

The parameters of the multiplet structure of the NMR spectra of [¹⁵N]indole and their relationship with the molecular electronic structure

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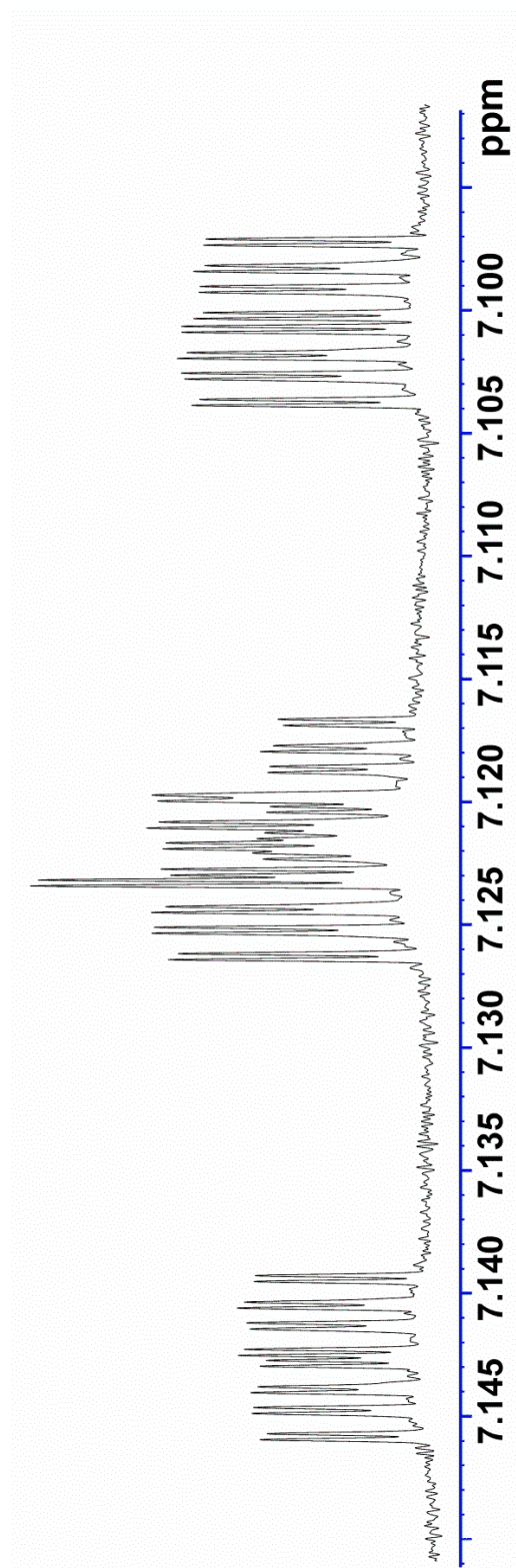
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SUPPLEMENTARY INFORMATION

¹H NMR spectrum of [¹⁵N]indole.



¹H NMR spectrum of [¹⁵N]-indole (proton H-6, 0.25 M solution in CD₃CN, the working frequency of the spectrometer for nuclei ¹H 360 MHz.

Detailed results of the ^1H NMR spectral elucidation of [^{15}N] indole.

PROGRAM LAOCN 5DP, COMPUTER IBM PC

*
* Indol-15N CD3CN solution 303K AV360 *
*

ITERATIVE CALCULATION
MAXIMUM NUMBER OF ITERATIONS 9

TRANSITIONS WITH INTENSITY LOWER
THAN 0.100 ARE NOT CONSIDERED.

INPUT PARAMETERS NUMBER OF GROUPS 8
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NO. OF NUCLEI			
ISOTOPE	IN EACH GROUP	SPIN	CHEMICAL SHIFTS
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2	1	0.5	W(1) 3333.050 HZ
1	1	0.5	W(2) 2607.869 HZ
1	1	0.5	W(3) 2326.926 HZ
1	1	0.5	W(4) 2727.016 HZ
1	1	0.5	W(5) 2532.887 HZ
1	1	0.5	W(6) 2565.866 HZ
1	1	0.5	W(7) 2674.868 HZ
0	1	0.5	W(8) 7000.000 HZ

COUPLING CONSTANTS

J(12) 2.447 HZ
J(13) 2.028 HZ
J(14) 0.812 HZ
J(15) 0.000 HZ
J(16) 0.000 HZ
J(17) 0.114 HZ
J(18) -98.187 HZ
J(23) 3.140 HZ
J(24) 0.162 HZ
J(25) 0.102 HZ
J(26) 0.389 HZ
J(27) 0.061 HZ
J(28) -4.746 HZ
J(34) -0.158 HZ
J(35) 0.040 HZ
J(36) -0.092 HZ

J(37) 0.961 HZ
 J(38) -4.732 HZ
 J(45) 7.909 HZ
 J(46) 1.193 HZ
 J(47) 0.814 HZ
 J(48) -0.292 HZ
 J(56) 7.010 HZ
 J(57) 1.032 HZ
 J(58) -0.095 HZ
 J(67) 8.166 HZ
 J(68) -0.693 HZ
 J(78) -1.212 HZ

List of 35 Variable Parameters:

1 10 00
 2 20 00
 3 30 00
 4 40 00
 5 50 00
 6 60 00
 7 70 00
 8 12 00
 9 13 00
 10 14 00
 11 15 00
 12 16 00
 13 17 00
 14 18 00
 15 23 00
 16 24 00
 17 25 00
 18 26 00
 19 27 00
 20 28 00
 21 34 00
 22 35 00
 23 36 00
 24 37 00
 25 38 00
 26 45 00
 27 46 00
 28 47 00
 29 48 00
 30 56 00
 31 57 00
 32 58 00
 33 67 00
 34 68 00
 35 78 00

NUMBER OF SUBMATRICES 1 NUMBER OF ENERGY LEVELS 256

 SUBMATRIX !ORDER (WEIGHT)! NO. OF SUB- ! ORDER OF SUB-SUBMATRICES
 NO. ! OF SUBMATRIX ! SUBMATRICES !

 1 ! 256 (1) ! 9 ! 1 8 28 56 70 56 28 8 1

ITERATION NO. 0 R.M.S.= 0.2040 HZ

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CORRECTION VECTOR

Parameter Nr Correction value

1	-0.0006
2	-0.0091
3	0.0158
4	-0.0881
5	0.4609
6	-0.2214
7	-0.1828
8	0.0232
9	0.0040
10	0.0057
11	-0.0002
12	-0.0002
13	0.0175
14	-0.0257
15	0.0474
16	-0.0023
17	0.0019
18	0.0024
19	-0.0047
20	-0.0055
21	0.0101
22	-0.0264
23	0.0009
24	-0.0008
25	-0.0020
26	0.0568
27	-0.0247
28	0.0027
29	-0.0046
30	0.0362
31	-0.0253
32	-0.0037
33	0.0524
34	-0.0035
35	-0.0005

ITERATION NO. 1 R.M.S.= 0.0053 HZ

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CORRECTION VECTOR

Parameter Nr Correction value

1	0.0002
2	-0.0000
3	-0.0000
4	0.0001
5	0.0003
6	-0.0002
7	0.0001
8	-0.0000
9	0.0000
10	-0.0001
11	-0.0001
12	-0.0001
13	-0.0000
14	0.0001
15	0.0001

16 0.0001
 17 0.0001
 18 0.0001
 19 0.0001
 20 0.0000
 21 0.0002
 22 -0.0000
 23 0.0001
 24 0.0001
 25 -0.0000
 26 0.0002
 27 -0.0001
 28 0.0001
 29 -0.0001
 30 0.0001
 31 -0.0002
 32 -0.0002
 33 0.0004
 34 -0.0001
 35 -0.0000

ITERATION NO. 2 R.M.S.= 0.0053 HZ

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ITERATED PARAMETERS

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PROBABLE

ISOTOPE CHEMICAL SHIFTS ERRORS

ISOTOPE	CHEMICAL SHIFTS	ERRORS
2	W(1) 3333.0496 HZ	0.0003 HZ
1	W(2) 2607.8604 HZ	0.0003 HZ
1	W(3) 2326.9414 HZ	0.0003 HZ
1	W(4) 2726.9280 HZ	0.0003 HZ
1	W(5) 2533.3486 HZ	0.0003 HZ
1	W(6) 2565.6448 HZ	0.0003 HZ
1	W(7) 2674.6855 HZ	0.0003 HZ
0	W(8) 7000.0000 HZ	NOT ITERATED

COUPLING CONSTANTS ERRORS

COUPLING CONSTANTS	ERRORS
J(12) 2.4705 HZ	0.0005 HZ
J(13) 2.0320 HZ	0.0005 HZ
J(14) 0.8176 HZ	0.0005 HZ
J(15) -0.0003 HZ	0.0005 HZ
J(16) -0.0003 HZ	0.0005 HZ
J(17) 0.1315 HZ	0.0005 HZ
J(18) -98.2121 HZ	0.0006 HZ
J(23) 3.1877 HZ	0.0005 HZ
J(24) 0.1602 HZ	0.0005 HZ
J(25) 0.1038 HZ	0.0005 HZ
J(26) 0.3913 HZ	0.0005 HZ
J(27) 0.0564 HZ	0.0005 HZ
J(28) -4.7512 HZ	0.0006 HZ
J(34) -0.1477 HZ	0.0005 HZ

J(35) 0.0135 HZ 0.0005 HZ
 J(36) -0.0909 HZ 0.0005 HZ
 J(37) 0.9600 HZ 0.0005 HZ
 J(38) -4.7338 HZ 0.0006 HZ
 J(45) 7.9657 HZ 0.0005 HZ
 J(46) 1.1682 HZ 0.0005 HZ
 J(47) 0.8163 HZ 0.0005 HZ
 J(48) -0.2966 HZ 0.0006 HZ
 J(56) 7.0458 HZ 0.0005 HZ
 J(57) 1.0067 HZ 0.0005 HZ
 J(58) -0.0991 HZ 0.0007 HZ
 J(67) 8.2184 HZ 0.0005 HZ
 J(68) -0.6970 HZ 0.0007 HZ
 J(78) -1.2130 HZ 0.0006 HZ

FITTED SPECTRUM

LINE	TRANS.	FREQUENCY	ERROR	INT.	ORIGIN
NO.	CALC.	EXP.			
1	8120	2321.353	2321.345	-0.008	0.99 E(136) - E(211)
2	3529	2321.364	2321.368	0.004	0.99 E(62) - E(142)
3	10759	2321.440	2321.440	0.000	0.99 E(203) - E(246)
4	8006	2321.451	2321.460	0.009	0.99 E(134) - E(209)
5	10672	2321.499	2321.493	-0.006	0.99 E(200) - E(243)
6	7721	2321.512	2321.512	0.000	0.99 E(129) - E(204)
7	11384	2321.587	2321.584	-0.003	0.99 E(241) - E(255)
8	10643	2321.600	2321.607	0.007	0.99 E(199) - E(242)
9	3884	2322.310	2322.304	-0.006	0.99 E(67) - E(147)
10	770	2322.323	2322.340	0.017	0.99 E(19) - E(71)
11	8290	2322.398	2322.396	-0.002	0.99 E(139) - E(213)
12	3813	2322.411	2322.425	0.014	0.99 E(66) - E(146)
13	7949	2322.458	2322.448	-0.010	0.99 E(133) - E(208)
14	3387	2322.470	2322.474	0.004	0.99 E(60) - E(140)
15	10730	2322.546	2322.537	-0.009	0.99 E(202) - E(245)
16	7892	2322.559	2322.556	-0.003	0.99 E(132) - E(207)
17	4878	2323.385	2323.384	-0.000	0.99 E(81) - E(161)
18	1178	2323.396	2323.401	0.005	0.99 E(26) - E(87)
19	9080	2323.472	2323.466	-0.006	0.99 E(153) - E(219)
20	4736	2323.484	2323.492	0.008	0.99 E(79) - E(159)
21	8909	2323.531	2323.522	-0.009	0.99 E(150) - E(216)
22	4381	2323.544	2323.551	0.007	0.99 E(74) - E(154)
23	11068	2323.619	2323.615	-0.004	0.99 E(214) - E(247)
24	8852	2323.632	2323.636	0.004	0.99 E(149) - E(215)
25	1463	2324.342	2324.335	-0.007	0.99 E(31) - E(92)
26	146	2324.354	2324.357	0.002	0.99 E(6) - E(35)
27	5090	2324.430	2324.429	-0.001	0.99 E(84) - E(163)
28	1406	2324.442	2324.445	0.003	0.99 E(30) - E(91)
29	4665	2324.490	2324.485	-0.004	0.99 E(78) - E(158)
30	1064	2324.502	2324.507	0.005	0.99 E(24) - E(85)
31	3742	2324.540	2324.537	-0.003	1.01 E(65) - E(145)
32	713	2324.552	2324.553	0.001	1.01 E(18) - E(70)
33	9023	2324.578	2324.573	-0.005	0.99 E(152) - E(218)
34	4594	2324.591	2324.594	0.003	0.99 E(77) - E(157)
35	8177	2324.627	2324.624	-0.003	1.01 E(137) - E(212)
36	3671	2324.639	2324.645	0.006	1.01 E(64) - E(144)
37	7835	2324.687	2324.675	-0.012	1.01 E(131) - E(206)
38	3315	2324.700	2324.707	0.007	1.01 E(59) - E(138)
39	10701	2324.775	2324.773	-0.002	1.01 E(201) - E(244)

40	7778	2324.787	2324.789	0.002	1.01	E(130) - E(205)
41	884	2325.498	2325.493	-0.005	1.01	E(21) - E(73)
42	49	2325.511	2325.509	-0.002	1.01	E(3) - E(22)
43	3955	2325.586	2325.581	-0.005	1.01	E(68) - E(148)
44	827	2325.598	2325.600	0.002	1.01	E(20) - E(72)
45	3600	2325.645	2325.635	-0.010	1.01	E(63) - E(143)
46	656	2325.658	2325.665	0.007	1.01	E(17) - E(69)
47	8063	2325.733	2325.725	-0.008	1.01	E(135) - E(210)
48	3458	2325.746	2325.761	0.015	1.01	E(61) - E(141)
49	9821	2326.086	2326.085	-0.001	0.99	E(170) - E(232)
50	5902	2326.098	2326.101	0.003	0.99	E(97) - E(177)
51	11246	2326.173	2326.167	-0.006	0.99	E(224) - E(253)
52	9791	2326.185	2326.193	0.008	0.99	E(169) - E(230)
53	11219	2326.233	2326.225	-0.008	0.99	E(221) - E(250)
54	9646	2326.249	2326.255	0.006	0.99	E(164) - E(225)
55	11433	2326.323	2326.321	-0.002	0.99	E(248) - E(256)
56	11210	2326.337	2326.337	-0.000	0.99	E(220) - E(249)
57	1349	2326.572	2326.554	-0.018	1.01	E(29) - E(90)
58	117	2326.584	2326.590	0.006	1.01	E(5) - E(34)
59	4949	2326.660	2326.662	0.002	1.01	E(82) - E(162)
60	1292	2326.671	2326.678	0.007	1.01	E(28) - E(89)
61	4523	2326.719	2326.715	-0.004	1.01	E(76) - E(156)
62	1006	2326.731	2326.734	0.002	1.01	E(23) - E(83)
63	8966	2326.806	2326.806	-0.000	1.01	E(151) - E(217)
64	4452	2326.820	2326.822	0.002	1.01	E(75) - E(155)
65	6187	2327.044	2327.042	-0.002	0.99	E(102) - E(182)
66	1953	2327.056	2327.058	0.002	0.99	E(40) - E(106)
67	9935	2327.132	2327.130	-0.002	0.99	E(174) - E(234)
68	6130	2327.145	2327.146	0.001	0.99	E(101) - E(181)
69	9762	2327.191	2327.186	-0.005	0.99	E(168) - E(229)
70	5788	2327.204	2327.202	-0.002	0.99	E(95) - E(175)
71	11237	2327.280	2327.274	-0.006	0.99	E(223) - E(252)
72	9733	2327.292	2327.301	0.009	0.99	E(167) - E(228)
73	204	2327.530	2327.526	-0.004	1.01	E(8) - E(37)
74	8	2327.542	2327.542	0.000	1.01	E(1) - E(9)
75	1520	2327.618	2327.618	-0.000	1.01	E(32) - E(93)
76	175	2327.630	2327.640	0.010	1.01	E(7) - E(36)
77	1235	2327.677	2327.670	-0.007	1.01	E(27) - E(88)
78	88	2327.690	2327.696	0.006	1.01	E(4) - E(33)
79	4807	2327.766	2327.762	-0.004	1.01	E(80) - E(160)
80	1121	2327.778	2327.778	0.000	1.01	E(25) - E(86)
81	6929	2328.118	2328.112	-0.006	0.99	E(115) - E(196)
82	2459	2328.130	2328.138	0.008	0.99	E(47) - E(122)
83	10333	2328.206	2328.210	0.004	0.99	E(188) - E(240)
84	6871	2328.218	2328.216	-0.001	0.99	E(114) - E(194)
85	10246	2328.265	2328.266	0.001	0.99	E(185) - E(237)
86	6586	2328.278	2328.282	0.004	0.99	E(109) - E(189)
87	11335	2328.353	2328.348	-0.005	0.99	E(235) - E(254)
88	10217	2328.366	2328.368	0.002	0.99	E(184) - E(236)
89	2814	2329.076	2329.075	-0.001	0.99	E(52) - E(127)
90	419	2329.088	2329.101	0.013	0.99	E(13) - E(56)
91	7155	2329.164	2329.147	-0.017	0.99	E(119) - E(198)
92	2743	2329.176	2329.183	0.007	0.99	E(51) - E(126)
93	6814	2329.223	2329.213	-0.010	0.99	E(113) - E(193)
94	2317	2329.236	2329.240	0.004	0.99	E(45) - E(120)
95	6073	2329.274	2329.275	0.001	1.01	E(100) - E(180)
96	1882	2329.285	2329.291	0.006	1.01	E(39) - E(105)
97	10304	2329.312	2329.311	-0.000	0.99	E(187) - E(239)
98	6757	2329.324	2329.327	0.003	0.99	E(112) - E(192)
99	9878	2329.361	2329.357	-0.004	1.01	E(172) - E(233)

100	6016	2329.373	2329.379	0.006	1.01	E(99) - E(179)
101	9704	2329.421	2329.419	-0.002	1.01	E(166) - E(227)
102	5730	2329.433	2329.435	0.002	1.01	E(94) - E(173)
103	11228	2329.509	2329.507	-0.002	1.01	E(222) - E(251)
104	9675	2329.521	2329.523	0.001	1.01	E(165) - E(226)
105	2095	2330.231	2330.227	-0.004	1.01	E(42) - E(108)
106	238	2330.247	2330.263	0.016	1.01	E(10) - E(43)
107	6244	2330.320	2330.319	-0.001	1.01	E(103) - E(183)
108	2024	2330.332	2330.341	0.009	1.01	E(41) - E(107)
109	5959	2330.379	2330.371	-0.008	1.01	E(98) - E(178)
110	1811	2330.394	2330.407	0.013	1.01	E(38) - E(104)
111	9848	2330.467	2330.443	-0.024	1.01	E(171) - E(231)
112	5845	2330.480	2330.479	-0.001	1.01	E(96) - E(176)
113	2672	2331.306	2331.307	0.001	1.01	E(50) - E(125)
114	362	2331.317	2331.319	0.002	1.01	E(12) - E(55)
115	7042	2331.394	2331.379	-0.015	1.01	E(117) - E(197)
116	2601	2331.405	2331.415	0.010	1.01	E(49) - E(124)
117	6700	2331.453	2331.446	-0.007	1.01	E(111) - E(191)
118	2245	2331.465	2331.467	0.002	1.01	E(44) - E(118)
119	10275	2331.541	2331.543	0.002	1.01	E(186) - E(238)
120	6643	2331.553	2331.559	0.006	1.01	E(110) - E(190)
121	533	2332.264	2332.244	-0.020	1.01	E(15) - E(58)
122	15	2332.277	2332.280	0.003	1.01	E(2) - E(16)
123	2885	2332.352	2332.352	0.000	1.01	E(53) - E(128)
124	476	2332.364	2332.368	0.004	1.01	E(14) - E(57)
125	2530	2332.411	2332.408	-0.003	1.01	E(48) - E(123)
126	305	2332.423	2332.424	0.001	1.01	E(11) - E(54)
127	6984	2332.500	2332.496	-0.003	1.01	E(116) - E(195)
128	2388	2332.512	2332.512	0.000	1.01	E(46) - E(121)
129	11392	2524.767	2524.762	-0.005	0.75	E(242) - E(255)
130	11096	2524.768	2524.762	-0.006	0.75	E(215) - E(247)
131	10642	2524.780	2524.782	0.002	0.75	E(199) - E(241)
132	8851	2524.780	2524.782	0.002	0.75	E(149) - E(214)
133	11343	2524.873	2524.880	0.007	0.75	E(236) - E(254)
134	9190	2524.874	2524.880	0.006	0.75	E(155) - E(217)
135	11434	2524.874	2524.880	0.006	0.75	E(249) - E(256)
136	10813	2524.875	2524.880	0.005	0.75	E(205) - E(244)
137	10216	2524.886	2524.880	-0.006	0.75	E(184) - E(235)
138	7774	2524.887	2524.880	-0.007	0.75	E(130) - E(201)
139	4448	2524.887	2524.880	-0.007	0.75	E(75) - E(151)
140	11209	2524.888	2524.880	-0.008	0.75	E(220) - E(248)
141	11260	2524.981	2524.987	0.006	0.75	E(226) - E(251)
142	10387	2524.981	2524.987	0.006	0.75	E(190) - E(238)
143	6639	2524.993	2524.987	-0.006	0.75	E(110) - E(186)
144	9671	2524.993	2524.987	-0.006	0.75	E(165) - E(222)
145	10870	2525.846	2525.858	0.012	0.79	E(207) - E(245)
146	9303	2525.846	2525.858	0.012	0.79	E(157) - E(218)
147	7887	2525.859	2525.858	-0.001	0.79	E(132) - E(202)
148	4589	2525.859	2525.858	-0.001	0.79	E(77) - E(152)
149	11277	2525.950	2525.957	0.007	0.79	E(228) - E(252)
150	10444	2525.950	2525.957	0.007	0.79	E(192) - E(239)
151	5227	2525.953	2525.957	0.004	0.79	E(86) - E(160)
152	8399	2525.953	2525.957	0.004	0.79	E(141) - E(210)
153	9728	2525.962	2525.957	-0.005	0.79	E(167) - E(223)
154	6752	2525.963	2525.957	-0.006	0.79	E(112) - E(187)
155	1115	2525.965	2525.957	-0.008	0.79	E(25) - E(80)
156	3452	2525.965	2525.957	-0.008	0.79	E(61) - E(135)
157	9988	2526.057	2526.058	0.001	0.79	E(176) - E(231)
158	7264	2526.057	2526.058	0.001	0.79	E(121) - E(195)
159	2383	2526.069	2526.058	-0.011	0.79	E(46) - E(116)

160	5840	2526.069	2526.058	-0.011	0.79	E(96) - E(171)
161	10784	2531.805	2531.820	0.015	1.15	E(204) - E(243)
162	9133	2531.805	2531.820	0.015	1.15	E(154) - E(216)
163	4377	2531.817	2531.820	0.003	1.15	E(74) - E(150)
164	7717	2531.817	2531.820	0.003	1.15	E(129) - E(200)
165	10358	2531.911	2531.918	0.007	1.15	E(189) - E(237)
166	11251	2531.911	2531.918	0.007	1.15	E(225) - E(250)
167	5013	2531.912	2531.918	0.006	1.16	E(83) - E(156)
168	8227	2531.912	2531.918	0.006	1.16	E(138) - E(206)
169	6582	2531.924	2531.918	-0.006	1.15	E(109) - E(185)
170	999	2531.924	2531.918	-0.006	1.16	E(23) - E(76)
171	3308	2531.925	2531.918	-0.007	1.16	E(59) - E(131)
172	9642	2531.926	2531.918	-0.008	1.15	E(164) - E(221)
173	9900	2532.018	2532.022	0.004	1.15	E(173) - E(227)
174	7092	2532.018	2532.022	0.004	1.15	E(118) - E(191)
175	5723	2532.031	2532.022	-0.009	1.15	E(94) - E(166)
176	2238	2532.031	2532.022	-0.009	1.15	E(44) - E(111)
177	9416	2532.624	2532.632	0.008	0.76	E(159) - E(219)
178	10927	2532.624	2532.632	0.008	0.76	E(209) - E(246)
179	8000	2532.635	2532.632	-0.003	0.76	E(134) - E(203)
180	4730	2532.636	2532.632	-0.004	0.76	E(79) - E(153)
181	8569	2532.733	2532.740	0.007	0.77	E(144) - E(212)
182	5439	2532.733	2532.740	0.007	0.77	E(89) - E(162)
183	11294	2532.734	2532.740	0.006	0.77	E(230) - E(253)
184	10501	2532.734	2532.740	0.006	0.77	E(194) - E(240)
185	3664	2532.745	2532.740	-0.005	0.76	E(64) - E(137)
186	1285	2532.745	2532.740	-0.005	0.76	E(28) - E(82)
187	6865	2532.746	2532.740	-0.006	0.77	E(114) - E(188)
188	9785	2532.746	2532.740	-0.006	0.77	E(169) - E(224)
189	10074	2532.843	2532.843	-0.000	0.77	E(179) - E(233)
190	7434	2532.844	2532.843	-0.000	0.77	E(124) - E(197)
191	6009	2532.855	2532.872	0.017	0.77	E(99) - E(172)
192	2594	2532.855	2532.872	0.017	0.77	E(49) - E(117)
193	5155	2532.884	2532.872	-0.011	1.14	E(85) - E(158)
194	8341	2532.884	2532.872	-0.011	1.14	E(140) - E(208)
195	3380	2532.896	2532.900	0.004	1.14	E(60) - E(133)
196	1057	2532.896	2532.900	0.004	1.14	E(24) - E(78)
197	7206	2532.988	2532.998	0.010	1.14	E(120) - E(193)
198	9958	2532.988	2532.998	0.010	1.14	E(175) - E(229)
199	1571	2532.990	2532.998	0.008	1.15	E(33) - E(88)
200	4020	2532.990	2532.998	0.008	1.15	E(69) - E(143)
201	5781	2533.000	2532.998	-0.002	1.14	E(95) - E(168)
202	2310	2533.000	2532.998	-0.002	1.14	E(45) - E(113)
203	650	2533.002	2532.998	-0.004	1.15	E(17) - E(63)
204	82	2533.003	2532.998	-0.005	1.15	E(4) - E(27)
205	2950	2533.094	2533.100	0.006	1.14	E(54) - E(123)
206	6295	2533.094	2533.100	0.006	1.14	E(104) - E(178)
207	299	2533.106	2533.100	-0.006	1.14	E(11) - E(48)
208	1805	2533.109	2533.100	-0.009	1.14	E(38) - E(98)
209	8682	2533.739	2533.742	0.003	0.82	E(146) - E(213)
210	5580	2533.739	2533.742	0.003	0.82	E(91) - E(163)
211	1399	2533.750	2533.742	-0.009	0.82	E(30) - E(84)
212	3806	2533.751	2533.742	-0.009	0.82	E(66) - E(139)
213	10131	2533.844	2533.849	0.005	0.82	E(181) - E(234)
214	7547	2533.845	2533.849	0.004	0.82	E(126) - E(198)
215	4235	2533.846	2533.849	0.003	0.82	E(72) - E(148)
216	1744	2533.846	2533.849	0.003	0.82	E(36) - E(93)
217	6123	2533.857	2533.849	-0.008	0.82	E(101) - E(174)
218	2736	2533.857	2533.849	-0.008	0.82	E(51) - E(119)
219	823	2533.858	2533.849	-0.009	0.82	E(20) - E(68)

220	171	2533.858	2533.849	-0.009	0.82	E(7) - E(32)
221	6468	2533.952	2533.957	0.005	0.83	E(107) - E(183)
222	3165	2533.952	2533.957	0.005	0.83	E(57) - E(128)
223	2020	2533.964	2533.957	-0.007	0.83	E(41) - E(103)
224	472	2533.964	2533.957	-0.007	0.83	E(14) - E(53)
225	8456	2539.662	2539.657	-0.005	1.30	E(142) - E(211)
226	5298	2539.662	2539.657	-0.005	1.30	E(87) - E(161)
227	3523	2539.673	2539.657	-0.016	1.30	E(62) - E(136)
228	1172	2539.673	2539.657	-0.016	1.30	E(26) - E(81)
229	4092	2539.771	2539.777	0.006	1.30	E(70) - E(145)
230	1629	2539.771	2539.777	0.006	1.30	E(34) - E(90)
231	7321	2539.772	2539.777	0.005	1.29	E(122) - E(196)
232	10017	2539.772	2539.777	0.005	1.29	E(177) - E(232)
233	708	2539.782	2539.777	-0.005	1.30	E(18) - E(65)
234	112	2539.783	2539.777	-0.006	1.30	E(5) - E(29)
235	2452	2539.784	2539.777	-0.007	1.29	E(47) - E(115)
236	5895	2539.784	2539.777	-0.007	1.29	E(97) - E(170)
237	3022	2539.881	2539.886	0.005	1.30	E(55) - E(125)
238	6353	2539.881	2539.886	0.005	1.30	E(105) - E(180)
239	1877	2539.893	2539.886	-0.007	1.30	E(39) - E(100)
240	357	2539.893	2539.886	-0.007	1.30	E(12) - E(50)
241	1687	2540.776	2540.788	0.012	1.28	E(35) - E(92)
242	4164	2540.776	2540.788	0.012	1.28	E(71) - E(147)
243	142	2540.788	2540.788	0.000	1.28	E(6) - E(31)
244	766	2540.789	2540.788	-0.000	1.28	E(19) - E(67)
245	6411	2540.882	2540.890	0.008	1.27	E(106) - E(182)
246	3094	2540.882	2540.890	0.008	1.27	E(56) - E(127)
247	232	2540.883	2540.890	0.007	1.28	E(9) - E(37)
248	940	2540.883	2540.890	0.007	1.28	E(22) - E(73)
249	1949	2540.895	2540.890	-0.005	1.27	E(40) - E(102)
250	415	2540.895	2540.890	-0.005	1.27	E(13) - E(52)
251	7	2540.896	2540.890	-0.006	1.28	E(1) - E(8)
252	48	2540.896	2540.890	-0.006	1.28	E(3) - E(21)
253	589	2540.990	2540.993	0.003	1.27	E(16) - E(58)
254	2165	2540.990	2540.993	0.003	1.27	E(43) - E(108)
255	14	2541.002	2540.993	-0.010	1.27	E(2) - E(15)
256	237	2541.006	2540.993	-0.013	1.28	E(10) - E(42)
257	10670	2557.068	2557.068	0.000	1.11	E(200) - E(241)
258	8907	2557.068	2557.068	0.000	1.11	E(150) - E(214)
259	11400	2557.156	2557.156	0.000	1.11	E(243) - E(255)
260	11124	2557.156	2557.156	0.000	1.11	E(216) - E(247)
261	7830	2557.455	2557.456	0.001	1.13	E(131) - E(201)
262	4518	2557.456	2557.456	0.000	1.13	E(76) - E(151)
263	9246	2557.543	2557.543	0.000	1.13	E(156) - E(217)
264	10841	2557.543	2557.543	-0.000	1.13	E(206) - E(244)
265	11217	2557.757	2557.760	0.003	1.11	E(221) - E(248)
266	10244	2557.758	2557.760	0.002	1.11	E(185) - E(235)
267	11351	2557.846	2557.847	0.001	1.11	E(237) - E(254)
268	11435	2557.847	2557.847	0.000	1.11	E(250) - E(256)
269	6695	2558.146	2558.146	0.000	1.12	E(111) - E(186)
270	9699	2558.146	2558.146	-0.000	1.13	E(166) - E(222)
271	10415	2558.234	2558.234	-0.000	1.12	E(191) - E(238)
272	11268	2558.235	2558.234	-0.001	1.12	E(227) - E(251)
273	4870	2558.345	2558.346	0.001	1.20	E(81) - E(153)
274	8112	2558.345	2558.346	0.000	1.20	E(136) - E(203)
275	9528	2558.433	2558.432	-0.001	1.19	E(161) - E(219)
276	10983	2558.433	2558.432	-0.001	1.19	E(211) - E(246)
277	1341	2558.730	2558.732	0.001	1.21	E(29) - E(82)
278	3734	2558.731	2558.732	0.001	1.21	E(65) - E(137)
279	5509	2558.818	2558.817	-0.001	1.21	E(90) - E(162)

280	8625	2558.818	2558.817	-0.001	1.21	E(145) - E(212)
281	6921	2559.032	2559.033	0.001	1.19	E(115) - E(188)
282	9813	2559.032	2559.033	0.001	1.19	E(170) - E(224)
283	11310	2559.119	2559.119	-0.000	1.19	E(232) - E(253)
284	10557	2559.120	2559.119	-0.001	1.19	E(196) - E(240)
285	2664	2559.418	2559.418	0.000	1.20	E(50) - E(117)
286	6065	2559.418	2559.418	0.000	1.20	E(100) - E(172)
287	7490	2559.505	2559.505	-0.000	1.20	E(125) - E(197)
288	10102	2559.505	2559.505	-0.000	1.20	E(180) - E(233)
289	4376	2564.105	2564.105	-0.000	0.71	E(74) - E(149)
290	7716	2564.105	2564.105	-0.000	0.71	E(129) - E(199)
291	9132	2564.193	2564.196	0.003	0.71	E(154) - E(215)
292	10783	2564.193	2564.196	0.003	0.71	E(204) - E(242)
293	998	2564.493	2564.492	-0.001	0.73	E(23) - E(75)
294	3307	2564.493	2564.492	-0.001	0.73	E(59) - E(130)
295	8226	2564.581	2564.580	-0.001	0.73	E(138) - E(205)
296	5012	2564.581	2564.580	-0.001	0.72	E(83) - E(155)
297	9641	2564.795	2564.795	0.000	0.71	E(164) - E(220)
298	6581	2564.796	2564.795	-0.001	0.71	E(109) - E(184)
299	11250	2564.884	2564.885	0.001	0.71	E(225) - E(249)
300	10357	2564.884	2564.885	0.001	0.71	E(189) - E(236)
301	5722	2565.184	2565.190	0.006	0.73	E(94) - E(165)
302	2237	2565.184	2565.180	-0.004	0.73	E(44) - E(110)
303	7943	2565.221	2565.219	-0.002	1.23	E(133) - E(202)
304	4659	2565.221	2565.219	-0.002	1.23	E(78) - E(152)
305	7091	2565.272	2565.270	-0.002	0.73	E(118) - E(190)
306	9899	2565.272	2565.270	-0.002	0.73	E(173) - E(226)
307	9359	2565.310	2565.309	-0.000	1.23	E(158) - E(218)
308	10898	2565.310	2565.309	-0.000	1.23	E(208) - E(245)
309	3521	2565.383	2565.384	0.001	0.66	E(62) - E(134)
310	1170	2565.383	2565.384	0.001	0.66	E(26) - E(79)
311	8454	2565.470	2565.469	-0.001	0.65	E(142) - E(209)
312	5296	2565.470	2565.469	-0.001	0.65	E(87) - E(159)
313	1227	2565.609	2565.611	0.002	1.25	E(27) - E(80)
314	3592	2565.610	2565.611	0.001	1.26	E(63) - E(135)
315	8511	2565.698	2565.700	0.002	1.26	E(143) - E(210)
316	5367	2565.698	2565.700	0.002	1.26	E(88) - E(160)
317	707	2565.769	2565.771	0.002	0.67	E(18) - E(64)
318	111	2565.769	2565.771	0.002	0.67	E(5) - E(28)
319	1628	2565.856	2565.854	-0.002	0.67	E(34) - E(89)
320	4091	2565.856	2565.854	-0.002	0.67	E(70) - E(144)
321	6808	2565.914	2565.916	0.002	1.23	E(113) - E(187)
322	9756	2565.914	2565.916	0.002	1.23	E(168) - E(223)
323	11285	2566.002	2566.003	0.000	1.23	E(229) - E(252)
324	10472	2566.002	2566.003	0.000	1.23	E(193) - E(239)
325	2451	2566.070	2566.068	-0.002	0.66	E(47) - E(114)
326	5894	2566.070	2566.068	-0.002	0.66	E(97) - E(169)
327	7319	2566.157	2566.156	-0.001	0.66	E(122) - E(194)
328	10015	2566.157	2566.156	-0.001	0.66	E(177) - E(230)
329	2523	2566.302	2566.302	-0.000	1.25	E(48) - E(116)
330	5952	2566.303	2566.302	-0.001	1.25	E(98) - E(171)
331	10044	2566.391	2566.390	-0.001	1.25	E(178) - E(231)
332	7376	2566.392	2566.390	-0.002	1.25	E(123) - E(195)
333	356	2566.455	2566.461	0.006	0.68	E(12) - E(49)
334	1876	2566.456	2566.461	0.005	0.68	E(39) - E(99)
335	3876	2566.462	2566.461	-0.001	1.30	E(67) - E(139)
336	1455	2566.462	2566.461	-0.001	1.30	E(31) - E(84)
337	3021	2566.543	2566.547	0.004	0.68	E(55) - E(124)
338	6352	2566.543	2566.547	0.004	0.68	E(105) - E(179)
339	5650	2566.551	2566.547	-0.003	1.30	E(92) - E(163)

340	8738	2566.551	2566.547	-0.003	1.30	E(147) - E(213)
341	199	2566.850	2566.851	0.001	1.32	E(8) - E(32)
342	879	2566.850	2566.851	0.001	1.32	E(21) - E(68)
343	1800	2566.938	2566.938	0.000	1.32	E(37) - E(93)
344	4305	2566.938	2566.938	0.000	1.32	E(73) - E(148)
345	2806	2567.153	2567.153	0.000	1.30	E(52) - E(119)
346	6179	2567.153	2567.153	-0.000	1.30	E(102) - E(174)
347	10159	2567.241	2567.241	-0.000	1.30	E(182) - E(234)
348	7603	2567.241	2567.241	-0.000	1.30	E(127) - E(198)
349	2090	2567.541	2567.541	0.000	1.32	E(42) - E(103)
350	528	2567.541	2567.541	0.000	1.32	E(15) - E(53)
351	3235	2567.629	2567.628	-0.001	1.32	E(58) - E(128)
352	6524	2567.629	2567.628	-0.001	1.32	E(108) - E(183)
353	1056	2572.258	2572.260	0.002	0.88	E(24) - E(77)
354	3379	2572.258	2572.260	0.002	0.88	E(60) - E(132)
355	5154	2572.347	2572.346	-0.001	0.88	E(85) - E(157)
356	8340	2572.347	2572.346	-0.001	0.88	E(140) - E(207)
357	648	2572.647	2572.648	0.001	0.90	E(17) - E(61)
358	80	2572.647	2572.648	0.000	0.90	E(4) - E(25)
359	1569	2572.735	2572.736	0.001	0.90	E(33) - E(86)
360	4018	2572.735	2572.736	0.001	0.90	E(69) - E(141)
361	5780	2572.952	2572.952	0.000	0.88	E(95) - E(167)
362	2309	2572.952	2572.952	0.000	0.88	E(45) - E(112)
363	7205	2573.040	2573.041	0.001	0.88	E(120) - E(192)
364	9957	2573.040	2573.041	0.001	0.88	E(175) - E(228)
365	297	2573.340	2573.340	-0.000	0.90	E(11) - E(46)
366	1803	2573.343	2573.340	-0.003	0.90	E(38) - E(96)
367	6293	2573.428	2573.428	-0.000	0.90	E(104) - E(176)
368	2948	2573.429	2573.428	-0.001	0.90	E(54) - E(121)
369	765	2573.500	2573.502	0.002	0.84	E(19) - E(66)
370	141	2573.500	2573.502	0.002	0.84	E(6) - E(30)
371	4163	2573.588	2573.588	0.000	0.84	E(71) - E(146)
372	1686	2573.588	2573.588	0.000	0.84	E(35) - E(91)
373	6	2573.887	2573.888	0.001	0.86	E(1) - E(7)
374	47	2573.888	2573.888	-0.000	0.87	E(3) - E(20)
375	231	2573.975	2573.975	0.000	0.87	E(9) - E(36)
376	939	2573.976	2573.975	-0.000	0.87	E(22) - E(72)
377	1948	2574.191	2574.192	0.001	0.85	E(40) - E(101)
378	414	2574.191	2574.192	0.001	0.85	E(13) - E(51)
379	3093	2574.279	2574.279	0.000	0.85	E(56) - E(126)
380	6410	2574.279	2574.279	0.000	0.85	E(106) - E(181)
381	13	2574.579	2574.577	-0.002	0.87	E(2) - E(14)
382	236	2574.583	2574.577	-0.006	0.87	E(10) - E(41)
383	588	2574.667	2574.665	-0.001	0.87	E(16) - E(57)
384	2164	2574.667	2574.665	-0.002	0.87	E(43) - E(107)
385	11408	2602.309	2602.303	-0.006	1.02	E(244) - E(255)
386	10954	2602.367	2602.362	-0.005	1.02	E(210) - E(245)
387	10811	2602.417	2602.412	-0.005	1.02	E(205) - E(242)
388	11011	2602.470	2602.472	0.002	1.02	E(212) - E(246)
389	8396	2602.473	2602.472	-0.001	1.02	E(141) - E(207)
390	8794	2602.527	2602.531	0.004	1.03	E(148) - E(213)
391	8566	2602.579	2602.582	0.003	1.02	E(144) - E(209)
392	4233	2602.634	2602.641	0.007	1.03	E(72) - E(146)
393	10840	2602.697	2602.697	-0.000	1.00	E(206) - E(243)
394	8509	2602.755	2602.750	-0.005	1.00	E(143) - E(208)
395	8225	2602.804	2602.800	-0.004	1.00	E(138) - E(204)
396	8624	2602.855	2602.859	0.003	1.00	E(145) - E(211)
397	4017	2602.862	2602.859	-0.003	1.00	E(69) - E(140)
398	4304	2602.915	2602.917	0.002	1.00	E(73) - E(147)
399	4089	2602.964	2602.965	0.001	1.00	E(70) - E(142)

400	938	2603.022	2603.025	0.003	1.00	E(22) - E(71)
401	11152	2604.781	2604.776	-0.005	1.02	E(217) - E(247)
402	9471	2604.837	2604.834	-0.003	1.02	E(160) - E(218)
403	9188	2604.887	2604.884	-0.003	1.02	E(155) - E(215)
404	9584	2604.940	2604.942	0.002	1.02	E(162) - E(219)
405	5224	2604.944	2604.942	-0.002	1.02	E(86) - E(157)
406	5720	2604.997	2604.999	0.002	1.03	E(93) - E(163)
407	5436	2605.050	2605.052	0.002	1.02	E(89) - E(159)
408	1742	2605.105	2605.111	0.006	1.02	E(36) - E(91)
409	9245	2605.167	2605.166	-0.001	1.00	E(156) - E(216)
410	5365	2605.226	2605.221	-0.005	1.00	E(88) - E(158)
411	5011	2605.275	2605.273	-0.002	1.00	E(83) - E(154)
412	5508	2605.326	2605.329	0.003	1.01	E(90) - E(161)
413	1568	2605.332	2605.329	-0.003	1.00	E(33) - E(85)
414	1799	2605.385	2605.388	0.003	1.00	E(37) - E(92)
415	1626	2605.435	2605.434	-0.001	1.00	E(34) - E(87)
416	230	2605.492	2605.494	0.002	1.00	E(9) - E(35)
417	10698	2605.497	2605.494	-0.003	1.00	E(201) - E(241)
418	8055	2605.554	2605.551	-0.003	1.00	E(135) - E(202)
419	7772	2605.604	2605.600	-0.004	0.99	E(130) - E(199)
420	8168	2605.657	2605.659	0.001	1.00	E(137) - E(203)
421	3449	2605.661	2605.659	-0.002	1.00	E(61) - E(132)
422	3946	2605.715	2605.720	0.005	1.00	E(68) - E(139)
423	3661	2605.767	2605.767	0.000	1.00	E(64) - E(134)
424	821	2605.822	2605.825	0.003	1.00	E(20) - E(66)
425	7829	2605.885	2605.881	-0.004	0.98	E(131) - E(200)
426	3590	2605.943	2605.939	-0.004	0.98	E(63) - E(133)
427	3306	2605.992	2605.990	-0.002	0.98	E(59) - E(129)
428	3733	2606.043	2606.047	0.004	0.98	E(65) - E(136)
429	647	2606.049	2606.047	-0.002	0.98	E(17) - E(60)
430	878	2606.103	2606.105	0.002	0.98	E(21) - E(67)
431	705	2606.152	2606.156	0.004	0.98	E(18) - E(62)
432	46	2606.210	2606.215	0.005	0.98	E(3) - E(19)
433	11436	2607.061	2607.058	-0.002	1.02	E(251) - E(256)
434	11301	2607.118	2607.109	-0.009	1.02	E(231) - E(252)
435	11258	2607.167	2607.163	-0.004	1.02	E(226) - E(249)
436	11318	2607.221	2607.223	0.002	1.02	E(233) - E(253)
437	9985	2607.224	2607.223	-0.001	1.02	E(176) - E(228)
438	10187	2607.278	2607.281	0.003	1.03	E(183) - E(234)
439	10071	2607.330	2607.331	0.001	1.02	E(179) - E(230)
440	6466	2607.385	2607.393	0.008	1.02	E(107) - E(181)
441	11267	2607.449	2607.448	-0.001	1.00	E(227) - E(250)
442	10042	2607.506	2607.501	-0.005	1.00	E(178) - E(229)
443	9898	2607.556	2607.551	-0.005	1.00	E(173) - E(225)
444	10101	2607.607	2607.610	0.003	1.01	E(180) - E(232)
445	6292	2607.613	2607.610	-0.002	1.00	E(104) - E(175)
446	6523	2607.666	2607.668	0.002	1.00	E(108) - E(182)
447	6350	2607.716	2607.721	0.005	1.00	E(105) - E(177)
448	2163	2607.773	2607.776	0.002	1.00	E(43) - E(106)
449	8963	2607.968	2607.963	-0.005	0.99	E(151) - E(214)
450	4799	2608.025	2608.022	-0.003	1.00	E(80) - E(152)
451	4446	2608.075	2608.073	-0.002	0.99	E(75) - E(149)
452	4940	2608.128	2608.130	0.002	1.00	E(82) - E(153)
453	1112	2608.131	2608.130	-0.001	1.00	E(25) - E(77)
454	1511	2608.185	2608.191	0.006	1.00	E(32) - E(84)
455	1282	2608.237	2608.241	0.004	1.00	E(28) - E(79)
456	169	2608.293	2608.299	0.006	1.00	E(7) - E(30)
457	4517	2608.355	2608.351	-0.004	0.98	E(76) - E(150)
458	1225	2608.413	2608.408	-0.005	0.98	E(27) - E(78)
459	997	2608.462	2608.459	-0.003	0.98	E(23) - E(74)

460	1340	2608.513	2608.517	0.004	0.98	E(29) - E(81)
461	79	2608.520	2608.517	-0.003	0.98	E(4) - E(24)
462	198	2608.572	2608.574	0.002	0.98	E(8) - E(31)
463	109	2608.623	2608.627	0.004	0.98	E(5) - E(26)
464	5	2608.680	2608.685	0.005	0.98	E(1) - E(6)
465	11359	2609.531	2609.528	-0.003	1.02	E(238) - E(254)
466	10528	2609.588	2609.587	-0.001	1.02	E(195) - E(239)
467	10385	2609.639	2609.634	-0.005	1.02	E(190) - E(236)
468	10585	2609.691	2609.693	0.002	1.02	E(197) - E(240)
469	7261	2609.694	2609.693	-0.001	1.02	E(121) - E(192)
470	7659	2609.749	2609.754	0.005	1.03	E(128) - E(198)
471	7431	2609.801	2609.801	0.000	1.02	E(124) - E(194)
472	3163	2609.856	2609.860	0.004	1.02	E(57) - E(126)
473	10414	2609.919	2609.914	-0.005	1.00	E(191) - E(237)
474	7374	2609.977	2609.972	-0.005	1.00	E(123) - E(193)
475	7090	2610.026	2610.025	-0.001	1.00	E(118) - E(189)
476	7489	2610.077	2610.080	0.003	1.01	E(125) - E(196)
477	2947	2610.083	2610.080	-0.003	1.00	E(54) - E(120)
478	3234	2610.136	2610.140	0.004	1.00	E(58) - E(127)
479	3019	2610.186	2610.189	0.003	1.00	E(55) - E(122)
480	587	2610.243	2610.246	0.003	1.00	E(16) - E(56)
481	11225	2610.247	2610.246	-0.000	0.99	E(222) - E(248)
482	9840	2610.305	2610.300	-0.005	1.00	E(171) - E(223)
483	9669	2610.352	2610.350	-0.001	0.99	E(165) - E(220)
484	9869	2610.409	2610.410	0.001	1.00	E(172) - E(224)
485	5836	2610.412	2610.410	-0.002	1.00	E(96) - E(167)
486	6235	2610.466	2610.473	0.007	1.00	E(103) - E(174)
487	6006	2610.518	2610.521	0.003	1.00	E(99) - E(169)
488	2018	2610.573	2610.578	0.005	1.00	E(41) - E(101)
489	9698	2610.636	2610.633	-0.003	0.98	E(166) - E(221)
490	5949	2610.694	2610.689	-0.005	0.98	E(98) - E(168)
491	5721	2610.740	2610.738	-0.002	0.98	E(94) - E(164)
492	6063	2610.794	2610.799	0.005	0.98	E(100) - E(170)
493	1802	2610.803	2610.799	-0.004	0.98	E(38) - E(95)
494	2089	2610.853	2610.857	0.004	0.98	E(42) - E(102)
495	1874	2610.903	2610.908	0.005	0.98	E(39) - E(97)
496	235	2610.964	2610.964	-0.000	0.98	E(10) - E(40)
497	10272	2612.719	2612.714	-0.005	0.99	E(186) - E(235)
498	6976	2612.776	2612.771	-0.005	1.00	E(116) - E(187)
499	6637	2612.826	2612.822	-0.004	0.99	E(110) - E(184)
500	7033	2612.879	2612.881	0.002	1.00	E(117) - E(188)
501	2379	2612.882	2612.881	-0.001	1.00	E(46) - E(112)
502	2876	2612.936	2612.938	0.002	1.00	E(53) - E(119)
503	2591	2612.988	2612.991	0.003	0.99	E(49) - E(114)
504	470	2613.043	2613.052	0.009	1.00	E(14) - E(51)
505	6694	2613.106	2613.105	-0.001	0.98	E(111) - E(185)
506	2520	2613.165	2613.159	-0.006	0.98	E(48) - E(113)
507	2236	2613.214	2613.209	-0.005	0.98	E(44) - E(109)
508	2662	2613.265	2613.267	0.002	0.98	E(50) - E(115)
509	296	2613.271	2613.267	-0.004	0.98	E(11) - E(45)
510	527	2613.324	2613.326	0.002	0.98	E(15) - E(52)
511	354	2613.374	2613.376	0.002	0.98	E(12) - E(47)
512	12	2613.432	2613.436	0.004	0.98	E(2) - E(13)
513	11416	2668.635	2668.635	0.000	1.07	E(245) - E(255)
514	10953	2668.692	2668.692	-0.000	1.07	E(210) - E(244)
515	11180	2668.767	2668.764	-0.003	1.07	E(218) - E(247)
516	9470	2668.823	2668.822	-0.001	1.07	E(160) - E(217)
517	11039	2669.453	2669.451	-0.002	1.11	E(213) - E(246)
518	8793	2669.510	2669.510	0.000	1.10	E(148) - E(212)
519	9640	2669.584	2669.584	0.000	1.11	E(163) - E(219)

520	10726	2669.594	2669.584	-0.010	1.06	E(202) - E(241)
521	5719	2669.641	2669.645	0.004	1.10	E(93) - E(162)
522	8054	2669.651	2669.645	-0.006	1.06	E(135) - E(201)
523	10867	2669.714	2669.717	0.003	1.06	E(207) - E(242)
524	9019	2669.725	2669.717	-0.008	1.06	E(152) - E(214)
525	8394	2669.770	2669.776	0.006	1.05	E(141) - E(205)
526	4798	2669.782	2669.776	-0.006	1.06	E(80) - E(151)
527	9300	2669.845	2669.846	0.001	1.06	E(157) - E(215)
528	11437	2669.848	2669.846	-0.002	1.07	E(252) - E(256)
529	5222	2669.902	2669.904	0.002	1.05	E(86) - E(155)
530	11300	2669.905	2669.904	-0.001	1.07	E(231) - E(251)
531	11367	2669.979	2669.976	-0.002	1.07	E(239) - E(254)
532	10527	2670.036	2670.036	0.000	1.07	E(195) - E(238)
533	8280	2670.411	2670.411	-0.000	1.10	E(139) - E(203)
534	3944	2670.468	2670.470	0.002	1.10	E(68) - E(137)
535	5080	2670.542	2670.552	0.010	1.10	E(84) - E(153)
536	8678	2670.567	2670.552	-0.015	1.08	E(146) - E(209)
537	1509	2670.600	2670.608	0.008	1.10	E(32) - E(82)
538	4231	2670.623	2670.608	-0.015	1.08	E(72) - E(144)
539	11326	2670.665	2670.676	0.011	1.11	E(234) - E(253)
540	7884	2670.673	2670.676	0.003	1.05	E(132) - E(199)
541	5576	2670.698	2670.700	0.001	1.08	E(91) - E(159)
542	10186	2670.722	2670.731	0.009	1.10	E(183) - E(233)
543	3447	2670.729	2670.731	0.002	1.05	E(61) - E(130)
544	1740	2670.754	2670.751	-0.003	1.08	E(36) - E(89)
545	10613	2670.796	2670.800	0.004	1.11	E(198) - E(240)
546	11233	2670.804	2670.800	-0.004	1.06	E(223) - E(248)
547	4586	2670.804	2670.800	-0.004	1.05	E(77) - E(149)
548	7658	2670.854	2670.858	0.004	1.10	E(128) - E(197)
549	1110	2670.860	2670.858	-0.002	1.05	E(25) - E(75)
550	9839	2670.863	2670.858	-0.005	1.06	E(171) - E(222)
551	11274	2670.924	2670.929	0.005	1.06	E(228) - E(249)
552	10300	2670.937	2670.929	-0.008	1.06	E(187) - E(235)
553	9983	2670.980	2670.988	0.008	1.05	E(176) - E(226)
554	6975	2670.994	2670.988	-0.006	1.06	E(116) - E(186)
555	10441	2671.056	2671.054	-0.002	1.06	E(192) - E(236)
556	7259	2671.111	2671.113	0.002	1.05	E(121) - E(190)
557	3801	2671.526	2671.523	-0.003	1.08	E(66) - E(134)
558	819	2671.582	2671.592	0.010	1.07	E(20) - E(64)
559	9925	2671.624	2671.630	0.006	1.10	E(174) - E(224)
560	1394	2671.657	2671.659	0.002	1.08	E(30) - E(79)
561	6233	2671.681	2671.685	0.004	1.10	E(103) - E(172)
562	167	2671.713	2671.706	-0.007	1.07	E(7) - E(28)
563	7145	2671.755	2671.763	0.008	1.10	E(119) - E(188)
564	10127	2671.775	2671.763	-0.012	1.08	E(181) - E(230)
565	2874	2671.812	2671.819	0.007	1.10	E(53) - E(117)
566	6464	2671.831	2671.819	-0.012	1.08	E(107) - E(179)
567	9725	2671.878	2671.895	0.017	1.05	E(167) - E(220)
568	7543	2671.907	2671.895	-0.012	1.08	E(126) - E(194)
569	5834	2671.939	2671.955	0.016	1.05	E(96) - E(165)
570	3161	2671.962	2671.955	-0.007	1.08	E(57) - E(124)
571	6749	2672.014	2672.012	-0.002	1.05	E(112) - E(184)
572	2377	2672.070	2672.072	0.002	1.05	E(46) - E(110)
573	6118	2672.734	2672.732	-0.002	1.08	E(101) - E(169)
574	2016	2672.790	2672.792	0.002	1.07	E(41) - E(99)
575	2731	2672.866	2672.865	-0.001	1.08	E(51) - E(114)
576	468	2672.921	2672.924	0.003	1.07	E(14) - E(49)
577	10896	2676.789	2676.791	0.002	0.92	E(208) - E(243)
578	8507	2676.847	2676.851	0.004	0.92	E(143) - E(206)
579	9357	2676.920	2676.922	0.002	0.92	E(158) - E(216)

580	5363	2676.979	2676.979	0.000	0.92	E(88) - E(156)
581	8736	2677.571	2677.572	0.001	0.95	E(147) - E(211)
582	4302	2677.630	2677.629	-0.001	0.95	E(73) - E(145)
583	5648	2677.702	2677.702	0.000	0.95	E(92) - E(161)
584	7941	2677.747	2677.752	0.005	0.91	E(133) - E(200)
585	1797	2677.761	2677.752	-0.009	0.95	E(37) - E(90)
586	3588	2677.805	2677.808	0.003	0.91	E(63) - E(131)
587	8337	2677.867	2677.873	0.006	0.91	E(140) - E(204)
588	4657	2677.878	2677.873	-0.005	0.91	E(78) - E(150)
589	4015	2677.925	2677.931	0.006	0.91	E(69) - E(138)
590	1223	2677.936	2677.931	-0.005	0.91	E(27) - E(76)
591	5151	2677.999	2678.001	0.002	0.91	E(85) - E(154)
592	11283	2678.003	2678.001	-0.002	0.92	E(229) - E(250)
593	1566	2678.056	2678.058	0.002	0.91	E(33) - E(83)
594	10040	2678.061	2678.058	-0.003	0.92	E(178) - E(227)
595	10470	2678.135	2678.136	0.001	0.92	E(193) - E(237)
596	7372	2678.193	2678.193	0.000	0.92	E(123) - E(191)
597	3873	2678.528	2678.527	-0.001	0.95	E(67) - E(136)
598	876	2678.587	2678.586	-0.001	0.95	E(21) - E(65)
599	1452	2678.660	2678.660	0.000	0.95	E(31) - E(81)
600	4159	2678.685	2678.679	-0.006	0.93	E(71) - E(142)
601	196	2678.719	2678.719	0.000	0.95	E(8) - E(29)
602	937	2678.742	2678.740	-0.002	0.93	E(22) - E(70)
603	10157	2678.787	2678.790	0.003	0.95	E(182) - E(232)
604	1682	2678.816	2678.830	0.014	0.93	E(35) - E(87)
605	3376	2678.826	2678.830	0.004	0.90	E(60) - E(129)
606	6521	2678.846	2678.840	-0.006	0.95	E(108) - E(180)
607	229	2678.873	2678.875	0.002	0.93	E(9) - E(34)
608	646	2678.883	2678.875	-0.008	0.90	E(17) - E(59)
609	7601	2678.918	2678.920	0.002	0.95	E(127) - E(196)
610	1053	2678.957	2678.964	0.007	0.90	E(24) - E(74)
611	9754	2678.961	2678.964	0.003	0.91	E(168) - E(221)
612	3232	2678.977	2678.964	-0.013	0.95	E(58) - E(125)
613	78	2679.015	2679.016	0.001	0.90	E(4) - E(23)
614	5947	2679.019	2679.016	-0.003	0.91	E(98) - E(166)
615	9954	2679.080	2679.086	0.006	0.91	E(175) - E(225)
616	6806	2679.093	2679.086	-0.007	0.91	E(113) - E(185)
617	6290	2679.137	2679.143	0.006	0.91	E(104) - E(173)
618	2518	2679.151	2679.143	-0.008	0.91	E(48) - E(111)
619	7202	2679.211	2679.209	-0.002	0.91	E(120) - E(189)
620	2945	2679.268	2679.266	-0.002	0.91	E(54) - E(118)
621	761	2679.644	2679.642	-0.001	0.93	E(19) - E(62)
622	45	2679.701	2679.700	-0.001	0.93	E(3) - E(18)
623	6175	2679.745	2679.756	0.011	0.95	E(102) - E(170)
624	137	2679.774	2679.786	0.011	0.93	E(6) - E(26)
625	2087	2679.803	2679.799	-0.004	0.95	E(42) - E(100)
626	4	2679.831	2679.835	0.004	0.93	E(1) - E(5)
627	2802	2679.876	2679.886	0.010	0.95	E(52) - E(115)
628	6406	2679.897	2679.886	-0.011	0.93	E(106) - E(177)
629	525	2679.935	2679.934	-0.001	0.95	E(15) - E(50)
630	2162	2679.955	2679.954	-0.000	0.93	E(43) - E(105)
631	3089	2680.028	2680.033	0.005	0.93	E(56) - E(122)
632	5777	2680.035	2680.033	-0.002	0.90	E(95) - E(164)
633	586	2680.085	2680.089	0.004	0.93	E(16) - E(55)
634	1801	2680.098	2680.089	-0.009	0.90	E(38) - E(94)
635	2306	2680.169	2680.170	0.000	0.90	E(45) - E(109)
636	295	2680.227	2680.230	0.003	0.90	E(11) - E(44)
637	1944	2680.855	2680.855	-0.000	0.93	E(40) - E(97)
638	234	2680.917	2680.912	-0.004	0.93	E(10) - E(39)
639	410	2680.987	2680.985	-0.002	0.93	E(13) - E(47)

640	11	2681.045	2681.045	0.000	0.93	E(2) - E(12)
641	10754	2721.329	2721.333	0.004	1.07	E(203) - E(241)
642	11424	2721.476	2721.486	0.010	1.07	E(246) - E(255)
643	8166	2721.489	2721.486	-0.003	1.07	E(137) - E(201)
644	11241	2721.624	2721.633	0.010	1.07	E(224) - E(248)
645	11009	2721.637	2721.633	-0.004	1.06	E(212) - E(244)
646	11438	2721.773	2721.777	0.004	1.07	E(253) - E(256)
647	9867	2721.786	2721.777	-0.009	1.07	E(172) - E(222)
648	11316	2721.934	2721.933	-0.000	1.06	E(233) - E(251)
649	9075	2722.146	2722.148	0.001	1.07	E(153) - E(214)
650	8279	2722.147	2722.148	0.001	1.03	E(139) - E(202)
651	11208	2722.294	2722.301	0.007	1.07	E(219) - E(247)
652	11038	2722.294	2722.301	0.007	1.03	E(213) - E(245)
653	4938	2722.307	2722.301	-0.006	1.06	E(82) - E(151)
654	3942	2722.307	2722.301	-0.006	1.03	E(68) - E(135)
655	10328	2722.443	2722.448	0.005	1.07	E(188) - E(235)
656	9924	2722.443	2722.448	0.005	1.03	E(174) - E(223)
657	9582	2722.453	2722.448	-0.005	1.06	E(162) - E(217)
658	8791	2722.455	2722.448	-0.007	1.03	E(148) - E(210)
659	11375	2722.590	2722.599	0.009	1.07	E(240) - E(254)
660	11325	2722.591	2722.599	0.008	1.03	E(234) - E(252)
661	7031	2722.603	2722.599	-0.004	1.07	E(117) - E(186)
662	6232	2722.604	2722.599	-0.004	1.03	E(103) - E(171)
663	8109	2722.607	2722.599	-0.008	1.05	E(136) - E(200)
664	10583	2722.750	2722.754	0.003	1.06	E(197) - E(238)
665	10184	2722.751	2722.754	0.003	1.03	E(183) - E(231)
666	10980	2722.753	2722.754	0.000	1.05	E(211) - E(243)
667	3728	2722.765	2722.754	-0.011	1.05	E(65) - E(131)
668	9810	2722.899	2722.906	0.007	1.05	E(170) - E(221)
669	8619	2722.912	2722.906	-0.006	1.05	E(145) - E(206)
670	5079	2722.964	2722.968	0.004	1.03	E(84) - E(152)
671	11307	2723.046	2723.049	0.003	1.05	E(232) - E(250)
672	6059	2723.057	2723.049	-0.008	1.05	E(100) - E(166)
673	9639	2723.111	2723.119	0.008	1.03	E(163) - E(218)
674	1507	2723.124	2723.119	-0.005	1.03	E(32) - E(80)
675	10096	2723.204	2723.202	-0.002	1.05	E(180) - E(227)
676	7144	2723.260	2723.266	0.006	1.03	E(119) - E(187)
677	5717	2723.271	2723.266	-0.005	1.03	E(93) - E(160)
678	3870	2723.388	2723.391	0.003	1.02	E(67) - E(133)
679	10612	2723.408	2723.411	0.003	1.03	E(198) - E(239)
680	2873	2723.420	2723.411	-0.010	1.03	E(53) - E(116)
681	4867	2723.424	2723.411	-0.013	1.05	E(81) - E(150)
682	8733	2723.535	2723.540	0.005	1.02	E(147) - E(208)
683	874	2723.547	2723.548	0.001	1.01	E(21) - E(63)
684	7656	2723.568	2723.564	-0.004	1.03	E(128) - E(195)
685	9525	2723.571	2723.564	-0.007	1.05	E(161) - E(216)
686	1335	2723.582	2723.584	0.002	1.05	E(29) - E(76)
687	6173	2723.682	2723.685	0.003	1.02	E(102) - E(168)
688	4300	2723.694	2723.707	0.013	1.01	E(73) - E(143)
689	6918	2723.716	2723.707	-0.009	1.05	E(115) - E(185)
690	5503	2723.729	2723.725	-0.004	1.05	E(90) - E(156)
691	10154	2723.830	2723.832	0.002	1.02	E(182) - E(229)
692	2085	2723.842	2723.852	0.010	1.01	E(42) - E(98)
693	10554	2723.863	2723.852	-0.011	1.05	E(196) - E(237)
694	2658	2723.875	2723.872	-0.002	1.05	E(50) - E(111)
695	6519	2723.989	2723.988	-0.001	1.01	E(108) - E(178)
696	7484	2724.021	2724.015	-0.007	1.05	E(125) - E(191)
697	1449	2724.205	2724.208	0.003	1.02	E(31) - E(78)
698	5645	2724.352	2724.360	0.008	1.02	E(92) - E(158)
699	194	2724.364	2724.360	-0.004	1.01	E(8) - E(27)

700	2800	2724.500	2724.504	0.004	1.02	E(52) - E(113)
701	1795	2724.511	2724.504	-0.007	1.01	E(37) - E(88)
702	7598	2724.646	2724.649	0.002	1.02	E(127) - E(193)
703	523	2724.659	2724.649	-0.010	1.01	E(15) - E(48)
704	3230	2724.806	2724.804	-0.002	1.01	E(58) - E(123)
705	7996	2729.185	2729.187	0.002	0.98	E(134) - E(199)
706	10923	2729.333	2729.343	0.010	0.98	E(209) - E(242)
707	3657	2729.347	2729.343	-0.004	0.98	E(64) - E(130)
708	9781	2729.481	2729.493	0.011	0.98	E(169) - E(220)
709	8562	2729.495	2729.493	-0.002	0.98	E(144) - E(205)
710	11290	2729.634	2729.638	0.004	0.98	E(230) - E(249)
711	6002	2729.647	2729.638	-0.010	0.98	E(99) - E(165)
712	10067	2729.796	2729.794	-0.002	0.98	E(179) - E(226)
713	4726	2730.002	2730.009	0.007	0.98	E(79) - E(149)
714	3799	2730.039	2730.029	-0.010	0.95	E(66) - E(132)
715	9412	2730.150	2730.155	0.005	0.98	E(159) - E(215)
716	1278	2730.164	2730.165	0.001	0.98	E(28) - E(75)
717	8676	2730.187	2730.178	-0.009	0.95	E(146) - E(207)
718	816	2730.200	2730.193	-0.007	0.95	E(20) - E(61)
719	6861	2730.303	2730.305	0.002	0.98	E(114) - E(184)
720	5432	2730.313	2730.322	0.009	0.98	E(89) - E(155)
721	6116	2730.337	2730.335	-0.002	0.95	E(101) - E(167)
722	4228	2730.348	2730.340	-0.008	0.95	E(72) - E(141)
723	10497	2730.451	2730.450	-0.001	0.98	E(194) - E(236)
724	3516	2730.462	2730.467	0.005	0.97	E(62) - E(129)
725	2587	2730.465	2730.467	0.002	0.98	E(49) - E(110)
726	10125	2730.485	2730.490	0.005	0.95	E(181) - E(228)
727	2013	2730.498	2730.490	-0.008	0.95	E(41) - E(96)
728	8449	2730.610	2730.619	0.009	0.97	E(142) - E(204)
729	7427	2730.613	2730.619	0.006	0.98	E(124) - E(190)
730	702	2730.623	2730.619	-0.004	0.97	E(18) - E(59)
731	6461	2730.646	2730.650	0.004	0.95	E(107) - E(176)
732	5889	2730.756	2730.766	0.010	0.97	E(97) - E(164)
733	4085	2730.771	2730.766	-0.004	0.96	E(70) - E(138)
734	1392	2730.855	2730.854	-0.001	0.95	E(30) - E(77)
735	10010	2730.907	2730.913	0.006	0.97	E(177) - E(225)
736	1871	2730.919	2730.913	-0.006	0.97	E(39) - E(94)
737	5574	2731.004	2731.009	0.005	0.95	E(91) - E(157)
738	164	2731.018	2731.009	-0.009	0.95	E(7) - E(25)
739	6346	2731.067	2731.059	-0.008	0.96	E(105) - E(173)
740	2729	2731.155	2731.160	0.005	0.95	E(51) - E(112)
741	1737	2731.165	2731.160	-0.005	0.95	E(36) - E(86)
742	1165	2731.280	2731.292	0.012	0.97	E(26) - E(74)
743	759	2731.280	2731.292	0.012	0.94	E(19) - E(60)
744	7541	2731.302	2731.292	-0.010	0.95	E(126) - E(192)
745	465	2731.316	2731.310	-0.006	0.95	E(14) - E(46)
746	5291	2731.427	2731.440	0.012	0.97	E(87) - E(154)
747	4157	2731.427	2731.440	0.012	0.94	E(71) - E(140)
748	106	2731.440	2731.440	-0.000	0.97	E(5) - E(23)
749	44	2731.441	2731.440	-0.001	0.94	E(3) - E(17)
750	3158	2731.464	2731.460	-0.004	0.95	E(57) - E(121)
751	1942	2731.577	2731.582	0.005	0.94	E(40) - E(95)
752	2446	2731.577	2731.582	0.005	0.97	E(47) - E(109)
753	936	2731.588	2731.582	-0.006	0.94	E(22) - E(69)
754	1622	2731.588	2731.582	-0.006	0.96	E(34) - E(83)
755	6404	2731.724	2731.729	0.005	0.94	E(106) - E(175)
756	7314	2731.724	2731.729	0.005	0.97	E(122) - E(189)
757	351	2731.737	2731.729	-0.008	0.97	E(12) - E(44)
758	233	2731.738	2731.729	-0.009	0.94	E(10) - E(38)
759	3015	2731.884	2731.884	-0.000	0.96	E(55) - E(118)

760	2161	2731.885	2731.884	-0.001	0.94	E(43) - E(104)
761	135	2732.097	2732.101	0.004	0.94	E(6) - E(24)
762	1680	2732.245	2732.252	0.007	0.94	E(35) - E(85)
763	3	2732.257	2732.252	-0.005	0.94	E(1) - E(4)
764	408	2732.394	2732.400	0.006	0.94	E(13) - E(45)
765	228	2732.405	2732.400	-0.005	0.94	E(9) - E(33)
766	3087	2732.542	2732.546	0.004	0.94	E(56) - E(120)
767	10	2732.555	2732.546	-0.009	0.94	E(2) - E(11)
768	585	2732.702	2732.699	-0.003	0.94	E(16) - E(54)
769	11432	3281.218	3281.217	-0.000	1.00	E(247) - E(255)
770	9121	3281.218	3281.217	-0.001	1.00	E(154) - E(204)
771	11120	3281.218	3281.217	-0.001	1.00	E(216) - E(243)
772	11091	3281.218	3281.217	-0.001	1.00	E(215) - E(242)
773	9349	3281.349	3281.350	0.001	1.00	E(158) - E(208)
774	9292	3281.349	3281.350	0.001	1.00	E(157) - E(207)
775	5137	3281.349	3281.350	0.001	1.00	E(85) - E(140)
776	11178	3281.349	3281.350	0.001	1.00	E(218) - E(245)
777	5279	3282.035	3282.036	0.001	1.00	E(87) - E(142)
778	9406	3282.035	3282.036	0.001	1.00	E(159) - E(209)
779	9520	3282.035	3282.036	0.001	1.00	E(161) - E(211)
780	11207	3282.035	3282.036	0.000	1.00	E(219) - E(246)
781	9634	3282.167	3282.167	0.000	1.00	E(163) - E(213)
782	5563	3282.167	3282.167	0.000	1.00	E(91) - E(146)
783	1666	3282.167	3282.167	0.000	1.00	E(35) - E(71)
784	5634	3282.167	3282.167	0.000	1.00	E(92) - E(147)
785	8836	3283.250	3283.250	0.000	1.00	E(149) - E(199)
786	11062	3283.250	3283.250	0.000	1.00	E(214) - E(241)
787	8893	3283.250	3283.250	0.000	1.00	E(150) - E(200)
788	4356	3283.250	3283.250	0.000	1.00	E(74) - E(129)
789	4640	3283.381	3283.381	-0.000	1.00	E(78) - E(133)
790	4569	3283.381	3283.381	-0.000	1.00	E(77) - E(132)
791	1039	3283.381	3283.381	-0.000	1.00	E(24) - E(60)
792	9007	3283.381	3283.381	-0.000	1.00	E(152) - E(202)
793	9235	3283.688	3283.688	-0.000	1.00	E(156) - E(206)
794	4995	3283.688	3283.688	-0.000	1.00	E(83) - E(138)
795	9178	3283.688	3283.688	-0.000	1.00	E(155) - E(205)
796	11149	3283.689	3283.688	-0.001	1.00	E(217) - E(244)
797	5208	3283.820	3283.821	0.001	1.00	E(86) - E(141)
798	9463	3283.820	3283.821	0.001	1.00	E(160) - E(210)
799	1552	3283.820	3283.821	0.001	1.00	E(33) - E(69)
800	5350	3283.820	3283.821	0.001	1.00	E(88) - E(143)
801	4853	3284.067	3284.067	-0.000	1.00	E(81) - E(136)
802	4711	3284.067	3284.067	-0.000	1.00	E(79) - E(134)
803	9064	3284.067	3284.067	-0.000	1.00	E(153) - E(203)
804	1153	3284.067	3284.067	-0.000	1.00	E(26) - E(62)
805	1381	3284.198	3284.197	-0.001	1.00	E(30) - E(66)
806	130	3284.198	3284.197	-0.001	1.00	E(6) - E(19)
807	5066	3284.198	3284.197	-0.001	1.00	E(84) - E(139)
808	1438	3284.199	3284.197	-0.002	1.00	E(31) - E(67)
809	5492	3284.506	3284.505	-0.001	1.00	E(90) - E(145)
810	9577	3284.506	3284.505	-0.001	1.00	E(162) - E(212)
811	5421	3284.506	3284.505	-0.001	1.00	E(89) - E(144)
812	1609	3284.506	3284.505	-0.001	1.00	E(34) - E(70)
813	5705	3284.637	3284.634	-0.003	1.00	E(93) - E(148)
814	1780	3284.637	3284.634	-0.003	1.00	E(37) - E(73)
815	217	3284.637	3284.634	-0.003	1.00	E(9) - E(22)
816	1723	3284.637	3284.634	-0.003	1.00	E(36) - E(72)
817	982	3285.720	3285.719	-0.001	1.00	E(23) - E(59)
818	8950	3285.720	3285.719	-0.001	1.00	E(151) - E(201)
819	4498	3285.721	3285.719	-0.002	1.00	E(76) - E(131)

820	4427	3285.721	3285.719	-0.002	1.00	E(75) - E(130)
821	1210	3285.852	3285.852	0.000	1.00	E(27) - E(63)
822	1096	3285.852	3285.852	0.000	1.00	E(25) - E(61)
823	4782	3285.852	3285.852	0.000	1.00	E(80) - E(135)
824	72	3285.852	3285.852	0.000	1.00	E(4) - E(17)
825	1324	3286.537	3286.538	0.001	1.00	E(29) - E(65)
826	4924	3286.538	3286.538	0.000	1.00	E(82) - E(137)
827	1267	3286.538	3286.538	0.000	1.00	E(28) - E(64)
828	101	3286.538	3286.538	0.000	1.00	E(5) - E(18)
829	2	3286.668	3286.672	0.004	1.00	E(1) - E(3)
830	188	3286.668	3286.672	0.004	1.00	E(8) - E(21)
831	1495	3286.669	3286.672	0.003	1.00	E(32) - E(68)
832	159	3286.669	3286.672	0.003	1.00	E(7) - E(20)
833	11338	3379.430	3379.429	-0.001	1.00	E(236) - E(249)
834	11347	3379.430	3379.429	-0.001	1.00	E(237) - E(250)
835	10346	3379.430	3379.429	-0.001	1.00	E(189) - E(225)
836	11439	3379.431	3379.429	-0.002	1.00	E(254) - E(256)
837	7188	3379.561	3379.560	-0.001	1.00	E(120) - E(175)
838	10433	3379.562	3379.560	-0.001	1.00	E(192) - E(228)
839	11365	3379.562	3379.560	-0.001	1.00	E(239) - E(252)
840	10462	3379.562	3379.560	-0.001	1.00	E(193) - E(229)
841	10491	3380.247	3380.250	0.003	1.00	E(194) - E(230)
842	7302	3380.247	3380.250	0.003	1.00	E(122) - E(177)
843	11374	3380.247	3380.250	0.003	1.00	E(240) - E(253)
844	10549	3380.248	3380.250	0.002	1.00	E(196) - E(232)
845	7587	3380.378	3380.379	0.000	1.00	E(127) - E(182)
846	10607	3380.378	3380.379	0.000	1.00	E(198) - E(234)
847	7530	3380.379	3380.379	0.000	1.00	E(126) - E(181)
848	3073	3380.379	3380.379	0.000	1.00	E(56) - E(106)
849	10201	3381.458	3381.460	0.002	1.00	E(184) - E(220)
850	6561	3381.459	3381.460	0.001	1.00	E(109) - E(164)
851	11329	3381.460	3381.460	-0.000	1.00	E(235) - E(248)
852	10230	3381.462	3381.460	-0.002	1.00	E(185) - E(221)
853	6789	3381.593	3381.593	-0.000	1.00	E(113) - E(168)
854	10288	3381.593	3381.593	-0.000	1.00	E(187) - E(223)
855	2292	3381.594	3381.593	-0.000	1.00	E(45) - E(95)
856	6732	3381.594	3381.593	-0.001	1.00	E(112) - E(167)
857	10404	3381.900	3381.901	0.000	1.00	E(191) - E(227)
858	7074	3381.901	3381.901	0.000	1.00	E(118) - E(173)
859	11356	3381.901	3381.901	0.000	1.00	E(238) - E(251)
860	10375	3381.901	3381.901	0.000	1.00	E(190) - E(226)
861	7245	3382.032	3382.031	-0.001	1.00	E(121) - E(176)
862	10520	3382.032	3382.031	-0.001	1.00	E(195) - E(231)
863	2931	3382.032	3382.031	-0.001	1.00	E(54) - E(104)
864	7359	3382.032	3382.031	-0.001	1.00	E(123) - E(178)
865	6903	3382.279	3382.279	-0.000	1.00	E(115) - E(170)
866	2434	3382.279	3382.279	-0.000	1.00	E(47) - E(97)
867	6846	3382.280	3382.279	-0.000	1.00	E(114) - E(169)
868	10317	3382.280	3382.279	-0.001	1.00	E(188) - E(224)
869	2718	3382.411	3382.412	0.001	1.00	E(51) - E(101)
870	2789	3382.411	3382.412	0.001	1.00	E(52) - E(102)
871	403	3382.411	3382.412	0.001	1.00	E(13) - E(40)
872	7131	3382.411	3382.412	0.001	1.00	E(119) - E(174)
873	3002	3382.718	3382.719	0.001	1.00	E(55) - E(105)
874	7473	3382.718	3382.719	0.001	1.00	E(125) - E(180)
875	10578	3382.718	3382.719	0.001	1.00	E(197) - E(233)
876	7416	3382.718	3382.719	0.001	1.00	E(124) - E(179)
877	574	3382.849	3382.847	-0.002	1.00	E(16) - E(43)
878	3215	3382.849	3382.847	-0.002	1.00	E(58) - E(108)
879	3144	3382.849	3382.847	-0.002	1.00	E(57) - E(107)

880	7644	3382.849	3382.847	-0.002	1.00	E(128) - E(183)
881	6675	3383.932	3383.930	-0.002	1.00	E(111) - E(166)
882	2221	3383.932	3383.930	-0.002	1.00	E(44) - E(94)
883	6618	3383.932	3383.930	-0.002	1.00	E(110) - E(165)
884	10259	3383.933	3383.930	-0.003	1.00	E(186) - E(222)
885	289	3384.061	3384.063	0.002	1.00	E(11) - E(38)
886	2363	3384.064	3384.063	-0.001	1.00	E(46) - E(96)
887	2505	3384.064	3384.063	-0.001	1.00	E(48) - E(98)
888	6960	3384.064	3384.063	-0.001	1.00	E(116) - E(171)
889	2647	3384.750	3384.751	0.001	1.00	E(50) - E(100)
890	346	3384.750	3384.751	0.001	1.00	E(12) - E(39)
891	7017	3384.750	3384.751	0.001	1.00	E(117) - E(172)
892	2576	3384.750	3384.751	0.001	1.00	E(49) - E(99)
893	9	3384.878	3384.883	0.005	1.00	E(2) - E(10)
894	2860	3384.881	3384.883	0.002	1.00	E(53) - E(103)
895	517	3384.881	3384.883	0.002	1.00	E(15) - E(42)
896	460	3384.881	3384.883	0.002	1.00	E(14) - E(41)

***** NORMAL TERMINATION OF LAOCOON PROGRAM *****