

## How to spot the International Space Station

Is it a meteor? Is it a plane? It might be the International Space Station (ISS)

Every so often, the ISS becomes visible in the night sky.

**To us on Earth, it looks like a bright star moving quickly above the horizon.** The ISS is so bright, it can even be seen from the centre of a city. Then, just as suddenly as it appeared, it disappears. How do you know when you can see the ISS in your night sky?

**NASA's 'Spot the Station' program lets you sign up to receive alerts to let you know when the ISS will be visible from your location – anywhere in the world.**

You can get alerts via email or text message. Typically, alerts are sent out a few times each month when the station's orbit is near your location.

The notices contain information on where to look for the ISS in the night sky. Just note where the sun sets and you can easily find the direction where the station will appear (for example, in the southwest or in the northwest). **The height at which the station will appear is given in degrees. Just remember that 90 degrees is directly over your head.** Any number less than 90 degrees will mean that the station will appear somewhere between the horizon and the 90 degree mark. The station is so bright that it is really hard to miss if you're looking in the right direction. **Alternatively, you can stretch out your fist at arm's length toward the horizon, which is equivalent to about 10 degrees.** Then, just use the appropriate number of fist-widths to find the location marker, e.g., four up from the horizon would be equivalent to about 40 degrees.

**The first module of the ISS was launched into space in 1998 and the initial construction of the station took about two years to complete. Human occupation of the station began on 2 November 2000.** Since that time, the ISS has been continuously occupied. The ISS serves as both an orbiting laboratory and a port for international spacecraft. **The primary partnering countries involved in operating the ISS include the United States, Canada, Europe, Japan and Russia.** The ISS orbits at approximately 400km above the Earth and it travels at an average speed of 27,724 kph. The ISS makes multiple orbits around the Earth every day.

**Heavens-Above** is also a handy reference to objects in the sky. Developed and maintained by Chris Peat the web site is dedicated to helping people observe and track satellites orbiting the Earth without the need for optical equipment such as binoculars or telescopes. It provides detailed star charts showing the trajectory of the satellites against the background of the stars as seen when looking up. Special attention is paid to the ISS, Iridium flares, and space shuttle missions. The website has information on currently visible comets, asteroids, planet and other information. Sky & Telescope described it as "the most popular website for tracking satellites".

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A composite photograph of the ISS taken from Earth



Photograph of the International Space Station taken from the space shuttle Endeavour on May 30, 2011.



Astronauts Robert Curbeam, Jr. and Christer Fuglesang working on the International Space Station

### ISS - Visible Passes

Search period start: 23 August 2015 00:00  
 Search period end: 02 September 2015 00:00  
 Orbit: 400 x 402 km, 51.6° (Epoch: 21 August)

Passes to include:  visible only  all

Click on the date to get a star chart and other pass details.

Date	Brightness (mag)	Start Time	Start Alt.	Start Az.	Highest point Time	Highest point Alt.	Highest point Az.	End Time	End Alt.	End Az.	Pass type
23 Aug	-1.0	05:46:02	10°	SSW	05:48:30	19°	SSE	05:51:00	10°	ESE	visible
24 Aug	-0.6	04:54:35	13°	SSE	04:54:49	13°	SSE	04:56:34	10°	SE	visible
25 Aug	-1.9	05:36:01	16°	SSW	05:38:16	34°	SSE	05:41:21	10°	E	visible
26 Aug	-1.0	04:44:56	21°	SE	04:44:56	21°	SE	04:47:17	10°	E	visible
26 Aug	-2.9	06:18:01	10°	WSW	06:21:15	47°	NW	06:24:25	10°	NNE	visible
27 Aug	-3.3	05:26:32	34°	SW	05:27:49	78°	SE	05:31:06	10°	NE	visible
28 Aug	-1.0	04:35:39	25°	E	04:35:39	25°	E	04:37:23	10°	ENE	visible
28 Aug	-1.7	06:08:15	11°	W	06:10:30	19°	NW	06:12:54	10°	N	visible
29 Aug	-2.6	05:17:29	38°	NNW	05:17:29	38°	NNW	05:20:13	10°	NNE	visible
30 Aug	-0.1	04:26:51	11°	NE	04:26:51	11°	NE	04:26:57	10°	NE	visible
01 Sep	-1.1	19:11:54	10°	N	19:12:47	14°	NNE	19:12:47	14°	NNE	visible