

# **Supplementary Material**

for

Aziridination Reactivity of a Manganese(II) Complex with a Bulky Chelating Bis(Alkoxide)  
Ligand

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## 1. Characterization of $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$ (2) and its stoichiometric reactivity

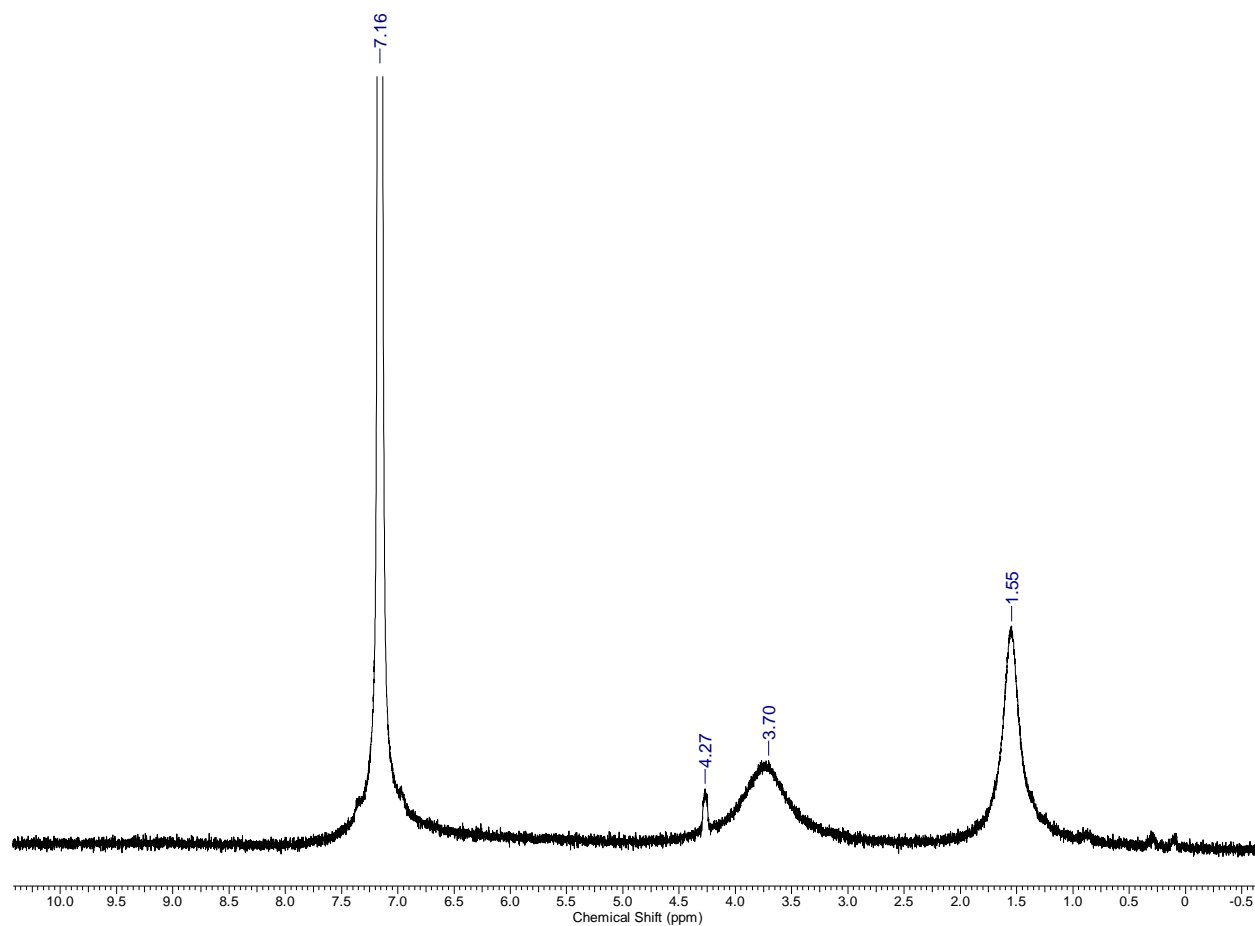
**Evans method formula and procedure.** Evans method was carried out using a standard NMR tube and a Wilmad coaxial insert (purchased from Aldrich). Carefully weighted (83 and 112 mg) sample of the Mn complex was dissolved in 1 ml of  $\text{C}_6\text{D}_6$  to prepare known concentrations of solutions which was further used for calculations. The insert with the solution was then placed inside an NMR tube containing  $\text{C}_6\text{D}_6$ . The resulting NMR spectra were used to measure molar susceptibility  $\chi_m$ . It was calculated using the equation (1).

$$\chi_m = \left[ \frac{3\Delta\nu}{4\pi m\nu_0} + \chi_0 \right] M \quad (\text{Eq. 1})$$

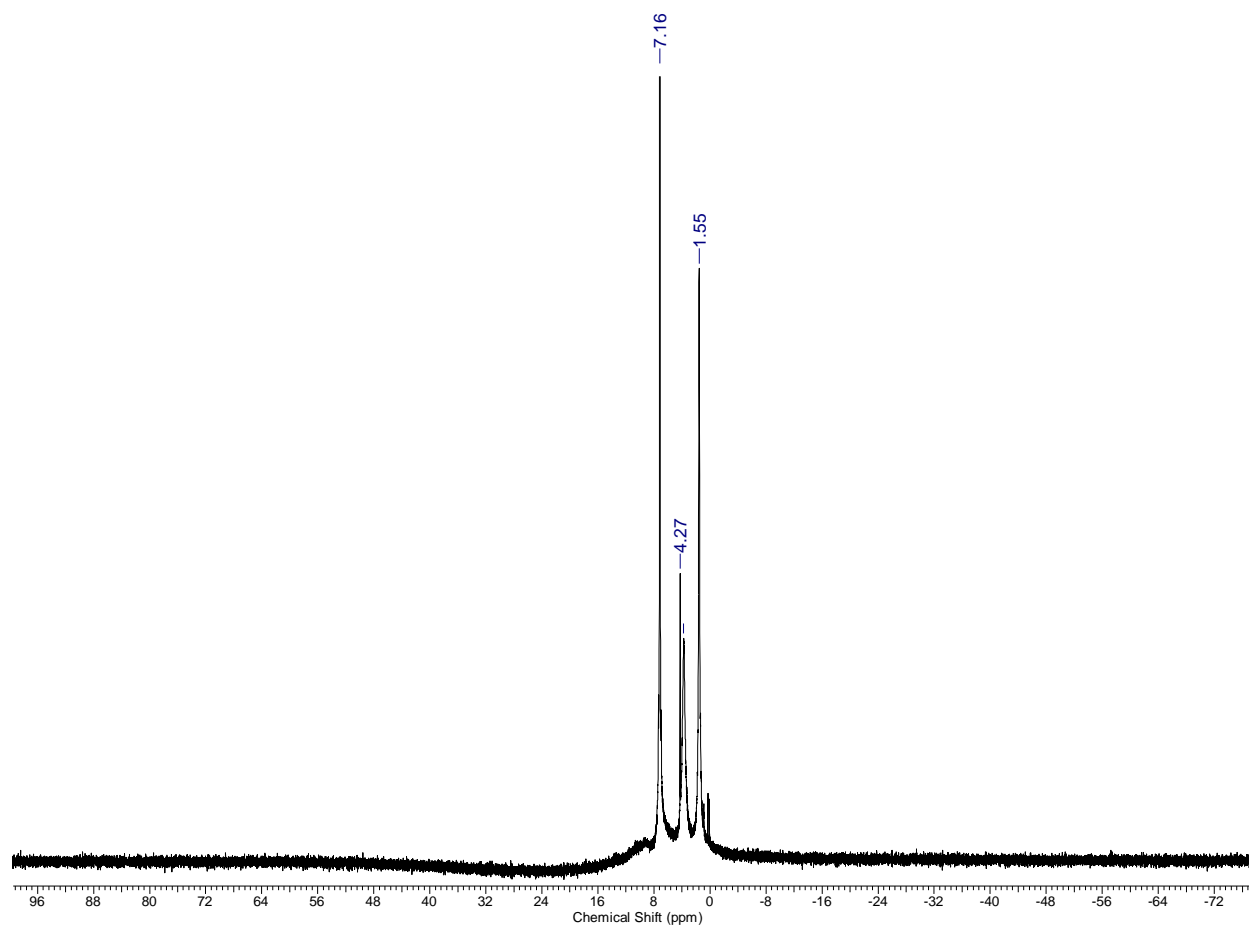
Where  $\Delta\nu$  is the peak separation (Hz),  $m$  is the concentration of the solution (g/mL),  $\nu_0$  is the spectrometer operating frequency in Hz,  $\chi_0$  is the molar susceptibility of the solvent (in  $\text{cm}^3/\text{g}$ ), and  $M$  is the molar mass of the compound (g/mol). Diamagnetic corrections were calculated using Pascals constants. The solution state effective magnetic moment ( $\mu_{\text{eff}}$ ) was calculated using Equation 2:

$$\mu_{\text{eff}} = \sqrt{(2.383 \times 10^3)(\chi_m)} \quad (\text{Eq. 2})$$

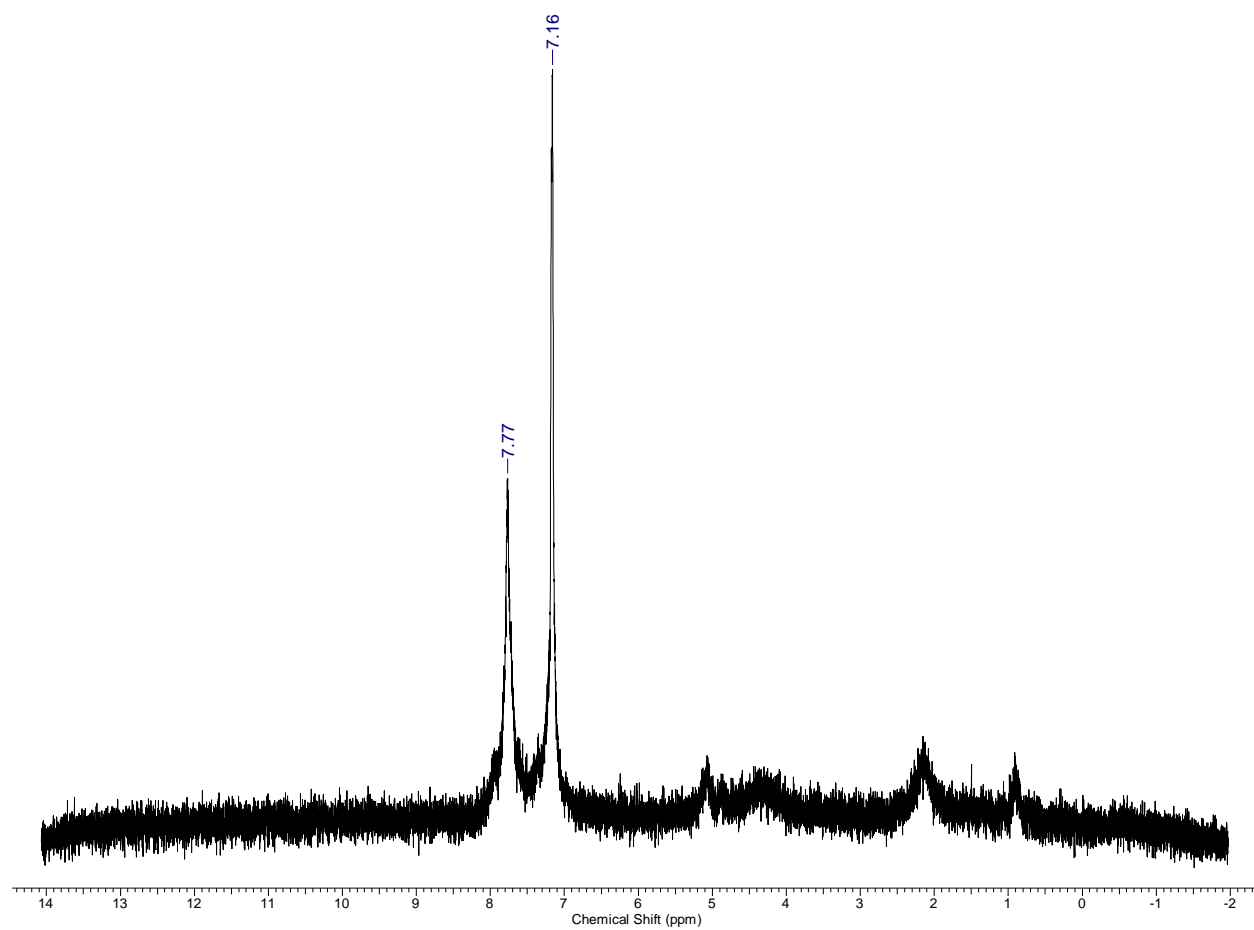
1	5.68
2	5.97



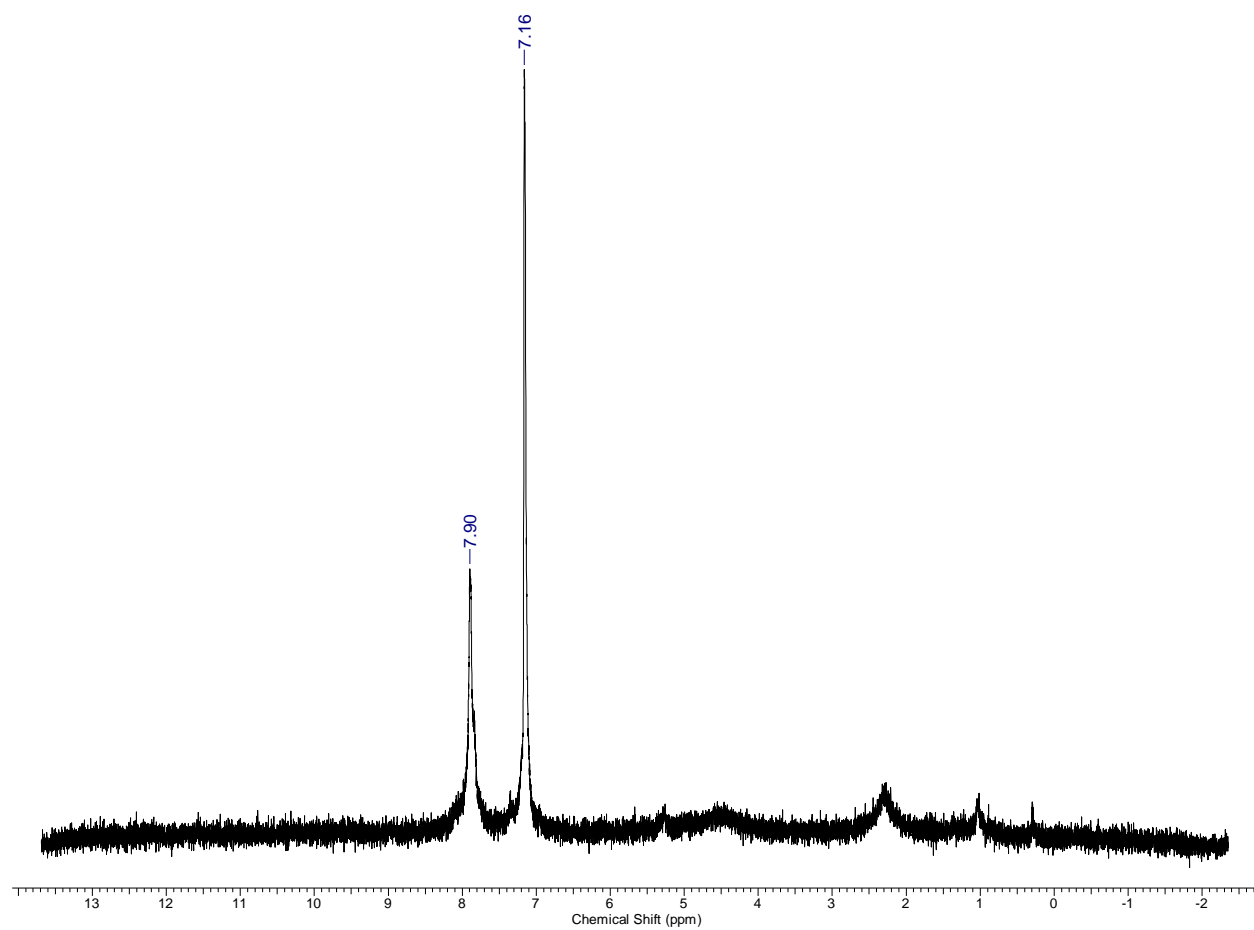
**Figure S1.**  $^1\text{H}$  NMR of  $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  ( $\text{C}_6\text{D}_6$ ) in the -0.5 ppm – 10.5 ppm range. Peaks at 1.55 and 3.70 ppm are THF signals and the peak at 4.27 ppm is  $\text{CH}_2\text{Cl}_2$ .



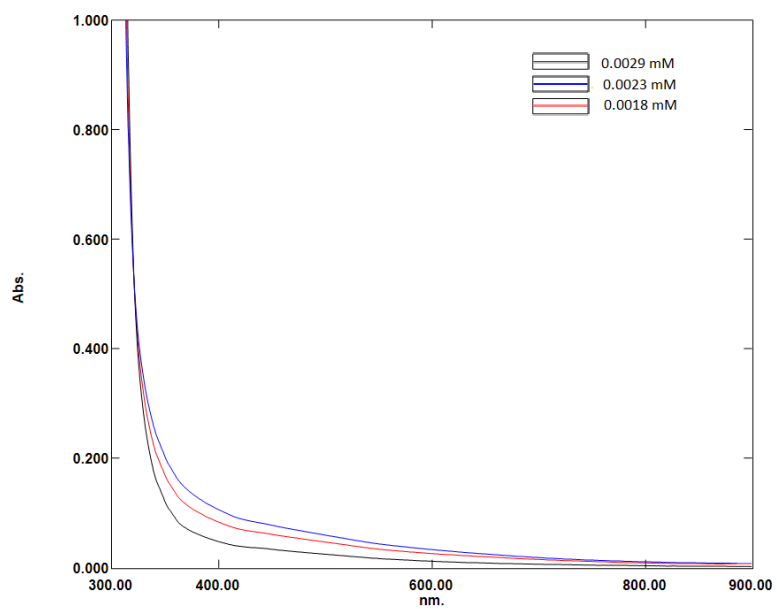
**Figure S2.**  $^1\text{H}$  NMR of  $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  taken in the broad (-72 ppm – 100 ppm) range. Peaks at 1.55 and 3.70 ppm are broad THF signals and 4.27 ppm is  $\text{CH}_2\text{Cl}_2$ .



**Figure S3.** Characterization of **2** by Evans method (experiment #1).

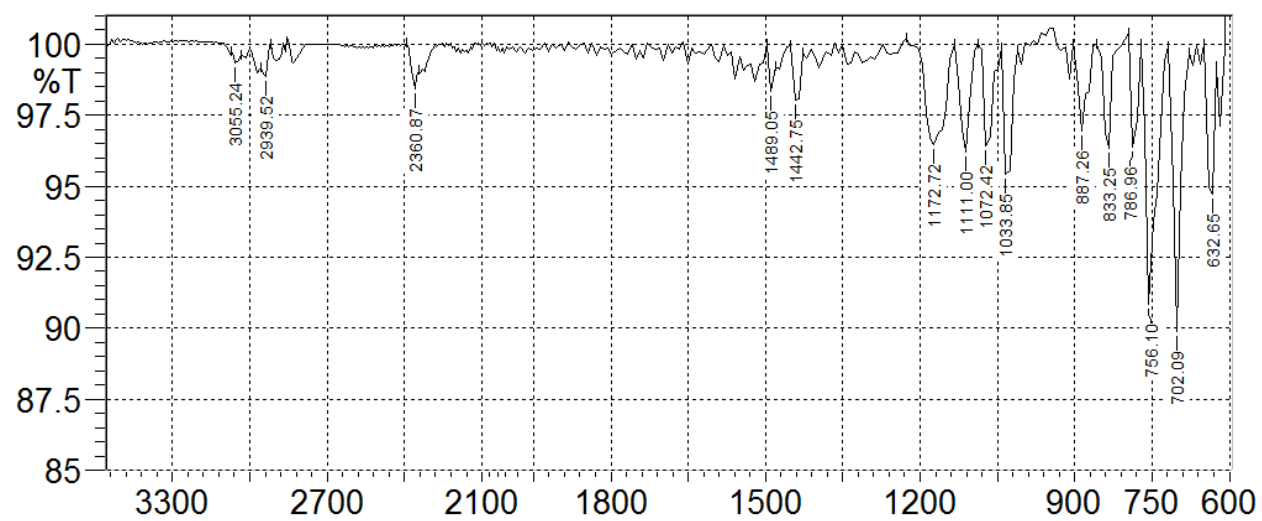


**Figure S4.** Characterization of **2** by Evans method (experiment #2).

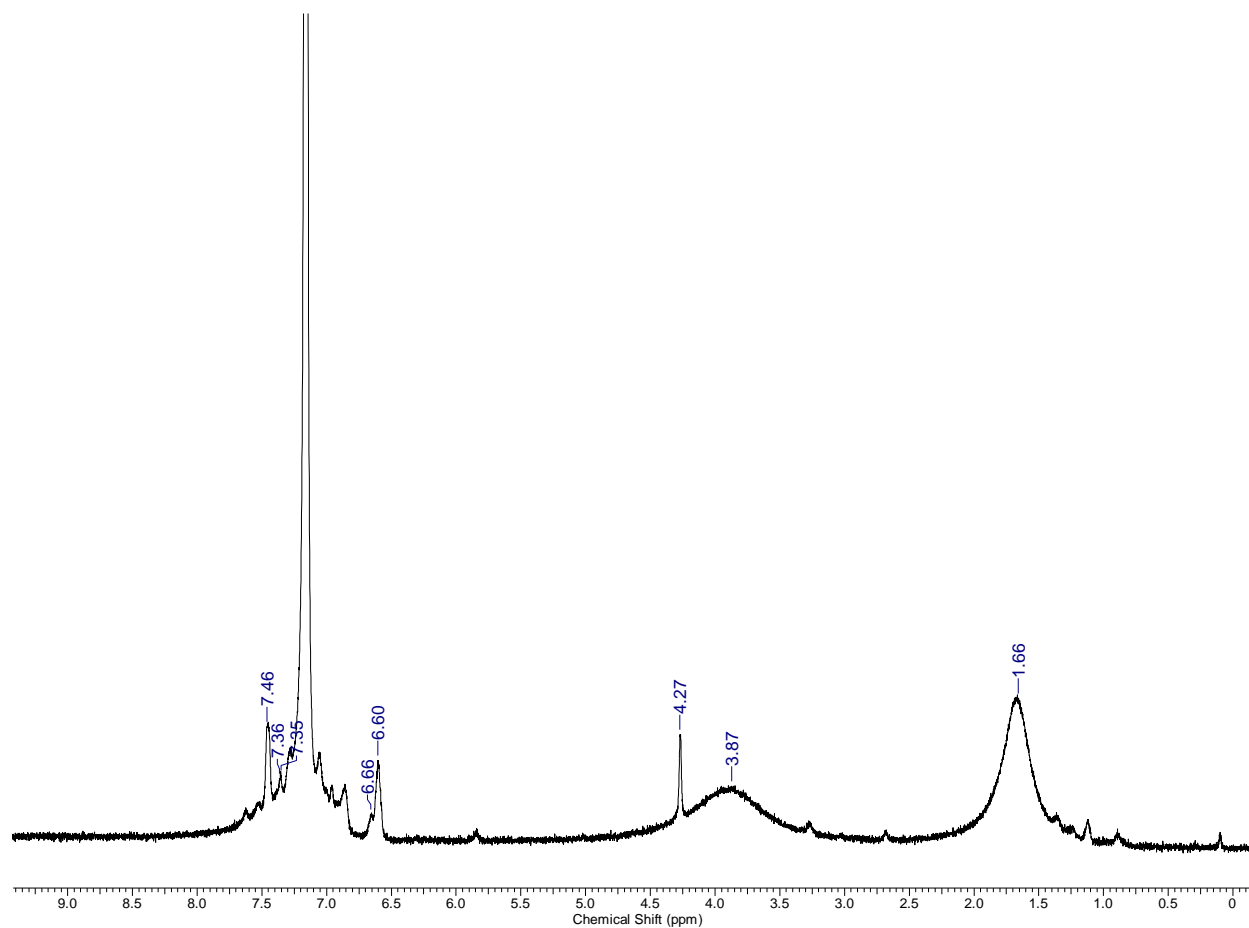


**Figure S5.** UV-vis spectrum of **2** at three different concentrations.

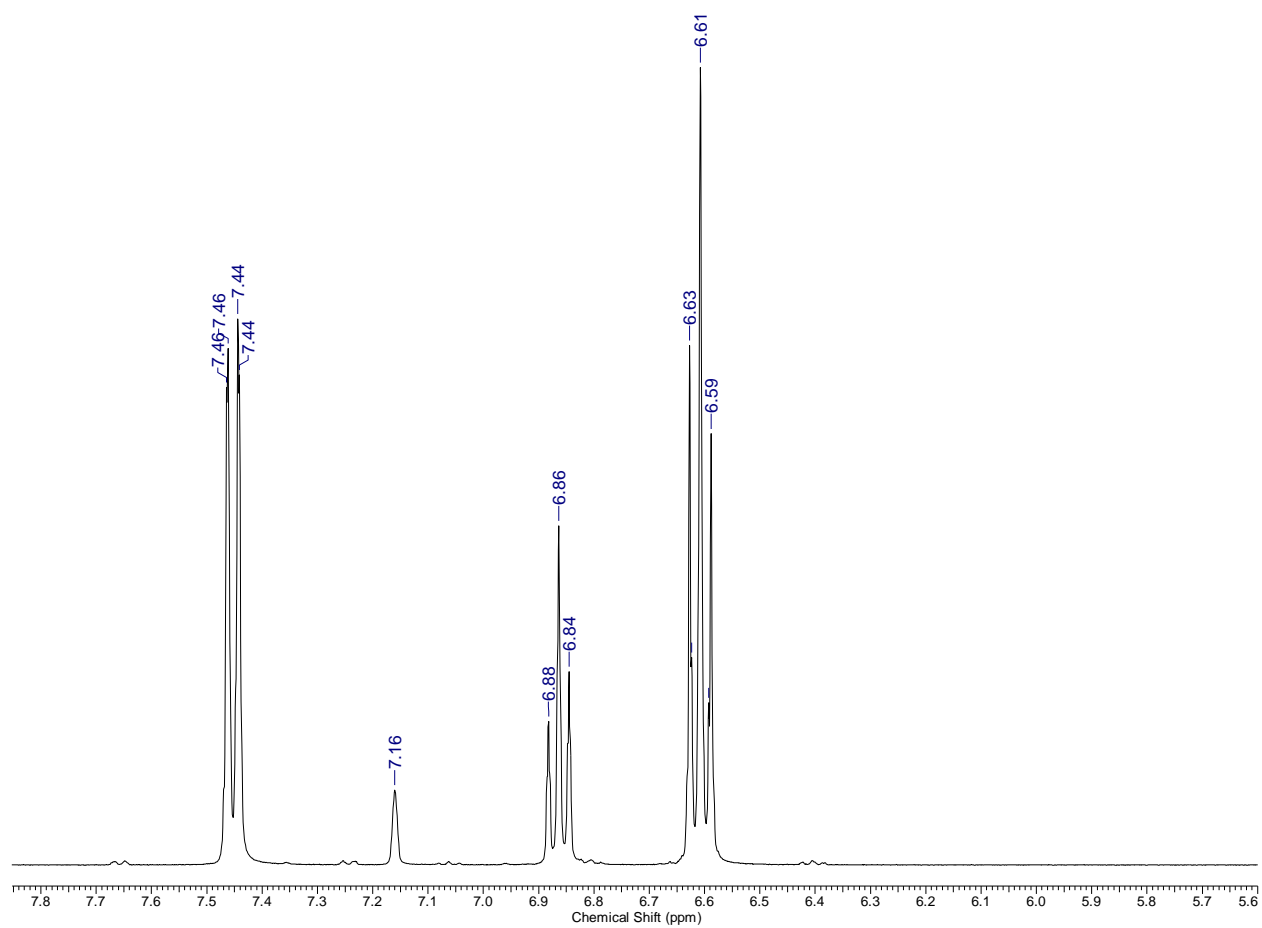




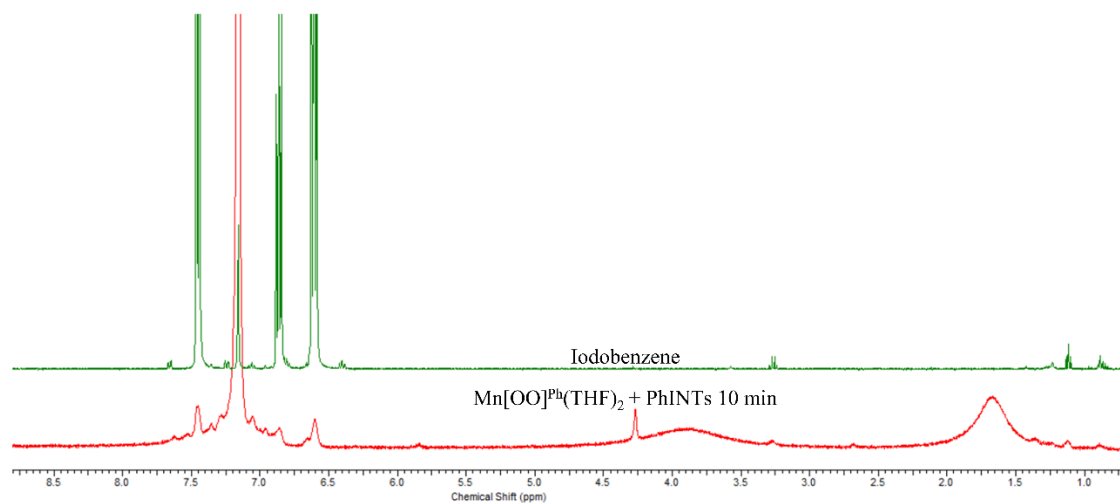
**Figure S6.** IR spectrum of **2**.



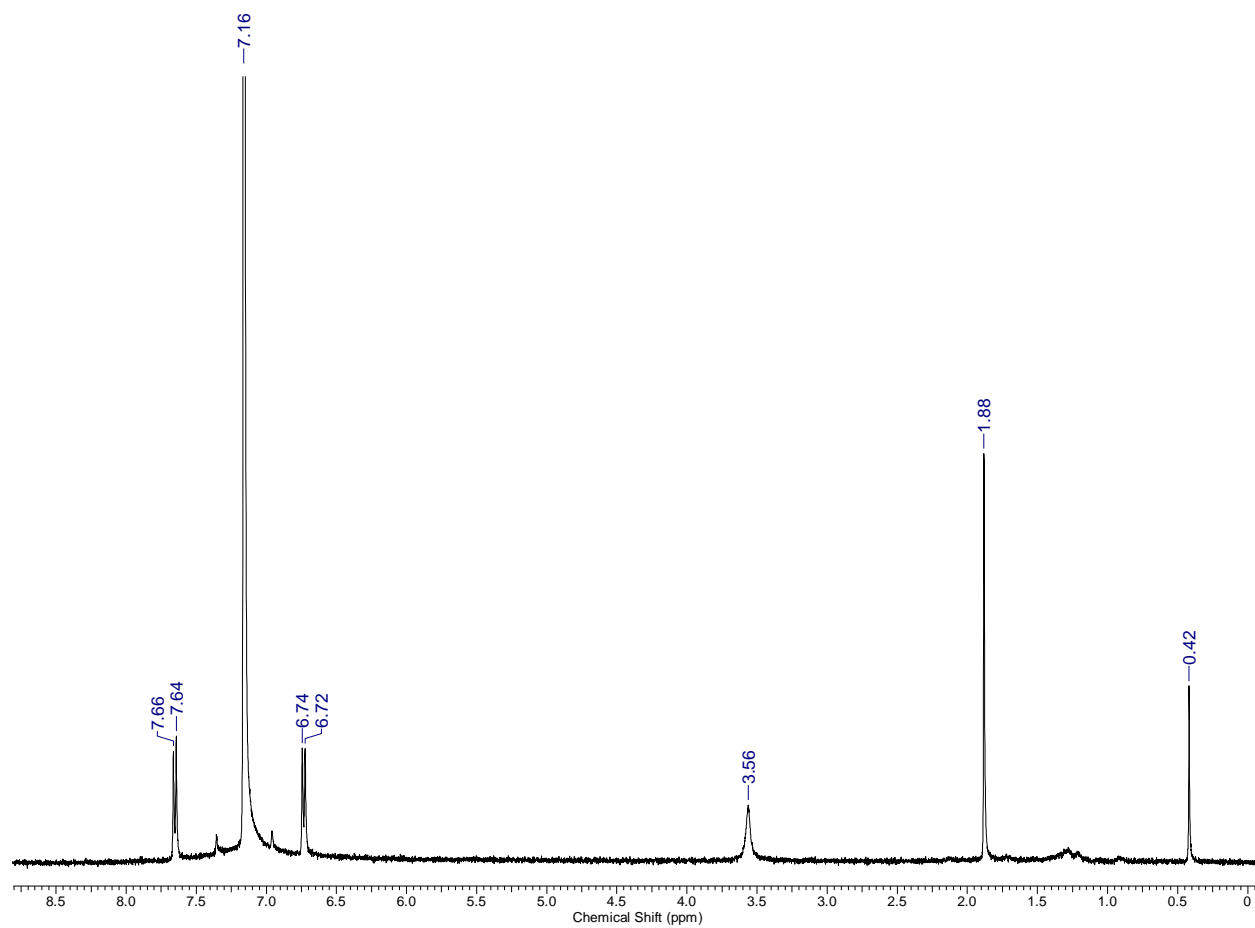
**Figure S7.** <sup>1</sup>H NMR of the reaction between **2** and PhINTs (in the absence of styrene). Peaks at 1.66 and 3.87 ppm are broad THF signals and 4.27 ppm is CH<sub>2</sub>Cl<sub>2</sub>. Peaks at 6.60 ppm is and 7.46 ppm are PhI resonances.



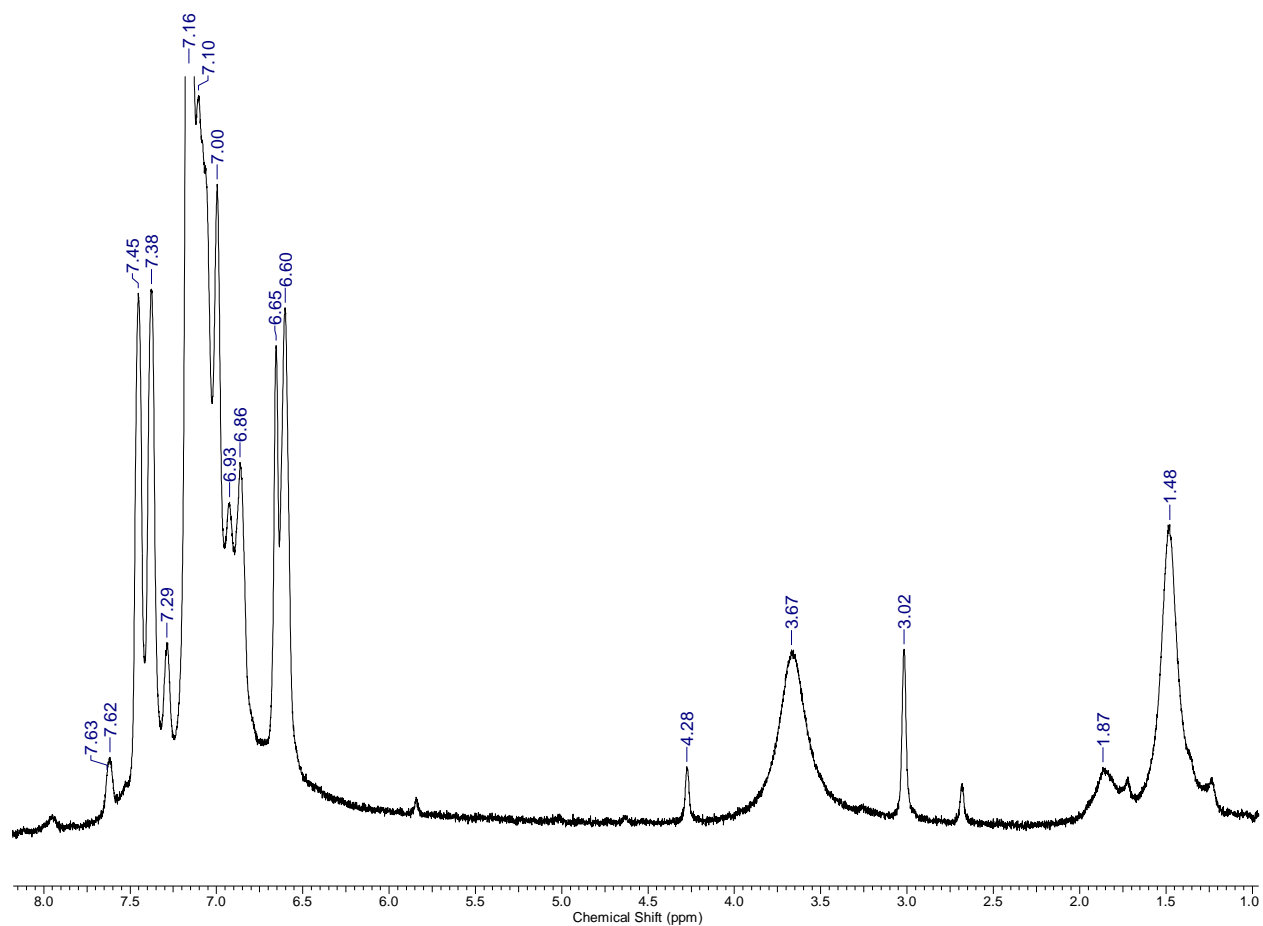
**Figure S8.**  $^1\text{H}$  NMR spectrum of PhI in  $\text{C}_6\text{D}_6$  (aromatic region).



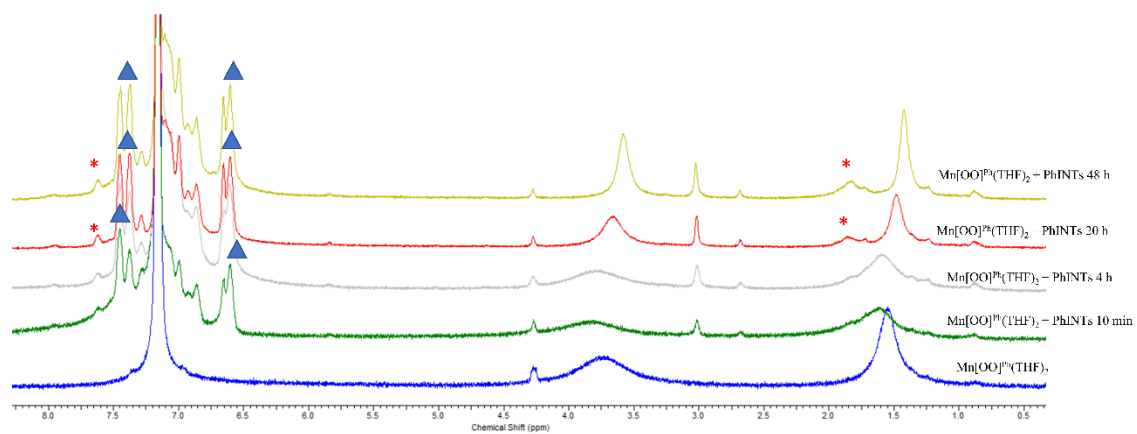
**Figure S9.** Stacked  $^1\text{H}$  NMR spectra of PhI (top) and of  $\{\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2 + \text{PhINTs}\}$  reaction (bottom) in  $\text{C}_6\text{D}_6$ .



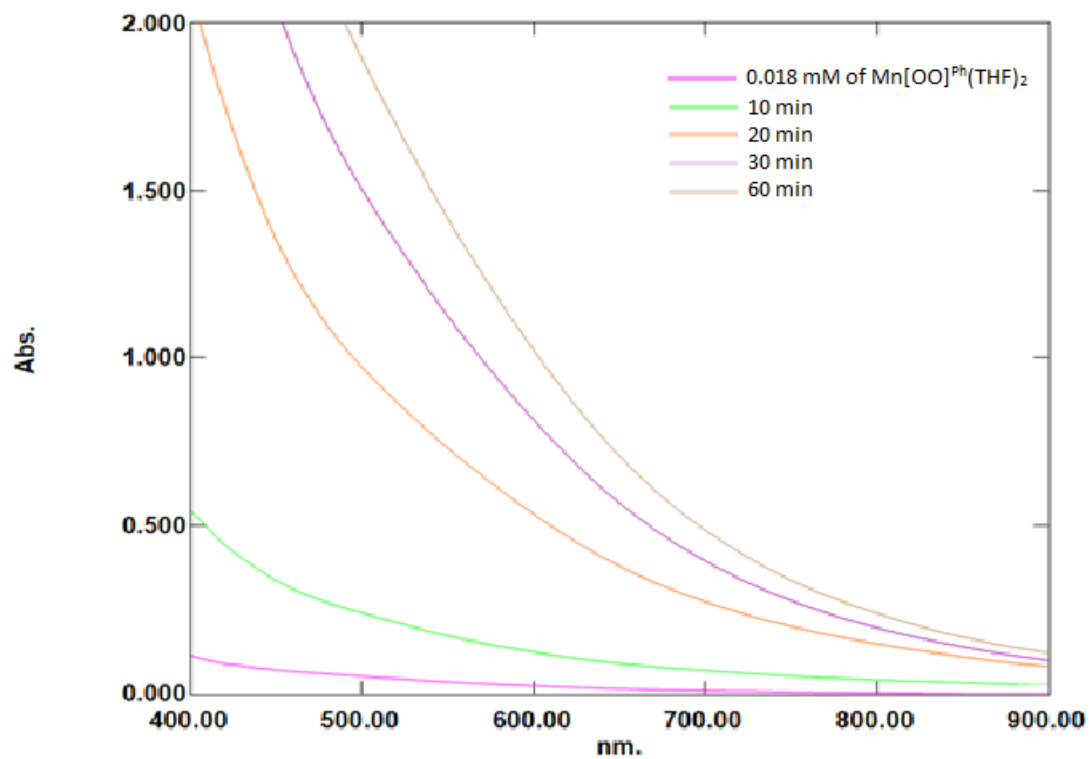
**Figure S10.**  $^1\text{H}$  NMR of tosylamide in  $\text{C}_6\text{D}_6$ .



**Figure S11.**  $^1\text{H}$  NMR spectrum of the reaction between  $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  and PhINTs in  $\text{C}_6\text{D}_6$  after 20 h. Peaks at 1.87 and 7.62-7.63 correspond with  $\text{TsNH}_2$ . Peaks at 6.60 ppm and 7.45 ppm correspond to iodobenzene.



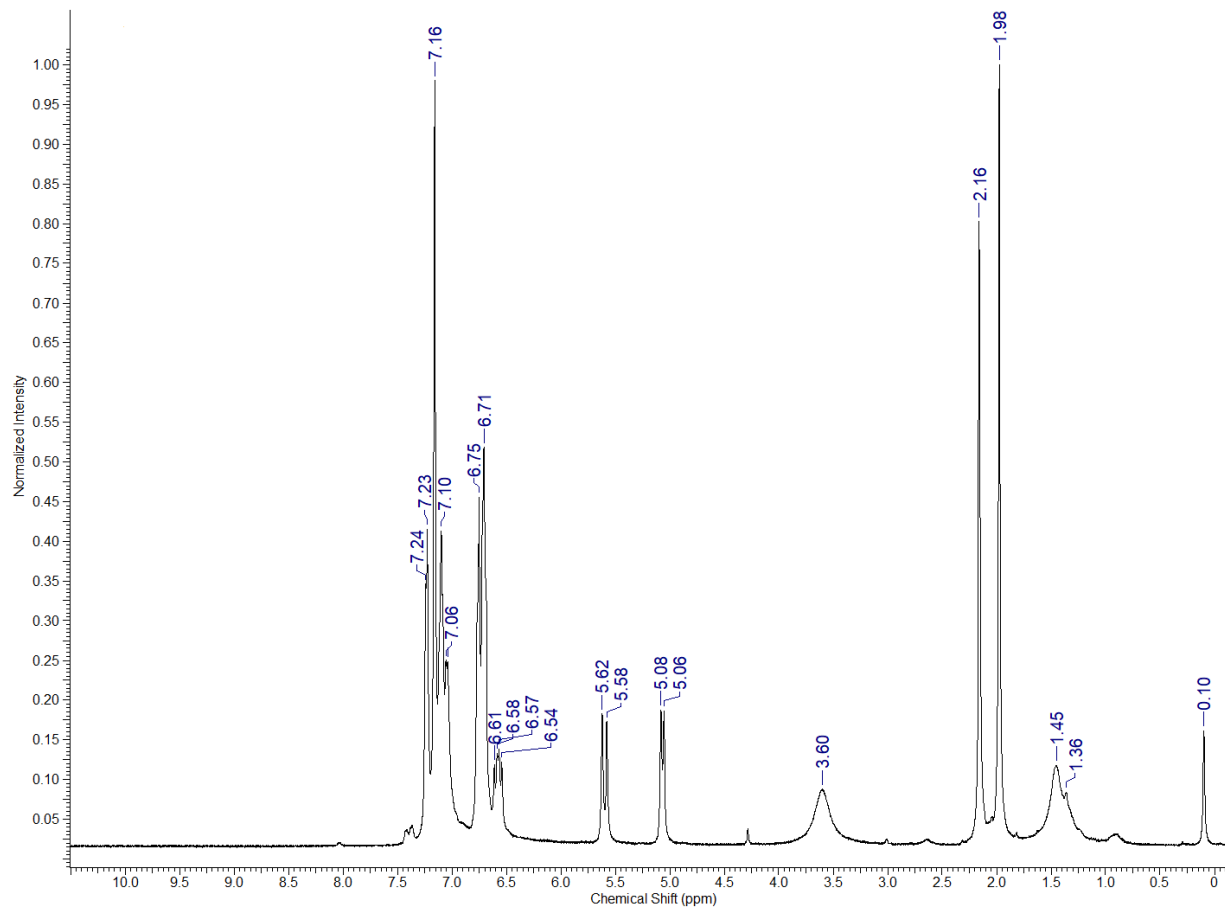
**Figure S12.**  $^1\text{H}$  NMR spectra of the reaction of  $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  and PhINTs in  $\text{C}_6\text{D}_6$  at different times. Peaks at 1.87 and 7.62-7.63 (marked by \*) correspond to  $\text{TsNH}_2$ .



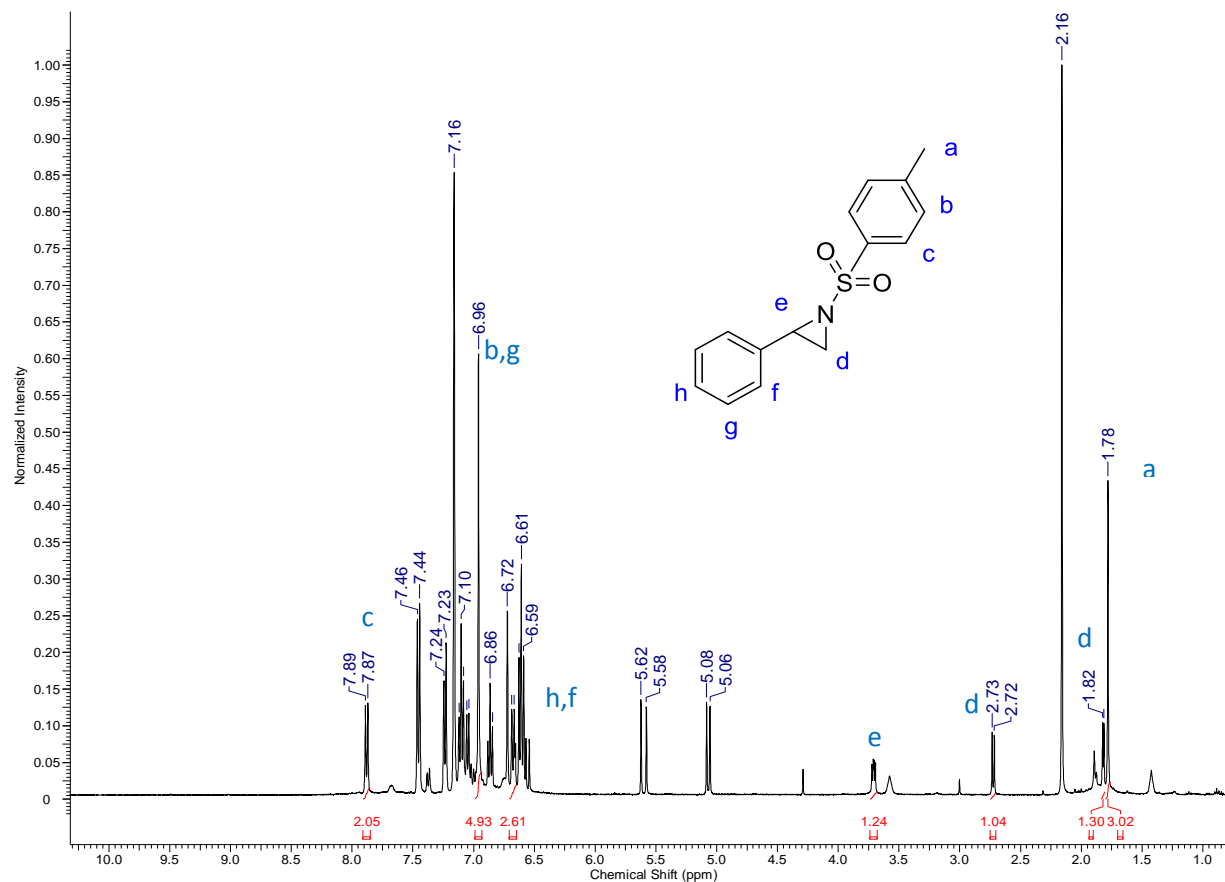
**Figure S13.** UV spectrum of 0.018 mM solution of  $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  on addition of stoichiometric amounts of PhINTs at different time.



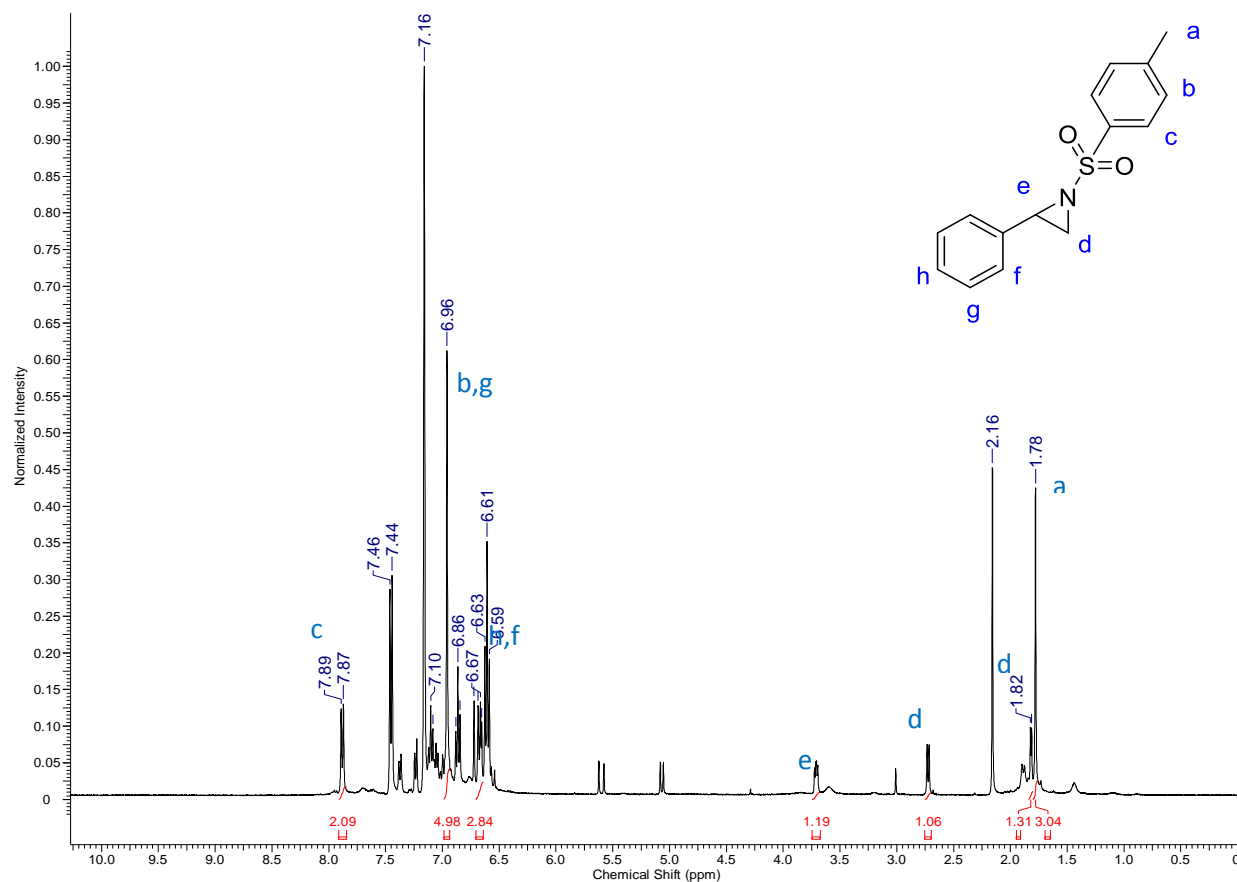
## 2. $^1\text{H}$ NMR characterization of the aziridine products.



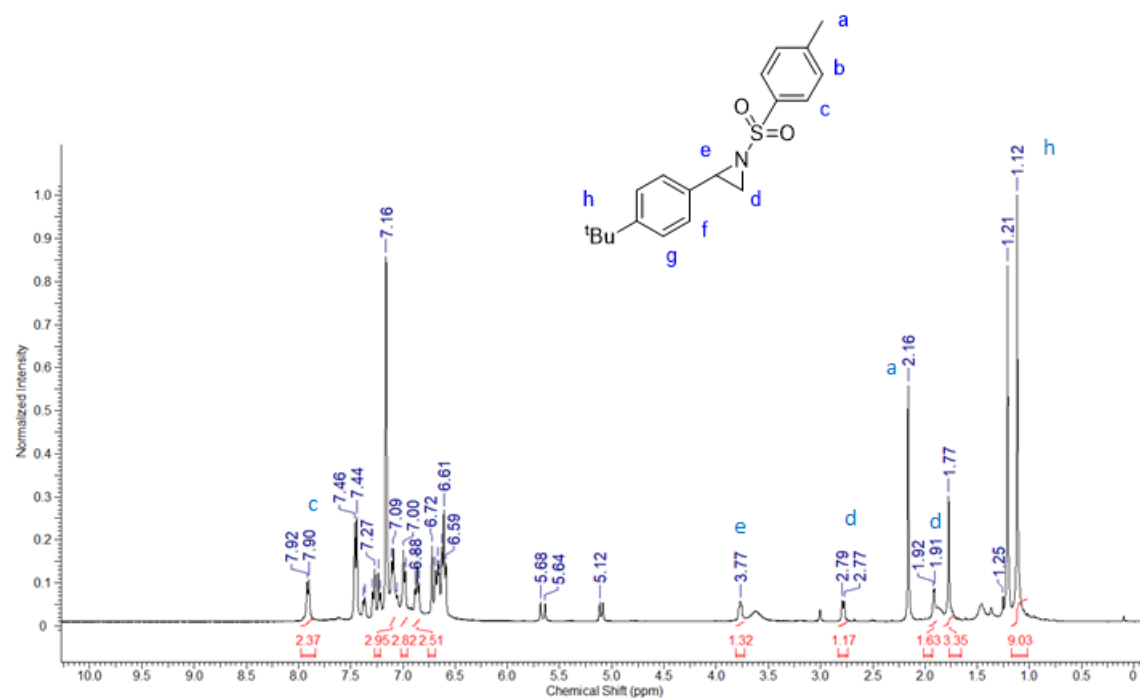
**Figure S14.**  $^1\text{H}$  NMR demonstrating no formation of 2-phenyl-1-(p-tolyl)aziridine from the reaction of 4-azidotoluene with styrene and  $\text{Fe}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$ . The peak at 2.16 ppm corresponds to mesitylene standard.



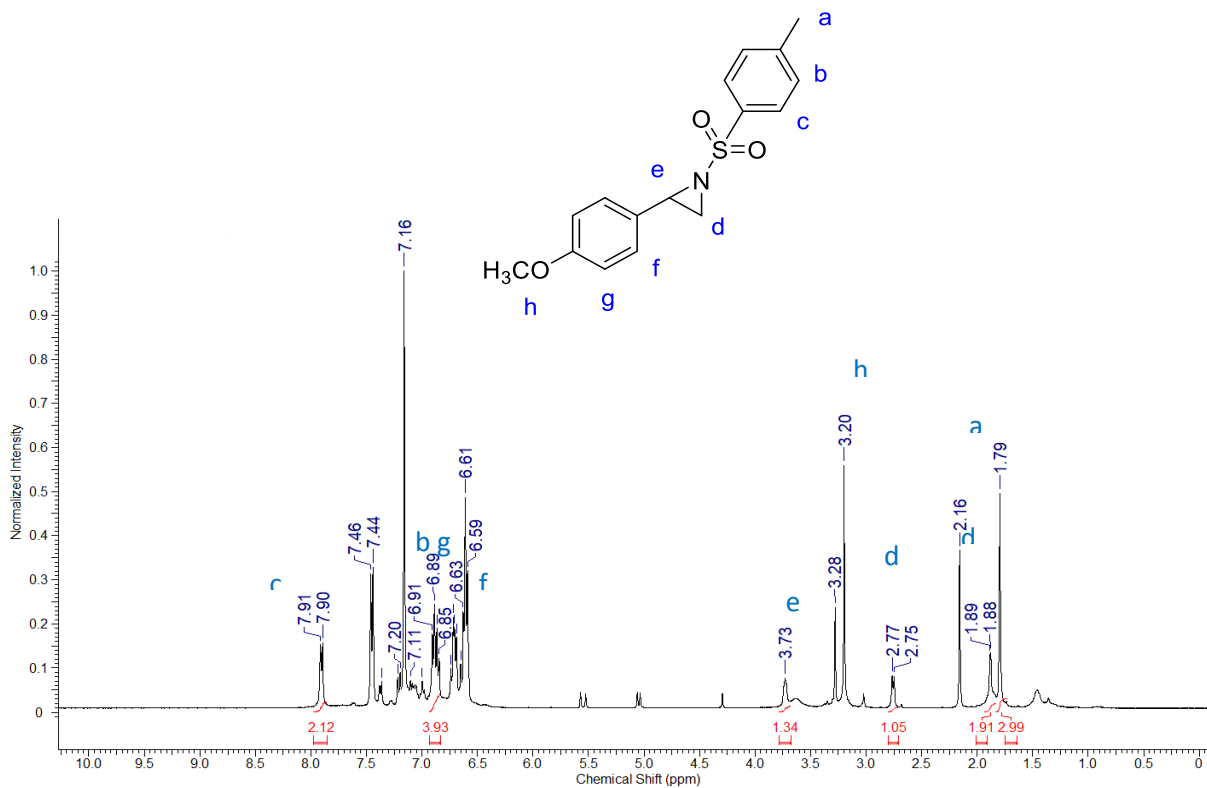
**Figure S15.**  $^1\text{H}$  NMR demonstrating catalytic formation of 2-phenyl-1-tosylaziridine by  $\text{Fe}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  (**1**). The peak at 2.16 ppm corresponds to the mesitylene standard. 10.4 mg (0.012 mmol) of  $\text{Fe}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  was reacted with 47.8 mg (0.13 mmol) of PhINTs and 13.4 mg (0.13 mmol) of styrene.



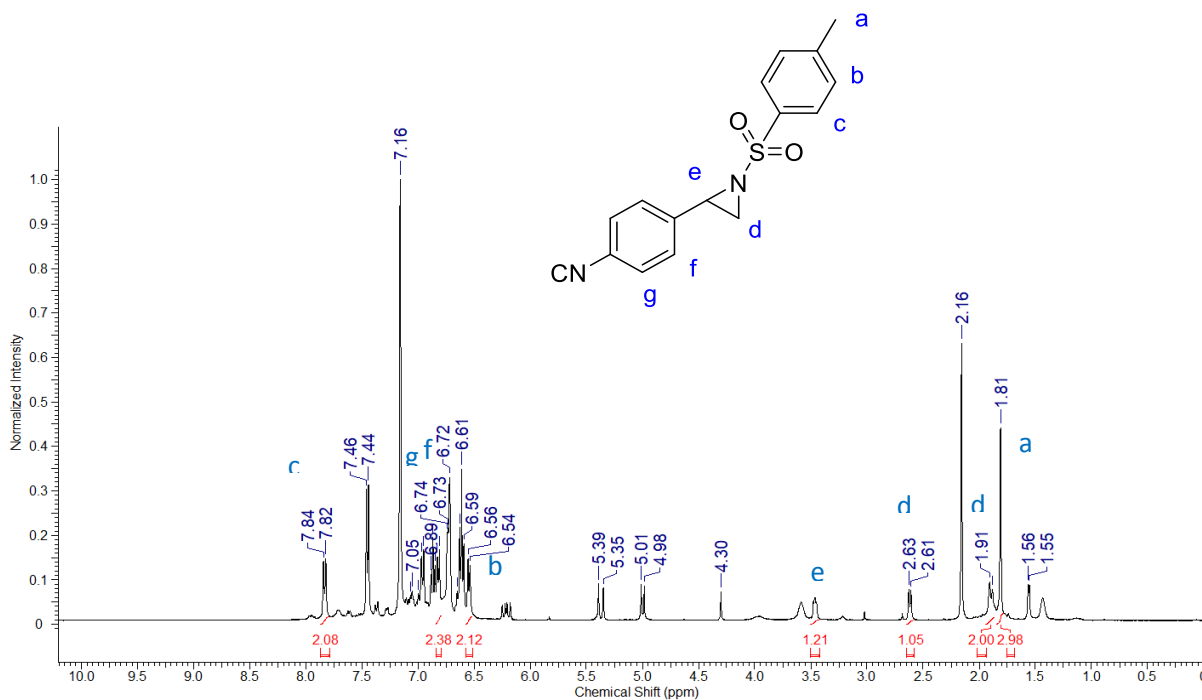
**Figure S16.** <sup>1</sup>H NMR demonstrating catalytic formation of 2-phenyl-1-tosylaziridine by Mn[O-terphenyl-O]<sup>Ph</sup>(THF)<sub>2</sub> (**2**). The peak at 2.16 ppm corresponds to mesitylene standard. 10.3 mg (0.012 mmol) of Mn[O-terphenyl-O]<sup>Ph</sup>(THF)<sub>2</sub> was reacted with 47.6 mg (0.13 mmol) of PhINTs and 13.2 mg (0.13 mmol) of styrene.



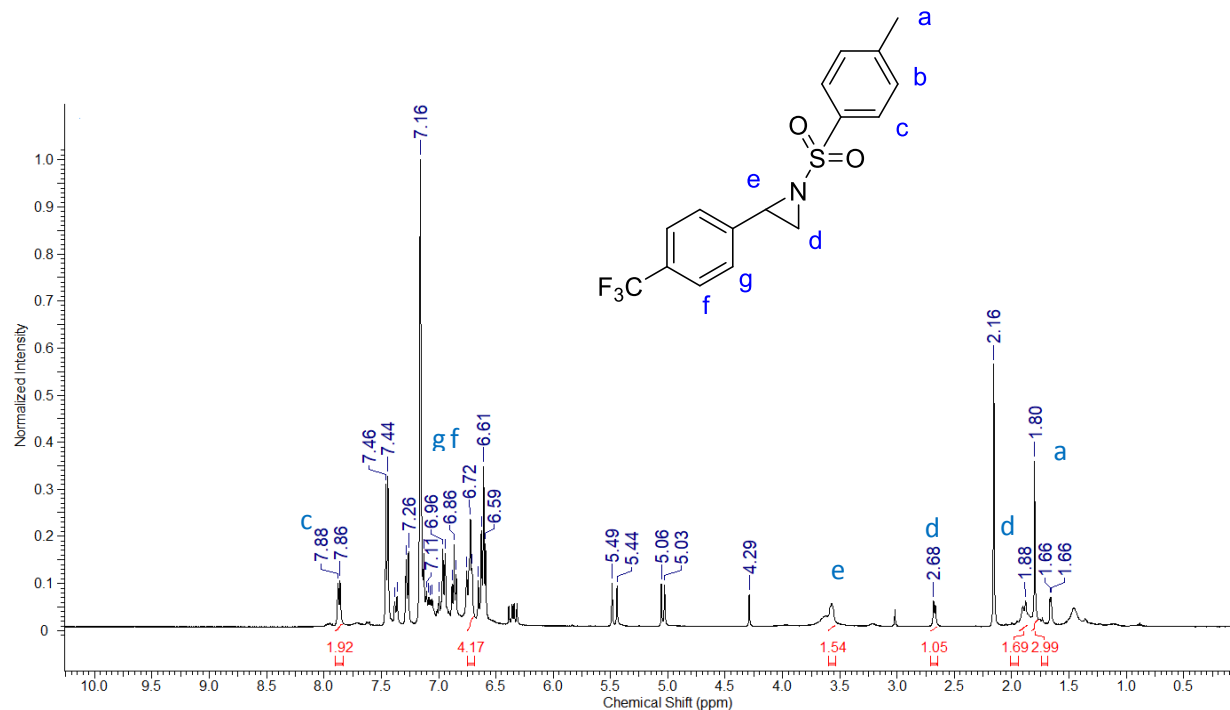
**Figure S17.**  $^1\text{H}$  NMR demonstrating catalytic formation of 2-(4-(tert-butyl)phenyl)-1-tosylaziridine. 10.2 mg (0.012 mmol) of  $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  was reacted with 47.8 mg (0.13 mmol) of PhINTs and 20.4 mg (0.13 mmol) of 4-*tert*-butylstyrene



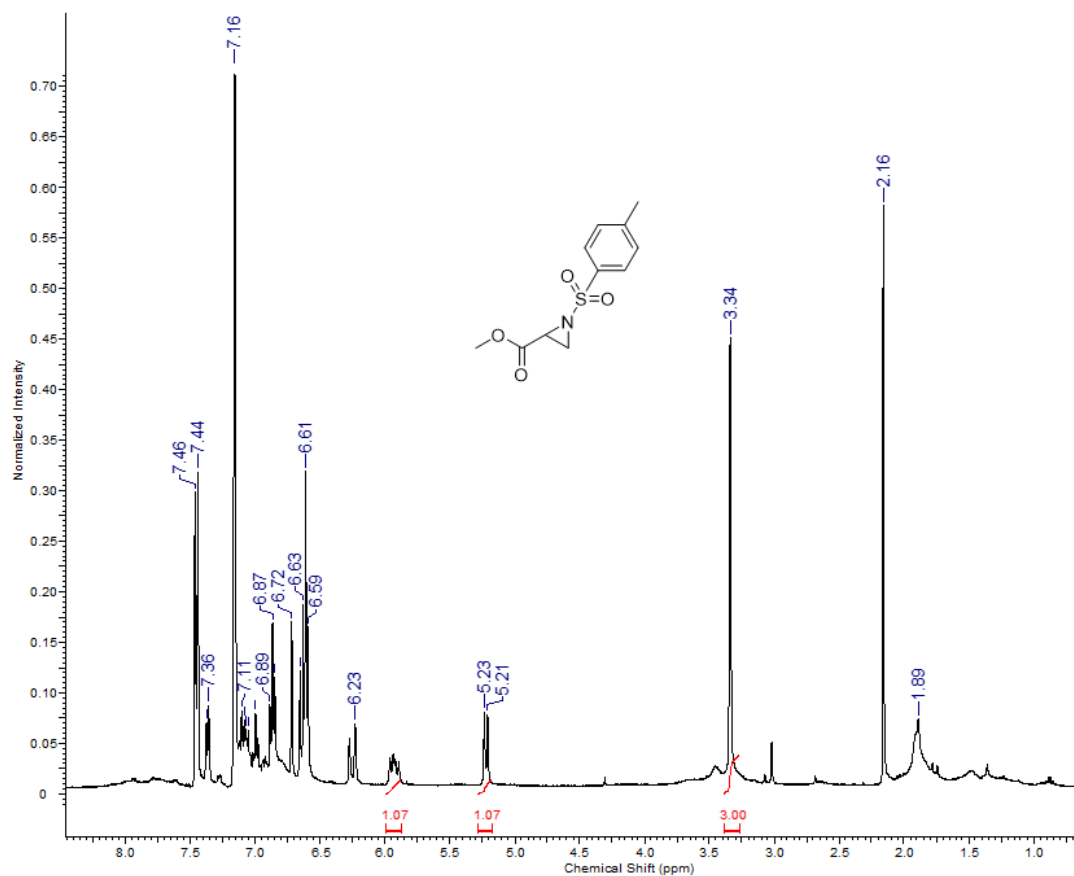
**Figure S18.** <sup>1</sup>H NMR demonstrating catalytic formation of 2-(4-methoxyphenyl)-1-tosylaziridine. 10.3 mg (0.012 mmol) of Mn[O-terphenyl-O]<sup>Ph</sup>(THF)<sub>2</sub> was reacted with 47.3 mg (0.13 mmol) of PhINTs and 16.4 mg (0.13 mmol) of 4-methoxystyrene.



**Figure S19.**  $^1\text{H}$  NMR demonstrating catalytic formation of 2-(4-isocyanophenyl)-1-tosylaziridine. 10.7 mg (0.012 mmol) of  $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  was reacted with 47.3mg (0.13 mmol) of PhINTs and 17.8 mg (0.13 mmol) of 4-cyanostyrene.

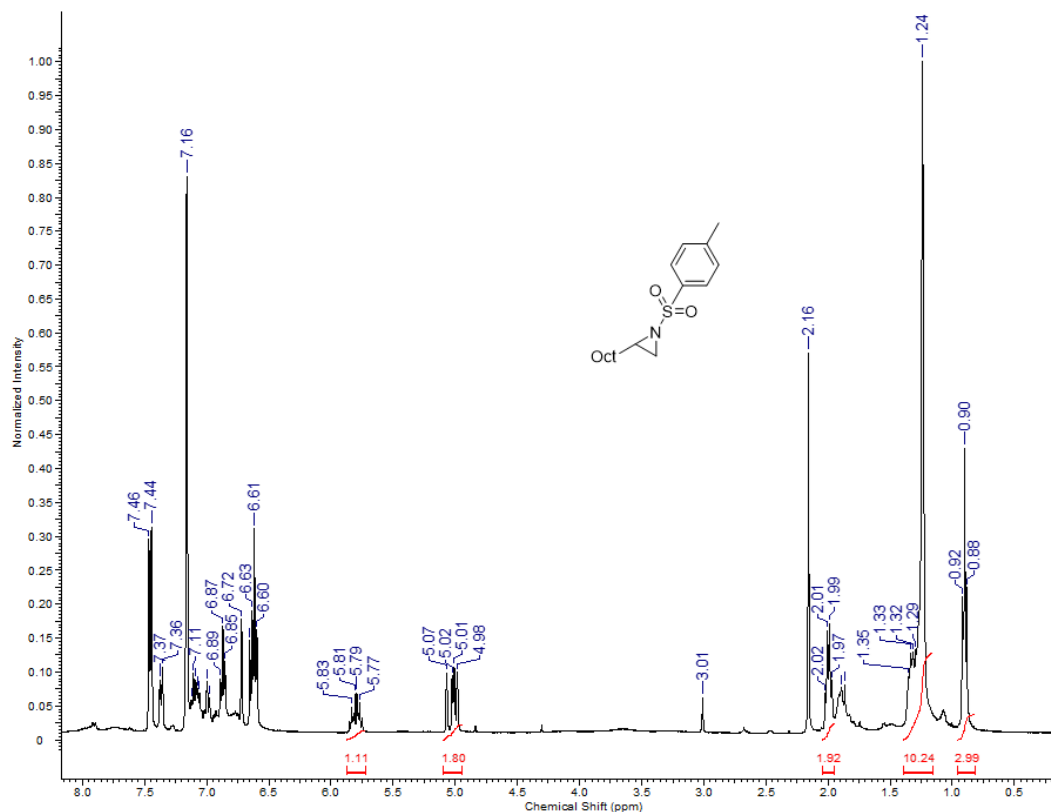


**Figure S20.** <sup>1</sup>H NMR demonstrating catalytic formation of 1-tosyl-2-(4-(trifluoromethyl)phenyl)aziridine. 10.5 mg (0.012 mmol) of Mn[O-terphenyl-O]<sup>Ph</sup>(THF)<sub>2</sub> was reacted with 47.8 mg (0.13 mmol) of PhINTs and 23.3 mg (0.13 mmol) of 4-trifluoromethyl styrene.

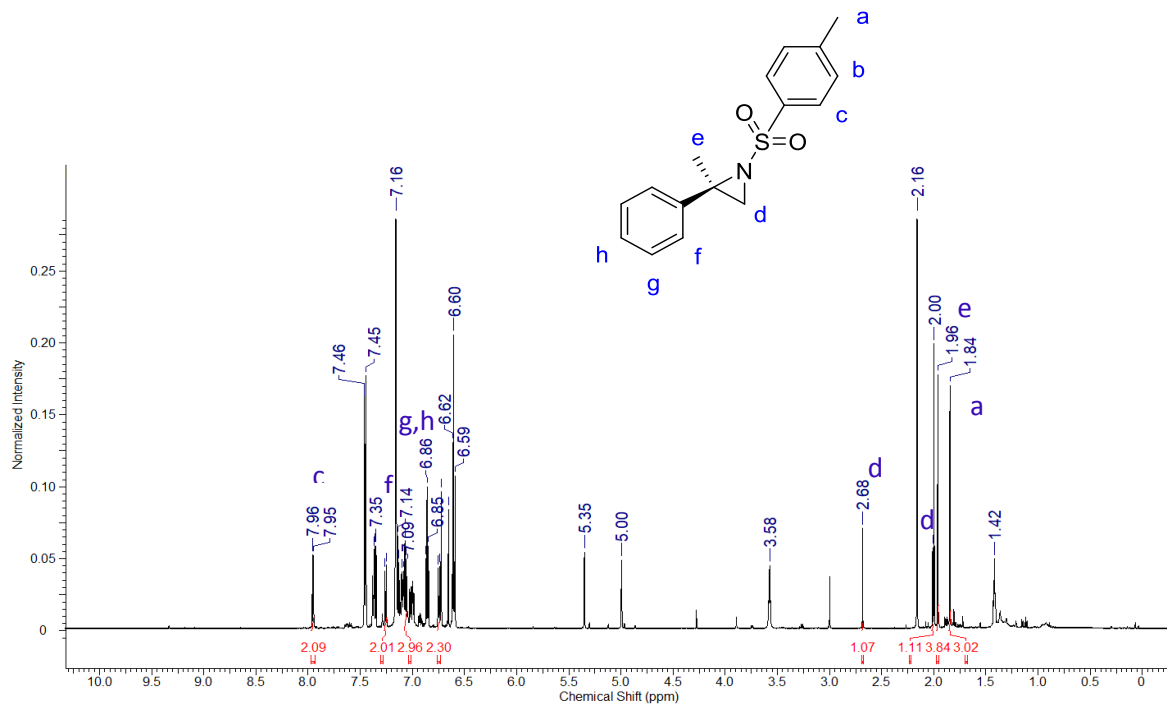


**Figure S21.**  $^1\text{H}$  NMR demonstrating no formation of methyl 1-tosylaziridine-2-carboxylate. 10.1 mg (0.012 mmol) of  $\text{Mn}[\text{O-terphenyl-O}]^{\text{Ph}}(\text{THF})_2$  was reacted with 47.6 mg (0.13 mmol) of PhINTs and 11.1 mg (0.13 mmol) of methyl acrylate.



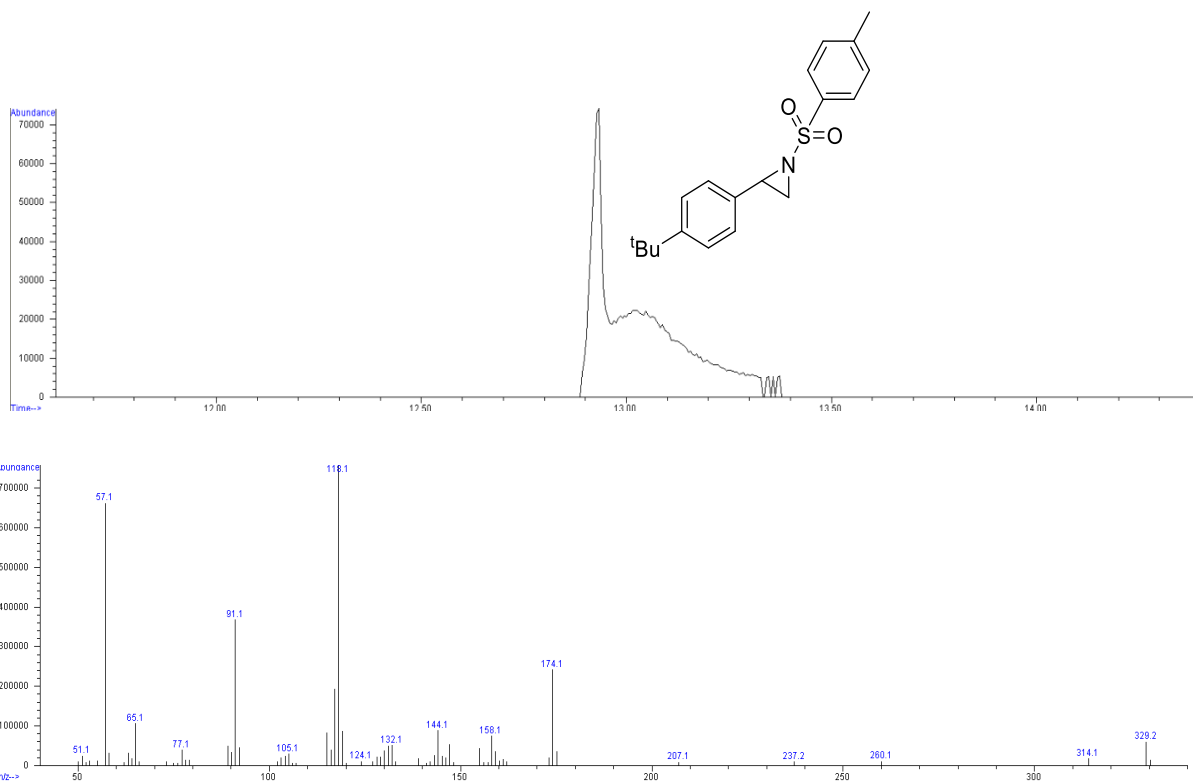


**Figure S22.** <sup>1</sup>H NMR demonstrating no formation of 1-(1-tosylaziridin-2-yl)octan-1-one. 10.4 mg (0.012 mmol) of Mn[O-terphenyl-O]<sup>Ph</sup>(THF)<sub>2</sub> was reacted with 47.8 mg (0.13 mmol) of PhINTs and 18.4 mg (0.13 mmol) of 1-decene.

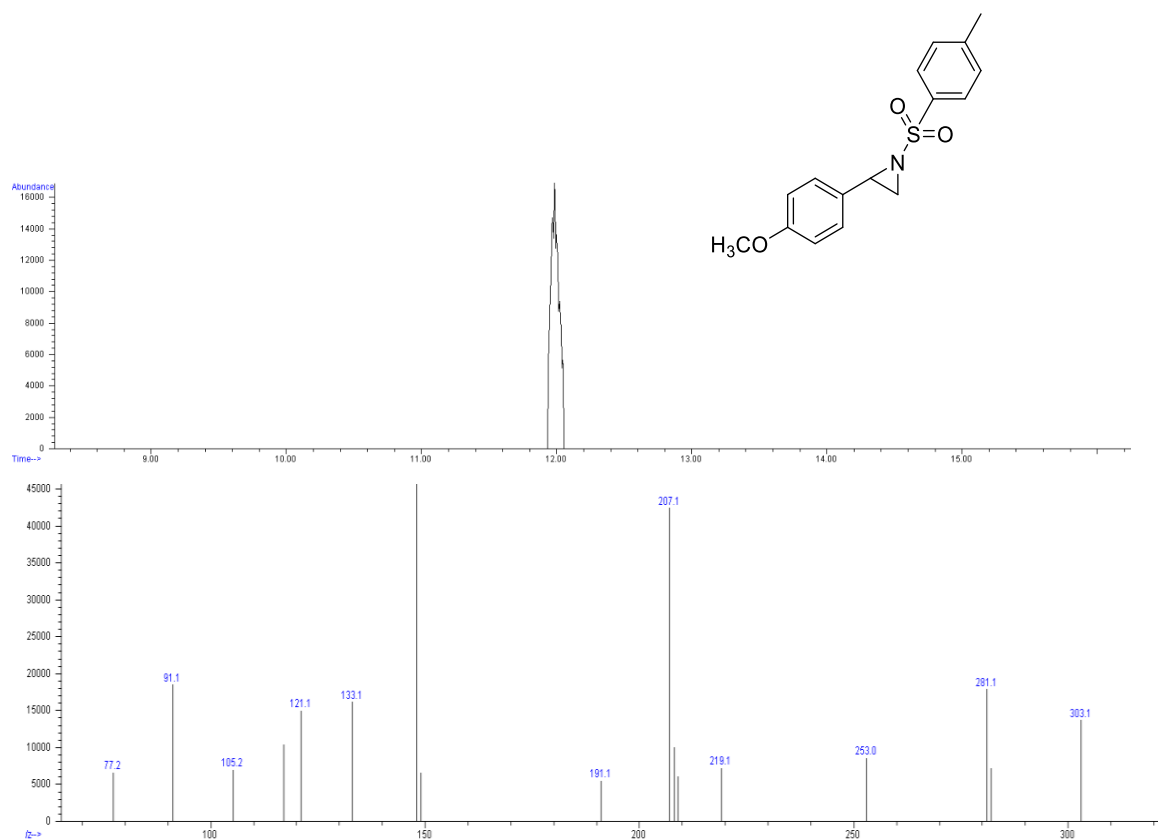


**Figure S23.** <sup>1</sup>H NMR demonstrating catalytic formation of 2-methyl-2-phenyl-1-tosylaziridine. 10.1 mg (0.012 mmol) of Mn[O-terphenyl-O]<sup>Ph</sup>(THF)<sub>2</sub> was reacted with 47.6 mg (0.13 mmol) of PhINTs and 15.1 mg (0.13 mmol) of α-methylstyrene.

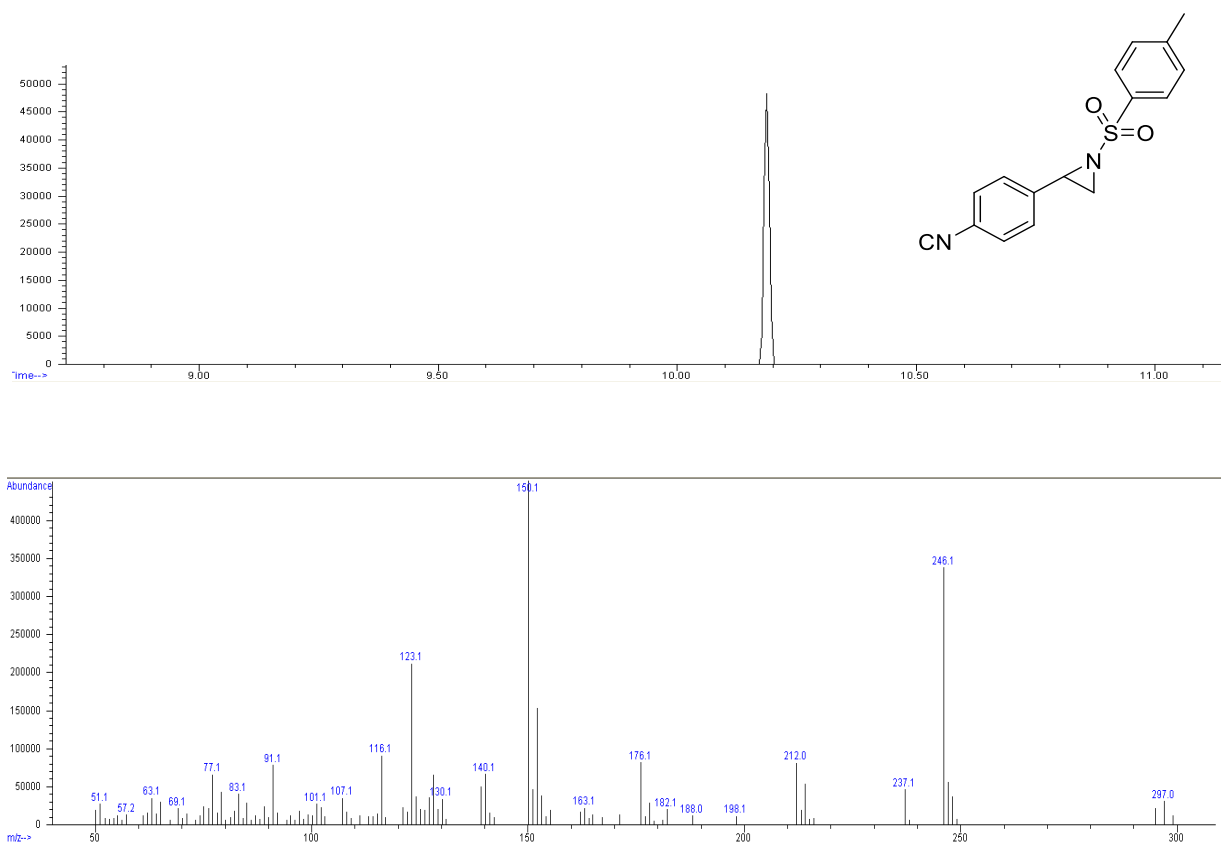
### 3. GC-MS spectra



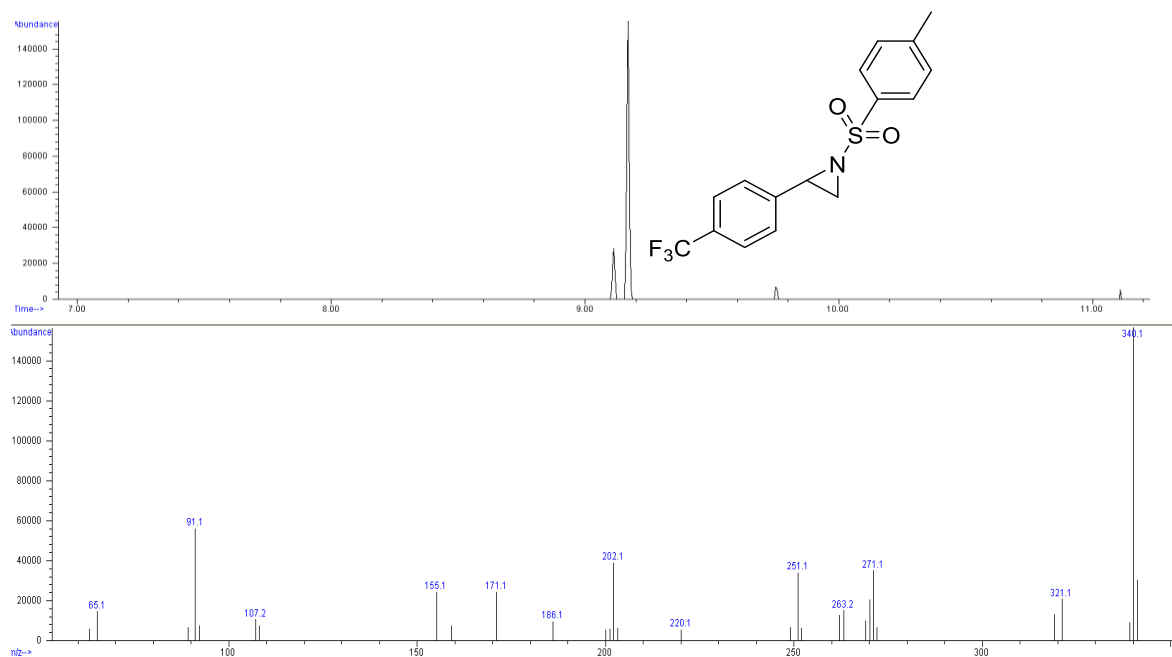
**Figure S24.** GC-MS of 2-(4-(tert-butyl)phenyl)-1-tosylaziridine.



**Figure S25.** GC-MS of 2-(4-methoxyphenyl)-1-tosylaziridine.



**Figure S26.** GC-MS of 2- (4-isocyanophenyl)-1-tosylaziridine.

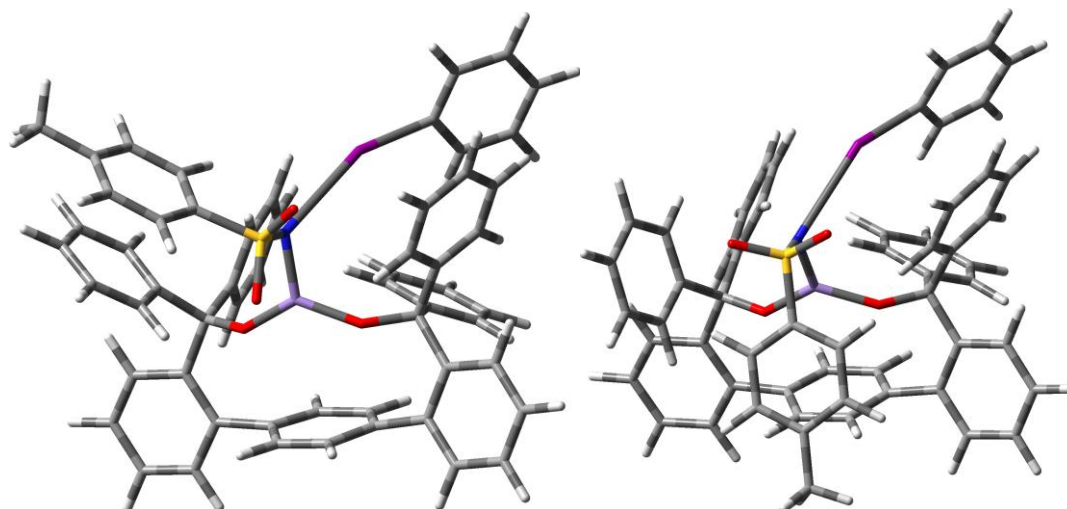


**Figure S27.** GC-MS of 1-tosyl-2-(4-(trifluoromethyl)phenyl)aziridine.

#### 4. Computational Data

All intermediates along the reaction pathway were probed as doublets, quartets, and sextets to allow for various combinations of  $\text{Mn}^{\text{II}}/\text{NR}^0$  to  $\text{Mn}^{\text{IV}}/\text{NR}^{2-}$ . Doublets were always higher in energy and are therefore only reported for the iminoiodinane/imido complexes. Multiple conformers of the tosyl substituent were probed (**Figure S28**) but the isomer with p-methyltoluene protruding into solution, and oxygen close to coordinating to Mn, was found to be lowest in energy for most structures (iso1). Different regio and stereoisomers were considered for the styrene added intermediate **C**. Unsurprisingly, the radical intermediate is significantly stabilized when localized on the secondary vs. primary carbon so we only present the former. We observe a stereochemical preference but that is due to our modeling only considering one possible conformation of the ligand backbone; in solution one expects a 50:50 mixture of these coordinations and therefore no stereoselectivity for one aziridine over another. Energies are summarized in Table S2, frequencies for optimized structures in Table S3, and all optimized structures can be found in the xyz file available in the Supporting Information.

**Figure S28.** Illustration of optimized structures of iso1 vs. iso2 for the iminoiodinane intermediate **A** that demonstrates the significant N-I activation.

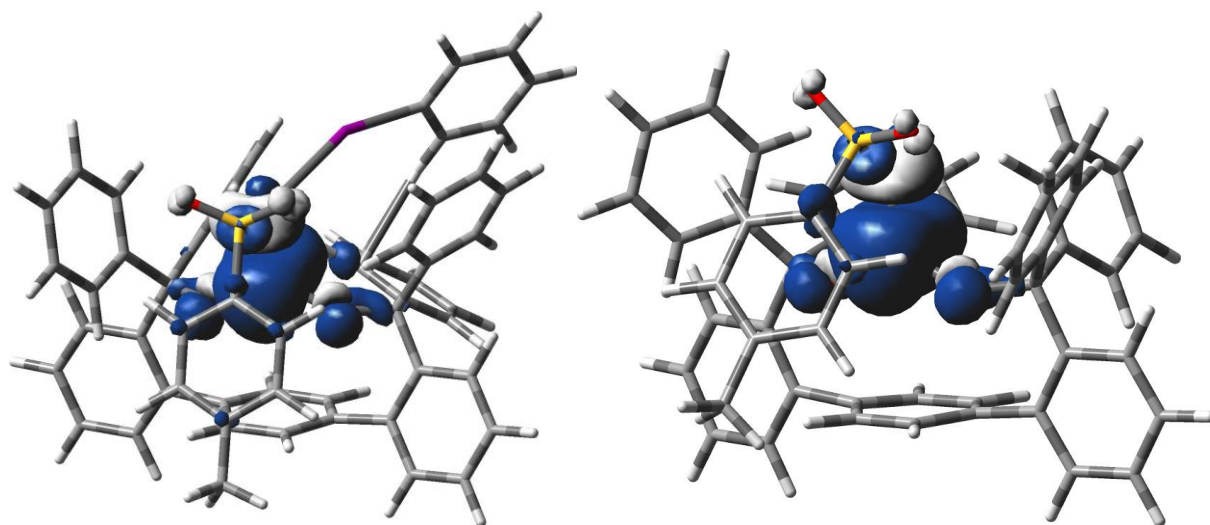


**Table S1.** Bond order analysis of iminoiodinane adducts (intermediate **A**).

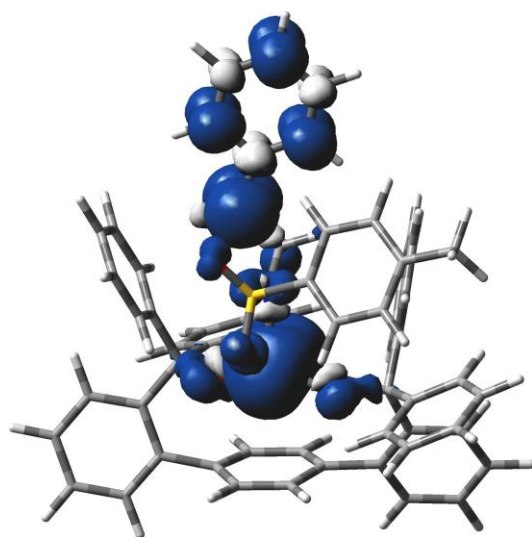
Structure	Spin State	Mayer	Wiberg	Bond Length (Å)
TsNIPh	Singlet	1.05	1.27	2.059
iso1	Sextet	0.08	0.11	2.955
iso2	Sextet	<0.05	0.05	3.173
iso1	Quartet	0.08	0.11	2.937
iso2	Quartet	0.05	0.07	3.096
iso1	Doublet	0.24	0.32	2.638
iso2	Doublet	0.10	0.12	3.001



**Figure S29.** Spin density isosurface plot (iso = 0.002 au) for the quartet iminoiodinane intermediate **A** (left) compared to the imido structure **B** (right).



**Figure S30.** Spin density isosurface plot (iso = 0.002 au) for the sextet radical intermediate **C**.



**Table S2.** Energies ( $E_h$ ) of optimized structures.

Structure	Spin State	$E_{DZ}$	H(gas)	G(gas)	$E_{TZ}$	CalcID
Mn[O-terphenyl-O] <sup>Ph</sup> (THF) <sub>2</sub>	sextet	-3461.041137	-3460.148207	-3460.290597	-3463.563386	TMn001
Mn[O-terphenyl-O] <sup>Ph</sup>	sextet	-2996.384408	-2995.735497	-2995.847667	-2997.846798	TMn011
THF	singlet	-232.286460	-232.167475	-232.202388	-232.556602	THF
styrene	singlet	-309.443171	-309.305840	-309.345084	-309.789589	STYRENE
iminoiodinane	singlet	-1403.138896	-1402.904865	-1402.975783	-1404.046199	NI001
phenyl iodide	singlet	-529.331578	-529.237124	-529.275943	-529.556431	PhI
Int A, iso1	doublet	-4399.649153	-4398.762715	-4398.917982	-4402.474009	MN053
Int A, iso2	doublet	-4399.631578	-4398.745641	-4398.899749	-4402.492884	MN053r
Int A, iso1	quartet	-4399.662672	-4398.776403	-4398.931406	-4402.506212	MN052
Int A, iso2	quartet	-4399.659462	-4398.773032	-4398.928220	-4402.506047	MN052r
Int A, iso1	sextet	-4399.631843	-4398.746679	-4398.902621	-4402.487853	MN051
Int A, iso2	sextet	-4399.640583	-4398.753818	-4398.905761	-4402.472309	MN051r
Int B, iso1	doublet	-3870.277419	-3869.486997	-3869.621762	-3872.897459	MN001c
Int B, iso2	doublet	-3870.273091	-3869.483782	-3869.618042	-3872.893771	MN007
Int B, iso1	quartet	-3870.299026	-3869.509280	-3869.646668	-3872.930194	MN003
Int B, iso2	quartet	-3870.299026	-3869.509280	-3869.646664	-3872.930199	MN009
Int B, iso1	sextet	-3870.263480	-3869.474234	-3869.613205	-3872.913423	MN005
Int B, iso2	sextet	-3870.265795	-3869.476685	-3869.612464	-3872.912177	MN010
Int C, iso1a	quartet	-4179.779563	-4178.849613	-4179.002265	-4182.764078	MN070
Int C, iso1b	quartet	-4179.783999	-4178.853949	-4179.003699	-4182.767982	MN071
Int C, iso2a	quartet	-4179.773237	-4178.843269	-4178.992751	-4182.753899	MN074
Int C, iso2b	quartet	-4179.776399	-4178.845745	-4179.000252	-4182.759573	MN075
Int C, iso1a	sextet	-4179.780050	-4178.850119	-4179.002640	-4182.763915	MN081
Int C, iso1b	sextet	-4179.784474	-4178.854482	-4179.004823	-4182.768680	MN082
Int C, iso2a	sextet	-4179.774368	-4178.843415	-4178.996950	-4182.756144	MN083
Int C, iso2b	sextet	-4179.776853	-4178.846215	-4179.001427	-4182.760079	MN084
Int D, iso1a	quartet	-4179.806978	-4178.877649	-4179.027699	-4182.743518	MN096
Int D, iso1b	quartet	-4179.772736	-4178.842644	-4178.995269	-4182.731312	MN097a
Int D, iso2a	quartet	-4179.778261	-4178.847567	-4179.000951	-4182.734473	MN098a
Int D, iso2b	quartet	-4179.783594	-4178.852476	-4179.006539	-4182.736723	MN101a
Int D, iso1a	sextet	-4179.783719	-4178.853933	-4179.002466	-4182.781443	MN102a
Int D, iso1b	sextet	-4179.785494	-4178.854303	-4179.009623	-4182.782628	MN103
Int D, iso2a	sextet	-4179.787670	-4178.855546	-4179.011336	-4182.782685	MN104a
Int D, iso2b	sextet	-4179.802928	-4178.871272	-4179.019191	-4182.793530	MN105
TS B-C-1a	quartet	-4179.757455	-4178.828611	-4178.982555	-4182.733288	MN086c
TS B-C-1b	quartet	-4179.758117	-4178.830076	-4178.981401	-4182.733707	MN087c
TS B-C-2a	quartet	-4179.757455	-4178.828611	-4178.982544	-4182.708880	MN090
TS B-C-2b	quartet	Not found				
TS C-D-1a	sextet	-4179.762197	-4178.832815	-4178.988421	-4182.755034	MN107
TS C-D-1b	sextet	-4179.769756	-4178.839943	-4178.995690	-4182.761341	MN108
TS C-D-2a	sextet	-4179.762197	-4178.832815	-4178.988416	-4182.755034	MN109
TS C-D-2b	sextet	Not found				

**Table S3.** Harmonic frequencies (cm<sup>-1</sup>) for all optimized species.

----			988.1988	988.4934	988.9492
Mn[O-terphenyl-O] <sup>Ph</sup> (THF) <sub>2</sub> S=5/2			1003.4239	1017.6000	1023.4052
----			1024.3634	1025.1462	1026.2600
9.2000	20.9668	22.0465	1027.0989	1030.1707	1036.3319
28.8956	34.7278	40.2600	1039.0028	1047.4073	1050.3893
46.0689	46.3864	49.4737	1064.7354	1065.8590	1069.7405
54.8332	55.1763	58.1343	1072.1077	1089.4604	1094.3597
58.9869	62.5056	66.0156	1097.3175	1097.5903	1100.9604
71.1429	73.0233	77.8753	1119.1332	1122.4945	1131.6737
79.4771	84.2058	88.9656	1131.7547	1132.8231	1134.8272
95.5837	102.2237	104.5877	1138.1416	1138.9363	1145.1995
109.1053	111.3691	114.9244	1146.6656	1147.4900	1151.6046
127.0872	128.5950	153.3502	1153.9054	1157.3247	1158.8088
160.2724	170.7235	176.4309	1159.6812	1160.9894	1170.3701
185.3630	189.9206	204.3726	1170.8772	1171.9200	1180.2159
206.5484	211.2393	215.3347	1184.9723	1186.0064	1203.8237
224.4755	228.0759	248.6428	1209.7006	1211.2140	1221.1308
253.7147	263.3846	264.7686	1239.7136	1240.4708	1257.8323
268.6375	277.1827	286.5812	1261.6530	1262.1111	1263.6446
292.2693	313.3784	320.7744	1275.6565	1277.6978	1280.0683
323.5420	328.2481	349.6937	1280.7188	1283.8674	1287.9446
372.5212	377.4955	391.2472	1290.8066	1311.6389	1312.6030
399.1986	400.6490	401.1857	1323.6840	1332.5594	1338.1677
406.2680	409.3219	425.0467	1346.4527	1350.2850	1366.3671
464.5212	468.6195	485.8977	1367.8341	1368.4209	1369.6903
503.0494	507.9839	518.3112	1398.5325	1403.1158	1408.9522
521.4083	537.8215	551.8968	1413.5901	1418.9096	1421.7829
559.6157	576.1525	611.6846	1424.2499	1424.8756	1427.8647
613.1803	613.2791	613.8400	1429.3397	1430.8801	1430.9689
614.4043	622.8895	627.3468	1444.3922	1448.9011	1457.5258
630.0558	634.2371	635.0661	1459.5634	1468.6922	1469.6911
635.2081	636.9559	641.9938	1469.9678	1470.3900	1474.3751
653.1882	674.6935	688.1141	1507.4997	1550.1446	1575.2682
696.3562	698.9776	700.8635	1577.8910	1588.8529	1589.4902
705.0728	708.1509	722.7722	1591.4390	1591.7524	1602.9643
728.9069	746.1303	748.3091	1604.6110	1605.2615	1605.3766
750.8386	757.3808	761.1339	1609.0173	1609.1301	1614.8856
770.3162	775.1270	776.7093	2933.3591	2938.0428	2942.8517
782.1179	787.8028	819.1159	2977.6595	2986.5322	2995.4564
824.9183	829.6956	831.4784	2998.2755	3006.4041	3037.3766
832.5522	834.5272	836.7346	3046.8146	3049.5727	3052.5867
843.6649	847.5683	864.0223	3056.9400	3061.8463	3066.6451
866.0901	873.0301	882.7979	3083.8369	3089.7413	3090.1000
886.9638	891.5778	894.7630	3090.2305	3090.7835	3092.7064
896.2489	901.9898	905.1941	3093.5736	3094.8393	3099.0998
913.4030	918.3063	926.1638	3099.7787	3100.0516	3101.3055
928.8037	930.7070	931.2831	3101.9744	3102.5473	3105.9149
935.8382	936.4896	941.2528	3110.3040	3112.0153	3113.3008
945.4949	946.4260	957.8841	3114.0153	3114.2078	3114.3678
958.2452	958.7610	961.7380	3119.9357	3120.0686	3121.1953
968.3556	975.4496	975.5518	3121.6421	3121.8770	3122.4242
977.6263	978.5585	981.1603	3123.5601	3124.5196	3125.8869
984.2706	986.5347	987.6526	3128.6512	3134.9460	3149.6856

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Mn[O-terphenyl-O]<sup>Ph</sup> S=5/2

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-7.8539	20.2536	24.4368
29.9701	33.2058	38.0719
44.0095	48.0270	52.1166
59.8226	60.1274	66.7479
72.9954	78.2408	82.9870
89.8892	91.8971	107.4082
108.4923	134.9757	170.2403
174.8145	199.7497	203.4942
214.1667	227.2484	235.6649
249.2635	253.4672	262.4283
266.5985	270.5191	293.0300
295.1732	307.9139	317.3698
323.0906	347.0099	364.1691
387.7918	398.9407	401.1819
402.0115	405.4042	406.6632
408.5512	427.9750	461.7181
481.5882	497.8731	502.4823
506.5800	520.5164	533.7534
542.0828	552.8436	575.4267
610.7104	612.6329	612.8871
613.3176	615.0090	623.7452
628.7578	632.0748	634.1816
635.8795	650.2137	660.5221
693.5114	699.1476	701.3076
706.0975	708.6870	709.3701
718.0681	728.0705	747.8249
748.9101	751.2795	757.6440
760.5192	765.0138	769.0754
780.9009	784.1290	826.0619
833.0210	833.8381	835.9014
836.7893	839.5813	864.4821
866.9123	885.0579	889.2579
900.9948	902.0390	924.8862
925.9020	929.5427	931.8286
941.0832	946.7395	947.0772
956.3275	958.2940	961.3376
962.3243	963.1432	978.6429
979.2523	980.6473	981.1812
981.8580	982.1496	986.7867
987.2825	988.3413	988.8942
990.4233	1001.1016	1020.5330
1022.5270	1023.7218	1023.8885
1024.7832	1045.1772	1051.3694
1056.2735	1061.8543	1065.6853
1066.9220	1081.3838	1087.4886
1095.9055	1097.5667	1104.0150
1130.1510	1132.3858	1132.6584
1134.9295	1139.3583	1140.9878
1144.0292	1145.8975	1148.1404
1149.7408	1154.3970	1155.1045
1155.9075	1171.1530	1174.6077
1181.9561	1186.5620	1241.8481
1243.8184	1260.7639	1269.9508

1275.5906	1278.8172	1280.0008
1281.1141	1281.1637	1315.8762
1342.6981	1344.2740	1365.8597
1367.7268	1369.1763	1369.9754
1387.1118	1420.9562	1423.1930
1427.1272	1429.4341	1430.9470
1431.3710	1455.4734	1467.0573
1467.2863	1468.7877	1471.1040
1471.5830	1502.0290	1539.6461
1575.5899	1576.2110	1585.7083
1590.4739	1592.4670	1593.4080
1600.8249	1602.2559	1603.7629
1606.0006	1607.0985	1610.0748
1610.2519	3088.0211	3091.7458
3092.1123	3094.8235	3095.3987
3096.5884	3098.5900	3099.3284
3101.1362	3104.7652	3104.7860
3104.8416	3107.8274	3109.2528
3109.2752	3110.6114	3112.9812
3115.4241	3117.9940	3118.1452
3118.6182	3118.9806	3119.2929
3119.9572	3123.4148	3127.0093
3128.5777	3129.6510	3130.0878
3131.3531	3133.1764	3149.9038

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THF

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27.3299	285.3752	625.3634
631.7082	777.3086	843.0881
889.0967	911.2069	920.8268
947.7493	1019.6673	1082.4992
1106.5438	1165.4697	1180.7922
1208.5441	1219.9073	1254.8415
1257.7666	1304.5884	1342.7297
1410.5493	1430.7812	1434.6309
1452.2788	2867.2564	2873.9463
2988.0998	2996.7635	3026.4858
3030.3846	3039.7599	3054.1798

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Styrene

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57.1616	202.1538	225.1465
399.5985	435.3862	436.4051
542.8759	613.0843	637.2438
691.1673	771.1974	782.7596
824.9379	881.8509	906.9135
957.8674	978.5592	983.4224
995.0820	1001.0831	1024.8042
1075.2363	1136.1067	1154.9412
1200.7128	1271.0551	1295.6777
1364.4565	1389.1374	1434.9566
1479.8884	1583.2226	1612.0618
1649.1112	3060.7886	3071.4360
3090.8993	3098.0701	3107.1183
3114.4175	3123.2718	3164.7351
57.1616	202.1538	225.1464

399.5984	435.3862	436.4052	3122.0420	3128.3959	3131.1772
542.8759	613.0843	637.2437	----		
691.1673	771.1974	782.7596	Int A iso1 S=1/2		
824.9380	881.8503	906.9137	----		
957.8675	978.5592	983.4224	10.7722	14.0930	20.0574
995.0822	1001.0831	1024.8042	22.3736	30.0107	33.0367
1075.2363	1136.1067	1154.9413	34.5917	37.8124	40.4587
1200.7128	1271.0552	1295.6779	46.4894	47.2199	48.8434
1364.4563	1389.1370	1434.9566	51.7811	54.4542	58.7810
1479.8885	1583.2227	1612.0618	61.6898	63.2300	71.1019
1649.1112	3060.7885	3071.4360	72.0736	75.8003	80.7070
3090.8992	3098.0700	3107.1183	84.6801	90.5449	98.5994
3114.4175	3123.2718	3164.7352	102.5535	107.3838	109.2762
----			109.6463	117.2059	121.0773
Iminoiodinane			127.8597	137.6476	147.5417
----			163.2029	169.1885	174.8366
8.9633	17.4059	27.0923	183.5426	194.5975	205.6551
30.4017	35.2744	71.8769	210.8860	218.1687	220.2235
104.5429	128.2751	149.4215	239.0470	250.2782	254.2636
166.0458	212.9888	221.3328	258.6271	261.3655	265.4638
252.4172	261.5867	285.9374	267.7908	279.7747	286.1487
324.6471	340.2710	394.1676	289.1469	296.4241	312.4443
402.6955	405.4231	442.0799	320.1095	321.7941	329.1268
450.7936	512.2449	523.3951	339.2566	343.3485	352.6786
539.5338	596.6281	618.3134	369.7863	381.4211	392.3776
625.9308	638.1012	683.4047	395.8008	397.5462	401.3780
701.4447	721.2339	729.5870	401.5240	407.0085	409.1620
796.6356	800.4880	823.3990	416.8387	421.4960	423.4673
824.2208	906.7562	941.4804	441.8197	452.6157	464.4338
957.9627	958.4693	962.8073	473.6840	494.7642	496.8493
968.4793	996.4406	997.5810	501.2616	503.2362	509.1265
1010.7027	1011.3164	1036.0864	520.9439	527.8568	539.3359
1038.4387	1069.4297	1086.1270	541.6522	553.8271	580.3037
1090.9224	1138.3859	1150.2987	580.4908	604.7853	611.0411
1161.1524	1204.7098	1236.8459	611.9435	612.3527	613.7804
1262.1901	1289.1193	1343.2096	616.5793	622.5295	624.2962
1356.0697	1359.7499	1391.6045	631.2758	632.3592	634.3603
1408.1958	1421.0775	1425.5698	635.8078	646.3472	649.4184
1449.3092	1473.0299	1570.7312	664.0797	669.9256	689.6302
1583.3645	1592.1738	1607.1956	691.8790	697.7496	698.2943
2957.4071	3029.6614	3062.0675	701.5668	703.4199	711.4347
3068.3485	3094.7382	3095.9450	723.3561	723.9078	734.1706
3102.2805	3110.5702	3117.9509	738.4209	742.7412	746.8295
3127.7168	3128.5785	3129.8706	748.9010	753.8398	758.0924
----			763.9170	779.7999	783.5764
PhI			786.7567	793.6147	806.2202
----			810.1060	815.6852	821.0428
145.5015	215.6894	261.3014	822.5006	823.6846	829.1020
398.4002	448.5712	602.5265	831.3191	832.8203	834.9312
647.8579	686.3160	721.4923	837.9833	858.6664	869.6421
814.6159	889.6011	952.8784	876.2435	888.0388	893.1991
972.5039	978.8148	1013.9153	899.5193	900.5995	917.3343
1046.8459	1061.3340	1135.9803	919.2438	922.4674	932.6387
1152.2738	1271.9733	1354.3551	932.8578	936.7597	942.8004
1421.8353	1448.7950	1581.1403	945.9827	950.0013	950.2866
1587.8650	3101.6178	3109.4325	950.7109	956.9412	957.6682

962.8839	964.7186	965.3947
975.2539	975.6274	976.4338
977.8416	978.5728	978.7008
979.3969	980.0355	983.1430
985.2330	988.3335	988.7785
990.1035	992.4160	998.3198
1005.5437	1008.9125	1014.0146
1023.5906	1025.3731	1025.8699
1026.6054	1032.1562	1038.8478
1046.9349	1048.8976	1053.6065
1061.0914	1073.1019	1074.0765
1075.6684	1078.0821	1090.3714
1092.1721	1095.2029	1097.4948
1099.1524	1133.1450	1133.5291
1134.5661	1135.3683	1136.4817
1138.5154	1140.0361	1148.9083
1149.4545	1151.5865	1153.9558
1154.4729	1154.6087	1157.6531
1158.3967	1166.8832	1172.5445
1186.5335	1195.8443	1198.5291
1201.6273	1208.3793	1238.6278
1242.9355	1264.4848	1265.0149
1271.6558	1272.8471	1279.0167
1283.4966	1283.7918	1285.9665
1288.4992	1331.0243	1342.3350
1343.2278	1349.1233	1354.6217
1359.6740	1367.2846	1371.2816
1371.7293	1372.2508	1394.2102
1397.6443	1408.3161	1419.0869
1420.6333	1420.8597	1426.4879
1427.9856	1429.5885	1432.6596
1433.8342	1449.6474	1457.2141
1470.5662	1471.5145	1472.8745
1473.1506	1473.7752	1474.0268
1509.8564	1561.4873	1575.1195
1577.2713	1581.8416	1583.8744
1584.0310	1588.2788	1589.4991
1593.0760	1593.5044	1604.1295
1606.5360	1606.7394	1607.5898
1608.4276	1610.9617	1611.5032
1622.4877	2876.9613	2956.0120
3030.5230	3066.5310	3094.5263
3095.1939	3096.6640	3097.8269
3098.7177	3099.5052	3099.9961
3101.5619	3103.0322	3103.2844
3106.6844	3107.2615	3107.3176
3107.9003	3108.7434	3110.1988
3111.9280	3112.3866	3114.3726
3115.8298	3116.9535	3118.0473
3118.2029	3120.2319	3120.6720
3121.3534	3121.4217	3121.6791
3124.1702	3124.5409	3125.5116
3127.2045	3128.1964	3129.2222
3130.1987	3138.1439	3141.3217
3144.9339	3153.5148	3160.8284

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-7.8332	16.3392	21.2507
24.6092	26.3437	33.8022
38.3950	39.4638	40.3572
43.8287	46.0044	47.9938
53.2598	55.4792	59.0619
62.9402	63.9263	65.1430
73.1531	76.5220	78.1785
86.0408	87.7600	90.4037
94.0279	95.3631	103.8589
108.3079	115.2451	115.9166
119.6341	124.4020	130.8026
138.7393	157.8990	164.8898
172.6234	184.9657	203.7405
208.3842	212.5857	217.9077
220.8954	242.6563	243.7539
252.8901	255.3385	258.6711
259.9566	267.1785	271.2291
278.3553	298.0410	300.8811
309.0434	310.5926	315.6111
326.9680	333.9420	349.7539
357.9911	384.1131	394.6869
396.3678	397.1958	399.2138
402.2052	404.8282	409.4465
410.7659	411.6270	414.9297
428.0740	430.3535	448.4079
458.0962	462.7449	482.1247
495.8233	498.1684	504.8625
507.4909	525.7615	532.6539
539.2242	551.6885	557.2263
572.0182	603.6376	611.9246
612.1473	612.7761	613.0611
614.1896	625.5819	626.2248
628.1688	632.1563	634.7183
637.1031	638.1826	647.8514
654.2328	663.4012	683.8346
689.0927	696.5025	699.0203
706.2091	707.8926	714.0879
716.4988	720.0426	720.9938
734.0313	748.3850	749.6473
751.4755	756.7087	760.2121
761.5288	765.7830	773.9809
782.1082	790.1990	794.5582
802.7923	816.6344	817.0212
824.9871	826.7354	832.2653
840.6575	845.8021	849.5461
866.3397	868.3544	886.7375
889.3191	890.5676	903.4032
907.0506	925.5825	928.6271
928.7479	933.2630	935.9564
942.9119	947.6925	948.2908
951.5475	953.9642	955.8841
956.6288	964.2216	966.4153
968.3644	971.3225	973.4388
975.8867	978.6487	979.1612

980.6569	983.1450	984.8549	-11.5895	12.5873	15.1835
986.0615	988.3100	989.1755	16.6464	23.2670	29.4052
989.7489	993.7019	995.6109	32.7013	37.0845	39.4356
998.7336	1002.3186	1009.5719	40.6513	44.4944	50.1329
1010.8388	1015.3010	1021.8710	50.7866	54.3845	55.5995
1024.6869	1025.7147	1026.5071	56.5947	62.8665	64.4782
1027.9675	1034.0619	1046.1597	72.9651	75.8553	79.5215
1046.7775	1055.6019	1063.4270	80.1047	85.7870	88.6595
1065.8807	1070.2508	1073.5306	93.9465	100.6820	103.8235
1074.5498	1084.4817	1092.3461	106.7404	109.4436	115.0534
1094.6585	1097.9223	1100.9209	118.7304	125.7404	130.1948
1105.6674	1132.9246	1133.3261	151.1472	165.9707	172.1961
1134.1459	1134.2778	1135.9739	181.9170	197.4378	200.6797
1138.5790	1141.8986	1146.1035	207.2111	215.6560	220.0119
1147.8529	1149.5939	1152.8004	224.4754	240.8399	248.7805
1153.6092	1155.6147	1159.3537	249.2202	256.9806	260.8747
1159.4299	1161.7505	1172.0558	261.6024	268.3902	275.4550
1180.5061	1184.1908	1190.4709	285.6854	288.6432	296.0489
1202.3333	1206.9690	1240.2012	305.8973	321.6876	328.2253
1244.7795	1257.2746	1263.4422	338.8809	347.1643	356.4847
1272.2401	1272.9368	1278.6172	361.2953	372.4296	389.7754
1281.1691	1283.1532	1287.1948	392.5813	398.2531	401.4498
1289.2612	1324.4746	1341.6677	402.5897	405.3710	406.6632
1345.4530	1349.8163	1355.5995	408.4744	410.9460	418.4231
1357.2578	1367.3299	1368.1780	420.3041	452.5858	464.6389
1370.9423	1372.9195	1393.1285	476.2569	478.2928	492.7685
1404.3483	1406.5707	1420.8451	502.2997	508.7419	510.6617
1421.1919	1422.1596	1427.5350	516.6111	521.4091	525.7904
1428.3736	1428.5818	1432.0984	541.0749	552.8903	580.8974
1433.4735	1449.8007	1455.8177	604.6071	611.2184	611.6169
1466.8662	1470.0058	1471.3704	612.3584	613.5540	616.3268
1472.3040	1472.9655	1473.1740	624.2400	627.7235	627.9068
1500.4672	1540.3817	1574.8341	630.2795	633.1860	634.5602
1576.3513	1577.2218	1581.6889	637.0171	649.2049	661.3066
1585.1650	1587.5643	1590.9248	666.0749	689.8492	691.6306
1592.2208	1595.1997	1602.3392	694.1123	697.0056	700.8196
1604.6206	1604.9028	1605.3384	703.9366	706.7617	720.2577
1607.0604	1609.3936	1611.0387	723.9940	729.7555	736.5952
1612.4989	2956.2569	3028.7182	740.0464	742.6870	748.0135
3061.5449	3087.8024	3094.6401	749.2550	752.4667	755.3393
3095.7571	3096.2704	3096.3435	761.1277	766.4712	780.8560
3097.0411	3097.8885	3098.3820	787.5361	794.3026	801.9767
3098.6840	3098.7971	3105.1699	813.4393	814.2472	818.6693
3105.4031	3105.6270	3107.2381	821.1079	824.9036	829.8669
3107.5992	3108.4866	3109.1751	831.0884	836.0020	841.0919
3110.0663	3115.2929	3115.5907	863.5411	869.4643	880.5589
3116.0022	3116.0649	3117.0920	890.8703	895.7840	900.3527
3118.4502	3119.7234	3120.4033	905.3878	920.6713	926.1867
3123.4436	3124.3011	3124.6503	926.4953	929.6874	930.6477
3125.2520	3127.7381	3128.2993	942.1160	946.9190	947.2411
3131.0078	3131.2810	3132.8849	952.0728	957.7853	958.2812
3133.0173	3143.1126	3149.7738	958.7995	960.1026	963.5039
3150.1101	3151.1543	3162.5498	964.3224	969.4672	975.3034
----			975.5586	978.5043	978.9637
Int A iso1 S=3/2			979.7466	980.2614	982.1066
----			984.6609	985.8414	986.7783

987.4877	988.3093	989.6512	33.6427	36.4232	40.5190
989.8798	1001.7490	1004.2123	42.0685	47.6142	50.5131
1009.4103	1011.6806	1014.0327	51.4247	56.0623	57.0797
1023.4407	1024.9671	1027.0923	58.6250	62.9936	70.2350
1027.4288	1029.6298	1030.4706	70.6939	74.6160	79.4045
1047.2415	1048.6959	1051.7469	80.9767	83.3715	86.5129
1062.1930	1074.1479	1075.8007	91.7643	94.9426	99.7061
1076.3652	1082.4892	1085.2818	105.2350	110.1525	114.0381
1091.6084	1096.2379	1096.6311	117.2190	123.5273	127.3264
1099.5125	1133.4105	1134.7429	138.1857	154.1727	165.5065
1135.0404	1135.9764	1136.9311	178.3682	184.6299	193.0929
1138.5976	1140.5182	1148.0300	205.9219	217.6161	220.1769
1148.3503	1152.7659	1154.5989	222.7685	236.8367	246.2345
1155.5393	1155.8153	1156.0160	252.7514	260.0942	260.8790
1160.1873	1161.3129	1170.5624	262.5617	272.3811	278.0523
1179.2513	1189.8429	1194.6425	282.6556	286.4235	300.7598
1207.4335	1214.8283	1240.8369	305.7280	313.3226	325.4935
1242.3759	1264.7854	1266.3164	332.4756	345.2954	352.3430
1273.8894	1273.9316	1280.2664	360.5616	377.5650	396.1100
1283.4601	1283.9757	1284.7086	397.5640	398.5404	399.9561
1289.9575	1330.3585	1342.5809	402.1184	404.4121	407.0965
1345.1152	1347.7439	1354.9711	408.6461	418.1900	419.6666
1357.3669	1366.6409	1370.5033	420.8439	442.3613	451.0645
1371.8602	1372.4658	1394.0685	466.4276	479.1551	490.8652
1398.6264	1407.4969	1420.6981	492.7878	501.2191	508.4771
1421.2986	1421.4056	1426.9431	517.2390	520.1735	527.8371
1429.0284	1430.0031	1433.3439	540.9098	554.3019	579.6610
1433.7878	1449.9692	1456.7164	598.1955	604.3043	612.0670
1469.9301	1471.9125	1472.4467	612.9011	613.5419	614.1316
1473.5397	1474.9999	1475.9438	615.6736	625.4994	628.1799
1508.9821	1559.6527	1575.2299	631.5036	633.2164	633.6508
1577.5381	1581.2285	1583.2649	635.9789	649.2387	654.6447
1584.0595	1588.8132	1591.3719	665.1268	666.9810	686.9721
1592.7054	1593.9812	1605.8538	689.7543	691.9993	694.1640
1606.5489	1607.0867	1608.0656	696.3759	703.2396	712.3675
1608.3591	1610.6947	1611.9856	721.5385	722.9507	734.7589
1621.1920	2957.7217	3029.7940	737.9492	748.3035	748.8656
3063.3160	3078.6963	3095.7584	752.5343	755.6917	760.3768
3096.6564	3097.0736	3098.0019	766.1338	779.5750	779.9988
3098.1146	3099.4789	3099.6822	791.6485	800.5278	809.7782
3100.0341	3101.9126	3103.7135	810.9311	814.0282	819.7631
3104.0802	3105.2141	3107.4324	820.7475	821.8864	828.6713
3107.9799	3108.7568	3110.0430	832.9362	834.4763	847.2348
3112.0882	3112.8859	3114.6598	864.2953	869.1934	879.2234
3116.3890	3117.7659	3118.6010	892.0904	894.3999	897.7636
3118.7176	3119.3397	3121.2110	910.7033	919.8491	920.5490
3121.4139	3121.8059	3123.6779	926.3766	930.7153	932.6650
3124.4188	3124.6011	3127.7898	940.9201	946.3966	946.9951
3127.9425	3128.6815	3129.2379	955.5925	956.4982	958.9307
3132.2485	3135.1886	3135.3388	960.2501	960.3848	962.7257
3136.5014	3143.7195	3144.1589	965.3395	972.8317	974.9433
----			978.0007	978.4743	978.5437
Int A iso2 S=3/2			980.1674	981.8186	984.3510
----			985.4277	986.6833	987.9234
-1.3734	11.5774	14.8249	988.8100	993.6038	994.2554
20.6795	21.7123	30.1294	998.1019	1002.6588	1006.5078



1010.3898	1014.3212	1023.6909	49.7549	53.9732	57.9193
1026.2778	1026.8417	1028.5068	61.6213	62.2032	65.6734
1029.8533	1032.8778	1047.8827	68.9355	71.9749	74.5181
1048.6435	1049.1906	1052.3778	80.7932	88.5101	91.3031
1062.6641	1072.9282	1075.7029	97.1413	99.3250	106.2747
1079.1915	1083.0152	1090.0232	107.7944	111.3813	114.3217
1094.6726	1095.6596	1098.6713	121.2651	125.4566	129.6196
1101.5520	1131.6001	1133.4031	142.8983	165.4208	170.8437
1135.6665	1136.3966	1137.7565	185.3966	192.2766	198.4455
1138.6578	1138.9751	1145.7305	206.6718	210.6324	213.8087
1147.6545	1152.7185	1153.1614	215.6172	236.3442	238.9401
1154.4951	1156.0432	1159.2185	242.5267	249.0091	253.7284
1160.9717	1164.4425	1178.6812	259.3425	265.5725	273.8852
1179.3834	1189.4494	1194.2545	280.8255	285.6825	293.6426
1207.9041	1238.4066	1242.3006	300.9497	317.7974	330.7571
1258.5129	1264.4224	1269.8117	336.6177	339.6399	343.2995
1272.2370	1274.5432	1277.2665	356.8780	358.0058	383.9820
1282.4145	1283.5216	1284.2640	391.2712	393.1845	398.8465
1293.6602	1330.8769	1342.4926	402.7406	402.8157	408.9719
1343.8571	1349.0318	1356.0347	412.0260	414.6486	418.5443
1357.4542	1366.0107	1370.9784	421.8655	448.6677	462.4862
1371.5466	1371.9357	1396.2409	472.1121	475.9978	490.0816
1397.9491	1407.4250	1420.6141	499.7279	502.5552	506.5177
1420.7858	1421.2693	1426.1685	508.8972	518.6623	526.7681
1426.5982	1429.0104	1433.1109	541.0974	552.5292	574.4387
1435.0029	1450.6068	1456.9816	577.8555	601.0727	610.6611
1470.7076	1471.0480	1471.8297	611.3924	612.0220	612.8478
1472.7816	1474.4800	1474.7489	614.2008	624.8463	625.6258
1508.7883	1559.8811	1574.9416	629.3247	630.7089	631.6537
1576.1948	1577.5694	1581.4562	633.2058	639.0833	646.1053
1584.8397	1586.8954	1591.3690	655.0554	663.1917	681.0281
1593.7337	1594.4910	1604.5285	694.1091	694.1633	700.0602
1605.5377	1606.0382	1608.3073	701.6353	701.7531	709.6318
1608.3310	1610.6996	1612.8274	717.9754	722.5740	729.4997
1621.5934	2958.2672	3029.8571	732.5247	743.7960	745.9568
3066.0468	3068.5259	3086.2015	750.9835	752.7354	757.7708
3095.4895	3096.0459	3096.0526	763.0338	766.7954	777.2106
3096.4167	3097.6010	3099.6510	778.8922	786.6503	795.4113
3099.7321	3100.6851	3105.0809	804.0883	814.9382	819.2210
3105.6499	3106.1835	3106.5892	824.1777	828.5800	831.1630
3106.9115	3108.3986	3108.5074	833.0122	838.9239	840.0845
3110.7075	3112.1138	3113.5399	859.9791	867.3876	882.1443
3114.0376	3114.5574	3117.6270	889.5200	894.5614	898.9937
3118.0033	3120.5490	3120.7748	902.4732	920.4974	924.0721
3123.3924	3124.4410	3125.0423	926.4345	929.3225	930.8600
3126.5526	3126.9725	3127.8509	942.0978	943.1811	944.4665
3130.1655	3131.2684	3133.8141	952.3644	954.0325	955.5995
3135.1582	3137.3718	3137.8471	958.1379	959.5952	962.7326
3139.5424	3141.2562	3186.9064	965.6720	967.2578	968.5055
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Int A iso1 S=5/2			977.6433	978.6711	982.2268
----			984.6402	985.1048	987.0239
-8.7406	9.6069	14.4370	988.0062	988.7759	990.2643
20.2149	23.9539	30.1688	990.9302	1000.5103	1000.9412
32.6155	38.9219	40.4722	1009.4475	1012.0835	1020.4118
43.6067	44.0422	46.5910	1025.0913	1025.9869	1026.4218

1027.2850	1040.9793	1044.8951
1046.8397	1058.1585	1063.1500
1068.6333	1073.2769	1073.6545
1082.7184	1087.2540	1090.6190
1093.9144	1094.8656	1096.0903
1107.5091	1133.7800	1133.9560
1134.6347	1135.0985	1136.0571
1138.7856	1139.0510	1147.1254
1149.6283	1151.1751	1153.1733
1154.0866	1154.3844	1155.3077
1159.2529	1159.7138	1168.5362
1175.3428	1178.7756	1183.2319
1196.3592	1207.0773	1239.2453
1243.1289	1261.9654	1264.3139
1268.5865	1273.7629	1275.9847
1281.3646	1283.0662	1283.5010
1290.9124	1321.8593	1342.3022
1345.0153	1346.2882	1356.8566
1358.2633	1367.1010	1368.7974
1370.7924	1372.5945	1393.4980
1398.7231	1407.4863	1419.1868
1421.0537	1422.4160	1425.5665
1426.4315	1429.2660	1430.6433
1433.5210	1446.1224	1455.1840
1467.9430	1469.8970	1472.6198
1473.0427	1474.2791	1475.6073
1500.1494	1544.0818	1574.7057
1574.9263	1575.1252	1579.0566
1582.2480	1586.4550	1588.3237
1588.8034	1594.1084	1600.9837
1603.9185	1605.3705	1606.9567
1608.2324	1608.5679	1609.3420
1611.3235	2955.3646	3027.7393
3062.7966	3070.0791	3093.0675
3093.4863	3096.2224	3096.6490
3096.8842	3097.5667	3097.6681
3098.8437	3099.0062	3102.4694
3103.9498	3105.8728	3105.9062
3106.8363	3107.0137	3108.6320
3109.6881	3110.4712	3111.4216
3111.7715	3113.3763	3116.2680
3117.0759	3117.1654	3118.3698
3118.5744	3119.4847	3122.5188
3123.0488	3123.6038	3124.1689
3124.5031	3124.7622	3125.3089
3126.9785	3135.8133	3139.0836
3139.5980	3143.8465	3144.1232

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Int A iso2 S=5/2

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-7.0820	15.7338	20.6383
24.1398	28.1098	32.8468
40.6068	41.6734	42.7760
44.1132	48.6301	51.3185
56.5267	60.5192	60.8889
66.8174	68.8311	69.8735

73.7220	77.5345	79.3564
85.7688	87.3145	91.5958
97.3865	100.2603	100.8994
106.3603	110.8636	114.6383
121.3341	133.6292	137.0660
152.6644	162.2398	181.7647
184.0252	192.5395	202.6258
210.4693	211.4906	221.0074
224.5733	234.1204	239.7556
248.8159	258.9147	261.1803
267.1744	274.2437	277.2516
281.6529	284.6885	297.2275
307.7485	320.2786	323.4346
331.8082	341.4250	346.3716
351.7045	357.8294	375.0009
381.1697	394.5739	395.2710
397.3877	403.4640	405.0052
409.2502	413.4383	417.7684
418.0651	421.8051	447.3401
466.4436	475.5474	488.7892
500.5548	503.4609	508.0413
511.4813	515.7912	526.6861
540.8725	555.2866	573.6746
582.8007	602.8292	611.3816
612.7192	613.3051	614.3179
616.3488	625.6258	627.7696
630.3119	632.0712	633.5247
634.5302	641.2850	647.2849
662.6286	667.0614	683.0290
694.0547	695.3274	702.2744
703.4316	707.1784	710.3334
721.3413	727.0262	733.8011
738.7445	747.4701	749.1077
752.5881	756.4232	760.4604
766.9243	779.4223	789.7859
798.6245	802.7014	814.0376
820.3568	822.8337	828.9058
831.5161	832.7661	837.2230
840.6740	844.2448	855.1686
862.6404	869.1842	883.9470
889.0074	896.9753	900.3362
909.7383	922.1222	924.4623
929.4477	931.0846	932.3780
943.4085	945.0583	946.4650
952.2451	956.1605	960.6061
961.2219	965.5912	965.8806
968.2476	970.8986	972.2948
976.3624	977.2279	979.3501
981.0526	984.8498	985.5329
987.0776	988.3311	990.4324
990.6649	992.3277	994.5009
998.8567	1003.5616	1010.0620
1015.2927	1015.4791	1025.7987
1026.4056	1027.3273	1028.0735
1029.0375	1042.5281	1045.5406
1047.0686	1049.7281	1059.1581

1066.0953	1074.1551	1075.7084
1079.5256	1085.8450	1087.4488
1089.8804	1093.6268	1095.4353
1098.7140	1134.1784	1135.2476
1135.9758	1136.0692	1137.2941
1137.6179	1139.2060	1146.2056
1147.7737	1151.6962	1154.4652
1156.7444	1157.9528	1160.1883
1161.6670	1164.7092	1176.7848
1183.6486	1187.1710	1197.7783
1207.5557	1236.4956	1238.9934
1240.8582	1262.0051	1267.6672
1270.7773	1274.6032	1276.1386
1282.1533	1286.3615	1287.6099
1293.6876	1330.2948	1341.3521
1342.7414	1347.0334	1356.7062
1359.2252	1367.3507	1369.7976
1370.6536	1372.1732	1392.1057
1393.3187	1404.2573	1419.5861
1421.2797	1422.1439	1427.0444
1427.5308	1430.1703	1433.2884
1434.2196	1450.5084	1455.9050
1469.6502	1472.9395	1473.5016
1474.3927	1474.6639	1476.1653
1504.6747	1556.0867	1573.4925
1576.3399	1580.9989	1581.3101
1588.3782	1588.3885	1592.1601
1593.2334	1593.6935	1605.3093
1605.9638	1606.8599	1607.9202
1608.6339	1610.5002	1612.7339
1613.6486	2960.8179	3032.9172
3074.1716	3096.2749	3097.2254
3097.3250	3097.5161	3097.7148
3097.9690	3100.2491	3100.5499
3104.5219	3104.9503	3105.7347
3105.9694	3108.9760	3109.4266
3109.5312	3111.1279	3111.3758
3112.8472	3112.8937	3113.3265
3115.6848	3118.4160	3120.2475
3120.7212	3120.9163	3121.1822
3122.7897	3123.1002	3125.2032
3126.6778	3128.2009	3128.4680
3129.8832	3129.9162	3130.8940
3130.9421	3139.2065	3143.4978
3148.2408	3151.7855	3162.5781

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Int B isol S=1/2

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-9.9971	18.7044	23.3863
28.5431	31.2369	33.8160
37.9830	42.3557	46.0423
48.2099	51.0141	52.3027
61.5980	65.0275	68.7748
73.4037	75.5913	79.8688
82.7571	87.2911	87.9687
93.1518	103.9685	107.2011

113.9570	122.4352	126.6204
160.0214	169.0018	173.8475
192.0144	205.0998	208.5479
217.0923	226.2935	239.6406
244.0930	252.1150	256.2525
269.6944	273.6645	283.2636
289.0784	297.2603	301.5999
309.5782	317.1887	324.7392
335.1587	342.6591	344.9526
358.8434	363.4337	382.9573
396.8171	400.8888	401.4216
404.3864	405.9746	409.8297
414.6787	422.6455	424.7429
449.5461	465.5630	476.3988
487.7554	498.2378	504.1863
507.2648	511.8037	521.7903
527.5756	540.3148	552.7706
559.1444	579.5143	611.7264
611.9195	613.4690	614.1572
616.6405	624.4673	628.6434
629.7826	632.0806	633.6492
636.4814	637.9488	666.6396
670.0207	693.4017	694.6756
698.1403	701.4701	703.2499
704.9814	728.6379	736.1260
740.2108	747.6281	749.1933
752.1879	755.1840	760.3334
767.2321	780.9264	790.3266
799.2884	800.9873	819.6193
820.0830	824.4946	825.3535
827.7789	828.5208	834.4689
836.7518	863.8089	868.1202
889.2860	893.9297	900.4113
905.0961	922.3702	923.7857
930.0299	930.8313	937.4811
940.3006	946.6591	947.1980
955.5893	955.9997	957.3455
957.8568	963.1636	963.3310
966.0825	967.5589	977.4026
978.5266	978.6499	980.1844
981.7434	983.1231	984.2170
987.6651	988.1333	989.5792
991.0298	992.4200	997.6726
1004.7169	1008.9262	1022.0873
1024.9905	1026.7347	1028.0123
1028.6879	1030.1154	1047.3234
1052.6018	1053.6652	1072.1745
1074.9440	1075.1565	1079.4541
1090.8004	1093.4142	1097.5793
1099.7765	1104.6704	1134.5081
1134.5513	1135.6364	1137.0590
1138.5386	1141.0184	1147.6393
1148.2389	1153.4235	1153.8368
1157.2347	1157.9168	1159.3055
1161.6381	1174.0652	1185.1985
1191.0120	1192.3278	1207.6894

1241.4801	1243.8819	1259.9310
1263.5989	1274.5787	1275.2126
1281.9374	1282.5632	1285.1957
1287.7192	1288.9573	1329.5088
1342.5276	1343.8816	1346.1720
1357.9608	1367.4092	1368.7651
1372.7677	1373.0631	1394.1292
1399.1100	1411.7514	1418.3526
1421.9648	1427.6142	1429.7036
1431.9609	1433.1814	1434.0229
1457.3276	1468.9510	1472.6709
1472.8735	1473.5751	1474.3246
1475.1696	1508.5443	1559.6155
1575.3706	1576.8077	1583.8210
1590.4960	1591.6660	1594.0098
1595.9369	1605.7975	1607.0166
1607.2525	1607.8865	1609.4483
1611.2726	1612.9639	1621.4943
2955.8449	3032.8215	3066.4623
3093.8516	3096.7176	3097.4369
3097.4721	3098.2069	3098.3715
3099.4162	3099.6296	3104.4418
3105.4579	3107.1813	3108.2216
3111.9556	3112.4057	3112.7591
3113.5675	3113.7973	3118.0065
3119.0298	3120.2224	3120.3862
3120.8422	3121.0593	3124.7770
3126.1337	3126.7141	3126.7939
3127.4557	3130.5630	3132.5387
3133.0227	3133.3305	3134.9570
3137.5789	3137.9249	3139.8358

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-11.4471	-5.7145	14.3193
20.0089	21.5970	26.7357
32.0267	34.5811	38.0766
42.0716	47.4909	53.4131
55.2397	59.0148	61.9068
67.1487	72.5375	77.2970
82.3575	85.8030	90.1640
93.7933	99.0992	107.5916
114.9407	121.8735	138.1820
149.1613	168.2223	178.2720
188.6896	197.0363	201.4015
212.2822	226.1820	232.0343
242.0859	250.2943	253.5273
259.6409	272.1433	280.6505
288.7294	293.5168	301.6624
304.6321	319.3166	326.1777
336.4420	342.5861	350.2541
358.8057	376.5335	382.7986
394.9239	397.7035	400.7087
401.7542	403.6601	407.0862
413.4562	421.4500	425.6433
440.6239	465.7274	480.0937

496.4203	502.1373	507.5961
508.8277	512.7988	518.8295
530.0397	539.8237	552.1593
575.9757	600.3124	611.3418
611.9135	612.6681	612.8069
616.3110	623.8812	628.3184
630.4481	632.0735	635.9745
636.3618	648.4018	665.9366
669.1064	696.3391	697.3180
699.2781	700.6021	704.7565
710.0728	727.6586	735.3591
740.1712	748.3143	749.9420
752.0931	756.3688	758.7423
767.0984	780.0219	795.3550
799.8528	803.6340	818.5430
820.9420	823.4218	827.3311
830.2953	834.7630	838.3411
844.5295	864.9707	866.2469
881.9709	892.2389	894.2709
906.7306	907.4621	921.8207
925.9163	929.2872	931.1964
938.3472	938.6681	947.1336
947.4593	952.9755	954.2919
957.0816	959.0167	962.6870
967.1992	969.7569	977.2649
978.3374	978.8434	980.1694
980.9696	983.7232	985.8981
987.9036	989.3183	992.8875
996.7961	997.1857	999.0679
1003.9694	1010.8359	1013.7562
1023.5687	1024.8061	1026.4276
1027.0654	1029.9227	1047.1764
1049.4042	1050.5753	1073.0922
1075.1391	1076.7430	1081.1021
1090.8519	1093.3202	1097.3314
1098.8278	1099.6429	1134.1662
1135.5073	1136.0673	1137.0772
1139.7145	1140.0806	1147.8955
1148.8634	1153.4099	1154.6112
1156.9473	1158.3348	1160.3535
1166.8012	1179.3775	1187.6663
1194.6639	1199.8172	1205.8500
1222.3422	1240.2149	1243.4338
1263.7367	1264.6269	1274.9333
1282.7075	1283.2771	1286.1300
1288.4632	1296.4906	1328.1361
1343.2153	1343.4790	1348.4101
1359.3818	1369.0392	1369.2516
1372.4616	1374.6986	1393.1290
1399.7421	1407.8473	1421.8068
1422.4637	1425.6364	1430.3740
1431.0147	1434.4974	1435.1506
1458.4903	1470.4339	1473.2938
1474.8396	1475.1113	1476.0385
1476.9784	1508.4110	1556.8924
1575.3129	1576.8947	1584.6138

1591.1888	1591.5270	1595.2066
1596.5896	1606.5922	1607.4303
1608.2219	1608.8369	1608.8882
1611.5189	1613.3706	1619.1118
2957.6125	3029.8517	3063.2699
3096.1380	3096.1681	3096.1908
3096.6540	3097.3514	3097.3665
3098.1499	3099.1301	3100.4820
3105.0233	3107.5775	3107.7560
3108.6320	3109.9134	3111.3371
3113.8510	3114.3932	3114.8423
3117.1144	3117.6855	3119.0744
3119.0932	3119.3660	3122.2479
3123.8376	3125.3803	3126.5124
3127.6472	3128.7314	3129.4809
3129.5684	3130.0416	3131.3613
3133.6412	3134.9796	3137.3017

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-12.5717	6.4085	15.9765
20.5450	23.1910	30.7842
36.1940	41.3006	44.2730
46.9064	49.6945	56.2139
57.7100	65.2262	66.7581
74.1406	81.4172	84.4533
88.4618	93.5965	97.4730
101.5431	109.4503	112.7064
114.3767	123.2446	132.9723
135.8396	168.6622	174.6693
182.1093	201.1624	203.9450
211.6786	226.8786	234.9778
244.0094	251.0427	259.9548
265.5425	271.5578	276.3759
282.9497	287.4917	304.2052
307.5614	318.1614	320.3522
327.8727	341.9853	348.4756
358.7457	362.6258	384.6976
395.2209	399.5296	401.5620
402.4147	404.4961	413.7276
414.6431	424.5102	426.3166
446.5341	467.9943	481.8691
491.1419	500.6171	504.4362
510.6363	522.3028	527.8649
536.1171	545.9469	552.0108
578.6879	611.3043	611.4355
612.8367	613.8120	616.3894
623.0725	624.2141	628.2738
630.3332	632.4058	634.3461
636.4909	662.2540	667.4481
689.9212	691.4768	694.5575
699.7343	700.3508	701.1928
706.2151	720.3114	733.2093
737.7733	745.0204	747.9603
750.6553	753.6564	754.1229
762.2197	766.1864	781.7074

787.9091	796.1545	801.0275
808.1460	820.2733	821.1685
821.7565	825.4725	827.5804
836.8268	840.1881	857.9765
866.8107	885.4484	891.8416
900.7888	907.9558	919.9656
922.7549	925.8560	928.7436
937.0699	939.8415	944.3620
945.0823	953.6399	956.3750
956.7180	957.1642	962.7480
964.4320	967.3536	976.4301
977.3621	979.0504	980.3015
981.6918	984.2397	985.0198
986.7517	988.0351	988.6217
989.8570	990.3293	998.6789
1004.3880	1007.2089	1010.1462
1015.8857	1023.7060	1024.7561
1026.1975	1027.1338	1029.5782
1044.8690	1054.1887	1070.4216
1074.6661	1075.6862	1083.4045
1087.3274	1091.1547	1091.3189
1096.4404	1100.2718	1133.6371
1133.9541	1135.7686	1136.7178
1137.8676	1141.9927	1147.3891
1148.2722	1152.0011	1152.5437
1154.7057	1157.4223	1157.5330
1163.9409	1164.4905	1180.8999
1196.8759	1203.6238	1207.2694
1233.8198	1239.2471	1241.3974
1263.8956	1265.3310	1271.3244
1280.3657	1284.9442	1287.6219
1288.3063	1288.9582	1330.6012
1340.3231	1346.4772	1351.5793
1360.3059	1365.5742	1366.9236
1371.3701	1374.2966	1395.0899
1401.3344	1405.0696	1417.8756
1421.6032	1426.8138	1428.3092
1429.8295	1434.5651	1434.7224
1458.2775	1471.0782	1472.4454
1473.1081	1473.3724	1474.1382
1474.7953	1510.2703	1559.7135
1576.1527	1579.4048	1582.8243
1587.6952	1590.6539	1592.5920
1594.7327	1605.3945	1606.4708
1606.8453	1608.3251	1609.2598
1611.5008	1612.0597	1622.3274
2959.2986	3032.5101	3065.3398
3094.1190	3096.9531	3097.1676
3097.2652	3098.0351	3098.3663
3100.5323	3101.8854	3101.9927
3103.9331	3106.9669	3107.1982
3108.0338	3108.9068	3109.2750
3112.4225	3114.4131	3117.6551
3118.4665	3119.2543	3119.7563
3120.4118	3120.5546	3124.8522
3125.8672	3126.0171	3126.2520

3128.6655	3129.8071	3129.9259
3130.2139	3131.2406	3133.7394
3135.3569	3142.3946	3145.4371

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-12.5779	6.4155	16.0207
20.5813	23.2162	30.7740
36.1936	41.3071	44.2707
46.9018	49.6903	56.2131
57.7080	65.2177	66.7494
74.1268	81.3862	84.4459
88.4549	93.5740	97.4608
101.5358	109.4410	112.7041
114.3598	123.2361	132.9662
135.8094	168.6548	174.6580
182.1099	201.1593	203.9480
211.6730	226.8795	234.9744
244.0108	251.0397	259.9574
265.5443	271.5524	276.3774
282.9503	287.4924	304.2059
307.5626	318.1624	320.3550
327.8681	341.9817	348.4746
358.7416	362.6238	384.6981
395.2240	399.5342	401.5553
402.4111	404.4900	413.7186
414.6379	424.5066	426.3143
446.5344	467.9922	481.8688
491.1437	500.6175	504.4348
510.6341	522.3047	527.8671
536.1152	545.9414	552.0114
578.6842	611.3057	611.4354
612.8363	613.8105	616.3896
623.0722	624.2144	628.2755
630.3333	632.4063	634.3461
636.4905	662.2503	667.4472
689.9231	691.4944	694.5545
699.7325	700.3523	701.1892
706.2125	720.3082	733.2082
737.7722	745.0202	747.9616
750.6550	753.6543	754.1232
762.2189	766.1869	781.7075
787.9061	796.1475	801.0272
808.1450	820.2748	821.1860
821.7445	825.4770	827.5741
836.8240	840.1842	857.9743
866.8133	885.4611	891.8395
900.7979	907.9552	919.9672
922.7568	925.8616	928.7418
937.0642	939.8397	944.3602
945.0851	953.6372	956.3802
956.7102	957.1698	962.7465
964.4301	967.3525	976.4298
977.3619	979.0497	980.3007
981.6900	984.2386	985.0174
986.7527	988.0358	988.6239

989.8595	990.3288	998.6660
1004.3862	1007.2103	1010.1442
1015.8751	1023.7056	1024.7550
1026.1996	1027.1358	1029.5783
1044.8723	1054.1886	1070.4204
1074.6685	1075.6900	1083.4055
1087.3303	1091.1548	1091.3163
1096.4434	1100.2706	1133.6358
1133.9553	1135.7696	1136.7179
1137.8696	1141.9918	1147.3925
1148.2710	1152.0009	1152.5399
1154.7063	1157.4254	1157.5361
1163.9426	1164.4935	1180.9002
1196.8798	1203.6219	1207.2657
1233.8237	1239.2514	1241.3955
1263.8925	1265.3308	1271.3264
1280.3658	1284.9506	1287.6253
1288.3122	1288.9607	1330.6031
1340.3212	1346.4756	1351.5811
1360.3066	1365.5757	1366.9279
1371.3717	1374.2987	1395.0896
1401.3359	1405.0673	1417.8744
1421.6034	1426.8137	1428.3088
1429.8311	1434.5668	1434.7225
1458.2793	1471.0772	1472.4464
1473.1088	1473.3733	1474.1417
1474.8006	1510.2725	1559.7168
1576.1529	1579.4070	1582.8257
1587.6963	1590.6567	1592.5928
1594.7361	1605.3944	1606.4694
1606.8495	1608.3242	1609.2627
1611.5015	1612.0616	1622.3296
2959.2961	3032.5042	3065.3418
3094.1184	3096.9523	3097.1682
3097.2658	3098.0343	3098.3657
3100.5323	3101.8856	3102.0012
3103.9329	3106.9663	3107.2032
3108.0342	3108.9074	3109.2766
3112.4222	3114.4134	3117.6548
3118.4663	3119.2545	3119.7567
3120.4114	3120.5553	3124.8522
3125.8672	3126.0171	3126.2553
3128.6670	3129.8079	3129.9247
3130.2178	3131.2425	3133.7514
3135.3627	3142.3944	3145.4499

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-11.1933	6.5270	13.8881
16.2652	25.3187	30.3606
35.3092	40.2948	42.9234
47.2396	49.3565	56.9891
62.7287	66.3973	69.8141
73.9301	77.5411	79.2042
81.5652	91.5499	93.0829
98.1650	101.7556	106.9674

108.4271	121.5331	128.9182
129.1542	153.8442	167.8117
182.9863	192.7390	200.2938
208.5981	215.3426	234.1675
240.6666	250.4616	258.4876
262.0753	265.8367	270.7964
282.7666	294.7850	303.6212
305.7036	306.0031	318.2115
321.2939	339.9533	345.9544
354.8728	368.2141	395.9147
399.1892	401.6855	402.4526
402.8485	411.1595	412.2056
417.9953	420.7039	426.9974
437.7703	464.5092	470.4179
485.1069	490.4659	499.9564
509.8644	522.8626	526.3056
533.7146	541.8948	551.2877
555.3537	571.9139	611.2136
611.5057	612.1337	612.9064
613.8227	622.8109	624.3793
628.6207	630.1035	631.0444
633.7072	639.0406	656.1098
663.9226	694.6084	697.0703
699.1843	700.0848	701.2503
714.7096	718.0689	727.7382
731.3851	741.4174	746.3283
749.3853	754.1306	760.4579
763.8788	771.9004	778.2072
780.5755	792.2537	796.7894
802.6722	823.7064	825.1950
828.9753	833.3350	835.1573
835.5267	853.0663	856.3453
868.1461	888.5325	891.0596
903.5387	905.0280	919.0861
925.2407	930.4186	932.9984
940.8469	943.9126	944.8148
947.0018	957.8878	960.1410
961.7116	962.0915	963.6105
964.0528	969.7759	975.2244
978.0759	979.6192	981.8558
982.8035	985.2944	987.8883
988.3466	989.0956	990.5537
995.7094	996.9083	1000.5347
1009.9550	1019.9201	1022.4386
1023.5047	1023.8474	1026.6234
1027.4772	1034.6802	1043.7404
1051.2350	1063.2911	1073.1659
1073.9788	1081.0028	1087.7973
1089.4824	1091.4811	1092.0699
1096.3732	1100.0843	1133.4719
1133.4984	1134.0285	1137.9648
1138.0615	1140.6400	1145.9770
1148.8941	1150.5886	1151.8110
1155.2845	1155.6324	1156.2674
1162.4594	1165.3704	1184.6660
1188.8775	1195.0679	1205.5552

1205.7903	1236.9009	1244.5214
1259.8702	1261.7604	1268.2193
1279.4992	1282.5230	1285.7440
1287.4138	1288.3898	1318.7700
1342.1496	1345.6642	1348.4385
1358.6859	1366.1144	1367.1691
1369.4524	1371.5384	1394.8943
1401.9562	1407.1661	1420.4787
1422.4777	1424.7472	1428.1754
1428.8184	1431.7379	1433.9767
1455.0015	1467.6904	1470.3292
1471.7551	1472.3479	1473.9116
1474.8350	1500.1574	1540.0985
1574.8008	1575.7946	1579.7089
1586.3610	1587.5915	1592.8501
1593.2737	1601.7692	1603.2067
1604.2583	1605.7485	1607.2385
1609.2674	1609.9105	1611.5455
2957.3751	3029.1481	3063.7532
3063.9039	3092.8822	3094.3395
3095.0488	3095.3119	3097.3856
3097.5813	3098.1819	3103.6141
3105.7039	3106.4012	3107.1419
3107.4515	3107.8971	3108.6871
3111.0629	3112.2152	3113.3486
3114.6559	3115.5814	3117.0656
3119.6504	3119.9350	3120.6321
3120.9096	3121.2810	3122.3502
3126.2331	3127.8771	3131.1566
3131.3977	3135.9977	3143.1747
3147.3416	3156.9691	3157.5090

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-14.9259	12.2770	23.0646
26.5505	35.0139	39.4483
44.4157	47.1175	48.5732
50.5814	53.4822	56.1746
60.3851	63.0286	67.6146
71.7240	75.2999	80.4263
85.2790	89.2971	93.8146
98.9879	110.2631	117.6744
124.3391	126.1983	128.8611
141.6578	169.3078	174.6693
180.0461	199.9155	205.5576
214.9623	218.0999	235.1579
241.3885	250.4612	251.2069
262.5647	269.7213	273.6854
281.2539	292.8532	303.4517
307.4090	311.8591	318.6025
334.7565	343.1433	348.1373
362.8221	372.5323	392.7758
396.1668	402.1933	403.4256
405.2876	405.7471	409.6774
412.9566	418.5024	422.4653
438.0278	464.1923	476.6691

485.0535	498.4177	500.5269
505.7518	516.4287	518.0595
527.8427	540.0076	544.3253
552.4837	585.3224	610.4575
611.6424	611.9119	612.3798
614.7730	623.7318	626.0762
627.9591	630.1483	631.7948
634.7155	636.5929	648.7185
662.8649	693.4111	694.3375
698.1849	698.2790	706.4375
711.8030	716.9294	724.9543
732.2638	747.4146	748.8683
751.4760	755.3003	758.8071
761.4830	772.7991	779.7898
783.1219	786.6034	791.3660
803.0299	816.2869	829.2502
831.6662	833.4221	839.6365
845.7081	847.3132	866.5000
867.6904	888.8498	889.3063
903.8965	905.2448	927.6920
928.2095	929.2965	930.1199
937.9180	943.8357	945.1133
948.8608	955.3122	956.6321
957.8514	961.3960	962.8447
964.1803	967.7791	977.4453
979.0566	979.8105	980.2523
981.0512	984.5168	988.2485
988.6667	989.0370	991.6470
995.0052	997.5450	1000.7915
1007.4279	1018.4809	1022.2343
1023.0423	1025.0024	1025.1699
1027.0264	1036.8663	1044.8993
1050.6938	1056.9555	1071.8503
1073.9571	1079.8601	1084.0757
1089.1989	1090.8928	1092.3803
1095.3420	1100.1052	1132.2015
1133.9104	1133.9920	1135.6858
1138.0430	1141.7680	1144.1510
1148.0778	1148.6911	1152.0565
1153.7156	1154.3437	1161.0351
1163.4237	1173.7622	1181.4677
1184.6390	1186.0023	1190.4217
1206.9801	1241.1850	1243.9518
1262.5221	1264.5590	1272.3137
1274.3239	1281.3500	1282.1117
1282.6731	1292.3181	1323.5941
1341.9886	1342.2716	1348.8900
1358.7975	1366.6321	1369.8914
1371.2654	1372.0705	1392.7232
1395.8632	1408.5401	1420.2714
1422.7970	1426.4621	1427.2771
1429.2884	1432.1669	1432.7684
1454.4213	1465.8852	1470.1631
1471.8771	1473.1578	1473.6149
1475.0266	1499.8196	1545.6244
1574.4289	1576.1093	1580.7852

1588.3019	1590.0002	1593.0931
1595.5598	1602.2068	1603.5122
1604.2881	1604.8451	1606.5229
1607.6069	1609.5823	1612.3590
2953.5818	3026.8775	3046.9249
3063.6905	3092.1705	3093.8768
3094.9128	3096.0313	3097.0041
3097.2680	3097.8719	3101.9081
3105.4154	3107.0574	3107.2147
3107.4004	3107.6100	3110.1392
3110.2193	3111.0769	3114.0306
3115.9627	3116.4832	3117.1684
3119.0488	3120.0319	3120.1372
3120.2909	3121.8083	3124.1547
3127.3039	3128.6429	3130.6251
3130.6863	3131.7527	3139.3644
3139.5391	3141.6803	3155.0622

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-4.4611	5.0546	14.7133
15.9950	26.1974	30.1711
36.6264	39.3213	42.3052
44.9154	47.8405	48.5408
53.6823	59.3874	65.1412
65.9892	70.7049	72.6267
74.2246	78.4182	81.6789
89.6620	91.4298	95.5380
101.4369	109.5684	114.4676
116.6281	124.3799	131.9469
133.7351	143.4105	163.6444
170.1616	175.6536	181.5282
198.4906	205.5326	208.8194
215.5022	232.7235	234.8002
239.3250	245.7938	249.5383
262.5417	265.3088	270.6574
278.4570	284.0140	285.3867
289.0541	300.9034	309.2902
314.9967	320.8877	332.4242
343.8948	347.0997	361.6988
367.8223	383.9586	400.5913
401.9481	404.9762	405.3518
406.1402	410.3368	415.6508
418.6537	422.0903	432.0650
442.0292	456.1123	467.2943
475.0742	477.4924	481.2878
496.0432	506.3904	508.8703
517.5406	518.2325	535.4748
539.5775	546.9474	551.9164
580.6774	607.0926	611.7384
611.9476	613.3442	614.1741
616.3601	620.4543	623.7700
625.6059	631.1408	632.7624
635.1942	637.7555	645.0608
661.7576	663.5443	672.7646
693.6757	694.9240	695.7520



697.4004	700.6685	702.2586
707.2225	720.2305	729.9689
735.3641	737.3757	741.7032
747.3032	750.5073	752.5953
758.3949	761.2531	763.6262
779.5491	785.9940	797.9635
799.0214	804.7806	809.7633
818.2706	821.6941	828.7136
829.6546	833.0461	835.0599
838.4863	842.4003	854.7330
867.2922	877.0034	879.5993
886.1384	899.9846	912.8410
919.6068	921.1709	925.4846
926.7596	930.3483	939.6637
941.1438	941.7355	944.5380
952.7658	954.3356	954.5995
959.6959	962.0366	963.6609
965.3198	967.8671	968.2093
971.3153	974.5412	977.4346
978.0132	981.0271	981.9908
984.7254	985.2188	985.9218
986.7574	987.7013	989.1842
990.0412	1003.6547	1004.8509
1011.2870	1013.6283	1022.4084
1024.8878	1024.9451	1026.2829
1026.6665	1043.7731	1050.2824
1056.2539	1059.9364	1063.8894
1072.5640	1073.4230	1082.2096
1086.5506	1089.0166	1090.4185
1092.5311	1095.7579	1097.2820
1102.4403	1110.0311	1130.6644
1131.0273	1133.1587	1133.7565
1135.9881	1137.5978	1141.5429
1145.5409	1146.0881	1146.3496
1150.6274	1152.1125	1153.9977
1154.8218	1155.9618	1157.5527
1161.6440	1174.0894	1187.6630
1196.5133	1199.9257	1207.6322
1210.5443	1229.1470	1239.0358
1241.0490	1261.5563	1266.0203
1266.3756	1275.5833	1278.6886
1282.2426	1283.4994	1285.2964
1288.6127	1293.2696	1328.2832
1342.3792	1342.9259	1350.3840
1357.6111	1357.9204	1364.1038
1368.8102	1369.5418	1370.0808
1380.2891	1393.3657	1397.2487
1405.9205	1407.1364	1416.6012
1421.3501	1426.5680	1427.0215
1429.3049	1432.2491	1433.5705
1441.1785	1456.2917	1468.6431
1471.3650	1472.3169	1472.6022
1472.7959	1473.9884	1479.7441
1505.9603	1543.9518	1555.8838
1574.9020	1576.9352	1578.5906
1581.2887	1586.4793	1590.6545

1591.3859	1591.6690	1605.3626
1605.8582	1606.2899	1607.2608
1607.5240	1610.6110	1611.9011
1618.0875	2942.7012	2958.0757
2994.1902	3031.9160	3061.2176
3063.2056	3091.3513	3094.4781
3094.7602	3096.4447	3096.4939
3097.1590	3097.8828	3098.5625
3099.0936	3102.2099	3102.9480
3103.5771	3104.0083	3106.3016
3107.9004	3108.8450	3109.6580
3111.5265	3111.6831	3113.5537
3114.2561	3114.5699	3116.9509
3117.2125	3117.4266	3120.3254
3120.3617	3120.7503	3121.0011
3122.7513	3123.8497	3124.7227
3125.0135	3128.4742	3130.2568
3130.7945	3133.2853	3137.9736
3139.8237	3142.6085	3154.4188

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-7.6838	13.6507	23.8254
25.2974	30.4391	32.7393
36.6828	39.2559	43.4991
46.1797	52.2141	52.7570
58.0075	61.9496	63.7841
66.5903	72.6008	76.7985
77.5251	81.2287	85.3069
94.9436	100.0791	102.5874
110.0862	111.4788	112.5992
118.5347	128.0105	132.1282
140.0622	144.8797	160.3925
169.9012	172.3720	178.6633
194.1031	197.3130	210.6273
222.6882	227.9382	235.7959
242.9158	248.1656	250.8691
261.6103	265.2293	271.0539
281.5054	284.2947	287.4344
294.5784	301.1688	311.4364
315.1142	320.6035	333.4529
342.3693	346.0625	363.2036
373.0157	386.7237	397.6477
402.2893	403.3982	409.2471
409.7859	411.4053	414.7787
417.4565	419.7300	429.0973
432.8620	448.6672	466.5719
474.1220	475.2869	481.1483
494.9406	503.1237	504.5233
518.9644	520.2752	535.4176
544.9819	551.7859	558.7793
581.2857	602.5939	607.6986
611.6381	612.3571	613.3513
613.5717	616.4264	623.7860
625.9914	629.4493	631.5931
632.9872	635.2926	637.8722

660.3437	663.2658	670.1415
682.4488	690.6803	694.0042
696.4741	700.4295	704.4846
706.4484	722.0154	731.3388
736.2381	741.0822	745.8536
747.3731	749.3813	752.8070
757.6184	759.4806	764.2969
780.0440	785.1633	794.9251
798.4722	802.7011	809.6123
813.4597	823.0077	824.3142
828.6903	832.7259	837.0247
840.5475	841.4019	855.0124
867.3077	874.9098	879.1442
885.9467	899.7858	911.8022
918.2728	919.1488	924.4951
926.6803	932.3631	934.2062
940.1638	942.1767	944.7680
947.3599	954.1488	955.3823
956.0918	963.3078	964.4738
966.5336	967.8285	970.3989
972.4849	974.6153	974.8852
977.5801	979.1481	981.7269
983.2030	985.2975	986.9194
987.9015	988.5889	990.1001
990.4573	1004.5077	1005.0118
1010.9879	1016.2863	1022.9226
1024.7799	1025.0915	1026.7817
1028.7318	1045.8614	1048.9870
1055.6553	1059.8697	1064.0008
1072.2680	1075.2384	1082.4194
1085.3618	1088.8032	1090.2365
1091.8703	1092.6417	1097.2625
1102.0076	1128.9075	1130.9423
1133.1644	1133.5046	1133.6367
1136.5224	1138.0538	1140.3614
1145.3312	1147.3782	1149.5599
1150.4174	1152.2489	1153.4121
1154.4305	1154.7874	1159.9272
1161.7364	1173.9059	1183.5054
1195.6023	1199.6865	1207.3737
1215.7611	1231.5842	1238.4287
1241.0790	1261.9193	1263.9403
1267.6815	1275.6523	1278.5243
1285.4970	1287.7076	1287.8717
1288.6031	1296.7482	1329.4374
1341.8848	1344.0628	1351.0464
1357.9150	1360.3846	1364.1821
1366.5405	1369.3891	1370.2353
1371.3866	1393.1431	1398.0716
1402.2470	1406.4087	1417.1756
1421.3146	1426.2055	1427.1938
1428.2614	1432.7075	1433.4505
1442.0509	1456.9040	1468.9223
1471.8805	1472.2197	1472.3889
1472.9268	1474.7916	1477.7539
1508.5141	1547.0386	1558.3955

1575.7118	1577.4423	1580.3666
1580.9037	1585.9708	1591.0611
1591.1918	1593.0493	1604.9185
1606.0942	1606.2838	1607.1846
1607.6562	1610.5063	1612.7674
1620.4682	2893.8348	2958.7503
3026.3753	3032.3904	3059.9609
3064.0443	3091.5645	3094.2309
3094.8759	3096.0773	3096.8206
3097.9168	3098.0146	3098.1526
3100.6051	3101.5666	3102.9186
3104.2354	3106.1426	3106.5909
3107.8569	3110.2875	3111.3183
3114.6552	3115.0210	3117.2805
3118.1216	3118.1732	3118.3299
3118.5638	3120.2850	3120.6530
3121.3484	3121.5231	3123.1182
3123.6292	3127.5085	3128.2547
3129.4151	3130.9492	3130.9631
3131.5386	3133.4164	3136.0256
3143.8525	3146.7165	3155.1453

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-7.3625	20.4306	21.4539
22.4958	30.5327	34.2613
37.9941	40.7672	43.0434
47.7323	50.6540	54.2912
58.6178	60.6943	66.9626
70.6625	74.5099	76.9182
82.0120	84.0583	88.5189
90.7662	97.1670	98.5188
102.2508	108.5759	117.5801
121.7176	125.1011	126.2419
135.6187	143.2033	151.0148
163.9294	170.8527	184.4249
189.4073	194.4994	207.5267
218.3765	225.7421	231.7888
236.0845	254.5976	258.6878
267.3093	271.5194	273.9712
279.6057	286.5920	290.0544
303.6286	306.4902	314.9004
323.4074	327.3479	332.3445
340.4341	345.7004	350.7582
361.7743	381.1469	396.7595
400.5992	401.3955	406.6855
407.7646	413.0792	413.3024
417.3096	420.6741	436.0773
437.0018	463.3022	464.9424
474.6846	478.4341	483.0121
487.7876	506.7162	512.3961
515.7531	525.3885	532.5738
540.6214	541.7758	552.4365
568.2277	576.9748	605.9258
611.1549	613.2620	613.8854
614.7337	615.4463	625.2503

625.7315	628.3939	632.7252
633.6337	637.3658	643.2112
657.8643	664.2567	670.9108
681.7924	687.7828	695.3638
697.1481	698.0773	703.3139
706.5987	708.0165	716.3334
728.4005	735.1160	738.6518
750.0104	751.2222	753.8340
762.7722	763.6986	768.5239
777.6119	780.3745	788.2432
795.0429	801.4405	805.2742
808.5188	817.1460	826.0605
827.9542	832.2081	833.4255
836.1990	842.9629	861.1997
866.5450	881.5980	889.3984
891.1771	905.3234	909.3895
915.5281	918.0304	922.1241
927.6569	929.4550	937.1514
943.4040	947.9591	951.4317
952.2001	952.7492	956.2576
958.5888	959.4674	962.0420
964.3174	965.6231	967.8571
971.0059	975.8824	977.1404
977.9055	979.9914	982.7976
984.4960	987.2627	987.6895
988.5564	989.1628	991.8547
992.4340	998.3383	1004.9779
1007.9899	1014.9158	1023.1682
1025.5160	1026.2577	1028.2728
1030.9034	1034.2677	1042.7084
1047.8285	1052.2153	1059.1155
1062.2960	1074.1956	1075.0702
1077.9788	1081.4392	1086.4599
1089.8088	1092.2021	1098.2530
1099.1642	1101.8703	1131.6709
1133.4094	1135.4635	1135.8089
1137.1964	1138.6350	1139.2983
1145.0882	1146.7853	1150.1654
1152.7648	1154.5016	1154.7976
1157.0767	1160.6520	1161.8722
1166.5297	1180.0590	1185.8339
1199.5780	1205.0519	1206.9937
1220.2275	1235.9628	1238.8033
1243.2113	1263.0432	1263.4074
1269.8428	1278.4970	1281.2143
1284.9438	1286.3277	1288.9267
1289.6883	1304.0201	1327.6302
1342.1773	1345.9893	1349.3721
1359.0154	1360.5801	1366.8530
1369.6176	1371.4278	1371.8325
1391.8620	1396.7175	1400.6100
1405.0977	1409.0608	1418.6406
1418.9555	1422.0124	1428.4079
1428.7308	1434.0835	1434.8984
1440.6231	1460.0302	1470.3794
1470.6626	1471.9125	1473.6716

1474.1055	1474.7082	1476.4877
1510.6955	1547.9623	1560.0790
1575.5816	1575.7058	1577.9860
1579.1574	1587.4009	1591.0060
1592.1894	1594.7077	1601.3681
1605.7469	1605.9987	1607.8646
1608.2693	1610.3114	1611.0831
1621.1445	2950.3861	2957.9007
3031.5008	3031.7705	3064.2573
3075.7294	3091.1731	3092.3922
3095.3254	3095.9124	3096.4098
3097.0844	3097.1529	3100.9260
3101.7910	3102.0667	3102.8582
3103.2333	3103.3013	3105.6225
3105.7983	3106.9974	3107.8917
3110.4328	3110.6899	3111.6479
3112.1555	3114.4184	3115.4943
3115.8160	3118.1459	3118.2802
3118.6531	3120.3957	3121.6251
3121.9512	3123.4088	3123.6539
3125.0666	3127.9212	3127.9508
3129.3804	3130.9986	3138.1560
3144.5072	3146.7210	3158.7581

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8.6085	14.8237	20.6804
23.8940	31.0649	32.5149
36.1309	40.3469	42.8916
44.2007	46.6075	56.1127
57.5264	59.9307	60.7381
70.0151	72.9029	79.3519
82.9188	83.8506	87.3698
90.2267	94.7377	96.3417
103.0703	113.1489	115.1325
120.8997	123.6552	127.0140
132.3057	138.3413	146.0631
153.6772	167.3753	181.6321
186.4312	194.8638	210.0294
215.3472	224.8631	231.2096
234.1757	238.0952	256.1380
260.5477	263.0326	267.1329
273.4943	273.7168	285.6100
291.5906	303.6418	312.1116
318.7464	323.4894	332.4441
341.1830	345.5484	358.4210
362.7329	379.2549	398.5184
401.8573	402.0743	408.5818
409.7477	413.6398	414.9796
415.4984	420.0524	426.5714
436.4389	451.5228	462.8240
473.2701	475.4534	478.7046
486.4941	510.4880	512.2422
515.9039	520.7566	531.7922
540.6575	552.1206	559.9791
576.7239	593.4199	606.8567

611.0618	612.9320	613.5747	1439.8157	1459.4611	1470.3712
614.3226	615.3412	624.5413	1471.4344	1472.2751	1473.3790
625.5821	629.4408	632.6221	1474.1445	1474.8177	1477.0761
634.5896	637.3988	649.3598	1510.3856	1544.5348	1559.4417
658.8531	664.6167	671.8261	1575.4744	1577.7263	1578.1690
680.6595	688.1462	695.9289	1578.3254	1587.5081	1590.9471
697.2909	699.2414	703.1025	1592.2962	1594.8897	1602.3557
707.3400	713.1055	716.8431	1605.5820	1606.0285	1607.8561
729.2376	734.5614	738.3566	1608.2571	1610.1638	1611.0371
750.3703	751.6181	753.0638	1620.9065	2873.9750	2957.8008
755.6195	763.2804	768.0212	2986.3834	3033.0619	3064.8540
777.8566	785.6816	794.7162	3079.8180	3094.6018	3095.5050
802.8989	805.4377	808.4293	3095.7216	3096.5245	3097.1776
815.4209	820.7930	826.6132	3097.6780	3100.5152	3100.9914
828.9319	831.6594	834.0315	3101.1459	3101.9992	3102.4893
838.0988	845.5238	860.7632	3102.7394	3105.2489	3105.9630
866.4870	874.8784	889.4924	3106.0620	3106.4997	3110.5204
891.0814	905.2935	907.0004	3112.1977	3112.5729	3113.7004
916.2807	918.8921	922.3651	3114.1907	3115.8045	3116.3073
928.2719	929.5758	933.7255	3117.4067	3119.2767	3120.6542
936.5480	942.9066	947.4255	3120.8082	3122.7876	3122.8385
951.4442	952.7090	955.3819	3123.5184	3123.9998	3124.1415
958.5023	962.4038	963.2228	3125.3308	3125.4070	3126.5604
967.3745	968.3327	968.3823	3129.2739	3129.8472	3132.3589
969.1932	975.2161	975.6772	3134.4409	3141.8067	3155.9410
977.8710	978.7627	981.5356	----		
984.9843	986.9584	987.8479	Int C iso la S=5/2		
988.6247	990.1593	996.0484	----		
999.7021	1005.0800	1008.3081	-8.2468	10.5213	14.6453
1013.1607	1023.4681	1026.0637	20.2289	23.4762	33.3565
1026.9953	1027.6116	1029.7388	37.0148	39.3759	40.5325
1036.0470	1042.7855	1043.2664	41.5243	46.0893	49.8913
1049.4109	1052.6966	1061.9907	52.3426	58.2171	63.4308
1071.3761	1074.2647	1075.1764	67.0338	67.4632	71.1272
1075.6820	1081.7940	1086.8473	73.0347	79.3099	83.0264
1088.0006	1098.4750	1099.1362	89.8696	90.6606	97.0359
1100.0746	1104.9630	1130.2766	99.1764	106.2276	112.6533
1134.0792	1135.7544	1136.1616	118.3944	124.0145	130.5601
1136.6555	1138.8821	1139.0442	135.8214	141.6744	164.2637
1146.2090	1147.4410	1147.7036	170.6357	173.9251	181.6077
1149.6991	1153.0235	1154.8313	199.0313	204.6849	207.6427
1155.9541	1159.7701	1160.1387	217.8818	223.2991	232.9108
1165.7385	1179.7411	1191.7868	237.7931	243.8007	246.8439
1196.8531	1204.3446	1206.4596	262.4970	265.5814	271.2698
1210.5305	1235.7104	1239.2684	275.7762	284.1400	286.3619
1242.8431	1262.8147	1262.9912	288.0960	300.8202	306.0311
1270.8521	1279.1732	1279.4788	312.7901	320.9632	330.5853
1281.8018	1284.7949	1288.7398	344.8507	347.5187	360.2559
1288.9160	1291.5003	1327.6650	365.1099	378.6364	399.1819
1342.9714	1345.4295	1349.3113	400.7917	403.9268	404.1000
1357.8016	1359.0080	1366.8076	405.2328	409.2478	413.6320
1369.0352	1370.8793	1371.3400	418.3829	422.7515	430.5701
1372.1944	1391.6348	1397.3440	437.7748	456.9771	467.2211
1401.3676	1410.5544	1418.0854	474.7399	478.0933	480.5401
1418.9711	1422.8577	1428.0751	495.4334	506.8768	509.1313
1428.9298	1433.8166	1434.1309	517.1288	519.1870	535.5059

538.8716	546.7564	552.2153
579.5981	606.4985	611.7157
611.8947	613.1198	614.1556
616.2234	620.0001	623.4639
626.0293	630.6795	632.7961
635.2427	637.0966	645.8713
660.9930	663.2157	671.5209
693.0325	695.1511	695.3573
699.3649	699.7461	706.7184
707.2497	718.6722	728.9385
736.2063	738.8747	741.5769
746.9454	750.7960	752.0512
760.3228	762.1160	763.8798
779.2627	785.7259	797.4888
798.3454	804.8542	811.8812
819.1154	820.7917	828.5991
832.1978	832.3192	834.7873
837.4855	842.0398	854.7674
867.1535	878.8919	882.8042
885.7955	898.6840	911.2613
919.1665	920.4861	926.1761
929.3588	931.4610	938.8407
941.0493	941.7918	944.4635
953.6100	953.7984	955.8140
959.4382	960.0767	962.7642
964.7639	967.6483	968.8657
973.2959	974.3551	975.4311
977.1946	980.1522	981.1755
982.4382	984.8532	985.2695
986.6520	987.5811	989.0619
989.9445	1003.2534	1004.5328
1011.3888	1013.3722	1022.2177
1024.6361	1024.7406	1026.1525
1026.6459	1043.0082	1050.9121
1057.7995	1061.8014	1063.6333
1072.2827	1073.2771	1083.8514
1085.9120	1089.3435	1092.0582
1093.3919	1094.4083	1096.4383
1101.8123	1119.4374	1130.5246
1131.4322	1132.9066	1133.3589
1135.7658	1137.4049	1141.8341
1145.0469	1145.4698	1147.3188
1150.4518	1151.7543	1153.1305
1154.4830	1155.1550	1158.1310
1161.6925	1172.6240	1186.8971
1196.6371	1200.0498	1207.6176
1213.3035	1226.0672	1238.9554
1241.0613	1260.0037	1263.8345
1266.1397	1275.3517	1278.2881
1283.2336	1285.8437	1286.1662
1288.0566	1296.8211	1328.1472
1342.0592	1343.1581	1350.2319
1357.6484	1359.6964	1364.0088
1368.4980	1369.5802	1370.3150
1389.2822	1393.6785	1397.2627
1406.6574	1410.2500	1415.6929

1421.3291	1426.4392	1426.7744
1429.3190	1432.0485	1433.2799
1442.1403	1456.2983	1468.5896
1471.0851	1472.0809	1472.2618
1472.9108	1473.2033	1483.3199
1504.9745	1544.9014	1554.7637
1574.8672	1576.6465	1579.1466
1581.0005	1585.9543	1590.6384
1591.2379	1591.6908	1605.2620
1606.1002	1606.1380	1607.0501
1607.6101	1610.3116	1611.5833
1617.1260	2927.5943	2957.8964
2999.6498	3031.7106	3060.9338
3062.8543	3094.4218	3094.5409
3094.8110	3096.1641	3096.4756
3097.2142	3097.7189	3098.6863
3101.0094	3101.9526	3102.9193
3103.5724	3103.7531	3105.7526
3107.7760	3109.5453	3110.7548
3111.3125	3112.8826	3113.6563
3116.1033	3116.3861	3117.0097
3118.1210	3119.9690	3120.1738
3120.6161	3121.2406	3123.4724
3123.5704	3124.4833	3124.6934
3125.0476	3126.8343	3127.7374
3128.4246	3130.0961	3137.7093
3138.4871	3144.1083	3154.5835

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-9.9704	13.4448	22.5506
26.1628	31.1236	35.4794
37.0273	38.7819	43.8475
44.2329	51.7240	53.0014
56.3784	61.9967	63.6918
66.5880	71.8648	76.3558
78.4988	80.7360	84.6431
94.1303	101.0304	102.9538
109.4123	110.4480	113.2255
118.6859	126.8030	131.6056
138.3956	143.9758	158.9150
169.5538	171.5840	178.3826
191.2492	196.4906	207.6527
215.4027	226.2361	233.5121
241.8792	247.1944	249.9185
260.6211	265.3962	269.9969
280.3567	283.3317	286.4227
294.5855	300.7471	311.0087
314.1857	320.5597	332.4420
343.0152	345.8908	363.7628
371.8647	385.0146	395.2845
401.5799	403.6671	408.9617
409.7956	410.6414	413.3697
417.4732	419.4148	427.5552
429.3953	448.3133	466.4541
472.5040	474.2713	479.5633

494.5289	502.6091	504.3330
518.1455	520.3321	535.3937
545.0579	551.6960	558.0067
581.2626	596.8694	607.3378
611.6569	612.2766	613.2773
613.5647	616.4261	623.5871
625.9903	629.5086	631.6072
632.7366	635.3664	637.6994
659.5397	662.7787	668.7368
689.2352	692.4644	693.9171
696.2979	700.7729	704.2443
706.3060	720.8896	731.0661
735.9621	740.7050	744.7080
747.2375	749.2686	753.0401
759.0005	760.4184	764.3481
779.9764	784.3476	794.6017
797.5308	802.7260	809.5318
817.2959	822.6897	824.8149
828.8330	833.0086	837.3424
840.4519	841.3321	854.9137
866.9933	876.8029	881.5904
885.5355	899.5372	911.8492
916.3085	918.7871	919.6859
925.7513	932.3558	933.6466
939.9228	942.2034	944.4496
950.1356	955.1231	955.4783
955.9435	963.4501	964.7068
966.5403	967.7835	970.8708
973.5487	974.3643	975.6039
977.3083	979.3461	981.6764
983.0821	985.3022	986.8888
987.9525	988.3505	990.1438
990.8793	1004.5171	1005.7006
1011.0047	1016.4012	1022.9097
1024.7177	1025.0331	1026.5171
1028.2529	1046.0003	1048.8985
1054.9435	1061.7081	1063.2746
1072.1884	1074.3904	1083.0194
1085.5942	1088.9721	1090.1466
1091.8571	1092.7045	1096.2973
1100.4192	1131.0369	1132.9335
1133.4988	1133.5987	1133.9070
1136.4010	1138.0705	1139.9042
1144.8569	1146.5101	1149.2735
1150.9703	1151.9255	1152.8349
1154.4216	1154.8322	1159.2795
1161.8062	1172.9111	1181.3877
1197.1321	1199.8790	1207.3691
1208.8540	1229.5981	1237.7980
1241.2215	1261.9066	1263.7063
1267.5995	1275.0102	1278.3298
1285.5949	1286.2631	1287.3673
1287.8609	1296.7973	1329.6192
1341.8409	1344.0280	1351.0499
1357.4255	1358.0409	1361.5045
1364.2431	1369.3755	1369.8138

1370.9705	1393.2587	1398.2965
1404.5657	1406.3768	1417.0967
1421.4608	1426.1238	1427.1970
1428.1472	1432.5148	1433.3887
1442.6045	1457.0018	1468.7054
1471.6214	1472.0521	1472.2461
1472.8458	1474.3500	1478.9840
1508.5736	1547.8515	1558.3265
1575.7301	1577.3539	1580.8429
1581.0790	1585.8741	1590.8960
1591.0391	1592.6923	1604.8886
1606.1873	1606.2638	1607.0346
1607.2207	1610.4185	1612.4409
1620.5758	2901.7750	2958.7006
3032.4779	3033.2056	3063.8679
3067.1072	3093.0441	3094.0382
3094.6722	3095.8776	3096.4541
3097.4447	3097.6827	3097.7189
3101.5430	3102.4266	3102.8317
3104.0149	3105.9212	3106.3305
3107.6231	3109.6227	3111.2981
3114.2782	3114.8303	3116.0966
3117.5063	3117.9815	3118.7267
3118.8879	3120.0234	3120.4184
3121.0967	3121.3496	3122.9698
3125.7965	3126.4261	3127.9791
3130.1125	3130.3978	3131.1129
3131.6527	3133.7607	3135.1303
3143.9063	3146.4562	3154.8160

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9.1170	16.2714	23.8487
27.4567	28.5208	34.3794
37.1893	43.1784	46.0528
49.7966	58.0817	58.6244
61.8772	67.2577	70.1405
73.4483	75.7536	77.9017
81.2942	84.7667	86.7862
91.1640	93.9955	99.4684
104.8881	111.5124	118.7229
120.2254	126.6591	127.9883
132.0111	144.4067	147.1840
157.9054	170.1274	179.6029
190.2409	198.8001	209.5166
214.5607	229.0302	229.3458
235.0404	241.1087	255.6552
262.6782	263.9659	268.8722
271.3950	274.6433	282.9157
287.1790	300.2102	305.0029
320.4999	323.5916	325.5898
337.4582	347.6808	353.9903
362.2887	374.1729	392.4228
398.7786	401.6807	405.8231
406.9290	408.4296	412.1009
412.4848	419.4539	434.2377

438.7362	463.3438	473.0111
473.8699	474.4903	482.3639
485.3045	508.3546	512.2636
515.4299	517.3582	531.8667
540.8385	551.6359	553.6425
566.2070	576.7453	605.5948
611.0067	612.8407	613.4857
614.6445	615.5850	625.2589
625.6929	630.3136	631.1091
634.7514	638.7610	643.3788
654.5130	662.2983	670.9235
681.6297	686.6574	692.8377
698.0627	699.1312	700.7274
707.6614	714.6651	729.2088
734.2094	735.4213	739.0548
750.3573	751.2099	755.1680
760.7570	763.9701	767.8988
779.8420	784.1851	787.7006
789.0109	797.8235	801.9811
814.6880	816.0326	823.8265
827.4944	830.3821	833.6655
837.2603	843.7273	858.8650
866.4084	885.8431	889.3250
895.1012	902.3390	906.0497
918.1506	918.8241	922.1569
927.5812	929.4937	936.8226
940.6845	941.9183	947.1072
952.6937	955.1801	956.3158
956.6345	962.3210	962.8474
966.8872	967.8881	969.0835
974.9995	975.9479	977.2931
977.8140	979.7885	982.7802
983.2252	987.3166	988.1140
989.5610	990.2503	992.1495
1001.6839	1003.1541	1006.4223
1008.3915	1017.4037	1023.9672
1025.6358	1025.9921	1026.2542
1028.1647	1037.9776	1041.9789
1050.3176	1052.7442	1056.3277
1071.1174	1071.4655	1073.5856
1075.1622	1078.6800	1088.7377
1089.6422	1092.6303	1098.5781
1099.2831	1104.9669	1131.3860
1132.7127	1133.5197	1134.9088
1135.6720	1138.8317	1139.7128
1146.8593	1147.3585	1151.2367
1151.4253	1154.0564	1154.4761
1156.8168	1157.5064	1160.7231
1163.6357	1171.1451	1190.4427
1205.4474	1206.3013	1207.1893
1213.2146	1235.8508	1236.4690
1240.7890	1263.8966	1264.8377
1273.6020	1277.4964	1281.9511
1284.6477	1286.4984	1289.4340
1295.8651	1317.3648	1330.6601
1342.2406	1349.2056	1350.0811

1359.5741	1364.1424	1367.0889
1369.0129	1371.5455	1373.1957
1391.8125	1392.5900	1402.0492
1403.3564	1409.0625	1418.8533
1419.2545	1423.3255	1427.6597
1430.3299	1433.2943	1434.1136
1441.3293	1459.5744	1469.8084
1471.8526	1472.6454	1473.4757
1473.6035	1474.3247	1478.9324
1513.0266	1550.3634	1561.2889
1577.1753	1578.0906	1578.1534
1580.6891	1587.0611	1591.9788
1592.3723	1594.6535	1602.9346
1605.3039	1606.1573	1608.1634
1608.4189	1610.6807	1611.6577
1624.7773	2922.9371	2958.8406
2990.4225	3032.8293	3065.6608
3084.1176	3091.5587	3092.8386
3095.8311	3096.1387	3097.0396
3100.2005	3100.4138	3100.6583
3101.2870	3102.4779	3103.6473
3104.0800	3105.7974	3105.8027
3105.9019	3106.2333	3107.5944
3111.9481	3112.1439	3114.0883
3114.4752	3115.9021	3117.3175
3118.2027	3120.7046	3120.8740
3122.3642	3122.4338	3123.7634
3124.1228	3125.8223	3128.6078
3129.3744	3130.7256	3133.4373
3135.5236	3136.9241	3137.6185
3139.9816	3144.6874	3151.9967

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7.3912	12.6448	20.9493
24.4065	31.5932	32.8288
34.9635	39.5662	42.8470
43.4514	46.4797	56.0217
57.0887	60.1930	61.2808
70.6039	73.4357	78.9148
83.0969	84.1097	87.9216
90.2204	94.8096	96.5693
102.8519	113.6597	114.6490
121.4648	122.8069	127.1422
132.0731	137.9840	146.0088
153.8994	167.8539	180.9427
186.7547	195.5254	211.4619
215.5798	225.5728	228.3443
232.5126	237.0874	255.5669
259.9290	262.6446	266.2321
272.9150	273.0944	285.3500
291.1539	303.5303	312.0743
317.8649	323.3921	331.1152
340.5614	346.0892	357.4929
362.6189	377.5514	398.2466
401.9610	402.2334	408.7105

409.7785	414.1626	414.6775	1288.7241	1291.5771	1327.9175
415.1161	420.0452	424.9472	1343.0684	1345.6037	1349.3555
436.8073	448.3451	462.7735	1358.4159	1359.0216	1364.9650
473.9175	475.3227	478.0901	1366.9115	1368.9801	1371.3669
486.3008	510.5616	512.2902	1372.2519	1391.5370	1397.6991
516.1922	520.0401	531.6136	1402.2835	1410.6114	1418.0128
540.5978	552.0479	559.9453	1418.9465	1422.8939	1427.9753
576.6097	593.7069	606.9117	1429.0355	1433.6843	1433.9776
611.0670	612.9891	613.5915	1440.1837	1459.4085	1470.3057
614.3629	615.3540	624.5999	1471.6074	1472.2761	1473.2661
625.4876	629.4293	632.4987	1474.0849	1474.8074	1477.5394
634.7202	637.2766	650.8964	1510.4683	1545.4222	1559.4504
658.7164	664.3314	671.6446	1575.4910	1577.7796	1578.6253
682.4130	690.1347	695.5880	1578.7517	1587.4727	1591.0254
697.3385	699.9831	702.9146	1592.2419	1594.8108	1602.2945
707.7727	714.1096	716.6420	1605.4645	1605.9504	1607.8594
729.0355	734.3033	738.3395	1608.2114	1610.1961	1610.9505
750.3866	751.6201	755.0518	1621.0889	2874.0759	2957.8230
755.9130	763.3182	767.9445	2985.2948	3033.1668	3064.9331
777.9919	784.6883	794.3400	3078.3752	3095.1018	3095.5622
802.4361	805.3524	808.9902	3095.5681	3096.4250	3097.0522
815.2948	821.2755	826.8385	3097.7890	3100.0713	3100.3649
828.9652	831.8517	834.4897	3101.1038	3103.0440	3103.4155
838.2847	845.0260	860.6964	3105.2221	3105.9145	3105.9535
866.4151	877.4121	889.2059	3106.4355	3106.8808	3110.2619
890.6937	904.9605	906.7755	3112.0558	3112.5875	3114.1235
916.3629	919.1035	921.8352	3114.4727	3115.8644	3116.2388
926.3264	928.9546	929.4422	3118.8605	3119.3680	3120.6205
936.2323	942.8554	947.2443	3121.7575	3121.9156	3123.4009
952.2135	952.7226	954.8571	3123.6863	3123.9964	3125.3917
958.4885	962.4725	963.3935	3125.6081	3126.1265	3126.2046
967.3490	969.0533	969.0964	3130.5264	3130.6652	3132.6176
970.1536	974.9646	975.5351	3134.9977	3142.0709	3154.6496
977.7697	978.9511	981.5508	----		
984.6533	986.9847	987.8321	Int D iso1a S=3/2		
988.8046	990.2085	995.3097	----		
999.8655	1005.1497	1008.2952	-5.4071	12.0778	21.9999
1013.4718	1023.4601	1026.0653	24.6382	29.3044	32.7460
1026.9806	1027.4858	1029.5417	37.5110	42.4327	47.4773
1036.1587	1040.2079	1043.5539	50.9842	52.8848	58.9597
1049.4603	1052.8371	1060.6128	60.4300	64.0351	66.0245
1073.3697	1074.4175	1074.9772	68.2176	73.6035	77.9584
1075.3556	1080.5548	1086.8341	80.9224	82.2277	85.2199
1087.9870	1098.5031	1098.7030	87.6074	98.9376	99.7069
1103.8781	1107.0445	1130.6441	103.2514	104.8072	113.8755
1134.0401	1135.6372	1136.0566	116.5803	125.0004	126.0972
1136.5192	1138.8838	1139.0257	138.1954	141.1871	145.9867
1146.2325	1147.5841	1148.1100	173.6766	183.8097	186.2692
1149.6646	1152.9381	1154.6094	191.8846	201.4178	206.9283
1155.9176	1159.4861	1159.8480	216.8254	222.8654	228.8396
1165.5892	1179.1450	1191.2564	234.5445	242.2457	248.6101
1195.8626	1204.3092	1205.9642	254.3359	264.1041	268.5898
1206.4950	1235.6431	1239.2548	278.5888	279.4784	287.6961
1241.8341	1262.6565	1262.7958	298.0900	304.7381	316.1309
1270.9978	1277.2048	1279.2260	321.0595	326.3642	327.4597
1282.0952	1285.0465	1288.4835	334.7425	339.6930	365.2543



366.0349	371.1329	380.6421	1266.1419	1270.9878	1279.6878
395.7351	399.8300	401.7253	1284.5357	1285.6352	1288.9432
404.1347	406.2528	406.9009	1289.5627	1290.2670	1329.5804
411.7956	412.8377	416.7352	1339.0151	1344.9698	1345.4400
434.3860	466.6689	467.6074	1352.3552	1360.6603	1366.6229
469.6858	476.1739	484.1763	1368.2549	1368.9505	1371.6523
491.4150	498.4851	509.0447	1378.2218	1393.2654	1403.2956
526.5262	533.7480	541.8548	1404.1889	1408.8822	1420.2831
548.2508	550.6801	554.5872	1420.6903	1423.0755	1429.2389
576.6511	596.4318	610.6787	1429.5255	1430.8620	1433.1528
611.4219	612.1156	613.0637	1442.5739	1458.5645	1469.0727
613.2563	613.7595	616.1733	1470.5358	1472.5577	1473.7832
624.0770	625.4008	628.4625	1473.8794	1477.1716	1484.5426
633.0403	634.9313	635.3294	1508.2364	1553.7319	1575.3032
650.6871	659.7782	667.3792	1578.5974	1583.8983	1588.2994
696.2681	697.6017	698.5447	1591.0324	1591.9890	1593.4551
699.3902	701.9902	703.7664	1594.2588	1604.2221	1605.0508
707.9555	724.9296	727.1325	1605.1106	1605.7132	1607.8620
734.2763	742.8314	749.4245	1609.8212	1611.2627	1614.9040
750.0709	752.4596	753.6362	1618.8493	2953.4861	2999.9752
761.6585	765.8036	767.2780	3029.6010	3061.5134	3092.1110
780.3641	788.3597	794.2656	3092.8175	3093.8769	3094.8179
798.1001	800.7926	806.8033	3095.0448	3096.5212	3096.7277
822.0183	826.8589	827.5929	3098.5935	3099.0238	3099.3488
832.5206	833.0470	834.3253	3101.1307	3101.5154	3102.8336
836.5338	850.8123	865.3580	3103.3084	3104.9876	3105.7434
867.1099	884.6909	886.7607	3107.7196	3109.1736	3109.5856
895.1610	905.7037	909.8202	3110.9978	3111.3925	3112.4297
910.2239	918.1222	921.5572	3112.6350	3113.4934	3113.7847
923.3120	930.2704	932.1545	3117.1630	3117.6561	3118.9439
941.1687	944.2682	945.7796	3119.7166	3120.3479	3121.4089
949.0751	956.0275	959.0712	3122.2669	3122.6231	3124.6858
961.9481	963.2988	963.9518	3125.6979	3125.9312	3128.1710
965.2128	966.8204	972.5470	3129.7873	3130.9972	3135.5433
976.2214	977.1302	978.8020	3136.9773	3140.7739	3163.4729
981.7328	983.2116	984.5178	----		
986.7771	987.7484	987.8516	Int D iso1b S=3/2		
987.9118	988.0735	990.4261	----		
990.5692	998.7582	999.1288	-3.3972	8.0509	15.7939
1004.3418	1008.6448	1021.0652	24.9339	25.5492	32.5642
1023.3895	1023.8879	1024.6525	39.6653	44.9559	47.4207
1026.6044	1028.0302	1031.7566	51.9733	52.6402	55.2420
1035.9921	1042.5854	1050.4285	58.4561	61.6622	64.1967
1056.8853	1058.7507	1063.6147	65.5544	69.8145	73.3102
1072.1790	1073.6386	1074.1982	74.2815	79.7242	83.8137
1076.4786	1084.5329	1088.1797	87.2232	88.8934	93.0958
1092.4815	1097.1318	1101.1835	98.7522	105.7107	106.9020
1104.1480	1133.5131	1134.2233	107.0328	108.1482	121.7180
1134.5891	1135.3291	1136.1690	126.8243	131.4943	133.1804
1138.3231	1141.4033	1142.5547	142.1799	164.4057	168.9902
1146.6175	1150.3327	1154.6766	182.2581	186.7137	200.4155
1155.3977	1156.2029	1156.6225	207.7392	218.5422	224.5282
1157.3701	1160.7248	1168.5911	235.1975	240.4481	242.6718
1171.1143	1180.3331	1187.3907	254.0588	259.9278	267.2543
1190.6399	1200.8745	1206.6476	271.1319	279.3215	284.5741
1236.9148	1240.0759	1265.9104	285.3625	291.8972	298.3477

308.4473	328.0782	334.0759	1197.7315	1205.4316	1239.8773
345.1040	355.1456	359.5438	1241.1867	1242.9378	1260.2974
370.6635	385.1360	388.8741	1264.6633	1268.5003	1276.8855
400.0492	400.4698	401.9951	1281.4731	1281.6921	1285.2676
404.0016	404.1115	408.2049	1288.4241	1290.1637	1325.4196
409.0997	412.3584	415.6744	1342.2922	1342.9413	1345.8025
421.1906	424.5354	444.5214	1348.3327	1355.7052	1368.7744
465.7715	467.8567	487.4249	1368.9975	1369.4393	1370.6142
492.1208	504.5950	512.0966	1380.4040	1389.2386	1396.5646
514.7223	518.0908	528.5029	1407.5252	1418.4388	1420.7736
530.6988	543.0326	552.6473	1424.1710	1425.2234	1426.8029
573.6938	583.4223	592.4575	1430.8669	1431.4398	1431.8433
611.3978	611.5897	612.1281	1442.4566	1456.5364	1465.7460
613.0272	613.8196	616.0692	1466.6671	1471.8844	1472.0063
623.7623	628.9113	632.0941	1472.7011	1474.3936	1484.9510
633.2382	635.1679	638.6506	1505.5386	1553.2162	1573.9891
662.6994	666.4000	693.8448	1576.3915	1577.2128	1590.1746
698.8243	700.1276	701.1100	1590.2391	1590.2815	1590.6512
701.5120	703.5165	707.1384	1593.2348	1598.8393	1605.2605
720.8241	731.9102	736.4204	1605.8341	1606.1868	1606.6490
741.8097	747.9375	751.7349	1609.8755	1611.1334	1612.7527
753.4246	757.7917	761.3081	1616.9213	2957.5412	3029.3350
764.6828	767.5091	780.3310	3030.1150	3039.9193	3043.4183
790.7324	795.3880	797.9182	3063.2757	3094.2742	3094.5012
815.1418	824.5237	824.7297	3095.9272	3095.9652	3096.3785
827.0826	829.2006	831.8390	3096.4903	3096.7293	3097.2807
836.9958	838.1566	839.0595	3099.5708	3103.4872	3104.9956
848.1829	867.5671	869.1470	3105.4689	3105.8802	3106.8008
884.9671	890.8785	904.6702	3107.9290	3109.0098	3110.1952
905.2547	906.9787	919.3888	3111.1128	3113.1554	3115.3026
920.8036	927.2771	930.0180	3116.2170	3116.6952	3117.0715
934.6442	941.1628	945.0531	3117.5870	3117.7445	3121.4559
945.2610	945.8875	948.4430	3121.5479	3121.9224	3122.4809
959.2365	959.8876	961.5565	3122.9031	3122.9252	3123.2120
961.8820	962.8229	963.1001	3124.6753	3126.9014	3128.5032
966.6510	969.0399	974.6403	3129.6282	3131.5526	3132.2461
976.7235	977.0257	980.7823	3136.0602	3142.7224	3142.8376
981.8757	982.6730	984.7925	----		
986.7737	987.1442	987.8268	Int D iso2a S=3/2		
988.3572	989.0096	990.4223	----		
994.5888	996.1750	1004.0193	18.2750	20.7387	24.9831
1011.0312	1020.7555	1022.7650	30.0362	36.7809	38.9703
1024.4001	1025.7006	1025.9650	44.3136	45.8409	50.3644
1027.2373	1027.7171	1038.4540	50.5295	55.4180	57.1561
1046.9469	1049.1060	1050.1406	58.5725	62.6907	67.3484
1060.3172	1069.2712	1072.5463	70.0105	72.5898	75.4282
1074.5642	1079.9243	1085.7990	77.9879	79.2592	87.2725
1087.9409	1090.7660	1091.9628	89.4652	91.3942	97.4245
1094.6449	1098.8413	1102.5793	101.0344	103.6202	106.2491
1130.9009	1132.4616	1134.2395	112.8586	116.2848	122.3460
1136.9016	1137.8278	1138.1608	128.8263	131.4260	138.6829
1139.5523	1142.8009	1147.2816	146.1871	158.6478	178.0568
1149.0579	1149.7650	1155.0673	181.3970	186.1771	192.1868
1156.2540	1157.5963	1159.8152	205.6696	219.4709	223.7556
1163.8609	1164.6013	1178.8464	230.8737	235.8833	239.7034
1180.7146	1187.1975	1197.3801	246.1451	249.7825	256.6653

268.3527	274.2263	281.7458
285.3848	288.1190	303.0110
307.6805	312.1887	329.6450
343.1042	346.9030	349.0773
369.1580	372.9105	383.8289
386.3808	398.8556	400.2110
405.6347	407.6184	409.2494
409.5834	413.0399	414.3633
424.0062	429.7128	446.5152
465.3255	466.7138	483.9161
500.8666	501.5308	507.4240
511.2189	516.3099	528.0257
539.5991	544.5318	553.1379
585.1521	585.9303	594.8815
611.7145	612.5256	612.7064
612.9845	613.7207	615.7605
622.5214	628.4266	630.8755
632.5571	633.4366	637.6832
653.2045	663.2043	688.6938
694.3700	698.6160	699.6708
705.6866	709.9473	710.6086
713.5278	726.7897	732.8194
737.6404	746.6378	749.8699
752.7190	755.7512	756.1859
761.6763	764.4905	778.8746
783.6779	789.0175	791.7868
795.1999	818.1941	831.3090
832.3791	833.4671	836.6583
840.0837	843.6669	848.8477
854.9385	866.7739	869.4496
885.2069	887.7275	900.0792
903.9862	905.3202	920.7418
921.2493	925.3571	927.0737
933.5288	936.8349	943.8847
945.6409	948.5285	950.7095
952.6633	956.9739	957.3668
959.9966	963.8914	965.2301
965.5357	969.9064	974.4398
977.4504	978.3783	979.4471
980.5503	985.2552	986.0265
987.0475	987.8658	989.1078
989.5692	990.9008	993.6523
996.1357	1004.6024	1004.8150
1009.7417	1011.3450	1022.4666
1023.7441	1024.2033	1024.3372
1025.0629	1029.8332	1037.5225
1043.2634	1046.0928	1048.2658
1052.4415	1058.6284	1070.4588
1070.7665	1074.6084	1077.8169
1079.8215	1084.7649	1090.4125
1092.3065	1095.7048	1100.0429
1123.3083	1133.0032	1133.2578
1133.7482	1134.8905	1138.2522
1140.2271	1141.3911	1143.7839
1148.6830	1150.0382	1152.1488
1154.1798	1156.1537	1157.0620

1157.1953	1166.8296	1173.0137
1178.0243	1185.5658	1189.3003
1196.4307	1207.6500	1234.3434
1241.7896	1243.1225	1262.0089
1266.0942	1272.9440	1273.6534
1281.3185	1282.5186	1285.6568
1289.1255	1292.5081	1329.1583
1341.9634	1345.0567	1352.9613
1355.5257	1356.3591	1366.7429
1368.3654	1369.5946	1370.8520
1380.9798	1387.6731	1396.0623
1406.5745	1418.1844	1421.7807
1422.8032	1426.6321	1427.7150
1429.8278	1430.0217	1432.5254
1443.1988	1456.5536	1466.1238
1468.2581	1469.3912	1471.9536
1472.7365	1476.4047	1485.0871
1504.4617	1553.7802	1574.8279
1577.7573	1578.2361	1588.7520
1589.6192	1592.4602	1593.3818
1594.1695	1597.0790	1603.9636
1604.8464	1606.0053	1606.5906
1609.4201	1610.0962	1612.3403
1615.7450	2956.1740	2992.0118
3021.3834	3030.0934	3050.4670
3068.3807	3084.6519	3092.8331
3094.4257	3095.5012	3096.3728
3096.7550	3097.2281	3097.5894
3097.9324	3105.1944	3105.5808
3106.3002	3106.8549	3106.8817
3109.1401	3110.3865	3111.3600
3111.7922	3113.8686	3114.1026
3114.7907	3115.4903	3119.0952
3119.3904	3120.0117	3120.6979
3121.2244	3121.5417	3123.1420
3125.9331	3127.7541	3128.4795
3129.0897	3131.4091	3134.8758
3135.9259	3139.0406	3145.4843
3148.9142	3149.8379	3151.1784

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Int D iso2b S=3/2

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0.6775	25.2362	27.3276
30.5174	37.8733	41.6412
44.0133	48.3029	50.7347
53.6283	58.7132	59.9605
61.5747	67.6934	70.8579
71.9999	77.1151	80.3232
81.6686	83.9511	87.6239
89.7932	93.9601	97.9935
105.7291	107.3483	108.1342
113.8679	115.5867	118.3517
122.8843	127.1676	137.9080
145.6652	155.4754	178.6858
185.1646	189.6848	206.8853
211.2166	218.9166	227.7032

234.7419	241.5298	245.1562	1147.7091	1150.0465	1152.1416
255.3279	258.1866	260.9267	1155.3714	1156.7152	1158.3270
273.8377	277.8928	284.8293	1161.5386	1163.6215	1176.2200
287.7274	296.2132	303.7262	1178.4621	1183.0113	1189.5338
307.7608	315.4173	329.6848	1194.8493	1208.3016	1240.4495
340.7918	348.2861	369.1957	1243.0059	1243.1872	1261.1314
373.0716	379.4111	384.2539	1266.2763	1271.4280	1272.5422
398.9947	401.4699	401.7301	1278.1800	1281.9861	1283.8588
404.3289	406.9522	409.9771	1287.1508	1290.1305	1328.8420
410.8800	416.7742	420.6066	1342.0022	1344.8698	1345.7165
423.1018	426.8543	431.7794	1352.1419	1355.5391	1365.9630
450.8733	466.5897	482.6499	1368.9022	1369.2307	1372.0564
499.5274	505.2027	511.8737	1380.1665	1388.4414	1395.0354
513.7086	519.3057	523.7558	1407.7945	1417.1540	1417.9638
533.3649	538.4457	553.4457	1422.8453	1426.0311	1427.3008
573.7214	586.5813	595.0610	1427.6451	1429.5823	1431.4108
611.8437	612.7384	612.8818	1441.7988	1456.6016	1467.0428
613.5232	613.8438	615.5964	1468.0683	1469.2581	1471.6196
624.1618	628.1444	632.1521	1471.8487	1472.3053	1484.6817
632.8395	635.3818	636.9303	1505.0562	1552.6801	1574.7065
655.0605	663.7005	689.4066	1577.6444	1578.0573	1589.1186
693.0425	696.2045	699.1851	1589.5558	1591.1383	1591.8484
705.5400	706.6771	712.3730	1591.9034	1599.2478	1603.9465
716.6187	727.5376	733.2644	1604.7324	1605.7343	1606.4973
748.0929	749.5379	749.8378	1608.9775	1609.8350	1612.0462
752.7076	757.2872	761.1820	1613.3428	2955.2460	2991.2320
763.6826	766.6390	781.5757	3025.1811	3029.5961	3031.0018
783.6393	788.8231	795.7813	3066.7692	3094.4748	3095.5567
801.0358	817.0680	828.2499	3096.0862	3096.2041	3096.4286
830.2482	834.1024	840.6537	3096.7001	3097.1772	3097.6110
842.1587	843.5627	849.3411	3097.7138	3104.5704	3106.4981
850.4693	867.2672	868.8594	3106.7290	3106.7945	3109.0798
887.7817	888.4788	905.2487	3109.6046	3109.8009	3109.9890
906.6994	907.3138	921.8077	3111.0365	3115.2745	3116.1947
923.7264	925.6293	930.3036	3116.6083	3117.0338	3118.6821
932.5431	935.4926	943.9984	3119.0626	3120.9538	3121.4578
944.4321	945.5405	948.3942	3121.5853	3122.6786	3124.6851
954.1521	955.3741	960.7154	3127.2325	3127.9256	3129.0924
961.4724	962.1832	964.9709	3129.5735	3130.1541	3133.3320
971.9419	972.8554	974.5750	3139.5400	3144.1580	3144.8785
976.6412	977.9598	979.7238	3146.3362	3158.4252	3187.8234
981.2231	982.4031	986.4365	----		
987.5377	988.6915	988.7544	Int D iso1a S=5/2		
989.2874	990.1036	994.8643	----		
1000.6038	1004.3332	1005.4304	-11.7991	-3.5122	20.4776
1009.5506	1021.3070	1023.1518	24.4555	28.0249	36.7252
1023.6992	1024.9641	1025.1692	39.1516	39.5950	43.1744
1026.6954	1029.0228	1042.7123	45.7392	49.3493	51.1003
1047.0774	1048.7969	1054.4175	55.4556	57.9530	59.7990
1060.1004	1064.8561	1072.1180	61.9613	63.6352	66.8784
1072.4622	1079.9115	1081.0852	69.5692	77.2146	81.0306
1086.9895	1089.8210	1091.3311	84.1394	93.6727	94.2740
1093.8024	1095.2659	1100.2417	96.6090	106.1802	109.8227
1125.2929	1131.3460	1131.7610	118.9771	123.6243	129.6396
1134.0538	1135.3741	1138.0633	136.3652	147.8204	156.5901
1140.5309	1141.6728	1145.4874	164.9343	171.7275	174.1709

181.0983	198.7031	205.3145	1133.3778	1135.6807	1136.9671
216.1489	218.6482	225.1074	1137.6424	1139.8321	1143.4070
227.9804	239.3983	239.9181	1148.8370	1153.2748	1153.4712
254.8443	260.1779	269.5923	1154.8158	1157.2801	1159.1950
270.2660	279.0840	282.1748	1162.7342	1168.5627	1171.8028
291.9771	293.6854	302.2672	1184.6867	1186.5201	1191.1142
311.6793	322.5690	328.5474	1209.5528	1211.3189	1236.5079
340.8465	342.2992	345.7028	1240.1988	1244.4990	1265.0922
357.7435	367.7418	387.5414	1271.3089	1273.4429	1274.7468
390.4156	395.0827	399.9506	1277.0313	1281.4783	1285.1111
401.3108	406.6328	408.7684	1286.7224	1291.1844	1322.7836
411.6630	416.2607	419.6634	1339.8059	1350.1189	1355.7662
447.9292	460.6538	468.7310	1356.3277	1364.3998	1366.7882
469.7848	474.1007	483.2198	1367.9585	1369.1583	1371.9719
504.2695	510.8810	513.5222	1373.5792	1394.4769	1397.8271
523.4682	532.0743	540.8534	1405.8920	1409.2273	1415.1665
545.1708	551.9050	567.1630	1422.1940	1423.9534	1426.4474
575.8284	611.4571	611.7749	1428.8224	1429.8967	1432.3656
611.9107	613.2429	614.3368	1438.0626	1459.0157	1468.3972
614.8680	621.9570	625.3807	1469.3118	1469.6114	1472.9281
630.1507	631.0458	632.4106	1474.7633	1476.1900	1486.5312
633.7063	635.6235	643.1923	1510.4248	1554.5507	1579.0674
652.8230	671.6759	686.8405	1580.8784	1584.5977	1587.2472
694.5207	697.2694	699.6727	1589.4016	1590.4216	1591.2615
702.1509	703.6837	706.6371	1593.3127	1604.1477	1605.2042
707.2657	724.6327	728.3348	1605.4081	1606.6772	1607.7527
737.1654	746.6348	750.2153	1609.4004	1609.5328	1616.1742
752.3452	753.7839	759.5452	1616.9563	2959.2781	3033.8419
763.0309	767.7399	776.2969	3043.4643	3060.8648	3067.4697
783.5217	786.2086	789.9431	3090.0553	3090.1382	3091.6596
803.1844	815.0894	825.6959	3092.2912	3093.0774	3093.6476
827.7591	833.2150	834.9922	3093.8237	3094.8350	3097.2076
836.6927	838.2776	843.2727	3102.2085	3102.5466	3103.2158
853.6354	860.3077	863.9489	3103.6673	3103.9295	3104.2350
880.5511	884.8164	894.6008	3104.9791	3106.1465	3107.2150
901.3906	904.0358	908.0964	3112.3496	3112.5274	3113.2726
912.4429	919.5392	923.9168	3113.6293	3114.2642	3114.7254
931.6775	936.9589	938.6709	3115.0759	3117.5135	3117.5450
939.3678	943.4371	951.1711	3118.8217	3120.1204	3120.2910
953.1726	953.7198	956.0501	3120.5244	3121.5069	3122.4896
960.0369	961.0615	961.8803	3122.8635	3126.5230	3129.9438
965.0332	966.5039	972.8209	3130.9813	3131.4773	3133.8644
975.1208	975.9569	977.9906	3145.2623	3158.9406	3167.4575
979.1892	981.5281	982.6031	----		
987.1024	987.8244	988.4731	Int D iso1b S=5/2		
989.3442	990.2430	999.9383	----		
1002.8996	1003.7174	1008.5140	-13.4158	4.5577	9.3854
1021.9146	1023.0286	1023.3657	13.0171	21.9022	27.5449
1025.2390	1025.4527	1026.3963	30.0046	38.4651	40.0513
1038.0103	1045.1026	1046.9699	45.2951	48.8200	50.9299
1049.1685	1064.3120	1066.9060	53.4570	55.9099	60.8752
1067.0406	1071.0379	1076.0342	62.6525	64.7182	71.9353
1082.2462	1087.2943	1089.4879	76.2587	77.4995	81.5712
1093.7411	1094.8648	1096.6505	83.3700	85.9982	92.0332
1102.0808	1107.5452	1119.5008	95.3999	102.0971	109.9749
1129.2772	1130.3487	1132.6071	112.9381	117.6288	124.2948

132.3052	139.6348	150.7098
153.2110	173.8462	174.9176
186.4301	198.7436	205.1426
216.3817	225.5645	232.8396
233.7270	246.2560	248.4880
255.0923	261.9762	271.1182
271.8751	276.8530	284.2429
289.7919	302.9467	307.3214
313.7120	314.1808	336.3777
341.3448	346.7934	361.6118
368.6489	374.0124	398.3364
398.4422	403.6065	404.4056
404.8738	406.6254	410.8825
413.5419	419.7386	419.9798
434.4616	449.4090	463.4728
469.7939	479.4566	489.5881
495.3229	510.9819	512.9352
514.3047	530.4735	533.6219
542.5480	552.2357	566.9632
580.9508	605.3848	612.1405
612.3868	612.5968	613.6922
613.8670	615.4421	624.7701
625.4816	631.7727	632.6105
634.9658	636.4315	647.1140
649.6473	655.5070	687.6840
691.0503	698.7108	700.4658
700.6618	705.8201	706.5990
708.8130	722.6665	727.9989
736.5736	741.5628	749.0262
751.9717	756.3201	763.4499
767.9414	772.6654	777.3456
784.4401	788.0902	798.9462
804.1879	814.3726	825.3241
831.6600	832.3854	835.7358
836.0722	840.6712	842.1805
848.8322	864.1970	865.8624
883.2166	884.5750	903.5499
904.4832	907.2295	910.6551
913.5781	925.1253	931.2111
933.3215	936.9050	941.2820
942.8400	944.9625	952.7942
957.3595	960.2264	961.0998
961.5559	964.9162	967.6856
969.6982	971.9060	974.6654
974.6837	977.1745	979.0346
980.8874	982.7863	984.9250
987.6467	988.0358	989.8785
990.0676	990.8060	993.5662
999.6198	1003.0870	1011.2128
1021.6916	1022.6050	1023.6716
1023.9273	1025.4834	1025.5735
1043.5443	1047.6496	1048.4244
1055.8567	1063.5205	1064.4063
1070.3358	1071.3138	1071.8984
1087.9527	1089.0646	1093.7776
1094.9208	1096.3796	1097.4866

1104.4819	1107.7675	1121.5681
1125.3711	1128.7719	1131.9230
1134.0582	1136.2732	1138.1364
1138.8063	1140.9025	1142.9749
1151.7425	1153.8991	1154.7969
1157.3405	1157.8835	1158.2463
1160.6447	1167.2236	1170.9214
1182.7227	1186.3099	1187.9316
1208.0630	1228.3787	1236.5306
1241.9917	1265.4294	1266.6142
1270.8970	1272.1354	1273.5438
1283.3362	1284.5494	1286.1598
1290.2208	1292.0779	1324.2453
1343.7181	1345.7244	1348.4325
1355.4718	1357.0125	1367.4124
1368.9412	1370.2784	1370.7009
1378.4258	1392.2533	1393.7283
1410.1632	1414.4581	1417.9732
1419.6115	1423.1600	1426.1034
1428.4483	1429.8358	1430.2387
1441.9769	1456.7810	1466.8761
1469.3141	1470.4208	1470.7466
1472.3542	1472.9436	1487.0571
1507.1410	1549.4614	1576.3761
1577.3559	1579.7291	1588.3186
1590.5056	1591.2473	1591.5730
1593.5004	1603.4171	1603.6220
1603.9344	1604.7959	1605.2098
1608.0444	1610.0724	1611.2795
1614.0801	2960.5424	3035.9924
3049.7610	3056.0545	3069.1302
3088.2134	3090.8650	3092.3314
3092.4552	3093.5631	3094.2370
3097.9897	3098.6115	3099.5373
3101.9125	3101.9278	3102.6981
3103.5453	3104.5684	3104.8892
3105.0550	3106.0650	3109.7847
3111.0254	3111.6767	3111.7586
3112.1020	3115.7273	3116.0854
3117.0284	3118.2156	3119.2206
3120.9426	3121.8675	3122.1457
3123.1172	3125.8460	3126.6811
3126.7510	3134.4012	3136.3459
3137.0770	3144.0239	3145.0558
3148.5630	3151.8145	3154.1362

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5.7848	13.1685	17.8487
21.3189	28.3357	36.3527
40.6050	43.8958	47.2314
50.5902	52.5247	54.6511
57.7565	62.7420	63.2481
64.9510	69.9461	72.7078
76.3440	80.1021	82.0843
84.3698	86.6569	90.8725

92.9678	96.7835	100.1991	1080.0207	1087.6729	1089.4886
107.4784	115.4793	130.5483	1092.8689	1093.6958	1098.6699
133.1294	138.8801	146.7214	1106.6236	1122.5378	1126.9991
172.4117	174.0541	185.8164	1129.0868	1131.8311	1132.3843
188.1363	201.6245	202.3682	1133.2014	1135.6694	1136.9949
207.1516	215.9875	228.2213	1140.0925	1144.1879	1145.6924
237.7343	248.6013	251.3278	1147.8790	1151.7668	1154.1754
254.2020	261.9181	273.3159	1155.6319	1156.6839	1157.6604
274.0604	281.6307	288.3866	1158.0013	1173.7285	1176.9909
297.0563	298.1418	309.2246	1177.7879	1182.1270	1189.2093
323.4716	325.5710	337.8962	1210.5631	1238.6526	1243.6233
341.8463	343.0922	370.2232	1250.1052	1261.8347	1264.5281
373.1119	385.2039	399.9293	1267.8959	1273.9561	1276.5353
401.2431	401.7217	402.8561	1279.3573	1280.4961	1283.6182
404.1428	404.8922	406.1528	1285.3886	1290.6174	1323.8169
409.3340	414.0081	421.3262	1343.7123	1345.0659	1346.9770
440.4491	461.4670	462.2700	1361.3303	1361.7991	1367.7097
468.4468	487.3236	487.7552	1368.5012	1370.4998	1371.8613
504.5977	506.4846	508.0392	1378.4800	1392.6696	1394.9861
516.7170	524.5448	538.7731	1408.2595	1417.6309	1420.5986
543.4990	552.6269	569.4916	1422.5156	1423.9830	1426.1915
581.2660	606.8719	611.7793	1430.0158	1430.3240	1430.9612
612.0217	612.3742	613.6489	1443.0304	1455.2496	1466.5036
614.4202	615.5013	626.0835	1467.2544	1470.1666	1470.4927
627.7700	631.4698	632.2968	1471.7776	1474.6132	1487.0855
634.3405	636.5891	649.1299	1504.5721	1547.3625	1573.5686
652.8333	654.7487	689.3601	1576.9223	1583.8332	1588.5141
693.7588	696.7390	698.4219	1591.4188	1591.6754	1592.0542
700.4707	702.0072	708.1602	1594.6190	1601.5999	1603.4412
711.6302	719.8920	720.8601	1605.1856	1606.1772	1606.3959
728.1083	747.6527	750.4351	1608.1245	1610.4608	1611.8942
753.6120	758.4834	763.0726	1617.6136	2960.0712	3039.0640
764.8173	765.3412	775.4967	3040.8452	3051.6302	3063.7665
781.0098	789.5971	791.3707	3067.8535	3092.9533	3093.1155
794.7082	802.8148	821.5479	3093.8648	3094.8674	3095.1891
827.4087	830.7071	831.5795	3096.9381	3098.1579	3100.0197
834.0476	838.9608	843.0788	3102.0097	3103.2917	3103.6329
845.1864	865.8833	867.4853	3104.4279	3106.4607	3106.8825
881.6234	889.3949	901.5532	3108.6640	3109.7864	3111.8877
903.0826	904.0491	915.3791	3112.4860	3113.4887	3114.2651
920.4214	926.8123	930.6087	3114.7927	3115.1580	3116.2321
931.1202	937.8606	940.4153	3117.0886	3117.7652	3120.7799
943.1954	946.1008	954.4443	3120.9993	3121.9100	3122.5444
959.4958	961.3787	961.9905	3124.6665	3125.1615	3126.5921
962.3112	963.4004	966.0593	3127.1756	3127.5791	3127.9076
967.1524	970.0002	975.0767	3135.6428	3136.7103	3137.6501
976.8227	979.4843	980.6643	3139.0205	3152.7043	3159.3149
982.0669	984.8007	985.7920	----		
987.0189	988.1191	988.6514	Int D iso2b S=5/2		
990.3523	991.2229	997.3579	----		
998.9332	1003.3523	1013.8139	-5.4738	20.0991	24.8211
1020.9086	1022.1287	1022.5762	32.9642	35.1323	40.9099
1023.8905	1024.2992	1027.3036	42.8284	51.1905	52.6830
1043.0348	1043.7093	1047.4898	53.6039	58.0855	59.8774
1053.0559	1057.4146	1065.0929	64.6682	69.8957	70.7216
1067.1654	1068.5540	1070.1005	71.3650	72.9950	75.0038

83.0524	86.2959	89.5661
90.9182	94.3739	98.3339
106.1691	110.4959	113.7082
118.6012	121.5376	124.7032
137.0264	150.6678	151.9855
170.4412	179.9353	183.8373
187.3152	202.8145	209.1823
214.8377	218.9050	228.7962
242.7847	248.3476	253.9472
257.2688	263.2553	273.3626
275.4769	276.7386	284.2811
289.2016	293.2821	309.1851
313.4338	313.9313	338.8972
343.3454	344.0774	363.1049
372.8689	373.6605	396.7698
397.4031	400.7655	402.2883
404.1431	410.9192	411.6993
414.5086	418.2819	422.9612
443.2131	445.0093	462.7719
470.8586	474.8516	484.6062
506.0204	509.9167	515.5101
519.4279	521.1173	540.5501
544.2743	553.5750	567.6562
583.6010	600.9697	612.1425
612.6529	613.0848	614.2505
614.7543	615.4370	625.5356
628.2553	632.3703	633.8581
634.6116	636.2874	646.4531
647.8364	653.1978	685.1515
688.3146	692.2041	699.1013
704.3239	706.8396	708.6395
711.3034	723.0601	726.6867
729.7424	748.2747	751.0742
752.8394	758.7482	759.7739
765.7160	771.6842	778.8791
783.4184	788.3751	790.0118
792.1529	805.0872	813.2716
823.3512	833.0396	835.6657
839.0727	843.8783	846.1826
848.4167	865.4813	868.2134
885.7923	886.5268	891.3366
902.5625	904.1043	905.1439
918.6714	926.4541	929.5819
934.6552	938.3424	943.6539
946.4130	949.8206	949.9207
956.4331	957.7494	959.8896
962.0549	963.2894	967.6152
970.3269	972.8943	974.4844
976.7011	978.7545	980.1126
981.1655	986.6663	987.3364
987.8375	989.0566	989.7757
989.9284	992.6590	993.5068
995.3964	1004.7503	1010.5432
1022.4701	1022.6686	1023.5078
1023.8215	1026.2522	1026.4822
1040.5390	1046.3931	1049.2248

1051.9859	1063.7305	1064.1111
1065.1654	1071.2100	1072.0081
1088.9614	1090.9591	1092.2878
1096.5196	1097.9400	1103.6568
1104.5992	1107.0678	1116.9506
1126.5393	1128.5171	1129.0056
1134.2189	1137.0858	1137.2237
1139.4244	1143.7113	1144.4245
1146.9430	1152.7065	1155.1221
1156.3129	1158.6786	1161.8933
1165.7315	1167.9660	1172.2002
1174.2184	1179.2507	1182.6608
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1241.3429	1264.9114	1265.3120
1269.4209	1270.2318	1273.4917
1276.8339	1277.5376	1283.9643
1286.3112	1296.1433	1327.4369
1342.0334	1343.2507	1352.6868
1358.2889	1359.8425	1366.9906
1368.1594	1368.3796	1372.4993
1385.0516	1392.7642	1394.3498
1407.7535	1418.2106	1420.7283
1421.6223	1422.6367	1426.6410
1426.8593	1430.6180	1430.6898
1446.1577	1455.7809	1467.9237
1468.5340	1469.7543	1470.3376
1470.5898	1473.4064	1488.8808
1505.9745	1551.1580	1572.7465
1579.0147	1579.8582	1588.5600
1589.8869	1590.4142	1591.6131
1593.0890	1601.9925	1604.0658
1604.1104	1604.9036	1605.0103
1608.5623	1610.7709	1612.3700
1614.4298	2958.6800	3034.6295
3038.6163	3073.8461	3075.4119
3092.1650	3092.8212	3092.8565
3093.0605	3093.7302	3095.0530
3100.8864	3101.3981	3102.1272
3102.8619	3103.2672	3103.3298
3103.6715	3105.7262	3108.4333
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3113.8287	3114.4972	3115.4490
3115.6796	3116.1529	3116.2090
3119.1073	3119.5533	3120.5206
3121.9872	3122.9722	3124.5644
3125.3505	3126.2018	3126.3131
3136.5113	3136.8112	3140.5164
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3162.7276	3170.7046	3190.6989
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TS B-C iso1a S=3/2		
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-463.9689	9.7267	16.8525
22.9292	25.6695	28.1496
32.8223	36.4119	41.7335
43.4304	46.1978	47.5872



50.9689	53.4124	60.9887
63.4693	65.1345	67.1394
73.0003	76.4083	81.8304
86.0572	90.6005	93.9078
95.1478	99.7373	106.3609
110.0824	117.6857	120.4833
131.4806	135.9730	152.9818
162.9940	170.3608	177.7892
181.2147	196.9902	203.7729
205.7704	218.5430	232.7993
238.4656	244.6626	248.6888
252.4659	262.3464	265.2016
271.4543	281.0368	285.4244
288.6413	300.5584	303.9655
311.8660	319.9160	321.9706
336.5853	347.8121	359.0502
366.5754	376.1646	385.8216
398.6478	400.3051	403.3982
404.3261	407.5649	410.1018
414.8229	417.5155	422.0040
425.4013	446.5871	450.1039
467.6427	475.4170	481.3805
493.7648	498.8537	506.0557
511.2472	516.9335	525.0111
535.8705	541.4178	546.3992
552.0528	574.3677	581.4172
609.4018	611.6526	611.9956
612.8856	614.0448	616.7617
621.8955	626.2778	629.7226
631.6664	633.2946	635.3204
637.5737	661.9827	663.8048
676.1941	692.2772	694.5141
698.0881	700.0425	701.8952
703.2299	707.7490	719.2675
727.5584	730.6708	736.1927
741.5632	747.5778	750.5558
752.5593	761.8330	763.7404
779.5981	780.6140	784.3246
790.8642	798.0834	800.2280
803.5243	819.6999	820.9385
822.6187	826.9776	832.2938
835.5906	835.9381	840.6047
855.0319	866.6287	881.8313
887.4724	899.3590	900.7600
910.5564	911.7934	918.6271
921.8898	926.2562	931.4113
934.4921	939.5304	941.5662
944.0390	954.0882	955.5205
956.3759	958.0670	960.6476
962.4248	964.5826	966.4189
971.4954	973.9232	975.3097
976.9104	979.5382	979.7497
980.8268	981.4391	982.8620
984.4175	986.7563	987.7447
988.9328	990.0608	1001.4205
1004.6987	1010.5345	1018.1588

1022.7595	1024.6730	1025.2894
1026.4579	1027.1484	1040.9125
1043.8740	1044.9937	1046.7416
1058.2011	1059.9573	1073.9289
1074.4750	1076.8889	1080.9533
1084.0174	1087.6691	1089.8696
1092.8274	1095.6257	1100.1198
1132.0884	1132.7680	1133.2090
1135.6981	1135.9856	1137.5950
1141.1739	1145.6002	1146.4500
1150.5911	1151.6412	1152.3723
1153.8421	1154.1858	1156.5050
1157.7977	1162.7252	1171.4898
1186.1189	1195.7907	1203.9506
1208.0051	1210.3464	1238.4101
1239.7873	1240.4231	1262.7029
1262.9661	1267.7767	1277.0188
1278.4171	1285.5180	1285.8346
1288.7639	1292.6425	1330.5051
1341.1687	1344.0687	1351.7452
1359.0320	1362.8071	1365.6758
1367.6922	1368.4471	1371.1564
1386.3264	1393.0053	1398.1149
1407.0452	1417.0593	1421.1881
1426.0376	1427.7860	1428.9917
1429.4694	1432.1561	1434.5668
1457.0187	1463.3056	1469.2409
1471.5391	1472.3490	1472.6387
1473.1609	1473.2951	1502.1772
1508.5395	1558.5262	1566.2400
1575.3654	1577.6302	1583.2932
1586.8597	1590.2932	1591.3636
1591.9776	1594.8490	1605.1902
1606.0417	1606.8138	1607.4786
1608.1957	1610.8528	1611.6682
1620.7093	2957.3838	3031.5421
3054.9286	3062.2561	3063.0856
3091.2426	3093.7673	3096.2574
3096.9341	3097.2870	3097.4319
3098.4544	3100.0088	3101.3854
3103.1089	3103.3771	3103.5225
3106.0288	3106.1476	3107.3536
3109.1692	3110.9230	3112.9013
3113.4887	3116.6548	3117.2097
3117.8746	3118.5678	3119.5833
3119.8265	3119.9468	3120.1865
3120.8571	3121.8210	3124.5897
3125.0989	3125.7927	3126.5214
3128.1039	3129.4826	3135.4099
3136.4698	3138.9435	3144.2216
3145.3532	3154.8231	3170.4524

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-404.0319	-20.4219	5.7048
10.8771	17.7295	27.1396

28.6438	34.4439	38.9582
41.5835	46.7227	53.4339
58.2989	62.0878	63.8404
67.0182	72.2633	73.4328
79.0467	80.7692	85.0159
85.2769	92.8310	102.6183
104.8449	106.0774	110.6688
112.6817	116.5696	131.3290
134.4789	140.0687	147.6159
152.4237	172.2237	173.8279
181.7624	193.6069	196.9559
206.5021	219.1358	227.7991
243.4869	246.3384	250.0608
252.5439	260.0332	261.9251
269.7144	281.0080	287.9256
289.1283	299.6078	305.3494
316.6867	323.2670	325.6138
343.3308	343.6788	361.6095
365.4373	380.3016	392.2593
399.0825	401.7050	402.9242
408.3220	409.5129	409.9847
411.0153	414.0354	419.1621
426.2405	446.6377	455.2445
464.6381	472.6397	482.9728
486.7771	497.3017	504.7790
507.7659	520.3483	528.5015
535.7726	537.2421	543.9609
551.5644	552.5256	581.0672
609.0779	611.7213	611.9326
612.2162	614.0097	616.2095
623.1385	625.5732	628.6670
631.9912	632.6866	635.0868
637.4380	662.3195	664.2533
674.6158	691.4804	694.5008
697.5709	699.5448	703.0511
703.9978	714.0882	722.3994
732.7749	735.7989	739.0829
744.0733	747.6893	750.1355
753.7394	759.0019	765.6812
779.2794	784.6855	786.7823
789.6747	801.1523	802.8391
811.2335	812.8196	820.9897
821.6193	829.5195	832.0057
834.6533	836.5955	842.1415
856.8082	867.4996	875.9865
888.2486	897.7812	903.6501
908.2621	915.7982	918.6096
920.8743	924.8313	932.9265
934.0284	939.3992	942.9823
944.1993	948.4056	955.6574
957.7369	959.2099	962.1217
963.6851	963.9764	967.0849
973.8002	974.8476	976.3856
977.1703	978.8781	979.8794
981.7397	982.2450	983.4058
984.0965	987.2092	988.4784

989.2223	990.3985	1002.7510
1004.8611	1010.4241	1019.7080
1022.7937	1023.8360	1024.8681
1025.2808	1027.1847	1030.9080
1046.5086	1046.8842	1055.6057
1060.3744	1064.3266	1072.3892
1073.2841	1084.3509	1086.4916
1088.1889	1089.6823	1090.9686
1095.5041	1095.7488	1101.3661
1131.4469	1132.6364	1133.1108
1133.6515	1134.9600	1138.6090
1139.0622	1145.4782	1146.6861
1151.4606	1152.1941	1153.2745
1154.5366	1155.5875	1157.8874
1158.3972	1163.3263	1176.7098
1185.2040	1199.6756	1202.2139
1206.4385	1208.1251	1233.9932
1236.5238	1242.8685	1264.7235
1264.8397	1267.8932	1275.1523
1279.7138	1282.4495	1283.7099
1287.5199	1293.1242	1329.1646
1342.7140	1343.3905	1348.4796
1356.5317	1366.8705	1368.1877
1369.7140	1371.2024	1371.4079
1393.0991	1394.1789	1396.4623
1410.1404	1418.7128	1419.5216
1426.0671	1427.7901	1428.9441
1431.9076	1432.0066	1434.0238
1456.5823	1465.1792	1468.4110
1470.1108	1472.3669	1473.1121
1473.6312	1475.1439	1506.1555
1508.6021	1558.5124	1566.0109
1574.7587	1576.4753	1582.7782
1588.0891	1589.5125	1591.7754
1592.7168	1596.0725	1605.7482
1606.4646	1606.5953	1607.0629
1607.6635	1610.7147	1611.9346
1620.4896	2957.8184	3032.0140
3034.6203	3044.6891	3065.5089
3093.8471	3094.2555	3095.6169
3096.0247	3096.1214	3096.4510
3097.0030	3097.1460	3102.6700
3103.9022	3105.1148	3105.3670
3106.1875	3106.6740	3106.7201
3108.8578	3110.7371	3114.1471
3114.3325	3117.5834	3117.9489
3118.1234	3118.1687	3119.5132
3120.3345	3120.7298	3121.3666
3123.4730	3124.5151	3125.8498
3127.6370	3127.9290	3128.0844
3129.1128	3130.1634	3133.4383
3135.7847	3144.2027	3146.7177
3151.2405	3153.1829	3155.4110

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-464.1640	9.7286	16.8544	980.8278	981.4397	982.8632
22.9394	25.7708	28.2648	984.4161	986.7560	987.7444
32.8234	36.4331	41.7367	988.9330	990.0600	1001.4161
43.4338	46.2016	47.5920	1004.6991	1010.5308	1018.1601
50.9737	53.4258	60.9897	1022.7591	1024.6723	1025.2884
63.4688	65.1360	67.1471	1026.4578	1027.1474	1040.9241
73.0040	76.4134	81.8389	1043.8746	1045.0092	1046.7465
86.0604	90.5913	93.9149	1058.1965	1059.9537	1073.9283
95.1540	99.7541	106.3608	1074.4738	1076.8903	1080.9589
110.0907	117.6857	120.4950	1084.0193	1087.6658	1089.8690
131.4859	135.9801	152.9850	1092.8329	1095.6250	1100.1217
162.9992	170.3650	177.7923	1132.0887	1132.7674	1133.2088
181.2147	196.9899	203.7746	1135.6985	1135.9858	1137.5946
205.7752	218.5407	232.7990	1141.1738	1145.6006	1146.4486
238.4624	244.6662	248.6911	1150.5919	1151.6430	1152.3755
252.4634	262.3461	265.2047	1153.8413	1154.1854	1156.5064
271.4571	281.0419	285.4246	1157.7989	1162.7262	1171.4981
288.6511	300.5592	303.9664	1186.1231	1195.7986	1203.9441
311.8686	319.9131	321.9718	1208.0072	1210.3466	1238.4115
336.5909	347.8109	359.0498	1239.7849	1240.4234	1262.7084
366.5755	376.1647	385.8234	1262.9688	1267.7762	1277.0181
398.6542	400.3103	403.3991	1278.4175	1285.5171	1285.8335
404.3289	407.5657	410.1027	1288.7656	1292.6431	1330.5034
414.8255	417.5230	422.0042	1341.1709	1344.0669	1351.7454
425.4047	446.5917	450.1029	1359.0233	1362.8034	1365.6720
467.6402	475.4206	481.3854	1367.6923	1368.4468	1371.1523
493.7697	498.8524	506.0630	1386.3227	1393.0050	1398.1145
511.2477	516.9353	525.0073	1407.0775	1417.0606	1421.1766
535.8704	541.4160	546.3975	1426.0388	1427.7846	1428.9925
552.0520	574.3794	581.4193	1429.4683	1432.1560	1434.5653
609.4014	611.6524	611.9957	1457.0179	1463.3040	1469.2407
612.8851	614.0444	616.7618	1471.5393	1472.3490	1472.6393
621.8982	626.2789	629.7217	1473.1625	1473.2929	1502.1721
631.6655	633.2955	635.3199	1508.5393	1558.5258	1566.2386
637.5735	661.9855	663.8052	1575.3636	1577.6309	1583.2954
676.1946	692.2783	694.5133	1586.8571	1590.2937	1591.3630
698.0878	700.0382	701.8945	1591.9753	1594.8467	1605.1909
703.2282	707.7501	719.2694	1606.0424	1606.8115	1607.4795
727.5605	730.6705	736.1938	1608.1931	1610.8512	1611.6683
741.5653	747.5799	750.5553	1620.7095	2957.3585	3031.5298
752.5602	761.8315	763.7399	3054.9246	3062.2665	3063.1119
779.6001	780.6147	784.3297	3091.2421	3093.7651	3096.2582
790.8594	798.0875	800.2280	3096.9332	3097.2868	3097.4326
803.5376	819.7138	820.9392	3098.4549	3100.0145	3101.3855
822.6250	826.9748	832.2964	3103.1075	3103.3757	3103.5207
835.5886	835.9407	840.6096	3106.0290	3106.1485	3107.3544
855.0324	866.6290	881.8303	3109.1682	3110.9225	3112.8967
887.4734	899.3608	900.7600	3113.4899	3116.6535	3117.2084
910.5565	911.7927	918.6252	3117.8735	3118.5625	3119.5803
921.8890	926.2580	931.4107	3119.8154	3119.9524	3120.1859
934.5021	939.5317	941.5671	3120.8534	3121.8226	3124.5892
944.0378	954.0912	955.5324	3125.0955	3125.7908	3126.5206
956.3754	958.0690	960.6460	3128.1083	3129.4886	3135.4155
962.4294	964.5985	966.4222	3136.4400	3138.9385	3144.2344
971.4943	973.9236	975.3084	3145.3793	3154.8263	3170.4589
976.9096	979.5364	979.7497	----		

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-430.8311	7.6283	15.3291
17.8395	22.8943	25.8188
27.9209	30.6684	39.1309
43.9406	45.9032	47.1422
51.9133	56.0559	57.5847
61.2267	66.8750	67.7381
70.7271	76.5933	81.4826
85.9004	89.2296	92.7524
94.4605	98.0787	105.7508
108.7176	112.5033	119.9832
136.1450	142.4970	148.8249
154.7918	166.1094	173.3803
179.3888	189.5763	194.6472
214.5919	218.8671	223.9451
235.6151	241.7879	247.8889
251.5652	262.5250	268.3909
269.4450	274.4142	280.7957
288.3335	295.3171	299.4530
319.3859	320.4263	325.4115
340.2118	342.7981	351.9371
366.1423	382.4363	384.7949
399.2342	402.0823	404.9798
407.0169	407.8440	408.8798
413.3806	416.4540	420.3092
429.5447	438.7310	462.0439
463.6609	473.9340	474.2436
489.8791	492.2814	501.2236
513.0666	515.4902	528.7045
537.6340	542.8081	553.2361
553.4106	576.4167	606.3862
609.8203	610.8966	612.1707
613.0431	614.4595	614.9548
623.3714	625.3927	630.9692
632.2260	634.0906	635.8785
650.9141	651.7190	656.1600
683.8611	688.7654	695.3188
696.7049	698.6079	703.2895
705.1240	712.7027	724.4146
733.0628	736.9968	746.0349
750.5182	750.7277	753.5761
756.5896	765.7418	776.1526
779.1806	780.1768	782.7515
795.6119	800.7686	819.6371
820.9095	822.7118	829.7334
830.2394	833.3918	838.1553
838.9513	859.7955	860.0587
864.4064	877.3339	881.5049
895.9903	906.9592	908.7350
914.0437	917.9629	921.8447
931.0831	938.7569	940.7604
941.7176	942.0144	952.7298
953.8135	957.1888	960.6513
961.6896	964.9445	965.0289
967.0098	972.3627	973.8759

976.6878	977.1211	978.2109
980.3357	981.6819	984.1803
985.9369	986.2778	986.4975
987.0867	988.7695	989.2689
993.4466	1003.6116	1003.8378
1011.3551	1019.6882	1022.8875
1024.0766	1024.3013	1025.0022
1025.2494	1025.8955	1044.6483
1047.2119	1066.0789	1069.9074
1071.4427	1072.0486	1074.5449
1083.0711	1087.5766	1093.1878
1093.8656	1094.6211	1107.0213
1108.2919	1119.4616	1130.9505
1131.3332	1132.0320	1132.5234
1135.7113	1136.8517	1137.7601
1141.2462	1142.8364	1143.6466
1147.3506	1151.7855	1153.2099
1154.0100	1155.7827	1160.2939
1161.9073	1162.3752	1163.9452
1171.6047	1191.5471	1207.4997
1221.6977	1233.3850	1234.2576
1240.9957	1246.1094	1264.4327
1264.5778	1268.1161	1271.9590
1273.3814	1280.6467	1282.2531
1286.4443	1291.5346	1326.3611
1343.3087	1343.6844	1346.0634
1358.1914	1366.6563	1366.8389
1368.5010	1370.2793	1373.1210
1391.6032	1396.0247	1396.9365
1409.2306	1418.8943	1420.2042
1420.6596	1424.6610	1425.5493
1426.2782	1430.0767	1430.5050
1447.6450	1455.9717	1466.4044
1467.1246	1470.5688	1471.0367
1471.0591	1471.3265	1489.6454
1508.5400	1557.8052	1574.3053
1575.1354	1576.0432	1580.1516
1585.7273	1587.1733	1589.6545
1590.0378	1602.2200	1602.8847
1603.2429	1603.7242	1604.5052
1605.1034	1608.5190	1609.7576
1619.2563	2959.5287	3013.9257
3034.9399	3059.3601	3067.6915
3085.9546	3089.1678	3091.4221
3091.5511	3092.2139	3092.8406
3095.5980	3096.1264	3096.4852
3098.8572	3100.3018	3100.6088
3101.2179	3102.0458	3103.7152
3104.2729	3105.1892	3106.3685
3108.8095	3108.8691	3109.6938
3110.7829	3111.8905	3112.9903
3113.8182	3114.9319	3115.4702
3118.2180	3119.5947	3120.1354
3120.2121	3120.2398	3120.9300
3123.0579	3123.9590	3124.2679
3125.0399	3128.8077	3130.3334

3136.4611 3147.7452 3156.6315

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-393.0795	5.8123	7.8846
10.9416	21.3006	27.7471
32.5210	34.0124	38.4219
46.9856	48.9481	51.8384
54.3977	58.4603	63.0672
66.5834	70.5285	71.6459
74.7113	80.9720	83.1148
88.3385	90.0573	93.4380
95.2560	103.4511	106.8532
110.2248	115.0663	122.1441
131.0130	138.3483	152.7497
158.5296	169.4813	173.9717
177.2379	184.0757	196.4221
208.3344	220.0253	227.6512
237.3872	245.2029	251.0613
252.6368	262.2046	264.4785
269.4678	274.9425	280.5525
291.7505	295.6385	298.1778
313.5843	322.0677	335.6404
338.2926	339.8664	357.4640
360.0077	378.3350	387.5822
399.9453	400.8477	404.8544
405.5837	407.8568	413.4296
416.0249	424.5425	427.0526
431.5273	439.5072	463.9370
471.7272	475.9773	478.6359
489.5516	492.4833	504.0552
512.8469	517.9136	528.8742
535.4611	544.3179	553.4292
555.7381	579.1531	608.7911
609.8079	611.9985	612.8745
613.9751	616.2087	616.7148
621.9419	625.0580	630.1697
632.9600	633.6507	635.1220
650.4429	653.8191	657.8439
679.9403	685.8597	688.7681
696.4910	699.6192	704.8361
708.4389	711.7605	721.8763
731.3901	738.2832	747.1902
750.9958	751.9634	754.0774
757.0086	765.5658	772.9081
779.5477	780.2506	780.9431
799.5038	801.6223	818.8953
823.2993	827.4682	829.6488
831.3923	834.4125	838.8006
845.5175	861.5722	862.8316
864.8785	874.9477	881.6896
897.1095	904.1562	915.8396
916.9434	919.1817	926.0901
933.1249	941.0086	941.3509
942.3726	945.9052	951.1173
954.2757	960.8949	961.3670

963.8745	966.2479	968.5429
969.7708	972.4736	973.0220
973.1967	974.6092	976.6338
977.0620	982.9238	983.6248
985.1685	986.4161	986.7380
988.7148	989.1358	991.0766
993.6870	1004.7591	1005.1511
1011.6825	1022.8946	1023.0759
1023.8741	1024.3220	1025.8193
1026.0999	1033.7968	1044.3662
1048.1566	1067.9979	1069.7682
1072.9782	1073.5466	1080.0054
1085.5214	1087.8018	1091.9948
1092.9804	1094.1491	1101.3091
1114.6518	1116.9878	1131.5506
1131.6242	1131.9003	1133.3188
1136.6958	1137.6010	1138.3831
1141.9190	1144.5327	1147.9715
1149.7203	1151.7917	1152.9010
1153.8177	1159.0297	1159.2546
1164.0557	1165.1954	1167.3701
1170.3226	1184.1665	1207.3551
1217.2869	1222.2040	1235.5034
1241.6056	1244.9601	1264.3492
1264.7323	1268.1081	1273.4049
1274.2766	1282.4491	1283.6415
1284.4662	1296.1014	1328.3943
1341.3427	1342.7842	1344.2215
1359.9654	1366.2534	1367.8678
1369.1151	1371.3247	1372.1810
1392.7616	1394.7335	1395.0767
1407.4816	1419.7770	1421.2400
1422.2622	1424.1600	1425.5902
1425.9745	1428.9483	1430.7514
1446.8040	1455.2073	1465.4281
1467.8180	1469.0714	1469.9921
1470.6404	1472.2791	1491.1456
1508.9401	1558.4248	1573.9221
1574.2283	1575.4216	1579.3873
1585.2122	1586.2874	1588.6157
1591.3724	1601.3832	1602.5305
1602.6267	1603.2000	1603.8956
1604.6065	1607.3619	1610.5477
1620.1135	2961.1695	3016.9383
3034.8638	3067.4208	3070.3890
3090.9802	3091.1377	3091.2489
3091.7059	3091.8949	3095.2391
3095.4994	3098.9437	3099.3564
3099.9190	3101.7663	3103.0660
3103.2645	3103.4371	3103.9342
3106.3509	3106.6440	3107.0513
3108.2272	3110.0582	3111.6256
3114.4623	3114.6590	3115.9708
3117.5556	3118.7788	3118.9949
3119.6085	3120.0340	3120.4209
3121.5439	3121.6125	3123.3509

3124.2586	3124.9960	3125.1518
3129.5702	3132.8884	3134.7575
3138.3554	3145.4347	3151.6213

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TS C-D iso2a S=5/2

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-430.8244	7.6296	15.3327
17.8438	22.9015	25.8378
28.0266	30.6736	39.1312
43.9406	45.9017	47.1428
51.9135	56.0560	57.5832
61.2268	66.8767	67.7370
70.7257	76.5935	81.4819
85.8995	89.2271	92.7495
94.4595	98.0804	105.7491
108.7166	112.5005	119.9816
136.1448	142.4977	148.8230
154.7902	166.1106	173.3806
179.3892	189.5755	194.6473
214.5916	218.8657	223.9445
235.6126	241.7872	247.8873
251.5644	262.5246	268.3883
269.4439	274.4133	280.7951
288.3338	295.3194	299.4526
319.3864	320.4287	325.4107
340.2116	342.7988	351.9382
366.1435	382.4383	384.7984
399.2356	402.0829	404.9781
407.0149	407.8429	408.8792
413.3797	416.4521	420.3079
429.5450	438.7300	462.0437
463.6600	473.9339	474.2433
489.8798	492.2811	501.2242
513.0673	515.4893	528.7048
537.6327	542.8080	553.2359
553.4104	576.4166	606.3891
609.8205	610.8968	612.1707
613.0431	614.4594	614.9548
623.3715	625.3939	630.9691
632.2261	634.0906	635.8788
650.9145	651.7207	656.1607
683.8606	688.7660	695.3149
696.7058	698.6075	703.2880
705.1234	712.7026	724.4148
733.0632	736.9970	746.0352
750.5181	750.7276	753.5758
756.5895	765.7418	776.1529
779.1805	780.1762	782.7521
795.6039	800.7752	819.6353
820.9056	822.7096	829.7324
830.2362	833.3917	838.1539
838.9503	859.7951	860.0554
864.4065	877.3325	881.5038
895.9899	906.9598	908.7351
914.0437	917.9623	921.8443
931.0827	938.7564	940.7601

941.7181	942.0182	952.7287
953.8132	957.1888	960.6515
961.6899	964.9439	965.0439
967.0042	972.3621	973.8763
976.6879	977.1211	978.2112
980.3343	981.6813	984.1793
985.9361	986.2776	986.4973
987.0869	988.7688	989.2683
993.4422	1003.6115	1003.8355
1011.3498	1019.6878	1022.8874
1024.0764	1024.3016	1025.0024
1025.2489	1025.8948	1044.6486
1047.2113	1066.0794	1069.9076
1071.4441	1072.0487	1074.5452
1083.0718	1087.5762	1093.1880
1093.8686	1094.6212	1107.0210
1108.2917	1119.4591	1130.9508
1131.3335	1132.0321	1132.5234
1135.7119	1136.8512	1137.7600
1141.2465	1142.8365	1143.6465
1147.3508	1151.7866	1153.2098
1154.0097	1155.7833	1160.2928
1161.9072	1162.3746	1163.9451
1171.6038	1191.5480	1207.5017
1221.6978	1233.3831	1234.2575
1240.9956	1246.1088	1264.4330
1264.5776	1268.1163	1271.9594
1273.3811	1280.6474	1282.2536
1286.4448	1291.5348	1326.3617
1343.3087	1343.6954	1346.0644
1358.1731	1366.6568	1366.8384
1368.5005	1370.2798	1373.1208
1391.5990	1396.0246	1396.9370
1409.2566	1418.8935	1420.2044
1420.6471	1424.6611	1425.5494
1426.2780	1430.0767	1430.5050
1447.6451	1455.9717	1466.4047
1467.1252	1470.5690	1471.0371
1471.0591	1471.3268	1489.6454
1508.5400	1557.8053	1574.3048
1575.1356	1576.0432	1580.1502
1585.7277	1587.1736	1589.6549
1590.0378	1602.2197	1602.8849
1603.2428	1603.7242	1604.5054
1605.1034	1608.5190	1609.7577
1619.2563	2959.5107	3013.9264
3034.9401	3059.3627	3067.6959
3085.9525	3089.1653	3091.4223
3091.5516	3092.2150	3092.8412
3095.5986	3096.1253	3096.4864
3098.8568	3100.3026	3100.6094
3101.2131	3102.0474	3103.7147
3104.2740	3105.1856	3106.3686
3108.8090	3108.8692	3109.6936
3110.7828	3111.8998	3112.9906
3113.8193	3114.9321	3115.4704

3118.2183	3119.5949	3120.1356
3120.2124	3120.2399	3120.9298
3123.0572	3123.9593	3124.2669
3125.0401	3128.8069	3130.3334
3136.4627	3147.7459	3156.6260

**5. Table S4.** Crystal and refinement data for  
**2.**

	Mn[O-terphenyl- O] <sup>Ph</sup> (THF) <sub>2</sub>
formula	C <sub>52</sub> H <sub>48</sub> MnO <sub>4</sub> ×CH <sub>2</sub> Cl <sub>2</sub>
fw	875.76
crystal system	Orthorhombic
space group	<i>P</i> 2 <sub>1</sub> 2 <sub>1</sub> 2 <sub>1</sub>
<i>a</i> (Å)	16.9723 (17)
<i>b</i> (Å)	17.3689 (15)
<i>c</i> (Å)	14.5364 (13)
<i>α</i> (deg)	90.00
<i>β</i> (deg)	90.00
<i>γ</i> (deg)	90.00
<i>V</i> (Å <sup>3</sup> )	4285.2 (7)
<i>D<sub>c</sub></i> (g cm <sup>-3</sup> )	1.357
<i>Z</i>	4
<i>μ</i> (mm <sup>-1</sup> )	0.483
<i>T</i> (K)	100(2)
<i>R<sub>I</sub></i>	0.0893
GOF	1.121