

TRMM Yaw Maneuver Operation

May 2, 2012

Yaw information		Orbit Information				comments
Date	Time	Orbit No.	Orbit Time			
97/12/13	13:11:00	247	97/12/13 12:22:36.424	~ 97/12/13 13:53:55.246		
97/12/14	11:44:37	262	97/12/14 11:12:17.380	~ 97/12/14 12:43:36.026		
97/12/14	12:43:25	262	97/12/14 11:12:17.380	~ 97/12/14 12:43:36.026		
98/01/14	20:48:00	757	98/01/14 20:32:50.923	~ 98/01/14 22:04:10.660		
98/01/29	23:30:11	995	98/01/29 22:46:03.826	~ 98/01/30 00:17:22.980		
98/02/27	12:00:00	1445	98/02/27 11:38:08.940	~ 98/02/27 13:09:28.723		
98/03/21	0:26:59	1784	98/03/20 23:34:35.630	~ 98/03/21 01:05:53.880		
98/04/11	19:11:05	2128	98/04/11 19:07:56.505	~ 98/04/11 20:39:16.124		
98/05/10	1:24:29	2573	98/05/10 00:24:10.160	~ 98/05/10 01:55:29.711		
98/05/25	10:11:07	2815	98/05/25 08:42:53.243	~ 98/05/25 10:14:12.953		
98/06/26	11:52:28	3321	98/06/26 10:49:07.097	~ 98/06/26 12:20:25.609		
98/07/10	1:58:16	3535	98/07/10 00:30:45.210	~ 98/07/10 02:02:04.722		
98/08/09	21:10:54	4021	98/08/09 20:11:20.551	~ 98/08/09 21:42:40.424		
98/08/28	7:07:09	4312	98/08/28 07:04:43.699	~ 98/08/28 08:36:03.356		
98/09/22	15:13:05	4711	98/09/22 14:20:33.392	~ 98/09/22 15:51:51.809		
98/10/17	15:41:54	5106	98/10/17 15:30:56.109	~ 98/10/17 17:02:15.326		
98/11/05	1:38:09	5396	98/11/05 00:52:53.843	~ 98/11/05 02:24:13.868		
98/12/05	14:45:01	5878	98/12/05 14:27:47.899	~ 98/12/05 15:59:05.995		
98/12/19	0:18:17	6089	98/12/18 23:37:06.463	~ 98/12/19 01:08:25.730		
99/01/19	16:52:10	6589	99/01/19 16:36:00.824	~ 99/01/19 18:07:19.696		
99/02/04	12:19:57	6838	99/02/04 11:34:57.738	~ 99/02/04 13:06:17.372		
99/03/04	3:20:58	7274	99/03/04 03:11:01.121	~ 99/03/04 04:42:20.351		
99/03/26	14:51:28	7628	99/03/26 13:57:49.099	~ 99/03/26 15:29:07.442		
99/04/16	15:18:16	7960	99/04/16 15:15:58.906	~ 99/04/16 16:47:18.169		
99/05/15	12:46:25	8415	99/05/15 11:45:13.806	~ 99/05/15 13:16:31.804		
99/05/30	9:21:31	8649	99/05/30 07:53:51.298	~ 99/05/30 09:25:10.223		
99/07/01	18:40:48	9160	99/07/01 17:37:11.131	~ 99/07/01 19:08:30.647		
99/07/15	10:18:07	9375	99/07/15 08:50:12.556	~ 99/07/15 10:21:32.481		
99/08/14	18:48:56	9854	99/08/14 17:50:04.512	~ 99/08/14 19:21:23.870		
99/09/02	21:30:58	10156	99/09/02 21:27:22.948	~ 99/09/02 22:58:41.426		
99/09/27	11:18:39	10543	99/09/27 10:26:56.254	~ 99/09/27 11:58:15.496		
99/10/23	6:04:12	10950	99/10/23 05:52:19.747	~ 99/10/23 07:23:37.515		
99/11/09	21:42:52	11228	99/11/09 20:58:20.827	~ 99/11/09 22:29:39.398		
99/12/10	19:58:16	11716	99/12/10 19:40:44.019	~ 99/12/10 21:12:03.535		
99/12/24	0:56:03	11924	99/12/24 00:15:02.806	~ 99/12/24 01:46:22.232		
00/01/24	14:30:51	12422	00/01/24 14:15:06.473	~ 00/01/24 15:46:24.959		
00/02/09	23:40:55	12680	00/02/09 22:55:00.430	~ 00/02/10 00:26:18.880		
00/03/07	23:25:18	13106	00/03/07 23:16:18.396	~ 00/03/08 00:47:37.226		

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Date	Time	Orbit No.	Orbit Time			
00/03/31	5:12:21	13472	00/03/31 04:18:00.620	~ 00/03/31 05:49:19.132		
00/04/20	12:52:13	13793	00/04/20 12:50:38.262	~ 00/04/20 14:21:55.877		
00/05/19	22:31:41	14256	00/05/19 21:29:51.964	~ 00/05/19 23:01:12.085		
00/06/03	8:26:19	14483	00/06/03 06:58:54.835	~ 00/06/03 08:30:13.145		
00/07/05	14:41:36	14992	00/07/05 13:38:46.361	~ 00/07/05 15:10:05.491		
00/07/19	18:30:41	15215	00/07/19 17:02:41.294	~ 00/07/19 18:34:00.369		
00/08/18	19:24:26	15689	00/08/18 18:25:57.783	~ 00/08/18 19:57:17.921		
00/09/07	13:21:16	16001	00/09/07 13:16:27.861	~ 00/09/07 14:47:45.921		
00/10/01	8:51:45	16376	00/10/01 08:00:36.803	~ 00/10/01 09:31:54.609		
00/10/27	18:52:40	16793	00/10/27 18:40:01.347	~ 00/10/27 20:11:19.752		
00/11/13	19:17:00	17061	00/11/13 18:33:21.860	~ 00/11/13 20:04:41.936		
00/12/15	1:11:04	17554	00/12/15 00:52:46.706	~ 00/12/15 02:24:06.695		
00/12/28	4:36:47	17761	00/12/28 03:55:23.015	~ 00/12/28 05:26:42.746		
01/01/28	10:29:28	18254	01/01/28 10:14:31.555	~ 01/01/28 11:45:49.354		
01/02/14	12:25:45	18523	01/02/14 11:39:05.794	~ 01/02/14 13:10:24.621		
01/03/12	19:23:40	18938	01/03/12 19:16:03.081	~ 01/03/12 20:47:22.549		
01/04/05	19:28:37	19316	01/04/05 18:33:35.276	~ 01/04/05 20:04:54.218		
01/04/25	8:52:23	19625	01/04/25 08:51:32.696	~ 01/04/25 10:22:51.317		
01/05/25	6:43:59	20096	01/05/25 05:41:52.638	~ 01/05/25 07:13:12.448		
01/06/08	7:30:30	20317	01/06/08 06:03:17.701	~ 01/06/08 07:34:36.361		
01/07/10	13:45:38	20826	01/07/10 12:42:51.440	~ 01/07/10 14:14:11.029		
01/07/25	4:14:33	21056	01/07/25 02:45:37.903	~ 01/07/25 04:16:55.730		
01/08/23	19:42:03	21522	01/08/23 18:42:55.745	~ 01/08/23 20:15:17.676		
01/09/13	19:52:18	21850	01/09/13 19:46:45.485	~ 01/09/13 21:19:09.802		
01/10/07	9:45:23	22217	01/10/07 08:54:34.472	~ 01/10/07 10:26:58.456		
01/11/04	6:58:54	22652	01/11/04 06:44:37.017	~ 01/11/04 08:17:00.010		
01/11/21	17:40:58	22924	01/11/21 17:35:16.665	~ 01/11/21 19:07:39.949		
01/12/23	2:52:01	23413	01/12/23 02:33:30.531	~ 01/12/23 04:05:53.305		
02/01/05	19:15:40	23626	02/01/05 18:33:07.257	~ 02/01/05 20:05:31.410		
02/02/06	2:14:15	24114	02/02/06 01:59:59.122	~ 02/02/06 03:32:22.122		
02/02/24	23:31:52	24408	02/02/24 22:42:46.366	~ 02/02/25 00:15:10.103		
02/03/22	11:41:14	24806	02/03/22 11:34:22.829	~ 02/03/22 13:06:46.339		
02/04/17	13:42:07	25212	02/04/17 12:43:59.574	~ 02/04/17 14:16:23.273		
02/05/06	0:11:54	25499	02/05/05 22:40:01.123	~ 02/05/06 00:12:24.070		
02/06/06	17:56:46	25994	02/06/06 16:52:42.160	~ 02/06/06 18:25:05.023		
02/06/20	10:18:51	26207	02/06/20 08:50:46.394	~ 02/06/20 10:23:10.609		
02/07/23	4:44:54	26718	02/07/23 03:42:11.406	~ 02/07/23 05:14:35.002		
02/08/08	13:53:32	26973	02/08/08 12:21:36.838	~ 02/08/08 13:54:00.800		

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Date	Time	Orbit No.	Orbit Time			
02/09/06	0:58:27	27417	02/09/06 00:01:59.130	~	02/09/06 01:34:21.697	
02/09/29	2:30:48	27777	02/09/29 02:22:34.268	~	02/09/29 03:54:57.658	
02/10/20	13:28:52	28111	02/10/20 12:40:09.731	~	02/10/20 14:12:33.366	
02/11/18	23:42:35	28570	02/11/18 23:26:41.856	~	02/11/19 00:59:04.656	
02/12/03	22:56:10	28803	02/12/03 22:13:32.351	~	02/12/03 23:45:55.732	
03/01/05	15:50:12	29313	03/01/05 15:32:17.783	~	03/01/05 17:04:41.217	
03/01/20	4:15:34	29539	03/01/20 03:31:50.866	~	03/01/20 05:04:15.062	
03/02/19	4:22:01	30007	03/02/19 04:09:43.455	~	03/02/19 05:42:07.769	
03/03/12	4:33:09	30334	03/03/12 03:41:21.368	~	03/03/12 05:13:45.485	
03/04/04	15:20:49	30700	03/04/04 15:16:07.396	~	03/04/04 16:48:31.204	
03/05/02	15:38:34	31136	03/05/02 14:38:12.574	~	03/05/02 16:10:35.330	
03/05/19	5:24:38	31394	03/05/19 03:54:24.356	~	03/05/19 05:26:46.810	
03/06/20	19:13:41	31902	03/06/20 18:09:10.135	~	03/06/20 19:41:34.088	
03/07/04	11:36:13	32115	03/07/04 10:07:44.844	~	03/07/04 11:40:09.181	
03/08/05	11:31:33	32614	03/08/05 10:30:22.346	~	03/08/05 12:02:44.784	
03/08/23	15:51:29	32898	03/08/23 15:49:24.178	~	03/08/23 17:21:48.231	
03/09/19	3:08:38	33310	03/09/19 02:14:33.813	~	03/09/19 03:46:56.605	
03/10/14	7:34:50	33703	03/10/14 07:24:02.868	~	03/10/14 08:56:26.009	
03/11/02	15:39:20	34004	03/11/02 14:52:51.189	~	03/11/02 16:25:13.818	
03/12/03	14:54:46	34487	03/12/03 14:37:11.556	~	03/12/03 16:09:34.355	
03/12/17	10:23:32	34702	03/12/17 09:41:32.724	~	03/12/17 11:13:56.076	
04/01/18	22:40:05	35864	04/02/29 22:57:50.593	~	04/03/01 00:30:13.163	
04/02/04	0:06:31	35864	04/02/29 22:57:50.593	~	04/03/01 00:30:13.163	
04/03/03	8:06:13	35901	04/03/03 07:55:59.979	~	04/03/03 09:28:24.263	
04/03/26	9:39:25	36260	04/03/26 08:45:00.773	~	04/03/26 10:17:24.369	
04/04/16	19:05:14	36594	04/04/16 19:02:50.977	~	04/04/16 20:35:13.850	
04/05/16	13:01:38	37057	04/05/16 11:59:17.955	~	04/05/16 13:31:41.787	
04/05/31	12:14:39	37290	04/05/31 10:45:44.768	~	04/05/31 12:18:07.464	
04/07/03	12:49:46	37805	04/07/03 11:45:37.606	~	04/07/03 13:17:59.880	
04/07/17	22:05:19	38029	04/07/17 20:35:47.486	~	04/07/17 22:08:08.995	
04/08/17	14:48:12	38508	04/08/17 13:48:55.356	~	04/08/17 15:21:17.977	
04/09/06	18:56:31	38823	04/09/06 18:52:07.705	~	04/09/06 20:24:30.711	
04/10/01	6:24:06	39204	04/10/01 05:32:18.960	~	04/10/01 07:04:41.814	
04/10/28	9:06:34	39627	04/10/28 08:53:19.864	~	04/10/28 10:25:43.846	
04/11/14	15:50:02	39896	04/11/14 15:05:25.666	~	04/11/14 16:37:49.595	
04/12/16	17:18:27	40396	04/12/16 17:00:07.726	~	04/12/16 18:32:30.366	
04/12/31	5:05:28	40622	04/12/31 05:01:33.071	~	04/12/31 06:33:56.267	
05/01/31	0:23:32	41102	05/01/31 00:08:21.093	~	05/01/31 01:40:45.127	

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Yaw information		Orbit Information				comments
Date	Time	Orbit No.	Orbit Time			
05/02/17	22:33:37	41381	05/02/17 21:45:39.110	~ 05/02/17 23:18:01.811		
05/03/16	9:51:04	41794	05/03/16 09:43:07.841	~ 05/03/16 11:15:30.365		
05/04/10	12:44:23	42185	05/04/10 11:47:27.848	~ 05/04/10 13:19:50.322		
05/04/29	22:23:07	42488	05/04/29 22:22:41.065	~ 05/04/29 23:55:04.185		
05/05/31	0:41:43	42972	05/05/30 23:38:12.066	~ 05/05/31 01:10:34.926		
05/06/14	0:48:42	43190	05/06/13 23:20:25.770	~ 05/06/14 00:52:49.343		
05/07/17	1:23:37	43705	05/07/17 00:20:11.646	~ 05/07/17 01:52:35.219		
05/08/01	14:29:00	43947	05/08/01 12:57:49.778	~ 05/08/01 14:30:12.589		
05/08/30	20:06:27	44403	05/08/30 19:09:09.407	~ 05/08/30 20:41:32.533		
05/09/22	1:34:52	44750	05/09/22 01:27:46.540	~ 05/09/22 03:00:09.712		
05/10/14	10:08:24	45098	05/10/14 09:18:47.035	~ 05/10/14 10:51:10.902		
05/11/12	6:29:24	45548	05/11/12 06:14:03.344	~ 05/11/12 07:46:27.427		
05/11/27	19:36:24	45790	05/11/27 18:53:10.527	~ 05/11/27 20:25:33.639		
05/12/30	9:26:14	46298	05/12/30 09:08:03.666	~ 05/12/30 10:40:26.703		
06/01/13	9:30:35	46516	06/01/13 08:47:34.505	~ 06/01/13 10:19:58.798		
06/02/13	2:37:17	46995	06/02/13 02:23:59.439	~ 06/02/13 03:56:22.323		
06/03/05	2:07:10	47306	06/03/05 01:16:37.043	~ 06/03/05 02:49:01.159		
06/03/29	12:04:05	47687	06/03/29 11:58:27.959	~ 06/03/29 13:30:51.030		
06/04/25	16:17:53	48110	06/04/25 15:18:28.600	~ 06/04/25 16:50:52.126		
06/05/13	2:05:34	48381	06/05/13 00:34:32.330	~ 06/05/13 02:06:56.646		
06/06/14	11:18:45	48886	06/06/14 10:14:04.406	~ 06/06/14 11:46:27.394		
06/06/27	21:29:51	49095	06/06/27 20:01:36.923	~ 06/06/27 21:33:59.592		
06/07/30	11:20:30	49603	06/07/30 10:18:15.771	~ 06/07/30 11:50:39.385		
06/08/16	14:59:46	49871	06/08/16 14:58:49.881	~ 06/08/16 16:31:13.071		
06/09/13	1:23:36	50298	06/09/13 00:28:24.023	~ 06/09/13 02:00:47.965		
06/10/07	11:19:17	50679	06/10/07 11:09:15.810	~ 06/10/07 12:41:38.773		
06/10/27	12:21:18	50991	06/10/27 11:33:49.301	~ 06/10/27 13:06:13.348		
06/11/26	23:16:35	51466	06/11/26 22:57:58.156	~ 06/11/27 00:30:20.513		
06/12/11	2:27:09	51686	06/12/11 01:44:58.550	~ 06/12/11 03:17:22.288		
07/01/12	17:47:36	52195	07/01/12 17:30:15.633	~ 07/01/12 19:02:39.757		
07/01/28	0:45:22	52433	07/01/28 00:00:40.426	~ 07/01/28 01:33:03.993		
07/02/26	4:46:18	52888	07/02/26 04:35:05.532	~ 07/02/26 06:07:29.910		
07/03/20	10:18:29	53234	07/03/20 09:25:04.123	~ 07/03/20 10:57:27.643		
07/04/11	15:45:41	53581	07/04/11 15:42:17.206	~ 07/04/11 17:14:39.778		
07/05/10	15:14:22	54032	07/05/10 14:12:51.949	~ 07/05/10 15:45:15.327		
07/05/26	10:29:38	54278	07/05/26 08:59:54.342	~ 07/05/26 10:32:17.231		
07/06/28	9:33:40	54792	07/06/28 08:28:51.932	~ 07/06/28 10:01:15.765		
07/07/12	9:40:20	55010	07/07/12 08:10:55.103	~ 07/07/12 09:43:18.629		

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Date	Time	Orbit No.	Orbit Time			
07/08/12	11:58:15	55495	07/08/12 10:58:04.077	~ 07/08/12 12:30:26.812		
07/08/31	16:55:45	55795	07/08/31 16:52:30.653	~ 07/08/31 18:24:54.905		
07/09/26	3:35:23	56191	07/09/26 02:42:32.593	~ 07/09/26 04:14:56.230		
07/10/22	14:51:00	56604	07/10/22 14:38:27.504	~ 07/10/22 16:10:50.318		
07/11/09	14:33:22	56884	07/11/09 13:47:49.825	~ 07/11/09 15:20:13.860		
07/12/11	14:31:01	57383	07/12/11 14:12:16.780	~ 07/12/11 15:44:39.945		
07/12/24	17:00:05	57587	07/12/24 16:18:10.402	~ 07/12/24 17:50:32.990		
08/01/26	2:13:29	58092	08/01/26 01:57:14.854	~ 08/01/26 03:29:38.441		
08/02/12	1:15:22	58356	08/02/12 00:28:19.163	~ 08/02/12 02:00:42.353		
08/03/10	10:05:20	58783	08/03/10 09:56:10.175	~ 08/03/10 11:28:34.349		
08/04/03	12:20:22	59158	08/04/03 11:24:32.166	~ 08/04/03 12:56:55.342		
08/04/23	19:30:44	59475	08/04/23 19:29:23.747	~ 08/04/23 21:01:46.334		
08/05/24	12:39:04	59953	08/05/24 11:35:37.554	~ 08/05/24 13:08:01.068		
08/06/07	17:22:32	60174	08/06/07 15:54:00.042	~ 08/06/07 17:26:23.368		
08/07/10	17:55:21	60689	08/07/10 16:51:33.637	~ 08/07/10 18:23:56.428		
08/07/25	17:05:44	60922	08/07/25 15:35:24.174	~ 08/07/25 17:07:46.671		
08/08/24	17:17:11	61390	08/08/24 16:18:53.163	~ 08/08/24 17:51:17.090		
08/09/15	1:12:37	61723	08/09/15 01:06:36.937	~ 08/09/15 02:39:00.389		
08/10/08	10:26:38	62087	08/10/08 09:35:49.530	~ 08/10/08 11:08:12.544		
08/11/05	10:42:49	62524	08/11/05 10:28:16.234	~ 08/11/05 12:00:40.362		
08/11/21	16:48:48	62777	08/11/21 16:04:56.651	~ 08/11/21 17:37:20.210		
08/12/24	1:59:10	63282	08/12/24 01:40:48.223	~ 08/12/24 03:13:11.075		
09/01/06	18:20:01	63495	09/01/06 17:37:28.406	~ 09/01/06 19:09:50.888		
09/02/07	1:22:16	63983	09/02/07 01:07:59.601	~ 09/02/07 02:40:23.263		
09/02/26	1:45:34	64279	09/02/26 00:56:08.161	~ 09/02/26 02:28:31.527		
09/03/23	10:46:56	64675	09/03/23 10:40:11.232	~ 09/03/23 12:12:33.965		
09/04/18	15:55:31	65083	09/04/18 14:57:11.097	~ 09/04/18 16:29:34.881		
09/05/06	23:21:14	65368	09/05/06 21:49:24.287	~ 09/05/06 23:21:47.749		
09/06/07	17:03:51	65863	09/06/07 15:59:41.761	~ 09/06/07 17:32:04.531		
09/06/21	10:56:36	66077	09/06/21 09:28:20.479	~ 09/06/21 11:00:43.001		
09/07/24	2:22:36	66586	09/07/24 01:19:57.873	~ 09/07/24 02:52:21.727		
09/08/09	14:37:50	66843	09/08/09 13:05:32.270	~ 09/08/09 14:37:55.860		
09/09/06	21:05:12	67284	09/09/06 20:09:04.136	~ 09/09/06 21:41:27.263		
09/09/30	4:44:15	67648	09/09/30 04:35:44.306	~ 09/09/30 06:08:06.870		
09/10/21	9:35:35	67978	09/10/21 08:47:10.276	~ 09/10/21 10:19:34.251		
09/11/20	3:32:43	68442	09/11/20 03:16:22.736	~ 09/11/20 04:48:45.708		
09/12/04	20:33:38	68671	09/12/04 19:51:04.697	~ 09/12/04 21:23:29.042		
10/01/06	13:31:55	69181	10/01/06 13:14:05.370	~ 10/01/06 14:46:28.773		

TRMM Yaw Maneuver Operation

May 2, 2012

Yaw information		Orbit Information				comments
Date	Time	Orbit No.	Orbit Time			
10/01/21	5:02:06	69409	10/01/21 04:18:12.028	~ 10/01/21 05:50:34.981		
10/02/20	2:04:20	69875	10/02/20 01:52:10.044	~ 10/02/20 03:24:33.353		
10/03/13	5:18:49	70204	10/03/13 04:26:48.064	~ 10/03/13 05:59:12.263		
10/04/05	13:01:58	70568	10/04/05 12:57:30.400	~ 10/04/05 14:29:53.256		
10/05/03	16:26:16	71006	10/05/03 15:25:41.951	~ 10/05/03 16:58:05.202		
10/05/20	3:05:21	71262	10/05/20 01:35:12.221	~ 10/05/20 03:07:34.735		
10/06/21	18:29:40	71771	10/06/21 17:25:07.404	~ 10/06/21 18:57:30.857		
10/07/05	10:52:03	71984	10/07/05 09:23:29.826	~ 10/07/05 10:55:52.822		
10/08/06	7:41:24	72481	10/08/06 06:40:23.019	~ 10/08/06 08:12:46.773		
10/08/24	16:38:05	72768	10/08/24 16:35:52.867	~ 10/08/24 18:08:15.764		
10/09/20	0:49:07	73178	10/09/19 23:55:11.268	~ 10/09/20 01:27:35.064		
10/10/15	8:18:19	73573	10/10/15 08:07:14.628	~ 10/10/15 09:39:38.978		
10/11/03	11:48:01	73871	10/11/03 11:01:02.952	~ 10/11/03 12:33:26.137		
10/12/04	14:09:01	74356	10/12/04 13:50:24.039	~ 10/12/04 15:22:47.358		
10/12/18	8:07:01	74570	10/12/18 07:20:21.528	~ 10/12/18 08:52:44.125		
11/01/19	18:53:01	75076	11/01/19 18:31:09.778	~ 11/01/19 20:03:32.836		
11/02/04	23:23:01	75328	11/02/04 22:31:40.791	~ 11/02/05 00:04:05.042		
11/03/05	4:19:01	75768	11/03/05 04:03:46.809	~ 11/03/05 05:36:10.885		
11/03/28	10:30:01	76130	11/03/28 09:30:13.757	~ 11/03/28 11:02:37.275		
11/04/18	15:18:01	76461	11/04/18 15:10:10.373	~ 11/04/18 16:42:32.903		
11/05/18	12:20:01	76926	11/05/18 11:12:29.559	~ 11/05/18 12:44:52.844		
11/06/02	10:00:01	77159	11/06/02 09:58:16.691	~ 11/06/02 11:30:40.909		
11/07/05	10:36:01	77673	11/07/05 09:27:02.708	~ 11/07/05 10:59:26.636		
11/07/19	21:30:01	77899	11/07/19 21:27:46.409	~ 11/07/19 23:00:09.562		
11/08/19	13:02:01	78376	11/08/19 11:57:48.222	~ 11/08/19 13:30:11.263		
11/09/08	20:16:01	78693	11/09/08 20:05:40.359	~ 11/09/08 21:38:03.520		
11/10/03	4:34:01	79072	11/10/03 03:41:03.531	~ 11/10/03 05:13:27.322		
11/10/30	10:25:01	79497	11/10/30 10:07:25.399	~ 11/10/30 11:39:49.367		
11/11/16	12:32:01	79763	11/11/16 11:42:38.102	~ 11/11/16 13:15:02.281		
11/12/18	15:33:01	80264	11/12/18 15:11:22.684	~ 11/12/18 16:43:46.842		
12/01/01	3:21:01	80474	12/01/01 02:33:24.923	~ 12/01/01 04:05:48.924		
12/02/01	21:07:01	80969	12/02/01 20:47:29.285	~ 12/02/01 22:19:52.560		
12/02/20	1:23:01	81252	12/02/20 00:33:54.329	~ 12/02/20 02:06:17.382		
12/03/17	6:34:01	81661	12/03/17 06:21:40.433	~ 12/03/17 07:54:03.398		
12/04/11	14:06:01	82055	12/04/11 13:03:33.399	~ 12/04/11 14:35:56.790		
12/04/30	19:06:01	82355	12/04/30 18:59:36.327	~ 12/04/30 20:31:58.826		