

# SMM C/P 1985 Coronal Mass Ejections page 1 of 8

Date	DOY	Time [UT]	Ctrl PA [deg]	Width [deg]	Kinematics						Comments
					Trajectory Times [UT]	Speed [km/s]	Speed PA	#Data Pts	Qual	Feature	
					—	—	—	—	—	—	DATA GAP: Jan 02 14:39 to Jan 03 04:03.
Jan 04/05	004/005	~07:05~05:39	252	050	—	—	—	1	Streamer	Slow swelling of streamer. Streamer becomes mound-shaped. Cavity(?) and core appear beneath streamer. Core is concave-outward, 'U'-shaped later in event. Streamer is disrupted.	
Jan 10	010	07:35-14:17	~312	~035	Jan 10 07:35-12:34	063 <sub>1</sub> * 083 <sub>2</sub>	308	6	6	Cavity	Very low contrast cavity superposed on faint ray north of streamer. Could be wider. Deflections.
Jan 14/15	014/015	03:14~01:01	285	066	Jan 14 06:44-10:51	053 <sub>1</sub> * 063 <sub>2</sub>	285	6	7	Wisp	Slow-moving cloud with bright, internal, structured wisp of material superposed on streamer. Wisp is concave-outward shaped late in event. Deflections.
Jan 17/18	017/018	09:38-07:40	262	055	Jan 17 11:12-18:06	050 <sub>1</sub> * 067 <sub>2</sub>	278	9	6	Mound	Mound superposed on streamer. Streamer is disrupted.
Jan 21/22	021/022	~06:26-01:50	271	100	Jan 22 00:17-00:20	800 <sub>1</sub> *	245	2	4	Fast cloud	Slow-moving cloud superposed on streamer.
					Jan 22 01:09-01:50	366 <sub>1</sub> * 365 <sub>2</sub>	270	8	5	Concave-outward shaped core	Fast-moving cloud with flat-topped core(?) is ejected from 00:17 until 01:50 on Jan 22. Core is concave-outward, 'U'-shaped in southwest images. Region is disrupted. Narrow jet appears in ray after event on Jan 22 from 12:56 until 15:55 at 265°.
Jan 22	022	19:14-23:30	290	027	Jan 22 19:14-21:57	097 <sub>1</sub> * 120 <sub>2</sub>	287	6	6	Loop	Faint loop/cavity superposed on ray. Ray is disrupted.
											DATA GAP: Jan 24 10:00 to 20:54.
Jan 28	028	00:25~19:16	~108	~065	Jan 28 02:05-08:23	030 <sub>1</sub> * 028 <sub>2</sub>	108	6	4	Mound	Faint mound south of streamer. Event may be wider.
											DATA GAP: Feb 01 04:02 to Feb 02 01:27.
Feb 02	033	~03:29~17:21	242	067	—	—	—	—	1	Streamer	Slow expansion and disruption of faint streamer.

Speed<sub>1</sub> ⇒ Speed was determined from a constant velocity fit to the number of points indicated.

Speed<sub>2</sub> ⇒ Speed was determined from a constant acceleration fit to the number of points indicated evaluated at the time of the last measurement (in Trajectory Times column).

\* Preferred fit to the data. This quantity is included in the speed histograms.

## SMM C/P 1985 Coronal Mass Ejections page 2 of 8

Date	DOY	Time [UT]	Cent PA [deg]	Width [deg]	Kinematics						Comments
					Trajectory Times [UT]	Speed [km/s]	Speed PA	#Data Pts	Qual	Feature	
Feb 17	048	20:33-23:45	099	032	—	—	—	—	0	Front at 20:36 only	Asymmetric, flattened loop(?)/cavity superposed on and north of streamer. Streamer is disrupted.
Feb 18	049	10:46-17:05	086	030	—	—	—	—	0	No obvious front	Material (bulge) with cavity(?) superposed on fan and streamer.
Feb 22	053	13:52~16:07	093	066	Feb 22 13:52-14:34	234 <sub>1</sub> ★	080	3	4	Mound	Mound superposed on streamer. Deflections.
											DATA GAPS: Feb 28 13:47 to Mar 01 00:03. Mar 01 19:04 to Mar 02 15:22. Mar 07 08:48 to 15:09. Mar 11 13:56 to 18:00.
Mar 14/15	073/074	~05:55~04:15	266	040	—	—	—	—	0	No clear front	Streamer expands slowly and blows out. Deflections.
											DATA GAP: Mar 17 14:13 to 20:18.
Mar 17	076	20:21-22:05	~101	~038	—	—	—	—	1	Cavity	Very faint cloud (or loop) with cavity superposed on streamer.
											DATA GAP: Mar 18 14:24 to 18:20.
Mar 21/22	080/081	03:10-01:40	078	035	—	—	—	—	0	Front at 03:10 only	Could be up to three events: 1. Small loop(?)/cavity in streamer. Data is streaked.
	080	03:10-04:35			—	—	—	—	0	No clear front	2. Structured material ejected in streamer. Streamer is disrupted. Data gap follows.
	080	09:19-12:27			—	—	—	—	1	Material	3. Concave-outward(?) shaped material superposed on streamer.
	080/081	23:28-01:40	081	038	—	—	—	—	0		DATA GAP: Mar 21 14:08 to 20:16.
Mar 28	087	06:34-16:37	255	040	—	—	—	—	0	No clear front	Slow expansion and partial blowout of streamer. Base of blowout appears concave-outward, 'V'-shaped. Data is streaked.

Speed<sub>1</sub> ⇒ Speed was determined from a constant velocity fit to the number of points indicated.

★ Preferred fit to the data. This quantity is included in the speed histograms.

## SMM C/P 1985 Coronal Mass Ejections page 3 of 8

Date	DOY	Time [UT]	Cent PA [deg]	Width [deg]	Kinematics						Comments
					Trajectory Times [UT]	Speed [km/s]	Speed PA	#Data Pts	Qual	Feature	
					—	—	—	—	0	No obvious front	DATA GAP: Mar 31 04:14 to 17:46.
Mar 31/ Apr 01	090/091	<17:49~01:41	095	060	—	—	—	—	0	No obvious front	Faint material around streamer. Could have missed front during data gap. Bright streamer visible before data gap may have been blown out between 03:49 and 17:49.
					—	—	—	—	0	Front at 04:18 only	DATA GAPS: Apr 02 17:37 to 20:06. Apr 12 00:35 to 22:22.
Apr 14	104	04:18-07:27	098	040	—	—	—	—	0	Front at 04:18 only	Loop/cavity superposed on streamer. Streamer is disrupted.
					—	—	—	—	0	No clear front	DATA GAPS: Apr 16 02:00 to 06:34. Apr 17 15:45 to 21:53. Apr 19 21:04 to Apr 20 00:12.
Apr 23/24	113/114	20:07-01:42	064	074	—	—	—	—	0	No clear front	Faint, fuzzy mound (with cavity?) superposed on faint streamer (or fan). Streamer is disrupted.
Apr 24	114	09:37-10:23	~035	~210	—	—	—	—	1	Loop in two images only at 09:37 and 09:40. Very little motion.	Possible halo. Broad loop/cavity superposed on existing structures in south and east images. Material (loop?/cavity?) in north and west. Data is streaked.
May 02	122	08:05-12:49	270	040	May 02 08:05-08:47	746 <sub>1</sub> *	265	2	4	Loop	Loop/cavity with core superposed on rays and south edge of streamer. Deflections. Region is disrupted.
May 05	125	07:28~13:06	064	025	—	—	—	—	0	No clear front	Fan, north of streamer, widens and blows out.
May 05	125	12:09~15:05	275	080	May 05 12:09-12:18	664 <sub>1</sub> *	295	2	6	Loop	Big, irregularly-shaped loop/cavity superposed on streamer. Streamer is disrupted. Deflections.
May 06	126	07:59~12:42	095	040	May 06 07:59-08:39	116 <sub>1</sub> *	095	2	5	Cavity	Loop(?)/cavity and core superposed on streamer. Loop fades.

Speed<sub>1</sub> ⇒ Speed was determined from a constant velocity fit to the number of points indicated.

\* Preferred fit to the data. This quantity is included in the speed histograms.

## SMM C/P 1985 Coronal Mass Ejections page 4 of 8

Date	DOY	Time [UT]	Cent PA [deg]	Width [deg]	Kinematics						Comments
					Trajectory Times [UT]	Speed [km/s]	Speed PA	#Data Pts	Qual	Feature	
					—	—	—	—	—		DATA GAPS: May 08 14:13 to May 09 03:33. May 09 07:27 to 11:29. May 10 07:06 to 13:14.
May 12	132	08:57-11:56	289	015	—	—	—	—	0	No clear front	Narrow fan (or jets) ejected north of streamer.
May 12/13	132/133	22:56-01:08	273	040	May 12 22:56-23:34	214 <sub>1</sub> ★	275	2	3	Mound	Faint mound (or cloud) superposed on streamer.
					—	—	—	—	—		DATA GAPS: May 16 07:43 to 19:34. May 17 07:21 to 20:44. May 19 09:41 to 16:49. May 24 07:27 to 10:47. May 27 19:56 to May 28 14:42. Jun 04 12:31 to Jun 05 17:38.
Jun 12	163	~06:11~19:46	~257	~021	—	—	—	—	0	No clear front	Slow-moving cloud superposed on streamer. Streamer is disrupted. Deflections.
Jun 16/17	167/168	00:38~23:51	091	060	—	—	—	—	0	No clear front	Slow blowout of streamer.
Jun 18/19	169/170	00:41~23:11	257	072	—	—	—	—	0	No clear front	Slow southward expansion of pre-existing fan (or streamer) south of equatorial streamer. Fan is blown out. Deflections.
					—	—	—	—	—		DATA GAPS: Jun 26 05:14 to 15:31. Jun 28 11:30 to 22:31.
Jun 28/29	179/180	<22:34~06:26	097	027	—	—	—	—	1	Cavity	Faint, fuzzy loop(?) / cavity and core in streamer (or fan). Data is streaked. We may have missed an event during data gap. Fan (or streamer) at 105° is blown out during data gap from Jun 28 11:30 to 22:34.
Jun 29	180	17:26-20:34	102	045	Jun 29 17:26-18:03	329 <sub>1</sub> ★	107	2	4	Loop	Multiple(?) loops / cavity and core superposed on streamer. Streamer is disrupted.
					Jun 29 17:26-19:00	349 <sub>1</sub> 483 <sub>2</sub> ★	105†	3	4	Cavity	Data is streaked.

† Position of feature was measured along a non-radial line.

Speed<sub>1</sub> ⇒ Speed was determined from a constant velocity fit to the number of points indicated.

Speed<sub>2</sub> ⇒ Speed was determined from a constant acceleration fit to the number of points indicated evaluated at the time of the last measurement (in Trajectory Times column).

\* Preferred fit to the data. This quantity is included in the speed histograms.

## SMM C/P 1985 Coronal Mass Ejections page 5 of 8

Date	DOY	Time [UT]	Cent PA [deg]	Width [deg]	Kinematics						Comments
					Trajectory Times [UT]	Speed [km/s]	Speed PA	#Data Pts	Qual	Feature	
Jun 30	181	00:21-02:52	095	042	Jun 30 00:21-01:18	305 <sub>1</sub> ★	085	2	3	Loop	Loop(s?) / cavity with diffuse core superposed on and south of streamer. Streamer is disrupted. Data is streaked.
					Jun 30 00:21-01:55	377 <sub>1</sub> 623 <sub>2</sub> ★	085	3	3	Cavity	
Jul 02	183	21:32-22:29	100	055	Jul 02 21:32-21:35	1280 <sub>1</sub> ★	110	2	5	Loop	Loop / cavity and small, faint, loop-shaped(?) core superposed on and south of streamer. Large deflections.
					Jul 02 21:32-21:35	1600 <sub>1</sub> ★	110	2	5	Cavity	
											DATA GAPS: Jul 03 17:27 to 20:27. Jul 06 02:01 to 05:50.
Jul 09	190	02:22-06:11	253	100	Jul 09 02:25-03:02	690 <sub>1</sub> ★	270	2	5	Loop	Loop / cavities superposed on streamer and faint fan. Looks like two overlapping loops at 03:02. Streamer is disrupted. Data is streaked.
					Jul 09 02:25-03:02	752 <sub>1</sub> ★	275	2	5	Northern cavity	
					Jul 09 02:22-02:25	800 <sub>1</sub> ★	245	2	3	Southern cavity	
Jul 15/16	196/197	20:29~01:16	266	054	Jul 15 20:29-21:57	185 <sub>1</sub> ★	270	2	2	Loop	Loop / cavity and core. Legs of loop are superposed on streamers. Streamers are deflected. Southern, fainter streamer is disrupted. Some streaking in data.
Jul 17	198	03:41-05:24	~288	~100	Jul 17 03:41-03:50	1195 <sub>1</sub> ★	289	2	8	Loop	Big, complex loop / cavity and possible core superposed on and south of streamer. Loop is immediately adjacent to next event. Big deflections. Streamer is disrupted. Event may be wider.
					Jul 17 03:41-03:50	1129 <sub>1</sub> ★	285	2	8	Cavity	
Jul 17	198	03:47-05:21	215	048	Jul 17 03:47-03:50	1600 <sub>1</sub> ★	220	2	8	Loop	Loop / cavity and faint core. Southern edge is obscured by pylon shadow. Loop is immediately adjacent to previous event.
					Jul 17 03:47-03:50	1000 <sub>1</sub> ★	220	2	9	Cavity	
Jul 25	206	19:13-23:59	085	042	Jul 25 19:13-19:57	223 <sub>1</sub> ★	080	3	4	Loop	Faint loop / cavity superposed on fan. Data dropouts obscure parts of event.
											DATA GAP: Jul 27 00:13 to 16:50.
Aug 06/07	218/219	21:25~17:25	092	045	—	—	—	—	0	No clear front	Slow-moving cloud superposed on streamer. Additional material is ejected in same region from Aug 07 15:38 to 17:25.

Speed<sub>1</sub> ⇒ Speed was determined from a constant velocity fit to the number of points indicated.

Speed<sub>2</sub> ⇒ Speed was determined from a constant acceleration fit to the number of points indicated evaluated at the time of the last measurement (in Trajectory Times column).

\* Preferred fit to the data. This quantity is included in the speed histograms.

## SMM C/P 1985 Coronal Mass Ejections page 6 of 8

Date	DOY	Time [UT]	Cent PA [deg]	Width [deg]	Kinematics						Comments
					Trajectory Times [UT]	Speed [km/s]	Speed PA	#Data Pts	Qual	Feature	
Aug 07/08	219/220	20:27>08:06	263	034	Aug 07/08 20:27-04:38	044 <sub>1</sub> 078 <sub>2</sub> ★	265	11	5	Cavity	Loop/cavity superposed on streamer. Small blob may be ejected along southern leg of loop just prior to data gap. Event ends during data gap.
											DATA GAP: Aug 08 08:06 to 18:22.
Aug 11	223	15:34-17:52	283	050	Aug 11 15:34-16:05	391 <sub>1</sub> ★ 431 <sub>2</sub>	295	5	6	Outer loop	Complex, dimpled, concentric loops/cavities superposed on streamer. Bright (prominence?) blobs are visible on northern legs of outer and innermost loops at 305° and 295° respectively. Northern part of streamer is disrupted. Deflections.
					Aug 11 15:34-16:05	342 <sub>1</sub> ★ 188 <sub>2</sub>	295	6	7	Outer cavity	
					Aug 11 15:34-16:05	406 <sub>1</sub> ★ 468 <sub>2</sub>	295	6	7	Inner loop	
Aug 16/17	228/229	23:02~18:31	295	030	Aug 16/17 23:39-02:10	054 <sub>1</sub> ★ 038 <sub>2</sub>	295	4	4	Mound	Faint mound superposed on fan (or streamer). Fan is disrupted.
Aug 19/20	231/232	12:15-23:28	083	080	Aug 19 12:53-14:27	062 <sub>1</sub> ★ 063 <sub>2</sub>	095	3	4	Cavity	Faint loop(?) / cavity with possible core superposed on and north of streamer. Loop is gone by Aug 19 ~19:10. Additional faint material is ejected throughout Aug 20.
Aug 24/25	236/237	~04:16~23:06	255	050	—	—	—	—	0	No clear front	Very slow swelling and blowout of streamer. Some acceleration early Aug 25. Concave-outward, 'U'-shaped material visible from Aug 25 19:19 until 22:27.
											DATA GAP: Sep 05 16:57 to Sep 06 14:16.
Sep 11	254	02:59-05:55	063	010	—	—	—	—	1	Jet	Narrow jet appears north of streamer, widens and disappears.
Sep 12	255	03:56-18:05	094	008	—	—	—	—	0	No clear fronts	Multiple, narrow jets (or rays) are ejected in succession just north of fan (or streamer).
Sep 15/17	258/260	~08:10~05:47	275?	090?	—	—	—	—	0	No clear front	Very slow expansion of faint material superposed on streamer(s?). Region is disrupted. Deflections. Some streaking in data.

Speed<sub>1</sub> ⇒ Speed was determined from a constant velocity fit to the number of points indicated.

Speed<sub>2</sub> ⇒ Speed was determined from a constant acceleration fit to the number of points indicated evaluated at the time of the last measurement (in Trajectory Times column).

\* Preferred fit to the data. This quantity is included in the speed histograms.

## SMM C/P 1985 Coronal Mass Ejections page 7 of 8

Date	DOY	Time [UT]	Cent PA [deg]	Width [deg]	Kinematics						Comments
					Trajectory Times [UT]	Speed [km/s]	Speed PA	#Data Pts	Qual	Feature	
Sep 17/18	260/261	17:38~03:17	~089	~046	Sep 17 17:38-19:51	090 <sub>1</sub> ★ 170 <sub>2</sub>	085	4	2	Loop	Faint loop(?)/cavity superposed on fuzzy streamer (or fan). Loop is visible from Sep 17 17:38 until ~21:25. Additional material visible from Sep 17 ~23:55 until Sep 18 ~03:17. Streamer is disrupted. Event may be wider. Data is streaked.
					Sep 17/18 23:55-01:29	103 <sub>1</sub> ★ 157 <sub>2</sub>	085	3	4	Material	
Sep 24/25	267/268	~04:10~13:01	~262	~025	—	—	—	—	1	Top of streamer	Very slow disruption of streamer. Event may be wider. Some streaking in data.
Sep 25	268	~05:32~12:46	~135	~030	—	—	—	—	1	Cloud	Very faint cloud.
Sep 25/28	268/271	~20:45~16:15	068	060	—	—	—	—	1	Material	Very slow blowout of streamer. Material ejected south of streamer from Sep 27 07:14~10:25.
											DATA GAP: Sep 26 14:39 to 21:45.
Oct 02/03	275/276	20:58-00:44	257	053	Oct 02 20:58-23:10	235 <sub>1</sub> ★ 226 <sub>2</sub>	265	12	6	Loop	Thin loop/cavity and structured(?) core superposed on and south of streamer. Loop becomes 'light-bulb'-shaped. Streamer is disrupted. Some streaking in data.
					Oct 02 20:58-23:10	234 <sub>1</sub> ★ 255 <sub>2</sub>	265	12	6	Cavity	
					Oct 02/03 21:01-00:10	174 <sub>1</sub> ★ 135 <sub>2</sub>	265	13	5	Core	
											DATA GAP: Oct 04 18:36 to 21:58.
Oct 05/06	278/279	~13:42~19:18	290	040	—	—	—	—	0	No clear front	Faint cloud on north side of streamer. Cloud expands slowly and blows out.
Oct 10/12	283/285	~20:49<01:08	~288	~045	—	—	—	—	1	Cavity	Slow disruption of streamer. Cavity blows out through south side of streamer. Ends during data gap. New structure forms Oct 11/12. Data is streaked.
											DATA GAP: Oct 11 14:47 to Oct 12 00:59.
Oct 25/26	298/299	two days	~260	~040	—	—	—	—	0	No clear front	Slow elongation and disruption of streamer.
Oct 25	298	~05:07~19:53	~085	~060	—	—	—	—	0	No clear front	Cloud superposed on streamer.
											DATA GAP: Nov 07 14:34 to Nov 08 14:59.

Speed<sub>1</sub> ⇒ Speed was determined from a constant velocity fit to the number of points indicated.

Speed<sub>2</sub> ⇒ Speed was determined from a constant acceleration fit to the number of points indicated evaluated at the time of the last measurement (in Trajectory Times column).

\* Preferred fit to the data. This quantity is included in the speed histograms.

## SMM C/P 1985 Coronal Mass Ejections page 8 of 8

Date	DOY	Time [UT]	Cent PA [deg]	Width [deg]	Kinematics						Comments
					Trajectory Times [UT]	Speed [km/s]	Speed PA	#Data Pts	Qual	Feature	
Nov 15/16	319/320	23:06~02:15	~107	~035	Nov 15/16 23:06-00:40	073 <sub>1</sub> ★ 045 <sub>2</sub>	105	3	2	Cloud	Cloud superposed on streamer. Could be wider. Data is partially streaked.
											DATA GAP: Nov 25 23:45 to Dec 04 15:18.
Dec 05	339	03:55~07:04	~095	~040	—	—	—	—	0	No clear front	Fuzzy material superposed on streamer. Bulge moves outward along streamer from 05:30 until 06:08. Poor quality data.
											DATA GAPS: Dec 09 13:58 to Dec 10 01:47. Dec 17 16:47 to Dec 18 14:09. Dec 23 15:15 to Dec 25 00:13. Dec 30 14:33 to Dec 31 16:33.

Speed<sub>1</sub> ⇒ Speed was determined from a constant velocity fit to the number of points indicated.

Speed<sub>2</sub> ⇒ Speed was determined from a constant acceleration fit to the number of points indicated evaluated at the time of the last measurement (in Trajectory Times column).

\* Preferred fit to the data. This quantity is included in the speed histograms.