

Chang'e-3 Lander Estimated Lunar Day / Night Cycle Mar 2019 - Jan 2020			
Lunar Night 66 28 Mar - 16 Apr 2019	~19 Days	28-Mar	Last Quarter Moon
		28-Mar	Chang'e-3 Lander Hibernates
		5-Apr	New Moon
		12-Apr	1st Quarter Moon
Lunar Day 67 16-27 Apr 2019	~11 Days	16-Apr	Chang'e-3 Lander Awakens
		19-Apr	Full Moon
		26-Apr	Last Quarter Moon
Lunar Night 67 27 Apr - 15 May 2019	~18 Days	27-Apr	Chang'e-3 Lander Hibernates
		4-May	New Moon
		12-May	1st Quarter Moon
		15-May	Chang'e-3 Lander Awakens
Lunar Day 68 15-26 May 2019	~11 Days	18-May	Full Moon
		26-May	Last Quarter Moon
Lunar Night 69 26 May - 13 Jun 2019	~18 Days	26-May	Chang'e-3 Lander Hibernates
		3-Jun	New Moon
		10-Jun	1st Quarter Moon
		13-Jun	Chang'e-3 Lander Awakens
Lunar Day 70 13-25 Jun 2019	~12 Days	17-Jun	Full Moon
		25-Jun	Last Quarter Moon
Lunar Night 70 25 Jun - 12 Jul 2019	~17 Days	25-Jun	Chang'e-3 Lander Hibernates
		2-Jul	New Moon
		9-Jul	1st Quarter Moon
		12-Jul	Chang'e-3 Lander Awakens
Lunar Day 71 12-25 Jul 2019	~13 Days	16-Jul	Full Moon
		16-17 Jul	Partial eclipse of Moon - UT Penumbral 18:43:51 on 16 Jul - 00:17:38 on 17 Jul, Partial 20:01:43-22:59:39 16 Jul
		25-Jul	Last Quarter Moon
Lunar Night 71 25 Jul - 11 Aug 2019	~17 Days	25-Jul	Chang'e-3 Lander Hibernates
		1-Aug	New Moon
		7-Aug	1st Quarter Moon
		11-Aug	Chang'e-3 Lander Awakens
Lunar Day 72 11-23 Aug 2019	~12 Days	15-Aug	Full Moon
		23-Aug	Last Quarter Moon
Lunar Night 72 23 Aug - 9 Sep 2019	~17 Days	23-Aug	Chang'e-3 Lander Hibernates
		30-Aug	New Moon
		6-Sep	1st Quarter Moon
		9-Sep	Chang'e-3 Lander Awakens
Lunar Day 73 9-22 Sep 2019	~13 Days	14-Sep	Full Moon
		22-Sep	Last Quarter Moon
Lunar Night 73 22 Sep - 8 Oct 2019	~16 Days	22-Sep	Chang'e-3 Lander Hibernates
		28-Sep	New Moon
		5-Oct	1st Quarter Moon
		8-Oct	Chang'e-3 Lander Awakens
Lunar Day 74 8-21 Oct 2019	~13 Days	13-Oct	Full Moon
		21-Oct	Last Quarter Moon
Lunar Night 74 21 Oct - 7 Nov 2019	~17 Days	21-Oct	Chang'e-3 Lander Hibernates
		28-Oct	New Moon
		4-Nov	1st Quarter Moon
		7-Nov	Chang'e-3 Lander Awakens
Lunar Day 75 7-20 Nov 2019	~13 Days	12-Nov	Full Moon

Lunar Night 75 20 Nov - 7 Dec 2019	~17 Days	19-Nov	Last Quarter Moon
		20-Nov	Chang'e-3 Lander Hibernates
		26-Nov	New Moon
		4-Dec	1st Quarter Moon
Lunar Day 76 7-19 Dec 2019	~12 Days	7-Dec	Chang'e-3 Lander Awakens
		12-Dec	Full Moon
		14-Dec	Chang'e-3 Lander Reaches 6 Full Years on Moon
Lunar Night 76 19 Dec 2019 - 6 Jan 2020	~18 Days	19-Dec	Last Quarter Moon
		19-Dec	Chang'e-3 Lander Hibernates
		26-Dec	New Moon
		2020 3-Jan	1st Quarter Moon
Chang'e-3 Lander & Yutu Rover Estimated Lunar Day / Night Cycle Mar 2019 - Dec 2013			
Lunar Day 66 17-28 Mar 2019	~11 Days	21-Mar	Full Moon
		17-Mar	Chang'e-3 Lander Awakens
Lunar Night 65 26 Feb - 17 Mar 2019	~19 Days	14-Mar	1st Quarter Moon
		6-Mar	New Moon
		26-Feb	Chang'e-3 Lander Hibernates
		26-Feb	Last Quarter Moon
Lunar Day 65 16-26 Feb 2019	~10 Days	19-Feb	Full Moon
		16-Feb	Chang'e-3 Lander Awakens
Lunar Night 64 28 Jan - 16 Feb 2019	~19 Days	12-Feb	1st Quarter Moon
		4-Feb	New Moon
		28-Jan	Chang'e-3 Lander Hibernates
		27-Jan	Last Quarter Moon
Lunar Day 64 17-28 Jan 2019	~11 Days	21-Jan	Full Moon
		21-Jan	Total Eclipse of Moon - UT Penumbral 02:36:29-07:48:02, Partial 03:33:54-06:50:39, Total 04:41:17-05:43:15 (Beijing 10:36:29-15:48:02, 11:33:54-14:50:39, 12:41:17-13:43:15) (HST 16:36:29-21:48:02 Jan 20, 17:33:54-20:50:39 Jan 20, 18:41:17-19:43:15 Jan 20)
		17-Jan	Chang'e-3 Lander Awakens
Lunar Night 63 29 Dec 2018 - 17 Jan 2019	~19 Days	14-Jan	1st Quarter Moon
		6-Jan	New Moon
		2019 29-Dec	Chang'e-3 Lander Hibernates
		29-Dec	Last Quarter Moon
Lunar Day 63 18-29 Dec 2018	~11 Days	22-Dec	Full Moon
		18-Dec	Chang'e-3 Lander Awakens
Lunar Night 62 30 Nov - 18 Dec 2018	~18 Days	15-Dec	1st Quarter Moon
		14-Dec	Chang'e-3 Lander Reaches 5 Full Years on Moon
		7-Dec	New Moon
		30-Nov	Chang'e-3 Lander Hibernates
		30-Nov	Last Quarter Moon
Lunar Day 62 18-30 Nov 2018	~12 Days	23-Nov	Full Moon
		18-Nov	Chang'e-3 Lander Awakens
Lunar Night 61 31 Oct - 18 Nov 2018	~18 Days	15-Nov	1st Quarter Moon
		7-Nov	New Moon
		31-Oct	Chang'e-3 Lander Hibernates
		31-Oct	Last Quarter Moon

Lunar Day 61 20-31 Oct 2018	~11 Days	24-Oct 20-Oct	Full Moon Chang'e-3 Lander Awakens
Lunar Night 60 2-20 Oct 2018	~18 Days	16-Oct 9-Oct 2-Oct 2-Oct	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 60 20 Sep - 2 Oct 2018	~12 Days	25-Sep 20-Sep	Full Moon Chang'e-3 Lander Awakens
Lunar Night 59 3-20 Sep 2018	~17 Days	16-Sep 9-Sep 3-Sep 3-Sep	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 59 21 Aug - 3 Sep 2018	~13 Days	26-Aug 21-Aug	Full Moon Chang'e-3 Lander Awakens
Lunar Night 58 5-21 Aug 2018	~16 Days	18-Aug 11-Aug 5-Aug 4-Aug	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 58 23 Jul - 5 Aug 2018	~13 Days	23-Jul 27-Jul 27-Jul	Chang'e-3 Lander Awakens Full Moon Total Eclipse of Moon - UT Penumbral 19:14:47-23:28:38, Partial 18:24:27-23:19:00, Total 19:30:15-21:13:11 (Beijing 03:14:47-07:28:38 Jul 28, 02:24:27-07:19:00 Jul 28, 03:30:15-5:13:11 Jul 28) (HST 09:14:47-13:28:38, 08:24:27-13:19:00, 09:30:15-11:13:11)
Lunar Night 57 6-23 Jul 2018	~17 Days	19-Jul 13-Jul 6-Jul 6-Jul	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 57 23 Jun - 6 Jul 2018	~13 Days	28-Jun 23-Jun	Full Moon Chang'e-3 Lander Awakens
Lunar Night 56 7-23 Jun 2018	~16 Days	20-Jun 13-Jun 7-Jun 6-Jun	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 56 25 May - 7 Jun 2018	~13 Days	29-May 25-May	Full Moon Chang'e-3 Lander Awakens
Lunar Night 55 8-25 May 2018	~17 Days	22-May 15-May 8-May 8-May	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 55 26 Apr - 8 May 2018	~12 Days	30-Apr 26-Apr	Full Moon Chang'e-3 Lander Awakens
Lunar Night 54 26 Apr 2018	8- ~18 Days	24-Apr 16-Apr 8-Apr 8-Apr	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon

Lunar Day 54 27 Mar - 8 Apr 2018	~12 Days	31-Mar 27-Mar	Full Moon Chang'e-3 Lander Awakens
Lunar Night 53 9-27 Mar 2018	~18 Days	24-Mar 17-Mar 9-Mar 9-Mar	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 53 26 Feb - 9 Mar 2018	~11 Days	Mar 22 / 23 26-Feb	Full Moon Chang'e-3 Lander Awakens
Lunar Night 52 26 Feb 2018	7- ~19 Days	23-Feb 15-Feb 7-Feb 7-Feb	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 52 Jan - 7 Feb 2018	28 ~10 Days	31-Jan	Total Eclipse of Moon - UT Penumbral 10:51:13-16:08:29, Partial 11:48:27-15:11:11, Total 12:51:47-14:07:51 (Beijing 18:51:13 Jan 31 - 00:08:29 Feb 1, 19:48:27- 23:11:11, 20:51:47-22:07:51) (HST 00:51:13-06:08:29, 01:48:27-05:11:11, 02:51:47-04:07:51)
Lunar Night 51 9-28 Jan 2018	~19 Days	31-Jan 28-Jan 24-Jan 17-Jan 9-Jan 8-Jan	Full Moon Chang'e-3 Lander Awakens 1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 51 29 Dec 2017 - 9 Jan 2018	~11 Days	2-Jan 2018 29-Dec	Full Moon Chang'e-3 Lander Awakens
Lunar Night 50 10-29 Dec 2017	~19 Days	26-Dec 18-Dec 14-Dec 10-Dec 10-Dec	1st Quarter Moon New Moon Chang'e-3 Lander Reaches 4 Full Years on Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 50 29 Nov - 10 Dec 2017	~11 Days	3-Dec 29-Nov	Full Moon Chang'e-3 Lander Awakens
Lunar Night 49 11 -29 Nov 2017	~18 Days	26-Nov 18-Nov 11-Nov 10-Nov	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 49 31 Oct - 11 Nov 2017	~11 Days	4-Nov 31-Oct	Full Moon Chang'e-3 Lander Awakens
Lunar Night 48 12-31 Oct 2017	~19 Days	27-Oct 19-Oct 12-Oct 12-Oct	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 48 1-12 Oct 2017	~11 Days	5-Oct 1-Oct	Full Moon Chang'e-3 Lander Awakens
Lunar Night 47 13 Sep - 1 Oct 2017	~18 Days	28-Sep 20-Sep 13-Sep 13-Sep	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 47 1-13 Sep 2017	~12 Days	6-Sep 1-Sep	Full Moon Chang'e-3 Lander Awakens

Lunar Night 46 15 Aug - 1 Sep 2017	~17 Days	29-Aug	1st Quarter Moon
		21-Aug 15-Aug 15-Aug	New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 46 2-15 Aug 2017	~15 Days	7-Aug	Partial Eclipse of Moon - UT Penumbral 15:50:01-20:50:56, Partial 17:22:56-19:18:09 (Beijing 23:50:01 Aug 7 - 04:50:56 Aug 8, 01:22:56-03:18:09 Aug 8) (HST 05:50:01-10:50:56, 07:22:56-09:18:09)
		2-Aug 2-Aug	Full Moon Chang'e-3 Lander Awakens
Lunar Night 45 17 Jul - 2 Aug 2017	~16 Days	30-Jul	1st Quarter Moon
		23-Jul 17-Jul 16-Jul	New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 45 4-17 Jul 2017	~13 Days	9-Jul	Full Moon
		4-Jul	Chang'e-3 Lander Awakens
Lunar Night 44 17 Jun - 4 Jul 2017	~17 Days	1-Jul	1st Quarter Moon
		24-Jun 17-Jun 17-Jun	New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 44 4-17 Jun 2017	~13 Days	9-Jun	Full Moon
		4-Jun	Chang'e-3 Lander Awakens
Lunar Night 43 19 May - 4 Jun 2017	~16 Days	1-Jun	1st Quarter Moon
		25-May 19-May 19-May	New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 43 6-19 May 2017	~13 Days	10-May	Full Moon
		6-May	Chang'e-3 Lander Awakens
Lunar Night 42 19 Apr - 6 May 2017	~17 Days	3-May	1st Quarter Moon
		26-Apr 19-Apr 19-Apr	New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 42 7-19 Apr 2017	~11 Days	11-Apr	Full Moon
		7-Apr	Chang'e-3 Lander Awakens
Lunar Night 41 20 Mar - 7 Apr 2017	~18 Days	3-Apr	1st Quarter Moon
		28-Mar 20-Mar 20-Mar	New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 41 8-20 Mar 2017	~11 Days	12-Mar	Full Moon
		8-Mar	Chang'e-3 Lander Awakens
Lunar Night 40 19 Feb - 8 Mar 2017	~17 Days	5-Mar	1st Quarter Moon
		26-Feb 19-Feb 18-Feb	New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 40 8-19 Feb 2017	~11 Days	11-Feb	Full Moon
		10-Feb	Penumbral Eclipse of Moon - UT 22:34:14 Feb 10 - 02:53:25 Feb 11 (Beijing 06:34:14-10:53:54 Feb 11) (HST 12:34:14-16:53:25)
Lunar Night 39 20 Jan - Feb 8 2017	~19 Days	8-Feb	Chang'e-3 Lander Awakens
		4-Feb 20-Jan 20-Jan 19-Jan	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon

Lunar Day 39 9-20 Jan 2017	~11 Days	12-Jan 9-Jan	Full Moon Chang'e-3 Lander Awakens
Lunar Night 38 21 Dec 2016 - 9 Jan 2017	~19 Days	5-Jan 2017 29-Dec 21-Dec 21-Dec	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 38 10-21 Dec 2016	~11 Days	14-Dec 14-Dec 10-Dec	Full Moon Lander reaches 3rd Full Year of Operations on Moon Chang'e-3 Lander Awakens
Lunar Night 37 21 Nov - 10 Dec 2016	~19 Days	7-Dec 29-Nov 29-Nov 21-Nov	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 37 11-21 Nov 2016	~10 Days	14-Nov 11-Nov	Full Moon Chang'e-3 Lander Awakens
Lunar Night 36 23 Oct - 11 Nov 2016	~19 Days	7-Nov 30-Oct 23-Oct 22-Oct	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 36 12-23 Oct 2016	~11 Days	16-Oct 12-Oct	Full Moon Chang'e-3 Lander Awakens
Lunar Night 35 23 Sep - 12 Oct 2016	~19 Days	9-Oct 1-Oct 23-Sep 23-Sep	1st Quarter Moon New Moon Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 35 12-23 Sep 2016	~11 Days	16-Sep 16-Sep 12-Sep	Penumbral Eclipse of Moon - UT 16:54:42-20:53:59 (Beijing 00:54:42-04:53:59 Sep 17) (HST 06:54:42-10:53:59) Full Moon Chang'e-3 Lander Awakens
Lunar Night 34 25 Aug - 12 Sep 2016	~18 Days	9-Sep 1-Sep Aug 31 / Sep 1 25-Aug 25-Aug	1st Quarter Moon New Moon Annular Eclipse of Sun - UT 06:13 - 12:01 Sep 1 (Beijing 14:13-20:01 Aug 31) (HST 20:13 Aug 31 - 02:01 Sep 1) Chang'e-3 Lander Hibernates Last Quarter Moon
Lunar Day 34 14-25 Aug 2016	~11 Days	18-Aug Aug 17 / 18 14-Aug	Full Moon Penumbral Eclipse of Moon - UT 09:24-10:01 Aug 18 (Beijing 17:24 - 18:01 Aug 17) (HST 23:24 Aug 17 - 00:01 Aug 18) Chang'e-3 Lander Awakens
Lunar Night 33 27 Jul - 14 Aug 2016	~18 Days	10-Aug 3-Aug 3-Aug 1-Aug 27-Jul 26-Jul	1st Quarter Moon Chang'e-3 Mission has returned more than 7TB of processed data Yutu rover stopped operating according to China SASTIND (State Administration for Science, Technology, and Industry for National Defense) after record-setting 31 months (10 times longer than planned 3-month design life) New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 33 15-27 Jul 2016	~12 Days	19-Jul 15-Jul	Full Moon Chang'e-3 Lander & Yutu Awaken

Lunar Night 32 28 Jun - 15 Jul 2016	~17 Days	12-Jul	1st Quarter Moon
		4-Jul	New Moon
		1-Jul	NUV Star Catalogue from LUT Survey: First Release published (submitted Apr 2016)
Lunar Day 32 15-28 Jun 2016	~13 Days	28-Jun	Chang'e-3 Lander & Yutu Hibernate
		27-Jun	Last Quarter Moon
		20-Jun	Full Moon
Lunar Night 31 29 May - 15 Jun 2016	~17 Days	15-Jun	Chang'e-3 Lander & Yutu Awaken
		12-Jun	1st Quarter Moon
		5-Jun	New Moon
Lunar Day 31 16-29 May 2016	~13 Days	29-May	Chang'e-3 Lander & Yutu Hibernate
		29-May	Last Quarter Moon
		21-May	Full Moon
Lunar Night 30 30 Apr - 16 May 2016	~16 Days	16-May	Chang'e-3 Lander & Yutu Awaken
		13-May	1st Quarter Moon
		6-May	New Moon
Lunar Day 30 17-30 April 2016	~13 Days	30-Apr	Chang'e-3 Lander & Yutu Hibernate
		30-Apr	Last Quarter Moon
		21-Apr	Full Moon
Lunar Night 29 31 Mar - 17 Apr 2016	~17 Days	17-Apr	Chang'e-3 Lander & Yutu Awaken
		14-Apr	1st Quarter Moon
		7-Apr	New Moon
Lunar Day 29 18-31 Mar 2016	~13 Days	31-Mar	Chang'e-3 Lander & Yutu Hibernate
		31-Mar	Last Quarter Moon
		Mar 22 / 23	Penumbral Eclipse of Moon - UT 09:39:31-13:54:53 (Beijing 17:39:31-21:54:53) (HST 23:39:31 Mar 22 - 03:54:53 Mar 23)
Lunar Night 28 2-18 Mar 2016	~16 Days	18-Mar	Full Moon
		18-Mar	Chang'e-3 Lander & Yutu Awaken
		15-Mar	1st Quarter Moon
Lunar Day 28 18 Feb - 2 Mar 2016	~13 Days	9-Mar	Total Eclipse of Sun 00:17-03:38 UT
		9-Mar	New Moon
		2-Mar	Chang'e-3 Lander & Yutu Hibernate
Lunar Night 27 1-18 Feb 2016	~17 Days	1-Mar	Last Quarter Moon
		22-Feb	Full Moon
		18-Feb	Chang'e-3 Lander & Yutu Awaken
Lunar Day 27 20 Jan - 1 Feb 2016	~11 Days	15-Feb	1st Quarter Moon
		8-Feb	New Moon
		1-Feb	Chang'e-3 Lander & Yutu Hibernate
Lunar Night 26 2-20 Jan 2016	~18 Days	1-Feb	Last Quarter Moon
		24-Jan	Full Moon
		20-Jan	CNSA makes Chang'e-3 Mission Data available to public
Lunar Day 26 21 Dec 2015 - 2 Jan 2016	~12 Days	20-Jan	Chang'e-3 Lander & Yutu Awaken
		16-Jan	1st Quarter Moon
		10-Jan	New Moon
Lunar Night 25 3-21 Dec 2015	~18 Days	2-Jan-16	Chang'e-3 Lander & Yutu Hibernate
		2-Jan-16	Last Quarter Moon
		25-Dec	Full Moon
		21-Dec	Chang'e-3 Lander & Yutu Awaken
		18-Dec	1st Quarter Moon
		14-Dec	Craft reach 2nd Full Year of Operations on Moon
		11-Dec	New Moon
		3-Dec	Chang'e-3 Lander & Yutu Hibernate
		3-Dec	Last Quarter Moon

Lunar Day 25 22 Nov - 3 Dec 2015	~11 Days	25-Nov 22-Nov	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 24 3-22 Nov 2015	~19 days	19-Nov 11-Nov 3-Nov 3-Nov	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 24 24 Oct - 3 Nov 2015	~10 Days	27-Oct 24-Oct	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 23 5-24 Oct 2015	~19 Days	20-Oct 13-Oct 6-Oct 5-Oct 4-Oct	1st Quarter Moon New Moon 18-Months Operation of Lunar-based Ultraviolet Telescope: A Highly Stable Photometric Performance study published Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 23 24 Sep - 5 Oct 2015	~11 Days	28-Sep 28-Sep 24-Sep	Total Eclipse of Moon - UT Penumbral 00:10-05:24, Partial 01:07-04:27, Total 02:10-03:24 (Beijing 8:10-13:24, 09:07-12:27, 10:10-11:24) (HST 14:10-19:24 Sep 27, 15:07-18:27 Sep 27, 16:10-17:24 Sep 27) Full Moon 02:50 UT Chang'e-3 Lander & Yutu Awaken
Lunar Night 22 5-24 Sep 2015	~19 Days	21-Sep 13-Sep 13-Sep 5-Sep 5-Sep	1st Quarter Moon Partial Eclipse of Sun 04:42-09:06 UT New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 22 26 Aug - 5 Sep 2015	~10 Days	29-Aug 26-Aug	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 21 7-26 Aug 2015	~19 Days	22-Aug 14-Aug 7-Aug 7-Aug	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 21 27 Jul - 7 Aug 2015	~11 Days	31-Jul 27-Jul	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 20 9-27 Jul 2015	~18 Days	24-Jul 16-Jul 9-Jul 8-Jul	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 20 27 Jun - 9 Jul 2015	~12 Days	2-Jul 27-Jun	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 19 9-27 Jun 2015	~18 Days	24-Jun 16-Jun 9-Jun 9-Jun	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 19 29 May - 9 Jun 2015	~11 Days	2-Jun 29-May	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 18 11-29 May 2015	~18 Days	25-May 18-May 11-May 11-May	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 18 29 Apr - 11 May 2015	~12 Days	4-May 29-Apr	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 17 12-29 Apr 2015	~17 Days	25-Apr 18-Apr 12-Apr 12-Apr	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon

Rover wake up time varies due to malfunction, ceased movement Mar 2015			
Lunar Day 17 30 Mar - 12 Apr 2015	~13 Days	4-Apr	Total Eclipse of Moon - Penumbral UT 09:00-15:01, Partial 10:15-13:45, Total 11:54-12:06 (Beijing 17:00-23:01, 18:15-21:45, 19:54-20:06) (HST 23:00 Apr 3 - 05:01 Apr 4, 00:15-03:45 Apr 4, 01:54-02:06 Apr 4)
		4-Apr	Full Moon 12:06 UT
		Apr	Chang'e-3 Mission has returned more than 3 TB of processed data
		30-Mar	Chang'e-3 Lander & Yutu Awaken (Yutu data transmission becomes compromised in March)
Lunar Night 16 13-30 Mar 2015	~16 Days	27-Mar	1st Quarter Moon
		20-Mar	Total Eclipse of Sun 09:10-10:21 UT
		20-Mar	New Moon
		14-Mar	Chang'e-3 Lander & Yutu Hibernate
Lunar Day 16 28 Feb - 13 Mar 2015	~14 Days	13-Mar	Last Quarter Moon
		5-Mar	Full Moon
		28-Feb	Chang'e-3 Lander & Yutu Awaken
		25-Feb	1st Quarter Moon
Lunar Night 15 12-28 Feb 2015	~16 Days	18-Feb	New Moon
		15-Feb	An Unprecedented Constraint on Water Content in the Sunlit Lunar Exosphere. Seen by Lunar-Based Ultraviolet Telescope of Chang'e-3 Mission study published utilizing Cygnus X2 Variable Star imaging
		12-Feb	Chang'e-3 Lander & Yutu Hibernate
		12-Feb	Last Quarter Moon
Lunar Day 15 30 Jan - 12 Feb 2015	~13 Days	3-Feb	Full Moon
		30-Jan	Chang'e-3 Lander & Yutu Awaken
		27-Jan	1st Quarter Moon
Lunar Night 14 13-31 Jan 2015	~17 Days	20-Jan	New Moon
		13-Jan	Chang'e-3 Lander & Yutu Hibernate
		13-Jan	Last Quarter Moon
		5-Jan-15	Full Moon
Lunar Day 14 1-13 Jan 2015	~12 Days	1-Jan-15	Chang'e-3 Lander & Yutu Awaken
		2015	
		31-Dec	Chang'e-3 Mission returned 1.1 TB of raw data (~2.8 TB processed data); LUT returned 2.760 TB of processed data, 1.726 TB of which is 2,280 hours Moon-based astronomical observation data and ~113,000 pieces image data
		28-Dec	1st Quarter Moon
Lunar Night 13 14 Dec - 1 Jan 2015	~18 Days	22-Dec	New Moon
		14-Dec	Craft reach 1 Full Year of Operations on Moon
		14-Dec	Chang'e-3 Lander & Yutu Hibernate
		14-Dec	Last Quarter Moon
Lunar Day 13 18:00 Dec 2 - 07:00 Dec 14, 2014	~12 Days	2-Dec	ILOA Lunar Astronomy Team further processes LUT M101 image Chang'e-3 Lander Lunar Ultraviolet Telescope (LUT) images Spiral Galaxy M101 for ILOA of Hawaii (63 individual exposures of 30 seconds each)
		2-Dec	Full Moon
		2-Dec	Chang'e-3 Lander & Yutu Awaken
		29-Nov	1st Quarter Moon
Lunar Night 12 14 Nov - 2 Dec 2014	~18 Days	22-Nov	New Moon
		14-Nov	Chang'e-3 Lander & Yutu Hibernate
		14-Nov	Last Quarter Moon
		6-Nov	Full Moon
Lunar Day 12 05:00 Nov 3 - 16:00 Nov 14, 2014	~11.5 Days	3-Nov	Chang'e-3 Lander & Yutu Awaken
		31-Oct	1st Quarter Moon
		23-Oct	Partial Eclipse of Sun 19:38-23:52 UT
		23-Oct	New Moon
Lunar Night 11 16 Oct - 3 Nov 2014	~18 Days	16-Oct	Chang'e-3 Lander & Yutu Hibernate
		15-Oct	Last Quarter Moon

Lunar Day 11 18:00 Oct 4 - 01:00 Oct 16 2014	~11 Days	8-Oct 8-Oct 4-Oct	Total Eclipse of Moon - Penumbral UT 08:14-13:35, Partial 09:15-12:35, Total 10:24-11:25 Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 10 16 Sep - 4 Oct 2014	~18 Days	1-Oct 24-Sep 16-Sep 16-Sep	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Rover Hibernate Last Quarter Moon
Lunar Day 10 07:00 Sep 5 - 10:00 Sep 16, 2014	~11 Days	9-Sep 6-Sep 5-Sep	Full Moon Chang'e-3 Lander & Yutu Awaken Start of Lunar Day 07:00 Beijing Time
Lunar Night 9 17 Jul - 6 Sep 2014	~20 Days	2-Sep 25-Aug 17-Aug 17-Aug	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 9 8-17 Aug 2014	~9 Days	10-Aug 8-Aug	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 8 19 Jul - 8 Aug 2014	~20 Days	4-Aug 26-Jul 19-Jul 19-Jul	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 8 9-19 Jul 2014	~10 Days	12-Jul 9-Jul	Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 7 19 Jun - 9 Jul 2014	~20 Days	5-Jul 27-Jun 19-Jun 19-Jun	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 7 9-19 Jun 2014	~10 Days	13-Jun	Full Moon LUT has taken more than 50,000 images, monitored 8 Variable Stars in 14 observational runs (235 hours), surveyed 1,000 square degrees of sky
Lunar Night 6 21 May - 9 Jun 2014	~19 Days	9-Jun 5-Jun 28-May 21-May 21-May	Chang'e-3 Lander & Yutu Awaken 1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 6 11-21 May 2014	~10 Days	14-May 11-May 9-May	Full Moon Chang'e-3 Lander & Yutu Awaken Sunrise occurred mid-day UT
Lunar Night 5 21 Apr - 11 May 2014	~20 Days	7-May 29-Apr 29-Apr 23-Apr 22-Apr 21-Apr	1st Quarter Moon Annular Eclipse of Sun 03:53-08:15 UT New Moon Sunset occurred Last Quarter Moon Chang'e-3 Lander & Yutu Hibernate
Lunar Day 5 11-21 Apr 2014	~10 Days	15-Apr 15-Apr 11-Apr	Total Eclipse of Moon - Penumbral UT 04:52-10:39, Partial 05:58-09:33, Total 07:06-08:25 Full Moon Chang'e-3 Lander & Yutu Awaken
Lunar Night 4 24 Mar - 11 Apr 2014	~19 Days	7-Apr 30-Mar 24-Mar 24-Mar	1st Quarter Moon New Moon Chang'e-3 Lander & Yutu Hibernate Last Quarter Moon
Lunar Day 4 12(14) - 24 Mar 2014	~12 Days	16-Mar 14-Mar 12-Mar 10-Mar	Full Moon Yutu Awake 06:42 Beijing Time (Late due to solar panel unable to tilt) Chang'e-3 Lander Awaken Sunrise occurred ~11:00 UT

Lunar Night 3 22(23) Feb - 12(14) Mar 2014 ~18 Days	8-Mar	1st Quarter Moon
	7-Mar	NASA publishes Lunar Reconnaissance Orbiter (LRO) Narrow Angle Camera images of Chang'e-3 and Yutu path on Moon Surface
	1-Mar	New Moon
	23-Feb	Sunset occurred late
	22-Feb	Chang'e-3 Lander Hibernates Yutu Hibernates Last Quarter Moon
Lunar Day 3 12 - 22(23) Feb 2014 ~10 Days	14-Feb	Full Moon
	12-Feb	Yutu awakens with mechanical problems Chang'e-3 Lander awakens
Lunar Night 2 24 Jan - 12 Feb 2014 ~19 Days	6-Feb	1st Quarter Moon
	30-Jan	New Moon
	24-Jan	Chang'e-3 Lander & Yutu Hibernate Evening Beijing Time (HST Morning Jan 25 / Dawn UTC); Yutu hibernates with mechanical problems - remains immobile from Jan 25 onward - traveled 114 meters total
	24-Jan	Last Quarter Moon
Lunar Day 2 11-24 Jan 2014 ~14 Days	16-Jan	Full Moon
	12-Jan	Yutu Awake @ 08:21 Beijing Time (HST 14:21 Jan 11)
	11-Jan	Chang'e-3 Lander Awake @ 05:09 Beijing Time (HST 11:09 Jan 10)
Lunar Night 1 25(26) Dec 2013 - 11 Jan 2014 ~16.5 Days	10-Jan	Sunrise occurred 05:30 UT
	8-Jan	1st Quarter Moon
	1-Jan-14	New Moon
	26-Dec	Yutu Hibernate @ 05:23 Beijing Time (HST 11:23 Dec 25)
	25-Dec	CE-3 Lander Hibernate @ 11:00 Beijing Time (HST 17:00 Dec 24)
	25-Dec	Chang'e Lander images Earth / Beijing Time 02:15 Dec 25 (UT 18:15 Dec 24) Last Quarter Moon
Lunar Day 1 14 - 25(26) Dec 2013 ~11 Days	24-Dec	NASA Lunar Reconnaissance Orbiter (LRO) images Chang'e-3 and Yutu on Moon Surface from 150-km altitude
	20-Dec	Yutu awakens from Solar hibernation
	16-Dec	Yutu Solar hibernation
	16-Dec	Full Moon
	14-16 Dec	CAS / NAO / CNSA images taken during spacecraft descent and images of Lander, Rover, Moon Surface, constellation Draco, LUT image of Earth from Moon surface
	14-16 Dec	First Light for Cameras and LUT (02:17 Dec 16 Beijing Time); LUT obtains ~10,000 images per month over next 18 months Yutu "Jade Rabbit" deployed 15 Dec 04:35 Beijing Time (20:35 UT 14 Dec)
	14-Dec	Landed on Moon at Guang Han Gong, Sinus Iridum / Mare Imbrium, 44.1260°N 19.5014°W Beijing Time 21:11:18 Dec 14 (HST 03:11:18 / 13:11:18 UTC); 3rd nation to achieve Soft Landing on Moon; Lander solar panels unfolded 4 minutes after landing
	13-Dec	Sunrise occurred at landing location
2013	9-Dec	1st Quarter Moon
	6-Dec	Chang'e-3 enter 100-km circular Moon orbit after 361-second engine fire
	2-Dec	Chang'e-3 Launch to Moon 01:30 local time on Long March 3B from Xichang Satellite Launch Center
	13-Aug	MoU signed by CNSA (Li Benzhen) and ILOA (Steve Durst) in Beijing, China further establishing collaboration with Chang'e-3 LUT and ILO-X / ILO-1 instruments
2012	4-Sep-12	MoU Signed by NAO / CAS (Jun Yan) and ILOA (Steve Durst) in Kamuela, Hawaii, USA for collaboration with Chang'e-3 LUT and ILO-X / ILO-1 instruments
	2-Feb-09	LUT Finalized as a 1 of 4 Selected Instruments for Chang'e-3 Lander
2009		