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30 новых переменных звезд в области M 56

Н. Е. Курочкин

Приведены результаты исследования 30 новых переменных звезд СПЗ 1636 – 1665, открытых автором методом цветового контраста в области $10^\circ \times 10^\circ$ с центром в скоплении M 56.

30 new Variable Stars in the Region M 56

by N. E. Kurochkin

The results of the investigation of 30 new variable stars SVS 1636–1665 are given. The variables were discovered by the author by means of colour contrast method in the region $10^\circ \times 10^\circ$ around the globular cluster M 56.

Открытие и исследование 30 новых переменных звезд СПЗ 1636 – 1665 производилось по фотографиям области $10^\circ \times 10^\circ$ с центром в M 56 ($\alpha = 19^h 12^m 6$; $\delta = +30^\circ.0$, 1900). Для открытия новых переменных использовался способ цветового контраста с проекцией на экран при помощи двойного спектропроектора ДСП–1. Открытия были произведены по одной паре фотографий, полученных в моменты J.D. 2438281.270 и 2438681.350 ($\Delta T = 400$).

Таблица 1

СПЗ	$\alpha_{(1900)}$	$\delta_{(1900)}$	Тип	Max	Min	Эпоха J.D. 24...	Период	Д или M-m
1636	$18^h 55^m 47^s + 31^\circ 20'$	6	RRc	15.1	15.7	39379.268	$0^d 33 18 18$	0.25
1637	19 02 49	+34 31.0	EW	13.5	14.5	39972.501	0.5826311	
1638	19 03 25	+30 10.1	EA	14.5	17.1	39376.365	3.146774	0.15:
1639	19 03 51	+26 10.4	SR?	15.2	(17.0			
1640	19 04 18	+31 15.5	UG	14.3	(17.0		$\leq 150^d$	
1641	19 04 31	+29 12.5	L	14.7	16.2			
1642	19 04 48	+30 33.8	EW	14.9	16.2	39376.33	0.300660	
1643	19 04 51	+33 09.1	RRa	14.5	15.9	40004.354	0.623845	0.12
1644	19 05 31	+25 30.6	SR	14.7	16.4	39950	150	
1645	19 07 23	+27 07.5	L	13.8	14.9			
1646	19 09 03	+33 03.5	RRa	15.2	16.8	39496.212	0.5316436	0.15
1647	19 09 48	+33 26.5	EA	13.4	14.3	39343.292	3.766035	0.07

Таблица 1
(продолжение)

СПЗ	$\alpha_{(1900)}$	$\delta_{(1900)}$	Тип	Max	Min	Эпоха J.D. 24...	Период	Д или M-m
1648	19 ^h 09 ^m 57 ^s	+34°19'0	EA	14.5	16.3	39330.455	1 ^d 067594	0 ^p .18
1649	19 10 10	+26 08.8	N	14.6	(17.5)	39260	149.5	
1650	19 10 16	+33 25.2	EW	14.3	15.1	39998.468	0.446367	
1651	19 10 33	+27 39.0	M	12.2	16.8	39029	237.5	
1652	19 12 49	+29 02.5	E	12.9	13.5			
1653	19 13 01	+30 39.2	M	14.8	(17.0)	39035	355.5	
1654	19 13 04	+28 49.6	M	14.6	(16.8)	39237	237.85	
1655	19 13 05	+32 25.0	M	14.8	(17.0)	39328	262.7	
1656	19 14 17	+25 14.5	E	14.3	15.1			
1657	19 14 25	+32 00.5	L	15.0	(16.0)			
1658	19 16 04	+32 18.9	EA	15.0	(16.5)	38281.244	2.730505	0.12
1659	19 17 26	+31 46.0	L	15.0	16.2			
1660	19 17 38	+33 49.8	M	14.2	(17.0)	39972	278	
1661	19 18 01	+27 11.5	RRa	14.7	16.4	39380.345	0.604893	0.10
1662	19 18 13	+32 34.8	L	14.8	16.2			
1663	19 18 15	+34 20.0	L	15.6	16.8			
1664	19 19 00	+29 29.3	SR	14.1	(16.5)	39330	220 ^d и 280 ^d	
1665	19 19 55	+31 56.1	RRa	14.8	16.0	39031.354	0.715070	

СПЗ 1637. Min II = 14^m.4. Возможен тип RRc с P=0^d.291315.

СПЗ 1638. Возможен вторичный минимум 14^m.8.

СПЗ 1639. Наблюдаются волны 300^d – 370^d.

СПЗ 1642. Даны возможные элементы. Период, возможно, изменяется.

СПЗ 1643. Ранее J.D. 2437118 наши наблюдения элементами не представляются. Возможно, период изменился.

СПЗ 1645. Волны 60^d – 100^d.

СПЗ 1647. Если период, определенный на ЭВМ, верен, то необходимо предположить существование движения линии апсид, чтобы объяснить неправильности в положении вторичного минимума. Min II = 14^m.3.

СПЗ 1648. Возможен вторичный минимум Min II = 14^m.8.

СПЗ 1650. Вторичный минимум 15^m.1.

СПЗ 1659. Волны с циклами 90^d_± и 320^d_±.

СПЗ 1665. Период, возможно, меняется.

Таблица 2

Звездные величины звезд сравнения

СПЗ	a	b	c	d
1636	14.87	15.20	15.43	16.50:
1637	12.80	13.70	14.58	

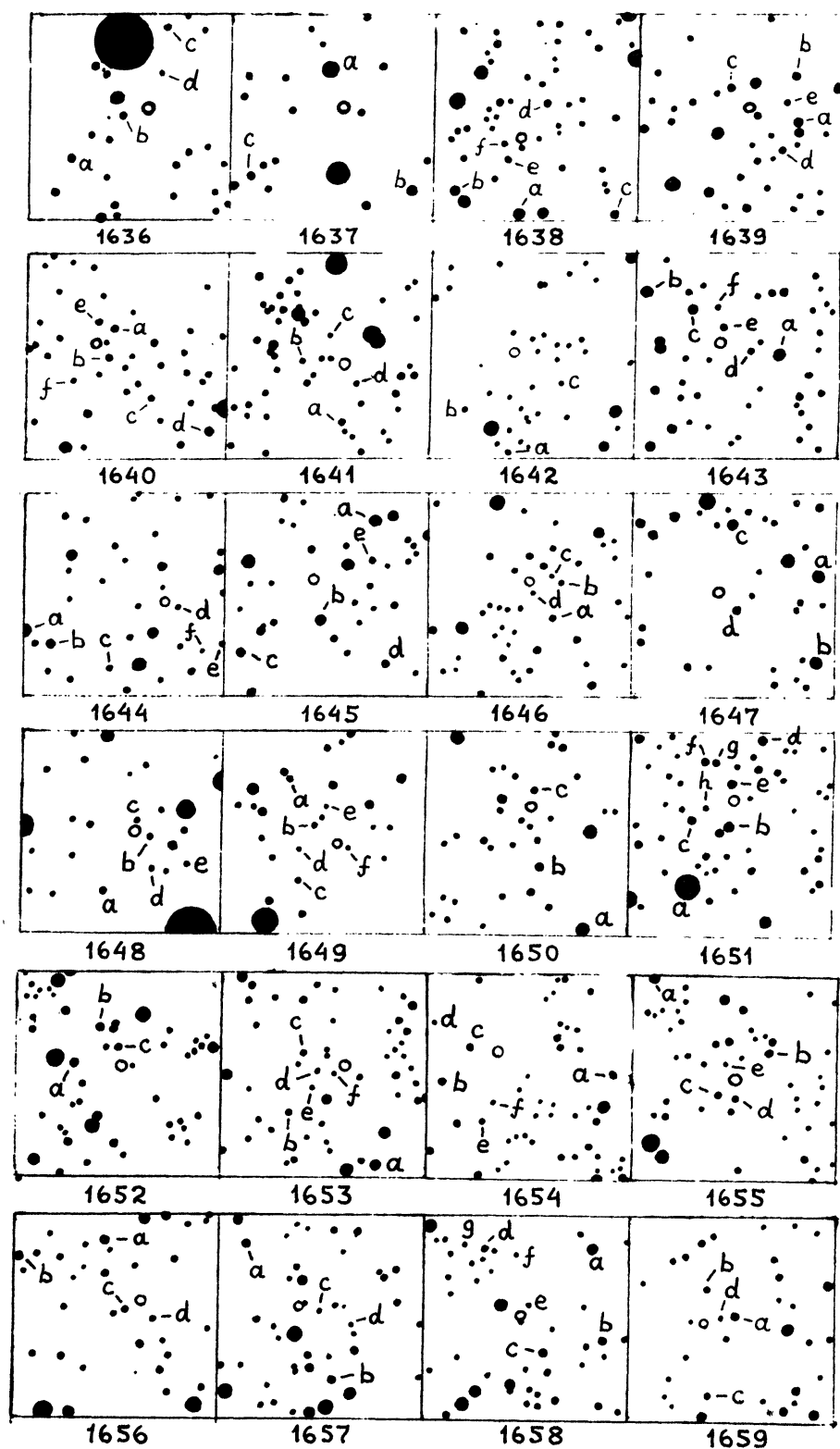


Рис. 1

Таблица 2
(продолжение)

СПЗ	a	b	c	d	e	f	g	h
1638	13.97	14.47	15.07	15.81	16.27	17.13:		
1639	14.90	15.12	15.34	16.14	16.70:			
1640	14.42	14.88	15.07	15.32	16.18	16.60:		
1641	14.66	15.20	15.60	16.38				
1642	15.05	15.37	16.30					
1643	13.82	14.66	14.88	15.18	15.80	16.65:		
1644	14.18	14.51	14.79	15.23	15.72	16.62:		
1645	13.73	14.13	14.63	14.99	15.21			
1646	15.04	15.36	16.14	16.54				
1647	12.90	13.32	14.42	14.80				
1648	14.47	15.15	15.35	15.65	16.50			
1649	14.52	14.97	15.10	15.92	16.45	17.03:		
1650	13.65	14.50	15.10					
1651	11.29	13.54	13.80	14.32	14.57	14.99	15.53	16.42:
1652	12.95	13.45	13.95					
1653	14.48	14.88	15.28	16.15	16.38	17.03		
1654	14.07	14.76	15.14	15.64	16.22	16.72		
1655	14.01	14.79	15.15	15.98	16.65			
1656	13.74	14.34	14.93	15.30				
1657	14.88	15.34	15.81	17.02				
1658	14.43	14.77	15.05	15.40	15.70	16.47	16.70:	
1659	14.78	15.10	15.45	16.15				
1660	14.30	14.64	14.82	15.12	15.36	15.84	16.32	16.78:
1661	13.84	14.76	15.05	15.52	16.35	16.65		
1662	13.54	14.42	14.73	15.21	15.28	15.91	16.32	
1663	14.94	15.65	16.62:					
1664	13.45	14.36	14.58	14.91	15.87	16.00	16.45:	
1665	14.44	14.82	15.10	15.45	16.28	16.80:		

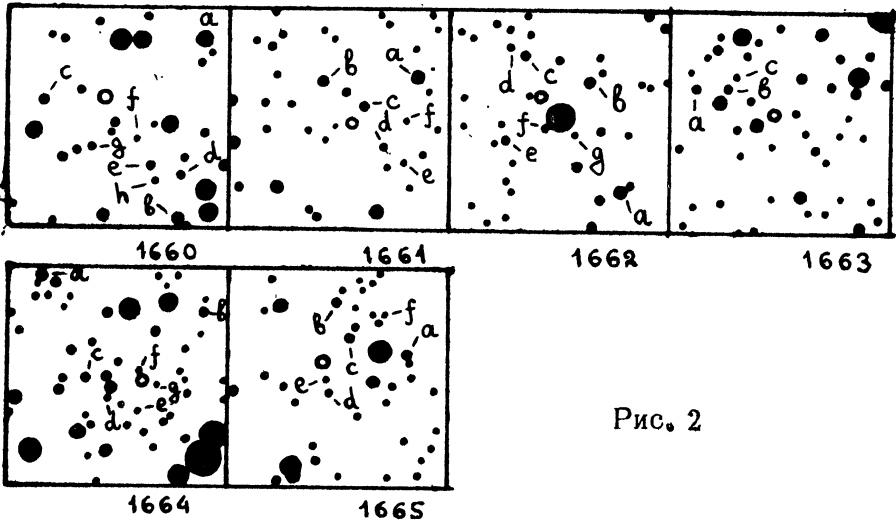


Рис. 2

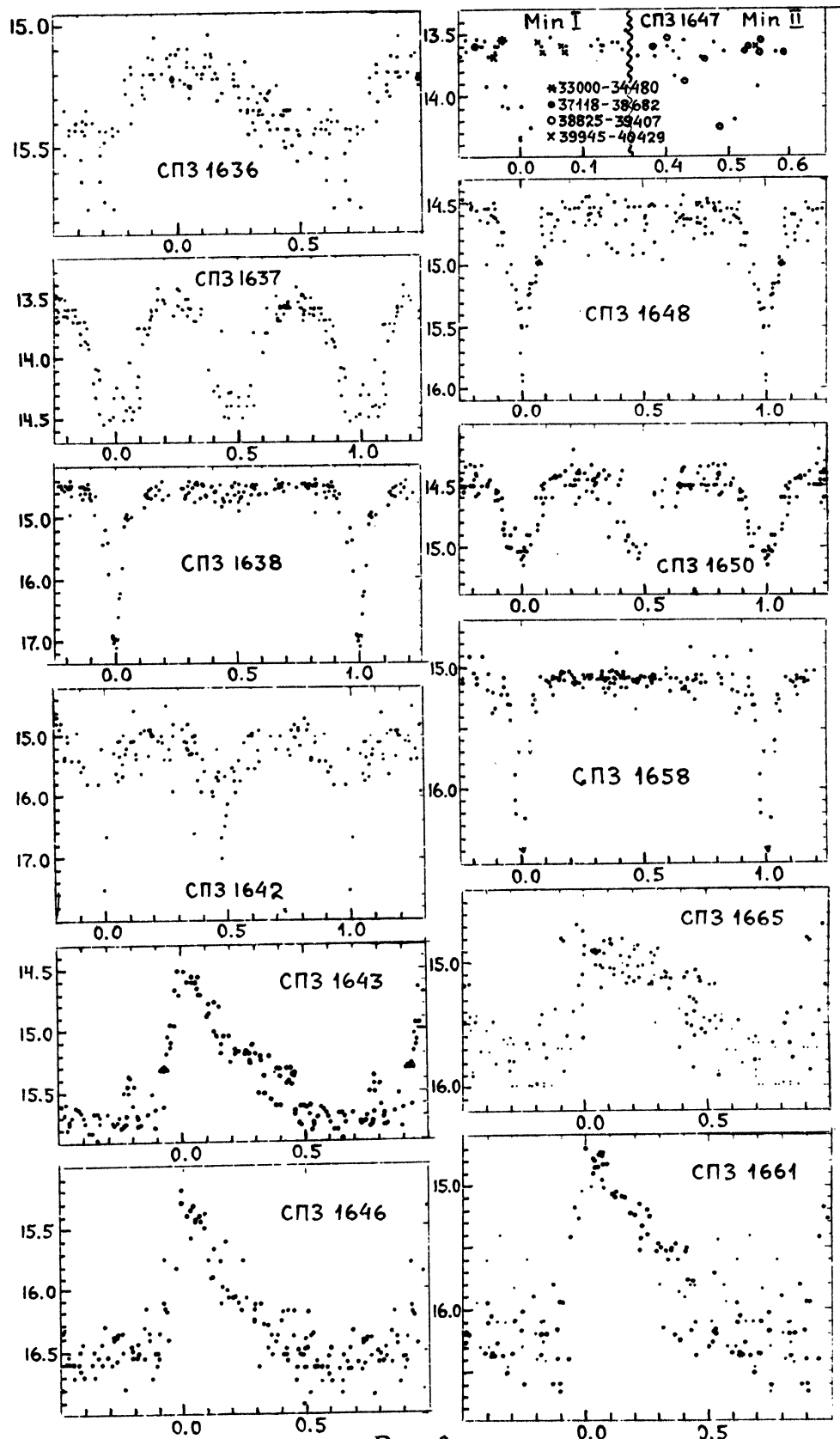


Рис. 3

В табл. 1 приведены обычные сведения о новых переменных звездах: обозначения СПЗ; координаты α , δ 1900; тип переменности; пределы изменения блеска; элементы—эпоха, период; D или m—M для периодических звезд. Звездные величины звезд сравнения даны в таблице 2. Определения звездных величин звезд сравнения велись глазомерными привязками к стандартам в M 56 [2] или SA 63. Карты окрестностей приведены на рис. 1, 2 (сторона квадрата $\sim 5'$, север вверху).

Вычисление периодов ряда звезд: СПЗ 1636, 1637, 1642, 1647, 1665 производилось на ЭВМ по программам, составленным П. Н. Холоповым и при его участии, за что автор выражает благодарность.

Произведены дополнительные оценки звезды СПЗ 1512, вспышка которой наблюдалась в течение нескольких дней с максимумом $15^m.3$ в J.D. 2437160 [3]. Звезда стала невидимой через 15 дней после максимума (слабее $17^m.0$). Новых вспышек звезды в интервале J.D. 2439185 — 2440429 на 37 пластинках не обнаружено. Это повышает вероятность того, что звезда является далекой, быть может, межгалактической Новой или еще более далекой Сверхновой звездой.

Таблица 3

	СПЗ 1636	СПЗ 1637	СПЗ 1638	СПЗ 1639	СПЗ 1640	СПЗ 1641	СПЗ 1642	СПЗ 1643
24.44								
33031.551	15.13	13.75	14.42	16.80:	(17.0	15.28	14.95	15.30
034.545	15.22	14.50	14.50	16.64	(17.0	15.40	14.80	15.12
34471.473	15.27::	13.60	14.53	16.14:	(16.5	15.00::	15.80::	15.37:
472.545	15.43	13.80	14.77:	15.50::	—	15.60:	—	14.75
476.532	15.45:	—	15.07:	—	—	—	—	—
477.461	15.37	13.80	14.47	16.18	(16.6	15.15	15.46:	14.60
479.543	—	—	—	—	—	—	—	—
480.437	15.37	13.65	14.47	16.42:	(16.6	15.15	15.17	15.80
37118.377	15.37	13.60	14.83	15.68	(16.2	14.98	15.83:	15.74
135.482	15.20	13.60	14.52	15.42	(16.6	15.15	15.21	15.03
137.473	15.14	13.75	14.90	15.50	(16.6	15.25	15.27	15.37
138.457	15.30	13.50	14.47	15.34	(16.6	15.30	15.08	15.12
160.316	15.75	13.52	14.47	15.42	(16.6	16.18	15.56	14.70
162.294	15.72	13.60	14.50	15.34	(16.6	16.10	15.00	15.03
164.337	15.28	13.55	14.95	15.34	(16.6	15.89	15.21	15.30
166.327	15.20	13.80	14.47	15.50	(17.0	16.18	15.34	15.68
168.379	15.25	13.75	14.47	15.60	(16.6	16.15	14.95	15.30
175.332	15.12	14.03	14.50	15.42	(16.6	15.68	15.46	14.66
176.512	—	14.23	14.95	15.34::	(16.2	15.80::	15.00	15.09
194.317	15.16	13.70	14.55	15.82	(17.0	15.00	15.00	15.61
218.213	15.20	13.65	14.50	16.14	(16.6	15.15	15.18	15.60
525.504	15.40::	14.40	14.53	16.52:	15.25	15.15	15.05	15.60
527.512	—	14.32	—	—	15.32::	—	15.20::	—
546.952	15.13	13.70	14.77	16.50:	(16.8	15.15	15.34	15.68
549.445	—	13.43	—	—	—	—	—	—

Таблица 3
(продолжение)

	СПЗ 1636	СПЗ 1637	СПЗ 1638	СПЗ 1639	СПЗ 1640	СПЗ 1641	СПЗ 1642	СПЗ 1643
24...								
37557.377	15.31	13.52	15.44	16.55:	(16.5	15.09	15.20	15.60
761.502	15.35::	13.60	14.40	—	—	—	—	—
845.491	15.40	13.60	14.60	16.60:	(16.6	15.15	15.20::	15.50
854.804	15.32	13.52	14.65	16.50:	(16.2	15.15	15.15	15.50
876.459	15.12	14.29	14.70	—	(16.6	15.33	15.20	14.94
885.416	15.22	13.60	14.72	16.38:	(16.6	15.24	15.00	15.36
902.302	—	13.60	14.47	16.20	(16.6	15.52	—	15.30
38142.521	15.20	13.75	14.60	16.20	(16.6	15.00	15.05	15.74
176.422	15.23	13.52	14.47	16.14	(16.2	15.15	15.25::	15.70::
196.450	15.28	13.60	15.01	15.90	(16.2	15.09	15.11	15.30:
227.348	15.35	13.55	14.50	15.42	(16.5	15.07	15.37	15.65
255.418	15.26	13.70	14.47	16.00	(16.6	14.77	14.90	15.36
260.393	15.10	14.32	14.47	16.30	16.70::	14.72	15.00	15.42
261.411	15.12	13.61	14.53	16.26	(16.6	14.77	14.95	14.60
263.447	15.25	13.50	14.77	16.14	(16.6	14.88	15.30	15.20
268.374	15.22	13.75	14.53	16.16	(16.6	14.88	15.26	15.15
281.270	15.13	13.44	(17.0	16.64	(16.8	15.15	14.85	15.62
289.434	—	13.58	14.65	—	—	—	—	—
290.345	15.35	13.70	14.60	16.52	14.98	15.04	15.11	15.40:
326.227	15.35	14.23	14.47	16.80:	(16.6	15.15	15.10	14.94
552.489	15.35	13.55	14.55	16.70:	(16.8	15.20	14.98	15.70
560.455	15.50:	13.78	14.47	16.60::	(16.6	15.09	15.37	15.30
562.424	15.15:	13.60	14.47	16.80::	(16.6	15.15	15.40	15.68
619.458	15.31::	13.60	14.65	16.80::	(16.0	15.24	15.12	14.50
676.242	—	—	14.47::	—	—	—	—	—
.272	15.43:	13.52	14.68	15.90	16.70::	15.30	15.27	14.70
.311	15.45:	13.60	14.60	16.26:	(16.0	15.68	15.15::	15.03
678.213	15.25	14.23	14.56	15.50	14.83	15.56	15.20:	15.24
.255	15.30	13.96	14.53	15.98	15.05	15.47	14.95	15.18
.308	15.53:	13.60	14.65	16.08	14.98	15.80	15.30::	15.55
680.250	15.40	14.42	14.53	15.74	15.07	15.60	14.95	15.37
.290	15.56:	14.14	14.47	16.14	15.03	15.67	15.26:	15.60
.331	15.39	13.52	14.50	15.98	14.98	15.40:	15.11	15.70
.379	15.43	13.45	14.65	15.34	15.05	15.83	14.75	15.74
681.308	15.45	13.89	14.83	15.50	15.05	15.20	15.11	14.79
.350	15.53:	14.10	14.68	15.74	15.20	15.93	16.00	15.18
825.561	15.45	14.40	15.20	16.66	(16.6	—	15.15	15.37
876.435	15.64	13.62	14.53	16.53:	(16.6	15.15	14.90	15.18
886.420	15.48	13.92	14.50	16.90:	(16.6	15.10	15.20	15.03
887.528	15.17	13.61	14.55	(16.3	(16.0	15.05	15.00	15.74
904.400	15.20	13.70	16.30	16.80::	(15.3	15.15	15.15	15.75
907.468	15.17	14.32	17.04	16.42	(16.6	15.20	15.37	15.68

Таблица 3
(продолжение)

	СПЗ 1636	СПЗ 1637	СПЗ 1638	СПЗ 1639	СПЗ 1640	СПЗ 1641	СПЗ 1642	СПЗ 1643
24.000								
38914.402	15.24	14.46	14.42	16.14	(16.6	15.15	15.27	15.43
918.449	15.22	13.79	14.45	16.14::	(16.6	15.09	15.24	15.10
938.392	15.37	14.32	14.95	15.34	(16.6	15.76	15.30	15.18
939.425	15.43	13.86	14.70	15.66	(16.2	15.64	15.18	15.30
943.395	15.43	13.60	14.60	16.14:	(16.6	15.47	15.32	15.24
965.430	15.40	14.50	14.77	15.56	(16.6	15.68	15.05	15.74
967.505	15.17	14.43	15.00	15.50	(16.2	15.48	15.05	15.60
969.466	15.22	14.49	14.60	15.37	(16.2	15.40	15.16	14.55
971.481	15.30	13.88	14.43	15.28	(16.6	15.20	16.11	15.18
973.492	15.17	13.65	15.40	15.58	(16.2	15.08	15.32	15.80
975.441	15.22	13.60	14.65	15.40	(16.6	15.15	14.95	15.88
978.493	15.28	14.28	14.65	15.34	15.15	15.05	14.93	15.70
981.495	15.22:	14.23	14.70	15.42::	(15.5	15.15::	15.00	15.70:
998.427	15.35	13.68	14.68	15.98::	(16.6	15.18	15.16	15.97
39029.413	15.75	13.70	14.53	16.80	(16.6	15.18	14.98	15.10
030.244	15.22	13.50	(17.0	16.06	(16.6	15.20	15.30:	15.88
.291	15.36	13.65	16.22	16.35::	(16.6	15.05	15.05	15.62
.338	15.37	14.32	15.14	16.10	(16.6	15.15	15.05	15.68
.383	15.43	14.32	15.03	16.06	(16.6	15.08	15.05	15.76
031.354	15.43	13.68	14.47	16.00	(16.6	15.18	15.00	15.18
033.291	15.32	14.30	15.90	16.20	(16.6	15.12	15.15	15.80
.337	15.50	14.50	16.96	16.14	(16.6	15.20	15.00	15.68
.384	15.55	13.65	17.13	16.40::	(16.6	15.18	15.15	15.74
034.328	15.43	13.60	14.60	16.20	(16.6	15.10	15.74	14.55
.372	15.43	13.60	14.53	16.06	(16.6	15.15	15.21	14.77
035.318	15.35	14.40	14.63	16.20	(16.6	15.15	14.95	15.80
185.589	15.43:	14.10	14.65	16.06	(16.6	15.18	14.98	15.68
236.490	15.43:	13.55	14.80	15.05	16.24	15.09	15.20:	14.85
237.511	15.22	14.40	14.50	-	16.80::	15.08	14.90	15.70
262.517	15.12	14.23	14.53	15.19	(16.6	15.24	15.55	15.74
269.470	15.20:	13.60	15.81	15.87	(16.6	15.20	15.05	14.66
290.425	15.30:	13.65	14.45	16.30::	(16.6	15.18	15.11	15.61
293.472	15.48	14.40	14.40	16.32	(16.6	15.15	15.46	15.35
297.420	15.35	13.70	14.71	16.20	(16.6	14.98	15.37	15.68
318.348	15.25	13.65	14.47	(16.0	16.26::	14.85	15.11:	15.23
324.471	15.25	13.43	14.77	16.80	(16.2	15.00	15.93::	14.75
328.514	15.15	13.58	14.55	(16.1	(16.2	15.15	15.86::	15.80
330.459	15.05	14.23	14.60	(16.0	(16.2	15.10	15.20::	15.73
335.502	15.20	13.70	16.60	17.00::	(16.5	15.15	14.98	15.76
343.295	15.40	14.40	14.45	16.58:	(16.2	15.05	15.05	15.50
345.301	15.40	14.32	14.62	16.70:	(16.6	15.18	14.90::	15.75
376.333	15.20	13.60	16.96	(16.7	(16.6	15.15	16.25	15.26

Таблица 3
(продолжение)

24.00	СПЗ 1636	СПЗ 1637	СПЗ 1638	СПЗ 1639	СПЗ 1640	СПЗ 1641	СПЗ 1642	СПЗ 1643
39377.320	15.04	14.50	14.42	(16.7	(16.6	15.15	15.00	15.65
379.270	15.10	13.65	14.65	(16.7	(16.6	15.10	14.90	14.50
380.386	15.28:	13.60	14.53	(16.5	(16.6	15.04	15.83	15.74
382.249	15.25	14.09	14.70	16.80:	(16.0	15.09	15.00	15.50
383.304	15.22	13.60	14.65	(16.7	(16.6	15.05	14.95	15.42
404.250	15.35	13.60	14.60	(16.1	(16.6	15.10	15.05	14.80
406.248	15.25	13.88	14.65	17.00::	(16.6	15.10	15.65	15.15
553.497	15.20	13.70	14.85	—	—	15.30::	15.20::	15.18::
945.577	15.64	13.65	14.45	16.50::	(16.6	15.18	15.05	15.43
969.449	15.35	13.65	14.75	15.74	(16.2	15.15	15.00	14.60
.485	15.42	13.65	14.50	16.14:	(16.6	15.25	15.20	14.88
972.472	15.45:	14.54	14.47	16.30::	(16.2	15.20	15.00	15.78
.496	15.17	14.48	14.71	15.85::	(16.2	15.04	15.00	15.28
998.422	15.20	14.28	14.53	15.90	(16.6	14.77	15.34	15.60
40004.406	15.17	13.50	14.47	16.20::	(16.6	15.08	15.40	14.70
085.309	15.28	13.80	14.70	16.60:	(16.6	15.05	15.05	15.78
365.521	—	14.40	14.37	—	(16.0	15.30::	—	15.30::
381.455	15.30	14.20	14.42	16.60::	(16.6	15.40	15.37	15.75
382.501	15.50	13.55	14.53	16.60::	(16.6	15.40	15.46	15.18
422.401	15.43	13.60	14.67	16.70::	(16.6	15.25	15.20	15.00
428.482	15.22	13.60	14.55	(16.5	(16.6	15.30	15.30	15.50::
24.00	СПЗ 1644	СПЗ 1645	СПЗ 1646	СПЗ 1647	СПЗ 1648	СПЗ 1649	СПЗ 1650	СПЗ 1651
33031.551	15.19	14.80	16.32	13.65	14.85:	16.97	15.00	15.50
034.545	15.60	14.80	16.10	13.68	14.80:	16.86	14.46	15.26
34471.473	15.10::	14.72	16.40::	13.58	14.60:	—	14.56	15.05:
472.545	15.23::	14.75::	—	13.60	14.70	—	14.65	15.10::
476.532	15.72::	14.82	—	—	—	14.60::	—	14.52
477.461	15.19	14.67	16.10	13.54	14.94	14.97	14.60	14.55
479.543	—	—	—	—	—	—	—	—
480.437	15.35	14.70	16.50	13.64	15.60	14.87	14.55	14.61
37118.377	16.35:	14.67	16.44:	13.76	15.31	(16.5	14.50	12.57
135.482	16.17:	14.70	16.54	13.68	15.90	17.00:	15.04	12.74
137.473	16.30	14.70:	16.70:	13.76	15.00	(16.5	14.98	12.81
138.457	16.26	14.67	16.14	13.93	14.75	17.15::	14.50	12.73
160.316	15.70	14.10	16.60	13.68	14.70	15.92	14.68	13.42
162.294	15.72::	14.46	16.23	13.64	14.60	15.90	14.86	13.48
164.337	15.60	14.03	15.67	13.70	15.35	15.84	14.56	13.57
166.327	15.72	14.07	16.40	13.68	14.55	15.65	14.60	13.48
168.379	—	14.03	16.38	13.64	14.58	15.18	14.53	13.67

Таблица 3
(продолжение)

	СПЗ 1644	СПЗ 1645	СПЗ 1646	СПЗ 1647	СПЗ 1648	СПЗ 1649	СПЗ 1650	СПЗ 1651
24...								
37175.332	15.72	14.05	16.49	13.48	14.57	14.90	14.45	14.06
176.512	—	14.03	15.59	13.80	14.68	—	14.70	14.11
194.317	15.60	14.28	16.34	13.68	14.60	15.18	14.34	14.65
218.213	15.36	14.63	16.60	13.60	14.54	16.40	14.38	15.42
525.504	15.23	14.77	16.48	13.58	14.62	17.20::	14.35	16.24
527.512	—	14.70::	15.75	13.76	14.68	—	14.55	(15.0
546.352	15.20	14.85	16.30	13.50	14.68	(16.5	15.10	15.31
549.445	—	—	—	13.68	14.75	—	14.45	15.00::
557.377	15.23	14.74	16.46	13.57	14.57	(16.5	14.50	14.52
761.502	—	14.13	—	13.80	14.50	—	15.05	(15.0
845.491	15.23	14.35	16.28	13.55	14.95	(16.5	14.30	12.30
854.504	15.05	14.38	16.14	13.60	14.94	(16.5	14.50	12.32
876.459	—	14.70	16.66	14.20	15.01	—	15.04	12.88
885.416	15.14	14.68	16.34	13.60	14.95	(16.5	14.74:	13.20
902.302	15.39	14.60	16.06	13.55	14.61	15.98	14.60	13.97
38142.521	15.30	14.70	15.44	13.34	14.55	(16.5	14.65	14.44
176.422	—	14.77	—	13.57	15.18	—	14.98	15.70::
196.450	15.19	14.67	16.50:	13.57	14.54	15.67	14.55	(16.4
227.348	15.39	14.10	16.44	13.60	14.50	14.65	14.60	(16.5
255.418	16.17	14.70	16.50	13.60	15.25	16.29	15.00	16.30
260.393	15.80	14.82	16.50	13.68	14.63	16.80	14.42	15.53
261.411	16.10:	14.87	16.60	13.57	14.65	17.15::	14.90	15.49
263.447	15.72	14.73	16.46	13.60	14.85	(16.5	15.10:	15.49
268.374	15.70	14.81	16.80	13.65	14.50	(16.5	14.90	15.04
281.270	16.00	14.67	15.33	14.35	14.50	(17.0	14.80	14.44
289.434	—	14.43	—	13.64	14.50	—	14.50	14.02
290.345	16.15	14.20	15.75	13.64	14.52	(16.5	14.40	13.72
326.227	15.30	14.70	16.50	13.60	14.88	(17.0	14.48	12.39
552.489	—	14.00	16.06	14.26	14.54	15.84::	14.58	12.95
560.455	15.35	14.00	15.83	13.64	14.70	16.50::	14.80	12.90
562.424	15.32	14.00	16.34	13.64	14.56	16.35::	14.45	13.00
619.458	15.60	14.15	15.75	13.64	15.25	(17.0	14.68	14.45
676.242	—	13.93	—	13.56	14.55	—	14.42	(15.0
.272	15.60	14.08	15.40	13.64	14.55	15.00	14.50	16.25
.311	15.23	14.53	15.38	13.68	14.65	14.92	15.00:	16.33
678.213	15.20	14.10	16.54	13.60	15.10	15.35	14.33	16.15
.255	15.23	14.00	16.35:	13.84	14.88	15.04	14.45	16.25
.308	15.00	14.05	16.14::	13.55	14.65	14.90	15.04	(15.5
680.250	15.00	14.05	16.60:	13.56	15.18	15.14	14.50	16.25
.290	15.19	14.28	16.54::	13.68	15.35	15.00	14.48	16.33
.331	15.05	14.13	16.80::	13.60	15.15	15.04	14.90::	16.33
.379	15.26	14.09	16.57	13.93	14.77	15.18	14.60:	16.48

Таблица 3

24...	СПЗ 1644	СПЗ 1645	СПЗ 1646	СПЗ 1647	СПЗ 1648	СПЗ 1649	СПЗ 1650	СПЗ 1651
38681.308	15.20	14.07	16.60	13.55	15.00	15.04	14.42	16.55
.350	15.20	14.10	16.70	13.60	15.73	15.14	14.45	16.40
825.561	15.19	14.18	16.42	13.64	15.00	14.90	14.42	12.88
876.435	15.80	14.07	16.14	13.60	14.50	17.15::	14.33	14.95
886.420	16.00	14.63	16.10	13.60	14.62	(17.0	14.38	15.49
887.528	16.40::	14.53	16.40::	14.10	14.81	(16.5	14.42	15.53
904.400	16.10::	14.81	15.90:	13.70	14.85	(16.5	15.00	(15.5
907.468	15.81	14.78	16.70:	13.64	14.57	(17.0	14.40	16.15
914.402	15.68	14.76	16.14	13.60	14.47	(17.0	14.45	16.45
918.449	15.80	14.81	16.60	13.76	14.70	(16.5	14.38	16.42
938.392	15.31	14.30	15.44	14.26	14.47	(16.5	14.53	16.70::
939.425	15.64	14.48	15.30	13.41	14.62	(16.5	14.50::	(16.5
943.395	15.82	14.43	16.70	13.60	14.55	16.74	14.50	16.57
965.430	15.80	14.13	16.50	13.76	14.55	15.50	14.35	16.50
967.505	15.72	14.08	16.34	13.45	15.20	15.67	14.42	16.15
969.466	15.68	14.13	16.38	13.50	14.55	15.10	14.50	16.48
971.481	15.72	14.05	16.25	13.65	14.63	15.06	14.45	15.98:
973.492	15.90:	14.13	15.40	13.50	14.61	15.26	14.40:	15.90
975.441	15.64	14.18	16.38	13.50	14.55	15.06	14.48	16.24:
979.493	15.68	14.05	16.50	13.60	14.60	15.10	14.90	15.71
981.495	15.60::	14.13	—	13.60	14.70	15.35:	14.50	15.90
998.427	14.70	14.33	15.83	13.88	15.50	16.18	14.45	14.34:
99029.413	15.14	14.43	16.06	13.60	15.50	(16.4	15.07	12.15
030.244	15.30	14.13	16.54	13.60	14.50	(16.5	14.45	12.20
.291	15.10	14.28	16.60	13.64	14.54	(17.0	14.85	12.25
.338	15.30	14.08	15.20	13.68	14.62	(17.0	14.60	12.39
.383	15.10	14.10	15.50	13.64	14.75	(17.0	14.38	12.42
031.354	15.15	14.13	16.54	13.48	14.65	(17.0	14.42	12.67
033.291	15.32	14.38	16.60	13.60	14.62	(17.5	14.50	12.71
.337	15.19	14.08	16.60	13.58	14.62	(17.0	14.50	12.40
.384	15.30	14.38	16.40	13.57	14.68	(17.0	14.62	12.63
034.328	15.20	14.38:	16.46	13.65	14.74	(17.0	15.03	12.60
.372	15.27	14.08	16.60:	14.09	14.47	(17.0	14.45	12.70
035.318	15.31	14.08	16.50	13.60	14.54	(17.0	14.40	12.50
185.589	15.10	14.67	15.36	13.55	14.70	(17.0	14.55	12.42
236.490	16.17	14.67	16.34::	13.70	15.38	15.90	14.86::	13.48
237.511	—	14.80	16.60	13.55	15.08	—	14.20	13.40
262.517	15.90	14.00	16.54	13.65	14.45	14.80	14.40	12.80
269.470	16.17	14.01	16.46	13.53	14.60	14.84	14.42	12.35
290.425	15.56	14.00	16.06	13.60	14.75	15.76	14.45	12.30
293.472	15.85	14.10	16.18	13.76	—	15.92	14.55	12.40
297.420	15.60	14.13	16.35	13.57	15.15	16.18	14.80:	12.67

Таблица 3
(продолжение)

24...	СПЗ 1644	СПЗ 1645	СПЗ 1646	СПЗ 1647	СПЗ 1648	СПЗ 1649	СПЗ 1650	СПЗ 1651
39318.348	15.60	14.56	16.60::	13.60	14.54	—	14.48	13.38
324.471	15.14	14.50	16.14	14.09::	14.70	(17.0	14.90:	13.61
328.514	15.08:	14.77::	16.30::	13.60::	14.55	(16.5	14.50:	13.90
330.459	15.20	14.80	—	13.65	15.95:	—	14.92	14.00
335.502	15.14	14.82	15.30	13.54	14.50	(16.5	14.35	14.35
343.295	15.23	14.85	16.70:	14.34	15.25	(17.0	14.50	14.52
345.301	15.10	14.70	16.14	13.60	14.68	(16.5	14.50	14.55
376.333	15.72	14.30	16.54	13.60	15.21	16.74:	14.50	15.93
377.320	16.00:	14.28	16.50:	13.60	14.62	16.40:	14.95:	16.33
379.270	15.82	14.10	16.10	13.55	14.68	16.50:	14.50	16.42
380.386	15.90	14.24	16.50:	13.58	14.50	16.19::	14.55	16.33
382.249	16.00	14.55	16.10	13.68	14.70	16.15:	15.00	15.98
383.304	15.90	14.15	16.50	13.64	14.62	16.20:	14.33	16.50
404.250	15.98	14.63	16.60	13.57	14.75	14.84	14.55	16.62
406.248	15.80	14.60	15.44	13.60	15.50	15.00	14.38	16.70
553.497	—	—	—	13.60	14.75	—	14.42	13.24
945.577	15.23	14.80	16.80:	13.60	14.82	(16.5	14.98	15.49
969.449	15.30	14.70	16.54	13.46	14.55	17.10:	15.04	13.54
.485	15.28	14.60	16.90:	13.60	15.00	16.57	14.82	13.36
972.472	—	14.70	15.90	13.60	14.90	16.10::	14.50	13.32
.496	—	14.92	15.98	13.65	14.93	15.76	14.58	13.36
998.422	15.72	14.60	15.75	13.68	14.63	15.40	14.62:	13.36
40004.406	15.75	14.00	16.00	13.60	14.60	15.26	14.45	13.36
085.309	16.44	14.75	16.46	13.57	15.00	(17.0	14.56	(16.4
365.521	16.40::	14.80	16.15::	13.76	14.54	(16.5	14.62	(15.5
381.455	16.00:	14.85	16.34	13.70	14.88	(17.0	15.15	(16.5
382.501	15.60	14.80	16.26	13.93	14.50	(16.5	14.92	(16.5
422.401	15.20	14.63	16.22	13.74	14.50	15.84	14.50	12.95
428.482	15.62	14.67	(16.0	13.57	14.64	15.72	14.65	12.60

24...	СПЗ 1652	СПЗ 1653	СПЗ 1654	СПЗ 1655	СПЗ 1656	СПЗ 1657	СПЗ 1658
33031.551	13.00	16.70	15.44	14.89	—	15.42	15.03
034.545	13.00:	16.64	15.30	14.97	14.48:	15.36	15.06
34471.473	13.00	—	14.95::	—	14.64::	—	15.05
472.545	13.00	—	15.10	—	14.25:	—	15.08
476.532	13.10	—	14.98	—	14.30::	—	15.00::
477.461	13.20	(16.5	14.64	16.32	14.30 ::	(16.0	15.08
479.543	13.05	—	—	—	—	—	—
480.437	13.15	(16.5	14.60	(16.5	14.30	15.85	16.24
37118.377	13.15	(16.5	14.66	(16.5	14.33:	15.34	15.15

Таблица 3
(продолжение)

	СПЗ 1652	СПЗ 1653	СПЗ 1654	СПЗ 1655	СПЗ 1656	СПЗ 1657	СПЗ 1658
37135.482	12.90	(16.9	14.84	(17.0	14.40	15.43	15.22
137.473	13.15	(16.5	14.86	(17.0	14.45	15.02	15.12
138.457	13.10	(16.9	14.82	(17.0	14.43	15.30	15.12
160.316	12.98	16.80	15.54	(17.0	14.38	15.81	15.09
162.294	13.00	16.85	15.54	(16.5	14.70	15.93:	15.05
164.337	12.92	16.82	15.90	(16.5	14.55	15.86	15.30
166.327	13.02	16.90	15.76	(16.5	14.69	15.83	15.09
168.379	13.00	16.88	15.92	16.85::	—	15.90:	15.16
175.332	12.98	16.77	16.16	16.32	14.65	(16.0	16.09
176.512	13.10	16.64:	16.18	16.38::	—	(16.0	15.15
194.317	12.95	16.36	16.72	15.81	14.28	(16.0	15.15
218.213	12.98	16.38	(16.7	15.11	14.34	16.17:	15.08
525.504	12.95	(16.4	16.47	15.56	14.52	15.72	15.12
527.512	13.02	(16.0	—	—	—	15.34	15.43
546.352	12.98	16.90	16.22	(16.0	14.40	15.43	15.18
549.445	13.05	—	—	—	—	15.53:	(15.7
557.377	13.05	16.70:	15.93	(16.0	14.40	15.43	15.33
761.502*	13.05	—	—	—	—	—	15.05:
845.491	12.95	(17.0	14.72	(16.6	14.37	15.72	15.07
854.504	13.05	(16.0	14.72	(16.0	14.40	15.81:	15.09
876.459	13.25	(16.5	15.59	(16.3	—	(15.8	15.12
885.416	12.90	16.90::	15.93	(16.6	14.34	15.76	15.60
902.302	12.98	(16.5	16.62	(16.6	14.40	15.67	15.12
38142.521	13.02	(16.9	16.52	(16.6	14.46	15.81	15.02
176.422	12.90	(16.5	(16.2	—	14.58	15.71	15.08
196.450	12.98	(16.5	(16.7	(16.3	14.30	15.62	15.22
227.348	13.05	(16.5	(16.5	16.50:	14.32	15.34	15.08
255.418	12.92	(16.5	15.40	15.08	14.93	15.32	15.06
260.393	13.50	16.75::	14.88	15.08	14.45:	15.42	15.02
261.411	12.98	16.58::	15.06	15.11	14.44	15.50	15.12
263.447	13.05	16.70::	15.00	14.93	14.34	15.53	15.09
268.374	12.97	16.36::	14.88	14.90	14.70	15.45	15.07
281.270	12.95	16.44	14.80	15.03	15.07	15.86	16.50
289.434	13.02	—	14.61	—	—	—	—
290.345	13.00	16.36:	14.68	15.10	14.34	16.04:	15.08
326.227	12.95	15.12	14.68	16.18	14.52	15.93:	15.33
552.489	13.05	16.90	14.68	15.04	—	15.76	15.08
560.455	13.00	(16.5	14.70	15.23	14.37	15.72	15.16
562.424	13.02	(16.6	14.80	15.15	14.37	15.81	15.88
619.458	12.95	(16.4	16.62	(16.0	14.37	15.70	15.05
676.242	13.00	14.92	(16.0	—	—	15.44	15.17
.272	12.98	14.80	(16.5	(16.6	14.30	15.39	15.15
.311	12.97	14.80	(16.5	(16.6	14.30	15.40	15.20
678.213	12.98	14.84	(16.5	(16.6	14.45	15.39	15.12

Таблица 3
(продолжение)

	СПЗ 1652	СПЗ 1653	СПЗ 1654	СПЗ 1655	СПЗ 1656	СПЗ 1657	СПЗ 1658
38678.255	12.95	14.84	(16.5	(16.6	14.40	15.30	15.05
.308	12.98	14.80	(16.5	—	14.30	15.27	15.02
680.250	12.97	14.80	(16.5	(16.6	14.38	15.20	15.07
.290	12.95	14.80	(16.5	(16.6	14.42	15.42	15.08
.331	12.97	14.86	(16.7	(16.6	14.40	15.20	15.08
.379	12.98	14.84	(16.8	(17.0	14.80	15.36	15.10
681.308	13.45	14.88	16.80	(16.6	14.64:	15.36	15.15
.350	13.45	14.88	16.80	17.20:	14.45:	15.30	15.10
825.561	12.95	(16.5	16.16	15.08	14.50:	15.37	15.08
876.435	13.05	(17.0	16.75	16.85	14.86	15.85	16.20
886.420	12.95	(17.0	16.62	(16.6	14.34	16.00	15.08
887.528	13.02	(16.5	16.75	(16.0	14.40	15.62	(15.7
904.400	13.00	(16.5	(16.2	—	14.50::	15.33	15.12
907.468	13.00	(16.5	16.70	(16.5	14.30	15.76	15.20
914.402	13.00	(16.5	(16.2	(16.0	14.45:	15.40	15.37
918.449	12.97	(16.5	16.70	(16.6	14.40	15.43	15.12
938.392	12.95	(16.5	16.80	(16.0	14.28	15.48	15.16
939.425	13.10	(16.5	16.80	(16.6	14.70::	15.53	15.30
943.395	12.90	(16.9	16.22	(17.0	14.93	15.50	15.07
965.430	12.95	(16.9	15.10	(16.6	14.30	15.16	15.09
967.505	12.92	(16.5	14.78	(16.6	14.30	15.48	15.05
969.466	12.92	(16.5	15.10	(16.0	14.25:	15.50:	15.22
971.481	13.00	(16.5	14.88	(16.0	14.90:	15.71	14.90
973.492	12.95	(16.5	14.84	(16.0	14.34	15.70	15.07
975.441	12.95	(16.5	14.80	(16.0	14.98	15.76	15.12
978.493	12.98	(16.9	14.92	(16.6	14.30	15.72	15.08
981.495	13.08	(16.5	14.84	(16.6	—	15.57::	15.09
998.427	12.92	17.00::	14.89	(16.6	14.28	(16.0	15.12
39029.413	12.98	15.98	14.76	16.70::	14.40	(16.0	(16.5
030.244	13.00	15.30	14.80	16.60:	14.30	16.40::	15.08
.291	13.02	15.24	14.76	16.60	14.30	(15.9	15.08
.338	12.97	15.62	14.84	16.65	14.38	(15.8	15.09
.383	12.93	15.60	14.80	16.60	14.40	(15.8	15.16
031.354	13.20	15.37	14.88	16.65	14.30	(15.8	15.05
033.291	12.88	15.45	14.76	16.65	14.68	(15.8	15.02
.337	12.95	15.36	15.00	16.60	14.30	(15.8	15.07
.384	12.95	15.24	14.95	16.70	14.63::	(15.8	15.10
034.328	13.00	15.81	14.84	16.65	14.40	(15.8	15.05
.372	12.98	15.30	15.10	16.65	14.30	(15.7	15.08
035.318	12.98	15.54	15.06	16.50	14.25	15.76	15.02
185.589	13.02	(15.5	16.37	(16.6	14.40	15.40	15.12
236.490	12.97	(15.5	14.69	(16.6	15.05:	15.68	14.90:

Таблица 3
(продолжение)

24...	СПЗ 1652	СПЗ 1653	СПЗ 1654	СПЗ 1655	СПЗ 1656	СПЗ 1657	СПЗ 1658
39237.511	12.97	(15.5	14.60	(16.6	—	15.50:	15.08
262.517	13.02	(15.5	14.78	(16.6	14.30	15.50:	15.02
269.470	13.05	(17.0	15.02	16.70	14.34	15.78	15.22
290.425	12.97	(17.0	15.76	15.70	14.36	15.85	15.05
293.472	13.05	(17.0	16.25	15.20	14.30	15.76	15.26
297.420	13.20:	(17.0	16.37	15.10	14.40	16.29::	15.09
318.348	13.22:	(16.5	(16.2	14.86	14.75	15.48	15.13
324.471	13.05	(16.5	(16.5	14.92	14.34	15.30	15.36
328.514	12.95	(16.5	(16.5	14.86	14.60::	15.59::	15.05
330.459	13.10	(16.5	(16.5	14.93	15.10	15.48::	15.05
335.502	12.97	(16.5	(16.5	14.86	15.05	15.40	15.10
343.295	12.98	(16.5	(16.5	14.83	14.40	(15.7	15.30
345.301	13.00	(17.0	(16.5	14.86	14.45	15.72	14.82
376.333	13.00	16.58	(16.5	15.65	14.30	15.43	15.26
377.320	13.08	(16.5	(16.5	15.40:	14.45:	15.70	15.05
379.270	13.08	16.60	(16.5	15.90:	14.46	15.37	15.22
380.386	12.95	16.29:	16.62	15.90:	14.30	15.42::	15.05
382.249	12.92	16.65	16.70	16.06	14.81	15.38	15.12
383.304	12.92	16.58	16.75	15.90	14.87	15.34	15.19
404.250	12.92	—	16.70	(16.6	14.50:	15.50	15.08
406.248	12.92	15.20	16.47	(16.6	14.30	15.43	(16.5
553.497	13.02	—	—	—	—	—	14.85:
945.577	13.00:	16.80::	14.80	(16.6	14.97::	15.40	15.12
969.449	13.00	(16.5	14.80	(16.5	14.60::	15.44	15.05
.485	12.90	(16.5	14.78	(16.6	14.93	15.40	15.05
972.472	13.05	(16.5	15.02	(16.5	—	15.34	15.08
.496	12.95	(16.5	15.06	(16.3	—	15.42	14.87
998.422	12.95	(16.5	16.22	(16.5	14.50:	14.92	15.20
40004.406	13.00	(16.5	16.50	(16.6	15.01	15.34	15.07
085.309	12.92	(16.5	(16.5	15.81	14.34	16.05	15.10
365.521	12.90	16.20:	15.06	15.11	15.23	(16.0	15.02
381.455	12.90	15.84	15.00	14.90	14.22	15.63	15.02
382.501	12.90	16.26:	14.87	14.83	14.46	15.72	15.08
422.401	13.00	16.26:	14.90	15.32	14.56	15.39	15.05
428.482	12.95	16.20:	14.95:	15.00::	14.28	15.16	15.08
24...	СПЗ 1659	СПЗ 1660	СПЗ 1661	СПЗ 1662	СПЗ 1663	СПЗ 1664	СПЗ 1665
33031.551	15.70	14.85	15.38	15.18	16.70:	14.68	15.45
034.545	15.52	14.97	15.50	14.80	16.00::	14.70	15.56
34471.473	—	(15.3	—	15.21	—	—	14.90::
472.545	15.50	(15.1	—	15.30:	—	—	—
476.532	—	—	—	—	—	—	—

Таблица 3
(продолжение)

24...	СПЗ 1659	СПЗ 1660	СПЗ 1661	СПЗ 1662	СПЗ 1663	СПЗ 1664	СПЗ 1665
34477.461	15.55	(16.3	16.00::	15.50:	16.75:	(15.0	15.58:
479.543	—	—	—	—	—	—	—
480.437	15.00	(16.8	16.40::	15.71:	17.00:	(15.0	15.60:
37118.377	15.94	(16.8	15.80:	15.20:	15.65	14.27	15.65
135.482	15.80	(16.8	16.10:	15.12	15.65	14.36	15.66:
137.473	15.87	(16.8	15.05	14.78	15.65	14.65:	15.15
138.457	15.80	(16.8	16.02	15.16	15.58	14.81	15.78:
160.316	15.55	16.55	16.18	15.24	15.60	15.58	15.43
162.294	15.48	16.44	15.10	15.24	15.62	15.77	15.12
164.337	15.50	16.08	16.20	15.21	15.65	15.90	14.90
166.327	15.59	15.80	16.38	15.21	15.62	15.78	15.42
168.379	15.45	15.60	15.15	15.23	15.60	16.02	15.80
175.332	15.41	15.17	16.10	15.24	15.65	16.00	15.50
176.512	15.45	15.08	15.40::	15.10	15.84	(15.5	15.20
194.317	15.40	14.80	14.82	15.20	16.48	(16.5	14.68
218.213	15.45	14.82	16.35	15.24	16.62	(16.5	15.70
525.504	15.35	16.08	15.60::	15.27	15.75	15.94	15.10
527.512	15.38	16.10::	—	15.66:	15.94::	16.05::	15.60
546.352	15.80	17.00::	15.02	16.00:	16.23::	14.95	15.17
549.445	15.80:	(16.8	—	16.03:	15.85::	14.91	15.55::
557.377	15.70:	(16.8	15.80::	16.00:	16.60::	14.74	15.93::
761.502	15.59::	14.72	—	15.25:	—	(15.0	15.00:
845.491	15.70:	(16.8	15.94	15.95	16.14::	14.18	15.72:
854.504	15.30:	(15.5	16.10::	15.70:	—	14.30	14.85
876.459	15.05	(17.0	16.20::	15.50	16.04::	14.47	15.88:
885.416	15.42	(16.8	16.30:	15.23	16.13::	14.40	15.20
902.302	15.60	(16.8	16.15:	15.23	15.45	14.83	14.90
38142.521	15.41	(17.0	16.10:	16.05:	15.60	14.50	15.61
176.422	15.20	(16.0	15.60::	15.60:	15.60::	(16.0	15.20::
196.450	15.42	(16.7	16.40::	15.90:	16.40::	(16.0	15.08
227.348	15.60	(16.7	16.40	16.20:	16.62	(16.5	15.48
255.418	15.00	16.70	15.47	16.12	15.70	(16.5	15.38
260.393	15.03	16.55	16.27	15.85	15.84	(16.5	15.66
261.411	15.07	16.70	15.24	16.20	15.65	16.45:	15.18
263.447	15.00	16.60	15.93:	16.12	15.80::	(16.0	14.83
268.374	15.10	15.70	16.35	16.03	15.50	(16.0	14.92
281.270	15.32	15.00	14.00	15.47	15.62	15.58	14.90
289.434	15.52::	14.50	—	15.72:	—	(15.0	—
290.345	15.27	14.47	14.79	15.60	15.75	15.10	16.00:
326.227	15.21	15.09	15.52	15.23	16.23:	14.60	14.80
552.489	15.25	15.07	15.50	15.21	15.44	14.69	15.07
560.455	15.20	14.68	16.30::	15.50:	16.00::	14.65	15.12

Таблица 3
(продолжение)

	СПЗ 1659	СПЗ 1660	СПЗ 1661	СПЗ 1662	СПЗ 1663	СПЗ 1664	СПЗ 1665
24...							
38562.424	15.27	14.64	16.10::	15.66:	16.07::	14.65	15.03
619.458	15.07	15.24	15.10	15.10	16.50:	14.36	15.18
676.242	15.52:	—	15.05:	15.24	—	(14.9	15.38:
.272	15.60	(17.0	14.86	15.12	16.65:	16.45:	15.28
.311	15.80:	(16.8	15.08	15.00:	16.62::	(15.8	15.58
678.213	15.52	(16.8	15.40	15.12	16.60:	16.36::	14.94
.255	15.55	(17.0	15.52	15.06	16.60:	16.36:	15.15
.308	15.66	—	15.80:	14.92	16.32::	(16.0	15.50::
680.250	15.52	—	16.38	14.97	16.45:	—	14.74
.290	15.52	(17.0	16.65::	15.07	16.45:	(16.0	15.02
.331	15.55	(17.0	16.65::	15.07	16.65::	(16.4	15.04
.379	15.66	(17.0	16.27:	14.83	16.60	(16.5	15.02
681.308	15.70	(17.0	15.47	14.85	16.62::	16.10::	15.55
.350	15.50	(16.8	16.18	14.86	16.65:	16.45:	15.44
925.561	15.52	15.34	16.41:	16.17:	16.42::	14.30	14.89
976.435	15.48	14.57	15.42	16.12	15.75	15.00	15.13
986.420	15.80	14.60	16.38	15.78	15.65	14.78	15.15
987.528	15.70	14.85	15.52	16.03	16.32:	15.30	16.00:
904.400	16.08	15.29	15.23	15.24	15.74::	(15.0	15.32
907.468	15.52	15.60	15.20	15.78	15.68:	16.00	15.32::
914.402	15.60	16.50	16.10:	16.00	16.15:	16.20:	15.30
919.449	15.66	16.46	15.52	15.78	16.13:	(16.0	14.80
938.392	15.52	(16.3	15.85::	15.34	16.70::	(16.5	14.93
939.425	15.45	(16.3	14.76	15.60	16.33:	(15.5	15.86
943.395	15.52	16.78	16.27	15.91	16.43:	(16.5	15.10:
965.430	15.49	(16.8	14.73	15.70:	16.33:	(16.5	—
967.505	15.60	(17.0	16.30	15.53	15.94:	(16.0	15.66::
969.466	15.52	(17.0	16.18	15.72	16.30:	(16.0	15.06
971.481	15.38	(16.8	14.82	15.41	15.90:	(16.0	15.18
973.492	15.60	(16.8	15.90:	15.60:	16.23:	(16.0	14.92
975.441	15.48	(16.8	16.05::	15.95:	15.75:	(16.0	15.98:
978.493	15.50	(17.0	16.38	15.34	15.65	(16.5	15.04
981.495	15.70::	—	—	15.34	15.80:	(16.0	15.00:
998.427	15.48	(17.0	16.35	15.60:	15.55	(16.5	15.40
39029.413	15.47	(16.8	16.20	15.12	16.70::	14.91	14.94
030.244	15.52	(17.0	15.42	15.16	16.42:	14.91	15.60
.291	15.57	(16.8	15.50	15.24	16.22:	14.81	15.48
.338	15.52	(16.8	16.20:	15.21	16.14:	14.74	15.72:
.383	15.48	(16.8	16.10	15.21	15.65:	14.84	15.82:
031.354	15.66	(16.8	14.76	15.19	15.85:	14.74	14.86
033.291	15.80	(17.0	15.24	15.10	16.04:	14.91	16.00::
.337	15.48	(17.0	15.60	15.23	15.70	14.68	16.00::
.384	15.52	(16.8	15.76	15.18	16.04:	14.81	15.98:

Таблица 3
(продолжение)

	СПЗ	СПЗ	СПЗ	СПЗ	СПЗ	СПЗ	СПЗ
24...	1659	1660	1661	1662	1663	1664	1665
39034.328	15.45	(16.8	15.28	15.16	16.23:	14.87	15.08
.372	15.41	(16.8	14.85	15.20	16.00::	14.74	15.12
035.318	15.68	(16.8	16.10	15.28	16.14:	14.63	15.92
185.589	15.64	15.5	14.80	15.60	16.40:	(16.0	15.88::
236.490	15.30:	(15.8	—	—	15.65::	—	—
237.511	15.40	(16.8	16.60	15.60	16.23::	—	—
262.517	15.48	(16.0	15.52	15.20	16.14::	(16.0	14.92:
269.470	15.45	(16.8	16.35	15.20	16.52::	15.68	15.36
290.425	15.73	(17.0	15.50	15.00	16.14:	14.78	14.88
293.472	15.48	(17.0	16.24	15.00	15.94::	14.60	15.49
297.420	15.52	(17.0	15.94	15.10	16.33::	14.62	14.82
318.348	15.38	(17.0	15.70	15.24	16.30::	14.27	15.22:
324.471	15.48	(17.0	16.38	15.72	16.75:	14.15	15.70..
328.514	15.90::	(17.0	16.15	15.95	16.62:	14.09	15.48:
330.459	15.80:	(16.0	15.42:	16.07:	16.05::	14.18	15.10:
335.502	15.49	(16.8	15.80	15.95	16.14::	14.30	15.08
343.295	15.66	(17.0	16.60	16.00:	16.35::	14.22	15.02
345.301	15.60	(16.8	14.96	15.98	—	14.33	14.90
376.333	15.58	16.37	15.60:	15.95	15.94::	14.84	15.52
377.320	15.52	(16.8	14.70	15.95	15.70::	15.00	15.50
379.270	15.73	16.41	15.33	16.00	15.75:	15.09	15.08::
380.386	15.55	16.60::	14.73	16.07	15.84:	—	14.84
382.249	15.52	16.36	15.10	15.95	16.50::	15.30	15.80:
383.304	15.45	16.36	15.94	15.93	16.52:	15.20	14.95
404.250	15.45	15.06	16.18	16.20	16.62::	15.94	15.62:
406.248	15.52	14.88	16.20	15.95	16.65	15.92	15.16
553.497	15.07::	—	—	—	—	—	14.86::
945.577	16.00	15.30	15.80::	15.24	16.52	(16.0	15.18
969.449	15.50	14.25	16.65	15.20	16.65:	(16.0	15.70::
.485	15.80	14.20	15.19	15.22	16.80::	(16.0	15.70:
972.472	16.18	14.20	16.60	15.24	16.55:	(16.0	15.05:
.496	15.94	14.25	16.40	15.18	16.38:	(16.0	14.80
998.422	15.80	14.25	15.90:	15.22	16.60::	16.00	15.12
40004.406	15.62	14.82	16.50	15.22	16.23:	15.90	15.70:
085.309	15.58	(16.5	15.68	15.15	16.00::	14.18	14.82
365.521	15.10	(16.0	16.20:	14.90	—	16.00:	16.00::
381.455	15.50	(17.0	15.02	14.85	16.42::	16.18	15.02
382.501	15.52	(16.5	16.30:	15.11	16.20::	16.20::	15.17
422.401	15.50	(16.5	15.82::	15.10	16.62:	(16.0	15.12:
428.482	15.60	(16.3	15.60::	15.21	16.80::	(16.0	16.00::

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