

AURORA VIEWING MAP & GUIDE

Optimal Aurora Viewing Locations Why Fairbanks Is the Best Place to View the Aurora Pro Tips on How to See the Northern Lights



the Golden Heart of Alaska



Plus Northern Lights Photography,

Aurora Science, FAQs and more!



WHY FAIRBANKS IS THE BEST AURORA VIEWING DESTINATION

Fairbanks sets the stage for optimal northern lights viewing during Aurora Season, August 21 through April 21, spanning nine months of the year and all four seasons. Global locations directly under the "Auroral Oval," such as Fairbanks, all have a significant advantage over other places when determining the likelihood of seeing the northern lights. Here in Fairbanks and the surrounding areas, if you stay a minimum of three nights and are actively out during the evening hours, your chances of seeing the aurora are more than 90%. This is because Fairbanks satisfies all the primary metrics determining optimal aurora viewing, including:

- Position directly under the "Auroral Oval" where northern lights frequently occur.
- Low precipitation and distance from coastal areas which contribute to clear skies.
- Low population, low light pollution and longer nights nine months of the year contribute to dark skies.
- Multiple, diverse and accessible vantage points to view and/or chase the aurora.



Additional reasons why Fairbanks is one of the best places to behold the northern lights include:

- Fairbanks International Airport features excellent connectivity to the lower 48 and the rest of the world.
- Many dwellings in the Fairbanks area have been built with the express purpose of aurora viewing in mind. Picturesque lodges and log cabins, remote yurts, well-appointed viewing spaces and posh igloos abound.
- Outstanding activities you can experience during the daytime can also be combined with evening aurora viewing, such as dog mushing, snowshoeing, ice fishing, snowmobiling and soaking in hot springs.
- Excellent and experienced aurora guides are ready to assist you in your quest to see the lights.
- Fairbanks is a delightful town brimming with breweries, distilleries, eateries, museums and art galleries as well as cool activities like walking with reindeer and viewing gigantic ice sculptures.

GG I saw the northern lights for the first time in Fairbanks and literally teared up—huge green and violet curtains pulsating and swirling across the sky. I couldn't believe how vibrant and fast they were.

Kate Siber, travel writer



AURORA VIEWING LOCATIONS

Behold the magic of the northern lights August 21 through April 21. Spanning all four seasons and nine months of the year, Fairbanks' renowned aurora viewing lures people from all over the world. Outstanding nearby aurora viewing locations include Murphy Dome, Cleary Summit, Chena Hot Springs Road, Chena Lake Recreation Area, Coldfoot and more.

Join a tour, head to an aurora viewing venue or explore on your own in a vehicle. Although the light show will be more vibrant a few miles out of town where it is darker, the northern lights are also visible anywhere in town. If you are new to northern lights viewing, getting an expert's advice on a tour or at an aurora venue is a good idea. Additional locations that offer excellent northern lights viewing include Denali National Park and Preserve, Delta Junction and locations along the Elliott Highway.

PRO TIPS: HOW TO SEE THE NORTHERN LIGHTS

- Be resolute and patient—the aurora is unpredictable and weather can change quickly so go aurora viewing even if the forecast is below average.
- Stay in the Fairbanks region for three to five nights for the best chance of seeing a dynamic aurora.
- If driving yourself, try to scout out viewing locations during daylight hours.
- Exercise caution when driving and do not stop on roadways—look for pullouts or other areas to safely get off the road.
- In snowy conditions, all-wheel or 4-wheel drive vehicles are recommended.
- Turn off car headlights while parked and turn off your camera flash to minimize light pollution.
- Watch out for wildlife on or near roadways and parking lots.
- Be aware that cell service can be irregular outside of town.

AURORA TRACKER

The one-of-a-kind Aurora Tracker was created for the Explore Fairbanks website to assist travelers who come to the Fairbanks region to view the northern lights. The Aurora Map presented here is similar to the map created for the Tracker. The Tracker combines three data streams to predict aurora viewing opportunities in real time as well as three-day forecasts.

The data streams include:

- Aurora: real-time and forecast data from the Geophysical Institute at the University of Alaska Fairbanks, the leading aurora research institute.
- Weather: real-time and forecast data from weather stations in each specific aurora viewing location.
- Amount of daylight hours.

While utilizing the Aurora Tracker, toggle between six aurora locations for viewing chances for different times and days. Check back often as data, and therefore predictions, change frequently.



Scan here to go to the Aurora Tracker on explorefairbanks.com to chase the northern lights in real time and for a three-day forecast.

AUG 30



Coldfoot

A tiny wilderness community 260 miles (418 km) north of Fairbanks in the Brooks Range, it is best to access Coldfoot via tour. The area is remote, the mostly gravel Dalton Highway can be rough and there are very few services along the way. For these reasons, most car rental companies prohibit traveling up the roadway.

To Dalton Highway and Coldfoot

Elliott Highway

The Elliott Highway begins 11 mile of Fairbanks and stretches 62 mile where it intersects with the Daltor area allows for outstanding northe viewing in a wilderness setting.

Fox

Chena

Richaldson







Murphy Dome

The highest point close to Fairbanks at 2,877 feet (877 meters), Murphy Dome is located 25 miles (40 km) west of Fairbanks. You will find a prominent viewpoint accessible by road after traversing some sharp turns and significant elevation changes. In snowy conditions, an all-wheel or 4-wheel drive vehicle is recommended.

Murphy Dome

Murphy Dome Rd

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3

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Airport Ro

Fairbanks

You can see the northern lights from anywhere in Fairbanks. One popular location is Creamer's Field Migratory Waterfowl Refuge, just 2 miles (3 km) from Downtown Fairbanks. Creamer's offers wide-open fields and wooded trails easily accessible via a well-maintained, paved road.



Denali National Park and Preserve

Just 120 miles (193 km) south of Fairbanks, Denali also presents aurora viewing and mountain vistas of the Alaska Range. Additionally, the Murie Science and Learning Center is open year round and the park road is partially accessible during Winter Season.

Photo credits, top to bottom: David Erichsen; David W. Shaw; Jody Overstreet; NPS Photo/Kent Miller





#Epic auroras by any standard, follo social media for past and current

Cleary Summit

At an elevation of 2,233 feet (680 meters), Cleary Summit is located 20 miles (32 km) north of Fairbanks and is a popular viewing area with pullouts. It is accessible by road but there are some very sharp turns and major elevation changes. In snowy conditions, an all-wheel or 4-wheel drive vehicle is recommended.

Chena River State Recreation Area

Accessed via Chena Hot Springs Road, the Chena River State Recreation Area begins at mile 27 (43.5 km) and continues to the end of the road at mile 58 (93.3 km). In snowy conditions, an all-wheel or 4-wheel drive vehicle is recommended.





Recreation Area

North Pole

Chena Lake Recreation Area is a 2,000-acre (8 km²) park located 17 miles (27 km) south of Fairbanks, just outside North Pole. The area offers lakes and trails easily accessible via well-maintained paved and gravel/dirt roads.



Delta Junction

Delta Junction is 95 miles (153 km) south of Fairbanks near the eastern Alaska Range. There are many excellent places to view the aurora on the way to and beyond Delta Junction, including many lakes that offer reflective auroras in the autumn and late spring.

s (18 km) north s (100 km) to h Highway. This rn lights

To Circle

Chatanika



Hot Spri*ngs* Rd

North Pole

Two Rivers

Major Highways s/8.05 km _I

w @ExploreFairbanks on northern lights images.

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To Delta Junction

AURORA SCIENCE

With Fairbanks being such a legendary aurora viewing location it is no surprise that the Geophysical Institute—one of the world's foremost aurora research centers—is located at the University of Alaska Fairbanks. And that the Poker Flats rocket range, where scientists shoot rockets into active auroras to collect data, is stationed just 27 miles north of the city's center. Locals look to aurora scientists to help explain the amazing lights and predict when they will be visible.

The vibrant dancing lights of the aurora are collisions between electrically charged particles from the sun that enter Earth's atmosphere via solar wind. The lights are seen above the magnetic poles of the northern and southern hemispheres. They are known as 'aurora borealis' in the north and 'aurora australis' in the south. The intensity of the aurora varies depending on the amount of geomagnetic energy being emitted from the sun. The solar wind hits Earth's magnetic field daily and creates auroras however, from the third week of April through the third week of August the sky is too bright in Fairbanks to see the northern lights.

Variations in color are due to the type of gas particles that are colliding. The most common auroral color, green, is produced by oxygen molecules located about 60 miles above the earth. Less common red auroras are produced by high-altitude oxygen, at heights of up to 200 miles. Nitrogen produces blue or purplish-red aurora. One of the most intriguing things about the aurora is the way it moves across the sky—weaving, dancing, swirling—sometimes fluid and fast sometimes lazy and slow.



BASICS FOR PHOTOGRAPHING THE NORTHERN LIGHTS

- Locate a dark area with minimal light pollution. Point your camera to the northern sky and compose your medium-distance foreground with a fixed object such as trees, hills or a cabin.
- Use a digital camera with manual settings and a solid tripod.
- Bring extra camera batteries and a flashlight, and dress for extended times outdoors.
- Manually set your camera on its highest ISO setting, widest focal point and lowest aperture.
- Expose each shot for approximately five to ten seconds. Longer exposures will result in brighter images, but stars will streak and the aurora will soften. Short exposures may have sharper detail but dimmer images.
- Every aurora and camera are distinctive, so experiment with different settings and exposure times to get the best shot. Review your shots and adjust the settings as needed.



AURORA FAQS

A: The Fairbanks area offers a multitude of excellent viewing locations. Check the map for ideas and descriptions. Getting away from Fairbanks' city lights will make the aurora more vibrant.

Q: What is the best time of night to see the aurora?

A: The best viewing generally happens between 10pm and 3am but the capricious aurora can be seen in the early evening as well as the early morning. Aurora viewing requires tenacity. Weather changes quickly and it is imperative you stay up all hours to give yourself the best chance of seeing a good show.

Q: What is the best time of year to see the northern lights?

A: Aurora Season in Fairbanks runs from August 21 through April 21, spanning all four seasons and nine months of the year. Different seasons allow for different landscapes, weather and daytime activities.

A: If you stay a minimum of three nights and are actively out during the evening hours, your chances of seeing the aurora in the Fairbanks region increase to more than 90% if the sky is clear and dark.

Q: Can you see the aurora if there is a full moon?

A: Yes. A full moon does not obscure the light of the aurora. In fact, the full moon can light the terrain and enhance the contrast between the landscape, the snow and the aurora.

O: How can I see the northern lights?

A: You can view the northern lights in a variety of ways. Go on an aurora tour and view the northern lights from a heated aurora venue or vantage point. Chase the lights in a vehicle with an aurora expert and guide. Combine aurora viewing with an activity such as ice fishing, snowmobiling or dog mushing. Or set out to scan the skies in a vehicle on your own.

A: Alaska Native legends describe the aurora in many ways. One of the most common myths says the northern lights are spirits of our ancestors playing ball with a walrus head. A second story suggests the spirits are communicating through a whistling sound originating from the aurora.

Q: Does the 11-year solar cycle affect northern lights viewing?

Aurora Borealis

Certificate

At Thickoh FAIRBANKS

A: Scientists have observed an 11-year solar cycle that loosely correlates to more solar activity and thus more auroras. However, because of our far-north position under the "Auroral Oval," the cycle does not significantly impact aurora viewing in Fairbanks.

> After viewing the aurora, take home a personalized Aurora Certificate, available from Explore Fairbanks at the Morris Thompson Cultural and Visitors Center or from some local tour operators.



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