

FAIRBANKS

DENALI · ARCTIC · NORTH POLE · INTERIOR ALASKA

AURORA VIEWING MAP & GUIDE



CHASE the aurora

in FAIRBANKS



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, have a significant advantage over other places when determining the likelihood of seeing the northern lights. If you stay a minimum of three nights in the Fairbanks area 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:

- Positioned directly under the Auroral Oval where the northern lights frequently appear.
- Consistently clear skies due to low precipitation and distance from coastal areas.
- Low population and therefore low light pollution along with longer nights for nine months of the year contribute to dark skies.



Additionally, Fairbanks is one of the best places to behold the northern lights because:

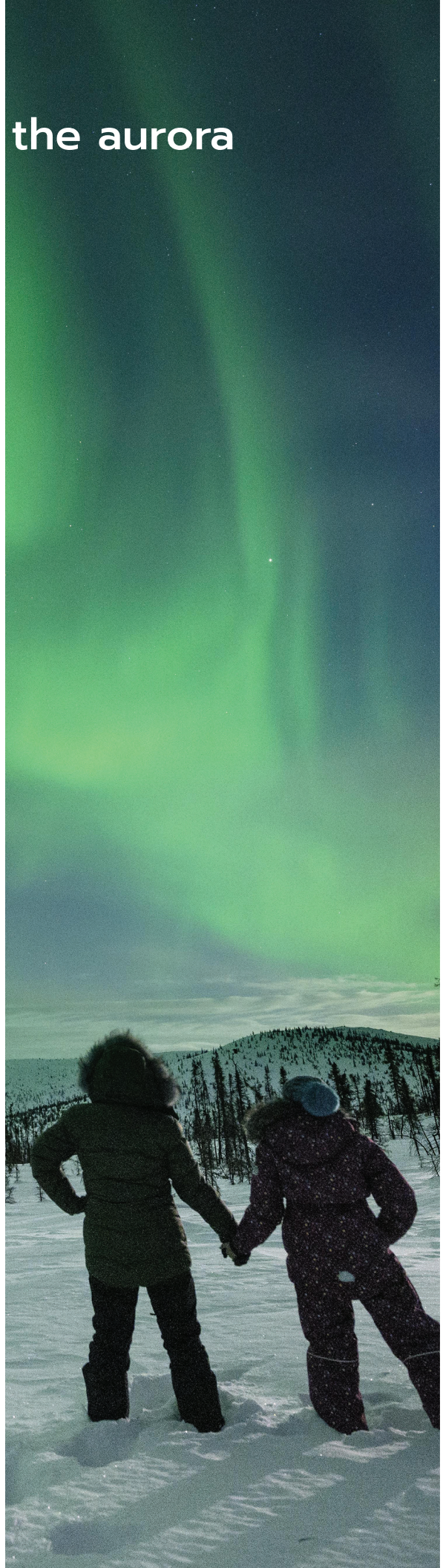
- Fairbanks International Airport features excellent connectivity to the lower 48 as well as the rest of the world.
- Multiple, diverse and accessible vantage points to view and/or chase the aurora can be found throughout the region.
- Picturesque lodges, log cabins, remote yurts, well-appointed viewing spaces and posh igloos abound, built with the express purpose of aurora viewing in mind.
- Many experienced aurora guides are ready to assist you in your quest to see and/or photograph the northern lights.
- Activities such as dog mushing, ice fishing, snowshoeing, snowmobiling and soaking in hot springs can fill your days or be combined with evening aurora viewing.
- Fairbanks is a delightful city brimming with eateries, breweries, distilleries, museums and art galleries in addition to cool activities like walking with reindeer and viewing gigantic ice sculptures.

the SCIENCE behind the aurora

Fairbanks is such a legendary aurora viewing location that one of the world's foremost aurora research centers—the Geophysical Institute—is located at the University of Alaska Fairbanks. As part of their research, scientists shoot rockets into active auroras to collect data just 27 miles north of the city's center at Poker Flat Research Range. Aurora chasers look to aurora scientists to help explain the amazing lights and predict when they will be visible.

These vibrant, dancing lights in the sky are caused when electrically charged particles from the sun collide with one another upon entering Earth's atmosphere via solar winds. The lights form over 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 from night to night depending upon 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 commonly seen 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 and at other times lazy and slow.





LOOK to the SKY

Fairbanks is renowned for spectacular northern lights viewing. The aurora may be visible from anywhere the northern sky can be seen but the show will be more vibrant a few miles out of town, away from city lights.

Head to a specialized aurora viewing venue or join a tour for expert guidance. Or set out to scan the skies in a vehicle on your own. Be aware that cell service can be irregular outside of town, all-wheel or 4-wheel drive is recommended in snowy conditions, and be cautious of wildlife on or near roadways.

Look for open fields or elevated areas with grand, uninterrupted views of the sky. Lakes and rivers offer clear views as well as breathtaking reflective auroras in the autumn before ice has formed and late spring, after it has thawed.

Popular aurora viewing locations are scattered throughout the region and marked on the map to the right.

1 Creamer's Field Migratory Waterfowl Refuge

Distance: 2 miles (3 km)

Close to downtown Fairbanks and easily accessible with plenty of parking, wide-open fields and wooded trails.

2 Chena Lake Recreation Area

Distance: 17 miles (27 km)

Easily accessible, this 2,000-acre (8 km²) park is located just past North Pole and features lake views and wooded walking trails.

3 Murphy Dome

Distance: 25 miles (40 km)

A prominent viewpoint at elevation 2,877 feet (877 meters) can be reached by road after traversing some sharp turns and significant elevation changes.

PHOTOGRAPHING the northern lights

- Use a digital camera with manual settings and a solid tripod.
- 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.
- 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 about 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 unique, so experiment with different settings, exposure times and compositions to get the best shot. Review your shots and adjust the settings as needed.



4 Chena River State Recreation Area

Distance: 32 miles (51 km) to 62 miles (100 km)

Stretching along part of Chena Hot Springs Road (miles 27–58), this area offers several public use sites to get off the road and scan the sky.

5 Cleary Summit

Distance: 20 miles (32 km)

A pullout up the Steese Highway at an elevation of 2,233 feet (680 meters). Be cautious of sharp turns and major elevation changes along the way.

6 Elliott Highway

Distance: 11 miles (18 km) to 62 miles (100 km)

The conduit to the Dalton Highway, this stretch of road has varied terrain and elevations with panoramic hilltop views of the northern wilderness.

7 Denali National Park and Preserve

Distance: 120 miles (193 km)

The park road is partially accessible during Winter Season to enjoy vistas of the Alaska Range.

8 Delta Junction

Distance: 95 miles (153 km)

The Richardson Highway leading to Delta Junction features varied terrain, mountain views, and several lake and river campgrounds for easy access to open skies.

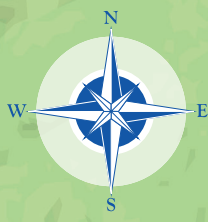
9 Coldfoot

Distance: 260 miles (418 km)

Best accessed via tour, Coldfoot is a tiny community in the remote Brooks Range. The Dalton Highway is mostly gravel and can be rough with very few services along the way. For these reasons, most car rental companies prohibit traveling up the roadway.



9 To Dalton Highway and Coldfoot



5 miles/8.05 km

6 Elliott Hwy

• Chatanika

5 Cleary Su

3 Murphy Dome

Fairbanks

1 Cremer's Field

Murphy Dome Rd

Goldstream Rd

Fox •

Steese Hwy

Murphy Dome Rd

Chena Hot Springs Rd

Sheep Creek Rd

Balmain Rd

Farmers Loop Rd

Chena River

Ester •

College Rd

Johansen Expy

Airport Rd

Mitchell Expy

Fairbanks International Airport

Tanana River

Badger Rd

Richardson Hwy

• North

7 To Denali

Aurora Borealis Certificate

This is to certify that
is an official member of the Latitude 65
Aurora Borealis Club hiking, snowed the
northern night in Fairbanks, Alaska.

John Doe
PROBATION & CO

explore
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.

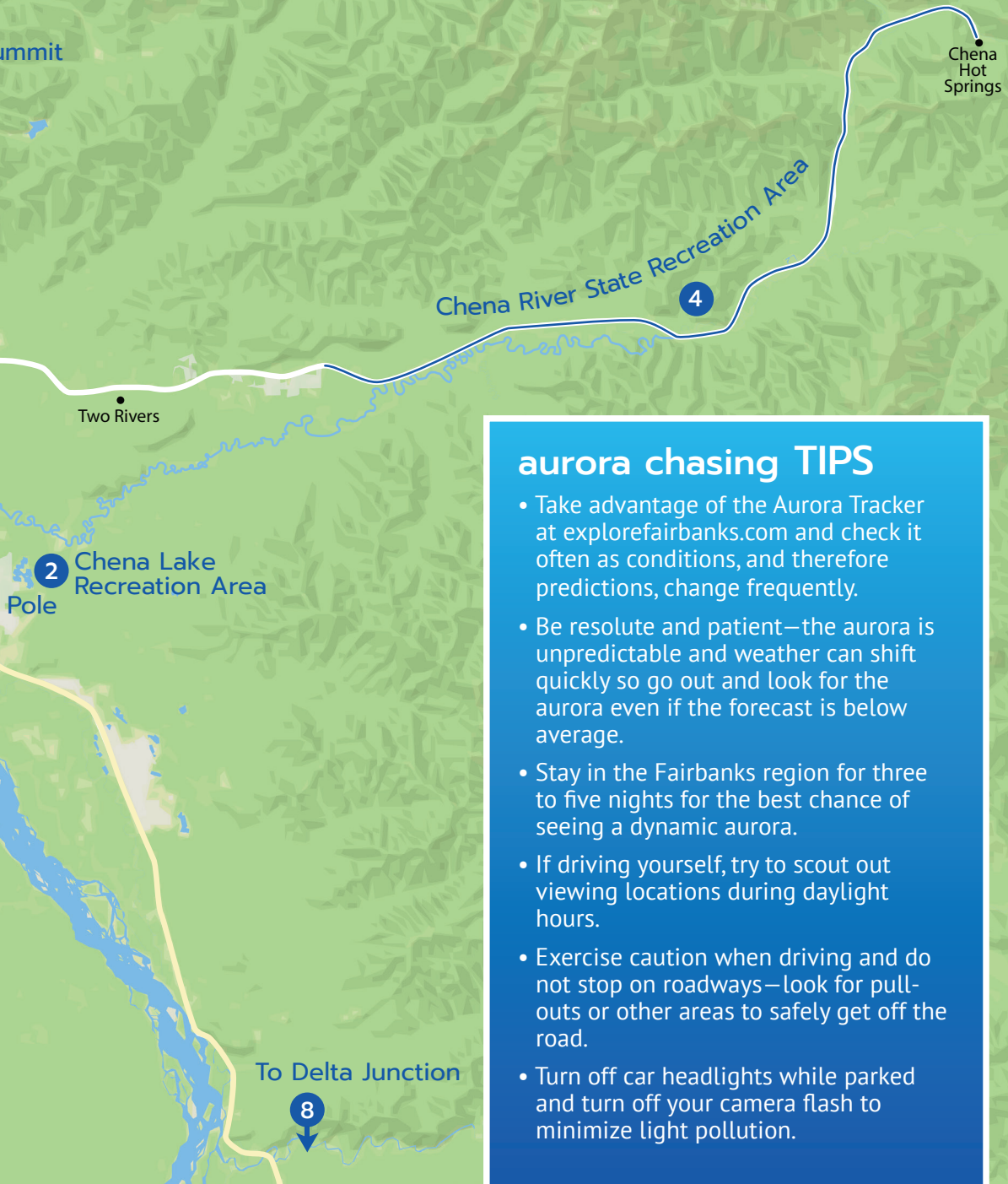


Don't Miss It!

Maximize your chances of seeing the northern lights with the **Aurora Tracker** on [explorefairbanks.com](https://www.explorefairbanks.com). This tool combines aurora activity data from the Geophysical Institute with weather and daylight information to provide real-time opportunities and three-day forecasts to help you plan your aurora chasing adventure.



Scan here for the Aurora Tracker.



aurora chasing TIPS

- Take advantage of the Aurora Tracker at [explorefairbanks.com](https://www.explorefairbanks.com) and check it often as conditions, and therefore predictions, change frequently.
- Be resolute and patient—the aurora is unpredictable and weather can shift quickly so go out and look for the aurora 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 pull-outs or other areas to safely get off the road.
- Turn off car headlights while parked and turn off your camera flash to minimize light pollution.

aurora FAQs

What are my chances of seeing the aurora in Fairbanks?

Pretty good, actually. Time your trip during Aurora Season—August 21 through April 21—and go out looking between the late evening hours of 10pm and 3am. Plan to stay a minimum of three nights and your chances of seeing the aurora in the Fairbanks region increase to more than 90% so long as the sky is clear and dark.

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

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

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

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.

Is there Alaska Native folklore about the aurora?

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.

Photos: Amy J. Johnson Photography (3), Jody Overstreet, State of Alaska/Chris McLennan, Andy Witteman, Joleen Redman, Niaz Uddin

share your ADVENTURES

Snap a selfie under the northern lights or capture a magical display of the aurora and show us!

Connect with us on social media and share your trip of a lifetime to Fairbanks using [#explorefairbanks](#). Maybe we'll feature your photo here next time!



101 Dunkel Street • Suite 111
Fairbanks, AK 99701-4806

1-800-327-5774
(907) 456-5774

explorefairbanks.com
info@explorefairbanks.com