

Astronomical Phenomena

July 2024 – June 2025

Orbital Phenomena of the Earth

Orbital Phenomena

Aphelion (Earth furthest from Sun)	2024 July 5	05:17
Equinox (Sun moves south of the equator); equal day, night	2024 September 23	00:44
Solstice (Sun furthest south); southern hemisphere longest day	2024 December 21	21:21
Perihelion (Earth nearest to Sun)	2025 January 5	01:28
Equinox (Sun moves north of the equator); equal day, night	2025 March 20	21:01
Solstice (Sun furthest north); southern hemisphere shortest day	2025 June 21	14:42

Solar and Lunar Eclipses

Type of Eclipse	Maximum eclipse		Visibility from New Zealand
Partial eclipse of the Moon	2024 September 18	14:44	Not visible
Annular eclipse of the Sun	2024 October 3	06:45	Not visible
Total eclipse of the Moon	2025 March 14	18:59	Moon rises during event
Partial eclipse of the Sun	2025 March 29	22:47	Not visible

Lunar Perigee and Apogee

Perigee (Moon closest to Earth)				Apogee (Moon furthest from Earth)		
Distance (km)				Distance (km)		
2024	Jul 24	17:41	365,065	Jul 12	20:11	404,207
	Aug 21	17:02	360,404	Aug 9	13:31	405,163
	Sep 19	01:22	357,529	Sep 6	02:54	406,108
	Oct 17	12:51	357,421	Oct 3	07:39	406,434
	Nov 14	23:16	360,325	Oct 30	10:50	406,064
	Dec 13	01:20	365,513	Nov 26	23:56	405,183
	Jan 8	12:01	370,234	Dec 24	19:25	404,327
2025	Feb 2	14:47	367,572	Jan 21	16:54	404,134
	Mar 2	09:21	362,154	Feb 18	13:10	404,735
	Mar 30	17:25	358,362	Mar 18	04:37	405,639
	Apr 28	04:18	357,365	Apr 14	10:48	406,210
	May 26	13:34	359,248	May 11	12:47	406,154
	Jun 23	16:44	363,355	Jun 7	22:44	405,436

Phases of the Moon

New Moon		First Quarter		Full Moon		Last Quarter		
2024	Jul 6	10:57	Jul 14	10:49	Jul 21	22:17	Jul 28	14:52
	Aug 4	23:13	Aug 13	03:19	Aug 20	06:26	Aug 26	21:26
	Sep 3	13:56	Sep 11	18:06	Sep 18	14:34	Sep 25	06:50
	Oct 3	06:49	Oct 11	06:55	Oct 17	23:26	Oct 24	20:03
	Nov 2	00:47	Nov 9	17:55	Nov 16	09:28	Nov 23	13:28
	Dec 1	18:21	Dec 9	03:27	Dec 15	21:02	Dec 23	10:18
	Dec 31	10:27						
2025			Jan 7	11:56	Jan 14	10:27	Jan 22	08:31
	Jan 30	00:36	Feb 5	20:02	Feb 13	01:53	Feb 21	05:32
	Feb 28	12:45	Mar 7	04:32	Mar 14	18:55	Mar 22	23:29
	Mar 29	22:58	Apr 5	14:15	Apr 13	12:22	Apr 21	13:36
	Apr 28	07:31	May 5	01:52	May 13	04:56	May 20	23:59
	May 27	15:02	Jun 3	15:41	Jun 11	19:44	Jun 19	07:19
Jun 25	22:32							

Times listed are in New Zealand Standard Time (NZST).
Add 1 hour when New Zealand daylight Time (NZDT) is in force.