	52	4.0	4.3	26.6	3	17.0	3	48	9.0	44.6	40.6
22	33.7	23	09	9.3	48.8	44.1	4	12.3	4	43	9.3	56.4	52.4
22	39.5	23	14	9.5	43.1	38.4	5	16.5	5	47	8.3	14.0	10.0
29	53.7	30	28	8.5	41.1	36.6	5	5.3.2	6	03	8.0	5.8.3	64.3
	31				4.5								
32	58.8	33	32	7.5	39.7	35.2	7	18.8	7	49	9.0	9.4	5.4
33	12.4	33	46	6.8	12.0	7.5	9	52.5	10	22	8.4	.03	-3.7
33	34.3	34	08	8.5	25.4	20.9	10	43.4	11	13	9.4	5.5.2	51.2
36	19.2	36	53	6.8	5.2.5	48.0	11	29.7	12	00	8.4	48.3	44.3
36	48.3	37	22	7.2	0.5	-4.0	13	49.7	14	20	8.2	9.2	5.4
37	17.2	37	51	7.0	3.7.5	33.1	15	31.2	16	04	8.5	48.8	45.0
38	39.2	39	13	8.0	32.5	28.1	15	40.5	16	10	8.9	48.3	44.8
								30				3.7	
41	14.0	41	48	8.4	14.2	9.8	15	45.7	16	18	5.8	30.5	26.6

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	15 17 15.2	-15 17 45	7.0	5.2	48.9		15 56 47.2	16 57 15	9.0		21.2	18.3
				3.7								
	38.2	19 08	8.0	40.4	36.7		57 33.0	58 01	8.3		31.5	28.6
	33.5	21 03	8.2	10.8	7.1		59 8.1	59 35	9.3		8.9	35.0
	22 17.9	22 48	7.0	33.6	30.0		15 59 48.1	16 00 16	8.9		38.4	38.5
				3.6								
	23 42.0	24 12	8.8	4.9	1.3		16 0 31.5	1 01	8.9		31.5	28.6
							2.7				2.9	
	24 05.3	24 35	9.0	13.1	9.5		9.5	1 36	9.1		26.6	23.7
	28 33.3	29 03	9.0	48.8	45.3		1 39.8	2 04	9.3		30.2	27.3
	28 52.2	29 21	9.2	3.3	47.1		1 58.0	2 25	9.4		23.6	20.7
	30 38.3	31 07	8.7	50.6	31		2 21.0	2 48	9.4		28.5	25.6
	24											
	32 0.4	32 29	6.0	3.4	29.4		2 33.5	3 02	9.0		43.3	40.4
	34 28.1	34 57	9.3	1.5	-1.9		2 45.3	3 12	9.4		29.1	26.3
							26				2.8	
	34 47.7	35 18	8.1	1.8	-1.5		4 17.0	4 44	9.2		43.3	40.5
				33								
	36 31.9	37 01	9.3	9.3	6.0		4 45.2	5 11	8.5		2.4	-0.4
	36 55.1	37 24	9.0	22.5	19.2		7 1.7	7 28	8.5		31.0	28.3
											2.7	
	37 30.1	37 59	8.9	35.7	32.4		8 57.2	9 17	8.9		8.1	5.4
				33								
	38 53.5	39 22	9.0	50.2	46.9		10 30.3	10 56	9.0		20.7	17.8
							26					
	40 46.4	41 16	9.0	45.3	42.1		11 33.5	11 59	8.8		23.5	20.9
				32							2.6	
	42 27.6	42 57	7.5	36.4	33.2		12 57.0	13 23.	9.0		5.6	55.0
	42 58.0	43 26	9.4	22.8	19.6		13 33.5	14 04	8.5		43.8	41.2
	42 58.5	43 26	7.8	26.0	22.8		16 44.5	17 10	6.8		28.1	20.6
							26				25	
	43 3.8	43 42	8.5	2.3	-0.9		16 57.6	17 16	8.0		11.2	8.7
	43 20.7	43 49	8.3	31.4	28.2		17 58.8	18 25	9.0		26.1	23.6
	46 30.5	46 58	8.0	12.2	9.1		20 50.0	21 16	6.5		8.7	25.0
											2.4	
	46 58.2	47 27	8.9	40.7	37.6		21 20.2	21 46	6.9		3.6	1.2
				31								
	47 49.1	48 17	8.6	1.6	-1.5		22 30.2	22 56	9.4		8.4	35.5
											2.3	
	48 9.1	48 37	8.6	5.9	0.8		25 4.4	25 30	7.2		5.0	2.7
	51 9.2	51 37	9.0	50.1	47.0		28 51.1	29 17	9.4		1.9	16.6
	55 25.2	55 53	8.5	8.2	5.1		28 57.3	29 23	9.5		2.4	19.2
							28				2.2	

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	30.26.1	30.57	7.0	A	31.9	30		8.4	5	9	8	9.0		12.9	11
	31.11.9	31.37	9.2	B	46.1	44		10.	11.9	10.46		8.9		11.9	3
	31.26.6	31 52	8.8		3.3	1		10.	19.0	10.44		8.3	A	27.8	26
	31.55.10	32.20	9.0	B	35.5	34		10.	47.7	11.13		9.0	A	18.5	47
	33.142	33 39	7.8	A	32.5	31		13.	22.0	13 45		7.5	2	56.4	57
	38.30.9	38.56	9.4	B	18.9	17		14.	16.8	14 39		8.9		59.1	57
	40 8.1	40 33	8.8	A	47.0	45		14.	32.1	14 55		7.8	2	37.1	35
	40.29.0	40.54	8.0	2	11.0	9		14.	43.12.6	15 6		7.8	2	29.3	27
	46.6.8	46.34	8.9		54.1	52		16.	32.5	16.56		7.9	A	1.6	0
	46.10.5	46.36	9.2	B	39.2	37		16.	52.6	17.15		9.0		14.1	12
	46 51.5	47.17	9.2	B	24.2	22		17.	38.0	17 56		9.0	B	16.3	15
	47.102	47.34	8.8	A	35.2	23		22.	13.3	22.36		6.5	A	54.7	53
	51.28.0	51 52	8.0	A	11.9	10		23.	44.22	24.7		8.1	A	0.0	−2
	52.56.6	53 21	6.8	2	33.9	54		23.	45.1	24 8		8.7		6.7	5
	53.42.9	54.6	7.7	A	5.9	4		24.	42.1	25 5		8.9	A	8.3	6
	54.37.3	55 1	8.2	A	0.7	−1		26	5.9	26 29		9.4	B	12.0	10
	55.34.1	55.59	8.3	2	31.3	29		27.	10.8	27 34		8.0	3	23.5	22
	57.55.0	58 19	6.8	A	48.1	46		29.	0.7	29 24		8.1	A	42.2	40
	58 113.9	59 9	7.5	A	8.6	7		29.	14.3	29.37		8.0	A	11.6	10
	1.50	1 29	8.3		20.9	19		29.	55.4	30 18		9.3	B	32.6	29
	1.56.1	2 20	8.0	A	23.3	21		31.	27.1	31 50		9.0		118.8	47
	2.1.7	2 25	8.5	B	33.0	31		31.	43.8	32 7		9.1	B	6.4	3
	2.33.5	2.58	8.4	A	13.4	11		31.	56.7	32 20		9.4	B	6.3	3
	4 32.8		9.3	B	52.4										
	4.38.5	5 2	8.8	A	30.3	28		31.	57.7	32.21		8.8		14.5	13
	5.34.0	5 59	9.3	B	49.1	47		32.	55.3	33 18		8.0	A	33.9	32
	5.57.7	6 21	9.3	B	55.2	53		33.	26.9	33 50		8.6	A	40.3	38
	7.12.8	7 36	6.0	2	35.2	33		34.	58.1	35.21		8.8	A	41.5	40
	7.55.9	8 19	9.0		7.8	6		38.	57.0	39 20		7.9	A	7.2	5

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	40	58.6	41	21	90		48.3	46								
	41	11.4	41	34	9.3B		18.5	16								
	41.	57.6	42.15		8.3A		03	-1		18	12	12.5	18	12	45	9.0	48.5	49
	42.	11.9	43	18	7.5A		32.3	30		13	5.0		13	28	8.0A		50.4	51
	50.	13.9	50	37	8.0A		24.5	-23		13	40.4		14	03	8.3		1.2	1
	53	28.8	53	52	8.7B		25.5	24		15	0.2	23	15	23	8.8		10.2	11
	54.	25.5	54.49		9.1B		21.6	20		16	6.2		16	29	7.5A		35.8	36
	54.	50.4	55.13		6.8A		13.5	12		16	35.0		16	58	9.0A		46.5	47
	56.	57.8	56.21		8.8		1.9	0		16	52.1		17	15	9.0		50.4	51
	56	50.3	57.13		8.8B		40.1	38		17	4.3		17	27	8.9A		36.8	37
	57.	02	57.33		7.2B		37.4	49		18	5.9		18	28	8.9A		7.2	8
	57.	08	57.23		8.4		02	-2		18	24.0		18	47	7.3		49.8	50
	57.	52	0	15	8.0A		37.4	33		18	37.4		19	00	9.0		38.9	39
	59.	57.1	0	22	7.9A		57.0	49		18	48.8		19	11	9.0		18.0	18
	8.	0. 21.5	0	43	8.5A		36.8	34		18	48.8		19	11	9.0		16.5	17
	2	21.1	18 2	44	8.5A		0.2	0		18	52.6		19	15	8.6A		8.5	9
	2	27.2	2	50	8.9		49.7	50		20	56.9		21	19	8.6		58.6	59
	2	46.6	3	09	9.0		19.5	20		22	52.8		23	15	8.7		10.3	11
	4	36.2	4	59	8.7		53.0	53		23	12.2		23	35	8.6		39.2	40
	8	41.2	9	04	7.4		16.7	17		23	17.1		23	40	9.1B		57.2	58
	8	55.4	9	18	8.4A		1.6	2		23	37.9		24	00	8.4R		59.6	60
	9	4.9	9	27	7.3		41.4	41		25	14.9		25	37	8.4A		20.8	21
	10	2.4	10	25	8.9		22.5	23		26	39.4		27	02	9.4B		31.5	32
	10	4.4	10	27	9.0B		39.8	40		28	5.1		28	25	8.4B		20.3	21
	10	13.9	10	36	8.6A		27.4	27		28	16.8		28	39	9.1A		59.1	60
	10	38.2	11	01	8.3A		28.9	29		28	31.4		28	54	9.2A		46.6	47
	10	39.3	11	02	9.3A		29.5	30		28	34.9		28	57	8.8A		34.7	35
	10	51.6	11	14	9.1B		38.0	38		28	52.9		29	15	6.5G		0.8	1
	11	27.4	11	50	7.8A		30.3	31		29	32.4		29	55	7.8A		17.8	18
	11	55.2	12	18	8.2A		6.9	7		30	20.7		30	24	8.3F		46.8	47

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18	30	37.0	18	31	00	8.6	A	14.6	15	18	58	27.1	18	58	50	9.2	A	36.1	37
	30	40.2		31	03	5.5	A	14.6	15		58	42.3		59	05	6.3	G	3.1	4
	31	54.9		32	17	8.9		48.7	49		59	56.8		60	19	8.8		13.3	14
	33	34.7		33	57	8.8		49.6	50	19	0	19.5		1	43	8.3	A	54.3	56
	35	28.3		35	51	9.0		35.3	36		0	19.9		0	43	8.7		2.8	4
	35	33.7		35	56	6.8	A	12.3	13		0	52.5		1	16	9.3	A	48.8	50
	36	17.5		36	40	7.8	A	48.6	49		1	24.8		1	48	7.8	A	32.1	34
	36	33.9		36	56	5.7	A	3.8	4		1	52.4		2	17	8.9	A	41.9	43
	38	13.2		38	36	8.8	R	27.3	28		2	2.4		2	26	9.3	B	18.4	20
	41	52.2		42	15	9.0	R	46.7	47		3	56.2		4	20	8.5		54.4	56
	43	5.2		43	28	9.4	R	28.2	29		4	28.7		4	52	8.2	B	45.2	47
	43	26.5		43	49	8.9	R	24.3	25		4	48.0		5	12	9.4	B	35.9	37
	43	29.7		43	52	6.3	A	49.2	50		4	54.2		5	18	9.3	B	33.4	35
	45	54.4		46	17	9.2	R	30.7	31		5	2.5		5	26	6.2	G	11.6	13
	47	28.5		47	51	9.0	A	40.6	41		5	9.0		5	33	7.9	B	42.4	44
	47	45.4		48	08	9.1	A	40.6	42		5	37.5		6	15	8.3	L	21.3	23
	47	51.6		48	14	8.9	R	8.8	9		5	55.6		6	19	9.2	R	3.8	5
	48	21.4		48	43	5.5	A	47.6	48		7	57.5		8	21	8.8		51.6	53
	48	39.2		49	02	7.7	A	53.8	54		8	22.7		8	46	8.2	L	23.4	25
	49	18.7		49	41	9.0	A	5.5	6		10	20.8		10	44	8.0	G	57.5	59
	51	10.6		51	33	7.6	L	30.3	31		10	34.4		10	58	9.0		24.4	26
	51	34.8		51	57	8.7	R	59.5	60		11	10.4		11	34	8.3		36.9	38
	52	27.1		52	50	9.0		28.9	29		14	12.1		14	36	8.5	A	59.3	61
	54	45.9		55	08	8.8	A	30.7	31		14	50.4		15	14	9.0		44.0	46
	55	8.6		55	31	9.2	A	53.8	54		15	11.8		15	35	8.5	B	46.5	50
	55	31.0		55	54	9.1	A	55.2	56		17	29.6		17	53	9.0		40.2	42
	55	46.1		56	09	9.0	A	52.8	53		18	5.3		18	29	7.1	G	5.9	7
	57	11.6		57	34	8.4	L	3.7	4		18	22.9		18	46	8.5	B	24.4	26
	57	42.3		58	05	8.9		57.8	58		19	7.4		19	31	7.5	P	45.8	47

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XX	1	19	19	47.7	20	11	7.8 L	17.0	19	XX	19	31	39.9	32	04	9.1 A	13.7	16
				24				1.9					25				2.2	
XX		19	49.6	20	13	8.4	59.1	61	XX		36	37.7	37	11	8.8 B	3.2	6	
XX		19	49.9	20	13	8.7	28.1	30	XX		37	44.3	38	09	8.9	16.0	18	
XX		20	12.8	20	36	8.7	38.1	40			38	4.0	38	29	8.9	32.8	35	
XX		21	9.7	21	33	9.0	10.3	12	XX		39	35.9	40	00	9.0	59.1	61	
XX		21	21.2	21	45	9.3 A	52.3	54			39	38.5	40	03	7.1 G	12.6	15	
																2.1		
XX		21	37.5	22	01	9.4 A	53.4	55			40	10.8	40	35	7.4 G	15.9	18	
XX		21	44.6	22	05	9.3 A	55.4	57			40	13.4	40	38	8.9	14.0	16	
XX		21	58.5	22	22	8.8 L	6.9	8			40	26.3	40	51	9.0	28.5	31	
XX		23	35.6	23	59	8.3 A	30.5	32	XX		40	29.7	40	54	9.0	9.0	11	
XX		23	52.6	24	18	6.1 G	1.6	4			40	49.8	41	14	8.5	47.9	50	
							2.0											
XX		24	23.3	24	47	8.8	31.0	33			40	56.0	41	21	8.9	46.5	49	
X		24	28.0	24	52	8.7 A	52.3	54	XX		41	40.9	42	05	8.0	42.9	45	
XX		24	39.1	25	03	8.0 A	27.8	29	XX		42	54.0	43	19	9.0	46.2	49	
XX		26	23.1	26	47	8.5 A	16.2	18			43	24.8	43	49	8.2 H	51.5	54	
		26	55.4	27	19	8.5	48.2	50	XX		45	31.5	45	56	8.2 A	41.2	44	
		27	2.4	27	26	8.8 A	48.5	20			45	36.4	46	02	8.5 A	25.3	28	
				7									26				2.5	
XX		27	5.5	27	29	9.1 B	21.2	23			46	5.4	46	31	9.0	56.6	59	
							2.1											
		27	9.7	27	33	8.5	54.8	57	XX		46	59.0	47	25	5.3 A	37.3	40	
XX		27	10.7	27	34	9.1 A	25.2	28			47	10.6	47	36	9.0	12.9	15	
		27	50.1	28	14	9.1 A	20.8	23	XX		48	33.3	48	59	8.4 A	61.1	53	
XX		28	9.8	28	33	9.0 A	34.0	37			48	52.5	49	18	8.9 A	58.9	61	
XX		28	12.9	28	36	8.1 A	41.2	44			48	55.2	49	21	9.0 A	50.3	53	
																2.6		
		28	26.9	28	50	8.3 A	40.5	43	XX		49	54.2	50	20	9.0	33.5	36	
XX		29	4.2	29	28	9.1 A	35.9	38			50	11.3	50	37	8.3	30.8	33	
XX		29	47.2	30	11	9.2 A	30.1	33	XX		51	26.5	51	52	9.0	25.8	28	
XX		30	35.9	31	00	8.1 A	21.9	24			51	52.9	52	18	5.5 J	3.5	6	
			25				2.2											
XX		31	24.0	31	49	8.5	55.0	57			51	54.1	52	20	8.8	23.4	26	
XX		31	26.2	31	51	6.3 A	11.0	13	XX		53	51.8	54	18	8.9	26.6	29	
													27				27	

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h								h							
19	54 0.3	54	27	8.9	55.4	58		20	5 25.0	5	52	9.4 A	22.2	25	
	54 11.4	54	38	9.0A	19.5	22			5 55.7	6	22	8.6 A	59.8	63	
	54 33.0	55	00	8.9A	22.8	26			6 55.4	7	22	8.8A	17.2	20	
	55 9.8	55	36	9.0A	30.7	34			9 39.7	10	06	8.4	23.3	26	
	56 46.9	57	13	8.3A	20.8	24			9 48.6	10	15	6.5A	40.7	44	
	57 19.9	57	46	9.0	38.0	41			11 33.7	12	00	8.5A	57.4	60	
	57 26.6	57	53	9.0A	43.0	46			11 46.7	12	13	9.5B	25.4	28	
	57 33.6	58	00	9.3B	3.9	17			11 52.7	12	19	7.3G	3.5	6	
	57 43.1	58	10	8.4A	39.3	42			12 10.1	12	37	9.0A	51.4	54	
	57 47.0	58	14	9.3B	5.8	63			14 44.8	15	11	9.3B	48.5	51	
	58 22.0	58	49	8.9A	30.2	33			15 1.9	15	28	8.9	13.4	16	
	58 25.0	58	52	9.5B	20.2	23			15 17.9	15	44	9.3B	48.6	52	
	58 42.7	59	09	8.8	57.8	61			16 32.6	16	59	9.2B	38.7	42	
	59 23.6	59	50	7.5L	9.9	13			16 56.2	17	25	9.4B	38.7	42	
	59 59.2	20 1	26	8.8	20.3	23			17 16.6	17	45	9.5B	23.3	26	
h															
20	0 37.6	1	05	8.2A	48.0	51			17 34.8	18	01	8.1A	39.1	42	
	0 58.5	1	26	8.9	3.2	6			18 24.7	18	51	8.8A	24.4	27	
	1 10.7	1	38	9.0A	47.9	51			18 53.2	19	20	8.6A	56.4	59	
	1 19.9	1	47	9.2B	41.9	45			18 56.7	19	23	7.6A	57.4	60	
	2 6.5	2	34	8.8A	38.1	41			18 57.6	19	24	9.0	52.0	55	
	2 24.0	2	52	5.9A	44.5	47			19 51.0	20	18	8.2G	3.9	4	
	2 40.8	3	09	9.1A	42.8	46			20 22.9	20	49	9.4B	7.3	10	
	2 53.9	3	21	8.8A	36.5	39			20 58.9	21	23	8.9B	49.2	52	
	3 4.3	3	32	9.1A	52.2	56			21 19.6	21	46	8.2B	23.5	27	
	3 32.1	4	00	8.8A	27.7	31			21 33.6	22	00	8.5G	10.2	13	
	4 30.0	4	58	9.0A	56.3	59			21 41.9	22	08	9.3B	33.2	36	
	4 52.2	5	20	8.9A	30.6	33			21 49.5	22	16	7.9L	39.3	42	
	4 54.8	5	22	8.2A	54.8	58			22 1.2	22	28	8.6A	14.3	17	
	5 4.9	5	32	8.1A	29.4	32			22 6.2	22	33	9.3A	2.6	6	

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	h																	
	20	22	12.0	22	39	9.5B	11.3	14		20	39	36.4	40	04	9.0	45.2	49
			27				3.2					28				3.6	
		22	44.2	23	11	8.0A	19.1	22			39	37.9	40	05	8.9	9.8	13
XXX		23	16.8	23	43	8.5A	32.8	36	XX		41	32.5	42	00	9.1B	25.6	29
XXX		23	57.9	24	24	9.4B	29.0	32			41	43.8	42	11	9.0	58.4	62
		25	2.8	25	29	8.3A	32.8	36			41	47.4	42	15	8.0G	15.1	19
XX		25	9.7	25	36	9.4A	48.9	52	XX ?		41	55.1	42	23	8.2A	37.6	41
		25	27.6	25	54	7.9A	52.5	56			41	59.5	42	27	8.5A	46.7	50
XX		26	10.6	26	87	8.8B	6.2	9	XX		42	9.2	42	37	6.2A	28.0	31
XX		26	29.5	26	56	8.8	30.5	34	XX		42	53.7	43	21	7.3A	4.8	8
XY		27	38.3	28	05	9.4B	43.7	47	XX		45	43.2	46	11	9.0B	10.8	14
							3.3										
		28	31.0	28	58	9.0A	23.9	27	X		45	46.6	46	15	7.8B	2.8	6
												29				3.8	
XX		28	40.8	29	07	7.4A	31.9	35	XX		46	25.9	46	54	8.7	46.0	49
		29	20.3	29	47	7.5A	18.4	22	XX		48	0.3	48	29	9.2B	26.7	30
		29	36.7	30	03	7.9A	58.2	61	XX		48	3.7	48	32	9.0	6.9	10
		29	40.1	30	07	7.3A	19.9	23	XX		49	42.4	50	11	8.9	54.6	58
XX		29	53.0	30	20	7.6A	6.0	9	XX		51	43.2	52	12	9.3B	39.2	43
XX		31	23.7	31	51	8.8A	50.7	54	XX		52	13.7	52	42	8.9B	16.0	19
			28				3.4										
XX		32	11.9	32	39	8.8A	49.1	52	X		55	2.0	55	31	8.8	5.4	9
XX		32	32.5	33	00	9.2A	49.3	53	XX		55	49.1	56	18	8.5	6.7	10
XX		33	5.8	33	33	6.5A	28.1	31	X		56	11.5	56	40	8.9	23.4	27
XX		34	44.7	35	12	9.3A	28.9	32			56	30.6	56	59	8.8A	38.0	41
		35	37.6	36	05	9.4B	37.4	41	XX		57	55.8	58	24	7.6A	0.3	4
XX		35	45.6	36	13	9.0A	50.5	54	XX		58	1.7	58	30	6.0A	5.7	9
XX		36	37.7	37	05	9.0	35.6	39			58	31.2	58	32	8.6A	12.7	16
XX		37	42.7	38	10	9.0	46.0	49	XX		59	20.7	59	49	5.5A	42.7	46
XX		37	48.0	38	16	9.1B	54.9	58	XX		59	38.3	0	07	9.0	10.8	14
		37	51.9	38	19	9.3B	54.9	58	X	h	21	m 0	dec 21.7	0	52	9.5B	21.7	26
													31				4.0	
		38	28.7	38	56	7.9B	6.6	10	XX		1	9.8	1	40	8.0A	2.4	6
XX		38	41.3	39	09	9.0	38.4	42	XX		1	46.9	2	17 07	8.8	33.2	37

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1	21	3	38.2	4	09	9.5B	0.5	13		21	23	14.5	23	47	6.7L	39.8	34
			31				4.0					33				4.2	
		3	49.0	4	20	7.0A	38.3	42			23	59.6	24	32	9.0A	9.7	14
		3	57.7	4	28	9.5B	43.4	47			24	5.5	24	38	8.4A	26.7	31
		5	29.3	6	00	8.6A	29.5	33			25	1.4	25	34	9.5A	18.0	22
		5	46.9	6	17	5.5A	58.3	62			25	3.6	25	36	9.5A	19.4	24
												33				4.3	
		8	17.6	8	48	9.0	7.8	12			25	4.6	25	37	7.2	17.9	22
		8	29.1	9	00	9.0	53.0	57			25	12.1	25	45	9.5B	38.6	43
		8	33.3	9	04	8.9	5.0	9			25	13.4	25	46	8.8A	11.8	16
		8	45.0	9	16	8.6L	4.1	8			25	34.5	26	04	8.3A	19.2	23
		9	23.9	9	55	7.1L	6.8	11			26	1.9	26	34	8.9A	12.6	17
			32				41										
		11	3.9	11	35	9.1B	27.8	32			26	59.9	27	32	8.5	46.6	50
		11	54.1	12	26	9.1A	42.6	47			27	23.5	27	56	8.3A	6.9	11
		12	9.9	12	41	8.2A	34.0	38			27	26.4	27	59	8.4A	11.9	16
		14	38.6	15	10	8.8	58.5	63			27	43.8	28	16	9.1B	26.6	31
		14	46.4	15	18	9.0	42.5	47			28	25.2	28	58	7.6A	56.9	62
		14	49.3	15	21	8.0A	52.4	56			28	54.5	29	27	8.8A	2.8	37
		14	50.5	15	22	8.2B	18.8	23			29	0.7	29	33	9.5B	5.2	90
		14	54.6	15	26	8.7	27.1	31			30	2.2	30	36	9.0	58.1	62
												34				4.4	
		15	1.5	15	34	6.5S	26.8	31			30	12.0	30	46	9.0	50.9	55
			33				4.2										
		15	2.1	15	35	8.4A	42.5	47			30	45.1	31	19	8.0L	11.2	16
		15	15.4	15	48	7.7A	42.6	47			30	45.1	31	19	8.5	30.0	34
		15	18.9	15	51	6.9S	22.1	26			31	10.7	31	44	8.0L	10.2	14
		16	7.1	16	40	8.5A	46.0	50			31	37.5	32	11	9.5B	42.3	47
		16	38.0	17	11	8.2A	40.0	44			32	13.8	32	47	7.3A	48.6	48
		19	55.1	20	28	8.0A	44.9	49			32	19.6	32	53	9.0	5.3	10
		21	0.9	21	33	7.5A	14.2	18			32	21.5	32	55	8.3A	45.3	50
		21	42.8	22	15	7.7A	7.1	11			32	29.0	33	03	8.5L	11.7	16
		21	58.6	22	31	5.8A	16.1	21			32	51.3	33	25	9.2A	34.5	39
		22	25.7	22	58	9.0	28.8	33			32	57.7	33	31	8.8B	22.5	27

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34	21	33	42.8	34	16	6.5G	55.7	60	21	50	42.5	51	15	8.3	13.1
			34				4.4				36				4.7
14		34	54.1	35	28	8.1G	44.9	49		51	16.5	51	32	8.3A	44.9
31		34	59.2	35	33	9.0	40.0	44		51	37.8	52	13	8.7A	46.4
							4.5								
22		37	8.5	37	42	8.7A	42.4	47		52	24.0	53	00	8.8A	7.0
24		37	11.8	37	45	9.0A	38.1	43		53	26.2	54	02	9.0A	9.6
22		37	28.7	38	02	7.9A	20.7	25		55	59.3	56	36	8.8	21.9
											37				4.8
43		37	41.6	38	15	7.5A	35.3	40		56	28.0	57	05	9.0	14.7
							4.5								
16		40	7.3	40	41	8.8	13.6	18		56	32.5	57	09	5.3G	11.0
23		40	13.9	40	48	8.6A	49.3	54		57	28.5	58	05	9.4B	20.6
			35												
17		40	21.9	40	56	9.4B	33.8	38		58	14.6	58	52	9.1A	22.6
50		40	52.1	41	25	8.8	14.5	19		58	18.4	58	56	8.0A	1.0
11		41	1.0	41	36	8.4	12.5	17		58	22.2	58	59	8.3A	30.5
16		41	25.5	42	00	9.0A	55.3	60		59	10.4	59	47	9.1B	30.4
							4.6								
7		42	3.1	42	38	8.5	38.0	43		59	54.4	0	31	8.8A	48.2
62		42	59.0	43	34	8.6A	48.9	53		h 22	0	8.8	0	46	9.0	8.0
											38					4.9
7		43	7.8	43	42	7.8L	24.6	29		0	10.5	0	48	9.3B	30.1
90		44	0.9	44	35	8.5A	44.1	49		0	10.8	0	48	9.0	5.5
62		44	3.8	44	38	8.5A	47.7	52		0	11.6	0	49	8.9	40.0
55		44	55.3	45	30	6.7G	1.2	6		0	28.4	1	06	8.9A	20.0
16		44	59.1	45	34	9.4B	59.8	64		0	38.9	1	16	7.2A	55.0
34		44	59.6	45	34	9.0	4.6	9		1	13.4	1	51	9.2A	58.9
14		46	51.5	47	27	8.8	1.7	6		1	16.9	1	54	8.4A	5.0
			36				4.7								
47		49	2.0	49	38	8.5	17.0	22		1	28.0	2	06	7.9B	26.2
48		49	15.2	49	51	8.3	40.5	45		2	4.1	2	42	6.2A	35.5
10		49	27.6	50	03	8.3A	49.5	54		2	26.2	3	04	9.0	9.5
50		49	46.9	50	22	9.4B	26.6	31		2	28.3	3	04	9.3B	50.5
16		50	0.1	50	36	9.0A	59.0	64		5	0.3	5	38	9.0	40.4
39		50	25.0	50	01	6.5A	33.9	38		5	58.3	6	36	8.5	16.2
27		50	25.8	50	01	9.4B	47.7	52		7	12.2	7	50	9.1B	59.2

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22	7 34.5	8	12	8.2	12.5	17	22	23 34.2	24	13	8.2A	16.8	22
	38				4.9			23 39			9.3A	24	
	7 43.4	8	21	8.5B	54.5	59		23 53.7				17.6	
								24 51.4	25	30	7.8A	47.1	42
	7 55.5	8	33	7.1B	26.2	31		25 44.5	26	23	8.4A	7.2	12
	8 25.1	9	03	7.6B	33.1	38		26 15.6	24	54	8.8R	17.1	22
	8 27.9	9	05	8.2	3.2	8		26 28.4	27	07	8.7	55.5	61
	8 48.9	9	26	7.9L	13.1	18		26 35.2	27	15	8.7A	28.7	34
								40					
	8 55.7	9	33	8.6A	58.5	63		27 34.1	28	14	9.3R	80.7	36
	9 10.2	9	48	8.5	30.7	35		28 32.9			9.0	2.4	
								29 8.0	29	48	8.7R	14.1	19
	10 18.3	10	56	8.8	16.7	21		29 27.4	30	07	9.0	55.3	60
	11 30.1	12	08	8.7A	55.5	60		29 51.3	30	31	8.3G	27.2	32
	11 33.6	12	11	8.1A	16.8	21		31 25.8	32	06	9.5B	9.6	15
								41				5.2	
	13 40.0	14	18	8.9A	52.7	57		32 8.6	32	49	8.9	3.2	8
	14 9.1	14	47	7.5A	9.0	14		32 23.5	33	04	9.3B	40.6	46
	14 23.0	15	01	8.0A	8.6	13		32 38.7	33	19	8.9A	52.9	58
	15 13.9	15	51	8.7A	3.0	8		32 40.3	33	21	9.1A	29.8	35
	38				5.1								
	15 48.2	16	26	9.0	40.3	45		32 45.0	33	26	8.1B	6.7	12
	17 12.2	17	50	9.4B	57.2	56		34 38.9	35	19	9.3B	18.3	23
	18 16.1	18	54	8.5	31.9	37		36 5.1	36	46	8.9A	5.0	10
	19 0.2	19	38	8.2A	0.4	5		36 8.8	36	49	9.4B	48.4	54
	19 0.2	19	38	8.9A	1.7	7		36 19.9	37	00	8.0A	2.7	8
	19 14.1	19	52	9.1R	31.8	37		36 40.0	37	21	9.4B	23.9	29
	19 24.0	20	02	8.4	59.3	64		37 36.8	38	17	9.2A	53.1	58
	19 45.1	20	23	9.2A	5.0	10		38 32.3	39	13	7.5A	59.9	65
	21 32.4	22	10	8.8A	21.9	26		38 48.5	39	29	7.5A	32.5	38
	22 6.2	22	44	8.2A	13.6	18		39 32.4	40	13	7.8A	36.6	42
	22 28.2	23	06	9.3R	31.7	37		39 34.9	40	15	7.5A	7.0	12
	22 46.1	23	24	7.7A	7.5	13		40 30.3	41	11	9.1A	28.5	34
	22 48.0	23	26	9.3B	53.8	59		40 42.1	41	23	8.0B	52.5	55
	23 22.9	24	00	8.5A	1.5	7		40 51.6	41	32	8.7	19.8	25

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22	22	40	58.5	41	40	8.2 L	59.3	64	23	4	31.3	5	16	8.8	41.6	47
			42				5.2				45				5.5	
42		41	17.3	41	59	7.0 A	37.3	42		4	37.0	5	22	9.2 B	10.9	16
12		41	35.0	42	17	9.0	53.3	55		4	41.2	5	26	7.2 G	16.5	22
22		41	35.9	42	17	9.0 A	3.1	8		4	53.7	5	35	9.3 B	10.7	16
61		44	48.7	45	30	8.6	16.6	22		5	32.9	6	17	8.5 L	33.9	39
34		45	37.3	46	20	7.0 B	15.6	21		5	36.2	6	21	8.6 L	24.0	29
			43				5.3									
36		45	39.87	46	22	7.9 B	25.3	31		5	43.8	6	28	8.2 A	2.0	7
19		46	48.5	46	31	9.2 9	18.1	24		6	44.2	7	29	8.3 B	19.9	25
60		45	52.4	46	35	8.3 A	57.0	62		7	42.8	8	27	9.0	38.5	43
32		46	54.3	46	37	9.3 B	2.0	7		8	0.5	8	45	8.9	32.0	37
15		47	35.9	48	18	9.0	33.9	39		8	38.3	9	23	9.4 B	53.4	59
8		50	50.0	51	33	8.9	10.8	16		9	19.9	10	04	9.2 R	10.2	16
46		50	56.6	51	39	9.1 B	37.1	42		9	29.9	10	14	9.0 R	11.9	17
58		52	29.1	53	12	8.8	50.2	55		9	43.4	10	28	9.0 A	47.5	53
35		53	4.6	53	47	8.6	56.0	61		9	56.9	10	41	8.9 A	41.9	47
12		53	7.2	53	50	9.2 B	15.6	21		10	7.6	10	52	5.4 G	26.3	32
		53	23.5	54	6	9.0	55.3	53 01								
23		54	13.6	54	56	8.9	6.0	11		10	26.9	11	11	9.3 B	21.3	27
10		54	52.9	55	35	8.8 B	44.1	49		10	39.5 ~~38.8~~	11	24	9.5 B	30 ~~34.5~~	7
54		55	23.8	56	06	9.5 B	39.4	45		11	21.6 ~~39.5~~	12	06	9.0	25.0 ~~6.6~~	30
8		55	28.4	56	11	8.1 A	8.8	9		12	24.1	13	09	8.3 A	28.0	33
29		56	27.4	57	10	8.0 A	27.8	33		13	45.6	14	30	8.8 A	29.0	34
58		57	8.5	57	51	7.5 A	31.3	37		15	51.3	16	37	9.0	36.0	42
											46				57.6	
65		57	27.2	58	10	8.8 A	47.6	53		16	18.7	17	04	8.8	0.0	6
38		58	13.4	58	56	8.8	10.3	16		16	44.8	17	30	8.1 A	5.1	11
42		58	16.2	59	01	8.4	15.4	21		16	48.3	17	34	9.0	10.6	16
12		59	11.2	59	54	8.8	27.3	33		17	48.1	18	34	9.2 B	36.3	42
34	23	0	45.5	1	30	5.5 A	2.0	7		17	58.0	18	44	7.8 B	37.0	43
			45				5.5									
58		4	1.2	4	46	8.8	52.3	58		18	54.0	19	40	7.0 A	12.2	18
25										19	2.1	19	45	8.9	46.0	54

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h	m	sec							h	m						
23	19	3.2	19	49	7.9A	34.6	40		23	34	36.0	35	24	9.0	4.5	10
	46					5.6					48				5.6	
	19	16.1	20	02	8.3A	23.0	29			34	52.1	35	40	9.0	22.5	28
	19	37.0	20	23	7.8A	22.1	28			35	43.9	36	31	9.3B	57.2	63
	19	44.3	20	30	9.3B	4.6	10			35	53.9	36	41	9.2B	18.7	24
	19	50.8	20	36	9.0A	38.6	44			36	1.2	36	49	9.0	32.8	38
	20	42.6	21	28	9.5B	16.0	22			36	4.0	36	52	6.5	21.8	26
	22	2.1	22	48	8.5L	17.5	23			36	35.8	37	23	9.0	10.7	16
	22	5.3	22	51	6.8G	52.0	58			38	54.5	39	42	8.9	15.0	24
	22	21.6	23	06	8.4A	36.4	42			39	16.2	40	04	8.7	49.0	55
	22	37.9	23	23	8.7L	21.0	27			40	4.4	41	53	9.1G	28.7	34
											49				5.6	
	22	39.7	23	25	8.6A	2.3	8			40	23.0	41	12	9.1R	25.5	31
	23	25.4	24	11	9.5B	8.7	14			40	47.6	41	36	8.8R	29.8	35
	24	28.7	25	15	9.0A	5.1	11			41	12.4	42	01	9.1R	8.4	14
		47				5.6										
	24	47.7	25	34	9.0A	21.6	27			41	14.3	42	03	8.6A	28.3	34
	25	1.9	25	48	9.3B	47.3	53			41	15.0	42	04	9.2B	43.4	49
	25	3.2	25	50	9.0A	18.6	24			41	19.4	42	08	8.9	33.1	39
	25	34.1	26	21	7.9L	30.4	36			41	38.0	42	27	9.0	15.8	24
	25	45.5	26	32	7.0G	53.2	59			41	49.9	42	38	8.7A	23.9	29
	26	0.3	26	47	8.5	59.7	65			42	29.0	43	18	8.8A	30.4	36
											12.0				27.4	
	26	2.1	26	49	9.2A	18.0	24			42	59.4	43	28	9.3A	4.7	10
	26	6.8	26	53	9.3A	15.6	21			43	3.4	43	32	8.6A	5.8	11
	26	14.4	27	01	9.0A	16.5	22			44	31.6	45	34	8.4	17.2	23
	27	23.0	28	10	9.0	6.5	12			44	44.5	45	33	9.0	24.5	30
	27	49.7	28	36	8.8	4.2	10			44	50.2	45	39	8.8R	22.1	28
	28	47.9	29	34	8.9A	55.3	61			45	36.5	46	26	9.4R	2.3	8
											50				5.6	
	30	10.4	30	58	7.5B	39.1	45			45	59.7	46	49	8.8R	17.0	23
		48				5.6										
	31	2.7	31	50	7.9L	1.2	7			46	11.1	46	56	8.3A	19.2	25
	33	47.4	34	35	8.5	7.5	13			47	32.4	48	22	7.5G	41.3	47
	34	20.0	35	08	8.6	56.6	62			48	58.0	49	48	8.7A	23.1	29

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h								
23	49	13.1	50	03	7.5A	54.5	60	
		50.				5.6		
XX	49	49.0	50	39	8.8A	56.9	62	
XX	50	30.2	51	20	9.0A	46.5	52	
XX	50	43.2	51	33	8.7	22.2	28	
XX	51	22.0	52	12	7.5A	35.0	41	
	51	29.4	52	19	8.2A	51.9	57	
XX	51	41.3	52	31	8.2A	26.6	32	
XX	51	51.8	52	41	9.0A	40.8	46	
X	51	52.3	52	43	7.3A	45.8	51	
		51				5.6		
XX	53	28.1	54	19	9.3A	47.9	53	
XX	53	32.0	54	23	9.0	28.1	34	
	53	44.3	54	35	8.2L	21.3	27	
XX	53	52.0	54	43	9.0L	24.2	30	
XX	55	54.2	56	45	9.0	44.3	50	
XX	56	3.3	56	54	8.0G	30.5	36	
XXX	56	24.8	57	15	9.0	23.5	29	
XX	57	52.7	58	43	9.4B	2.4	8	
XX	58	2.9	58	53	9.5B	2.4	8	
	58	8.1	58	59	7.0A	21.6	27	
XX	58	35.9	59	26	8.5G	28.6	34	
XX	59	32.0	24 0	24	9.0	21.4	27	
		52				5.7		

1588 stars in zone 5-2°

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1623 " Lett 1873

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52°

	h	m								h	m					
	0	0	6.6		0	0	39	8.4 B	43.2	49	0	14	36.0	15	50	9.0	48.2	54
			+52						+5.7				54			5	+5.6	
		0	14.1		1	06		8.4 L	18.3	29		15	0.7	15	53	8.7 A	23.2	29
		0	33.2		1	25		8.0 A	59.1	04		16	13.0	17	07	9.1 A	21.5	27
		0	40.3		1	32		9.0	43.7	49		16	31.2	17	25	8.8 A	26.1	32
		1	2.4		1	54		8.0 G	27.2	33		16	39.7	17	34	9.3 A	31.8	38
		2	17.1		3	09		8.5 L	43.5	49		17	18.0	18	12	6.0 G	14.7	21
		3	39.5		4	31		8.3 L	36.8	42		17	25.9	18	20	8.7 L	2.2	8
		4	12.1		5	04		9.0	58.6	59		18	56.5	19	51	9.0	27.5	33
		4	32.9		5	25		6.5 L	49.4	54		20	2.5	20	57	8.5 L	9.2	15
		6	38.9		7	31		9.0	15.7	22		20	41.7	21	36	8.7 B	14.1	20
		6	39.8		7	32		8.7 B	48.7	57		21	11.4	22	05	9.3 A	31.3	37
		6	43.3		7	35		7.4 L	3.2	9		21	33.3	22	27	8.7 A	35.2	41
		6	56.9		7	59		9.0	58.0	4		21	42.0	22	37	8.9 B	13.8	19
													55					
		7	13.5		8	05		8.9	26.9	31		23	6.3		01	9.4 B	29.6	35
		7	34.3		8	26		7.3 L	46.2	542		23	35.7	24	31	8.8 A	16.7	22
		9	21.3		10	13		7.8 L	26.4	31		23	46.9	24	42	6.2 A	2.4	8
		9	54.8		10	47		9.0	35.1	40		24	11.0	25	06	7.8 A	12.8	8
		10	3.7		10	56		7.8 B	54.3	00		25	50.4	26	45	8.7 A	4.2	10
		10	56.1		11	48		7.9 A	7.5	13		26	1.3	26	56	8.7	18.1	24
		11	20.7		12	13		9.1 A	29.6	35		27	14.9	28	10	9.2 B	53.7	59
		11	35.8		12	28		9.4 A	13.4	19		27	33.6	28	29	7.5 L	41.2	47
		12	29.1		13	21		8.5 A	29.7	35		28	36.4	29	31	8.0 J	40.5	46
		12	59.9		13	52		9.2 A	19.1	25		29	49.3	30	45	8.9	58.3	04
		13	21.0		14	13		9.3 B	38.0	43		32	51.8	33	48	9.2 A	0.9	6
													56				5.6	
		13	38.0		14	30		9.2 A	21.2	27		33	0.1	33	56	9.0	58.6	5
		13	38.3		14	30		9.3 A	18.8	24		33	6.2	34	02	8.7 A	13.5	19
		14	11.4		15	03		8.2 L	40.5	46		35	46.4	36	42	8.8	30.3	36
		14	33.9		15	24		8.0 L	48.0	53		36	32.7	37	30	8.9	55.4	01
		14	49.6		15	42		9.0 A	16.7	22		37	0.3	37	50	8.5	45.5	51
			54						+5.6									

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		h									h						
54	XX	0	37	41.2	38	38	9.0	31.2	36	XX	0	57	24.3	58	25	8.5A	2.2	7
29	XX		39	7.1	40	04	8.7A	20.6	26	X		58	33.7	59	34	6.3 G	43.3	49
27			39	47.0	40	44	9.1A	59.7	5			59	28.4	0	28	8.1 B	30.6	36
32	XX		39	58.8	40	52	8.6	9.2	14	XX		59	37.4	0	37	8.4 A	3.2	8
38	XX		41	4.4	42	1	9.0	25.3	30		1	1	8.9	2	9	7.8A	4.9	10
21			41	30.3	42	27	9.0	4.8	10			1	24.2	2	24	8.4 A	12.4	18
8			43	0.9	43	57	9.0	57.9	3			1	43.0	2	43	8.2 A	57.6	3
33			44	45.3	45	43	8.7	5.5	11			3	52.4	4	52	9.0	25.9	31
15	XX		45	28.0	46	22	8.2 B	28.2	33			3	59.2	4	59	9.0	24.8	30
20			45	42.1	46	40	9.0	19.0	24			4	9.5	5	10	8.1 B	47.6	53
37			45	47.2	46	45	9.0	50.9	55			5	45.2	6	46	8.7	15.2	21
41	XX		46	15.8	47	13	9.0	29.4	34			6	7.4	7	8	8.6 A	3.9	10
19	XX		47	41.5	48	39	9.0A	8.4	13			6	18.1	7	19	9.4 B	50.5	56
35			47	46.9	48	45	9.2A	5.6	11			6	31.2	7	32	9.0	23.2	29
22			48	19.7	49	17	8.9 B	33.9	39			7	58.4	8	9	9.4 B	7.8	13
8	XX		48	56.1	49	55	7.5A	31.1	36			8	10.4	9	11	9.1 B	59.5	5
8			49	19.5	50	18	8.2	47.7	52			11	35.2	12	36	8.4 A	6.2	12
10	XX		49	51.2	50	49	9.2A	28.2	33			12	15.5	13	16	9.5 B	58.2	2
24	XX		51	7.0	52	6	8.9A	9.9	15			13	2.8	14	4	8.8	13.4	19
59			51	35.9	52	35	8.5A	17.8	23			13	27.4	14	28	9.0	32.2	38
47			51	43.0	52	42	8.8A	11.7	17			14	16.3	15	18	8.5	42.8	46
46	XX		52	51.5	53	50	9.4 B	16.9	22			14	34.0	15	36	7.8 B	2.9	49
04			54	10.4	55	9	7.3A	4.3	10			15	15.6	16	17	8.2 B	5.9	42
6			54	39.2	55	38	7.5 B	21.6	27			15	39.9	16	41	8.5 B	25.7	32
5	XX		55	25.2	56	24	7.9 B	16.5	24			16	9.1	17	11	8.7	20.5	32
19			55	29.8	56	29	8.6	5.3	10			16	23.2	17	25	8.8	39.4	45
36			55	41.9	56	41	8.8	5.4	10			17	35.2	18	37	8.8	39.0	45
01	XX		56	23.2	57	22	9.0	26.6	32			17	37.2	18	40	7.4 B	22.5	28
51			55	31.8	57	31	8.8	39.8	45			19	21.4	20	23	9.0 B	43.5	49

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h																	
19	21.9	20	24	9.0	43.2	48	XXX	35	7.3	36	12	8.5	27.7	33			
20	50.2	21	53	8.5	21.5	26	XX	36	24.0	37	29	8.9	21.8	27			
20	53.6	21	56	8.5	36.0	41		36	51.7	37	56	8.8	52.7	58			
20	54.1	21	57	8.8	45.2	50	XX	37	54.1	38	59	8.8	8.5	14			
21	7.9	22	11	8.9	35.6	41	XX	39	1.3	40	6	8.8	31.3	36			
21	12.5	22	15	8.8	20.7	26	XX	41	34.9	42	40	9.0	25.9	31			
21	34.5	22	37	8.9	53.9	59	XXX	42	33.6	43	39	9.1	47.0	53			
23	51.3	24	54	8.8	28.5	34		42	34.4	43	40	9.2	46.1	52			
23	57.0	25	00	8.4	16.9	22		42	37.8	43	43	8.9	58.4	04			
23	58.2	25	1	8.8	55.5	01		43	0.9	44	6	8.5	16.9	22			
24	53.2	25	56	8.1	35.8	41		43	4.9	44	10	8.8	16.5	22			
26	13.2	27	17	8.9	20.4	26	XXX	44	1.9	45	8	9.1	10.0	16			
26	16.2	27	19	9.0	17.5	23		44	31.2	45	37	9.4	14.3	20			
26	19.3	27	22	6.6	36.1	42	XX	46	45.8	47	51	8.5	53.7	59			
27	51.5	28	55	9.1	21.9	27		47	12.7	48	19	7.5	35.4	41			
28	17.2	29	21	9.4	18.9	24		47	56.7	49	2	9.5	59.9	05			
29	37.5	30	41	8.7	32.2	37	XX	48	25.6	49	32	8.3	27.7	33			
29	41.5	30	45	8.7	30.0	35	XX	49	3.7	50	09	7.8	21.8	27			
29	42.0	30	46	8.8	37.2	42	XX	50	32.4	51	37	8.6	33.8	39			
29	46.8	30	51	8.8	14.7	20	XX	50	44.9	51	50	8.4	32.7	39			
30	11.7	31	15	9.2	13.1	18		50	54.8	52	00	9.0	16.2	21			
30	25.4	31	29	8.2	11.0	16	XX	51	21.7	52	27	9.1	16.1	21			
30	42.5	31	46	9.0	10.2	15	XX	51	37.1	52	42	8.0	49.1	54			
31	41.4	32	46	7.5	50.1	55	XX	52	30.8	53	56	7.8	55.7	01			
32	33.4	33	37	9.0	38.5	43		53	3.8	54	9	8.8	50.5	55			
32	57.3	34	02	9.2	46.0	51		53	8.2	54	14	6.4	22.6	28			
33	0.5	34	5	9.4	11.5	17	XX	54	28.4	55	34	9.2	6.8	12			
34	19.8	35	24	9.0	33.6	39		54	39.7	55	56	8.9	12.5	17			
34	27.3	35	32	7.0	8.9	15		54	41.1	55	48	8.9	15.5	21			

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	h									h								
	54	41.7	55	49	9.1A	15.0	20		2	11	58.2	13	07	9.0	4.4	9
	56	20.3	57	26	8.9	48.8	54			13	50.2	14	59	8.0L	1.4	6
	56	31.6	57	37	8.9B	1.2	6			14	34.4	15	43	9.0	47.5	52
	59	5.3	00	09	8.8A	12.6	18			15	18.6	16	27	8.7A	57.5	62
	59	12.6	0	17	8.5A	10.2	15			16	0.8	17	9	9.0	43.0	47
	59	13.1	0	18	9.0	56.5	01			17	27.8	18	36	8.5A	50.0	54
	59	47.3	0	54	7.9G	33.0	38			17	34.6	18	43	9.2A	53.9	58
	59	54.1	1	00	9.0	3.0	8			17	40.3	18	49	9.0A	57.2	62
	h 2	0.1	1	34	9.0	5.5	11			18	33.3	19	42	7.5A	25.3	30
		0	40.3	1	48	8.8A	13.2	18		18	50.7	19	54	8.8A	53.3	55
		1	0.4	2	08	8.5A	31.5	36		19	48.9	20	57	8.3B	24.6	29
		1	50.1	2	54	9.4A	34.6	39		20	55.7	22	04	7.5G	32.2	37
		2	54.7	3	01	8.8A	40.4	45		22	0.6	23	9	8.5	11.5	16
		3	2.1	4	11	9.2A	46.2	51		24	13.0	25	22	9.0	12.0	16
		3	53.0	5	1	6.7A	22.2	27		24	17.4	25	26	8.8	46.5	51
		4	11.3	5	20	9.0A	26.4	31		27	47.9	28	56	8.2A	10.9	15
		4	58.4	5	8	9.2A	15.5	20		29	54.8	31	03	9.0A	21.8	26
		5	15.7	6	25	9.4A	17.4	22		30	5.8	31	15	9.0	9.7	14
		5	28.2	6	38	8.6A	53.7	59		30	19.3	31	29	7.5A	10.2	15
		6	55.1	8	5	7.9G	2.9	8		31	15.8	32	25	8.9A	3.7	8
		7	10.1	8	20	6.8A	47.7	52		31	23.9	32	33	8.5A	3.4	8
		7	23.9	8	33	9.2A	42.5	47		32	49.1	33	59	6.0G	54.2	59
		8	26.4	9	35	9.0A	46.3	51		33	13.7	34	23	9.0A	7.5	12
		8	30.1	9	39	8.6A	48.9	54		35	56.4	37	06	8.0A	37.0	41
		9	4.4	10	13	9.2A	54.1	58		36	4.6	37	14	9.5B	44.7	49
		9	30.0	10	39	6.7A	56.0	63		36	11.5	37	21	8.0A	33.4	38
		11	6.0	12	16	9.0	7.3	12		37	49.4	38	59	9.4B	20.4	25
		11	21.8	12	22	9.1A	38.7	3		39	8.0	40	18	8.3E	25.1	30
		11	39.5	12	49	8.8	2.5	7		40	46.5	41	27	9.2R	0.0	4

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h	m	s					
2	40	17.1	41	29	9.5B	44.6	49
	40	20.4	41	32	8.7L	20.6	25
	41	19.6	42	01	8.7A	39.3	44
	41	32.3	42	44	7.0A	24.9	29
	41	50.3	43	02	9.5A	39.4	44
	42	15.2	43	27	8.2A	47.6	52
	42	37.3	43	49	7.0A	24.5	29
	43	59.9	45	11	4.2A	9.4	14
	44	18.5	45	30	8.8	47.2	52
	44	33.4	45	45	8.8	55.5	60
	47	25.5	48	37	8.8	19.0	24
	48	32.3	49	44	9.5B	38.5	43
	54	20.0	55	32	3.2A	56.0	60
	54	40.6	55	52	7.9B	3.4	8
	55	25.8	56	37	8.0A	9.1	14
	55	34.6	56	46	9.2B	57.2	56
	55	39.0	56	59	8.5A	29.3	34
	59	47.5	0	39	8.9A	22.0	26
3	0	15.7	1	28	9.3B	18.7	23
	0	29.4	1	32	7.0A	35.8	40
	1	38.4	2	41	8.3A	41.7	46
	2	9.0	3	22	8.3A	19.0	23
	5	4.0	6	17	8.0A	12.8	17
	5	45.2	6	58	9.5B	54.6	59
	8	27.2	9	40	8.9	15.6	20
	9	7.2	10	20	8.7	7.7	12
	9	39.8	10	52	9.0	35.3	40
	9	53.6	11	06	8.9A	44.1	48
	11	10.0	12	23	8.5A	57.2	61

h	m	s					
3	11	10.1	12	23	7.5A	10.7	15
	11	18.0	12	31	7.5A	6.4	11
	14	1.4	15	14	8.9	38.2	43
	15	3.6	16	18	8.0A	14.5	18
	15	11.6	16	26	7.0A	47.8	51
	15	55.8	17	14	8.2A	23.5	27
	17	10.6	18	25	8.8A	49.0	53
	18	39.0	19	54	8.6A	51.0	54
	19	21.4	20	36	8.8A	54.9	58
	19	32.5	20	47	6.7A	23.6	27
	22	36.7	23	54	8.7B	27.4	31
	25	37.1	26	32	7.0A	26.5	30
	26	8.5	27	33	8.9A	23.6	27
	27	32.7	28	47	8.5A	7.3	11
	28	16.5	29	31	7.4A	21.2	25
	30	55.5	32	11	8.6	49.2	53
	33	9.7	34	25	9.0A	0.3	4
	35	3.6	36	19	9.0A	29.2	33
	38	52.0	38	08	9.1A	59.5	63
	38	58.4	38	14	9.0	1.5	5
	38	32.2	39	48	6.5B	12.2	16
	39	31.8	40	48	6.6A	1.8	5
	40	27.2	41	44	8.6A	8.6	7
	42	38.8	43	55	8.4A	7.7	11
	42	43.7	44	00	7.9A	51.0	54
	42	56.4	44	13	9.3A	6.7	10
	44	32.7	45	49	9.2B	21.5	25
	44	40.4	46	57	6.5A	12.7	16
	45	21.1	46	38	8.7A	8.3	10

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	h									h							
	3	49	21.4	50	38	9.0	40.2	43		4	5	21.3	6	39	9.2B	36.2	39
		49	23.3	50	40	9.3B	16.3	19			5	30.9	6	48	8.8A	19.4	22
		49	24.4	50	41	8.5A	31.4	35			5	53.1	7	11	8.0A	59.4	62
		49	40.0	50	57	8.9A	33.9	37			6	30.9	7	48	8.2A	46.5	49
		51	2.0	52	19	9.5B	10.8	14			6	36.6	7	54	9.0B	0.5	3
		51	10.3	52	27	8.5L	28.4	32			7	21.5	8	39	8.3A	36.7	39
		51	48.3	52	05	8.7L	20.8	24			8	19.0	9	37	8.7	30.9	33
		52	1.7	53	18	8.8B	14.1	18			9	27.5	10	45	8.0A	59.5	62
		52	43.4	53	00	7.6A	52.3	56			11	1.9	12	19	8.5	59.0	61
		53	12.9	54	29	9.0	21.1	24			15	12.0	16	36	7.9A	9.9	12
		53	13.5	54	30	8.2A	55.3	59			15	36.3	16	56	8.0A	30.9	33
		54	9.3	55	26	9.1A	24.8	28			17	12.0	18	31	9.2A	19.3	22
		54	21.4	55	38	9.0A	27.7	31			17	13.1	18	32	9.0A	18.8	21
		54	22.0	55	38	8.9A	54.0	57			17	39.9	18	58	7.5A	3.3	6
		54	31.5	55	48	8.1A	40.1	43			17	58.0	19	17	9.5B	10.5	13
		54	58.2	56	15	9.2B	44.7	47			21	22.9	22	41	9.0R	30.0	32
		55	9.1	56	26	9.0A	41.3	44			21	59.1	23	18	7.0A	29.2	32
		55	49.3	57	06	9.0	53.0	56			22	2.0	23	21	9.4A	28.8	31
		56	39.0	57	56	8.7A	39.5	63			22	20.6	23	39	9.1R	18.8	21
		56	39.5	57	56	9.1A	49.0	52			22	42.1	24	01	9.0A	41.9	44
		57	23.2	58	40	9.3A	59.8	63			22	46.7	24	05	9.0R	22.0	24
		57	27.3	58	44	7.1A	56.1	61			24	46.2	26	05	9.0A	33.9	36
		57	50.8	58	07	9.0A	57.4	61			24	55.2	26	14	7.9A	34.3	37
		58	59.2	60	16	8.5A	37.2	40			25	0.1	26	19	8.4A	11.9	14
		58	59.9	60	16	9.0	6.7	10			26	15.2	27	34	8.7A	36.7	39
		59	5.8	60	22	8.9A	46.9	50			27	0.2	28	19	9.0	24.8	27
		59	30.3	60	48	8.3A	45.8	48			27	0.6	28	19	9.0B	42.9	45
	h																
	4	1	57.4	3	15	9.0B	33.9	36			27	11.2	28	30	8.5A	27.3	30
		2	46.3	4	04	9.0A	45.9	48			28	30.9	29	49	5.4A	46.7	49

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h	m	s						
4	28	35.0	29	53	8.2A	31.4	34	
	28	44.7	30	02	8.0G	11.3	14	
	29	24.2	30	42	9.0A	19.3	22	
	31	31.4	32	49	8.0A	51.2	53	
	32	37.3	33	55	8.7	42.5	45	
	33	35.4	34	53	7.0A	3.3	6	
	34	31.8	35	49	8.5A	30.9	33	
	36	35.3	37	53	7.5G	50.3	53	
	36	40.5	37	58	8.8A	20.0	22	
	39	14.5	40	32	8.5	59.7	62	
	39	44.9	41	02	8.7B	8.5	11	
	39	51.4	41	09	9.2A	24.4	27	
	40	34.7	41	52	9.3A	50.6	53	
	40	47.3	42	05	8.7A	29.9	32	
	41	44.0	43	02	7.2A	34.3	37	
	43	0.5	44	18	8.9	10.7	13	
	43	40.7	44	58	8.9	27.0	29	
	43	47.0	45	05	8.8B	47.9	50	
	43	47.4	45	05	8.8	12.7	15	
	44	39.9	45	59	6.5A	37.3	39	
	47	51.8	49	11	8.0A	14.3	16	
	48	15.9	49	35	6.4A	53.8	55	
	54	52.5	56	12	8.6A	48.0	50	
	54	53.2	56	13	8.5	28.4	30	
	55	9.8	56	29	8.9A	46.5	48	
	55	21.2	56	41	9.3B	1.7	3	
	56	23.5	57	43	9.0A	1.2	3	
	56	46.4	58	08	9.1A	9.0	11	
	58	9.4	59	29	9.4B	31.8	33	

h	m	s						
4	58	26.2	59	46	8.5G	7.1	9	
	59	28.1	0	48	8.6A	34.0	35	
	2	11.6	3	32	9.0	50.5	52	
	5	22.0	6	43	9.1A	5.8	7	
	6	35.6	7	56	8.9	12.9	14	
	7	11.5	8	32	8.2B	40.0	41	
	10	29.0	11	50	9.1A	0.6	2	
	10	30.8	11	51	8.3A	3.1	4	
	11	2.4	12	23	8.5A	35.6	37	
	11	3.3	12	24	8.9	52.1	53	
	11	35.2	12	56	9.4B	47.6	49	
	12	26.8	13	47	8.3B	47.4	49	
	12	58.2	13	19	7.8A	5.1	6	
	14	34.2	15	55	9.0	29.1	30	
	18	56.8	20	17	9.5B	19.8	21	
	20	27.7	21	48	9.0	11.4	13	
	21	23.1	22	44	8.2B	0.8	2	
	21	53.9	23	14	7.9B	32.4	34	
	22	43.7	24	04	8.3A	6.6	8	
	23	12.2	24	33	8.1A	51.2	52	
	23	15.0	24	36	9.3B	59.6	61	
	24	3.2	25	24	8.5A	28.1	29	
	27	57.5	29	18	8.9B	38.8	40	
	28	13.0	29	34	8.4B	48.7	50	
	29	6.2	30	27	7.2A	28.3	30	
	29	38.2	30	59	9.0	18.2	20	
	29	39.0	31	00	8.0A	5.9	7	
	30	44.7	32	05	8.4A	35.0	36	
	31	23.2	32	44	9.0	8.9	9	

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h	m	sec								h	m	sec							
31	46.7	5	33	07	7.0A	23.0	24			6	0	7.8	1	29	6.7A	40.1	40		
	1 21					0.8					1 22					0.0			
32	41.7		34	02	8.0A	38.4	39				1 13.8		2	35	9.0A	45.0	45		
33	39.4		35	00	8.2B	34.5	35				1 36.3		2	58	8.8A	56.2	56		
						0.1										−0.1			
33	54.5		35	15	8.1B	5.8	6				1 44.3		3	06	8.6	11.5	11		
36	22.7		37	43	9.0A	38.4	39				2 2.8		3	24	9.2A	1.3	1		
36	54.0		38	15	9.2A	29.6	30				2 27.0		3	49	7.7A	1.8	1		
																−0.2			
36	59.1		38	20	8.0A	30.6	31				4 30.8		5	55	7.8A	12.5	12		
						0.0													
40	44.2		42	05	8.9A	8.4	9				5 35.3		6	57	8.3A	21.9	21		
41	17.2		42	38	8.5A	45.3	46				5 37.7		6	59	7.9A	34.6	34		
																−0.3			
42	8.2		43	29	8.5A	35.5	36				8 0.6		9	22	9.0A	25.8	25		
42	36.2		43	57	8.8A	40.9	41				9 15.7		10	37	7.7A	12.5	12		
						0.5					9 55.2		11	17	8.4B	34.6	B5		
42	46.7		44	07	8.8	12.9	13				~~11 58.2~~		~~13~~	~~17~~	~~8.4B~~	~~34.6~~	~~34~~		
43	49.6		45	10	9.1B	18.2	19				15 43.6		17	05	8.6A	38.0	37		
	1 22										1 22					−0.4			
43	58.2		45	19	8.0A	57.0	57				16 1.2		17	23	9.0	55.2	54		
44	49.9		46	10	9.0	54.7	55				17 15.8		18	07	7.5A	31.7	31		
45	38.8		47	00	9.0B	50.3	51				17 16.7		18	38	9.6A	42.4	42		
	1 22					0.4													
46	14.4		47	36	9.0	7.9	8				17 23.4		18	45	8.0G	13.4	12		
											18 52.7				9.0	13.0			
46	41.5		48	03	9.0	1.1	1				18 54.2		20	16	7.7A	52.3	51		
47	16.9		48	38	8.9A	28.6	29				19 32.8		20	54	8.1A	53.3	52		
						0.3													
47	34.7		48	56	8.9	37.5	38				19 44.7		21	06	8.4A	52.3	51		
47	42.1		49	04	8.4A	23.2	23				21 7.8		22	29	9.1B	34.3	33		
																−0.6			
47	45.2		49	07	9.0	39.9	40				22 21.1		23	43	7.0B	33.5	32		
48	21.4		49	43	8.5A	19.2	19				23 33.6		24	55	7.5A	59.0	58		
						0.2													
48	39.2		50	01	8.8A	21.0	21				23 49.6		25	11	7.7A	5.0	4		
50	14.3		51	36	9.4B	46.4	49				25 31.7		26	53	8.8A	39.0	38		
																−0.7			
57	26.8		58	48	8.5A	25.3	25				26 56.3		28	18	8.2	6.7	6		
57	45.3		59	07	8.4A	46.5	47				26 58.3		28	20	8.6B	24.6	23		
						0.1													
58	27.9		59	49	8.9A	49.9	50				28 27.5		29	47	8.5	6.0	5		
											28 58.7		30	15	8.6B	55.7	55		

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