

International Space Station (ISS) Passes from Granada, June 2025

The International Space Station (ISS) is undoubtedly the symbol of space research. It is an artificial satellite, but with conditions that make it unique and unmatched (for now). It is an artificial satellite, that is, a body placed in orbit around Earth by humans, but habitable. We can consider it a space laboratory where science is researched, to name a few branches, biology, physics, astronomy or meteorology.

From Earth we can see it as a bright dot crossing the sky. Its brightness is a consequence of the reflection of sunlight on its surface, especially on its solar panels that power it for proper functioning. Its dimensions, slightly larger than a soccer field, allow that with the help of small telescopes or powerful binoculars we can discern its silhouette (around 30" in the sky) when it passes in front of the Sun or Moon (a more common event than we think).

This table shows us the main ISS passes observable from Granada during this month. The various columns indicate different information, all useful for observing these phenomena:

- Column 1: Observation date.
- Column 2: Magnitude brightness. Remember, smaller or even negative values will indicate very bright passes while higher values will reveal more modest passes.
- Columns 3 to 5(*): Local time, altitude and direction to observe when the pass begins.
- Columns 6 to 8(*): Local time, altitude and direction to observe when the ISS is at its highest point.
- Columns 9 to 11(*): Local time, altitude and direction to observe when the ISS will disappear.

(*) All these events are calculated at the beginning of the month. The exact moment may vary as the date approaches due to irregularities in the ISS orbit or even voluntary human modifications. I strongly recommend recalculating the ephemeris, especially if we are interested in late-month events. For more information and calculations see <http://www.heavens-above.com/>.

Date	Brightness (mag)	Time	Begins Alt.	Az.	Time	Highest point Alt.	Az.	Time	Ends Alt.	Az.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
01 Jul	-0.9	03:41:21	14°	NNW	03:41:48	14°	NNW	03:43:37	10°	N
02 Jul	-0.7	02:54:02	16°	N	02:54:02	16°	N	02:55:22	10°	NNE
03 Jul	-0.5	02:06:35	12°	NNE	02:06:35	12°	NNE	02:06:59	10°	NNE
04 Jul	-0.4	02:51:49	10°	NNW	02:52:36	11°	NNW	02:53:35	10°	N
04 Jul	-0.6	06:06:41	10°	NNW	06:08:39	14°	NNE	06:10:36	10°	ENE
05 Jul	-0.6	02:03:55	14°	NNW	02:03:55	14°	NNW	02:05:33	10°	NNE
05 Jul	-0.3	05:18:39	10°	N	05:19:38	11°	NNE	05:20:36	10°	NE
06 Jul	-1.0	01:15:18	19°	N	01:15:18	19°	N	01:17:13	10°	NNE
06 Jul	-1.4	06:05:14	10°	NNW	06:08:10	28°	NNE	06:11:07	10°	E
06 Jul	-2.8	22:46:16	10°	S	22:49:04	25°	SE	22:51:53	10°	ENE

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Date	Brightness	Time	Begins		Highest point			Ends		
	(mag)		Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
07 Jul	-1.9	00:22:42	10°	W	00:25:42	30°	NNW	00:28:44	10°	NNE
07 Jul	-0.7	05:16:46	10°	NNW	05:19:15	19°	NNE	05:21:43	10°	ENE
07 Jul	-3.0	23:33:35	10°	WSW	23:36:51	52°	NW	23:40:07	10°	NE
08 Jul	-0.2	01:12:58	10°	NW	01:14:11	12°	NNW	01:15:25	10°	N
08 Jul	-0.4	04:28:25	10°	N	04:30:14	14°	NNE	04:32:02	10°	NE
08 Jul	-3.6	06:04:05	10°	NW	06:07:26	76°	NE	06:10:46	10°	SE
08 Jul	-3.9	22:44:42	10°	SW	22:48:02	83°	SE	22:51:22	10°	NE
09 Jul	-0.5	00:23:02	10°	WNW	00:25:07	15°	NNW	00:27:13	10°	NNE
09 Jul	-0.1	03:40:30	10°	N	03:41:09	10°	NNE	03:41:48	10°	NNE
09 Jul	-2.4	05:15:23	10°	NW	05:18:35	41°	NE	05:21:47	10°	ESE
09 Jul	-1.0	23:33:26	10°	W	23:36:07	22°	NNW	23:38:47	10°	NNE
10 Jul	-1.4	04:26:48	10°	NNW	04:29:40	26°	NNE	04:32:31	10°	E
10 Jul	-3.1	06:03:21	10°	WNW	06:06:23	32°	SW	06:09:24	10°	SSE
10 Jul	-1.9	22:44:04	10°	W	22:47:08	33°	NW	22:50:13	10°	NNE
11 Jul	-0.8	03:38:17	10°	NNW	03:40:39	18°	NNE	03:43:00	10°	ENE
11 Jul	-3.9	05:14:19	10°	NW	05:17:38	63°	SW	05:20:56	10°	SE
11 Jul	-0.4	23:34:06	10°	NW	23:35:31	12°	NNW	23:36:57	10°	N
12 Jul	-0.5	02:49:56	10°	N	02:51:34	13°	NNE	02:51:49	13°	NNE
12 Jul	-0.6	22:44:11	10°	WNW	22:46:24	16°	NNW	22:48:38	10°	NNE
15 Jul	-0.3	01:59:34	10°	NNW	02:00:07	12°	N	02:00:07	12°	N
16 Jul	-0.6	01:11:12	10°	N	01:12:28	12°	NNE	01:12:28	12°	NNE
18 Jul	-0.7	01:09:10	10°	NNW	01:10:12	16°	N	01:10:12	16°	N
19 Jul	-1.1	00:20:36	10°	NNW	00:22:41	15°	NNE	00:22:43	15°	NNE
19 Jul	-0.9	23:32:15	10°	N	23:33:27	11°	NNE	23:34:38	10°	NE
20 Jul	-0.6	01:07:30	10°	NW	01:08:07	14°	NW	01:08:07	14°	NW
21 Jul	-1.6	00:18:42	10°	NNW	00:20:41	25°	N	00:20:41	25°	N
21 Jul	-1.7	23:30:00	10°	NNW	23:32:32	20°	NNE	23:33:18	19°	NE
22 Jul	-1.2	22:41:24	10°	NNW	22:43:18	14°	NNE	22:45:13	10°	ENE
23 Jul	-1.7	00:17:06	10°	NW	00:18:47	27°	NW	00:18:47	27°	NW
23 Jul	-3.1	23:28:09	10°	NW	23:31:22	45°	NE	23:31:26	45°	NE
24 Jul	-2.2	22:39:19	10°	NNW	22:42:13	27°	NNE	22:44:09	16°	E
25 Jul	-1.2	00:15:57	10°	WNW	00:17:00	17°	W	00:17:00	17°	W
25 Jul	-3.4	23:26:39	10°	WNW	23:29:44	56°	WSW	23:29:44	56°	WSW
26 Jul	-3.8	22:37:32	10°	NW	22:40:52	73°	NE	22:42:32	27°	ESE
27 Jul	-1.7	23:25:48	10°	W	23:28:12	18°	SW	23:28:14	18°	SW
28 Jul	-2.6	22:36:09	10°	WNW	22:39:13	34°	SW	22:41:08	18°	S
29 Jul	-3.5	21:46:51	10°	NW	21:50:10	68°	SW	21:53:28	10°	SE
30 Jul	-1.0	22:36:08	10°	WSW	22:37:19	11°	SW	22:38:29	10°	SSW
14 Aug	-0.8	07:00:58	10°	SE	07:01:51	11°	SE	07:02:45	10°	ESE
16 Aug	-2.3	06:56:25	10°	SSW	06:59:24	32°	SE	07:02:25	10°	ENE
17 Aug	-1.4	06:08:07	11°	S	06:10:08	17°	SE	06:12:23	10°	E
18 Aug	-3.8	06:53:51	11°	SW	06:57:04	79°	NW	07:00:25	10°	NE
19 Aug	-3.3	06:06:37	35°	S	06:07:39	52°	SE	06:10:55	10°	ENE
20 Aug	-1.6	05:19:18	22°	E	05:19:18	22°	E	05:21:09	10°	ENE
20 Aug	-2.5	06:52:09	11°	W	06:54:53	29°	NNW	06:57:52	10°	NNE

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	(mag)	Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
21 Aug	-3.4	06:04:45	43°	WNW	06:05:19	50°	NW	06:08:34	10°	NE
22 Aug	-1.9	05:17:17	30°	NE	05:17:17	30°	NE	05:19:07	10°	NE
22 Aug	-1.4	06:50:48	10°	WNW	06:52:51	15°	NNW	06:54:54	10°	NNE
23 Aug	-2.0	06:02:35	21°	NW	06:03:07	22°	NNW	06:05:46	10°	NNE
24 Aug	-1.4	05:15:00	22°	NNE	05:15:00	22°	NNE	05:16:31	10°	NNE
25 Aug	-1.2	06:00:11	11°	NW	06:01:03	12°	NNW	06:02:30	10°	N
26 Aug	-0.9	05:12:32	14°	N	05:12:32	14°	N	05:13:29	10°	NNE

Table 1: International Space Station (ISS) Passes Observable from Granada, June 2025