

Datum	Begin	Duur (min)	Object A	Type	Object B	D (r)	S (")	H (°)	H ⊙ (°)	Phase ⊕ (°)	e ⊕ (°)
1-mei	4:09:17	0.77	Enceladus	Schaduwovergang.Begin	Saturnus	0.21	9.84	11.6	-1.7	86	39.4
1-mei	4:27:45	0.72	Enceladus	Overgang.Begin	Saturnus		8.07	14.2	0.9	86.1	39.3
1-mei	6:36:14	0.77	Enceladus	Schaduwovergang.Einde	Saturnus	-0.34	5.36	28.4	20.7	87.3	38.4
1-mei	7:04:11	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.04	30.2	25.1	87.5	38.2
1-mei	7:55:12	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.19	9.63	32.1	33	88	37.8
1-mei	8:09:08	0.5	Mimas	Overgang.Begin	Saturnus		8.1	32.3	35.1	88.1	37.7
1-mei	10:11:51	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.24	6.2	27.2	50.4	89.2	36.7
1-mei	10:28:33	0.5	Mimas	Overgang.Einde	Saturnus		8.08	25.7	51.7	89.3	36.5
1-mei	10:53:05	1.77	Tethys	Schaduwovergang.Begin	Saturnus	0.28	10.38	23.1	53.3	89.6	36.3
1-mei	11:19:10	1.64	Tethys	Overgang.Begin	Saturnus		8.09	20.2	54.3	89.8	36.1
1-mei	13:12:09	2.49	Saturnus	Verduistering.Begin	Dione	0.27	10.27	4.5	49.8	90.8	34.9
1-mei	13:36:03	1.77	Tethys	Schaduwovergang.Einde	Saturnus	-0.42	4.7	0.9	47.4	91	34.7
1-mei	14:14:10	1.64	Tethys	Overgang.Einde	Saturnus	-0.01	8.06	-5.1	42.8	91.4	34.3
1-mei	16:49:19	2.03	Saturnus	Bedekking.Einde	Dione	-0.01	8.01	-29	19.6	92.8	32.5
1-mei	19:09:04	0.54	Saturnus	Verduistering.Begin	Mimas	0.2	9.72	-43.9	-1.5	94	30.8
1-mei	20:41:33	0.77	Saturnus	Verduistering.Begin	Enceladus	0.22	9.88	-45.7	-13.3	94.8	29.7
1-mei	21:49:29	0.52	Saturnus	Bedekking.Einde	Mimas		8.11	-41.9	-19.5	95.5	29
1-mei	23:36:51	0.72	Saturnus	Bedekking.Einde	Enceladus		8.08	-29.4	-23.7	96.4	27.9
2-mei	6:32:24	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.19	9.66	28.4	20.3	100.2	24.5
2-mei	6:46:30	0.5	Mimas	Overgang.Begin	Saturnus		8.11	29.4	22.6	100.3	24.4
2-mei	8:49:04	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.24	6.19	31.8	41	101.5	23.4
2-mei	9:05:56	0.5	Mimas	Overgang.Einde	Saturnus		8.09	31.2	43.3	101.6	23.3
2-mei	9:32:28	1.77	Saturnus	Verduistering.Begin	Tethys	0.29	10.44	29.8	46.6	101.9	23.1
2-mei	11:40:47	10.86	Saturnus	Verduistering.Begin	Rhea	0.06	8.62	16.4	54.8	103.1	21.9
2-mei	12:54:30	1.64	Saturnus	Bedekking.Einde	Tethys		8.1	6.7	51.7	103.7	21.3
2-mei	13:02:24	0.77	Enceladus	Schaduwovergang.Begin	Saturnus	0.22	9.89	5.6	51	103.8	21.2
2-mei	13:21:13	0.72	Enceladus	Overgang.Begin	Saturnus		8.08	2.7	49.3	103.9	21
2-mei	15:14:26	3.64	Saturnus	Bedekking.Einde	Rhea	-0.03	7.89	-15.3	34.4	105	19.8
2-mei	15:29:27	0.77	Enceladus	Schaduwovergang.Einde	Saturnus	-0.34	5.33	-17.5	32.4	105.1	19.6
2-mei	15:57:47	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.06	-21.8	28	105.4	19.3
2-mei	17:46:00	0.54	Saturnus	Verduistering.Begin	Mimas	0.2	9.75	-36.6	11	106.4	18
2-mei	20:26:37	0.52	Saturnus	Bedekking.Einde	Mimas		8.12	-45.9	-11.3	107.9	16.1

2-mei	21:59:52	2.5 Dione	Schaduwovergang.Begin	Saturnus	0.27	10.34	-40.5	-20.1	108.7	15
2-mei	22:30:26	2.04 Dione	Overgang.Begin	Saturnus	-0.01	8.03	-37.3	-21.8	109	14.6
3-mei	0:33:24	2.5 Dione	Schaduwovergang.Einde	Saturnus	-0.57	3.53	-20.4	-22.3	110.1	13.3
3-mei	1:38:24	2.04 Dione	Overgang.Einde	Saturnus	-0.02	8	-10.3	-18.4	110.7	12.7
3-mei	5:09:36	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.19	9.69	20.5	7.6	112.7	10.9
3-mei	5:23:51	0.5 Mimas	Overgang.Begin	Saturnus		8.12	22.2	9.8	112.8	10.8
3-mei	5:34:40	0.77 Saturnus	Verduistering.Begin	Enceladus	0.22	9.93	23.4	11.5	112.9	10.8
3-mei	7:26:16	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.24	6.18	31.6	29	114	9.9
3-mei	7:43:19	0.5 Mimas	Overgang.Einde	Saturnus		8.1	32.1	31.7	114.1	9.8
3-mei	8:11:37	1.77 Tethys	Schaduwovergang.Begin	Saturnus	0.29	10.47	32.4	36	114.4	9.6
3-mei	8:30:28	0.72 Saturnus	Bedekking.Einde	Enceladus		8.09	32.2	38.7	114.6	9.4
3-mei	8:38:23	1.64 Tethys	Overgang.Begin	Saturnus		8.11	32	39.9	114.6	9.3
3-mei	10:54:47	1.77 Tethys	Schaduwovergang.Einde	Saturnus	-0.43	4.65	22.2	54	115.9	8.2
3-mei	11:33:34	1.64 Tethys	Overgang.Einde	Saturnus	-0.01	8.08	17.5	55.1	116.3	7.9
3-mei	16:22:55	0.54 Saturnus	Verduistering.Begin	Mimas	0.2	9.78	-26	24.3	119	5
3-mei	19:03:44	0.52 Saturnus	Bedekking.Einde	Mimas		8.13	-44	-0.3	120.5	3.2
3-mei	21:55:32	0.77 Enceladus	Schaduwovergang.Begin	Saturnus	0.22	9.94	-40.6	-19.4	122.1	1.7
3-mei	22:14:40	0.72 Enceladus	Overgang.Begin	Saturnus		8.1	-38.7	-20.7	122.3	1.6
4-mei	0:22:40	0.77 Enceladus	Schaduwovergang.Einde	Saturnus	-0.35	5.3	-21.6	-22.5	123.5	1.9
4-mei	0:51:22	0.72 Enceladus	Overgang.Einde	Saturnus	-0.01	8.07	-17.2	-21.3	123.8	2.1
4-mei	3:46:48	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.19	9.72	10	-4.1	125.4	3.4
4-mei	4:01:13	0.5 Mimas	Overgang.Begin	Saturnus		8.14	12.1	-2.1	125.6	3.5
4-mei	6:03:29	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.24	6.17	26.6	16.2	126.7	4.4
4-mei	6:20:41	0.5 Mimas	Overgang.Einde	Saturnus		8.11	28.1	19	126.9	4.5
4-mei	6:50:58	1.77 Saturnus	Verduistering.Begin	Tethys	0.29	10.53	30.2	23.8	127.2	4.7
4-mei	6:53:29	2.48 Saturnus	Verduistering.Begin	Dione	0.28	10.42	30.4	24.3	127.2	4.8
4-mei	10:13:52	1.64 Saturnus	Bedekking.Einde	Tethys		8.12	26.1	51.4	129.1	6.2
4-mei	10:32:55	2.02 Saturnus	Bedekking.Einde	Dione	-0.01	8.05	24.2	53	129.3	6.3
4-mei	14:27:47	0.77 Saturnus	Verduistering.Begin	Enceladus	0.23	9.99	-8.8	41.8	131.5	8.4
4-mei	14:59:51	0.54 Saturnus	Verduistering.Begin	Mimas	0.21	9.81	-13.9	37.2	131.8	8.7
4-mei	17:24:03	0.72 Saturnus	Bedekking.Einde	Enceladus		8.11	-34.8	14.8	133.2	10.3
4-mei	17:40:51	0.52 Saturnus	Bedekking.Einde	Mimas		8.14	-36.8	12.2	133.3	10.5
4-mei	17:53:34	10.47 Rhea	Schaduwovergang.Begin	Saturnus	0.08	8.8	-38.8	9.5	133.5	10.7

4-mei	18:11:43	3.61	Rhea	Overgang.Begin	Saturnus	-0.03	7.92	-40.3	7.3	133.6	10.9
4-mei	19:02:31	10.47	Rhea	Schaduwovergang.Einde	Saturnus	-0.38	5.07	-44.4	-0.6	134.1	11.5
4-mei	21:30:57	3.61	Rhea	Overgang.Einde	Saturnus	-0.03	7.89	-42.3	-17.4	135.5	13.4
5-mei	2:24:00	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.2	9.75	-2	-13.8	138.3	16.8
5-mei	2:38:34	0.5	Mimas	Overgang.Begin	Saturnus		8.15	0.3	-12.2	138.4	16.9
5-mei	4:40:42	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.24	6.16	17.9	3.8	139.6	18.1
5-mei	4:58:03	0.5	Mimas	Overgang.Einde	Saturnus		8.12	20.1	6.4	139.8	18.3
5-mei	5:30:15	1.77	Tethys	Schaduwovergang.Begin	Saturnus	0.3	10.56	23.8	11.4	140.1	18.6
5-mei	5:57:41	1.64	Tethys	Overgang.Begin	Saturnus		8.13	26.5	15.6	140.3	18.8
5-mei	6:48:38	0.77	Enceladus	Schaduwovergang.Begin	Saturnus	0.23	10	30.3	23.6	140.8	19.2
5-mei	7:08:07	0.72	Enceladus	Overgang.Begin	Saturnus		8.12	31.3	26.7	141	19.4
5-mei	8:13:36	1.76	Tethys	Schaduwovergang.Einde	Saturnus	-0.44	4.6	32.4	36.8	141.6	19.9
5-mei	8:53:03	1.64	Tethys	Overgang.Einde	Saturnus	-0.01	8.1	31.4	42.4	142	20.2
5-mei	9:15:53	0.77	Enceladus	Schaduwovergang.Einde	Saturnus	-0.35	5.27	30.3	45.3	142.2	20.4
5-mei	9:44:55	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.09	28.3	48.8	142.5	20.6
5-mei	13:36:47	0.54	Saturnus	Verduistering.Begin	Mimas	0.21	9.84	-1.3	48.4	144.7	22.5
5-mei	15:41:10	2.49	Dione	Schaduwovergang.Begin	Saturnus	0.29	10.5	-21	31.1	145.9	23.7
5-mei	16:13:03	2.03	Dione	Overgang.Begin	Saturnus	-0.01	8.07	-25.7	26.1	146.2	24
5-mei	16:17:57	0.52	Saturnus	Bedekking.Einde	Mimas		8.15	-26.3	25.5	146.3	24.1
5-mei	18:15:30	2.49	Dione	Schaduwovergang.Einde	Saturnus	-0.58	3.42	-40.9	7	147.4	25.4
5-mei	19:21:54	2.03	Dione	Overgang.Einde	Saturnus	-0.02	8.03	-45.2	-2.5	148	26.2
5-mei	23:20:57	0.77	Saturnus	Verduistering.Begin	Enceladus	0.23	10.04	-29.5	-22.5	150.3	29.2
6-mei	1:01:11	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.2	9.78	-14.5	-20.2	151.3	30.4
6-mei	1:15:55	0.5	Mimas	Overgang.Begin	Saturnus		8.16	-12.2	-19.3	151.4	30.6
6-mei	2:17:41	0.72	Saturnus	Bedekking.Einde	Enceladus		8.13	-2.4	-14.1	152	31.3
6-mei	3:17:54	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.25	6.15	6.9	-7.3	152.6	32
6-mei	3:35:25	0.5	Mimas	Overgang.Einde	Saturnus		8.13	9.4	-5.1	152.7	32.1
6-mei	4:09:28	1.76	Saturnus	Verduistering.Begin	Tethys	0.3	10.61	14.4	-0.4	153.1	32.5
6-mei	7:33:12	1.64	Saturnus	Bedekking.Einde	Tethys		8.14	32.2	30.9	155	34.4
6-mei	12:13:42	0.54	Saturnus	Verduistering.Begin	Mimas	0.21	9.88	10.7	55.3	157.7	36.6
6-mei	14:55:03	0.52	Saturnus	Bedekking.Einde	Mimas		8.16	-14.2	38.4	159.2	38
6-mei	15:41:45	0.77	Enceladus	Schaduwovergang.Begin	Saturnus	0.23	10.05	-21.5	31.3	159.7	38.4
6-mei	16:01:33	0.72	Enceladus	Overgang.Begin	Saturnus		8.13	-24.4	28.2	159.8	38.6

6-mei	18:09:06	0.77	Enceladus	Schaduwovergang.Einde	Saturnus	-0.36	5.25	-40.5	8.3	161.1	39.9
6-mei	18:38:28	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.1	-43	3.9	161.3	40.3
6-mei	23:38:23	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.2	9.81	-26.5	-22.3	164.2	44
6-mei	23:53:16	0.5	Mimas	Overgang.Begin	Saturnus		8.17	-24.3	-22.2	164.3	44.1
7-mei	0:04:21	9.64	Saturnus	Verduistering.Begin	Rhea	0.11	9.07	-22	-22	164.5	44.3
7-mei	0:34:47	2.47	Saturnus	Verduistering.Begin	Dione	0.29	10.58	-17.9	-21.2	164.7	44.7
7-mei	1:55:06	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.25	6.14	-5.4	-16	165.5	45.6
7-mei	2:12:47	0.5	Mimas	Overgang.Einde	Saturnus		8.14	-2.6	-14.4	165.6	45.8
7-mei	2:48:47	1.76	Tethys	Schaduwovergang.Begin	Saturnus	0.3	10.64	3.1	-10.5	166	46.3
7-mei	3:16:50	1.64	Tethys	Overgang.Begin	Saturnus		8.15	7.4	-7.1	166.2	46.6
7-mei	3:47:26	3.56	Saturnus	Bedekking.Einde	Rhea	-0.03	7.96	11.9	-3.1	166.5	47
7-mei	4:16:23	2.01	Saturnus	Bedekking.Einde	Dione	-0.01	8.09	15.8	0.8	166.8	47.3
7-mei	5:32:19	1.76	Tethys	Schaduwovergang.Einde	Saturnus	-0.44	4.55	24.8	12.1	167.5	48
7-mei	6:12:23	1.64	Tethys	Overgang.Einde	Saturnus	-0.01	8.12	28.4	18.4	167.9	48.4
7-mei	8:14:04	0.77	Saturnus	Verduistering.Begin	Enceladus	0.23	10.09	32.4	37.3	169	49.5
7-mei	10:50:38	0.54	Saturnus	Verduistering.Begin	Mimas	0.21	9.91	21.2	54.9	170.4	50.8
7-mei	11:11:14	0.72	Saturnus	Bedekking.Einde	Enceladus		8.14	18.7	55.8	170.6	50.9
7-mei	13:32:09	0.52	Saturnus	Bedekking.Einde	Mimas		8.17	-1.7	49.4	171.9	52
7-mei	22:15:34	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.2	9.84	-36.9	-19.6	176.1	57.4
7-mei	22:30:36	0.5	Mimas	Overgang.Begin	Saturnus		8.18	-35.1	-20.4	176.2	57.6
8-mei	0:32:19	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.25	6.13	-17.8	-21	176.9	59.1
8-mei	0:34:53	0.77	Enceladus	Schaduwovergang.Begin	Saturnus	0.23	10.1	-17.4	-20.9	176.9	59.1
8-mei	0:50:08	0.5	Mimas	Overgang.Einde	Saturnus		8.15	-15	-20.2	176.9	59.3
8-mei	0:54:58	0.72	Enceladus	Overgang.Begin	Saturnus		8.15	-14.3	-20	177	59.4
8-mei	1:27:59	1.76	Saturnus	Verduistering.Begin	Tethys	0.31	10.7	-9	-17.9	177.1	59.8
8-mei	3:02:18	0.77	Enceladus	Schaduwovergang.Einde	Saturnus	-0.36	5.22	5.7	-8.7	177.2	60.9
8-mei	3:32:00	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.12	10.1	-5	177.2	61.3
8-mei	4:52:32	1.64	Saturnus	Bedekking.Einde	Tethys		8.17	20.8	6.3	177	62.2
8-mei	9:22:37	2.48	Dione	Schaduwovergang.Begin	Saturnus	0.3	10.65	29.2	47	175.4	64.8
8-mei	9:27:34	0.54	Saturnus	Verduistering.Begin	Mimas	0.21	9.94	28.9	47.5	175.4	64.8
8-mei	9:55:48	2.02	Dione	Overgang.Begin	Saturnus	-0.01	8.1	26.5	50.8	175.2	65
8-mei	11:57:45	2.48	Dione	Schaduwovergang.Einde	Saturnus	-0.59	3.32	11.9	56.3	174.2	66
8-mei	12:09:15	0.52	Saturnus	Bedekking.Einde	Mimas		8.18	10.4	56	174.1	66

8-mei	13:05:28	2.02	Dione	Overgang.Einde	Saturnus	-0.01	8.07	1.8	52.2	173.6	66.5
8-mei	17:07:10	0.76	Saturnus	Verduistering.Begin	Enceladus	0.24	10.14	-34.4	18.3	171.6	68.4
8-mei	20:04:47	0.72	Saturnus	Bedekking.Einde	Enceladus		8.16	-45.7	-7.3	170	70.2
8-mei	20:52:46	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.2	9.87	-43.9	-12.7	169.6	70.7
8-mei	21:07:56	0.5	Mimas	Overgang.Begin	Saturnus		8.19	-42.9	-14.2	169.4	70.9
8-mei	23:09:31	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.25	6.12	-29.5	-21.5	168.3	72.3
8-mei	23:27:29	0.5	Mimas	Overgang.Einde	Saturnus		8.16	-27	-21.7	168.2	72.5
9-mei	0:07:17	1.76	Tethys	Schaduwovergang.Begin	Saturnus	0.31	10.73	-21	-21.5	167.8	73
9-mei	0:35:57	1.64	Tethys	Overgang.Begin	Saturnus		8.18	-16.6	-20.6	167.5	73.4
9-mei	2:51:00	1.76	Tethys	Schaduwovergang.Einde	Saturnus	-0.45	4.51	4.6	-9.7	166.3	75.1
9-mei	3:31:39	1.64	Tethys	Overgang.Einde	Saturnus	-0.01	8.15	10.6	-4.8	166	75.6
9-mei	6:17:18	9.39	Rhea	Schaduwovergang.Begin	Saturnus	0.13	9.24	29.6	20.2	164.4	77.4
9-mei	6:40:32	3.54	Rhea	Overgang.Begin	Saturnus	-0.03	7.99	30.8	23.4	164.3	77.6
9-mei	7:34:13	9.39	Rhea	Schaduwovergang.Einde	Saturnus	-0.4	4.93	32.5	32.3	163.7	78.2
9-mei	8:04:30	0.54	Saturnus	Verduistering.Begin	Mimas	0.22	9.97	32.5	36.2	163.5	78.4
9-mei	9:27:59	0.77	Enceladus	Schaduwovergang.Begin	Saturnus	0.24	10.15	28.6	47.8	162.8	79.2
9-mei	9:48:23	0.72	Enceladus	Overgang.Begin	Saturnus		8.17	26.9	50.2	162.6	79.3
9-mei	10:03:41	3.54	Rhea	Overgang.Einde	Saturnus	-0.03	7.96	25.4	51.9	162.4	79.5
9-mei	10:46:20	0.52	Saturnus	Bedekking.Einde	Mimas		8.19	20.9	55.1	162	79.8
9-mei	11:55:30	0.77	Enceladus	Schaduwovergang.Einde	Saturnus	-0.37	5.2	11.8	56.6	161.4	80.3
9-mei	12:25:31	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.14	7.4	55.5	161.1	80.5
9-mei	18:16:03	2.45	Saturnus	Verduistering.Begin	Dione	0.31	10.73	-42.1	7.7	158	83.2
9-mei	19:29:57	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.21	9.9	-45.7	-2.6	157.3	83.9
9-mei	19:45:16	0.5	Mimas	Overgang.Begin	Saturnus		8.2	-45.8	-4.6	157.2	84.1
9-mei	21:46:43	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.11	-39.2	-17.2	156.1	85.4
9-mei	21:59:41	2.01	Saturnus	Bedekking.Einde	Dione	-0.01	8.12	-37.7	-18.2	156	85.5
9-mei	22:04:50	0.5	Mimas	Overgang.Einde	Saturnus		8.17	-37.2	-18.5	155.9	85.6
9-mei	22:46:29	1.76	Saturnus	Verduistering.Begin	Tethys	0.31	10.79	-32	-20.6	155.6	86
10-mei	2:00:16	0.76	Saturnus	Verduistering.Begin	Enceladus	0.24	10.19	-2.7	-14.8	153.8	88.4
10-mei	2:11:48	1.64	Saturnus	Bedekking.Einde	Tethys		8.19	-0.9	-13.6	153.7	88.5
10-mei	4:58:18	0.72	Saturnus	Bedekking.Einde	Enceladus		8.18	22.3	7.5	152.3	90.5
10-mei	6:41:26	0.54	Saturnus	Verduistering.Begin	Mimas	0.22	10	31	23.5	151.3	91.6
10-mei	9:23:25	0.52	Saturnus	Bedekking.Einde	Mimas		8.21	28.7	47.5	149.9	93.1

10-mei	18:07:08	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.21	9.93	-41.5	9.4	145.3	97
10-mei	18:21:07	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.24	10.2	-42.7	7.3	145.2	97.1
10-mei	18:22:36	0.5	Mimas	Overgang.Begin	Saturnus		8.21	-42.8	7.1	145.2	97.1
10-mei	18:41:49	0.72	Enceladus	Overgang.Begin	Saturnus		8.19	-44	4.3	145	97.3
10-mei	20:23:55	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.1	-45	-9.1	144.1	98.2
10-mei	20:42:10	0.5	Mimas	Overgang.Einde	Saturnus		8.18	-44.1	-11.1	144	98.4
10-mei	20:48:45	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.37	5.18	-43.7	-11.8	143.9	98.4
10-mei	21:19:03	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.15	-41.4	-14.8	143.6	98.7
10-mei	21:25:50	1.76	Tethys	Schaduwovergang.Begin	Saturnus	0.32	10.81	-40.8	-15.4	143.6	98.8
10-mei	21:55:06	1.64	Tethys	Overgang.Begin	Saturnus		8.2	-37.8	-17.6	143.3	99.1
11-mei	0:09:45	1.76	Tethys	Schaduwovergang.Einde	Saturnus	-0.46	4.46	-19.5	-20.9	142.1	100.6
11-mei	0:50:58	1.64	Tethys	Overgang.Einde	Saturnus	-0.01	8.17	-13	-19.4	141.8	101.1
11-mei	3:03:53	2.47	Dione	Schaduwovergang.Begin	Saturnus	0.31	10.8	7.7	-7.7	140.6	102.7
11-mei	3:38:16	2.01	Dione	Overgang.Begin	Saturnus	-0.01	8.14	12.7	-3.5	140.3	103.1
11-mei	5:18:22	0.54	Saturnus	Verduistering.Begin	Mimas	0.22	10.03	24.9	10.7	139.5	104.2
11-mei	5:39:47	2.47	Dione	Schaduwovergang.Einde	Saturnus	-0.61	3.23	27	14.2	139.3	104.5
11-mei	6:48:40	2.01	Dione	Overgang.Einde	Saturnus	-0.01	8.11	31.6	25	138.7	105.2
11-mei	8:00:31	0.52	Saturnus	Bedekking.Einde	Mimas		8.22	32.5	36.1	138.1	105.9
11-mei	10:53:24	0.76	Saturnus	Verduistering.Begin	Enceladus	0.25	10.25	19.2	56.1	136.6	107.4
11-mei	12:27:53	8.76	Saturnus	Verduistering.Begin	Rhea	0.15	9.49	5.4	55.6	135.8	108.1
11-mei	13:51:50	0.71	Saturnus	Bedekking.Einde	Enceladus		8.2	-7	48	135.1	108.7
11-mei	16:19:25	3.5	Saturnus	Bedekking.Einde	Rhea	-0.02	8.04	-29.7	26.2	133.8	109.7
11-mei	16:44:19	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.21	9.96	-32.8	22.5	133.6	109.8
11-mei	16:59:55	0.5	Mimas	Overgang.Begin	Saturnus		8.22	-34.8	20	133.5	109.9
11-mei	19:01:07	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.09	-45.1	1.7	132.5	110.8
11-mei	19:19:31	0.5	Mimas	Overgang.Einde	Saturnus		8.19	-45.6	-0.8	132.3	111
11-mei	20:05:02	1.76	Saturnus	Verduistering.Begin	Tethys	0.32	10.87	-45.4	-6.8	131.9	111.4
11-mei	23:31:04	1.63	Saturnus	Bedekking.Einde	Tethys		8.21	-24.7	-21	130.2	113.4
12-mei	3:14:13	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.25	10.25	9.7	-6.4	128.3	115.9
12-mei	3:35:11	0.72	Enceladus	Overgang.Begin	Saturnus		8.2	12.7	-3.7	128.1	116.1
12-mei	3:55:18	0.54	Saturnus	Verduistering.Begin	Mimas	0.22	10.05	15.4	-1.1	128	116.3
12-mei	5:41:56	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.37	5.16	27.5	14.6	127.1	117.5
12-mei	6:12:32	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.17	29.8	19.4	126.8	117.9

12-mei	6:37:35	0.52	Saturnus	Bedekking.Einde	Mimas	8.23	31.2	23.3	126.6	118.1
12-mei	11:57:23	2.44	Saturnus	Verduistering.Begin	Dione	0.32	10.88	9.9	57.3	124
12-mei	15:21:31	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.21	9.99	-21.6	35.6	122.3
12-mei	15:37:15	0.5	Mimas	Overgang.Begin	Saturnus	8.24	-23.9	33.2	122.2	122.5
12-mei	15:42:54	2.0	Saturnus	Bedekking.Einde	Dione	-0.01	8.16	-24.9	32.2	122.1
12-mei	17:38:19	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.09	-39.5	14.2	121.2
12-mei	17:56:51	0.5	Mimas	Overgang.Einde	Saturnus	8.2	-41.2	11.4	121	123.4
12-mei	18:44:21	1.76	Tethys	Schaduwovergang.Begin	Saturnus	0.32	10.9	-44.5	4.2	120.6
12-mei	19:14:10	1.63	Tethys	Overgang.Begin	Saturnus	8.23	-45.5	0	120.4	124
12-mei	19:46:30	0.76	Saturnus	Verduistering.Begin	Enceladus	0.25	10.3	-45.7	-4.2	120.1
12-mei	21:28:26	1.76	Tethys	Schaduwovergang.Einde	Saturnus	-0.46	4.43	-39.8	-15.1	119.3
12-mei	22:10:10	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.19	-35.2	-18.1	119
12-mei	22:45:19	0.71	Saturnus	Bedekking.Einde	Enceladus	8.21	-30.7	-19.8	118.7	125.4
13-mei	2:32:15	0.54	Saturnus	Verduistering.Begin	Mimas	0.22	10.08	4	-11	116.8
13-mei	5:14:40	0.52	Saturnus	Bedekking.Einde	Mimas	8.24	25.3	10.6	115.5	128.1
13-mei	10:52:53	64.97	Titan	Overgang.Begin	Saturnus	-0.09	7.49	14.1	57.7	112.5
13-mei	12:07:20	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.25	10.3	8.1	57.3	133.5
13-mei	12:21:29	67.08	Titan	Overgang.Einde	Saturnus	-0.09	7.47	0.9	54.4	112.2
13-mei	12:28:34	0.72	Enceladus	Overgang.Begin	Saturnus	8.22	4.9	56.3	111.8	134
13-mei	13:58:42	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.21	10.02	-9.2	47.5	112
13-mei	14:14:34	0.5	Mimas	Overgang.Begin	Saturnus	8.25	-11.7	45.5	111.3	134.6
13-mei	14:35:08	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.38	5.14	-15	42.6	111.2
13-mei	15:06:00	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.19	-19.8	38.1	111
13-mei	16:15:31	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.08	-29.9	27.4	110.8
13-mei	16:34:11	0.5	Mimas	Overgang.Einde	Saturnus	8.21	-32.4	24.4	110.2	135
13-mei	17:23:33	1.76	Saturnus	Verduistering.Begin	Tethys	0.33	10.95	-38.4	16.6	110.1
13-mei	18:41:02	8.57	Rhea	Schaduwovergang.Begin	Saturnus	0.17	9.66	-44.7	4.4	109.7
13-mei	19:08:58	3.48	Rhea	Overgang.Begin	Saturnus	-0.02	8.07	-45.5	0.8	109
13-mei	20:05:14	8.57	Rhea	Schaduwovergang.Einde	Saturnus	-0.42	4.8	-45	-6.8	108.8
13-mei	20:45:09	2.45	Dione	Schaduwovergang.Begin	Saturnus	0.33	10.94	-43.1	-10.9	108.4
13-mei	20:50:16	1.63	Saturnus	Bedekking.Einde	Tethys	8.24	-42.7	-11.4	108.1	137
13-mei	21:20:42	2.0	Dione	Overgang.Begin	Saturnus	-0.01	8.18	-40.2	-14.3	108
13-mei	22:35:27	3.48	Rhea	Overgang.Einde	Saturnus	-0.03	8.03	-31.4	-19.2	107.8

13-mei	23:21:48	2.45	Dione	Schaduwovergang.Einde	Saturnus	-0.62	3.15	-24.9	-20.4	106.8	138.6
14-mei	0:31:46	2.0	Dione	Overgang.Einde	Saturnus	-0.01	8.14	-14.2	-19.5	106.3	139.2
14-mei	1:09:11	0.54	Saturnus	Verduistering.Begin	Mimas	0.22	10.11	-8.4	-17.7	106	139.6
14-mei	3:51:44	0.52	Saturnus	Bedekking.Einde	Mimas		8.25	16	-1.2	104.7	141.3
14-mei	4:39:37	0.76	Saturnus	Verduistering.Begin	Enceladus	0.25	10.35	22	5.5	104.3	141.8
14-mei	7:38:48	0.71	Saturnus	Bedekking.Einde	Enceladus		8.23	32.7	33.3	102.9	143.8
14-mei	12:35:53	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	10.04	3.2	56.1	100.6	146.4
14-mei	12:51:52	0.5	Mimas	Overgang.Begin	Saturnus		8.26	0.8	54.9	100.5	146.5
14-mei	14:52:43	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.07	-18.2	40.3	99.5	147.3
14-mei	15:11:30	0.5	Mimas	Overgang.Einde	Saturnus		8.23	-21.1	37.5	99.4	147.4
14-mei	16:02:52	1.76	Tethys	Schaduwovergang.Begin	Saturnus	0.33	10.98	-28.7	29.5	99	147.8
14-mei	16:33:13	1.63	Tethys	Overgang.Begin	Saturnus		8.25	-32.8	24.7	98.7	148
14-mei	18:47:08	1.75	Tethys	Schaduwovergang.Einde	Saturnus	-0.47	4.39	-44.9	4.2	97.7	148.8
14-mei	19:29:21	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.22	-45.7	-1.6	97.4	149.1
14-mei	21:00:25	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.25	10.35	-41.7	-12.1	96.7	149.7
14-mei	21:21:56	0.71	Enceladus	Overgang.Begin	Saturnus		8.24	-39.7	-14.1	96.5	149.8
14-mei	23:28:19	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.38	5.12	-23.5	-20.2	95.5	150.8
14-mei	23:46:08	0.54	Saturnus	Verduistering.Begin	Mimas	0.23	10.14	-20.8	-20.3	95.4	151
14-mei	23:59:27	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.2	-18.8	-20.1	95.3	151.1
15-mei	2:28:48	0.52	Saturnus	Bedekking.Einde	Mimas		8.26	4.6	-10.9	94.1	152.5
15-mei	5:38:51	2.43	Saturnus	Verduistering.Begin	Dione	0.33	11.02	28.3	14.8	92.7	154.5
15-mei	9:26:10	1.99	Saturnus	Bedekking.Einde	Dione	-0.01	8.2	27.1	48.9	90.9	156.8
15-mei	11:13:04	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	10.07	14.8	57.8	90.1	157.8
15-mei	11:29:11	0.5	Mimas	Overgang.Begin	Saturnus		8.27	12.6	58.2	90	157.9
15-mei	13:29:55	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.07	-5.8	51.4	89.1	158.9
15-mei	13:32:43	0.76	Saturnus	Verduistering.Begin	Enceladus	0.26	10.39	-6.2	51.1	89	158.9
15-mei	13:48:49	0.5	Mimas	Overgang.Einde	Saturnus		8.24	-8.8	49.2	88.9	159
15-mei	14:42:03	1.75	Saturnus	Verduistering.Begin	Tethys	0.33	11.04	-17.2	41.9	88.5	159.4
15-mei	16:32:17	0.71	Saturnus	Bedekking.Einde	Enceladus		8.25	-33.1	25.1	87.7	160.1
15-mei	18:09:25	1.63	Saturnus	Bedekking.Einde	Tethys		8.26	-43	9.9	86.9	160.7
15-mei	22:23:04	0.54	Saturnus	Verduistering.Begin	Mimas	0.23	10.17	-32.2	-18.1	85	162.3
16-mei	0:52:08	8.1	Saturnus	Verduistering.Begin	Rhea	0.2	9.9	-9.3	-18	83.8	163.6
16-mei	1:05:52	0.52	Saturnus	Bedekking.Einde	Mimas		8.28	-7.8	-17.4	83.8	163.7



16-mei	4:51:13	3.45	Saturnus	Bedekking.Einde	Rhea	-0.02	8.11	24.3	7.8	82	165.9
16-mei	5:53:35	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.26	10.4	29.6	17.1	81.6	166.5
16-mei	6:15:21	0.71	Enceladus	Overgang.Begin	Saturnus		8.26	30.9	20.5	81.4	166.7
16-mei	8:21:35	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.38	5.11	31.3	40.2	80.5	168
16-mei	8:52:57	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.22	29.5	44.7	80.2	168.3
16-mei	9:50:15	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	10.1	24.5	51.9	79.8	168.9
16-mei	10:06:29	0.5	Mimas	Overgang.Begin	Saturnus		8.28	22.7	53.6	79.7	169.1
16-mei	12:07:07	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.06	6.5	58	78.8	170.1
16-mei	12:26:08	0.5	Mimas	Overgang.Einde	Saturnus		8.25	3.6	57.1	78.6	170.3
16-mei	13:21:21	1.75	Tethys	Schaduwovergang.Begin	Saturnus	0.33	11.06	-5.1	52.5	78.2	170.7
16-mei	13:52:13	1.63	Tethys	Overgang.Begin	Saturnus		8.27	-10	48.9	78	171
16-mei	14:26:25	2.44	Dione	Schaduwovergang.Begin	Saturnus	0.34	11.09	-15.4	44.3	77.7	171.2
16-mei	15:03:03	2.0	Dione	Overgang.Begin	Saturnus	-0.01	8.22	-21	39	77.4	171.5
16-mei	16:05:48	1.75	Tethys	Schaduwovergang.Einde	Saturnus	-0.47	4.36	-30.1	29.3	76.9	171.9
16-mei	16:48:28	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.24	-35.6	22.6	76.6	172.2
16-mei	17:03:50	2.44	Dione	Schaduwovergang.Einde	Saturnus	-0.63	3.07	-37.4	20.1	76.5	172.3
16-mei	18:14:44	2.0	Dione	Overgang.Einde	Saturnus	-0.01	8.18	-43.6	9.3	76	172.7
16-mei	21:00:01	0.54	Saturnus	Verduistering.Begin	Mimas	0.23	10.2	-41	-11.7	74.7	173.7
16-mei	22:25:48	0.76	Saturnus	Verduistering.Begin	Enceladus	0.26	10.44	-31.3	-18	74.1	174.3
16-mei	23:42:55	0.52	Saturnus	Bedekking.Einde	Mimas		8.29	-20.2	-19.8	73.5	174.8
17-mei	1:25:43	0.71	Saturnus	Bedekking.Einde	Enceladus		8.27	-4	-16	72.7	175.6
17-mei	8:27:26	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	10.13	30.9	41.2	69.6	179.8
17-mei	8:43:47	0.5	Mimas	Overgang.Begin	Saturnus		8.3	29.9	43.5	69.4	180
17-mei	10:44:18	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.05	17.7	56.9	68.5	178.8
17-mei	11:03:27	0.5	Mimas	Overgang.Einde	Saturnus		8.26	15.2	57.9	68.4	178.7
17-mei	12:00:39	1.75	Saturnus	Verduistering.Begin	Tethys	0.34	11.12	6.9	58.4	67.9	178.1
17-mei	14:46:41	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.26	10.45	-19	41.7	66.7	176.8
17-mei	15:08:41	0.71	Enceladus	Overgang.Begin	Saturnus		8.28	-22.3	38.4	66.5	176.6
17-mei	15:28:39	1.63	Saturnus	Bedekking.Einde	Tethys		8.29	-25.4	35.3	66.4	176.5
17-mei	17:14:46	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.39	5.09	-38.9	18.7	65.6	175.8
17-mei	17:46:22	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.24	-41.8	13.8	65.3	175.6
17-mei	19:36:57	0.53	Saturnus	Verduistering.Begin	Mimas	0.23	10.22	-45.4	-2	64.5	174.9
17-mei	22:19:58	0.52	Saturnus	Bedekking.Einde	Mimas		8.3	-31.6	-17.5	63.3	173.9

17-mei	23:20:05	2.42	Saturnus	Verduistering.Begin	Dione	0.34	11.16	-22.9	-19.5	62.8	173.5
18-mei	3:09:03	1.98	Saturnus	Bedekking.Einde	Dione	-0.01	8.24	12.3	-5.7	61.1	171.7
18-mei	7:04:37	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	10.16	32.7	28.6	59.3	169.4
18-mei	7:04:53	7.95	Rhea	Schaduwovergang.Begin	Saturnus	0.21	10.06	32.8	29.2	59.3	169.3
18-mei	7:18:54	0.76	Saturnus	Verduistering.Begin	Enceladus	0.26	10.49	32.8	30.9	59.2	169.2
18-mei	7:21:05	0.5	Mimas	Overgang.Begin	Saturnus		8.31	32.8	31.2	59.2	169.2
18-mei	7:37:07	3.43	Rhea	Overgang.Begin	Saturnus	-0.02	8.14	32.6	33.9	59.1	169
18-mei	8:35:40	7.96	Rhea	Schaduwovergang.Einde	Saturnus	-0.44	4.68	30	43.1	58.6	168.4
18-mei	9:21:30	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.05	26.6	48.8	58.3	168
18-mei	9:40:46	0.5	Mimas	Overgang.Einde	Saturnus		8.27	24.7	51.2	58.2	167.8
18-mei	10:19:10	0.71	Saturnus	Bedekking.Einde	Enceladus		8.29	20.4	55.2	57.9	167.4
18-mei	10:39:50	1.75	Tethys	Schaduwovergang.Begin	Saturnus	0.34	11.14	17.7	56.8	57.7	167.2
18-mei	11:06:28	3.44	Rhea	Overgang.Einde	Saturnus	-0.03	8.1	14.1	58.3	57.5	166.9
18-mei	11:11:11	1.63	Tethys	Overgang.Begin	Saturnus		8.3	13.5	58.5	57.5	166.9
18-mei	13:24:27	1.75	Tethys	Schaduwovergang.Einde	Saturnus	-0.48	4.33	-6.7	52.5	56.5	165.7
18-mei	14:07:32	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.26	-13.5	47.3	56.1	165.3
18-mei	18:13:53	0.53	Saturnus	Verduistering.Begin	Mimas	0.23	10.25	-43.9	9.9	54.3	163.5
18-mei	20:57:01	0.52	Saturnus	Bedekking.Einde	Mimas		8.31	-40.6	-11	53.1	162.5
18-mei	23:39:48	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.26	10.49	-19.5	-19.4	51.8	161.5
19-mei	0:02:02	0.71	Enceladus	Overgang.Begin	Saturnus		8.29	-16	-19.2	51.7	161.3
19-mei	2:07:58	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.39	5.08	3.8	-12.1	50.7	160.4
19-mei	2:39:47	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.26	8.5	-8.9	50.5	160.1
19-mei	5:41:47	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	10.18	29.6	15.7	49.1	158.5
19-mei	5:58:22	0.5	Mimas	Overgang.Begin	Saturnus		8.32	30.7	18.3	49	158.3
19-mei	7:58:41	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.05	31.9	37.2	48.1	157.1
19-mei	8:07:43	2.43	Dione	Schaduwovergang.Begin	Saturnus	0.35	11.22	31.5	38.7	48	157
19-mei	8:18:04	0.5	Mimas	Overgang.Einde	Saturnus		8.28	31	40.1	47.9	156.9
19-mei	8:45:23	1.99	Dione	Overgang.Begin	Saturnus	-0.01	8.26	29.3	44.2	47.7	156.6
19-mei	9:19:09	1.75	Saturnus	Verduistering.Begin	Tethys	0.34	11.19	26.4	48.8	47.4	156.3
19-mei	10:45:54	2.43	Dione	Schaduwovergang.Einde	Saturnus	-0.64	3	16.4	57.5	46.8	155.4
19-mei	11:57:37	1.99	Dione	Overgang.Einde	Saturnus	-0.01	8.22	6.2	58.9	46.2	154.7
19-mei	12:47:44	1.63	Saturnus	Bedekking.Einde	Tethys		8.31	-1.5	56.2	45.9	154.2
19-mei	16:12:00	0.76	Saturnus	Verduistering.Begin	Enceladus	0.27	10.54	-32.3	29	44.3	152.4

19-mei	16:50:50	0.53	Saturnus	Verduistering.Begin	Mimas	0.23	10.28	-37	22.8	44	152.2
19-mei	19:12:35	0.71	Saturnus	Bedekking.Einde	Enceladus		8.3	-45.6	1.6	42.9	151.2
19-mei	19:34:03	0.52	Saturnus	Bedekking.Einde	Mimas		8.32	-45.3	-1.2	42.8	151.1
20-mei	3:40:39	5.6	Tethys	Gedeeltelijke bedekking	Enceladus	2.73	0.08	17.9	-1.2	39	147.7
20-mei	4:18:58	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	10.21	22.3	3.6	38.8	147.4
20-mei	4:35:39	0.5	Mimas	Overgang.Begin	Saturnus		8.33	24.1	6	38.6	147.2
20-mei	6:35:53	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.04	32.4	24.4	37.7	146.1
20-mei	6:55:22	0.5	Mimas	Overgang.Einde	Saturnus		8.3	32.8	27.4	37.6	145.9
20-mei	7:58:21	1.75	Tethys	Schaduwovergang.Begin	Saturnus	0.35	11.21	31.8	37.4	37.1	145.3
20-mei	8:30:10	1.63	Tethys	Overgang.Begin	Saturnus		8.33	30.1	42.1	36.8	144.9
20-mei	8:32:54	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.26	10.54	29.9	42.5	36.8	144.9
20-mei	8:55:21	0.71	Enceladus	Overgang.Begin	Saturnus		8.31	28.3	45.7	36.6	144.7
20-mei	10:43:09	1.75	Tethys	Schaduwovergang.Einde	Saturnus	-0.48	4.3	16.4	57.5	35.8	143.5
20-mei	11:01:09	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.39	5.07	14	58.4	35.7	143.4
20-mei	11:26:36	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.29	10.3	59.2	35.5	143.1
20-mei	11:33:11	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.28	9.4	59.3	35.4	143
20-mei	13:16:03	7.57	Saturnus	Verduistering.Begin	Rhea	0.23	10.28	-7	53.5	34.6	142
20-mei	14:30:05	28.18	Tethys	Gedeeltelijke bedekking	Enceladus	2.01	0.06	-20.5	42.4	33.9	141.2
20-mei	15:27:47	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.3	-26.7	36	33.6	140.8
20-mei	17:01:20	2.41	Saturnus	Verduistering.Begin	Dione	0.35	11.3	-38.6	21.2	32.9	140
20-mei	17:21:47	3.4	Saturnus	Bedekking.Einde	Rhea	-0.02	8.18	-40.7	17.9	32.7	139.9
20-mei	18:11:05	0.52	Saturnus	Bedekking.Einde	Mimas		8.34	-44.1	10.6	32.4	139.5
20-mei	20:51:49	1.98	Saturnus	Bedekking.Einde	Dione	-0.01	8.28	-40.3	-10.1	31.1	138.4
21-mei	1:05:10	0.76	Saturnus	Verduistering.Begin	Enceladus	0.27	10.58	-4.9	-16.5	29.2	136.8
21-mei	2:56:09	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.24	12	-6.8	28.3	136
21-mei	3:12:56	0.5	Mimas	Overgang.Begin	Saturnus		8.35	14.4	-4.8	28.2	135.9
21-mei	4:06:03	0.71	Saturnus	Bedekking.Einde	Enceladus		8.32	21.2	2	27.8	135.5
21-mei	5:13:05	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.04	28	11.6	27.2	134.9
21-mei	5:32:40	0.5	Mimas	Overgang.Einde	Saturnus		8.31	29.5	14.6	27.1	134.7
21-mei	6:37:39	1.75	Saturnus	Verduistering.Begin	Tethys	0.35	11.27	32.6	24.9	26.6	134.1
21-mei	9:51:45	26.84	Saturnus	Bedekking.Begin	Titan	-0.07	7.8	20.8	54.4	25	131.9
21-mei	10:06:46	1.63	Saturnus	Bedekking.Einde	Tethys		8.34	20.6	54.6	25	131.9
21-mei	13:08:35	26.84	Saturnus	Bedekking.Einde	Titan	-0.07	7.8	-7.9	53.5	23.5	129.9

21-mei	14:04:43	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.33	-14.7	48.3	23.1	129.4
21-mei	16:48:07	0.52	Saturnus	Bedekking.Einde	Mimas		8.35	-37.5	23.6	21.8	127.9
21-mei	17:26:00	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.27	10.58	-41.2	17.6	21.6	127.6
21-mei	17:48:40	0.71	Enceladus	Overgang.Begin	Saturnus		8.33	-43	14.2	21.4	127.4
21-mei	19:54:21	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.39	5.06	-44.2	-3.4	20.4	126.5
21-mei	20:26:33	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.29	-42.2	-7.2	20.1	126.3
22-mei	1:33:20	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.26	0.1	-14.4	17.8	124.3
22-mei	1:49:12	2.42	Dione	Schaduwovergang.Begin	Saturnus	0.36	11.36	2.7	-13.1	17.6	124.2
22-mei	1:50:12	0.5	Mimas	Overgang.Begin	Saturnus		8.36	2.8	-13.1	17.6	124.2
22-mei	2:27:48	1.99	Dione	Overgang.Begin	Saturnus	-0.01	8.3	8.6	-9.6	17.3	124
22-mei	3:50:16	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.04	19.7	0	16.7	123.3
22-mei	4:09:57	0.5	Mimas	Overgang.Einde	Saturnus		8.32	22.1	2.7	16.5	123.2
22-mei	4:28:07	2.42	Dione	Schaduwovergang.Einde	Saturnus	-0.65	2.94	24.2	5.3	16.4	123
22-mei	5:16:51	1.75	Tethys	Schaduwovergang.Begin	Saturnus	0.35	11.29	28.7	12.4	16	122.6
22-mei	5:40:33	1.99	Dione	Overgang.Einde	Saturnus	-0.01	8.26	30.4	16.1	15.8	122.4
22-mei	5:49:05	1.63	Tethys	Overgang.Begin	Saturnus		8.35	30.9	17.4	15.8	122.3
22-mei	8:01:49	1.75	Tethys	Schaduwovergang.Einde	Saturnus	-0.49	4.28	31.3	38.2	14.7	121
22-mei	8:45:37	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.31	28.5	44.7	14.4	120.6
22-mei	9:58:15	0.76	Saturnus	Verduistering.Begin	Enceladus	0.27	10.63	21.2	53.8	13.9	119.8
22-mei	12:41:41	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.36	-2.1	57.3	12.6	118
22-mei	12:59:25	0.71	Saturnus	Bedekking.Einde	Enceladus		8.34	-4.9	55.9	12.5	117.8
22-mei	15:25:09	0.52	Saturnus	Bedekking.Einde	Mimas		8.36	-27.3	36.8	11.4	116.3
22-mei	19:29:28	7.45	Rhea	Schaduwovergang.Begin	Saturnus	0.25	10.43	-44.9	-0.5	9.5	114.2
22-mei	20:05:35	3.39	Rhea	Overgang.Begin	Saturnus	-0.02	8.21	-43.3	-4.8	9.2	113.9
22-mei	21:06:23	7.45	Rhea	Schaduwovergang.Einde	Saturnus	-0.45	4.57	-37.8	-11.4	8.8	113.5
22-mei	23:37:20	3.39	Rhea	Overgang.Einde	Saturnus	-0.02	8.17	-17.3	-18.6	7.7	112.5
23-mei	0:10:30	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.29	-12.3	-18.2	7.5	112.3
23-mei	0:27:29	0.5	Mimas	Overgang.Begin	Saturnus		8.37	-9.6	-17.8	7.4	112.2
23-mei	2:19:06	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.27	10.63	7.7	-10.3	6.6	111.5
23-mei	2:27:27	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.03	9	-9.5	6.6	111.4
23-mei	2:41:58	0.71	Enceladus	Overgang.Begin	Saturnus		8.35	11.1	-8	6.5	111.3
23-mei	2:47:14	0.5	Mimas	Overgang.Einde	Saturnus		8.33	11.8	-7.5	6.4	111.3
23-mei	3:56:13	1.75	Saturnus	Verduistering.Begin	Tethys	0.35	11.34	21	1	6	110.8

23-mei	4:47:32	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.05	26.5	8.2	5.7	110.4
23-mei	5:19:56	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.31	29.2	13	5.5	110.1
23-mei	7:25:52	1.63	Saturnus	Bedekking.Einde	Tethys		8.36	32.5	32.7	4.8	109
23-mei	10:42:35	2.4	Saturnus	Verduistering.Begin	Dione	0.36	11.43	15	58	4	106.9
23-mei	11:18:38	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.38	10	59.7	3.9	106.5
23-mei	14:02:10	0.52	Saturnus	Bedekking.Einde	Mimas		8.37	-15.4	48.9	3.8	104.7
23-mei	14:34:26	1.97	Saturnus	Bedekking.Einde	Dione	-0.01	8.32	-20.5	44.4	3.9	104.3
23-mei	18:51:21	0.76	Saturnus	Verduistering.Begin	Enceladus	0.27	10.67	-45.5	5.3	4.7	101.8
23-mei	21:52:48	0.71	Saturnus	Bedekking.Einde	Enceladus		8.36	-32.1	-14.7	5.7	100.5
23-mei	22:47:41	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.31	-24.5	-17.5	6	100.1
23-mei	23:04:45	0.5	Mimas	Overgang.Begin	Saturnus		8.38	-21.9	-18	6.1	100
24-mei	1:04:39	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.03	-3.2	-15.9	6.9	99.2
24-mei	1:24:31	0.5	Mimas	Overgang.Einde	Saturnus		8.35	0	-14.7	7.1	99.1
24-mei	2:35:23	1.75	Tethys	Schaduwovergang.Begin	Saturnus	0.35	11.36	10.8	-8.5	7.6	98.6
24-mei	3:08:01	1.63	Tethys	Overgang.Begin	Saturnus		8.38	15.3	-4.9	7.8	98.4
24-mei	5:20:30	1.75	Tethys	Schaduwovergang.Einde	Saturnus	-0.49	4.26	29.6	13.3	8.8	97.4
24-mei	6:04:37	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.34	32	20	9.1	97
24-mei	9:55:35	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.41	20.7	53.9	10.9	94.8
24-mei	11:12:12	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.27	10.67	10.4	59.6	11.5	93.9
24-mei	11:35:15	0.71	Enceladus	Overgang.Begin	Saturnus		8.37	7	60.1	11.7	93.6
24-mei	12:39:12	0.52	Saturnus	Bedekking.Einde	Mimas		8.39	-2.9	57.9	12.2	92.9
24-mei	13:40:44	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.04	-12.6	51.8	12.7	92.2
24-mei	14:13:16	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.33	-17.7	47.6	12.9	91.8
24-mei	19:30:30	2.41	Dione	Schaduwovergang.Begin	Saturnus	0.37	11.49	-44.7	0	15.5	88.6
24-mei	20:09:58	1.98	Dione	Overgang.Begin	Saturnus	-0.01	8.34	-42.5	-4.9	15.8	88.3
24-mei	21:24:51	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.34	-35.2	-12.4	16.4	87.7
24-mei	21:42:00	0.5	Mimas	Overgang.Begin	Saturnus		8.4	-33	-13.7	16.5	87.6
24-mei	22:10:09	2.41	Dione	Schaduwovergang.Einde	Saturnus	-0.66	2.89	-29.2	-15.6	16.8	87.4
24-mei	23:23:12	1.98	Dione	Overgang.Einde	Saturnus	-0.01	8.3	-18.4	-18.1	17.4	86.9
24-mei	23:41:50	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.03	-15.6	-18.2	17.5	86.8
25-mei	0:01:48	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.36	-12.5	-18	17.7	86.6
25-mei	1:14:41	1.74	Saturnus	Verduistering.Begin	Tethys	0.36	11.42	-0.9	-15.1	18.3	86.1
25-mei	1:40:20	7.14	Saturnus	Verduistering.Begin	Rhea	0.27	10.64	3.5	-13.1	18.5	86

25-mei	3:44:25	0.76	Saturnus	Verduistering.Begin	Enceladus	0.28	10.72	20.5	-0.3	19.5	85.1
25-mei	4:44:49	1.63	Saturnus	Bedekking.Einde	Tethys		8.39	27	8.1	20	84.7
25-mei	5:51:57	3.37	Saturnus	Bedekking.Einde	Rhea	-0.02	8.25	31.7	18.3	20.6	84.2
25-mei	6:46:08	0.71	Saturnus	Bedekking.Einde	Enceladus		8.38	32.9	26.6	21	83.7
25-mei	8:32:32	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.43	28.7	43.1	21.9	82.7
25-mei	11:16:13	0.52	Saturnus	Bedekking.Einde	Mimas		8.4	9.3	59.9	23.3	81
25-mei	20:02:01	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.36	-42.8	-3.7	27.7	75.3
25-mei	20:05:20	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.27	10.72	-42.6	-4.1	27.8	75.2
25-mei	20:19:15	0.5	Mimas	Overgang.Begin	Saturnus		8.41	-41.5	-5.7	27.9	75.1
25-mei	20:28:35	0.71	Enceladus	Overgang.Begin	Saturnus		8.39	-40.7	-6.7	28	75
25-mei	22:19:01	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.03	-27.5	-15.9	28.9	74.1
25-mei	22:33:57	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.04	-25.3	-16.6	29	74
25-mei	22:39:04	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.37	-24.6	-16.8	29.1	74
25-mei	23:06:39	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.35	-20.5	-17.7	29.3	73.8
25-mei	23:53:53	1.74	Tethys	Schaduwovergang.Begin	Saturnus	0.36	11.43	-13	-18	29.7	73.5
26-mei	0:26:53	1.63	Tethys	Overgang.Begin	Saturnus		8.4	-7.8	-17.2	30	73.2
26-mei	2:39:11	1.74	Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.25	12.4	-7.8	31.1	72.4
26-mei	3:23:34	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.37	18.4	-2.7	31.5	72.1
26-mei	4:23:53	2.39	Saturnus	Verduistering.Begin	Dione	0.37	11.55	25.4	5.3	32	71.6
26-mei	7:09:30	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.46	32.7	30.4	33.4	70.3
26-mei	8:16:59	1.97	Saturnus	Bedekking.Einde	Dione	-0.01	8.36	29.6	41	34	69.7
26-mei	9:53:14	0.52	Saturnus	Bedekking.Einde	Mimas		8.41	20.1	53.9	34.8	68.8
26-mei	12:37:32	0.76	Saturnus	Verduistering.Begin	Enceladus	0.28	10.76	-3.8	58.3	36.2	66.9
26-mei	15:39:29	0.71	Saturnus	Bedekking.Einde	Enceladus		8.4	-31.3	35.1	37.8	64.8
26-mei	18:39:12	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.39	-45.4	7.5	39.4	62.8
26-mei	18:56:30	0.5	Mimas	Overgang.Begin	Saturnus		8.42	-45.4	5	39.5	62.6
26-mei	20:56:12	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.03	-37.6	-9.4	40.5	61.5
26-mei	21:16:20	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.38	-35.3	-11.3	40.7	61.3
26-mei	22:33:11	1.74	Saturnus	Verduistering.Begin	Tethys	0.36	11.48	-24.8	-16.4	41.4	60.7
27-mei	2:03:44	1.63	Saturnus	Bedekking.Einde	Tethys		8.42	7.8	-11.1	43.2	59.1
27-mei	4:58:25	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	10.76	28.8	10.2	44.7	57.9
27-mei	5:21:50	0.71	Enceladus	Overgang.Begin	Saturnus		8.41	30.4	13.7	44.9	57.8
27-mei	5:46:27	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.48	31.7	17.5	45.1	57.6

27-mei	7:27:08	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.03	32.1	33.3	46	56.8
27-mei	7:53:35	7.04	Rhea	Schaduwovergang.Begin	Saturnus	0.28	10.78	30.7	37.9	46.3	56.5
27-mei	7:59:58	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.37	30.5	38.4	46.3	56.5
27-mei	8:30:14	0.52	Saturnus	Bedekking.Einde	Mimas		8.43	28.3	43	46.6	56.2
27-mei	8:33:10	3.36	Rhea	Overgang.Begin	Saturnus	-0.02	8.29	28	43.6	46.6	56.2
27-mei	9:36:09	7.04	Rhea	Schaduwovergang.Einde	Saturnus	-0.47	4.45	21.3	52.4	47.2	55.5
27-mei	12:06:58	3.36	Rhea	Overgang.Einde	Saturnus	-0.02	8.24	0.3	60.1	48.5	53.9
27-mei	13:11:44	2.4	Dione	Schaduwovergang.Begin	Saturnus	0.38	11.61	-9.9	55.4	49	53.2
27-mei	13:51:59	1.98	Dione	Overgang.Begin	Saturnus	-0.01	8.38	-16.2	50.8	49.4	52.7
27-mei	15:52:06	2.4	Dione	Schaduwovergang.Einde	Saturnus	-0.66	2.84	-33.5	33.2	50.5	51.3
27-mei	17:05:37	1.98	Dione	Overgang.Einde	Saturnus	-0.01	8.34	-41.3	21.6	51.1	50.5
27-mei	17:16:22	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.41	-42.1	20.1	51.2	50.3
27-mei	17:33:45	0.5	Mimas	Overgang.Begin	Saturnus		8.44	-43.3	17.4	51.3	50.1
27-mei	19:33:23	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.03	-44	0.2	52.4	48.8
27-mei	19:53:36	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.4	-42.8	-2.3	52.6	48.6
27-mei	21:12:23	1.74	Tethys	Schaduwovergang.Begin	Saturnus	0.36	11.5	-35.2	-10.8	53.3	47.9
27-mei	21:30:38	0.76	Saturnus	Verduistering.Begin	Enceladus	0.28	10.8	-33	-12.3	53.4	47.7
27-mei	21:45:43	1.63	Tethys	Overgang.Begin	Saturnus		8.43	-31	-13.5	53.6	47.5
27-mei	23:57:50	1.74	Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.24	-11.2	-17.6	54.7	46.4
28-mei	0:32:49	0.71	Saturnus	Bedekking.Einde	Enceladus		8.42	-5.8	-16.7	55	46.2
28-mei	0:42:27	1.63	Tethys	Overgang.Einde	Saturnus	-0.01	8.39	-4.2	-16.4	55.1	46.1
28-mei	4:23:25	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.5	26	5.3	57.1	44.5
28-mei	7:07:15	0.52	Saturnus	Bedekking.Einde	Mimas		8.44	32.6	30.3	58.5	43.3
28-mei	13:51:31	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	10.8	-16.6	51.1	62.1	39.3
28-mei	14:15:05	0.71	Enceladus	Overgang.Begin	Saturnus		8.43	-20.2	48	62.3	39
28-mei	15:53:32	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.44	-34	33.2	63.2	37.8
28-mei	16:11:00	0.5	Mimas	Overgang.Begin	Saturnus		8.45	-36.1	30.5	63.3	37.6
28-mei	16:20:19	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.03	-37.2	29	63.4	37.5
28-mei	16:53:16	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.39	-40.5	23.8	63.7	37.1
28-mei	18:10:34	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.03	-45.1	11.9	64.4	36.2
28-mei	18:30:51	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.41	-45.4	8.9	64.6	36
28-mei	19:51:41	1.74	Saturnus	Verduistering.Begin	Tethys	0.37	11.55	-42.7	-2	65.3	35.1
28-mei	22:05:20	2.37	Saturnus	Verduistering.Begin	Dione	0.38	11.67	-27.7	-14.7	66.5	33.7

28-mei	23:22:39	1.63	Saturnus	Bedekking.Einde	Tethys	8.45	-16.2	-17.5	67.2	33	
29-mei	1:59:34	1.96	Saturnus	Bedekking.Einde	Dione	-0.01	8.4	8.3	-11.2	68.6	31.7
29-mei	3:00:23	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.53	16.8	-5.2	69.1	31.3
29-mei	5:44:15	0.52	Saturnus	Bedekking.Einde	Mimas	8.45	32	17.3	70.6	30.1	
29-mei	6:23:43	0.76	Saturnus	Verduistering.Begin	Enceladus	0.28	10.85	33	23.5	71	29.8
29-mei	9:26:07	0.71	Saturnus	Bedekking.Einde	Enceladus	8.44	22	51	72.6	28.3	
29-mei	9:47:21	26.88	Titan	Overgang.Begin	Saturnus	-0.06	7.94	17.8	55.1	72.9	28
29-mei	13:25:46	27.12	Titan	Overgang.Einde	Saturnus	-0.07	7.89	-15.2	52.8	74.9	25.7
29-mei	14:04:54	6.77	Saturnus	Verduistering.Begin	Rhea	0.3	10.97	-19.7	49.1	75.1	25.4
29-mei	14:30:42	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.46	-23.1	45.9	75.3	25.1
29-mei	14:48:14	0.5	Mimas	Overgang.Begin	Saturnus	8.46	-25.7	43.4	75.5	24.9	
29-mei	16:47:45	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.03	-40.3	24.8	76.6	23.5
29-mei	17:08:06	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.42	-42.1	21.6	76.8	23.2
29-mei	18:21:32	3.34	Saturnus	Bedekking.Einde	Rhea	-0.02	8.33	-45.4	10.2	77.4	22.4
29-mei	18:30:58	1.74	Tethys	Schaduwovergang.Begin	Saturnus	0.37	11.56	-45.4	9	77.5	22.3
29-mei	19:04:36	1.63	Tethys	Overgang.Begin	Saturnus	8.46	-44.9	4.2	77.8	21.9	
29-mei	21:16:35	1.74	Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.23	-33.7	-10.9	79	20.4
29-mei	22:01:24	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.42	-27.8	-14.3	79.4	19.9
29-mei	22:44:37	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	10.84	-21.5	-16.4	79.8	19.5
29-mei	23:08:19	0.71	Enceladus	Overgang.Begin	Saturnus	8.45	-17.9	-17.1	80	19.3	
30-mei	1:13:30	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.03	1.8	-14.5	81.1	18.2
30-mei	1:37:21	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.55	5.5	-12.9	81.4	18
30-mei	1:46:33	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.41	6.9	-12.2	81.4	17.9
30-mei	4:21:15	0.52	Saturnus	Bedekking.Einde	Mimas	8.47	26.6	5.2	82.8	16.7	
30-mei	6:52:58	2.39	Dione	Schaduwovergang.Begin	Saturnus	0.38	11.73	32.8	28.3	84.2	15.6
30-mei	7:33:55	1.97	Dione	Overgang.Begin	Saturnus	-0.01	8.42	31.4	34.8	84.6	15.3
30-mei	9:34:03	2.38	Dione	Schaduwovergang.Einde	Saturnus	-0.67	2.81	20.6	52.2	85.7	14.3
30-mei	10:47:54	1.97	Dione	Overgang.Einde	Saturnus	-0.01	8.38	10.7	59.4	86.4	13.6
30-mei	13:07:52	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.48	-10.9	56.4	87.6	12.2
30-mei	13:25:28	0.5	Mimas	Overgang.Begin	Saturnus	8.48	-13.6	54.5	87.8	12	
30-mei	15:16:49	0.76	Saturnus	Verduistering.Begin	Enceladus	0.28	10.89	-30.2	39.2	88.8	10.8
30-mei	15:24:56	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.03	-31.3	37.9	88.9	10.7
30-mei	15:45:21	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.43	-33.9	34.8	89.1	10.4



30-mei	17:10:10	1.74	Saturnus	Verduistering.Begin	Tethys	0.37	11.62	-42.5	21.3	89.8	9.4
30-mei	18:19:26	0.71	Saturnus	Bedekking.Einde	Enceladus		8.46	-45.3	10.9	90.5	8.6
30-mei	20:41:29	1.62	Saturnus	Bedekking.Einde	Tethys		8.47	-37.4	-7.4	91.8	6.9
31-mei	0:14:19	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.57	-6.9	-16.9	93.7	4.8
31-mei	2:58:15	0.52	Saturnus	Bedekking.Einde	Mimas		8.48	17.5	-5.2	95.2	3.4
31-mei	7:37:45	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	10.88	31	35.3	97.8	1.4
31-mei	8:01:36	0.71	Enceladus	Overgang.Begin	Saturnus		8.47	29.4	39	98	1.3
31-mei	10:06:44	0.76	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.03	16	56	99.1	0.8
31-mei	10:39:52	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.43	11.4	58.9	99.4	0.9
31-mei	11:45:02	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.51	1.6	61.2	100	1.3
31-mei	12:02:41	0.5	Mimas	Overgang.Begin	Saturnus		8.49	-1.1	60.9	100.2	1.4
31-mei	14:02:07	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.03	-19.9	50.1	101.3	2.5
31-mei	14:22:36	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.45	-23	47.3	101.5	2.8
31-mei	15:46:41	2.36	Saturnus	Verduistering.Begin	Dione	0.39	11.79	-34.7	34.5	102.3	3.7
31-mei	15:49:26	1.74	Tethys	Schaduwovergang.Begin	Saturnus	0.37	11.63	-35	34.2	102.3	3.7
31-mei	16:23:21	1.62	Tethys	Overgang.Begin	Saturnus		8.49	-38.7	28.8	102.6	4.1
31-mei	18:35:13	1.74	Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.22	-45.3	8.6	103.8	5.7
31-mei	19:20:12	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.45	-43.9	2.4	104.2	6.3
31-mei	19:41:55	1.96	Saturnus	Bedekking.Einde	Dione	-0.01	8.44	-42.5	-0.4	104.4	6.5
31-mei	20:18:08	6.69	Rhea	Schaduwovergang.Begin	Saturnus	0.31	11.1	-39.2	-5	104.8	7
31-mei	21:00:44	3.33	Rhea	Overgang.Begin	Saturnus	-0.02	8.36	-34.7	-9.2	105.2	7.5
31-mei	22:06:00	6.69	Rhea	Schaduwovergang.Einde	Saturnus	-0.49	4.34	-25.6	-14.4	105.8	8.3
31-mei	22:51:17	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.6	-19.3	-16.3	106.2	8.7
01-Jun	0:09:54	0.76	Saturnus	Verduistering.Begin	Enceladus	0.29	10.93	-7	-16.8	106.9	9.6
01-Jun	0:36:12	3.33	Rhea	Overgang.Einde	Saturnus	-0.02	8.32	-2.6	-16	107.2	9.8
01-Jun	1:35:14	0.52	Saturnus	Bedekking.Einde	Mimas		8.49	6.3	-12.8	107.7	10.4
01-Jun	3:12:42	0.71	Saturnus	Bedekking.Einde	Enceladus		8.48	19.9	-3.4	108.6	11.3
01-Jun	10:22:12	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.53	13.4	57.6	112.5	14.6
01-Jun	10:39:54	0.5	Mimas	Overgang.Begin	Saturnus		8.5	10.9	59	112.7	14.8
01-Jun	12:39:17	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.04	-7.5	59.1	113.8	15.8
01-Jun	12:59:50	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.46	-10.7	57.4	114	16
01-Jun	14:28:41	1.74	Saturnus	Verduistering.Begin	Tethys	0.37	11.68	-24.5	46.5	114.8	16.9
01-Jun	16:30:51	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	10.92	-39.8	27.8	116	18.3

01-Jun 16:54:49	0.71 Enceladus	Overgang.Begin	Saturnus	8.49	-41.9	24.1	116.2	18.5	
01-Jun 18:00:19	1.62 Saturnus	Bedekking.Einde	Tethys	8.5	-45.2	13.9	116.8	19.3	
01-Jun 18:59:55	0.76 Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.04	-44.6	5.3	117.3	20
01-Jun 19:33:08	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.45	-42.9	0.9	117.6	20.5
01-Jun 21:28:15	0.53 Saturnus	Verduistering.Begin	Mimas	0.25	10.62	-30.8	-11.4	118.7	21.9
02-Jun 0:12:13	0.52 Saturnus	Bedekking.Einde	Mimas	8.51	-6	-16.6	120.2	23.8	
02-Jun 0:34:15	2.38 Dione	Schaduwovergang.Begin	Saturnus	0.39	11.84	-2.4	-16	120.4	24
02-Jun 1:15:49	1.97 Dione	Overgang.Begin	Saturnus	-0.01	8.46	4	-14	120.8	24.4
02-Jun 3:16:03	2.37 Dione	Schaduwovergang.Einde	Saturnus	-0.67	2.78	20.9	-2.8	121.9	25.6
02-Jun 4:30:07	1.97 Dione	Overgang.Einde	Saturnus	-0.01	8.42	28.4	6.8	122.6	26.3
02-Jun 8:59:22	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.55	23.4	47.7	125.1	28.4
02-Jun 9:03:00	0.76 Saturnus	Verduistering.Begin	Enceladus	0.29	10.96	23	48.3	125.1	28.4
02-Jun 9:17:07	0.5 Mimas	Overgang.Begin	Saturnus	8.52	21.4	50.2	125.3	28.5	
02-Jun 11:16:28	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.04	4.9	61.1	126.4	29.4
02-Jun 11:37:04	0.5 Mimas	Overgang.Einde	Saturnus	-0.01	8.47	1.7	61.5	126.6	29.6
02-Jun 12:05:58	0.71 Saturnus	Bedekking.Einde	Enceladus	8.5	-2.8	61.1	126.8	29.9	
02-Jun 13:07:55	1.74 Tethys	Schaduwovergang.Begin	Saturnus	0.37	11.69	-12.7	56.7	127.4	30.4
02-Jun 13:42:04	1.62 Tethys	Overgang.Begin	Saturnus	8.51	-18	52.9	127.7	30.7	
02-Jun 15:53:52	1.74 Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.22	-36.3	33.7	129	32.1
02-Jun 16:38:58	1.62 Tethys	Overgang.Einde	Saturnus	-0.01	8.47	-40.9	26.6	129.4	32.6
02-Jun 20:05:14	0.53 Saturnus	Verduistering.Begin	Mimas	0.25	10.64	-40	-2.9	131.3	35
02-Jun 22:49:12	0.52 Saturnus	Bedekking.Einde	Mimas	8.52	-18.5	-16	132.8	37	
03-Jun 1:23:57	0.76 Enceladus	Schaduwovergang.Begin	Saturnus	0.28	10.96	5.8	-13.4	134.2	38.8
03-Jun 1:48:02	0.71 Enceladus	Overgang.Begin	Saturnus	8.51	9.4	-11.6	134.4	39.1	
03-Jun 2:29:33	6.47 Saturnus	Verduistering.Begin	Rhea	0.32	11.27	15.6	-7.6	134.9	39.5
03-Jun 3:53:06	0.76 Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.04	25.3	1.8	135.6	40.3
03-Jun 4:26:22	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.47	28.4	6.3	135.9	40.6
03-Jun 6:50:29	3.31 Saturnus	Bedekking.Einde	Rhea	-0.02	8.4	32.5	28.3	137.3	41.9
03-Jun 7:36:32	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.57	30.4	35.3	137.7	42.2
03-Jun 7:54:20	0.5 Mimas	Overgang.Begin	Saturnus	8.53	29.2	38.1	137.8	42.3	
03-Jun 9:27:57	2.35 Saturnus	Verduistering.Begin	Dione	0.39	11.89	19.5	51.8	138.7	43.1
03-Jun 9:53:38	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.04	16.3	54.8	138.9	43.2
03-Jun 10:14:17	0.5 Mimas	Overgang.Einde	Saturnus	-0.01	8.49	13.5	57	139.1	43.4

03-Jun 11:47:09	1.73	Saturnus	Verduistering.Begin	Tethys	0.38	11.74	-0.5	61.6	140	44.1
03-Jun 13:24:04	1.96	Saturnus	Bedekking.Einde	Dione	-0.01	8.48	-15.8	55.1	140.9	44.9
03-Jun 15:19:03	1.62	Saturnus	Bedekking.Einde	Tethys		8.53	-32.5	39.3	141.9	46
03-Jun 17:56:05	0.76	Saturnus	Verduistering.Begin	Enceladus	0.29	11	-45.2	14.8	143.4	47.7
03-Jun 18:42:12	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.66	-44.9	8.1	143.8	48.2
03-Jun 20:59:13	0.71	Saturnus	Bedekking.Einde	Enceladus		8.52	-33.6	-8.6	145.1	49.9
03-Jun 21:26:11	0.52	Saturnus	Bedekking.Einde	Mimas		8.53	-30.1	-11	145.3	50.2
04-Jun 6:13:42	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.6	33.1	22.3	150.1	56
04-Jun 6:31:32	0.5	Mimas	Overgang.Begin	Saturnus		8.54	32.9	25.1	150.3	56.1
04-Jun 8:30:49	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.05	25.7	43.7	151.4	57.1
04-Jun 8:51:31	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.5	23.5	46.8	151.6	57.2
04-Jun 10:17:02	0.76	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	10.99	12.5	57.4	152.4	57.8
04-Jun 10:26:31	1.73	Tethys	Schaduwovergang.Begin	Saturnus	0.37	11.75	11.1	58.3	152.5	57.9
04-Jun 10:41:13	0.71	Enceladus	Overgang.Begin	Saturnus		8.53	9	59.4	152.6	58
04-Jun 11:00:52	1.62	Tethys	Overgang.Begin	Saturnus		8.54	6	60.7	152.8	58.2
04-Jun 12:46:17	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.05	-10.4	59	153.7	59
04-Jun 13:12:38	1.73	Tethys	Schaduwovergang.Einde	Saturnus	-0.51	4.23	-14.6	56.5	154	59.2
04-Jun 13:19:36	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.49	-15.6	55.8	154	59.2
04-Jun 13:57:49	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.5	-21.6	51.1	154.4	59.6
04-Jun 17:19:11	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.68	-44.1	20.6	156.2	61.5
04-Jun 18:15:35	2.36	Dione	Schaduwovergang.Begin	Saturnus	0.4	11.94	-45.3	11.9	156.7	62.1
04-Jun 18:57:39	1.97	Dione	Overgang.Begin	Saturnus	-0.01	8.5	-44.2	5.9	157.1	62.5
04-Jun 20:03:09	0.52	Saturnus	Bedekking.Einde	Mimas		8.55	-39.4	-2.4	157.7	63.3
04-Jun 20:58:04	2.36	Dione	Schaduwovergang.Einde	Saturnus	-0.68	2.77	-33.1	-8.4	158.2	64
04-Jun 22:12:15	1.97	Dione	Overgang.Einde	Saturnus	-0.01	8.46	-22.8	-14.1	158.8	64.9
05-Jun 2:49:14	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.04	18.9	-5.7	161.3	68.2
05-Jun 4:47:25	7.25	607	Overgang.Begin	Saturnus	-0.09	7.75	30.7	9.9	162.4	69.5
05-Jun 4:50:51	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.62	30.7	9.9	162.4	69.5
05-Jun 5:08:44	0.5	Mimas	Overgang.Begin	Saturnus		8.56	31.7	12.5	162.5	69.6
05-Jun 5:52:30	0.71	Saturnus	Bedekking.Einde	Enceladus		8.54	33	19.1	162.9	70
05-Jun 5:54:37	7.68	607	Overgang.Einde	Saturnus	-0.1	7.72	33.1	20	163	70.1
05-Jun 7:08:00	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.05	31.6	31	163.6	70.7
05-Jun 7:28:44	0.5	Mimas	Overgang.Einde	Saturnus	-0.01	8.51	30.5	34.2	163.8	70.9

05-Jun	8:42:32	6.39	Rhea	Schaduwovergang.Begin	Saturnus	0.33	11.39	23.7	45.9	164.4	71.5
05-Jun	9:05:37	1.73	Saturnus	Verduistering.Begin	Tethys	0.38	11.8	21.4	48.9	164.6	71.6
05-Jun	9:27:42	3.31	Rhea	Overgang.Begin	Saturnus	-0.02	8.43	18.5	52	164.8	71.8
05-Jun	10:35:27	6.39	Rhea	Schaduwovergang.Einde	Saturnus	-0.51	4.22	8.9	59.3	165.4	72.3
05-Jun	12:37:45	1.62	Saturnus	Bedekking.Einde	Tethys		8.56	-9.7	59.7	166.5	73.2
05-Jun	13:04:29	3.31	Rhea	Overgang.Einde	Saturnus	-0.02	8.39	-14	57.3	166.7	73.4
05-Jun	15:56:10	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.7	-37.7	33.8	168.1	74.8
05-Jun	18:40:07	0.52	Saturnus	Bedekking.Einde	Mimas		8.56	-44.7	8.6	169.5	76.4
05-Jun	19:10:08	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.03	-43.3	4.4	169.7	76.7
05-Jun	19:34:23	0.71	Enceladus	Overgang.Begin	Saturnus		8.55	-41.6	1.2	169.9	77
05-Jun	21:39:27	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.05	-27.1	-11.8	170.9	78.4
05-Jun	22:12:48	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.51	-22.2	-14	171.2	78.8
06-Jun	3:09:17	2.34	Saturnus	Verduistering.Begin	Dione	0.4	11.99	21.9	-3.3	173.4	82.4
06-Jun	3:28:01	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.64	23.9	-1.2	173.5	82.6
06-Jun	3:45:55	0.5	Mimas	Overgang.Begin	Saturnus		8.57	25.8	1	173.6	82.8
06-Jun	5:45:10	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.06	33	18	174.3	84
06-Jun	6:05:56	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.53	33.1	21.2	174.4	84.2
06-Jun	7:06:06	1.96	Saturnus	Bedekking.Einde	Dione	-0.01	8.53	31.5	30.8	174.7	84.8
06-Jun	7:45:00	1.73	Tethys	Schaduwovergang.Begin	Saturnus	0.38	11.8	29	36.9	174.9	85.1
06-Jun	8:19:33	1.62	Tethys	Overgang.Begin	Saturnus		8.57	26	42.2	175	85.4
06-Jun	8:52:42	21.27	Saturnus	Bedekking.Begin	Titan	-0.05	8.17	21.3	48.5	175.2	85.7
06-Jun	10:31:17	1.73	Tethys	Schaduwovergang.Einde	Saturnus	-0.51	4.23	9.3	58.9	175.4	86.4
06-Jun	11:16:32	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.53	2.5	61.5	175.5	86.7
06-Jun	11:42:18	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.07	-1.4	61.9	175.5	86.9
06-Jun	13:00:41	21.26	Saturnus	Bedekking.Einde	Titan	-0.05	8.16	-15.4	56.9	175.5	87.5
06-Jun	14:33:09	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.72	-27.7	46.5	175.3	88.1
06-Jun	14:45:42	0.71	Saturnus	Bedekking.Einde	Enceladus		8.56	-29.5	44.7	175.3	88.2
06-Jun	17:17:05	0.52	Saturnus	Bedekking.Einde	Mimas		8.57	-44.3	21.1	174.8	89.5
07-Jun	2:05:11	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.66	14	-9.9	171.4	95.4
07-Jun	2:23:07	0.51	Mimas	Overgang.Begin	Saturnus		8.59	16.5	-8.2	171.2	95.6
07-Jun	4:03:14	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.06	27.8	3.4	170.5	96.7
07-Jun	4:22:20	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.07	29.3	5.9	170.3	96.9
07-Jun	4:27:34	0.71	Enceladus	Overgang.Begin	Saturnus		8.57	29.7	6.7	170.3	97

07-Jun	4:43:09	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.54	30.7	8.9	170.2	97.1
07-Jun	6:24:07	1.73 Saturnus	Verduistering.Begin	Tethys	0.38	11.85	32.9	24.2	169.4	98.2
07-Jun	6:32:39	0.75 Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.06	32.7	25.5	169.3	98.2
07-Jun	7:06:00	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.53	31.4	30.7	169	98.5
07-Jun	9:56:26	1.62 Saturnus	Bedekking.Einde	Tethys		8.58	13.8	55.5	167.7	99.9
07-Jun	11:56:56	2.35 Dione	Schaduwovergang.Begin	Saturnus	0.4	12.03	-4.5	61.8	166.7	100.8
07-Jun	12:39:25	1.96 Dione	Overgang.Begin	Saturnus	-0.01	8.55	-11.2	59.8	166.3	101.1
07-Jun	13:10:08	0.53 Saturnus	Verduistering.Begin	Mimas	0.25	10.74	-15.9	57.1	166.1	101.3
07-Jun	14:40:07	2.35 Dione	Schaduwovergang.Einde	Saturnus	-0.68	2.76	-29.4	45.5	165.3	101.9
07-Jun	14:54:18	6.2 Saturnus	Verduistering.Begin	Rhea	0.34	11.54	-31.5	43.1	165.2	102
07-Jun	15:54:03	0.52 Saturnus	Bedekking.Einde	Mimas		8.59	-38.3	34.3	164.7	102.4
07-Jun	15:54:15	1.96 Dione	Overgang.Einde	Saturnus	-0.01	8.5	-38.4	34.2	164.7	102.5
07-Jun	19:18:41	3.29 Saturnus	Bedekking.Einde	Rhea	-0.01	8.47	-42.1	3.3	163	104.2
07-Jun	20:35:24	0.75 Saturnus	Verduistering.Begin	Enceladus	0.29	11.11	-34.6	-5.7	162.4	105
07-Jun	23:38:54	0.71 Saturnus	Bedekking.Einde	Enceladus		8.58	-7.6	-16.3	160.8	107
08-Jun	0:42:20	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.68	2.3	-15.1	160.3	107.8
08-Jun	1:00:18	0.51 Mimas	Overgang.Begin	Saturnus		8.6	5.1	-14.3	160.2	108
08-Jun	2:59:31	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.07	21.5	-4.4	159.2	109.4
08-Jun	3:20:21	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.55	23.9	-2	159	109.6
08-Jun	5:03:32	1.73 Tethys	Schaduwovergang.Begin	Saturnus	0.38	11.85	32	11.9	158.1	110.8
08-Jun	5:38:12	1.62 Tethys	Overgang.Begin	Saturnus		8.6	33	17.1	157.8	111.1
08-Jun	7:49:58	1.73 Tethys	Schaduwovergang.Einde	Saturnus	-0.51	4.25	28	37.8	156.7	112.4
08-Jun	8:35:13	1.62 Tethys	Overgang.Einde	Saturnus	-0.01	8.56	23.6	44.7	156.4	112.8
08-Jun	11:47:07	0.53 Saturnus	Verduistering.Begin	Mimas	0.25	10.76	-3.4	62.1	154.8	114.2
08-Jun	12:56:19	0.75 Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.09	-14.3	58.5	154.2	114.7
08-Jun	13:20:43	0.71 Enceladus	Overgang.Begin	Saturnus		8.59	-18.1	56.1	154	114.8
08-Jun	14:31:00	0.52 Saturnus	Bedekking.Einde	Mimas		8.6	-28.5	47	153.4	115.3
08-Jun	15:25:49	0.75 Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.07	-35.6	38.8	152.9	115.7
08-Jun	15:59:11	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.55	-39.2	33.6	152.7	115.9
08-Jun	20:50:37	2.33 Saturnus	Verduistering.Begin	Dione	0.4	12.09	-32.1	-7.3	150.2	118.3
08-Jun	23:19:29	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.7	-10.1	-16.1	149	119.9
08-Jun	23:37:28	0.51 Mimas	Overgang.Begin	Saturnus		8.61	-7.3	-16.2	148.9	120.1
09-Jun	0:48:01	1.95 Saturnus	Bedekking.Einde	Dione	-0.01	8.57	3.9	-14.8	148.3	120.9

09-Jun	1:36:41	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.08	11.1	-12	147.9	121.5
09-Jun	1:57:33	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.57	14	-10.4	147.7	121.7
09-Jun	3:42:35	1.73	Saturnus	Verduistering.Begin	Tethys	0.38	11.9	26.6	0.8	146.8	122.9
09-Jun	5:28:28	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.14	32.9	15.6	146	124.1
09-Jun	7:15:04	1.62	Saturnus	Bedekking.Einde	Tethys		8.61	30.4	32.3	145.1	125.1
09-Jun	8:32:04	0.71	Saturnus	Bedekking.Einde	Enceladus		8.6	23.6	44.2	144.5	125.8
09-Jun	10:24:06	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.77	8.8	58.4	143.5	126.7
09-Jun	13:07:58	0.52	Saturnus	Bedekking.Einde	Mimas		8.62	-16.7	57.5	142.2	127.8
09-Jun	21:07:34	6.14	Rhea	Schaduwovergang.Begin	Saturnus	0.35	11.65	-29.1	-9	138.3	131.4
09-Jun	21:49:28	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.13	-23.4	-12.1	138	131.8
09-Jun	21:54:50	3.29	Rhea	Overgang.Begin	Saturnus	-0.01	8.5	-22.4	-12.6	137.9	131.8
09-Jun	21:56:39	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.71	-22.4	-12.6	137.9	131.8
09-Jun	22:13:54	0.71	Enceladus	Overgang.Begin	Saturnus		8.61	-19.7	-13.7	137.8	132
09-Jun	22:14:38	0.51	Mimas	Overgang.Begin	Saturnus		8.63	-19.6	-13.7	137.8	132
09-Jun	23:05:10	6.14	Rhea	Schaduwovergang.Einde	Saturnus	-0.53	4.1	-11.3	-15.8	137.3	132.6
10-Jun	0:13:51	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.09	-0.9	-15.8	136.8	133.3
10-Jun	0:19:04	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.09	-0.1	-15.7	136.8	133.3
10-Jun	0:34:44	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.58	2.3	-15.3	136.6	133.5
10-Jun	0:52:24	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.57	5.1	-14.5	136.5	133.7
10-Jun	1:32:41	3.3	Rhea	Overgang.Einde	Saturnus	-0.02	8.46	11.2	-12.1	136.1	134.2
10-Jun	2:22:01	1.73	Tethys	Schaduwovergang.Begin	Saturnus	0.38	11.9	17.9	-8.1	135.8	134.7
10-Jun	2:56:48	1.62	Tethys	Overgang.Begin	Saturnus		8.63	22.2	-4.5	135.5	135.1
10-Jun	5:08:37	1.73	Tethys	Schaduwovergang.Einde	Saturnus	-0.51	4.26	32.5	12.8	134.4	136.5
10-Jun	5:38:12	2.34	Dione	Schaduwovergang.Begin	Saturnus	0.4	12.12	33.1	17.2	134.2	136.8
10-Jun	5:53:51	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.59	33.1	19.6	134.1	137
10-Jun	6:21:01	1.96	Dione	Overgang.Begin	Saturnus	-0.01	8.59	32.7	23.8	133.8	137.3
10-Jun	8:22:04	2.34	Dione	Schaduwovergang.Einde	Saturnus	-0.68	2.77	24.2	42.8	132.9	138.4
10-Jun	9:01:06	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.79	19.7	48.4	132.6	138.8
10-Jun	9:36:03	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.54	15.1	53.2	132.3	139.1
10-Jun	11:44:55	0.52	Saturnus	Bedekking.Einde	Mimas		8.63	-4.2	62.3	131.2	140
10-Jun	14:21:34	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.17	-28.2	48.6	130	141.1
10-Jun	17:25:14	0.71	Saturnus	Bedekking.Einde	Enceladus		8.62	-45	20.2	128.5	142.2
10-Jun	20:33:48	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.73	-33.4	-5.3	127	143.7

10-Jun 20:51:48	0.51 Mimas	Overgang.Begin	Saturnus	8.64	-31.1	-7.1	126.9	143.8	
10-Jun 22:51:01	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.1	-13.4	-15.3	126	144.9
10-Jun 23:11:55	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.6	-10.1	-15.8	125.8	145.1
11-Jun 1:01:10	1.73 Saturnus	Verduistering.Begin	Tethys	0.38	11.95	7	-14	124.9	146.2
11-Jun 4:33:45	1.62 Saturnus	Bedekking.Einde	Tethys	8.64	31.1	7.8		123.3	148.5
11-Jun 6:42:33	0.75 Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.16	31.8	27.1	122.3	149.9
11-Jun 7:07:01	0.71 Enceladus	Overgang.Begin	Saturnus	8.63	30.5	31		122.1	150.1
11-Jun 7:38:06	0.53 Saturnus	Verduistering.Begin	Mimas	0.25	10.81	28.1	35.9	121.8	150.4
11-Jun 9:12:14	0.75 Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.1	17.8	50	121.1	151.3
11-Jun 9:45:33	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.59	13.3	54.3	120.8	151.5
11-Jun 10:21:52	0.52 Saturnus	Bedekking.Einde	Mimas	8.64	8	58.3		120.5	151.8
11-Jun 14:31:56	2.32 Saturnus	Verduistering.Begin	Dione	0.41	12.17	-30.3	47	118.6	153.6
11-Jun 18:29:49	1.95 Saturnus	Bedekking.Einde	Dione	-0.01	8.61	-44.2	10.5	116.7	155.1
11-Jun 19:10:57	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.75	-41.6	4.9	116.4	155.4
11-Jun 19:28:58	0.51 Mimas	Overgang.Begin	Saturnus	8.66	-40.1	2.5		116.3	155.5
11-Jun 21:28:11	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.1	-25.4	-10.4	115.4	156.4
11-Jun 21:49:06	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.61	-22.3	-11.9	115.2	156.6
11-Jun 23:14:39	0.75 Saturnus	Verduistering.Begin	Enceladus	0.29	11.2	-9	-15.8	114.5	157.3
11-Jun 23:40:29	1.73 Tethys	Schaduwovergang.Begin	Saturnus	0.38	11.95	-4.9	-16	114.3	157.6
12-Jun 0:15:19	1.62 Tethys	Overgang.Begin	Saturnus	8.65	0.6	-15.7		114.1	157.9
12-Jun 2:18:23	0.71 Saturnus	Bedekking.Einde	Enceladus	8.64	18.4	-8.4		113.1	159.2
12-Jun 2:27:15	1.73 Tethys	Schaduwovergang.Einde	Saturnus	-0.51	4.28	19.6	-7.5	113	159.3
12-Jun 3:12:25	1.62 Tethys	Overgang.Einde	Saturnus	-0.01	8.61	24.8	-2.7	112.7	159.7
12-Jun 3:18:49	5.96 Saturnus	Verduistering.Begin	Rhea	0.36	11.78	25.7	-1.7	112.6	159.8
12-Jun 6:15:06	0.53 Saturnus	Verduistering.Begin	Mimas	0.25	10.82	32.7	22.8	111.3	161.6
12-Jun 7:45:55	3.28 Saturnus	Bedekking.Einde	Rhea	-0.01	8.55	27	37.3	110.6	162.6
12-Jun 8:58:49	0.52 Saturnus	Bedekking.Einde	Mimas	8.66	19.1	48.1		110	163.2
12-Jun 15:35:39	0.75 Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.19	-38.3	37.6	107	166.2
12-Jun 16:00:09	0.71 Enceladus	Overgang.Begin	Saturnus	8.65	-40.7	33.8		106.8	166.3
12-Jun 17:48:06	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.77	-45.2	16.9	106	167
12-Jun 18:05:25	0.75 Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.12	-44.9	14.3	105.9	167.1
12-Jun 18:06:07	0.51 Mimas	Overgang.Begin	Saturnus	8.67	-44.9	14.2		105.8	167.1
12-Jun 18:38:41	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.61	-43.5	9.4	105.6	167.3

12-Jun 20:05:21	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.3	6.11	-35.9	-1.9	104.9	167.9
12-Jun 20:26:16	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.62	-33.4	-4.3	104.8	168
12-Jun 22:19:41	1.73	Saturnus	Verduistering.Begin	Tethys	0.38	11.99	-17	-13.8	103.9	168.9
12-Jun 23:19:32	2.33	Dione	Schaduwovergang.Begin	Saturnus	0.41	12.2	-7.5	-15.8	103.5	169.4
13-Jun 0:02:34	1.96	Dione	Overgang.Begin	Saturnus	-0.01	8.63	-0.8	-15.8	103.1	169.8
13-Jun 1:52:19	1.62	Saturnus	Bedekking.Einde	Tethys		8.67	15.5	-10.6	102.3	170.8
13-Jun 2:04:04	2.33	Dione	Schaduwovergang.Einde	Saturnus	-0.68	2.79	17.1	-9.6	102.2	170.9
13-Jun 3:17:44	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.58	25.7	-2	101.6	171.7
13-Jun 4:52:06	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.84	32.3	10.3	100.9	172.7
13-Jun 7:35:45	0.52	Saturnus	Bedekking.Einde	Mimas		8.67	27.7	35.5	99.7	174.3
13-Jun 8:07:45	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.23	24.6	40.5	99.4	174.7
13-Jun 11:11:31	0.71	Saturnus	Bedekking.Einde	Enceladus		8.66	-0.7	61.8	98.1	176.3
13-Jun 16:25:15	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.78	-42.9	29.9	95.7	178.5
13-Jun 16:43:16	0.51	Mimas	Overgang.Begin	Saturnus		8.68	-43.9	27	95.5	178.6
13-Jun 18:42:31	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.3	6.12	-43.1	9	94.6	179.2
13-Jun 19:03:27	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.64	-41.6	6.1	94.5	179.2
13-Jun 20:58:59	1.73	Tethys	Schaduwovergang.Begin	Saturnus	0.38	11.99	-28.4	-7.7	93.6	179.3
13-Jun 21:33:51	1.62	Tethys	Overgang.Begin	Saturnus		8.68	-23.4	-10.7	93.3	179.1
13-Jun 23:45:54	1.73	Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.3	-2.8	-15.9	92.3	178.3
14-Jun 0:28:44	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.21	3.8	-15.2	92	178
14-Jun 0:30:58	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.64	4.2	-15.1	92	177.9
14-Jun 0:53:14	0.71	Enceladus	Overgang.Begin	Saturnus		8.67	7.5	-14.3	91.8	177.8
14-Jun 2:58:35	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.14	24.1	-4.3	90.9	176.6
14-Jun 3:29:07	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.86	27.1	-0.8	90.7	176.3
14-Jun 3:31:48	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.63	27.4	-0.4	90.6	176.3
14-Jun 6:12:42	0.52	Saturnus	Bedekking.Einde	Mimas		8.69	32.6	22.5	89.4	174.7
14-Jun 8:13:16	2.31	Saturnus	Verduistering.Begin	Dione	0.41	12.24	23.5	41.5	88.5	173.5
14-Jun 8:47:05	22.76	Titan	Overgang.Begin	Saturnus	-0.05	8.28	18.2	48	88.2	173.1
14-Jun 9:32:17	5.91	Rhea	Schaduwovergang.Begin	Saturnus	0.37	11.88	13.2	53	87.9	172.7
14-Jun 9:39:53	2.28	Saturnus	Bedekking.Begin	607	-0.07	8.08	12.4	53.8	87.9	172.7
14-Jun 10:21:09	3.28	Rhea	Overgang.Begin	Saturnus	-0.01	8.58	6.2	58.4	87.6	172.3
14-Jun 11:34:23	5.91	Rhea	Schaduwovergang.Einde	Saturnus	-0.54	3.97	-5.4	62.5	87	171.6
14-Jun 12:11:27	1.95	Saturnus	Bedekking.Einde	Dione	-0.01	8.65	-10.9	61.9	86.7	171.3



14-Jun 12:50:14	2.28	Saturnus	Bedekking.Einde	607	-0.07	8.05	-17	59.5	86.4	171
14-Jun 13:04:52	22.89	Titan	Overgang.Einde	Saturnus	-0.06	8.22	-20.8	57.1	86.2	170.8
14-Jun 13:59:44	3.28	Rhea	Overgang.Einde	Saturnus	-0.02	8.53	-27.5	51.7	85.9	170.5
14-Jun 15:02:24	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.8	-35.5	42.9	85.4	170.1
14-Jun 15:20:25	0.51	Mimas	Overgang.Begin	Saturnus		8.7	-37.5	40.1	85.3	170
14-Jun 17:00:51	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.26	-44.8	24.3	84.6	169.3
14-Jun 17:19:41	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.13	-45.1	21.4	84.4	169.2
14-Jun 17:40:36	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.65	-45.2	18.2	84.3	169.1
14-Jun 19:38:11	1.72	Saturnus	Verduistering.Begin	Tethys	0.38	12.03	-38	1.4	83.4	168.3
14-Jun 20:04:40	0.71	Saturnus	Bedekking.Einde	Enceladus		8.69	-35	-1.7	83.2	168.2
14-Jun 23:10:51	1.62	Saturnus	Bedekking.Einde	Tethys		8.7	-7.7	-15.6	81.8	166.9
15-Jun 2:06:07	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.87	18.3	-9.4	80.4	165.4
15-Jun 4:49:38	0.52	Saturnus	Bedekking.Einde	Mimas		8.7	32.5	10	79.2	163.8
15-Jun 9:21:53	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.24	14.5	51.3	77.2	161.1
15-Jun 9:46:22	0.71	Enceladus	Overgang.Begin	Saturnus		8.69	11	54.5	77	160.8
15-Jun 11:51:48	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.16	-8.3	62.5	76	159.7
15-Jun 12:24:56	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.65	-13.5	61.4	75.8	159.4
15-Jun 13:39:33	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.82	-24.9	54.5	75.2	158.8
15-Jun 13:57:33	0.51	Mimas	Overgang.Begin	Saturnus		8.71	-27.5	52.2	75.1	158.6
15-Jun 15:56:51	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.15	-41.3	34.5	74.2	157.8
15-Jun 16:17:46	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.67	-42.9	31.2	74	157.7
15-Jun 17:00:53	2.32	Dione	Schaduwovergang.Begin	Saturnus	0.41	12.27	-44.9	24.3	73.7	157.4
15-Jun 17:44:02	1.96	Dione	Overgang.Begin	Saturnus	-0.01	8.67	-45.1	17.6	73.4	157.1
15-Jun 18:17:27	1.72	Tethys	Schaduwovergang.Begin	Saturnus	0.38	12.03	-44	12.6	73.1	156.9
15-Jun 18:52:19	1.62	Tethys	Overgang.Begin	Saturnus		8.71	-41.8	7.6	72.8	156.7
15-Jun 19:46:05	2.32	Dione	Schaduwovergang.Einde	Saturnus	-0.68	2.82	-36.7	0.5	72.4	156.3
15-Jun 20:59:20	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.63	-27.3	-7.6	71.9	155.9
15-Jun 21:04:32	1.72	Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.33	-26.5	-8.1	71.8	155.9
15-Jun 21:49:27	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.67	-19.9	-11.8	71.5	155.6
16-Jun 0:43:08	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.88	7.1	-14.7	70.2	154.3
16-Jun 1:53:56	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.28	17.2	-10.4	69.6	153.7
16-Jun 3:26:34	0.52	Saturnus	Bedekking.Einde	Mimas		8.71	27.6	-1.1	68.9	152.9
16-Jun 4:57:46	0.71	Saturnus	Bedekking.Einde	Enceladus		8.71	32.9	11.2	68.2	152

16-Jun 12:16:42	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.83	-12.8	61.8	64.9	147.6
16-Jun 12:34:41	0.51	Mimas	Overgang.Begin	Saturnus		8.73	-15.6	60.8	64.8	147.4
16-Jun 14:34:01	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.16	-32.9	47.2	63.9	146.4
16-Jun 14:54:55	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.68	-35.5	44.1	63.7	146.3
16-Jun 15:44:04	5.76	Saturnus	Verduistering.Begin	Rhea	0.37	11.99	-40.8	36.1	63.3	145.9
16-Jun 16:56:47	1.72	Saturnus	Verduistering.Begin	Tethys	0.38	12.07	-44.9	25	62.8	145.4
16-Jun 18:14:58	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.27	-44	13.1	62.2	144.9
16-Jun 18:39:27	0.71	Enceladus	Overgang.Begin	Saturnus		8.71	-42.5	9.6	62	144.7
16-Jun 20:13:06	3.27	Saturnus	Bedekking.Einde	Rhea	-0.01	8.62	-32.9	-2.8	61.3	144.1
16-Jun 20:29:26	1.62	Saturnus	Bedekking.Einde	Tethys		8.73	-30.9	-4.5	61.1	144
16-Jun 20:44:59	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.18	-28.8	-6.1	61	143.9
16-Jun 21:18:01	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.67	-24.1	-9.2	60.8	143.7
16-Jun 23:20:08	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.9	-5.1	-15.6	59.8	142.9
17-Jun 1:54:32	2.31	Saturnus	Verduistering.Begin	Dione	0.41	12.31	17.9	-10.3	58.6	141.7
17-Jun 2:03:29	0.52	Saturnus	Bedekking.Einde	Mimas		8.73	18.9	-9.6	58.6	141.7
17-Jun 5:52:53	1.95	Saturnus	Bedekking.Einde	Dione	-0.01	8.69	32.8	19.5	56.8	139.5
17-Jun 10:47:02	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.31	0.7	60.5	54.5	136.5
17-Jun 10:53:51	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.85	-0.3	61	54.5	136.4
17-Jun 11:11:49	0.51	Mimas	Overgang.Begin	Saturnus		8.74	-3.2	61.9	54.3	136.2
17-Jun 13:11:10	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.17	-21.8	57.8	53.4	135.1
17-Jun 13:32:04	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.69	-24.9	55.5	53.3	134.9
17-Jun 13:50:51	0.71	Saturnus	Bedekking.Einde	Enceladus		8.73	-27.6	53.2	53.1	134.7
17-Jun 15:35:57	1.72	Tethys	Schaduwovergang.Begin	Saturnus	0.38	12.06	-40.2	37.8	52.3	133.8
17-Jun 16:10:46	1.62	Tethys	Overgang.Begin	Saturnus		8.74	-42.9	32.3	52	133.5
17-Jun 18:23:11	1.72	Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.36	-43.3	11.9	51	132.6
17-Jun 19:07:55	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.7	-39.8	5.6	50.6	132.3
17-Jun 21:57:09	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.91	-17.6	-12.2	49.3	131.3
18-Jun 0:40:25	0.52	Saturnus	Bedekking.Einde	Mimas		8.74	7.9	-14.7	48	130.2
18-Jun 3:08:04	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.29	26.6	-3.2	46.9	129
18-Jun 3:32:31	0.71	Enceladus	Overgang.Begin	Saturnus		8.74	28.8	-0.3	46.7	128.8
18-Jun 5:38:11	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.41	5.2	33	17.1	45.7	127.6
18-Jun 6:11:06	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.69	32.1	22.2	45.4	127.2
18-Jun 9:31:00	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.86	11.6	52.5	43.9	125.1

18-Jun 9:48:56	0.51 Mimas	Overgang.Begin	Saturnus	8.75	9	54.8	43.7	124.9
18-Jun 10:42:14	2.32 Dione	Schaduwovergang.Begin	Saturnus	0.41	12.33	0.7	60.2	43.3 124.3
18-Jun 11:25:24	1.96 Dione	Overgang.Begin	Saturnus	-0.01	8.71	-6	62.4	43 123.9
18-Jun 11:48:20	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.18	-9.6	62.6	42.8 123.6
18-Jun 12:09:12	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.71	-12.8	62.2	42.6 123.4
18-Jun 13:28:06	2.31 Dione	Schaduwovergang.Einde	Saturnus	-0.67	2.86	-25	55.9	42 122.6
18-Jun 14:15:16	1.72 Saturnus	Verduistering.Begin	Tethys	0.38	12.1	-31.6	49.9	41.6 122.2
18-Jun 14:40:49	1.96 Dione	Overgang.Einde	Saturnus	-0.01	8.67	-34.8	46.2	41.4 122
18-Jun 17:47:52	1.62 Saturnus	Bedekking.Einde	Tethys	8.75	-44.7	17.2	39.9	120.4
18-Jun 19:40:07	0.75 Saturnus	Verduistering.Begin	Enceladus	0.29	11.33	-36.1	1.5	39.1 119.7
18-Jun 20:34:10	0.53 Saturnus	Verduistering.Begin	Mimas	0.25	10.92	-29.2	-4.9	38.6 119.3
18-Jun 21:57:02	5.71 Rhea	Schaduwovergang.Begin	Saturnus	0.38	12.06	-16.6	-12.3	37.9 118.8
18-Jun 22:43:55	0.71 Saturnus	Bedekking.Einde	Enceladus	8.75	-9.6	-14.6	37.6	118.5
18-Jun 22:47:02	3.27 Rhea	Overgang.Begin	Saturnus	-0.01	8.65	-8.9	-14.8	37.6 118.5
18-Jun 23:17:20	0.52 Saturnus	Bedekking.Einde	Mimas	8.76	-4.3	-15.5	37.3	118.3
19-Jun 0:03:24	5.71 Rhea	Schaduwovergang.Einde	Saturnus	-0.56	3.84	3.3	-15.6	36.9 118
19-Jun 2:26:07	3.28 Rhea	Overgang.Einde	Saturnus	-0.02	8.6	22.8	-7.5	35.8 116.9
19-Jun 8:08:09	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.87	22	40.5	33.1 113.6
19-Jun 8:26:03	0.51 Mimas	Overgang.Begin	Saturnus	8.77	19.8	43.3	32.9	113.4
19-Jun 10:25:30	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.2	2.9	58.7	32 112.1
19-Jun 10:46:21	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.72	-0.4	60.5	31.8 111.9
19-Jun 12:01:10	0.75 Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.31	-12.2	62.4	31.2 111.1
19-Jun 12:25:34	0.71 Enceladus	Overgang.Begin	Saturnus	8.76	-16	61.5	31	110.8
19-Jun 12:54:28	1.72 Tethys	Schaduwovergang.Begin	Saturnus	0.38	12.1	-20.6	59.3	30.8 110.5
19-Jun 13:29:12	1.62 Tethys	Overgang.Begin	Saturnus	8.77	-25.7	55.8	30.5	110.1
19-Jun 14:31:22	0.75 Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.23	-34	47.7	30 109.5
19-Jun 15:04:09	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.72	-37.8	42.9	29.7 109.2
19-Jun 15:41:51	1.72 Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.4	-41.4	37	29.4 108.8
19-Jun 16:26:21	1.62 Tethys	Overgang.Einde	Saturnus	-0.01	8.73	-44.2	30	29.1 108.4
19-Jun 19:11:11	0.53 Saturnus	Verduistering.Begin	Mimas	0.25	10.94	-38.8	5.3	27.7 107.2
19-Jun 19:35:54	2.3 Saturnus	Verduistering.Begin	Dione	0.41	12.37	-36	1.9	27.5 107
19-Jun 21:54:15	0.52 Saturnus	Bedekking.Einde	Mimas	8.77	-16.8	-11.9	26.4	106.1
19-Jun 23:34:16	1.95 Saturnus	Bedekking.Einde	Dione	-0.01	8.74	-1	-15.7	25.6 105.4

20-Jun	4:33:16	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.35	32.6	7.6	23.2	103.1
20-Jun	6:45:17	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.89	29.6	27.5	22.1	101.9
20-Jun	7:03:09	0.51	Mimas	Overgang.Begin	Saturnus		8.78	28.2	30.3	22	101.7
20-Jun	7:37:02	0.71	Saturnus	Bedekking.Einde	Enceladus		8.77	25	35.7	21.7	101.3
20-Jun	9:02:39	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.21	14.5	48.6	21	100.4
20-Jun	9:23:28	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.74	11.6	51.5	20.8	100.1
20-Jun	11:33:45	1.72	Saturnus	Verduistering.Begin	Tethys	0.38	12.13	-8.6	62.6	19.8	98.6
20-Jun	15:06:16	1.62	Saturnus	Bedekking.Einde	Tethys		8.78	-38.5	42.5	18	96.3
20-Jun	17:48:13	0.53	Saturnus	Verduistering.Begin	Mimas	0.25	10.95	-44.4	17.3	16.7	94.8
20-Jun	20:31:09	0.52	Saturnus	Bedekking.Einde	Mimas		8.78	-28.6	-4.5	15.4	93.6
20-Jun	20:54:16	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.33	-25.3	-6.9	15.2	93.4
20-Jun	21:18:36	0.71	Enceladus	Overgang.Begin	Saturnus		8.78	-21.7	-9.1	15	93.3
20-Jun	23:24:32	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.25	-2	-15.6	14	92.4
20-Jun	23:57:12	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.74	3.1	-15.7	13.8	92.2
21-Jun	4:08:47	5.57	Saturnus	Verduistering.Begin	Rhea	0.38	12.16	32	4.6	11.8	90.3
21-Jun	4:23:33	2.31	Dione	Schaduwovergang.Begin	Saturnus	0.41	12.39	32.5	6.3	11.7	90.2
21-Jun	5:06:37	1.96	Dione	Overgang.Begin	Saturnus		8.76	33.2	12.4	11.4	89.8
21-Jun	5:22:26	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.9	33.1	14.7	11.2	89.7
21-Jun	5:40:15	0.51	Mimas	Overgang.Begin	Saturnus		8.8	32.7	17.3	11.1	89.5
21-Jun	7:10:04	2.31	Dione	Schaduwovergang.Einde	Saturnus	-0.67	2.92	27.2	31.5	10.4	88.6
21-Jun	7:39:48	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.23	24.3	36	10.2	88.3
21-Jun	8:00:36	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.75	22	39.3	10	88.1
21-Jun	8:22:06	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.71	19.3	42.7	9.9	87.8
21-Jun	8:39:01	3.26	Saturnus	Bedekking.Einde	Rhea	-0.01	8.69	17	45.3	9.8	87.6
21-Jun	10:12:58	1.72	Tethys	Schaduwovergang.Begin	Saturnus	0.38	12.13	3.5	57.5	9.1	86.6
21-Jun	10:47:35	1.62	Tethys	Overgang.Begin	Saturnus		8.8	-1.9	60.6	8.8	86.2
21-Jun	13:00:29	1.72	Tethys	Schaduwovergang.Einde	Saturnus	-0.5	4.44	-22.6	58.9	7.9	84.6
21-Jun	13:26:21	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.37	-26.4	56.2	7.7	84.3
21-Jun	13:44:44	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.76	-29	54	7.6	84.1
21-Jun	16:25:14	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.96	-44.4	30.3	6.6	82.4
21-Jun	16:30:04	0.71	Saturnus	Bedekking.Einde	Enceladus		8.79	-44.6	29.5	6.6	82.4
21-Jun	19:08:04	0.52	Saturnus	Bedekking.Einde	Mimas		8.8	-38.3	5.8	5.8	80.9
22-Jun	3:59:34	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.91	31.6	3	5.2	77.1

22-Jun	4:17:21	0.51 Mimas	Overgang.Begin	Saturnus	8.81	32.4	5.3	5.2	76.9
22-Jun	5:47:22	0.75 Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.35	32.4	18.4	76.1
22-Jun	6:11:38	0.71 Enceladus	Overgang.Begin	Saturnus	8.8	31.3	22.2	5.6	75.9
22-Jun	6:16:58	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.24	31	23	75.8
22-Jun	6:37:43	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.77	29.6	26.2	75.6
22-Jun	7:48:02	19.96 Saturnus	Bedekking.Begin	Titan	-0.04	8.46	21.9	38.8	74.8
22-Jun	8:17:44	0.75 Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.28	19.4	41.9	74.6
22-Jun	8:50:14	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.76	15.1	46.8	74.2
22-Jun	8:52:17	1.72 Saturnus	Verduistering.Begin	Tethys	0.38	12.16	14.8	47.1	74.2
22-Jun	12:11:45	19.96 Saturnus	Bedekking.Einde	Titan	-0.04	8.45	-17.2	61.7	71.8
22-Jun	12:24:41	1.62 Saturnus	Bedekking.Einde	Tethys	8.81	-17.8	61.5	7.8	71.7
22-Jun	13:17:14	2.29 Saturnus	Verduistering.Begin	Dione	0.41	12.41	-25.7	57.2	71.1
22-Jun	15:02:16	0.53 Saturnus	Verduistering.Begin	Mimas	0.24	10.97	-38.8	43.2	69.9
22-Jun	17:15:29	1.95 Saturnus	Bedekking.Einde	Dione	8.78	-45.1	22.3	9.9	68.5
22-Jun	17:44:58	0.52 Saturnus	Bedekking.Einde	Mimas	8.81	-44.3	17.9	10.1	68.2
22-Jun	22:19:27	0.75 Saturnus	Verduistering.Begin	Enceladus	0.29	11.39	-11	-13.4	65.9
23-Jun	1:23:05	0.71 Saturnus	Bedekking.Einde	Enceladus	8.81	16.7	-12.7	13.8	64.6
23-Jun	2:36:43	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.92	25.5	-6.7	64
23-Jun	2:54:27	0.51 Mimas	Overgang.Begin	Saturnus	8.83	27.2	-4.8	14.5	63.9
23-Jun	4:54:07	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.26	33.2	10.4	63
23-Jun	5:14:50	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.78	33.1	13.5	62.8
23-Jun	7:31:32	1.72 Tethys	Schaduwovergang.Begin	Saturnus	0.38	12.15	24.3	34.8	61.5
23-Jun	8:05:59	1.62 Tethys	Overgang.Begin	Saturnus	8.83	20.3	40.1	17.2	61.1
23-Jun	10:19:12	1.72 Tethys	Schaduwovergang.Einde	Saturnus	-0.49	4.49	1.4	58.1	59.7
23-Jun	10:22:26	5.53 Rhea	Schaduwovergang.Begin	Saturnus	0.38	12.21	0.6	58.6	59.6
23-Jun	11:03:08	1.62 Tethys	Overgang.Einde	Saturnus	-0.01	8.79	-5.5	61.5	59.1
23-Jun	11:13:05	3.27 Rhea	Overgang.Begin	Saturnus	-0.01	8.72	-7.2	62	59
23-Jun	12:32:55	5.53 Rhea	Schaduwovergang.Einde	Saturnus	-0.58	3.71	-19.9	60.9	58
23-Jun	13:39:18	0.53 Saturnus	Verduistering.Begin	Mimas	0.24	10.98	-29.3	54.8	57.3
23-Jun	14:40:28	0.75 Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.37	-36.9	46.5	56.5
23-Jun	14:52:21	3.27 Rhea	Overgang.Einde	Saturnus	-0.02	8.67	-38.3	44.6	56.4
23-Jun	15:04:38	0.71 Enceladus	Overgang.Begin	Saturnus	8.82	-39.4	42.9	20.8	56.3
23-Jun	16:21:53	0.52 Saturnus	Bedekking.Einde	Mimas	8.83	-44.6	30.9	21.5	55.4

23-Jun 17:10:55	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.31	-45.1	23.1	21.9	54.8
23-Jun 17:43:15	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.78	-44.2	18.1	22.2	54.5
23-Jun 22:04:53	2.3	Dione	Schaduwovergang.Begin	Saturnus	0.41	12.43	-12.6	-12.6	24.5	52.1
23-Jun 22:47:45	1.96	Dione	Overgang.Begin	Saturnus		8.8	-5.8	-14.8	24.9	51.8
24-Jun 0:52:03	2.3	Dione	Schaduwovergang.Einde	Saturnus	-0.66	2.99	13.1	-14.3	26	50.9
24-Jun 1:13:51	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.93	16	-13.2	26.1	50.7
24-Jun 1:30:59	5.64	Enceladus	Ringvormige bedekking	Tethys	2.91		18.6	-12	26.3	50.6
24-Jun 1:31:32	0.51	Mimas	Overgang.Begin	Saturnus		8.84	18.3	-12.2	26.3	50.6
24-Jun 2:03:16	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.75	22.3	-9.7	26.6	50.4
24-Jun 3:31:16	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.28	30.4	-0.7	27.4	49.7
24-Jun 3:51:56	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.79	31.6	1.9	27.5	49.6
24-Jun 6:10:47	1.72	Saturnus	Verduistering.Begin	Tethys	0.38	12.18	30.9	22	28.8	48.4
24-Jun 7:12:32	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.41	25.9	31.6	29.3	47.8
24-Jun 9:43:01	1.62	Saturnus	Bedekking.Einde	Tethys		8.84	6.3	53.9	30.7	46.3
24-Jun 10:16:05	0.71	Saturnus	Bedekking.Einde	Enceladus		8.83	1.3	57.7	31	45.9
24-Jun 12:16:20	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.99	-17.6	61.9	32	44.5
24-Jun 14:58:47	0.52	Saturnus	Bedekking.Einde	Mimas		8.84	-39.2	43.8	33.5	42.5
24-Jun 23:33:38	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.29	11.39	1.9	-15.8	38.1	37.4
24-Jun 23:51:00	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.24	10.94	4.5	-15.8	38.3	37.2
24-Jun 23:57:42	0.71	Enceladus	Overgang.Begin	Saturnus		8.84	5.6	-15.8	38.4	37.2
25-Jun 0:08:37	0.51	Mimas	Overgang.Begin	Saturnus		8.85	7.2	-15.6	38.5	37.1
25-Jun 2:04:10	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.4	5.35	22.8	-9.7	39.5	36.2
25-Jun 2:08:26	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.29	23.3	-9.4	39.5	36.2
25-Jun 2:29:02	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.81	25.5	-7.5	39.7	36.1
25-Jun 2:36:18	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.8	26.2	-6.8	39.8	36
25-Jun 4:50:01	1.72	Tethys	Schaduwovergang.Begin	Saturnus	0.37	12.17	33.2	9.8	41	35
25-Jun 5:24:17	1.62	Tethys	Overgang.Begin	Saturnus		8.86	32.7	14.8	41.3	34.7
25-Jun 6:58:37	2.28	Saturnus	Verduistering.Begin	Dione	0.41	12.45	26.8	29.5	42.2	33.9
25-Jun 7:37:51	1.72	Tethys	Schaduwovergang.Einde	Saturnus	-0.49	4.53	22.8	35.6	42.5	33.6
25-Jun 8:21:26	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.82	17.4	42.4	42.9	33.1
25-Jun 10:53:23	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	10.99	-5.1	60.8	44.3	31.5
25-Jun 10:56:39	1.95	Saturnus	Bedekking.Einde	Dione		8.82	-5.8	61	44.3	31.5
25-Jun 13:35:41	0.52	Saturnus	Bedekking.Einde	Mimas		8.85	-29.8	55.2	45.8	29.6

25-Jun 16:05:37	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.42	-44.3	33.4	47.1	27.8
25-Jun 16:33:50	5.41	Saturnus	Verduistering.Begin	Rhea	0.39	12.29	-45.1	28.6	47.4	27.4
25-Jun 19:09:04	0.71	Saturnus	Bedekking.Einde	Enceladus		8.85	-36.5	5.7	48.8	25.7
25-Jun 21:04:34	3.26	Saturnus	Bedekking.Einde	Rhea	-0.01	8.76	-20.7	-8	49.9	24.5
25-Jun 22:28:08	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.95	-7.8	-13.9	50.6	23.8
25-Jun 22:45:41	0.51	Mimas	Overgang.Begin	Saturnus		8.87	-5	-14.7	50.8	23.6
26-Jun 0:45:35	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.31	13.2	-14.7	51.9	22.6
26-Jun 1:06:08	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.82	16	-13.7	52.1	22.5
26-Jun 3:29:18	1.71	Saturnus	Verduistering.Begin	Tethys	0.38	12.2	30.8	-0.9	53.4	21.4
26-Jun 7:01:18	1.62	Saturnus	Bedekking.Einde	Tethys		8.87	26.2	29.8	55.3	19.7
26-Jun 8:26:44	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	11.4	16.2	43.1	56.1	18.9
26-Jun 8:50:41	0.71	Enceladus	Overgang.Begin	Saturnus		8.86	12.9	46.6	56.3	18.7
26-Jun 9:30:25	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	11	7.1	52.2	56.7	18.3
26-Jun 10:37:28	3.06	607	Overgang.Begin	Saturnus	-0.08	8.17	-3.4	59.7	57.3	17.6
26-Jun 10:57:21	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.39	5.38	-6.4	61	57.5	17.4
26-Jun 11:29:17	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.82	-11.5	62.4	57.8	17.1
26-Jun 12:12:34	0.52	Saturnus	Bedekking.Einde	Mimas		8.87	-18.2	62	58.2	16.6
26-Jun 13:19:40	3.11	607	Overgang.Einde	Saturnus	-0.09	8.12	-28.3	56.9	58.8	15.8
26-Jun 15:46:17	2.29	Dione	Schaduwovergang.Begin	Saturnus	0.4	12.46	-43.6	36.4	60.1	14
26-Jun 16:28:50	1.96	Dione	Overgang.Begin	Saturnus		8.84	-45.1	29.7	60.5	13.5
26-Jun 18:34:05	2.29	Dione	Schaduwovergang.Einde	Saturnus	-0.65	3.07	-39.7	10.5	61.7	12
26-Jun 19:44:21	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.8	-31.7	1	62.3	11.2
26-Jun 21:05:16	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.96	-20.2	-7.9	63	10.4
26-Jun 21:22:45	0.51	Mimas	Overgang.Begin	Saturnus		8.88	-17.5	-9.5	63.2	10.2
26-Jun 23:22:44	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.33	1.4	-15.7	64.3	9.1
26-Jun 23:43:13	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.84	4.5	-15.9	64.5	8.9
27-Jun 0:58:43	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.44	15.5	-14.1	65.2	8.3
27-Jun 2:08:31	1.71	Tethys	Schaduwovergang.Begin	Saturnus	0.37	12.19	24.2	-9.4	65.8	7.7
27-Jun 2:42:33	1.62	Tethys	Overgang.Begin	Saturnus		8.88	27.6	-6.2	66.1	7.4
27-Jun 4:02:03	0.71	Saturnus	Bedekking.Einde	Enceladus		8.87	32.5	3.1	66.9	6.8
27-Jun 4:56:30	1.71	Tethys	Schaduwovergang.Einde	Saturnus	-0.48	4.59	33.1	10.7	67.4	6.4
27-Jun 5:39:42	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.84	31.9	17.1	67.8	6.1
27-Jun 8:07:28	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	11.01	18.3	40.1	69.1	4.9

27-Jun 10:49:28	0.52	Saturnus	Bedekking.Einde	Mimas	8.88	-5.8	60.4	70.6	3.4	
27-Jun 17:19:50	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	11.41	-44.5	21.8	74.2	1.3
27-Jun 17:43:40	0.71	Enceladus	Overgang.Begin	Saturnus	8.88	-43.3	18.1	74.4	1.6	
27-Jun 19:42:24	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.97	-31.5	1.3	75.5	3
27-Jun 19:50:32	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.39	5.42	-30.4	0.3	75.6	3.1
27-Jun 19:59:49	0.51	Mimas	Overgang.Begin	Saturnus	8.9	-29.2	-0.8	75.6	3.2	
27-Jun 20:22:16	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.84	-26	-3.5	75.8	3.4
27-Jun 21:59:53	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.35	-11.1	-12.3	76.7	4.5
27-Jun 22:20:18	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.85	-7.8	-13.6	76.9	4.7
27-Jun 22:47:18	5.37	Rhea	Schaduwovergang.Begin	Saturnus	0.38	12.33	-3.2	-14.9	77.2	4.9
27-Jun 23:38:07	3.27	Rhea	Overgang.Begin	Saturnus	-0.01	8.78	4.6	-15.9	77.7	5.4
28-Jun 0:39:57	2.27	Saturnus	Verduistering.Begin	Dione	0.4	12.48	13.6	-14.9	78.2	6
28-Jun 0:47:47	1.71	Saturnus	Verduistering.Begin	Tethys	0.37	12.22	14.6	-14.7	78.3	6
28-Jun 1:01:42	5.37	Rhea	Schaduwovergang.Einde	Saturnus	-0.6	3.58	16.8	-13.9	78.4	6.2
28-Jun 3:17:23	3.27	Rhea	Overgang.Einde	Saturnus	-0.02	8.74	30.6	-2.4	79.7	7.2
28-Jun 4:19:31	1.62	Saturnus	Bedekking.Einde	Tethys	8.9	33	5.4	80.2	7.7	
28-Jun 4:37:36	1.95	Saturnus	Bedekking.Einde	Dione	8.86	33.2	7.9	80.4	7.8	
28-Jun 6:44:32	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	11.02	27.1	27	81.5	8.8
28-Jun 9:26:22	0.52	Saturnus	Bedekking.Einde	Mimas	8.9	6.6	51.5	83	10.1	
28-Jun 9:51:49	0.75	Saturnus	Verduistering.Begin	Enceladus	0.29	11.45	2.6	54.7	83.3	10.3
28-Jun 12:55:00	0.71	Saturnus	Bedekking.Einde	Enceladus	8.89	-25.8	59.3	84.9	12.2	
28-Jun 18:19:33	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.98	-40.4	12.7	87.9	16
28-Jun 18:36:53	0.51	Mimas	Overgang.Begin	Saturnus	8.91	-38.7	10.2	88.1	16.2	
28-Jun 20:37:02	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.29	6.37	-23.3	-5.1	89.2	17.6
28-Jun 20:57:23	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.86	-20.2	-7.2	89.4	17.8
28-Jun 23:27:08	1.71	Tethys	Schaduwovergang.Begin	Saturnus	0.37	12.2	3.4	-15.9	90.7	19.5
29-Jun 0:00:54	1.62	Tethys	Overgang.Begin	Saturnus	8.91	8.5	-15.9	91	19.8	
29-Jun 2:12:56	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	11.43	25.4	-9.2	92.2	21
29-Jun 2:15:16	1.71	Tethys	Schaduwovergang.Einde	Saturnus	-0.48	4.65	25.7	-8.9	92.3	21
29-Jun 2:36:37	0.71	Enceladus	Overgang.Begin	Saturnus	8.9	27.7	-7	92.5	21.2	
29-Jun 2:58:02	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.87	29.5	-4.7	92.7	21.4
29-Jun 4:43:43	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.39	5.46	33.2	8.6	93.6	22.2
29-Jun 5:15:12	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.86	32.6	13.2	93.9	22.4



29-Jun	5:21:35	0.53	Saturnus	Verduistering.Begin	Mimas	0.24	11.02	32.3	14.1	94	22.5
29-Jun	8:03:15	0.52	Saturnus	Bedekking.Einde	Mimas		8.91	17.8	39.3	95.4	23.7
29-Jun	9:27:33	2.28	Dione	Schaduwovergang.Begin	Saturnus	0.4	12.48	5.6	51.7	96.2	24.4
29-Jun	10:09:42	1.96	Dione	Overgang.Begin	Saturnus	-0.01	8.88	-0.8	56.8	96.6	24.7
29-Jun	12:15:59	2.28	Dione	Schaduwovergang.Einde	Saturnus	-0.65	3.16	-20.7	61.7	97.7	25.9
29-Jun	13:25:11	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.84	-30.6	56.3	98.4	26.6
29-Jun	16:56:41	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.99	-44.9	25.4	100.3	29
29-Jun	17:13:56	0.51	Mimas	Overgang.Begin	Saturnus		8.93	-44.4	22.7	100.5	29.2
29-Jun	18:44:57	0.75	Saturnus	Verduistering.Begin	Enceladus	0.28	11.46	-37.5	9	101.3	30.3
29-Jun	19:14:11	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.39	-34.1	5	101.5	30.6
29-Jun	19:34:27	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.88	-31.5	2.3	101.7	30.9
29-Jun	21:48:00	0.71	Saturnus	Bedekking.Einde	Enceladus		8.91	-11.7	-11.6	102.9	32.5
29-Jun	22:06:17	1.71	Saturnus	Verduistering.Begin	Tethys	0.37	12.23	-8.7	-12.9	103.1	32.7
30-Jun	1:37:42	1.62	Saturnus	Bedekking.Einde	Tethys		8.93	22	-12	105	34.9
30-Jun	3:58:38	0.53	Saturnus	Verduistering.Begin	Mimas	0.23	11.03	32.7	2.4	106.3	36.1
30-Jun	4:59:07	5.25	Saturnus	Verduistering.Begin	Rhea	0.39	12.38	32.8	11.1	106.9	36.6
30-Jun	6:40:08	0.52	Saturnus	Bedekking.Einde	Mimas		8.92	26.8	26.1	107.8	37.3
30-Jun	7:37:58	22.35	Titan	Overgang.Begin	Saturnus	-0.05	8.52	19.1	36.9	108.4	37.8
30-Jun	9:29:31	3.26	Saturnus	Bedekking.Einde	Rhea	-0.01	8.82	4.7	51.9	109.3	38.6
30-Jun	11:06:05	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	11.44	-10.3	61.3	110.2	39.4
30-Jun	11:29:36	0.71	Enceladus	Overgang.Begin	Saturnus		8.92	-14	62.1	110.4	39.6
30-Jun	12:00:06	22.45	Titan	Overgang.Einde	Saturnus	-0.05	8.47	-20.4	61.9	110.8	40
30-Jun	13:36:56	0.75	Enceladus	Schaduwovergang.Einde	Saturnus	-0.39	5.5	-32.6	55	111.6	40.8
30-Jun	14:08:10	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.88	-36.4	51	111.8	41.1
30-Jun	15:33:49	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	10.99	-43.7	38.4	112.6	42
30-Jun	15:50:59	0.51	Mimas	Overgang.Begin	Saturnus		8.94	-44.5	35.7	112.8	42.2
30-Jun	17:51:20	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.41	-42.1	16.9	113.9	43.6
30-Jun	18:11:31	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.89	-40.4	13.9	114	43.8
30-Jun	18:21:22	2.26	Saturnus	Verduistering.Begin	Dione	0.4	12.5	-39.4	12.3	114.1	44
30-Jun	20:45:39	1.71	Tethys	Schaduwovergang.Begin	Saturnus	0.36	12.21	-20.7	-6.2	115.4	45.7
30-Jun	21:19:06	1.62	Tethys	Overgang.Begin	Saturnus		8.94	-15.6	-9.4	115.7	46.1
30-Jun	22:18:28	1.95	Saturnus	Bedekking.Einde	Dione	-0.01	8.9	-6.2	-13.7	116.3	46.8
30-Jun	23:33:55	1.71	Tethys	Schaduwovergang.Einde	Saturnus	-0.47	4.71	5.6	-16.1	117	47.7

01-Jul	0:16:14	1.62	Tethys	Overgang.Einde	Saturnus	-0.01	8.9	11.8	-15.8	117.3	48.1
01-Jul	2:35:42	0.53	Saturnus	Verduistering.Begin	Mimas	0.23	11.03	28.3	-7.2	118.6	49.5
01-Jul	3:38:03	0.75	Saturnus	Verduistering.Begin	Enceladus	0.28	11.47	32.2	-0.3	119.1	50.1
01-Jul	5:17:01	0.52	Saturnus	Bedekking.Einde	Mimas		8.94	32.2	13.3	120	50.9
01-Jul	6:40:55	0.71	Saturnus	Bedekking.Einde	Enceladus		8.93	26.3	26.2	120.8	51.5
01-Jul	10:07:44	1.69	Mimas	Gedeeltelijke bedekking	Enceladus	2.12	0.02	-1.8	56.4	122.7	53.1
01-Jul	14:10:57	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	11	-37.1	50.6	124.8	55.1
01-Jul	14:28:01	0.51	Mimas	Overgang.Begin	Saturnus		8.95	-38.9	48.3	125	55.3
01-Jul	16:28:29	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.44	-45.2	29.8	126.1	56.6
01-Jul	16:48:34	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.91	-45	26.6	126.2	56.8
01-Jul	19:24:49	1.71	Saturnus	Verduistering.Begin	Tethys	0.37	12.24	-31.7	3.4	127.6	58.6
01-Jul	19:59:11	0.75	Enceladus	Schaduwovergang.Begin	Saturnus	0.28	11.44	-27	-0.9	127.9	59
01-Jul	20:22:32	0.71	Enceladus	Overgang.Begin	Saturnus		8.94	-23.7	-3.6	128.2	59.3
01-Jul	22:30:08	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.38	5.54	-3.8	-14.3	129.3	60.8
01-Jul	22:55:53	1.62	Saturnus	Bedekking.Einde	Tethys		8.95	0.3	-15.4	129.5	61.1
01-Jul	23:01:06	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.91	1.1	-15.5	129.6	61.2
02-Jul	1:12:45	0.53	Saturnus	Verduistering.Begin	Mimas	0.23	11.03	19.9	-13.8	130.7	62.7
02-Jul	3:08:55	2.27	Dione	Schaduwovergang.Begin	Saturnus	0.39	12.5	31	-3.7	131.8	63.9
02-Jul	3:50:33	1.96	Dione	Overgang.Begin	Saturnus	-0.01	8.92	32.8	1.3	132.2	64.2
02-Jul	3:53:53	0.52	Saturnus	Bedekking.Einde	Mimas		8.95	32.8	1.6	132.2	64.3
02-Jul	5:57:59	2.27	Dione	Schaduwovergang.Einde	Saturnus	-0.64	3.27	29.6	19.5	133.3	65.3
02-Jul	7:05:58	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.88	23.2	30.1	133.9	65.8
02-Jul	11:12:33	5.22	Rhea	Schaduwovergang.Begin	Saturnus	0.38	12.4	-12.9	61.5	136.1	67.6
02-Jul	12:03:01	3.28	Rhea	Overgang.Begin	Saturnus	-0.01	8.85	-20.6	62	136.5	68
02-Jul	12:31:09	0.75	Saturnus	Verduistering.Begin	Enceladus	0.28	11.48	-24.6	60.8	136.8	68.2
02-Jul	12:48:05	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	11	-27	59.7	136.9	68.3
02-Jul	13:05:04	0.51	Mimas	Overgang.Begin	Saturnus		8.97	-29.4	58.3	137.1	68.5
02-Jul	13:30:42	5.22	Rhea	Schaduwovergang.Einde	Saturnus	-0.61	3.48	-33.1	55.3	137.3	68.7
02-Jul	15:05:38	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.46	-42.5	42.7	138.1	69.6
02-Jul	15:25:38	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.92	-43.7	39.6	138.3	69.8
02-Jul	15:33:51	0.71	Saturnus	Bedekking.Einde	Enceladus		8.96	-44.1	38.4	138.4	69.8
02-Jul	15:41:59	3.28	Rhea	Overgang.Einde	Saturnus	-0.02	8.81	-44.5	36.9	138.5	69.9
02-Jul	18:04:09	1.71	Tethys	Schaduwovergang.Begin	Saturnus	0.36	12.21	-40.3	14.8	139.7	71.4

02-Jul 18:37:16	1.62	Tethys	Overgang.Begin	Saturnus	8.97	-37	10	140	71.8	
02-Jul 20:52:34	1.71	Tethys	Schaduwovergang.Einde	Saturnus	-0.47	4.77	-18.4	-7	141.2	73.4
02-Jul 21:34:22	1.62	Tethys	Overgang.Einde	Saturnus	8.93	-11.9	-10.8		141.6	73.9
02-Jul 23:49:49	0.53	Saturnus	Verduistering.Begin	Mimas	0.23	11.04	9.1	-16.3	142.7	75.5
03-Jul 2:30:46	0.52	Saturnus	Bedekking.Einde	Mimas	8.97	28.5	-7.9		144.2	77.3
03-Jul 4:52:18	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.27	11.45	32.7	9.5	145.4	78.7
03-Jul 5:15:28	0.71	Enceladus	Overgang.Begin	Saturnus	8.96	31.9	12.9		145.6	78.9
03-Jul 7:23:19	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.38	5.58	20.8	32.7	146.7	79.9
03-Jul 7:54:00	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.93	16.9	37.5	147	80.1
03-Jul 11:25:12	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.23	11.01	-15.1	61.8	148.8	81.6
03-Jul 11:42:05	0.51	Mimas	Overgang.Begin	Saturnus	8.98	-17.8	62.1		149	81.7
03-Jul 12:02:51	2.25	Saturnus	Verduistering.Begin	Dione	0.39	12.5	-21.1	61.9	149.1	81.9
03-Jul 13:42:46	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.48	-34.8	54.2	150	82.6
03-Jul 14:02:40	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.94	-37.1	51.6	150.2	82.8
03-Jul 15:59:17	1.95	Saturnus	Bedekking.Einde	Dione	-0.01	8.94	-45.1	34.2	151.2	83.8
03-Jul 16:43:19	1.71	Saturnus	Verduistering.Begin	Tethys	0.36	12.24	-44.9	27.3	151.6	84.3
03-Jul 20:14:00	1.62	Saturnus	Bedekking.Einde	Tethys	8.98	-23.7	-2.8		153.4	86.6
03-Jul 21:24:15	0.75	Saturnus	Verduistering.Begin	Enceladus	0.28	11.48	-13	-9.9	154	87.4
03-Jul 22:26:53	0.53	Saturnus	Verduistering.Begin	Mimas	0.23	11.04	-3.1	-14.3	154.5	88.1
04-Jul 0:26:44	0.71	Saturnus	Bedekking.Einde	Enceladus	8.98	14.9	-15.8		155.5	89.6
04-Jul 1:07:38	0.52	Saturnus	Bedekking.Einde	Mimas	8.98	20.2	-14.2		155.9	90
04-Jul 10:02:20	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	11.01	-2.7	55.4	160.4	94.7
04-Jul 10:19:07	0.51	Mimas	Overgang.Begin	Saturnus	9	-5.3	57.2		160.6	94.8
04-Jul 12:19:55	0.52	Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.51	-24.1	61.3	161.6	95.7
04-Jul 12:39:43	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.95	-27	60.2	161.7	95.8
04-Jul 13:45:25	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.27	11.46	-35.6	53.8	162.3	96.3
04-Jul 14:08:23	0.71	Enceladus	Overgang.Begin	Saturnus	8.98	-38.1	50.8		162.5	96.5
04-Jul 15:22:43	1.71	Tethys	Schaduwovergang.Begin	Saturnus	0.36	12.22	-44	39.9	163.1	97.1
04-Jul 15:55:26	1.62	Tethys	Overgang.Begin	Saturnus	9	-45.1	34.8		163.4	97.4
04-Jul 16:16:32	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.37	5.63	-45.2	31.6	163.5	97.5
04-Jul 16:46:55	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.95	-44.7	26.8	163.8	97.8
04-Jul 17:24:27	5.12	Saturnus	Verduistering.Begin	Rhea	0.38	12.43	-42.7	20.6	164.1	98.2
04-Jul 18:11:17	1.71	Tethys	Schaduwovergang.Einde	Saturnus	-0.46	4.84	-38.9	13.7	164.5	98.7

04-Jul 18:52:32	1.62 Tethys	Overgang.Einde	Saturnus	8.96	-34.3	7.7	164.8	99.1
04-Jul 20:50:12	2.26 Dione	Schaduwovergang.Begin	Saturnus	0.39	12.5	-17.6	-6.9	165.8 100.4
04-Jul 21:03:58	0.53 Saturnus	Verduistering.Begin	Mimas	0.23	11.04	-15.6	-8.1	165.9 100.6
04-Jul 21:31:12	1.96 Dione	Overgang.Begin	Saturnus	-0.01	8.96	-11.2	-10.6	166.1 100.9
04-Jul 21:53:51	3.27 Saturnus	Bedekking.Einde	Rhea	-0.01	8.89	-7.5	-12.4	166.3 101.2
04-Jul 23:39:53	2.26 Dione	Schaduwovergang.Einde	Saturnus	-0.62	3.39	8.9	-16.4	167.1 102.4
04-Jul 23:44:30	0.52 Saturnus	Bedekking.Einde	Mimas		8.99	9.4	-16.4	167.1 102.4
05-Jul 0:46:31	1.96 Dione	Overgang.Einde	Saturnus	-0.01	8.92	18.1	-15.3	167.6 103.2
05-Jul 6:17:24	0.75 Saturnus	Verduistering.Begin	Enceladus	0.27	11.49	27	22.1	170.1 106.5
05-Jul 8:39:28	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.22	11.01	9.4	44.2	171.2 107.6
05-Jul 8:56:08	0.51 Mimas	Overgang.Begin	Saturnus		9.01	6.9	46.7	171.3 107.8
05-Jul 9:19:40	0.71 Saturnus	Bedekking.Einde	Enceladus		9	3.3	50	171.4 107.9
05-Jul 10:57:03	0.52 Mimas	Schaduwovergang.Einde	Saturnus	-0.28	6.53	-12	60.3	172.1 108.6
05-Jul 11:16:45	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.96	-15.1	61.3	172.2 108.7
05-Jul 14:01:53	1.71 Saturnus	Verduistering.Begin	Tethys	0.36	12.24	-37.9	51.6	173.2 109.9
05-Jul 16:19:58	2.32 Saturnus	Bedekking.Begin	607	-0.07	8.38	-45.2	30.9	174 110.9
05-Jul 17:32:07	1.62 Saturnus	Bedekking.Einde	Tethys		9.01	-42	19.6	174.3 111.6
05-Jul 19:26:57	2.32 Saturnus	Bedekking.Einde	607	-0.08	8.34	-29.3	2.9	174.7 112.7
05-Jul 19:41:02	0.53 Saturnus	Verduistering.Begin	Mimas	0.22	11.04	-27.4	1.2	174.7 112.8
05-Jul 22:21:22	0.52 Saturnus	Bedekking.Einde	Mimas		9.01	-2.7	-14.1	175 114.6
05-Jul 22:38:31	0.74 Enceladus	Schaduwovergang.Begin	Saturnus	0.27	11.46	0	-15	175 114.8
05-Jul 23:01:17	0.71 Enceladus	Overgang.Begin	Saturnus		9	3.5	-15.9	175 115.1
06-Jul 1:09:43	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.37	5.68	21.4	-14.3	174.9 116.6
06-Jul 1:39:47	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	8.97	24.8	-12.5	174.8 116.9
06-Jul 5:44:13	2.25 Saturnus	Verduistering.Begin	Dione	0.38	12.5	29.4	17	174 119.4
06-Jul 7:16:35	0.52 Mimas	Schaduwovergang.Begin	Saturnus	0.22	11.02	20.2	31.3	173.5 120.2
06-Jul 7:33:09	0.51 Mimas	Overgang.Begin	Saturnus		9.02	18.1	33.9	173.4 120.4
06-Jul 9:34:12	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.56	0.5	51.8	172.7 121.3
06-Jul 9:39:51	1.95 Saturnus	Bedekking.Einde	Dione	-0.01	8.98	-0.5	52.6	172.7 121.3
06-Jul 9:53:46	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	8.98	-2.6	54.2	172.6 121.4
06-Jul 12:41:13	1.71 Tethys	Schaduwovergang.Begin	Saturnus	0.35	12.21	-28.4	59.9	171.5 122.5
06-Jul 13:13:31	1.62 Tethys	Overgang.Begin	Saturnus		9.02	-32.7	57.1	171.3 122.7
06-Jul 15:10:30	0.74 Saturnus	Verduistering.Begin	Enceladus	0.27	11.49	-43.8	41.8	170.5 123.5

06-Jul 15:29:56	1.71	Tethys	Schaduwovergang.Einde	Saturnus	-0.46	4.92	-44.6	38.7	170.3	123.7
06-Jul 16:10:36	1.62	Tethys	Overgang.Einde	Saturnus		8.99	-45.2	32.4	170.1	124
06-Jul 18:12:32	0.71	Saturnus	Bedekking.Einde	Enceladus		9.02	-38	13.5	169.2	125
06-Jul 18:18:07	0.53	Saturnus	Verduistering.Begin	Mimas	0.22	11.04	-37.4	12.7	169.1	125.1
06-Jul 20:58:14	0.52	Saturnus	Bedekking.Einde	Mimas		9.02	-15.2	-7.7	167.9	126.6
06-Jul 23:37:38	5.09	Rhea	Schaduwovergang.Begin	Saturnus	0.38	12.43	9.9	-16.6	166.7	128.4
07-Jul 0:27:17	3.28	Rhea	Overgang.Begin	Saturnus	-0.01	8.91	16.7	-16.1	166.4	129
07-Jul 1:59:24	5.09	Rhea	Schaduwovergang.Einde	Saturnus	-0.62	3.4	27.3	-10.9	165.6	130
07-Jul 4:05:41	3.29	Rhea	Overgang.Einde	Saturnus	-0.02	8.87	33.1	2.8	164.7	131.4
07-Jul 5:53:43	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	11.02	28.4	18.2	163.8	132.4
07-Jul 6:10:09	0.51	Mimas	Overgang.Begin	Saturnus		9.04	27	20.8	163.7	132.6
07-Jul 7:31:39	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.27	11.46	17.7	33.6	163.1	133.3
07-Jul 7:54:11	0.71	Enceladus	Overgang.Begin	Saturnus		9.02	14.7	37.1	162.9	133.5
07-Jul 8:11:20	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.58	12.3	39.8	162.8	133.6
07-Jul 8:30:48	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	8.99	9.5	42.7	162.6	133.7
07-Jul 10:02:55	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.37	5.73	-4.7	55.2	161.9	134.4
07-Jul 10:32:40	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	8.99	-9.4	58.2	161.7	134.6
07-Jul 11:20:25	1.71	Saturnus	Verduistering.Begin	Tethys	0.35	12.23	-17	61.2	161.3	134.9
07-Jul 14:31:36	2.25	Dione	Schaduwovergang.Begin	Saturnus	0.38	12.49	-41.5	47.3	159.8	136.2
07-Jul 14:50:10	1.62	Saturnus	Bedekking.Einde	Tethys		9.04	-42.8	44.7	159.7	136.3
07-Jul 15:11:52	1.96	Dione	Overgang.Begin	Saturnus	-0.01	9	-44.1	41.4	159.5	136.5
07-Jul 16:55:12	0.53	Saturnus	Verduistering.Begin	Mimas	0.22	11.04	-43.9	25.3	158.7	137.2
07-Jul 17:21:53	2.25	Dione	Schaduwovergang.Einde	Saturnus	-0.61	3.52	-42.2	21	158.5	137.4
07-Jul 18:27:02	1.96	Dione	Overgang.Einde	Saturnus	-0.01	8.96	-35.9	11.2	157.9	137.9
07-Jul 19:35:06	0.52	Saturnus	Bedekking.Einde	Mimas		9.03	-27.1	1.8	157.4	138.5
08-Jul 0:03:37	0.74	Saturnus	Verduistering.Begin	Enceladus	0.27	11.49	13.9	-16.7	155.3	141.3
08-Jul 3:05:23	0.71	Saturnus	Bedekking.Einde	Enceladus		9.04	31.9	-4.8	153.9	143.3
08-Jul 4:30:50	0.52	Mimas	Schaduwovergang.Begin	Saturnus	0.22	11.02	32.8	6	153.2	144.2
08-Jul 4:47:09	0.51	Mimas	Overgang.Begin	Saturnus		9.05	32.2	8.2	153.1	144.4
08-Jul 6:32:18	20.58	Saturnus	Bedekking.Begin	Titan	-0.04	8.66	23.2	25.7	152.2	145.5
08-Jul 6:48:29	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.61	22.6	26.7	152.1	145.5
08-Jul 7:07:49	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	9	20.3	29.7	152	145.7
08-Jul 9:59:46	1.71	Tethys	Schaduwovergang.Begin	Saturnus	0.35	12.2	-4.9	54.8	150.6	147.1

08-Jul 10:31:36	1.62	Tethys	Overgang.Begin	Saturnus	9.05	-9.9	58	150.4	147.3	
08-Jul 10:47:33	20.58	Saturnus	Bedekking.Einde	Titan	-0.05	8.65	-14	60	150.2	147.5
08-Jul 12:48:37	1.71	Tethys	Schaduwovergang.Einde	Saturnus	-0.45	5	-30.5	59.1	149.3	148.2
08-Jul 13:28:40	1.62	Tethys	Overgang.Einde	Saturnus	9.02	-35.6	55.4		149	148.4
08-Jul 15:32:17	0.53	Saturnus	Verduistering.Begin	Mimas	0.22	11.04	-44.9	38.3	148	149.2
08-Jul 16:24:46	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.26	11.46	-44.9	30.1	147.6	149.6
08-Jul 16:47:03	0.71	Enceladus	Overgang.Begin	Saturnus	9.04	-44.1	26.6		147.4	149.7
08-Jul 18:11:57	0.52	Saturnus	Bedekking.Einde	Mimas	9.05	-37.3	13.4		146.8	150.4
08-Jul 18:56:07	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.36	5.78	-31.9	7	146.4	150.7
08-Jul 19:25:31	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.01	-27.9	3	146.2	151
08-Jul 23:25:36	2.24	Saturnus	Verduistering.Begin	Dione	0.38	12.48	9.1	-16.7	144.3	153.2
09-Jul 3:07:58	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.22	11.02	32.2	-4.7	142.6	155.6
09-Jul 3:20:18	1.95	Saturnus	Bedekking.Einde	Dione	-0.01	9.02	32.6	-3.2	142.5	155.8
09-Jul 3:24:09	0.51	Mimas	Overgang.Begin	Saturnus	9.06	32.7	-2.8		142.5	155.8
09-Jul 5:25:37	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.64	29.9	13.8	141.5	157.1
09-Jul 5:44:49	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	9.02	28.5	16.7	141.4	157.2
09-Jul 5:49:48	4.99	Saturnus	Verduistering.Begin	Rhea	0.37	12.44	27.9	17.8	141.3	157.3
09-Jul 8:38:57	1.7	Saturnus	Verduistering.Begin	Tethys	0.35	12.22	7	43.8	140	158.8
09-Jul 8:56:43	0.74	Saturnus	Verduistering.Begin	Enceladus	0.27	11.49	4.4	46.3	139.9	159
09-Jul 10:17:23	3.28	Saturnus	Bedekking.Einde	Rhea	-0.01	8.95	-8.5	56.6	139.2	159.6
09-Jul 11:58:13	0.71	Saturnus	Bedekking.Einde	Enceladus	9.06	-23.9	61.4		138.5	160.3
09-Jul 12:08:10	1.62	Saturnus	Bedekking.Einde	Tethys	9.07	-25.4	61.2		138.4	160.4
09-Jul 14:09:22	0.53	Saturnus	Verduistering.Begin	Mimas	0.22	11.04	-40.2	50.4	137.5	161.1
09-Jul 16:48:49	0.52	Saturnus	Bedekking.Einde	Mimas	9.06	-43.8	26.2		136.2	162.1
10-Jul 1:17:57	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.26	11.46	24.1	-14.3	132.3	166.5
10-Jul 1:40:00	0.71	Enceladus	Overgang.Begin	Saturnus	9.06	26.4	-12.9		132.1	166.8
10-Jul 1:45:05	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.21	11.02	26.9	-12.6	132.1	166.8
10-Jul 2:01:08	0.51	Mimas	Overgang.Begin	Saturnus	9.08	28.3	-11.3		132	167
10-Jul 3:49:24	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.36	5.83	33.1	0.2	131.2	168.1
10-Jul 4:02:46	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.27	6.67	33.1	1.9	131.1	168.3
10-Jul 4:18:26	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.03	32.8	4	130.9	168.4
10-Jul 4:21:50	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	9.03	32.8	4.5	130.9	168.5
10-Jul 4:46:54	15.06	Enceladus	Gedeeltelijke bedekking	Mimas	0.41	0.02	31.6	8.9	130.7	168.8

10-Jul	7:18:17	1.7 Tethys	Schaduwovergang.Begin	Saturnus	0.34	12.19	17.8	31.3	129.6	170.2
10-Jul	7:49:38	1.62 Tethys	Overgang.Begin	Saturnus		9.08	13.6	36.2	129.3	170.5
10-Jul	8:13:09	2.25 Dione	Schaduwovergang.Begin	Saturnus	0.37	12.47	10.2	39.9	129.1	170.7
10-Jul	8:52:34	1.96 Dione	Overgang.Begin	Saturnus	-0.01	9.04	4.3	45.7	128.8	171.1
10-Jul	10:07:17	1.7 Tethys	Schaduwovergang.Einde	Saturnus	-0.44	5.08	-7.4	55.4	128.3	171.7
10-Jul	10:46:40	1.62 Tethys	Overgang.Einde	Saturnus		9.04	-13.6	59	128	172
10-Jul	11:04:02	2.25 Dione	Schaduwovergang.Einde	Saturnus	-0.6	3.67	-16.4	60.1	127.8	172.1
10-Jul	12:07:34	1.96 Dione	Overgang.Einde	Saturnus	-0.01	9	-25.9	61.1	127.3	172.5
10-Jul	12:46:28	0.53 Saturnus	Verduistering.Begin	Mimas	0.21	11.04	-31.2	59.1	127.1	172.8
10-Jul	15:25:40	0.52 Saturnus	Bedekking.Einde	Mimas		9.07	-45	39.2	125.8	173.8
10-Jul	17:49:50	0.74 Saturnus	Verduistering.Begin	Enceladus	0.26	11.48	-38.8	16.6	124.7	174.6
10-Jul	20:51:02	0.71 Saturnus	Bedekking.Einde	Enceladus		9.07	-13.9	-7.4	123.4	175.9
11-Jul	0:22:13	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.21	11.02	17.9	-16.7	121.8	177.7
11-Jul	0:38:08	0.51 Mimas	Overgang.Begin	Saturnus		9.09	20	-16.3	121.6	177.8
11-Jul	2:39:54	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.7	31.2	-7.9	120.7	178.8
11-Jul	2:58:49	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	9.05	32.1	-5.9	120.6	178.9
11-Jul	5:57:35	1.7 Saturnus	Verduistering.Begin	Tethys	0.34	12.2	26.6	18.5	119.2	178.4
11-Jul	9:26:14	1.62 Saturnus	Bedekking.Einde	Tethys		9.09	-1.5	50.2	117.6	176.6
11-Jul	10:11:04	0.74 Enceladus	Schaduwovergang.Begin	Saturnus	0.26	11.45	-8.5	55.6	117.3	176.3
11-Jul	10:32:51	0.71 Enceladus	Overgang.Begin	Saturnus		9.08	-12	57.7	117.1	176.1
11-Jul	11:23:34	0.53 Saturnus	Verduistering.Begin	Mimas	0.21	11.04	-19.9	60.8	116.8	175.7
11-Jul	12:03:19	4.97 Rhea	Schaduwovergang.Begin	Saturnus	0.36	12.41	-26.1	61	116.4	175.4
11-Jul	12:42:36	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.35	5.89	-31.3	59.3	116.2	175.1
11-Jul	12:51:42	3.3 Rhea	Overgang.Begin	Saturnus	-0.01	8.97	-32.6	58.5	116.1	175.1
11-Jul	13:11:15	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.05	-34.9	56.9	115.9	174.9
11-Jul	14:02:31	0.52 Saturnus	Bedekking.Einde	Mimas		9.09	-40.3	51.1	115.6	174.6
11-Jul	14:28:33	4.97 Rhea	Schaduwovergang.Einde	Saturnus	-0.63	3.37	-42.6	47.3	115.3	174.4
11-Jul	16:29:18	3.3 Rhea	Overgang.Einde	Saturnus	-0.02	8.94	-44.3	28.9	114.4	173.7
11-Jul	17:06:53	2.23 Saturnus	Verduistering.Begin	Dione	0.37	12.46	-42.1	23.1	114.2	173.4
11-Jul	21:00:30	1.95 Saturnus	Bedekking.Einde	Dione	-0.01	9.06	-11.7	-8.5	112.4	171.8
11-Jul	22:59:20	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.21	11.02	6.8	-16.5	111.5	170.9
11-Jul	23:15:07	0.51 Mimas	Overgang.Begin	Saturnus		9.1	9.1	-16.9	111.4	170.7
12-Jul	1:17:02	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.73	24.9	-14.7	110.5	169.6

12-Jul	1:35:49	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	9.06	26.7	-13.5	110.3	169.4
12-Jul	2:42:57	0.74 Saturnus	Verduistering.Begin	Enceladus	0.26	11.48	31.6	-7.7	109.8	168.8
12-Jul	4:36:48	1.7 Tethys	Schaduwovergang.Begin	Saturnus	0.34	12.17	31.9	6.4	109	167.6
12-Jul	5:07:37	1.62 Tethys	Overgang.Begin	Saturnus		9.11	30.3	10.8	108.7	167.3
12-Jul	5:43:51	0.71 Saturnus	Bedekking.Einde	Enceladus		9.09	27.5	16.2	108.4	166.9
12-Jul	7:25:57	1.7 Tethys	Schaduwovergang.Einde	Saturnus	-0.43	5.17	15.7	32.2	107.7	165.9
12-Jul	8:04:37	1.62 Tethys	Overgang.Einde	Saturnus		9.07	10.3	38.2	107.4	165.5
12-Jul	10:00:40	0.53 Saturnus	Verduistering.Begin	Mimas	0.21	11.03	-7.5	54.3	106.5	164.5
12-Jul	12:39:22	0.52 Saturnus	Bedekking.Einde	Mimas		9.1	-31.4	59.4	105.3	163.2
12-Jul	19:04:12	0.74 Enceladus	Schaduwovergang.Begin	Saturnus	0.25	11.45	-28.7	5.5	102.4	160.8
12-Jul	19:25:42	0.71 Enceladus	Overgang.Begin	Saturnus		9.1	-25.7	2.6	102.3	160.6
12-Jul	21:35:49	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.35	5.95	-5.5	-11.8	101.3	159.7
12-Jul	21:36:27	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.21	11.01	-5.5	-11.8	101.3	159.7
12-Jul	21:52:05	0.51 Mimas	Overgang.Begin	Saturnus		9.12	-3	-13	101.2	159.6
12-Jul	22:04:04	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.07	-1.1	-13.9	101.1	159.5
12-Jul	23:54:10	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.76	15.3	-17.4	100.2	158.6
13-Jul	0:12:48	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	9.07	17.7	-17.2	100.1	158.4
13-Jul	1:54:33	2.24 Dione	Schaduwovergang.Begin	Saturnus	0.36	12.43	28.8	-12.2	99.3	157.5
13-Jul	2:33:02	1.96 Dione	Overgang.Begin	Saturnus	-0.01	9.07	31.3	-8.8	99	157.1
13-Jul	3:16:07	1.7 Saturnus	Verduistering.Begin	Tethys	0.33	12.18	32.9	-4.2	98.7	156.7
13-Jul	4:46:02	2.24 Dione	Schaduwovergang.Einde	Saturnus	-0.58	3.83	31.3	7.6	98	155.8
13-Jul	5:47:50	1.96 Dione	Overgang.Einde	Saturnus	-0.01	9.04	26.7	16.7	97.6	155.1
13-Jul	6:44:10	1.62 Saturnus	Bedekking.Einde	Tethys		9.12	20.6	25.5	97.1	154.6
13-Jul	8:37:46	0.53 Saturnus	Verduistering.Begin	Mimas	0.21	11.03	4.8	43.1	96.3	153.4
13-Jul	11:16:13	0.52 Saturnus	Bedekking.Einde	Mimas		9.11	-20	60.2	95.1	152
13-Jul	11:36:04	0.74 Saturnus	Verduistering.Begin	Enceladus	0.26	11.47	-23	60.8	94.9	151.8
13-Jul	14:36:39	0.71 Saturnus	Bedekking.Einde	Enceladus		9.11	-43.5	46.2	93.6	150.5
13-Jul	18:14:57	4.88 Saturnus	Verduistering.Begin	Rhea	0.36	12.4	-34.4	12.3	91.9	149.1
13-Jul	20:13:35	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.21	11.01	-17.9	-3.6	91	148.4
13-Jul	20:29:03	0.51 Mimas	Overgang.Begin	Saturnus		9.13	-15.5	-5.4	90.9	148.3
13-Jul	22:31:19	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.26	6.79	3.7	-15.6	90	147.4
13-Jul	22:40:02	3.3 Saturnus	Bedekking.Einde	Rhea	-0.01	9	5.3	-16.1	89.9	147.3
13-Jul	22:49:47	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	9.09	6.5	-16.4	89.8	147.3



14-Jul	1:55:21	1.7 Tethys	Schaduwovergang.Begin	Saturnus	0.33	12.15	29.1	-12.3	88.4	145.7
14-Jul	2:25:36	1.62 Tethys	Overgang.Begin	Saturnus		9.13	31.1	-9.7	88.2	145.4
14-Jul	3:57:20	0.74 Enceladus	Schaduwovergang.Begin	Saturnus	0.25	11.44	32.9	0.7	87.5	144.5
14-Jul	4:18:32	0.71 Enceladus	Overgang.Begin	Saturnus		9.12	32.3	3.5	87.3	144.3
14-Jul	4:44:38	1.7 Tethys	Schaduwovergang.Einde	Saturnus	-0.42	5.27	31.1	7.2	87.1	144
14-Jul	5:22:33	1.62 Tethys	Overgang.Einde	Saturnus		9.1	28.6	12.8	86.8	143.6
14-Jul	6:29:01	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.34	6.01	22	22.9	86.3	142.9
14-Jul	6:56:52	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.09	18.5	27.3	86.1	142.6
14-Jul	7:14:53	0.53 Saturnus	Verduistering.Begin	Mimas	0.21	11.02	16.2	30.1	86	142.4
14-Jul	9:53:04	0.52 Saturnus	Bedekking.Einde	Mimas		9.12	-7.6	53.1	84.8	140.9
14-Jul	10:48:18	2.22 Saturnus	Verduistering.Begin	Dione	0.36	12.42	-16.4	58.6	84.4	140.3
14-Jul	14:40:40	1.96 Saturnus	Bedekking.Einde	Dione	-0.01	9.09	-44	45.4	82.6	138.4
14-Jul	18:50:42	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.2	11.01	-29.5	7.2	80.7	136.8
14-Jul	19:06:01	0.51 Mimas	Overgang.Begin	Saturnus		9.14	-27.4	5.1	80.6	136.7
14-Jul	20:29:14	0.74 Saturnus	Verduistering.Begin	Enceladus	0.25	11.46	-14.8	-5.5	79.9	136.2
14-Jul	21:08:27	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.25	6.82	-8.6	-9.6	79.6	136
14-Jul	21:26:45	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	9.1	-5.7	-11.3	79.5	135.8
14-Jul	23:29:29	0.71 Saturnus	Bedekking.Einde	Enceladus		9.13	12.9	-17.6	78.5	134.9
15-Jul	0:34:40	1.7 Saturnus	Verduistering.Begin	Tethys	0.33	12.16	21.5	-17	78	134.4
15-Jul	4:02:04	1.62 Saturnus	Bedekking.Einde	Tethys		9.14	32.7	1.2	76.4	132.5
15-Jul	5:52:00	0.53 Saturnus	Verduistering.Begin	Mimas	0.2	11.02	25.6	17	75.6	131.4
15-Jul	8:29:55	0.52 Saturnus	Bedekking.Einde	Mimas		9.14	4.8	41.6	74.4	129.7
15-Jul	12:50:28	0.74 Enceladus	Schaduwovergang.Begin	Saturnus	0.25	11.43	-34.4	58.2	72.3	127.2
15-Jul	13:11:22	0.71 Enceladus	Overgang.Begin	Saturnus		9.14	-36.8	56.4	72.2	127
15-Jul	15:22:14	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.34	6.07	-45.3	39.2	71.2	126
15-Jul	15:49:39	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.11	-45.2	35	70.9	125.8
15-Jul	17:27:49	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.2	11	-39	19.6	70.2	125.1
15-Jul	17:42:59	0.51 Mimas	Overgang.Begin	Saturnus		9.15	-37.4	17.2	70.1	125
15-Jul	19:35:57	2.23 Dione	Schaduwovergang.Begin	Saturnus	0.35	12.39	-22.3	0.8	69.2	124.3
15-Jul	19:45:35	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.25	6.85	-21	-0.3	69.1	124.2
15-Jul	20:03:43	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	9.11	-18.2	-2.6	69	124.1
15-Jul	20:13:23	1.97 Dione	Overgang.Begin	Saturnus	-0.01	9.11	-16.6	-3.9	68.9	124.1
15-Jul	22:28:01	2.23 Dione	Schaduwovergang.Einde	Saturnus	-0.56	4	4.6	-15.8	67.8	123.2

15-Jul 23:13:52	1.7 Tethys	Schaduwovergang.Begin	Saturnus	0.32	12.13	11.3	-17.5	67.5	122.8
15-Jul 23:27:57	1.97 Dione	Overgang.Einde	Saturnus	-0.01	9.08	13.4	-17.8	67.3	122.7
15-Jul 23:43:30	1.62 Tethys	Overgang.Begin	Saturnus		9.16	15.5	-17.9	67.2	122.6
16-Jul 0:28:38	4.85 Rhea	Schaduwovergang.Begin	Saturnus	0.35	12.36	21.5	-17.3	66.9	122.3
16-Jul 1:15:18	3.31 Rhea	Overgang.Begin	Saturnus	-0.02	9.02	26.4	-15.3	66.5	121.9
16-Jul 2:03:18	1.7 Tethys	Schaduwovergang.Einde	Saturnus	-0.41	5.36	30.2	-12	66.1	121.5
16-Jul 2:40:25	1.62 Tethys	Overgang.Einde	Saturnus		9.13	32.1	-8.5	65.8	121.1
16-Jul 2:57:13	4.85 Rhea	Schaduwovergang.Einde	Saturnus	-0.63	3.39	32.7	-6.6	65.7	121
16-Jul 4:29:07	0.53 Saturnus	Verduistering.Begin	Mimas	0.2	11.01	31.5	4.7	65	120.1
16-Jul 4:51:46	3.32 Rhea	Overgang.Einde	Saturnus	-0.02	8.99	30.1	8.1	64.8	119.8
16-Jul 5:22:21	0.74 Saturnus	Verduistering.Begin	Enceladus	0.25	11.45	27.9	12.4	64.6	119.5
16-Jul 6:18:02	24.87 Titan	Overgang.Begin	Saturnus	-0.06	8.66	20.9	22.8	64	118.8
16-Jul 7:06:46	0.52 Saturnus	Bedekking.Einde	Mimas		9.15	16.2	28.6	63.7	118.4
16-Jul 8:22:15	0.71 Saturnus	Bedekking.Einde	Enceladus		9.15	5.3	40.3	63.1	117.6
16-Jul 10:13:16	24.99 Titan	Overgang.Einde	Saturnus	-0.06	8.61	-14	56.3	62.2	116.3
16-Jul 11:50:59	1.08 Mimas	Gedeeltelijke bedekking	Enceladus	2.13	0.06	-27	60.4	61.5	115.4
16-Jul 16:04:56	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.2	11	-44.6	32.5	59.4	113.2
16-Jul 16:19:56	0.51 Mimas	Overgang.Begin	Saturnus		9.17	-44	30.2	59.3	113.1
16-Jul 18:22:43	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.25	6.89	-32.2	11.1	58.3	112.2
16-Jul 18:40:41	0.51 Mimas	Overgang.Einde	Saturnus	-0.01	9.12	-29.8	8.5	58.2	112.1
16-Jul 21:43:36	0.74 Enceladus	Schaduwovergang.Begin	Saturnus	0.24	11.42	-1.8	-13	56.7	111
16-Jul 21:53:19	1.7 Saturnus	Verduistering.Begin	Tethys	0.32	12.13	-0.2	-13.7	56.6	110.9
16-Jul 22:04:11	0.71 Enceladus	Overgang.Begin	Saturnus		9.16	1.4	-14.5	56.6	110.8
17-Jul 0:15:27	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.33	6.13	20.1	-17.8	55.5	109.9
17-Jul 0:42:26	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.13	23.3	-17.1	55.3	109.7
17-Jul 1:20:02	1.62 Saturnus	Bedekking.Einde	Tethys		9.17	27.1	-15.3	55	109.4
17-Jul 3:06:14	0.53 Saturnus	Verduistering.Begin	Mimas	0.2	11	32.9	-6	54.1	108.5
17-Jul 4:29:51	2.21 Saturnus	Verduistering.Begin	Dione	0.35	12.37	31.2	4.7	53.4	107.6
17-Jul 5:43:36	0.52 Saturnus	Bedekking.Einde	Mimas		9.16	25.6	15.4	52.8	106.9
17-Jul 8:20:50	1.96 Saturnus	Bedekking.Einde	Dione	-0.01	9.13	4.8	40.1	51.6	105.1
17-Jul 14:15:29	0.74 Saturnus	Verduistering.Begin	Enceladus	0.24	11.44	-43.3	48.7	48.7	101.4
17-Jul 14:42:03	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.2	10.99	-44.6	45	48.5	101.2
17-Jul 14:56:53	0.51 Mimas	Overgang.Begin	Saturnus		9.18	-45.1	42.8	48.3	101

17-Jul 16:59:51	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.25	6.92	-40.9	23.7	47.3	100
17-Jul 17:15:01	0.71	Saturnus	Bedekking.Einde	Enceladus		9.17	-39.5	21.3	47.2	99.9
17-Jul 17:17:38	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	9.14	-39.3	20.9	47.2	99.9
17-Jul 20:32:26	1.7	Tethys	Schaduwovergang.Begin	Saturnus	0.32	12.09	-12.4	-6.3	45.6	98.6
17-Jul 21:01:26	1.62	Tethys	Overgang.Begin	Saturnus		9.18	-7.8	-9.4	45.3	98.4
17-Jul 23:21:59	1.7	Tethys	Schaduwovergang.Einde	Saturnus	-0.41	5.47	13.6	-18	44.2	97.4
17-Jul 23:58:17	1.62	Tethys	Overgang.Einde	Saturnus		9.15	18.5	-18.2	43.9	97.2
18-Jul 1:43:21	0.53	Saturnus	Verduistering.Begin	Mimas	0.2	11	29.3	-13.9	43	96.4
18-Jul 4:20:26	0.52	Saturnus	Bedekking.Einde	Mimas		9.17	31.5	3.2	41.7	94.9
18-Jul 6:36:44	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.24	11.4	19	23.6	40.5	93.5
18-Jul 6:40:43	4.77	Saturnus	Verduistering.Begin	Rhea	0.34	12.33	18.2	24.5	40.5	93.4
18-Jul 6:56:59	0.71	Enceladus	Overgang.Begin	Saturnus		9.18	16.4	26.8	40.4	93.3
18-Jul 9:08:40	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.33	6.2	-3.2	46.8	39.3	91.8
18-Jul 9:35:12	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.15	-7.4	50.3	39	91.5
18-Jul 11:02:35	3.32	Saturnus	Bedekking.Einde	Rhea	-0.02	9.06	-21.2	58.8	38.3	90.4
18-Jul 13:17:19	2.22	Dione	Schaduwovergang.Begin	Saturnus	0.34	12.34	-38.9	55.3	37.2	89
18-Jul 13:19:10	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.19	10.98	-39	55.2	37.2	89
18-Jul 13:33:50	0.51	Mimas	Overgang.Begin	Saturnus		9.19	-40.4	53.7	37	88.8
18-Jul 13:53:37	1.97	Dione	Overgang.Begin	Saturnus	-0.01	9.14	-42.1	51.3	36.9	88.6
18-Jul 15:36:59	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.24	6.95	-45.2	36.6	36	87.6
18-Jul 15:54:35	0.51	Mimas	Overgang.Einde	Saturnus	-0.01	9.15	-44.7	33.9	35.8	87.5
18-Jul 16:09:59	2.22	Dione	Schaduwovergang.Einde	Saturnus	-0.54	4.19	-44	31.4	35.7	87.3
18-Jul 17:07:54	1.97	Dione	Overgang.Einde	Saturnus	-0.01	9.11	-39.8	22.2	35.2	86.8
18-Jul 19:11:52	1.7	Saturnus	Verduistering.Begin	Tethys	0.31	12.1	-24.2	3.7	34.2	85.9
18-Jul 22:37:52	1.62	Saturnus	Bedekking.Einde	Tethys		9.19	7.8	-16.7	32.4	84.5
18-Jul 23:08:36	0.74	Saturnus	Verduistering.Begin	Enceladus	0.24	11.42	12.2	-17.9	32.2	84.3
19-Jul 0:20:28	0.53	Saturnus	Verduistering.Begin	Mimas	0.19	10.99	21.6	-18.1	31.6	83.8
19-Jul 2:07:45	0.71	Saturnus	Bedekking.Einde	Enceladus		9.19	31.1	-12.2	30.6	82.9
19-Jul 2:57:16	0.52	Saturnus	Bedekking.Einde	Mimas		9.19	32.9	-7.3	30.2	82.5
19-Jul 11:56:17	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.19	10.98	-29.4	59.9	25.6	76.6
19-Jul 12:10:46	0.51	Mimas	Overgang.Begin	Saturnus		9.2	-31.4	59.6	25.5	76.4
19-Jul 14:14:07	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.24	6.99	-43.7	48.6	24.4	75
19-Jul 14:31:32	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.16	-44.5	46.2	24.3	74.9

19-Jul 15:29:54	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.24	11.39	-45.3	37.6	23.8	74.3
19-Jul 15:49:48	0.71	Enceladus	Overgang.Begin	Saturnus		9.19	-44.8	34.5	23.6	74.1
19-Jul 17:51:00	1.7	Tethys	Schaduwovergang.Begin	Saturnus	0.31	12.06	-34.6	15.4	22.5	73
19-Jul 18:01:54	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.32	6.26	-33.3	13.8	22.4	72.9
19-Jul 18:19:19	1.63	Tethys	Overgang.Begin	Saturnus		9.21	-31	11.1	22.3	72.7
19-Jul 18:27:58	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.17	-29.9	9.9	22.2	72.7
19-Jul 20:40:41	1.7	Tethys	Schaduwovergang.Einde	Saturnus	-0.4	5.57	-9.8	-7.6	21.1	71.7
19-Jul 21:16:07	1.63	Tethys	Overgang.Einde	Saturnus		9.18	-4.2	-11.1	20.8	71.4
19-Jul 22:11:19	2.21	Saturnus	Verduistering.Begin	Dione	0.34	12.31	4.4	-15.5	20.3	71
19-Jul 22:57:36	0.53	Saturnus	Verduistering.Begin	Mimas	0.19	10.98	11.2	-17.7	19.9	70.7
20-Jul 1:34:06	0.52	Saturnus	Bedekking.Einde	Mimas		9.2	29.2	-14.9	18.5	69.6
20-Jul 2:00:49	1.96	Saturnus	Bedekking.Einde	Dione	-0.01	9.16	31	-12.9	18.3	69.4
20-Jul 8:01:46	0.74	Saturnus	Verduistering.Begin	Enceladus	0.24	11.4	5.9	36.6	15.2	65.8
20-Jul 10:33:24	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.19	10.97	-17.8	56.3	13.9	64
20-Jul 10:47:42	0.51	Mimas	Overgang.Begin	Saturnus		9.22	-20	57.4	13.8	63.8
20-Jul 11:00:31	0.71	Saturnus	Bedekking.Einde	Enceladus		9.2	-22	58.3	13.7	63.6
20-Jul 12:51:15	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.24	7.02	-36.9	57.3	12.8	62.3
20-Jul 12:54:02	4.75	Rhea	Schaduwovergang.Begin	Saturnus	0.33	12.27	-37.4	56.9	12.7	62.2
20-Jul 13:08:28	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.18	-38.7	55.9	12.6	62.1
20-Jul 13:38:34	3.34	Rhea	Overgang.Begin	Saturnus	-0.02	9.08	-41.6	52.7	12.4	61.7
20-Jul 15:25:51	4.75	Rhea	Schaduwovergang.Einde	Saturnus	-0.62	3.5	-45.3	37.8	11.5	60.5
20-Jul 16:30:25	1.7	Saturnus	Verduistering.Begin	Tethys	0.31	12.06	-42.3	27.9	11	59.9
20-Jul 17:13:39	3.34	Rhea	Overgang.Einde	Saturnus	-0.02	9.05	-38.3	21	10.6	59.4
20-Jul 19:55:39	1.63	Saturnus	Bedekking.Einde	Tethys		9.22	-16.3	-2.4	9.3	58
20-Jul 21:34:44	0.53	Saturnus	Verduistering.Begin	Mimas	0.19	10.97	-0.7	-12.9	8.6	57.3
21-Jul 0:10:56	0.52	Saturnus	Bedekking.Einde	Mimas		9.21	21.4	-18.6	7.4	56.2
21-Jul 0:23:02	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.23	11.37	22.8	-18.4	7.3	56.1
21-Jul 0:42:35	0.71	Enceladus	Overgang.Begin	Saturnus		9.21	24.9	-17.8	7.2	55.9
21-Jul 2:55:07	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.31	6.33	32.9	-7.9	6.3	54.9
21-Jul 3:20:42	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.18	32.9	-5	6.2	54.7
21-Jul 6:58:43	2.22	Dione	Schaduwovergang.Begin	Saturnus	0.33	12.27	14.4	26.7	5.1	52.5
21-Jul 7:33:48	1.97	Dione	Overgang.Begin	Saturnus	-0.01	9.18	9.4	32.2	5	52.1
21-Jul 9:10:31	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.19	10.96	-5.4	46.6	4.8	51

21-Jul	9:24:38	0.52	Mimas	Overgang.Begin	Saturnus	9.23	-7.7	48.5	4.8	50.9	
21-Jul	9:51:58	2.22	Dione	Schaduwovergang.Einde	Saturnus	-0.52	4.39	-12.1	52	4.7	50.5
21-Jul	10:47:45	1.97	Dione	Overgang.Einde	Saturnus	-0.01	9.15	-20.8	57.3	4.7	49.8
21-Jul	11:28:22	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.24	7.06	-26.7	59.3	4.8	49.3
21-Jul	11:45:23	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.19	-29.1	59.5	4.8	49.1
21-Jul	15:09:33	1.7	Tethys	Schaduwovergang.Begin	Saturnus	0.3	12.02	-45.4	40.3	5.4	46.7
21-Jul	15:37:09	1.63	Tethys	Overgang.Begin	Saturnus	9.23	-44.9	36.1	5.5	46.3	
21-Jul	16:54:54	0.74	Saturnus	Verduistering.Begin	Enceladus	0.23	11.39	-40	24	5.9	45.5
21-Jul	17:59:23	1.7	Tethys	Schaduwovergang.Einde	Saturnus	-0.39	5.68	-32.6	13.9	6.3	44.9
21-Jul	18:33:54	1.63	Tethys	Overgang.Einde	Saturnus	9.2	-27.9	8.7	6.5	44.5	
21-Jul	19:53:14	0.71	Saturnus	Bedekking.Einde	Enceladus	9.22	-16.1	-2.2	7	43.8	
21-Jul	20:11:52	0.53	Saturnus	Verduistering.Begin	Mimas	0.19	10.96	-13.2	-4.5	7.1	43.7
21-Jul	22:47:46	0.52	Saturnus	Bedekking.Einde	Mimas	9.22	10.9	-17.7	8.3	42.4	
22-Jul	7:47:37	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.18	10.95	6.8	34.1	12.7	37.7
22-Jul	8:01:34	0.52	Mimas	Overgang.Begin	Saturnus	9.24	4.7	36.3	12.9	37.6	
22-Jul	9:16:11	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.23	11.35	-7	47.2	13.5	36.7
22-Jul	9:35:22	0.71	Enceladus	Overgang.Begin	Saturnus	9.23	-10	49.7	13.7	36.5	
22-Jul	10:05:30	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.23	7.1	-14.8	53.2	13.9	36.1
22-Jul	10:22:19	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.2	-17.4	54.9	14.1	35.9
22-Jul	11:48:21	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.31	6.4	-30.1	59.3	14.9	34.9
22-Jul	12:13:26	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.2	-33.4	58.9	15.1	34.6
22-Jul	13:48:59	1.7	Saturnus	Verduistering.Begin	Tethys	0.3	12.02	-43	51.2	15.9	33.4
22-Jul	15:52:44	2.2	Saturnus	Verduistering.Begin	Dione	0.32	12.24	-44.2	33.5	17	31.9
22-Jul	17:13:25	1.63	Saturnus	Bedekking.Einde	Tethys	9.24	-37.6	20.8	17.8	31	
22-Jul	18:49:00	0.53	Saturnus	Verduistering.Begin	Mimas	0.18	10.95	-25.3	6.4	18.6	30
22-Jul	19:06:04	4.68	Saturnus	Verduistering.Begin	Rhea	0.32	12.22	-22.4	3.7	18.8	29.8
22-Jul	19:40:36	1.97	Saturnus	Bedekking.Einde	Dione	-0.01	9.2	-17.4	-0.8	19.1	29.5
22-Jul	21:24:36	0.52	Saturnus	Bedekking.Einde	Mimas	9.23	-1.1	-12.4	20.1	28.5	
22-Jul	23:24:00	3.34	Saturnus	Bedekking.Einde	Rhea	-0.02	9.1	16.7	-19	21.2	27.6
23-Jul	1:48:02	0.74	Saturnus	Verduistering.Begin	Enceladus	0.23	11.37	30.9	-14.5	22.5	26.5
23-Jul	4:45:57	0.71	Saturnus	Bedekking.Einde	Enceladus	9.24	28.5	6	24.1	25	
23-Jul	6:24:44	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.18	10.94	17.9	20.9	25	24.1
23-Jul	6:38:29	0.52	Mimas	Overgang.Begin	Saturnus	9.25	16.1	23.1	25.2	24	

23-Jul	8:42:38	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.23	7.14	-2.3	42.3	26.3	22.7
23-Jul	8:59:14	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.21	-4.9	44.7	26.5	22.5
23-Jul	12:28:14	1.69	Tethys	Schaduwovergang.Begin	Saturnus	0.29	11.98	-35.8	58.1	28.4	20
23-Jul	12:55:06	1.63	Tethys	Overgang.Begin	Saturnus		9.26	-38.7	56.4	28.7	19.6
23-Jul	15:18:11	1.69	Tethys	Schaduwovergang.Einde	Saturnus	-0.37	5.8	-45.3	38.7	30	17.8
23-Jul	15:51:45	1.63	Tethys	Overgang.Einde	Saturnus		9.23	-44	33.6	30.3	17.4
23-Jul	17:26:09	0.53	Saturnus	Verduistering.Begin	Mimas	0.18	10.93	-35.8	18.8	31.2	16.3
23-Jul	18:09:20	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.22	11.33	-30.3	12.1	31.6	15.9
23-Jul	18:28:08	0.71	Enceladus	Overgang.Begin	Saturnus		9.25	-27.7	9.3	31.8	15.6
23-Jul	20:01:26	0.52	Saturnus	Bedekking.Einde	Mimas		9.24	-13.6	-3.6	32.6	14.7
23-Jul	20:41:35	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.3	6.47	-7.2	-8.3	33	14.3
23-Jul	21:06:08	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.22	-3.3	-10.8	33.2	14.1
24-Jul	0:40:17	2.21	Dione	Schaduwovergang.Begin	Saturnus	0.31	12.19	26	-18.5	35.3	12.3
24-Jul	1:14:01	1.98	Dione	Overgang.Begin	Saturnus	-0.01	9.21	28.9	-16.9	35.6	12
24-Jul	3:34:05	2.21	Dione	Schaduwovergang.Einde	Saturnus	-0.5	4.6	32.3	-3.8	36.9	10.9
24-Jul	4:27:37	1.98	Dione	Overgang.Einde	Saturnus	-0.01	9.18	29.5	3.3	37.4	10.5
24-Jul	5:01:51	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.18	10.93	26.7	8.1	37.7	10.2
24-Jul	5:07:43	24.06	Saturnus	Bedekking.Begin	Titan	-0.06	8.74	25	10.7	37.9	10
24-Jul	5:15:24	0.52	Mimas	Overgang.Begin	Saturnus		9.26	25.4	10.1	37.8	10.1
24-Jul	7:19:45	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.23	7.17	9.7	29.4	39	8.9
24-Jul	7:36:08	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.22	7.3	32	39.2	8.8
24-Jul	8:45:42	24.06	Saturnus	Bedekking.Einde	Titan	-0.06	8.73	-5.3	44.2	39.9	7.9
24-Jul	10:41:10	0.74	Saturnus	Verduistering.Begin	Enceladus	0.22	11.34	-21.6	56.2	40.9	6.8
24-Jul	11:07:32	1.69	Saturnus	Verduistering.Begin	Tethys	0.29	11.97	-25.6	57.9	41.1	6.4
24-Jul	13:38:38	0.71	Saturnus	Bedekking.Einde	Enceladus		9.26	-42.8	52.1	42.6	4.6
24-Jul	14:31:07	1.63	Saturnus	Bedekking.Einde	Tethys		9.27	-45.3	45.4	43.1	4
24-Jul	16:03:18	0.53	Saturnus	Verduistering.Begin	Mimas	0.18	10.92	-43.2	31.7	43.9	2.8
24-Jul	18:38:15	0.52	Saturnus	Bedekking.Einde	Mimas		9.25	-25.7	7.7	45.4	1.1
25-Jul	1:19:54	4.65	Rhea	Schaduwovergang.Begin	Saturnus	0.31	12.14	29.7	-16.7	49.2	2.9
25-Jul	2:01:55	3.36	Rhea	Overgang.Begin	Saturnus	-0.02	9.12	32	-13.7	49.5	3.2
25-Jul	3:02:33	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.22	11.31	32.8	-7.8	50.1	3.6
25-Jul	3:20:58	0.71	Enceladus	Overgang.Begin	Saturnus		9.26	32.5	-5.7	50.3	3.8
25-Jul	3:38:58	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.18	10.92	32	-3.5	50.4	3.9

25-Jul	3:52:18	0.52 Mimas	Overgang.Begin	Saturnus	9.27	31.4	-1.8	50.6	4	
25-Jul	3:54:51	4.65 Rhea	Schaduwovergang.Einde	Saturnus	-0.6	3.69	31.2	-1.2	50.6	4.1
25-Jul	5:34:53	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.3	6.54	22.9	12.9	51.5	4.8
25-Jul	5:35:14	3.37 Rhea	Overgang.Einde	Saturnus	-0.02	9.1	22.7	13.1	51.5	4.8
25-Jul	5:56:53	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.22	7.21	20.3	16.3	51.7	5
25-Jul	5:58:54	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.24	20.1	16.6	51.8	5
25-Jul	6:13:03	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.24	18.3	18.8	51.9	5.2
25-Jul	9:34:12	2.19 Saturnus	Verduistering.Begin	Dione	0.31	12.16	-11.9	49.1	53.8	7.1
25-Jul	9:46:48	1.69 Tethys	Schaduwovergang.Begin	Saturnus	0.28	11.93	-13.9	50.6	53.9	7.2
25-Jul	10:12:53	1.63 Tethys	Overgang.Begin	Saturnus		9.28	-17.9	53.5	54.1	7.5
25-Jul	12:36:53	1.69 Tethys	Schaduwovergang.Einde	Saturnus	-0.36	5.92	-37.7	57.2	55.5	9.1
25-Jul	13:09:28	1.63 Tethys	Overgang.Einde	Saturnus		9.25	-40.9	54.8	55.8	9.5
25-Jul	13:20:18	1.97 Saturnus	Bedekking.Einde	Dione	-0.01	9.23	-41.8	53.8	55.9	9.6
25-Jul	14:40:27	0.53 Saturnus	Verduistering.Begin	Mimas	0.17	10.91	-45.5	44	56.6	10.6
25-Jul	17:15:05	0.52 Saturnus	Bedekking.Einde	Mimas		9.27	-36.2	20.2	58.1	12.5
25-Jul	19:34:18	0.74 Saturnus	Verduistering.Begin	Enceladus	0.22	11.32	-16.6	-0.4	59.4	14.1
25-Jul	22:31:19	0.71 Saturnus	Bedekking.Einde	Enceladus		9.27	10.8	-17.8	61	16
26-Jul	2:16:04	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.17	10.9	32.5	-12.8	63.1	17.9
26-Jul	2:29:13	0.52 Mimas	Overgang.Begin	Saturnus		9.29	32.7	-11.5	63.2	18
26-Jul	4:34:01	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.22	7.25	28.4	3.7	64.4	19
26-Jul	4:49:57	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.25	27.1	6	64.5	19.1
26-Jul	8:26:08	1.69 Saturnus	Verduistering.Begin	Tethys	0.28	11.92	-1.8	39.4	66.6	20.9
26-Jul	11:48:50	1.63 Saturnus	Bedekking.Einde	Tethys		9.29	-32.4	58.5	68.4	22.9
26-Jul	11:55:42	0.74 Enceladus	Schaduwovergang.Begin	Saturnus	0.21	11.28	-33.3	58.4	68.5	23
26-Jul	12:13:43	0.71 Enceladus	Overgang.Begin	Saturnus		9.28	-35.5	58.1	68.7	23.2
26-Jul	13:17:36	0.53 Saturnus	Verduistering.Begin	Mimas	0.17	10.89	-41.9	53.9	69.3	23.9
26-Jul	14:28:07	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.29	6.62	-45.4	45.5	69.9	24.8
26-Jul	14:51:36	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.26	-45.5	42.2	70.1	25.1
26-Jul	15:51:55	0.52 Saturnus	Bedekking.Einde	Mimas		9.28	-43.4	33.1	70.7	25.8
26-Jul	18:21:47	2.2 Dione	Schaduwovergang.Begin	Saturnus	0.3	12.11	-26.8	9.6	72.1	27.6
26-Jul	18:54:07	1.98 Dione	Overgang.Begin	Saturnus	-0.01	9.24	-22	4.9	72.4	28
26-Jul	21:16:10	2.2 Dione	Schaduwovergang.Einde	Saturnus	-0.48	4.82	0.2	-12.5	73.7	29.6
26-Jul	22:07:19	1.98 Dione	Overgang.Einde	Saturnus	-0.01	9.22	8	-16.6	74.1	30.2

27-Jul	0:53:11	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.17	10.89	28.1	-18.6	75.7	31.8
27-Jul	1:06:07	0.52	Mimas	Overgang.Begin	Saturnus		9.3	29.1	-18	75.8	31.9
27-Jul	3:11:08	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.22	7.29	32.5	-7.2	76.9	32.9
27-Jul	3:26:50	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.26	32.1	-5.3	77.1	33
27-Jul	4:27:27	0.74	Saturnus	Verduistering.Begin	Enceladus	0.21	11.29	28.6	2.6	77.6	33.5
27-Jul	7:05:22	1.69	Tethys	Schaduwovergang.Begin	Saturnus	0.27	11.87	9.9	26.8	79.1	34.7
27-Jul	7:23:59	0.71	Saturnus	Bedekking.Einde	Enceladus		9.29	7.2	29.6	79.3	34.8
27-Jul	7:30:39	1.63	Tethys	Overgang.Begin	Saturnus		9.3	6.1	30.7	79.3	34.9
27-Jul	7:31:46	4.59	Saturnus	Verduistering.Begin	Rhea	0.3	12.07	5.7	31.1	79.3	34.9
27-Jul	9:55:35	1.69	Tethys	Schaduwovergang.Einde	Saturnus	-0.35	6.04	-16.6	51.2	80.6	36.1
27-Jul	10:27:09	1.63	Tethys	Overgang.Einde	Saturnus		9.28	-21.4	54.4	80.9	36.4
27-Jul	11:45:05	3.37	Saturnus	Bedekking.Einde	Rhea	-0.02	9.15	-32.6	58.2	81.6	37.2
27-Jul	11:54:46	0.53	Saturnus	Verduistering.Begin	Mimas	0.17	10.88	-33.7	58.2	81.7	37.3
27-Jul	14:28:44	0.52	Saturnus	Bedekking.Einde	Mimas		9.29	-45.5	45.3	83.1	39
27-Jul	20:48:53	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.21	11.25	-3.6	-9.9	86.6	43.5
27-Jul	21:06:28	0.71	Enceladus	Overgang.Begin	Saturnus		9.29	-0.8	-11.7	86.7	43.7
27-Jul	23:21:22	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.28	6.69	18.7	-20	88	45.2
27-Jul	23:30:17	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.17	10.88	19.8	-20.2	88	45.2
27-Jul	23:43:01	0.52	Mimas	Overgang.Begin	Saturnus		9.31	21.4	-20.3	88.2	45.4
27-Jul	23:44:17	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.27	21.5	-20.3	88.2	45.4
28-Jul	1:48:16	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.21	7.33	31.8	-15.5	89.3	46.5
28-Jul	2:03:43	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.27	32.3	-14.3	89.4	46.7
28-Jul	3:15:42	2.19	Saturnus	Verduistering.Begin	Dione	0.29	12.06	32.3	-6.8	90.1	47.3
28-Jul	5:44:42	1.69	Saturnus	Verduistering.Begin	Tethys	0.27	11.86	20.2	14	91.4	48.4
28-Jul	6:59:53	1.97	Saturnus	Bedekking.Einde	Dione	-0.01	9.26	10	25.8	92.1	48.9
28-Jul	9:06:28	1.63	Saturnus	Bedekking.Einde	Tethys		9.31	-9.5	44.8	93.2	49.9
28-Jul	10:31:56	0.53	Saturnus	Verduistering.Begin	Mimas	0.16	10.86	-22.7	54.6	94	50.6
28-Jul	13:05:34	0.52	Saturnus	Bedekking.Einde	Mimas		9.3	-41.6	54.6	95.4	52.1
28-Jul	13:20:36	0.74	Saturnus	Verduistering.Begin	Enceladus	0.21	11.26	-42.8	53.2	95.5	52.2
28-Jul	16:16:38	0.71	Saturnus	Bedekking.Einde	Enceladus		9.3	-41	28.9	97.1	54.2
28-Jul	22:07:24	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.16	10.86	9.1	-17	100.2	58.4
28-Jul	22:19:55	0.52	Mimas	Overgang.Begin	Saturnus		9.32	10.9	-17.8	100.3	58.5
29-Jul	0:25:23	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.21	7.37	26.3	-20.1	101.5	59.8



29-Jul	0:40:37	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.28	27.7	-19.6	101.6	60
29-Jul	4:24:02	1.69	Tethys	Schaduwovergang.Begin	Saturnus	0.27	11.82	28.1	1.9	103.6	61.9
29-Jul	4:48:29	1.63	Tethys	Overgang.Begin	Saturnus		9.32	25.9	5.3	103.8	62.1
29-Jul	5:42:02	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.2	11.23	20.1	13.3	104.3	62.5
29-Jul	5:59:12	0.71	Enceladus	Overgang.Begin	Saturnus		9.31	17.9	15.9	104.4	62.6
29-Jul	7:14:24	1.69	Tethys	Schaduwovergang.Einde	Saturnus	-0.34	6.16	7.3	27.8	105.1	63.1
29-Jul	7:44:54	1.63	Tethys	Overgang.Einde	Saturnus		9.3	2.7	32.6	105.4	63.3
29-Jul	8:14:36	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.27	6.77	-1.9	37.1	105.6	63.5
29-Jul	8:36:57	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.29	-5.4	40.4	105.8	63.7
29-Jul	9:09:05	0.53	Saturnus	Verduistering.Begin	Mimas	0.16	10.85	-10.5	44.9	106.1	63.9
29-Jul	11:42:23	0.52	Saturnus	Bedekking.Einde	Mimas		9.31	-33.2	57.7	107.4	65.2
29-Jul	12:03:09	2.19	Dione	Schaduwovergang.Begin	Saturnus	0.29	12.01	-35.8	57.6	107.6	65.4
29-Jul	12:34:00	1.98	Dione	Overgang.Begin	Saturnus	-0.01	9.27	-39.2	56.5	107.9	65.7
29-Jul	13:45:26	4.57	Rhea	Schaduwovergang.Begin	Saturnus	0.28	11.97	-44.6	50.1	108.5	66.4
29-Jul	14:24:35	3.4	Rhea	Overgang.Begin	Saturnus	-0.02	9.16	-45.6	45.2	108.9	66.7
29-Jul	14:58:06	2.19	Dione	Schaduwovergang.Einde	Saturnus	-0.46	5.06	-45.3	40.6	109.2	67.1
29-Jul	15:46:44	1.99	Dione	Overgang.Einde	Saturnus	-0.01	9.25	-43	33.3	109.6	67.6
29-Jul	16:23:24	4.56	Rhea	Schaduwovergang.Einde	Saturnus	-0.57	3.97	-39.8	27.3	109.9	68.1
29-Jul	17:55:51	3.4	Rhea	Overgang.Einde	Saturnus	-0.02	9.14	-28.7	12.9	110.7	69.1
29-Jul	20:44:30	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.16	10.85	-3	-9.8	112.2	71.1
29-Jul	20:56:48	0.52	Mimas	Overgang.Begin	Saturnus		9.33	-1.1	-11.1	112.3	71.3
29-Jul	22:13:49	0.74	Saturnus	Verduistering.Begin	Enceladus	0.2	11.23	10.6	-17.7	113	72.2
29-Jul	23:02:31	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.21	7.41	17.3	-20	113.4	72.7
29-Jul	23:17:29	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.29	19.2	-20.4	113.5	72.9
30-Jul	1:09:21	0.71	Saturnus	Bedekking.Einde	Enceladus		9.32	30.1	-18.5	114.5	74
30-Jul	3:03:18	1.69	Saturnus	Verduistering.Begin	Tethys	0.26	11.8	32.4	-8.7	115.5	75.1
30-Jul	6:24:05	1.63	Saturnus	Bedekking.Einde	Tethys		9.33	14	19.7	117.3	76.6
30-Jul	7:46:16	0.53	Saturnus	Verduistering.Begin	Mimas	0.16	10.83	1.9	32.6	118	77.2
30-Jul	10:19:12	0.52	Saturnus	Bedekking.Einde	Mimas		9.32	-22	53	119.3	78.3
30-Jul	14:35:12	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.2	11.19	-45.6	43.8	121.5	80.5
30-Jul	14:51:56	0.71	Enceladus	Overgang.Begin	Saturnus		9.32	-45.4	41.4	121.7	80.6
30-Jul	17:07:50	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.27	6.85	-34.7	20.4	122.8	82.1
30-Jul	17:29:36	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.3	-31.9	17	123	82.3

30-Jul 19:21:37	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.16	10.83	-15.5	0.3	124	83.6
30-Jul 19:33:41	0.52	Mimas	Overgang.Begin	Saturnus		9.34	-13.6	-1.3	124.1	83.8
30-Jul 20:57:21	2.18	Saturnus	Verduistering.Begin	Dione	0.28	11.96	-0.2	-11.5	124.8	84.8
30-Jul 21:39:38	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.2	7.46	6.1	-15.4	125.2	85.3
30-Jul 21:54:21	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.3	8.3	-16.6	125.3	85.4
31-Jul 0:39:31	1.98	Saturnus	Bedekking.Einde	Dione	-0.01	9.28	28.3	-20.1	126.7	87.3
31-Jul 1:42:37	1.69	Tethys	Schaduwovergang.Begin	Saturnus	0.26	11.75	32	-16.6	127.3	87.9
31-Jul 2:06:11	1.63	Tethys	Overgang.Begin	Saturnus		9.34	32.6	-14.7	127.5	88.1
31-Jul 4:33:06	1.69	Tethys	Schaduwovergang.Einde	Saturnus	-0.33	6.29	26.6	2.8	128.7	89.4
31-Jul 5:02:31	1.63	Tethys	Overgang.Einde	Saturnus		9.32	23.6	7	129	89.6
31-Jul 6:23:26	0.53	Saturnus	Verduistering.Begin	Mimas	0.16	10.81	13.5	19.4	129.6	90.2
31-Jul 7:06:58	0.74	Saturnus	Verduistering.Begin	Enceladus	0.2	11.2	7.2	26.3	130	90.5
31-Jul 8:56:02	0.52	Saturnus	Bedekking.Einde	Mimas		9.33	-9.7	42.8	130.9	91.3
31-Jul 10:01:58	0.71	Saturnus	Bedekking.Einde	Enceladus		9.33	-20.1	51	131.5	91.7
31-Jul 17:58:44	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.15	10.81	-27.4	12.3	135.5	96
31-Jul 18:10:34	0.52	Mimas	Overgang.Begin	Saturnus		9.35	-25.7	10.5	135.6	96.1
31-Jul 19:57:31	4.5	Saturnus	Verduistering.Begin	Rhea	0.27	11.88	-8.9	-4.9	136.6	97.4
31-Jul 20:16:46	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.2	7.5	-6.1	-7.1	136.7	97.6
31-Jul 20:31:13	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.31	-3.8	-8.8	136.8	97.7
31-Jul 23:28:22	0.74	Enceladus	Schaduwovergang.Begin	Saturnus	0.19	11.16	21.5	-21.1	138.3	99.8
31-Jul 23:44:39	0.71	Enceladus	Overgang.Begin	Saturnus		9.34	23.4	-21.3	138.5	100
01-Aug 0:05:28	3.41	Saturnus	Bedekking.Einde	Rhea	-0.02	9.18	25.7	-21.1	138.6	100.2
01-Aug 0:21:55	1.69	Saturnus	Verduistering.Begin	Tethys	0.25	11.73	27.1	-20.9	138.8	100.4
01-Aug 2:01:05	0.74	Enceladus	Schaduwovergang.Einde	Saturnus	-0.26	6.93	32.6	-15.4	139.6	101.4
01-Aug 2:22:15	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.32	32.8	-13.5	139.8	101.6
01-Aug 3:41:42	1.63	Saturnus	Bedekking.Einde	Tethys		9.35	30.2	-4.4	140.5	102.3
01-Aug 4:56:30	37.77	Titan	Overgang.Begin	Saturnus	-0.08	8.63	21.8	8.6	141.2	103.1
01-Aug 5:00:37	0.53	Saturnus	Verduistering.Begin	Mimas	0.15	10.8	23.4	6.5	141.1	103
01-Aug 5:44:36	2.19	Dione	Schaduwovergang.Begin	Saturnus	0.27	11.9	18.1	13.3	141.5	103.3
01-Aug 6:13:52	1.99	Dione	Overgang.Begin	Saturnus	-0.01	9.3	14.2	17.8	141.7	103.6
01-Aug 7:31:02	38.02	Titan	Overgang.Einde	Saturnus	-0.08	8.6	0	32.7	142.5	104.2
01-Aug 7:32:51	0.52	Saturnus	Bedekking.Einde	Mimas		9.34	2.7	30.1	142.4	104.1
01-Aug 8:40:06	2.19	Dione	Schaduwovergang.Einde	Saturnus	-0.43	5.31	-8	40.4	143	104.6

01-Aug 9:26:06	1.99 Dione	Overgang.Einde	Saturnus	-0.01	9.28	-15.3	46.7	143.3	104.9
01-Aug 16:00:08	0.74 Saturnus	Verduistering.Begin	Enceladus	0.19	11.17	-41.1	30.7	146.6	107.9
01-Aug 16:35:50	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.15	10.79	-37.5	25.1	146.9	108.2
01-Aug 16:47:27	0.52 Mimas	Overgang.Begin	Saturnus		9.36	-36.2	23.3	147	108.4
01-Aug 18:53:53	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.2	7.54	-18.5	3.8	148	109.7
01-Aug 18:54:36	0.71 Saturnus	Bedekking.Einde	Enceladus		9.35	-18.4	3.7	148.1	109.7
01-Aug 19:08:05	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.32	-16.3	1.8	148.2	109.8
01-Aug 23:01:14	1.69 Tethys	Schaduwovergang.Begin	Saturnus	0.25	11.69	18.8	-20.7	150.1	112.5
01-Aug 23:23:55	1.63 Tethys	Overgang.Begin	Saturnus		9.36	21.5	-21.3	150.3	112.8
02-Aug 1:51:51	1.69 Tethys	Schaduwovergang.Einde	Saturnus	-0.31	6.43	32.4	-16.3	151.5	114.4
02-Aug 2:20:08	1.63 Tethys	Overgang.Einde	Saturnus		9.34	32.7	-13.9	151.7	114.7
02-Aug 3:37:47	0.53 Saturnus	Verduistering.Begin	Mimas	0.15	10.78	30.2	-5.2	152.4	115.4
02-Aug 6:09:40	0.52 Saturnus	Bedekking.Einde	Mimas		9.35	14.3	16.8	153.6	116.7
02-Aug 8:21:33	0.74 Enceladus	Schaduwovergang.Begin	Saturnus	0.19	11.13	-5.6	37.4	154.7	117.6
02-Aug 8:37:22	0.71 Enceladus	Overgang.Begin	Saturnus		9.35	-8.1	39.7	154.8	117.7
02-Aug 10:54:20	0.74 Enceladus	Schaduwovergang.Einde	Saturnus	-0.25	7.01	-29	55.1	155.9	118.6
02-Aug 11:14:53	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.34	-31.8	56.1	156.1	118.7
02-Aug 14:38:56	2.17 Saturnus	Verduistering.Begin	Dione	0.26	11.84	-45.4	42.5	157.7	120.2
02-Aug 15:12:56	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.15	10.78	-44.2	37.7	158	120.5
02-Aug 15:24:19	0.52 Mimas	Overgang.Begin	Saturnus		9.37	-43.5	36	158.1	120.6
02-Aug 17:31:01	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.19	7.59	-30.1	16.2	159.1	121.7
02-Aug 17:44:56	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.33	-28.2	14	159.2	121.9
02-Aug 18:18:56	1.98 Saturnus	Bedekking.Einde	Dione	-0.01	9.31	-23.1	8.7	159.5	122.2
02-Aug 21:40:31	1.69 Saturnus	Verduistering.Begin	Tethys	0.24	11.66	8.1	-16.2	161.1	124.4
03-Aug 0:53:17	0.74 Saturnus	Verduistering.Begin	Enceladus	0.19	11.13	30.1	-20.3	162.6	126.6
03-Aug 0:59:15	1.63 Saturnus	Bedekking.Einde	Tethys		9.37	30.5	-20	162.7	126.7
03-Aug 2:11:15	4.48 Rhea	Schaduwovergang.Begin	Saturnus	0.25	11.77	32.7	-14.8	163.3	127.4
03-Aug 2:14:58	0.53 Saturnus	Verduistering.Begin	Mimas	0.15	10.76	32.7	-14.6	163.3	127.5
03-Aug 2:47:14	3.44 Rhea	Overgang.Begin	Saturnus	-0.02	9.19	32.2	-11.2	163.6	127.8
03-Aug 3:47:13	0.71 Saturnus	Bedekking.Einde	Enceladus		9.36	29.3	-4.2	164	128.4
03-Aug 4:46:29	0.52 Saturnus	Bedekking.Einde	Mimas		9.36	24	4	164.5	128.9
03-Aug 4:52:09	4.48 Rhea	Schaduwovergang.Einde	Saturnus	-0.54	4.35	23.2	5.1	164.5	129
03-Aug 6:16:03	3.44 Rhea	Overgang.Einde	Saturnus	-0.02	9.18	12.6	17.9	165.2	129.7

03-Aug 13:50:03	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.14	10.76	-45.5	48.7	168.7	132.7
03-Aug 14:01:11	0.52 Mimas	Overgang.Begin	Saturnus		9.38	-45.6	47.3	168.8	132.8
03-Aug 16:08:08	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.19	7.63	-39.6	29.1	169.7	133.8
03-Aug 16:21:47	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.34	-38.2	26.9	169.8	133.9
03-Aug 17:14:45	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.18	11.09	-31.8	18.5	170.2	134.4
03-Aug 17:30:06	0.71 Enceladus	Overgang.Begin	Saturnus		9.37	-29.7	16.1	170.3	134.5
03-Aug 19:47:37	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.24	7.1	-8.8	-4.1	171.3	135.9
03-Aug 20:07:33	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.35	-5.7	-6.6	171.4	136.1
03-Aug 20:19:50	1.69 Tethys	Schaduwovergang.Begin	Saturnus	0.24	11.62	-3.7	-8.2	171.5	136.2
03-Aug 20:41:36	1.63 Tethys	Overgang.Begin	Saturnus		9.38	-0.2	-10.7	171.7	136.4
03-Aug 23:10:36	1.69 Tethys	Schaduwovergang.Einde	Saturnus	-0.3	6.56	20.9	-21.5	172.7	138.1
03-Aug 23:26:07	2.18 Dione	Schaduwovergang.Begin	Saturnus	0.25	11.78	22.7	-21.9	172.8	138.3
03-Aug 23:37:43	1.63 Tethys	Overgang.Einde	Saturnus		9.36	23.9	-22	172.9	138.4
03-Aug 23:53:44	2.0 Dione	Overgang.Begin	Saturnus	-0.01	9.32	25.6	-22	173	138.6
04-Aug 0:52:09	0.53 Saturnus	Verduistering.Begin	Mimas	0.14	10.74	30.2	-20.6	173.3	139.2
04-Aug 2:22:09	2.18 Dione	Schaduwovergang.Einde	Saturnus	-0.41	5.56	32.6	-14.1	173.9	140.2
04-Aug 3:05:25	2.0 Dione	Overgang.Einde	Saturnus	-0.01	9.3	31.4	-9.5	174.1	140.6
04-Aug 3:23:18	0.52 Saturnus	Bedekking.Einde	Mimas		9.36	30.6	-7.4	174.2	140.8
04-Aug 9:46:29	0.74 Saturnus	Verduistering.Begin	Enceladus	0.18	11.09	-20.3	48.4	175.7	143.8
04-Aug 12:27:09	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.14	10.74	-40.9	55.3	175.8	144.9
04-Aug 12:38:03	0.52 Mimas	Overgang.Begin	Saturnus		9.39	-41.9	54.8	175.8	144.9
04-Aug 12:39:51	0.71 Saturnus	Bedekking.Einde	Enceladus		9.37	-42	54.7	175.8	144.9
04-Aug 14:45:15	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.18	7.68	-45.1	41.3	175.6	145.8
04-Aug 14:58:37	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.35	-44.5	39.4	175.5	145.9
04-Aug 18:59:13	1.69 Saturnus	Verduistering.Begin	Tethys	0.23	11.59	-15.8	2.3	174.5	147.9
04-Aug 22:16:52	1.63 Saturnus	Bedekking.Einde	Tethys		9.39	14.5	-19.4	173.4	149.9
04-Aug 23:29:21	0.53 Saturnus	Verduistering.Begin	Mimas	0.14	10.72	23.4	-22.2	173	150.7
05-Aug 2:00:07	0.52 Saturnus	Bedekking.Einde	Mimas		9.37	32.6	-16.4	172	152.3
05-Aug 2:07:55	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.17	11.05	32.7	-15.7	172	152.4
05-Aug 2:22:48	0.71 Enceladus	Overgang.Begin	Saturnus		9.38	32.5	-14.3	171.9	152.6
05-Aug 4:40:52	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.24	7.18	23.7	2.8	170.9	153.9
05-Aug 5:00:09	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.36	21.5	5.6	170.8	154.1
05-Aug 8:20:23	2.17 Saturnus	Verduistering.Begin	Dione	0.24	11.72	-7.6	36.7	169.3	155.8

05-Aug 8:23:31	4.42	Saturnus	Verduistering.Begin	Rhea	0.24	11.66	-8.2	37.4	169.3	155.8
05-Aug 11:04:15	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.14	10.72	-32.1	54.8	168.1	156.9
05-Aug 11:14:55	0.52	Mimas	Overgang.Begin	Saturnus		9.39	-33.5	55.3	168.1	156.9
05-Aug 11:58:08	1.99	Saturnus	Bedekking.Einde	Dione	-0.01	9.33	-38.6	55.9	167.7	157.2
05-Aug 12:25:30	3.45	Saturnus	Bedekking.Einde	Rhea	-0.02	9.21	-41.3	55.1	167.5	157.4
05-Aug 13:22:23	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.18	7.72	-44.9	51.1	167.1	157.7
05-Aug 13:35:27	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.36	-45.3	49.8	167	157.8
05-Aug 17:38:26	1.69	Tethys	Schaduwovergang.Begin	Saturnus	0.23	11.54	-27.3	14.3	165.2	159.5
05-Aug 17:59:15	1.63	Tethys	Overgang.Begin	Saturnus		9.4	-24.3	11.1	165.1	159.7
05-Aug 18:39:39	0.74	Saturnus	Verduistering.Begin	Enceladus	0.17	11.05	-18.2	5	164.8	160
05-Aug 20:29:19	1.69	Tethys	Schaduwovergang.Einde	Saturnus	-0.29	6.7	-0.9	-9.8	163.9	161
05-Aug 20:55:14	1.63	Tethys	Overgang.Einde	Saturnus		9.38	3.1	-12.7	163.7	161.3
05-Aug 21:32:26	0.71	Saturnus	Bedekking.Einde	Enceladus		9.39	8.6	-16.3	163.5	161.7
05-Aug 22:06:32	0.53	Saturnus	Verduistering.Begin	Mimas	0.14	10.69	13.5	-19	163.2	162
06-Aug 0:36:56	0.52	Saturnus	Bedekking.Einde	Mimas		9.38	29.7	-21.8	162.1	163.6
06-Aug 9:41:21	0.53	Mimas	Schaduwovergang.Begin	Saturnus	0.13	10.69	-20.8	47.4	158	168.6
06-Aug 9:51:46	0.52	Mimas	Overgang.Begin	Saturnus		9.4	-22.4	48.6	157.9	168.7
06-Aug 11:01:07	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.17	11.01	-32.3	54.4	157.3	169.2
06-Aug 11:15:31	0.71	Enceladus	Overgang.Begin	Saturnus		9.39	-34.1	55.1	157.2	169.2
06-Aug 11:59:30	0.53	Mimas	Schaduwovergang.Einde	Saturnus	-0.18	7.77	-39.1	55.6	156.9	169.5
06-Aug 12:12:17	0.52	Mimas	Overgang.Einde	Saturnus	-0.01	9.37	-40.4	55.3	156.8	169.6
06-Aug 13:34:08	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.23	7.27	-45.4	49.6	156.2	170.1
06-Aug 13:52:46	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.38	-45.8	47.6	156	170.2
06-Aug 16:17:51	1.68	Saturnus	Verduistering.Begin	Tethys	0.22	11.51	-37.3	26.8	154.9	171.1
06-Aug 17:07:47	2.17	Dione	Schaduwovergang.Begin	Saturnus	0.24	11.65	-31	18.9	154.6	171.5
06-Aug 17:33:40	2.0	Dione	Overgang.Begin	Saturnus	-0.01	9.34	-27.4	14.8	154.4	171.7
06-Aug 19:34:23	1.63	Saturnus	Bedekking.Einde	Tethys		9.41	-8.9	-3.1	153.4	172.6
06-Aug 20:04:21	2.17	Dione	Schaduwovergang.Einde	Saturnus	-0.38	5.83	-4.2	-7.1	153.2	172.9
06-Aug 20:43:44	0.53	Saturnus	Verduistering.Begin	Mimas	0.13	10.67	1.9	-11.7	152.9	173.2
06-Aug 20:44:45	2.0	Dione	Overgang.Einde	Saturnus	-0.01	9.33	2.1	-11.9	152.9	173.2
06-Aug 23:13:45	0.52	Saturnus	Bedekking.Einde	Mimas		9.39	22.5	-22.4	151.8	174.7
07-Aug 3:32:50	0.74	Saturnus	Verduistering.Begin	Enceladus	0.17	11.01	29.1	-6.9	149.8	177.3
07-Aug 6:25:01	0.72	Saturnus	Bedekking.Einde	Enceladus		9.4	9	18.3	148.5	178.9

07-Aug	8:18:27	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.13	10.67	-8.5	35.9	147.7	179.2
07-Aug	8:28:37	0.52 Mimas	Overgang.Begin	Saturnus		9.41	-10.1	37.4	147.6	179.2
07-Aug	10:36:37	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.17	7.81	-29.5	52.6	146.6	178.6
07-Aug	10:49:06	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.38	-31.2	53.4	146.5	178.5
07-Aug	14:36:49	4.4 Rhea	Schaduwovergang.Begin	Saturnus	0.22	11.53	-44.9	41.5	144.8	177.1
07-Aug	14:57:04	1.68 Tethys	Schaduwovergang.Begin	Saturnus	0.21	11.46	-44	38.8	144.6	177
07-Aug	15:09:20	3.49 Rhea	Overgang.Begin	Saturnus	-0.02	9.22	-43.1	36.9	144.5	176.9
07-Aug	15:16:55	1.64 Tethys	Overgang.Begin	Saturnus		9.42	-42.7	35.9	144.5	176.8
07-Aug	17:20:32	4.4 Rhea	Schaduwovergang.Einde	Saturnus	-0.49	4.8	-28.6	16.4	143.5	176
07-Aug	17:48:05	1.68 Tethys	Schaduwovergang.Einde	Saturnus	-0.27	6.85	-24.8	12.3	143.3	175.8
07-Aug	18:12:45	1.64 Tethys	Overgang.Einde	Saturnus		9.4	-21.1	8.5	143.2	175.7
07-Aug	18:35:19	3.49 Rhea	Overgang.Einde	Saturnus	-0.02	9.21	-17.5	5	143	175.5
07-Aug	19:20:56	0.53 Saturnus	Verduistering.Begin	Mimas	0.13	10.65	-10.5	-1.4	142.6	175.2
07-Aug	19:54:18	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.16	10.97	-5.2	-5.9	142.4	174.9
07-Aug	20:08:12	0.71 Enceladus	Overgang.Begin	Saturnus		9.41	-3	-7.7	142.3	174.8
07-Aug	21:50:34	0.52 Saturnus	Bedekking.Einde	Mimas		9.4	12.4	-18.3	141.5	173.9
07-Aug	22:27:24	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.22	7.36	17.4	-20.8	141.2	173.6
07-Aug	22:45:22	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.39	19.7	-21.7	141.1	173.4
08-Aug	2:01:53	2.16 Saturnus	Verduistering.Begin	Dione	0.23	11.59	32.6	-17	139.6	171.5
08-Aug	5:37:14	2.0 Saturnus	Bedekking.Einde	Dione	-0.01	9.35	15.1	10.8	138	169.3
08-Aug	6:55:33	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.13	10.65	3.8	22.9	137.4	168.6
08-Aug	7:05:28	0.52 Mimas	Overgang.Begin	Saturnus		9.42	2.3	24.5	137.3	168.5
08-Aug	9:13:44	0.53 Mimas	Schaduwovergang.Einde	Saturnus	-0.17	7.86	-17.9	43.5	136.4	167.4
08-Aug	9:25:56	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.39	-19.7	45	136.3	167.3
08-Aug	12:26:00	0.74 Saturnus	Verduistering.Begin	Enceladus	0.16	10.97	-42.3	54.3	134.9	166
08-Aug	13:36:30	1.68 Saturnus	Verduistering.Begin	Tethys	0.21	11.43	-45.7	48.8	134.4	165.6
08-Aug	15:17:36	0.72 Saturnus	Bedekking.Einde	Enceladus		9.41	-42.3	35.6	133.6	165
08-Aug	16:51:53	1.64 Saturnus	Bedekking.Einde	Tethys		9.42	-32.1	20.9	132.9	164.4
08-Aug	17:58:08	0.53 Saturnus	Verduistering.Begin	Mimas	0.12	10.63	-22.8	10.6	132.4	163.9
08-Aug	20:27:23	0.52 Saturnus	Bedekking.Einde	Mimas		9.41	0.6	-10.3	131.3	162.8
09-Aug	3:46:46	44.27 Saturnus	Bedekking.Begin	Titan	-0.09	8.64	25.2	-2.6	127.8	158.4
09-Aug	4:47:34	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.16	10.93	20.9	3	127.5	158
09-Aug	5:00:58	0.71 Enceladus	Overgang.Begin	Saturnus		9.42	19.3	5	127.4	157.9

09-Aug	5:32:39	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.12	10.63	15.2	9.8	127.2	157.6
09-Aug	5:42:19	0.52 Mimas	Overgang.Begin	Saturnus		9.43	13.9	11.2	127.1	157.5
09-Aug	5:45:03	44.27 Saturnus	Bedekking.Einde	Titan	-0.09	8.63	10.4	15.1	126.9	157.2
09-Aug	7:20:44	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.21	7.44	-0.7	26.7	126.4	156.5
09-Aug	7:38:01	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.4	-3.5	29.4	126.2	156.4
09-Aug	7:50:51	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.16	7.91	-5.5	31.4	126.1	156.3
09-Aug	8:02:44	0.52 Mimas	Overgang.Einde	Saturnus	-0.01	9.4	-7.3	33.2	126	156.1
09-Aug	10:49:24	2.17 Dione	Schaduwovergang.Begin	Saturnus	0.22	11.51	-32.5	53	124.8	154.8
09-Aug	11:13:30	2.01 Dione	Overgang.Begin	Saturnus	-0.01	9.36	-35.5	54.2	124.6	154.6
09-Aug	12:15:41	1.68 Tethys	Schaduwovergang.Begin	Saturnus	0.2	11.38	-41.9	54.4	124.1	154.1
09-Aug	12:34:32	1.64 Tethys	Overgang.Begin	Saturnus		9.43	-43.3	53.5	124	154
09-Aug	13:46:30	2.17 Dione	Schaduwovergang.Einde	Saturnus	-0.35	6.11	-45.9	47.4	123.5	153.5
09-Aug	14:23:55	2.01 Dione	Overgang.Einde	Saturnus	-0.01	9.35	-45.2	42.8	123.2	153.3
09-Aug	15:06:48	1.68 Tethys	Schaduwovergang.Einde	Saturnus	-0.26	6.99	-42.8	36.9	122.9	153.1
09-Aug	15:30:13	1.64 Tethys	Overgang.Einde	Saturnus		9.42	-40.9	33.4	122.7	152.9
09-Aug	16:35:21	0.53 Saturnus	Verduistering.Begin	Mimas	0.12	10.6	-33.8	23.4	122.2	152.5
09-Aug	19:04:13	0.52 Saturnus	Bedekking.Einde	Mimas		9.41	-11.9	0.5	121.1	151.5
09-Aug	20:49:23	4.35 Saturnus	Verduistering.Begin	Rhea	0.21	11.41	4.9	-13.3	120.3	150.8
09-Aug	21:19:11	0.74 Saturnus	Verduistering.Begin	Enceladus	0.15	10.92	9	-16.2	120.1	150.5
10-Aug	0:10:10	0.72 Saturnus	Bedekking.Einde	Enceladus		9.42	28.9	-23.5	118.8	149.1
10-Aug	0:44:43	3.5 Saturnus	Bedekking.Einde	Rhea	-0.02	9.23	31.1	-22.5	118.5	148.7
10-Aug	4:09:45	0.53 Mimas	Schaduwovergang.Begin	Saturnus	0.12	10.6	24.7	-2.7	117	146.7
10-Aug	4:19:10	0.52 Mimas	Overgang.Begin	Saturnus		9.43	23.7	-1.3	116.9	146.6
10-Aug	6:27:58	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.16	7.95	6.7	18.2	115.9	145.2
10-Aug	6:39:33	0.53 Mimas	Overgang.Einde	Saturnus	-0.01	9.41	5	20	115.8	145.1
10-Aug	10:55:15	1.68 Saturnus	Verduistering.Begin	Tethys	0.2	11.34	-33.8	53	113.9	142.8
10-Aug	13:40:46	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.15	10.88	-45.9	47.8	112.6	141.6
10-Aug	13:53:39	0.71 Enceladus	Overgang.Begin	Saturnus		9.43	-45.8	46.4	112.6	141.5
10-Aug	14:09:27	1.64 Saturnus	Bedekking.Einde	Tethys		9.44	-45.5	44.4	112.4	141.4
10-Aug	15:12:34	0.53 Saturnus	Verduistering.Begin	Mimas	0.12	10.58	-42.1	35.9	112	141
10-Aug	16:14:01	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.2	7.53	-35.9	26.5	111.5	140.7
10-Aug	16:30:37	0.71 Enceladus	Overgang.Einde	Saturnus	-0.01	9.42	-33.9	23.9	111.4	140.6
10-Aug	17:41:02	0.52 Saturnus	Bedekking.Einde	Mimas		9.42	-24.1	12.8	110.8	140.1

10-Aug 19:43:25	2.15	Saturnus	Verduistering.Begin	Dione	0.21	11.44	-4.9	-5.4	109.9	139.3
10-Aug 23:16:16	2.0	Saturnus	Bedekking.Einde	Dione	-0.01	9.37	24.6	-23.7	108.3	137.7
11-Aug 2:46:52	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.12	10.58	30.8	-13.3	106.7	135.7
11-Aug 2:56:01	0.53	Mimas	Overgang.Begin	Saturnus		9.44	30.3	-12.3	106.6	135.6
11-Aug 5:05:06	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.16	8	17.7	5.1	105.6	134.3
11-Aug 5:16:21	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.41	16.3	6.9	105.6	134.2
11-Aug 6:12:22	0.74	Saturnus	Verduistering.Begin	Enceladus	0.15	10.88	8.4	15.6	105.1	133.6
11-Aug 9:02:44	0.72	Saturnus	Bedekking.Einde	Enceladus		9.43	-18.2	41.4	103.8	131.9
11-Aug 9:34:19	1.68	Tethys	Schaduwovergang.Begin	Saturnus	0.19	11.29	-23.1	45.4	103.6	131.6
11-Aug 9:52:09	1.64	Tethys	Overgang.Begin	Saturnus		9.45	-25.7	47.4	103.5	131.4
11-Aug 12:25:35	1.68	Tethys	Schaduwovergang.Einde	Saturnus	-0.25	7.14	-43.3	53.4	102.3	130.1
11-Aug 12:47:41	1.64	Tethys	Overgang.Einde	Saturnus		9.43	-44.6	52.2	102.1	130
11-Aug 13:49:47	0.53	Saturnus	Verduistering.Begin	Mimas	0.11	10.55	-45.9	46.6	101.6	129.5
11-Aug 16:17:51	0.52	Saturnus	Bedekking.Einde	Mimas		9.43	-35	25.7	100.5	128.6
11-Aug 22:33:59	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.14	10.84	20.2	-22.4	97.6	126.1
11-Aug 22:46:20	0.71	Enceladus	Overgang.Begin	Saturnus		9.44	21.7	-23	97.5	126
12-Aug 1:07:18	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.2	7.62	32.1	-22	96.4	124.8
12-Aug 1:23:12	0.71	Enceladus	Overgang.Einde	Saturnus	-0.01	9.43	32.4	-21.1	96.3	124.6
12-Aug 1:23:58	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.11	10.55	32.4	-21	96.3	124.6
12-Aug 1:32:51	0.53	Mimas	Overgang.Begin	Saturnus		9.45	32.5	-20.4	96.2	124.5
12-Aug 3:03:12	4.33	Rhea	Schaduwovergang.Begin	Saturnus	0.19	11.27	29.4	-11.5	95.5	123.6
12-Aug 3:32:04	3.54	Rhea	Overgang.Begin	Saturnus	-0.03	9.24	27.2	-8	95.3	123.3
12-Aug 3:42:13	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.15	8.05	26.5	-6.8	95.2	123.2
12-Aug 3:53:09	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.42	25.4	-5.4	95.2	123.1
12-Aug 4:30:58	2.16	Dione	Schaduwovergang.Begin	Saturnus	0.2	11.36	21.3	0	94.9	122.7
12-Aug 4:53:14	2.02	Dione	Overgang.Begin	Saturnus	-0.01	9.38	18.6	3.3	94.7	122.5
12-Aug 5:49:40	4.33	Rhea	Schaduwovergang.Einde	Saturnus	-0.44	5.32	10.8	12.1	94.3	121.8
12-Aug 6:54:48	3.54	Rhea	Overgang.Einde	Saturnus	-0.03	9.23	1.1	22.3	93.7	121.2
12-Aug 7:28:36	2.16	Dione	Schaduwovergang.Einde	Saturnus	-0.33	6.39	-4.1	27.5	93.5	120.8
12-Aug 8:02:57	2.02	Dione	Overgang.Einde	Saturnus	-0.01	9.37	-9.5	32.7	93.2	120.5
12-Aug 8:13:53	1.68	Saturnus	Verduistering.Begin	Tethys	0.19	11.25	-11.2	34.3	93.1	120.3
12-Aug 11:26:52	1.64	Saturnus	Bedekking.Einde	Tethys		9.45	-38.5	53.7	91.6	118.5
12-Aug 12:27:00	0.53	Saturnus	Verduistering.Begin	Mimas	0.11	10.53	-43.7	53	91.2	118



12-Aug 14:54:40	0.52	Saturnus	Bedekking.Einde	Mimas		9.44	-42.9	37.9	90	116.9
12-Aug 15:05:34	0.73	Saturnus	Verduistering.Begin	Enceladus	0.14	10.83	-42.1	36.4	89.9	116.8
12-Aug 17:55:17	0.72	Saturnus	Bedekking.Einde	Enceladus		9.45	-20.8	10	88.6	115.7
13-Aug 0:01:04	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.11	10.53	29.1	-24.6	85.8	113.2
13-Aug 0:09:41	0.53	Mimas	Overgang.Begin	Saturnus		9.46	29.7	-24.4	85.7	113.1
13-Aug 2:16:37	2.02	Tethys	Gedeeltelijke bedekking	Enceladus	2.77	0.12	31.7	-16.9	84.7	111.9
13-Aug 2:19:20	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.15	8.1	31.6	-16.7	84.7	111.9
13-Aug 2:29:57	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.43	31.2	-15.6	84.6	111.8
13-Aug 6:52:59	1.68	Tethys	Schaduwovergang.Begin	Saturnus	0.18	11.2	0.8	21.6	82.5	109
13-Aug 7:09:47	1.64	Tethys	Overgang.Begin	Saturnus		9.46	-1.8	24.3	82.4	108.8
13-Aug 7:27:11	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.14	10.79	-4.4	26.9	82.2	108.7
13-Aug 7:39:01	0.72	Enceladus	Overgang.Begin	Saturnus		9.45	-6.3	28.7	82.1	108.5
13-Aug 9:44:22	1.68	Tethys	Schaduwovergang.Einde	Saturnus	-0.23	7.3	-25.8	46.1	81.1	107.2
13-Aug 10:00:34	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.19	7.72	-28.1	47.8	81	107
13-Aug 10:05:08	1.64	Tethys	Overgang.Einde	Saturnus		9.45	-28.8	48.3	81	107
13-Aug 10:15:45	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.44	-30.2	49.2	80.9	106.9
13-Aug 11:04:13	0.53	Saturnus	Verduistering.Begin	Mimas	0.11	10.5	-36.4	52.6	80.5	106.4
13-Aug 13:25:07	2.15	Saturnus	Verduistering.Begin	Dione	0.19	11.29	-46	48.5	79.4	105.2
13-Aug 13:31:30	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.44	-46	47.9	79.3	105.1
13-Aug 16:55:22	2.01	Saturnus	Bedekking.Einde	Dione	-0.01	9.39	-28.9	19.1	77.7	103.6
13-Aug 22:38:10	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.11	10.5	21.6	-23.2	75	101.4
13-Aug 22:46:31	0.53	Mimas	Overgang.Begin	Saturnus		9.46	22.6	-23.6	74.9	101.3
13-Aug 23:58:49	0.73	Saturnus	Verduistering.Begin	Enceladus	0.14	10.78	29.2	-24.9	74.3	100.8
14-Aug 0:56:27	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.14	8.15	32	-23.2	73.8	100.3
14-Aug 1:06:44	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.44	32.2	-22.7	73.8	100.2
14-Aug 2:47:53	0.72	Saturnus	Bedekking.Einde	Enceladus		9.45	29.9	-13.9	72.9	99.2
14-Aug 5:32:32	1.68	Saturnus	Verduistering.Begin	Tethys	0.18	11.16	12.2	8.8	71.6	97.5
14-Aug 8:44:17	1.64	Saturnus	Bedekking.Einde	Tethys		9.47	-17.4	38.2	70	95.3
14-Aug 9:15:02	4.28	Saturnus	Verduistering.Begin	Rhea	0.17	11.14	-22.3	42.5	69.8	95
14-Aug 9:41:27	0.53	Saturnus	Verduistering.Begin	Mimas	0.1	10.47	-25.9	45.4	69.6	94.7
14-Aug 12:08:19	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.45	-43	53.1	68.4	93.2
14-Aug 13:03:08	3.56	Saturnus	Bedekking.Einde	Rhea	-0.03	9.25	-45.7	50.1	67.9	92.7
14-Aug 16:20:23	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.13	10.74	-33.2	24.5	66.3	91.1

14-Aug 16:31:41	0.72	Enceladus	Overgang.Begin	Saturnus	9.46	-31.7	22.7	66.2	91
14-Aug 18:53:51	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.18	7.81	-10.3	0.6	65
14-Aug 19:08:19	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.45	-8	-1.5	64.9
14-Aug 21:15:16	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.1	10.47	11.4	-17.3	63.9
14-Aug 21:23:21	0.53	Mimas	Overgang.Begin	Saturnus	9.47	12.5	-18	63.8	89.1
14-Aug 22:12:30	2.15	Dione	Schaduwovergang.Begin	Saturnus	0.18	11.21	19.1	-22.1	63.4
14-Aug 22:32:52	2.03	Dione	Overgang.Begin	Saturnus	-0.01	9.4	21.6	-23.3	63.2
14-Aug 23:33:34	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.14	8.2	27.6	-25.2	62.7
14-Aug 23:43:32	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.44	28.4	-25.2	62.6
15-Aug 1:10:39	2.15	Dione	Schaduwovergang.Einde	Saturnus	-0.3	6.68	32.3	-22.7	61.9
15-Aug 1:41:50	2.03	Dione	Overgang.Einde	Saturnus	-0.01	9.39	32.3	-20.5	61.6
15-Aug 4:11:39	1.68	Tethys	Schaduwovergang.Begin	Saturnus	0.17	11.1	22	-3.4	60.4
15-Aug 4:27:23	1.64	Tethys	Overgang.Begin	Saturnus	9.48	20.2	-1.2	60.2	85.6
15-Aug 7:03:08	1.68	Tethys	Schaduwovergang.Einde	Saturnus	-0.22	7.45	-2.1	22.8	58.9
15-Aug 7:22:33	1.64	Tethys	Overgang.Einde	Saturnus	9.46	-5.1	25.9	58.8	83.4
15-Aug 8:18:41	0.53	Saturnus	Verduistering.Begin	Mimas	0.1	10.45	-13.9	34.3	58.3
15-Aug 8:52:00	0.73	Saturnus	Verduistering.Begin	Enceladus	0.13	10.73	-19.2	39	58
15-Aug 10:45:08	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.45	-35.2	51	57.1
15-Aug 11:40:25	0.72	Saturnus	Bedekking.Einde	Enceladus	9.46	-41.1	53	56.6	80.5
15-Aug 19:52:22	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.1	10.45	-0.5	-7.9	52.4
15-Aug 20:00:11	0.53	Mimas	Overgang.Begin	Saturnus	9.47	0.7	-8.9	52.3	76.4
15-Aug 22:10:42	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.13	8.25	19.3	-22.2	51.2
15-Aug 22:20:19	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.45	20.5	-22.8	51.1
16-Aug 1:13:36	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.12	10.69	32.3	-22.8	49.6
16-Aug 1:24:22	0.72	Enceladus	Overgang.Begin	Saturnus	9.47	32.4	-22.1	49.5	74
16-Aug 2:51:14	1.68	Saturnus	Verduistering.Begin	Tethys	0.16	11.06	29.1	-14	48.8
16-Aug 3:47:09	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.17	7.9	24.3	-7.1	48.3
16-Aug 4:00:52	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.46	22.8	-5.2	48.2
16-Aug 6:01:43	1.64	Saturnus	Bedekking.Einde	Tethys	9.48	6.7	12.9	47.1	71.1
16-Aug 6:55:55	0.53	Saturnus	Verduistering.Begin	Mimas	0.1	10.42	-1.5	21.4	46.7
16-Aug 7:06:45	2.14	Saturnus	Verduistering.Begin	Dione	0.17	11.13	-3.4	23.2	46.6
16-Aug 9:21:58	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.46	-24.3	42.6	45.4
16-Aug 10:34:16	2.02	Saturnus	Bedekking.Einde	Dione	-0.01	9.4	-34.4	50	44.7

16-Aug 15:29:04	4.26 Rhea	Schaduwovergang.Begin	Saturnus	0.16	10.99	-38.2	31.5	42.1	64.8
16-Aug 15:54:06	3.61 Rhea	Overgang.Begin	Saturnus	-0.03	9.25	-35.3	27.8	41.9	64.6
16-Aug 17:45:13	0.73 Saturnus	Verduistering.Begin	Enceladus	0.12	10.67	-19.8	10.5	40.9	63.7
16-Aug 18:18:11	4.26 Rhea	Schaduwovergang.Einde	Saturnus	-0.38	5.9	-14.4	5.1	40.6	63.4
16-Aug 18:29:28	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.09	10.42	-12.9	3.7	40.6	63.3
16-Aug 18:37:00	0.53 Mimas	Overgang.Begin	Saturnus		9.48	-11.7	2.6	40.5	63.3
16-Aug 19:13:09	3.61 Rhea	Overgang.Einde	Saturnus	-0.03	9.24	-5.8	-3	40.2	63
16-Aug 20:32:57	0.72 Saturnus	Bedekking.Einde	Enceladus		9.47	6.4	-13.3	39.5	62.4
16-Aug 20:47:49	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.13	8.3	8.6	-15	39.3	62.3
16-Aug 20:57:05	0.53 Mimas	Overgang.Einde	Saturnus	-0.01	9.46	9.9	-16	39.2	62.3
17-Aug 1:30:22	1.68 Tethys	Schaduwovergang.Begin	Saturnus	0.16	11.01	32.3	-22	36.8	60.2
17-Aug 1:45:02	1.64 Tethys	Overgang.Begin	Saturnus		9.49	32	-20.8	36.7	60.1
17-Aug 4:21:58	1.68 Tethys	Schaduwovergang.Einde	Saturnus	-0.2	7.61	19.8	-2.4	35.3	58.5
17-Aug 4:40:00	1.64 Tethys	Overgang.Einde	Saturnus		9.48	17.5	0.2	35.1	58.3
17-Aug 5:33:09	0.53 Saturnus	Verduistering.Begin	Mimas	0.09	10.39	10.3	8.2	34.6	57.8
17-Aug 7:58:47	0.52 Saturnus	Bedekking.Einde	Mimas	-0.01	9.47	-12.2	30.9	33.3	56.1
17-Aug 10:06:50	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.12	10.63	-31.4	47.3	32.2	54.5
17-Aug 10:17:02	0.72 Enceladus	Overgang.Begin	Saturnus		9.48	-32.7	48.3	32.1	54.4
17-Aug 12:40:26	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.16	7.99	-45.5	50.8	30.8	52.6
17-Aug 12:53:25	0.72 Enceladus	Overgang.Einde	Saturnus	-0.01	9.47	-45.9	50	30.7	52.5
17-Aug 15:54:05	2.15 Dione	Schaduwovergang.Begin	Saturnus	0.16	11.05	-34.9	27.6	29	50.6
17-Aug 16:12:31	2.04 Dione	Overgang.Begin	Saturnus	-0.01	9.41	-32.5	24.8	28.8	50.4
17-Aug 17:06:34	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.09	10.39	-25.1	16.4	28.4	49.9
17-Aug 17:13:50	0.53 Mimas	Overgang.Begin	Saturnus		9.49	-24	15.2	28.3	49.9
17-Aug 18:52:45	2.15 Dione	Schaduwovergang.Einde	Saturnus	-0.27	6.98	-8.5	-0.2	27.4	49
17-Aug 19:20:40	2.04 Dione	Overgang.Einde	Saturnus	-0.01	9.4	-4.1	-4.2	27.1	48.8
17-Aug 19:24:56	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.12	8.34	-3.5	-4.7	27.1	48.8
17-Aug 19:33:51	0.53 Mimas	Overgang.Einde	Saturnus	-0.01	9.46	-2.1	-5.9	27	48.7
18-Aug 0:09:55	1.68 Saturnus	Verduistering.Begin	Tethys	0.15	10.96	30.8	-26	24.5	46.6
18-Aug 2:38:25	0.73 Saturnus	Verduistering.Begin	Enceladus	0.11	10.62	29.4	-16	23.1	45.4
18-Aug 3:19:06	1.64 Saturnus	Bedekking.Einde	Tethys		9.49	26.1	-11.2	22.7	45
18-Aug 4:10:23	0.53 Saturnus	Verduistering.Begin	Mimas	0.09	10.36	20.7	-4.4	22.3	44.5
18-Aug 5:25:28	0.72 Saturnus	Bedekking.Einde	Enceladus		9.48	10.8	6.8	21.6	43.7

18-Aug 6:35:37	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.47	0.3	17.8	20.9	42.9
18-Aug 15:43:40	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.09	10.36	-35.8	29	15.9	36.3
18-Aug 15:50:39	0.53	Mimas	Overgang.Begin	Saturnus		9.49	-34.9	28	15.8	36.3
18-Aug 18:02:03	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.12	8.4	-16	7.4	14.6	35
18-Aug 18:10:38	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.47	-14.6	6	14.5	34.9
18-Aug 19:00:05	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.11	10.58	-6.8	-1.4	14.1	34.5
18-Aug 19:09:45	0.72	Enceladus	Overgang.Begin	Saturnus		9.48	-5.3	-2.8	14	34.4
18-Aug 21:33:47	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.15	8.09	16.1	-20.3	12.7	33.2
18-Aug 21:41:28	4.21	Saturnus	Verduistering.Begin	Rhea	0.14	10.86	17.4	-21.1	12.6	33.1
18-Aug 21:46:00	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.48	17.7	-21.3	12.5	33.1
18-Aug 22:49:02	1.68	Tethys	Schaduwovergang.Begin	Saturnus	0.14	10.91	25	-25.3	12	32.6
18-Aug 23:02:36	1.65	Tethys	Overgang.Begin	Saturnus		9.5	26.3	-25.8	11.8	32.5
19-Aug 0:48:24	2.13	Saturnus	Verduistering.Begin	Dione	0.15	10.97	32.1	-25.1	10.9	31.7
19-Aug 1:21:44	3.63	Saturnus	Bedekking.Einde	Rhea	-0.03	9.26	32.2	-23.1	10.6	31.4
19-Aug 1:40:45	1.68	Tethys	Schaduwovergang.Einde	Saturnus	-0.19	7.76	31.8	-21.7	10.4	31.3
19-Aug 1:57:22	1.65	Tethys	Overgang.Einde	Saturnus		9.49	31.3	-20.3	10.3	31.1
19-Aug 2:47:38	0.53	Saturnus	Verduistering.Begin	Mimas	0.08	10.33	28.4	-15.3	9.8	30.7
19-Aug 4:13:07	2.03	Saturnus	Bedekking.Einde	Dione	-0.01	9.42	19.8	-4.1	9	29.9
19-Aug 5:12:26	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.48	12	4.5	8.5	29.3
19-Aug 11:31:39	0.73	Saturnus	Verduistering.Begin	Enceladus	0.11	10.56	-41.9	51.6	5.4	24.7
19-Aug 14:18:00	0.72	Saturnus	Bedekking.Einde	Enceladus		9.49	-43.6	40.8	4.2	22.7
19-Aug 14:20:46	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.08	10.33	-43.5	40.5	4.2	22.6
19-Aug 14:27:28	0.53	Mimas	Overgang.Begin	Saturnus		9.5	-43	39.6	4.2	22.5
19-Aug 16:39:10	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.11	8.45	-27.9	20.1	3.5	21.1
19-Aug 16:47:23	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.47	-26.7	18.8	3.5	21
19-Aug 21:28:37	1.68	Saturnus	Verduistering.Begin	Tethys	0.14	10.86	16	-20.2	3.6	18.3
20-Aug 0:36:29	1.65	Saturnus	Bedekking.Einde	Tethys		9.5	32	-25.9	4.7	16.8
20-Aug 1:24:52	0.53	Saturnus	Verduistering.Begin	Mimas	0.08	10.3	32.1	-23.3	5	16.4
20-Aug 3:49:16	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.48	22.1	-7.8	6.2	15.2
20-Aug 3:53:19	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.1	10.52	21.7	-7.2	6.2	15.2
20-Aug 4:02:24	0.72	Enceladus	Overgang.Begin	Saturnus		9.49	20.6	-6	6.3	15.1
20-Aug 6:27:05	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.14	8.18	0.2	16	7.5	13.6
20-Aug 6:38:33	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.49	-1.5	17.8	7.6	13.5

20-Aug 9:35:49	2.14 Dione	Schaduwovergang.Begin	Saturnus	0.14	10.88	-29	43.3	9.2	11.4
20-Aug 9:52:17	2.04 Dione	Overgang.Begin	Saturnus	-0.01	9.42	-31.2	45.1	9.3	11.2
20-Aug 12:35:00	2.14 Dione	Schaduwovergang.Einde	Saturnus	-0.24	7.28	-45.8	50	10.8	9.1
20-Aug 12:57:52	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.08	10.3	-46.2	48.7	11	8.8
20-Aug 12:59:34	2.05 Dione	Overgang.Einde	Saturnus	-0.01	9.41	-46.2	48.5	11.1	8.8
20-Aug 13:04:17	0.53 Mimas	Overgang.Begin	Saturnus		9.5	-46.2	48.2	11.1	8.8
20-Aug 15:16:17	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.11	8.5	-38	32.5	12.3	7.1
20-Aug 15:24:09	0.53 Mimas	Overgang.Einde	Saturnus	-0.01	9.48	-37.1	31.4	12.4	7
20-Aug 20:07:43	1.68 Tethys	Schaduwovergang.Begin	Saturnus	0.13	10.8	5.1	-11.5	15.1	4
20-Aug 20:20:10	1.65 Tethys	Overgang.Begin	Saturnus		9.51	6.9	-13	15.2	3.9
20-Aug 20:24:52	0.73 Saturnus	Verduistering.Begin	Enceladus	0.1	10.51	7.6	-13.5	15.2	3.8
20-Aug 22:59:32	1.68 Tethys	Schaduwovergang.Einde	Saturnus	-0.17	7.92	26.7	-26.4	16.7	2.5
20-Aug 23:10:32	0.72 Saturnus	Bedekking.Einde	Enceladus		9.5	27.6	-26.7	16.8	2.4
20-Aug 23:14:43	1.65 Tethys	Overgang.Einde	Saturnus		9.5	27.9	-26.8	16.9	2.4
21-Aug 0:02:07	0.53 Saturnus	Verduistering.Begin	Mimas	0.08	10.27	30.9	-27.1	17.3	2
21-Aug 2:26:05	0.52 Saturnus	Bedekking.Einde	Mimas	-0.01	9.49	29.3	-18.2	18.7	0.8
21-Aug 3:55:01	4.2 Rhea	Schaduwovergang.Begin	Saturnus	0.12	10.7	20.8	-7	19.6	0.1
21-Aug 4:16:08	3.69 Rhea	Overgang.Begin	Saturnus	-0.03	9.25	18.2	-4	19.8	0.2
21-Aug 6:46:43	4.2 Rhea	Schaduwovergang.Einde	Saturnus	-0.32	6.53	-3.8	19.2	21.2	1.7
21-Aug 7:31:03	3.69 Rhea	Overgang.Einde	Saturnus	-0.03	9.25	-10.8	26	21.6	2.1
21-Aug 11:34:57	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.08	10.27	-42.9	51	24	5
21-Aug 11:41:06	0.53 Mimas	Overgang.Begin	Saturnus		9.5	-43.4	51	24	5.1
21-Aug 12:46:34	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.1	10.47	-46.1	49.1	24.6	5.9
21-Aug 12:55:05	0.72 Enceladus	Overgang.Begin	Saturnus		9.5	-46.2	48.5	24.7	6
21-Aug 13:53:24	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.1	8.55	-44.7	43.1	25.3	6.8
21-Aug 14:00:54	0.53 Mimas	Overgang.Einde	Saturnus	-0.01	9.48	-44.3	42.2	25.4	6.9
21-Aug 15:20:23	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.13	8.28	-37.1	31.6	26.1	7.9
21-Aug 15:31:05	0.72 Enceladus	Overgang.Einde	Saturnus	-0.01	9.49	-35.8	30	26.2	8
21-Aug 18:30:03	2.13 Saturnus	Verduistering.Begin	Dione	0.13	10.8	-9.5	2	28	10.1
21-Aug 18:47:18	1.68 Saturnus	Verduistering.Begin	Tethys	0.13	10.75	-6.8	-0.5	28.1	10.3
21-Aug 21:51:53	2.04 Saturnus	Bedekking.Einde	Dione	-0.01	9.42	20	-22.9	29.9	12.2
21-Aug 21:53:49	1.65 Saturnus	Bedekking.Einde	Tethys		9.51	20.2	-23	29.9	12.2
21-Aug 22:39:22	0.53 Saturnus	Verduistering.Begin	Mimas	0.07	10.24	25.1	-25.9	30.4	12.6

22-Aug 1:02:56	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.49	32.2	-25.3	31.7	13.8
22-Aug 5:18:05	0.73	Saturnus	Verduistering.Begin	Enceladus	0.09	10.45	9.3	4.8	34.2	15.9
22-Aug 8:03:02	0.72	Saturnus	Bedekking.Einde	Enceladus		9.5	-16.3	30.4	35.8	17.5
22-Aug 10:12:03	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.07	10.24	-34.9	46.4	37	18.9
22-Aug 10:17:55	0.53	Mimas	Overgang.Begin	Saturnus		9.51	-35.6	46.9	37.1	19
22-Aug 12:30:31	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.1	8.6	-46	49.6	38.4	20.6
22-Aug 12:37:39	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.49	-46.1	49.3	38.4	20.7
22-Aug 17:26:30	1.68	Tethys	Schaduwovergang.Begin	Saturnus	0.12	10.69	-18.9	11.7	41.2	24.3
22-Aug 17:37:51	1.65	Tethys	Overgang.Begin	Saturnus		9.52	-17.1	9.9	41.3	24.4
22-Aug 20:18:27	1.68	Tethys	Schaduwovergang.Einde	Saturnus	-0.15	8.08	7.9	-13.5	42.9	26.2
22-Aug 20:32:10	1.65	Tethys	Overgang.Einde	Saturnus		9.51	9.9	-15.1	43	26.4
22-Aug 21:16:38	0.53	Saturnus	Verduistering.Begin	Mimas	0.07	10.21	16	-20	43.4	26.8
22-Aug 21:39:48	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.09	10.41	18.9	-22.1	43.6	27.1
22-Aug 21:47:45	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	9.51	19.9	-22.8	43.7	27.1
22-Aug 23:39:45	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.49	30.1	-27.8	44.8	28.2
23-Aug 0:13:42	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.12	8.37	31.6	-27.5	45.1	28.5
23-Aug 0:23:37	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.5	31.9	-27.3	45.2	28.5
23-Aug 3:17:23	2.14	Dione	Schaduwovergang.Begin	Saturnus	0.12	10.71	24	-12.6	46.9	29.9
23-Aug 3:31:50	2.06	Dione	Overgang.Begin	Saturnus	-0.01	9.43	22.5	-10.8	47	30.1
23-Aug 6:17:04	2.14	Dione	Schaduwovergang.Einde	Saturnus	-0.21	7.59	-0.3	13.9	48.6	31.4
23-Aug 6:38:12	2.06	Dione	Overgang.Einde	Saturnus	-0.01	9.42	-3.6	17.2	48.8	31.6
23-Aug 8:49:09	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.07	10.21	-24	36.7	50	32.8
23-Aug 8:54:43	0.53	Mimas	Overgang.Begin	Saturnus		9.51	-24.8	37.4	50	32.9
23-Aug 10:07:25	4.15	Saturnus	Verduistering.Begin	Rhea	0.1	10.56	-35.1	45.8	50.8	33.7
23-Aug 11:07:38	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.09	8.65	-41.4	49.7	51.3	34.3
23-Aug 11:14:24	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.49	-42	49.9	51.4	34.4
23-Aug 13:39:22	3.72	Saturnus	Bedekking.Einde	Rhea	-0.03	9.25	-45	43.8	52.8	36.2
23-Aug 14:11:20	0.73	Saturnus	Verduistering.Begin	Enceladus	0.09	10.39	-43	40.3	53	36.5
23-Aug 16:05:59	1.68	Saturnus	Verduistering.Begin	Tethys	0.11	10.64	-30.2	24	54.1	38
23-Aug 16:55:34	0.72	Saturnus	Bedekking.Einde	Enceladus	-0.01	9.51	-23.1	16.3	54.6	38.6
23-Aug 19:11:07	1.65	Saturnus	Bedekking.Einde	Tethys		9.52	-1.8	-4.6	55.9	40.2
23-Aug 19:53:53	0.53	Saturnus	Verduistering.Begin	Mimas	0.07	10.18	4.7	-10.5	56.3	40.7
23-Aug 22:16:35	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.5	23.6	-25.3	57.6	42.2

24-Aug	6:33:06	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.08	10.35	-3.4	16.1	62.2	46.3
24-Aug	6:40:29	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	9.51	-4.6	17.3	62.3	46.4
24-Aug	7:26:15	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.06	10.17	-11.8	24.4	62.7	46.8
24-Aug	7:31:32	0.53	Mimas	Overgang.Begin	Saturnus		9.52	-12.6	25.2	62.8	46.8
24-Aug	9:07:04	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.11	8.47	-27.3	38.8	63.7	47.7
24-Aug	9:16:12	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.51	-28.6	39.9	63.8	47.8
24-Aug	9:44:45	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.09	8.7	-32.5	43.1	64	48
24-Aug	9:51:09	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.5	-33.3	43.8	64.1	48.1
24-Aug	12:11:45	2.12	Saturnus	Verduistering.Begin	Dione	0.11	10.62	-45.8	49.6	65.4	49.6
24-Aug	14:45:13	1.67	Tethys	Schaduwovergang.Begin	Saturnus	0.11	10.58	-39.6	35.6	66.8	51.4
24-Aug	14:55:25	1.65	Tethys	Overgang.Begin	Saturnus		9.53	-38.5	34.2	66.9	51.5
24-Aug	15:30:36	2.05	Saturnus	Bedekking.Einde	Dione	-0.01	9.43	-34.3	29.1	67.2	52
24-Aug	17:37:16	1.67	Tethys	Schaduwovergang.Einde	Saturnus	-0.14	8.25	-16	9.4	68.4	53.5
24-Aug	17:49:30	1.65	Tethys	Overgang.Einde	Saturnus		9.52	-14	7.4	68.5	53.7
24-Aug	18:31:09	0.53	Saturnus	Verduistering.Begin	Mimas	0.06	10.15	-7.5	1.1	68.9	54.2
24-Aug	20:53:26	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.5	13.9	-18.2	70.2	55.8
24-Aug	23:04:33	0.73	Saturnus	Verduistering.Begin	Enceladus	0.08	10.33	28.3	-27.9	71.4	57.2
25-Aug	1:48:03	0.72	Saturnus	Bedekking.Einde	Enceladus	-0.01	9.51	30.4	-22.9	72.9	58.6
25-Aug	6:03:20	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.06	10.14	0.6	11.2	75.2	60.6
25-Aug	6:08:20	0.53	Mimas	Overgang.Begin	Saturnus		9.52	-0.2	11.9	75.2	60.6
25-Aug	8:21:53	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.09	8.75	-21.2	32.4	76.4	61.6
25-Aug	8:27:53	0.53	Mimas	Overgang.Einde	Saturnus	-0.01	9.5	-22.1	33.3	76.5	61.7
25-Aug	13:24:42	1.67	Saturnus	Verduistering.Begin	Tethys	0.1	10.53	-45.3	44.7	79.2	64.6
25-Aug	15:26:22	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.08	10.29	-34.5	29.5	80.3	66
25-Aug	15:33:09	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	9.52	-33.6	28.5	80.3	66.1
25-Aug	16:21:27	4.14	Rhea	Schaduwovergang.Begin	Saturnus	0.09	10.4	-26.7	20.8	80.8	66.7
25-Aug	16:28:27	1.65	Saturnus	Bedekking.Einde	Tethys		9.52	-25.9	19.9	80.8	66.7
25-Aug	16:38:35	3.78	Rhea	Overgang.Begin	Saturnus	-0.03	9.24	-24.2	18.1	80.9	66.9
25-Aug	17:08:25	0.53	Saturnus	Verduistering.Begin	Mimas	0.06	10.11	-19.9	13.7	81.2	67.2
25-Aug	18:00:23	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.1	8.56	-11.8	5.5	81.7	67.9
25-Aug	18:08:43	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.51	-10.4	4.2	81.7	68
25-Aug	19:15:40	4.14	Rhea	Schaduwovergang.Einde	Saturnus	-0.25	7.19	0.4	-6.1	82.3	68.8
25-Aug	19:30:16	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.5	2.3	-7.9	82.5	68.9

25-Aug 19:48:53	3.78 Rhea	Overgang.Einde	Saturnus	-0.03	9.25	5.4	-10.7	82.6	69.2
25-Aug 20:59:05	2.13 Dione	Schaduwovergang.Begin	Saturnus	0.1	10.53	15.3	-19.2	83.3	70
25-Aug 21:11:29	2.07 Dione	Overgang.Begin	Saturnus	-0.01	9.43	17	-20.5	83.4	70.1
25-Aug 23:59:14	2.13 Dione	Schaduwovergang.Einde	Saturnus	-0.17	7.9	31.5	-28.8	84.9	71.8
26-Aug 0:16:52	2.07 Dione	Overgang.Einde	Saturnus	-0.01	9.43	31.9	-28.5	85	72
26-Aug 4:40:26	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.06	10.11	12.2	-1.9	87.3	74.1
26-Aug 4:45:09	0.53 Mimas	Overgang.Begin	Saturnus		9.52	11.6	-1.2	87.4	74.1
26-Aug 6:59:00	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.08	8.8	-8.9	19.7	88.6	75.1
26-Aug 7:04:37	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.5	-9.8	20.6	88.6	75.1
26-Aug 7:57:48	0.73 Saturnus	Verduistering.Begin	Enceladus	0.07	10.26	-18.1	28.7	89.1	75.5
26-Aug 10:40:34	0.72 Saturnus	Bedekking.Einde	Enceladus	-0.01	9.52	-40.1	47.3	90.5	76.8
26-Aug 12:03:56	1.67 Tethys	Schaduwovergang.Begin	Saturnus	0.09	10.47	-45.8	49.1	91.3	77.6
26-Aug 12:13:00	1.66 Tethys	Overgang.Begin	Saturnus		9.53	-46.1	48.9	91.3	77.7
26-Aug 14:56:07	1.67 Tethys	Schaduwovergang.Einde	Saturnus	-0.12	8.41	-37.6	33.4	92.8	79.4
26-Aug 15:06:51	1.66 Tethys	Overgang.Einde	Saturnus	-0.01	9.52	-36.3	31.9	92.9	79.5
26-Aug 15:45:41	0.53 Saturnus	Verduistering.Begin	Mimas	0.05	10.08	-31.4	26.3	93.2	80
26-Aug 18:07:07	0.52 Saturnus	Bedekking.Einde	Mimas	-0.01	9.51	-10.1	4.1	94.4	81.7
27-Aug 0:19:38	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.07	10.23	32	-28.7	97.7	85.8
27-Aug 0:25:50	0.72 Enceladus	Overgang.Begin	Saturnus	-0.01	9.52	32	-28.6	97.7	85.9
27-Aug 2:53:43	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.1	8.66	24.7	-16.7	99	87.1
27-Aug 3:01:15	0.72 Enceladus	Overgang.Einde	Saturnus	-0.01	9.52	23.9	-15.8	99.1	87.2
27-Aug 3:17:32	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.05	10.07	22.2	-13.7	99.2	87.3
27-Aug 3:21:57	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.52	21.7	-13.2	99.2	87.3
27-Aug 5:36:07	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.08	8.85	3.4	6.4	100.4	88.3
27-Aug 5:41:21	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.51	2.6	7.3	100.4	88.3
27-Aug 5:53:35	2.12 Saturnus	Verduistering.Begin	Dione	0.09	10.44	0.6	9.3	100.5	88.4
27-Aug 9:09:24	2.06 Saturnus	Bedekking.Einde	Dione	-0.01	9.43	-29.6	38.3	102.2	89.8
27-Aug 10:43:24	1.67 Saturnus	Verduistering.Begin	Tethys	0.09	10.42	-40.9	47.2	103	90.5
27-Aug 13:45:44	1.66 Saturnus	Bedekking.Einde	Tethys		9.53	-43.8	41.9	104.6	92.2
27-Aug 14:22:57	0.53 Saturnus	Verduistering.Begin	Mimas	0.05	10.05	-40.7	37.6	104.9	92.5
27-Aug 16:43:58	0.52 Saturnus	Bedekking.Einde	Mimas	-0.01	9.51	-22.4	16.9	106.1	94.1
27-Aug 16:51:01	0.73 Saturnus	Verduistering.Begin	Enceladus	0.07	10.2	-21.3	15.8	106.2	94.2
27-Aug 19:33:03	0.72 Saturnus	Bedekking.Einde	Enceladus	-0.01	9.52	4	-9	107.5	96.1



27-Aug 22:33:40	4.09	Saturnus	Verduistering.Begin	Rhea	0.07	10.25	26.9	-27.8	109.1	98.1
28-Aug 1:54:38	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.05	10.04	29.2	-23.3	110.8	100.1
28-Aug 1:56:48	3.81	Saturnus	Bedekking.Einde	Rhea	-0.03	9.24	29	-22.9	110.8	100.1
28-Aug 1:58:46	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	9.53	28.9	-22.9	110.8	100.1
28-Aug 4:13:14	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.07	8.9	14.8	-6.4	111.9	101.2
28-Aug 4:18:06	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	9.51	14.1	-5.7	112	101.2
28-Aug 9:12:53	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.06	10.16	-30.6	38.4	114.4	103.2
28-Aug 9:18:31	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	9.52	-31.3	39.1	114.5	103.3
28-Aug 9:22:43	1.67	Tethys	Schaduwovergang.Begin	Saturnus	0.08	10.36	-32	39.6	114.5	103.3
28-Aug 9:30:38	1.66	Tethys	Overgang.Begin	Saturnus		9.54	-33	40.5	114.6	103.3
28-Aug 11:47:03	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.09	8.76	-45.6	48.6	115.7	104.4
28-Aug 11:53:46	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.52	-45.8	48.6	115.8	104.4
28-Aug 12:15:01	1.67	Tethys	Schaduwovergang.Einde	Saturnus	-0.1	8.57	-46.3	48.1	116	104.6
28-Aug 12:24:13	1.66	Tethys	Overgang.Einde	Saturnus	-0.01	9.53	-46.4	47.8	116	104.7
28-Aug 13:00:14	0.53	Saturnus	Verduistering.Begin	Mimas	0.05	10.01	-45.9	45.7	116.3	105
28-Aug 14:40:45	2.12	Dione	Schaduwovergang.Begin	Saturnus	0.08	10.35	-38.4	34.8	117.2	105.9
28-Aug 14:51:06	2.08	Dione	Overgang.Begin	Saturnus	-0.01	9.43	-37.2	33.4	117.3	106
28-Aug 15:20:48	0.52	Saturnus	Bedekking.Einde	Mimas	-0.01	9.51	-33.7	29.3	117.5	106.3
28-Aug 17:41:23	2.12	Dione	Schaduwovergang.Einde	Saturnus	-0.14	8.22	-12.7	7.4	118.7	107.9
28-Aug 17:55:27	2.08	Dione	Overgang.Einde	Saturnus	-0.02	9.43	-10.5	5.2	118.8	108
29-Aug 0:31:44	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.04	10	32	-29	122.1	112.4
29-Aug 0:35:34	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	9.53	31.9	-28.9	122.1	112.5
29-Aug 1:44:20	0.73	Saturnus	Verduistering.Begin	Enceladus	0.06	10.14	29.6	-24.5	122.7	113.1
29-Aug 2:50:21	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.07	8.96	24.2	-17.6	123.2	113.7
29-Aug 2:54:49	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	9.51	23.7	-17.1	123.2	113.7
29-Aug 4:25:37	0.73	Saturnus	Bedekking.Einde	Enceladus	-0.01	9.52	12.5	-4.8	124	114.4
29-Aug 8:02:10	1.67	Saturnus	Verduistering.Begin	Tethys	0.08	10.3	-20.9	28.7	125.8	115.9
29-Aug 11:03:03	1.66	Saturnus	Bedekking.Einde	Tethys	-0.01	9.53	-43.3	47.5	127.3	117.1
29-Aug 11:37:31	0.53	Saturnus	Verduistering.Begin	Mimas	0.04	9.98	-45.4	48.3	127.5	117.4
29-Aug 13:57:39	0.53	Saturnus	Bedekking.Einde	Mimas	-0.01	9.51	-42.3	39.9	128.7	118.5
29-Aug 18:06:09	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.05	10.1	-8.3	3.3	130.7	121
29-Aug 18:11:11	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	-7.5	2.5	130.7	121
29-Aug 20:40:23	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.08	8.85	14.9	-18.4	132	122.7

29-Aug 20:46:17	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.52	15.7	-19.1	132	122.8
29-Aug 23:08:50	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.04	9.97	29.8	-29.8	133.2	124.4
29-Aug 23:12:22	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	9.53	30	-29.9	133.2	124.4
29-Aug 23:35:15	2.11	Saturnus	Verduistering.Begin	Dione	0.07	10.26	31.1	-30.3	133.4	124.7
30-Aug 1:27:29	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.06	9.01	30.2	-26.2	134.3	125.8
30-Aug 1:31:33	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	9.51	30	-25.9	134.3	125.8
30-Aug 2:47:58	2.07	Saturnus	Bedekking.Einde	Dione	-0.02	9.44	23.9	-18.1	134.9	126.5
30-Aug 4:47:37	4.08	Rhea	Schaduwovergang.Begin	Saturnus	0.05	10.1	8.5	-1.5	135.9	127.5
30-Aug 5:00:46	3.88	Rhea	Overgang.Begin	Saturnus	-0.04	9.23	6.5	0.5	136	127.6
30-Aug 6:41:26	1.67	Tethys	Schaduwovergang.Begin	Saturnus	0.07	10.24	-8.9	16.1	136.8	128.3
30-Aug 6:48:11	1.66	Tethys	Overgang.Begin	Saturnus		9.54	-10	17.2	136.9	128.3
30-Aug 7:44:16	4.08	Rhea	Schaduwovergang.Einde	Saturnus	-0.18	7.89	-19	26	137.3	128.7
30-Aug 8:06:01	3.88	Rhea	Overgang.Einde	Saturnus	-0.04	9.23	-22.3	29.2	137.5	128.8
30-Aug 9:33:50	1.67	Tethys	Schaduwovergang.Einde	Saturnus	-0.09	8.74	-34.6	40.3	138.2	129.4
30-Aug 9:41:30	1.66	Tethys	Overgang.Einde	Saturnus	-0.01	9.53	-35.5	41.1	138.3	129.4
30-Aug 10:14:48	0.53	Saturnus	Verduistering.Begin	Mimas	0.04	9.95	-39.3	44.2	138.5	129.6
30-Aug 10:37:34	0.73	Saturnus	Verduistering.Begin	Enceladus	0.05	10.07	-41.5	45.8	138.7	129.8
30-Aug 12:34:30	0.53	Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	-46.4	46.6	139.6	130.6
30-Aug 13:18:06	0.73	Saturnus	Bedekking.Einde	Enceladus	-0.01	9.53	-44.8	43.5	140	130.9
30-Aug 21:45:56	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.04	9.93	23.3	-25.5	144	136
30-Aug 21:49:11	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	9.53	23.6	-25.8	144.1	136.1
31-Aug 0:04:36	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.06	9.06	31.9	-30.5	145.1	137.5
31-Aug 0:08:17	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	9.51	31.9	-30.4	145.2	137.6
31-Aug 2:59:25	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.05	10.03	22.2	-17.1	146.5	139.2
31-Aug 3:03:51	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	21.7	-16.5	146.6	139.3
31-Aug 5:20:56	1.67	Saturnus	Verduistering.Begin	Tethys	0.06	10.18	3	3.2	147.7	140.4
31-Aug 5:33:43	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.07	8.95	1.1	5.2	147.8	140.5
31-Aug 5:38:48	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	9.53	0.3	6	147.8	140.5
31-Aug 8:20:22	1.66	Saturnus	Bedekking.Einde	Tethys	-0.01	9.53	-25	30.8	149.1	141.6
31-Aug 8:22:27	2.12	Dione	Schaduwovergang.Begin	Saturnus	0.06	10.16	-25.3	31.1	149.1	141.6
31-Aug 8:30:45	2.09	Dione	Overgang.Begin	Saturnus	-0.02	9.43	-26.5	32.3	149.2	141.7
31-Aug 8:52:05	0.53	Saturnus	Verduistering.Begin	Mimas	0.03	9.91	-29.5	35	149.3	141.8
31-Aug 11:11:22	0.53	Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	-44.5	47.1	150.4	142.7

31-Aug 11:23:35	2.12 Dione	Schaduwovergang.Einde	Saturnus	-0.11	8.53	-45.2	47.4	150.5	142.8
31-Aug 11:34:00	2.09 Dione	Overgang.Einde	Saturnus	-0.02	9.43	-45.7	47.5	150.6	142.8
31-Aug 19:30:50	0.73 Saturnus	Verduistering.Begin	Enceladus	0.04	10	6.1	-10	154.4	146.9
31-Aug 20:23:02	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.03	9.9	13.6	-17	154.8	147.5
31-Aug 20:25:59	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.53	14	-17.4	154.8	147.5
31-Aug 22:10:36	0.73 Saturnus	Bedekking.Einde	Enceladus	-0.01	9.53	26.1	-27.8	155.6	148.7
31-Aug 22:41:43	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.05	9.11	28.6	-29.6	155.8	149
31-Aug 22:45:00	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.52	28.8	-29.7	155.9	149
01-Sep 4:00:11	1.67 Tethys	Schaduwovergang.Begin	Saturnus	0.06	10.12	14.1	-9.1	158.3	152.2
01-Sep 4:05:46	1.66 Tethys	Overgang.Begin	Saturnus		9.54	13.3	-8.3	158.4	152.2
01-Sep 6:52:41	1.67 Tethys	Schaduwovergang.Einde	Saturnus	-0.07	8.9	-12.1	17.4	159.7	153.5
01-Sep 6:58:48	1.66 Tethys	Overgang.Einde	Saturnus	-0.01	9.53	-13.1	18.4	159.7	153.5
01-Sep 7:29:22	0.53 Saturnus	Verduistering.Begin	Mimas	0.03	9.88	-17.8	23	160	153.7
01-Sep 9:48:13	0.53 Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	-37.3	41.2	161	154.6
01-Sep 11:00:01	4.04 Saturnus	Verduistering.Begin	Rhea	0.04	9.95	-44.2	46.4	161.6	155.1
01-Sep 11:52:42	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.04	9.97	-46.3	47.1	162	155.4
01-Sep 11:56:32	0.72 Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	-46.4	47.1	162	155.4
01-Sep 14:13:54	3.92 Saturnus	Bedekking.Einde	Rhea	-0.04	9.22	-39.5	36.7	163.1	156.4
01-Sep 14:27:03	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.06	9.05	-38.2	35.3	163.2	156.5
01-Sep 14:31:19	0.72 Enceladus	Overgang.Einde	Saturnus	-0.01	9.53	-37.7	34.8	163.2	156.5
01-Sep 17:16:59	2.11 Saturnus	Verduistering.Begin	Dione	0.05	10.07	-14	10	164.5	157.9
01-Sep 19:00:07	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.03	9.86	2.1	-5.9	165.3	158.9
01-Sep 19:02:47	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.53	2.5	-6.3	165.3	158.9
01-Sep 20:26:32	2.09 Saturnus	Bedekking.Einde	Dione	-0.02	9.43	14.7	-17.9	166	159.7
01-Sep 21:18:50	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.04	9.16	21.2	-23.7	166.4	160.3
01-Sep 21:21:43	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.52	21.5	-24	166.4	160.3
02-Sep 2:39:41	1.67 Saturnus	Verduistering.Begin	Tethys	0.05	10.06	23.3	-20	168.8	163.7
02-Sep 4:24:05	0.73 Saturnus	Verduistering.Begin	Enceladus	0.04	9.94	10.2	-6	169.6	164.6
02-Sep 5:37:40	1.66 Saturnus	Bedekking.Einde	Tethys	-0.01	9.54	-0.9	5.4	170.2	165.2
02-Sep 6:06:39	0.53 Saturnus	Verduistering.Begin	Mimas	0.03	9.84	-5.4	9.9	170.4	165.4
02-Sep 7:03:05	0.73 Saturnus	Bedekking.Einde	Enceladus	-0.01	9.53	-14.4	18.7	170.8	165.9
02-Sep 8:25:05	0.53 Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	-26.9	30.9	171.4	166.4
02-Sep 17:37:13	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.02	9.83	-10.3	6.6	175.4	170.2

02-Sep 17:39:35	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-9.9	6.2	175.4	170.2
02-Sep 19:55:58	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.04	9.21	11	-14.2	176.3	171.5
02-Sep 19:58:26	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.52	11.3	-14.5	176.3	171.5
02-Sep 20:46:02	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.03	9.9	17.7	-20.5	176.6	172
02-Sep 20:49:16	0.73 Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	18.1	-20.9	176.6	172
02-Sep 23:20:28	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.05	9.14	31	-31.6	177.3	173.6
02-Sep 23:23:53	0.73 Enceladus	Overgang.Einde	Saturnus	-0.01	9.53	31.1	-31.6	177.4	173.6
03-Sep 1:18:55	1.67 Tethys	Schaduwovergang.Begin	Saturnus	0.04	10	29.6	-28.1	177.7	174.8
03-Sep 1:23:19	1.67 Tethys	Overgang.Begin	Saturnus		9.55	29.4	-27.7	177.7	174.9
03-Sep 2:04:19	2.11 Dione	Schaduwovergang.Begin	Saturnus	0.04	9.97	26.3	-24.1	177.7	175.3
03-Sep 2:10:31	2.1 Dione	Overgang.Begin	Saturnus	-0.02	9.43	25.7	-23.4	177.7	175.4
03-Sep 4:11:31	1.67 Tethys	Schaduwovergang.Einde	Saturnus	-0.06	9.06	11.3	-8	177.6	176.5
03-Sep 4:16:04	1.67 Tethys	Overgang.Einde	Saturnus	-0.01	9.54	10.7	-7.3	177.6	176.6
03-Sep 4:43:57	0.53 Saturnus	Verduistering.Begin	Mimas	0.02	9.81	6.7	-3.3	177.5	176.8
03-Sep 5:05:55	2.11 Dione	Schaduwovergang.Einde	Saturnus	-0.08	8.85	3.2	0.2	177.4	177
03-Sep 5:12:39	2.1 Dione	Overgang.Einde	Saturnus	-0.02	9.43	2.2	1.3	177.4	177.1
03-Sep 7:01:56	0.53 Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	-14.8	18.3	176.9	177.9
03-Sep 13:17:22	0.73 Saturnus	Verduistering.Begin	Enceladus	0.03	9.87	-43.9	42.1	174.5	178.9
03-Sep 15:55:35	0.73 Saturnus	Bedekking.Einde	Enceladus	-0.01	9.53	-25.4	22.1	173.4	178
03-Sep 16:14:19	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.02	9.79	-22.6	19.3	173.2	177.9
03-Sep 16:16:23	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-22.3	18.9	173.2	177.9
03-Sep 17:13:58	4.03 Rhea	Schaduwovergang.Begin	Saturnus	0.02	9.8	-13.1	9.6	172.8	177.5
03-Sep 17:23:10	4.0 Rhea	Overgang.Begin	Saturnus	-0.04	9.21	-11.6	8.2	172.7	177.4
03-Sep 18:33:05	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.03	9.26	-0.9	-2.5	172.2	176.9
03-Sep 18:35:09	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.52	-0.5	-2.8	172.2	176.9
03-Sep 20:12:58	4.03 Rhea	Schaduwovergang.Einde	Saturnus	-0.1	8.59	14.1	-17	171.5	176.1
03-Sep 20:22:54	4.0 Rhea	Overgang.Einde	Saturnus	-0.04	9.21	15.4	-18.3	171.4	176
03-Sep 23:58:34	1.67 Saturnus	Verduistering.Begin	Tethys	0.04	9.94	31.8	-32	169.8	173.9
04-Sep 2:55:04	1.67 Saturnus	Bedekking.Einde	Tethys	-0.01	9.54	20.7	-18.7	168.5	172.1
04-Sep 3:21:15	0.53 Saturnus	Verduistering.Begin	Mimas	0.02	9.77	17.5	-15.4	168.3	171.9
04-Sep 5:38:48	0.53 Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	-2.4	5	167.3	170.6
04-Sep 5:39:19	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.02	9.83	-2.5	5.1	167.3	170.6
04-Sep 5:41:57	0.73 Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	-2.9	5.5	167.3	170.6

04-Sep	8:13:49	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.04	9.24	-26.5	28.8	166.1	169.4
04-Sep	8:16:24	0.73 Enceladus	Overgang.Einde	Saturnus	-0.01	9.53	-26.9	29.1	166.1	169.3
04-Sep	10:58:43	2.1 Saturnus	Verduistering.Begin	Dione	0.03	9.88	-44.9	45.3	164.9	168.2
04-Sep	14:05:03	2.1 Saturnus	Bedekking.Einde	Dione	-0.02	9.43	-39.2	36.8	163.5	167.1
04-Sep	14:51:25	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.02	9.75	-33.8	31	163.2	166.8
04-Sep	14:53:11	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-33.6	30.8	163.1	166.8
04-Sep	17:10:12	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.03	9.31	-13.3	10.2	162.1	165.8
04-Sep	17:11:52	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.52	-13	9.9	162.1	165.8
04-Sep	22:10:38	0.73 Saturnus	Verduistering.Begin	Enceladus	0.02	9.8	27.4	-29.3	159.9	163.2
04-Sep	22:37:39	1.67 Tethys	Schaduwovergang.Begin	Saturnus	0.03	9.88	29.3	-30.9	159.7	162.9
04-Sep	22:40:54	1.67 Tethys	Overgang.Begin	Saturnus	-0.01	9.54	29.5	-31.1	159.6	162.9
05-Sep	0:48:05	0.73 Saturnus	Bedekking.Einde	Enceladus	-0.01	9.53	30.7	-30.7	158.7	161.6
05-Sep	1:30:22	1.67 Tethys	Schaduwovergang.Einde	Saturnus	-0.04	9.23	28.3	-27.8	158.4	161.2
05-Sep	1:33:20	1.67 Tethys	Overgang.Einde	Saturnus	-0.01	9.54	28.1	-27.6	158.3	161.1
05-Sep	1:58:32	0.53 Saturnus	Verduistering.Begin	Mimas	0.01	9.73	26.1	-25.3	158.1	160.9
05-Sep	4:15:40	0.53 Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	9.5	-8	157.1	159.5
05-Sep	13:28:30	0.54 Mimas	Schaduwovergang.Begin	Saturnus	0.01	9.72	-42.5	40.4	153	155.3
05-Sep	13:29:59	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-42.3	40.2	152.9	155.3
05-Sep	14:32:37	0.73 Enceladus	Schaduwovergang.Begin	Saturnus	0.02	9.76	-35.7	33.2	152.5	154.9
05-Sep	14:34:39	0.73 Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	-35.4	32.9	152.5	154.9
05-Sep	15:47:19	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.02	9.36	-25.4	22.7	151.9	154.4
05-Sep	15:48:34	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.52	-25.3	22.5	151.9	154.4
05-Sep	17:07:11	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.03	9.33	-13.1	10.3	151.3	153.9
05-Sep	17:08:56	0.73 Enceladus	Overgang.Einde	Saturnus	-0.01	9.53	-12.8	10	151.3	153.9
05-Sep	19:46:04	2.11 Dione	Schaduwovergang.Begin	Saturnus	0.02	9.78	11.4	-14	150.1	152.7
05-Sep	19:50:11	2.12 Dione	Overgang.Begin	Saturnus	-0.02	9.43	12	-14.6	150.1	152.6
05-Sep	21:17:20	1.67 Saturnus	Verduistering.Begin	Tethys	0.02	9.82	22.8	-25.1	149.4	151.9
05-Sep	22:48:07	2.11 Dione	Schaduwovergang.Einde	Saturnus	-0.05	9.16	30.1	-31.8	148.7	151
05-Sep	22:51:09	2.12 Dione	Overgang.Einde	Saturnus	-0.02	9.42	30.3	-31.9	148.7	151
05-Sep	23:26:38	3.99 Saturnus	Verduistering.Begin	Rhea	0.01	9.66	31.5	-32.8	148.4	150.6
06-Sep	0:12:20	1.67 Saturnus	Bedekking.Einde	Tethys	-0.01	9.53	31.6	-32.5	148.1	150.2
06-Sep	0:35:51	0.53 Saturnus	Verduistering.Begin	Mimas	0.01	9.7	31	-31.7	147.9	150
06-Sep	2:30:55	4.05 Saturnus	Bedekking.Einde	Rhea	-0.04	9.2	22.2	-22	147	148.8

06-Sep	2:52:33	0.53	Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	20	-19.6	146.9	148.6
06-Sep	7:03:54	0.73	Saturnus	Verduistering.Begin	Enceladus	0.01	9.73	-17.2	17.9	145	146.1
06-Sep	9:40:35	0.73	Saturnus	Bedekking.Einde	Enceladus	-0.01	9.53	-39	38.9	143.8	144.8
06-Sep	12:05:36	0.54	Mimas	Schaduwovergang.Begin	Saturnus	0.01	9.68	-46.6	45	142.7	143.8
06-Sep	12:06:47	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-46.5	45	142.7	143.8
06-Sep	14:24:27	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.02	9.41	-36.2	33.8	141.7	143
06-Sep	14:25:17	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	9.52	-36.1	33.7	141.7	143
06-Sep	19:56:28	1.67	Tethys	Schaduwovergang.Begin	Saturnus	0.02	9.76	13.3	-15.8	139.2	140.7
06-Sep	19:58:31	1.67	Tethys	Overgang.Begin	Saturnus	-0.01	9.54	13.6	-16	139.2	140.7
06-Sep	22:49:16	1.67	Tethys	Schaduwovergang.Einde	Saturnus	-0.02	9.39	30.3	-32.2	137.9	139.2
06-Sep	22:50:39	1.67	Tethys	Overgang.Einde	Saturnus	-0.01	9.53	30.4	-32.2	137.9	139.2
06-Sep	23:13:09	0.53	Saturnus	Verduistering.Begin	Mimas	0.01	9.66	31.2	-32.9	137.7	139
06-Sep	23:25:55	0.73	Enceladus	Schaduwovergang.Begin	Saturnus	0.01	9.69	31.5	-33.2	137.6	138.9
06-Sep	23:27:21	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	31.5	-33.2	137.6	138.9
07-Sep	1:29:26	0.53	Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	27.7	-28.6	136.7	137.7
07-Sep	2:00:32	0.73	Enceladus	Schaduwovergang.Einde	Saturnus	-0.02	9.43	25.1	-25.8	136.4	137.3
07-Sep	2:01:27	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	9.53	25	-25.7	136.4	137.3
07-Sep	4:40:30	2.1	Saturnus	Verduistering.Begin	Dione	0.01	9.69	4.5	-4.6	135.2	135.7
07-Sep	7:43:35	2.11	Saturnus	Bedekking.Einde	Dione	-0.02	9.42	-24.1	23.8	133.8	133.9
07-Sep	10:42:42	0.54	Mimas	Schaduwovergang.Begin	Saturnus		9.64	-44.7	43.4	132.5	132.5
07-Sep	10:43:35	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-44.8	43.5	132.5	132.4
07-Sep	13:01:34	0.54	Mimas	Schaduwovergang.Einde	Saturnus	-0.01	9.46	-44	41.9	131.4	131.5
07-Sep	13:01:59	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	9.52	-43.9	41.8	131.4	131.5
07-Sep	15:57:12	0.73	Saturnus	Verduistering.Begin	Enceladus	0.01	9.66	-22.7	20.5	130.1	130.4
07-Sep	18:33:07	0.73	Saturnus	Bedekking.Einde	Enceladus	-0.01	9.53	1.7	-3.9	128.9	129.4
07-Sep	18:36:06	1.67	Saturnus	Verduistering.Begin	Tethys	0.01	9.7	2.2	-4.4	128.9	129.4
07-Sep	21:29:37	1.67	Saturnus	Bedekking.Einde	Tethys	-0.01	9.53	24.9	-27.1	127.6	128.1
07-Sep	21:50:27	0.53	Saturnus	Verduistering.Begin	Mimas		9.62	26.7	-28.9	127.4	127.9
08-Sep	0:06:18	0.53	Saturnus	Bedekking.Einde	Mimas	-0.01	9.52	31.5	-33.3	126.4	126.7
08-Sep	5:40:10	3.98	Rhea	Schaduwovergang.Begin	Saturnus	-0.01	9.52	-5.6	4.6	123.8	123.2
08-Sep	5:45:33	4.14	Rhea	Overgang.Begin	Saturnus	-0.04	9.18	-6.5	5.4	123.8	123.2
08-Sep	8:19:16	0.73	Enceladus	Schaduwovergang.Begin	Saturnus		9.62	-29.8	28.5	122.6	121.7
08-Sep	8:20:06	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	-29.9	28.6	122.6	121.7

08-Sep	8:39:17	4.14 Rhea	Overgang.Einde	Saturnus	-0.04	9.18	-32.8	31.4	122.5	121.5
08-Sep	8:41:27	3.98 Rhea	Schaduwovergang.Einde	Saturnus	-0.03	9.31	-33.1	31.7	122.5	121.5
08-Sep	9:19:47	0.54 Mimas	Schaduwovergang.Begin	Saturnus		9.6	-37.6	36.1	122.2	121.1
08-Sep	9:20:23	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-37.7	36.1	122.2	121.1
08-Sep	10:53:56	0.73 Enceladus	Schaduwovergang.Einde	Saturnus	-0.01	9.52	-45.6	43.6	121.5	120.4
08-Sep	10:54:00	0.73 Enceladus	Overgang.Einde	Saturnus	-0.01	9.53	-45.6	43.6	121.5	120.4
08-Sep	11:38:41	0.54 Mimas	Schaduwovergang.Einde	Saturnus	-0.01	9.51	-46.7	44.6	121.1	120
08-Sep	11:38:42	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.51	-46.7	44.6	121.1	120
08-Sep	13:27:49	2.1 Dione	Schaduwovergang.Begin	Saturnus		9.59	-41.4	39.2	120.3	119.3
08-Sep	13:29:53	2.13 Dione	Overgang.Begin	Saturnus	-0.02	9.42	-41.2	39	120.3	119.3
08-Sep	16:29:37	2.13 Dione	Overgang.Einde	Saturnus	-0.02	9.42	-17	15	118.9	118.2
08-Sep	16:30:20	2.1 Dione	Schaduwovergang.Einde	Saturnus	-0.01	9.48	-16.9	14.9	118.9	118.2
08-Sep	17:15:14	1.67 Tethys	Schaduwovergang.Begin	Saturnus		9.63	-9.8	7.9	118.5	117.9
08-Sep	17:16:07	1.68 Tethys	Overgang.Begin	Saturnus	-0.01	9.54	-9.7	7.8	118.5	117.9
08-Sep	20:07:55	1.68 Tethys	Overgang.Einde	Saturnus	-0.01	9.53	16	-18	117.2	116.7
08-Sep	20:08:08	1.67 Tethys	Schaduwovergang.Einde	Saturnus		9.55	16	-18	117.2	116.7
08-Sep	20:27:46	0.53 Saturnus	Verduistering.Begin	Mimas		9.59	18.4	-20.5	117.1	116.6
08-Sep	22:43:22	0.53 Saturnus	Verduistering.Einde	Mimas	-0.01	9.54	30.4	-32.7	116	115.5
09-Sep	0:50:29	0.73 Saturnus	Verduistering.Begin	Enceladus		9.59	29.7	-32	115	114.3
09-Sep	3:25:57	0.73 Saturnus	Verduistering.Einde	Enceladus		9.56	14	-16.1	113.8	112.7
09-Sep	7:56:53	0.54 Mimas	Schaduwovergang.Begin	Saturnus		9.56	-27.2	25.1	111.7	109.9
09-Sep	7:57:11	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-27.3	25.1	111.7	109.9
09-Sep	10:15:24	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	9.51	-43.5	41	110.7	108.6
09-Sep	10:15:49	0.54 Mimas	Schaduwovergang.Einde	Saturnus		9.56	-43.5	41	110.7	108.6
09-Sep	15:54:58	1.67 Saturnus	Verduistering.Begin	Tethys		9.57	-21.8	20	108	106.2
09-Sep	17:12:34	0.72 Enceladus	Schaduwovergang.Begin	Saturnus		9.55	-9.7	8	107.4	105.7
09-Sep	17:12:49	0.73 Enceladus	Overgang.Begin	Saturnus	-0.01	9.53	-9.7	8	107.4	105.7
09-Sep	18:47:58	1.67 Saturnus	Verduistering.Einde	Tethys		9.63	5.2	-6.9	106.7	105.1
09-Sep	19:05:05	0.53 Saturnus	Verduistering.Begin	Mimas		9.55	7.7	-9.4	106.5	105
09-Sep	19:46:32	0.73 Enceladus	Overgang.Einde	Saturnus	-0.01	9.53	13.6	-15.4	106.2	104.7
09-Sep	19:47:19	0.72 Enceladus	Schaduwovergang.Einde	Saturnus		9.61	13.7	-15.5	106.2	104.7
09-Sep	21:20:39	0.53 Saturnus	Verduistering.Einde	Mimas		9.59	24.7	-26.9	105.5	104
09-Sep	22:22:21	2.09 Saturnus	Verduistering.Begin	Dione	-0.01	9.5	29.5	-32	105	103.5

10-Sep	1:24:41	2.09	Saturnus	Verduistering.Einde	Dione	9.63	27	-29.9	103.6	101.9	
10-Sep	6:33:59	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.01	9.53	-15.3	12.3	101.1	98.6
10-Sep	6:33:59	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.53	-15.3	12.3	101.1	98.6
10-Sep	8:52:07	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.51	-35.4	32.2	100	97.1
10-Sep	8:52:56	0.54	Mimas	Schaduwovergang.Einde	Saturnus		9.61	-35.5	32.3	100	97.1
10-Sep	9:43:44	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.53	-41.1	37.9	99.6	96.6
10-Sep	11:53:00	3.94	Saturnus	Verduistering.Begin	Rhea	-0.02	9.38	-46.6	43.7	98.6	95.5
10-Sep	12:19:18	0.73	Saturnus	Verduistering.Einde	Enceladus	0.01	9.66	-45.8	43.1	98.4	95.3
10-Sep	14:33:46	1.68	Tethys	Overgang.Begin	Saturnus	-0.01	9.54	-32.9	31.1	97.3	94.3
10-Sep	14:34:04	1.67	Tethys	Schaduwovergang.Begin	Saturnus	-0.01	9.51	-32.9	31.1	97.3	94.3
10-Sep	14:55:31	3.94	Saturnus	Verduistering.Einde	Rhea	0.01	9.66	-29.8	28.1	97.1	94.1
10-Sep	17:25:14	1.68	Tethys	Overgang.Einde	Saturnus	-0.01	9.53	-7	5.6	96	93.2
10-Sep	17:27:03	1.67	Tethys	Schaduwovergang.Einde	Saturnus	0.01	9.71	-6.7	5.3	95.9	93.2
10-Sep	17:42:16	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.53	-4.4	3	95.8	93.1
10-Sep	19:57:56	0.53	Saturnus	Verduistering.Einde	Mimas		9.63	15.6	-17.3	94.7	92.2
11-Sep	2:05:32	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	9.52	22.7	-26.5	91.8	89.1
11-Sep	2:05:54	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.01	9.48	22.7	-26.4	91.8	89.1
11-Sep	4:39:05	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	9.52	2.1	-5.9	90.5	87.4
11-Sep	4:40:42	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.01	9.71	1.9	-5.7	90.5	87.4
11-Sep	5:10:47	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.52	-2.8	-1	90.3	87.1
11-Sep	5:11:05	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.01	9.49	-2.8	-1	90.3	87.1
11-Sep	7:09:42	2.15	Dione	Overgang.Begin	Saturnus	-0.02	9.41	-21.6	17.7	89.3	85.8
11-Sep	7:09:42	2.1	Dione	Schaduwovergang.Begin	Saturnus	-0.02	9.41	-21.6	17.7	89.3	85.8
11-Sep	7:28:49	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.51	-24.4	20.5	89.2	85.5
11-Sep	7:30:04	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.01	9.66	-24.6	20.6	89.2	85.5
11-Sep	10:08:11	2.15	Dione	Overgang.Einde	Saturnus	-0.02	9.4	-43.7	39.8	87.9	83.9
11-Sep	10:12:39	2.1	Dione	Schaduwovergang.Einde	Saturnus	0.02	9.79	-44	40.2	87.8	83.8
11-Sep	13:12:55	1.68	Saturnus	Bedekking.Begin	Tethys	-0.01	9.53	-41.7	39.4	86.4	82.2
11-Sep	16:06:52	1.67	Saturnus	Verduistering.Einde	Tethys	0.02	9.79	-18.7	17.5	84.9	80.9
11-Sep	16:19:18	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.53	-16.8	15.7	84.8	80.9
11-Sep	18:35:14	0.53	Saturnus	Verduistering.Einde	Mimas	0.01	9.68	4.4	-5.6	83.7	80
11-Sep	18:36:25	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.52	4.6	-5.8	83.7	80
11-Sep	21:12:40	0.73	Saturnus	Verduistering.Einde	Enceladus	0.02	9.75	24.7	-26.8	82.4	78.9



12-Sep	3:47:36	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.52	9.2	-13.8	79.1	75.3
12-Sep	3:48:11	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.02	9.45	9.1	-13.8	79.1	75.3
12-Sep	6:05:32	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.51	-12.1	7.3	78	73.7
12-Sep	6:07:12	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.01	9.71	-12.4	7.6	78	73.7
12-Sep	10:58:16	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	9.52	-46.5	42.3	75.5	70.5
12-Sep	10:59:13	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.02	9.41	-46.5	42.4	75.5	70.5
12-Sep	11:51:25	1.68	Tethys	Overgang.Begin	Saturnus	-0.01	9.53	-46.5	43	75.1	70
12-Sep	11:52:53	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.02	9.38	-46.5	43	75.1	70
12-Sep	13:31:37	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	9.52	-39.5	37.4	74.2	69.1
12-Sep	13:34:05	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.02	9.8	-39.2	37.1	74.2	69
12-Sep	14:42:33	1.68	Tethys	Overgang.Einde	Saturnus	-0.01	9.52	-30.6	29.2	73.6	68.5
12-Sep	14:45:58	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.03	9.87	-30.1	28.8	73.6	68.5
12-Sep	14:56:21	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.53	-28.7	27.5	73.5	68.4
12-Sep	16:03:09	2.14	Saturnus	Bedekking.Begin	Dione	-0.02	9.4	-18.6	17.7	73	67.9
12-Sep	17:12:32	0.53	Saturnus	Verduistering.Einde	Mimas	0.01	9.73	-7.8	7	72.4	67.4
12-Sep	18:07:11	3.93	Rhea	Schaduwovergang.Begin	Saturnus	-0.04	9.25	1	-1.9	71.9	67
12-Sep	18:08:54	4.3	Rhea	Overgang.Begin	Saturnus	-0.05	9.14	1.3	-2.2	71.9	67
12-Sep	19:06:56	2.09	Saturnus	Verduistering.Einde	Dione	0.04	9.93	9.8	-10.9	71.4	66.6
12-Sep	20:56:13	4.3	Rhea	Overgang.Einde	Saturnus	-0.05	9.14	23.6	-25.6	70.4	65.9
12-Sep	21:10:41	3.93	Rhea	Schaduwovergang.Einde	Saturnus	0.04	10.02	25	-27.2	70.3	65.8
13-Sep	2:24:24	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.52	19.6	-25	67.6	63.1
13-Sep	2:25:17	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.02	9.41	19.5	-24.9	67.6	63.1
13-Sep	3:29:10	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.52	11.1	-16.7	67.1	62.4
13-Sep	4:42:14	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.5	0.3	-6	66.5	61.6
13-Sep	4:44:19	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.02	9.76	0	-5.6	66.4	61.6
13-Sep	6:06:05	0.73	Saturnus	Verduistering.Einde	Enceladus	0.03	9.84	-12.9	7.2	65.7	60.6
13-Sep	10:30:34	1.68	Saturnus	Bedekking.Begin	Tethys	-0.01	9.53	-45.7	40.7	63.4	57.5
13-Sep	13:25:47	1.66	Saturnus	Verduistering.Einde	Tethys	0.04	9.95	-39.7	37.5	61.9	55.7
13-Sep	13:33:24	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.52	-38.9	36.8	61.8	55.6
13-Sep	15:49:50	0.53	Saturnus	Verduistering.Einde	Mimas	0.02	9.78	-20.2	19.5	60.6	54.5
13-Sep	19:50:59	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	9.52	16.3	-17.5	58.5	52.7
13-Sep	19:52:32	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.03	9.34	16.5	-17.7	58.5	52.7
13-Sep	22:24:09	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	9.52	30.3	-33.6	57.1	51.6

13-Sep 22:27:27	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.03	9.89	30.4	-33.8	57.1	51.6
14-Sep 0:49:29	2.16	Dione	Overgang.Begin	Saturnus	-0.02	9.39	28.2	-33.7	55.8	50.4
14-Sep 0:51:33	2.09	Dione	Schaduwovergang.Begin	Saturnus	-0.04	9.22	28.1	-33.6	55.8	50.4
14-Sep 1:01:13	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.51	27.4	-33.1	55.7	50.3
14-Sep 1:02:23	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.02	9.37	27.3	-33	55.7	50.3
14-Sep 3:18:57	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.5	12	-18.4	54.5	48.9
14-Sep 3:21:27	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.02	9.81	11.6	-18.1	54.5	48.9
14-Sep 3:46:42	2.16	Dione	Overgang.Einde	Saturnus	-0.02	9.39	7.9	-14.4	54.3	48.6
14-Sep 3:54:57	2.09	Dione	Schaduwovergang.Einde	Saturnus	0.05	10.09	6.7	-13.2	54.2	48.5
14-Sep 9:09:04	1.69	Tethys	Overgang.Begin	Saturnus	-0.01	9.53	-39.5	33.1	51.4	44.8
14-Sep 9:11:41	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.03	9.26	-39.8	33.4	51.3	44.8
14-Sep 11:59:51	1.69	Tethys	Overgang.Einde	Saturnus	-0.01	9.51	-46	42.1	49.8	42.8
14-Sep 12:04:52	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.05	10.03	-45.8	42	49.8	42.7
14-Sep 12:10:27	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.52	-45.5	41.8	49.7	42.7
14-Sep 12:21:52	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.51	-44.8	41.4	49.6	42.6
14-Sep 14:27:08	0.53	Saturnus	Verduistering.Einde	Mimas	0.02	9.82	-31.7	30.5	48.5	41.3
14-Sep 14:59:27	0.73	Saturnus	Verduistering.Einde	Enceladus	0.04	9.93	-27.1	26.3	48.2	41
14-Sep 23:38:01	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.51	31.2	-36.3	43.4	36.9
14-Sep 23:39:29	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.03	9.33	31.2	-36.3	43.4	36.9
15-Sep 0:19:19	3.89	Saturnus	Verduistering.Begin	Rhea	-0.05	9.13	29.7	-35.5	43	36.5
15-Sep 1:55:39	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.5	21.9	-28.8	42.1	35.7
15-Sep 1:58:34	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.03	9.85	21.6	-28.5	42.1	35.6
15-Sep 3:24:01	3.89	Saturnus	Verduistering.Einde	Rhea	0.08	10.37	10.4	-17.7	41.3	34.7
15-Sep 4:43:43	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	9.51	-1.3	-6.2	40.6	33.9
15-Sep 4:45:52	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.03	9.27	-1.6	-5.9	40.6	33.9
15-Sep 7:16:42	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	9.51	-25.2	17.6	39.2	32.1
15-Sep 7:20:51	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.04	9.98	-25.8	18.3	39.1	32
15-Sep 7:48:14	1.69	Saturnus	Bedekking.Begin	Tethys	-0.01	9.52	-29.8	22.3	38.9	31.7
15-Sep 9:42:57	2.16	Saturnus	Bedekking.Begin	Dione	-0.02	9.38	-43.2	36.3	37.8	30.2
15-Sep 10:44:41	1.66	Saturnus	Verduistering.Einde	Tethys	0.05	10.1	-46.6	40.7	37.2	29.5
15-Sep 10:47:30	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.52	-46.6	40.8	37.2	29.5
15-Sep 12:49:12	2.08	Saturnus	Verduistering.Einde	Dione	0.07	10.24	-42.4	39.5	36	28
15-Sep 13:04:27	0.53	Saturnus	Verduistering.Einde	Mimas	0.03	9.87	-41.1	38.5	35.9	27.8

15-Sep 21:14:34	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.51	26.3	-28.6	31.3	23.4
15-Sep 22:14:50	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.51	30.2	-33.8	30.7	22.9
15-Sep 22:16:35	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.03	9.29	30.3	-33.9	30.7	22.9
15-Sep 23:52:49	0.73	Saturnus	Verduistering.Einde	Enceladus	0.05	10.02	30.7	-36.6	29.8	22.1
16-Sep 0:32:22	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.49	28.8	-35.4	29.4	21.8
16-Sep 0:35:42	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.03	9.9	28.6	-35.2	29.4	21.8
16-Sep 6:26:50	1.69	Tethys	Overgang.Begin	Saturnus	-0.01	9.52	-18.3	9.8	26	18.1
16-Sep 6:30:37	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.05	9.13	-18.9	10.4	26	18.1
16-Sep 9:17:16	1.69	Tethys	Overgang.Einde	Saturnus	-0.01	9.51	-41.2	33.4	24.4	16
16-Sep 9:23:52	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.06	10.18	-41.9	34.1	24.3	15.9
16-Sep 9:24:34	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.51	-41.9	34.1	24.3	15.9
16-Sep 11:41:45	0.53	Saturnus	Verduistering.Einde	Mimas	0.03	9.91	-46.4	41.5	23	14.2
16-Sep 13:36:28	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	9.51	-37.2	35.4	21.9	12.8
16-Sep 13:39:12	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.04	9.2	-36.8	35.1	21.8	12.8
16-Sep 16:09:15	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	9.51	-15.2	15.4	20.4	11.1
16-Sep 16:14:14	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.05	10.07	-14.4	14.7	20.3	11.1
16-Sep 18:29:18	2.18	Dione	Overgang.Begin	Saturnus	-0.02	9.37	6.7	-6.6	19	9.8
16-Sep 18:33:23	2.09	Dione	Schaduwovergang.Begin	Saturnus	-0.06	9.04	7.3	-7.2	19	9.7
16-Sep 20:51:38	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.5	24.6	-26.4	17.6	8.6
16-Sep 20:53:40	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.03	9.26	24.7	-26.6	17.6	8.5
16-Sep 21:25:13	2.18	Dione	Overgang.Einde	Saturnus	-0.02	9.37	27.5	-30.1	17.3	8.3
16-Sep 21:37:13	2.09	Dione	Schaduwovergang.Einde	Saturnus	0.08	10.39	28.4	-31.3	17.2	8.2
16-Sep 23:09:04	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.49	31.4	-36.7	16.3	7.4
16-Sep 23:12:50	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.04	9.95	31.4	-36.8	16.3	7.4
17-Sep 5:05:53	1.69	Saturnus	Bedekking.Begin	Tethys	-0.01	9.51	-6.2	-3.2	12.8	4.1
17-Sep 6:07:17	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.5	-15.9	6.4	12.2	3.4
17-Sep 6:31:48	4.48	Rhea	Overgang.Begin	Saturnus	-0.05	9.09	-20	10.6	12	3.1
17-Sep 6:33:34	3.88	Rhea	Schaduwovergang.Begin	Saturnus	-0.06	9.01	-20.2	10.8	12	3.1
17-Sep 8:01:38	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.51	-32.8	23.6	11.1	2.1
17-Sep 8:03:36	1.66	Saturnus	Verduistering.Einde	Tethys	0.07	10.25	-33.2	24	11.1	2
17-Sep 8:46:12	0.73	Saturnus	Verduistering.Einde	Enceladus	0.05	10.11	-38.4	29.5	10.7	1.5
17-Sep 9:12:19	4.48	Rhea	Overgang.Einde	Saturnus	-0.05	9.09	-41.3	32.7	10.4	1.2
17-Sep 9:39:12	3.88	Rhea	Schaduwovergang.Einde	Saturnus	0.12	10.72	-43.7	35.4	10.1	0.8

17-Sep 10:19:05	0.53	Saturnus	Verduistering.Einde	Mimas	0.04	9.96	-46	38.5	9.8	0.4
17-Sep 19:28:27	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.5	15.5	-15.8	4.4	6.1
17-Sep 19:30:47	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.04	9.22	15.8	-16.1	4.4	6.1
17-Sep 21:45:47	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.49	29.1	-32.4	3.1	7.3
17-Sep 21:49:57	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.04	9.99	29.3	-32.7	3.1	7.3
17-Sep 22:29:17	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	9.5	30.9	-35.5	2.7	7.6
17-Sep 22:32:36	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.05	9.13	31	-35.7	2.7	7.7
18-Sep 1:01:53	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	9.5	25.9	-34.4	1.4	8.9
18-Sep 1:07:42	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.06	10.15	25.4	-34	1.4	8.9
18-Sep 3:22:55	2.18	Saturnus	Bedekking.Begin	Dione	-0.02	9.37	8.8	-18.8	1.1	10.1
18-Sep 3:44:31	1.69	Tethys	Overgang.Begin	Saturnus	-0.01	9.51	5.7	-15.8	1.2	10.3
18-Sep 3:49:26	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.06	9.01	4.9	-15.1	1.2	10.4
18-Sep 6:31:34	2.07	Saturnus	Verduistering.Einde	Dione	0.1	10.53	-20.4	10.1	2.5	12.1
18-Sep 6:34:35	1.69	Tethys	Overgang.Einde	Saturnus	-0.01	9.5	-20.9	10.5	2.5	12.1
18-Sep 6:38:42	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.5	-21.4	11.1	2.5	12.1
18-Sep 6:42:47	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.08	10.33	-22.1	11.8	2.6	12.2
18-Sep 8:56:24	0.53	Saturnus	Verduistering.Einde	Mimas	0.04	10	-40	30.4	3.8	13.8
18-Sep 15:00:00	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.5	-24.6	24.7	7.4	18.4
18-Sep 17:39:35	0.73	Saturnus	Verduistering.Einde	Enceladus	0.06	10.2	0.3	0.6	8.9	20.3
18-Sep 18:05:16	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.49	4.2	-3.4	9.2	20.6
18-Sep 18:07:52	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.04	9.18	4.6	-3.9	9.2	20.6
18-Sep 20:22:30	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.48	22.4	-23.6	10.5	22
18-Sep 20:27:05	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.05	10.04	22.9	-24.2	10.6	22
19-Sep 2:23:36	1.69	Saturnus	Bedekking.Begin	Tethys	-0.01	9.5	16.4	-26.8	14.1	25.1
19-Sep 5:15:46	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.5	-9.1	-2.2	15.8	26.6
19-Sep 5:22:33	1.66	Saturnus	Verduistering.Einde	Tethys	0.09	10.4	-10.2	-1	15.9	26.7
19-Sep 7:22:02	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	9.49	-28.5	17.4	17	27.9
19-Sep 7:25:57	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.05	9.06	-29.1	18	17.1	28
19-Sep 7:33:43	0.53	Saturnus	Verduistering.Einde	Mimas	0.05	10.05	-30.2	19.1	17.1	28
19-Sep 9:54:27	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	9.49	-45.2	36	18.5	29.7
19-Sep 10:01:06	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.07	10.24	-45.6	36.5	18.6	29.8
19-Sep 12:09:10	2.2	Dione	Overgang.Begin	Saturnus	-0.02	9.36	-44.4	39.9	19.9	31.4
19-Sep 12:15:14	2.08	Dione	Schaduwovergang.Begin	Saturnus	-0.08	8.86	-43.9	39.7	19.9	31.5

19-Sep 12:42:52	4.56	Saturnus	Bedekking.Begin	Rhea	-0.05	9.07	-41.5	38.3	20.2	31.9
19-Sep 15:03:45	2.2	Dione	Overgang.Einde	Saturnus	-0.02	9.35	-23.4	23.7	21.6	33.7
19-Sep 15:19:30	2.08	Dione	Schaduwovergang.Einde	Saturnus	0.12	10.68	-21	21.6	21.7	33.9
19-Sep 15:53:05	3.85	Saturnus	Verduistering.Einde	Rhea	0.15	11.06	-15.6	16.6	22.1	34.3
19-Sep 16:42:05	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.49	-8.1	9.3	22.5	34.9
19-Sep 16:44:58	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.05	9.14	-7.6	8.9	22.6	34.9
19-Sep 18:59:13	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.48	12.6	-12.2	23.9	36.5
19-Sep 19:04:13	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.05	10.08	13.3	-12.9	23.9	36.5
19-Sep 23:52:45	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.49	29.9	-38.1	26.7	39.2
20-Sep 1:02:14	1.7	Tethys	Overgang.Begin	Saturnus	-0.01	9.5	25	-35	27.4	39.8
20-Sep 1:08:17	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.07	8.89	24.4	-34.6	27.5	39.9
20-Sep 2:32:59	0.73	Saturnus	Verduistering.Einde	Enceladus	0.07	10.28	14.6	-26.1	28.3	40.5
20-Sep 3:51:56	1.7	Tethys	Overgang.Einde	Saturnus	-0.01	9.49	3.2	-15.2	29.1	41.2
20-Sep 3:52:51	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.49	3.2	-15.2	29.1	41.2
20-Sep 4:01:43	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.09	10.48	1.7	-13.8	29.2	41.3
20-Sep 6:11:03	0.53	Saturnus	Verduistering.Einde	Mimas	0.05	10.09	-18.5	6.3	30.4	42.4
20-Sep 15:18:53	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.48	-20.5	21.4	35.7	48.9
20-Sep 15:22:04	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.05	9.1	-20.1	20.9	35.8	48.9
20-Sep 16:14:49	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	9.49	-11.8	13.1	36.3	49.6
20-Sep 16:19:18	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.06	8.99	-11	12.5	36.3	49.6
20-Sep 17:35:55	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.47	1	0.5	37.1	50.6
20-Sep 17:41:20	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.06	10.13	1.8	-0.4	37.1	50.6
20-Sep 18:47:02	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	9.49	11.5	-10.7	37.7	51.4
20-Sep 18:54:31	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.08	10.32	12.5	-11.8	37.8	51.5
20-Sep 21:02:54	2.19	Saturnus	Bedekking.Begin	Dione	-0.02	9.35	27	-29.3	39.1	52.9
20-Sep 23:41:18	1.7	Saturnus	Bedekking.Begin	Tethys	-0.01	9.49	30.2	-38.6	40.6	54.3
21-Sep 0:13:57	2.07	Saturnus	Verduistering.Einde	Dione	0.13	10.82	28.4	-37.9	40.9	54.6
21-Sep 2:29:56	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.49	14.5	-26.7	42.2	55.7
21-Sep 2:41:28	1.66	Saturnus	Verduistering.Einde	Tethys	0.1	10.55	12.8	-25.2	42.3	55.8
21-Sep 4:48:23	0.52	Saturnus	Verduistering.Einde	Mimas	0.06	10.13	-6.1	-7	43.5	56.8
21-Sep 8:45:29	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.48	-40.2	28.2	45.7	58.9
21-Sep 11:26:22	0.73	Saturnus	Verduistering.Einde	Enceladus	0.08	10.37	-46.4	39.6	47.3	60.7
21-Sep 13:55:43	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.48	-32.1	31.5	48.7	62.5

21-Sep 13:59:10	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.05	9.06	-31.7	31.1	48.7	62.6
21-Sep 16:12:38	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.47	-11.5	13.1	49.9	64.3
21-Sep 16:18:28	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.06	10.17	-10.5	12.2	50	64.3
21-Sep 18:55:12	4.69	Rhea	Overgang.Begin	Saturnus	-0.06	9.04	13.4	-12.6	51.5	66.3
21-Sep 19:00:11	3.84	Rhea	Schaduwovergang.Begin	Saturnus	-0.08	8.79	14.1	-13.3	51.5	66.3
21-Sep 21:28:34	4.69	Rhea	Overgang.Einde	Saturnus	-0.06	9.04	29.1	-32.5	52.9	67.9
21-Sep 22:07:54	3.84	Rhea	Schaduwovergang.Einde	Saturnus	0.19	11.4	30.8	-35.8	53.3	68.3
21-Sep 22:20:02	1.7	Tethys	Overgang.Begin	Saturnus	-0.01	9.49	31	-36.6	53.4	68.4
21-Sep 22:27:13	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.08	8.76	31.1	-37	53.5	68.5
22-Sep 1:07:01	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.48	23.7	-35.4	54.9	69.9
22-Sep 1:07:35	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	9.48	23.7	-35.3	54.9	69.9
22-Sep 1:09:23	1.7	Tethys	Overgang.Einde	Saturnus	-0.01	9.48	23.4	-35.2	55	69.9
22-Sep 1:12:39	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.07	8.91	23.1	-35	55	69.9
22-Sep 1:20:44	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.11	10.63	22.2	-34.3	55.1	70
22-Sep 3:25:43	0.52	Saturnus	Verduistering.Einde	Mimas	0.06	10.17	6	-19.6	56.2	70.9
22-Sep 3:39:37	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	9.48	3.9	-17.6	56.3	71
22-Sep 3:47:55	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.09	10.4	2.6	-16.4	56.4	71.1
22-Sep 5:49:00	2.21	Dione	Overgang.Begin	Saturnus	-0.02	9.33	-16.5	2.4	57.5	72
22-Sep 5:57:02	2.08	Dione	Schaduwovergang.Begin	Saturnus	-0.09	8.68	-17.8	3.7	57.6	72.1
22-Sep 8:42:15	2.21	Dione	Overgang.Einde	Saturnus	-0.02	9.33	-40.4	27.6	59.1	73.5
22-Sep 9:01:42	2.08	Dione	Schaduwovergang.Einde	Saturnus	0.15	10.97	-42.3	29.9	59.3	73.7
22-Sep 12:32:32	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	9.47	-41.5	37.7	61.2	75.9
22-Sep 12:36:16	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.06	9.02	-41.2	37.6	61.3	75.9
22-Sep 14:49:21	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	9.46	-23.8	24.7	62.5	77.5
22-Sep 14:55:36	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.07	10.21	-22.9	23.8	62.5	77.6
22-Sep 17:38:17	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.47	2.6	-0.6	64	79.6
22-Sep 20:19:49	0.73	Saturnus	Verduistering.Einde	Enceladus	0.09	10.45	23.8	-24.8	65.5	81.5
22-Sep 20:59:03	1.7	Saturnus	Bedekking.Begin	Tethys	-0.01	9.48	27.3	-29.6	65.8	81.9
22-Sep 23:44:06	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	9.48	29.7	-39.3	67.3	83.5
23-Sep 0:00:25	1.66	Saturnus	Verduistering.Einde	Tethys	0.12	10.7	28.7	-39.1	67.5	83.7
23-Sep 2:03:03	0.52	Saturnus	Verduistering.Einde	Mimas	0.07	10.21	16.8	-30.5	68.6	84.7
23-Sep 10:00:25	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	9.47	-46.4	35.1	72.8	88.3
23-Sep 10:06:03	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.07	8.84	-46.6	35.5	72.9	88.4

23-Sep 11:09:21	0.55 Mimas	Overgang.Begin	Saturnus	-0.01	9.46	-46.7	38.6	73.4	89
23-Sep 11:13:21	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.06	8.98	-46.6	38.6	73.5	89.1
23-Sep 12:32:14	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	9.47	-41.2	37.4	74.2	89.9
23-Sep 12:41:21	0.72 Enceladus	Schaduwovergang.Einde	Saturnus	0.1	10.48	-40.2	36.9	74.2	90
23-Sep 13:26:04	0.55 Mimas	Overgang.Einde	Saturnus	-0.01	9.46	-35	33.6	74.6	90.5
23-Sep 13:32:43	0.54 Mimas	Schaduwovergang.Einde	Saturnus	0.07	10.25	-34.1	33	74.7	90.5
23-Sep 14:42:55	2.21 Saturnus	Bedekking.Begin	Dione	-0.02	9.32	-24.1	25	75.3	91.4
23-Sep 17:56:20	2.07 Saturnus	Verduistering.Einde	Dione	0.16	11.1	6	-4	77	93.7
23-Sep 19:37:46	1.7 Tethys	Overgang.Begin	Saturnus	-0.01	9.47	19.7	-19.4	77.9	94.9
23-Sep 19:46:03	1.66 Tethys	Schaduwovergang.Begin	Saturnus	-0.1	8.64	20.6	-20.6	78	95
23-Sep 22:21:12	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	9.47	31.1	-37.4	79.3	96.6
23-Sep 22:26:45	1.7 Tethys	Overgang.Einde	Saturnus	-0.01	9.46	31.2	-37.8	79.4	96.7
23-Sep 22:39:39	1.66 Tethys	Schaduwovergang.Einde	Saturnus	0.13	10.77	31.2	-38.5	79.5	96.8
24-Sep 0:40:24	0.52 Saturnus	Verduistering.Einde	Mimas	0.07	10.26	25.4	-37.9	80.5	97.9
24-Sep 1:06:17	4.78 Saturnus	Bedekking.Begin	Rhea	-0.06	9.01	22.7	-36	80.8	98.2
24-Sep 2:31:01	0.74 Saturnus	Bedekking.Begin	Enceladus	-0.01	9.47	12.5	-27.5	81.5	98.8
24-Sep 4:21:41	3.8 Saturnus	Verduistering.Einde	Rhea	0.23	11.73	-4.2	-11.6	82.5	99.6
24-Sep 5:13:12	0.73 Saturnus	Verduistering.Einde	Enceladus	0.1	10.53	-12.1	-3.8	82.9	99.9
24-Sep 9:46:10	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	9.46	-46	33.6	85.2	101.9
24-Sep 9:50:27	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.06	8.94	-46.2	33.9	85.3	102
24-Sep 12:02:48	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	9.45	-43.5	38.1	86.4	103.2
24-Sep 12:09:51	0.54 Mimas	Schaduwovergang.Einde	Saturnus	0.08	10.3	-42.9	37.9	86.5	103.2
24-Sep 18:16:49	1.71 Saturnus	Bedekking.Begin	Tethys	-0.01	9.47	9.6	-7.5	89.6	107.4
24-Sep 18:53:13	0.74 Enceladus	Overgang.Begin	Saturnus	-0.01	9.46	14.5	-13.1	89.9	107.8
24-Sep 18:59:25	0.72 Enceladus	Schaduwovergang.Begin	Saturnus	-0.08	8.77	15.3	-14	89.9	107.9
24-Sep 20:58:17	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	9.46	27.7	-30.3	90.9	109.2
24-Sep 21:19:23	1.66 Saturnus	Verduistering.Einde	Tethys	0.13	10.84	29.1	-32.6	91.1	109.4
24-Sep 21:24:51	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	9.46	29.4	-33.2	91.2	109.5
24-Sep 21:34:46	0.72 Enceladus	Schaduwovergang.Einde	Saturnus	0.11	10.56	29.9	-34.1	91.2	109.6
24-Sep 23:17:45	0.52 Saturnus	Verduistering.Einde	Mimas	0.08	10.3	30.4	-40	92.1	110.6
24-Sep 23:29:04	2.23 Dione	Overgang.Begin	Saturnus	-0.03	9.31	29.9	-40.1	92.2	110.7
24-Sep 23:39:01	2.07 Dione	Schaduwovergang.Begin	Saturnus	-0.11	8.51	29.4	-40.1	92.3	110.8
25-Sep 2:20:58	2.23 Dione	Overgang.Einde	Saturnus	-0.03	9.31	13.2	-28.9	93.7	112.2

25-Sep	2:44:05	2.07 Dione	Schaduwovergang.Einde	Saturnus	0.18	11.25	10	-26	93.9	112.4
25-Sep	8:23:00	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	9.45	-39.7	24.2	96.7	114.7
25-Sep	8:27:34	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.07	8.91	-40.2	24.8	96.7	114.7
25-Sep	10:39:32	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	9.44	-47.2	36.8	97.8	115.7
25-Sep	10:46:59	0.54 Mimas	Schaduwovergang.Einde	Saturnus	0.08	10.34	-47.1	37.1	97.9	115.7
25-Sep	11:23:47	0.74 Saturnus	Bedekking.Begin	Enceladus	-0.01	9.46	-45.8	38	98.2	116.1
25-Sep	14:06:37	0.73 Saturnus	Verduistering.Einde	Enceladus	0.11	10.61	-28.3	28.7	99.5	117.6
25-Sep	16:55:34	1.71 Tethys	Overgang.Begin	Saturnus	-0.01	9.46	-2	5	100.9	119.5
25-Sep	17:04:57	1.66 Tethys	Schaduwovergang.Begin	Saturnus	-0.11	8.52	-0.6	3.5	101	119.6
25-Sep	19:35:23	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	9.46	20.3	-19.7	102.2	121.3
25-Sep	19:44:11	1.71 Tethys	Overgang.Einde	Saturnus	-0.01	9.45	21.3	-21.1	102.3	121.4
25-Sep	19:58:37	1.66 Tethys	Schaduwovergang.Einde	Saturnus	0.14	10.91	22.9	-23.1	102.4	121.5
25-Sep	21:55:06	0.52 Saturnus	Verduistering.Einde	Mimas	0.08	10.34	30.7	-36.3	103.4	122.8
26-Sep	3:46:02	0.74 Enceladus	Overgang.Begin	Saturnus	-0.01	9.45	0.2	-17.7	106.2	125.9
26-Sep	3:52:48	0.72 Enceladus	Schaduwovergang.Begin	Saturnus	-0.09	8.7	-0.8	-16.7	106.3	125.9
26-Sep	6:17:28	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	9.45	-23.5	5.8	107.5	126.9
26-Sep	6:28:12	0.72 Enceladus	Schaduwovergang.Einde	Saturnus	0.12	10.64	-25.1	7.5	107.6	126.9
26-Sep	6:59:50	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	9.44	-29.7	12.3	107.8	127.1
26-Sep	7:04:39	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.07	8.87	-30.4	13	107.9	127.2
26-Sep	7:19:08	4.93 Rhea	Overgang.Begin	Saturnus	-0.06	8.98	-32.7	15.5	108	127.3
26-Sep	7:27:06	3.8 Rhea	Schaduwovergang.Begin	Saturnus	-0.1	8.6	-33.7	16.5	108	127.3
26-Sep	8:22:56	2.23 Saturnus	Bedekking.Begin	Dione	-0.03	9.3	-40.3	24	108.5	127.7
26-Sep	9:16:15	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	9.44	-44.8	30.1	108.9	128
26-Sep	9:24:07	0.54 Mimas	Schaduwovergang.Einde	Saturnus	0.09	10.38	-45.3	30.9	109	128.1
26-Sep	9:45:06	4.93 Rhea	Overgang.Einde	Saturnus	-0.06	8.98	-46.5	33	109.2	128.3
26-Sep	10:36:48	3.8 Rhea	Schaduwovergang.Einde	Saturnus	0.26	12.06	-47.2	36.4	109.6	128.6
26-Sep	11:38:40	2.06 Saturnus	Verduistering.Einde	Dione	0.19	11.38	-44.7	37.6	110.1	129.1
26-Sep	15:34:36	1.71 Saturnus	Bedekking.Begin	Tethys	-0.01	9.46	-14.2	16.9	112	131.3
26-Sep	18:12:30	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	9.45	10	-7.4	113.2	133
26-Sep	18:38:20	1.66 Saturnus	Verduistering.Einde	Tethys	0.15	10.98	13.7	-11.6	113.5	133.3
26-Sep	20:16:33	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	9.45	25	-25.8	114.2	134.4
26-Sep	20:32:27	0.52 Saturnus	Verduistering.Einde	Mimas	0.09	10.37	26.3	-27.9	114.4	134.6
26-Sep	23:00:01	0.72 Saturnus	Verduistering.Einde	Enceladus	0.12	10.69	30.6	-40.4	115.5	136.1



27-Sep	5:36:40	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.44	-17.9	-0.9	118.7	139.4
27-Sep	5:41:46	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.07	8.83	-18.6	-0.1	118.7	139.4
27-Sep	7:52:59	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.43	-37.3	19.7	119.8	140.2
27-Sep	8:01:16	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.09	10.42	-38.3	20.8	119.8	140.3
27-Sep	12:38:51	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	9.44	-38.8	35.4	122	142.2
27-Sep	12:46:11	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.09	8.63	-37.9	35	122.1	142.3
27-Sep	14:13:23	1.71	Tethys	Overgang.Begin	Saturnus	-0.01	9.45	-26.1	27.1	122.8	143
27-Sep	14:23:51	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.12	8.4	-24.5	25.9	122.9	143.1
27-Sep	15:10:07	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	9.44	-17.5	20	123.2	143.6
27-Sep	15:21:38	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.12	10.72	-15.7	18.4	123.3	143.7
27-Sep	16:49:36	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.44	-1.8	5.3	124	144.6
27-Sep	17:01:38	1.71	Tethys	Overgang.Einde	Saturnus	-0.01	9.43	0.2	3.3	124.1	144.7
27-Sep	17:09:12	2.25	Dione	Overgang.Begin	Saturnus	-0.03	9.28	1.4	2.1	124.2	144.8
27-Sep	17:17:37	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.16	11.04	2.6	0.8	124.2	144.9
27-Sep	17:21:02	2.07	Dione	Schaduwovergang.Begin	Saturnus	-0.13	8.34	3.2	0.2	124.3	144.9
27-Sep	19:09:49	0.52	Saturnus	Verduistering.Einde	Mimas	0.09	10.41	18.2	-16.7	125.1	146.1
27-Sep	19:59:46	2.25	Dione	Overgang.Einde	Saturnus	-0.03	9.28	23.8	-24	125.5	146.6
27-Sep	20:26:29	2.07	Dione	Schaduwovergang.Einde	Saturnus	0.21	11.51	26.2	-27.6	125.7	146.9
28-Sep	4:13:30	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.43	-5.4	-14.1	129.4	151.3
28-Sep	4:18:52	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.08	8.79	-6.2	-13.3	129.4	151.3
28-Sep	5:09:24	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.44	-14.3	-5.4	129.8	151.7
28-Sep	6:29:44	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.42	-26.6	7.2	130.4	152.2
28-Sep	6:38:24	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.1	10.46	-27.9	8.5	130.5	152.3
28-Sep	7:53:29	0.72	Saturnus	Verduistering.Einde	Enceladus	0.13	10.76	-37.9	19.5	131.1	152.7
28-Sep	12:52:29	1.71	Saturnus	Bedekking.Begin	Tethys	-0.01	9.44	-36.6	34.2	133.4	154.7
28-Sep	13:30:19	5.03	Saturnus	Bedekking.Begin	Rhea	-0.06	8.95	-31.4	31	133.7	155
28-Sep	15:26:43	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.44	-14.2	17.3	134.6	156
28-Sep	15:57:23	1.66	Saturnus	Verduistering.Einde	Tethys	0.17	11.11	-9.3	12.8	134.8	156.3
28-Sep	16:50:35	3.76	Saturnus	Verduistering.Einde	Rhea	0.3	12.37	-0.8	4.5	135.3	156.8
28-Sep	17:47:10	0.52	Saturnus	Verduistering.Einde	Mimas	0.1	10.45	7.5	-4.2	135.7	157.4
28-Sep	21:31:41	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	9.43	30.3	-35.4	137.4	159.8
28-Sep	21:39:33	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.1	8.56	30.6	-36.1	137.5	159.9
29-Sep	0:02:45	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	9.43	26.7	-41.3	138.6	161.3

29-Sep	0:15:03	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.13	10.79	25.7	-40.9	138.7	161.4
29-Sep	2:02:57	2.25	Saturnus	Bedekking.Begin	Dione	-0.03	9.27	13.3	-32.2	139.5	162.5
29-Sep	2:50:21	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.42	6.7	-26.4	139.9	162.9
29-Sep	2:55:58	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.08	8.75	5.9	-25.7	139.9	162.9
29-Sep	5:06:28	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.42	-14.5	-6.1	140.9	163.9
29-Sep	5:15:32	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.1	10.5	-15.9	-4.7	141	164
29-Sep	5:20:58	2.06	Saturnus	Verduistering.Einde	Dione	0.22	11.64	-16.9	-3.7	141.1	164
29-Sep	11:31:12	1.72	Tethys	Overgang.Begin	Saturnus	-0.01	9.43	-44.4	36.5	143.9	166.4
29-Sep	11:42:44	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.13	8.28	-43.5	36.4	144	166.5
29-Sep	14:02:11	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.42	-26.6	27.6	145.1	167.5
29-Sep	14:03:50	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.43	-26.4	27.5	145.1	167.5
29-Sep	14:19:06	1.72	Tethys	Overgang.Einde	Saturnus	-0.01	9.42	-24	25.7	145.2	167.6
29-Sep	14:36:35	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.17	11.18	-21.4	23.6	145.3	167.7
29-Sep	16:24:32	0.52	Saturnus	Verduistering.Einde	Mimas	0.1	10.49	-4.5	8.4	146.1	168.7
29-Sep	16:46:53	0.72	Saturnus	Verduistering.Einde	Enceladus	0.14	10.84	-0.9	5	146.3	168.9
30-Sep	1:27:11	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.41	17.5	-36.4	150.3	174.2
30-Sep	1:33:04	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.08	8.71	16.8	-35.8	150.3	174.2
30-Sep	3:43:13	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.41	-2	-19.2	151.3	175.4
30-Sep	3:52:40	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.11	10.53	-3.5	-17.8	151.4	175.4
30-Sep	6:24:31	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	9.42	-27.1	5.9	152.6	176.6
30-Sep	6:32:56	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.11	8.49	-28.4	7.2	152.6	176.6
30-Sep	8:55:25	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	9.42	-44.7	26.6	153.7	177.5
30-Sep	9:08:30	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.14	10.87	-45.5	28	153.8	177.6
30-Sep	10:10:18	1.72	Saturnus	Bedekking.Begin	Tethys	-0.01	9.42	-47.4	33.4	154.3	177.9
30-Sep	10:49:20	2.27	Dione	Overgang.Begin	Saturnus	-0.03	9.26	-46.5	35.4	154.6	178.1
30-Sep	11:03:01	2.06	Dione	Schaduwovergang.Begin	Saturnus	-0.14	8.18	-45.9	35.8	154.7	178.2
30-Sep	12:40:57	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.42	-37.1	34.1	155.4	178.7
30-Sep	13:16:21	1.66	Saturnus	Verduistering.Einde	Tethys	0.18	11.24	-32.5	31.6	155.7	178.8
30-Sep	13:38:35	2.27	Dione	Overgang.Einde	Saturnus	-0.03	9.25	-29.3	29.6	155.9	178.9
30-Sep	14:08:52	2.06	Dione	Schaduwovergang.Einde	Saturnus	0.24	11.77	-24.9	26.4	156.1	178.9
30-Sep	15:01:54	0.52	Saturnus	Verduistering.Einde	Mimas	0.11	10.52	-16.9	20	156.5	179
30-Sep	19:43:13	5.21	Rhea	Overgang.Begin	Saturnus	-0.06	8.91	23.5	-23	158.7	177.2
30-Sep	19:53:53	3.76	Rhea	Schaduwovergang.Begin	Saturnus	-0.11	8.44	24.4	-24.4	158.7	177.1

30-Sep	22:01:32	5.21 Rhea	Overgang.Einde	Saturnus	-0.06	8.92	31	-39	159.7	175.9
30-Sep	22:55:00	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	9.41	30.1	-41.9	160.1	175.4
30-Sep	23:05:32	3.76 Rhea	Schaduwovergang.Einde	Saturnus	0.33	12.68	29.6	-42.2	160.2	175.2
1-okt	0:04:02	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	9.4	25.8	-42	160.6	174.7
1-okt	0:10:11	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.09	8.68	25.3	-41.8	160.7	174.6
1-okt	1:40:19	0.72 Saturnus	Verduistering.Einde	Enceladus	0.15	10.91	15.2	-35.4	161.4	173.7
1-okt	2:19:58	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	9.4	9.8	-30.9	161.7	173.4
1-okt	2:29:48	0.54 Mimas	Schaduwovergang.Einde	Saturnus	0.11	10.57	8.4	-29.7	161.7	173.3
1-okt	8:49:04	1.72 Tethys	Overgang.Begin	Saturnus	-0.01	9.41	-44.6	25.7	164.6	170.4
1-okt	9:01:39	1.66 Tethys	Schaduwovergang.Begin	Saturnus	-0.14	8.17	-45.4	27	164.7	170.3
1-okt	11:18:04	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	9.41	-44.8	35.6	165.7	169.4
1-okt	11:36:36	1.72 Tethys	Overgang.Einde	Saturnus	-0.01	9.4	-43.3	35.7	165.9	169.3
1-okt	11:55:34	1.66 Tethys	Schaduwovergang.Einde	Saturnus	0.19	11.3	-41.6	35.5	166	169.2
1-okt	13:39:16	0.52 Saturnus	Verduistering.Einde	Mimas	0.11	10.56	-28.8	29.2	166.8	168.5
1-okt	15:17:22	0.74 Enceladus	Overgang.Begin	Saturnus	-0.01	9.41	-13.8	17.5	167.5	167.8
1-okt	15:26:20	0.72 Enceladus	Schaduwovergang.Begin	Saturnus	-0.11	8.42	-12.4	16.3	167.6	167.7
1-okt	17:48:04	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	9.41	9.4	-5.4	168.7	166.6
1-okt	18:01:56	0.72 Enceladus	Schaduwovergang.Einde	Saturnus	0.15	10.94	11.4	-7.6	168.8	166.5
1-okt	19:43:11	2.26 Saturnus	Bedekking.Begin	Dione	-0.03	9.24	23.7	-23.2	169.6	165.5
1-okt	22:40:53	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	9.4	30.4	-41.7	170.9	163.7
1-okt	22:47:17	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.09	8.64	30.2	-42	170.9	163.7
1-okt	23:03:23	2.05 Saturnus	Verduistering.Einde	Dione	0.25	11.89	29.5	-42.5	171.1	163.5
2-okt	0:56:43	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	9.39	20.1	-39.6	171.9	162.3
2-okt	1:06:57	0.54 Mimas	Schaduwovergang.Einde	Saturnus	0.12	10.61	18.9	-38.8	172	162.2
2-okt	2:57:53	9.66 Enceladus	ÉC(A)	Tethys	2.55	0.75	3	-25.6	172.9	161.1
2-okt	7:28:11	1.72 Saturnus	Bedekking.Begin	Tethys	-0.01	9.41	-37	14.9	174.9	158.9
2-okt	7:47:49	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	9.4	-39.2	17.6	175	158.8
2-okt	9:55:12	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	9.4	-47.4	31.6	176	157.9
2-okt	10:33:44	0.72 Saturnus	Verduistering.Einde	Enceladus	0.16	10.98	-46.9	34	176.3	157.7
2-okt	10:35:21	1.66 Saturnus	Verduistering.Einde	Tethys	0.2	11.37	-46.8	34.1	176.3	157.7
2-okt	12:16:39	0.52 Saturnus	Verduistering.Einde	Mimas	0.11	10.59	-39	34.5	177	157.1
2-okt	21:17:44	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	9.39	30.3	-35.5	178.8	152.8
2-okt	21:24:23	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.09	8.6	30.5	-36.2	178.8	152.7

2-okt	23:33:28	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.38	27.5	-43.3	177.8	151.4
2-okt	23:44:05	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.12	10.64	26.7	-43.2	177.7	151.3
3-okt	0:10:18	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	9.39	24.5	-42.6	177.5	151
3-okt	0:19:47	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.12	8.35	23.6	-42.2	177.4	150.9
3-okt	1:54:34	5.31	Saturnus	Bedekking.Begin	Rhea	-0.06	8.88	11.9	-34.3	176.7	149.9
3-okt	2:40:49	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	9.39	5.5	-28.8	176.4	149.5
3-okt	2:55:26	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.16	11	3.3	-26.9	176.3	149.4
3-okt	4:29:30	2.28	Dione	Overgang.Begin	Saturnus	-0.03	9.23	-11.5	-12.8	175.6	148.5
3-okt	4:44:58	2.06	Dione	Schaduwovergang.Begin	Saturnus	-0.15	8.03	-13.9	-10.4	175.4	148.3
3-okt	5:19:20	3.73	Saturnus	Verduistering.Einde	Rhea	0.37	12.97	-19.4	-4.9	175.2	148
3-okt	6:06:55	1.72	Tethys	Overgang.Begin	Saturnus	-0.01	9.39	-26.5	2.5	174.8	147.6
3-okt	6:20:32	1.66	Tethys	Schaduwovergang.Begin	Saturnus	-0.15	8.05	-28.5	4.6	174.7	147.5
3-okt	7:17:26	2.28	Dione	Overgang.Einde	Saturnus	-0.03	9.22	-36.3	13.1	174.3	147.1
3-okt	7:51:12	2.06	Dione	Schaduwovergang.Einde	Saturnus	0.27	12.02	-40.2	17.8	174	146.8
3-okt	8:32:20	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.4	-43.9	23	173.7	146.5
3-okt	8:54:05	1.72	Tethys	Overgang.Einde	Saturnus	-0.01	9.38	-45.5	25.6	173.6	146.4
3-okt	9:14:31	1.66	Tethys	Schaduwovergang.Einde	Saturnus	0.2	11.43	-46.6	27.7	173.4	146.2
3-okt	10:54:01	0.52	Saturnus	Verduistering.Einde	Mimas	0.12	10.62	-45.8	34.4	172.7	145.6
3-okt	16:40:39	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.39	0.6	4.5	170	143.4
3-okt	19:27:10	0.72	Saturnus	Verduistering.Einde	Enceladus	0.16	11.05	22.8	-21.4	168.8	142
3-okt	19:54:35	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.38	25.4	-25.4	168.6	141.8
3-okt	20:01:29	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.1	8.56	26	-26.4	168.5	141.7
3-okt	22:10:13	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.38	30.9	-40.6	167.6	140.5
3-okt	22:21:13	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.12	10.68	30.7	-41.4	167.5	140.4
4-okt	4:46:11	1.73	Saturnus	Bedekking.Begin	Tethys	-0.01	9.39	-14.7	-10.5	164.6	136.5
4-okt	7:09:28	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.39	-35.7	11.6	163.5	135.2
4-okt	7:54:28	1.65	Saturnus	Verduistering.Einde	Tethys	0.21	11.49	-40.9	18	163.1	134.9
4-okt	9:03:11	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.38	-46.2	26.2	162.6	134.4
4-okt	9:13:11	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.13	8.29	-46.7	27.2	162.5	134.3
4-okt	9:31:24	0.52	Saturnus	Verduistering.Einde	Mimas	0.12	10.66	-47.2	28.9	162.4	134.2
4-okt	11:33:31	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.38	-42.6	34.6	161.5	133.4
4-okt	11:48:53	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.17	11.07	-41.1	34.4	161.4	133.3
4-okt	13:23:25	2.28	Saturnus	Bedekking.Begin	Dione	-0.03	9.21	-29.2	29.4	160.6	132.7

4-okt	16:45:46	2.05	Saturnus	Verduistering.Einde	Dione	0.28	12.13	2.1	3.3	159.1	131.4
4-okt	18:31:26	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.37	16.9	-13.2	158.3	130.6
4-okt	18:38:36	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.1	8.53	17.8	-14.4	158.3	130.5
4-okt	20:46:59	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.37	29.3	-32.7	157.3	129.5
4-okt	20:58:22	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.13	10.71	29.8	-34.1	157.2	129.4
5-okt	1:33:29	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.38	13.9	-37.4	155.1	126.6
5-okt	3:24:49	1.73	Tethys	Overgang.Begin	Saturnus	-0.01	9.38	-2.6	-23.2	154.2	125.4
5-okt	3:39:26	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.16	7.94	-4.9	-21	154.1	125.3
5-okt	4:20:36	0.72	Saturnus	Verduistering.Einde	Enceladus	0.17	11.12	-11.3	-14.8	153.8	124.9
5-okt	5:46:37	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.38	-24.7	-1.3	153.2	124
5-okt	6:11:37	1.73	Tethys	Overgang.Einde	Saturnus	-0.01	9.36	-28.5	2.7	153	123.8
5-okt	6:33:29	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.22	11.54	-31.6	6	152.8	123.6
5-okt	8:07:44	5.52	Rhea	Overgang.Begin	Saturnus	-0.07	8.85	-42.8	19.7	152.1	122.8
5-okt	8:08:47	0.52	Saturnus	Verduistering.Einde	Mimas	0.13	10.69	-42.7	19.5	152.1	122.8
5-okt	8:20:50	3.72	Rhea	Schaduwovergang.Begin	Saturnus	-0.12	8.31	-43.9	21.2	152	122.7
5-okt	10:18:19	5.52	Rhea	Overgang.Einde	Saturnus	-0.07	8.85	-47	32.2	151.1	121.8
5-okt	11:34:20	3.72	Rhea	Schaduwovergang.Einde	Saturnus	0.4	13.26	-42	34.2	150.5	121.3
5-okt	17:08:17	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.36	6	-0.5	148	119.2
5-okt	17:15:42	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.1	8.49	7.1	-1.6	147.9	119.2
5-okt	17:56:05	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.37	12.8	-8	147.6	118.9
5-okt	18:06:36	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.13	8.22	14.2	-9.7	147.5	118.8
5-okt	19:23:45	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.36	23.3	-21.6	146.9	118.2
5-okt	19:35:30	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.13	10.74	24.4	-23.3	146.8	118.2
5-okt	20:26:14	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.37	28.4	-30.5	146.5	117.7
5-okt	20:42:20	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.18	11.14	29.3	-32.5	146.3	117.6
5-okt	22:09:45	2.3	Dione	Overgang.Begin	Saturnus	-0.03	9.19	30.7	-41.4	145.7	116.8
5-okt	22:26:58	2.05	Dione	Schaduwovergang.Begin	Saturnus	-0.17	7.88	30.2	-42.6	145.5	116.6
6-okt	0:56:25	2.3	Dione	Overgang.Einde	Saturnus	-0.03	9.19	18	-41	144.4	115.1
6-okt	1:33:34	2.05	Dione	Schaduwovergang.Einde	Saturnus	0.29	12.25	13.2	-37.6	144.1	114.7
6-okt	2:04:07	1.73	Saturnus	Bedekking.Begin	Tethys	-0.01	9.37	8.9	-34.3	143.9	114.4
6-okt	4:23:46	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.37	-12.5	-14.6	142.8	112.9
6-okt	5:13:29	1.65	Saturnus	Verduistering.Einde	Tethys	0.23	11.61	-20.4	-6.7	142.4	112.4
6-okt	6:46:11	0.52	Saturnus	Verduistering.Einde	Mimas	0.13	10.72	-33.8	7.6	141.7	111.5

6-okt	10:26:21	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.36	-46.6	32.2	140	109.7
6-okt	13:14:03	0.72	Saturnus	Verduistering.Einde	Enceladus	0.18	11.18	-29.5	29.5	138.7	108.6
6-okt	15:45:09	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.35	-6.2	11.8	137.6	107.7
6-okt	15:52:48	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.11	8.45	-5	10.7	137.5	107.6
6-okt	18:00:32	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.35	13.9	-9.1	136.5	106.8
6-okt	18:12:39	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.14	10.77	15.5	-11	136.4	106.7
7-okt	0:42:46	1.73	Tethys	Overgang.Begin	Saturnus	-0.01	9.36	19.1	-42.3	133.4	103.3
7-okt	0:58:22	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.17	7.83	17.2	-41.2	133.3	103.1
7-okt	2:48:58	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.35	1.7	-28.9	132.4	102
7-okt	3:00:00	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.14	8.15	0	-27.3	132.3	101.8
7-okt	3:00:54	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.36	-0.1	-27.2	132.3	101.8
7-okt	3:29:13	1.73	Tethys	Overgang.Einde	Saturnus	-0.01	9.35	-4.6	-23.1	132.1	101.5
7-okt	3:52:29	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.23	11.66	-8.3	-19.6	131.9	101.3
7-okt	5:18:57	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.36	-21.8	-6.2	131.3	100.4
7-okt	5:23:34	0.52	Saturnus	Verduistering.Einde	Mimas	0.14	10.75	-22.5	-5.4	131.2	100.3
7-okt	5:35:47	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.18	11.2	-24.3	-3.5	131.1	100.2
7-okt	7:03:44	2.3	Saturnus	Bedekking.Begin	Dione	-0.03	9.18	-36.7	10.1	130.4	99.3
7-okt	10:28:13	2.04	Saturnus	Verduistering.Einde	Dione	0.31	12.36	-46.4	31.9	128.8	97.5
7-okt	14:19:29	5.64	Saturnus	Bedekking.Begin	Rhea	-0.07	8.81	-18.7	22.4	127	95.9
7-okt	14:22:01	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.34	-18.7	22.4	127	95.9
7-okt	14:29:54	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.11	8.41	-17.4	21.5	127	95.9
7-okt	16:37:18	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.34	2.5	3.7	126	95.1
7-okt	16:49:47	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.14	10.81	4.4	1.7	125.9	95
7-okt	17:48:26	3.69	Saturnus	Verduistering.Einde	Rhea	0.43	13.54	13.1	-7.7	125.4	94.7
7-okt	19:19:15	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.35	23.6	-21.6	124.7	94
7-okt	22:07:33	0.72	Saturnus	Verduistering.Einde	Enceladus	0.19	11.25	30.5	-42	123.4	92.7
7-okt	23:22:03	1.73	Saturnus	Bedekking.Begin	Tethys	-0.01	9.35	26.7	-45.2	122.8	92
8-okt	1:38:04	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.35	11.5	-37.9	121.7	90.6
8-okt	2:32:30	1.65	Saturnus	Verduistering.Einde	Tethys	0.24	11.72	3.5	-31.3	121.3	90
8-okt	4:00:57	0.52	Saturnus	Verduistering.Einde	Mimas	0.14	10.78	-10.2	-18.6	120.6	89.1
8-okt	11:41:54	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.34	-40.2	33	116.9	84.6
8-okt	11:53:26	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.14	8.09	-38.9	32.8	116.8	84.5
8-okt	12:58:53	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.33	-30.5	29.9	116.3	84.1

8-okt	13:07:01	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.11	8.38	-29.4	29.3	116.3	84
8-okt	14:11:42	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.34	-19.6	23.2	115.7	83.6
8-okt	14:29:15	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.19	11.26	-16.9	21.2	115.6	83.5
8-okt	15:14:05	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.33	-9.8	15.4	115.3	83.2
8-okt	15:26:56	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.15	10.84	-7.8	13.7	115.2	83.1
8-okt	15:50:09	2.32	Dione	Overgang.Begin	Saturnus	-0.03	9.16	-4	10.2	115	83
8-okt	16:09:03	2.05	Dione	Schaduwovergang.Begin	Saturnus	-0.18	7.74	-1.1	7.5	114.8	82.9
8-okt	18:35:35	2.32	Dione	Overgang.Einde	Saturnus	-0.03	9.16	19.4	-15.4	113.6	81.9
8-okt	19:16:01	2.05	Dione	Schaduwovergang.Einde	Saturnus	0.32	12.48	23.8	-21.6	113.3	81.6
8-okt	22:00:43	1.73	Tethys	Overgang.Begin	Saturnus	-0.01	9.34	30.5	-41.9	112	80.4
8-okt	22:17:18	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.18	7.72	30.1	-43.1	111.9	80.2
9-okt	0:15:13	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.34	21.3	-44.6	110.9	79.1
9-okt	0:46:50	1.73	Tethys	Overgang.Einde	Saturnus	-0.01	9.32	17.6	-42.7	110.7	78.8
9-okt	1:11:29	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.25	11.77	14.4	-40.7	110.5	78.5
9-okt	2:38:21	0.52	Saturnus	Verduistering.Einde	Mimas	0.14	10.81	2.1	-30.9	109.8	77.6
9-okt	4:12:07	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.33	-12.7	-17.1	109	76.6
9-okt	7:00:59	0.72	Saturnus	Verduistering.Einde	Enceladus	0.2	11.31	-37.3	9	107.6	74.7
9-okt	11:35:45	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.32	-40.5	32.6	105.4	72.1
9-okt	11:44:07	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.12	8.34	-39.6	32.6	105.4	72
9-okt	13:50:52	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.32	-22.2	25	104.3	71.1
9-okt	14:04:04	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.15	10.87	-20.2	23.7	104.2	71
9-okt	20:32:17	5.86	Rhea	Overgang.Begin	Saturnus	-0.07	8.77	29.6	-33	101	68.4
9-okt	20:34:50	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.32	29.6	-33	101	68.4
9-okt	20:40:03	1.74	Saturnus	Bedekking.Begin	Tethys	-0.01	9.33	29.9	-33.8	101	68.4
9-okt	20:46:51	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.15	8.02	30.1	-34.5	100.9	68.3
9-okt	20:47:32	3.68	Rhea	Schaduwovergang.Begin	Saturnus	-0.13	8.2	30.2	-34.8	100.9	68.3
9-okt	22:35:10	5.86	Rhea	Overgang.Einde	Saturnus	-0.07	8.78	29	-44.6	100	67.4
9-okt	22:52:23	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.33	28.2	-45.3	99.9	67.3
9-okt	23:04:28	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.33	27.4	-45.6	99.8	67.2
9-okt	23:22:43	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.2	11.32	26	-45.9	99.6	67
9-okt	23:51:33	1.65	Saturnus	Verduistering.Einde	Tethys	0.25	11.83	23.3	-45.7	99.4	66.7
10-okt	0:02:51	3.69	Rhea	Schaduwovergang.Einde	Saturnus	0.46	13.8	22	-45.3	99.3	66.6
10-okt	0:44:03	2.31	Saturnus	Bedekking.Begin	Dione	-0.03	9.15	17.4	-43.2	99	66.2

10-okt	1:15:45	0.52	Saturnus	Verduistering.Einde	Mimas	0.15	10.84	13.4	-40.7	98.7	65.9
10-okt	4:10:34	2.04	Saturnus	Verduistering.Einde	Dione	0.33	12.58	-13.2	-17.5	97.2	64
10-okt	10:12:38	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.31	-46.6	30	94.2	60
10-okt	10:21:14	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.12	8.31	-46.2	30.4	94.2	59.9
10-okt	12:27:40	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.31	-33.7	30.9	93.1	58.8
10-okt	12:41:13	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.16	10.89	-31.9	30.2	93	58.7
10-okt	13:05:01	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.32	-28.5	28.6	92.8	58.5
10-okt	15:54:26	0.72	Saturnus	Verduistering.Einde	Enceladus	0.21	11.36	-2.2	9	91.4	57.3
10-okt	19:18:48	1.74	Tethys	Overgang.Begin	Saturnus	-0.01	9.31	24.7	-22.7	89.6	55.9
10-okt	19:36:19	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.19	7.62	26.2	-25.3	89.5	55.8
10-okt	21:29:33	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.32	30.8	-39.7	88.5	55
10-okt	22:04:34	1.74	Tethys	Overgang.Einde	Saturnus	-0.01	9.3	30.2	-43	88.2	54.7
10-okt	22:30:34	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.26	11.87	29.1	-44.7	88	54.4
10-okt	23:53:09	0.52	Saturnus	Verduistering.Einde	Mimas	0.15	10.86	22.7	-46	87.3	53.7
11-okt	5:27:46	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.31	-25.7	-5.8	84.5	50.1
11-okt	5:40:16	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.16	7.96	-27.6	-3.8	84.4	49.9
11-okt	7:57:14	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.31	-44	16.3	83.2	48.3
11-okt	8:16:11	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.21	11.37	-45.4	18.7	83	48.1
11-okt	8:49:30	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	9.3	-47	22.5	82.7	47.8
11-okt	8:58:20	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.12	8.27	-47.3	23.5	82.7	47.7
11-okt	9:30:34	2.34	Dione	Overgang.Begin	Saturnus	-0.03	9.13	-47.6	26.6	82.4	47.3
11-okt	9:51:06	2.05	Dione	Schaduwovergang.Begin	Saturnus	-0.19	7.6	-47.2	28.2	82.2	47.1
11-okt	11:04:28	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	9.3	-42.8	31.7	81.6	46.3
11-okt	11:18:22	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.16	10.92	-41.4	31.9	81.5	46.2
11-okt	12:14:48	2.34	Dione	Overgang.Einde	Saturnus	-0.03	9.13	-34.8	31	81	45.7
11-okt	12:58:25	2.05	Dione	Schaduwovergang.Einde	Saturnus	0.35	12.68	-28.8	28.7	80.6	45.3
11-okt	17:58:02	1.74	Saturnus	Bedekking.Begin	Tethys	-0.01	9.31	16.3	-10.4	78	43
11-okt	20:06:43	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.31	28.6	-29.9	76.9	42.1
11-okt	21:10:33	1.65	Saturnus	Verduistering.Einde	Tethys	0.27	11.93	30.7	-38.1	76.3	41.7
11-okt	21:57:55	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.3	30.3	-42.8	75.9	41.3
11-okt	22:30:34	0.52	Saturnus	Verduistering.Einde	Mimas	0.16	10.89	28.9	-45	75.6	41
12-okt	0:47:53	0.72	Saturnus	Verduistering.Einde	Enceladus	0.21	11.42	15.9	-43.7	74.4	39.8
12-okt	2:44:18	5.99	Saturnus	Bedekking.Begin	Rhea	-0.07	8.74	-1.2	-30.5	73.4	38.5



12-okt	6:17:08	3.65	Saturnus	Verduistering.Einde	Rhea	0.49	14.06	-33.5	1.9	71.5	36.1
12-okt	7:26:24	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.29	-41.6	11.8	70.9	35.3
12-okt	7:35:27	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.13	8.24	-42.4	13.1	70.8	35.2
12-okt	9:41:17	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.29	-47.4	27.1	69.7	33.7
12-okt	9:55:31	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.16	10.95	-47	28.2	69.6	33.5
12-okt	14:20:44	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.29	-15.7	20.7	67.2	30.9
12-okt	14:33:43	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.16	7.9	-13.6	19.2	67.1	30.8
12-okt	16:36:51	1.74	Tethys	Overgang.Begin	Saturnus	-0.01	9.29	5.6	1.9	66	29.8
12-okt	16:50:03	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.3	7.5	0	65.8	29.7
12-okt	16:55:18	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.2	7.51	8.3	-0.9	65.8	29.6
12-okt	17:09:41	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.21	11.43	10.3	-3.1	65.7	29.5
12-okt	18:24:31	2.33	Saturnus	Bedekking.Begin	Dione	-0.03	9.11	20	-15	65	29
12-okt	18:43:53	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.3	22	-17.9	64.8	28.8
12-okt	19:22:17	1.74	Tethys	Overgang.Einde	Saturnus	-0.01	9.28	25.7	-23.9	64.5	28.5
12-okt	19:49:36	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.27	11.97	27.8	-27.9	64.2	28.3
12-okt	21:07:58	0.52	Saturnus	Verduistering.Einde	Mimas	0.16	10.92	30.7	-38.1	63.5	27.8
12-okt	21:53:01	2.03	Saturnus	Verduistering.Einde	Dione	0.36	12.78	30.2	-42.8	63.1	27.4
13-okt	6:03:17	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.28	-32	-0.7	58.6	22.4
13-okt	6:12:34	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.13	8.2	-33.3	0.7	58.5	22.3
13-okt	6:50:52	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.29	-38.2	6.5	58.2	21.8
13-okt	8:18:06	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.28	-46	18.3	57.4	20.8
13-okt	8:32:40	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.17	10.98	-46.7	20	57.3	20.6
13-okt	9:41:22	0.72	Saturnus	Verduistering.Einde	Enceladus	0.22	11.48	-47.3	26.8	56.6	19.7
13-okt	15:16:05	1.74	Saturnus	Bedekking.Begin	Tethys	-0.01	9.29	-6.2	13.3	53.5	16.2
13-okt	17:21:04	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.29	12.4	-5.2	52.4	15.1
13-okt	18:29:36	1.65	Saturnus	Verduistering.Einde	Tethys	0.28	12.03	21	-16.1	51.7	14.6
13-okt	19:45:23	0.52	Saturnus	Verduistering.Einde	Mimas	0.16	10.94	27.7	-27.5	51	14
13-okt	23:13:42	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.28	25.2	-47.3	49.1	12.4
13-okt	23:27:09	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.17	7.83	24	-47.4	48.9	12.2
14-okt	1:42:51	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.28	7.2	-39.2	47.7	11
14-okt	2:03:09	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.22	11.48	4.2	-36.8	47.5	10.8
14-okt	3:11:04	2.35	Dione	Overgang.Begin	Saturnus	-0.03	9.09	-6.5	-27.5	46.8	10.1
14-okt	3:33:11	2.04	Dione	Schaduwovergang.Begin	Saturnus	-0.2	7.47	-9.9	-24.3	46.6	9.8

14-okt	4:40:10	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.26	-20.4	-14	46	9.1
14-okt	4:49:40	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.13	8.17	-21.8	-12.5	45.9	9
14-okt	5:54:11	2.35	Dione	Overgang.Einde	Saturnus	-0.03	9.09	-31.5	-2.3	45.3	8.2
14-okt	6:40:52	2.04	Dione	Schaduwovergang.Einde	Saturnus	0.37	12.88	-37.6	4.8	44.8	7.6
14-okt	6:54:55	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.27	-39.1	6.8	44.7	7.5
14-okt	7:09:49	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.17	11	-40.7	8.9	44.6	7.3
14-okt	8:57:59	6.25	Rhea	Overgang.Begin	Saturnus	-0.07	8.7	-47.6	22.8	43.5	5.9
14-okt	9:15:07	3.65	Rhea	Schaduwovergang.Begin	Saturnus	-0.14	8.12	-47.7	24.3	43.4	5.7
14-okt	10:53:18	6.25	Rhea	Overgang.Einde	Saturnus	-0.07	8.7	-42.4	30.4	42.4	4.5
14-okt	12:32:12	3.65	Rhea	Schaduwovergang.Einde	Saturnus	0.52	14.29	-30.7	29.1	41.5	3.4
14-okt	13:54:55	1.75	Tethys	Overgang.Begin	Saturnus	-0.01	9.27	-18.4	22.7	40.7	2.5
14-okt	14:14:15	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.21	7.41	-15.4	20.7	40.5	2.3
14-okt	15:43:48	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.27	-1.3	9.2	39.7	1.6
14-okt	15:58:15	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.28	0.9	7.2	39.6	1.5
14-okt	16:40:02	1.75	Tethys	Overgang.Einde	Saturnus	-0.01	9.26	7.2	0.8	39.1	1.2
14-okt	17:08:37	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.29	12.06	11.3	-3.6	38.9	1
14-okt	18:22:47	0.52	Saturnus	Verduistering.Einde	Mimas	0.17	10.96	20.6	-15.2	38.2	0.9
14-okt	18:34:50	0.72	Saturnus	Verduistering.Einde	Enceladus	0.23	11.53	21.9	-17.1	38.1	0.9
15-okt	3:17:04	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.25	-7.9	-27.1	33	4.8
15-okt	3:26:47	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.13	8.13	-9.5	-25.6	32.9	4.9
15-okt	5:31:44	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.26	-28.8	-6.2	31.7	6.3
15-okt	5:46:58	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.18	11.03	-30.9	-3.8	31.6	6.5
15-okt	8:06:40	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.26	-45.9	16.3	30.2	8.2
15-okt	8:20:35	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.17	7.77	-46.6	18	30.1	8.4
15-okt	10:35:41	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.26	-43.9	29.4	28.8	10.1
15-okt	10:56:38	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.23	11.53	-42	30	28.6	10.3
15-okt	12:05:09	2.35	Saturnus	Bedekking.Begin	Dione	-0.03	9.08	-33.9	29.8	27.9	11.2
15-okt	12:34:08	1.75	Saturnus	Bedekking.Begin	Tethys	-0.01	9.26	-30	28.7	27.6	11.6
15-okt	14:35:26	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.26	-11.5	17.9	26.4	13
15-okt	15:35:34	2.03	Saturnus	Verduistering.Einde	Dione	0.38	12.97	-1.9	10	25.8	13.7
15-okt	15:48:38	1.65	Saturnus	Verduistering.Einde	Tethys	0.29	12.12	0.1	8.1	25.7	13.8
15-okt	17:00:12	0.52	Saturnus	Verduistering.Einde	Mimas	0.17	10.99	10.6	-2.5	25	14.5
16-okt	0:36:44	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.26	15.1	-45.8	20.6	18.4

16-okt	1:53:58	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.24	4.3	-38.5	19.8	19.1
16-okt	2:03:54	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.14	8.1	2.8	-37.3	19.7	19.2
16-okt	3:28:18	0.72	Saturnus	Verduistering.Einde	Enceladus	0.24	11.58	-10.4	-25.6	18.9	20
16-okt	4:08:34	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.25	-16.7	-19.5	18.5	20.4
16-okt	4:24:08	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.18	11.05	-19.2	-17.1	18.3	20.6
16-okt	11:13:06	1.75	Tethys	Overgang.Begin	Saturnus	-0.01	9.24	-39.8	30	14.3	25.6
16-okt	11:33:19	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.22	7.31	-37.5	30	14.1	25.9
16-okt	13:12:37	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.25	-23.8	25.8	13.1	27.1
16-okt	13:57:55	1.75	Tethys	Overgang.Einde	Saturnus	-0.01	9.23	-16.7	21.7	12.7	27.7
16-okt	14:27:45	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.3	12.15	-12	18.4	12.4	28.1
16-okt	15:09:17	6.38	Saturnus	Bedekking.Begin	Rhea	-0.07	8.67	-5	12.9	12	28.6
16-okt	15:37:37	0.52	Saturnus	Verduistering.Einde	Mimas	0.18	11.01	-1	9.4	11.7	28.9
16-okt	16:59:40	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.24	11.1	-2.8	10.9	29.8
16-okt	17:14:01	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.18	7.71	13.1	-5	10.8	29.9
16-okt	18:45:44	3.62	Saturnus	Verduistering.Einde	Rhea	0.55	14.53	24	-19.7	9.9	30.9
16-okt	19:28:31	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.25	27.4	-26	9.5	31.3
16-okt	19:50:06	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.24	11.57	28.7	-29.2	9.3	31.5
16-okt	20:51:30	2.37	Dione	Overgang.Begin	Saturnus	-0.03	9.05	30.7	-37.7	8.6	32
16-okt	21:15:08	2.04	Dione	Schaduwovergang.Begin	Saturnus	-0.21	7.35	30.6	-40.4	8.4	32.2
16-okt	23:33:33	2.37	Dione	Overgang.Einde	Saturnus	-0.03	9.05	22	-48.5	7.1	33.4
17-okt	0:23:10	2.04	Dione	Schaduwovergang.Einde	Saturnus	0.4	13.06	16.3	-47	6.6	33.8
17-okt	0:30:52	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.23	15.4	-46.6	6.5	33.8
17-okt	0:41:01	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.14	8.06	14	-45.9	6.4	33.9
17-okt	2:45:25	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.24	-4.3	-32.1	5.3	35
17-okt	3:01:17	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.18	11.07	-6.8	-29.9	5.1	35.1
17-okt	9:29:41	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.24	-47.2	24.5	1.9	39.4
17-okt	9:52:14	1.75	Saturnus	Bedekking.Begin	Tethys	-0.01	9.24	-46.3	26.3	1.8	39.7
17-okt	11:49:49	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.24	-35	29.5	1.7	41.3
17-okt	12:21:46	0.72	Saturnus	Verduistering.Einde	Enceladus	0.24	11.62	-30.6	28.5	1.8	41.7
17-okt	13:07:40	1.65	Saturnus	Verduistering.Einde	Tethys	0.31	12.21	-23.8	25.8	2	42.3
17-okt	14:15:02	0.52	Saturnus	Verduistering.Einde	Mimas	0.18	11.03	-13.4	19.6	2.4	43.1
17-okt	23:07:47	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.22	24.2	-48.7	7.3	48.6
17-okt	23:18:08	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.14	8.03	23.2	-48.9	7.4	48.7

18-okt	1:22:16	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.23	7.7	-42.6	8.6	49.7
18-okt	1:38:26	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.19	11.09	5.3	-40.9	8.7	49.9
18-okt	1:52:44	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.22	3.2	-39.3	8.8	50
18-okt	2:07:31	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.18	7.65	0.9	-37.5	9	50.1
18-okt	4:21:27	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.23	-20.1	-18	10.3	51.3
18-okt	4:43:39	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.24	11.62	-23.5	-14.5	10.5	51.5
18-okt	5:45:48	2.36	Saturnus	Bedekking.Begin	Dione	-0.03	9.04	-32.7	-4.6	11.1	52.1
18-okt	8:31:12	1.75	Tethys	Overgang.Begin	Saturnus	-0.01	9.22	-47.5	18.4	12.7	53.9
18-okt	8:52:16	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.23	7.22	-47.7	20.7	12.9	54.2
18-okt	9:18:04	2.03	Saturnus	Verduistering.Einde	Dione	0.41	13.15	-47.5	23.2	13.2	54.5
18-okt	10:27:01	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.23	-43.6	27.9	13.8	55.3
18-okt	11:15:43	1.75	Tethys	Overgang.Einde	Saturnus	-0.01	9.21	-38.6	29.3	14.3	56
18-okt	11:46:45	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.31	12.24	-34.8	29.2	14.6	56.4
18-okt	12:52:28	0.52	Saturnus	Verduistering.Einde	Mimas	0.18	11.05	-25.6	26.5	15.2	57.2
18-okt	18:22:39	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.22	22.3	-16.5	18.5	61.3
18-okt	21:15:14	0.72	Saturnus	Verduistering.Einde	Enceladus	0.25	11.67	30.5	-41.1	20.1	63
18-okt	21:23:10	6.66	Rhea	Overgang.Begin	Saturnus	-0.08	8.63	30.2	-42.3	20.2	63.1
18-okt	21:42:02	3.62	Rhea	Schaduwovergang.Begin	Saturnus	-0.14	8.05	29.6	-44	20.4	63.3
18-okt	21:44:42	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.21	29.6	-44.1	20.4	63.3
18-okt	21:55:15	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.14	8	29.1	-45.1	20.5	63.4
18-okt	23:11:20	6.66	Rhea	Overgang.Einde	Saturnus	-0.08	8.63	23.2	-49.2	21.3	64
18-okt	23:59:07	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.22	18.3	-48.8	21.7	64.4
19-okt	0:15:35	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.19	11.11	16.3	-48.1	21.9	64.5
19-okt	1:00:48	3.62	Rhea	Schaduwovergang.Einde	Saturnus	0.58	14.73	10	-44.9	22.3	64.9
19-okt	7:10:24	1.75	Saturnus	Bedekking.Begin	Tethys	-0.01	9.22	-43	7.8	25.9	68.1
19-okt	9:04:13	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.22	-47.7	21.6	26.9	69.3
19-okt	10:26:44	1.65	Saturnus	Verduistering.Einde	Tethys	0.32	12.29	-43.3	27.6	27.7	70.3
19-okt	10:45:45	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.21	-41.5	28.3	27.9	70.5
19-okt	11:00:58	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.19	7.6	-39.9	28.7	28.1	70.7
19-okt	11:29:53	0.52	Saturnus	Verduistering.Einde	Mimas	0.19	11.07	-36.5	28.9	28.3	71.1
19-okt	13:14:20	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.21	-21.6	24.6	29.3	72.4
19-okt	13:37:08	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.25	11.66	-18.1	22.7	29.5	72.7
19-okt	14:32:07	2.38	Dione	Overgang.Begin	Saturnus	-0.03	9.01	-9.3	16.8	30.1	73.4

19-okt	14:57:13	2.03	Dione	Schaduwovergang.Begin	Saturnus	-0.22	7.23	-5.4	13.8	30.3	73.7
19-okt	17:13:10	2.38	Dione	Overgang.Einde	Saturnus	-0.03	9.01	14.7	-5.9	31.6	75.4
19-okt	18:05:34	2.03	Dione	Schaduwovergang.Einde	Saturnus	0.42	13.23	21	-14.2	32.1	76
19-okt	20:21:36	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.19	30.3	-34.7	33.4	77.5
19-okt	20:32:22	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.15	7.96	30.5	-36.1	33.5	77.6
19-okt	22:35:58	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.2	26.2	-48.3	34.6	78.7
19-okt	22:52:45	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.19	11.13	24.8	-49	34.8	78.9
20-okt	3:15:38	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.2	-11	-28.6	37.3	80.9
20-okt	5:49:22	1.75	Tethys	Overgang.Begin	Saturnus	-0.01	9.2	-34.2	-4.6	38.7	82.2
20-okt	6:08:43	0.72	Saturnus	Verduistering.Einde	Enceladus	0.26	11.71	-36.6	-1.7	38.9	82.3
20-okt	6:11:15	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.24	7.13	-37	-1.2	38.9	82.4
20-okt	7:41:25	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.21	-45.6	11.6	39.7	83.2
20-okt	8:33:36	1.75	Tethys	Overgang.Einde	Saturnus	-0.01	9.19	-47.7	18.1	40.2	83.7
20-okt	9:05:48	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.32	12.32	-47.6	21.4	40.5	84
20-okt	10:07:19	0.52	Saturnus	Verduistering.Einde	Mimas	0.19	11.09	-44.6	26.2	41.1	84.7
20-okt	18:58:31	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.18	26.3	-22.7	46	91.1
20-okt	19:09:29	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.15	7.93	27.1	-24.4	46.1	91.3
20-okt	19:38:47	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	9.19	28.9	-28.8	46.4	91.6
20-okt	19:54:26	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.19	7.54	29.6	-31.1	46.5	91.7
20-okt	21:12:50	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.19	30.3	-41.5	47.2	92.5
20-okt	21:29:54	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.2	11.15	29.8	-43.3	47.4	92.7
20-okt	22:07:14	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	9.2	28	-46.8	47.7	93.1
20-okt	22:30:38	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.26	11.7	26.3	-48.3	47.9	93.3
20-okt	23:26:30	2.38	Saturnus	Bedekking.Begin	Dione	-0.03	9	21	-50	48.4	93.7
21-okt	3:00:34	2.02	Saturnus	Verduistering.Einde	Dione	0.43	13.31	-9.4	-30.9	50.4	95.4
21-okt	3:35:06	6.79	Saturnus	Bedekking.Begin	Rhea	-0.08	8.6	-15.3	-25.4	50.7	95.6
21-okt	4:28:33	1.76	Saturnus	Bedekking.Begin	Tethys	-0.01	9.19	-23.2	-17.5	51.2	96
21-okt	6:18:38	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.19	-38.3	-0.4	52.2	96.8
21-okt	7:14:57	3.59	Saturnus	Verduistering.Einde	Rhea	0.6	14.94	-44.2	8	52.7	97.3
21-okt	7:45:47	1.65	Saturnus	Verduistering.Einde	Tethys	0.33	12.37	-46.2	12	53	97.6
21-okt	8:44:45	0.52	Saturnus	Verduistering.Einde	Mimas	0.19	11.1	-47.8	19	53.5	98.1
21-okt	12:08:38	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.19	-30.2	27.6	55.3	100.3
21-okt	15:02:11	0.72	Saturnus	Verduistering.Einde	Enceladus	0.26	11.75	-3.4	12.6	56.9	102.3

21-okt	17:35:27	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.17	18.4	-9.9	58.2	104.2
21-okt	17:46:36	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.15	7.9	19.7	-11.7	58.3	104.3
21-okt	19:49:42	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.18	29.6	-30.7	59.4	105.7
21-okt	20:07:04	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.2	11.17	30.2	-33.3	59.5	105.9
22-okt	3:07:37	1.76	Tethys	Overgang.Begin	Saturnus	-0.01	9.17	-11.2	-30.2	63.2	109.5
22-okt	3:30:18	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.24	7.04	-14.8	-26.8	63.4	109.6
22-okt	4:31:49	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.17	-24.2	-17.3	64	110.1
22-okt	4:47:53	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.2	7.48	-26.7	-14.8	64.1	110.2
22-okt	4:55:50	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.18	-27.8	-13.5	64.2	110.2
22-okt	5:51:36	1.76	Tethys	Overgang.Einde	Saturnus	-0.01	9.16	-35.6	-4.7	64.7	110.6
22-okt	6:24:55	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.33	12.39	-39.6	0.3	65	110.9
22-okt	7:00:09	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.18	-43.1	5.4	65.3	111.1
22-okt	7:22:10	0.52	Saturnus	Verduistering.Einde	Mimas	0.2	11.12	-44.9	8.5	65.4	111.3
22-okt	7:24:07	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.26	11.74	-45.1	8.8	65.5	111.3
22-okt	8:12:55	2.4	Dione	Overgang.Begin	Saturnus	-0.03	8.98	-47.5	15.2	65.9	111.7
22-okt	8:39:25	2.03	Dione	Schaduwovergang.Begin	Saturnus	-0.23	7.12	-47.8	18.2	66.1	111.9
22-okt	10:53:04	2.4	Dione	Overgang.Einde	Saturnus	-0.03	8.98	-39.4	27.5	67.3	113.2
22-okt	11:48:06	2.03	Dione	Schaduwovergang.Einde	Saturnus	0.44	13.38	-32.5	27.7	67.7	113.7
22-okt	16:12:22	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.16	7.8	2.5	70	116.8
22-okt	16:23:43	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.15	7.86	9.4	0.9	70.1	116.9
22-okt	18:26:35	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.17	24.2	-18.3	71.2	118.3
22-okt	18:44:13	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.2	11.19	25.8	-21	71.3	118.5
22-okt	21:01:41	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.17	30.3	-40.8	72.5	120
22-okt	23:55:44	0.72	Saturnus	Verduistering.Einde	Enceladus	0.27	11.79	16.6	-50.2	73.9	121.6
23-okt	1:46:47	1.76	Saturnus	Bedekking.Begin	Tethys	-0.01	9.17	0.8	-41.4	74.9	122.5
23-okt	3:33:03	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.17	-15.8	-26.7	75.8	123.2
23-okt	5:04:52	1.65	Saturnus	Verduistering.Einde	Tethys	0.34	12.44	-29.8	-12.3	76.5	123.8
23-okt	5:59:36	0.52	Saturnus	Verduistering.Einde	Mimas	0.2	11.14	-37.1	-3.8	77	124.2
23-okt	9:48:41	7.1	Rhea	Overgang.Begin	Saturnus	-0.08	8.55	-44.9	24.2	78.9	125.9
23-okt	10:09:07	3.59	Rhea	Schaduwovergang.Begin	Saturnus	-0.14	7.98	-43.4	25.4	79.1	126.1
23-okt	11:30:13	7.1	Rhea	Overgang.Einde	Saturnus	-0.08	8.56	-34	27.5	79.8	126.9
23-okt	13:24:53	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.15	-17.5	22.4	80.7	128
23-okt	13:29:34	3.59	Rhea	Schaduwovergang.Einde	Saturnus	0.63	15.12	-16.5	21.9	80.8	128.1

23-okt	13:41:20	0.72	Enceladus	Schaduwovergang.Begin	Saturnus	-0.2	7.43	-14.9	21	80.8	128.2
23-okt	14:49:18	0.57	Mimas	Overgang.Begin	Saturnus	-0.01	9.14	-4.2	13.6	81.4	128.9
23-okt	15:00:50	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.16	7.83	-2.4	12.1	81.5	129
23-okt	15:53:05	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.16	5.6	5	81.9	129.6
23-okt	16:17:37	0.72	Enceladus	Schaduwovergang.Einde	Saturnus	0.27	11.77	9.1	1.5	82.1	129.9
23-okt	17:03:28	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.16	15.4	-5.5	82.5	130.4
23-okt	17:07:12	2.39	Saturnus	Bedekking.Begin	Dione	-0.03	8.96	16	-6.2	82.6	130.5
23-okt	17:21:23	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.21	11.21	17.6	-8.3	82.7	130.6
23-okt	20:43:00	2.02	Saturnus	Verduistering.Einde	Dione	0.45	13.46	30.5	-38.9	84.3	132.9
24-okt	0:25:49	1.76	Tethys	Overgang.Begin	Saturnus	-0.01	9.14	12.1	-49.2	86.1	135
24-okt	0:49:17	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.25	6.95	8.8	-47.5	86.3	135.1
24-okt	2:10:16	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.16	-3.3	-38.8	87	135.7
24-okt	3:09:33	1.76	Tethys	Overgang.Einde	Saturnus	-0.02	9.14	-12.8	-30.4	87.5	136.2
24-okt	3:43:57	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.34	12.46	-18.2	-25.2	87.8	136.4
24-okt	4:37:03	0.52	Saturnus	Verduistering.Einde	Mimas	0.2	11.15	-26.3	-17	88.2	136.7
24-okt	5:54:42	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.15	-37	-4.8	88.8	137.2
24-okt	8:49:12	0.72	Saturnus	Verduistering.Einde	Enceladus	0.28	11.83	-47.6	18.5	90.2	138.4
24-okt	13:26:14	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.13	-16.7	22	92.5	140.8
24-okt	13:37:57	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.16	7.8	-14.8	20.9	92.5	140.9
24-okt	15:40:22	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.15	4.3	6.5	93.5	142.2
24-okt	15:58:32	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.21	11.22	7	4	93.7	142.4
24-okt	22:17:57	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.13	26	-48.9	96.7	146.5
24-okt	22:34:48	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.2	7.37	24.5	-50	96.8	146.6
24-okt	23:05:02	1.76	Saturnus	Bedekking.Begin	Tethys	-0.01	9.14	21.5	-51.1	97.1	146.9
25-okt	0:46:03	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.14	8.7	-48.1	97.9	147.8
25-okt	0:47:30	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.14	8.5	-48	97.9	147.8
25-okt	1:11:07	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.27	11.81	5.1	-45.9	98.1	148
25-okt	1:53:41	2.41	Dione	Overgang.Begin	Saturnus	-0.04	8.94	-1.5	-41.1	98.4	148.3
25-okt	2:21:32	2.03	Dione	Schaduwovergang.Begin	Saturnus	-0.24	7.02	-5.9	-37.5	98.6	148.5
25-okt	2:23:57	1.65	Saturnus	Verduistering.Einde	Tethys	0.35	12.51	-6.2	-37.2	98.7	148.6
25-okt	3:14:29	0.52	Saturnus	Verduistering.Einde	Mimas	0.21	11.17	-14.1	-30	99.1	148.9
25-okt	4:33:01	2.41	Dione	Overgang.Einde	Saturnus	-0.04	8.94	-26.4	-17.7	99.7	149.4
25-okt	5:30:33	2.03	Dione	Schaduwovergang.Einde	Saturnus	0.46	13.52	-34.5	-8.7	100.1	149.8

25-okt	12:03:11	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.12	-28.7	26.3	103.2	152.5
25-okt	12:15:05	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.16	7.77	-27	25.9	103.3	152.6
25-okt	14:17:16	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.13	-8	16.7	104.3	153.8
25-okt	14:35:42	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.21	11.24	-5.1	14.6	104.4	153.9
25-okt	14:47:44	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.13	-3.2	13.1	104.5	154.1
25-okt	16:00:37	7.21	Saturnus	Bedekking.Begin	Rhea	-0.08	8.52	8.3	2.9	105.1	154.8
25-okt	17:42:42	0.72	Saturnus	Verduistering.Einde	Enceladus	0.28	11.86	21	-12.2	105.9	155.9
25-okt	19:43:44	3.56	Saturnus	Verduistering.Einde	Rhea	0.65	15.31	30	-31.3	106.8	157.2
25-okt	21:44:05	1.76	Tethys	Overgang.Begin	Saturnus	-0.01	9.12	28	-46.5	107.7	158.5
25-okt	22:08:18	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.26	6.87	26.4	-48.6	107.9	158.7
25-okt	23:24:43	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.13	18.9	-51.7	108.5	159.4
26-okt	0:27:35	1.76	Tethys	Overgang.Einde	Saturnus	-0.02	9.11	10.7	-49.7	109	160
26-okt	1:03:02	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.35	12.52	5.6	-46.9	109.3	160.3
26-okt	1:51:55	0.52	Saturnus	Verduistering.Einde	Mimas	0.21	11.18	-1.8	-41.7	109.7	160.7
26-okt	7:11:02	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.11	-45.3	5.9	112.1	162.8
26-okt	7:28:16	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.21	7.32	-46.4	8.3	112.3	162.9
26-okt	9:39:02	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.12	-44.9	22.4	113.3	163.8
26-okt	10:04:37	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.28	11.84	-42.8	24.1	113.5	163.9
26-okt	10:40:07	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.1	-39.1	25.7	113.7	164.2
26-okt	10:48:00	2.4	Saturnus	Bedekking.Begin	Dione	-0.03	8.92	-38.1	26	113.8	164.2
26-okt	10:52:12	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.16	7.74	-37.7	26.1	113.8	164.3
26-okt	12:54:10	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.12	-20.4	23.6	114.8	165.2
26-okt	13:12:52	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.22	11.25	-17.5	22.4	114.9	165.4
26-okt	14:25:28	2.02	Saturnus	Verduistering.Einde	Dione	0.47	13.59	-5.9	15.4	115.5	166
26-okt	20:23:18	1.76	Saturnus	Bedekking.Begin	Tethys	-0.01	9.11	30.5	-37.1	118.2	169.7
26-okt	22:01:57	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.12	26.6	-48.4	119	170.7
26-okt	23:40:46	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.11	16.4	-52	119.7	171.7
26-okt	23:43:02	1.65	Saturnus	Verduistering.Einde	Tethys	0.36	12.57	16.1	-51.9	119.7	171.7
27-okt	0:29:22	0.52	Saturnus	Verduistering.Einde	Mimas	0.21	11.19	9.9	-50	120.1	172.1
27-okt	2:36:10	0.72	Saturnus	Verduistering.Einde	Enceladus	0.29	11.89	-9.4	-36.1	121.1	173.2
27-okt	9:17:05	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.09	-46.1	20.3	124.1	175.8
27-okt	9:29:20	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.17	7.71	-45.4	21.3	124.2	175.8
27-okt	11:31:06	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.11	-32.1	26.2	125.1	176.6



27-okt	11:50:03	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.22	11.26	-29.5	25.9	125.3	176.7
27-okt	16:04:10	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.1	9.5	2.3	127.2	178.6
27-okt	16:21:46	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.21	7.27	12	-0.3	127.3	178.7
27-okt	18:32:04	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.1	26.4	-20.6	128.3	179
27-okt	18:58:10	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.29	11.87	28.2	-24.6	128.5	178.9
27-okt	19:02:22	1.77	Tethys	Overgang.Begin	Saturnus	-0.01	9.09	28.4	-25.4	128.6	178.9
27-okt	19:27:17	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.26	6.78	29.6	-29.2	128.7	178.7
27-okt	19:34:34	2.42	Dione	Overgang.Begin	Saturnus	-0.04	8.9	29.9	-30.4	128.8	178.7
27-okt	20:03:42	2.02	Dione	Schaduwovergang.Begin	Saturnus	-0.25	6.92	30.5	-34.6	129	178.4
27-okt	20:39:11	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.11	30.3	-39.5	129.3	178.1
27-okt	20:51:50	97.12	Saturnus	Verduistering.Begin	Titan	1.08	19.19	27.8	-46.7	129.7	177.5
27-okt	21:45:39	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	9.08	27.4	-47.3	129.8	177.5
27-okt	21:46:29	96.66	Saturnus	Verduistering.Einde	Titan	1.28	21	23.4	-51	130.2	177
27-okt	22:13:10	2.42	Dione	Overgang.Einde	Saturnus	-0.04	8.9	25.3	-49.6	130	177.2
27-okt	22:14:29	7.52	Rhea	Overgang.Begin	Saturnus	-0.08	8.48	24.9	-49.9	130	177.2
27-okt	22:22:05	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.36	12.58	24.5	-50.2	130.1	177.1
27-okt	22:36:29	3.56	Rhea	Schaduwovergang.Begin	Saturnus	-0.14	7.93	23.1	-51.1	130.2	177
27-okt	23:06:48	0.52	Saturnus	Verduistering.Einde	Mimas	0.21	11.2	20	-52.2	130.4	176.7
27-okt	23:13:02	2.02	Dione	Schaduwovergang.Einde	Saturnus	0.48	13.64	19.2	-52.3	130.4	176.6
27-okt	23:50:19	7.52	Rhea	Overgang.Einde	Saturnus	-0.08	8.48	14.2	-52	130.7	176.3
28-okt	1:58:30	3.56	Rhea	Schaduwovergang.Einde	Saturnus	0.68	15.45	-4.3	-41.2	131.7	175.1
28-okt	7:54:02	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.08	-47.7	11	134.4	172.6
28-okt	8:06:27	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.17	7.68	-47.8	12.6	134.5	172.6
28-okt	8:33:52	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.09	-47.7	15.7	134.7	172.4
28-okt	10:08:01	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.1	-41.7	23.6	135.4	171.8
28-okt	10:27:13	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.22	11.27	-39.7	24.6	135.5	171.7
28-okt	11:29:41	0.72	Saturnus	Verduistering.Einde	Enceladus	0.29	11.92	-31.8	25.8	136	171.3
28-okt	17:41:43	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	9.09	22.2	-12.9	138.8	168.2
28-okt	19:16:25	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.09	29.3	-27.7	139.5	167.3
28-okt	21:02:13	1.65	Saturnus	Verduistering.Einde	Tethys	0.37	12.62	29.5	-42.8	140.3	166.2
28-okt	21:44:15	0.52	Saturnus	Verduistering.Einde	Mimas	0.22	11.21	27.3	-47.4	140.6	165.8
29-okt	0:57:16	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.08	4.7	-48.4	142.1	163.9
29-okt	1:15:14	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.22	7.22	2	-46.7	142.2	163.7

29-okt	3:25:05	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.09	-18.4	-29.4	143.2	162.6
29-okt	3:51:40	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.29	11.89	-22.5	-25.3	143.4	162.4
29-okt	4:28:59	2.41	Saturnus	Bedekking.Begin	Dione	-0.04	8.88	-28.2	-19.3	143.7	162.1
29-okt	6:31:00	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.07	-43.1	-0.6	144.6	161.2
29-okt	6:43:35	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.17	7.65	-44.2	1.2	144.7	161.1
29-okt	8:08:02	2.01	Saturnus	Verduistering.Einde	Dione	0.49	13.71	-47.9	12.6	145.3	160.6
29-okt	8:44:58	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.08	-47.3	16.6	145.6	160.4
29-okt	9:04:23	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.23	11.28	-46.4	18.5	145.7	160.2
29-okt	16:20:41	1.77	Tethys	Overgang.Begin	Saturnus	-0.02	9.06	13	-0.8	149	157.2
29-okt	16:46:18	1.65	Tethys	Schaduwovergang.Begin	Saturnus	-0.27	6.71	16.3	-4.6	149.2	157
29-okt	17:26:56	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.08	21	-10.8	149.5	156.6
29-okt	17:53:40	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.08	23.7	-15	149.7	156.3
29-okt	19:03:46	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	9.06	28.9	-26.1	150.2	155.7
29-okt	19:41:09	1.65	Tethys	Schaduwovergang.Einde	Saturnus	0.37	12.63	30.2	-31.8	150.5	155.3
29-okt	20:21:42	0.52	Saturnus	Verduistering.Einde	Mimas	0.22	11.22	30.4	-37.7	150.8	154.9
29-okt	20:23:11	0.72	Saturnus	Verduistering.Einde	Enceladus	0.3	11.95	30.4	-37.9	150.8	154.9
30-okt	4:26:22	7.61	Saturnus	Bedekking.Begin	Rhea	-0.08	8.45	-28.8	-19.6	154.5	150.2
30-okt	5:07:58	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.05	-34.2	-13.6	154.7	149.9
30-okt	5:20:43	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.17	7.62	-35.8	-11.6	154.8	149.8
30-okt	7:21:54	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.07	-46.9	6.3	155.7	149
30-okt	7:41:33	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.23	11.3	-47.6	8.9	155.9	148.8
30-okt	8:12:41	3.53	Saturnus	Verduistering.Einde	Rhea	0.7	15.61	-47.9	12.9	156.1	148.6
30-okt	9:50:24	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.06	-42.7	21.9	156.9	148
30-okt	10:08:43	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.22	7.17	-40.8	23	157	147.9
30-okt	12:18:08	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.07	-23.5	24.2	158	147.1
30-okt	12:45:11	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.3	11.92	-19.3	22.9	158.2	146.9
30-okt	13:15:30	2.43	Dione	Overgang.Begin	Saturnus	-0.04	8.86	-14.4	20.8	158.4	146.7
30-okt	13:45:52	2.02	Dione	Schaduwovergang.Begin	Saturnus	-0.26	6.82	-9.7	18.2	158.6	146.5
30-okt	15:00:03	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	9.06	1.9	10.1	159.2	146
30-okt	15:53:29	2.43	Dione	Overgang.Einde	Saturnus	-0.04	8.86	9.8	2.8	159.6	145.6
30-okt	16:30:54	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.07	14.8	-2.5	159.9	145.3
30-okt	16:55:32	2.02	Dione	Schaduwovergang.Einde	Saturnus	0.5	13.75	18	-6.3	160	145.1
30-okt	18:21:18	1.64	Saturnus	Verduistering.Einde	Tethys	0.38	12.67	26.5	-19.7	160.7	144.3

30-okt	18:59:08	0.52	Saturnus	Verduistering.Einde	Mimas	0.22	11.23	28.9	-25.6	161	143.9
31-okt	2:20:02	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.06	-9.4	-39.4	164.3	139.5
31-okt	3:44:56	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.04	-22.7	-26.9	164.9	138.7
31-okt	3:57:51	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.17	7.59	-24.7	-24.9	165	138.6
31-okt	5:16:41	0.72	Saturnus	Verduistering.Einde	Enceladus	0.3	11.97	-35.8	-12.4	165.6	138
31-okt	5:58:52	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.06	-40.8	-5.9	165.9	137.6
31-okt	6:18:44	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.23	11.3	-42.8	-2.9	166	137.5
31-okt	13:39:04	1.77	Tethys	Overgang.Begin	Saturnus	-0.02	9.04	-10.1	18.6	169.3	134.6
31-okt	14:05:20	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.28	6.63	-6	16.1	169.5	134.5
31-okt	15:08:09	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.05	3.6	8.8	169.9	134
31-okt	16:21:59	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	9.03	14.2	-1.5	170.5	133.5
31-okt	17:00:15	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.38	12.67	19	-7.2	170.7	133.2
31-okt	17:36:35	0.52	Saturnus	Verduistering.Einde	Mimas	0.23	11.24	22.9	-12.8	171	132.9
31-okt	18:43:32	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.04	28.2	-23.4	171.5	132.3
31-okt	19:02:11	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.22	7.12	29.2	-26.3	171.6	132.1
31-okt	21:11:11	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.05	28.5	-44.7	172.5	130.9
31-okt	21:38:42	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.3	11.94	26.8	-47.7	172.7	130.6
31-okt	22:09:56	2.42	Saturnus	Bedekking.Begin	Dione	-0.04	8.84	24.1	-50.7	173	130.2
01-Nov	1:50:32	2.01	Saturnus	Verduistering.Einde	Dione	0.51	13.81	-5.5	-43.4	174.4	128
01-Nov	2:21:54	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.02	-10.3	-39.4	174.6	127.7
01-Nov	2:34:59	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.18	7.56	-12.4	-37.6	174.7	127.5
01-Nov	4:35:49	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.05	-30.9	-19.1	175.5	126.4
01-Nov	4:55:54	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.23	11.31	-33.6	-16	175.6	126.2
01-Nov	10:40:15	7.92	Rhea	Overgang.Begin	Saturnus	-0.08	8.41	-35.8	23.9	177.1	123.7
01-Nov	11:03:48	3.53	Rhea	Schaduwovergang.Begin	Saturnus	-0.14	7.87	-32.9	24.4	177.1	123.6
01-Nov	11:13:08	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.04	-31.9	24.5	177.1	123.5
01-Nov	12:11:20	7.92	Rhea	Overgang.Einde	Saturnus	-0.08	8.41	-22.8	23.6	177.2	123.1
01-Nov	12:18:26	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	9.03	-22.2	23.5	177.2	123.1
01-Nov	13:45:24	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.04	-8.6	17.8	177.1	122.6
01-Nov	14:10:11	0.72	Saturnus	Verduistering.Einde	Enceladus	0.31	11.99	-4.7	15.3	177	122.4
01-Nov	14:27:25	3.53	Rhea	Schaduwovergang.Einde	Saturnus	0.72	15.73	-1.7	13.3	177	122.3
01-Nov	15:40:24	1.64	Saturnus	Verduistering.Einde	Tethys	0.39	12.72	9	4.2	176.7	121.8
01-Nov	16:14:02	0.52	Saturnus	Verduistering.Einde	Mimas	0.23	11.25	13.6	-0.5	176.6	121.6

02-Nov	0:58:53	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9.01	2	-49.5	173.5	116.6
02-Nov	1:12:07	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.18	7.53	0	-48.2	173.4	116.5
02-Nov	3:12:47	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.03	-19	-32.3	172.6	115.2
02-Nov	3:33:05	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.24	11.32	-22.2	-29.2	172.4	115
02-Nov	3:36:45	0.76	Enceladus	Overgang.Begin	Saturnus	-0.01	9.02	-22.7	-28.6	172.4	115
02-Nov	3:55:43	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.23	7.07	-25.6	-25.7	172.2	114.8
02-Nov	6:04:20	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.03	-42.2	-5.6	171.3	113.6
02-Nov	6:32:16	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.31	11.96	-44.6	-1.4	171.1	113.4
02-Nov	6:56:29	2.44	Dione	Overgang.Begin	Saturnus	-0.04	8.82	-46.3	2.2	170.9	113.2
02-Nov	7:28:01	2.01	Dione	Schaduwovergang.Begin	Saturnus	-0.26	6.73	-47.6	6.4	170.7	112.9
02-Nov	9:33:58	2.44	Dione	Overgang.Einde	Saturnus	-0.04	8.82	-43	19.9	169.8	112
02-Nov	10:38:00	2.01	Dione	Schaduwovergang.Einde	Saturnus	0.51	13.85	-35.9	23.4	169.3	111.6
02-Nov	10:57:26	1.77	Tethys	Overgang.Begin	Saturnus	-0.02	9.01	-33.4	23.9	169.2	111.5
02-Nov	11:24:20	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.28	6.56	-29.6	24.2	169	111.3
02-Nov	12:22:39	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.03	-21	23	168.5	111
02-Nov	13:40:11	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	9	-8.7	17.9	167.9	110.5
02-Nov	14:19:18	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.39	12.71	-2.5	14	167.6	110.2
02-Nov	14:51:29	0.52	Saturnus	Verduistering.Einde	Mimas	0.23	11.25	2.3	10.4	167.4	110
02-Nov	20:06:15	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	9.02	30.4	-36.5	165	107.6
02-Nov	23:03:41	0.72	Saturnus	Verduistering.Einde	Enceladus	0.31	12.01	17.5	-54.1	163.7	105.9
02-Nov	23:35:52	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	9	13.3	-54.3	163.4	105.5
02-Nov	23:49:15	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.18	7.5	11.5	-54	163.3	105.4
03-Nov	1:49:46	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.02	-6.5	-44.1	162.4	104.1
03-Nov	2:10:15	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.24	11.33	-9.8	-41.5	162.2	103.9
03-Nov	9:36:54	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	9.01	-42.4	19.8	158.8	99.8
03-Nov	10:59:55	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9.01	-32.6	23.7	158.2	99.3
03-Nov	12:29:55	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	9	-19.2	22.4	157.5	98.7
03-Nov	12:49:12	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.23	7.02	-16.2	21.4	157.3	98.6
03-Nov	12:59:34	1.64	Saturnus	Verduistering.Einde	Tethys	0.4	12.76	-14.5	20.7	157.2	98.5
03-Nov	13:28:56	0.52	Saturnus	Verduistering.Einde	Mimas	0.23	11.26	-9.9	18.6	157	98.3
03-Nov	14:57:26	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	9.01	3.8	9.4	156.3	97.8
03-Nov	15:25:47	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.31	11.97	8	5.7	156.1	97.6
03-Nov	15:50:55	2.43	Saturnus	Bedekking.Begin	Dione	-0.04	8.8	11.7	2.2	155.9	97.4

03-Nov 16:51:58	7.93	Saturnus	Bedekking.Begin	Rhea	-0.08	8.38	19.7	-7.2	155.4	97
03-Nov 19:32:58	2.0	Saturnus	Verduistering.Einde	Dione	0.52	13.9	30.4	-31.9	154.2	95.8
03-Nov 20:41:30	3.5	Saturnus	Verduistering.Einde	Rhea	0.74	15.86	29.3	-41.9	153.6	95.2
03-Nov 22:12:51	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.98	22.7	-51.7	152.9	94.3
03-Nov 22:26:23	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.18	7.48	21.3	-52.7	152.8	94.2
04-Nov 0:26:45	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	9.01	5.6	-52.6	151.9	92.9
04-Nov 0:47:26	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.24	11.33	2.5	-51	151.7	92.7
04-Nov 4:59:23	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	9	-35.7	-16.1	149.7	90
04-Nov 7:57:12	0.72	Saturnus	Verduistering.Einde	Enceladus	0.32	12.03	-47.9	9.5	148.3	88.3
04-Nov 8:15:55	1.77	Tethys	Overgang.Begin	Saturnus	-0.02	8.98	-47.5	11.8	148.2	88.1
04-Nov 8:43:25	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.29	6.49	-46.2	14.8	148	87.9
04-Nov 9:37:10	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	9	-42.1	19.5	147.5	87.5
04-Nov 10:58:31	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	8.97	-32.2	23.3	146.9	86.9
04-Nov 11:38:25	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.4	12.75	-26.4	23.5	146.6	86.7
04-Nov 12:06:24	0.52	Saturnus	Verduistering.Einde	Mimas	0.23	11.26	-22.3	23	146.4	86.5
04-Nov 20:49:51	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.97	28.8	-43.1	142.2	82.8
04-Nov 21:03:31	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.18	7.45	28	-44.8	142.1	82.7
04-Nov 21:23:07	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.98	26.7	-47.2	142	82.5
04-Nov 21:42:42	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.23	6.98	25.1	-49.3	141.8	82.3
04-Nov 23:03:44	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.99	16.5	-54.7	141.2	81.5
04-Nov 23:24:37	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.24	11.34	13.8	-55	141	81.3
04-Nov 23:50:34	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.99	10.2	-54.6	140.8	81
05-Nov 0:19:19	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.32	11.99	6.1	-53.4	140.6	80.7
05-Nov 0:37:41	2.44	Dione	Overgang.Begin	Saturnus	-0.04	8.78	3.2	-52	140.4	80.5
05-Nov 1:10:19	2.01	Dione	Schaduwovergang.Begin	Saturnus	-0.27	6.64	-1.7	-49.1	140.1	80.2
05-Nov 3:14:46	2.44	Dione	Overgang.Einde	Saturnus	-0.04	8.78	-21.4	-32.6	139.2	78.8
05-Nov 4:20:37	2.01	Dione	Schaduwovergang.Einde	Saturnus	0.53	13.93	-31.1	-22.4	138.6	78.1
05-Nov 6:55:20	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	8.98	-46.9	1.2	137.4	76.5
05-Nov 8:14:26	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.99	-47.4	11.3	136.8	75.7
05-Nov 10:18:40	1.64	Saturnus	Verduistering.Einde	Tethys	0.4	12.79	-36.9	21.7	135.8	74.7
05-Nov 10:43:51	0.52	Saturnus	Verduistering.Einde	Mimas	0.24	11.27	-33.7	22.7	135.6	74.5
05-Nov 13:52:32	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.98	-4.9	15.9	134.1	73.3
05-Nov 16:50:42	0.72	Saturnus	Verduistering.Einde	Enceladus	0.32	12.04	20.1	-6.9	132.6	72.2

05-Nov 19:26:51	0.57 Mimas	Overgang.Begin	Saturnus	-0.02	8.96	30.4	-31.3	131.4	71
05-Nov 19:40:39	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.18	7.42	30.5	-33.4	131.2	70.9
05-Nov 21:40:44	0.57 Mimas	Overgang.Einde	Saturnus	-0.01	8.98	25	-49.3	130.3	69.9
05-Nov 22:01:47	0.54 Mimas	Schaduwovergang.Einde	Saturnus	0.25	11.34	23	-51.4	130.1	69.7
05-Nov 23:05:50	8.22 Rhea	Overgang.Begin	Saturnus	-0.08	8.34	15.2	-55.1	129.6	69
05-Nov 23:31:05	3.5 Rhea	Schaduwovergang.Begin	Saturnus	-0.14	7.8	12.2	-55.2	129.4	68.8
06-Nov 0:33:39	8.22 Rhea	Overgang.Einde	Saturnus	-0.08	8.34	2.8	-52.4	128.8	68.1
06-Nov 1:01:15	6.78 Tethys	Gedeeltelijke verduistering	Enceladus	2.72	1.73	-1.3	-50.1	128.6	67.8
06-Nov 2:56:13	3.51 Rhea	Schaduwovergang.Einde	Saturnus	0.75	15.95	-19.2	-35.5	127.7	66.5
06-Nov 5:34:23	1.77 Tethys	Overgang.Begin	Saturnus	-0.02	8.95	-40.8	-11	126.4	64.8
06-Nov 6:02:27	1.64 Tethys	Schaduwovergang.Begin	Saturnus	-0.29	6.42	-43.6	-6.8	126.2	64.5
06-Nov 6:16:18	0.76 Enceladus	Overgang.Begin	Saturnus	-0.02	8.96	-44.7	-4.8	126.1	64.3
06-Nov 6:36:11	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.24	6.93	-46	-1.8	125.9	64.1
06-Nov 6:51:42	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.97	-46.9	0.4	125.8	64
06-Nov 8:16:52	1.77 Tethys	Overgang.Einde	Saturnus	-0.02	8.95	-47.1	11.4	125.1	63.1
06-Nov 8:43:43	0.76 Enceladus	Overgang.Einde	Saturnus	-0.01	8.97	-45.8	14.2	124.9	62.9
06-Nov 8:57:31	1.64 Tethys	Schaduwovergang.Einde	Saturnus	0.41	12.78	-44.8	15.6	124.8	62.8
06-Nov 9:12:51	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.32	12	-43.6	17	124.6	62.6
06-Nov 9:21:19	0.52 Saturnus	Verduistering.Einde	Mimas	0.24	11.27	-42.8	17.7	124.6	62.6
06-Nov 9:32:03	2.43 Saturnus	Bedekking.Begin	Dione	-0.04	8.76	-41.7	18.6	124.5	62.5
06-Nov 13:15:30	2.0 Saturnus	Verduistering.Einde	Dione	0.54	13.97	-10	18.8	122.7	60.8
06-Nov 18:03:51	0.57 Mimas	Overgang.Begin	Saturnus	-0.02	8.94	27.2	-18.5	120.3	58.9
06-Nov 18:17:47	0.54 Mimas	Schaduwovergang.Begin	Saturnus	-0.19	7.39	28.1	-20.7	120.2	58.8
06-Nov 20:17:45	0.57 Mimas	Overgang.Einde	Saturnus	-0.01	8.97	29.8	-39.1	119.2	57.9
06-Nov 20:38:58	0.54 Mimas	Schaduwovergang.Einde	Saturnus	0.25	11.34	28.9	-42.1	119	57.7
06-Nov 22:45:45	0.77 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.96	17.7	-54.6	118	56.6
07-Nov 1:44:16	0.72 Saturnus	Verduistering.Einde	Enceladus	0.33	12.05	-8.2	-45.9	116.5	54.7
07-Nov 4:13:50	1.77 Saturnus	Bedekking.Begin	Tethys	-0.01	8.95	-31.3	-23.9	115.2	53
07-Nov 5:28:58	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.96	-40.6	-12.2	114.6	52.1
07-Nov 7:37:47	1.64 Saturnus	Verduistering.Einde	Tethys	0.41	12.82	-47.9	6.4	113.5	50.7
07-Nov 7:58:46	0.52 Saturnus	Verduistering.Einde	Mimas	0.24	11.27	-47.6	8.9	113.4	50.5
07-Nov 15:09:30	0.76 Enceladus	Overgang.Begin	Saturnus	-0.02	8.94	8	6.8	109.8	47
07-Nov 15:29:40	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.24	6.89	10.8	4.2	109.6	46.9

07-Nov 16:40:51	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.93	19.9	-5.9	109	46.4
07-Nov 16:54:56	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	7.37	21.4	-8	108.9	46.3
07-Nov 17:36:53	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.95	25.4	-14.5	108.5	46.1
07-Nov 18:06:22	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.32	12.01	27.6	-19.1	108.3	45.8
07-Nov 18:18:50	2.45	Dione	Overgang.Begin	Saturnus	-0.04	8.73	28.4	-21.2	108.2	45.8
07-Nov 18:52:30	2.01	Dione	Schaduwovergang.Begin	Saturnus	-0.28	6.56	29.9	-26.5	107.9	45.5
07-Nov 18:54:46	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.96	29.9	-26.7	107.9	45.5
07-Nov 19:16:09	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.25	11.35	30.4	-30.1	107.7	45.4
07-Nov 20:55:38	2.45	Dione	Overgang.Einde	Saturnus	-0.04	8.74	27.7	-44.7	106.9	44.6
07-Nov 22:03:07	2.01	Dione	Schaduwovergang.Einde	Saturnus	0.54	13.99	22	-52.1	106.3	44
08-Nov 2:52:52	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.92	-19.8	-36.6	103.8	41
08-Nov 3:21:29	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.3	6.35	-24.2	-32.3	103.6	40.7
08-Nov 4:06:15	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.94	-30.7	-25.4	103.2	40.1
08-Nov 5:17:50	8.16	Saturnus	Bedekking.Begin	Rhea	-0.08	8.31	-40.3	-13.6	102.6	39.3
08-Nov 5:35:15	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.92	-41.8	-11.4	102.4	39.1
08-Nov 6:16:35	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.41	12.8	-45.3	-5.1	102.1	38.6
08-Nov 6:36:14	0.52	Saturnus	Verduistering.Einde	Mimas	0.24	11.27	-46.5	-2.3	101.9	38.4
08-Nov 7:38:54	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.94	-47.9	6.2	101.4	37.7
08-Nov 9:10:44	3.48	Saturnus	Verduistering.Einde	Rhea	0.77	16.06	-42.9	16.3	100.6	36.7
08-Nov 10:37:46	0.72	Saturnus	Verduistering.Einde	Enceladus	0.33	12.06	-32.9	21.6	99.9	35.9
08-Nov 15:17:52	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.92	9.7	5.5	97.5	33.7
08-Nov 15:32:04	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	7.34	11.7	3.7	97.3	33.6
08-Nov 17:31:47	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.94	25.3	-13.9	96.3	32.7
08-Nov 17:53:20	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.25	11.35	27	-17.2	96.1	32.6
09-Nov 0:02:44	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.92	6.2	-55.4	92.9	29.6
09-Nov 0:23:10	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.24	6.85	3.1	-54.3	92.7	29.3
09-Nov 1:32:20	1.78	Saturnus	Bedekking.Begin	Tethys	-0.01	8.92	-7.7	-47.8	92.1	28.6
09-Nov 2:30:05	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.93	-16.7	-40.2	91.6	28
09-Nov 2:43:31	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.93	-18.8	-38.3	91.5	27.8
09-Nov 2:59:54	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.33	12.02	-21.4	-35.9	91.4	27.6
09-Nov 3:13:16	2.44	Saturnus	Bedekking.Begin	Dione	-0.04	8.72	-23.6	-33.7	91.3	27.5
09-Nov 4:56:54	1.64	Saturnus	Verduistering.Einde	Tethys	0.42	12.84	-38	-17.6	90.4	26.3
09-Nov 5:13:41	0.52	Saturnus	Verduistering.Einde	Mimas	0.25	11.27	-39.8	-15	90.2	26.1

09-Nov	6:58:03	2.0	Saturnus	Verduistering.Einde	Dione	0.55	14.03	-47.6	0.6	89.3	24.9
09-Nov	13:54:53	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.9	-2.1	14.7	85.6	20.7
09-Nov	14:09:13	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	7.32	0.1	13.3	85.5	20.6
09-Nov	16:08:50	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.93	17	-1.6	84.5	19.7
09-Nov	16:30:31	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.25	11.35	19.6	-4.8	84.3	19.5
09-Nov	16:32:05	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.92	19.8	-5	84.2	19.5
09-Nov	19:31:17	0.72	Saturnus	Verduistering.Einde	Enceladus	0.33	12.07	30.4	-32.8	82.7	18.2
10-Nov	0:11:30	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.89	4.2	-55.2	80.2	15.8
10-Nov	0:40:37	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.3	6.29	-0.2	-53.2	79.9	15.5
10-Nov	1:20:48	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.92	-6.4	-49.4	79.5	15.1
10-Nov	2:53:48	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.89	-21.2	-36.9	78.7	14.1
10-Nov	3:35:47	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.42	12.82	-27.5	-30.6	78.3	13.6
10-Nov	3:51:09	0.52	Saturnus	Verduistering.Einde	Mimas	0.25	11.27	-29.7	-28.3	78.2	13.4
10-Nov	8:55:58	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.9	-43.7	14.3	75.5	9.8
10-Nov	9:16:39	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.25	6.81	-41.7	16.2	75.3	9.6
10-Nov	11:23:17	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.91	-25.2	21.8	74.1	8.2
10-Nov	11:31:06	8.38	Rhea	Overgang.Begin	Saturnus	-0.08	8.28	-23.4	21.8	74	8.1
10-Nov	11:53:26	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.33	12.02	-20.6	21.6	73.9	7.9
10-Nov	11:58:16	3.48	Rhea	Schaduwovergang.Begin	Saturnus	-0.14	7.73	-19.6	21.4	73.8	7.9
10-Nov	11:59:56	2.45	Dione	Overgang.Begin	Saturnus	-0.04	8.69	-19.4	21.4	73.8	7.9
10-Nov	12:31:54	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.89	-14.5	20.3	73.5	7.6
10-Nov	12:34:35	2.0	Dione	Schaduwovergang.Begin	Saturnus	-0.28	6.48	-14	20.2	73.5	7.5
10-Nov	12:46:21	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	7.29	-12.3	19.6	73.4	7.4
10-Nov	12:57:14	8.38	Rhea	Overgang.Einde	Saturnus	-0.08	8.28	-9.9	18.7	73.2	7.3
10-Nov	14:36:36	2.45	Dione	Overgang.Einde	Saturnus	-0.04	8.7	5	10	72.4	6.4
10-Nov	14:45:52	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.92	6.2	9	72.3	6.4
10-Nov	15:07:42	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.26	11.35	9.4	6.4	72.1	6.2
10-Nov	15:24:53	3.48	Rhea	Schaduwovergang.Einde	Saturnus	0.78	16.12	12	4	71.9	6
10-Nov	15:45:30	2.0	Dione	Schaduwovergang.Einde	Saturnus	0.55	14.04	14.6	1.3	71.7	5.9
10-Nov	22:50:52	1.78	Saturnus	Bedekking.Begin	Tethys	-0.01	8.89	15	-56	67.9	2.5
10-Nov	23:58:05	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.9	5.7	-56.1	67.3	1.9
11-Nov	1:25:17	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.9	-7.8	-49.1	66.5	1.1
11-Nov	2:16:00	1.64	Saturnus	Verduistering.Einde	Tethys	0.42	12.86	-15.9	-42.6	66	0.6



11-Nov	2:28:36	0.52	Saturnus	Verduistering.Einde	Mimas	0.25	11.27	-17.7	-40.9	65.9	0.5
11-Nov	4:24:47	0.72	Saturnus	Verduistering.Einde	Enceladus	0.34	12.08	-34.9	-23.2	64.8	1
11-Nov	11:08:56	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.87	-26.7	21.5	61.1	5.8
11-Nov	11:23:30	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	7.27	-24.6	21.6	60.9	6
11-Nov	13:22:56	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.9	-5.8	16.9	59.8	7.3
11-Nov	13:44:54	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.26	11.34	-2.4	15.1	59.6	7.5
11-Nov	17:49:15	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.87	27.5	-17.2	57.3	9.6
11-Nov	18:10:12	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.25	6.77	28.8	-20.5	57.2	9.8
11-Nov	20:16:34	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.89	29	-40	56	10.8
11-Nov	20:47:01	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.33	12.03	27.3	-44.3	55.7	11
11-Nov	20:54:41	2.44	Saturnus	Bedekking.Begin	Dione	-0.04	8.68	26.7	-45.4	55.6	11.1
11-Nov	21:30:04	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.87	23.7	-49.7	55.3	11.3
11-Nov	21:59:40	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.31	6.23	20.7	-52.8	55	11.6
11-Nov	22:35:22	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.89	16.5	-55.4	54.7	11.9
12-Nov	0:12:18	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.86	2.9	-55.7	53.8	12.7
12-Nov	0:40:43	1.99	Saturnus	Verduistering.Einde	Dione	0.56	14.07	-1.5	-53.8	53.5	13
12-Nov	0:54:52	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.42	12.84	-3.7	-52.5	53.4	13.1
12-Nov	1:06:04	0.52	Saturnus	Verduistering.Einde	Mimas	0.25	11.27	-5.3	-51.5	53.3	13.2
12-Nov	9:45:58	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.86	-37.6	17.9	48.4	19.3
12-Nov	10:00:39	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	7.24	-35.7	18.8	48.2	19.4
12-Nov	10:18:31	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.88	-33.4	19.7	48.1	19.7
12-Nov	11:59:59	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.89	-18.3	20.9	47.1	20.9
12-Nov	12:22:05	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.26	11.34	-14.8	20.2	46.9	21.1
12-Nov	13:18:19	0.72	Saturnus	Verduistering.Einde	Enceladus	0.34	12.08	-5.9	17	46.3	21.8
12-Nov	17:42:57	8.23	Saturnus	Bedekking.Begin	Rhea	-0.08	8.25	27.6	-17	43.8	24.4
12-Nov	19:45:30	34.48	Saturnus	Verduistering.Begin	Titan	1.09	18.84	29.5	-38.1	42.5	25.5
12-Nov	20:09:28	1.78	Saturnus	Bedekking.Begin	Tethys	-0.01	8.87	29.1	-39.3	42.4	25.5
12-Nov	21:12:39	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.88	25	-47.8	41.8	26
12-Nov	21:39:22	3.45	Saturnus	Verduistering.Einde	Rhea	0.8	16.2	22.3	-51.1	41.6	26.3
12-Nov	22:18:34	34.43	Saturnus	Verduistering.Einde	Titan	1.69	24.19	16	-55.7	41.1	26.7
12-Nov	23:35:07	1.64	Saturnus	Verduistering.Einde	Tethys	0.43	12.87	7.8	-57.2	40.5	27.2
12-Nov	23:43:32	0.52	Saturnus	Verduistering.Einde	Mimas	0.25	11.27	6.7	-57.1	40.4	27.3
13-Nov	0:18:53	1.19	Mimas	Verduistering in bij schaduw	Tethys	0.88	1.82	1.3	-55.6	40.1	27.6

13-Nov	2:42:31	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.85	-21.2	-39.4	38.7	28.9
13-Nov	3:03:42	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.25	6.73	-24.4	-36.2	38.5	29.1
13-Nov	5:09:49	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.87	-41.1	-16.5	37.3	30.5
13-Nov	5:40:33	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.34	12.03	-44	-11.8	37	30.9
13-Nov	5:41:15	2.45	Dione	Overgang.Begin	Saturnus	-0.04	8.65	-44.2	-11.5	37	30.9
13-Nov	6:16:49	2.0	Dione	Schaduwovergang.Begin	Saturnus	-0.29	6.4	-46.5	-6.2	36.6	31.3
13-Nov	8:17:52	2.45	Dione	Overgang.Einde	Saturnus	-0.04	8.66	-45.6	9.7	35.5	32.8
13-Nov	8:23:01	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.85	-45.3	10.2	35.4	32.9
13-Nov	8:37:49	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	7.22	-44.2	11.8	35.3	33.1
13-Nov	9:28:01	2.0	Dione	Schaduwovergang.Einde	Saturnus	0.57	14.08	-39.1	16.4	34.8	33.7
13-Nov	10:37:04	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.88	-30.2	20.2	34.2	34.6
13-Nov	10:59:17	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.26	11.34	-27	20.8	33.9	34.9
13-Nov	18:48:42	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.84	30.3	-27	29.4	39.9
13-Nov	19:11:45	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.86	30.5	-30.6	29.2	40.1
13-Nov	19:18:45	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.31	6.17	30.4	-31.7	29.1	40.2
13-Nov	19:49:57	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.86	29.8	-36.4	28.8	40.5
13-Nov	21:30:54	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.83	22.8	-50.3	27.9	41.3
13-Nov	22:11:50	0.72	Saturnus	Verduistering.Einde	Enceladus	0.35	12.08	18.4	-54.2	27.5	41.6
13-Nov	22:14:00	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.43	12.84	18.1	-54.5	27.5	41.6
13-Nov	22:21:00	0.52	Saturnus	Verduistering.Einde	Mimas	0.25	11.26	17.3	-55	27.4	41.7
14-Nov	7:00:04	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.83	-47.9	-0.4	22.4	46.7
14-Nov	7:14:58	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	7.19	-47.9	1.6	22.3	46.9
14-Nov	9:14:09	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.86	-40.3	14.9	21.1	48.4
14-Nov	9:36:28	0.54	Mimas	Schaduwovergang.Einde	Saturnus	0.26	11.34	-37.8	16.7	20.9	48.7
14-Nov	11:35:48	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.83	-20.8	20.8	19.8	50.2
14-Nov	11:57:12	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.25	6.69	-17.5	20.5	19.6	50.5
14-Nov	14:03:07	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.85	2.2	12.7	18.4	52.1
14-Nov	14:31:17	1.62	Mimas	Verduistering in bijschaduw	Tethys	1.76	3.15	6.5	9.8	18.1	52.4
14-Nov	14:34:06	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.34	12.03	6.8	9.5	18.1	52.4
14-Nov	14:36:03	2.44	Saturnus	Bedekking.Begin	Dione	-0.04	8.64	7.3	9.2	18.1	52.5
14-Nov	17:28:03	1.78	Saturnus	Bedekking.Begin	Tethys	-0.01	8.84	26.9	-14.5	16.4	54.3
14-Nov	18:23:17	1.99	Saturnus	Verduistering.Einde	Dione	0.57	14.1	29.8	-23.2	15.9	54.9
14-Nov	18:27:14	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.85	29.9	-23.7	15.9	54.9

14-Nov 20:54:12	1.64	Saturnus	Verduistering.Einde	Tethys	0.44	12.88	25.8	-45.9	14.5	56.2
14-Nov 20:58:27	0.52	Saturnus	Verduistering.Einde	Mimas	0.26	11.26	25.5	-46.4	14.5	56.2
14-Nov 21:10:13	10.72	Mimas	ÉC(A)	Tethys	0.65	1.71	24	-48.5	14.3	56.4
14-Nov 23:56:56	8.37	Rhea	Overgang.Begin	Saturnus	-0.08	8.21	2.9	-57.1	12.8	57.7
15-Nov 0:26:15	3.45	Rhea	Schaduwovergang.Begin	Saturnus	-0.15	7.64	-1.2	-55.6	12.5	57.9
15-Nov 1:23:09	8.37	Rhea	Overgang.Einde	Saturnus	-0.08	8.22	-10.5	-49.9	12	58.4
15-Nov 3:54:19	3.46	Rhea	Schaduwovergang.Einde	Saturnus	0.81	16.23	-33.1	-28.6	10.6	59.7
15-Nov 4:04:59	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.84	-34.3	-27.2	10.5	59.8
15-Nov 5:37:07	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.82	-44.4	-12.8	9.7	60.8
15-Nov 5:52:07	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	7.17	-45.5	-10.5	9.6	60.9
15-Nov 7:05:21	0.72	Saturnus	Verduistering.Einde	Enceladus	0.35	12.08	-47.9	0.1	8.9	61.8
15-Nov 7:51:14	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.85	-46.7	6	8.5	62.3
15-Nov 8:13:40	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.26	11.33	-45.4	8.7	8.3	62.6
15-Nov 16:07:25	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.81	19.7	-2.7	4.8	68.5
15-Nov 16:37:54	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.32	6.12	23	-7.1	4.6	68.9
15-Nov 17:04:32	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.83	25.4	-11	4.5	69.2
15-Nov 18:49:38	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.8	30.4	-27.5	4	70.2
15-Nov 19:33:13	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.44	12.85	30	-34.3	3.9	70.7
15-Nov 19:35:55	0.52	Saturnus	Verduistering.Einde	Mimas	0.26	11.25	30	-34.6	3.9	70.7
15-Nov 20:29:05	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.81	27.4	-42.6	3.8	71.2
15-Nov 20:50:42	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.65	25.8	-45.6	3.8	71.3
15-Nov 22:56:25	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.83	11.7	-57.4	4	72.4
15-Nov 23:22:36	2.45	Dione	Overgang.Begin	Saturnus	-0.04	8.62	7.9	-58	4.1	72.6
15-Nov 23:27:38	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.34	12.03	7.2	-58	4.1	72.6
15-Nov 23:59:00	2.0	Dione	Schaduwovergang.Begin	Saturnus	-0.29	6.33	2.5	-57.4	4.2	72.9
16-Nov 1:59:19	2.45	Dione	Overgang.Einde	Saturnus	-0.04	8.62	-16.4	-46	4.8	73.8
16-Nov 3:10:31	2.0	Dione	Schaduwovergang.Einde	Saturnus	0.58	14.1	-27.3	-35.8	5.2	74.4
16-Nov 4:14:10	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.8	-36	-25.9	5.6	75
16-Nov 4:29:16	0.54	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	7.15	-37.9	-23.6	5.7	75.1
16-Nov 6:28:20	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.84	-47.5	-5.3	6.6	76.3
16-Nov 6:50:52	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.33	-47.9	-2.1	6.8	76.5
16-Nov 11:49:55	3.75	Mimas	ÉC(A)	Tethys	1.75	3.07	-17.2	20.1	9.3	80.2
16-Nov 12:58:15	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.82	-6.6	17.4	9.9	81

16-Nov 14:46:42	1.78	Saturnus	Bedekking.Begin	Tethys	-0.01	8.81	9.9	7.6	10.9	82.4
16-Nov 15:41:50	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.82	17.1	0.8	11.3	83.1
16-Nov 15:58:54	0.72	Saturnus	Verduistering.Einde	Enceladus	0.35	12.08	19.2	-1.6	11.5	83.3
16-Nov 18:09:19	7.37	Mimas	Gedeeltelijke verduistering	Tethys	0.43	1.64	29.7	-21.7	12.7	84.8
16-Nov 18:13:20	1.64	Saturnus	Verduistering.Einde	Tethys	0.44	12.88	29.8	-21.9	12.7	84.8
16-Nov 18:13:23	0.52	Saturnus	Verduistering.Einde	Mimas	0.26	11.25	29.7	-21.8	12.7	84.8
17-Nov 2:51:14	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.79	-24.9	-39	17.4	89.1
17-Nov 3:06:26	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	7.13	-27.2	-36.7	17.6	89.2
17-Nov 5:05:26	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.82	-42.3	-18.1	18.6	90.2
17-Nov 5:22:27	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.79	-43.8	-15.4	18.8	90.4
17-Nov 5:28:04	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.32	-44.3	-14.6	18.9	90.4
17-Nov 5:44:15	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.62	-45.5	-12.1	19	90.6
17-Nov 6:07:59	8.15	Saturnus	Bedekking.Begin	Rhea	-0.08	8.19	-47	-8	19.3	90.9
17-Nov 7:49:47	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.81	-46.4	5.4	20.1	91.9
17-Nov 8:17:25	2.43	Saturnus	Bedekking.Begin	Dione	-0.04	8.6	-44.5	8.7	20.4	92.2
17-Nov 8:21:13	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.35	12.02	-44.2	9	20.4	92.2
17-Nov 10:08:07	3.43	Saturnus	Verduistering.Einde	Rhea	0.82	16.28	-31.9	18	21.4	93.4
17-Nov 12:05:47	1.99	Saturnus	Verduistering.Einde	Dione	0.58	14.12	-14.2	19.5	22.5	94.9
17-Nov 13:26:04	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.78	-1.6	15.3	23.2	95.9
17-Nov 13:56:56	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.32	6.07	3.2	12.6	23.5	96.3
17-Nov 14:19:08	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.81	6.4	10.5	23.7	96.6
17-Nov 16:08:17	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.78	20.7	-3.1	24.7	97.9
17-Nov 16:50:51	0.52	Saturnus	Verduistering.Einde	Mimas	0.26	11.24	24.9	-9.2	25.1	98.4
17-Nov 16:52:18	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.44	12.85	25.1	-9.5	25.1	98.4
17-Nov 21:51:30	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.8	19	-53.2	27.8	101.4
18-Nov 0:52:24	0.72	Saturnus	Verduistering.Einde	Enceladus	0.35	12.07	-6.9	-54.3	29.5	102.8
18-Nov 1:28:18	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.78	-12.6	-50.5	29.8	103.1
18-Nov 1:43:35	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	7.1	-15	-48.6	29.9	103.2
18-Nov 3:42:33	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.81	-32.9	-31.3	31	104.1
18-Nov 4:05:16	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.31	-35.9	-27.8	31.2	104.2
18-Nov 9:09:46	3.94	Mimas	ÉC(A)	Tethys	1.74	2.99	-38.8	13.7	34	107
18-Nov 12:05:24	1.78	Saturnus	Bedekking.Begin	Tethys	-0.01	8.78	-13.6	19.3	35.5	109
18-Nov 12:56:26	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.79	-5.7	17.1	36	109.6

18-Nov 14:15:46	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.77	6.5	10.6	36.7	110.6
18-Nov 14:37:46	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.58	9.6	8.3	36.9	110.9
18-Nov 15:28:19	0.52	Saturnus	Verduistering.Einde	Mimas	0.26	11.23	16.4	2.2	37.3	111.5
18-Nov 15:32:28	1.64	Saturnus	Verduistering.Einde	Tethys	0.45	12.88	17	1.6	37.4	111.6
18-Nov 16:43:07	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.79	24.6	-8.2	38	112.4
18-Nov 17:04:09	2.45	Dione	Overgang.Begin	Saturnus	-0.04	8.58	26.4	-11.5	38.2	112.7
18-Nov 17:14:46	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.35	12.01	27.1	-13	38.3	112.8
18-Nov 17:41:21	1.99	Dione	Schaduwovergang.Begin	Saturnus	-0.3	6.25	28.7	-17.2	38.5	113.1
18-Nov 19:41:05	2.45	Dione	Overgang.Einde	Saturnus	-0.04	8.58	29.4	-36	39.6	114.4
18-Nov 20:53:09	1.99	Dione	Schaduwovergang.Einde	Saturnus	0.58	14.11	24.6	-46.5	40.2	115.1
19-Nov 0:05:22	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.76	-0.2	-57.8	41.9	116.6
19-Nov 0:20:45	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	7.08	-2.5	-57	42	116.8
19-Nov 2:19:40	0.57	Mimas	Overgang.Einde	Saturnus	-0.01	8.8	-21.3	-44	43.1	117.6
19-Nov 2:42:28	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.31	-24.7	-40.7	43.3	117.8
19-Nov 6:44:48	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.78	-47.9	-3.6	45.4	119.6
19-Nov 9:45:56	0.72	Saturnus	Verduistering.Einde	Enceladus	0.36	12.07	-34	16.1	46.9	121.2
19-Nov 10:44:46	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.75	-25.5	19	47.5	121.9
19-Nov 11:15:59	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.32	6.02	-20.8	19.5	47.7	122.2
19-Nov 11:33:45	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.78	-18.1	19.6	47.9	122.4
19-Nov 12:21:43	8.2	Rhea	Overgang.Begin	Saturnus	-0.08	8.16	-9.9	18.4	48.3	123
19-Nov 12:53:25	3.43	Rhea	Schaduwovergang.Begin	Saturnus	-0.15	7.54	-5.3	17	48.6	123.3
19-Nov 13:27:01	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.75	-0.2	14.8	48.9	123.7
19-Nov 13:49:45	8.2	Rhea	Overgang.Einde	Saturnus	-0.08	8.16	3.8	12.6	49.1	124
19-Nov 14:05:46	0.52	Saturnus	Verduistering.Einde	Mimas	0.26	11.22	5.6	11.5	49.2	124.2
19-Nov 14:11:25	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.44	12.84	6.5	10.9	49.2	124.2
19-Nov 16:22:53	3.43	Rhea	Schaduwovergang.Einde	Saturnus	0.83	16.28	23.2	-5.6	50.4	125.8
19-Nov 22:42:26	0.57	Mimas	Overgang.Begin	Saturnus	-0.02	8.75	11.5	-57.7	53.6	129.7
19-Nov 22:57:54	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	7.06	9.3	-58.4	53.7	129.8
19-Nov 23:09:06	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.75	7.7	-58.7	53.8	129.9
19-Nov 23:31:17	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.55	4.4	-58.9	54	130
20-Nov 0:56:48	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.78	-8.8	-54.4	54.7	130.7
20-Nov 1:19:39	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.3	-12.4	-52	54.9	130.8
20-Nov 1:36:30	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.77	-15.1	-50	55.1	131

20-Nov	1:58:54	2.43	Saturnus	Bedekking.Begin	Dione	-0.04	8.57	-18.8	-47	55.3	131.1
20-Nov	2:08:19	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.35	12.01	-20.1	-45.8	55.4	131.2
20-Nov	5:48:19	1.98	Saturnus	Verduistering.Einde	Dione	0.59	14.12	-46.5	-12	57.2	132.7
20-Nov	6:30:53	2.14	Mimas	Verduistering in bij schaduw	Tethys	1.73	2.91	-47.9	-5.7	57.6	133
20-Nov	9:24:08	1.78	Saturnus	Bedekking.Begin	Tethys	-0.01	8.75	-36.3	14.3	59	134.4
20-Nov	10:11:04	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.77	-30	17.4	59.4	134.9
20-Nov	12:43:15	0.51	Saturnus	Verduistering.Einde	Mimas	0.26	11.22	-6.5	17.4	60.7	136.5
20-Nov	12:51:36	1.64	Saturnus	Verduistering.Einde	Tethys	0.45	12.87	-5.1	16.9	60.8	136.5
20-Nov	15:38:05	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.76	18.6	0.6	62.1	138.4
20-Nov	18:39:27	0.72	Saturnus	Verduistering.Einde	Enceladus	0.36	12.06	30.5	-26.5	63.6	140.5
20-Nov	19:38:41	38.02	Titan	Schaduwovergang.Begin	Saturnus	1.29	20.33	28.2	-38.6	64.3	141.3
20-Nov	21:19:31	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.74	21.3	-50.1	64.9	142.1
20-Nov	21:35:04	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	7.04	19.5	-52	65.1	142.2
20-Nov	22:12:09	38.67	Titan	Schaduwovergang.Einde	Saturnus	1.87	25.48	12.5	-57.2	65.5	142.7
20-Nov	23:33:56	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.77	3.4	-59.1	66.1	143.2
20-Nov	23:56:52	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.29	0	-58.7	66.2	143.4
21-Nov	7:43:32	15.95	Tethys	Gedeeltelijke bedekking	Enceladus	0.11	0.09	-45.3	4.7	70.1	146.7
21-Nov	8:02:26	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.73	-44.5	6	70.2	146.8
21-Nov	8:03:31	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.72	-44.4	6.2	70.2	146.8
21-Nov	8:24:47	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.52	-42.5	8.5	70.4	146.9
21-Nov	8:35:04	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.33	5.97	-41.5	9.6	70.5	147
21-Nov	8:48:22	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.75	-40.1	10.9	70.6	147.1
21-Nov	10:29:53	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.75	-26.7	18	71.4	148
21-Nov	10:45:41	2.44	Dione	Overgang.Begin	Saturnus	-0.04	8.54	-24.2	18.5	71.5	148.1
21-Nov	10:45:49	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.72	-24.2	18.5	71.5	148.1
21-Nov	11:01:52	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.35	12	-21.8	18.9	71.7	148.3
21-Nov	11:20:42	0.51	Saturnus	Verduistering.Einde	Mimas	0.26	11.21	-18.9	19.1	71.8	148.5
21-Nov	11:23:36	1.99	Dione	Schaduwovergang.Begin	Saturnus	-0.3	6.18	-18.4	19.1	71.8	148.5
21-Nov	11:30:33	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.45	12.83	-17.3	19.1	71.9	148.6
21-Nov	13:22:56	2.44	Dione	Overgang.Einde	Saturnus	-0.04	8.54	0.4	14.7	72.8	149.7
21-Nov	14:35:41	1.99	Dione	Schaduwovergang.Einde	Saturnus	0.59	14.1	11.1	7.9	73.4	150.5
21-Nov	18:33:19	7.91	Saturnus	Bedekking.Begin	Rhea	-0.08	8.13	30.5	-26.2	75.3	153.1
21-Nov	19:56:36	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.72	28	-38.6	75.9	154

21-Nov 20:12:14	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	7.02	27	-41	76.1	154.1
21-Nov 22:11:05	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.76	14.6	-55.8	77	155.3
21-Nov 22:34:04	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.28	11.5	-57.6	77.2	155.5
21-Nov 22:37:18	3.41	Saturnus	Verduistering.Einde	Rhea	0.84	16.32	10.9	-57.8	77.2	155.5
22-Nov 0:31:28	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.74	-6.1	-57	78.1	156.4
22-Nov 3:33:02	0.72	Saturnus	Verduistering.Einde	Enceladus	0.36	12.05	-33.7	-33.6	79.6	157.7
22-Nov 6:42:58	1.78	Saturnus	Bedekking.Begin	Tethys	-0.01	8.73	-47.9	-4.4	81.1	158.9
22-Nov 7:25:41	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.74	-46.6	1.3	81.4	159.2
22-Nov 9:58:10	0.51	Saturnus	Verduistering.Einde	Mimas	0.26	11.2	-30.7	16.2	82.6	160.3
22-Nov 10:10:48	1.64	Saturnus	Verduistering.Einde	Tethys	0.45	12.86	-28.8	16.9	82.7	160.4
22-Nov 16:55:47	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.71	26.9	-10.7	85.9	164.4
22-Nov 17:18:17	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.49	28.3	-14.1	86	164.6
22-Nov 18:33:42	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.71	30.5	-25.8	86.6	165.4
22-Nov 18:49:23	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	7	30.4	-28.3	86.8	165.6
22-Nov 19:23:17	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.73	29.5	-33.6	87	166
22-Nov 19:40:28	2.42	Saturnus	Bedekking.Begin	Dione	-0.04	8.53	28.7	-36.4	87.2	166.1
22-Nov 19:55:24	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.35	11.98	27.9	-38.6	87.3	166.3
22-Nov 20:48:14	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.74	23.7	-46.3	87.7	166.8
22-Nov 21:11:16	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.27	21.3	-49.4	87.9	167
22-Nov 23:30:52	1.98	Saturnus	Verduistering.Einde	Dione	0.6	14.11	2.6	-59.6	88.9	168.3
23-Nov 5:22:16	1.78	Tethys	Overgang.Begin	Saturnus	-0.02	8.7	-45.6	-16.6	91.7	170.8
23-Nov 5:54:07	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.33	5.92	-47.2	-11.8	91.9	171
23-Nov 6:03:00	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.72	-47.5	-10.5	92	171
23-Nov 8:04:39	1.78	Tethys	Overgang.Einde	Saturnus	-0.02	8.69	-43.6	5.9	92.9	171.8
23-Nov 8:35:38	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.19	-40.6	9.2	93.1	172
23-Nov 8:49:40	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.45	12.82	-39	10.7	93.3	172.1
23-Nov 9:24:46	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.72	-34.7	13.7	93.5	172.3
23-Nov 12:26:33	0.72	Saturnus	Verduistering.Einde	Enceladus	0.36	12.03	-7.3	17.6	94.9	173.7
23-Nov 17:10:47	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.69	28.1	-13	97.1	176.5
23-Nov 17:26:33	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.98	29	-15.4	97.2	176.7
23-Nov 19:25:24	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.73	29.3	-34.1	98.1	177.9
23-Nov 19:48:28	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	11.26	28.1	-37.6	98.3	178.1
24-Nov 0:46:39	7.9	Rhea	Overgang.Begin	Saturnus	-0.08	8.1	-10.2	-55.8	100.6	178.8

24-Nov	1:20:57	3.41	Rhea	Schaduwovergang.Begin	Saturnus	-0.16	7.43	-15.3	-52.5	100.8	178.6
24-Nov	1:49:10	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.69	-19.5	-49.2	101	178.4
24-Nov	2:11:48	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.46	-23	-46.2	101.2	178.3
24-Nov	2:18:06	7.9	Rhea	Overgang.Einde	Saturnus	-0.08	8.1	-24.5	-44.8	101.3	178.2
24-Nov	4:01:46	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	8.7	-38.4	-29.4	102	177.5
24-Nov	4:16:43	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.71	-40	-27.2	102.2	177.4
24-Nov	4:27:14	2.44	Dione	Overgang.Begin	Saturnus	-0.04	8.5	-41.2	-25.4	102.2	177.3
24-Nov	4:40:19	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.71	-42.4	-23.5	102.3	177.3
24-Nov	4:48:58	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.97	-43.3	-22.1	102.4	177.2
24-Nov	4:51:48	3.41	Rhea	Schaduwovergang.Einde	Saturnus	0.85	16.29	-43.6	-21.4	102.4	177.2
24-Nov	5:05:48	1.99	Dione	Schaduwovergang.Begin	Saturnus	-0.31	6.11	-44.7	-19.3	102.5	177.1
24-Nov	7:04:56	2.43	Dione	Overgang.Einde	Saturnus	-0.04	8.5	-47.1	-1.8	103.4	176.3
24-Nov	7:13:06	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.17	-46.8	-0.8	103.5	176.3
24-Nov	7:29:56	1.64	Saturnus	Verduistering.Einde	Tethys	0.46	12.84	-45.9	1.5	103.6	176.2
24-Nov	8:18:10	1.99	Dione	Schaduwovergang.Einde	Saturnus	0.6	14.09	-42	7.2	104	175.9
24-Nov	15:47:54	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.68	21.4	-1.2	107.4	172.3
24-Nov	16:03:44	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.96	23.1	-3.4	107.5	172.1
24-Nov	18:02:35	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.72	30.3	-21.1	108.4	171
24-Nov	18:18:07	0.77	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.7	30.5	-23.6	108.5	170.8
24-Nov	18:25:40	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.24	30.5	-24.8	108.6	170.7
24-Nov	21:20:05	0.71	Saturnus	Verduistering.Einde	Enceladus	0.36	12.02	19.5	-50.8	109.9	169
25-Nov	2:41:05	1.77	Tethys	Overgang.Begin	Saturnus	-0.02	8.67	-28.1	-42.1	112.3	166.2
25-Nov	3:13:12	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.33	5.88	-32.6	-37.2	112.5	165.9
25-Nov	3:17:38	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.7	-33.1	-36.6	112.6	165.9
25-Nov	5:23:34	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	8.67	-46.1	-16.8	113.5	165
25-Nov	5:50:34	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.16	-47.3	-12.8	113.7	164.9
25-Nov	6:08:48	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.45	12.8	-47.8	-10	113.9	164.8
25-Nov	10:42:32	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.67	-22.4	17.6	115.9	163
25-Nov	11:05:19	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.43	-18.9	18.1	116.1	162.9
25-Nov	13:10:09	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.69	0.8	14.9	117	161.9
25-Nov	13:22:13	2.42	Saturnus	Bedekking.Begin	Dione	-0.04	8.49	2.7	14	117.1	161.8
25-Nov	13:42:30	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.95	5.6	12.5	117.2	161.7
25-Nov	14:25:00	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.67	11.7	8.6	117.6	161.3



25-Nov 14:40:54	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.94	13.8	6.9	117.7	161.2
25-Nov 16:39:46	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.7	26.6	-8.6	118.6	160.1
25-Nov 17:02:53	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.23	28.1	-12	118.7	159.8
25-Nov 17:13:32	1.98	Saturnus	Verduistering.Einde	Dione	0.6	14.09	28.8	-13.7	118.8	159.7
26-Nov 1:20:34	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	8.67	-16.3	-53.1	122.5	155
26-Nov 1:54:58	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.68	-21.6	-48.9	122.7	154.7
26-Nov 3:11:26	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.68	-32.8	-37.8	123.3	154.1
26-Nov 4:28:02	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.15	-42	-25.8	123.9	153.5
26-Nov 4:49:03	1.64	Saturnus	Verduistering.Einde	Tethys	0.46	12.82	-44	-22.4	124	153.4
26-Nov 6:13:35	0.71	Saturnus	Verduistering.Einde	Enceladus	0.36	12	-47.9	-9.5	124.7	152.8
26-Nov 6:58:05	7.58	Saturnus	Bedekking.Begin	Rhea	-0.08	8.08	-47	-2.7	125	152.5
26-Nov 11:06:04	3.39	Saturnus	Verduistering.Einde	Rhea	0.85	16.3	-17.9	18	126.9	151
26-Nov 13:02:07	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.65	0.1	15.3	127.7	150.2
26-Nov 13:18:04	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.92	2.5	14.3	127.8	150.1
26-Nov 15:16:57	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.69	18.9	2.5	128.7	149.1
26-Nov 15:40:06	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.22	21.5	-0.4	128.9	148.9
26-Nov 19:35:59	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.65	28.1	-36	130.7	146.6
26-Nov 19:58:53	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.4	26.6	-39.5	130.8	146.4
26-Nov 22:03:41	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.67	13.1	-55.9	131.8	145.1
26-Nov 22:08:53	2.43	Dione	Overgang.Begin	Saturnus	-0.04	8.46	12.2	-56.5	131.8	145.1
26-Nov 22:36:07	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.93	8.6	-58.5	132	144.8
26-Nov 22:48:02	1.98	Dione	Schaduwovergang.Begin	Saturnus	-0.31	6.05	6.7	-59.3	132.1	144.7
26-Nov 23:59:55	1.77	Tethys	Overgang.Begin	Saturnus	-0.02	8.64	-4.2	-59.8	132.6	144
27-Nov 0:32:16	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.33	5.84	-9.3	-57.9	132.9	143.7
27-Nov 0:32:17	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.67	-9.2	-58	132.9	143.7
27-Nov 0:47:10	2.43	Dione	Overgang.Einde	Saturnus	-0.04	8.47	-11.7	-56.7	133	143.5
27-Nov 2:00:41	1.98	Dione	Schaduwovergang.Einde	Saturnus	0.6	14.06	-23.2	-48.2	133.5	142.9
27-Nov 2:42:31	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	8.64	-29.4	-42.2	133.9	142.5
27-Nov 3:05:29	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.14	-32.5	-38.9	134	142.3
27-Nov 3:27:55	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.45	12.77	-35.6	-35.3	134.2	142.1
27-Nov 11:39:15	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.64	-12.3	17.9	137.9	138.9
27-Nov 11:55:15	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.9	-9.8	17.7	138	138.8
27-Nov 12:04:49	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.66	-8.2	17.5	138.1	138.8

27-Nov 13:54:09	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.68	8.5	11.3	138.9	138
27-Nov 14:17:18	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.2	11.7	9.1	139.1	137.8
27-Nov 15:07:07	0.71	Saturnus	Verduistering.Einde	Enceladus	0.37	11.98	18.2	3.6	139.4	137.4
27-Nov 22:39:31	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	8.64	7.4	-58.9	142.8	133
27-Nov 23:09:37	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.66	3.1	-60.3	143.1	132.7
28-Nov 1:42:57	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.12	-20.9	-50.8	144.2	131.2
28-Nov 2:08:17	1.64	Saturnus	Verduistering.Einde	Tethys	0.46	12.8	-24.9	-47.4	144.4	131
28-Nov 4:29:24	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.63	-42.8	-25.9	145.5	129.8
28-Nov 4:52:24	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.37	-44.8	-22.3	145.6	129.6
28-Nov 6:57:10	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.65	-46.8	-3.7	146.6	128.7
28-Nov 7:03:51	2.41	Saturnus	Bedekking.Begin	Dione	-0.04	8.45	-46.4	-2.7	146.6	128.7
28-Nov 7:29:40	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.91	-44.9	0.6	146.8	128.5
28-Nov 10:16:23	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.63	-24.6	16	148.1	127.5
28-Nov 10:32:26	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.89	-22.1	16.7	148.2	127.4
28-Nov 10:55:59	1.98	Saturnus	Verduistering.Einde	Dione	0.6	14.05	-18.4	17.4	148.4	127.3
28-Nov 12:31:22	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.67	-3.4	16.5	149.1	126.7
28-Nov 12:54:31	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.19	0.1	15.4	149.3	126.5
28-Nov 13:11:32	7.49	Rhea	Overgang.Begin	Saturnus	-0.08	8.05	3.3	14.2	149.4	126.4
28-Nov 13:48:31	3.38	Rhea	Schaduwovergang.Begin	Saturnus	-0.17	7.3	8.4	11.5	149.7	126.1
28-Nov 14:47:54	7.49	Rhea	Overgang.Einde	Saturnus	-0.08	8.06	16.7	5.3	150.2	125.7
28-Nov 17:20:41	3.39	Rhea	Schaduwovergang.Einde	Saturnus	0.86	16.25	29.7	-15.2	151.3	124.4
28-Nov 18:35:49	25.74	Saturnus	Verduistering.Begin	Titan	1.05	17.95	30	-28.7	152	123.6
28-Nov 20:58:11	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.64	20.2	-48.3	152.9	122.3
28-Nov 21:18:48	1.77	Tethys	Overgang.Begin	Saturnus	-0.02	8.61	17.8	-51.1	153.1	122
28-Nov 21:46:57	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.64	14.3	-54.4	153.3	121.8
28-Nov 21:51:21	1.64	Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.8	13.6	-54.9	153.3	121.7
28-Nov 22:00:47	25.72	Saturnus	Verduistering.Einde	Titan	1.88	25.2	10.7	-57	153.5	121.5
29-Nov 0:00:39	0.71	Saturnus	Verduistering.Einde	Enceladus	0.37	11.96	-5.4	-60.1	154.3	120.4
29-Nov 0:01:32	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	8.61	-5.6	-60.1	154.3	120.3
29-Nov 0:20:25	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.11	-8.5	-59.1	154.5	120.2
29-Nov 0:47:02	1.64	Tethys	Schaduwovergang.Einde	Saturnus	0.46	12.75	-12.8	-57.1	154.7	119.9
29-Nov 8:53:31	0.56	Mimas	Overgang.Begin	Saturnus	-0.02	8.61	-35.7	9.8	158.3	115.9
29-Nov 9:09:37	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.87	-33.6	11.2	158.5	115.8

29-Nov 11:08:35	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	8.65	-15.9	17.4	159.4	115.1
29-Nov 11:31:44	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.17	-12.2	17.6	159.5	115
29-Nov 13:22:49	0.76 Enceladus	Overgang.Begin	Saturnus	-0.02	8.61	5	13.5	160.4	114.3
29-Nov 13:45:55	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.35	8.4	11.7	160.5	114.1
29-Nov 15:50:41	0.76 Enceladus	Overgang.Einde	Saturnus	-0.01	8.63	23.7	-2.1	161.5	113.2
29-Nov 15:50:43	2.42 Dione	Overgang.Begin	Saturnus	-0.04	8.43	23.8	-2.3	161.5	113.2
29-Nov 16:23:14	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.89	26.5	-6.6	161.7	112.9
29-Nov 16:30:22	1.98 Dione	Schaduwovergang.Begin	Saturnus	-0.32	5.98	27.1	-7.7	161.8	112.9
29-Nov 18:29:40	2.42 Dione	Overgang.Einde	Saturnus	-0.04	8.43	30.3	-25.9	162.7	111.8
29-Nov 19:43:18	1.98 Dione	Schaduwovergang.Einde	Saturnus	0.6	14.01	26.9	-37.5	163.2	111.1
29-Nov 19:58:24	1.77 Saturnus	Bedekking.Begin	Tethys	-0.01	8.62	25.7	-39.8	163.3	110.9
29-Nov 20:24:17	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.63	23.4	-43.6	163.5	110.7
29-Nov 22:57:52	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	11.09	3.7	-60.2	164.7	109.1
29-Nov 23:27:25	1.64 Saturnus	Verduistering.Einde	Tethys	0.46	12.77	-0.9	-60.9	164.9	108.7
30-Nov 5:51:35	0.76 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.62	-47.8	-13.5	167.7	105
30-Nov 7:30:39	0.56 Mimas	Overgang.Begin	Saturnus	-0.02	8.6	-44.2	0.3	168.4	104.3
30-Nov 7:46:48	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.85	-42.8	2.3	168.5	104.2
30-Nov 8:54:11	0.71 Saturnus	Verduistering.Einde	Enceladus	0.37	11.94	-35.1	9.7	169	103.7
30-Nov 9:45:48	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	8.64	-28	13.8	169.4	103.4
30-Nov 10:08:57	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.16	-24.5	15.2	169.6	103.2
30-Nov 18:37:44	1.77 Tethys	Overgang.Begin	Saturnus	-0.02	8.59	30.1	-27.2	172.9	99.6
30-Nov 19:01:37	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.62	29.2	-30.9	173.1	99.4
30-Nov 19:10:26	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.77	28.7	-32.4	173.1	99.3
30-Nov 19:23:07	7.18 Saturnus	Bedekking.Begin	Rhea	-0.08	8.03	27.8	-34.8	173.2	99.1
30-Nov 21:20:37	1.77 Tethys	Overgang.Einde	Saturnus	-0.02	8.58	16.6	-51.5	173.9	98
30-Nov 21:35:20	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	11.08	14.8	-53.3	173.9	97.8
30-Nov 22:06:11	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.46	12.71	10.6	-56.7	174.1	97.5
30-Nov 22:16:15	0.76 Enceladus	Overgang.Begin	Saturnus	-0.02	8.59	9.2	-57.5	174.1	97.4
30-Nov 22:39:26	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.32	5.9	-59.3	174.2	97.1
30-Nov 23:35:04	3.36 Saturnus	Verduistering.Einde	Rhea	0.86	16.23	-2.8	-61	174.5	96.5
01-Dec 0:44:13	0.76 Enceladus	Overgang.Einde	Saturnus	-0.01	8.61	-13.5	-57.7	174.8	95.8
01-Dec 0:45:36	2.4 Saturnus	Bedekking.Begin	Dione	-0.03	8.42	-13.9	-57.5	174.8	95.8
01-Dec 1:16:47	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.87	-18.6	-54.5	174.9	95.4

01-Dec	4:38:30	1.97	Saturnus	Verduistering.Einde	Dione	0.61	14	-44.6	-24.9	175.4	93.4
01-Dec	6:07:48	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	8.59	-47.8	-11.3	175.4	92.6
01-Dec	6:23:59	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.83	-47.5	-9	175.4	92.5
01-Dec	8:23:02	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.63	-38.5	6.3	175.3	91.6
01-Dec	8:46:10	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.14	-35.7	8.7	175.2	91.4
01-Dec	14:45:00	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.6	17.4	5.7	173.8	89.1
01-Dec	17:17:20	1.77	Saturnus	Bedekking.Begin	Tethys	-0.01	8.59	30	-14.8	172.9	88
01-Dec	17:38:57	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.6	30.4	-18	172.8	87.8
01-Dec	17:47:44	0.71	Saturnus	Verduistering.Einde	Enceladus	0.37	11.91	30.6	-19.3	172.7	87.7
01-Dec	20:12:48	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.06	23.8	-42	171.8	86.4
01-Dec	20:46:33	1.63	Saturnus	Verduistering.Einde	Tethys	0.46	12.73	20.2	-47	171.5	86
02-Dec	4:44:57	0.56	Mimas	Overgang.Begin	Saturnus	-0.01	8.57	-45.3	-24.2	168.1	80.9
02-Dec	5:01:10	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.82	-46.3	-21.6	168	80.8
02-Dec	7:00:17	0.56	Mimas	Overgang.Einde	Saturnus	-0.01	8.61	-45.8	-4	167.1	79.7
02-Dec	7:09:45	0.76	Enceladus	Overgang.Begin	Saturnus	-0.02	8.57	-45.1	-2.7	167	79.6
02-Dec	7:23:24	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.12	-44.1	-1	166.9	79.5
02-Dec	7:33:00	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.3	-43.3	0.3	166.9	79.4
02-Dec	9:32:39	2.4	Dione	Overgang.Begin	Saturnus	-0.04	8.39	-28.6	12.6	165.9	78.5
02-Dec	9:37:48	0.76	Enceladus	Overgang.Einde	Saturnus	-0.01	8.59	-28	12.9	165.9	78.5
02-Dec	10:10:23	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.84	-23.1	15	165.7	78.3
02-Dec	10:12:44	1.98	Dione	Schaduwovergang.Begin	Saturnus	-0.32	5.92	-22.7	15.1	165.6	78.2
02-Dec	12:12:23	2.4	Dione	Overgang.Einde	Saturnus	-0.03	8.4	-3.8	16.6	164.7	77.5
02-Dec	13:25:58	1.98	Dione	Schaduwovergang.Einde	Saturnus	0.61	13.96	7.3	12.9	164.1	77
02-Dec	15:56:38	1.77	Tethys	Overgang.Begin	Saturnus	-0.02	8.56	25.4	-3.2	163	76
02-Dec	16:16:18	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.59	26.9	-5.8	162.8	75.9
02-Dec	16:29:29	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.74	27.8	-7.8	162.7	75.8
02-Dec	18:39:42	1.77	Tethys	Overgang.Einde	Saturnus	-0.02	8.56	29.8	-27.6	161.7	74.7
02-Dec	18:50:15	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	11.04	29.4	-29.2	161.6	74.6
02-Dec	19:25:18	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.46	12.68	27.4	-34.8	161.3	74.3
02-Dec	23:38:24	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.58	-4.3	-61.3	159.3	71.7
03-Dec	1:36:28	7.06	Rhea	Overgang.Begin	Saturnus	-0.08	8.01	-23.3	-52.1	158.3	70.4
03-Dec	2:16:07	3.36	Rhea	Schaduwovergang.Begin	Saturnus	-0.18	7.15	-29	-47	158	69.9
03-Dec	2:41:15	0.71	Saturnus	Verduistering.Einde	Enceladus	0.37	11.89	-32.3	-43.6	157.8	69.7

03-Dec	3:18:46	7.06 Rhea	Overgang.Einde	Saturnus	-0.08	8.01	-37.6	-37.4	157.5	69.2
03-Dec	3:22:06	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	8.56	-37.6	-37.4	157.5	69.2
03-Dec	3:38:21	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.8	-39.5	-34.8	157.4	69
03-Dec	5:37:31	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	8.6	-47.7	-16.2	156.4	67.8
03-Dec	5:49:38	3.37 Rhea	Schaduwovergang.Einde	Saturnus	0.86	16.16	-47.8	-14.1	156.3	67.7
03-Dec	6:00:37	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.11	-47.8	-12.7	156.2	67.6
03-Dec	14:36:19	1.77 Saturnus	Bedekking.Begin	Tethys	-0.01	8.56	17.3	6.4	152.1	63.8
03-Dec	14:53:38	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.58	19.3	4.6	151.9	63.6
03-Dec	16:03:12	0.75 Enceladus	Overgang.Begin	Saturnus	-0.01	8.55	26.2	-4.1	151.3	63.2
03-Dec	16:26:31	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.28	27.9	-7.3	151.2	63
03-Dec	17:27:43	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	11.03	30.4	-16.3	150.7	62.6
03-Dec	18:05:44	1.63 Saturnus	Verduistering.Einde	Tethys	0.46	12.69	30.5	-22.3	150.3	62.3
03-Dec	18:27:27	2.38 Saturnus	Bedekking.Begin	Dione	-0.03	8.38	30.1	-25.8	150.2	62.1
03-Dec	18:31:22	0.75 Enceladus	Overgang.Einde	Saturnus	-0.01	8.57	30	-26.3	150.1	62.1
03-Dec	19:03:56	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.82	28.5	-31.4	149.9	61.8
03-Dec	22:21:00	1.97 Saturnus	Verduistering.Einde	Dione	0.61	13.94	6.8	-58.3	148.2	59.9
04-Dec	1:59:16	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	8.55	-26.8	-49.7	146.5	57.4
04-Dec	2:15:32	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.79	-29.2	-47.5	146.3	57.3
04-Dec	4:14:47	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	8.59	-43.5	-29.3	145.3	55.9
04-Dec	4:37:50	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.09	-45.3	-25.6	145.1	55.7
04-Dec	8:31:50	0.76 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.56	-36	6.8	143.2	53.4
04-Dec	11:34:47	0.71 Saturnus	Verduistering.Einde	Enceladus	0.37	11.86	-8.7	16.9	141.7	52
04-Dec	13:15:41	1.77 Tethys	Overgang.Begin	Saturnus	-0.02	8.53	6.9	13.4	140.8	51.3
04-Dec	13:30:59	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.56	9.1	12.3	140.7	51.2
04-Dec	13:48:38	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.7	11.6	10.9	140.6	51.1
04-Dec	15:58:56	1.77 Tethys	Overgang.Einde	Saturnus	-0.02	8.53	26.2	-3.6	139.5	50.2
04-Dec	16:05:10	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	11.01	26.7	-4.4	139.4	50.2
04-Dec	16:44:29	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.46	12.64	29.1	-10	139.1	49.9
05-Dec	0:36:26	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	8.54	-14.6	-59	135.1	45.5
05-Dec	0:52:43	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.77	-17.2	-57.6	135	45.3
05-Dec	0:56:41	0.75 Enceladus	Overgang.Begin	Saturnus	-0.01	8.53	-17.8	-57.3	135	45.3
05-Dec	1:20:02	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.26	-21.5	-54.8	134.8	45
05-Dec	2:52:02	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	8.58	-34.8	-42.3	134	43.9

05-Dec	3:14:28	2.39 Dione	Overgang.Begin	Saturnus	-0.03	8.36	-37.7	-38.7	133.8	43.7
05-Dec	3:15:03	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.07	-37.6	-38.8	133.8	43.7
05-Dec	3:24:57	0.75 Enceladus	Overgang.Einde	Saturnus	-0.01	8.55	-38.8	-37.2	133.7	43.6
05-Dec	3:54:56	1.98 Dione	Schaduwovergang.Begin	Saturnus	-0.32	5.86	-42.1	-32.4	133.5	43.2
05-Dec	3:57:30	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.79	-42.3	-32.1	133.4	43.2
05-Dec	5:55:06	2.39 Dione	Overgang.Einde	Saturnus	-0.03	8.36	-47.7	-13.7	132.4	41.9
05-Dec	7:08:27	1.98 Dione	Schaduwovergang.Einde	Saturnus	0.61	13.9	-44.3	-3.3	131.8	41.1
05-Dec	7:47:58	6.75 Saturnus	Bedekking.Begin	Rhea	-0.08	7.99	-40.3	2	131.5	40.7
05-Dec	11:55:17	1.76 Saturnus	Bedekking.Begin	Tethys	-0.01	8.54	-4.7	16.6	129.4	38.6
05-Dec	12:03:47	3.34 Saturnus	Verduistering.Einde	Rhea	0.86	16.12	-3.3	16.4	129.3	38.6
05-Dec	12:08:20	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.55	-2.8	16.3	129.3	38.6
05-Dec	14:42:38	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	10.99	19	5.7	128	37.5
05-Dec	15:24:50	1.63 Saturnus	Verduistering.Einde	Tethys	0.46	12.65	23.6	0.7	127.6	37.2
05-Dec	17:25:16	0.76 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.54	30.5	-16	126.6	36.4
05-Dec	20:28:18	0.71 Saturnus	Verduistering.Einde	Enceladus	0.37	11.83	20.7	-44.5	125	34.9
05-Dec	23:13:36	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	8.52	-2.2	-61.5	123.6	33.3
05-Dec	23:29:55	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.76	-4.7	-61.7	123.5	33.1
06-Dec	1:29:18	0.56 Mimas	Overgang.Einde	Saturnus	-0.01	8.56	-23.4	-53.9	122.5	31.8
06-Dec	1:52:16	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.05	-26.9	-51	122.3	31.5
06-Dec	9:50:10	0.75 Enceladus	Overgang.Begin	Saturnus	-0.01	8.51	-23.8	13.2	118.1	26.3
06-Dec	10:13:33	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.24	-20.2	14.5	117.9	26.1
06-Dec	10:34:42	1.76 Tethys	Overgang.Begin	Saturnus	-0.02	8.51	-16.8	15.5	117.8	25.9
06-Dec	10:45:41	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.54	-15.2	15.9	117.7	25.9
06-Dec	11:07:44	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.68	-11.6	16.4	117.5	25.7
06-Dec	12:09:27	2.37 Saturnus	Bedekking.Begin	Dione	-0.03	8.35	-1.9	16.2	116.9	25.2
06-Dec	12:18:34	0.75 Enceladus	Overgang.Einde	Saturnus	-0.01	8.53	-0.6	15.9	116.9	25.1
06-Dec	12:51:03	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.76	4.4	14.6	116.6	24.9
06-Dec	13:18:10	1.76 Tethys	Overgang.Einde	Saturnus	-0.02	8.5	8.4	13	116.3	24.7
06-Dec	13:20:05	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	10.97	8.6	12.9	116.3	24.6
06-Dec	14:03:38	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.46	12.59	14.7	9.5	115.9	24.3
06-Dec	16:03:35	1.97 Saturnus	Verduistering.Einde	Dione	0.61	13.87	27.2	-4.4	114.9	23.5
06-Dec	18:29:14	27.43 Titan	Schaduwovergang.Begin	Saturnus	1.17	18.71	29.1	-28.1	113.5	22.3
06-Dec	21:50:46	0.56 Mimas	Overgang.Begin	Saturnus	-0.01	8.51	9.7	-55.5	111.9	20.7

06-Dec 22:02:57	27.68 Titan	Schaduwovergang.Einde	Saturnus	2	25.88	6	-58.1	111.7	20.5
06-Dec 22:07:06	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.74	7.3	-57.2	111.8	20.6
07-Dec 0:06:35	0.55 Mimas	Overgang.Einde	Saturnus	-0.01	8.55	-11.1	-61.1	110.7	19.4
07-Dec 0:29:30	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.03	-14.7	-59.8	110.5	19.1
07-Dec 2:18:46	0.76 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.52	-31.3	-47.5	109.6	17.9
07-Dec 5:21:52	0.71 Saturnus	Verduistering.Einde	Enceladus	0.37	11.8	-47.6	-19.2	108	15.8
07-Dec 9:14:18	1.76 Saturnus	Bedekking.Begin	Tethys	-0.01	8.51	-28.5	10.4	105.9	13.2
07-Dec 9:23:02	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.53	-27.3	11.1	105.8	13.1
07-Dec 11:57:32	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	10.95	-3.3	16.3	104.5	11.7
07-Dec 12:43:58	1.63 Saturnus	Verduistering.Einde	Tethys	0.46	12.6	4	14.9	104.1	11.3
07-Dec 14:01:27	6.61 Rhea	Overgang.Begin	Saturnus	-0.08	7.97	15.2	9.4	103.4	10.7
07-Dec 14:43:41	3.34 Rhea	Schaduwovergang.Begin	Saturnus	-0.19	6.99	20.2	5.3	103	10.4
07-Dec 15:50:39	6.61 Rhea	Overgang.Einde	Saturnus	-0.08	7.97	26.7	-3	102.4	9.9
07-Dec 18:18:27	3.35 Rhea	Schaduwovergang.Einde	Saturnus	0.86	16.03	29.9	-24.5	101.1	8.8
07-Dec 18:43:39	0.75 Enceladus	Overgang.Begin	Saturnus	-0.01	8.49	28.9	-28.3	100.9	8.6
07-Dec 19:07:04	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.22	27.4	-32	100.7	8.5
07-Dec 20:27:57	0.55 Mimas	Overgang.Begin	Saturnus	-0.01	8.5	19.9	-44.5	100	7.8
07-Dec 20:44:18	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.73	18	-46.8	99.8	7.7
07-Dec 20:56:25	2.38 Dione	Overgang.Begin	Saturnus	-0.03	8.32	16.4	-48.7	99.7	7.6
07-Dec 21:12:11	0.75 Enceladus	Overgang.Einde	Saturnus	-0.01	8.51	14.4	-50.7	99.6	7.4
07-Dec 21:37:10	1.97 Dione	Schaduwovergang.Begin	Saturnus	-0.33	5.8	11	-54	99.4	7.2
07-Dec 21:44:36	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.73	10	-54.8	99.3	7.2
07-Dec 22:43:52	0.55 Mimas	Overgang.Einde	Saturnus	-0.01	8.54	1.3	-60.3	98.8	6.6
07-Dec 23:06:43	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	11.01	-2.2	-61.4	98.6	6.4
07-Dec 23:38:01	2.38 Dione	Overgang.Einde	Saturnus	-0.03	8.33	-7.3	-61.9	98.3	6.1
08-Dec 0:50:57	1.97 Dione	Schaduwovergang.Einde	Saturnus	0.6	13.82	-18.8	-58.2	97.7	5.3
08-Dec 7:53:44	1.76 Tethys	Overgang.Begin	Saturnus	-0.02	8.48	-38.7	2	93.9	0.7
08-Dec 8:00:23	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.51	-37.9	2.7	93.8	0.6
08-Dec 8:26:48	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.65	-34.6	5.7	93.6	0.5
08-Dec 10:34:59	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	10.93	-15.7	15.3	92.5	1.4
08-Dec 10:37:26	1.76 Tethys	Overgang.Einde	Saturnus	-0.02	8.48	-15.2	15.4	92.4	1.5
08-Dec 11:12:13	0.76 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.5	-9.8	16.2	92.1	1.8
08-Dec 11:22:46	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.46	12.55	-8	16.4	92	1.9

08-Dec 14:15:24	0.71	Saturnus	Verduistering.Einde	Enceladus	0.37	11.77	17.1	8.3	90.5	3.4
08-Dec 19:05:09	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	8.48	27.3	-31.7	87.9	5.5
08-Dec 19:21:30	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.72	26.1	-34.2	87.7	5.6
08-Dec 21:21:09	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	8.53	12.8	-51.9	86.7	6.6
08-Dec 21:43:56	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	10.99	9.6	-54.7	86.5	6.7
09-Dec 3:37:10	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	8.48	-41.7	-35.9	83.3	10.3
09-Dec 4:00:35	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.2	-43.8	-32.2	83.1	10.6
09-Dec 5:51:37	2.36	Saturnus	Bedekking.Begin	Dione	-0.03	8.32	-47.4	-14.8	82.1	11.9
09-Dec 6:05:50	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	8.49	-47	-12.8	81.9	12.1
09-Dec 6:33:20	1.76	Saturnus	Bedekking.Begin	Tethys	-0.01	8.49	-45.6	-8.8	81.7	12.4
09-Dec 6:37:44	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.5	-45.4	-8.2	81.6	12.5
09-Dec 6:38:10	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.69	-45.4	-8.2	81.6	12.5
09-Dec 9:12:26	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	10.91	-27.7	9.9	80.2	14.3
09-Dec 9:46:18	1.96	Saturnus	Verduistering.Einde	Dione	0.6	13.79	-22.5	12.6	79.9	14.7
09-Dec 10:03:05	1.63	Saturnus	Verduistering.Einde	Tethys	0.46	12.55	-20	13.6	79.8	14.9
09-Dec 17:42:20	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	8.47	30.6	-18.7	75.6	19.1
09-Dec 17:58:42	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.71	30.3	-21.2	75.5	19.2
09-Dec 19:58:27	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	8.51	22.3	-40	74.4	20.1
09-Dec 20:05:42	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.48	21.6	-41.1	74.3	20.1
09-Dec 20:13:23	6.33	Saturnus	Bedekking.Begin	Rhea	-0.07	7.95	20.4	-42.7	74.2	20.2
09-Dec 20:21:10	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.28	10.96	19.8	-43.5	74.2	20.3
09-Dec 23:08:56	0.71	Saturnus	Verduistering.Einde	Enceladus	0.37	11.73	-3.8	-61.7	72.6	21.6
10-Dec 0:32:53	3.32	Saturnus	Verduistering.Einde	Rhea	0.86	15.97	-17.2	-59.9	71.8	22.4
10-Dec 5:12:54	1.76	Tethys	Overgang.Begin	Saturnus	-0.02	8.46	-47.6	-20.9	69.3	25.5
10-Dec 5:15:06	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.49	-47.6	-20.7	69.3	25.5
10-Dec 5:45:59	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.63	-47.5	-15.9	69	25.9
10-Dec 7:49:53	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	10.89	-38.3	1.2	67.8	27.4
10-Dec 7:56:51	1.76	Tethys	Overgang.Einde	Saturnus	-0.02	8.45	-37.4	2.1	67.8	27.5
10-Dec 8:42:00	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.46	12.49	-31.5	7	67.4	28
10-Dec 12:30:41	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	8.46	3.6	15.2	65.3	30.6
10-Dec 12:54:06	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.19	7.1	14.2	65	30.9
10-Dec 14:38:24	2.36	Dione	Overgang.Begin	Saturnus	-0.03	8.29	20.8	5.8	64.1	31.9
10-Dec 14:59:30	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	8.47	23	3.6	63.9	32.1



10-Dec 15:19:21	1.97 Dione	Schaduwovergang.Begin	Saturnus	-0.33	5.74	24.9	1.2	63.7	32.3
10-Dec 15:31:44	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.66	25.9	-0.2	63.6	32.4
10-Dec 16:19:32	0.55 Mimas	Overgang.Begin	Saturnus	-0.01	8.46	29.1	-6.5	63.2	32.8
10-Dec 16:35:54	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.69	29.8	-8.8	63	32.9
10-Dec 17:21:04	2.36 Dione	Overgang.Einde	Saturnus	-0.03	8.3	30.7	-15.6	62.6	33.3
10-Dec 18:33:24	1.97 Dione	Schaduwovergang.Einde	Saturnus	0.6	13.74	28.8	-26.8	61.9	33.9
10-Dec 18:35:45	0.55 Mimas	Overgang.Einde	Saturnus	-0.01	8.5	28.7	-27	61.9	33.9
10-Dec 18:58:24	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	10.94	27.3	-30.6	61.7	34.1
10-Dec 23:09:55	5.52 Enceladus	ÉC(A)	Tethys	2.64	2.02	-4.9	-61.9	59.3	36.1
11-Dec 3:52:24	1.76 Saturnus	Bedekking.Begin	Tethys	-0.01	8.46	-43.8	-33.7	56.7	38.8
11-Dec 3:52:27	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.48	-43.8	-33.8	56.7	38.8
11-Dec 4:59:10	0.76 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.46	-47.4	-23.3	56.1	39.6
11-Dec 6:27:20	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	10.87	-45.5	-10	55.3	40.6
11-Dec 7:22:12	1.63 Saturnus	Verduistering.Einde	Tethys	0.46	12.5	-40.8	-2.4	54.8	41.3
11-Dec 8:02:27	0.71 Saturnus	Verduistering.Einde	Enceladus	0.37	11.7	-36.2	2.5	54.4	41.8
11-Dec 14:56:45	0.55 Mimas	Overgang.Begin	Saturnus	-0.01	8.45	23.1	3.9	50.6	46.6
11-Dec 15:13:06	0.53 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.68	24.7	2	50.4	46.7
11-Dec 17:13:04	0.55 Mimas	Overgang.Einde	Saturnus	-0.01	8.49	30.7	-14.2	49.3	47.8
11-Dec 17:35:38	0.53 Mimas	Schaduwovergang.Einde	Saturnus	0.28	10.92	30.7	-17.6	49.1	48
11-Dec 21:24:16	0.75 Enceladus	Overgang.Begin	Saturnus	-0.01	8.44	10.8	-52.4	47	49.8
11-Dec 21:47:41	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.17	7.5	-55.3	46.7	50
11-Dec 23:33:42	2.34 Saturnus	Bedekking.Begin	Dione	-0.03	8.29	-8.9	-62.3	45.8	50.8
11-Dec 23:53:14	0.75 Enceladus	Overgang.Einde	Saturnus	-0.01	8.46	-11.9	-62.1	45.6	51
12-Dec 0:25:21	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.62	-17	-60.7	45.3	51.3
12-Dec 2:26:28	6.19 Rhea	Overgang.Begin	Saturnus	-0.07	7.93	-35.1	-46.6	44.1	52.4
12-Dec 2:29:49	0.54 Saturnus	Bedekking.Begin	Mimas	-0.01	8.46	-35.2	-46.6	44.1	52.4
12-Dec 2:31:58	1.76 Tethys	Overgang.Begin	Saturnus	-0.01	8.43	-35.6	-46.2	44.1	52.4
12-Dec 3:05:02	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.61	-39.5	-41.2	43.8	52.8
12-Dec 3:11:05	3.32 Rhea	Schaduwovergang.Begin	Saturnus	-0.2	6.82	-40.3	-40.2	43.7	52.8
12-Dec 3:28:50	1.96 Saturnus	Verduistering.Einde	Dione	0.6	13.7	-42	-37.5	43.6	53
12-Dec 4:23:10	6.19 Rhea	Overgang.Einde	Saturnus	-0.07	7.94	-46.3	-28.6	43	53.6
12-Dec 5:04:47	0.51 Saturnus	Verduistering.Einde	Mimas	0.27	10.84	-47.5	-22.5	42.7	54.1
12-Dec 5:16:11	1.76 Tethys	Overgang.Einde	Saturnus	-0.01	8.43	-47.6	-20.7	42.6	54.2

12-Dec 6:01:06	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.45	12.44	-46.7	-13.9	42.1	54.7
12-Dec 6:47:06	3.33	Rhea	Schaduwovergang.Einde	Saturnus	0.85	15.85	-43.7	-7.1	41.7	55.3
12-Dec 13:33:58	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	8.44	13.8	11.6	37.9	60.2
12-Dec 13:50:19	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.67	15.9	10.4	37.8	60.4
12-Dec 13:52:40	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.45	16.2	10.2	37.8	60.5
12-Dec 15:50:24	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	8.48	27.9	-2.6	36.7	61.7
12-Dec 16:12:51	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.9	29.2	-5.6	36.5	61.9
12-Dec 16:55:58	0.71	Saturnus	Verduistering.Einde	Enceladus	0.36	11.66	30.6	-11.7	36.1	62.3
13-Dec 1:07:10	0.54	Saturnus	Bedekking.Begin	Mimas	-0.01	8.45	-24	-57.3	31.5	66.3
13-Dec 1:11:32	1.75	Saturnus	Bedekking.Begin	Tethys	-0.01	8.44	-24.8	-56.7	31.4	66.3
13-Dec 3:42:14	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	10.82	-43.5	-35.7	30.1	67.7
13-Dec 4:41:21	1.63	Saturnus	Verduistering.Einde	Tethys	0.46	12.44	-47.1	-26.3	29.5	68.3
13-Dec 6:17:48	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	8.42	-45.6	-11.6	28.6	69.4
13-Dec 6:41:12	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.16	-44	-8.2	28.4	69.7
13-Dec 8:20:33	2.34	Dione	Overgang.Begin	Saturnus	-0.03	8.26	-32.8	4.4	27.5	70.9
13-Dec 8:46:56	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	8.44	-29.2	7.1	27.2	71.2
13-Dec 9:01:38	1.97	Dione	Schaduwovergang.Begin	Saturnus	-0.33	5.69	-26.9	8.6	27.1	71.4
13-Dec 9:18:54	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.59	-24.5	10	26.9	71.6
13-Dec 11:04:22	2.34	Dione	Overgang.Einde	Saturnus	-0.03	8.27	-7.8	15.7	26	73
13-Dec 12:11:11	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	8.42	2.4	15.6	25.4	73.8
13-Dec 12:15:57	1.97	Dione	Schaduwovergang.Einde	Saturnus	0.6	13.64	3.3	15.5	25.3	73.9
13-Dec 12:27:31	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.66	4.9	15.2	25.2	74
13-Dec 14:27:43	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	8.47	20.9	7	24.1	75.4
13-Dec 14:50:06	0.53	Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.87	23.2	4.6	23.9	75.7
13-Dec 19:43:06	2.35	Mimas	Gedeeltelijke verduistering	Enceladus	1.89	1.97	22.3	-37.7	21.2	78.5
13-Dec 22:46:11	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.43	-2.5	-60.7	19.6	79.9
13-Dec 23:44:32	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.44	-11.7	-62.4	19	80.3
13-Dec 23:51:06	1.75	Tethys	Overgang.Begin	Saturnus	-0.01	8.41	-12.8	-62.3	19	80.4
14-Dec 0:24:07	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.59	-18	-60.9	18.7	80.6
14-Dec 1:49:30	0.71	Saturnus	Verduistering.Einde	Enceladus	0.36	11.63	-30.7	-52.4	17.9	81.3
14-Dec 2:19:41	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	10.8	-34.8	-48.3	17.6	81.6
14-Dec 2:35:35	1.75	Tethys	Overgang.Einde	Saturnus	-0.01	8.4	-36.9	-45.9	17.5	81.7
14-Dec 3:20:14	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.45	12.38	-41.9	-39.1	17.1	82.1

14-Dec	6:41:38	14.39	607	Schaduwovergang.Begin	Saturnus	1.96	25.21	-43	-7.3	15.3	84.2
14-Dec	7:12:45	16.14	607	Schaduwovergang.Einde	Saturnus	2.07	26.18	-39.8	-3	15	84.6
14-Dec	8:38:35	5.93	Saturnus	Bedekking.Begin	Rhea	-0.07	7.92	-29.4	6.4	14.3	85.6
14-Dec	10:48:25	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	8.41	-9.9	15.2	13.2	87.2
14-Dec	11:04:44	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.65	-7.3	15.6	13	87.4
14-Dec	13:01:28	3.31	Saturnus	Verduistering.Einde	Rhea	0.85	15.77	10.6	13.6	12	88.8
14-Dec	13:05:04	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	8.45	10.9	13.4	12	88.9
14-Dec	13:27:20	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.85	13.9	12.1	11.8	89.1
14-Dec	15:11:22	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	8.4	25.6	2.2	10.9	90.4
14-Dec	15:34:44	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.15	27.4	-0.6	10.8	90.6
14-Dec	17:15:52	2.32	Saturnus	Bedekking.Begin	Dione	-0.03	8.26	30.8	-14.7	9.9	91.7
14-Dec	17:31:08	21.77	Saturnus	Verduistering.Begin	Titan	0.9	16.15	30.4	-18.5	9.7	92
14-Dec	17:40:39	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	8.42	30.4	-18.4	9.7	91.9
14-Dec	18:12:28	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.36	11.55	29.2	-23.3	9.5	92.3
14-Dec	21:11:20	1.96	Saturnus	Verduistering.Einde	Dione	0.6	13.6	11	-50.7	8.1	93.8
14-Dec	21:33:25	21.76	Saturnus	Verduistering.Einde	Titan	1.9	24.67	6.4	-54.8	7.9	94
14-Dec	22:21:54	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.43	0.7	-58.8	7.6	94.3
14-Dec	22:30:40	1.75	Saturnus	Bedekking.Begin	Tethys	-0.01	8.41	-0.7	-59.6	7.5	94.4
15-Dec	0:57:07	0.51	Saturnus	Verduistering.Einde	Mimas	0.27	10.77	-23.6	-58.4	6.6	95.4
15-Dec	2:00:27	1.63	Saturnus	Verduistering.Einde	Tethys	0.45	12.38	-32.8	-51	6.2	95.9
15-Dec	7:39:42	0.76	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.41	-37.1	-0.7	5	99.1
15-Dec	9:25:39	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	8.4	-22.3	10.4	4.9	100.4
15-Dec	9:41:57	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.64	-19.7	11.6	5	100.6
15-Dec	10:43:01	0.71	Saturnus	Verduistering.Einde	Enceladus	0.36	11.59	-10.1	14.9	5	101.3
15-Dec	11:42:24	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	8.44	-0.8	15.9	5.2	102.1
15-Dec	12:04:34	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.82	2.6	15.7	5.2	102.4
15-Dec	20:59:16	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.41	12.3	-48.9	8.2	108
15-Dec	21:10:19	1.75	Tethys	Overgang.Begin	Saturnus	-0.01	8.38	10.7	-50.5	8.3	108.1
15-Dec	21:43:15	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.57	5.9	-54.8	8.6	108.4
15-Dec	23:34:33	0.51	Saturnus	Verduistering.Einde	Mimas	0.26	10.75	-11.3	-62.5	9.4	109.2
15-Dec	23:55:06	1.75	Tethys	Overgang.Einde	Saturnus	-0.01	8.38	-14.6	-62.3	9.6	109.4
16-Dec	0:04:56	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	8.38	-16.1	-62	9.6	109.4
16-Dec	0:28:15	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.14	-19.7	-60.8	9.8	109.6

16-Dec	0:39:26	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.45	12.32	-21.5	-60	9.9	109.7
16-Dec	2:02:52	2.33	Dione	Overgang.Begin	Saturnus	-0.03	8.23	-33.7	-50.7	10.6	110.3
16-Dec	2:34:22	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	8.4	-37.6	-46.3	10.8	110.5
16-Dec	2:44:01	1.96	Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.64	-38.8	-44.8	10.9	110.6
16-Dec	3:06:01	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.35	11.51	-41.1	-41.6	11.1	110.7
16-Dec	4:47:54	2.33	Dione	Overgang.Einde	Saturnus	-0.03	8.24	-47.4	-25.5	11.9	111.6
16-Dec	5:58:35	1.97	Dione	Schaduwovergang.Einde	Saturnus	0.59	13.53	-46	-14.7	12.5	112.2
16-Dec	8:02:53	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	8.39	-33.7	2	13.5	113.5
16-Dec	8:19:10	0.53	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.63	-31.5	3.9	13.6	113.7
16-Dec	10:19:45	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	8.43	-13.2	13.9	14.6	115
16-Dec	10:41:48	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.8	-9.7	14.8	14.8	115.3
16-Dec	14:52:29	5.79	Rhea	Overgang.Begin	Saturnus	-0.07	7.9	24.8	4.1	17	118.4
16-Dec	15:39:11	3.3	Rhea	Schaduwovergang.Begin	Saturnus	-0.22	6.64	28.3	-1.3	17.3	118.9
16-Dec	16:33:16	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.39	30.6	-8.3	17.8	119.5
16-Dec	16:57:08	5.79	Rhea	Overgang.Einde	Saturnus	-0.07	7.9	30.9	-12.1	18	119.8
16-Dec	19:16:25	3.31	Rhea	Schaduwovergang.Einde	Saturnus	0.84	15.64	23.9	-33.5	19.2	121.2
16-Dec	19:36:35	0.71	Saturnus	Verduistering.Einde	Enceladus	0.36	11.55	22	-36.4	19.4	121.3
16-Dec	19:36:38	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.4	22	-36.4	19.4	121.3
16-Dec	19:49:53	1.75	Saturnus	Bedekking.Begin	Tethys	-0.01	8.39	20.5	-38.6	19.5	121.5
16-Dec	22:12:00	0.51	Saturnus	Verduistering.Einde	Mimas	0.26	10.73	1.1	-57.9	20.7	122.6
16-Dec	23:19:37	1.63	Saturnus	Verduistering.Einde	Tethys	0.45	12.32	-9.5	-62.3	21.3	123.1
17-Dec	6:40:08	0.55	Mimas	Overgang.Begin	Saturnus	-0.01	8.38	-42.7	-8.8	25	126.4
17-Dec	6:56:23	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.62	-41.1	-6.6	25.2	126.6
17-Dec	8:57:06	0.55	Mimas	Overgang.Einde	Saturnus	-0.01	8.42	-25.4	7.7	26.2	127.8
17-Dec	8:58:32	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	8.37	-25.2	7.9	26.2	127.8
17-Dec	9:19:03	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.77	-22.1	9.7	26.4	128
17-Dec	9:21:47	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.13	-21.7	9.9	26.4	128.1
17-Dec	10:58:07	2.31	Saturnus	Bedekking.Begin	Dione	-0.03	8.23	-6.4	15.3	27.2	129.1
17-Dec	11:28:08	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	8.38	-1.8	15.8	27.5	129.5
17-Dec	11:59:36	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.35	11.47	3	15.7	27.7	129.8
17-Dec	14:53:51	1.96	Saturnus	Verduistering.Einde	Dione	0.59	13.49	25.1	4.2	29.2	131.9
17-Dec	18:14:01	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.39	28.6	-23.4	30.9	134.1
17-Dec	18:29:29	1.75	Tethys	Overgang.Begin	Saturnus	-0.01	8.36	27.6	-25.9	31	134.3

17-Dec 19:02:19	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.56	25	-31	31.3	134.6
17-Dec 20:49:26	0.51 Saturnus	Verduistering.Einde	Mimas	0.26	10.7	12.6	-47.4	32.2	135.6
17-Dec 21:14:35	1.75 Tethys	Overgang.Einde	Saturnus	-0.01	8.36	9	-51	32.4	135.8
17-Dec 21:58:33	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.45	12.26	2.5	-56.5	32.8	136.1
18-Dec 1:26:48	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.37	-29.6	-55.5	34.6	137.6
18-Dec 4:30:05	0.71 Saturnus	Verduistering.Einde	Enceladus	0.36	11.5	-47.2	-28.6	36.1	138.9
18-Dec 5:17:22	0.55 Mimas	Overgang.Begin	Saturnus	-0.01	8.36	-47.3	-21.3	36.5	139.2
18-Dec 5:33:36	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.62	-46.8	-18.8	36.6	139.4
18-Dec 7:34:28	0.55 Mimas	Overgang.Einde	Saturnus	-0.01	8.41	-36.3	-1.6	37.6	140.4
18-Dec 7:56:17	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.75	-33.5	1.1	37.8	140.6
18-Dec 16:51:23	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.38	30.9	-10.8	42.2	146.4
18-Dec 17:09:05	1.74 Saturnus	Bedekking.Begin	Tethys	-0.01	8.36	30.8	-13.5	42.4	146.6
18-Dec 17:52:07	0.75 Enceladus	Overgang.Begin	Saturnus	-0.01	8.35	29.6	-19.9	42.7	147
18-Dec 18:15:18	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.12	28.3	-23.5	42.9	147.3
18-Dec 19:26:52	0.51 Saturnus	Verduistering.Einde	Mimas	0.26	10.68	22.3	-34.8	43.5	148
18-Dec 19:45:09	2.31 Dione	Overgang.Begin	Saturnus	-0.03	8.2	20.2	-37.8	43.7	148.2
18-Dec 20:21:54	0.75 Enceladus	Overgang.Einde	Saturnus	-0.01	8.37	15.8	-43.3	44	148.5
18-Dec 20:26:16	1.96 Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.6	15.2	-44.1	44	148.5
18-Dec 20:38:44	1.63 Saturnus	Verduistering.Einde	Tethys	0.45	12.25	13.5	-45.9	44.1	148.6
18-Dec 20:53:09	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.35	11.43	11.6	-47.9	44.2	148.8
18-Dec 21:04:11	5.57 Saturnus	Bedekking.Begin	Rhea	-0.07	7.89	9.7	-49.8	44.3	148.9
18-Dec 22:31:28	2.31 Dione	Overgang.Einde	Saturnus	-0.03	8.21	-3.2	-59.7	45	149.6
18-Dec 23:41:07	1.96 Dione	Schaduwovergang.Einde	Saturnus	0.59	13.42	-14.1	-62.6	45.6	150.1
19-Dec 1:30:08	3.29 Saturnus	Verduistering.Einde	Rhea	0.84	15.54	-30.7	-55.1	46.5	150.8
19-Dec 3:54:38	0.55 Mimas	Overgang.Begin	Saturnus	-0.01	8.35	-45.8	-34.3	47.7	151.8
19-Dec 4:10:49	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.61	-46.6	-31.8	47.8	151.9
19-Dec 6:11:50	0.55 Mimas	Overgang.Einde	Saturnus	-0.01	8.39	-44.4	-13.1	48.8	152.7
19-Dec 6:33:31	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.72	-42.6	-9.9	49	152.9
19-Dec 10:20:22	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.36	-11.3	13.7	50.8	154.9
19-Dec 13:23:36	0.71 Saturnus	Verduistering.Einde	Enceladus	0.36	11.46	16	12.3	52.3	156.8
19-Dec 15:28:45	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.37	28.3	0.3	53.3	158.2
19-Dec 15:48:43	1.74 Tethys	Overgang.Begin	Saturnus	-0.01	8.33	29.5	-2.3	53.5	158.4
19-Dec 16:21:24	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.55	30.6	-6.6	53.7	158.8

19-Dec 18:04:18	0.51	Saturnus	Verduistering.Einde	Mimas	0.26	10.65	28.8	-21.7	54.5	159.9
19-Dec 18:34:09	1.74	Tethys	Overgang.Einde	Saturnus	-0.01	8.33	26.7	-26.5	54.8	160.2
19-Dec 19:17:42	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.44	12.19	22.8	-33.3	55.1	160.6
20-Dec 2:31:53	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	8.34	-38.9	-47.1	58.6	164
20-Dec 2:45:43	0.75	Enceladus	Overgang.Begin	Saturnus	-0.01	8.33	-40.5	-45	58.7	164.1
20-Dec 2:48:02	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.6	-40.7	-44.7	58.7	164.1
20-Dec 3:08:49	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.11	-42.7	-41.6	58.9	164.3
20-Dec 4:40:28	2.29	Saturnus	Bedekking.Begin	Dione	-0.03	8.2	-47.4	-27.1	59.6	164.8
20-Dec 4:49:12	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	8.38	-47.5	-25.8	59.7	164.9
20-Dec 5:10:45	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.69	-47.2	-22.5	59.8	165
20-Dec 5:15:41	0.75	Enceladus	Overgang.Einde	Saturnus	-0.01	8.35	-47.1	-21.7	59.9	165.1
20-Dec 5:46:43	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.35	11.38	-45.8	-16.9	60.1	165.3
20-Dec 8:36:22	1.95	Saturnus	Verduistering.Einde	Dione	0.58	13.37	-26.7	5.5	61.5	166.5
20-Dec 14:06:08	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.36	21.5	9.1	64.1	169.6
20-Dec 14:28:18	1.74	Saturnus	Bedekking.Begin	Tethys	-0.01	8.34	23.9	7	64.2	169.9
20-Dec 16:41:44	0.51	Saturnus	Verduistering.Einde	Mimas	0.26	10.62	31	-9.3	65.3	171.3
20-Dec 17:57:50	1.63	Saturnus	Verduistering.Einde	Tethys	0.44	12.18	28.9	-20.7	65.9	172.1
20-Dec 19:13:54	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.34	22.9	-32.6	66.5	172.9
20-Dec 22:17:06	0.71	Saturnus	Verduistering.Einde	Enceladus	0.35	11.42	-1.9	-58.3	67.9	174.6
21-Dec 1:09:09	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	8.33	-28.6	-57.7	69.2	175.9
21-Dec 1:25:16	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.59	-30.9	-55.9	69.3	176
21-Dec 3:18:08	5.44	Rhea	Overgang.Begin	Saturnus	-0.07	7.87	-44	-39.8	70.2	176.7
21-Dec 3:26:35	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	8.37	-44.4	-38.9	70.3	176.7
21-Dec 3:48:00	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.27	10.67	-45.8	-35.6	70.4	176.8
21-Dec 4:06:35	3.29	Rhea	Schaduwovergang.Begin	Saturnus	-0.23	6.46	-46.7	-32.4	70.6	176.9
21-Dec 5:30:58	5.44	Rhea	Overgang.Einde	Saturnus	-0.07	7.88	-46.2	-19	71.3	177.4
21-Dec 7:44:59	3.29	Rhea	Schaduwovergang.Einde	Saturnus	0.83	15.39	-33.3	-0.3	72.3	178.1
21-Dec 11:39:20	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	8.32	2.3	15.8	74.1	178.6
21-Dec 12:02:21	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.28	6.1	5.8	15.6	74.3	178.6
21-Dec 12:43:31	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.35	11.7	14.5	74.6	178.4
21-Dec 13:07:57	1.74	Tethys	Overgang.Begin	Saturnus	-0.01	8.31	15	13.3	74.8	178.2
21-Dec 13:27:30	2.29	Dione	Overgang.Begin	Saturnus	-0.03	8.17	17.6	12	74.9	178.1
21-Dec 13:40:28	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.54	19.1	11.2	75	178

21-Dec 14:08:30	1.96 Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.55	22.3	8.9	75.2	177.8
21-Dec 14:09:29	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	8.33	22.3	8.8	75.2	177.8
21-Dec 14:40:17	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.35	11.34	25.3	5.9	75.5	177.5
21-Dec 15:19:10	0.51 Saturnus	Verduistering.Einde	Mimas	0.26	10.6	28.3	1.6	75.8	177.2
21-Dec 15:53:42	1.74 Tethys	Overgang.Einde	Saturnus	-0.01	8.31	30.1	-2.8	76	176.9
21-Dec 16:15:09	2.29 Dione	Overgang.Einde	Saturnus	-0.03	8.18	30.7	-5.7	76.2	176.7
21-Dec 16:36:48	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.44	12.12	31	-8.6	76.4	176.5
21-Dec 17:23:36	1.96 Dione	Schaduwovergang.Einde	Saturnus	0.58	13.3	30.3	-15.5	76.7	176
21-Dec 23:46:25	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	8.32	-16.5	-62.6	79.6	172.5
22-Dec 0:02:29	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.59	-19.1	-62.3	79.8	172.4
22-Dec 2:03:58	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	8.36	-36.5	-51.2	80.7	171.5
22-Dec 2:25:14	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.26	10.64	-39	-48.2	80.8	171.4
22-Dec 4:07:33	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.32	-46.8	-32.5	81.6	170.7
22-Dec 7:10:40	0.71 Saturnus	Verduistering.Einde	Enceladus	0.35	11.37	-37.3	-5	83	169.6
22-Dec 11:20:53	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.33	0	15.6	84.9	167.7
22-Dec 11:47:41	1.74 Saturnus	Bedekking.Begin	Tethys	-0.01	8.32	4.2	15.7	85.1	167.5
22-Dec 13:56:36	0.51 Saturnus	Verduistering.Einde	Mimas	0.26	10.57	21.3	10	86.1	166.4
22-Dec 15:17:04	1.63 Saturnus	Verduistering.Einde	Tethys	0.44	12.11	28.4	1.8	86.7	165.6
22-Dec 17:25:42	22.95 Titan	Schaduwovergang.Begin	Saturnus	0.93	16.26	29.7	-17.3	87.7	164.2
22-Dec 20:32:57	0.74 Enceladus	Overgang.Begin	Saturnus	-0.01	8.3	12.4	-44.7	89.1	162.4
22-Dec 20:55:51	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.1	9.2	-48	89.2	162.2
22-Dec 21:41:41	23.07 Titan	Schaduwovergang.Einde	Saturnus	1.94	24.74	0.7	-55.5	89.7	161.6
22-Dec 22:22:55	2.27 Saturnus	Bedekking.Begin	Dione	-0.03	8.17	-4.1	-58.8	89.9	161.4
22-Dec 22:23:42	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	8.31	-4	-58.8	89.9	161.4
22-Dec 22:39:43	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.58	-6.6	-60.1	90	161.2
22-Dec 23:03:17	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	8.32	-10.3	-61.7	90.2	161
22-Dec 23:33:50	0.71 Enceladus	Schaduwovergang.Einde	Saturnus	0.34	11.29	-15.1	-62.6	90.4	160.8
23-Dec 0:41:21	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	8.35	-25.5	-60.3	90.9	160.2
23-Dec 1:02:29	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.26	10.61	-28.6	-58.4	91.1	160
23-Dec 2:18:55	1.95 Saturnus	Verduistering.Einde	Dione	0.58	13.25	-38.7	-49.1	91.7	159.5
23-Dec 9:30:33	5.23 Saturnus	Bedekking.Begin	Rhea	-0.06	7.86	-16.4	10.5	94.9	156.7
23-Dec 9:58:17	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.32	-12.3	12.4	95.1	156.6
23-Dec 10:27:12	1.74 Tethys	Overgang.Begin	Saturnus	-0.01	8.29	-7.7	14	95.3	156.3

23-Dec 10:59:31	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.54	-2.6	15.2	95.6	156.1
23-Dec 11:06:19	2.62	Saturnus	Verduistering.Begin	607	1.45	20.56	-1.5	15.4	95.6	156
23-Dec 12:34:01	0.51	Saturnus	Verduistering.Einde	Mimas	0.26	10.54	11.4	14.9	96.3	155.4
23-Dec 13:01:07	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.31	15.1	13.7	96.5	155.1
23-Dec 13:13:18	1.74	Tethys	Overgang.Einde	Saturnus	-0.01	8.29	16.7	13	96.6	155
23-Dec 13:55:55	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.43	12.04	21.7	10	96.9	154.6
23-Dec 13:59:05	3.27	Saturnus	Verduistering.Einde	Rhea	0.82	15.27	22.2	9.7	96.9	154.6
23-Dec 13:59:12	2.61	Saturnus	Verduistering.Einde	607	2.11	26.13	22.1	9.7	96.9	154.6
23-Dec 16:04:11	0.71	Saturnus	Verduistering.Einde	Enceladus	0.35	11.32	30.7	-3.9	97.8	153.4
23-Dec 21:00:59	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	8.3	8	-48.7	100.1	150.4
23-Dec 21:16:57	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.58	5.6	-50.9	100.2	150.3
23-Dec 23:18:45	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	8.34	-13.3	-62.3	101.1	149.1
23-Dec 23:39:43	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.26	10.58	-16.6	-62.6	101.2	149
24-Dec 5:26:35	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	8.28	-45.9	-20.3	103.8	146.4
24-Dec 5:49:22	0.71	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.09	-44.5	-16.8	104	146.3
24-Dec 7:10:02	2.27	Dione	Overgang.Begin	Saturnus	-0.03	8.15	-36.4	-5.1	104.6	145.8
24-Dec 7:50:50	1.96	Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.52	-31	0.2	104.9	145.6
24-Dec 7:57:06	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	8.3	-30.2	0.8	105	145.5
24-Dec 8:27:23	0.71	Enceladus	Schaduwovergang.Einde	Saturnus	0.34	11.25	-25.8	4.3	105.2	145.3
24-Dec 8:35:39	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.31	-24.6	5.2	105.2	145.3
24-Dec 9:06:59	1.73	Saturnus	Bedekking.Begin	Tethys	-0.01	8.3	-19.7	8.4	105.5	145.1
24-Dec 9:59:03	2.27	Dione	Overgang.Einde	Saturnus	-0.03	8.15	-11.5	12.4	105.9	144.7
24-Dec 11:06:11	1.96	Dione	Schaduwovergang.Einde	Saturnus	0.57	13.17	-0.9	15.4	106.4	144.3
24-Dec 11:11:27	0.51	Saturnus	Verduistering.Einde	Mimas	0.25	10.52	-0.2	15.5	106.4	144.2
24-Dec 12:36:11	1.63	Saturnus	Verduistering.Einde	Tethys	0.44	12.04	12.3	14.8	107.1	143.6
24-Dec 19:38:16	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	8.29	18.6	-36.1	110.2	139.6
24-Dec 19:54:11	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.57	16.6	-38.6	110.3	139.5
24-Dec 21:54:44	0.75	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.29	-0.7	-55.6	111.2	138.2
24-Dec 21:56:09	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	8.33	-0.9	-55.8	111.2	138.2
24-Dec 22:16:58	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.26	10.55	-4.1	-58	111.4	138
25-Dec 0:57:42	0.71	Saturnus	Verduistering.Einde	Enceladus	0.35	11.28	-29	-58.9	112.6	136.6
25-Dec 7:13:02	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.3	-35.6	-4.8	115.4	133.9
25-Dec 7:46:31	1.73	Tethys	Overgang.Begin	Saturnus	-0.01	8.27	-31.1	-0.4	115.7	133.7



25-Dec	8:18:35	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.54	-26.5	3.4	115.9	133.5
25-Dec	9:48:52	0.51 Saturnus	Verduistering.Einde	Mimas	0.25	10.49	-12.6	11.7	116.6	133
25-Dec	10:32:58	1.73 Tethys	Overgang.Einde	Saturnus	-0.01	8.27	-5.6	14.3	116.9	132.7
25-Dec	11:15:02	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.43	11.97	1	15.6	117.2	132.4
25-Dec	14:20:13	0.74 Enceladus	Overgang.Begin	Saturnus	-0.01	8.27	24.9	8.1	118.6	131
25-Dec	14:42:53	0.71 Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.09	26.8	5.9	118.8	130.8
25-Dec	15:44:28	5.12 Rhea	Overgang.Begin	Saturnus	-0.06	7.85	30.4	-1.5	119.3	130.2
25-Dec	16:05:25	2.25 Saturnus	Bedekking.Begin	Dione	-0.03	8.14	30.9	-4	119.4	130.1
25-Dec	16:34:13	3.27 Rhea	Schaduwovergang.Begin	Saturnus	-0.25	6.28	31.1	-8	119.6	129.8
25-Dec	16:50:56	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	8.28	30.9	-10.2	119.8	129.6
25-Dec	17:20:56	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.34	11.2	30	-14.6	120	129.3
25-Dec	18:05:34	5.12 Rhea	Overgang.Einde	Saturnus	-0.06	7.85	27.2	-21.8	120.3	128.9
25-Dec	18:15:34	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	8.28	26.7	-23	120.4	128.8
25-Dec	18:31:24	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.22	6.57	25.3	-25.4	120.5	128.6
25-Dec	20:01:25	1.95 Saturnus	Verduistering.Einde	Dione	0.57	13.11	15.2	-39.7	121.2	127.7
25-Dec	20:13:48	3.27 Rhea	Schaduwovergang.Einde	Saturnus	0.81	15.11	13.4	-41.7	121.3	127.6
25-Dec	20:33:33	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	8.32	10.9	-44.5	121.4	127.4
25-Dec	20:54:12	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.26	10.52	7.9	-47.5	121.6	127.2
26-Dec	5:50:25	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.29	-43.9	-16.8	125.7	122.5
26-Dec	6:26:19	1.73 Saturnus	Bedekking.Begin	Tethys	-0.01	8.27	-40.5	-11.3	125.9	122.3
26-Dec	6:48:20	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.28	-38.1	-8.3	126.1	122.1
26-Dec	8:26:17	0.51 Saturnus	Verduistering.Einde	Mimas	0.25	10.46	-24.9	4.1	126.8	121.6
26-Dec	9:51:12	0.71 Saturnus	Verduistering.Einde	Enceladus	0.34	11.23	-11.6	11.9	127.5	121
26-Dec	9:55:19	1.63 Saturnus	Verduistering.Einde	Tethys	0.43	11.96	-10.9	12.2	127.5	121
26-Dec	16:52:52	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	8.27	30.8	-10.4	130.7	117.8
26-Dec	17:08:39	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.56	30.3	-12.7	130.8	117.7
26-Dec	19:10:58	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	8.31	21	-31.6	131.8	116.4
26-Dec	19:31:28	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.26	10.49	18.6	-34.8	131.9	116.2
26-Dec	23:13:56	0.74 Enceladus	Overgang.Begin	Saturnus	-0.01	8.25	-14.2	-61.9	133.6	113.9
26-Dec	23:36:27	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.09	-17.8	-62.5	133.8	113.7
27-Dec	0:52:34	2.25 Dione	Overgang.Begin	Saturnus	-0.03	8.12	-29.4	-59.3	134.4	112.9
27-Dec	1:33:06	1.95 Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.49	-34.9	-55.2	134.7	112.5
27-Dec	1:44:50	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	8.27	-36.3	-53.8	134.8	112.4

27-Dec	2:14:33	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.34	11.15	-39.7	-49.9	135	112.1
27-Dec	3:43:01	2.25 Dione	Overgang.Einde	Saturnus	-0.03	8.13	-46.5	-36.6	135.7	111.4
27-Dec	4:27:49	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.28	-47.2	-29.7	136	111.1
27-Dec	4:48:41	1.96 Dione	Schaduwovergang.Einde	Saturnus	0.56	13.03	-46.9	-26.2	136.2	110.9
27-Dec	5:05:48	1.73 Tethys	Overgang.Begin	Saturnus	-0.01	8.25	-46.3	-23.6	136.3	110.8
27-Dec	5:37:37	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.34	5.54	-44.5	-18.7	136.6	110.5
27-Dec	7:03:42	0.51 Saturnus	Verduistering.Einde	Mimas	0.25	10.43	-35.8	-6.2	137.2	110
27-Dec	7:52:37	1.73 Tethys	Overgang.Einde	Saturnus	-0.01	8.24	-29.1	0.3	137.6	109.7
27-Dec	8:34:07	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.42	11.89	-23	5	137.9	109.4
27-Dec	15:30:10	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	8.25	30.1	0.7	141.1	106.6
27-Dec	15:41:57	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.26	30.6	-0.7	141.2	106.5
27-Dec	15:45:53	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.56	30.7	-1.2	141.3	106.4
27-Dec	17:48:23	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	8.29	28.2	-18.5	142.2	105.3
27-Dec	18:08:42	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.25	10.47	26.7	-21.7	142.4	105.1
27-Dec	18:44:43	0.71 Saturnus	Verduistering.Einde	Enceladus	0.34	11.18	23.4	-27.3	142.7	104.7
27-Dec	21:57:04	4.94 Saturnus	Bedekking.Begin	Rhea	-0.06	7.84	-3	-55.8	144.2	102.7
28-Dec	2:27:49	3.26 Saturnus	Verduistering.Einde	Rhea	0.8	14.98	-41.6	-47.9	146.3	99.9
28-Dec	3:05:12	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.27	-44.6	-42.6	146.6	99.6
28-Dec	3:45:43	1.73 Saturnus	Bedekking.Begin	Tethys	-0.01	8.25	-46.7	-36.2	146.9	99.2
28-Dec	5:41:07	0.51 Saturnus	Verduistering.Einde	Mimas	0.25	10.4	-44	-18.3	147.8	98.3
28-Dec	7:14:30	1.63 Saturnus	Verduistering.Einde	Tethys	0.43	11.88	-33.9	-4.7	148.5	97.6
28-Dec	8:07:35	0.74 Enceladus	Overgang.Begin	Saturnus	-0.01	8.24	-26.5	2	148.9	97.3
28-Dec	8:29:58	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.09	-23.1	4.5	149.1	97.1
28-Dec	9:47:56	2.23 Saturnus	Bedekking.Begin	Dione	-0.03	8.12	-10.8	11.7	149.7	96.7
28-Dec	10:38:42	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	8.25	-2.9	14.6	150.1	96.4
28-Dec	11:08:06	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.33	11.1	1.6	15.5	150.3	96.2
28-Dec	13:43:50	1.95 Saturnus	Verduistering.Einde	Dione	0.56	12.97	22.6	11.3	151.6	95.1
28-Dec	14:07:29	0.54 Mimas	Overgang.Begin	Saturnus	-0.01	8.24	24.8	9.5	151.8	95
28-Dec	14:23:08	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.56	26.2	8.1	151.9	94.8
28-Dec	16:25:49	0.54 Mimas	Overgang.Einde	Saturnus	-0.01	8.28	31.2	-6.4	152.8	93.8
28-Dec	16:45:58	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.25	10.44	30.8	-9.2	153	93.7
28-Dec	21:29:42	1.66 Mimas	Gedeeltelijke verduistering	Enceladus	1.92	1.82	1	-52.2	155.2	90.7
29-Dec	0:35:34	0.75 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.24	-27.8	-60.7	156.7	88.7

29-Dec	1:42:35	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.26	-36.8	-54.2	157.2	88
29-Dec	2:25:13	1.72	Tethys	Overgang.Begin	Saturnus	-0.01	8.23	-41.6	-48.4	157.6	87.6
29-Dec	2:56:43	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.33	5.54	-44.3	-43.8	157.8	87.3
29-Dec	3:38:13	0.71	Saturnus	Verduistering.Einde	Enceladus	0.34	11.13	-46.5	-37.5	158.1	86.9
29-Dec	4:18:31	0.51	Saturnus	Verduistering.Einde	Mimas	0.25	10.38	-47.2	-31.2	158.5	86.5
29-Dec	5:12:23	1.72	Tethys	Overgang.Einde	Saturnus	-0.01	8.22	-45.6	-22.6	158.9	86.1
29-Dec	5:53:16	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.42	11.81	-42.6	-16.4	159.2	85.7
29-Dec	12:44:49	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	8.23	16	14.8	162.4	83
29-Dec	13:00:23	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.56	17.9	14.2	162.6	82.9
29-Dec	15:03:14	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	8.27	29.3	4.1	163.5	82
29-Dec	15:23:13	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.25	10.41	30.2	1.8	163.7	81.8
29-Dec	17:01:16	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	8.22	30.3	-11.3	164.4	81
29-Dec	17:23:29	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.09	29.3	-14.6	164.6	80.8
29-Dec	18:35:14	2.23	Dione	Overgang.Begin	Saturnus	-0.03	8.1	23.6	-25.7	165.2	80.1
29-Dec	19:15:24	1.95	Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.46	19.2	-32	165.5	79.7
29-Dec	19:32:35	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	8.24	17.2	-34.6	165.6	79.5
29-Dec	20:01:39	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.33	11.05	13.4	-39.2	165.8	79.2
29-Dec	21:27:08	2.23	Dione	Overgang.Einde	Saturnus	-0.03	8.1	0.8	-51.8	166.5	78.3
29-Dec	22:31:15	1.95	Dione	Schaduwovergang.Einde	Saturnus	0.55	12.89	-9.3	-59	167	77.6
30-Dec	0:19:59	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.25	-26	-61.5	167.8	76.4
30-Dec	1:05:04	1.72	Saturnus	Bedekking.Begin	Tethys	-0.01	8.23	-32.5	-58.2	168.2	75.8
30-Dec	2:55:56	0.51	Saturnus	Verduistering.Einde	Mimas	0.24	10.35	-44.4	-44	169	74.7
30-Dec	4:11:10	4.83	Rhea	Overgang.Begin	Saturnus	-0.06	7.83	-47.2	-32	169.5	73.9
30-Dec	4:33:35	1.63	Saturnus	Verduistering.Einde	Tethys	0.42	11.8	-46.9	-28.8	169.7	73.7
30-Dec	5:01:48	3.25	Rhea	Schaduwovergang.Begin	Saturnus	-0.27	6.09	-45.8	-24.2	169.9	73.4
30-Dec	6:40:33	4.83	Rhea	Overgang.Einde	Saturnus	-0.06	7.83	-37	-9.2	170.6	72.6
30-Dec	8:42:26	3.26	Rhea	Schaduwovergang.Einde	Saturnus	0.78	14.8	-19.8	6	171.5	71.7
30-Dec	9:29:13	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.23	-12.7	10.3	171.8	71.4
30-Dec	11:22:08	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	8.22	4.9	15.9	172.5	70.7
30-Dec	11:37:37	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.55	7.2	16.1	172.6	70.6
30-Dec	12:31:44	0.71	Saturnus	Verduistering.Einde	Enceladus	0.33	11.08	14.8	15.4	172.9	70.2
30-Dec	13:40:40	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	8.26	23	11.8	173.3	69.8
30-Dec	14:00:28	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.25	10.37	24.9	10.3	173.4	69.6

30-Dec 16:29:48	19.45	Saturnus	Verduistering.Begin	Titan	0.64	13.59	30.9	-8	174.2	68.4
30-Dec 19:00:25	1.57	Tethys	Verduistering in bijschaduw	Enceladus	2.94	2.53	20.6	-29.5	174.7	67.1
30-Dec 21:00:54	19.44	Saturnus	Verduistering.Einde	Titan	1.76	22.94	2.9	-49.2	175	65.7
30-Dec 22:57:23	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.24	-13.8	-60.8	175	64.5
30-Dec 23:44:38	1.72	Tethys	Overgang.Begin	Saturnus	-0.01	8.2	-21.3	-62.3	175	64
31-Dec 0:15:48	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.33	5.55	-26	-61.6	175	63.6
31-Dec 1:33:20	0.51	Saturnus	Verduistering.Einde	Mimas	0.24	10.32	-36.5	-55.3	174.8	62.7
31-Dec 1:54:56	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	8.21	-39.1	-52.6	174.8	62.5
31-Dec 2:16:59	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.27	6.09	-41.4	-49.7	174.7	62.2
31-Dec 2:32:10	1.72	Tethys	Overgang.Einde	Saturnus	-0.01	8.2	-42.8	-47.5	174.7	62.1
31-Dec 3:12:24	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.41	11.73	-45.7	-41.5	174.5	61.6
31-Dec 3:30:41	2.21	Saturnus	Bedekking.Begin	Dione	-0.02	8.1	-46.5	-38.6	174.4	61.4
31-Dec 4:26:27	0.74	Enceladus	Overgang.Einde	Saturnus	-0.01	8.22	-47	-30	174.2	60.9
31-Dec 4:55:12	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.33	11	-46	-25.5	174.1	60.6
31-Dec 7:26:23	1.94	Saturnus	Verduistering.Einde	Dione	0.55	12.82	-30.7	-3.1	173.3	59.3
31-Dec 9:59:28	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	8.21	-7.3	12.5	172.4	58.1
31-Dec 10:14:52	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.55	-4.9	13.5	172.3	58
31-Dec 12:18:07	0.54	Mimas	Overgang.Einde	Saturnus	-0.01	8.25	13.5	15.8	171.4	57.2
31-Dec 12:37:43	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.25	10.34	16.1	15.3	171.3	57.1
31-Dec 18:22:54	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.21	24.2	-23.4	168.7	54.4
31-Dec 21:25:17	0.71	Saturnus	Verduistering.Einde	Enceladus	0.33	11.02	0.1	-51.2	167.3	52.5
31-Dec 21:34:46	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.23	-1.4	-52.4	167.2	52.4
31-Dec 22:24:28	1.72	Saturnus	Bedekking.Begin	Tethys	-0.01	8.21	-9.3	-58.1	166.8	51.9
01-Jan 0:10:44	0.51	Saturnus	Verduistering.Einde	Mimas	0.24	10.29	-25.7	-61.8	166	50.7
01-Jan 1:52:41	1.63	Saturnus	Verduistering.Einde	Tethys	0.41	11.71	-39.3	-52.8	165.2	49.5
01-Jan 8:36:48	0.54	Mimas	Overgang.Begin	Saturnus	-0.01	8.2	-19.7	5.3	161.8	45.4
01-Jan 8:52:07	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.55	-17.4	6.9	161.7	45.3
01-Jan 10:24:10	4.68	Saturnus	Bedekking.Begin	Rhea	-0.06	7.82	-2.5	14.2	160.9	44.6
01-Jan 10:48:39	0.74	Enceladus	Overgang.Begin	Saturnus	-0.01	8.19	1	15.2	160.7	44.4
01-Jan 10:55:34	0.53	Mimas	Overgang.Einde	Saturnus		8.24	2	15.4	160.7	44.4
01-Jan 11:10:30	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.1	4.3	15.8	160.6	44.3
01-Jan 11:14:59	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.25	10.31	5	15.9	160.5	44.3
01-Jan 12:17:57	2.21	Dione	Overgang.Begin	Saturnus	-0.03	8.07	14.1	15.9	160	43.8

01-Jan 12:57:40	1.95 Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.44	19.1	14.5	159.7	43.5
01-Jan 13:20:22	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	8.21	21.7	13.4	159.5	43.4
01-Jan 13:48:45	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.32	10.95	24.6	11.4	159.2	43.2
01-Jan 14:56:34	3.24 Saturnus	Verduistering.Einde	Rhea	0.77	14.65	29.7	5	158.6	42.7
01-Jan 15:11:21	2.21 Dione	Overgang.Einde	Saturnus	-0.02	8.08	30.3	3.4	158.5	42.6
01-Jan 16:13:46	1.95 Dione	Schaduwovergang.Einde	Saturnus	0.54	12.74	31.2	-4.3	158	42.1
01-Jan 20:12:10	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.22	10.5	-40.4	156	40
01-Jan 21:04:03	1.72 Tethys	Overgang.Begin	Saturnus	-0.01	8.19	2.7	-48.2	155.5	39.5
01-Jan 21:34:52	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.33	5.55	-2	-52.3	155.3	39.2
01-Jan 22:48:09	0.51 Saturnus	Verduistering.Einde	Mimas	0.24	10.26	-13.5	-59.9	154.6	38.4
01-Jan 23:51:58	1.72 Tethys	Overgang.Einde	Saturnus	-0.01	8.18	-23.5	-62.1	154.1	37.6
02-Jan 0:31:31	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.41	11.64	-29.3	-60.7	153.7	37.1
02-Jan 3:16:33	0.74 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.2	-46.1	-40.9	152.3	35.2
02-Jan 6:18:46	0.71 Saturnus	Verduistering.Einde	Enceladus	0.33	10.97	-38.4	-12.7	150.7	33.2
02-Jan 7:14:09	0.53 Mimas	Overgang.Begin	Saturnus	-0.01	8.19	-31.4	-4.8	150.3	32.7
02-Jan 7:29:22	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.55	-29.3	-2.8	150.1	32.6
02-Jan 9:33:00	0.53 Mimas	Overgang.Einde	Saturnus		8.23	-10.3	10.7	149.1	31.5
02-Jan 9:52:14	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.24	10.28	-7.3	12.1	148.9	31.3
02-Jan 18:49:34	0.53 Saturnus	Bedekking.Begin	Mimas	-0.01	8.21	20.7	-27.3	144.2	27.3
02-Jan 19:42:21	0.74 Enceladus	Overgang.Begin	Saturnus	-0.01	8.18	14.1	-35.6	143.7	26.8
02-Jan 19:43:53	1.71 Saturnus	Bedekking.Begin	Tethys	-0.01	8.19	13.8	-36	143.7	26.8
02-Jan 20:04:01	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.1	11.1	-39	143.6	26.6
02-Jan 21:13:27	2.19 Saturnus	Bedekking.Begin	Dione	-0.02	8.07	0.7	-49.4	142.9	25.9
02-Jan 21:25:32	0.51 Saturnus	Verduistering.Einde	Mimas	0.24	10.23	-1	-50.9	142.8	25.8
02-Jan 22:14:16	0.74 Enceladus	Overgang.Einde	Saturnus	-0.01	8.19	-8.7	-56.8	142.4	25.3
02-Jan 22:42:18	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.32	10.9	-13.1	-59.4	142.2	24.9
02-Jan 23:11:47	1.63 Saturnus	Verduistering.Einde	Tethys	0.41	11.63	-17.8	-61.2	141.9	24.6
03-Jan 1:08:52	1.94 Saturnus	Verduistering.Einde	Dione	0.53	12.67	-34.9	-57.7	140.9	23.3
03-Jan 5:51:29	0.53 Mimas	Overgang.Begin	Saturnus	-0.01	8.19	-40.9	-16.8	138.4	20
03-Jan 6:06:38	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.55	-39.3	-14.5	138.3	19.8
03-Jan 8:10:28	0.53 Mimas	Overgang.Einde	Saturnus		8.22	-22.6	2.4	137.2	18.6
03-Jan 8:29:29	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.24	10.25	-19.7	4.6	137	18.4
03-Jan 12:10:13	0.74 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.18	14	16.3	135	16.5

03-Jan 15:12:16	0.71	Saturnus	Verduistering.Einde	Enceladus	0.32	10.92	30.6	3.7	133.4	15.2
03-Jan 16:38:34	4.58	Rhea	Overgang.Begin	Saturnus	-0.05	7.81	30.5	-7.6	132.6	14.6
03-Jan 17:26:58	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.2	28.1	-14.4	132.2	14.2
03-Jan 17:29:36	3.24	Rhea	Schaduwovergang.Begin	Saturnus	-0.28	5.93	27.8	-15	132.2	14.2
03-Jan 18:23:35	1.71	Tethys	Overgang.Begin	Saturnus	-0.01	8.17	23.1	-23.2	131.7	13.7
03-Jan 18:54:01	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.33	5.57	19.7	-28	131.4	13.5
03-Jan 19:16:06	4.58	Rhea	Overgang.Einde	Saturnus	-0.05	7.82	16.8	-31.7	131.2	13.3
03-Jan 20:02:56	0.51	Saturnus	Verduistering.Einde	Mimas	0.24	10.2	10.8	-38.7	130.8	12.9
03-Jan 21:11:22	3.24	Rhea	Schaduwovergang.Einde	Saturnus	0.75	14.47	0.4	-49	130.2	12.2
03-Jan 21:11:52	1.71	Tethys	Overgang.Einde	Saturnus	-0.01	8.16	0.5	-49	130.2	12.2
03-Jan 21:50:43	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.4	11.56	-5.6	-54	129.9	11.8
04-Jan 4:28:50	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.18	-46.4	-29.6	126.3	7.3
04-Jan 4:36:03	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	8.16	-46.1	-28.5	126.3	7.2
04-Jan 4:43:53	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.21	6.55	-45.7	-27.3	126.2	7.1
04-Jan 4:57:31	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.11	-45	-25.1	126.1	6.9
04-Jan 6:00:39	2.2	Dione	Overgang.Begin	Saturnus	-0.02	8.05	-39.5	-15.2	125.5	6.2
04-Jan 6:39:49	1.95	Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.43	-34.8	-9.5	125.2	5.8
04-Jan 6:47:55	0.53	Mimas	Overgang.Einde	Saturnus		8.21	-33.9	-8.4	125.1	5.7
04-Jan 7:06:44	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.24	10.22	-31.4	-5.8	124.9	5.5
04-Jan 7:08:11	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	8.18	-31.1	-5.6	124.9	5.5
04-Jan 7:35:50	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.31	10.84	-27.2	-1.9	124.7	5.2
04-Jan 8:55:32	2.19	Dione	Overgang.Einde	Saturnus	-0.02	8.06	-14.9	7.4	123.9	4.4
04-Jan 9:56:10	1.95	Dione	Schaduwovergang.Einde	Saturnus	0.53	12.58	-5.3	12.6	123.4	3.8
04-Jan 15:35:09	2.29	607	Schaduwovergang.Begin	Saturnus	1.27	18.71	31.3	1	120.4	1.1
04-Jan 16:04:22	0.53	Saturnus	Bedekking.Begin	Mimas	-0.01	8.19	31.3	-2.6	120.1	0.9
04-Jan 17:03:20	1.71	Saturnus	Bedekking.Begin	Tethys	-0.01	8.17	29.3	-10.8	119.6	0.4
04-Jan 18:40:20	0.51	Saturnus	Verduistering.Einde	Mimas	0.23	10.17	21	-25.6	118.7	0.3
04-Jan 19:06:30	2.31	607	Schaduwovergang.Einde	Saturnus	2.03	24.98	17.7	-29.8	118.5	0.5
04-Jan 20:30:52	1.63	Saturnus	Verduistering.Einde	Tethys	0.4	11.54	6.2	-42.9	117.7	1.3
04-Jan 21:03:53	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.17	1.2	-47.7	117.4	1.6
05-Jan 0:05:45	0.71	Saturnus	Verduistering.Einde	Enceladus	0.32	10.86	-27	-61.6	115.8	3.4
05-Jan 3:06:12	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.17	-46	-42.5	114.2	5.5
05-Jan 3:21:08	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	6.56	-46.6	-40.2	114	5.6

05-Jan	5:25:22	0.53	Mimas	Overgang.Einde	Saturnus	8.2	-42.6	-20.8	112.9	7.1	
05-Jan	5:44:00	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.24	10.19	-40.9	-17.9	112.7	7.3
05-Jan	13:29:47	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	8.15	24.3	13.3	108.5	12
05-Jan	13:51:02	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.11	26.2	11.8	108.4	12.2
05-Jan	14:41:46	0.52	Saturnus	Bedekking.Begin	Mimas	-0.01	8.18	29.7	7.3	107.9	12.6
05-Jan	14:56:18	2.18	Saturnus	Bedekking.Begin	Dione	-0.02	8.05	30.4	5.7	107.8	12.7
05-Jan	15:43:01	1.71	Tethys	Overgang.Begin	Saturnus	-0.01	8.15	31.4	0.2	107.3	13
05-Jan	16:02:08	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	8.16	31.4	-2.1	107.2	13.2
05-Jan	16:13:03	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.32	5.58	31.2	-3.6	107.1	13.3
05-Jan	16:29:24	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.31	10.79	30.7	-5.8	106.9	13.4
05-Jan	17:17:43	0.51	Saturnus	Verduistering.Einde	Mimas	0.23	10.14	28.3	-12.7	106.5	13.7
05-Jan	18:31:42	1.71	Tethys	Overgang.Einde	Saturnus	-0.01	8.15	21.5	-24.1	105.8	14.3
05-Jan	18:51:23	1.94	Saturnus	Verduistering.Einde	Dione	0.52	12.51	19.2	-27.3	105.6	14.5
05-Jan	19:09:48	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.39	11.47	16.9	-30.1	105.5	14.6
05-Jan	22:51:30	4.45	Saturnus	Bedekking.Begin	Rhea	-0.05	7.81	-16.5	-59.8	103.5	16.6
06-Jan	1:43:34	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.16	-40	-53.9	101.9	18.4
06-Jan	1:58:23	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	6.56	-41.5	-52	101.8	18.5
06-Jan	3:25:00	3.22	Saturnus	Verduistering.Einde	Rhea	0.74	14.3	-46.8	-39.4	101	19.5
06-Jan	4:02:50	0.53	Mimas	Overgang.Einde	Saturnus	8.19	-46.8	-33.7	100.7	20	
06-Jan	4:21:15	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.23	10.15	-46.3	-30.8	100.5	20.2
06-Jan	5:57:37	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.16	-39	-15.8	99.6	21.4
06-Jan	8:59:17	0.71	Saturnus	Verduistering.Einde	Enceladus	0.31	10.81	-13.2	7.9	98	23.5
06-Jan	13:19:10	0.52	Saturnus	Bedekking.Begin	Mimas	-0.01	8.17	23.6	14.1	95.6	26
06-Jan	14:22:50	1.71	Saturnus	Bedekking.Begin	Tethys	-0.01	8.15	28.9	9.2	95	26.6
06-Jan	15:55:06	0.51	Saturnus	Verduistering.Einde	Mimas	0.23	10.1	31.4	-1	94.2	27.3
06-Jan	17:49:57	1.63	Saturnus	Verduistering.Einde	Tethys	0.39	11.45	25.4	-17.5	93.2	28.1
06-Jan	22:23:30	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	8.14	-12.4	-57.1	90.7	30.3
06-Jan	22:44:31	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.26	6.12	-15.7	-59	90.5	30.5
06-Jan	23:43:35	2.18	Dione	Overgang.Begin	Saturnus	-0.02	8.03	-24.9	-61.6	90	31.1
07-Jan	0:20:56	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.15	-30.2	-60.9	89.6	31.4
07-Jan	0:22:08	1.95	Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.43	-30.4	-60.8	89.6	31.5
07-Jan	0:35:39	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	6.56	-32.2	-60.1	89.5	31.6
07-Jan	0:56:04	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	8.15	-34.9	-58.7	89.3	31.8

07-Jan	1:22:55	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.31	10.73	-38.1	-56.1	89.1	32.1
07-Jan	2:39:59	2.18 Dione	Overgang.Einde	Saturnus	-0.02	8.04	-45.1	-46.2	88.4	32.9
07-Jan	2:40:18	0.53 Mimas	Overgang.Einde	Saturnus		8.18	-45	-46.3	88.4	32.9
07-Jan	2:58:31	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.23	10.12	-46	-43.6	88.2	33.1
07-Jan	3:38:42	1.95 Dione	Schaduwovergang.Einde	Saturnus	0.51	12.42	-46.9	-37.4	87.8	33.6
07-Jan	11:56:35	0.52 Saturnus	Bedekking.Begin	Mimas	-0.01	8.16	14.2	16.9	83.3	39.4
07-Jan	13:02:31	1.7 Tethys	Overgang.Begin	Saturnus	-0.01	8.13	22.3	15.1	82.7	40
07-Jan	13:32:06	1.63 Tethys	Schaduwovergang.Begin	Saturnus	-0.32	5.6	25.3	13.4	82.4	40.3
07-Jan	14:32:30	0.51 Saturnus	Verduistering.Einde	Mimas	0.23	10.07	29.7	8.5	81.9	40.8
07-Jan	14:51:19	0.74 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.14	30.5	6.6	81.7	41
07-Jan	15:51:35	1.7 Tethys	Overgang.Einde	Saturnus	-0.01	8.13	31.4	-0.5	81.2	41.5
07-Jan	16:26:06	20.42 Titan	Schaduwovergang.Begin	Saturnus	0.6	13.14	30.3	-6.4	80.8	41.8
07-Jan	16:28:54	1.63 Tethys	Schaduwovergang.Einde	Saturnus	0.39	11.38	30.5	-5.5	80.8	41.8
07-Jan	17:52:47	0.71 Saturnus	Verduistering.Einde	Enceladus	0.31	10.75	24.9	-17.7	80.1	42.4
07-Jan	21:14:20	20.47 Titan	Schaduwovergang.Einde	Saturnus	1.74	22.46	-3.5	-50	78.2	44
07-Jan	22:58:18	0.53 Mimas	Overgang.Begin	Saturnus	-0.01	8.14	-18.4	-59.8	77.3	44.8
07-Jan	23:12:55	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.2	6.56	-20.6	-60.6	77.2	44.9
08-Jan	1:17:46	0.53 Mimas	Overgang.Einde	Saturnus		8.17	-37.9	-56.6	76	46.1
08-Jan	1:35:46	0.52 Mimas	Schaduwovergang.Einde	Saturnus	0.23	10.09	-39.9	-54.7	75.9	46.3
08-Jan	5:06:13	4.36 Rhea	Overgang.Begin	Saturnus	-0.05	7.8	-43	-23.4	74	48.6
08-Jan	5:57:09	3.22 Rhea	Schaduwovergang.Begin	Saturnus	-0.3	5.77	-38.1	-15.6	73.5	49.2
08-Jan	7:17:15	0.73 Enceladus	Overgang.Begin	Saturnus	-0.01	8.12	-27.7	-4.2	72.8	50.2
08-Jan	7:38:01	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.25	6.13	-24.6	-1.4	72.6	50.4
08-Jan	7:51:42	4.36 Rhea	Overgang.Einde	Saturnus	-0.05	7.8	-22.3	0.6	72.5	50.6
08-Jan	8:39:15	2.16 Saturnus	Bedekking.Begin	Dione	-0.02	8.03	-15.1	6	72	51.2
08-Jan	9:39:56	3.23 Rhea	Schaduwovergang.Einde	Saturnus	0.72	14.11	-5.4	11.8	71.5	51.9
08-Jan	9:50:01	0.73 Enceladus	Overgang.Einde	Saturnus	-0.01	8.14	-4	12.5	71.4	52
08-Jan	10:16:28	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.3	10.68	0.1	14.2	71.2	52.3
08-Jan	10:33:59	0.52 Saturnus	Bedekking.Begin	Mimas	-0.01	8.15	2.8	15.2	71	52.5
08-Jan	11:42:19	1.7 Saturnus	Bedekking.Begin	Tethys	-0.01	8.14	12.9	17	70.4	53.3
08-Jan	12:33:52	1.94 Saturnus	Verduistering.Einde	Dione	0.51	12.34	19.5	16.4	69.9	53.8
08-Jan	13:09:52	0.51 Saturnus	Verduistering.Einde	Mimas	0.22	10.04	23.4	14.9	69.6	54.2
08-Jan	15:09:01	1.63 Saturnus	Verduistering.Einde	Tethys	0.38	11.35	31.2	4.8	68.5	55.3



08-Jan 21:35:41	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.13	-5.9	-51.3	65	58.3
08-Jan 21:50:11	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	6.57	-8.2	-53.1	64.9	58.4
08-Jan 23:45:01	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.13	-26	-61.3	63.8	59.3
08-Jan 23:55:15	0.53	Mimas	Overgang.Einde	Saturnus		8.17	-27.5	-61.3	63.7	59.4
09-Jan 0:13:02	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.23	10.06	-30	-60.9	63.6	59.6
09-Jan 2:46:16	0.71	Saturnus	Verduistering.Einde	Enceladus	0.31	10.69	-45.7	-45.3	62.2	61.1
09-Jan 9:11:23	0.52	Saturnus	Bedekking.Begin	Mimas	-0.01	8.14	-9.5	9.3	58.7	65.6
09-Jan 10:22:06	1.7	Tethys	Overgang.Begin	Saturnus	-0.01	8.11	1.7	14.7	58	66.4
09-Jan 10:51:13	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.31	5.62	6.1	16.1	57.8	66.8
09-Jan 11:47:15	0.51	Saturnus	Verduistering.Einde	Mimas	0.22	10.01	14	17.2	57.3	67.4
09-Jan 13:11:35	1.7	Tethys	Overgang.Einde	Saturnus	-0.01	8.11	24.1	14.9	56.5	68.3
09-Jan 13:48:05	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.38	11.29	27.3	12.6	56.2	68.7
09-Jan 16:10:59	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	8.11	31	-2.6	54.9	70
09-Jan 16:31:31	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.25	6.14	30.2	-5.4	54.7	70.2
09-Jan 17:26:30	2.16	Dione	Overgang.Begin	Saturnus	-0.02	8.01	26.6	-13.5	54.2	70.7
09-Jan 18:04:20	1.94	Dione	Schaduwovergang.Begin	Saturnus	-0.34	5.43	23	-19.2	53.9	71
09-Jan 18:43:58	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	8.12	18.5	-25.3	53.5	71.3
09-Jan 19:09:59	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.3	10.62	15.2	-29.4	53.3	71.5
09-Jan 20:13:04	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.12	6.3	-39.3	52.7	71.9
09-Jan 20:24:24	2.16	Dione	Overgang.Einde	Saturnus	-0.02	8.02	4.5	-41.1	52.6	72
09-Jan 20:27:26	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	6.57	4.2	-41.5	52.6	72
09-Jan 21:21:08	1.94	Dione	Schaduwovergang.Einde	Saturnus	0.5	12.25	-4.2	-49.3	52.1	72.4
09-Jan 22:32:44	0.53	Mimas	Overgang.Einde	Saturnus		8.16	-15.4	-57.5	51.4	72.9
09-Jan 22:50:17	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.22	10.02	-18.2	-58.9	51.3	73.1
10-Jan 7:48:48	0.52	Saturnus	Bedekking.Begin	Mimas	-0.01	8.13	-21.9	0.1	46.4	78.5
10-Jan 8:38:44	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.12	-14.1	6	46	79.2
10-Jan 9:01:52	1.7	Saturnus	Bedekking.Begin	Tethys	-0.01	8.12	-10.3	8.5	45.8	79.4
10-Jan 10:24:37	0.51	Saturnus	Verduistering.Einde	Mimas	0.22	9.98	2.5	14.9	45	80.4
10-Jan 11:19:48	4.24	Saturnus	Bedekking.Begin	Rhea	-0.05	7.8	11	17.1	44.5	81.1
10-Jan 11:39:46	0.71	Saturnus	Verduistering.Einde	Enceladus	0.3	10.64	13.5	17.3	44.4	81.3
10-Jan 12:28:06	1.63	Saturnus	Verduistering.Einde	Tethys	0.38	11.26	19.7	16.8	43.9	81.9
10-Jan 15:53:57	3.21	Saturnus	Verduistering.Einde	Rhea	0.7	13.93	31.3	-0.4	42.1	84
10-Jan 18:50:27	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.11	17.3	-26.2	40.5	85.5

10-Jan 19:04:43	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.2	6.58	15.5	-28.4	40.4	85.6
10-Jan 21:10:13	0.53	Mimas	Overgang.Einde	Saturnus		8.15	-3	-47.5	39.2	86.5
10-Jan 21:27:33	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.22	9.99	-5.7	-49.9	39.1	86.7
11-Jan 1:04:48	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	8.1	-37.6	-57.5	37.2	88.3
11-Jan 1:25:04	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.25	6.16	-39.8	-55.6	37	88.5
11-Jan 2:22:15	2.14	Saturnus	Bedekking.Begin	Dione	-0.02	8.01	-44.7	-48.5	36.5	89
11-Jan 3:38:00	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	8.11	-46.7	-37.4	35.8	89.7
11-Jan 4:03:35	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.29	10.56	-46.1	-33.4	35.6	89.9
11-Jan 6:16:19	1.94	Saturnus	Verduistering.Einde	Dione	0.49	12.17	-34.4	-12.6	34.4	91.4
11-Jan 6:26:12	0.52	Saturnus	Bedekking.Begin	Mimas	-0.01	8.12	-33.2	-11.3	34.3	91.5
11-Jan 7:41:37	1.7	Tethys	Overgang.Begin	Saturnus	-0.01	8.09	-22.3	-0.7	33.6	92.4
11-Jan 8:10:14	1.63	Tethys	Schaduwovergang.Begin	Saturnus	-0.31	5.64	-17.9	2.9	33.4	92.7
11-Jan 9:02:00	0.51	Saturnus	Verduistering.Einde	Mimas	0.22	9.95	-9.8	8.6	32.9	93.3
11-Jan 10:31:29	1.7	Tethys	Overgang.Einde	Saturnus	-0.01	8.09	4.2	15.4	32.1	94.4
11-Jan 11:07:09	1.63	Tethys	Schaduwovergang.Einde	Saturnus	0.37	11.19	9.5	16.9	31.8	94.9
11-Jan 17:27:51	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.1	26	-13.2	28.4	98.9
11-Jan 17:32:26	0.74	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.1	25.5	-13.9	28.4	98.9
11-Jan 17:41:59	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	6.58	24.7	-15.3	28.3	99
11-Jan 19:47:42	0.53	Mimas	Overgang.Einde	Saturnus		8.14	9	-35	27.2	100
11-Jan 20:04:49	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.22	9.96	6.5	-37.7	27.1	100.2
11-Jan 20:33:14	0.71	Saturnus	Verduistering.Einde	Enceladus	0.3	10.58	2.2	-42	26.8	100.4
12-Jan 5:03:37	0.52	Saturnus	Bedekking.Begin	Mimas	-0.01	8.12	-42.1	-23.9	22.3	104.4
12-Jan 6:21:25	1.69	Saturnus	Bedekking.Begin	Tethys	-0.01	8.1	-33.2	-11.8	21.7	105.3
12-Jan 7:39:22	0.51	Saturnus	Verduistering.Einde	Mimas	0.22	9.91	-22.1	-1	21	106.1
12-Jan 9:47:11	1.63	Saturnus	Verduistering.Einde	Tethys	0.37	11.16	-2	12.7	19.9	107.7
12-Jan 9:58:33	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	8.08	-0.3	13.5	19.8	107.8
12-Jan 10:18:33	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.24	6.17	2.8	14.8	19.6	108
12-Jan 11:09:31	2.14	Dione	Overgang.Begin	Saturnus	-0.02	7.99	10.4	17.1	19.2	108.7
12-Jan 11:46:32	1.94	Dione	Schaduwovergang.Begin	Saturnus	-0.33	5.44	15.5	17.6	18.9	109.1
12-Jan 12:31:58	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	8.1	21	17.1	18.5	109.6
12-Jan 12:57:06	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.29	10.51	23.8	16.2	18.3	109.9
12-Jan 14:08:54	2.14	Dione	Overgang.Einde	Saturnus	-0.02	8	29.6	11.5	17.6	110.8
12-Jan 15:03:34	1.94	Dione	Schaduwovergang.Einde	Saturnus	0.48	12.08	31.5	6.1	17.2	111.4

12-Jan 16:05:15	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.1	30.9	-1.3	16.7	112
12-Jan 16:19:15	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	6.59	30.4	-3.2	16.5	112.1
12-Jan 17:34:14	4.17	Rhea	Overgang.Begin	Saturnus	-0.05	7.79	24.9	-14.3	15.9	112.8
12-Jan 18:24:35	3.21	Rhea	Schaduwovergang.Begin	Saturnus	-0.31	5.64	19.5	-22	15.5	113.3
12-Jan 18:25:12	0.53	Mimas	Overgang.Einde	Saturnus		8.13	19.6	-21.8	15.5	113.3
12-Jan 18:42:05	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.22	9.92	17.5	-24.5	15.3	113.4
12-Jan 20:27:26	4.17	Rhea	Overgang.Einde	Saturnus	-0.04	7.79	2.3	-41.2	14.4	114.2
12-Jan 22:08:24	3.21	Rhea	Schaduwovergang.Einde	Saturnus	0.68	13.73	-13.4	-54.6	13.6	114.9
13-Jan 2:26:11	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.09	-45.2	-47.9	11.5	116.8
13-Jan 3:41:01	0.52	Saturnus	Bedekking.Begin	Mimas	-0.01	8.11	-46.5	-36.8	10.9	117.4
13-Jan 5:01:11	1.69	Tethys	Overgang.Begin	Saturnus	-0.01	8.08	-41.9	-24.1	10.3	118.1
13-Jan 5:26:44	0.71	Saturnus	Verduistering.Einde	Enceladus	0.29	10.52	-39.4	-20.2	10.1	118.4
13-Jan 5:29:16	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.3	5.67	-39.1	-19.7	10.1	118.4
13-Jan 6:16:44	0.51	Saturnus	Verduistering.Einde	Mimas	0.21	9.88	-33.4	-12.5	9.7	118.9
13-Jan 7:51:27	1.69	Tethys	Overgang.Einde	Saturnus	-0.01	8.08	-19.6	0.8	9	119.9
13-Jan 8:26:14	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.36	11.1	-14.2	5	8.7	120.3
13-Jan 14:42:40	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.09	31.2	8.6	6.2	124.7
13-Jan 14:56:32	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	6.59	31.5	7.1	6.1	124.8
13-Jan 17:02:42	0.53	Mimas	Overgang.Einde	Saturnus		8.12	27.5	-9.1	5.5	126.1
13-Jan 17:19:21	0.52	Mimas	Schaduwovergang.Einde	Saturnus	0.21	9.89	26.2	-11.6	5.4	126.3
13-Jan 18:52:19	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	8.07	15.8	-25.9	5	127.1
13-Jan 19:12:03	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.24	6.18	13.1	-29	4.9	127.3
13-Jan 20:05:25	2.12	Saturnus	Bedekking.Begin	Dione	-0.02	7.99	5.3	-37.5	4.8	127.7
13-Jan 21:12:44	1.78	Saturnus	Verduistering.Begin	607	0.85	15.04	-5.1	-47.4	4.7	128.2
13-Jan 21:25:57	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	8.08	-7.1	-49.1	4.6	128.3
13-Jan 21:50:38	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.28	10.45	-11	-52.3	4.6	128.5
13-Jan 23:58:50	1.93	Saturnus	Verduistering.Einde	Dione	0.47	12	-30.5	-60.5	4.6	129.4
14-Jan 1:27:17	1.78	Saturnus	Verduistering.Einde	607	1.82	22.92	-41.1	-55	4.8	130
14-Jan 2:18:26	0.52	Saturnus	Bedekking.Begin	Mimas	-0.01	8.1	-45	-48.9	4.9	130.3
14-Jan 3:40:59	1.69	Saturnus	Bedekking.Begin	Tethys	-0.01	8.08	-46.4	-36.7	5.2	131
14-Jan 4:54:05	0.51	Saturnus	Verduistering.Einde	Mimas	0.21	9.85	-42.2	-25.3	5.6	131.6
14-Jan 7:06:14	1.62	Saturnus	Verduistering.Einde	Tethys	0.36	11.07	-25.9	-5.2	6.3	132.8
14-Jan 11:19:54	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.08	12.9	17.7	7.9	135.6

14-Jan 13:20:05	0.53	Mimas	Overgang.Begin	Saturnus	-0.01	8.08	26.6	15.4	8.7	137
14-Jan 13:33:48	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	6.6	27.7	14.6	8.8	137.2
14-Jan 14:20:12	0.71	Saturnus	Verduistering.Einde	Enceladus	0.29	10.46	30.5	10.9	9.2	137.7
14-Jan 15:40:12	0.52	Mimas	Overgang.Einde	Saturnus		8.11	31.5	2.3	9.8	138.6
14-Jan 15:56:37	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.21	9.86	31.1	0.2	9.9	138.7
14-Jan 23:47:58	4.06	Saturnus	Bedekking.Begin	Rhea	-0.04	7.79	-29.6	-60.3	13.5	142.7
15-Jan 0:55:51	0.52	Saturnus	Bedekking.Begin	Mimas		8.09	-38.1	-57.8	14.1	143.1
15-Jan 2:20:47	1.69	Tethys	Overgang.Begin	Saturnus	-0.01	8.06	-45.3	-48.4	14.7	143.7
15-Jan 2:48:19	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.3	5.7	-46.3	-44.5	15	143.9
15-Jan 3:31:27	0.51	Saturnus	Verduistering.Einde	Mimas	0.21	9.82	-46.5	-38.1	15.3	144.2
15-Jan 3:46:05	0.73	Enceladus	Overgang.Begin	Saturnus	-0.01	8.06	-46.1	-35.9	15.4	144.3
15-Jan 4:05:32	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.24	6.2	-45.3	-32.8	15.6	144.4
15-Jan 4:22:12	3.2	Saturnus	Verduistering.Einde	Rhea	0.67	13.54	-44.2	-30	15.7	144.6
15-Jan 4:52:37	2.12	Dione	Overgang.Begin	Saturnus	-0.02	7.97	-41.9	-25.3	15.9	144.8
15-Jan 5:11:26	1.69	Tethys	Overgang.Einde	Saturnus	-0.01	8.06	-40.1	-22.4	16.1	144.9
15-Jan 5:28:46	1.94	Dione	Schaduwovergang.Begin	Saturnus	-0.33	5.46	-38.3	-19.6	16.2	145.1
15-Jan 5:45:20	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.35	11	-36.3	-17.1	16.4	145.2
15-Jan 6:19:56	0.73	Enceladus	Overgang.Einde	Saturnus	-0.01	8.07	-32	-11.9	16.6	145.5
15-Jan 6:44:09	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.28	10.39	-28.6	-8.3	16.8	145.7
15-Jan 7:53:30	2.12	Dione	Overgang.Einde	Saturnus	-0.02	7.98	-18.1	1.3	17.4	146.4
15-Jan 8:46:00	1.94	Dione	Schaduwovergang.Einde	Saturnus	0.46	11.9	-9.8	7.4	17.8	146.9
15-Jan 11:57:30	0.52	Mimas	Overgang.Begin	Saturnus	-0.01	8.07	18.3	18.2	19.3	149
15-Jan 12:11:05	0.52	Mimas	Schaduwovergang.Begin	Saturnus	-0.19	6.61	19.9	18.1	19.5	149.2
15-Jan 14:17:42	0.52	Mimas	Overgang.Einde	Saturnus		8.1	30.6	11.3	20.5	150.6
15-Jan 14:33:53	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.21	9.82	31.2	9.8	20.6	150.8
15-Jan 15:30:49	17.94	Saturnus	Verduistering.Begin	Titan	0.29	10.52	31.5	2.5	21.1	151.5
15-Jan 20:13:42	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.07	3.1	-38.3	23.3	154.1
15-Jan 20:24:45	17.93	Saturnus	Verduistering.Einde	Titan	1.5	20.31	0.1	-41.3	23.5	154.3
15-Jan 23:13:44	0.71	Saturnus	Verduistering.Einde	Enceladus	0.28	10.4	-24.9	-59.2	24.8	155.4
15-Jan 23:33:16	0.52	Saturnus	Bedekking.Begin	Mimas		8.08	-27.7	-59.9	24.9	155.6
16-Jan 1:00:40	1.69	Saturnus	Bedekking.Begin	Tethys	-0.01	8.07	-39	-57.2	25.6	156.2
16-Jan 2:08:48	0.51	Saturnus	Verduistering.Einde	Mimas	0.2	9.78	-44.8	-49.9	26.2	156.6
16-Jan 4:25:22	1.62	Saturnus	Verduistering.Einde	Tethys	0.35	10.97	-43.8	-29.5	27.3	157.5

16-Jan 10:34:55	0.52 Mimas	Overgang.Begin	Saturnus	-0.01	8.06	7.5	16.4	30.2	160.8
16-Jan 10:48:22	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.19	6.61	9.5	17	30.3	160.9
16-Jan 12:39:53	0.72 Enceladus	Overgang.Begin	Saturnus	-0.01	8.05	23.6	17.6	31.2	162.1
16-Jan 12:55:12	0.52 Mimas	Overgang.Einde	Saturnus		8.09	25.1	17	31.4	162.3
16-Jan 12:59:01	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.23	6.22	25.5	16.9	31.4	162.3
16-Jan 13:11:09	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.21	9.79	26.6	16.3	31.5	162.5
16-Jan 13:48:32	2.1 Saturnus	Bedekking.Begin	Dione	-0.02	7.98	29.4	13.9	31.8	162.9
16-Jan 15:13:56	0.72 Enceladus	Overgang.Einde	Saturnus	-0.01	8.06	31.8	5.8	32.5	163.8
16-Jan 15:37:41	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.27	10.33	31.5	3	32.7	164.1
16-Jan 17:41:13	1.93 Saturnus	Verduistering.Einde	Dione	0.46	11.82	23	-14.4	33.6	165.3
16-Jan 22:10:41	0.52 Saturnus	Bedekking.Begin	Mimas		8.07	-15.7	-53.9	35.8	167.7
16-Jan 23:40:23	1.68 Tethys	Overgang.Begin	Saturnus	-0.01	8.05	-29.3	-59.9	36.5	168.3
17-Jan 0:07:20	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.29	5.73	-33	-59.8	36.7	168.5
17-Jan 0:46:10	0.51 Saturnus	Verduistering.Einde	Mimas	0.2	9.75	-37.7	-58.1	37	168.7
17-Jan 2:31:25	1.68 Tethys	Overgang.Einde	Saturnus	-0.01	8.04	-46	-46.7	37.8	169.4
17-Jan 3:04:23	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.34	10.9	-46.6	-42	38.1	169.6
17-Jan 5:07:26	0.73 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.06	-39.8	-22.9	39.1	170.4
17-Jan 6:03:27	4.0 Rhea	Overgang.Begin	Saturnus	-0.04	7.78	-32.9	-13.9	39.5	170.8
17-Jan 6:52:42	3.2 Rhea	Schaduwovergang.Begin	Saturnus	-0.32	5.54	-26.1	-6.7	39.9	171.2
17-Jan 8:07:11	0.71 Saturnus	Verduistering.Einde	Enceladus	0.28	10.34	-14.9	3.1	40.5	171.7
17-Jan 9:04:01	4.0 Rhea	Overgang.Einde	Saturnus	-0.04	7.79	-5.6	9.7	40.9	172.2
17-Jan 9:12:20	0.52 Mimas	Overgang.Begin	Saturnus	-0.01	8.06	-4.6	10.3	41	172.3
17-Jan 9:25:39	0.52 Mimas	Schaduwovergang.Begin	Saturnus	-0.18	6.62	-2.5	11.6	41.1	172.4
17-Jan 10:37:28	3.2 Rhea	Schaduwovergang.Einde	Saturnus	0.64	13.33	8.6	16.7	41.7	173.1
17-Jan 11:32:43	0.52 Mimas	Overgang.Einde	Saturnus		8.09	16.1	18.4	42.1	173.6
17-Jan 11:48:25	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.2	9.76	18.1	18.6	42.2	173.8
17-Jan 20:48:06	0.52 Saturnus	Bedekking.Begin	Mimas		8.07	-3.2	-43	46.4	178.7
17-Jan 21:33:40	0.72 Enceladus	Overgang.Begin	Saturnus	-0.01	8.04	-10.4	-49.3	46.8	178.9
17-Jan 21:52:30	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.23	6.23	-13.4	-51.7	46.9	178.9
17-Jan 22:20:18	1.68 Saturnus	Bedekking.Begin	Tethys	-0.01	8.05	-17.9	-54.8	47.1	178.9
17-Jan 22:35:51	2.1 Dione	Overgang.Begin	Saturnus	-0.02	7.96	-20.3	-56.3	47.2	178.8
17-Jan 23:11:01	1.94 Dione	Schaduwovergang.Begin	Saturnus	-0.32	5.49	-25.6	-58.7	47.5	178.7
17-Jan 23:23:30	0.51 Saturnus	Verduistering.Einde	Mimas	0.2	9.72	-27.3	-59.2	47.6	178.7

18-Jan	0:07:56	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.05	-33.5	-59.6	48	178.5
18-Jan	0:31:12	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.27	10.27	-36.4	-58.8	48.1	178.4
18-Jan	1:38:12	2.1	Dione	Overgang.Einde	Saturnus	-0.02	7.96	-43.2	-53.2	48.7	178
18-Jan	1:44:27	1.62	Saturnus	Verduistering.Einde	Tethys	0.34	10.87	-43.6	-52.6	48.7	178
18-Jan	2:28:29	1.94	Dione	Schaduwovergang.Einde	Saturnus	0.45	11.72	-46	-47	49	177.7
18-Jan	7:49:47	0.52	Mimas	Overgang.Begin	Saturnus	-0.01	8.05	-17	1.1	51.5	175.7
18-Jan	8:02:56	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.18	6.63	-15	2.7	51.6	175.6
18-Jan	10:10:13	0.52	Mimas	Overgang.Einde	Saturnus		8.08	4.9	15.3	52.6	174.6
18-Jan	10:25:41	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.2	9.72	7.3	16.2	52.7	174.4
18-Jan	14:01:12	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.04	30.5	13.4	54.4	172.4
18-Jan	17:00:40	0.71	Saturnus	Verduistering.Einde	Enceladus	0.27	10.28	26.4	-7.8	55.7	170.6
18-Jan	19:25:31	0.52	Saturnus	Bedekking.Begin	Mimas		8.06	8.8	-30.2	56.9	169.2
18-Jan	21:00:01	1.68	Tethys	Overgang.Begin	Saturnus	-0.01	8.03	-5.7	-44.6	57.6	168.3
18-Jan	21:26:21	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.29	5.77	-9.9	-48.2	57.8	168.1
18-Jan	22:00:51	0.51	Saturnus	Verduistering.Einde	Mimas	0.2	9.69	-15.3	-52.4	58	167.8
18-Jan	23:51:27	1.68	Tethys	Overgang.Einde	Saturnus	-0.01	8.03	-31.8	-59.5	58.9	167
19-Jan	0:23:28	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.33	10.8	-35.9	-58.9	59.1	166.8
19-Jan	6:27:13	0.52	Mimas	Overgang.Begin	Saturnus	-0.01	8.04	-28.9	-10.4	61.9	164.4
19-Jan	6:27:28	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	8.03	-28.8	-10.3	61.9	164.4
19-Jan	6:40:12	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.18	6.64	-27	-8.5	62	164.3
19-Jan	6:45:59	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.23	6.25	-26.1	-7.6	62	164.3
19-Jan	7:31:43	2.09	Saturnus	Bedekking.Begin	Dione	-0.02	7.96	-19.1	-1.1	62.4	164
19-Jan	8:47:44	0.52	Mimas	Overgang.Einde	Saturnus		8.07	-7.3	8.1	63	163.4
19-Jan	9:01:57	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.04	-5	9.6	63.1	163.3
19-Jan	9:02:57	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.2	9.69	-4.9	9.7	63.1	163.3
19-Jan	9:24:43	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.26	10.21	-1.5	11.8	63.2	163.1
19-Jan	11:23:36	1.93	Saturnus	Verduistering.Einde	Dione	0.44	11.63	16	18.7	64.1	162.1
19-Jan	12:16:50	3.91	Saturnus	Bedekking.Begin	Rhea	-0.04	7.78	22.6	18.8	64.5	161.7
19-Jan	16:50:40	3.18	Saturnus	Verduistering.Einde	Rhea	0.62	13.13	26.9	-6.4	66.6	158.9
19-Jan	18:02:56	0.52	Saturnus	Bedekking.Begin	Mimas		8.05	19.5	-17	67.1	158.2
19-Jan	19:39:57	1.68	Saturnus	Bedekking.Begin	Tethys	-0.01	8.04	6.1	-32.3	67.9	157.3
19-Jan	20:38:12	0.51	Saturnus	Verduistering.Einde	Mimas	0.19	9.65	-2.7	-41.2	68.3	156.7
19-Jan	22:54:57	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.03	-24.1	-57.3	69.3	155.5

19-Jan 23:03:29	1.62	Saturnus	Verduistering.Einde	Tethys	0.33	10.77	-25.4	-57.8	69.4	155.5
20-Jan 1:54:07	0.71	Saturnus	Verduistering.Einde	Enceladus	0.26	10.22	-44.6	-51.2	70.7	154.2
20-Jan 5:04:39	0.52	Mimas	Overgang.Begin	Saturnus	-0.01	8.04	-38.8	-23	72.1	153.1
20-Jan 5:17:30	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.18	6.65	-37.4	-21	72.2	153
20-Jan 7:25:15	0.52	Mimas	Overgang.Einde	Saturnus		8.06	-19.7	-1.9	73.2	152.2
20-Jan 7:40:13	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.19	9.65	-17.3	0.1	73.3	152.1
20-Jan 15:21:18	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	8.02	31.7	5.8	76.7	148.2
20-Jan 15:39:29	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.22	6.28	31.1	3.6	76.9	148
20-Jan 16:19:14	2.09	Dione	Overgang.Begin	Saturnus	-0.02	7.94	29.1	-1.7	77.2	147.6
20-Jan 16:40:21	0.52	Saturnus	Bedekking.Begin	Mimas		8.04	27.6	-4.5	77.3	147.4
20-Jan 16:53:20	1.94	Dione	Schaduwovergang.Begin	Saturnus	-0.32	5.53	26.4	-6.4	77.4	147.3
20-Jan 17:56:00	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8.03	19.9	-15.7	77.9	146.6
20-Jan 18:18:15	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.26	10.15	17.2	-19.2	78.1	146.4
20-Jan 18:19:39	1.68	Tethys	Overgang.Begin	Saturnus	-0.01	8.02	16.9	-19.5	78.1	146.4
20-Jan 18:45:21	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.28	5.81	13.5	-23.5	78.3	146.1
20-Jan 19:15:32	0.51	Saturnus	Verduistering.Einde	Mimas	0.19	9.62	9.3	-28.2	78.5	145.8
20-Jan 19:23:01	2.09	Dione	Overgang.Einde	Saturnus	-0.02	7.95	8.1	-29.5	78.6	145.8
20-Jan 20:11:00	1.94	Dione	Schaduwovergang.Einde	Saturnus	0.43	11.54	0.9	-37	78.9	145.3
20-Jan 21:11:28	1.68	Tethys	Overgang.Einde	Saturnus	-0.01	8.01	-8.6	-45.8	79.4	144.7
20-Jan 21:42:31	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.33	10.7	-13.5	-49.9	79.6	144.4
21-Jan 3:42:06	0.52	Mimas	Overgang.Begin	Saturnus	-0.01	8.03	-45.2	-35.9	82.3	141.7
21-Jan 3:54:47	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.17	6.66	-44.5	-33.9	82.4	141.7
21-Jan 6:02:46	0.52	Mimas	Overgang.Einde	Saturnus		8.05	-31.2	-13.8	83.3	140.9
21-Jan 6:17:29	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.19	9.62	-29.2	-11.6	83.5	140.8
21-Jan 7:48:46	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	8.02	-15.4	1.4	84.1	140.2
21-Jan 10:47:36	0.71	Saturnus	Verduistering.Einde	Enceladus	0.26	10.16	12.1	17.9	85.5	139
21-Jan 15:17:46	0.52	Saturnus	Bedekking.Begin	Mimas		8.04	31.7	6.5	87.5	136.6
21-Jan 16:59:42	1.68	Saturnus	Bedekking.Begin	Tethys	-0.01	8.02	25.6	-7.1	88.3	135.6
21-Jan 17:52:52	0.51	Saturnus	Verduistering.Einde	Mimas	0.19	9.59	19.9	-15	88.7	135.1
21-Jan 18:32:20	3.85	Rhea	Overgang.Begin	Saturnus	-0.04	7.77	14.7	-21.4	89	134.7
21-Jan 19:20:00	3.18	Rhea	Schaduwovergang.Begin	Saturnus	-0.32	5.47	8	-28.9	89.3	134.2
21-Jan 20:22:37	1.62	Saturnus	Verduistering.Einde	Tethys	0.32	10.67	-1.4	-38.5	89.8	133.5
21-Jan 21:27:56	1.38	Enceladus	Gedeeltelijke verduistering	Mimas	1.99	1.88	-11.7	-47.8	90.3	132.9

21-Jan 21:39:57	3.85 Rhea	Overgang.Einde	Saturnus	-0.04	7.78	-13.8	-49.5	90.4	132.8
21-Jan 23:05:44	3.19 Rhea	Schaduwovergang.Einde	Saturnus	0.6	12.91	-26.9	-57.5	91	132
22-Jan 0:15:06	0.72 Enceladus	Overgang.Begin	Saturnus	-0.01	8.01	-36	-58.6	91.5	131.4
22-Jan 0:32:57	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.22	6.3	-38.1	-57.9	91.7	131.3
22-Jan 1:14:56	2.07 Saturnus	Bedekking.Begin	Dione	-0.01	7.94	-42.3	-54.9	92	131
22-Jan 2:19:33	0.52 Mimas	Overgang.Begin	Saturnus	-0.01	8.02	-45.9	-47.7	92.5	130.5
22-Jan 2:32:04	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.17	6.67	-46.2	-46	92.6	130.4
22-Jan 2:50:00	0.72 Enceladus	Overgang.Einde	Saturnus	-0.01	8.02	-46.4	-43.5	92.7	130.3
22-Jan 3:11:46	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.25	10.09	-46.1	-40.3	92.9	130.1
22-Jan 4:40:17	0.52 Mimas	Overgang.Einde	Saturnus		8.05	-40.5	-26.6	93.5	129.6
22-Jan 4:54:46	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.19	9.58	-39.1	-24.3	93.6	129.5
22-Jan 5:05:53	1.93 Saturnus	Verduistering.Einde	Dione	0.42	11.45	-37.8	-22.5	93.7	129.4
22-Jan 13:55:12	0.52 Saturnus	Bedekking.Begin	Mimas		8.03	31	14.8	97.7	125.8
22-Jan 15:39:19	1.67 Tethys	Overgang.Begin	Saturnus	-0.01	8	30.9	4	98.5	124.8
22-Jan 16:04:22	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.27	5.85	29.6	0.8	98.7	124.5
22-Jan 16:30:12	0.51 Saturnus	Verduistering.Einde	Mimas	0.19	9.55	27.9	-2.6	98.9	124.3
22-Jan 16:42:33	0.73 Saturnus	Bedekking.Begin	Enceladus	-0.01	8.01	26.9	-4.4	99	124.2
22-Jan 18:31:30	1.67 Tethys	Overgang.Einde	Saturnus	-0.01	8	14.5	-20.9	99.8	123
22-Jan 19:01:34	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.32	10.6	10.3	-25.7	100	122.7
22-Jan 19:41:04	0.71 Saturnus	Verduistering.Einde	Enceladus	0.25	10.1	4.5	-31.8	100.3	122.3
23-Jan 0:57:00	0.52 Mimas	Overgang.Begin	Saturnus	-0.01	8.01	-40.9	-56.3	102.7	119.3
23-Jan 1:09:21	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.17	6.68	-42	-55.3	102.8	119.2
23-Jan 3:17:48	0.52 Mimas	Overgang.Einde	Saturnus		8.04	-45.8	-39.3	103.8	118.3
23-Jan 3:32:02	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.19	9.55	-45.2	-37.1	103.9	118.2
23-Jan 9:08:55	0.72 Enceladus	Overgang.Begin	Saturnus	-0.01	8	-1.6	11	106.4	116.1
23-Jan 9:26:26	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.21	6.32	1.2	12.7	106.6	116
23-Jan 10:02:35	2.07 Dione	Overgang.Begin	Saturnus	-0.02	7.93	6.8	15.7	106.9	115.7
23-Jan 10:35:33	1.93 Dione	Schaduwovergang.Begin	Saturnus	-0.31	5.57	11.5	17.8	107.1	115.5
23-Jan 11:44:02	0.72 Enceladus	Overgang.Einde	Saturnus	-0.01	8.01	20.4	19.8	107.6	115
23-Jan 12:05:16	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.25	10.03	22.8	19.8	107.8	114.9
23-Jan 12:32:37	0.52 Saturnus	Bedekking.Begin	Mimas		8.02	25.6	19.4	108	114.7
23-Jan 13:07:47	2.07 Dione	Overgang.Einde	Saturnus	-0.01	7.93	28.6	18	108.3	114.4
23-Jan 13:53:25	1.93 Dione	Schaduwovergang.Einde	Saturnus	0.41	11.35	31.1	15.1	108.6	114



23-Jan 14:19:23	1.67	Saturnus	Bedekking.Begin	Tethys	-0.01	8.01	31.9	12.9	108.8	113.8
23-Jan 15:07:32	0.51	Saturnus	Verduistering.Einde	Mimas	0.18	9.52	31.9	8.1	109.2	113.3
23-Jan 15:29:14	18.8	Titan	Schaduwovergang.Begin	Saturnus	0.2	9.66	30.9	4.4	109.4	113.1
23-Jan 17:41:39	1.62	Saturnus	Verduistering.Einde	Tethys	0.31	10.56	20.4	-13	110.4	111.8
23-Jan 20:42:45	18.82	Titan	Schaduwovergang.Einde	Saturnus	1.41	19.36	-7	-42.3	111.8	109.8
23-Jan 23:34:28	0.52	Mimas	Overgang.Begin	Saturnus		8.01	-31.6	-58.2	113.1	108.2
23-Jan 23:46:39	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.17	6.69	-33.3	-58.4	113.2	108.1
24-Jan 0:46:29	3.76	Saturnus	Bedekking.Begin	Rhea	-0.03	7.78	-40.3	-56.6	113.6	107.5
24-Jan 1:36:21	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	8	-44.2	-52.5	114	107.1
24-Jan 1:55:20	0.52	Mimas	Overgang.Einde	Saturnus		8.03	-45.2	-50.4	114.2	106.9
24-Jan 2:09:18	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.18	9.52	-45.8	-48.7	114.3	106.8
24-Jan 4:34:32	0.71	Saturnus	Verduistering.Einde	Enceladus	0.25	10.03	-40.3	-27.3	115.4	105.7
24-Jan 5:19:19	3.17	Saturnus	Verduistering.Einde	Rhea	0.58	12.7	-35.2	-20	115.8	105.4
24-Jan 11:10:02	0.52	Saturnus	Bedekking.Begin	Mimas		8.02	16.7	19.4	118.5	103.3
24-Jan 12:59:02	1.67	Tethys	Overgang.Begin	Saturnus	-0.01	7.99	28.2	18.7	119.3	102.5
24-Jan 13:23:23	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.27	5.89	29.9	17.4	119.5	102.3
24-Jan 13:44:51	0.51	Saturnus	Verduistering.Einde	Mimas	0.18	9.49	30.9	16	119.7	102.1
24-Jan 15:51:35	1.67	Tethys	Overgang.Einde	Saturnus	-0.01	7.99	30	2.9	120.7	101
24-Jan 16:20:38	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.31	10.5	28.1	-0.9	120.9	100.7
24-Jan 18:02:45	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	7.99	17.5	-15.9	121.7	99.7
24-Jan 18:19:54	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.21	6.34	15.2	-18.6	121.8	99.5
24-Jan 18:58:21	2.06	Saturnus	Bedekking.Begin	Dione	-0.01	7.93	9.8	-24.7	122.1	99.1
24-Jan 20:38:04	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	8	-5.4	-40.1	122.9	98
24-Jan 20:58:46	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.24	9.97	-8.7	-43	123.1	97.8
24-Jan 22:11:56	0.52	Mimas	Overgang.Begin	Saturnus		8	-20.1	-52.3	123.7	97
24-Jan 22:23:56	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.17	6.71	-21.9	-53.5	123.7	96.8
24-Jan 22:48:18	1.93	Saturnus	Verduistering.Einde	Dione	0.4	11.26	-25.7	-55.6	123.9	96.6
25-Jan 0:32:51	0.52	Mimas	Overgang.Einde	Saturnus		8.02	-39.1	-57.3	124.8	95.5
25-Jan 0:46:34	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.18	9.48	-40.5	-56.5	124.9	95.4
25-Jan 9:47:27	0.52	Saturnus	Bedekking.Begin	Mimas		8.01	5.5	14.9	129.2	91.5
25-Jan 10:30:09	0.73	Saturnus	Bedekking.Begin	Enceladus	-0.01	7.99	11.8	17.9	129.5	91.2
25-Jan 11:39:06	1.67	Saturnus	Bedekking.Begin	Tethys		8	20.8	20.3	130.1	90.8
25-Jan 12:22:11	0.51	Saturnus	Verduistering.Einde	Mimas	0.18	9.45	25.4	20.1	130.4	90.5

25-Jan 13:28:00	0.71	Saturnus	Verduistering.Einde	Enceladus	0.24	9.97	30.3	17.4	130.9	90
25-Jan 15:00:42	1.62	Saturnus	Verduistering.Einde	Tethys	0.3	10.46	31.9	9.3	131.7	89.2
25-Jan 20:49:24	0.52	Mimas	Overgang.Begin	Saturnus		7.99	-7.7	-41.5	134.5	85.6
25-Jan 21:01:14	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.16	6.72	-9.6	-43.2	134.6	85.5
25-Jan 23:10:23	0.52	Mimas	Overgang.Einde	Saturnus		8.02	-29.2	-56.7	135.6	84.1
25-Jan 23:23:51	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.18	9.45	-31.1	-57.3	135.7	83.9
26-Jan 0:25:21	1.68	607	Schaduwovergang.Begin	Saturnus	0.54	12.37	-38.7	-57.3	136.2	83.3
26-Jan 2:56:38	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	7.98	-45.9	-41.9	137.5	81.8
26-Jan 3:13:25	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.21	6.37	-45.4	-39.5	137.6	81.7
26-Jan 3:45:58	2.06	Dione	Overgang.Begin	Saturnus	-0.01	7.91	-43.7	-34.4	137.9	81.4
26-Jan 4:17:42	1.93	Dione	Schaduwovergang.Begin	Saturnus	-0.3	5.63	-41.1	-29.5	138.1	81.1
26-Jan 5:10:16	1.69	607	Schaduwovergang.Einde	Saturnus	1.55	20.48	-35.5	-21.2	138.6	80.7
26-Jan 5:32:09	0.72	Enceladus	Overgang.Einde	Saturnus	-0.01	7.99	-32.7	-17.9	138.7	80.6
26-Jan 5:52:19	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.23	9.91	-30	-14.7	138.9	80.4
26-Jan 6:52:33	2.06	Dione	Overgang.Einde	Saturnus	-0.01	7.92	-21.1	-5.5	139.4	80
26-Jan 7:02:03	3.72	Rhea	Overgang.Begin	Saturnus	-0.03	7.77	-19.5	-4	139.5	79.9
26-Jan 7:35:47	1.93	Dione	Schaduwovergang.Einde	Saturnus	0.39	11.16	-14.4	0.5	139.7	79.7
26-Jan 7:47:39	3.17	Rhea	Schaduwovergang.Begin	Saturnus	-0.32	5.45	-12.4	2.2	139.8	79.6
26-Jan 8:24:53	0.52	Saturnus	Bedekking.Begin	Mimas		8	-6.7	6.7	140.1	79.4
26-Jan 10:16:19	3.71	Rhea	Overgang.Einde	Saturnus	-0.03	7.78	10.5	17.4	141.1	78.7
26-Jan 10:18:42	1.67	Tethys	Overgang.Begin	Saturnus	-0.01	7.98	10.7	17.5	141.1	78.7
26-Jan 10:42:21	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.26	5.94	14	18.8	141.3	78.5
26-Jan 10:59:30	0.51	Saturnus	Verduistering.Einde	Mimas	0.17	9.42	16.3	19.5	141.4	78.4
26-Jan 11:34:17	3.17	Rhea	Schaduwovergang.Einde	Saturnus	0.56	12.48	20.8	20.5	141.7	78.2
26-Jan 13:11:37	1.67	Tethys	Overgang.Einde	Saturnus	-0.01	7.97	29.7	18.6	142.5	77.5
26-Jan 13:39:39	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.3	10.39	31.1	16.9	142.7	77.3
26-Jan 19:23:57	0.72	Saturnus	Bedekking.Begin	Enceladus	-0.01	7.98	5.1	-28.2	145.6	74
26-Jan 19:26:52	0.52	Mimas	Overgang.Begin	Saturnus		7.99	4.7	-28.7	145.6	74
26-Jan 19:38:32	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.16	6.73	2.9	-30.5	145.7	73.8
26-Jan 21:47:55	0.52	Mimas	Overgang.Einde	Saturnus		8.01	-17.4	-49	146.8	72.4
26-Jan 22:01:07	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.17	9.41	-19.5	-50.6	146.9	72.2
26-Jan 22:21:27	0.71	Saturnus	Verduistering.Einde	Enceladus	0.24	9.91	-22.6	-52.7	147.1	72
27-Jan 7:02:18	0.52	Saturnus	Bedekking.Begin	Mimas		8	-19.1	-4.1	151.4	67

27-Jan	8:58:52	1.66	Saturnus	Bedekking.Begin	Tethys	7.98	-0.7	10.8	152.4	66.2	
27-Jan	9:36:48	0.51	Saturnus	Verduistering.Einde	Mimas	0.17	9.39	5	14.5	152.7	66
27-Jan	11:50:28	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	7.97	22.9	20.9	153.8	65.1
27-Jan	12:06:52	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.2	6.4	24.6	20.8	154	65
27-Jan	12:19:47	1.62	Saturnus	Verduistering.Einde	Tethys	0.29	10.35	25.9	20.7	154.1	64.9
27-Jan	12:41:56	2.04	Saturnus	Bedekking.Begin	Dione	-0.01	7.92	27.9	20.1	154.3	64.7
27-Jan	14:26:11	0.72	Enceladus	Overgang.Einde	Saturnus		7.98	32.3	13.4	155.1	63.9
27-Jan	14:45:49	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.23	9.85	32.2	11.4	155.3	63.8
27-Jan	16:30:47	1.92	Saturnus	Verduistering.Einde	Dione	0.38	11.06	26.5	-1.6	156.2	62.8
27-Jan	18:04:21	0.52	Mimas	Overgang.Begin	Saturnus		7.98	16	-15.5	157	61.9
27-Jan	18:15:50	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.16	6.74	14.4	-17.3	157.1	61.8
27-Jan	20:25:27	0.52	Mimas	Overgang.Einde	Saturnus		8	-5	-37.5	158.2	60.4
27-Jan	20:38:24	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.17	9.38	-7	-39.4	158.3	60.2
28-Jan	4:17:45	0.72	Saturnus	Bedekking.Begin	Enceladus		7.97	-40.4	-29.3	162.2	55.2
28-Jan	5:39:43	0.52	Saturnus	Bedekking.Begin	Mimas		7.99	-30.7	-16.4	162.9	54.4
28-Jan	7:14:53	0.71	Saturnus	Verduistering.Einde	Enceladus	0.23	9.85	-16.6	-2.1	163.7	53.7
28-Jan	7:38:30	1.66	Tethys	Overgang.Begin	Saturnus	-0.01	7.97	-12.8	1.3	163.9	53.5
28-Jan	8:01:24	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.25	5.99	-9.2	4.3	164.1	53.3
28-Jan	8:14:07	0.51	Saturnus	Verduistering.Einde	Mimas	0.17	9.35	-7.3	5.8	164.2	53.2
28-Jan	10:31:46	1.66	Tethys	Overgang.Einde	Saturnus	-0.01	7.96	13.6	18.8	165.4	52.3
28-Jan	10:58:44	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.28	10.29	17.2	20	165.6	52.1
28-Jan	13:16:20	3.64	Saturnus	Bedekking.Begin	Rhea	-0.03	7.77	30.5	18.8	166.8	51.1
28-Jan	16:41:50	0.52	Mimas	Overgang.Begin	Saturnus		7.98	25.2	-2.9	168.5	49.4
28-Jan	16:53:08	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.16	6.76	24.1	-4.5	168.6	49.3
28-Jan	17:47:44	3.16	Saturnus	Verduistering.Einde	Rhea	0.53	12.26	17.6	-12.9	169	48.8
28-Jan	19:03:00	0.52	Mimas	Overgang.Einde	Saturnus		8	7.2	-24.5	169.6	48
28-Jan	19:15:41	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.17	9.34	5.3	-26.5	169.7	47.9
28-Jan	20:44:19	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	7.96	-8.5	-40	170.5	46.9
28-Jan	21:00:20	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.2	6.43	-11	-42.3	170.6	46.7
28-Jan	21:29:20	2.04	Dione	Overgang.Begin	Saturnus	-0.01	7.9	-15.7	-46.3	170.8	46.3
28-Jan	21:59:47	1.93	Dione	Schaduwovergang.Begin	Saturnus	-0.29	5.69	-20.4	-50	171.1	46
28-Jan	23:20:13	0.72	Enceladus	Overgang.Einde	Saturnus		7.97	-32	-56.4	171.7	45
28-Jan	23:39:18	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.22	9.79	-34.4	-57	171.9	44.8

29-Jan	0:37:16	2.04	Dione	Overgang.Einde	Saturnus	-0.01	7.91	-40.9	-56	172.3	44.1
29-Jan	1:18:04	1.93	Dione	Schaduwovergang.Einde	Saturnus	0.37	10.97	-44	-53.2	172.6	43.6
29-Jan	4:17:09	0.52	Saturnus	Bedekking.Begin	Mimas		7.98	-40.1	-29.2	173.9	41.7
29-Jan	6:18:35	1.66	Saturnus	Bedekking.Begin	Tethys		7.97	-24.5	-10.1	174.7	40.5
29-Jan	6:51:25	0.51	Saturnus	Verduistering.Einde	Mimas	0.16	9.32	-19.7	-5.3	174.9	40.3
29-Jan	9:38:47	1.62	Saturnus	Verduistering.Einde	Tethys	0.28	10.25	6.5	15.2	175.7	38.9
29-Jan	13:11:34	0.72	Saturnus	Bedekking.Begin	Enceladus		7.96	30.4	19.4	176.2	37.4
29-Jan	15:19:20	0.52	Mimas	Overgang.Begin	Saturnus		7.97	31	8.2	176	36.4
29-Jan	15:30:26	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.15	6.77	30.5	6.9	175.9	36.3
29-Jan	16:08:20	0.71	Saturnus	Verduistering.Einde	Enceladus	0.22	9.78	27.9	2	175.8	36
29-Jan	17:40:32	0.52	Mimas	Overgang.Einde	Saturnus		7.99	18.2	-11.3	175.4	35.2
29-Jan	17:52:57	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.16	9.31	16.6	-13.2	175.4	35.1
30-Jan	2:54:35	0.52	Saturnus	Bedekking.Begin	Mimas		7.98	-45.4	-41.5	171.6	28.9
30-Jan	4:58:15	1.66	Tethys	Overgang.Begin	Saturnus	-0.01	7.95	-35	-22.5	170.5	27.5
30-Jan	5:20:24	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.24	6.04	-32.2	-19	170.3	27.3
30-Jan	5:28:43	0.51	Saturnus	Verduistering.Einde	Mimas	0.16	9.28	-31.2	-17.7	170.3	27.2
30-Jan	5:38:09	0.72	Enceladus	Overgang.Begin	Saturnus	-0.01	7.95	-29.9	-16.2	170.2	27.1
30-Jan	5:53:47	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.19	6.45	-27.7	-13.8	170.1	26.9
30-Jan	6:25:28	2.03	Saturnus	Bedekking.Begin	Dione	-0.01	7.9	-22.9	-8.8	169.8	26.6
30-Jan	7:51:52	1.66	Tethys	Overgang.Einde	Saturnus	-0.01	7.95	-9.5	3.5	169.1	25.8
30-Jan	8:14:15	0.72	Enceladus	Overgang.Einde	Saturnus		7.96	-6	6.3	168.9	25.7
30-Jan	8:17:46	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.27	10.19	-5.4	6.8	168.8	25.6
30-Jan	8:32:47	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.22	9.72	-3.1	8.5	168.7	25.5
30-Jan	10:13:08	1.92	Saturnus	Verduistering.Einde	Dione	0.36	10.87	12.1	18.1	167.8	24.7
30-Jan	13:56:49	0.52	Mimas	Overgang.Begin	Saturnus		7.96	32.2	16.7	165.9	23.1
30-Jan	14:07:44	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.15	6.79	32.4	15.8	165.8	23
30-Jan	16:18:04	0.52	Mimas	Overgang.Einde	Saturnus		7.98	26.8	0.9	164.6	21.9
30-Jan	16:30:14	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.16	9.27	25.7	-0.7	164.5	21.8
30-Jan	19:32:04	3.6	Rhea	Overgang.Begin	Saturnus	-0.03	7.77	1.6	-28.8	162.9	20.1
30-Jan	20:15:07	3.16	Rhea	Schaduwovergang.Begin	Saturnus	-0.32	5.47	-5.1	-35.4	162.5	19.6
30-Jan	22:05:26	0.72	Saturnus	Bedekking.Begin	Enceladus		7.96	-22.2	-50	161.5	18.4
30-Jan	22:52:32	3.6	Rhea	Overgang.Einde	Saturnus	-0.03	7.78	-29.3	-54.4	161.1	17.8
31-Jan	0:02:35	3.16	Rhea	Schaduwovergang.Einde	Saturnus	0.51	12.04	-38.1	-56.5	160.5	17

31-Jan	1:01:50	0.71	Saturnus	Verduistering.Einde	Enceladus	0.22	9.72	-43.3	-54	159.9	16.3
31-Jan	1:32:00	0.52	Saturnus	Bedecking.Begin	Mimas		7.97	-45	-51.4	159.7	15.9
31-Jan	3:38:21	1.66	Saturnus	Bedecking.Begin	Tethys		7.96	-42.7	-34.8	158.5	14.4
31-Jan	4:06:01	0.51	Saturnus	Verduistering.Einde	Mimas	0.16	9.25	-40.4	-30.6	158.3	14.1
31-Jan	6:57:48	1.62	Saturnus	Verduistering.Einde	Tethys	0.27	10.14	-17.4	-3.9	156.7	12.3
31-Jan	12:34:19	0.52	Mimas	Overgang.Begin	Saturnus		7.96	28.5	21.4	153.6	9.4
31-Jan	12:45:02	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.15	6.8	29.3	21.1	153.5	9.3
31-Jan	14:32:00	0.71	Enceladus	Overgang.Begin	Saturnus	-0.01	7.94	32.3	13.9	152.5	8.5
31-Jan	14:33:38	16.89	Saturnus	Verduistering.Begin	Titan	-0.07	7.39	32.1	12.9	152.5	8.4
31-Jan	14:47:14	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.19	6.48	32	12.3	152.4	8.4
31-Jan	14:55:37	0.51	Mimas	Overgang.Einde	Saturnus		7.98	31.8	11.4	152.3	8.3
31-Jan	15:07:31	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.16	9.24	31.3	10.1	152.2	8.3
31-Jan	15:12:56	2.03	Dione	Overgang.Begin	Saturnus	-0.01	7.89	31	9.4	152.2	8.2
31-Jan	15:41:59	1.93	Dione	Schaduwovergang.Begin	Saturnus	-0.28	5.77	29.4	5.9	151.9	8
31-Jan	17:08:18	0.71	Enceladus	Overgang.Einde	Saturnus		7.95	21.3	-6	151.1	7.3
31-Jan	17:26:16	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.21	9.66	19.2	-8.7	150.9	7.1
31-Jan	18:22:09	2.03	Dione	Overgang.Einde	Saturnus	-0.01	7.9	11.6	-17.4	150.4	6.6
31-Jan	19:00:27	1.93	Dione	Schaduwovergang.Einde	Saturnus	0.35	10.77	6	-23.5	150.1	6.3
31-Jan	19:45:41	16.89	Saturnus	Verduistering.Einde	Titan	1.14	17.07	-2.1	-31.7	149.6	5.8
01-Feb	0:09:26	0.52	Saturnus	Bedecking.Begin	Mimas		7.96	-39	-56.2	147.2	2.9
01-Feb	2:18:02	1.66	Tethys	Overgang.Begin	Saturnus		7.94	-45.9	-45.9	146	1.3
01-Feb	2:39:23	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.24	6.1	-45.6	-43.1	145.8	1.1
01-Feb	2:43:19	0.51	Saturnus	Verduistering.Einde	Mimas	0.15	9.22	-45.5	-42.6	145.8	1.1
01-Feb	5:11:59	1.66	Tethys	Overgang.Einde	Saturnus	-0.01	7.94	-32.3	-19.9	144.4	0.8
01-Feb	5:36:48	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.26	10.08	-28.9	-16	144.2	1.1
01-Feb	6:59:15	0.72	Saturnus	Bedecking.Begin	Enceladus		7.95	-16.7	-3.5	143.4	1.9
01-Feb	9:55:16	0.71	Saturnus	Verduistering.Einde	Enceladus	0.21	9.65	10.6	17.3	141.8	3.7
01-Feb	11:11:49	0.51	Mimas	Overgang.Begin	Saturnus		7.95	20.7	21.6	141.1	4.3
01-Feb	11:22:20	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.15	6.82	21.9	21.8	141	4.4
01-Feb	13:33:10	0.51	Mimas	Overgang.Einde	Saturnus		7.97	31.9	19	139.8	5.4
01-Feb	13:44:47	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.15	9.21	32.2	18.2	139.7	5.5
01-Feb	22:46:52	0.52	Saturnus	Bedecking.Begin	Mimas		7.96	-29.2	-53.3	134.7	10.4
01-Feb	23:25:52	0.71	Enceladus	Overgang.Begin	Saturnus	-0.01	7.94	-34.4	-55.5	134.3	10.8

01-Feb 23:40:42	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.18	6.52	-36.2	-55.9	134.2	11
02-Feb 0:09:03	2.01 Saturnus	Bedekking.Begin	Dione	-0.01	7.89	-39.4	-55.9	133.9	11.3
02-Feb 0:58:06	1.65 Saturnus	Bedekking.Begin	Tethys		7.95	-43.5	-53.8	133.4	11.9
02-Feb 1:20:37	0.51 Saturnus	Verduistering.Einde	Mimas	0.15	9.18	-44.7	-52	133.2	12.1
02-Feb 1:46:46	3.54 Saturnus	Bedekking.Begin	Rhea	-0.03	7.77	-45.7	-49.3	133	12.5
02-Feb 2:02:21	0.71 Enceladus	Overgang.Einde	Saturnus		7.94	-45.9	-47.7	132.8	12.6
02-Feb 2:19:45	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.2	9.6	-45.8	-45.5	132.7	12.9
02-Feb 3:55:27	1.92 Saturnus	Verduistering.Einde	Dione	0.34	10.67	-40.6	-31.7	131.8	14
02-Feb 4:16:47	1.62 Saturnus	Verduistering.Einde	Tethys	0.26	10.04	-38.5	-28.4	131.6	14.3
02-Feb 6:16:10	3.15 Saturnus	Verduistering.Einde	Rhea	0.48	11.81	-22.5	-9.6	130.5	15.7
02-Feb 9:49:20	0.51 Mimas	Overgang.Begin	Saturnus		7.95	10.2	17	128.5	17.9
02-Feb 9:59:39	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.14	6.84	11.7	17.9	128.4	18
02-Feb 12:10:43	0.51 Mimas	Overgang.Einde	Saturnus		7.97	27.2	22.5	127.2	19.2
02-Feb 12:22:04	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.15	9.17	28.2	22.3	127.1	19.3
02-Feb 15:53:05	0.72 Saturnus	Bedekking.Begin	Enceladus		7.94	28.2	5	125.1	20.9
02-Feb 18:48:42	0.71 Saturnus	Verduistering.Einde	Enceladus	0.2	9.59	6.9	-21	123.5	22.3
02-Feb 21:24:17	0.52 Saturnus	Bedekking.Begin	Mimas		7.95	-17.4	-44.3	122.1	23.7
02-Feb 23:37:56	1.65 Tethys	Overgang.Begin	Saturnus		7.93	-36.3	-55.5	120.8	25.1
02-Feb 23:57:54	0.51 Saturnus	Verduistering.Einde	Mimas	0.15	9.15	-38.4	-55.7	120.7	25.3
02-Feb 23:58:29	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.23	6.16	-38.6	-55.7	120.6	25.4
03-Feb 2:32:13	1.65 Tethys	Overgang.Einde	Saturnus		7.93	-45.5	-43.6	119.2	27.1
03-Feb 2:55:56	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.25	9.97	-44.6	-40.4	119	27.4
03-Feb 8:19:44	0.71 Enceladus	Overgang.Begin	Saturnus		7.93	-2.8	7.9	116	31.3
03-Feb 8:26:50	0.51 Mimas	Overgang.Begin	Saturnus		7.94	-1.7	8.7	116	31.3
03-Feb 8:34:08	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.18	6.55	-0.5	9.6	115.9	31.4
03-Feb 8:36:57	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.14	6.85	-0.1	9.9	115.9	31.5
03-Feb 8:56:39	2.01 Dione	Overgang.Begin	Saturnus	-0.01	7.88	3	12.3	115.7	31.7
03-Feb 9:24:14	1.93 Dione	Schaduwovergang.Begin	Saturnus	-0.27	5.85	7.2	15.1	115.4	32
03-Feb 10:48:15	0.51 Mimas	Overgang.Einde	Saturnus		7.96	18.8	21.2	114.6	32.8
03-Feb 10:56:24	0.71 Enceladus	Overgang.Einde	Saturnus		7.93	19.8	21.6	114.6	32.9
03-Feb 10:59:21	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.15	9.14	20.1	21.7	114.5	32.9
03-Feb 11:13:14	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.2	9.54	21.8	22.2	114.4	33
03-Feb 12:07:07	2.01 Dione	Overgang.Einde	Saturnus	-0.01	7.89	27.3	22.8	113.9	33.5

03-Feb 12:42:53	1.93 Dione	Schaduwovergang.Einde	Saturnus	0.33	10.57	30	22	113.6	33.8
03-Feb 17:23:54	2.69 Enceladus	Gedeeltelijke verduistering	Tethys	2.77	1.47	18.1	-7.8	111	36
03-Feb 20:01:43	0.52 Saturnus	Bedekking.Begin	Mimas		7.95	-4.9	-32.2	109.6	37.3
03-Feb 22:17:53	1.65 Saturnus	Bedekking.Begin	Tethys		7.94	-26.1	-50.3	108.3	38.5
03-Feb 22:35:11	0.51 Saturnus	Verduistering.Einde	Mimas	0.15	9.12	-28.5	-51.8	108.1	38.6
04-Feb 0:46:55	0.72 Saturnus	Bedekking.Begin	Enceladus		7.93	-43.1	-53.9	106.9	40
04-Feb 1:35:45	1.62 Saturnus	Verduistering.Einde	Tethys	0.25	9.93	-45.5	-50	106.5	40.6
04-Feb 3:42:07	0.71 Saturnus	Verduistering.Einde	Enceladus	0.2	9.53	-41.2	-33.4	105.3	42.1
04-Feb 6:23:57	1.5 Saturnus	Verduistering.Begin	607	0.17	9.28	-20.3	-8.1	103.8	44
04-Feb 7:04:21	0.51 Mimas	Overgang.Begin	Saturnus		7.94	-14.1	-2.1	103.5	44.5
04-Feb 7:14:16	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.14	6.87	-12.6	-0.7	103.4	44.6
04-Feb 8:02:47	3.5 Rhea	Overgang.Begin	Saturnus	-0.02	7.77	-4.7	6.1	102.9	45.2
04-Feb 8:42:52	3.15 Rhea	Schaduwovergang.Begin	Saturnus	-0.3	5.54	1.6	11	102.6	45.7
04-Feb 9:25:48	0.51 Mimas	Overgang.Einde	Saturnus		7.95	7.9	15.4	102.2	46.1
04-Feb 9:36:37	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.14	9.1	9.5	16.4	102.1	46.2
04-Feb 11:29:05	3.5 Rhea	Overgang.Einde	Saturnus	-0.02	7.78	24.1	22.9	101	47.4
04-Feb 11:30:54	1.5 Saturnus	Verduistering.Einde	607	1.26	17.95	24.2	22.9	101	47.4
04-Feb 12:31:12	3.15 Rhea	Schaduwovergang.Einde	Saturnus	0.46	11.58	29.5	22.7	100.5	48
04-Feb 17:13:38	0.71 Enceladus	Overgang.Begin	Saturnus		7.92	19.2	-5.8	97.9	50.2
04-Feb 17:27:37	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.17	6.58	17.4	-7.9	97.8	50.3
04-Feb 17:52:40	2.0 Saturnus	Bedekking.Begin	Dione	-0.01	7.88	13.9	-11.9	97.6	50.5
04-Feb 18:39:09	0.52 Saturnus	Bedekking.Begin	Mimas		7.94	7.4	-19	97.1	50.9
04-Feb 19:50:30	0.71 Enceladus	Overgang.Einde	Saturnus		7.93	-3.6	-30.3	96.5	51.4
04-Feb 20:06:46	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.19	9.47	-6.2	-32.7	96.3	51.5
04-Feb 20:57:43	1.65 Tethys	Overgang.Begin	Saturnus		7.92	-14.3	-40.3	95.9	51.9
04-Feb 21:12:28	0.51 Saturnus	Verduistering.Einde	Mimas	0.14	9.08	-16.6	-42.2	95.7	52.1
04-Feb 21:17:26	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.22	6.22	-17.4	-42.9	95.7	52.1
04-Feb 21:37:44	1.92 Saturnus	Verduistering.Einde	Dione	0.32	10.47	-20.6	-45.6	95.5	52.3
04-Feb 23:52:19	1.65 Tethys	Overgang.Einde	Saturnus		7.92	-38.6	-55.1	94.3	53.5
05-Feb 0:14:56	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.24	9.87	-40.8	-54.9	94.1	53.7
05-Feb 5:41:52	0.51 Mimas	Overgang.Begin	Saturnus		7.93	-26.1	-14.5	91.1	57.5
05-Feb 5:51:34	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.13	6.89	-24.7	-13	91	57.6
05-Feb 8:03:21	0.51 Mimas	Overgang.Einde	Saturnus		7.95	-4.2	6.3	89.8	59.2

05-Feb	8:13:54	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.14	9.07	-2.6	7.6	89.7	59.3
05-Feb	9:40:46	0.72 Saturnus	Bedekking.Begin	Enceladus		7.92	10.7	17.1	89	60.3
05-Feb	12:35:33	0.71 Saturnus	Verduistering.Einde	Enceladus	0.19	9.46	30	22.9	87.4	62.1
05-Feb	17:16:34	0.52 Saturnus	Bedekking.Begin	Mimas		7.94	18.4	-6	84.9	64.4
05-Feb	19:37:42	1.65 Saturnus	Bedekking.Begin	Tethys		7.93	-2.2	-28.1	83.6	65.4
05-Feb	19:49:44	0.51 Saturnus	Verduistering.Einde	Mimas	0.14	9.05	-4	-29.9	83.5	65.5
05-Feb	22:54:46	1.62 Saturnus	Verduistering.Einde	Tethys	0.24	9.82	-32.1	-52.7	81.8	67
05-Feb	23:18:37	1.56 Enceladus	Gedeeltelijke verduistering	Mimas	1.96	1.39	-35.1	-54	81.6	67.2
06-Feb	2:07:30	0.71 Enceladus	Overgang.Begin	Saturnus		7.91	-45.6	-46	80.1	68.8
06-Feb	2:21:03	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.17	6.62	-45.4	-44.4	80	69
06-Feb	2:40:19	2.0 Dione	Overgang.Begin	Saturnus	-0.01	7.87	-44.7	-41.8	79.8	69.2
06-Feb	3:06:22	1.93 Dione	Schaduwovergang.Begin	Saturnus	-0.25	5.94	-43.3	-38.2	79.6	69.5
06-Feb	4:19:23	0.51 Mimas	Overgang.Begin	Saturnus		7.93	-36.5	-27.2	78.9	70.3
06-Feb	4:28:53	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.13	6.91	-35.4	-25.8	78.8	70.4
06-Feb	4:44:32	0.71 Enceladus	Overgang.Einde	Saturnus		7.92	-33.5	-23.3	78.7	70.6
06-Feb	5:00:13	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.18	9.41	-31.4	-20.8	78.5	70.8
06-Feb	5:51:59	2.0 Dione	Overgang.Einde	Saturnus	-0.01	7.88	-24	-12.5	78.1	71.4
06-Feb	6:25:12	1.93 Dione	Schaduwovergang.Einde	Saturnus	0.31	10.38	-19	-7.4	77.8	71.8
06-Feb	6:40:54	0.51 Mimas	Overgang.Einde	Saturnus		7.94	-16.6	-5.2	77.6	72
06-Feb	6:51:10	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.14	9.03	-15	-3.6	77.6	72.1
06-Feb	14:17:20	3.44 Saturnus	Bedekking.Begin	Rhea	-0.02	7.77	32.4	16.8	73.6	77
06-Feb	15:54:00	0.52 Saturnus	Bedekking.Begin	Mimas		7.93	27.1	6	72.7	77.8
06-Feb	18:17:31	1.65 Tethys	Overgang.Begin	Saturnus		7.91	9.5	-15.2	71.4	78.8
06-Feb	18:27:01	0.51 Saturnus	Verduistering.Einde	Mimas	0.13	9.02	8.2	-16.6	71.4	78.9
06-Feb	18:34:38	0.72 Saturnus	Bedekking.Begin	Enceladus		7.92	7	-17.9	71.3	79
06-Feb	18:36:24	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.21	6.28	6.7	-18.2	71.3	79
06-Feb	18:44:15	3.14 Saturnus	Verduistering.Einde	Rhea	0.43	11.35	5.4	-19.6	71.2	79
06-Feb	21:12:26	1.65 Tethys	Overgang.Einde	Saturnus		7.91	-17.7	-41.8	69.9	80.1
06-Feb	21:28:59	0.71 Saturnus	Verduistering.Einde	Enceladus	0.18	9.4	-20.2	-43.8	69.8	80.2
06-Feb	21:33:55	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.23	9.76	-21	-44.5	69.7	80.2
07-Feb	2:56:54	0.51 Mimas	Overgang.Begin	Saturnus		7.92	-43.6	-39.4	66.9	83.1
07-Feb	3:06:11	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.13	6.92	-43	-38.1	66.8	83.2
07-Feb	5:18:27	0.51 Mimas	Overgang.Einde	Saturnus		7.94	-28.4	-17.7	65.6	84.7



07-Feb 5:28:27	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.13	9	-27	-16.1	65.5	84.8
07-Feb 11:01:24	0.71	Enceladus	Overgang.Begin	Saturnus		7.91	22.2	23	62.6	88.7
07-Feb 11:14:30	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.16	6.65	23.7	23.4	62.5	88.9
07-Feb 11:36:26	1.99	Saturnus	Bedekking.Begin	Dione	-0.01	7.87	26	23.9	62.3	89.1
07-Feb 13:38:36	0.71	Enceladus	Overgang.Einde	Saturnus		7.91	32.7	20.4	61.2	90.4
07-Feb 13:53:42	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.18	9.35	32.7	19.3	61.1	90.5
07-Feb 14:31:26	0.52	Saturnus	Bedekking.Begin	Mimas		7.93	32.1	15.9	60.7	90.9
07-Feb 15:20:03	1.92	Saturnus	Verduistering.Einde	Dione	0.29	10.27	29.5	10.5	60.3	91.3
07-Feb 16:57:31	1.65	Saturnus	Bedekking.Begin	Tethys		7.92	19.9	-2.7	59.5	92.1
07-Feb 17:04:17	0.51	Saturnus	Verduistering.Einde	Mimas	0.13	8.98	19.1	-3.7	59.4	92.1
07-Feb 20:13:44	1.62	Saturnus	Verduistering.Einde	Tethys	0.22	9.71	-9	-33.1	57.8	93.5
08-Feb 1:34:26	0.51	Mimas	Overgang.Begin	Saturnus		7.92	-45.5	-49.1	55	95.9
08-Feb 1:43:30	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.13	6.94	-45.6	-48.2	54.9	96
08-Feb 3:28:29	0.72	Saturnus	Bedekking.Begin	Enceladus		7.91	-40.9	-34.5	54	97
08-Feb 3:56:00	0.51	Mimas	Overgang.Einde	Saturnus		7.93	-38.3	-30.4	53.7	97.3
08-Feb 4:05:44	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.13	8.97	-37.2	-28.9	53.6	97.4
08-Feb 6:22:24	0.71	Saturnus	Verduistering.Einde	Enceladus	0.18	9.34	-18.3	-7.5	52.5	98.9
08-Feb 12:59:14	36.58	Titan	Overgang.Begin	Saturnus	-0.08	7.31	32.4	22.1	48.9	103.7
08-Feb 13:08:51	0.52	Saturnus	Bedekking.Begin	Mimas		7.92	32.2	22.5	48.9	103.6
08-Feb 14:34:28	17.7	Titan	Schaduwovergang.Begin	Saturnus	-0.19	6.44	31.5	15	48.1	104.5
08-Feb 15:37:23	1.64	Tethys	Overgang.Begin	Saturnus		7.91	27.9	8.6	47.7	105
08-Feb 15:41:32	0.51	Saturnus	Verduistering.Einde	Mimas	0.13	8.95	27.6	8.2	47.6	105
08-Feb 15:41:48	36.58	Titan	Overgang.Einde	Saturnus	-0.08	7.31	26	5.8	47.5	105.2
08-Feb 15:55:23	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.2	6.35	26.3	6.3	47.5	105.2
08-Feb 18:32:37	1.64	Tethys	Overgang.Einde	Saturnus		7.9	6.3	-17.1	46.1	106.4
08-Feb 18:52:57	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.22	9.66	3.2	-20.3	46	106.5
08-Feb 19:55:16	0.71	Enceladus	Overgang.Begin	Saturnus		7.9	-6.5	-30	45.4	107
08-Feb 20:07:44	17.7	Titan	Schaduwovergang.Einde	Saturnus	0.98	15.73	-9.8	-33.2	45.3	107.1
08-Feb 20:07:56	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.16	6.69	-8.5	-31.9	45.3	107
08-Feb 20:24:01	1.99	Dione	Overgang.Begin	Saturnus	-0.01	7.86	-11.1	-34.4	45.2	107.2
08-Feb 20:33:42	3.41	Rhea	Overgang.Begin	Saturnus	-0.02	7.77	-12.8	-35.9	45.1	107.2
08-Feb 20:48:26	1.92	Dione	Schaduwovergang.Begin	Saturnus	-0.24	6.05	-15	-37.9	45	107.3
08-Feb 21:10:20	3.14	Rhea	Schaduwovergang.Begin	Saturnus	-0.29	5.66	-18.5	-41	44.8	107.5

08-Feb 22:32:39	0.71 Enceladus	Overgang.Einde	Saturnus	7.91	-30.4	-50.1	44.1	108
08-Feb 22:47:09	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.17	9.29	-32.3	-51.3	44 108.1
08-Feb 23:36:49	1.99 Dione	Overgang.Einde	Saturnus	-0.01	7.87	-38.3	-53.7	43.5 108.5
09-Feb 0:05:17	3.41 Rhea	Overgang.Einde	Saturnus	-0.02	7.78	-41.1	-53.8	43.3 108.7
09-Feb 0:07:26	1.92 Dione	Schaduwovergang.Einde	Saturnus	0.28	10.18	-41.2	-53.8	43.3 108.7
09-Feb 0:11:58	0.51 Mimas	Overgang.Begin	Saturnus	7.91	-41.5	-53.7	43.2	108.7
09-Feb 0:20:48	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.12	6.96	-42.3	-53.5	43.2 108.8
09-Feb 0:59:26	3.14 Rhea	Schaduwovergang.Einde	Saturnus	0.4	11.12	-44.6	-51.6	42.8 109.1
09-Feb 2:33:33	0.51 Mimas	Overgang.Einde	Saturnus	7.93	-44.4	-42	42	109.9
09-Feb 2:43:01	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.13	8.93	-43.9	-40.8	41.9 110
09-Feb 11:46:17	0.52 Saturnus	Bedekking.Begin	Mimas	7.92	27.5	24.7	37.3	116
09-Feb 12:22:21	0.72 Saturnus	Bedekking.Begin	Enceladus	7.9	30.2	24.5	37	116.4
09-Feb 14:17:26	1.64 Saturnus	Bedekking.Begin	Tethys	7.91	32.3	17.8	36	117.6
09-Feb 14:18:48	0.51 Saturnus	Verduistering.Einde	Mimas	0.12	8.91	32.3	17.7	36 117.6
09-Feb 15:15:50	0.71 Saturnus	Verduistering.Einde	Enceladus	0.17	9.27	29.4	11.6	35.5 118.2
09-Feb 17:32:46	1.62 Saturnus	Verduistering.Einde	Tethys	0.21	9.61	14.5	-7.5	34.4 119.3
09-Feb 22:49:30	0.51 Mimas	Overgang.Begin	Saturnus	7.91	-33	-51.1	31.7	121.5
09-Feb 22:58:08	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.12	6.98	-34.1	-51.7	31.6 121.6
10-Feb 1:11:06	0.51 Mimas	Overgang.Einde	Saturnus	7.92	-45.1	-50.5	30.5	122.6
10-Feb 1:20:18	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.12	8.9	-45.3	-49.8	30.4 122.6
10-Feb 4:49:12	0.71 Enceladus	Overgang.Begin	Saturnus	7.89	-30.9	-21.6	28.7	124.5
10-Feb 5:01:25	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.15	6.73	-29.2	-19.7	28.6 124.6
10-Feb 5:20:22	1.98 Saturnus	Bedekking.Begin	Dione	-0.01	7.86	-26.4	-16.6	28.4 124.8
10-Feb 7:26:44	0.71 Enceladus	Overgang.Einde	Saturnus	7.9	-7	2.6	27.3	126.1
10-Feb 7:40:39	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.16	9.22	-4.8	4.5	27.2 126.3
10-Feb 9:02:30	1.92 Saturnus	Verduistering.Einde	Dione	0.27	10.07	7.9	14.8	26.5 127.2
10-Feb 10:23:43	0.52 Saturnus	Bedekking.Begin	Mimas	7.91	19	21.9	25.9	128.1
10-Feb 12:56:03	0.51 Saturnus	Verduistering.Einde	Mimas	0.12	8.88	32.1	23.7	24.6 129.9
10-Feb 12:57:11	1.64 Tethys	Overgang.Begin	Saturnus	7.9	32.2	23.7	24.6	129.9
10-Feb 13:14:18	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.19	6.42	32.6	22.8	24.4 130.1
10-Feb 15:52:43	1.64 Tethys	Overgang.Einde	Saturnus	7.89	26	7.2	23.1	131.6
10-Feb 16:11:55	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.21	9.55	24.1	4.6	23 131.8
10-Feb 21:16:12	0.71 Saturnus	Bedekking.Begin	Enceladus	7.9	-20.2	-41.1	20.4	134.1

10-Feb 21:27:02	0.51 Mimas	Overgang.Begin	Saturnus	7.9	-21.8	-42.5	20.4	134.2
10-Feb 21:35:26	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.12	7	-23.1	-43.5	20.3 134.3
10-Feb 23:48:39	0.51 Mimas	Overgang.Einde	Saturnus	7.92	-40	-53.2	19.2	135.1
10-Feb 23:57:35	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.12	8.86	-40.8	-53.2	19.1 135.2
11-Feb 0:09:14	0.71 Saturnus	Verduistering.Einde	Enceladus	0.16	9.21	-41.8	-53.1	19 135.3
11-Feb 2:48:46	3.36 Saturnus	Bedekking.Begin	Rhea	-0.02	7.78	-43	-39.2	17.7 136.5
11-Feb 7:12:47	3.13 Saturnus	Verduistering.Einde	Rhea	0.38	10.89	-8.5	1	15.5 138.9
11-Feb 9:01:09	0.52 Saturnus	Bedekking.Begin	Mimas	7.91	8.1	14.9	14.7	140.1
11-Feb 11:33:18	0.51 Saturnus	Verduistering.Einde	Mimas	0.12	8.85	27.1	25.1	13.4 141.8
11-Feb 11:37:18	1.64 Saturnus	Bedekking.Begin	Tethys	7.9	27.5	25.2	13.4	141.8
11-Feb 13:43:06	0.71 Enceladus	Overgang.Begin	Saturnus	7.89	32.9	21.3	12.4	143.2
11-Feb 13:54:50	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.15	6.77	32.8	20.4	12.3 143.3
11-Feb 14:07:47	1.98 Dione	Overgang.Begin	Saturnus	-0.01	7.86	32.5	19.2	12.2 143.5
11-Feb 14:30:31	1.92 Dione	Schaduwovergang.Begin	Saturnus	-0.22	6.16	31.7	17.1	12 143.7
11-Feb 14:51:45	1.62 Saturnus	Verduistering.Einde	Tethys	0.2	9.5	30.6	14.9	11.8 143.9
11-Feb 16:20:47	0.71 Enceladus	Overgang.Einde	Saturnus	7.89	22.8	3.7	11.1	144.8
11-Feb 16:34:06	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.16	9.16	21.2	1.8	11 144.9
11-Feb 17:21:39	1.98 Dione	Overgang.Einde	Saturnus	-0.01	7.86	15.1	-5.4	10.7 145.3
11-Feb 17:49:41	1.92 Dione	Schaduwovergang.Einde	Saturnus	0.26	9.98	11.1	-9.7	10.4 145.6
11-Feb 20:04:35	0.51 Mimas	Overgang.Begin	Saturnus	7.9	-9.5	-30.6	9.4	146.6
11-Feb 20:12:45	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.11	7.02	-10.8	-31.9	9.3 146.7
11-Feb 22:26:13	0.51 Mimas	Overgang.Einde	Saturnus	7.91	-30.8	-48.6	8.3	147.6
11-Feb 22:34:51	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.12	8.83	-31.9	-49.4	8.2 147.6
12-Feb 6:10:04	0.71 Saturnus	Bedekking.Begin	Enceladus	7.89	-17.9	-8.4	4.9	151
12-Feb 7:38:34	0.52 Saturnus	Bedekking.Begin	Mimas	7.9	-4	4.7	4.3	151.9
12-Feb 9:02:39	0.71 Saturnus	Verduistering.Einde	Enceladus	0.16	9.14	8.9	15.3	3.9 152.7
12-Feb 10:10:33	0.51 Saturnus	Verduistering.Einde	Mimas	0.11	8.81	18.3	21.6	3.5 153.5
12-Feb 10:17:04	1.64 Tethys	Overgang.Begin	Saturnus	7.89	19.2	22.1	3.5	153.6
12-Feb 10:33:15	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.18	6.49	21.2	23.2	3.4 153.7
12-Feb 13:12:51	1.64 Tethys	Overgang.Einde	Saturnus	7.89	32.8	23.5	2.9	155.5
12-Feb 13:30:54	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.19	9.44	33	22.4	2.9 155.7
12-Feb 18:42:08	0.51 Mimas	Overgang.Begin	Saturnus	7.9	2.9	-17.5	3.5	158.7
12-Feb 18:50:04	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.11	7.04	1.7	-18.8	3.6 158.7

12-Feb 21:03:46	0.51 Mimas	Overgang.Einde	Saturnus		7.91	-19.3	-38.9		4.3	159.7
12-Feb 21:12:08	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.11	8.8	-20.6	-40		4.4	159.8
12-Feb 22:36:59	0.71 Enceladus	Overgang.Begin	Saturnus		7.88	-32.6	-49.2		4.9	160.4
12-Feb 22:48:15	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.14	6.8	-34.1	-50.1		5	160.4
12-Feb 23:04:12	1.97 Saturnus	Bedekking.Begin	Dione	-0.01	7.86	-36.1	-51.1		5.1	160.5
13-Feb 1:14:50	0.71 Enceladus	Overgang.Einde	Saturnus		7.89	-45.3	-49.3		6	161.4
13-Feb 1:27:33	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.15	9.1	-45.4	-48.2		6.1	161.5
13-Feb 2:44:46	1.92 Saturnus	Verduistering.Einde	Dione	0.25	9.87	-42.7	-39.3		6.6	162
13-Feb 6:16:00	0.52 Saturnus	Bedekking.Begin	Mimas		7.9	-16.4	-7.2		8.2	163.6
13-Feb 8:47:48	0.51 Saturnus	Verduistering.Einde	Mimas	0.11	8.78	7.3	13.9		9.3	165
13-Feb 8:57:09	1.64 Saturnus	Bedekking.Begin	Tethys		7.89	8.7	15.1		9.4	165.1
13-Feb 9:04:55	3.33 Rhea	Overgang.Begin	Saturnus	-0.02	7.77	10	16		9.5	165.2
13-Feb 9:37:42	3.13 Rhea	Schaduwovergang.Begin	Saturnus	-0.26	5.83	14.6	19.3		9.7	165.5
13-Feb 12:10:42	1.62 Saturnus	Verduistering.Einde	Tethys	0.19	9.39	30.6	25.9		10.9	167.1
13-Feb 12:41:22	3.33 Rhea	Overgang.Einde	Saturnus	-0.02	7.78	32.2	25.2		11.1	167.5
13-Feb 13:27:34	3.13 Rhea	Schaduwovergang.Einde	Saturnus	0.35	10.66	33	22.9		11.5	168
13-Feb 15:03:55	0.71 Saturnus	Bedekking.Begin	Enceladus		7.89	29.4	14.2		12.2	169
13-Feb 17:19:41	0.51 Mimas	Overgang.Begin	Saturnus		7.89	14.6	-4.4		13.2	170.3
13-Feb 17:27:23	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.11	7.06	13.5	-5.6		13.3	170.4
13-Feb 17:56:03	0.71 Saturnus	Verduistering.Einde	Enceladus	0.15	9.08	9.4	-10.1		13.5	170.7
13-Feb 19:41:19	0.51 Mimas	Overgang.Einde	Saturnus		7.9	-6.9	-26.6		14.3	171.5
13-Feb 19:49:25	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.11	8.76	-8.1	-27.8		14.4	171.6
14-Feb 4:53:26	0.52 Saturnus	Bedekking.Begin	Mimas		7.9	-28.2	-19.9		18.6	175
14-Feb 7:25:02	0.51 Saturnus	Verduistering.Einde	Mimas	0.11	8.75	-5	3.4		19.8	176.1
14-Feb 7:30:53	0.71 Enceladus	Overgang.Begin	Saturnus		7.88	-4	4.2		19.8	176.1
14-Feb 7:36:55	1.64 Tethys	Overgang.Begin	Saturnus		7.88	-3	5.2		19.9	176.2
14-Feb 7:41:40	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.13	6.85	-2.3	5.7		19.9	176.2
14-Feb 7:51:39	1.97 Dione	Overgang.Begin	Saturnus	-0.01	7.85	-0.7	7.2		20	176.3
14-Feb 7:52:11	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.17	6.56	-0.6	7.3		20	176.3
14-Feb 8:12:38	1.92 Dione	Schaduwovergang.Begin	Saturnus	-0.21	6.27	2.6	10		20.2	176.4
14-Feb 10:08:53	0.71 Enceladus	Overgang.Einde	Saturnus		7.88	19.1	22.2		21.1	177.3
14-Feb 10:21:00	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.14	9.03	20.6	23		21.2	177.4
14-Feb 10:32:59	1.64 Tethys	Overgang.Einde	Saturnus		7.88	22.1	23.8		21.2	177.5

14-Feb 10:49:52	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.18	9.33	24	24.7	21.4	177.6
14-Feb 11:06:32	1.97	Dione	Overgang.Einde	Saturnus	-0.01	7.85	25.7	25.4	21.5	177.7
14-Feb 11:31:57	1.92	Dione	Schaduwovergang.Einde	Saturnus	0.24	9.77	28.1	26.1	21.7	177.9
14-Feb 15:57:14	0.51	Mimas	Overgang.Begin	Saturnus		7.89	24.4	7.8	23.8	177.6
14-Feb 16:04:42	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.1	7.09	23.5	6.7	23.8	177.5
14-Feb 18:18:53	0.51	Mimas	Overgang.Einde	Saturnus		7.9	5.5	-13.4	24.8	176.5
14-Feb 18:26:42	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.11	8.73	4.3	-14.6	24.9	176.4
14-Feb 18:46:36	8.25	Dione	Gedeeltelijke verduistering	Tethys	3.77	0.87	0.6	-18.4	25.1	176.3
14-Feb 21:19:22	1.15	Mimas	Gedeeltelijke verduistering	Enceladus	1.71	1.31	-22.7	-40.4	26.2	175.1
14-Feb 23:57:51	0.71	Saturnus	Bedekking.Begin	Enceladus		7.88	-41.9	-51.9	27.5	174
15-Feb 2:49:30	0.71	Saturnus	Verduistering.Einde	Enceladus	0.14	9.02	-41.8	-38.2	28.8	173
15-Feb 3:30:51	0.52	Saturnus	Bedekking.Begin	Mimas		7.89	-38	-32.4	29.1	172.7
15-Feb 6:02:17	0.51	Saturnus	Verduistering.Einde	Mimas	0.1	8.72	-17.4	-8.8	30.3	171.6
15-Feb 6:17:07	1.64	Saturnus	Bedekking.Begin	Tethys		7.88	-15	-6.4	30.4	171.5
15-Feb 9:29:44	1.62	Saturnus	Verduistering.Einde	Tethys	0.18	9.28	14.5	19.1	31.8	170
15-Feb 14:34:47	0.51	Mimas	Overgang.Begin	Saturnus		7.89	31	18	34.2	167
15-Feb 14:42:02	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.1	7.11	30.5	17.2	34.2	166.9
15-Feb 15:20:05	3.29	Saturnus	Bedekking.Begin	Rhea	-0.01	7.78	27.5	12.7	34.5	166.5
15-Feb 16:24:47	0.71	Enceladus	Overgang.Begin	Saturnus		7.87	20.8	4.2	35	165.9
15-Feb 16:35:05	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.13	6.89	19.6	2.7	35.1	165.8
15-Feb 16:47:59	1.96	Saturnus	Bedekking.Begin	Dione	-0.01	7.85	17.9	0.7	35.2	165.7
15-Feb 16:56:26	0.51	Mimas	Overgang.Einde	Saturnus		7.89	16.8	-0.4	35.3	165.6
15-Feb 17:03:59	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.1	8.7	15.8	-1.5	35.3	165.5
15-Feb 19:02:56	0.71	Enceladus	Overgang.Einde	Saturnus		7.88	-1.9	-20.1	36.2	164.4
15-Feb 19:14:26	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.14	8.97	-3.7	-21.9	36.3	164.3
15-Feb 19:40:44	3.12	Saturnus	Verduistering.Einde	Rhea	0.32	10.42	-8	-26.2	36.5	164.1
15-Feb 20:26:54	1.91	Saturnus	Verduistering.Einde	Dione	0.22	9.67	-15.2	-33	36.9	163.7
16-Feb 2:08:17	0.52	Saturnus	Bedekking.Begin	Mimas		7.89	-44.1	-43.1	39.5	161.3
16-Feb 4:39:31	0.51	Saturnus	Verduistering.Einde	Mimas	0.1	8.68	-29.1	-21.6	40.6	160.4
16-Feb 4:56:48	1.63	Tethys	Overgang.Begin	Saturnus		7.88	-26.6	-18.8	40.7	160.2
16-Feb 5:11:07	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.16	6.64	-24.5	-16.5	40.8	160.1
16-Feb 7:53:07	1.63	Tethys	Overgang.Einde	Saturnus		7.87	0.7	8	42.1	159
16-Feb 8:08:50	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.17	9.23	3.1	10.1	42.2	158.9

16-Feb	8:51:43	0.71	Saturnus	Bedekking.Begin	Enceladus	7.87	9.5	15.3	42.5	158.5
16-Feb	8:54:57	3.57	607	Overgang.Begin	Saturnus	-0.09	7.22	10.2	15.9	42.5 158.5
16-Feb	10:07:20	1.44	607	Schaduwovergang.Begin	Saturnus	-0.15	6.7	19.9	22.7	43.1 157.9
16-Feb	11:11:07	3.57	607	Overgang.Einde	Saturnus	-0.09	7.21	27	26.3	43.6 157.3
16-Feb	11:42:53	0.71	Saturnus	Verduistering.Einde	Enceladus	0.13	8.95	29.5	27	43.8 157
16-Feb	12:12:29	20.6	Saturnus	Bedekking.Begin	Titan	-0.04	7.54	31.9	26.8	44.1 156.6
16-Feb	13:12:20	0.51	Mimas	Overgang.Begin	Saturnus		7.88	33.1	24.9	44.5 156.1
16-Feb	13:19:21	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.1	7.13	33.2	24.5	44.5 156.1
16-Feb	15:34:00	0.51	Mimas	Overgang.Einde	Saturnus		7.89	26.1	11.4	45.6 154.7
16-Feb	15:39:54	1.44	607	Schaduwovergang.Einde	Saturnus	0.87	14.73	25.5	10.6	45.6 154.6
16-Feb	15:41:16	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.1	8.66	25.4	10.4	45.6 154.6
16-Feb	19:04:03	16.16	Saturnus	Verduistering.Einde	Titan	0.71	13.46	-3.8	-21.2	47.2 152.6
17-Feb	0:45:43	0.52	Saturnus	Bedekking.Begin	Mimas		7.88	-44.7	-49.9	49.7 149.9
17-Feb	1:18:41	0.71	Enceladus	Overgang.Begin	Saturnus		7.87	-45.2	-47.7	50 149.7
17-Feb	1:28:30	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.12	6.93	-45.1	-46.8	50 149.7
17-Feb	1:35:47	1.96	Dione	Overgang.Begin	Saturnus	-0.01	7.84	-45	-46.1	50.1 149.6
17-Feb	1:54:55	1.92	Dione	Schaduwovergang.Begin	Saturnus	-0.19	6.4	-44.5	-44.2	50.2 149.5
17-Feb	3:16:44	0.52	Saturnus	Verduistering.Einde	Mimas	0.1	8.65	-38.7	-33.8	50.8 149
17-Feb	3:37:01	1.63	Saturnus	Bedekking.Begin	Tethys		7.88	-36.5	-30.8	51 148.9
17-Feb	3:56:59	0.71	Enceladus	Overgang.Einde	Saturnus		7.87	-34.1	-27.9	51.1 148.8
17-Feb	4:07:53	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.13	8.91	-32.8	-26.2	51.2 148.7
17-Feb	4:51:36	1.96	Dione	Overgang.Einde	Saturnus	-0.01	7.85	-26.8	-19.3	51.6 148.4
17-Feb	5:14:23	1.92	Dione	Schaduwovergang.Einde	Saturnus	0.21	9.57	-23.4	-15.7	51.7 148.3
17-Feb	6:48:41	1.62	Saturnus	Verduistering.Einde	Tethys	0.16	9.17	-8.9	-1	52.4 147.7
17-Feb	11:49:54	0.51	Mimas	Overgang.Begin	Saturnus		7.88	30.3	27.4	54.7 145.3
17-Feb	11:56:40	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.09	7.15	30.7	27.4	54.8 145.2
17-Feb	14:11:33	0.51	Mimas	Overgang.Einde	Saturnus		7.89	31.9	20.9	55.8 143.9
17-Feb	14:18:33	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.09	8.63	31.6	20.2	55.8 143.8
17-Feb	17:45:36	0.71	Saturnus	Bedekking.Begin	Enceladus		7.87	9	-7.4	57.4 141.7
17-Feb	20:36:17	0.71	Saturnus	Verduistering.Einde	Enceladus	0.13	8.89	-17.6	-33.7	58.6 140.1
17-Feb	21:37:01	3.27	Rhea	Overgang.Begin	Saturnus	-0.01	7.78	-26.8	-41.8	59.1 139.6
17-Feb	22:05:33	3.12	Rhea	Schaduwovergang.Begin	Saturnus	-0.23	6.04	-30.8	-44.9	59.3 139.4
17-Feb	23:23:09	0.52	Saturnus	Bedekking.Begin	Mimas		7.88	-39.6	-50.3	59.9 138.8

18-Feb	1:17:48	3.27	Rhea	Overgang.Einde	Saturnus	-0.01	7.79	-45.2	-47.3	60.8	138
18-Feb	1:53:58	0.52	Saturnus	Verduistering.Einde	Mimas	0.09	8.62	-44.4	-44	61	137.7
18-Feb	1:56:06	3.12	Rhea	Schaduwovergang.Einde	Saturnus	0.29	10.19	-44.2	-43.7	61.1	137.7
18-Feb	2:16:43	1.63	Tethys	Overgang.Begin	Saturnus		7.87	-43.2	-41.4	61.2	137.6
18-Feb	2:30:04	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.15	6.71	-42.3	-39.8	61.3	137.5
18-Feb	5:13:16	1.63	Tethys	Overgang.Einde	Saturnus		7.87	-23.1	-15.6	62.5	136.5
18-Feb	5:27:48	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.16	9.12	-20.9	-13.3	62.6	136.4
18-Feb	7:32:08	4.74	Enceladus	Gedeeltelijke verduistering	Mimas	1.77	0.45	-1.2	5.9	63.6	135.7
18-Feb	10:12:36	0.7	Enceladus	Overgang.Begin	Saturnus		7.86	21.5	23.8	64.8	134.5
18-Feb	10:21:55	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.12	6.97	22.5	24.4	64.8	134.4
18-Feb	10:27:28	0.51	Mimas	Overgang.Begin	Saturnus		7.88	23.2	24.8	64.9	134.4
18-Feb	10:31:54	1.95	Saturnus	Bedekking.Begin	Dione		7.85	23.7	25.1	64.9	134.3
18-Feb	10:33:59	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.09	7.18	23.9	25.2	64.9	134.3
18-Feb	12:49:07	0.51	Mimas	Overgang.Einde	Saturnus		7.88	33.1	26.7	65.9	133.1
18-Feb	12:51:02	0.7	Enceladus	Overgang.Einde	Saturnus		7.87	33.1	26.6	66	133.1
18-Feb	12:55:50	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.09	8.6	33.2	26.4	66	133.1
18-Feb	13:01:19	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.12	8.85	33.2	26.2	66	133
18-Feb	14:09:06	1.91	Saturnus	Verduistering.Einde	Dione	0.2	9.47	31.9	21.3	66.5	132.4
18-Feb	19:37:10	3.48	Enceladus	Gedeeltelijke bedekking	Tethys	2.95	0.04	-9	-24.9	69	129
18-Feb	22:00:34	0.52	Saturnus	Bedekking.Begin	Mimas		7.88	-30.4	-44	70.1	127.7
19-Feb	0:31:11	0.52	Saturnus	Verduistering.Einde	Mimas	0.09	8.58	-44.4	-49.8	71.2	126.6
19-Feb	0:56:56	1.63	Saturnus	Bedekking.Begin	Tethys		7.87	-45	-48.5	71.4	126.4
19-Feb	2:39:28	0.71	Saturnus	Bedekking.Begin	Enceladus		7.87	-41.4	-38.3	72.2	125.7
19-Feb	4:07:39	1.62	Saturnus	Verduistering.Einde	Tethys	0.15	9.07	-31.8	-25.6	72.8	125.2
19-Feb	5:29:39	0.71	Saturnus	Verduistering.Einde	Enceladus	0.12	8.83	-20.1	-12.8	73.4	124.7
19-Feb	9:05:02	0.51	Mimas	Overgang.Begin	Saturnus		7.87	13.1	17.8	75.1	123.3
19-Feb	9:11:18	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.09	7.2	14	18.5	75.1	123.3
19-Feb	11:26:40	0.51	Mimas	Overgang.Einde	Saturnus		7.88	29.2	27.8	76.1	122.2
19-Feb	11:33:07	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.09	8.56	29.7	27.9	76.2	122.2
19-Feb	19:06:34	0.7	Enceladus	Overgang.Begin	Saturnus		7.86	-4.5	-19.6	79.6	117.7
19-Feb	19:15:22	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.11	7.02	-5.9	-21	79.7	117.7
19-Feb	19:19:47	1.95	Dione	Overgang.Begin	Saturnus		7.84	-6.7	-21.8	79.7	117.6
19-Feb	19:37:02	1.92	Dione	Schaduwovergang.Begin	Saturnus	-0.17	6.53	-9.4	-24.4	79.8	117.4

19-Feb 20:38:00	0.52	Saturnus	Bedekking.Begin	Mimas	7.87	-18.8	-33.4	80.3	116.8	
19-Feb 21:45:08	0.7	Enceladus	Overgang.Einde	Saturnus	7.86	-28.7	-42	80.8	116.2	
19-Feb 21:54:48	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.12	8.78	-30	-43.1	80.9	116.1
19-Feb 22:36:30	1.95	Dione	Overgang.Einde	Saturnus	7.84	-35.4	-47	81.2	115.7	
19-Feb 22:56:40	1.92	Dione	Schaduwovergang.Einde	Saturnus	0.19	9.37	-37.6	-48.4	81.4	115.6
19-Feb 23:08:24	0.52	Saturnus	Verduistering.Einde	Mimas	0.09	8.55	-38.8	-48.9	81.4	115.5
19-Feb 23:27:02	0.62	Tethys	Verduistering in bij schaduw	Mimas	0.33	1.95	-40.5	-49.7	81.6	115.3
19-Feb 23:36:35	1.63	Tethys	Overgang.Begin	Saturnus	7.86	-41.4	-49.9	81.7	115.2	
19-Feb 23:48:57	1.62	Tethys	Schaduwovergang.Begin	Saturnus	-0.14	6.79	-42.3	-50.1	81.7	115.1
20-Feb 2:33:21	1.63	Tethys	Overgang.Einde	Saturnus	7.86	-41.5	-38.7	83	113.9	
20-Feb 2:46:43	1.62	Tethys	Schaduwovergang.Einde	Saturnus	0.14	9.01	-40.4	-37	83.1	113.8
20-Feb 3:51:59	3.23	Saturnus	Bedekking.Begin	Rhea	-0.01	7.78	-33.2	-27.6	83.6	113.4
20-Feb 7:42:36	0.51	Mimas	Overgang.Begin	Saturnus	7.87	1.3	7.7	85.3	112.1	
20-Feb 7:48:37	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.08	7.22	2.2	8.5	85.4	112
20-Feb 8:08:53	3.11	Saturnus	Verduistering.Einde	Rhea	0.26	9.95	5.6	11.4	85.5	111.9
20-Feb 10:04:14	0.51	Mimas	Overgang.Einde	Saturnus	7.87	21.4	23.8	86.4	111.1	
20-Feb 10:10:24	0.51	Mimas	Schaduwovergang.Einde	Saturnus	0.08	8.53	22.1	24.3	86.5	111.1
20-Feb 11:33:22	0.71	Saturnus	Bedekking.Begin	Enceladus	7.86	30	28.3	87.1	110.5	
20-Feb 14:23:03	0.71	Saturnus	Verduistering.Einde	Enceladus	0.11	8.76	30.9	20.7	88.4	109
20-Feb 19:15:25	0.52	Saturnus	Bedekking.Begin	Mimas	7.87	-6.4	-20.7	90.6	105.9	
20-Feb 21:45:37	0.52	Saturnus	Verduistering.Einde	Mimas	0.08	8.52	-29.2	-41.7	91.8	104.4
20-Feb 22:16:54	1.63	Saturnus	Bedekking.Begin	Tethys	7.86	-33.4	-45	92	104.1	
21-Feb 1:08:58	1.38	Enceladus	Gedeeltelijke verduistering	Mimas	1.93	0.83	-45	-47	93.4	102.6
21-Feb 1:26:39	1.62	Saturnus	Verduistering.Einde	Tethys	0.14	8.96	-44.7	-45.6	93.5	102.5
21-Feb 4:00:28	0.7	Enceladus	Overgang.Begin	Saturnus	7.86	-31.8	-26.2	94.7	101.4	
21-Feb 4:08:46	0.7	Enceladus	Schaduwovergang.Begin	Saturnus	-0.1	7.06	-30.7	-24.9	94.7	101.4
21-Feb 4:15:51	1.94	Saturnus	Bedekking.Begin	Dione	7.84	-29.6	-23.7	94.8	101.3	
21-Feb 6:20:10	0.51	Mimas	Overgang.Begin	Saturnus	7.87	-11.1	-4.3	95.8	100.6	
21-Feb 6:25:57	0.51	Mimas	Schaduwovergang.Begin	Saturnus	-0.08	7.25	-10.2	-3.4	95.8	100.6
21-Feb 6:39:10	0.7	Enceladus	Overgang.Einde	Saturnus	7.86	-8.1	-1.4	95.9	100.5	
21-Feb 6:48:14	0.7	Enceladus	Schaduwovergang.Einde	Saturnus	0.11	8.72	-6.6	0	96	100.4
21-Feb 7:51:15	1.91	Saturnus	Verduistering.Einde	Dione	0.18	9.27	3.3	9.3	96.5	100
21-Feb 8:41:47	0.51	Mimas	Overgang.Einde	Saturnus	7.87	10.8	15.8	96.9	99.7	



21-Feb 8:47:41	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.08	8.5	11.7	16.5	96.9	99.7
21-Feb 17:52:51	0.52 Saturnus	Bedekking.Begin	Mimas		7.87	6	-7.5	101.2	94.9
21-Feb 20:22:49	0.52 Saturnus	Verduistering.Einde	Mimas	0.08	8.49	-17.5	-30.7	102.3	93.3
21-Feb 20:27:15	0.71 Saturnus	Bedekking.Begin	Enceladus		7.86	-18.2	-31.3	102.4	93.3
21-Feb 20:43:17	1.11 Tethys	Verduistering in bij schaduw	Mimas	0.35	1.75	-20.7	-33.6	102.5	93.1
21-Feb 20:56:32	1.63 Tethys	Overgang.Begin	Saturnus		7.86	-22.7	-35.4	102.6	92.9
21-Feb 21:07:53	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.13	6.88	-24.4	-36.9	102.7	92.8
21-Feb 23:16:25	0.71 Saturnus	Verduistering.Einde	Enceladus	0.11	8.7	-40.1	-48.6	103.7	91.5
21-Feb 23:53:30	1.63 Tethys	Overgang.Einde	Saturnus		7.86	-43	-49.4	104	91.2
22-Feb 0:05:41	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.13	8.91	-43.6	-49.3	104.1	91.1
22-Feb 4:57:44	0.51 Mimas	Overgang.Begin	Saturnus		7.86	-23.2	-17	106.4	88.9
22-Feb 5:03:16	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.08	7.27	-22.4	-16.1	106.5	88.8
22-Feb 7:19:21	0.51 Mimas	Overgang.Einde	Saturnus		7.87	-1.2	5	107.5	88
22-Feb 7:24:58	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.08	8.47	-0.3	5.8	107.6	88
22-Feb 10:08:54	3.21 Rhea	Overgang.Begin	Saturnus	-0.01	7.79	23	25	108.9	86.9
22-Feb 10:32:49	3.11 Rhea	Schaduwovergang.Begin	Saturnus	-0.2	6.3	25.6	26.6	109.1	86.8
22-Feb 12:54:24	0.7 Enceladus	Overgang.Begin	Saturnus		7.85	33.4	27.9	110.2	85.7
22-Feb 13:02:11	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.1	7.11	33.4	27.5	110.3	85.6
22-Feb 13:03:44	1.94 Dione	Overgang.Begin	Saturnus		7.84	33.4	27.4	110.3	85.6
22-Feb 13:19:02	1.92 Dione	Schaduwovergang.Begin	Saturnus	-0.15	6.67	33.2	26.5	110.4	85.5
22-Feb 13:53:33	3.21 Rhea	Overgang.Einde	Saturnus	-0.01	7.79	32.1	24	110.7	85.2
22-Feb 14:24:04	3.11 Rhea	Schaduwovergang.Einde	Saturnus	0.24	9.72	30.4	21.1	110.9	84.9
22-Feb 15:33:13	0.7 Enceladus	Overgang.Einde	Saturnus		7.86	24.3	13.2	111.5	84.2
22-Feb 15:41:40	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.1	8.66	23.3	12.1	111.6	84.1
22-Feb 16:21:16	1.94 Dione	Overgang.Einde	Saturnus		7.84	18.4	6.5	111.9	83.7
22-Feb 16:30:16	0.52 Saturnus	Bedekking.Begin	Mimas		7.87	17.3	5.3	111.9	83.7
22-Feb 16:38:48	1.92 Dione	Schaduwovergang.Einde	Saturnus	0.17	9.17	16.1	4	112	83.6
22-Feb 19:00:01	0.52 Saturnus	Verduistering.Einde	Mimas	0.07	8.45	-5	-17.8	113.2	82
22-Feb 19:36:49	1.63 Saturnus	Bedekking.Begin	Tethys		7.86	-10.9	-23.6	113.5	81.6
22-Feb 22:45:34	1.62 Saturnus	Verduistering.Einde	Tethys	0.13	8.85	-37.4	-46.6	115	79.6
23-Feb 3:35:19	0.51 Mimas	Overgang.Begin	Saturnus		7.86	-34	-29.3	117.3	77
23-Feb 3:40:35	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.07	7.3	-33.4	-28.5	117.4	76.9
23-Feb 5:21:09	0.71 Saturnus	Bedekking.Begin	Enceladus		7.85	-19.1	-13	118.2	76.2

23-Feb	5:56:54	0.51 Mimas	Overgang.Einde	Saturnus	7.86	-13.6	-7.3	118.5	76	
23-Feb	6:02:15	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.07	8.43	-12.8	-6.5	118.6	76
23-Feb	8:09:49	0.71 Saturnus	Verduistering.Einde	Enceladus	0.1	8.64	7.2	12.4	119.6	75.1
23-Feb	13:32:25	2.31 Tethys	Gedeeltelijke verduistering	Enceladus	2.81	0.86	32.9	26	122.3	72.8
23-Feb	15:07:42	0.52 Saturnus	Bedekking.Begin	Mimas	7.86	26.6	16.7	123.1	72	
23-Feb	17:37:13	0.52 Saturnus	Verduistering.Einde	Mimas	0.07	8.42	7.4	-4.5	124.3	70.4
23-Feb	17:59:40	1.31 Tethys	Gedeeltelijke verduistering	Mimas	0.37	1.56	3.9	-8.1	124.5	70.2
23-Feb	18:16:28	1.63 Tethys	Overgang.Begin	Saturnus	7.86	1.3	-10.8	124.6	70	
23-Feb	18:26:47	1.62 Tethys	Schaduwovergang.Begin	Saturnus	-0.11	6.96	-0.3	-12.4	124.7	69.9
23-Feb	21:13:37	1.63 Tethys	Overgang.Einde	Saturnus	7.85	-26.1	-37.1	126.1	68	
23-Feb	21:24:37	1.62 Tethys	Schaduwovergang.Einde	Saturnus	0.12	8.8	-27.7	-38.4	126.2	67.9
23-Feb	21:48:18	0.7 Enceladus	Overgang.Begin	Saturnus	7.85	-30.9	-41.1	126.4	67.6	
23-Feb	21:55:34	0.7 Enceladus	Schaduwovergang.Begin	Saturnus	-0.09	7.16	-31.8	-41.9	126.5	67.5
23-Feb	22:00:04	1.93 Saturnus	Bedekking.Begin	Dione	7.84	-32.5	-42.4	126.5	67.5	
24-Feb	0:27:14	0.7 Enceladus	Overgang.Einde	Saturnus	7.85	-44.6	-48.1	127.7	65.9	
24-Feb	0:35:04	0.7 Enceladus	Schaduwovergang.Einde	Saturnus	0.09	8.6	-44.7	-47.8	127.8	65.8
24-Feb	1:33:36	1.91 Saturnus	Verduistering.Einde	Dione	0.15	9.06	-44	-43.9	128.3	65.2
24-Feb	2:12:53	0.51 Mimas	Overgang.Begin	Saturnus	7.86	-41.8	-39.9	128.6	64.9	
24-Feb	2:17:54	0.51 Mimas	Schaduwovergang.Begin	Saturnus	-0.07	7.32	-41.5	-39.3	128.7	64.8
24-Feb	4:34:27	0.51 Mimas	Overgang.Einde	Saturnus	7.86	-25.5	-20	129.8	63.7	
24-Feb	4:39:32	0.51 Mimas	Schaduwovergang.Einde	Saturnus	0.07	8.4	-24.8	-19.2	129.9	63.7
24-Feb	12:27:30	19.0 Titan	Overgang.Begin	Saturnus	-0.03	7.64	33.5	29.3	133.9	60.3
24-Feb	13:41:18	16.94 Titan	Schaduwovergang.Begin	Saturnus	-0.33	5.23	32.1	25.1	134.6	59.7
24-Feb	13:45:07	0.52 Saturnus	Bedekking.Begin	Mimas	7.86	32.3	25.4	134.5	59.8	
24-Feb	14:15:03	0.71 Saturnus	Bedekking.Begin	Enceladus	7.85	30.7	22.8	134.8	59.5	
24-Feb	16:14:25	0.52 Saturnus	Verduistering.Einde	Mimas	0.07	8.39	18.6	8.2	135.8	58.4
24-Feb	16:24:20	3.18 Saturnus	Bedekking.Begin	Rhea	-0.01	7.79	17.1	6.6	135.9	58.3
24-Feb	16:56:45	1.63 Saturnus	Bedekking.Begin	Tethys	7.85	12.7	1.9	136.2	57.9	
24-Feb	17:03:13	0.71 Saturnus	Verduistering.Einde	Enceladus	0.09	8.57	11.9	1	136.2	57.9
24-Feb	17:40:27	19.0 Titan	Overgang.Einde	Saturnus	-0.03	7.64	5	-6.2	136.6	57.4
24-Feb	19:29:42	16.94 Titan	Schaduwovergang.Einde	Saturnus	0.5	11.8	-12	-23.1	137.6	56.1
24-Feb	20:04:30	1.62 Saturnus	Verduistering.Einde	Tethys	0.11	8.75	-16.3	-27.2	137.8	55.8
24-Feb	20:37:01	3.1 Saturnus	Verduistering.Einde	Rhea	0.21	9.48	-21.3	-32	138.1	55.4