

Sterbedekkingen door de Maan 2023

Tijden voor Ukkel

Datum 2023	UT	Ver.	Object	Mag.	Fase	CA	a	b
Jan 01	18 58 33.0	B	403	5.8	77+	39Z	3.2	-1.9
Jan 02	00 33 52.5	B	423	6.3	78+	78Z	0.5	-1.5
Jan 02	20 32 37.8	B	520	7.5	85+	46Z	2.6	-2.1
Jan 03	01 29 05.1	B	534	6.1	86+	83N	0.5	-1.0
Jan 05	22 36 02.6	B	958	6.7	99+	26N	1.6	2.6
Jan 07	21 33 12.8	E	1211	6.3	-99	71N	1.1	1.1
Jan 09	00 15 44.7	E	1334	7.0	-96	41Z	2.3	4.5
Jan 10	02 39 28.6	E	1444	7.8	-91	39N	0.8	-2.5
Jan 10	21 50 30.6	E	1535	6.9	-86	16N	0.9	-4.0
Jan 11	04 28 22.6	E	1553	7.8	-85	78Z	1.6	-1.0
Jan 13	04 02 37.6	E	119212	7.5	-69	71Z	1.9	0.0
Jan 14	07 03 40.2	E	1850	6.5	-58	84N	1.2	-1.5
Jan 24	18 16 16.4	B	165525	8.3	12+	64Z	1.0	-1.8
Jan 26	18 05 53.6	B	109506	7.6	30+	42N	0.6	1.4
Jan 27	18 08 32.3	B	247	6.3	40+	89N	1.4	0.2
Jan 27	18 59 01.5	B	110063	7.3	41+	56N	0.9	0.9
Jan 27	20 48 12.6	B	110100	7.9	41+	56N	0.7	0.5
Jan 27	20 48 17.3	B	110099	8.0	41+	56N	0.7	0.5
Jan 28	20 58 27.2	B	374	6.0	52+	32N	0.8	2.2
Jan 29	18 30 11.3	B	480	7.4	61+	78Z	1.8	0.1
Jan 29	19 41 03.0	B	93400	8.0	62+	48N	1.2	1.7
Jan 30	14 46 24.6	B	599	4.4	70+	52Z	1.1	1.0
Jan 31	00 13 29.6	B	76555	7.2	72+	55N	0.8	-0.2
Feb 01	18 27 12.0	B	77759	7.7	86+	86Z	1.4	0.9
Feb 02	23 59 11.6	B	78957	7.5	93+	76N	1.4	-1.0
Feb 03	18 18 49.3	B	1169	5.3	96+	70N	0.6	1.5
Feb 10	00 57 19.6	E	1802	7.1	-84	13N	-0.4	-3.3
Feb 10	04 01 50.0	E	1808	7.0	-83	87Z	1.5	-1.0
Feb 14	06 01 28.5	E	2283	6.8	-44	65N	1.3	-0.4
Feb 23	18 55 14.2	B	109824	8.8	16+	46N	0.5	0.8
Feb 24	22 06 46.1	B	338	7.8	26+	87Z	0.0	-1.0
Feb 25	17 55 40.3	B	442	6.7	34+	33N	0.9	2.5
Feb 26	18 32 13.4	B	76311	7.2	44+	46Z	1.9	-2.8
Feb 26	20 22 13.2	B	582	5.6	45+	57N	1.2	0.4
Feb 27	22 10 33.9	B	733	7.2	55+	85Z	0.7	-1.5
Feb 28	18 22 01.4	B	77389	8.1	64+	56N	1.5	1.8
Mar 01	18 49 17.5	B	1013	7.0	73+	78Z	1.7	-0.3
Mar 01	22 16 24.9	B	1028	7.5	74+	52Z	0.7	-2.9
Mar 03	03 01 05.0	B	1169	5.3	83+	39N	0.4	-0.9
Mar 03	17 35 33.0	B	80089	7.2	88+	22Z	2.6	-7.9
Mar 03	20 53 58.5	B	80165	7.5	88+	53Z	1.3	-2.3

Mar 05	03 10 21.3	B	1393	6.5	94+	50N	0.6	-1.5
Mar 12	03 33 48.6	E	2104	7.3	-80	54N	1.0	-0.9
Mar 13	02 38 58.1	E	2226	7.0	-71	44N	0.6	-0.4
Mar 23	20 05 14.3	B	92669	7.4	5+	52N	0.1	0.2
Mar 23	20 05 17.9	B	X 60134	8.2	5+	52N	0.1	0.2
Mar 24	20 11 00.5	B	93076	8.7	12+	39Z	-0.2	-2.9
Mar 24	20 11 00.5	B	X 63209	8.6	12+	39Z	-0.2	-2.9
Mar 25	19 32 55.0	B	76007	8.6	19+	66N	0.8	-0.2
Mar 25	21 27 49.3	B	525	6.5	20+	37Z	-0.5	-2.8
Mar 25	22 15 20.2	B	76070	7.2	20+	35N	0.5	0.7
Mar 27	23 21 57.2	B	77229	7.8	39+	85N	-0.1	-1.3
Mar 28	20 02 47.2	B	78234	8.2	47+	64Z	1.0	-2.2
Mar 29	00 46 48.0	B	994	6.6	49+	9Z	-2.1	-4.0
Mar 29	18 20 37.1	B	1088	5.8	56+	35Z	1.4	-3.9
Mar 29	19 05 59.1	B	X 99111	7.2	57+	35N	2.3	2.9
Mar 29	19 05 59.1	B	1093	6.6	57+	35N	2.3	2.9
Mar 29	21 35 29.4	B	1105	6.5	57+	62Z	0.6	-2.4
Mar 29	22 53 38.8	B	1108	7.0	58+	51N	1.1	-0.7
Mar 30	21 26 48.1	B	79980	7.3	67+	62Z	0.8	-2.3
Apr 01	21 53 28.7	B	1444	7.8	83+	45N	2.5	0.5
Apr 02	23 05 14.8	B	1553	7.8	90+	84N	1.3	-1.4
Apr 03	23 36 08.9	B	1646	7.6	95+	24Z	-0.4	-3.2
Apr 04	21 53 25.3	B	119212	7.5	98+	45N	2.3	1.4
Apr 10	02 43 03.1	B	2349	2.9	-83	47Z	1.1	-0.5
Apr 10	03 44 08.3	E	2349	2.9	-83	58Z	1.7	-0.3
Apr 11	04 38 54.9	E	2505	5.3	-74	75Z	1.5	-0.3
Apr 22	20 09 35.1	B	612	7.6	8+	61Z	-0.2	-1.8
Apr 22	20 09 35.8	B	76475	7.7	8+	61Z	-0.2	-1.8
Apr 22	20 12 14.9	B	76470	9.1	8+	40N	0.6	0.5
Apr 23	19 57 31.5	B	76924	8.4	14+	42Z	-0.2	-2.6
Apr 24	17 00 25.3	B	890	4.6	21+	23N	2.3	5.7
Apr 24	20 13 14.6	B	906	6.6	22+	79Z	0.4	-1.7
Apr 24	21 06 14 0	M	909	6.0	22+	8N	9.9	9.9
Apr 25	20 06 10.8	B	78862	8.6	31+	69N	1.1	-1.0
Apr 25	20 06 10.8	B	X 95186	8.6	31+	69N	1.1	-1.0
Apr 25	20 22 26.4	B	78873	7.8	31+	87N	0.7	-1.5
Apr 25	20 27 05.3	B	1056	7.2	31+	77N	0.8	-1.3
Apr 25	21 33 32.6	B	78916	8.4	31+	64Z	0.0	-2.0
Apr 25	22 35 51.7	B	78957	7.5	31+	57Z	-0.4	-2.0
Apr 25	22 55 41.2	B	1067	7.1	32+	45N	0.4	-0.7
Apr 27	19 06 38 0	B	1290	6.9	49+	16N	9.9	9.9
Apr 27	19 16 40 0	E	1290	6.9	49+	2N	9.9	9.9

May 02	21 09 14.1	B	138836	7.3	91+	61Z	0.9	-1.1
May 03	00 46 36.7	B	1808	7.0	92+	32N	2.0	-0.8
May 21	19 52 03.5	E	844	5.8	5+	56N	-0.4	-1.8
May 21	19 54 20.5	B	849	6.5	5+	27Z	-0.8	-2.5
May 21	20 55 55.0	B	77398	8.0	5+	34Z	-0.8	-1.9
May 21	20 56 50.1	B	77389	8.1	5+	23N	1.6	2.0
May 21	21 07 34.2	E	77389	8.1	5+	-1N	-2.4	-4.3
May 22	20 25 48.0	B	1013	7.0	10+	84N	0.0	-1.3
May 22	21 38 35.7	B	78576	8.3	10+	15Z	-1.3	-2.6
May 23	21 26 06.8	B	79495	8.3	17+	84Z	-0.2	-1.6
May 24	21 10 58.0	B	80165	7.5	25+	83N	0.2	-1.6
May 24	22 13 56.2	B	80192	8.5	25+	90Z	-0.2	-1.6
May 26	23 37 50.9	B	1479	6.4	44+	63Z	-0.3	-1.9
May 30	01 07 07.9	B	1772	3.9	72+	30Z	0.1	-2.4
Jun 23	21 17 45.4	B	1545	8.0	27+	86N	0.2	-1.8
Jun 24	19 57 23.4	B	1625	5.8	36+	89N	0.9	-1.8
Jun 25	22 12 08.8	B	1732	6.8	46+	14Z	-0.3	-2.9
Jun 30	21 47 41.7	B	2299	6.2	91+	14Z	0.7	-1.4
Jul 04	00 43 16.1	E	2831	6.0	-99	74Z	1.6	-0.3
Jul 05	01 52 06.4	E	2998	6.4	-96	75Z	1.4	0.0
Jul 06	01 49 38.7	E	3160	6.7	-90	71N	1.7	0.2
Jul 09	01 26 10.8	E	36	7.1	-61	11Z	-0.4	2.8
Jul 10	01 24 52.9	E	155	6.4	-50	64N	0.7	1.6
Jul 10	01 26 11.7	E	109667	7.3	-50	65N	0.7	1.6
Jul 11	00 47 46.8	E	92688	6.8	-39	69Z	0.0	1.8
Jul 13	02 40 48.2	E	525	6.5	-20	58Z	-0.1	2.0
Jul 13	03 24 06.0	E	76070	7.2	-19	41N	1.3	0.7
Jul 23	14 58 20.8	B	1772	3.9	28+	55Z	0.9	-1.1
Jul 23	16 13 25.2	E	1772	3.9	29+	88Z	1.6	-0.7
Jul 27	20 36 51.8	B	2227	5.8	70+	20Z	0.9	-1.8
Jul 27	21 09 23.3	B	2235	6.3	70+	55Z	1.3	-1.4
Aug 02	22 06 15.8	E	3227	6.3	-98	50Z	0.9	1.5
Aug 04	02 05 51.6	E	3392	7.3	-92	82Z	1.3	0.4
Aug 05	01 40 48.6	E	3526	4.9	-84	65N	1.8	0.5
Aug 05	03 45 28.3	E	3535	5.1	-84	79N	1.5	-0.2
Aug 06	02 25 20.7	E	109	6.4	-75	85N	1.4	1.0
Aug 09	00 05 38.5	E	93394	6.9	-44	71N	0.1	1.5
Aug 09	01 25 55.6	E	489	6.8	-43	25Z	-0.5	2.6
Aug 09	03 52 10.3	E	500	7.1	-42	42Z	0.4	2.5
Aug 09	23 40 12.7	E	76499	7.3	-34	63N	-0.2	1.2
Aug 09	23 50 27.5	E	76502	7.7	-34	83N	-0.3	1.4
Aug 10	00 33 00.5	E	624	6.8	-33	74N	0.0	1.4
Aug 10	00 33 48.1	E	76516	8.1	-33	77Z	-0.2	1.6
Aug 10	02 44 53.9	E	76545	7.9	-33	87Z	0.5	1.7
Aug 11	02 00 17.6	E	780	6.8	-24	52N	0.6	0.8

Aug 11	02 11 53.1	E	77031	8.4	-24	75Z	0.0	1.7
Aug 12	02 17 13.8	E	927	8.0	-16	70N	0.2	1.0
Aug 12	02 50 04.7	E	78041	7.8	-16	42Z	-0.4	2.2
Aug 13	01 25 12.2	E	78957	7.5	-10	72Z	-0.5	1.2
Aug 13	02 46 13.7	E	1075	8.5	-9	85N	0.0	1.1
Aug 13	02 50 17.4	E	79022	8.0	-9	54Z	-0.4	1.8
Aug 14	04 02 56.6	B	1206	5.9	-4	-2N	-1.5	4.7
Aug 14	04 22 50.4	E	1206	5.9	-4	37N	1.6	-2.1
Aug 24	20 12 32.1	B	2332	6.1	54+	76N	1.2	-1.1
Aug 27	20 49 34.9	B	2831	6.0	85+	30N	0.9	1.0
Aug 28	21 58 52.4	B	2998	6.4	93+	89N	1.3	0.2
Aug 29	21 43 00.3	B	3160	6.7	98+	89N	1.2	0.9
Aug 29	22 02 12.5	B	3158	5.7	98+	51N	0.7	1.2
Sep 02	00 16 43.0	E	55	6.4	-94	33Z	0.4	1.9
Sep 03	23 46 59.6	E	319	7.7	-79	89Z	0.7	1.7
Sep 04	22 14 10.4	E	442	6.7	-70	27Z	-0.5	2.3
Sep 05	03 41 48.1	E	460	6.9	-68	70Z	1.2	1.3
Sep 05	03 51 01.6	B	465	4.4	-68	70N	1.2	1.3
Sep 05	05 06 36.7	E	465	4.4	-68	89Z	1.5	0.1
Sep 06	01 49 14.7	E	594	6.9	-59	82Z	0.8	1.7
Sep 06	01 49 24.0	E	76389	7.8	-59	81Z	0.8	1.7
Sep 06	03 32 30.0	E	76423	8.2	-58	55Z	0.9	2.1
Sep 06	04 23 25.1	E	76436	8.3	-58	63N	1.9	-0.5
Sep 07	04 27 15.8	E	76895	7.5	-47	61N	1.9	-0.4
Sep 07	04 27 48.3	E	76904	8.2	-47	27N	3.4	-5.3
Sep 08	00 09 05.9	E	77588	7.7	-39	78N	0.0	1.3
Sep 08	00 12 58.0	E	77604	7.0	-39	23N	2.2	-1.7
Sep 08	00 54 25.8	E	77619	7.1	-38	63N	0.5	1.0
Sep 08	01 18 13.2	B	890	4.6	-38	43N	-0.3	2.4
Sep 08	02 10 08.6	E	890	4.6	-38	67N	0.9	0.9
Sep 08	02 47 44.7	E	77711	7.9	-38	29Z	-0.1	3.4
Sep 08	03 22 16.0	E	77724	7.0	-38	66N	1.4	0.5
Sep 09	00 10 17.4	E	78685	8.0	-29	67N	0.0	0.9
Sep 09	02 01 28.6	E	1042	6.7	-29	9Z	-1.4	4.7
Sep 10	01 35 12.8	E	1162	8.2	-21	42Z	-0.5	2.1
Sep 10	02 39 44.6	E	1169	5.3	-20	10Z	-1.2	4.8
Sep 10	03 41 21.2	E	79672	7.6	-20	76Z	0.5	1.6
Sep 11	03 41 37.7	E	80288	8.6	-13	56Z	0.1	2.0
Sep 12	02 56 48.9	E	80804	9.1	-7	78N	0.0	0.5
Sep 12	03 16 23.6	E	1393	6.5	-7	88Z	0.0	0.9
Sep 26	18 20 26.1	B	3227	6.3	90+	75Z	1.0	1.4
Sep 27	22 35 34.3	B	3392	7.3	97+	72Z	1.4	0.2
Sep 28	21 48 41.8	B	3526	4.9	100+	78Z	1.1	1.2
Sep 28	23 45 45.3	B	3535	5.1	100+	65Z	1.3	0.3
Sep 29	22 29 45.7	E	109	6.4	-100	43Z	0.7	1.7

Sep 30	21 43 08.7	E	252	7.3	-97	54N	1.4	1.0
Oct 01	00 29 52.3	E	264	7.1	-96	88Z	1.3	0.8
Oct 03	01 47 04.2	E	76050	7.3	-83	61Z	1.0	1.8
Oct 03	23 52 20.3	E	683	7.4	-75	77N	0.9	1.3
Oct 04	02 31 47.6	E	698	7.5	-74	45N	2.3	-1.5
Oct 05	01 37 38.4	E	77258	7.8	-65	30Z	0.1	3.6
Oct 05	02 09 41.3	E	77266	8.1	-64	67Z	1.0	1.9
Oct 05	02 59 40.3	E	840	6.3	-64	51N	2.0	-1.0
Oct 06	00 39 03.4	E	78410	7.7	-55	57Z	0.1	2.2
Oct 06	02 45 59.2	E	78483	8.0	-54	31N	2.4	-3.1
Oct 06	03 04 30.6	E	78480	7.5	-54	78Z	1.2	1.4
Oct 06	03 08 21.2	B	1008	5.3	-54	- 49N	1.0	2.6
Oct 06	03 23 40.1	E	78496	7.5	-54	68N	1.6	-0.1
Oct 06	04 13 45.6	E	1008	5.3	-54	60N	1.8	-1.0
Oct 06	22 51 08.3	E	1108	7.0	-46	88Z	-0.3	1.2
Oct 07	03 33 13.2	E	79431	8.2	-44	58N	1.5	-0.6
Oct 18	12 59 14.6	B	2366	1.1	15+	84N	1.4	0.6
Oct 18	14 14 32.5	E	2366	1.1	15+	- 72N	1.4	-0.2
Oct 23	18 05 13.4	B	190556	7.0	68+	90N	1.4	0.8
Oct 23	18 57 30.2	B	3178	6.2	68+	89N	1.4	0.5
Oct 26	20 29 03.2	B	55	6.4	95+	36Z	2.6	-0.2
Oct 29	23 06 41.5	E	460	6.9	-98	66Z	0.9	1.9
Oct 29	23 15 17.4	B	465	4.4	-98	- 86N	1.2	1.3
Oct 30	00 28 18.2	E	465	4.4	-98	81Z	1.3	1.0
Oct 30	05 26 38.0	E	485	7.0	-98	70Z	0.6	-0.3
Oct 30	06 24 06.7	E	487	5.2	-98	85N	0.2	-1.1
Oct 30	20 21 56.0	E	594	6.9	-95	89N	0.2	1.7
Oct 31	00 23 35.4	E	611	7.0	-94	67Z	1.1	1.7
Oct 31	01 01 35.6	E	76480	7.4	-94	88N	1.5	0.6
Oct 31	01 11 22.7	E	76483	7.2	-94	64Z	1.2	1.6
Oct 31	22 59 00.7	E	76945	7.5	-88	43N	1.7	-0.1
Oct 31	23 26 48.7	E	762	6.6	-88	52Z	0.5	2.5
Nov 01	21 07 00.7	E	77804	7.3	-81	90Z	0.0	1.5
Nov 01	21 54 59.1	E	909	6.0	-81	75Z	0.1	1.8
Nov 01	23 10 18.0	E	77909	7.6	-81	46Z	0.1	2.7
Nov 02	22 55 36.3	E	1067	7.1	-72	31Z	-0.5	3.2
Nov 03	05 49 55.4	E	1093	6.6	-70	86N	1.4	-1.2
Nov 03	05 49 55.4	E	X 99111	7.2	-70	86N	1.4	-1.2
Nov 04	01 49 23.2	E	1206	5.9	-62	60Z	1.0	2.2
Nov 04	04 35 36.6	E	79936	8.1	-61	28N	1.0	-4.0
Nov 05	02 59 04.3	E	1330	7.8	-52	58Z	1.3	2.1
Nov 06	05 26 34.5	E	98751	8.3	-42	79Z	1.7	0.2
Nov 07	02 10 50.9	E	99123	7.3	-33	62Z	0.4	1.9

Nov 07	03 12 42.5	E	99149	7.1	-33	22Z	1.0	6.9
Nov 07	06 01 48.1	E	1545	8.0	-32	64Z	1.9	0.8
Nov 08	04 11 52.9	E	118729	8.0	-24	49Z	1.1	2.6
Nov 08	04 27 06.7	E	1625	5.8	-24	90Z	0.9	0.6
Nov 09	04 31 18.0	E	119126	8.5	-16	85Z	0.7	0.9
Nov 09	06 18 18.1	E	1732	6.8	-16	46Z	2.1	2.6
Nov 09	09 50 22.1	B	Venus	-4.4	-15	36Z	0.4	-2.4
Nov 09	10 57 00.3	E	Venus	-4.4	-15	66Z	1.7	-1.5
Nov 10	03 57 59.9	E	1818	8.0	-10	31N	-0.1	-1.7
Nov 17	17 15 55.1	B	2831	6.0	21+	6N	-1.0	1.8
Nov 19	17 40 13.0	B	190337	7.2	42+	86N	1.4	0.1
Nov 20	19 31 23.9	B	3284	7.0	54+	11N	-0.9	2.6
Nov 21	16 49 40.3	B	3409	7.0	64+	90N	1.2	1.3
Nov 21	18 44 06.9	B	3419	4.2	65+	86Z	1.4	0.5
Nov 21	19 52 20.3	E	3419	4.2	65+	61Z	0.8	0.7
Nov 22	15 56 54.9	B	3535	5.1	74+	48N	0.4	2.0
Nov 22	20 02 32.0	B	15	7.1	76+	46Z	2.5	-1.0
Nov 22	22 44 24.7	B	22	7.2	77+	83N	0.8	-0.3
Nov 23	21 08 48.2	B	109599	7.7	85+	47Z	2.4	-1.4
Nov 23	23 44 12.6	B	153	6.0	86+	74Z	1.0	-1.1
Nov 24	18 16 52.7	B	264	7.1	92+	45N	0.2	2.2
Nov 24	20 13 09.4	B	272	5.9	92+	51Z	2.2	-0.1
Nov 25	01 37 51.6	B	290	6.1	93+	37Z	0.7	-3.8
Nov 26	03 04 32.4	B	432	5.8	98+	80Z	0.4	-1.5
Nov 28	19 34 03.5	E	833	7.1	-97	71Z	-0.1	2.0
Nov 29	01 46 02.8	E	868	7.5	-97	50N	1.5	-1.7
Nov 29	04 38 02.2	E	77604	7.0	-96	89N	0.9	-1.1
Nov 29	05 06 46.7	E	77619	7.1	-96	84Z	0.8	-1.0
Nov 29	05 09 18.3	E	77621	7.5	-96	55N	0.4	-2.1
Nov 29	06 19 04.5	E	890	4.6	-96	61N	0.1	-1.8
Nov 29	23 20 54.8	E	78580	7.3	-92	62N	1.4	0.2
Nov 30	03 14 00.3	E	1035	6.7	-92	77N	1.4	-1.1
Dec 01	05 15 32.5	E	79672	7.6	-85	76N	1.0	-1.7
Dec 03	02 43 44.0	E	1393	6.5	-69	79N	1.4	-0.3
Dec 03	23 09 47.1	E	1479	6.4	-61	77Z	0.1	1.4
Dec 05	04 38 09.1	E	118593	7.6	-50	79Z	1.7	0.2
Dec 07	01 46 30.6	E	1772	3.9	-32	66N	0.2	0.1
Dec 08	05 20 55.2	E	139171	8.4	-23	72N	0.8	0.0
Dec 08	06 25 14.4	E	139185	8.2	-22	58Z	2.2	1.3
Dec 08	06 30 00.2	E	1890	7.3	-22	89N	1.4	0.1
Dec 15	17 05 22.5	B	188955	7.2	9+	66Z	1.4	-1.7
Dec 17	18 08 26.9	B	3243	7.3	27+	75N	0.9	-0.2
Dec 18	20 54 11.8	B	146509	7.1	39+	68N	0.4	-0.2
Dec 19	22 12 44.6	B	147015	7.1	51+	68Z	0.6	-1.5
Dec 20	19 34 58.5	B	109427	7.7	61+	84N	1.2	0.4

Dec 23	15 29 28.3	B	465	4.4	88+	24N	-0.6	2.3
Dec 23	16 04 14.8	E	465	4.4	88+	- 50N	0.9	1.1
Dec 23	20 02 49.7	B	485	7.0	89+	79Z	1.6	0.5
Dec 23	21 13 48.9	B	487	5.2	89+	82Z	1.7	0.0
Dec 23	21 43 21.5	B	75906	7.5	89+	65N	1.3	1.0
Dec 23	22 19 55.8	B	492	6.1	90+	53Z	1.8	-2.2
Dec 24	16 15 58.6	B	611	7.0	94+	36N	-0.4	2.1
Dec 24	16 52 20.9	B	76483	7.2	94+	40N	-0.2	2.2
Dec 24	19 19 43.3	B	76523	7.6	95+	51Z	2.1	-0.4
Dec 25	19 01 07.0	B	780	6.8	98+	47Z	2.3	-1.3
Dec 27	21 18 27.8	E	1088	5.8	-99	67Z	0.6	2.9
Dec 28	00 22 08.9	E	1105	6.5	-99	43Z	2.3	6.4
Dec 28	02 10 31.6	E	1108	7.0	-99	65N	1.4	-1.2
Dec 28	19 06 06.7	E	1211	6.3	-96	70N	0.1	1.0
Dec 28	23 04 36.7	E	79980	7.3	-96	79N	1.4	0.6
Dec 29	04 58 33.6	E	80089	7.2	-95	51N	0.4	-2.3
Dec 29	05 45 34.9	E	1251	5.9	-95	55N	0.2	-2.1
Dec 29	20 39 54.6	E	1334	7.0	-92	52N	0.6	0.1
Dec 31	04 24 15.2	E	1462	7.3	-84	29N	0.2	-3.0