

*Electronic Supplementary Information for:*

## Di-lanthanide Encapsulated into Large Fullerene C<sub>100</sub>: A DFT Survey<sup>†</sup>

Tao Yang,<sup>a</sup> Xiang Zhao,<sup>\*a</sup> and Shigeru Nagase<sup>b</sup>

---

<sup>a</sup> *Institute for Chemical Physics and Department of Chemistry, Xi'an Jiaotong University,  
Xi'an 710049, China.*

*Email: [xzhao@mail.xjtu.edu.cn](mailto:xzhao@mail.xjtu.edu.cn); Fax: +86 29 8266 8559; Tel: +86 29 8266 5671*

<sup>b</sup> *Department of Theoretical and Computational Molecular Science,  
Institute for Molecular Science, Okazaki 444-8585, Japan*

## 1. Optimized energies at AM1 level.

IPR (isolated pentagon rule)<sup>S1</sup> indicates that the more pentagon adjacency in fullerene, the less stable the fullerene is. Therefore all of isomers belonged to PA=0~2 are in consideration in our calculations. There are 450 IPR isomers, 4034 isomers of PA=1 and 20271 isomers belonged to PA=2.<sup>S2</sup> Semi-empirical calculations at the AM1<sup>S3</sup> level were performed on the hexa-anion of all these isomers using the PC MOPAC package.

**Table S1.** The C<sub>100</sub> isomers considered at hexa-anion state in AM1 calculations.

C <sub>100</sub>	PA	All number	non-C <sub>I</sub>	C <sub>I</sub>
	0	450	116	334
	1	4034	94	3940
	2	20271	772	19499
SUM	PA≤2	24755	982	23813

Thinking of about 25000 isomers are considered in AM1 calculations, here we only provide the optimized energy of all IPR isomers and PA=1~2 with relative energy below 100kcal/mol. Such a plan give rise to about 4400 isomers and the results are collected in Table S2. For all the optimized energies, please contact the authors.

**Table S2.** AM1 optimized energetics of all IPR isomers and non-IPR isomers (PA=1~2) with relative energy below 100kcal/mol at hexa-anion of C<sub>100</sub>.

---

C <sub>100</sub>	Hexa-anion	Hexa-anion	C <sub>100</sub>	Hexa-anion	Hexa-anion
	AM1	AM1		AM1	AM1

spiral ID	PA	Sym.	$\Delta H_f$	$\Delta\Delta H_f$	spiral ID	PA	Sym.	$\Delta H_f$	$\Delta\Delta H_f$
			kcal/mol	kcal/mol				kcal/mol	kcal/mol
285913	0	$D_5$	1535.85	0.00	271216	2	$C_1$	1626.01	90.16
285793	0	$C_2$	1557.99	22.13	273275	1	$C_1$	1626.01	90.16
285864	0	$C_2$	1559.73	23.88	252446	2	$C_1$	1626.02	90.16
285858	0	$D_{2d}$	1564.11	28.26	285768	0	$C_1$	1626.02	90.17
285868	0	$C_1$	1568.15	32.29	268948	2	$C_1$	1626.04	90.19
285813	0	$C_2$	1569.99	34.13	270613	1	$C_1$	1626.04	90.19
285800	0	$C_1$	1571.35	35.50	253774	2	$C_1$	1626.05	90.19
285857	0	$C_s$	1571.89	36.04	224594	2	$C_1$	1626.06	90.20
285845	0	$C_1$	1572.50	36.65	247127	1	$C_1$	1626.07	90.21
285859	0	$C_2$	1572.57	36.71	263320	2	$C_1$	1626.07	90.21
285865	0	$C_2$	1572.93	37.08	252612	2	$C_1$	1626.07	90.22
285816	0	$C_1$	1574.87	39.01	265665	2	$C_1$	1626.07	90.22
285902	0	$C_2$	1575.98	40.12	203285	2	$C_1$	1626.09	90.23
285590	0	$C_s$	1576.06	40.20	282375	2	$C_1$	1626.09	90.24
285910	0	$C_s$	1576.07	40.21	267189	2	$C_1$	1626.10	90.24
285903	0	$C_2$	1577.70	41.85	276512	2	$C_1$	1626.10	90.24
285847	0	$C_1$	1578.89	43.04	272467	1	$C_1$	1626.10	90.24
285678	0	$C_1$	1579.08	43.22	237596	2	$C_1$	1626.10	90.25
285833	0	$C_1$	1579.25	43.40	270826	2	$C_1$	1626.11	90.26
285807	0	$C_1$	1579.27	43.42	282068	1	$C_1$	1626.12	90.26

285402	1	$C_2$	1579.71	43.86	285076	2	$C_1$	1626.12	90.27
285809	0	$C_1$	1579.75	43.90	276229	2	$C_1$	1626.13	90.27
285911	0	$C_2$	1579.87	44.02	265566	2	$C_1$	1626.13	90.28
285832	0	$C_1$	1579.89	44.03	283529	2	$C_1$	1626.14	90.28
285844	0	$C_2$	1580.26	44.40	266571	2	$C_1$	1626.14	90.28
285905	0	$C_2$	1580.59	44.74	275438	1	$C_1$	1626.14	90.29
275176	1	$C_1$	1580.95	45.09	283191	1	$C_1$	1626.15	90.29
285904	0	$C_1$	1581.06	45.20	264168	2	$C_1$	1626.15	90.29
285843	0	$C_1$	1582.27	46.42	229322	1	$C_1$	1626.15	90.30
285841	0	$C_2$	1582.36	46.51	203782	2	$C_1$	1626.15	90.30
285641	0	$C_1$	1582.45	46.60	265597	2	$C_1$	1626.16	90.30
265734	1	$C_1$	1582.56	46.71	263827	1	$C_1$	1626.16	90.31
285912	0	$D_2$	1582.92	47.06	280595	1	$C_1$	1626.18	90.32
285890	0	$C_1$	1583.59	47.73	267017	2	$C_1$	1626.19	90.33
285820	0	$C_1$	1584.02	48.17	266749	2	$C_1$	1626.19	90.34
285799	0	$C_1$	1584.50	48.65	215658	2	$C_1$	1626.20	90.35
285615	0	$C_1$	1585.07	49.21	285666	0	$C_1$	1626.20	90.35
285489	0	$C_1$	1585.44	49.58	222909	2	$C_1$	1626.21	90.36
285825	0	$C_1$	1585.50	49.64	126455	2	$C_1$	1626.22	90.36
285456	1	$C_2$	1585.55	49.69	265670	2	$C_1$	1626.22	90.36
285795	0	$C_1$	1585.80	49.94	239246	1	$C_1$	1626.22	90.36
285167	1	$C_1$	1585.92	50.06	276533	2	$C_1$	1626.22	90.36

285401	1	$C_2$	1586.02	50.16	180010	2	$C_I$	1626.22	90.37
285723	0	$C_I$	1586.09	50.23	264470	1	$C_I$	1626.23	90.37
282076	1	$C_I$	1586.45	50.60	266703	2	$C_I$	1626.24	90.38
285711	0	$C_I$	1586.47	50.62	262979	2	$C_I$	1626.24	90.39
285578	0	$C_2$	1586.59	50.73	269649	1	$C_I$	1626.25	90.39
285613	0	$C_s$	1586.71	50.86	270820	2	$C_I$	1626.25	90.40
285849	0	$C_I$	1586.72	50.86	277397	2	$C_I$	1626.26	90.40
283431	1	$C_I$	1586.74	50.88	275985	1	$C_I$	1626.27	90.42
285717	0	$C_I$	1586.74	50.88	285595	0	$C_2$	1626.27	90.42
285866	0	$C_I$	1586.88	51.02	276054	2	$C_I$	1626.28	90.42
285683	0	$C_I$	1586.91	51.06	212582	2	$C_I$	1626.30	90.44
285631	0	$C_I$	1587.03	51.18	216571	2	$C_I$	1626.31	90.45
281327	1	$C_I$	1587.25	51.40	268639	2	$C_I$	1626.31	90.46
285724	0	$C_I$	1587.42	51.56	281999	2	$C_I$	1626.34	90.48
285681	0	$C_I$	1588.15	52.30	267274	2	$C_I$	1626.34	90.48
285563	0	$C_I$	1588.17	52.32	235745	2	$C_I$	1626.34	90.48
285891	0	$C_I$	1588.18	52.33	276168	2	$C_I$	1626.34	90.48
285716	0	$C_I$	1588.34	52.48	284324	1	$C_I$	1626.36	90.51
285812	0	$C_I$	1588.37	52.51	269222	2	$C_I$	1626.37	90.51
285797	0	$C_I$	1589.03	53.17	262495	1	$C_I$	1626.37	90.52
285856	0	$C_I$	1589.08	53.23	236593	2	$C_I$	1626.38	90.52
285788	0	$C_I$	1589.24	53.38	285004	1	$C_I$	1626.39	90.54

285840	0	$C_I$	1589.31	53.45	265758	2	$C_I$	1626.39	90.54
213083	1	$C_I$	1589.32	53.46	210274	2	$C_I$	1626.40	90.54
285636	0	$C_I$	1589.34	53.48	266600	2	$C_I$	1626.40	90.55
285133	1	$C_I$	1589.50	53.64	275614	2	$C_I$	1626.41	90.56
285805	0	$C_I$	1589.62	53.76	212287	2	$C_I$	1626.41	90.56
265847	1	$C_I$	1589.86	54.01	278682	1	$C_I$	1626.42	90.56
285132	1	$C_I$	1589.96	54.10	274804	2	$C_I$	1626.43	90.57
285888	0	$C_I$	1590.03	54.18	267225	1	$C_I$	1626.44	90.58
252804	1	$C_I$	1590.11	54.25	203246	1	$C_I$	1626.44	90.59
275169	1	$C_I$	1590.13	54.27	242641	2	$C_I$	1626.45	90.60
265825	1	$C_I$	1590.32	54.46	282351	2	$C_I$	1626.45	90.60
285713	0	$C_I$	1590.33	54.47	280198	1	$C_I$	1626.46	90.61
281325	1	$C_I$	1590.44	54.59	251163	2	$C_I$	1626.47	90.61
276594	1	$C_I$	1590.56	54.70	283404	1	$C_I$	1626.47	90.61
285623	0	$C_I$	1590.58	54.73	202958	2	$C_I$	1626.47	90.62
283430	1	$C_I$	1590.63	54.78	242651	1	$C_I$	1626.48	90.63
275959	1	$C_I$	1590.78	54.92	268480	2	$C_I$	1626.49	90.64
212115	1	$C_I$	1590.92	55.06	251793	2	$C_I$	1626.50	90.64
285842	0	$C_I$	1590.98	55.12	284259	1	$C_I$	1626.51	90.65
285826	0	$C_I$	1591.00	55.15	283890	1	$C_I$	1626.51	90.66
285163	1	$C_I$	1591.02	55.17	285103	1	$C_I$	1626.51	90.66
285712	0	$C_I$	1591.37	55.51	280647	1	$C_I$	1626.51	90.66

278695	1	$C_1$	1591.48	55.62	274676	1	$C_1$	1626.52	90.67
285893	0	$C_2$	1591.53	55.67	242644	1	$C_1$	1626.53	90.67
285719	0	$C_1$	1591.61	55.76	252807	1	$C_1$	1626.53	90.67
285676	0	$C_1$	1591.63	55.78	274072	2	$C_1$	1626.53	90.68
285566	0	$C_2$	1591.98	56.12	203658	2	$C_1$	1626.55	90.69
285677	0	$C_1$	1591.99	56.14	285355	2	$C_1$	1626.55	90.69
266049	1	$C_1$	1592.00	56.15	278689	2	$C_1$	1626.56	90.70
285792	0	$C_1$	1592.02	56.16	256878	1	$C_1$	1626.56	90.71
207074	1	$C_1$	1592.05	56.20	212109	1	$C_1$	1626.56	90.71
285896	0	$C_2$	1592.17	56.32	265759	1	$C_1$	1626.57	90.71
282360	1	$C_1$	1592.36	56.50	263117	1	$C_1$	1626.58	90.72
285585	0	$C_1$	1592.43	56.57	252624	2	$C_1$	1626.58	90.72
226381	1	$C_1$	1592.46	56.60	275433	2	$C_1$	1626.59	90.73
285166	1	$C_1$	1592.65	56.79	285881	0	$C_1$	1626.59	90.74
285156	1	$C_1$	1592.67	56.82	212049	2	$C_1$	1626.60	90.74
223113	1	$C_1$	1592.68	56.82	284297	2	$C_1$	1626.60	90.75
285579	0	$C_1$	1592.68	56.83	268433	2	$C_1$	1626.63	90.78
285815	0	$C_1$	1592.73	56.87	282171	2	$C_1$	1626.63	90.78
213677	1	$C_1$	1592.73	56.88	236196	2	$C_1$	1626.64	90.78
285405	1	$C_s$	1592.81	56.96	269172	2	$C_1$	1626.64	90.78
285691	0	$C_1$	1592.83	56.98	278397	1	$C_2$	1626.65	90.79
231219	1	$C_1$	1592.88	57.03	250913	2	$C_1$	1626.66	90.81

285134	1	$C_I$	1592.88	57.03	236572	1	$C_I$	1626.67	90.81
285895	0	$D_2$	1592.96	57.10	281397	1	$C_I$	1626.67	90.82
285244	1	$C_I$	1592.97	57.11	265673	2	$C_I$	1626.68	90.82
285796	0	$C_I$	1593.00	57.15	223287	2	$C_I$	1626.68	90.82
284340	1	$C_I$	1593.01	57.15	206350	1	$C_I$	1626.69	90.83
281545	1	$C_I$	1593.02	57.17	285733	0	$C_I$	1626.69	90.84
212094	1	$C_I$	1593.06	57.20	284290	1	$C_I$	1626.70	90.85
285872	0	$C_I$	1593.06	57.21	265761	2	$C_I$	1626.71	90.85
285558	0	$C_I$	1593.07	57.22	276932	2	$C_I$	1626.71	90.85
285639	0	$C_I$	1593.09	57.23	210848	2	$C_I$	1626.71	90.86
282100	1	$C_I$	1593.31	57.46	285517	0	$C_I$	1626.72	90.86
285537	0	$C_I$	1593.47	57.62	281099	1	$C_I$	1626.73	90.87
285674	0	$C_I$	1593.57	57.72	285568	0	$C_I$	1626.73	90.87
282056	1	$C_I$	1593.83	57.97	152569	2	$C_I$	1626.73	90.87
285811	0	$C_I$	1593.96	58.11	215032	1	$C_I$	1626.73	90.88
285839	0	$C_2$	1594.01	58.15	234811	1	$C_I$	1626.73	90.88
285668	0	$C_I$	1594.09	58.23	247238	2	$C_I$	1626.74	90.88
231204	1	$C_I$	1594.24	58.38	285652	0	$C_I$	1626.74	90.88
281326	1	$C_I$	1594.31	58.45	282352	2	$C_I$	1626.74	90.88
282350	1	$C_I$	1594.34	58.49	275634	1	$C_s$	1626.75	90.90
285837	0	$C_I$	1594.39	58.54	278545	2	$C_I$	1626.75	90.90
285640	0	$C_I$	1594.40	58.55	203786	1	$C_I$	1626.75	90.90



285831	0	$C_1$	1594.42	58.56	279771	1	$C_1$	1626.75	90.90
284323	1	$C_1$	1594.44	58.58	231177	1	$C_1$	1626.76	90.90
285846	0	$C_1$	1594.48	58.63	212392	2	$C_1$	1626.76	90.91
275659	1	$C_1$	1594.61	58.75	276085	2	$C_1$	1626.76	90.91
275955	1	$C_1$	1594.66	58.80	285174	1	$C_1$	1626.77	90.92
250864	1	$C_1$	1595.02	59.16	263580	2	$C_1$	1626.78	90.92
214191	1	$C_1$	1595.04	59.18	243333	1	$C_1$	1626.78	90.93
283201	1	$C_1$	1595.04	59.19	277346	1	$C_1$	1626.80	90.94
285875	0	$C_1$	1595.07	59.22	281593	1	$C_1$	1626.80	90.94
285135	1	$C_1$	1595.10	59.24	281588	2	$C_1$	1626.80	90.95
212068	1	$C_1$	1595.14	59.29	269701	1	$C_1$	1626.82	90.96
276363	1	$C_1$	1595.15	59.30	247626	1	$C_1$	1626.82	90.97
285637	0	$C_2$	1595.49	59.64	249478	2	$C_1$	1626.82	90.97
285477	0	$C_3$	1595.64	59.78	274478	1	$C_1$	1626.83	90.97
214196	1	$C_1$	1595.64	59.79	235002	1	$C_1$	1626.83	90.97
285835	0	$C_2$	1595.82	59.96	249969	1	$C_1$	1626.83	90.98
285684	0	$C_3$	1596.05	60.20	237139	1	$C_1$	1626.84	90.98
285675	0	$C_2$	1596.07	60.21	262864	2	$C_1$	1626.84	90.98
275170	1	$C_1$	1596.09	60.23	273459	2	$C_1$	1626.85	91.00
285688	0	$C_1$	1596.13	60.27	215289	2	$C_1$	1626.85	91.00
275965	1	$C_1$	1596.18	60.32	280666	2	$C_1$	1626.86	91.01
285673	0	$C_1$	1596.21	60.35	248111	1	$C_1$	1626.86	91.01

275165	1	$C_1$	1596.28	60.42	282735	1	$C_1$	1626.87	91.01
266015	1	$C_1$	1596.28	60.43	213145	2	$C_1$	1626.87	91.02
285803	0	$C_1$	1596.29	60.44	266090	2	$C_1$	1626.88	91.02
285887	0	$C_1$	1596.32	60.46	282321	2	$C_1$	1626.88	91.03
285368	1	$C_1$	1596.39	60.54	278706	2	$C_1$	1626.88	91.03
285725	0	$C_1$	1596.40	60.55	262968	2	$C_1$	1626.89	91.03
285801	0	$C_2$	1596.41	60.55	203238	2	$C_1$	1626.90	91.05
285900	0	$C_1$	1596.47	60.61	274574	1	$C_1$	1626.91	91.06
265760	1	$C_1$	1596.53	60.68	284274	1	$C_1$	1626.92	91.06
285780	0	$C_1$	1596.53	60.68	204616	1	$C_1$	1626.92	91.06
285369	1	$C_1$	1596.57	60.71	278685	1	$C_1$	1626.92	91.07
285161	1	$C_1$	1596.59	60.73	281363	1	$C_1$	1626.93	91.07
285848	0	$C_1$	1596.59	60.74	207164	2	$C_1$	1626.93	91.08
268510	1	$C_1$	1596.61	60.76	276256	2	$C_1$	1626.94	91.08
284913	1	$C_1$	1596.64	60.78	275491	1	$C_1$	1626.94	91.09
284910	1	$C_1$	1596.73	60.88	282888	2	$C_1$	1626.94	91.09
282322	1	$C_1$	1596.74	60.88	213695	2	$C_1$	1626.95	91.09
285862	0	$C_1$	1596.96	61.10	191323	2	$C_1$	1626.95	91.10
284333	1	$C_1$	1596.98	61.13	277859	2	$C_1$	1626.97	91.11
276406	1	$C_1$	1597.04	61.18	189315	2	$C_1$	1626.97	91.11
220219	1	$C_1$	1597.11	61.25	285643	0	$C_1$	1626.97	91.12
251181	1	$C_1$	1597.12	61.27	283219	2	$C_1$	1626.97	91.12

285897	0	$C_I$	1597.23	61.37	285608	0	$C_I$	1626.97	91.12
285630	0	$C_I$	1597.33	61.47	277647	1	$C_I$	1626.98	91.12
242649	1	$C_I$	1597.42	61.56	214297	1	$C_I$	1626.99	91.13
278571	1	$C_I$	1597.43	61.57	285819	0	$C_s$	1626.99	91.14
285635	0	$C_I$	1597.50	61.64	262969	2	$C_I$	1627.00	91.14
284754	1	$C_I$	1597.65	61.80	284684	1	$C_I$	1627.03	91.17
285591	0	$C_I$	1597.69	61.83	228479	1	$C_I$	1627.03	91.17
265733	1	$C_I$	1597.72	61.86	272652	2	$C_I$	1627.04	91.18
211166	1	$C_I$	1597.72	61.86	203231	2	$C_I$	1627.04	91.19
281570	1	$C_I$	1597.74	61.88	280590	1	$C_I$	1627.04	91.19
283132	1	$C_I$	1597.75	61.89	285406	1	$C_I$	1627.06	91.20
285501	0	$C_s$	1597.82	61.96	277443	1	$C_I$	1627.07	91.21
285645	0	$C_I$	1597.86	62.00	203247	2	$C_I$	1627.07	91.22
285794	0	$C_I$	1597.91	62.06	247041	2	$C_I$	1627.07	91.22
285365	1	$C_I$	1597.91	62.06	282929	2	$C_I$	1627.07	91.22
285687	0	$C_I$	1598.08	62.23	213578	2	$C_I$	1627.07	91.22
203259	1	$C_I$	1598.10	62.25	226375	1	$C_I$	1627.08	91.22
285581	0	$C_I$	1598.14	62.28	275162	2	$C_I$	1627.08	91.22
223134	1	$C_I$	1598.17	62.31	275552	2	$C_I$	1627.08	91.22
277349	1	$C_I$	1598.30	62.45	211194	2	$C_I$	1627.08	91.23
276596	1	$C_I$	1598.32	62.46	282004	2	$C_I$	1627.09	91.23
203663	1	$C_I$	1598.39	62.53	283189	2	$C_I$	1627.09	91.23

203496	1	$C_1$	1598.42	62.56	276341	2	$C_1$	1627.09	91.23
282600	1	$C_1$	1598.49	62.63	203236	2	$C_1$	1627.09	91.24
268657	1	$C_1$	1598.57	62.71	266791	2	$C_1$	1627.09	91.24
285224	1	$C_1$	1598.61	62.75	276561	2	$C_1$	1627.09	91.24
279697	1	$C_1$	1598.75	62.89	263023	2	$C_1$	1627.10	91.25
276225	1	$C_1$	1598.78	62.93	262826	1	$C_1$	1627.11	91.25
285597	0	$C_1$	1598.79	62.93	280110	1	$C_1$	1627.12	91.26
285806	0	$C_2$	1598.82	62.97	281057	1	$C_1$	1627.12	91.27
284336	1	$C_1$	1598.87	63.01	244061	1	$C_1$	1627.13	91.27
207054	1	$C_1$	1598.91	63.06	283448	2	$C_1$	1627.13	91.27
282338	1	$C_1$	1598.92	63.07	284299	1	$C_1$	1627.13	91.28
251604	1	$C_1$	1598.93	63.07	216463	2	$C_1$	1627.14	91.28
265822	1	$C_1$	1598.95	63.10	285627	0	$C_1$	1627.15	91.29
276361	1	$C_1$	1599.03	63.17	251458	1	$C_1$	1627.15	91.30
285894	0	$D_2$	1599.07	63.21	257557	1	$C_1$	1627.16	91.30
285860	0	$C_1$	1599.10	63.25	263571	1	$C_1$	1627.17	91.32
285899	0	$C_1$	1599.11	63.25	255769	1	$C_1$	1627.17	91.32
281544	1	$C_1$	1599.11	63.26	282570	2	$C_1$	1627.17	91.32
285669	0	$C_1$	1599.11	63.26	145833	2	$C_1$	1627.19	91.33
234787	1	$C_1$	1599.13	63.27	285001	1	$C_1$	1627.19	91.33
283064	1	$C_1$	1599.24	63.38	284461	1	$C_1$	1627.19	91.34
285838	0	$C_1$	1599.32	63.46	283100	1	$C_1$	1627.20	91.34

213786	1	$C_1$	1599.39	63.53	279054	1	$C_1$	1627.20	91.35
282920	1	$C_1$	1599.40	63.54	228842	1	$C_1$	1627.20	91.35
284908	1	$C_1$	1599.51	63.65	231940	1	$C_1$	1627.20	91.35
285088	1	$C_1$	1599.52	63.67	266514	2	$C_1$	1627.20	91.35
284916	1	$C_1$	1599.62	63.77	268621	2	$C_1$	1627.22	91.36
282355	1	$C_1$	1599.63	63.77	242278	1	$C_1$	1627.22	91.36
207225	1	$C_1$	1599.67	63.82	277275	2	$C_1$	1627.22	91.37
285834	0	$C_1$	1599.69	63.83	283921	1	$C_1$	1627.23	91.37
285728	0	$C_1$	1599.72	63.86	236177	2	$C_1$	1627.23	91.37
277373	1	$C_2$	1599.72	63.87	266566	2	$C_1$	1627.23	91.38
284855	1	$C_1$	1599.73	63.87	253604	1	$C_1$	1627.23	91.38
283099	1	$C_1$	1599.76	63.90	252549	1	$C_1$	1627.24	91.38
276358	1	$C_1$	1599.81	63.95	214125	2	$C_1$	1627.24	91.39
282054	1	$C_1$	1599.81	63.96	269079	2	$C_1$	1627.24	91.39
281711	1	$C_1$	1599.85	63.99	242656	2	$C_1$	1627.24	91.39
285823	0	$C_1$	1599.89	64.04	262956	2	$C_1$	1627.25	91.39
284905	1	$C_1$	1599.90	64.04	282853	1	$C_1$	1627.25	91.39
285682	0	$C_1$	1599.95	64.09	284369	1	$C_1$	1627.25	91.39
275434	1	$C_1$	1599.97	64.12	236168	2	$C_1$	1627.25	91.39
276360	1	$C_1$	1600.02	64.16	280669	1	$C_1$	1627.27	91.41
285714	0	$C_1$	1600.05	64.19	226450	1	$C_1$	1627.27	91.42
262924	1	$C_1$	1600.08	64.23	269643	2	$C_1$	1627.28	91.42

285259	1	$C_1$	1600.09	64.23	205221	2	$C_1$	1627.28	91.43
285629	0	$C_1$	1600.11	64.25	251166	2	$C_1$	1627.28	91.43
285889	0	$C_1$	1600.20	64.34	265453	2	$C_1$	1627.29	91.44
236583	1	$C_1$	1600.24	64.39	239191	2	$C_1$	1627.30	91.45
283447	1	$C_1$	1600.26	64.40	275962	2	$C_1$	1627.30	91.45
252584	1	$C_1$	1600.32	64.46	247260	1	$C_1$	1627.31	91.46
207055	1	$C_1$	1600.32	64.46	228691	2	$C_1$	1627.31	91.46
282324	1	$C_1$	1600.34	64.48	278317	1	$C_1$	1627.34	91.48
214178	1	$C_1$	1600.35	64.50	284945	2	$C_1$	1627.34	91.49
285708	0	$C_1$	1600.38	64.53	282919	2	$C_1$	1627.35	91.50
255767	1	$C_1$	1600.42	64.56	285222	1	$C_1$	1627.37	91.52
282319	1	$C_1$	1600.42	64.57	250168	1	$C_1$	1627.37	91.52
284367	1	$C_1$	1600.45	64.59	247390	2	$C_1$	1627.37	91.52
285506	0	$C_1$	1600.45	64.59	214304	1	$C_1$	1627.37	91.52
282353	2	$C_1$	1600.46	64.61	279097	1	$C_1$	1627.37	91.52
252575	1	$C_1$	1600.47	64.62	276395	2	$C_1$	1627.38	91.52
282594	1	$C_1$	1600.55	64.69	282315	2	$C_1$	1627.38	91.53
277701	1	$C_1$	1600.64	64.78	109789	2	$C_1$	1627.38	91.53
275969	1	$C_1$	1600.71	64.86	267239	2	$C_1$	1627.39	91.53
285867	0	$C_1$	1600.75	64.89	252743	2	$C_1$	1627.39	91.53
285199	1	$C_1$	1600.76	64.91	274740	1	$C_1$	1627.39	91.54
274005	1	$C_1$	1600.83	64.97	269769	2	$C_1$	1627.41	91.56

282085	1	$C_I$	1601.02	65.16	283063	2	$C_I$	1627.41	91.56
267202	1	$C_I$	1601.04	65.18	270958	2	$C_I$	1627.42	91.57
237214	1	$C_I$	1601.05	65.19	226778	1	$C_I$	1627.43	91.57
283202	1	$C_I$	1601.06	65.21	276833	2	$C_I$	1627.43	91.57
265650	1	$C_I$	1601.08	65.22	252903	1	$C_I$	1627.43	91.57
256781	1	$C_I$	1601.14	65.28	281980	2	$C_I$	1627.43	91.57
285642	0	$C_I$	1601.21	65.35	212092	2	$C_I$	1627.44	91.59
285771	0	$C_I$	1601.22	65.37	254913	2	$C_I$	1627.45	91.59
285200	1	$C_I$	1601.25	65.39	219523	1	$C_I$	1627.46	91.60
285705	0	$C_I$	1601.26	65.41	284028	1	$C_S$	1627.46	91.60
285824	0	$C_I$	1601.39	65.54	227503	2	$C_I$	1627.46	91.61
269218	1	$C_I$	1601.40	65.55	251182	2	$C_I$	1627.49	91.64
285821	0	$C_I$	1601.42	65.57	282343	2	$C_I$	1627.50	91.65
235726	1	$C_I$	1601.46	65.60	236225	2	$C_I$	1627.50	91.65
273900	1	$C_I$	1601.47	65.62	269645	2	$C_I$	1627.51	91.65
247230	1	$C_I$	1601.49	65.64	276628	1	$C_S$	1627.51	91.65
285827	0	$C_2$	1601.50	65.64	251235	2	$C_I$	1627.51	91.65
285854	0	$C_I$	1601.62	65.76	236344	2	$C_I$	1627.51	91.66
285618	0	$C_I$	1601.64	65.78	228681	2	$C_I$	1627.52	91.66
285850	0	$C_2$	1601.68	65.82	274810	2	$C_I$	1627.52	91.67
284883	1	$C_I$	1601.70	65.85	276181	2	$C_I$	1627.53	91.68
285871	0	$C_I$	1601.73	65.87	285565	0	$C_I$	1627.53	91.68

227544	1	$C_I$	1601.79	65.94	283762	1	$C_I$	1627.54	91.68
282601	1	$C_I$	1601.86	66.00	285254	2	$C_I$	1627.54	91.68
285715	0	$C_S$	1601.87	66.01	285495	0	$C_I$	1627.55	91.70
265729	1	$C_I$	1601.89	66.03	263337	2	$C_I$	1627.56	91.70
285172	1	$C_I$	1601.90	66.04	283006	2	$C_I$	1627.56	91.70
284334	1	$C_I$	1601.91	66.05	252607	1	$C_I$	1627.57	91.72
282591	1	$C_I$	1601.94	66.08	215145	1	$C_I$	1627.57	91.72
249967	1	$C_I$	1601.96	66.11	283087	1	$C_I$	1627.58	91.72
276180	2	$C_I$	1602.00	66.14	235730	2	$C_I$	1627.62	91.76
285720	0	$C_I$	1602.02	66.16	273920	1	$C_I$	1627.62	91.76
285534	0	$C_I$	1602.03	66.18	243916	1	$C_I$	1627.62	91.76
203278	1	$C_I$	1602.05	66.20	268435	2	$C_I$	1627.63	91.78
282348	1	$C_I$	1602.06	66.20	180946	2	$C_I$	1627.63	91.78
252757	1	$C_I$	1602.08	66.22	236437	1	$C_I$	1627.64	91.78
268511	1	$C_I$	1602.09	66.23	282170	1	$C_I$	1627.64	91.79
282354	1	$C_I$	1602.16	66.31	212554	2	$C_I$	1627.65	91.79
284906	1	$C_I$	1602.18	66.33	280162	2	$C_I$	1627.66	91.80
285772	0	$C_I$	1602.19	66.34	252512	2	$C_I$	1627.66	91.80
282576	1	$C_I$	1602.20	66.35	265731	2	$C_I$	1627.67	91.81
285381	1	$C_2$	1602.21	66.36	273390	1	$C_I$	1627.68	91.82
251178	1	$C_I$	1602.22	66.36	284621	1	$C_I$	1627.68	91.82
284282	1	$C_S$	1602.39	66.53	284894	1	$C_I$	1627.68	91.83



223809	1	$C_I$	1602.40	66.54	274163	2	$C_I$	1627.70	91.84
282575	1	$C_I$	1602.40	66.55	237220	2	$C_I$	1627.70	91.85
281712	1	$C_I$	1602.41	66.55	272405	1	$C_I$	1627.70	91.85
284343	1	$C_I$	1602.43	66.58	226347	2	$C_I$	1627.71	91.85
266012	1	$C_I$	1602.45	66.59	277587	2	$C_I$	1627.71	91.85
285680	0	$C_I$	1602.61	66.75	250177	1	$C_I$	1627.72	91.87
285275	1	$C_I$	1602.64	66.78	214808	1	$C_I$	1627.73	91.87
282589	1	$C_I$	1602.67	66.82	282326	2	$C_I$	1627.73	91.88
281618	1	$C_I$	1602.74	66.89	216430	2	$C_I$	1627.74	91.88
285193	1	$C_I$	1602.74	66.89	281434	2	$C_I$	1627.74	91.89
284625	1	$C_I$	1602.79	66.94	275368	2	$C_I$	1627.75	91.89
282624	1	$C_I$	1602.81	66.96	231069	1	$C_I$	1627.75	91.90
283203	1	$C_I$	1602.85	67.00	262432	1	$C_I$	1627.75	91.90
284842	1	$C_I$	1602.93	67.08	251370	2	$C_I$	1627.75	91.90
280096	1	$C_I$	1602.95	67.09	206390	1	$C_I$	1627.76	91.91
205206	1	$C_I$	1602.96	67.11	285089	2	$C_I$	1627.79	91.93
234805	1	$C_I$	1602.97	67.11	276230	1	$C_I$	1627.79	91.93
251776	1	$C_I$	1603.01	67.16	280769	1	$C_I$	1627.80	91.94
284338	1	$C_I$	1603.02	67.16	276388	1	$C_I$	1627.80	91.95
281546	2	$C_I$	1603.02	67.16	269450	1	$C_I$	1627.80	91.95
284298	1	$C_I$	1603.07	67.21	277083	2	$C_I$	1627.80	91.95
265727	1	$C_I$	1603.07	67.21	277444	2	$C_I$	1627.80	91.95

214124	1	$C_I$	1603.12	67.26	269644	2	$C_I$	1627.80	91.95
285388	1	$C_s$	1603.14	67.28	281582	1	$C_I$	1627.82	91.96
231205	1	$C_I$	1603.15	67.30	207166	2	$C_I$	1627.83	91.97
221129	1	$C_I$	1603.19	67.33	251209	2	$C_I$	1627.84	91.99
285776	0	$C_I$	1603.20	67.34	227482	2	$C_I$	1627.85	91.99
285817	0	$C_s$	1603.25	67.39	265595	2	$C_I$	1627.86	92.00
285667	0	$C_I$	1603.25	67.39	285016	2	$C_I$	1627.86	92.01
268670	1	$C_I$	1603.30	67.45	284770	1	$C_I$	1627.86	92.01
252787	1	$C_I$	1603.32	67.46	285531	0	$C_I$	1627.86	92.01
285633	0	$C_I$	1603.32	67.47	279001	2	$C_I$	1627.87	92.01
285664	0	$C_I$	1603.32	67.47	138404	2	$C_I$	1627.88	92.02
285353	2	$C_I$	1603.36	67.50	237562	2	$C_I$	1627.88	92.03
215033	1	$C_I$	1603.39	67.54	281547	1	$C_s$	1627.89	92.03
285557	0	$C_{2v}$	1603.40	67.54	252582	2	$C_I$	1627.89	92.04
285583	0	$C_I$	1603.40	67.55	213785	2	$C_I$	1627.92	92.06
266055	1	$C_I$	1603.41	67.55	207895	1	$C_I$	1627.92	92.07
284881	1	$C_I$	1603.42	67.57	218902	2	$C_I$	1627.93	92.07
284331	1	$C_I$	1603.50	67.64	285322	1	$C_I$	1627.93	92.08
284319	1	$C_I$	1603.55	67.69	248436	1	$C_I$	1627.95	92.09
266598	1	$C_I$	1603.56	67.71	256879	1	$C_I$	1627.95	92.09
273990	1	$C_I$	1603.57	67.72	276195	2	$C_I$	1627.95	92.10
284289	1	$C_I$	1603.61	67.75	205637	1	$C_I$	1627.95	92.10

223061	1	$C_1$	1603.62	67.76	180123	2	$C_1$	1627.95	92.10
210952	1	$C_1$	1603.64	67.78	265138	2	$C_1$	1627.96	92.10
285626	0	$C_1$	1603.65	67.80	252447	2	$C_1$	1627.97	92.11
251184	2	$C_1$	1603.69	67.83	267419	2	$C_1$	1627.97	92.11
284345	1	$C_1$	1603.70	67.85	278276	1	$C_2$	1627.97	92.12
251648	1	$C_1$	1603.73	67.87	227317	2	$C_1$	1627.98	92.13
284907	1	$C_1$	1603.73	67.88	202985	2	$C_1$	1627.99	92.13
213661	1	$C_1$	1603.78	67.92	250141	1	$C_1$	1627.99	92.14
276251	2	$C_1$	1603.79	67.93	203881	2	$C_1$	1628.00	92.14
263113	1	$C_1$	1603.80	67.94	252619	2	$C_1$	1628.01	92.16
278493	1	$C_1$	1603.84	67.98	227548	2	$C_1$	1628.02	92.16
269379	1	$C_1$	1603.85	67.99	283761	2	$C_1$	1628.02	92.16
283679	1	$C_1$	1603.89	68.04	275167	2	$C_1$	1628.02	92.16
265801	1	$C_1$	1603.98	68.12	270951	1	$C_1$	1628.02	92.16
255250	1	$C_1$	1603.99	68.13	243796	2	$C_1$	1628.02	92.17
284322	1	$C_1$	1603.99	68.14	203271	2	$C_1$	1628.03	92.18
276414	1	$C_1$	1604.00	68.14	276340	2	$C_1$	1628.06	92.20
228397	1	$C_1$	1604.00	68.15	213558	2	$C_1$	1628.06	92.21
284852	1	$C_1$	1604.03	68.18	236182	2	$C_1$	1628.07	92.22
266502	1	$C_1$	1604.05	68.20	236492	2	$C_1$	1628.07	92.22
207193	1	$C_1$	1604.06	68.21	218883	1	$C_1$	1628.08	92.22
278740	1	$C_1$	1604.08	68.22	268564	2	$C_1$	1628.08	92.22

214175	1	$C_I$	1604.09	68.24	236667	1	$C_I$	1628.08	92.22
251180	2	$C_I$	1604.18	68.33	275367	1	$C_I$	1628.08	92.23
268509	1	$C_I$	1604.19	68.34	263550	2	$C_I$	1628.09	92.23
285808	0	$C_S$	1604.24	68.38	273693	1	$C_I$	1628.09	92.23
282363	1	$C_I$	1604.25	68.39	276293	2	$C_I$	1628.10	92.24
285775	0	$C_I$	1604.25	68.39	229578	2	$C_I$	1628.10	92.24
276223	1	$C_I$	1604.26	68.41	273912	1	$C_I$	1628.11	92.25
285679	0	$C_I$	1604.29	68.43	277402	2	$C_I$	1628.11	92.25
235709	1	$C_I$	1604.34	68.49	283374	2	$C_I$	1628.12	92.26
285386	1	$C_I$	1604.35	68.50	283438	1	$C_I$	1628.12	92.27
268504	2	$C_I$	1604.38	68.53	218910	2	$C_I$	1628.13	92.27
285863	0	$C_I$	1604.39	68.53	212390	2	$C_I$	1628.14	92.29
284446	1	$C_I$	1604.47	68.62	282523	2	$C_I$	1628.16	92.31
285491	0	$C_I$	1604.49	68.64	282686	2	$C_I$	1628.17	92.31
275988	1	$C_I$	1604.51	68.65	212086	2	$C_I$	1628.17	92.32
285396	1	$C_I$	1604.51	68.65	284898	1	$C_I$	1628.18	92.33
282317	1	$C_I$	1604.63	68.77	278305	2	$C_I$	1628.20	92.35
281437	1	$C_I$	1604.64	68.79	282993	2	$C_I$	1628.21	92.35
285155	1	$C_I$	1604.67	68.81	234769	1	$C_I$	1628.21	92.36
282595	1	$C_I$	1604.67	68.81	284393	2	$C_I$	1628.21	92.36
285785	0	$C_3$	1604.72	68.86	213234	2	$C_I$	1628.21	92.36
284912	1	$C_I$	1604.73	68.87	266556	2	$C_I$	1628.22	92.36

277698	1	$C_1$	1604.77	68.91	222938	1	$C_1$	1628.22	92.36
285366	2	$C_1$	1604.81	68.95	270612	1	$C_1$	1628.22	92.36
282055	1	$C_1$	1604.85	68.99	252632	1	$C_1$	1628.22	92.37
281324	1	$C_1$	1604.91	69.05	265649	1	$C_1$	1628.22	92.37
281567	1	$C_1$	1604.93	69.07	285552	0	$C_1$	1628.22	92.37
262788	1	$C_1$	1604.95	69.10	283487	1	$C_1$	1628.22	92.37
214982	1	$C_1$	1605.12	69.27	266752	2	$C_1$	1628.23	92.37
285017	1	$C_1$	1605.14	69.28	278264	1	$C_2$	1628.23	92.38
228290	1	$C_1$	1605.17	69.31	266741	2	$C_1$	1628.25	92.39
285610	0	$C_1$	1605.17	69.32	275365	1	$C_1$	1628.25	92.40
285818	0	$C_1$	1605.20	69.34	281538	2	$C_1$	1628.26	92.41
277304	2	$C_1$	1605.22	69.36	263112	2	$C_1$	1628.27	92.41
285906	0	$C_2$	1605.26	69.40	244085	2	$C_1$	1628.27	92.42
285879	0	$C_1$	1605.29	69.43	284954	2	$C_1$	1628.28	92.43
266014	2	$C_1$	1605.34	69.48	256762	1	$C_1$	1628.28	92.43
275970	1	$C_1$	1605.36	69.50	187863	2	$C_1$	1628.29	92.43
285592	0	$C_1$	1605.36	69.50	279055	1	$C_1$	1628.29	92.44
251613	1	$C_1$	1605.41	69.56	269743	2	$C_1$	1628.30	92.45
265877	1	$C_1$	1605.43	69.57	221194	1	$C_1$	1628.30	92.45
284712	1	$C_1$	1605.44	69.59	263579	2	$C_1$	1628.30	92.45
273995	1	$C_1$	1605.46	69.61	266192	2	$C_1$	1628.31	92.45
211188	1	$C_1$	1605.48	69.63	276234	2	$C_1$	1628.31	92.46

285169	2	$C_1$	1605.50	69.65	282007	2	$C_1$	1628.31	92.46
284365	1	$C_1$	1605.51	69.66	265641	2	$C_1$	1628.32	92.46
285694	0	$C_1$	1605.53	69.68	254034	2	$C_1$	1628.32	92.46
266575	1	$C_1$	1605.54	69.69	206339	2	$C_1$	1628.32	92.46
275172	1	$C_1$	1605.54	69.69	268499	2	$C_1$	1628.34	92.48
269038	1	$C_1$	1605.57	69.72	282859	2	$C_1$	1628.34	92.49
265833	2	$C_1$	1605.58	69.73	227582	2	$C_1$	1628.35	92.50
285658	0	$C_1$	1605.61	69.76	203230	1	$C_1$	1628.35	92.50
276067	2	$C_1$	1605.66	69.80	276559	2	$C_1$	1628.36	92.50
285439	1	$C_2$	1605.70	69.84	212601	2	$C_1$	1628.36	92.51
278862	1	$C_1$	1605.70	69.85	279774	1	$C_1$	1628.37	92.51
284339	1	$C_1$	1605.71	69.85	276061	2	$C_1$	1628.37	92.51
282864	1	$C_1$	1605.71	69.85	263751	1	$C_1$	1628.40	92.54
268477	1	$C_1$	1605.71	69.86	215733	2	$C_1$	1628.40	92.55
256642	1	$C_1$	1605.75	69.89	236073	2	$C_1$	1628.41	92.56
284316	1	$C_1$	1605.78	69.92	214312	1	$C_1$	1628.42	92.56
285710	0	$C_1$	1605.78	69.93	280839	1	$C_1$	1628.42	92.57
282347	2	$C_1$	1605.79	69.93	213679	2	$C_1$	1628.42	92.57
283433	2	$C_1$	1605.81	69.95	235983	2	$C_1$	1628.43	92.57
252578	1	$C_1$	1605.85	70.00	243056	1	$C_2$	1628.43	92.57
268653	1	$C_1$	1605.85	70.00	222660	1	$C_1$	1628.43	92.58
285709	0	$C_1$	1605.86	70.01	282848	1	$C_1$	1628.44	92.58

276268	2	$C_1$	1605.89	70.03	253272	1	$C_1$	1628.45	92.60
214149	1	$C_1$	1605.91	70.05	278391	1	$C_2$	1628.46	92.60
213139	1	$C_1$	1605.91	70.06	284670	1	$C_1$	1628.46	92.61
281626	1	$C_1$	1605.91	70.06	151300	2	$C_1$	1628.47	92.62
214179	1	$C_1$	1605.94	70.08	251381	1	$C_1$	1628.48	92.62
268506	1	$C_1$	1605.94	70.09	242164	1	$C_1$	1628.48	92.62
282922	2	$C_1$	1605.95	70.10	271926	2	$C_1$	1628.49	92.63
285370	2	$C_1$	1605.97	70.11	258407	1	$C_1$	1628.49	92.63
282162	1	$C_1$	1605.98	70.13	269096	2	$C_1$	1628.51	92.65
277697	1	$C_1$	1606.08	70.22	215648	1	$C_1$	1628.51	92.65
276209	2	$C_1$	1606.12	70.26	282527	2	$C_1$	1628.52	92.66
284304	1	$C_1$	1606.14	70.28	227669	1	$C_1$	1628.52	92.66
282860	1	$C_1$	1606.14	70.28	189318	2	$C_1$	1628.53	92.68
269143	1	$C_1$	1606.15	70.30	277094	2	$C_1$	1628.55	92.69
285786	0	$C_1$	1606.18	70.33	253631	2	$C_1$	1628.55	92.70
285587	0	$C_1$	1606.21	70.36	232078	1	$C_1$	1628.55	92.70
284325	1	$C_1$	1606.22	70.36	265738	2	$C_1$	1628.56	92.71
285861	0	$C_1$	1606.22	70.37	214754	2	$C_1$	1628.56	92.71
268476	1	$C_1$	1606.25	70.40	271182	2	$C_1$	1628.57	92.71
251169	1	$C_1$	1606.27	70.42	253681	2	$C_1$	1628.57	92.71
276245	1	$C_1$	1606.28	70.42	282810	2	$C_1$	1628.57	92.71
213859	1	$C_1$	1606.30	70.44	263219	2	$C_1$	1628.57	92.72

285162	1	$C_I$	1606.30	70.44	203672	2	$C_I$	1628.58	92.72
285657	0	$C_I$	1606.32	70.46	215720	2	$C_I$	1628.58	92.73
250281	1	$C_I$	1606.35	70.50	282302	2	$C_I$	1628.59	92.74
251185	1	$C_I$	1606.39	70.54	266582	2	$C_I$	1628.59	92.74
203466	1	$C_I$	1606.40	70.54	240861	2	$C_I$	1628.59	92.74
228817	1	$C_I$	1606.51	70.65	251229	2	$C_I$	1628.60	92.74
282053	1	$C_I$	1606.52	70.66	240462	2	$C_I$	1628.60	92.74
283075	1	$C_I$	1606.53	70.68	247266	2	$C_I$	1628.61	92.75
284307	1	$C_I$	1606.55	70.69	205602	1	$C_I$	1628.62	92.77
276922	1	$C_I$	1606.59	70.74	236576	1	$C_I$	1628.63	92.78
283102	1	$C_I$	1606.60	70.74	274805	2	$C_I$	1628.63	92.78
208316	1	$C_I$	1606.64	70.78	267242	2	$C_I$	1628.63	92.78
253787	1	$C_I$	1606.65	70.79	239970	1	$C_I$	1628.64	92.78
285632	0	$C_I$	1606.66	70.81	239904	2	$C_I$	1628.65	92.79
224131	1	$C_I$	1606.68	70.82	236021	2	$C_I$	1628.66	92.81
276359	1	$C_I$	1606.74	70.88	252749	2	$C_I$	1628.66	92.81
283399	1	$C_I$	1606.76	70.91	284976	1	$C_I$	1628.67	92.81
235742	1	$C_I$	1606.76	70.91	284526	1	$C_I$	1628.67	92.81
280109	1	$C_I$	1606.88	71.03	248358	1	$C_I$	1628.67	92.81
269397	1	$C_I$	1606.89	71.03	268605	1	$C_I$	1628.67	92.82
284330	1	$C_I$	1606.89	71.04	237612	1	$C_I$	1628.67	92.82
276356	1	$C_I$	1606.90	71.04	201737	2	$C_I$	1628.70	92.84



212114	1	$C_I$	1606.91	71.06	235772	1	$C_I$	1628.71	92.86
285473	0	$C_I$	1606.94	71.08	236025	2	$C_I$	1628.72	92.87
285721	0	$C_I$	1607.03	71.18	252730	2	$C_I$	1628.72	92.87
285378	2	$C_I$	1607.04	71.18	265747	2	$C_I$	1628.73	92.88
285575	0	$C_I$	1607.05	71.19	242165	1	$C_I$	1628.74	92.88
275371	1	$C_I$	1607.06	71.20	239327	1	$C_I$	1628.75	92.90
285686	0	$C_I$	1607.08	71.22	273305	1	$C_I$	1628.76	92.90
285665	0	$C_I$	1607.09	71.24	263090	2	$C_I$	1628.77	92.91
255865	1	$C_I$	1607.11	71.25	251014	1	$C_I$	1628.78	92.92
285804	0	$C_I$	1607.11	71.26	267205	2	$C_I$	1628.78	92.93
281425	1	$C_I$	1607.12	71.27	284735	1	$C_I$	1628.78	92.93
276224	1	$C_I$	1607.14	71.28	273261	1	$C_I$	1628.79	92.93
285802	0	$C_I$	1607.22	71.36	274732	1	$C_I$	1628.79	92.93
212107	1	$C_I$	1607.25	71.40	263705	1	$C_I$	1628.79	92.93
281360	1	$C_I$	1607.27	71.41	276260	2	$C_I$	1628.80	92.94
252929	1	$C_I$	1607.32	71.46	252784	2	$C_I$	1628.81	92.96
228526	1	$C_I$	1607.32	71.46	282073	2	$C_I$	1628.82	92.96
265656	1	$C_I$	1607.37	71.52	212938	2	$C_I$	1628.82	92.96
279052	1	$C_I$	1607.38	71.52	212429	2	$C_I$	1628.83	92.97
284683	1	$C_I$	1607.46	71.60	247261	2	$C_I$	1628.83	92.98
215037	1	$C_I$	1607.52	71.66	181938	2	$C_I$	1628.83	92.98
231206	1	$C_I$	1607.52	71.67	278564	1	$C_I$	1628.84	92.98

284364	1	$C_1$	1607.65	71.79	282724	2	$C_1$	1628.85	92.99
252737	1	$C_1$	1607.69	71.83	212076	2	$C_1$	1628.85	93.00
283418	2	$C_1$	1607.69	71.84	282022	2	$C_1$	1628.85	93.00
285814	0	$C_1$	1607.72	71.87	285250	2	$C_1$	1628.85	93.00
219551	1	$C_1$	1607.73	71.88	273485	1	$C_1$	1628.86	93.00
278968	1	$C_1$	1607.79	71.93	213561	2	$C_1$	1628.86	93.00
215029	1	$C_1$	1607.82	71.97	275678	2	$C_1$	1628.86	93.01
270899	1	$C_1$	1607.86	72.01	254012	1	$C_1$	1628.86	93.01
222903	1	$C_1$	1607.86	72.01	262431	1	$C_1$	1628.87	93.01
237571	1	$C_1$	1607.88	72.03	244049	1	$C_1$	1628.87	93.01
285567	0	$C_1$	1607.89	72.04	214110	1	$C_1$	1628.87	93.02
285191	1	$C_1$	1607.90	72.05	285620	0	$C_1$	1628.88	93.02
285628	0	$C_1$	1607.93	72.07	265943	2	$C_1$	1628.88	93.02
214852	1	$C_1$	1607.96	72.10	270431	2	$C_1$	1628.88	93.02
285647	0	$C_1$	1607.98	72.12	227359	2	$C_1$	1628.88	93.02
284363	1	$C_1$	1607.98	72.13	267196	2	$C_1$	1628.88	93.03
266039	1	$C_1$	1608.00	72.15	228721	1	$C_1$	1628.88	93.03
221107	1	$C_1$	1608.03	72.18	285519	0	$C_1$	1628.88	93.03
285175	1	$C_1$	1608.04	72.19	273263	2	$C_1$	1628.89	93.04
277066	1	$C_1$	1608.11	72.25	271017	2	$C_1$	1628.89	93.04
283061	1	$C_1$	1608.12	72.26	204794	2	$C_1$	1628.90	93.04
285901	0	$D_2$	1608.13	72.27	262797	2	$C_1$	1628.90	93.05

285131	1	$C_I$	1608.17	72.32	231213	2	$C_I$	1628.91	93.05
251177	1	$C_I$	1608.26	72.40	284312	1	$C_I$	1628.91	93.06
270927	1	$C_I$	1608.26	72.40	285548	0	$C_S$	1628.91	93.06
212091	2	$C_I$	1608.28	72.42	271674	2	$C_I$	1628.92	93.06
285612	0	$C_2$	1608.29	72.44	274721	2	$C_I$	1628.92	93.07
285588	0	$C_I$	1608.30	72.44	229574	2	$C_I$	1628.93	93.07
276046	2	$C_I$	1608.31	72.46	266534	1	$C_I$	1628.93	93.07
282244	2	$C_I$	1608.36	72.51	282229	1	$C_I$	1628.93	93.07
284915	1	$C_I$	1608.36	72.51	279678	1	$C_I$	1628.93	93.08
214791	1	$C_I$	1608.37	72.52	282528	2	$C_I$	1628.94	93.08
285570	0	$C_I$	1608.38	72.52	269785	2	$C_I$	1628.94	93.08
285599	0	$C_I$	1608.39	72.53	258668	2	$C_I$	1628.95	93.10
269375	1	$C_I$	1608.41	72.55	276115	2	$C_I$	1628.96	93.10
285616	0	$C_I$	1608.41	72.56	268810	2	$C_I$	1628.96	93.10
283054	1	$C_I$	1608.42	72.57	284755	2	$C_I$	1628.97	93.12
285822	0	$C_I$	1608.42	72.57	250905	2	$C_I$	1628.97	93.12
268512	2	$C_I$	1608.43	72.58	265444	2	$C_I$	1628.98	93.12
252918	1	$C_I$	1608.43	72.58	283886	1	$C_2$	1628.98	93.13
279002	1	$C_I$	1608.44	72.58	282412	2	$C_I$	1629.00	93.14
283224	1	$C_I$	1608.44	72.59	255987	1	$C_I$	1629.01	93.15
285692	0	$C_I$	1608.45	72.59	247251	1	$C_I$	1629.01	93.15
212118	1	$C_I$	1608.47	72.62	254801	2	$C_I$	1629.01	93.16

282161	1	$C_1$	1608.48	72.63	226809	2	$C_1$	1629.02	93.16
285726	0	$C_1$	1608.50	72.64	253575	1	$C_1$	1629.02	93.16
284714	1	$C_1$	1608.52	72.66	285267	1	$C_1$	1629.03	93.17
269742	1	$C_1$	1608.53	72.68	237122	1	$C_1$	1629.03	93.18
213953	1	$C_1$	1608.58	72.72	283561	2	$C_1$	1629.03	93.18
282320	2	$C_1$	1608.62	72.76	226541	1	$C_1$	1629.04	93.18
252806	1	$C_1$	1608.64	72.79	212359	2	$C_1$	1629.04	93.18
276362	1	$C_1$	1608.64	72.79	265797	2	$C_1$	1629.04	93.18
282084	1	$C_1$	1608.66	72.81	232461	1	$C_1$	1629.05	93.19
213971	1	$C_1$	1608.69	72.83	284836	2	$C_1$	1629.05	93.20
281323	1	$C_1$	1608.74	72.88	273904	1	$C_1$	1629.07	93.21
285789	0	$C_2$	1608.75	72.89	213231	2	$C_1$	1629.09	93.24
277326	2	$C_1$	1608.75	72.89	280130	1	$C_1$	1629.09	93.24
281424	1	$C_1$	1608.79	72.93	264444	1	$C_1$	1629.11	93.26
283524	1	$C_1$	1608.83	72.98	282571	2	$C_1$	1629.12	93.26
282187	1	$C_1$	1608.83	72.98	264360	1	$C_1$	1629.13	93.27
285886	0	$C_1$	1608.86	73.00	284878	1	$C_1$	1629.13	93.27
204623	1	$C_1$	1608.87	73.01	265578	2	$C_1$	1629.13	93.27
270413	1	$C_1$	1608.87	73.02	225739	1	$C_1$	1629.14	93.28
278686	1	$C_1$	1608.91	73.05	254912	2	$C_1$	1629.14	93.28
232453	1	$C_1$	1608.93	73.07	265750	2	$C_1$	1629.15	93.29
239865	1	$C_1$	1608.93	73.08	239348	1	$C_1$	1629.15	93.30

273994	1	$C_I$	1608.95	73.09	277872	2	$C_I$	1629.16	93.30
256588	1	$C_I$	1608.96	73.11	262516	1	$C_I$	1629.16	93.30
203495	1	$C_I$	1608.97	73.12	266740	2	$C_I$	1629.16	93.31
273924	1	$C_I$	1609.00	73.14	274000	1	$C_I$	1629.17	93.31
285798	0	$C_I$	1609.02	73.16	243856	2	$C_I$	1629.17	93.31
277348	1	$C_I$	1609.09	73.23	252691	1	$C_I$	1629.17	93.31
285201	2	$C_I$	1609.09	73.24	284445	2	$C_I$	1629.17	93.32
285718	0	$C_I$	1609.13	73.27	237199	2	$C_I$	1629.19	93.34
285685	0	$C_I$	1609.16	73.31	270910	1	$C_I$	1629.20	93.34
276220	2	$C_I$	1609.19	73.34	267294	2	$C_I$	1629.20	93.35
282632	1	$C_I$	1609.19	73.34	213566	2	$C_I$	1629.21	93.36
284332	1	$C_I$	1609.20	73.34	266738	2	$C_I$	1629.21	93.36
277279	1	$C_I$	1609.23	73.37	193877	2	$C_I$	1629.22	93.37
285877	0	$C_S$	1609.27	73.41	283297	2	$C_I$	1629.22	93.37
285766	0	$C_I$	1609.30	73.44	263265	2	$C_I$	1629.22	93.37
214183	1	$C_I$	1609.30	73.44	237449	1	$C_I$	1629.22	93.37
284358	1	$C_I$	1609.35	73.50	283916	2	$C_I$	1629.22	93.37
247259	1	$C_I$	1609.37	73.52	229298	2	$C_I$	1629.23	93.37
211187	1	$C_I$	1609.40	73.54	270906	1	$C_I$	1629.24	93.39
235137	1	$C_I$	1609.42	73.56	253313	2	$C_I$	1629.25	93.39
283734	1	$C_I$	1609.43	73.58	256638	1	$C_I$	1629.27	93.41
282049	2	$C_I$	1609.44	73.58	214790	1	$C_I$	1629.27	93.41

250908	1	$C_1$	1609.45	73.60	236340	2	$C_1$	1629.28	93.42
285569	0	$C_1$	1609.48	73.63	281616	1	$C_1$	1629.28	93.42
282866	1	$C_1$	1609.50	73.65	284620	1	$C_1$	1629.28	93.43
276080	2	$C_1$	1609.54	73.68	266087	2	$C_1$	1629.28	93.43
282599	2	$C_1$	1609.54	73.69	285593	0	$C_2$	1629.29	93.43
275171	1	$C_1$	1609.58	73.72	219566	2	$C_1$	1629.30	93.44
282349	1	$C_1$	1609.59	73.73	234821	1	$C_1$	1629.30	93.44
272414	1	$C_1$	1609.59	73.74	284525	1	$C_1$	1629.30	93.45
265725	2	$C_1$	1609.62	73.77	206421	2	$C_1$	1629.33	93.48
282169	1	$C_1$	1609.64	73.78	282426	1	$C_1$	1629.33	93.48
242166	1	$C_1$	1609.65	73.79	275647	2	$C_1$	1629.34	93.48
282597	1	$C_1$	1609.66	73.81	226531	2	$C_1$	1629.34	93.48
284717	1	$C_1$	1609.67	73.82	242336	1	$C_1$	1629.35	93.50
284702	1	$C_1$	1609.70	73.85	229841	2	$C_1$	1629.35	93.50
282817	1	$C_1$	1609.73	73.87	280503	1	$C_1$	1629.36	93.50
226830	1	$C_1$	1609.74	73.89	270526	1	$C_1$	1629.36	93.51
285634	0	$C_1$	1609.78	73.92	250163	2	$C_1$	1629.37	93.51
277720	1	$C_1$	1609.79	73.93	283912	1	$C_1$	1629.37	93.51
218881	1	$C_1$	1609.79	73.94	275952	1	$C_1$	1629.37	93.52
262960	1	$C_1$	1609.82	73.96	203781	2	$C_1$	1629.38	93.52
284696	1	$C_1$	1609.83	73.97	280441	2	$C_1$	1629.38	93.52
275450	1	$C_1$	1609.86	74.00	279928	1	$C_1$	1629.38	93.52

285701	0	$C_I$	1609.87	74.02	248359	1	$C_I$	1629.38	93.53
269367	1	$C_I$	1609.92	74.07	270867	2	$C_I$	1629.39	93.54
270932	1	$C_I$	1609.93	74.07	253629	2	$C_I$	1629.39	93.54
276238	1	$C_I$	1610.02	74.16	282569	2	$C_I$	1629.40	93.54
254239	1	$C_I$	1610.04	74.19	283690	2	$C_I$	1629.40	93.55
285661	0	$C_I$	1610.05	74.20	236080	2	$C_I$	1629.40	93.55
282535	2	$C_I$	1610.13	74.27	268822	2	$C_I$	1629.41	93.55
267184	1	$C_I$	1610.13	74.28	278699	2	$C_I$	1629.41	93.55
282740	1	$C_I$	1610.14	74.29	237428	1	$C_I$	1629.41	93.56
277063	1	$C_I$	1610.16	74.30	236191	2	$C_I$	1629.42	93.56
282831	1	$C_I$	1610.17	74.31	285373	1	$C_I$	1629.42	93.57
269046	1	$C_I$	1610.17	74.31	229095	2	$C_I$	1629.44	93.58
285695	0	$C_I$	1610.17	74.31	267041	2	$C_I$	1629.44	93.58
236585	1	$C_I$	1610.20	74.34	274519	2	$C_I$	1629.44	93.58
285170	2	$C_I$	1610.21	74.35	255862	2	$C_I$	1629.44	93.59
236015	2	$C_I$	1610.22	74.36	284292	1	$C_I$	1629.45	93.59
284850	1	$C_I$	1610.22	74.37	212235	2	$C_I$	1629.46	93.61
285376	1	$C_I$	1610.24	74.38	237128	2	$C_I$	1629.47	93.61
252610	1	$C_I$	1610.29	74.44	282978	1	$C_I$	1629.47	93.61
237591	1	$C_I$	1610.29	74.44	254155	1	$C_I$	1629.49	93.64
277068	2	$C_I$	1610.33	74.48	278906	2	$C_I$	1629.50	93.64
203267	1	$C_I$	1610.34	74.49	278418	2	$C_I$	1629.50	93.64

270928	1	$C_1$	1610.37	74.52	285450	1	$C_1$	1629.50	93.64
285696	0	$C_1$	1610.38	74.53	284288	2	$C_1$	1629.50	93.65
276231	1	$C_1$	1610.40	74.54	278626	2	$C_1$	1629.51	93.66
285480	0	$C_1$	1610.40	74.55	229087	2	$C_1$	1629.53	93.67
276511	1	$C_1$	1610.46	74.60	269288	1	$C_1$	1629.53	93.68
285778	0	$C_1$	1610.47	74.62	252746	1	$C_1$	1629.53	93.68
252811	1	$C_1$	1610.48	74.62	197176	2	$C_1$	1629.53	93.68
265842	2	$C_1$	1610.50	74.64	262354	2	$C_1$	1629.54	93.68
283200	2	$C_1$	1610.50	74.65	269052	2	$C_1$	1629.54	93.68
212102	2	$C_1$	1610.50	74.65	285287	1	$C_1$	1629.55	93.69
277345	1	$C_2$	1610.51	74.65	223026	2	$C_1$	1629.55	93.69
285604	0	$C_1$	1610.52	74.66	275128	1	$C_1$	1629.55	93.70
282096	2	$C_1$	1610.53	74.67	268454	1	$C_1$	1629.55	93.70
281356	1	$C_1$	1610.53	74.68	281552	2	$C_1$	1629.55	93.70
276934	1	$C_1$	1610.57	74.71	281347	1	$C_1$	1629.58	93.72
285576	0	$C_1$	1610.57	74.71	284747	2	$C_1$	1629.58	93.72
285173	1	$C_1$	1610.58	74.72	188753	2	$C_1$	1629.58	93.73
285184	2	$C_1$	1610.59	74.73	242308	2	$C_1$	1629.58	93.73
281713	1	$C_1$	1610.59	74.74	268759	2	$C_1$	1629.59	93.73
213198	2	$C_1$	1610.66	74.81	226372	2	$C_1$	1629.59	93.73
285352	2	$C_1$	1610.67	74.82	213685	2	$C_1$	1629.59	93.74
285379	1	$C_2$	1610.67	74.82	207171	2	$C_1$	1629.60	93.75



285540	0	$C_I$	1610.69	74.84	216469	2	$C_I$	1629.61	93.75
275961	1	$C_I$	1610.70	74.85	207704	2	$C_I$	1629.61	93.76
281047	1	$C_I$	1610.78	74.93	216156	2	$C_I$	1629.62	93.76
282370	1	$C_I$	1610.78	74.93	231879	1	$C_I$	1629.62	93.77
285584	0	$C_I$	1610.79	74.94	252548	2	$C_I$	1629.63	93.77
276355	1	$C_I$	1610.80	74.95	280210	1	$C_I$	1629.64	93.78
205323	1	$C_I$	1610.81	74.95	252524	1	$C_I$	1629.64	93.78
231197	1	$C_I$	1610.82	74.97	251649	2	$C_I$	1629.64	93.79
276065	2	$C_I$	1610.83	74.97	281441	1	$C_I$	1629.64	93.79
280108	1	$C_I$	1610.83	74.97	252946	1	$C_I$	1629.65	93.80
215005	1	$C_I$	1610.83	74.98	282751	2	$C_I$	1629.65	93.80
273743	1	$C_I$	1610.84	74.99	278260	1	$C_I$	1629.66	93.81
236636	2	$C_I$	1610.87	75.02	278323	1	$C_I$	1629.66	93.81
227623	1	$C_I$	1610.90	75.04	191683	2	$C_I$	1629.67	93.81
236584	1	$C_I$	1610.90	75.05	277330	2	$C_I$	1629.67	93.82
285130	1	$C_I$	1610.90	75.05	256552	2	$C_I$	1629.68	93.83
282587	1	$C_I$	1610.91	75.05	270432	2	$C_I$	1629.68	93.83
284341	1	$C_I$	1610.93	75.07	251779	1	$C_I$	1629.69	93.84
285385	1	$C_I$	1610.94	75.09	284021	1	$C_I$	1629.69	93.84
281568	1	$C_I$	1610.96	75.11	252651	2	$C_I$	1629.70	93.84
251174	2	$C_I$	1610.97	75.11	235974	2	$C_I$	1629.70	93.84
236658	1	$C_I$	1610.98	75.12	283439	1	$C_I$	1629.70	93.85

275974	2	$C_I$	1610.99	75.14	265784	2	$C_I$	1629.71	93.85
285536	0	$C_I$	1611.00	75.14	208328	1	$C_I$	1629.71	93.86
252919	1	$C_I$	1611.02	75.17	284813	1	$C_I$	1629.71	93.86
251023	1	$C_I$	1611.03	75.18	280373	1	$C_I$	1629.71	93.86
284308	1	$C_I$	1611.05	75.19	203257	2	$C_I$	1629.72	93.86
257523	1	$C_I$	1611.06	75.20	277289	2	$C_I$	1629.72	93.86
252621	2	$C_I$	1611.07	75.22	281557	1	$C_I$	1629.74	93.88
277284	1	$C_I$	1611.08	75.23	203667	2	$C_I$	1629.74	93.88
216619	2	$C_I$	1611.10	75.25	276211	2	$C_I$	1629.74	93.89
247687	1	$C_I$	1611.11	75.26	266633	2	$C_I$	1629.74	93.89
285266	1	$C_I$	1611.11	75.26	223512	1	$C_I$	1629.75	93.89
284695	1	$C_I$	1611.12	75.27	251777	1	$C_I$	1629.75	93.90
268697	2	$C_I$	1611.14	75.28	275751	1	$C_I$	1629.76	93.91
282356	2	$C_I$	1611.18	75.33	282759	2	$C_I$	1629.76	93.91
237184	1	$C_I$	1611.29	75.43	270633	2	$C_I$	1629.76	93.91
285646	0	$C_I$	1611.29	75.43	269048	2	$C_I$	1629.76	93.91
284934	2	$C_I$	1611.31	75.45	212036	1	$C_I$	1629.76	93.91
227421	1	$C_I$	1611.31	75.46	215618	1	$C_I$	1629.76	93.91
284884	1	$C_I$	1611.31	75.46	278883	1	$C_I$	1629.77	93.91
266620	1	$C_I$	1611.33	75.47	280583	1	$C_I$	1629.78	93.93
285770	0	$C_I$	1611.34	75.49	285874	0	$C_2$	1629.79	93.94
285731	0	$C_I$	1611.37	75.51	267206	2	$C_I$	1629.79	93.94

285153	2	$C_I$	1611.37	75.52	278707	2	$C_I$	1629.80	93.94
229591	1	$C_I$	1611.38	75.53	276175	2	$C_I$	1629.80	93.94
277092	2	$C_I$	1611.43	75.58	247161	1	$C_I$	1629.80	93.94
284843	1	$C_I$	1611.43	75.58	235748	2	$C_I$	1629.81	93.95
274873	1	$C_I$	1611.44	75.59	269694	2	$C_I$	1629.81	93.95
279751	1	$C_I$	1611.47	75.62	268678	2	$C_I$	1629.81	93.96
281431	1	$C_I$	1611.49	75.63	285547	0	$C_I$	1629.81	93.96
203488	1	$C_I$	1611.52	75.66	215617	1	$C_I$	1629.82	93.96
211875	2	$C_I$	1611.55	75.69	212042	2	$C_I$	1629.83	93.97
268760	1	$C_I$	1611.58	75.72	243285	1	$C_I$	1629.83	93.97
285784	0	$T$	1611.59	75.74	285176	1	$C_I$	1629.85	93.99
283066	1	$C_I$	1611.65	75.80	274069	2	$C_I$	1629.85	93.99
276386	1	$C_I$	1611.66	75.81	205642	2	$C_I$	1629.86	94.00
214892	1	$C_I$	1611.69	75.83	256654	2	$C_I$	1629.86	94.01
251179	1	$C_I$	1611.70	75.84	282365	2	$C_I$	1629.88	94.02
285625	0	$C_I$	1611.70	75.84	282182	1	$C_I$	1629.88	94.02
268686	2	$C_I$	1611.74	75.88	225284	2	$C_I$	1629.89	94.03
282359	2	$C_I$	1611.76	75.90	280186	1	$C_I$	1629.89	94.03
284880	1	$C_I$	1611.78	75.93	285882	0	$C_I$	1629.89	94.04
239967	1	$C_I$	1611.79	75.93	239974	2	$C_I$	1629.90	94.05
285651	0	$C_I$	1611.81	75.95	282009	2	$C_I$	1629.90	94.05
276099	2	$C_I$	1611.81	75.96	285742	0	$C_I$	1629.91	94.06

262972	1	$C_I$	1611.82	75.96	283479	2	$C_I$	1629.91	94.06
284699	1	$C_I$	1611.86	76.01	280585	1	$C_I$	1629.92	94.06
285697	0	$C_I$	1611.90	76.04	229088	2	$C_I$	1629.92	94.06
281429	1	$C_I$	1611.91	76.05	273765	1	$C_I$	1629.92	94.06
281564	1	$C_I$	1611.91	76.06	267193	2	$C_I$	1629.92	94.06
203282	2	$C_I$	1611.93	76.07	262938	1	$C_I$	1629.92	94.07
284302	1	$C_I$	1611.97	76.11	265831	2	$C_I$	1629.93	94.08
282327	2	$C_I$	1611.97	76.12	208286	1	$C_I$	1629.93	94.08
284303	1	$C_I$	1611.98	76.12	212172	2	$C_I$	1629.93	94.08
284328	1	$C_I$	1611.99	76.13	282633	1	$C_I$	1629.94	94.09
284917	1	$C_I$	1612.09	76.23	276944	2	$C_I$	1629.95	94.09
223058	1	$C_I$	1612.09	76.23	267916	2	$C_I$	1629.95	94.09
265728	1	$C_I$	1612.09	76.23	235972	2	$C_I$	1629.95	94.09
203497	1	$C_I$	1612.09	76.24	281337	1	$C_I$	1629.95	94.09
214845	1	$C_I$	1612.09	76.24	246518	1	$C_I$	1629.96	94.10
285892	0	$C_2$	1612.14	76.28	282708	2	$C_I$	1629.96	94.10
277273	1	$C_I$	1612.14	76.28	237114	1	$C_I$	1629.96	94.10
274803	1	$C_I$	1612.16	76.31	228267	1	$C_I$	1629.97	94.11
213662	1	$C_I$	1612.17	76.32	279749	1	$C_I$	1629.97	94.11
268524	1	$C_I$	1612.19	76.34	284697	1	$C_I$	1629.98	94.12
276062	2	$C_I$	1612.19	76.34	220061	1	$C_I$	1629.98	94.12
246496	1	$C_I$	1612.20	76.34	285128	1	$C_s$	1629.99	94.13

271212	1	$C_I$	1612.20	76.35	277655	1	$C_2$	1630.00	94.14
265806	2	$C_I$	1612.21	76.36	266091	1	$C_I$	1630.00	94.14
234804	1	$C_I$	1612.23	76.37	276916	2	$C_I$	1630.00	94.14
282279	2	$C_I$	1612.23	76.37	284519	1	$C_I$	1630.00	94.15
277069	1	$C_I$	1612.23	76.37	244070	2	$C_I$	1630.00	94.15
262935	1	$C_I$	1612.24	76.39	203485	2	$C_I$	1630.01	94.16
285274	1	$C_I$	1612.25	76.40	275543	1	$C_I$	1630.02	94.16
283193	1	$C_I$	1612.27	76.41	204606	2	$C_I$	1630.03	94.17
277065	1	$C_I$	1612.29	76.43	252598	2	$C_I$	1630.03	94.18
285258	1	$C_I$	1612.29	76.43	203501	2	$C_I$	1630.04	94.19
269552	2	$C_I$	1612.29	76.44	267171	2	$C_I$	1630.04	94.19
265823	1	$C_I$	1612.30	76.44	264915	2	$C_I$	1630.05	94.20
268505	2	$C_I$	1612.30	76.44	264442	2	$C_I$	1630.06	94.21
285335	1	$C_I$	1612.31	76.45	285205	2	$C_I$	1630.06	94.21
285638	0	$C_I$	1612.33	76.47	281575	2	$C_I$	1630.07	94.21
252785	2	$C_I$	1612.33	76.47	256136	2	$C_I$	1630.07	94.22
204076	2	$C_I$	1612.34	76.49	265865	2	$C_I$	1630.07	94.22
229667	1	$C_I$	1612.36	76.50	252639	2	$C_I$	1630.08	94.22
252622	2	$C_I$	1612.36	76.51	254235	2	$C_I$	1630.08	94.23
279714	1	$C_I$	1612.36	76.51	213151	2	$C_I$	1630.08	94.23
247258	1	$C_I$	1612.37	76.51	237565	1	$C_I$	1630.09	94.24
284937	1	$C_I$	1612.45	76.59	284034	1	$C_I$	1630.10	94.25

281469	1	$C_I$	1612.48	76.62	236183	2	$C_I$	1630.11	94.25
285276	2	$C_I$	1612.48	76.62	249968	1	$C_I$	1630.11	94.26
282066	2	$C_I$	1612.49	76.63	285209	1	$C_I$	1630.11	94.26
273886	1	$C_I$	1612.49	76.64	283173	2	$C_I$	1630.13	94.28
284879	1	$C_I$	1612.49	76.64	282997	2	$C_I$	1630.14	94.28
243214	1	$C_I$	1612.50	76.65	198632	2	$C_I$	1630.14	94.28
269146	1	$C_I$	1612.51	76.66	213773	2	$C_I$	1630.14	94.28
251781	1	$C_I$	1612.53	76.68	256967	1	$C_I$	1630.17	94.31
285227	2	$C_I$	1612.57	76.71	270908	1	$C_I$	1630.17	94.32
248203	1	$C_I$	1612.59	76.74	275174	2	$C_I$	1630.18	94.33
278752	1	$C_I$	1612.60	76.75	252448	2	$C_I$	1630.19	94.33
285159	1	$C_I$	1612.61	76.76	280146	2	$C_I$	1630.19	94.33
282286	2	$C_I$	1612.63	76.77	276528	1	$C_I$	1630.19	94.34
282362	1	$C_I$	1612.64	76.78	267151	1	$C_I$	1630.20	94.35
280925	2	$C_I$	1612.66	76.80	228384	2	$C_I$	1630.20	94.35
254300	1	$C_I$	1612.68	76.83	280508	1	$C_I$	1630.21	94.35
276364	1	$C_I$	1612.69	76.83	226390	2	$C_I$	1630.21	94.36
284661	1	$C_I$	1612.69	76.84	269057	2	$C_I$	1630.21	94.36
252917	1	$C_I$	1612.70	76.84	281367	1	$C_I$	1630.22	94.37
203234	1	$C_I$	1612.72	76.86	216169	2	$C_I$	1630.23	94.37
281627	1	$C_I$	1612.73	76.87	285883	0	$C_I$	1630.23	94.38
284681	1	$C_I$	1612.73	76.88	269359	1	$C_I$	1630.23	94.38

236704	2	$C_I$	1612.73	76.88	213244	2	$C_I$	1630.25	94.39
278579	1	$C_I$	1612.74	76.89	212798	2	$C_I$	1630.25	94.39
242976	1	$C_I$	1612.75	76.89	251453	1	$C_I$	1630.26	94.41
266040	1	$C_I$	1612.75	76.90	214279	1	$C_I$	1630.26	94.41
211189	1	$C_I$	1612.76	76.90	280116	2	$C_I$	1630.26	94.41
284810	1	$C_I$	1612.76	76.90	239406	1	$C_I$	1630.27	94.41
207047	1	$C_I$	1612.76	76.91	265785	2	$C_I$	1630.27	94.41
285151	1	$C_I$	1612.77	76.91	268060	2	$C_I$	1630.27	94.41
285852	0	$C_I$	1612.78	76.93	283043	2	$C_I$	1630.27	94.42
265671	2	$C_I$	1612.79	76.93	212214	2	$C_I$	1630.27	94.42
203515	2	$C_I$	1612.81	76.96	256073	2	$C_I$	1630.28	94.43
212120	2	$C_I$	1612.83	76.97	280810	2	$C_I$	1630.29	94.43
214862	1	$C_I$	1612.85	77.00	172015	2	$C_I$	1630.30	94.45
265730	2	$C_I$	1612.88	77.02	277705	2	$C_I$	1630.30	94.45
262447	1	$C_I$	1612.89	77.03	283205	2	$C_I$	1630.30	94.45
251788	2	$C_I$	1612.92	77.07	272382	1	$C_I$	1630.31	94.46
276939	1	$C_I$	1612.94	77.08	214983	1	$C_I$	1630.31	94.46
268464	1	$C_I$	1612.95	77.09	265299	2	$C_I$	1630.32	94.47
205627	1	$C_I$	1612.95	77.10	265741	2	$C_I$	1630.32	94.47
282261	2	$C_I$	1612.99	77.13	269077	2	$C_I$	1630.33	94.47
276357	1	$C_I$	1612.99	77.14	278939	2	$C_I$	1630.33	94.47
203699	2	$C_I$	1613.01	77.16	236007	2	$C_I$	1630.33	94.48

285256	1	$C_I$	1613.03	77.17	284713	1	$C_I$	1630.33	94.48
284711	1	$C_I$	1613.03	77.17	265432	2	$C_I$	1630.33	94.48
284459	1	$C_I$	1613.06	77.20	285410	1	$C_I$	1630.34	94.48
282806	1	$C_I$	1613.09	77.24	277699	1	$C_I$	1630.34	94.49
214136	1	$C_I$	1613.14	77.28	282667	2	$C_I$	1630.35	94.49
285571	0	$C_I$	1613.16	77.30	281351	1	$C_I$	1630.35	94.49
283596	2	$C_I$	1613.16	77.31	266576	1	$C_I$	1630.36	94.50
276130	2	$C_I$	1613.18	77.33	282530	2	$C_I$	1630.36	94.50
265988	1	$C_I$	1613.24	77.39	251538	2	$C_I$	1630.36	94.51
285384	1	$C_2$	1613.25	77.39	215120	1	$C_I$	1630.36	94.51
276353	2	$C_I$	1613.25	77.39	283277	2	$C_I$	1630.37	94.52
285478	0	$C_S$	1613.25	77.40	262496	1	$C_I$	1630.37	94.52
282372	1	$C_I$	1613.28	77.42	213704	2	$C_I$	1630.37	94.52
270824	1	$C_I$	1613.32	77.46	268535	2	$C_I$	1630.38	94.52
251164	1	$C_I$	1613.35	77.50	254299	2	$C_I$	1630.38	94.52
283434	1	$C_I$	1613.39	77.53	278693	2	$C_I$	1630.38	94.53
285528	0	$C_I$	1613.39	77.54	235166	2	$C_I$	1630.38	94.53
284854	1	$C_I$	1613.40	77.54	277274	2	$C_I$	1630.39	94.53
227581	1	$C_I$	1613.40	77.54	214071	2	$C_I$	1630.39	94.54
285374	1	$C_I$	1613.40	77.55	284980	1	$C_I$	1630.39	94.54
214988	1	$C_I$	1613.40	77.55	273944	1	$C_I$	1630.40	94.54
265859	1	$C_I$	1613.42	77.57	266185	2	$C_I$	1630.40	94.55



282415	1	$C_1$	1613.44	77.59	240208	2	$C_1$	1630.41	94.55
265824	2	$C_1$	1613.50	77.64	265687	2	$C_1$	1630.41	94.56
284759	1	$C_1$	1613.51	77.65	281428	1	$C_1$	1630.41	94.56
282861	1	$C_1$	1613.53	77.68	248100	2	$C_1$	1630.42	94.57
282641	2	$C_1$	1613.53	77.68	226745	1	$C_1$	1630.42	94.57
285908	0	$D_2$	1613.54	77.68	265724	2	$C_1$	1630.43	94.57
281703	1	$C_1$	1613.56	77.71	270517	2	$C_1$	1630.43	94.58
263161	1	$C_1$	1613.56	77.71	232065	2	$C_1$	1630.44	94.59
285690	0	$C_1$	1613.58	77.72	265554	2	$C_1$	1630.44	94.59
285070	1	$C_1$	1613.59	77.73	179558	2	$C_1$	1630.45	94.59
280094	1	$C_1$	1613.60	77.75	285648	0	$C_1$	1630.45	94.59
282183	1	$C_1$	1613.61	77.75	239952	2	$C_1$	1630.45	94.59
282083	1	$C_1$	1613.62	77.76	213094	2	$C_1$	1630.45	94.60
285490	0	$C_1$	1613.62	77.76	284486	1	$C_1$	1630.46	94.60
268721	1	$C_1$	1613.62	77.77	265481	2	$C_1$	1630.46	94.60
256883	1	$C_1$	1613.64	77.78	212377	2	$C_1$	1630.47	94.61
284846	1	$C_1$	1613.64	77.79	276086	2	$C_1$	1630.47	94.62
214192	1	$C_1$	1613.68	77.83	285390	1	$C_1$	1630.48	94.62
159644	2	$C_1$	1613.72	77.87	285622	0	$C_2$	1630.48	94.62
278934	1	$C_1$	1613.73	77.87	274068	2	$C_1$	1630.48	94.62
285760	0	$C_1$	1613.78	77.92	214847	1	$C_1$	1630.49	94.64
282937	2	$C_1$	1613.80	77.94	282820	2	$C_1$	1630.49	94.64

277091	2	$C_1$	1613.82	77.96	284294	1	$C_1$	1630.49	94.64
283918	1	$C_1$	1613.84	77.98	205606	1	$C_1$	1630.50	94.64
223406	1	$C_1$	1613.84	77.98	212360	2	$C_1$	1630.50	94.64
285530	0	$D_2$	1613.84	77.99	213918	1	$C_1$	1630.50	94.65
285586	0	$C_1$	1613.87	78.01	205641	1	$C_1$	1630.50	94.65
266065	1	$C_1$	1613.87	78.02	236784	2	$C_1$	1630.50	94.65
285611	0	$C_1$	1613.89	78.03	282755	2	$C_1$	1630.50	94.65
282023	1	$C_1$	1613.89	78.04	265934	2	$C_1$	1630.51	94.65
269373	2	$C_1$	1613.90	78.04	267018	2	$C_1$	1630.51	94.65
274827	2	$C_1$	1613.91	78.05	276232	2	$C_1$	1630.51	94.66
226572	1	$C_1$	1613.94	78.08	212935	2	$C_1$	1630.51	94.66
214141	1	$C_1$	1613.94	78.09	229573	2	$C_1$	1630.52	94.66
267181	1	$C_1$	1613.96	78.11	206362	1	$C_1$	1630.52	94.66
285497	0	$C_2$	1613.97	78.12	255794	2	$C_1$	1630.52	94.67
282816	1	$C_1$	1613.98	78.13	279292	2	$C_1$	1630.53	94.67
269043	2	$C_1$	1614.04	78.19	227449	2	$C_1$	1630.53	94.67
284663	1	$C_1$	1614.05	78.19	271215	2	$C_1$	1630.53	94.68
205594	1	$C_1$	1614.06	78.21	212440	2	$C_1$	1630.54	94.68
280185	1	$C_1$	1614.07	78.22	281555	1	$C_1$	1630.56	94.70
253705	1	$C_1$	1614.09	78.24	255791	2	$C_1$	1630.57	94.71
274716	1	$C_1$	1614.10	78.24	269457	1	$C_1$	1630.57	94.72
283060	2	$C_1$	1614.10	78.25	282420	2	$C_1$	1630.57	94.72

214303	1	$C_I$	1614.12	78.27	246382	2	$C_I$	1630.58	94.73
284818	1	$C_I$	1614.13	78.28	285549	0	$C_I$	1630.58	94.73
284947	1	$C_I$	1614.14	78.28	213666	1	$C_I$	1630.59	94.73
268495	2	$C_I$	1614.14	78.28	270955	2	$C_I$	1630.59	94.74
283398	1	$C_I$	1614.15	78.30	275325	1	$C_I$	1630.59	94.74
282928	2	$C_I$	1614.15	78.30	278368	1	$C_I$	1630.60	94.74
269050	2	$C_I$	1614.17	78.32	281447	1	$C_I$	1630.60	94.74
213563	1	$C_I$	1614.19	78.33	247247	2	$C_I$	1630.61	94.75
275212	1	$C_I$	1614.20	78.35	269053	1	$C_I$	1630.61	94.75
284371	1	$C_I$	1614.23	78.37	254898	2	$C_I$	1630.61	94.76
273386	1	$C_I$	1614.25	78.40	170934	2	$C_I$	1630.61	94.76
251539	1	$C_I$	1614.26	78.41	256662	2	$C_I$	1630.62	94.76
218985	1	$C_S$	1614.30	78.45	226757	1	$C_I$	1630.63	94.77
282807	2	$C_I$	1614.32	78.47	281096	2	$C_I$	1630.63	94.77
285700	0	$C_I$	1614.35	78.50	277884	1	$C_I$	1630.63	94.78
285873	0	$C_I$	1614.38	78.52	282373	1	$C_I$	1630.64	94.78
285885	0	$C_2$	1614.39	78.53	179975	2	$C_I$	1630.64	94.79
265709	2	$C_I$	1614.40	78.55	254031	1	$C_I$	1630.65	94.79
270992	1	$C_I$	1614.41	78.56	282808	2	$C_I$	1630.65	94.79
276114	2	$C_I$	1614.41	78.56	213950	1	$C_I$	1630.65	94.79
213789	1	$C_I$	1614.42	78.57	213633	2	$C_I$	1630.65	94.80
276381	1	$C_I$	1614.44	78.58	227689	1	$C_I$	1630.66	94.80

275960	2	$C_I$	1614.45	78.60	262920	1	$C_I$	1630.66	94.80
206358	1	$C_I$	1614.45	78.60	236208	2	$C_I$	1630.66	94.81
285564	0	$C_I$	1614.46	78.61	236338	2	$C_I$	1630.66	94.81
215777	1	$C_I$	1614.46	78.61	255770	1	$C_I$	1630.66	94.81
281625	1	$C_I$	1614.47	78.62	278868	1	$C_I$	1630.67	94.82
226792	1	$C_I$	1614.49	78.63	277241	2	$C_I$	1630.67	94.82
283470	1	$C_I$	1614.50	78.65	282381	2	$C_I$	1630.68	94.82
280066	1	$C_I$	1614.52	78.66	285215	1	$C_I$	1630.68	94.82
215616	1	$C_I$	1614.52	78.67	266591	2	$C_I$	1630.68	94.82
282191	1	$C_I$	1614.52	78.67	187861	2	$C_I$	1630.68	94.82
285371	1	$C_I$	1614.53	78.68	203407	2	$C_I$	1630.68	94.83
266013	2	$C_I$	1614.55	78.69	282832	2	$C_I$	1630.68	94.83
264422	1	$C_I$	1614.59	78.73	251056	2	$C_I$	1630.68	94.83
265753	1	$C_I$	1614.65	78.79	205636	2	$C_I$	1630.70	94.84
237570	1	$C_I$	1614.65	78.80	262584	1	$C_I$	1630.70	94.84
282593	1	$C_I$	1614.65	78.80	285148	2	$C_I$	1630.70	94.85
282168	1	$C_I$	1614.66	78.81	269834	2	$C_I$	1630.71	94.85
284764	1	$C_I$	1614.68	78.82	275122	1	$C_I$	1630.71	94.85
285790	0	$C_I$	1614.69	78.83	203232	2	$C_I$	1630.71	94.85
269758	1	$C_I$	1614.69	78.83	270752	2	$C_I$	1630.72	94.86
214984	1	$C_I$	1614.70	78.84	269828	2	$C_I$	1630.73	94.87
285603	0	$C_I$	1614.71	78.85	227590	2	$C_I$	1630.74	94.89

273389	1	$C_I$	1614.73	78.87	243215	2	$C_I$	1630.74	94.89
284844	1	$C_I$	1614.75	78.89	237444	2	$C_I$	1630.75	94.89
268434	2	$C_I$	1614.78	78.93	282531	2	$C_I$	1630.75	94.90
273388	1	$C_I$	1614.79	78.93	213643	1	$C_I$	1630.76	94.90
283169	2	$C_I$	1614.80	78.95	207258	2	$C_I$	1630.76	94.90
285598	0	$C_I$	1614.82	78.96	275549	2	$C_I$	1630.76	94.91
282442	1	$C_I$	1614.83	78.97	252729	2	$C_I$	1630.77	94.92
285544	0	$C_I$	1614.83	78.97	282516	2	$C_I$	1630.77	94.92
281427	1	$C_I$	1614.85	78.99	272660	1	$C_I$	1630.77	94.92
205344	1	$C_I$	1614.85	79.00	248334	1	$C_I$	1630.79	94.93
285562	0	$C_2$	1614.85	79.00	284529	1	$C_I$	1630.79	94.94
270823	1	$C_I$	1614.86	79.00	283682	2	$C_I$	1630.79	94.94
275083	2	$C_I$	1614.87	79.01	285596	0	$C_I$	1630.80	94.94
285672	0	$C_s$	1614.88	79.03	285535	0	$C_I$	1630.80	94.95
278568	2	$C_I$	1614.89	79.04	268379	2	$C_I$	1630.81	94.95
283042	2	$C_I$	1614.91	79.05	239874	1	$C_I$	1630.81	94.95
277659	1	$C_I$	1614.92	79.06	251034	2	$C_I$	1630.81	94.96
277715	1	$C_I$	1614.92	79.07	254301	2	$C_I$	1630.82	94.96
281561	1	$C_I$	1614.93	79.07	282957	2	$C_I$	1630.82	94.97
283005	1	$C_I$	1614.93	79.08	277673	2	$C_I$	1630.83	94.97
285573	0	$C_I$	1614.99	79.13	213939	2	$C_I$	1630.83	94.98
285836	0	$C_I$	1614.99	79.14	248120	1	$C_I$	1630.84	94.98

281710	1	$C_I$	1614.99	79.14	207226	1	$C_I$	1630.84	94.99
283125	2	$C_I$	1615.00	79.14	187603	2	$C_I$	1630.84	94.99
282949	2	$C_I$	1615.03	79.17	262512	1	$C_I$	1630.85	94.99
213060	1	$C_I$	1615.03	79.18	240431	1	$C_I$	1630.86	95.01
252573	1	$C_I$	1615.04	79.18	275473	2	$C_I$	1630.87	95.01
203265	1	$C_I$	1615.04	79.19	205590	1	$C_I$	1630.87	95.02
251008	1	$C_I$	1615.06	79.20	227539	2	$C_I$	1630.88	95.02
203500	1	$C_I$	1615.06	79.21	282150	2	$C_I$	1630.88	95.02
235990	2	$C_I$	1615.07	79.21	269226	2	$C_I$	1630.88	95.02
281293	1	$C_I$	1615.07	79.22	266299	2	$C_I$	1630.88	95.02
214134	1	$C_I$	1615.08	79.22	268445	2	$C_I$	1630.88	95.03
285754	0	$C_S$	1615.08	79.22	255768	2	$C_I$	1630.89	95.03
285909	0	$C_2$	1615.08	79.23	240887	1	$C_I$	1630.89	95.04
281358	1	$C_I$	1615.10	79.24	275119	2	$C_I$	1630.89	95.04
213948	1	$C_I$	1615.11	79.26	214103	1	$C_I$	1630.90	95.04
282959	2	$C_I$	1615.13	79.27	194293	2	$C_I$	1630.90	95.04
285783	0	$C_I$	1615.15	79.30	270412	2	$C_I$	1630.90	95.04
276924	1	$C_I$	1615.16	79.30	213976	2	$C_I$	1630.90	95.05
285002	1	$C_I$	1615.16	79.31	256838	1	$C_I$	1630.91	95.05
214122	1	$C_I$	1615.17	79.32	263115	2	$C_I$	1630.91	95.05
277696	1	$C_I$	1615.17	79.32	278653	2	$C_I$	1630.91	95.06
263138	1	$C_I$	1615.19	79.33	285759	0	$C_I$	1630.91	95.06

203281	1	$C_1$	1615.19	79.34	207685	2	$C_1$	1630.92	95.07
251728	2	$C_1$	1615.19	79.34	247236	2	$C_1$	1630.92	95.07
285375	1	$C_1$	1615.21	79.35	269750	2	$C_1$	1630.93	95.07
215028	2	$C_1$	1615.21	79.35	268572	1	$C_1$	1630.93	95.07
284479	1	$C_1$	1615.21	79.35	284362	1	$C_1$	1630.93	95.08
265795	2	$C_1$	1615.21	79.36	285443	1	$C_1$	1630.94	95.08
235731	1	$C_1$	1615.24	79.38	211608	2	$C_1$	1630.94	95.09
213067	2	$C_1$	1615.24	79.38	252522	1	$C_1$	1630.95	95.09
285580	0	$C_2$	1615.29	79.43	285474	0	$C_1$	1630.95	95.09
274499	1	$C_1$	1615.29	79.44	275981	2	$C_1$	1630.96	95.10
283053	1	$C_1$	1615.31	79.46	270984	2	$C_1$	1630.96	95.10
252763	1	$C_1$	1615.36	79.51	252510	2	$C_1$	1630.96	95.11
285762	0	$C_1$	1615.39	79.53	258847	2	$C_1$	1630.96	95.11
283188	1	$C_1$	1615.40	79.55	269356	1	$C_1$	1630.96	95.11
214861	1	$C_1$	1615.41	79.55	273911	1	$C_1$	1630.97	95.11
285248	2	$C_1$	1615.43	79.57	285541	0	$C_1$	1630.97	95.11
282069	1	$C_1$	1615.44	79.58	283677	1	$C_1$	1630.97	95.12
276056	2	$C_1$	1615.45	79.60	212842	2	$C_1$	1630.98	95.13
205268	1	$C_1$	1615.45	79.60	248216	1	$C_1$	1631.00	95.14
265808	2	$C_1$	1615.46	79.61	278541	1	$C_1$	1631.00	95.15
269189	2	$C_1$	1615.52	79.67	278933	1	$C_1$	1631.01	95.16
285202	2	$C_1$	1615.53	79.67	207373	2	$C_1$	1631.01	95.16

249970	1	$C_1$	1615.53	79.68	236030	2	$C_1$	1631.02	95.16
277262	1	$C_1$	1615.54	79.68	180256	2	$C_1$	1631.02	95.17
284860	2	$C_1$	1615.54	79.68	279656	1	$C_1$	1631.02	95.17
278694	1	$C_1$	1615.56	79.71	275967	1	$C_1$	1631.02	95.17
252615	2	$C_1$	1615.57	79.71	262921	1	$C_1$	1631.02	95.17
274723	1	$C_1$	1615.58	79.72	280087	2	$C_1$	1631.02	95.17
252799	2	$C_1$	1615.58	79.73	247124	2	$C_1$	1631.03	95.18
215004	1	$C_1$	1615.61	79.76	277856	2	$C_1$	1631.05	95.19
282534	2	$C_1$	1615.62	79.76	264438	2	$C_1$	1631.05	95.19
285164	1	$C_1$	1615.64	79.78	279685	1	$C_1$	1631.05	95.20
225477	1	$C_1$	1615.64	79.78	211178	1	$C_1$	1631.06	95.20
284327	1	$C_1$	1615.64	79.79	239318	1	$C_1$	1631.06	95.21
283007	2	$C_1$	1615.68	79.82	279007	1	$C_1$	1631.06	95.21
203243	1	$C_1$	1615.68	79.83	151310	2	$C_1$	1631.06	95.21
268460	1	$C_1$	1615.68	79.83	253696	1	$C_1$	1631.07	95.21
280054	1	$C_1$	1615.72	79.86	253765	1	$C_1$	1631.07	95.22
251069	1	$C_1$	1615.73	79.87	222787	1	$C_1$	1631.07	95.22
237185	1	$C_1$	1615.73	79.88	285738	0	$C_1$	1631.08	95.22
268517	2	$C_1$	1615.73	79.88	276308	2	$C_1$	1631.09	95.23
285359	2	$C_1$	1615.75	79.89	280197	1	$C_1$	1631.09	95.23
278644	1	$C_1$	1615.78	79.92	280068	1	$C_1$	1631.10	95.25
283098	2	$C_1$	1615.81	79.95	215746	2	$C_1$	1631.11	95.25



276609	1	$C_1$	1615.82	79.96	283680	2	$C_1$	1631.11	95.26
284293	1	$C_1$	1615.82	79.97	276497	2	$C_1$	1631.12	95.26
268492	1	$C_1$	1615.84	79.99	210842	2	$C_1$	1631.12	95.27
270920	2	$C_1$	1615.85	80.00	269298	1	$C_1$	1631.12	95.27
265788	2	$C_1$	1615.87	80.01	212034	2	$C_1$	1631.12	95.27
277062	2	$C_1$	1615.87	80.01	212972	2	$C_1$	1631.14	95.28
285693	0	$C_1$	1615.87	80.01	184847	2	$C_1$	1631.14	95.28
267155	1	$C_1$	1615.89	80.03	269617	2	$C_1$	1631.14	95.29
239864	1	$C_1$	1615.90	80.05	227668	2	$C_1$	1631.15	95.29
212117	2	$C_1$	1615.91	80.05	247703	1	$C_1$	1631.15	95.30
232107	1	$C_1$	1615.91	80.06	284752	1	$C_1$	1631.15	95.30
282804	1	$C_1$	1615.93	80.07	265559	2	$C_1$	1631.17	95.31
214140	1	$C_1$	1615.95	80.10	208335	1	$C_1$	1631.18	95.32
284701	1	$C_1$	1615.98	80.12	282262	2	$C_1$	1631.18	95.32
285614	0	$C_2$	1615.99	80.13	262515	1	$C_1$	1631.18	95.33
280065	1	$C_1$	1616.00	80.15	266034	2	$C_1$	1631.18	95.33
213949	1	$C_1$	1616.01	80.15	212088	2	$C_1$	1631.19	95.33
282434	1	$C_1$	1616.01	80.15	252794	2	$C_1$	1631.19	95.34
227558	1	$C_1$	1616.01	80.15	213954	1	$C_1$	1631.20	95.34
218256	1	$C_1$	1616.02	80.16	251392	2	$C_1$	1631.20	95.34
252705	1	$C_1$	1616.02	80.16	283889	1	$C_1$	1631.20	95.34
250911	1	$C_1$	1616.02	80.17	284344	1	$C_1$	1631.20	95.35

279053	1	$C_I$	1616.04	80.18	278879	1	$C_I$	1631.20	95.35
203256	1	$C_I$	1616.04	80.19	255677	2	$C_I$	1631.21	95.36
278870	1	$C_I$	1616.06	80.21	278863	2	$C_I$	1631.22	95.37
285154	2	$C_I$	1616.06	80.21	274439	1	$C_I$	1631.24	95.39
283436	1	$C_I$	1616.07	80.21	282945	1	$C_I$	1631.25	95.39
282447	1	$C_I$	1616.07	80.21	237569	1	$C_I$	1631.26	95.41
285404	1	$C_S$	1616.07	80.22	275120	2	$C_I$	1631.27	95.42
269772	1	$C_I$	1616.08	80.23	270819	2	$C_I$	1631.27	95.42
273394	1	$C_I$	1616.09	80.23	280589	1	$C_I$	1631.28	95.43
213085	1	$C_I$	1616.10	80.25	226310	2	$C_I$	1631.29	95.43
214053	1	$C_I$	1616.10	80.25	248425	2	$C_I$	1631.31	95.45
281330	1	$C_I$	1616.12	80.27	268491	2	$C_I$	1631.31	95.45
251168	2	$C_I$	1616.16	80.31	197278	2	$C_I$	1631.31	95.46
243208	1	$C_I$	1616.19	80.33	227683	1	$C_I$	1631.31	95.46
234803	1	$C_I$	1616.20	80.34	212897	1	$C_I$	1631.33	95.47
280071	1	$C_I$	1616.20	80.35	247264	2	$C_I$	1631.33	95.47
285349	2	$C_I$	1616.20	80.35	213313	2	$C_I$	1631.33	95.47
252695	1	$C_I$	1616.21	80.36	269974	2	$C_I$	1631.33	95.48
273426	1	$C_I$	1616.22	80.36	275664	1	$C_I$	1631.34	95.48
279086	1	$C_I$	1616.22	80.36	272466	1	$C_I$	1631.35	95.49
282685	2	$C_I$	1616.23	80.38	282941	2	$C_I$	1631.35	95.50
277225	2	$C_I$	1616.23	80.38	236635	2	$C_I$	1631.37	95.51

285829	0	$C_1$	1616.27	80.42	225375	1	$C_1$	1631.37	95.51
236221	2	$C_1$	1616.30	80.44	280464	2	$C_1$	1631.37	95.52
281075	1	$C_1$	1616.32	80.47	278504	2	$C_1$	1631.38	95.52
236038	2	$C_1$	1616.33	80.48	240170	2	$C_1$	1631.38	95.52
214180	1	$C_1$	1616.34	80.48	244071	2	$C_1$	1631.38	95.53
285160	1	$C_1$	1616.35	80.50	284999	1	$C_1$	1631.38	95.53
214209	1	$C_1$	1616.35	80.50	282562	2	$C_1$	1631.39	95.53
188751	2	$C_1$	1616.36	80.51	270191	2	$C_1$	1631.39	95.54
235743	1	$C_1$	1616.37	80.51	284011	1	$C_1$	1631.41	95.55
285898	0	$C_2$	1616.37	80.51	278995	2	$C_1$	1631.43	95.57
256881	1	$C_1$	1616.37	80.52	227422	2	$C_1$	1631.43	95.58
276248	2	$C_1$	1616.39	80.53	229568	2	$C_1$	1631.44	95.58
278989	1	$C_1$	1616.39	80.54	214981	2	$C_1$	1631.45	95.59
212108	2	$C_1$	1616.40	80.54	282232	1	$C_1$	1631.45	95.60
281320	1	$C_1$	1616.40	80.55	254237	2	$C_1$	1631.46	95.60
280766	1	$C_1$	1616.43	80.57	278779	1	$C_1$	1631.46	95.61
285090	1	$C_1$	1616.44	80.59	276210	2	$C_1$	1631.46	95.61
276048	2	$C_1$	1616.45	80.59	282037	2	$C_1$	1631.46	95.61
239343	1	$C_1$	1616.47	80.61	284350	2	$C_1$	1631.47	95.61
265732	2	$C_1$	1616.47	80.61	269245	1	$C_1$	1631.48	95.62
207208	2	$C_1$	1616.50	80.65	280713	2	$C_1$	1631.48	95.63
284357	1	$C_1$	1616.51	80.66	213940	2	$C_1$	1631.48	95.63

266196	2	$C_I$	1616.52	80.67	243781	1	$C_2$	1631.48	95.63
284933	2	$C_I$	1616.53	80.68	244476	1	$C_I$	1631.49	95.63
216464	2	$C_I$	1616.54	80.69	283176	2	$C_I$	1631.49	95.64
282537	2	$C_I$	1616.56	80.70	205132	1	$C_I$	1631.50	95.65
246515	1	$C_I$	1616.57	80.71	278486	2	$C_I$	1631.52	95.66
237452	1	$C_I$	1616.58	80.73	265608	2	$C_I$	1631.53	95.67
246367	1	$C_I$	1616.60	80.74	268498	2	$C_I$	1631.53	95.67
236281	2	$C_I$	1616.61	80.76	266583	2	$C_I$	1631.53	95.67
276104	1	$C_I$	1616.62	80.76	212143	2	$C_I$	1631.53	95.68
283206	1	$C_I$	1616.63	80.77	284385	1	$C_I$	1631.55	95.69
277060	1	$C_I$	1616.63	80.78	203677	2	$C_I$	1631.56	95.70
282538	2	$C_I$	1616.65	80.79	262494	1	$C_I$	1631.56	95.70
284283	1	$C_I$	1616.65	80.80	213562	2	$C_I$	1631.56	95.71
284923	1	$C_S$	1616.66	80.80	210865	2	$C_I$	1631.56	95.71
263582	1	$C_I$	1616.67	80.81	252773	2	$C_I$	1631.57	95.71
285828	0	$C_I$	1616.68	80.82	269058	2	$C_I$	1631.57	95.71
253784	1	$C_I$	1616.68	80.82	254940	2	$C_I$	1631.58	95.72
284861	1	$C_I$	1616.69	80.83	268757	1	$C_I$	1631.58	95.73
252814	2	$C_I$	1616.69	80.84	275194	2	$C_I$	1631.59	95.74
203659	1	$C_I$	1616.69	80.84	284520	1	$C_I$	1631.59	95.74
266151	2	$C_I$	1616.70	80.84	277067	1	$C_I$	1631.60	95.74
283215	2	$C_I$	1616.70	80.85	284632	1	$C_I$	1631.60	95.74

270111	2	$C_I$	1616.74	80.89	265997	2	$C_I$	1631.60	95.75
231193	1	$C_I$	1616.75	80.89	222895	2	$C_I$	1631.60	95.75
276136	2	$C_I$	1616.75	80.89	269144	1	$C_I$	1631.61	95.75
269406	2	$C_I$	1616.80	80.94	284893	1	$C_I$	1631.61	95.76
275687	1	$C_I$	1616.82	80.97	256589	1	$C_I$	1631.61	95.76
285383	1	$C_I$	1616.83	80.97	236200	2	$C_I$	1631.62	95.76
236489	2	$C_I$	1616.86	81.00	224575	2	$C_I$	1631.62	95.77
278735	1	$C_I$	1616.87	81.01	284920	1	$C_s$	1631.63	95.77
210840	1	$C_I$	1616.88	81.02	283199	2	$C_I$	1631.63	95.78
203921	2	$C_I$	1616.92	81.07	262353	2	$C_I$	1631.63	95.78
269082	2	$C_I$	1616.94	81.09	274667	1	$C_I$	1631.63	95.78
284457	1	$C_I$	1616.95	81.10	262437	2	$C_I$	1631.64	95.78
281487	1	$C_I$	1616.97	81.11	231152	2	$C_I$	1631.64	95.78
214727	1	$C_I$	1616.98	81.12	269770	2	$C_I$	1631.64	95.79
264148	1	$C_I$	1617.00	81.15	207280	2	$C_I$	1631.65	95.79
281563	2	$C_I$	1617.01	81.15	253298	2	$C_I$	1631.65	95.80
227660	1	$C_I$	1617.01	81.16	268679	2	$C_I$	1631.66	95.80
278419	2	$C_I$	1617.02	81.16	205589	2	$C_I$	1631.66	95.80
279057	1	$C_I$	1617.03	81.18	251535	2	$C_I$	1631.67	95.81
280093	1	$C_I$	1617.04	81.18	252788	2	$C_I$	1631.67	95.81
281707	1	$C_I$	1617.04	81.18	256564	1	$C_I$	1631.67	95.81
283881	1	$C_I$	1617.07	81.21	283572	2	$C_I$	1631.67	95.81

219001	1	$C_s$	1617.07	81.22	274722	2	$C_I$	1631.67	95.81
285660	0	$C_I$	1617.08	81.22	279095	1	$C_I$	1631.67	95.82
266080	1	$C_I$	1617.11	81.26	214934	2	$C_I$	1631.68	95.82
285171	1	$C_I$	1617.12	81.27	285572	0	$C_I$	1631.68	95.82
285698	0	$C_I$	1617.13	81.27	229700	2	$C_I$	1631.69	95.83
214135	1	$C_I$	1617.13	81.28	239972	2	$C_I$	1631.69	95.83
284475	1	$C_I$	1617.14	81.28	282681	2	$C_I$	1631.69	95.83
280112	1	$C_I$	1617.17	81.31	277751	1	$C_I$	1631.69	95.83
284311	1	$C_I$	1617.17	81.31	236204	2	$C_I$	1631.70	95.84
252781	1	$C_I$	1617.18	81.33	269747	2	$C_I$	1631.70	95.84
278981	1	$C_I$	1617.20	81.34	251620	1	$C_I$	1631.70	95.85
203266	2	$C_I$	1617.23	81.37	283432	1	$C_I$	1631.70	95.85
252821	1	$C_I$	1617.25	81.40	229323	1	$C_I$	1631.71	95.85
248446	1	$C_I$	1617.25	81.40	277648	1	$C_I$	1631.71	95.86
265832	2	$C_I$	1617.26	81.41	277283	1	$C_I$	1631.71	95.86
284778	1	$C_I$	1617.27	81.41	273897	2	$C_I$	1631.71	95.86
206357	1	$C_I$	1617.29	81.43	273362	1	$C_I$	1631.72	95.86
285655	0	$C_I$	1617.29	81.44	203627	1	$C_I$	1631.72	95.87
249841	1	$C_I$	1617.30	81.45	207692	2	$C_I$	1631.73	95.88
282711	2	$C_I$	1617.31	81.45	280459	1	$C_I$	1631.73	95.88
232072	1	$C_I$	1617.32	81.47	262793	2	$C_I$	1631.73	95.88
284660	1	$C_I$	1617.33	81.47	282390	2	$C_I$	1631.75	95.90

277268	1	$C_I$	1617.33	81.47	205591	2	$C_I$	1631.75	95.90
239863	1	$C_I$	1617.33	81.47	215076	2	$C_I$	1631.75	95.90
268475	2	$C_I$	1617.34	81.48	268913	2	$C_I$	1631.76	95.90
285182	1	$C_I$	1617.36	81.50	250896	2	$C_I$	1631.76	95.90
212674	2	$C_I$	1617.37	81.51	204689	2	$C_I$	1631.76	95.91
273894	1	$C_I$	1617.38	81.52	262480	1	$C_I$	1631.76	95.91
214644	2	$C_I$	1617.39	81.53	215150	1	$C_I$	1631.76	95.91
253641	1	$C_I$	1617.39	81.54	284723	1	$C_I$	1631.76	95.91
284871	2	$C_I$	1617.40	81.54	214160	2	$C_I$	1631.77	95.92
262399	1	$C_I$	1617.43	81.57	203455	1	$C_I$	1631.77	95.92
269170	2	$C_I$	1617.47	81.62	256557	2	$C_I$	1631.78	95.92
282118	1	$C_I$	1617.49	81.64	262975	2	$C_I$	1631.78	95.92
283520	2	$C_I$	1617.51	81.66	237450	1	$C_I$	1631.78	95.92
285763	0	$C_I$	1617.52	81.66	234838	2	$C_I$	1631.79	95.93
252809	2	$C_I$	1617.54	81.68	251042	2	$C_I$	1631.79	95.93
267240	1	$C_I$	1617.56	81.71	273381	2	$C_I$	1631.79	95.93
269074	2	$C_I$	1617.57	81.72	212442	2	$C_I$	1631.79	95.94
283914	1	$C_I$	1617.59	81.74	267971	2	$C_I$	1631.79	95.94
285493	0	$C_I$	1617.60	81.75	227692	1	$C_I$	1631.80	95.94
278539	1	$C_I$	1617.61	81.76	268775	2	$C_I$	1631.80	95.94
285644	0	$C_I$	1617.62	81.76	216467	2	$C_I$	1631.80	95.94
266815	1	$C_I$	1617.63	81.77	268527	2	$C_I$	1631.80	95.94

278556	2	$C_I$	1617.63	81.77	268892	2	$C_I$	1631.81	95.95
280088	2	$C_I$	1617.63	81.77	280486	1	$C_I$	1631.81	95.96
274872	1	$C_I$	1617.64	81.79	280070	1	$C_I$	1631.82	95.96
203467	1	$C_I$	1617.66	81.80	242521	1	$C_I$	1631.82	95.96
283992	1	$C_I$	1617.66	81.81	264227	1	$C_I$	1631.82	95.97
282577	2	$C_I$	1617.66	81.81	247871	2	$C_I$	1631.84	95.98
212150	1	$C_I$	1617.68	81.82	210833	2	$C_I$	1631.84	95.99
226583	1	$C_I$	1617.68	81.82	273746	1	$C_I$	1631.84	95.99
203275	2	$C_I$	1617.69	81.84	254952	2	$C_I$	1631.85	95.99
227661	1	$C_I$	1617.71	81.86	265561	2	$C_I$	1631.87	96.02
268693	2	$C_I$	1617.73	81.87	270990	1	$C_I$	1631.89	96.03
213084	1	$C_I$	1617.75	81.90	252623	2	$C_I$	1631.90	96.04
282424	1	$C_I$	1617.75	81.90	256053	2	$C_I$	1631.90	96.04
251183	1	$C_I$	1617.76	81.91	211181	1	$C_I$	1631.90	96.05
285483	0	$C_I$	1617.78	81.93	251638	2	$C_I$	1631.91	96.05
220457	1	$C_I$	1617.79	81.93	280192	1	$C_I$	1631.91	96.06
268436	1	$C_I$	1617.79	81.93	243783	2	$C_I$	1631.92	96.07
282336	2	$C_I$	1617.79	81.93	278978	1	$C_I$	1631.92	96.07
281806	2	$C_I$	1617.79	81.94	214831	2	$C_I$	1631.92	96.07
268698	2	$C_I$	1617.79	81.94	278587	2	$C_I$	1631.93	96.07
262863	1	$C_I$	1617.82	81.97	268177	2	$C_I$	1631.93	96.07
266234	2	$C_I$	1617.83	81.98	283812	1	$C_I$	1631.93	96.07



212093	2	$C_I$	1617.84	81.98	201458	2	$C_I$	1631.94	96.08
277079	2	$C_I$	1617.85	82.00	213809	2	$C_I$	1631.94	96.09
248430	1	$C_I$	1617.86	82.00	283055	1	$C_I$	1631.94	96.09
262433	1	$C_I$	1617.86	82.01	285187	2	$C_I$	1631.95	96.09
285781	0	$C_2$	1617.87	82.01	251594	2	$C_I$	1631.95	96.09
274024	1	$C_I$	1617.88	82.03	265798	2	$C_I$	1631.95	96.10
182256	2	$C_I$	1617.89	82.04	271237	2	$C_I$	1631.96	96.10
282160	1	$C_I$	1617.90	82.04	284382	2	$C_I$	1631.96	96.11
273921	1	$C_I$	1617.91	82.05	212971	1	$C_I$	1631.97	96.11
207361	1	$C_I$	1617.91	82.05	216427	2	$C_I$	1631.97	96.11
276170	2	$C_I$	1617.91	82.05	279695	2	$C_I$	1631.97	96.12
203277	1	$C_I$	1617.93	82.08	263575	2	$C_I$	1631.98	96.12
269036	2	$C_I$	1617.97	82.11	248123	2	$C_I$	1631.98	96.12
262923	1	$C_I$	1617.98	82.12	276063	2	$C_I$	1631.98	96.12
285290	1	$C_I$	1617.99	82.13	271011	1	$C_I$	1631.99	96.13
282944	1	$C_I$	1618.00	82.14	262337	2	$C_I$	1632.00	96.14
235746	1	$C_I$	1618.04	82.18	269045	2	$C_I$	1632.00	96.14
274825	2	$C_I$	1618.04	82.18	205628	1	$C_I$	1632.00	96.15
203804	2	$C_I$	1618.05	82.20	264440	2	$C_I$	1632.00	96.15
228710	1	$C_I$	1618.06	82.21	282783	1	$C_I$	1632.01	96.15
207196	2	$C_I$	1618.07	82.21	285436	2	$C_I$	1632.01	96.15
284847	2	$C_I$	1618.07	82.22	281418	1	$C_I$	1632.01	96.15

276081	2	$C_I$	1618.07	82.22	215137	2	$C_I$	1632.02	96.16
285246	1	$C_I$	1618.09	82.24	214858	1	$C_I$	1632.02	96.16
282031	2	$C_I$	1618.10	82.24	282915	2	$C_I$	1632.02	96.17
280456	1	$C_I$	1618.11	82.26	262821	1	$C_I$	1632.03	96.17
281322	1	$C_I$	1618.13	82.28	266572	1	$C_I$	1632.03	96.17
285878	0	$C_I$	1618.14	82.29	285271	2	$C_I$	1632.03	96.18
214936	2	$C_I$	1618.15	82.29	268771	1	$C_I$	1632.03	96.18
282814	1	$C_I$	1618.16	82.30	205601	2	$C_I$	1632.04	96.18
269776	2	$C_I$	1618.20	82.34	276921	2	$C_I$	1632.04	96.18
262849	1	$C_I$	1618.20	82.34	212183	2	$C_I$	1632.05	96.19
215149	1	$C_I$	1618.21	82.35	276607	2	$C_I$	1632.05	96.20
253769	1	$C_I$	1618.21	82.36	251727	2	$C_I$	1632.05	96.20
285216	1	$C_I$	1618.23	82.38	269055	1	$C_I$	1632.05	96.20
267201	2	$C_I$	1618.24	82.38	283684	2	$C_I$	1632.06	96.20
252543	1	$C_I$	1618.24	82.39	227902	1	$C_I$	1632.06	96.20
282358	2	$C_I$	1618.25	82.39	210793	2	$C_I$	1632.06	96.20
265579	2	$C_I$	1618.25	82.40	285621	0	$C_I$	1632.07	96.21
269386	1	$C_I$	1618.26	82.40	212031	2	$C_I$	1632.07	96.21
213788	1	$C_I$	1618.26	82.41	212353	2	$C_I$	1632.07	96.22
268684	2	$C_I$	1618.27	82.42	240237	2	$C_I$	1632.08	96.22
281535	2	$C_I$	1618.31	82.45	262406	2	$C_I$	1632.08	96.22
220222	1	$C_I$	1618.31	82.46	268762	2	$C_I$	1632.08	96.22

251047	1	$C_1$	1618.31	82.46	227514	2	$C_1$	1632.08	96.23
203260	1	$C_1$	1618.32	82.46	282829	1	$C_1$	1632.09	96.24
279750	1	$C_1$	1618.35	82.49	282623	2	$C_1$	1632.09	96.24
282438	2	$C_1$	1618.35	82.50	212599	2	$C_1$	1632.10	96.24
265803	2	$C_1$	1618.39	82.53	235160	2	$C_1$	1632.10	96.25
282794	1	$C_1$	1618.40	82.54	268116	2	$C_1$	1632.11	96.25
282602	2	$C_1$	1618.40	82.54	250855	2	$C_1$	1632.11	96.26
285538	0	$C_1$	1618.41	82.55	254216	2	$C_1$	1632.13	96.28
266011	2	$C_1$	1618.41	82.56	232433	1	$C_1$	1632.13	96.28
281566	1	$C_1$	1618.41	82.56	235560	2	$C_1$	1632.13	96.28
268497	2	$C_1$	1618.42	82.56	277100	2	$C_1$	1632.15	96.30
214999	1	$C_1$	1618.46	82.61	283570	2	$C_1$	1632.15	96.30
251383	1	$C_1$	1618.48	82.62	278921	2	$C_1$	1632.15	96.30
212669	2	$C_1$	1618.48	82.63	265887	1	$C_1$	1632.16	96.30
207996	2	$C_1$	1618.49	82.63	236741	2	$C_1$	1632.16	96.30
284885	2	$C_1$	1618.50	82.65	215890	2	$C_1$	1632.16	96.30
269225	2	$C_1$	1618.51	82.66	265906	2	$C_1$	1632.16	96.30
285773	0	$C_2$	1618.52	82.67	277170	2	$C_1$	1632.17	96.31
282590	1	$C_1$	1618.52	82.67	236377	2	$C_1$	1632.17	96.31
277442	2	$C_1$	1618.53	82.67	255904	2	$C_1$	1632.17	96.31
282995	1	$C_1$	1618.53	82.67	268490	2	$C_1$	1632.17	96.32
236181	2	$C_1$	1618.53	82.68	279043	1	$C_1$	1632.18	96.32

212054	1	$C_I$	1618.54	82.69	203660	2	$C_I$	1632.18	96.32
275917	1	$C_I$	1618.55	82.69	276626	1	$C_I$	1632.18	96.33
284337	1	$C_I$	1618.57	82.71	226537	1	$C_I$	1632.18	96.33
263195	2	$C_I$	1618.58	82.72	219974	1	$C_I$	1632.19	96.33
284914	1	$C_I$	1618.59	82.73	235965	2	$C_I$	1632.19	96.33
266052	2	$C_I$	1618.61	82.75	277056	1	$C_I$	1632.20	96.34
282738	1	$C_I$	1618.62	82.77	191627	2	$C_I$	1632.20	96.34
281540	1	$C_I$	1618.65	82.80	214851	2	$C_I$	1632.20	96.35
187859	2	$C_I$	1618.65	82.80	254295	2	$C_I$	1632.20	96.35
281455	1	$C_I$	1618.66	82.80	284619	1	$C_I$	1632.21	96.35
213663	1	$C_I$	1618.66	82.80	275971	2	$C_I$	1632.22	96.36
285192	1	$C_I$	1618.67	82.81	222876	2	$C_I$	1632.22	96.36
284664	1	$C_I$	1618.67	82.81	284698	1	$C_I$	1632.22	96.37
285185	2	$C_I$	1618.67	82.81	263335	2	$C_I$	1632.23	96.37
269076	2	$C_I$	1618.67	82.81	188534	2	$C_I$	1632.24	96.39
205619	1	$C_I$	1618.68	82.83	203911	2	$C_I$	1632.25	96.39
266543	1	$C_I$	1618.69	82.84	282862	1	$C_I$	1632.25	96.39
281508	2	$C_I$	1618.69	82.84	191612	2	$C_I$	1632.26	96.40
284326	1	$C_I$	1618.70	82.85	242274	1	$C_I$	1632.26	96.40
282565	2	$C_I$	1618.71	82.85	262908	1	$C_I$	1632.26	96.40
285411	1	$C_I$	1618.73	82.87	282886	2	$C_I$	1632.26	96.41
227415	2	$C_I$	1618.75	82.90	236335	2	$C_I$	1632.27	96.42

284882	2	$C_I$	1618.76	82.90	285749	0	$C_I$	1632.28	96.42
273905	1	$C_I$	1618.76	82.90	215708	2	$C_I$	1632.28	96.42
285810	0	$C_{2v}$	1618.77	82.91	251390	2	$C_I$	1632.28	96.43
278721	2	$C_I$	1618.78	82.92	266781	2	$C_I$	1632.28	96.43
268666	1	$C_I$	1618.79	82.93	283137	2	$C_I$	1632.31	96.46
251603	1	$C_I$	1618.79	82.93	239249	1	$C_I$	1632.32	96.46
285247	2	$C_I$	1618.80	82.94	262350	2	$C_I$	1632.32	96.47
269086	1	$C_I$	1618.81	82.96	234024	2	$C_I$	1632.33	96.47
281417	1	$C_I$	1618.81	82.96	276269	2	$C_I$	1632.35	96.49
269223	2	$C_I$	1618.83	82.97	284300	2	$C_I$	1632.35	96.49
278718	2	$C_I$	1618.84	82.99	284688	1	$C_I$	1632.36	96.51
265805	1	$C_I$	1618.89	83.03	229701	2	$C_I$	1632.36	96.51
282101	2	$C_I$	1618.89	83.04	247132	2	$C_I$	1632.36	96.51
275966	2	$C_I$	1618.90	83.04	278748	2	$C_I$	1632.37	96.51
266592	2	$C_I$	1618.91	83.06	282996	1	$C_I$	1632.37	96.52
269149	2	$C_I$	1618.94	83.08	232123	1	$C_I$	1632.39	96.54
285607	0	$C_I$	1618.95	83.09	280079	1	$C_I$	1632.40	96.54
214195	2	$C_I$	1618.95	83.10	251074	2	$C_I$	1632.41	96.55
252579	1	$C_I$	1618.96	83.10	284839	1	$C_I$	1632.41	96.56
278891	1	$C_I$	1618.96	83.10	279489	2	$C_I$	1632.41	96.56
213958	2	$C_I$	1618.96	83.10	215334	2	$C_I$	1632.42	96.56
274504	1	$C_I$	1618.97	83.11	248586	2	$C_I$	1632.42	96.56

214147	1	$C_1$	1618.97	83.12	277746	1	$C_1$	1632.42	96.57
280767	1	$C_1$	1618.99	83.13	267013	2	$C_1$	1632.43	96.58
282409	1	$C_1$	1618.99	83.14	284442	2	$C_1$	1632.44	96.58
278398	1	$C_2$	1619.00	83.14	285546	0	$C_1$	1632.44	96.59
284909	1	$C_1$	1619.01	83.15	269104	1	$C_1$	1632.44	96.59
284618	1	$C_1$	1619.02	83.16	228543	1	$C_1$	1632.45	96.59
215862	2	$C_1$	1619.02	83.16	226747	2	$C_1$	1632.45	96.60
282441	1	$C_1$	1619.02	83.17	271181	2	$C_1$	1632.45	96.60
283683	2	$C_1$	1619.03	83.17	271929	2	$C_1$	1632.46	96.60
277718	1	$C_1$	1619.04	83.19	282419	2	$C_1$	1632.47	96.61
228694	1	$C_1$	1619.05	83.19	212806	2	$C_1$	1632.47	96.62
204037	2	$C_1$	1619.05	83.20	280362	1	$C_1$	1632.47	96.62
284680	1	$C_1$	1619.06	83.20	204745	2	$C_1$	1632.47	96.62
282318	1	$C_1$	1619.06	83.20	219529	2	$C_1$	1632.48	96.62
283752	1	$C_1$	1619.06	83.20	232109	1	$C_1$	1632.48	96.63
285876	0	$C_2$	1619.07	83.21	205211	1	$C_1$	1632.49	96.63
236673	2	$C_1$	1619.07	83.22	207076	2	$C_1$	1632.49	96.63
285699	0	$C_1$	1619.07	83.22	281401	1	$C_1$	1632.51	96.65
285296	1	$C_1$	1619.10	83.24	278992	2	$C_1$	1632.51	96.65
267014	2	$C_1$	1619.10	83.25	237113	2	$C_1$	1632.51	96.65
279065	1	$C_1$	1619.11	83.26	281820	2	$C_1$	1632.52	96.67
285190	1	$C_1$	1619.11	83.26	277300	2	$C_1$	1632.53	96.67

274869	2	$C_I$	1619.12	83.27	269951	2	$C_I$	1632.53	96.67
282052	1	$C_I$	1619.13	83.27	285870	0	$C_I$	1632.53	96.68
252576	1	$C_I$	1619.14	83.29	265778	2	$C_I$	1632.54	96.68
270930	1	$C_I$	1619.16	83.31	269194	2	$C_I$	1632.54	96.68
203908	2	$C_I$	1619.18	83.32	283446	1	$C_I$	1632.54	96.69
284775	1	$C_I$	1619.23	83.37	284401	1	$C_I$	1632.54	96.69
285787	0	$C_I$	1619.25	83.39	282513	2	$C_I$	1632.54	96.69
278425	1	$C_I$	1619.26	83.41	268927	2	$C_I$	1632.55	96.70
280111	1	$C_I$	1619.27	83.41	272667	2	$C_I$	1632.55	96.70
207043	1	$C_I$	1619.28	83.43	244448	1	$C_I$	1632.55	96.70
270988	1	$C_I$	1619.28	83.43	282682	2	$C_I$	1632.55	96.70
277237	1	$C_I$	1619.30	83.44	283908	1	$C_I$	1632.56	96.70
284706	1	$C_I$	1619.31	83.45	220176	2	$C_I$	1632.56	96.71
265594	2	$C_I$	1619.35	83.50	212446	2	$C_I$	1632.56	96.71
239953	2	$C_I$	1619.36	83.50	203505	2	$C_I$	1632.57	96.72
277089	2	$C_I$	1619.36	83.51	269083	2	$C_I$	1632.58	96.72
266008	2	$C_I$	1619.38	83.53	281097	2	$C_I$	1632.58	96.72
285350	2	$C_I$	1619.39	83.53	270535	2	$C_I$	1632.58	96.72
269400	2	$C_I$	1619.39	83.54	206890	2	$C_I$	1632.58	96.73
270950	1	$C_I$	1619.41	83.56	283602	2	$C_I$	1632.58	96.73
282525	2	$C_I$	1619.42	83.56	176868	2	$C_I$	1632.58	96.73
270918	2	$C_I$	1619.44	83.58	270688	1	$C_I$	1632.59	96.73

285486	0	$C_2$	1619.44	83.59	266499	2	$C_1$	1632.59	96.73
255880	1	$C_1$	1619.45	83.59	251005	1	$C_1$	1632.59	96.74
275648	2	$C_1$	1619.46	83.61	212145	2	$C_1$	1632.59	96.74
268520	1	$C_1$	1619.46	83.61	263592	1	$C_1$	1632.60	96.75
277646	1	$C_1$	1619.46	83.61	269901	2	$C_1$	1632.60	96.75
268824	2	$C_1$	1619.47	83.62	265581	2	$C_1$	1632.60	96.75
258287	1	$C_1$	1619.49	83.63	262343	2	$C_1$	1632.61	96.75
252583	2	$C_1$	1619.50	83.64	235975	2	$C_1$	1632.61	96.76
252862	2	$C_1$	1619.51	83.65	215614	2	$C_1$	1632.62	96.77
214998	1	$C_1$	1619.51	83.66	282683	2	$C_1$	1632.62	96.77
273895	1	$C_1$	1619.51	83.66	236101	2	$C_1$	1632.63	96.77
159693	2	$C_1$	1619.53	83.67	280466	1	$C_1$	1632.64	96.78
210707	1	$C_1$	1619.53	83.67	282559	2	$C_1$	1632.64	96.79
284998	1	$C_1$	1619.53	83.68	212556	2	$C_1$	1632.65	96.80
281574	2	$C_1$	1619.53	83.68	278942	1	$C_1$	1632.66	96.80
282863	1	$C_1$	1619.54	83.69	215884	2	$C_1$	1632.66	96.81
239345	1	$C_1$	1619.55	83.69	265483	2	$C_1$	1632.67	96.81
212103	1	$C_1$	1619.55	83.70	274816	2	$C_1$	1632.67	96.81
285727	0	$C_1$	1619.56	83.70	269085	2	$C_1$	1632.67	96.81
241912	1	$C_1$	1619.57	83.72	227966	2	$C_1$	1632.67	96.82
265826	2	$C_1$	1619.57	83.72	239882	2	$C_1$	1632.69	96.83
282608	2	$C_1$	1619.59	83.74	283130	2	$C_1$	1632.70	96.84



282609	2	$C_I$	1619.59	83.74	282514	2	$C_I$	1632.70	96.84
284313	1	$C_I$	1619.61	83.75	276383	1	$C_I$	1632.71	96.85
281219	2	$C_I$	1619.63	83.77	276052	2	$C_I$	1632.71	96.85
282612	2	$C_I$	1619.64	83.78	283002	2	$C_I$	1632.71	96.85
285481	0	$C_2$	1619.65	83.79	228227	2	$C_I$	1632.71	96.85
269230	1	$C_I$	1619.65	83.80	283423	2	$C_I$	1632.73	96.87
212427	2	$C_I$	1619.65	83.80	282192	2	$C_I$	1632.73	96.88
284824	1	$C_I$	1619.66	83.81	284718	2	$C_I$	1632.73	96.88
285670	0	$C_I$	1619.67	83.82	235715	2	$C_I$	1632.74	96.88
251595	1	$C_I$	1619.68	83.83	266843	1	$C_I$	1632.74	96.88
276366	2	$C_I$	1619.69	83.84	265998	2	$C_I$	1632.74	96.88
278600	2	$C_I$	1619.69	83.84	279524	2	$C_I$	1632.75	96.89
252644	2	$C_I$	1619.70	83.84	207096	2	$C_I$	1632.75	96.89
285740	0	$C_I$	1619.70	83.85	283711	2	$C_I$	1632.76	96.91
234808	1	$C_I$	1619.71	83.85	187862	2	$C_I$	1632.76	96.91
236560	1	$C_I$	1619.71	83.85	216248	2	$C_I$	1632.77	96.91
283268	2	$C_I$	1619.71	83.86	224129	1	$C_I$	1632.78	96.92
237420	1	$C_I$	1619.72	83.87	203483	2	$C_I$	1632.78	96.92
218961	1	$C_S$	1619.73	83.87	215562	2	$C_I$	1632.79	96.93
269358	1	$C_I$	1619.75	83.89	282896	2	$C_I$	1632.79	96.93
251165	1	$C_I$	1619.75	83.89	215112	1	$C_I$	1632.79	96.94
265787	2	$C_I$	1619.75	83.90	252450	2	$C_I$	1632.79	96.94

274002	2	$C_I$	1619.76	83.90	275155	2	$C_I$	1632.80	96.94
239946	1	$C_I$	1619.76	83.90	284309	2	$C_I$	1632.80	96.94
282543	2	$C_I$	1619.77	83.91	277176	2	$C_I$	1632.80	96.95
285367	1	$C_S$	1619.78	83.92	231199	2	$C_I$	1632.81	96.95
273923	1	$C_I$	1619.80	83.94	285144	2	$C_I$	1632.81	96.95
283051	1	$C_I$	1619.80	83.95	269784	2	$C_I$	1632.81	96.96
282339	2	$C_I$	1619.82	83.96	237429	1	$C_I$	1632.81	96.96
277057	1	$C_I$	1619.84	83.99	283576	2	$C_I$	1632.82	96.96
282000	2	$C_I$	1619.84	83.99	252574	1	$C_I$	1632.82	96.97
252921	1	$C_I$	1619.85	83.99	277327	2	$C_I$	1632.83	96.97
251380	1	$C_I$	1619.87	84.02	251641	2	$C_I$	1632.83	96.97
273992	1	$C_I$	1619.87	84.02	206766	1	$C_I$	1632.83	96.97
235021	1	$C_I$	1619.88	84.02	276133	2	$C_I$	1632.83	96.97
270935	2	$C_I$	1619.88	84.03	282028	2	$C_I$	1632.84	96.99
203276	2	$C_I$	1619.91	84.05	283126	2	$C_I$	1632.85	96.99
282089	2	$C_I$	1619.92	84.06	281406	2	$C_I$	1632.86	97.00
278333	1	$C_I$	1619.97	84.12	237100	2	$C_I$	1632.86	97.00
250854	2	$C_I$	1619.99	84.14	236226	2	$C_I$	1632.86	97.00
267172	2	$C_I$	1620.00	84.14	254479	2	$C_I$	1632.86	97.01
282596	1	$C_I$	1620.01	84.16	215887	1	$C_I$	1632.86	97.01
281303	1	$C_I$	1620.02	84.17	281144	2	$C_I$	1632.87	97.01
284662	1	$C_I$	1620.02	84.17	256198	2	$C_I$	1632.87	97.01

281283	1	$C_I$	1620.02	84.17	281405	1	$C_I$	1632.87	97.02
285005	1	$C_I$	1620.04	84.19	224130	1	$C_I$	1632.88	97.03
206282	1	$C_I$	1620.05	84.19	223035	1	$C_I$	1632.89	97.04
284458	1	$C_I$	1620.05	84.20	282811	2	$C_I$	1632.89	97.04
276597	2	$C_I$	1620.07	84.21	191675	2	$C_I$	1632.89	97.04
268565	1	$C_I$	1620.07	84.22	268691	2	$C_I$	1632.89	97.04
282872	1	$C_I$	1620.09	84.24	275204	2	$C_I$	1632.89	97.04
203484	1	$C_I$	1620.11	84.26	226343	2	$C_I$	1632.90	97.05
285272	2	$C_I$	1620.12	84.26	223505	2	$C_I$	1632.90	97.05
236027	2	$C_I$	1620.12	84.27	236215	2	$C_I$	1632.91	97.05
228354	1	$C_I$	1620.12	84.27	282418	2	$C_I$	1632.91	97.06
265573	2	$C_I$	1620.13	84.27	215200	1	$C_I$	1632.92	97.06
213787	1	$C_I$	1620.13	84.27	265646	1	$C_I$	1632.92	97.07
285774	0	$C_I$	1620.14	84.29	263119	2	$C_I$	1632.92	97.07
284480	1	$C_I$	1620.15	84.29	184821	2	$C_I$	1632.92	97.07
232080	1	$C_I$	1620.16	84.31	264281	2	$C_I$	1632.93	97.07
285907	0	$C_S$	1620.19	84.33	284356	1	$C_I$	1632.93	97.08
236003	2	$C_I$	1620.20	84.34	281078	1	$C_I$	1632.93	97.08
275114	1	$C_I$	1620.20	84.34	262791	1	$C_I$	1632.94	97.08
265726	2	$C_I$	1620.22	84.36	283392	1	$C_I$	1632.94	97.08
282323	1	$C_I$	1620.23	84.37	220342	2	$C_I$	1632.94	97.08
285722	0	$C_I$	1620.23	84.38	213580	2	$C_I$	1632.95	97.09

285853	0	$D_2$	1620.25	84.39	269024	2	$C_1$	1632.95	97.10
213857	2	$C_1$	1620.25	84.40	275439	2	$C_1$	1632.95	97.10
284768	1	$C_1$	1620.26	84.40	277163	2	$C_1$	1632.96	97.10
281076	1	$C_1$	1620.26	84.41	268083	2	$C_1$	1632.96	97.11
231143	1	$C_1$	1620.26	84.41	278495	2	$C_1$	1632.96	97.11
213671	2	$C_1$	1620.27	84.42	212135	2	$C_1$	1632.96	97.11
273393	1	$C_1$	1620.27	84.42	284761	2	$C_1$	1632.97	97.11
285387	1	$C_1$	1620.27	84.42	279757	1	$C_1$	1632.97	97.12
276400	2	$C_1$	1620.28	84.43	272653	2	$C_1$	1632.97	97.12
283086	1	$C_1$	1620.29	84.43	281353	1	$C_1$	1632.98	97.12
276083	2	$C_1$	1620.30	84.44	285761	0	$C_1$	1632.98	97.12
285602	0	$C_2$	1620.30	84.45	284953	1	$C_1$	1632.98	97.13
285706	0	$C_1$	1620.30	84.45	214889	2	$C_1$	1632.99	97.13
212350	2	$C_1$	1620.32	84.46	172393	2	$C_1$	1632.99	97.13
284285	2	$C_1$	1620.32	84.46	228407	2	$C_1$	1632.99	97.14
246514	1	$C_1$	1620.33	84.47	212514	2	$C_1$	1632.99	97.14
285533	0	$C_1$	1620.33	84.47	207582	2	$C_1$	1632.99	97.14
283678	1	$C_1$	1620.33	84.47	270957	2	$C_1$	1633.00	97.14
285444	1	$C_2$	1620.33	84.47	236670	2	$C_1$	1633.00	97.15
285268	2	$C_1$	1620.34	84.48	226733	2	$C_1$	1633.01	97.15
282885	1	$C_1$	1620.34	84.49	226354	1	$C_1$	1633.02	97.16
278322	1	$C_1$	1620.36	84.50	282548	2	$C_1$	1633.02	97.16

203977	2	$C_I$	1620.36	84.51	282078	2	$C_I$	1633.02	97.16
203261	2	$C_I$	1620.36	84.51	212290	2	$C_I$	1633.02	97.17
284301	1	$C_I$	1620.37	84.51	268708	2	$C_I$	1633.04	97.18
280586	1	$C_I$	1620.40	84.55	283783	1	$C_I$	1633.04	97.19
213612	1	$C_I$	1620.41	84.55	283047	1	$C_I$	1633.05	97.19
285269	1	$C_I$	1620.43	84.58	203701	2	$C_I$	1633.07	97.22
211540	1	$C_I$	1620.46	84.61	212470	2	$C_I$	1633.08	97.22
265866	2	$C_I$	1620.48	84.63	263749	2	$C_I$	1633.08	97.23
269376	1	$C_I$	1620.49	84.63	285707	0	$C_s$	1633.09	97.23
252771	2	$C_I$	1620.49	84.64	284928	2	$C_I$	1633.09	97.24
284944	1	$C_I$	1620.50	84.64	268935	2	$C_I$	1633.10	97.24
266638	1	$C_I$	1620.51	84.66	284212	2	$C_I$	1633.10	97.25
269073	2	$C_I$	1620.52	84.66	284200	2	$C_I$	1633.11	97.25
252540	1	$C_I$	1620.53	84.67	247133	2	$C_I$	1633.11	97.26
248423	1	$C_I$	1620.53	84.68	222739	2	$C_I$	1633.12	97.26
265990	2	$C_I$	1620.54	84.68	212193	2	$C_I$	1633.13	97.27
282067	1	$C_I$	1620.56	84.70	244038	1	$C_I$	1633.13	97.27
252520	1	$C_I$	1620.56	84.70	236086	2	$C_I$	1633.13	97.28
232926	1	$C_I$	1620.58	84.72	236011	2	$C_I$	1633.13	97.28
285539	0	$C_I$	1620.58	84.72	222906	1	$C_I$	1633.15	97.29
229541	1	$C_I$	1620.59	84.74	208324	1	$C_I$	1633.15	97.30
285561	0	$C_2$	1620.60	84.75	283763	1	$C_I$	1633.15	97.30

228846	2	$C_1$	1620.60	84.75	212225	2	$C_1$	1633.16	97.30
252538	1	$C_1$	1620.62	84.76	280485	2	$C_1$	1633.16	97.30
283411	1	$C_1$	1620.63	84.78	211297	1	$C_1$	1633.16	97.31
207678	1	$C_1$	1620.64	84.78	280799	1	$C_1$	1633.17	97.31
263210	1	$C_1$	1620.64	84.78	268726	1	$C_1$	1633.17	97.32
281704	1	$C_1$	1620.64	84.78	212900	2	$C_1$	1633.19	97.33
282090	2	$C_1$	1620.65	84.79	284024	1	$C_2$	1633.19	97.33
285689	0	$C_1$	1620.66	84.80	218886	1	$C_1$	1633.19	97.33
212913	1	$C_1$	1620.66	84.81	265942	2	$C_1$	1633.19	97.34
266189	2	$C_1$	1620.69	84.83	254917	2	$C_1$	1633.21	97.35
273910	1	$C_1$	1620.70	84.84	235999	2	$C_1$	1633.21	97.35
212455	2	$C_1$	1620.71	84.85	284617	1	$C_1$	1633.21	97.36
284295	1	$C_1$	1620.74	84.88	251797	2	$C_1$	1633.21	97.36
283111	1	$C_1$	1620.74	84.89	207194	2	$C_1$	1633.23	97.37
281542	1	$C_1$	1620.75	84.89	283390	2	$C_1$	1633.23	97.38
285656	0	$C_1$	1620.75	84.89	214199	2	$C_1$	1633.24	97.38
285255	1	$C_1$	1620.75	84.89	251817	2	$C_1$	1633.25	97.39
275349	1	$C_1$	1620.76	84.90	284194	2	$C_1$	1633.25	97.39
262840	1	$C_1$	1620.76	84.91	283628	2	$C_1$	1633.25	97.39
282925	2	$C_1$	1620.77	84.91	285177	1	$C_1$	1633.25	97.40
214463	2	$C_1$	1620.77	84.91	276239	1	$C_1$	1633.26	97.41
283121	2	$C_1$	1620.80	84.95	236006	2	$C_1$	1633.26	97.41

266585	2	$C_I$	1620.81	84.95	269042	2	$C_I$	1633.27	97.41
284315	2	$C_I$	1620.82	84.96	269107	1	$C_I$	1633.27	97.42
250899	2	$C_I$	1620.82	84.97	172392	2	$C_I$	1633.27	97.42
285183	1	$C_I$	1620.84	84.98	285554	0	$C_I$	1633.28	97.42
268646	2	$C_I$	1620.84	84.99	214951	2	$C_I$	1633.28	97.43
271627	1	$C_I$	1620.85	84.99	268522	2	$C_I$	1633.28	97.43
251550	1	$C_I$	1620.85	84.99	251231	2	$C_I$	1633.28	97.43
274483	1	$C_I$	1620.86	85.00	282075	2	$C_I$	1633.28	97.43
285545	0	$C_I$	1620.86	85.00	265796	2	$C_I$	1633.30	97.44
284756	1	$C_I$	1620.86	85.01	205216	2	$C_I$	1633.30	97.44
252618	2	$C_I$	1620.86	85.01	182185	2	$C_I$	1633.31	97.46
243180	1	$C_I$	1620.90	85.04	271172	2	$C_I$	1633.32	97.46
274444	2	$C_I$	1620.91	85.05	226523	2	$C_I$	1633.32	97.46
198629	2	$C_I$	1620.91	85.05	214459	2	$C_I$	1633.32	97.46
275209	1	$C_I$	1620.92	85.07	262483	1	$C_I$	1633.33	97.47
276216	2	$C_I$	1620.93	85.07	270900	2	$C_I$	1633.33	97.47
266009	1	$C_I$	1620.93	85.07	227110	2	$C_I$	1633.33	97.48
206359	1	$C_I$	1620.93	85.07	283104	2	$C_I$	1633.33	97.48
284921	1	$C_S$	1620.94	85.08	243171	2	$C_I$	1633.34	97.48
266792	1	$C_I$	1620.95	85.09	282106	1	$C_I$	1633.35	97.49
273384	1	$C_I$	1620.96	85.10	269111	1	$C_I$	1633.35	97.49
235735	1	$C_I$	1620.96	85.11	213309	2	$C_I$	1633.35	97.50

285194	1	$C_I$	1620.97	85.11	280484	1	$C_I$	1633.35	97.50
252931	1	$C_I$	1620.98	85.12	280800	2	$C_I$	1633.35	97.50
277332	2	$C_I$	1620.98	85.13	268635	2	$C_I$	1633.36	97.50
223060	1	$C_I$	1620.99	85.13	212407	2	$C_I$	1633.36	97.51
226605	1	$C_I$	1621.01	85.16	234842	1	$C_I$	1633.36	97.51
275972	1	$C_I$	1621.01	85.16	222914	2	$C_I$	1633.37	97.51
281536	1	$C_I$	1621.02	85.16	213858	2	$C_I$	1633.38	97.53
285407	1	$C_I$	1621.02	85.17	270874	2	$C_I$	1633.38	97.53
280159	1	$C_I$	1621.04	85.18	262365	2	$C_I$	1633.38	97.53
270933	1	$C_I$	1621.06	85.20	218900	1	$C_S$	1633.39	97.53
283076	1	$C_I$	1621.06	85.21	255654	2	$C_I$	1633.39	97.53
281709	1	$C_I$	1621.07	85.22	231681	1	$C_I$	1633.39	97.54
270993	1	$C_I$	1621.08	85.22	264279	2	$C_I$	1633.39	97.54
227586	1	$C_I$	1621.08	85.23	203440	2	$C_I$	1633.40	97.54
277226	2	$C_I$	1621.11	85.25	182240	2	$C_I$	1633.40	97.54
285264	1	$C_I$	1621.12	85.26	282752	2	$C_I$	1633.40	97.54
235970	2	$C_I$	1621.12	85.27	280945	2	$C_I$	1633.40	97.55
250280	1	$C_I$	1621.13	85.28	280924	2	$C_I$	1633.40	97.55
253709	2	$C_I$	1621.14	85.29	276615	1	$C_I$	1633.41	97.55
267185	1	$C_I$	1621.15	85.30	284020	2	$C_I$	1633.41	97.55
252745	2	$C_I$	1621.16	85.30	255660	2	$C_I$	1633.41	97.56
283123	2	$C_I$	1621.17	85.32	281940	2	$C_I$	1633.41	97.56



284943	1	$C_I$	1621.18	85.32	282631	2	$C_I$	1633.41	97.56
278589	1	$C_I$	1621.18	85.32	210877	2	$C_I$	1633.42	97.56
205638	1	$C_I$	1621.19	85.33	208282	2	$C_I$	1633.42	97.56
213138	1	$C_I$	1621.20	85.34	277295	2	$C_I$	1633.42	97.57
282850	1	$C_I$	1621.20	85.35	276261	2	$C_I$	1633.42	97.57
265553	2	$C_I$	1621.20	85.35	256553	2	$C_I$	1633.43	97.58
271227	1	$C_I$	1621.21	85.35	214048	2	$C_I$	1633.44	97.58
283195	1	$C_I$	1621.23	85.38	277378	2	$C_I$	1633.45	97.59
253788	1	$C_I$	1621.23	85.38	278505	1	$C_I$	1633.45	97.60
180745	2	$C_I$	1621.25	85.39	210951	1	$C_I$	1633.47	97.61
262493	1	$C_I$	1621.25	85.39	284896	1	$C_I$	1633.47	97.61
235964	2	$C_I$	1621.26	85.41	284314	1	$C_I$	1633.47	97.62
266602	1	$C_I$	1621.29	85.43	203242	1	$C_I$	1633.48	97.63
210841	2	$C_I$	1621.30	85.45	208817	2	$C_I$	1633.50	97.64
278700	2	$C_I$	1621.31	85.45	252451	2	$C_I$	1633.50	97.64
211607	1	$C_I$	1621.31	85.46	256089	2	$C_I$	1633.50	97.64
282956	2	$C_I$	1621.34	85.49	210834	2	$C_I$	1633.50	97.65
266083	1	$C_I$	1621.35	85.50	284935	2	$C_I$	1633.50	97.65
284481	1	$C_I$	1621.35	85.50	250278	1	$C_I$	1633.51	97.65
215000	1	$C_I$	1621.36	85.50	285550	0	$C_I$	1633.51	97.66
285765	0	$C_I$	1621.37	85.51	205615	2	$C_I$	1633.51	97.66
282107	1	$C_I$	1621.37	85.52	239895	2	$C_I$	1633.52	97.66

266737	1	$C_I$	1621.38	85.53	251644	1	$C_I$	1633.52	97.67
179596	2	$C_I$	1621.39	85.53	219988	2	$C_I$	1633.52	97.67
265980	2	$C_I$	1621.39	85.54	252779	2	$C_I$	1633.53	97.67
269065	2	$C_I$	1621.40	85.54	172333	2	$C_I$	1633.54	97.68
266191	2	$C_I$	1621.40	85.54	239966	2	$C_I$	1633.54	97.69
205208	1	$C_I$	1621.40	85.55	254113	2	$C_I$	1633.54	97.69
277236	2	$C_I$	1621.41	85.55	182297	2	$C_I$	1633.55	97.69
273908	1	$C_I$	1621.43	85.57	213410	2	$C_I$	1633.55	97.70
285594	0	$C_I$	1621.43	85.58	263180	2	$C_I$	1633.55	97.70
212399	2	$C_I$	1621.46	85.61	216449	2	$C_I$	1633.55	97.70
276923	2	$C_I$	1621.46	85.61	254313	2	$C_I$	1633.56	97.70
247245	2	$C_I$	1621.47	85.62	284977	1	$C_I$	1633.56	97.70
285197	1	$C_I$	1621.47	85.62	262814	1	$C_I$	1633.56	97.70
269195	2	$C_I$	1621.48	85.63	205212	2	$C_I$	1633.56	97.70
253682	1	$C_I$	1621.48	85.63	281516	2	$C_I$	1633.57	97.71
266504	1	$C_I$	1621.49	85.63	277582	2	$C_I$	1633.57	97.71
250866	1	$C_I$	1621.49	85.63	283009	2	$C_I$	1633.57	97.71
271184	1	$C_I$	1621.50	85.64	207560	1	$C_I$	1633.57	97.71
237425	1	$C_I$	1621.50	85.65	254704	2	$C_I$	1633.57	97.72
275817	2	$C_I$	1621.52	85.67	213207	2	$C_I$	1633.57	97.72
281352	1	$C_I$	1621.52	85.67	275685	2	$C_I$	1633.58	97.72
275161	1	$C_I$	1621.54	85.68	226522	2	$C_I$	1633.58	97.72

265547	2	$C_I$	1621.54	85.69	120344	2	$C_I$	1633.58	97.73
235992	2	$C_I$	1621.57	85.72	162371	2	$C_I$	1633.59	97.73
285372	1	$C_I$	1621.57	85.72	280052	2	$C_I$	1633.59	97.74
143565	2	$C_I$	1621.58	85.72	214277	2	$C_I$	1633.59	97.74
282328	2	$C_I$	1621.58	85.72	236688	2	$C_I$	1633.60	97.74
278692	1	$C_I$	1621.58	85.72	265153	2	$C_I$	1633.60	97.75
203268	1	$C_I$	1621.59	85.74	284951	2	$C_I$	1633.61	97.75
284719	1	$C_I$	1621.59	85.74	227510	2	$C_I$	1633.61	97.76
250885	2	$C_I$	1621.60	85.75	270842	2	$C_I$	1633.61	97.76
278538	1	$C_I$	1621.60	85.75	277790	2	$C_I$	1633.62	97.76
269228	2	$C_I$	1621.61	85.76	285663	0	$C_I$	1633.62	97.76
282005	2	$C_I$	1621.62	85.77	262717	2	$C_I$	1633.62	97.76
207195	2	$C_I$	1621.62	85.77	276401	1	$C_I$	1633.62	97.76
269407	2	$C_I$	1621.62	85.77	222737	2	$C_I$	1633.62	97.77
249495	2	$C_I$	1621.63	85.77	269972	2	$C_I$	1633.63	97.77
265944	2	$C_I$	1621.63	85.77	252951	2	$C_I$	1633.64	97.78
284565	2	$C_I$	1621.63	85.78	264443	2	$C_I$	1633.64	97.78
270825	2	$C_I$	1621.64	85.78	277770	2	$C_I$	1633.64	97.79
243218	2	$C_I$	1621.65	85.79	262142	2	$C_I$	1633.65	97.79
213778	1	$C_I$	1621.65	85.80	279072	2	$C_I$	1633.65	97.80
269451	1	$C_I$	1621.66	85.80	284488	1	$C_I$	1633.67	97.81
242759	1	$C_I$	1621.66	85.80	236337	2	$C_I$	1633.68	97.82

275151	1	$C_1$	1621.66	85.81	212184	1	$C_1$	1633.68	97.82
282361	1	$C_1$	1621.69	85.84	202961	2	$C_1$	1633.68	97.83
284780	1	$C_1$	1621.70	85.85	265752	2	$C_1$	1633.69	97.83
255771	1	$C_1$	1621.70	85.85	251778	2	$C_1$	1633.69	97.83
284911	1	$C_1$	1621.71	85.85	266515	2	$C_1$	1633.69	97.83
214711	1	$C_1$	1621.71	85.86	263079	1	$C_1$	1633.69	97.84
203235	1	$C_1$	1621.72	85.86	269453	2	$C_1$	1633.69	97.84
187661	2	$C_1$	1621.72	85.86	277269	2	$C_1$	1633.69	97.84
250868	2	$C_1$	1621.72	85.87	247211	2	$C_1$	1633.69	97.84
239272	1	$C_1$	1621.73	85.87	226744	2	$C_1$	1633.70	97.84
236567	2	$C_1$	1621.73	85.88	212070	2	$C_1$	1633.70	97.84
264250	1	$C_1$	1621.73	85.88	282011	2	$C_1$	1633.70	97.85
212085	2	$C_1$	1621.75	85.89	268114	2	$C_1$	1633.70	97.85
268658	2	$C_1$	1621.75	85.90	273414	2	$C_1$	1633.70	97.85
262977	2	$C_1$	1621.75	85.90	275983	2	$C_1$	1633.71	97.85
284760	1	$C_1$	1621.75	85.90	265844	2	$C_1$	1633.71	97.85
270530	1	$C_1$	1621.76	85.90	213856	2	$C_1$	1633.71	97.86
207289	2	$C_1$	1621.76	85.90	243776	2	$C_1$	1633.71	97.86
283097	2	$C_1$	1621.77	85.91	285769	0	$C_1$	1633.71	97.86
283400	1	$C_1$	1621.77	85.91	239856	2	$C_1$	1633.72	97.86
282579	1	$C_1$	1621.77	85.92	251952	2	$C_1$	1633.72	97.86
283891	1	$C_2$	1621.78	85.93	215629	1	$C_1$	1633.72	97.86

251167	1	$C_I$	1621.78	85.93	235984	2	$C_I$	1633.72	97.86
285223	1	$C_I$	1621.78	85.93	268636	2	$C_I$	1633.72	97.87
266038	2	$C_I$	1621.80	85.94	276091	2	$C_I$	1633.72	97.87
213616	2	$C_I$	1621.81	85.95	243179	2	$C_I$	1633.73	97.87
266016	1	$C_I$	1621.82	85.97	236828	2	$C_I$	1633.73	97.88
284271	1	$C_I$	1621.83	85.97	264952	2	$C_I$	1633.73	97.88
250992	2	$C_I$	1621.84	85.98	279775	1	$C_I$	1633.73	97.88
253120	2	$C_I$	1621.86	86.01	284513	1	$C_I$	1633.74	97.89
285779	0	$C_I$	1621.87	86.01	262395	2	$C_I$	1633.74	97.89
214857	1	$C_I$	1621.88	86.03	283134	2	$C_I$	1633.74	97.89
280189	1	$C_I$	1621.89	86.03	212611	2	$C_I$	1633.75	97.89
266601	1	$C_I$	1621.89	86.04	212395	2	$C_I$	1633.75	97.90
282040	2	$C_I$	1621.90	86.04	203476	2	$C_I$	1633.76	97.90
284217	2	$C_I$	1621.91	86.06	277757	2	$C_I$	1633.76	97.90
281310	1	$C_I$	1621.91	86.06	206942	2	$C_I$	1633.76	97.91
231377	1	$C_I$	1621.92	86.06	277409	2	$C_I$	1633.77	97.91
268687	2	$C_I$	1621.94	86.09	276020	2	$C_I$	1633.78	97.92
213657	2	$C_I$	1621.95	86.10	284489	1	$C_I$	1633.78	97.92
284359	1	$C_I$	1621.98	86.13	268494	2	$C_I$	1633.78	97.92
282737	2	$C_I$	1621.98	86.13	197339	2	$C_I$	1633.78	97.92
265755	2	$C_I$	1621.98	86.13	219965	2	$C_I$	1633.78	97.93
275452	2	$C_I$	1621.99	86.13	265771	2	$C_I$	1633.79	97.93

252519	1	$C_I$	1621.99	86.14	253177	2	$C_I$	1633.80	97.94
214076	2	$C_I$	1622.00	86.14	242721	2	$C_I$	1633.80	97.94
281580	2	$C_I$	1622.00	86.15	282102	2	$C_I$	1633.80	97.94
285702	0	$C_I$	1622.00	86.15	203629	2	$C_I$	1633.80	97.95
251173	1	$C_I$	1622.01	86.15	282374	2	$C_I$	1633.81	97.95
282369	1	$C_I$	1622.01	86.16	285746	0	$C_I$	1633.81	97.96
252873	2	$C_I$	1622.03	86.17	282694	2	$C_I$	1633.82	97.96
256872	1	$C_I$	1622.03	86.17	173823	2	$C_I$	1633.82	97.96
281686	2	$C_I$	1622.03	86.18	276098	2	$C_I$	1633.82	97.97
285302	1	$C_I$	1622.04	86.18	270866	2	$C_I$	1633.82	97.97
229577	2	$C_I$	1622.04	86.19	285438	2	$C_I$	1633.82	97.97
243034	2	$C_I$	1622.06	86.20	252484	2	$C_I$	1633.83	97.97
274692	2	$C_I$	1622.06	86.21	252895	1	$C_I$	1633.83	97.97
270873	1	$C_I$	1622.07	86.22	277370	2	$C_I$	1633.83	97.98
282758	2	$C_I$	1622.08	86.22	280771	1	$C_I$	1633.84	97.99
270486	1	$C_I$	1622.08	86.23	285102	1	$C_I$	1633.84	97.99
285449	2	$C_I$	1622.08	86.23	278320	2	$C_I$	1633.84	97.99
226444	2	$C_I$	1622.09	86.24	236320	2	$C_I$	1633.84	97.99
275696	2	$C_I$	1622.11	86.26	284955	2	$C_I$	1633.85	97.99
282256	2	$C_I$	1622.15	86.30	284265	1	$C_I$	1633.85	97.99
207056	1	$C_I$	1622.16	86.31	256194	2	$C_I$	1633.85	98.00
274806	2	$C_I$	1622.17	86.32	268573	2	$C_I$	1633.85	98.00

265549	2	$C_I$	1622.18	86.33	278663	2	$C_I$	1633.86	98.01
281883	2	$C_I$	1622.22	86.36	236549	2	$C_I$	1633.87	98.01
276051	2	$C_I$	1622.22	86.37	227488	2	$C_I$	1633.87	98.02
226692	2	$C_I$	1622.23	86.37	253706	2	$C_I$	1633.87	98.02
282818	1	$C_I$	1622.23	86.38	271183	2	$C_I$	1633.88	98.02
273993	1	$C_I$	1622.23	86.38	237416	1	$C_I$	1633.89	98.03
276593	1	$C_I$	1622.23	86.38	236070	2	$C_I$	1633.90	98.04
278781	1	$C_I$	1622.24	86.38	285507	0	$C_I$	1633.90	98.04
252722	1	$C_I$	1622.24	86.39	213974	2	$C_I$	1633.91	98.05
276118	2	$C_I$	1622.25	86.39	282986	1	$C_I$	1633.91	98.06
270643	1	$C_I$	1622.25	86.39	223495	1	$C_I$	1633.93	98.07
282546	2	$C_I$	1622.25	86.40	236432	2	$C_I$	1633.93	98.08
283326	2	$C_I$	1622.26	86.41	280502	1	$C_I$	1633.94	98.08
228431	1	$C_I$	1622.27	86.42	212896	2	$C_I$	1633.94	98.08
248363	1	$C_I$	1622.27	86.42	251637	1	$C_I$	1633.94	98.09
239901	1	$C_I$	1622.29	86.44	275330	1	$C_I$	1633.94	98.09
284291	2	$C_I$	1622.30	86.45	237456	2	$C_I$	1633.95	98.09
270529	1	$C_I$	1622.30	86.45	203972	2	$C_I$	1633.96	98.11
226388	2	$C_I$	1622.31	86.46	195794	2	$C_I$	1633.97	98.11
207059	1	$C_I$	1622.34	86.49	277325	2	$C_I$	1633.98	98.12
216247	2	$C_I$	1622.35	86.49	234703	2	$C_I$	1633.98	98.12
263338	2	$C_I$	1622.36	86.51	236422	2	$C_I$	1633.98	98.13

267417	1	$C_1$	1622.37	86.52	252694	2	$C_1$	1633.99	98.13
212152	1	$C_1$	1622.40	86.54	215557	2	$C_1$	1634.00	98.15
252922	1	$C_1$	1622.41	86.56	269399	2	$C_1$	1634.00	98.15
264239	1	$C_1$	1622.42	86.56	275324	2	$C_1$	1634.01	98.15
284817	1	$C_1$	1622.42	86.57	265827	2	$C_1$	1634.01	98.16
282947	2	$C_1$	1622.42	86.57	269039	2	$C_1$	1634.02	98.16
266048	2	$C_1$	1622.44	86.59	253583	2	$C_1$	1634.02	98.16
231151	2	$C_1$	1622.44	86.59	278631	1	$C_1$	1634.02	98.16
213137	1	$C_1$	1622.44	86.59	285221	1	$C_1$	1634.03	98.17
279772	1	$C_1$	1622.45	86.59	268608	2	$C_1$	1634.03	98.17
247257	1	$C_1$	1622.46	86.60	254033	2	$C_1$	1634.03	98.18
282815	1	$C_1$	1622.46	86.61	227881	2	$C_1$	1634.03	98.18
212295	2	$C_1$	1622.48	86.63	283978	1	$C_1$	1634.03	98.18
270645	1	$C_1$	1622.50	86.64	269692	2	$C_1$	1634.05	98.19
214046	2	$C_1$	1622.50	86.65	282448	1	$C_1$	1634.05	98.20
270952	1	$C_1$	1622.52	86.66	284876	2	$C_1$	1634.06	98.20
252546	2	$C_1$	1622.52	86.67	280084	2	$C_1$	1634.06	98.20
252942	1	$C_1$	1622.53	86.68	263136	1	$C_1$	1634.07	98.22
214296	1	$C_1$	1622.54	86.69	273922	1	$C_1$	1634.07	98.22
214291	1	$C_1$	1622.56	86.70	276682	2	$C_1$	1634.09	98.23
252712	1	$C_1$	1622.57	86.71	262378	2	$C_1$	1634.09	98.23
283269	2	$C_1$	1622.57	86.72	237445	2	$C_1$	1634.09	98.23



255777	2	$C_I$	1622.57	86.72	161547	2	$C_I$	1634.09	98.23
262489	1	$C_I$	1622.57	86.72	214799	1	$C_I$	1634.09	98.24
265567	2	$C_I$	1622.58	86.73	231254	2	$C_I$	1634.09	98.24
260152	2	$C_I$	1622.59	86.73	283396	1	$C_I$	1634.10	98.24
267183	2	$C_I$	1622.60	86.74	251237	2	$C_I$	1634.10	98.25
252791	1	$C_I$	1622.60	86.74	284201	2	$C_I$	1634.10	98.25
191611	2	$C_I$	1622.61	86.76	282110	2	$C_I$	1634.11	98.26
213577	2	$C_I$	1622.62	86.77	283190	2	$C_I$	1634.12	98.26
212733	2	$C_I$	1622.62	86.77	284929	2	$C_I$	1634.12	98.27
226598	2	$C_I$	1622.62	86.77	214397	1	$C_I$	1634.12	98.27
265666	2	$C_I$	1622.64	86.78	237417	1	$C_I$	1634.13	98.27
282443	1	$C_I$	1622.64	86.79	257769	1	$C_I$	1634.13	98.27
263092	1	$C_I$	1622.65	86.79	262943	2	$C_I$	1634.13	98.28
267203	1	$C_I$	1622.65	86.80	274750	2	$C_I$	1634.14	98.28
250630	2	$C_I$	1622.66	86.81	280919	2	$C_I$	1634.14	98.29
276236	2	$C_I$	1622.66	86.81	228287	2	$C_I$	1634.15	98.29
236028	2	$C_I$	1622.67	86.81	269221	2	$C_I$	1634.15	98.30
284404	2	$C_I$	1622.67	86.82	266359	2	$C_I$	1634.15	98.30
285601	0	$C_I$	1622.68	86.82	229324	1	$C_I$	1634.16	98.30
284758	2	$C_I$	1622.68	86.83	268283	2	$C_I$	1634.16	98.31
276282	1	$C_I$	1622.69	86.83	268551	1	$C_I$	1634.16	98.31
283014	1	$C_I$	1622.69	86.84	235020	1	$C_I$	1634.17	98.31

175204	2	$C_1$	1622.69	86.84	270414	1	$C_1$	1634.17	98.32
252521	1	$C_1$	1622.70	86.85	236634	2	$C_1$	1634.17	98.32
215034	1	$C_1$	1622.71	86.85	214779	1	$C_1$	1634.17	98.32
273998	1	$C_1$	1622.71	86.86	216268	2	$C_1$	1634.17	98.32
278907	1	$C_1$	1622.71	86.86	282080	2	$C_1$	1634.18	98.33
252826	1	$C_1$	1622.72	86.86	248378	2	$C_1$	1634.18	98.33
283575	2	$C_1$	1622.72	86.87	284812	1	$C_1$	1634.18	98.33
276134	2	$C_1$	1622.73	86.87	270437	2	$C_1$	1634.19	98.33
277224	2	$C_1$	1622.73	86.87	251337	2	$C_1$	1634.19	98.33
285243	1	$C_1$	1622.73	86.88	213691	2	$C_1$	1634.19	98.33
285395	1	$C_1$	1622.74	86.88	268662	2	$C_1$	1634.19	98.33
266017	1	$C_1$	1622.76	86.90	213635	2	$C_1$	1634.20	98.34
272403	1	$C_1$	1622.76	86.90	213855	2	$C_1$	1634.20	98.34
280403	2	$C_1$	1622.77	86.91	280481	2	$C_1$	1634.20	98.34
171217	2	$C_1$	1622.77	86.91	269736	1	$C_1$	1634.20	98.34
283507	2	$C_1$	1622.78	86.92	214770	1	$C_1$	1634.20	98.35
214953	1	$C_1$	1622.78	86.93	215817	1	$C_1$	1634.20	98.35
277750	1	$C_1$	1622.78	86.93	252904	1	$C_1$	1634.21	98.36
277355	1	$C_1$	1622.80	86.94	277263	1	$C_1$	1634.21	98.36
223059	1	$C_1$	1622.80	86.94	212532	2	$C_1$	1634.22	98.37
212029	2	$C_1$	1622.81	86.96	270960	2	$C_1$	1634.23	98.38
276076	2	$C_1$	1622.82	86.97	266782	1	$C_1$	1634.24	98.38

285448	2	$C_I$	1622.83	86.98	210914	2	$C_I$	1634.24	98.39
237606	1	$C_I$	1622.83	86.98	268671	2	$C_I$	1634.24	98.39
272493	1	$C_I$	1622.85	86.99	276641	2	$C_I$	1634.24	98.39
249911	1	$C_I$	1622.85	86.99	228430	1	$C_I$	1634.25	98.39
285206	2	$C_I$	1622.86	87.01	203430	1	$C_I$	1634.25	98.40
214295	1	$C_I$	1622.87	87.01	268538	2	$C_I$	1634.26	98.41
282572	1	$C_I$	1622.89	87.03	268701	2	$C_I$	1634.27	98.42
276445	2	$C_I$	1622.90	87.04	223062	1	$C_I$	1634.28	98.42
285251	2	$C_I$	1622.91	87.05	203630	2	$C_I$	1634.28	98.42
243186	1	$C_I$	1622.92	87.06	270991	2	$C_I$	1634.28	98.43
265570	2	$C_I$	1622.93	87.08	240435	2	$C_I$	1634.29	98.43
226526	1	$C_I$	1622.94	87.08	256551	2	$C_I$	1634.30	98.44
226805	1	$C_I$	1622.95	87.09	270105	2	$C_I$	1634.30	98.45
284857	1	$C_I$	1622.96	87.11	282437	2	$C_I$	1634.31	98.46
237426	1	$C_I$	1622.96	87.11	284627	1	$C_I$	1634.31	98.46
252754	1	$C_I$	1622.97	87.12	254206	2	$C_I$	1634.32	98.46
247638	2	$C_I$	1622.98	87.13	269744	2	$C_I$	1634.32	98.47
268442	2	$C_I$	1622.99	87.13	269188	2	$C_I$	1634.32	98.47
269105	1	$C_I$	1622.99	87.14	278324	1	$C_I$	1634.33	98.47
237423	1	$C_I$	1623.00	87.15	277282	2	$C_I$	1634.33	98.48
282533	2	$C_I$	1623.01	87.16	256776	2	$C_I$	1634.34	98.49
274719	1	$C_I$	1623.02	87.16	226928	1	$C_I$	1634.34	98.49

276178	1	$C_1$	1623.02	87.17	282481	2	$C_1$	1634.35	98.50
283435	1	$C_1$	1623.03	87.17	274470	1	$C_1$	1634.35	98.50
285520	0	$C_1$	1623.03	87.18	219978	1	$C_1$	1634.35	98.50
273749	1	$C_1$	1623.03	87.18	256635	2	$C_1$	1634.36	98.50
278717	2	$C_1$	1623.05	87.19	282428	1	$C_1$	1634.36	98.50
231874	1	$C_1$	1623.05	87.20	240312	2	$C_1$	1634.37	98.51
212516	2	$C_1$	1623.06	87.20	247248	1	$C_1$	1634.37	98.51
252930	1	$C_1$	1623.06	87.21	285479	0	$C_2$	1634.37	98.51
268663	2	$C_1$	1623.08	87.23	255823	2	$C_1$	1634.37	98.51
282346	2	$C_1$	1623.09	87.24	277860	1	$C_1$	1634.37	98.51
236494	2	$C_1$	1623.10	87.24	139423	2	$C_1$	1634.37	98.52
226758	2	$C_1$	1623.10	87.25	214251	2	$C_1$	1634.37	98.52
243780	1	$C_1$	1623.11	87.26	266745	1	$C_1$	1634.38	98.52
266188	2	$C_1$	1623.12	87.27	262941	2	$C_1$	1634.38	98.52
213128	2	$C_1$	1623.13	87.28	247126	2	$C_1$	1634.38	98.52
265860	1	$C_1$	1623.13	87.28	255782	2	$C_1$	1634.38	98.53
285617	0	$C_1$	1623.15	87.29	285440	1	$C_1$	1634.38	98.53
242663	1	$C_1$	1623.15	87.30	276120	2	$C_1$	1634.40	98.55
205207	1	$C_1$	1623.15	87.30	282977	2	$C_1$	1634.40	98.55
277070	2	$C_1$	1623.16	87.31	277090	2	$C_1$	1634.41	98.56
268463	2	$C_1$	1623.17	87.32	180799	2	$C_1$	1634.42	98.56
269949	1	$C_1$	1623.17	87.32	282803	2	$C_1$	1634.42	98.56

252934	1	$C_1$	1623.17	87.32	277173	2	$C_1$	1634.42	98.56
273909	1	$C_1$	1623.21	87.35	213058	2	$C_1$	1634.42	98.57
253630	1	$C_1$	1623.21	87.35	179549	2	$C_1$	1634.43	98.57
275160	2	$C_1$	1623.21	87.35	231291	2	$C_1$	1634.43	98.57
268878	2	$C_1$	1623.22	87.36	207899	1	$C_1$	1634.43	98.57
276587	2	$C_1$	1623.23	87.37	212914	2	$C_1$	1634.43	98.57
277369	2	$C_1$	1623.23	87.37	274474	2	$C_1$	1634.44	98.58
282547	2	$C_1$	1623.23	87.37	267194	2	$C_1$	1634.45	98.59
276611	1	$C_1$	1623.23	87.38	274549	1	$C_1$	1634.45	98.60
276107	2	$C_1$	1623.24	87.39	262420	2	$C_1$	1634.45	98.60
281553	2	$C_1$	1623.24	87.39	269474	2	$C_1$	1634.46	98.60
223613	1	$C_1$	1623.25	87.39	239197	2	$C_1$	1634.46	98.60
282812	1	$C_1$	1623.25	87.40	276127	2	$C_1$	1634.46	98.61
284228	2	$C_1$	1623.26	87.41	227733	1	$C_1$	1634.46	98.61
275931	2	$C_1$	1623.27	87.42	243175	2	$C_1$	1634.47	98.61
285484	0	$C_1$	1623.28	87.43	239273	2	$C_1$	1634.47	98.61
269454	1	$C_1$	1623.30	87.45	262997	1	$C_1$	1634.47	98.62
276595	2	$C_1$	1623.31	87.46	275463	1	$C_1$	1634.48	98.62
268472	2	$C_1$	1623.34	87.48	206346	1	$C_1$	1634.48	98.62
280829	1	$C_1$	1623.34	87.49	208010	2	$C_1$	1634.48	98.62
284305	1	$C_1$	1623.35	87.49	283067	2	$C_1$	1634.48	98.62
236035	2	$C_1$	1623.35	87.50	152527	2	$C_1$	1634.48	98.63

285851	0	$C_s$	1623.36	87.50	216008	2	$C_I$	1634.48	98.63
203262	2	$C_I$	1623.36	87.50	252497	2	$C_I$	1634.48	98.63
269748	2	$C_I$	1623.38	87.53	265676	1	$C_I$	1634.49	98.63
265793	2	$C_I$	1623.39	87.53	283094	1	$C_I$	1634.49	98.63
282536	2	$C_I$	1623.39	87.53	266497	2	$C_I$	1634.49	98.64
281583	1	$C_I$	1623.39	87.54	273989	1	$C_I$	1634.49	98.64
262947	1	$C_I$	1623.41	87.56	213147	2	$C_I$	1634.50	98.64
283211	1	$C_I$	1623.41	87.56	242640	2	$C_I$	1634.50	98.64
282819	1	$C_I$	1623.41	87.56	216417	2	$C_I$	1634.50	98.64
207204	2	$C_I$	1623.42	87.56	227452	2	$C_I$	1634.50	98.65
284366	1	$C_I$	1623.42	87.57	258741	2	$C_I$	1634.50	98.65
281619	2	$C_I$	1623.43	87.57	285730	0	$C_I$	1634.50	98.65
284922	1	$C_s$	1623.43	87.57	285509	0	$C_I$	1634.51	98.65
252790	2	$C_I$	1623.43	87.57	243795	2	$C_I$	1634.51	98.65
215854	1	$C_I$	1623.44	87.58	232116	1	$C_I$	1634.51	98.65
273276	1	$C_I$	1623.44	87.59	273477	1	$C_I$	1634.51	98.66
235201	1	$C_I$	1623.45	87.59	284786	2	$C_I$	1634.52	98.66
284027	1	$C_{2v}$	1623.46	87.61	266786	2	$C_I$	1634.52	98.66
254028	1	$C_I$	1623.46	87.61	273600	2	$C_I$	1634.52	98.66
284398	2	$C_I$	1623.47	87.61	214126	1	$C_I$	1634.52	98.67
282312	2	$C_I$	1623.48	87.62	255785	2	$C_I$	1634.53	98.67
284849	1	$C_I$	1623.48	87.63	244258	2	$C_I$	1634.53	98.67

277717	2	$C_I$	1623.48	87.63	212908	2	$C_I$	1634.53	98.67
222918	1	$C_I$	1623.48	87.63	278711	2	$C_I$	1634.53	98.68
262915	1	$C_I$	1623.48	87.63	228472	1	$C_I$	1634.54	98.68
223830	1	$C_I$	1623.49	87.63	283011	1	$C_I$	1634.54	98.69
275650	1	$C_I$	1623.49	87.64	210967	2	$C_I$	1634.55	98.70
284353	2	$C_I$	1623.50	87.64	271733	2	$C_I$	1634.55	98.70
281319	1	$C_I$	1623.50	87.64	279658	1	$C_I$	1634.56	98.70
281040	1	$C_S$	1623.50	87.65	279017	1	$C_I$	1634.56	98.70
284634	1	$C_I$	1623.50	87.65	285659	0	$C_I$	1634.56	98.70
272710	1	$C_I$	1623.51	87.65	227404	2	$C_I$	1634.58	98.72
285624	0	$C_I$	1623.51	87.66	269754	2	$C_I$	1634.58	98.72
227538	2	$C_I$	1623.51	87.66	269954	2	$C_I$	1634.58	98.73
265592	2	$C_I$	1623.51	87.66	275168	2	$C_I$	1634.58	98.73
275861	1	$C_I$	1623.52	87.66	234810	2	$C_I$	1634.60	98.74
207042	2	$C_I$	1623.52	87.66	253175	2	$C_I$	1634.60	98.74
268695	2	$C_I$	1623.53	87.67	263111	1	$C_I$	1634.61	98.75
220221	1	$C_I$	1623.55	87.70	284286	2	$C_I$	1634.61	98.75
254293	1	$C_I$	1623.56	87.70	280098	1	$C_I$	1634.61	98.75
203255	2	$C_I$	1623.56	87.71	227732	1	$C_I$	1634.61	98.76
251771	2	$C_I$	1623.58	87.72	214242	2	$C_I$	1634.61	98.76
268545	2	$C_I$	1623.58	87.72	252769	2	$C_I$	1634.62	98.76
276510	2	$C_I$	1623.59	87.73	212580	2	$C_I$	1634.62	98.77

223935	1	$C_1$	1623.60	87.74	212531	2	$C_1$	1634.62	98.77
282865	1	$C_1$	1623.62	87.77	262773	2	$C_1$	1634.63	98.78
284919	2	$C_1$	1623.63	87.77	239342	2	$C_1$	1634.65	98.79
273371	1	$C_1$	1623.66	87.80	213232	2	$C_1$	1634.65	98.79
240309	2	$C_1$	1623.66	87.80	203674	2	$C_1$	1634.65	98.80
236308	2	$C_1$	1623.67	87.81	281653	1	$C_1$	1634.66	98.80
282307	2	$C_1$	1623.68	87.83	227561	2	$C_1$	1634.66	98.81
278662	1	$C_1$	1623.69	87.83	285650	0	$C_1$	1634.67	98.81
270985	1	$C_1$	1623.69	87.84	256015	2	$C_1$	1634.67	98.82
268508	2	$C_1$	1623.69	87.84	269037	2	$C_1$	1634.68	98.82
285143	1	$C_1$	1623.69	87.84	256507	2	$C_1$	1634.68	98.83
276522	1	$C_1$	1623.71	87.85	253785	1	$C_1$	1634.69	98.84
214990	1	$C_1$	1623.71	87.85	282093	2	$C_1$	1634.69	98.84
267845	2	$C_1$	1623.71	87.86	212753	1	$C_1$	1634.70	98.84
278261	1	$C_1$	1623.72	87.86	278927	2	$C_1$	1634.70	98.84
266507	2	$C_1$	1623.73	87.87	285560	0	$C_1$	1634.70	98.84
276918	1	$C_1$	1623.74	87.89	285855	0	$C_2$	1634.71	98.85
216578	2	$C_1$	1623.76	87.91	276415	1	$C_1$	1634.71	98.86
253114	1	$C_1$	1623.76	87.91	222361	2	$C_1$	1634.72	98.86
211464	2	$C_1$	1623.77	87.91	212579	2	$C_1$	1634.72	98.86
256110	1	$C_1$	1623.78	87.93	236662	2	$C_1$	1634.72	98.86
187857	2	$C_1$	1623.78	87.93	252861	2	$C_1$	1634.73	98.87



265552	2	$C_I$	1623.80	87.94	212803	2	$C_I$	1634.73	98.87
280650	1	$C_I$	1623.80	87.94	213615	2	$C_I$	1634.73	98.87
282598	1	$C_I$	1623.80	87.94	188531	2	$C_I$	1634.73	98.88
285830	0	$C_I$	1623.81	87.96	284889	1	$C_I$	1634.73	98.88
285472	0	$C_I$	1623.82	87.96	252495	2	$C_I$	1634.74	98.88
263553	1	$C_I$	1623.82	87.96	213584	2	$C_I$	1634.74	98.89
237186	1	$C_I$	1623.84	87.98	237120	2	$C_I$	1634.74	98.89
204624	1	$C_I$	1623.84	87.99	207355	2	$C_I$	1634.76	98.90
269220	2	$C_I$	1623.85	88.00	278491	2	$C_I$	1634.76	98.91
285214	1	$C_I$	1623.86	88.01	276226	1	$C_I$	1634.77	98.92
227511	1	$C_I$	1623.86	88.01	248372	1	$C_I$	1634.77	98.92
250321	1	$C_I$	1623.87	88.01	265083	2	$C_I$	1634.78	98.92
265772	2	$C_I$	1623.87	88.01	273375	1	$C_I$	1634.78	98.93
237193	1	$C_I$	1623.89	88.03	263723	2	$C_I$	1634.78	98.93
227316	2	$C_I$	1623.89	88.03	284840	2	$C_I$	1634.79	98.93
281317	1	$C_I$	1623.89	88.04	267012	2	$C_I$	1634.79	98.94
266036	2	$C_I$	1623.92	88.07	273907	1	$C_I$	1634.79	98.94
251004	2	$C_I$	1623.93	88.07	280212	1	$C_I$	1634.79	98.94
285147	2	$C_I$	1623.93	88.07	254120	2	$C_I$	1634.79	98.94
273274	1	$C_I$	1623.93	88.08	191616	2	$C_I$	1634.80	98.95
279773	1	$C_I$	1623.94	88.08	212548	2	$C_I$	1634.81	98.95
276379	2	$C_I$	1623.94	88.09	280768	1	$C_I$	1634.82	98.96

269648	2	$C_I$	1623.95	88.10	207168	2	$C_I$	1634.82	98.97
252741	1	$C_I$	1623.96	88.10	278634	2	$C_I$	1634.82	98.97
223831	1	$C_I$	1623.97	88.11	270531	2	$C_I$	1634.84	98.98
273745	2	$C_I$	1623.98	88.12	284451	2	$C_I$	1634.84	98.98
270637	1	$C_I$	1623.99	88.14	284240	2	$C_I$	1634.84	98.99
203664	1	$C_I$	1623.99	88.14	207901	2	$C_I$	1634.84	98.99
227399	2	$C_I$	1624.01	88.15	253119	2	$C_I$	1634.85	99.00
285739	0	$C_I$	1624.01	88.16	282086	2	$C_I$	1634.85	99.00
277059	2	$C_I$	1624.02	88.16	182213	2	$C_I$	1634.86	99.01
282921	2	$C_I$	1624.03	88.17	269933	1	$C_I$	1634.86	99.01
256663	2	$C_I$	1624.04	88.18	281059	1	$C_I$	1634.87	99.02
231130	1	$C_I$	1624.04	88.19	192525	2	$C_I$	1634.88	99.02
247115	1	$C_I$	1624.05	88.19	284685	1	$C_I$	1634.88	99.02
278860	1	$C_I$	1624.06	88.20	227663	1	$C_I$	1634.88	99.03
203968	2	$C_I$	1624.07	88.21	254082	1	$C_I$	1634.89	99.03
248029	1	$C_I$	1624.07	88.21	265409	2	$C_I$	1634.89	99.03
246377	1	$C_I$	1624.07	88.21	232706	1	$C_I$	1634.89	99.04
285351	2	$C_I$	1624.07	88.22	275202	1	$C_I$	1634.89	99.04
285245	1	$C_I$	1624.09	88.23	247689	1	$C_I$	1634.90	99.05
281562	2	$C_I$	1624.09	88.24	285021	2	$C_I$	1634.92	99.07
285764	0	$C_I$	1624.10	88.24	205625	1	$C_I$	1634.93	99.07
274727	1	$C_I$	1624.11	88.25	252545	2	$C_I$	1634.93	99.08

274792	2	$C_1$	1624.11	88.25	243791	2	$C_1$	1634.94	99.09
215045	2	$C_1$	1624.13	88.27	227506	2	$C_1$	1634.94	99.09
280796	1	$C_1$	1624.13	88.28	227666	1	$C_1$	1634.94	99.09
283131	2	$C_1$	1624.13	88.28	273893	1	$C_1$	1634.94	99.09
270829	2	$C_1$	1624.13	88.28	223513	2	$C_1$	1634.95	99.10
274790	2	$C_1$	1624.13	88.28	274807	2	$C_1$	1634.95	99.10
213110	2	$C_1$	1624.14	88.28	269355	2	$C_1$	1634.95	99.10
248451	1	$C_1$	1624.14	88.29	212535	2	$C_1$	1634.95	99.10
278877	1	$C_1$	1624.14	88.29	275472	2	$C_1$	1634.95	99.10
265020	2	$C_1$	1624.15	88.30	267529	2	$C_1$	1634.96	99.10
275476	2	$C_1$	1624.15	88.30	223534	2	$C_1$	1634.96	99.10
205620	1	$C_1$	1624.17	88.31	273385	1	$C_1$	1634.96	99.10
269778	2	$C_1$	1624.17	88.31	207173	2	$C_1$	1634.96	99.10
269075	2	$C_1$	1624.17	88.32	235147	2	$C_1$	1634.96	99.10
283217	2	$C_1$	1624.19	88.33	193184	2	$C_1$	1634.97	99.11
281705	1	$C_1$	1624.19	88.34	227691	1	$C_1$	1634.97	99.11
276078	2	$C_1$	1624.20	88.34	236033	2	$C_1$	1634.97	99.12
212292	2	$C_1$	1624.20	88.35	282413	2	$C_1$	1634.98	99.12
250910	2	$C_1$	1624.21	88.35	210836	2	$C_1$	1634.98	99.13
235029	1	$C_1$	1624.21	88.36	254586	2	$C_1$	1634.98	99.13
212078	2	$C_1$	1624.22	88.37	207029	2	$C_1$	1634.98	99.13
205621	2	$C_1$	1624.23	88.37	274477	2	$C_1$	1634.99	99.13

285007	1	$C_I$	1624.23	88.37	239897	2	$C_I$	1634.99	99.13
271140	2	$C_I$	1624.23	88.38	216519	2	$C_I$	1634.99	99.13
251236	2	$C_I$	1624.24	88.38	265991	2	$C_I$	1634.99	99.13
280434	2	$C_I$	1624.24	88.39	188538	2	$C_I$	1634.99	99.14
210962	2	$C_I$	1624.26	88.40	255781	2	$C_I$	1635.00	99.14
269720	1	$C_I$	1624.27	88.42	285496	0	$C_I$	1635.00	99.14
236104	2	$C_I$	1624.27	88.42	272909	1	$C_I$	1635.00	99.15
250857	1	$C_I$	1624.28	88.43	223180	2	$C_I$	1635.00	99.15
284368	1	$C_I$	1624.29	88.43	285334	1	$C_I$	1635.00	99.15
280442	2	$C_I$	1624.30	88.44	266813	2	$C_I$	1635.00	99.15
253781	2	$C_I$	1624.32	88.47	247325	2	$C_I$	1635.01	99.16
216450	2	$C_I$	1624.32	88.47	265686	2	$C_I$	1635.01	99.16
285260	1	$C_I$	1624.32	88.47	275432	2	$C_I$	1635.03	99.17
226311	2	$C_I$	1624.34	88.48	191620	2	$C_I$	1635.03	99.18
278843	1	$C_I$	1624.34	88.49	274440	2	$C_I$	1635.03	99.18
254047	2	$C_I$	1624.36	88.51	262916	2	$C_I$	1635.04	99.18
262965	2	$C_I$	1624.36	88.51	262488	1	$C_I$	1635.04	99.19
277085	2	$C_I$	1624.37	88.52	205102	2	$C_I$	1635.05	99.19
253627	1	$C_I$	1624.37	88.52	251012	2	$C_I$	1635.05	99.19
276354	1	$C_I$	1624.38	88.52	227687	1	$C_I$	1635.05	99.20
268544	2	$C_I$	1624.40	88.55	280712	1	$C_I$	1635.06	99.20
236041	2	$C_I$	1624.41	88.56	223154	2	$C_I$	1635.07	99.21

282410	2	$C_I$	1624.41	88.56	251596	2	$C_I$	1635.07	99.21
266574	2	$C_I$	1624.43	88.57	274055	2	$C_I$	1635.07	99.22
226383	1	$C_I$	1624.43	88.58	265995	2	$C_I$	1635.07	99.22
214292	1	$C_I$	1624.44	88.59	258034	2	$C_I$	1635.07	99.22
285179	1	$C_I$	1624.44	88.59	212283	2	$C_I$	1635.07	99.22
268440	1	$C_I$	1624.44	88.59	236192	2	$C_I$	1635.08	99.22
280653	1	$C_I$	1624.46	88.60	282461	2	$C_I$	1635.08	99.22
240204	1	$C_I$	1624.46	88.60	237187	1	$C_I$	1635.08	99.23
281554	2	$C_I$	1624.48	88.62	214935	2	$C_I$	1635.08	99.23
237561	1	$C_I$	1624.48	88.62	268600	1	$C_I$	1635.09	99.23
285188	1	$C_I$	1624.48	88.63	252960	2	$C_I$	1635.09	99.23
213149	1	$C_I$	1624.49	88.63	247763	1	$C_I$	1635.09	99.24
275130	2	$C_I$	1624.49	88.63	231938	2	$C_I$	1635.10	99.24
207205	2	$C_I$	1624.49	88.64	253268	2	$C_I$	1635.10	99.24
253783	1	$C_I$	1624.49	88.64	277711	2	$C_I$	1635.10	99.24
251045	2	$C_I$	1624.51	88.65	281426	2	$C_I$	1635.10	99.25
252606	2	$C_I$	1624.51	88.65	284689	1	$C_I$	1635.10	99.25
285152	1	$C_I$	1624.52	88.67	266765	2	$C_I$	1635.11	99.25
268461	2	$C_I$	1624.53	88.67	179559	2	$C_I$	1635.11	99.25
285210	1	$C_I$	1624.53	88.68	212105	2	$C_I$	1635.12	99.26
284514	1	$C_I$	1624.55	88.69	281654	2	$C_I$	1635.13	99.27
250901	1	$C_I$	1624.56	88.71	213658	2	$C_I$	1635.13	99.27

236425	1	$C_1$	1624.57	88.71	239349	1	$C_1$	1635.14	99.28
204593	2	$C_1$	1624.58	88.72	151257	2	$C_1$	1635.15	99.29
284859	1	$C_1$	1624.58	88.72	252535	1	$C_1$	1635.15	99.29
251953	2	$C_1$	1624.59	88.73	232059	1	$C_1$	1635.15	99.30
283127	2	$C_1$	1624.59	88.73	269292	2	$C_1$	1635.15	99.30
252805	1	$C_1$	1624.59	88.73	254907	2	$C_1$	1635.15	99.30
283133	1	$C_1$	1624.59	88.73	284848	2	$C_1$	1635.15	99.30
250853	2	$C_1$	1624.59	88.74	212351	2	$C_1$	1635.15	99.30
282367	2	$C_1$	1624.60	88.75	282736	2	$C_1$	1635.16	99.31
274022	2	$C_1$	1624.60	88.75	265557	2	$C_1$	1635.16	99.31
280670	1	$C_1$	1624.61	88.75	282433	1	$C_1$	1635.16	99.31
283920	1	$C_1$	1624.62	88.77	232212	2	$C_1$	1635.17	99.31
262934	2	$C_1$	1624.64	88.78	274475	2	$C_1$	1635.17	99.32
281584	2	$C_1$	1624.65	88.79	248382	1	$C_1$	1635.18	99.33
219527	2	$C_1$	1624.66	88.80	253692	2	$C_1$	1635.19	99.33
274826	2	$C_1$	1624.66	88.81	276978	1	$C_1$	1635.19	99.33
275480	2	$C_1$	1624.67	88.81	216513	2	$C_1$	1635.19	99.34
276113	2	$C_1$	1624.68	88.82	214316	1	$C_1$	1635.20	99.34
191297	2	$C_1$	1624.68	88.82	212549	2	$C_1$	1635.20	99.34
260699	2	$C_1$	1624.69	88.83	231335	2	$C_1$	1635.20	99.34
269145	2	$C_1$	1624.69	88.84	277266	2	$C_1$	1635.20	99.35
227540	2	$C_1$	1624.70	88.85	273423	2	$C_1$	1635.20	99.35

282337	1	$C_I$	1624.71	88.85	283057	2	$C_I$	1635.21	99.35
266789	2	$C_I$	1624.72	88.87	276307	2	$C_I$	1635.21	99.35
285791	0	$C_I$	1624.73	88.88	285063	1	$C_I$	1635.21	99.36
204759	1	$C_I$	1624.73	88.88	283880	1	$C_I$	1635.22	99.37
284837	1	$C_I$	1624.75	88.90	262982	2	$C_I$	1635.23	99.37
275990	1	$C_I$	1624.75	88.90	210916	2	$C_I$	1635.23	99.37
282574	1	$C_I$	1624.76	88.90	243863	1	$C_I$	1635.23	99.37
277036	2	$C_I$	1624.76	88.91	153535	2	$C_I$	1635.23	99.38
282588	1	$C_I$	1624.76	88.91	214710	2	$C_I$	1635.23	99.38
282940	2	$C_I$	1624.77	88.91	282883	1	$C_I$	1635.24	99.39
282334	2	$C_I$	1624.77	88.92	284057	1	$C_I$	1635.25	99.40
266066	2	$C_I$	1624.78	88.92	263183	2	$C_I$	1635.26	99.40
237418	1	$C_I$	1624.78	88.93	243854	2	$C_I$	1635.26	99.40
285777	0	$C_I$	1624.79	88.93	263851	1	$C_I$	1635.26	99.40
284320	2	$C_I$	1624.80	88.94	241566	2	$C_I$	1635.26	99.40
255656	1	$C_I$	1624.80	88.94	276410	2	$C_I$	1635.27	99.41
282851	1	$C_I$	1624.81	88.96	275757	1	$C_I$	1635.27	99.42
262449	1	$C_I$	1624.82	88.97	213236	2	$C_I$	1635.27	99.42
268119	2	$C_I$	1624.84	88.99	251850	1	$C_I$	1635.28	99.42
266082	2	$C_I$	1624.85	88.99	227575	2	$C_I$	1635.28	99.43
276255	2	$C_I$	1624.86	89.01	282541	2	$C_I$	1635.28	99.43
250871	2	$C_I$	1624.87	89.01	239908	2	$C_I$	1635.29	99.43

204014	2	$C_I$	1624.87	89.02	284700	2	$C_I$	1635.29	99.44
269815	1	$C_I$	1624.88	89.02	210879	2	$C_I$	1635.29	99.44
269389	2	$C_I$	1624.88	89.02	268554	2	$C_I$	1635.30	99.44
284845	1	$C_I$	1624.88	89.03	269689	2	$C_I$	1635.30	99.45
276552	2	$C_I$	1624.89	89.03	284375	2	$C_I$	1635.32	99.46
285589	0	$C_S$	1624.89	89.03	214271	1	$C_I$	1635.32	99.46
262836	2	$C_I$	1624.90	89.04	228517	2	$C_I$	1635.32	99.46
237198	1	$C_I$	1624.90	89.04	248478	1	$C_I$	1635.32	99.47
285582	0	$C_I$	1624.90	89.04	229099	2	$C_I$	1635.33	99.47
283681	1	$C_I$	1624.93	89.08	182253	2	$C_I$	1635.33	99.47
269751	2	$C_I$	1624.94	89.08	278980	1	$C_I$	1635.33	99.47
284637	1	$C_I$	1624.94	89.09	226825	2	$C_I$	1635.33	99.48
210867	2	$C_I$	1624.96	89.10	263107	2	$C_I$	1635.33	99.48
280795	2	$C_I$	1624.97	89.11	254902	2	$C_I$	1635.34	99.48
268704	1	$C_I$	1624.98	89.12	207354	2	$C_I$	1635.34	99.48
231194	2	$C_I$	1624.98	89.13	213122	2	$C_I$	1635.34	99.49
212133	2	$C_I$	1624.99	89.13	204107	2	$C_I$	1635.34	99.49
285112	1	$C_I$	1624.99	89.13	207039	2	$C_I$	1635.36	99.50
212218	2	$C_I$	1624.99	89.14	278998	1	$C_I$	1635.36	99.50
284767	1	$C_I$	1624.99	89.14	248183	2	$C_I$	1635.36	99.50
252947	1	$C_I$	1625.01	89.15	251647	1	$C_I$	1635.36	99.50
278424	1	$C_I$	1625.01	89.15	242655	2	$C_I$	1635.36	99.51



240233	2	$C_1$	1625.02	89.17	285065	1	$C_1$	1635.36	99.51
285394	1	$C_2$	1625.03	89.17	276521	1	$C_1$	1635.37	99.51
211190	1	$C_1$	1625.03	89.18	207630	1	$C_1$	1635.37	99.51
270923	2	$C_1$	1625.03	89.18	109172	2	$C_1$	1635.37	99.51
277695	1	$C_1$	1625.04	89.19	269404	2	$C_1$	1635.37	99.52
210856	2	$C_1$	1625.06	89.20	284184	2	$C_1$	1635.37	99.52
274726	1	$C_1$	1625.06	89.20	215142	2	$C_1$	1635.38	99.52
273484	1	$C_1$	1625.06	89.21	278654	2	$C_1$	1635.38	99.53
235966	2	$C_1$	1625.06	89.21	235732	2	$C_1$	1635.39	99.53
214856	1	$C_1$	1625.06	89.21	234794	2	$C_1$	1635.39	99.54
243850	1	$C_1$	1625.07	89.21	267243	1	$C_1$	1635.41	99.56
236355	1	$C_1$	1625.08	89.23	269044	2	$C_1$	1635.41	99.56
250887	2	$C_1$	1625.08	89.23	278390	1	$C_2$	1635.42	99.56
172385	2	$C_1$	1625.09	89.24	282635	2	$C_1$	1635.42	99.56
214123	1	$C_1$	1625.09	89.24	273488	1	$C_1$	1635.42	99.57
236687	2	$C_1$	1625.10	89.24	274054	2	$C_1$	1635.42	99.57
269755	2	$C_1$	1625.10	89.25	212041	2	$C_1$	1635.42	99.57
252786	2	$C_1$	1625.10	89.25	236783	2	$C_1$	1635.42	99.57
213895	1	$C_1$	1625.11	89.25	267283	2	$C_1$	1635.42	99.57
281548	2	$C_1$	1625.11	89.25	229692	2	$C_1$	1635.43	99.58
282953	2	$C_1$	1625.11	89.25	254029	2	$C_1$	1635.43	99.58
207198	2	$C_1$	1625.12	89.27	193183	2	$C_1$	1635.44	99.58

268661	1	$C_I$	1625.12	89.27	235979	2	$C_I$	1635.44	99.58
251048	2	$C_I$	1625.13	89.27	211339	2	$C_I$	1635.44	99.58
228727	1	$C_I$	1625.13	89.27	237994	2	$C_I$	1635.44	99.59
247123	2	$C_I$	1625.13	89.28	222878	1	$C_I$	1635.44	99.59
271684	1	$C_I$	1625.14	89.28	277303	2	$C_I$	1635.44	99.59
283403	1	$C_I$	1625.14	89.29	274063	2	$C_I$	1635.44	99.59
281333	1	$C_S$	1625.15	89.29	213921	1	$C_I$	1635.45	99.59
280988	2	$C_I$	1625.15	89.30	248954	2	$C_I$	1635.45	99.60
212227	2	$C_I$	1625.16	89.30	273889	2	$C_I$	1635.46	99.60
214185	2	$C_I$	1625.18	89.33	277692	2	$C_I$	1635.46	99.61
277064	1	$C_I$	1625.20	89.34	204611	2	$C_I$	1635.46	99.61
282450	2	$C_I$	1625.20	89.35	283973	1	$C_I$	1635.46	99.61
285703	0	$C_I$	1625.23	89.38	262964	2	$C_I$	1635.47	99.61
219868	1	$C_I$	1625.23	89.38	239989	2	$C_I$	1635.47	99.62
272912	1	$C_I$	1625.24	89.39	237595	2	$C_I$	1635.47	99.62
227585	1	$C_I$	1625.25	89.40	222919	2	$C_I$	1635.48	99.62
243790	2	$C_I$	1625.26	89.40	198346	2	$C_I$	1635.48	99.62
267156	2	$C_I$	1625.28	89.43	214709	2	$C_I$	1635.48	99.63
285412	1	$C_I$	1625.31	89.45	278867	1	$C_I$	1635.49	99.63
275173	2	$C_I$	1625.31	89.46	278651	1	$C_I$	1635.49	99.63
227411	2	$C_I$	1625.32	89.46	282435	2	$C_I$	1635.49	99.64
269224	2	$C_I$	1625.32	89.47	229838	2	$C_I$	1635.50	99.65

275190	2	$C_I$	1625.34	89.48	282159	1	$C_I$	1635.50	99.65
265648	2	$C_I$	1625.36	89.51	197567	2	$C_I$	1635.50	99.65
243103	2	$C_I$	1625.36	89.51	285273	1	$C_I$	1635.50	99.65
276513	2	$C_I$	1625.37	89.51	188755	2	$C_I$	1635.52	99.66
231208	1	$C_I$	1625.37	89.52	284388	2	$C_I$	1635.52	99.66
251605	2	$C_I$	1625.39	89.53	214729	2	$C_I$	1635.52	99.66
188790	2	$C_I$	1625.39	89.54	275661	1	$C_I$	1635.52	99.67
285203	2	$C_I$	1625.39	89.54	235976	2	$C_I$	1635.53	99.68
212200	1	$C_I$	1625.40	89.54	276270	2	$C_I$	1635.54	99.68
282592	1	$C_I$	1625.41	89.55	281805	2	$C_I$	1635.56	99.71
254222	1	$C_I$	1625.41	89.55	247637	1	$C_I$	1635.56	99.71
263321	2	$C_I$	1625.43	89.58	212894	2	$C_I$	1635.57	99.71
281355	1	$C_I$	1625.44	89.59	284260	2	$C_I$	1635.57	99.71
269158	2	$C_I$	1625.44	89.59	283456	1	$C_I$	1635.58	99.72
264249	2	$C_I$	1625.44	89.59	275207	2	$C_I$	1635.58	99.72
278780	1	$C_I$	1625.46	89.60	235776	1	$C_I$	1635.58	99.72
262973	2	$C_I$	1625.47	89.61	231668	2	$C_I$	1635.58	99.73
163333	2	$C_I$	1625.47	89.61	237283	2	$C_I$	1635.58	99.73
285168	2	$C_I$	1625.47	89.62	281600	1	$C_I$	1635.59	99.73
254602	2	$C_I$	1625.47	89.62	284422	1	$C_I$	1635.59	99.74
285782	0	$C_S$	1625.48	89.62	278647	1	$C_I$	1635.60	99.74
191613	2	$C_I$	1625.48	89.62	250912	2	$C_I$	1635.60	99.74

214895	2	$C_I$	1625.49	89.64	224069	2	$C_I$	1635.61	99.75
205603	1	$C_I$	1625.49	89.64	216128	2	$C_I$	1635.61	99.76
253690	1	$C_I$	1625.53	89.68	282423	1	$C_I$	1635.63	99.77
284384	1	$C_I$	1625.54	89.69	272687	2	$C_I$	1635.63	99.78
252770	2	$C_I$	1625.56	89.70	197051	2	$C_I$	1635.63	99.78
204591	1	$C_I$	1625.56	89.71	152826	2	$C_I$	1635.63	99.78
278584	1	$C_I$	1625.58	89.72	202969	2	$C_I$	1635.64	99.79
275454	2	$C_I$	1625.58	89.72	265657	1	$C_I$	1635.64	99.79
213579	2	$C_I$	1625.58	89.72	267665	2	$C_I$	1635.65	99.79
282918	2	$C_I$	1625.61	89.76	284635	1	$C_I$	1635.65	99.79
216618	2	$C_I$	1625.62	89.77	265605	2	$C_I$	1635.65	99.80
243170	2	$C_I$	1625.63	89.78	275142	1	$C_I$	1635.65	99.80
276250	2	$C_I$	1625.64	89.78	265800	2	$C_I$	1635.66	99.80
284281	1	$C_S$	1625.65	89.80	254085	1	$C_I$	1635.66	99.80
248431	1	$C_I$	1625.65	89.80	266092	2	$C_I$	1635.66	99.80
265580	2	$C_I$	1625.65	89.80	270922	2	$C_I$	1635.67	99.81
225898	1	$C_I$	1625.66	89.80	269199	2	$C_I$	1635.67	99.81
212089	2	$C_I$	1625.66	89.80	280188	1	$C_I$	1635.67	99.82
275182	2	$C_I$	1625.68	89.82	226932	1	$C_I$	1635.67	99.82
275181	2	$C_I$	1625.68	89.83	282431	2	$C_I$	1635.68	99.82
216185	2	$C_I$	1625.69	89.84	252542	1	$C_I$	1635.68	99.83
250279	1	$C_I$	1625.69	89.84	229308	2	$C_I$	1635.68	99.83

275668	1	$C_I$	1625.69	89.84	247243	2	$C_I$	1635.69	99.84
243284	1	$C_I$	1625.70	89.85	176870	2	$C_I$	1635.69	99.84
281318	1	$C_I$	1625.70	89.85	227508	2	$C_I$	1635.70	99.84
203381	2	$C_I$	1625.70	89.85	207774	1	$C_I$	1635.70	99.85
276428	2	$C_I$	1625.70	89.85	269072	2	$C_I$	1635.71	99.85
280482	1	$C_I$	1625.71	89.85	228726	2	$C_I$	1635.71	99.86
251631	1	$C_I$	1625.71	89.86	126992	2	$C_I$	1635.72	99.86
275152	1	$C_I$	1625.71	89.86	270638	1	$C_I$	1635.72	99.86
266053	2	$C_I$	1625.72	89.86	264905	2	$C_I$	1635.72	99.86
203269	2	$C_I$	1625.72	89.86	253795	2	$C_I$	1635.72	99.87
213973	2	$C_I$	1625.73	89.87	210862	2	$C_I$	1635.72	99.87
213625	2	$C_I$	1625.73	89.87	285609	0	$C_I$	1635.74	99.88
268656	1	$C_I$	1625.75	89.89	205631	2	$C_I$	1635.74	99.88
214945	2	$C_I$	1625.75	89.90	205626	2	$C_I$	1635.74	99.89
211275	1	$C_I$	1625.75	89.90	262341	2	$C_I$	1635.74	99.89
236218	2	$C_I$	1625.76	89.90	214151	2	$C_I$	1635.75	99.89
284930	2	$C_I$	1625.77	89.92	227551	2	$C_I$	1635.76	99.90
226755	2	$C_I$	1625.78	89.93	242733	2	$C_I$	1635.76	99.90
284195	2	$C_I$	1625.78	89.93	216155	2	$C_I$	1635.76	99.91
275864	1	$C_S$	1625.78	89.93	253242	2	$C_I$	1635.76	99.91
247140	1	$C_I$	1625.79	89.94	268699	2	$C_I$	1635.77	99.92
285262	1	$C_I$	1625.79	89.94	207256	2	$C_I$	1635.78	99.93

228863	2	$C_I$	1625.80	89.95	271917	2	$C_I$	1635.78	99.93
281416	1	$C_I$	1625.83	89.97	274021	2	$C_I$	1635.79	99.93
214281	2	$C_I$	1625.83	89.97	283001	2	$C_I$	1635.79	99.94
273430	1	$C_I$	1625.83	89.98	272881	1	$C_I$	1635.79	99.94
282079	1	$C_I$	1625.84	89.98	267408	2	$C_I$	1635.79	99.94
276252	2	$C_I$	1625.85	89.99	282231	1	$C_I$	1635.79	99.94
269456	1	$C_I$	1625.86	90.01	266295	2	$C_I$	1635.79	99.94
280815	1	$C_I$	1625.86	90.01	232468	1	$C_I$	1635.81	99.96
211340	1	$C_I$	1625.87	90.01	280665	2	$C_I$	1635.82	99.97
212402	2	$C_I$	1625.88	90.03	226900	1	$C_I$	1635.82	99.97
234681	1	$C_I$	1625.88	90.03	277584	2	$C_I$	1635.82	99.97
283441	2	$C_I$	1625.93	90.07	285093	1	$C_I$	1635.83	99.97
282114	2	$C_I$	1625.94	90.08	284515	1	$C_I$	1635.83	99.97
277760	2	$C_I$	1625.94	90.08	214461	2	$C_I$	1635.83	99.98
276182	1	$C_I$	1625.94	90.09	226734	2	$C_I$	1635.83	99.98
221193	1	$C_I$	1625.95	90.09	262492	1	$C_I$	1635.83	99.98
275449	2	$C_I$	1625.95	90.10	269830	2	$C_I$	1635.84	99.98
213759	2	$C_I$	1625.95	90.10	263572	2	$C_I$	1635.84	99.98
257837	1	$C_I$	1625.96	90.10	282887	2	$C_I$	1635.84	99.99
273981	1	$C_I$	1625.96	90.11	276139	2	$C_I$	1635.85	99.99
213582	2	$C_I$	1625.96	90.11	254899	2	$C_I$	1635.85	99.99
283267	2	$C_I$	1625.98	90.12	242787	1	$C_I$	1635.85	100.00

266501	2	$C_1$	1625.98	90.12	275409	2	$C_1$	1635.85	100.00
253314	1	$C_1$	1625.98	90.12	284734	1	$C_1$	1635.86	100.00
285086	2	$C_1$	1625.98	90.13	221324	1	$C_1$	1635.86	100.00
269761	2	$C_1$	1626.00	90.15	266054	2	$C_1$	1635.86	100.00
250865	2	$C_1$	1626.01	90.15	229077	2	$C_1$	1635.86	100.00

## 2. Relative optimized energies of hexa-anion $C_{100}^{6-}$ and $Dy_2@C_{100}$ at B3LYP/SLC&6-31G(d) level.

Geometries were fully optimized by hybrid density functional calculations at the B3LYP<sup>S4</sup> level for the most stable  $C_{100}^{6-}$  cages and  $Dy_2@C_{100}$ . The split-valence d-polarized 6-31G(d) basis set was used for carbon. As for the dysprosium, the quasi-relativistic pseudo-potential (SLC) with corresponding valence basis set (7s6p5d)/[5s4p3d] developed by the Stuttgart team<sup>S5</sup> was used. All the results are collected in Table S4. All the calculations performed in Gaussian 03<sup>S6</sup>.

**Table S3.** Optimized energies of all the hexa-anion and  $Dy_2@C_{100}$  at B3LYP level.

$C_{100}$			Hexa-anion	Hexa-anion	$Dy_2@C_{100}$	$Dy_2@C_{100}$
spiralID	PA	Symmetry	$\Delta E$ kcal/mol	Gap eV	$\Delta E$ kcal/mol	Gap eV
285913	0	$D_5$	0.00	2.50	1.85	0.70
285793	0	$C_2$	22.27	1.77	4.95	1.20
285864	0	$C_2$	20.78	1.69	0.00	1.16
285858	0	$D_{2d}$	25.98	1.91	17.06	0.84
285402	1	$C_2$	38.32	1.98	43.87	0.80
276180	2	$C_2$	58.00	2.50	52.21	0.67
285353	2	$C_2$	59.37	1.50	75.46	1.23
285366	2	$C_{2v}$	61.34	1.63	51.36	0.76
282347	2	$C_2$	62.02	1.96	42.27	0.85
283433	2	$C_s$	61.81	1.78	40.30	1.10

277326	2	$D_2$	61.76	1.85	38.01	0.99
243782	2	$D_2$	89.22	1.92	65.34	0.66
284020	2	$D_2$	94.84	1.51	52.92	0.96
284029	2	$D_{2d}$	93.94	1.57	61.38	0.91
217626	2	$D_2$	157.86	1.25	96.29	0.93
283876	2	$D_2$	109.45	1.64	86.99	0.59
204140	2	$D_2$	115.47	0.79	50.02	1.85
242740	2	$D_2$	138.13	1.44	91.77	0.89
277774	2	$D_2$	110.61	1.34	66.44	1.04
277791	2	$D_2$	121.22	2.04	97.08	0.61
283900	2	$D_2$	148.18	2.70	128.09	0.61
285145	2	$D_2$	218.79	1.07	154.14	0.94

### 3. The energy levels of 285913: $D_5$ species and 285864: $C_2$ species of $Dy_2@C_{100}$

Energy levels of 285913: $D_5$  species and 285864: $C_2$  species of  $Dy_2@C_{100}$  are computed in Gaussian 03 program. The geometry optimizations are performed at B3LYP/SLC&6-31G(d) without any restraint. Then the pseudo-potential SDD with corresponding valence basis set is used for Dy atom and 3-21G basis set is used for carbon atom. Figure S2 shows the important energy levels of the both two isomers. The SOMO-LUMO gaps computed with this method are similar with the previous calculated HOMO-LUMO gaps at B3LYP/SLC&6-31G(d) level, 1.16eV and 0.70eV for 285864: $C_2$  and 285913: $D_5$  respectively. And the  $\alpha$ - and  $\beta$ -spin energy levels of  $Dy_2@C_{100}$  are split by the existence of unpaired  $f$  electrons on each  $Dy(4f^{10}5d^06s^2)$  atom.



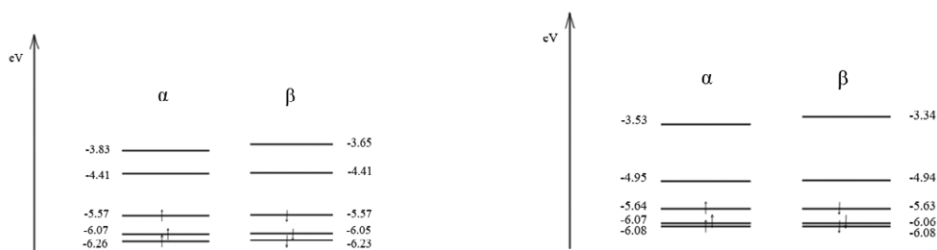


Figure S1. Energy levels of 285864: $C_2$  species (left) and 285913: $D_5$  species (right).

#### 4. Optimized Cartesian coordinates of the 285913: $D_5$ species of $Dy_2@C_{100}$ at

##### B3LYP/SLC&6-31g(d) level.

285913: $D_5$

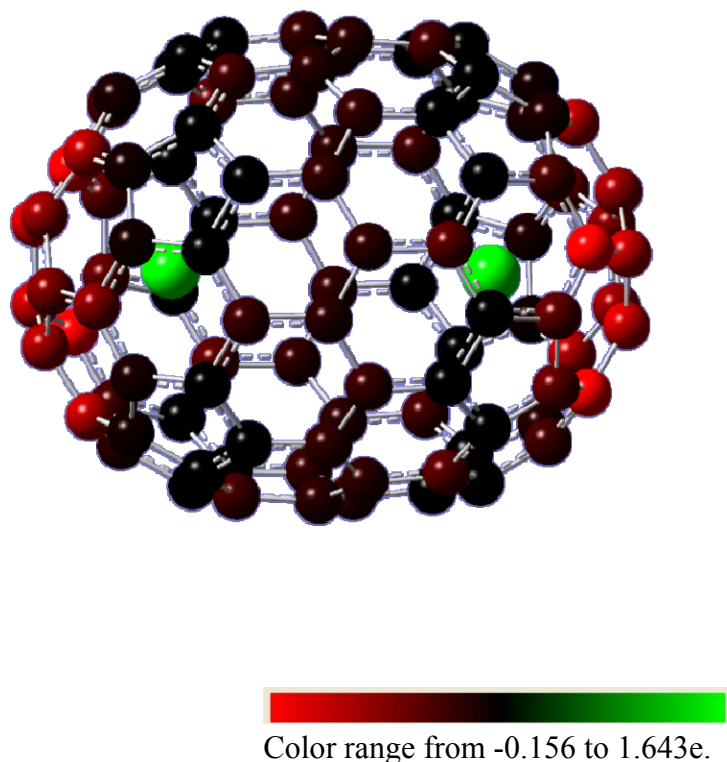
xyz file:

C	1.810347	4.030545	0.370847
C	2.459499	3.818925	-0.875430
C	1.689020	3.556715	-2.074871
C	2.423427	2.650778	-2.895057
C	1.731469	1.675727	-3.655059
C	2.403230	0.434454	-3.848133
C	1.663154	-0.788479	-3.961389
C	2.418359	-1.827629	-3.352165
C	1.752564	-2.866300	-2.654920
C	2.453748	-3.425150	-1.545885
C	1.737431	-3.911956	-0.418814
C	2.503794	-3.644949	0.754325
C	1.845546	-3.326646	1.971324
C	2.542671	-2.449742	2.843922
C	1.811853	-1.536180	3.664523
C	2.558778	-0.316168	3.766915
C	1.880145	0.926023	3.844018
C	2.545479	2.037488	3.263170
C	1.783220	3.104657	2.654622
C	2.511678	3.597761	1.522926
C	0.371847	4.132218	0.409342
C	-0.333061	3.815836	1.630354
C	0.396355	3.150778	2.719607
C	-0.270194	2.143098	3.553695
C	0.442362	0.944264	3.975159

C	-0.287276	-0.311287	4.055212
C	0.413463	-1.561854	3.751848
C	-0.277424	-2.646459	3.065143
C	0.406077	-3.424444	2.050277
C	-0.350006	-3.883741	0.882254
C	0.328083	-3.989246	-0.398959
C	-0.369020	-3.665380	-1.630262
C	0.313634	-2.950316	-2.701171
C	-0.434389	-1.976540	-3.494960
C	0.259225	-0.807759	-4.003099
C	-0.422102	0.483675	-4.071900
C	0.292283	1.718914	-3.726783
C	-0.424683	2.777415	-3.042193
C	0.299192	3.613177	-2.087028
C	-0.360411	4.089728	-0.862680
C	-1.746310	4.027239	-0.825481
C	-2.473627	3.912281	0.401469
C	-1.772082	3.719847	1.616639
C	-2.426369	2.931214	2.602371
C	-1.664574	2.112329	3.517711
C	-2.407709	0.928330	3.788265
C	-1.726321	-0.299897	3.973759
C	-2.411736	-1.471947	3.537399
C	-1.685333	-2.596621	3.039732
C	-2.447579	-3.198545	2.000476
C	-1.789251	-3.774453	0.884439
C	-2.494727	-3.720279	-0.352234
C	-1.775959	-3.596455	-1.572679
C	-2.536425	-2.781213	-2.467521
C	-1.872940	-1.916196	-3.376559
C	-2.558661	-0.719123	-3.708614
C	-1.815539	0.476783	-3.984036
C	-2.552815	1.599544	-3.479243
C	-1.862569	2.711200	-2.935877
C	-2.517327	3.397787	-1.879040
C	-3.726608	2.921380	-1.306623
C	-3.702319	3.235976	0.118628
C	-4.292564	2.365607	1.062350
C	-3.652570	2.262835	2.336654
C	-3.655273	1.012951	3.074303
C	-4.278370	-0.142947	2.547112
C	-3.657427	-1.399508	2.828364
C	-3.695653	-2.480960	1.872747
C	-4.371845	-2.359282	0.616545

C	-3.750375	-3.011509	-0.493741
C	-3.769371	-2.427492	-1.820912
C	-4.411457	-1.171511	-2.084128
C	-3.780171	-0.339557	-3.053369
C	-3.768365	1.108882	-2.912034
C	-4.363958	1.737871	-1.785779
C	-5.053421	0.900698	-0.834366
C	-5.002509	1.206393	0.570488
C	-5.020938	-0.029439	1.303363
C	-5.101323	-1.123268	0.353383
C	-5.114053	-0.537372	-0.983198
C	3.677079	3.097091	-0.975154
C	3.665475	2.363869	-2.232430
C	4.272539	1.092531	-2.336835
C	3.642370	0.140729	-3.197493
C	3.669082	-1.271057	-2.891338
C	4.328553	-1.772131	-1.731644
C	3.711272	-2.885529	-1.080326
C	3.745981	-3.030593	0.358969
C	4.409769	-2.074701	1.203605
C	3.776885	-1.810255	2.453400
C	3.775472	-0.477682	3.034309
C	4.384096	0.621363	2.362011
C	3.754127	1.889952	2.523777
C	3.732639	2.860865	1.434927
C	4.319146	2.558956	0.182979
C	5.016856	1.302770	0.045475
C	5.005583	0.578867	-1.195065
C	5.072758	-0.834352	-0.900693
C	5.120022	-0.983700	0.550181
C	5.077436	0.349352	1.124246
Dy	-2.700414	-0.391713	-0.053331
Dy	2.703134	-0.388274	0.019477

**5. Charge Distribution of the 285913:D<sub>5</sub> species of Dy<sub>2</sub>@C<sub>100</sub> at B3LYP/CEP-31G&3-21G level.**



**Figure S2.** The Charge Distribution of  $\text{Dy}_2@285913:D_5$  species.

From the Charge Distribution Map, metal atoms transfer the electrons to the two top carbons, which may have strong electrostatic interactions with the positive charged metal.

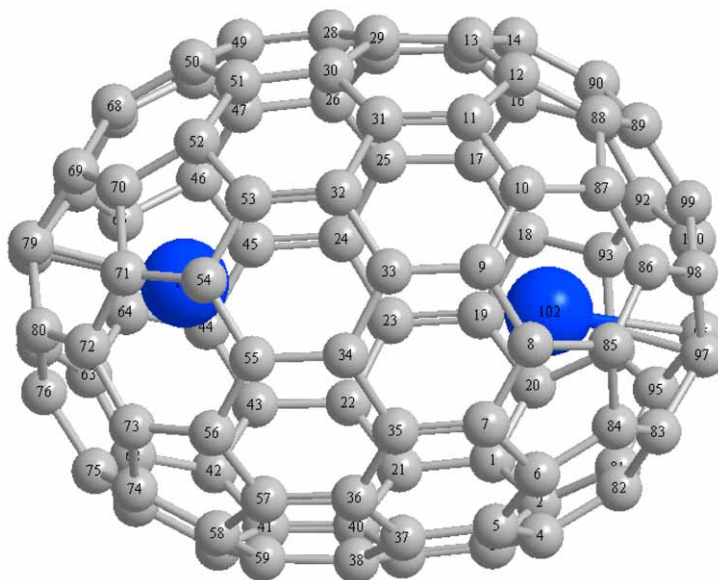
## 6. Detailed information of $^{13}\text{C}$ NMR computation.

The  $285913:D_5$  species of  $\text{Dy}_2@C_{100}$  is expected to show ten lines in  $^{13}\text{C}$  NMR duo to the free motion of Dy in fullerene cage and is also greatly dependent on the temperature. Employing the gauge-independent atomic orbital (GIAO)<sup>S7</sup> method at the B3LYP level of theory in Gaussian 03, here we calculated the diamagnetic  $\delta_{\text{dia}}$  values of the  $\text{Dy}_2@C_{100}$ , which is one important factor of the chemical shifts in the  $^{13}\text{C}$  NMR spectrum of  $\text{Dy}_2@C_{100}$ <sup>S8</sup>. Chemical shifts were calculated relative to  $C_{60}$  using

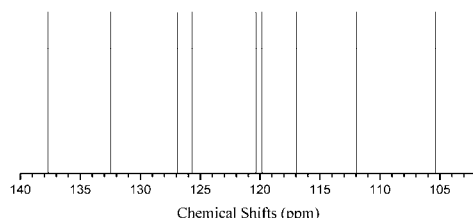
the experimental value for C<sub>60</sub> (142.5 ppm) and converted to the TMS (tetramethylsilane) scale.

**Table S3.** The diamagnetic  $\delta_{\text{dia}}$  values of <sup>13</sup>C NMR chemical shifts (ppm) of endohedral metallofullerene Dy<sub>2</sub>@285913:D<sub>5</sub> species.

$\delta$	intensity
105.39	1
111.95	1
116.96	1
119.84	1
119.88	1
120.36	1
125.68	1
126.92	1
132.47	1
137.69	1



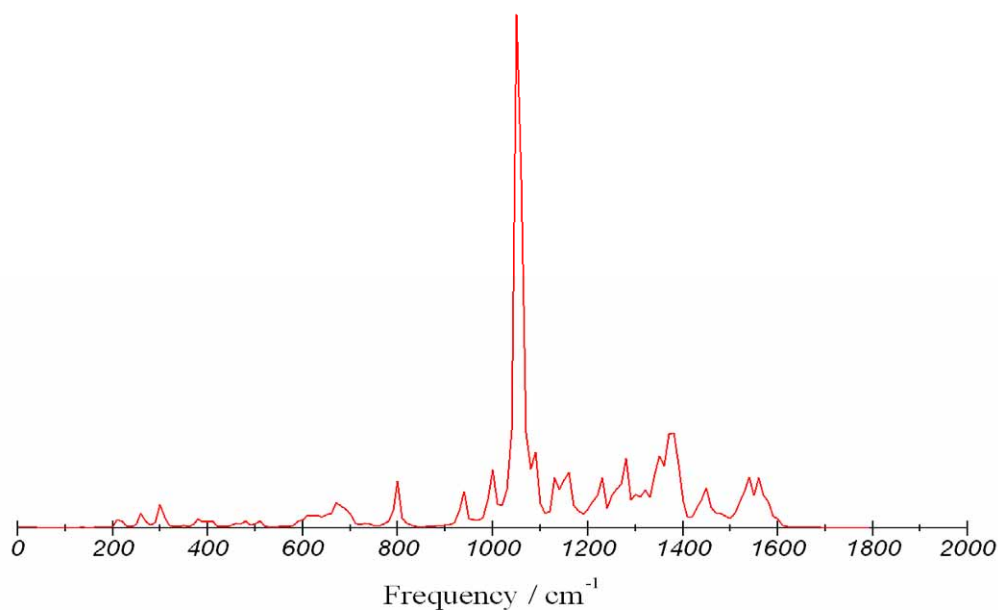
**Figure S3.** The optimized structure of Dy<sub>2</sub>@285913:D<sub>5</sub> species at B3LYP level.



**Figure S4.** The simulated  $^{13}\text{C}$  NMR spectrum of the diamagnetic  $\delta_{\text{dia}}$  values of  $\text{Dy}_2@285913:D_5$ . The signals at 119.84 and 119.88 ppm are combined into a signal with double line width due to the small space.

### 7. The simulated IR spectrum of $\text{Dy}_2@285913:D_5$ species.

The vibrational frequencies and infrared (IR) absorption intensities of  $\text{Dy}_2@285913:D_5$  species have been computed by harmonic vibrational analysis. Figure S3 depicts the simulated IR spectrum of  $\text{Dy}_2@285913:D_5$  species. The IR spectrum of the  $285913:D_5$  species with the highest vibrational frequency lower than  $1600\text{ cm}^{-1}$  consists roughly of three wide-bands. The two wide bands, one ranging from  $950\text{ cm}^{-1}$  to  $1600\text{ cm}^{-1}$  and another from  $600\text{ cm}^{-1}$  to  $700\text{ cm}^{-1}$ , are mainly attributed to vibrational modes of the  $\text{C}_{100}^{6-}$  cage. The latter can be a fingerprint for characterization the  $285913:D_5$  species of  $\text{Dy}_2@C_{100}$ . Because of the graphitization upon decomposition of the di-metallofullerenes, the real vibrational modes of the endohedral metallofullerene ranging from  $850$  to  $1260\text{ cm}^{-1}$  may be covered up.<sup>S9</sup> The highest absorption intensity of  $1056\text{ cm}^{-1}$  is attributed to the C-C stretching frequency of carbon cage, due to the high symmetry of the structure. The weaker band ranging from  $200$  to  $300\text{ cm}^{-1}$  is on account of vibrations of the encapsulated cations.



**Figure S5.** The simulated IR spectrum of Dy<sub>2</sub>@285913:D<sub>5</sub> species.

**References for *electronic supplementary information*:**

- S1 H. W. Kroto, *Nature.*, 1987, **329**, 529–531.
- S2 P. W. Fowler, D. E. Manolopoulos, *An Atlas of Fullerenes.*, Oxford, 1995.
- S3 M. J. S. Dewar, E. Zebisch, E. F. Healy, J. J. P. Stewart, *J. Am. Chem. Soc.*, 1985, **107**, 3902-3909.
- S4 a) A. D. Becke, *Phys. Rev. A.*, 1988, **38**, 3098-3100; b) C. Lee, W. Yang, R. G. Parr, *Phys. Rev. B.*, 1988, **37**, 785-789.
- S5 a) M. Dolg, H. Stoll, A. Savin, H. Preuss, *Theor. Chem. Account.*, 1989, **75**, 173-194; b) M. Dolg, H. Stoll, H. Preuss, *Theor. Chem. Account.*, 1993, **85**, 441-450.

- S6 Gaussian 03, Revision E.01, M. J. Frisch, G. W. Trucks, H. B. Schlegel, G. E. Scuseria, M. A. Robb, J. R. Cheeseman, J. A. Montgomery, Jr., T. Vreven, K. N. Kudin, J. C. Burant, J. M. Millam, S. S. Iyengar, J. Tomasi, V. Barone, B. Mennucci, M. Cossi, G. Scalmani, N. Rega, G. A. Petersson, H. Nakatsuji, M. Hada, M. Ehara, K. Toyota, R. Fukuda, J. Hasegawa, M. Ishida, T. Nakajima, Y. Honda, O. Kitao, H. Nakai, M. Klene, X. Li, J. E. Knox, H. P. Hratchian, J. B. Cross, V. Bakken, C. Adamo, J. Jaramillo, R. Gomperts, R. E. Stratmann, O. Yazyev, A. J. Austin, R. Cammi, C. Pomelli, J. W. Ochterski, P. Y. Ayala, K. Morokuma, G. A. Voth, P. Salvador, J. J. Dannenberg, V. G. Zakrzewski, S. Dapprich, A. D. Daniels, M. C. Strain, O. Farkas, D. K. Malick, A. D. Rabuck, K. Raghavachari, J. B. Foresman, J. V. Ortiz, Q. Cui, A. G. Baboul, S. Clifford, J. Cioslowski, B. B. Stefanov, G. Liu, A. Liashenko, P. Piskorz, I. Komaromi, R. L. Martin, D. J. Fox, T. Keith, M. A. Al-Laham, C. Y. Peng, A. Nanayakkara, M. Challacombe, P. M. W. Gill, B. Johnson, W. Chen, M. W. Wong, C. Gonzalez, J. A. Pople, Gaussian, Inc., Wallingford CT, 2004.
- S7 M. J. S. Dewar, E. Zoebisch, E. F. Healy, J. J. P. Stewart, *J. Am. Chem. Soc.*, 1985, **107**, 3902-3909.
- S8 M. Yamada, T. Wakahara, Y. Lian, T. Tsuchiya, T. Akasaka, M. Waelchli, N. Mizorogi, S. Nagase, K. M. Kadish, *J. Am. Chem. Soc.*, 2006, **128**, 1400-1401.
- S9 S. Yang, L. Dunsch, *Angew. Chem.*, 2006, *118*, 1321-1324; *Angew. Chem. Int. Ed.*, 2006, **45**, 1299-1302.