



DIY Aurora Handbook - Anchorage, AK“

“From a retired Tour Operator with 10+ Years of Near-Perfect Success”

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The **Aurora Borealis**, commonly called **Northern Lights**, is one of the most extraordinary natural displays on Earth. The experience can shift from still and faint to powerful and fast-moving in seconds — painting the sky in greens, purples, yellows, reds, and sweeping curtains of light.

For first-time visitors, photographers, and travelers who have never seen the aurora, witnessing it is often described as **life-changing**. Photos can capture the beauty — but seeing the lights dance across the Alaskan sky is unforgettable.



Eureka Roadhouse, AK | Nikon D-850,
Sigma 14-24 mm f/2.8, ISO 800, 6 seconds

Disclaimer

This DIY Aurora Handbook - Anchorage, Alaska is provided for general informational purposes only. All information is offered **"as is"** without any warranty, express or implied, regarding its accuracy, adequacy, validity, reliability, or completeness. While every effort has been made to ensure the content is helpful and up to date, conditions related to weather, safety, aurora forecasts, and local access can change rapidly and unpredictably.

By using this handbook, you agree that the author assumes **no responsibility or liability** for any errors, omissions, or outcomes resulting from the use of the information provided. Users should exercise their own judgment, verify details independently, and follow all applicable laws, regulations, and safety practices when planning or undertaking any Northern Lights-related activities.



About The Author

by: Scott Stansbury

Scott began his journey into photography in 1976 and earned his first publication credit in 1980. Over the decades, his work has appeared in national and international publications, and he has received numerous awards for both skill and contribution to the craft.

Scott has chased the Northern Lights hundreds of times and has mentored countless photographers and guests along the way. His first encounter with the aurora was powerful — the sky exploded with motion and color — and from that moment, he was hooked.



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Having been a tour guide and now mostly retired. His mission is simple:

~ **Helping others to experience the aurora even better than he did**
— **with knowledge, safety, and excitement.** ~

Everything here is practical, simplified, and based on years of real-world field knowledge—not theory.

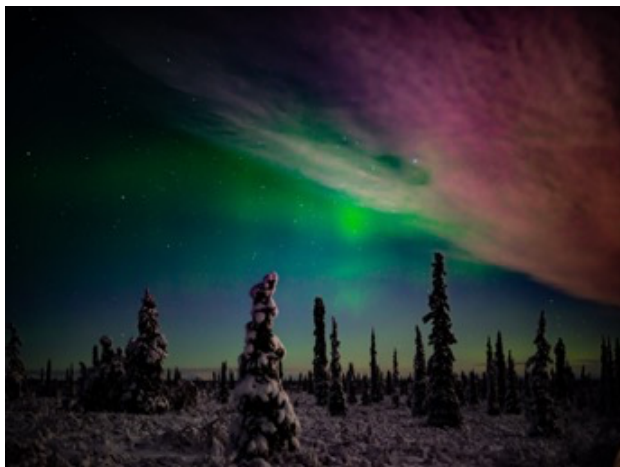
Common Myths About Northern Lights

Many visitors — and even locals — repeat aurora misinformation.

✗ **Myth #1:** “The lights are always better in Fairbanks.”

📌 **Reality:** Fairbanks sits under the auroral oval — but Anchorage and Southcentral Alaska also experience strong aurora activity. The key factor isn’t the city — it’s **weather, solar activity, and being in the RIGHT dark location.**

✗ **Myth #2:** “A high Kp Index guarantees amazing lights!”



Eureka Roadhouse, AK | Nikon D-800,
Sigma 35 mm f/1.4, ISO 400, 2 seconds

📌 **Reality:** The Kp Index is helpful, but **not the deciding factor.** Many spectacular displays occur on low Kp nights — especially when other solar conditions align.

✗ **Myth #3:** “Low Kp means no lights — don’t bother.”

📌 **Reality:** Incorrect. Some nights with a Kp of 1–3 have produced bright, dynamic auroras — especially near Anchorage — if the solar wind, Bz(nt), density, and Bt(nt) are favorable.

This handbook provides a clear, accessible explanation of the fundamental science behind the Northern Lights, along with the simplified,

non-technical method Scott uses to find them. His approach focuses on interpreting key satellite data, making informed decisions, and—most importantly—enjoying the experience. The process is remarkably effective, giving him an almost 100% success rate over more than a decade, with only seven missed attempts. Understanding when to head out and when to stay home not only saves time, but also reduces unnecessary costs such as vehicle rentals, fuel, or added mileage on your personal car.



Why Alaska Offers the Most Consistent Aurora Viewing

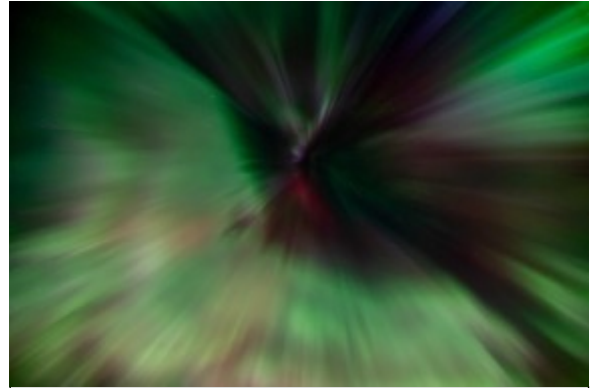
Prime Latitude and Weather Advantage

Alaska sits beneath the auroral oval, yielding frequent geomagnetic activity even under moderate solar conditions. Combined with low light pollution, inland elevation, and cold, stable winter skies, the region produces a high number of clear viewing nights per season.

Direct Access to Remote Dark-Sky Zones

It is best to travel beyond the city limits to certain vantage points. These are selected for best horizon visibility, weather forecast, and road conditions. These outer zones consistently outperform urban perimeters.

These trips are designed for everyone, especially photographers seeking exceptional composition and visibility.

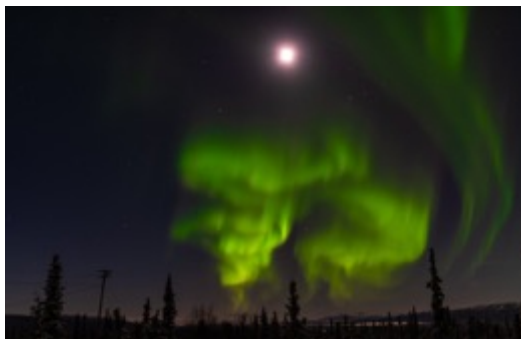


Eureka Roadhouse, AK | Nikon D-850
Sigma 14-24 mm f/2.8, ISO 400, 4 seconds

When to See the Northern Lights

Mid-August through Mid-April

Within this timeframe, the strongest combination of darkness, solar activity, and stable skies produces the region's most reliable aurora displays.



Eureka Roadhouse, AK | Nikon D-850,
Sigma 35 mm f/1.4, ISO 320r, 4 seconds

Monthly Breakdown

1. **August–September:** Average low temperatures 42° to 31°F / 5.6 to -0.6°C , Early-season aurora, Excellent twilight photography.
2. **WARNING – Aug, Sept, and Oct:** These are typically bad weather months due to a high chance of rain from the changeover of fall to the winter season. Clouds/Rain will prevent you from seeing the lights.
3. **October–December:** Average low temperatures 16 to -13° F / -8.9 to -25°C Strong geomagnetic activity, Longer nights, Crisp air for clarity.
4. **January–March (Best Viewing Months):** Average low temperatures -17 to -3°F / -27.2 to -19.4°C, Highest frequency of clear nights, Optimal for extended viewing.
5. **April:** Average low temperatures 20°F / -6.7°C, Late-season opportunities with milder weather.



How to Increase Your Chance of Seeing the Lights Overview

1. **Weather Forecast Monitoring**
2. **Geomagnetic Activity Monitoring**
3. **Road Conditions**
4. **Choosing the right location for Viewing**



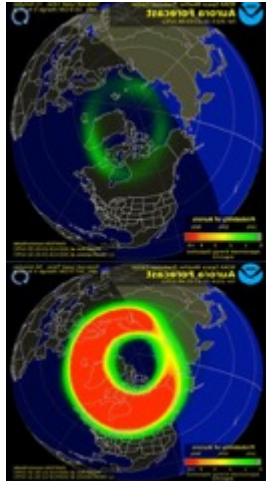
Weather Forecast Monitoring

The weather is a huge deciding factor of go or don't go.

Clouds are like a brick wall that we cannot see through. The clouds will completely obscure the lights and make it 100% impossible to see the lights. No matter how bad you want to see the lights, if there is a lot of clouds, stay home. It is ok to have some clouds such as partly cloudy. Some clouds such as partly cloudy can make for very dramatic photos, including the moon. If the conditions are mostly cloudy or cloudy, you will not see the lights. Again, it is like having a brick wall up in the sky.

Geomagnetic Activity Monitoring

The geomagnetic activity is essential for predicting the Aurora Borealis because auroras are a direct result of how Earth's magnetic field reacts to charged particles from the Sun. Higher geomagnetic activity increases both the intensity and visibility of the aurora.



Key reasons:

1. **Auroras are triggered by solar wind disturbances.** When solar wind streams or coronal mass ejections strike Earth's magnetosphere, they disturb the magnetic field. These disturbances generate the energy that produces visible auroras.
2. **Geomagnetic indices indicate aurora strength.** Measures such as the **Kp index**, **Bz (IMF orientation)**, and **solar wind speed** show how active the magnetosphere is. Higher values correlate with stronger and more widespread auroral displays when conditions are right.
3. **Predicts visibility at lower latitudes:** During strong geomagnetic storms, auroras expand farther south. Monitoring geomagnetic activity helps determine when these rare events occur.
4. **Improves timing accuracy:** Rapid changes in geomagnetic conditions can signal upcoming auroral breakups or bright pulses, useful for planning photography or going on tours.
5. **Helps avoid false expectations:** Clear skies alone are not enough; without sufficient geomagnetic activity, auroras may remain weak or invisible. Monitoring ensures realistic expectations.



Road Conditions

Know before you go! This is very important and cannot be stressed enough. Our roads can go from dry pavement to solid ice within minutes. It will also make a difference on your SAFETY!

WARNING 🚧 **Moose Hazard:**

Starting about midnight, Moose often walk or rest **in the middle of the road at night!** One big issue with moose is that their eyes **do not reflect headlights**, making them nearly invisible until you are extremely close. Often, it is too late to react.



🚫 Do **NOT** exit your vehicle to approach or photograph a moose. Moose can be unpredictable, aggressive, and **can kill you**.

Scott's safety motto: "Arrive alive — drive slow and give yourself time."

It cannot be stress enough to drive slow and safely at night. Depending on where you go, you might be the only one around for many miles/kilometers. Some of the locations you will drive for 2.5 hours. Beginning at the halfway point, you might not see anyone or vehicles for up to 9 hours. Others you might see a dozen or so. At some locations, the closest gas/petro pump was the one you filled up at that is now 90 mi / 145 km away. Some locations have no cell coverage, and others just one carrier and not the other carriers.



Choosing the Right Location for Viewing

Anchorage itself, you can see the lights in the city a few times a year. When they are seen, they appear to be fainter due to the light pollution. The big question is; "Then where do we go?" (Close locations for Anchorage/Eagle River will be listed at the end of the handbook.)

There are many factors that go into choosing the right location. That decision comes from the weather patterns, solar activity, road conditions, and most importantly YOUR winter driving skills! Some remote areas require driving on a narrow, 2 lane mountain road that has steep grades at times that can be ice covered, including the S turns iced over with several hundreds of yards/meters drop offs that have no shoulders nor guardrails.

Does your vehicle have snow or studded tires? Most of the rentals at the airport do NOT! It is highly recommended you get a vehicle with studded tires. It can mean the difference of life or death. Then there is the need for traction to dodge a moose in the middle of the road. For a winter equipped vehicle, I highly recommend the website Turo (<https://turo.com>). Turo is like an Airbnb, except for rental cars and they will state what type of tires they have on their vehicles.



Preparing for Your Northern Lights Excursion

Clothing Checklist

- Insulated parka (a light jacket does just fine for the early and later parts of the viewing season). Temperatures can and do reach -40°F/-40°C during the coldest of winter months.
- Thermal base layers
- Waterproof and warm foot ware
- Wind-resistant gloves and hat
- Neck gaiter or balaclava
- Hand and foot warmers
- **WARNING: Frostbite happens here in Alaska. Protect your hands and feet!**

Photography Equipment Recommended (*Point-n-shoot cameras will not photograph the Northern Lights. Stewarts Photo in Anchorage rents cameras and lenses. <https://www.stewartsphoto.com>*)

- DSLR, mirrorless camera or even a smartphone!
- Wide-angle lens (f/2.8 or faster)
- Sturdy tripod
- Spare batteries
- Remote shutter release
- Memory cards with ample storage
- iPhones 11 and up, all Samsungs and many other smartphone manufacturers will photograph the lights. You must ensure that the camera is set to night mode and the flash is off. Refer to your manufacturer's manual on proper setup.





The Simplified Process

Weather Radar - Step 1

1. Go to <https://www.alaskasnewsresource.com/weather/> and scroll down the page until you see the live radar then click on "Layers" on the bottom right.



2. Click on "Radar/Satellite"



3. Move the slider to the far right.



4. Click on "Close" on the bottom right. Now the radar will show the actual cloud coverage and direction of travel.

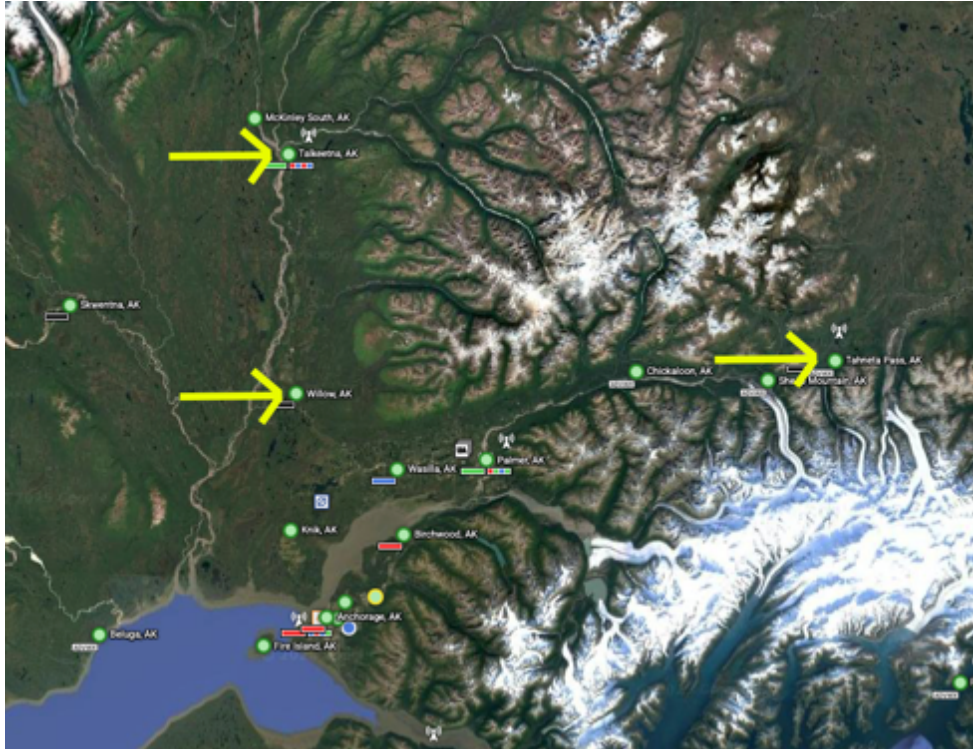




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5. You can now zoom in and out on the viewing areas.
6. You can also view the cloud coverage live via the FAA's webcams at:
<https://weathercams.faa.gov/map/-155.28458,58.97549,-144.28726,63.07735>



7. To view the live cameras, click on the green dot next to the viewing areas. You might have to deselect some of the items on the menu bar on the right side of the image. The menu bar is not shown in the picture above.
8. If all the viewing areas are covered up with clouds, stay home and enjoy the evening.
9. If you have open skies, continue to the next section.



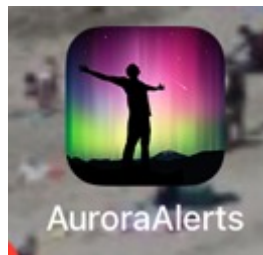


Geomagnetic/Solar Activity - Step 2

The tracking app Scott uses is very easy to understand and it is free. It has one paid function on the app for extended Kp Index predictions beyond 3 days for the next 27 days. The 27-day information is not needed. If you wish to see that information, it can be found at:

<https://www.gi.alaska.edu/monitors/aurora-forecast>

1. Download any Northern Lights Tracker app. The app that Scott uses is, "**Northern Light Aurora Forecast**" and is the app that will be discussed here. This app is very easy to use and straight forward. In the app store, search for "**AuroraAlerts**" as one word that looks like this:



2. There are a few things we are highly interested in on the home tab of the app.
 - a. The rectangle labeled "Now" is showing the data hitting the earth now and the rectangle labeled "In XX Minutes."





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- b. The "In XX Minutes" box, it is misunderstood the most. This data is received from a satellite further out in space. Because of this, the data could have already been taken much earlier and showing older data. Think of it this way, the numbers showing is what to be expected hitting the earth somewhere between now, and the "In XX minutes" shown.
- c. The next items we need are the numbers in the 4 semicircles.
 - i. Solar wind speed (far left)
 - ii. Bz (center left)
 - iii. Density of the solar wind (center right)
 - iv. Bt (far right)



- d. The "Two Numbers Rule": ***"If it starts with a 3 is good, anything over a 5 is excellent. Except the Bz, that needs to be -3 and -5 respectively."***

The Bz is the single most important measurement. When the Bz goes negative, the solar wind is attracted to the earth to cause the Northern Lights. Without the low Bz, the solar winds will pass by the earth. This number normally goes up and down all night like a yo-yo, so don't get worried if it rises and the lights go away. If the Bz is a very high number like a +5 or more for an extended period, you might as well stay home. The earth will not be attracting enough solar radiation to produce the lights and likely not to be visible to the naked eye. Cameras may see the lights when they are faint from taking a long exposure.



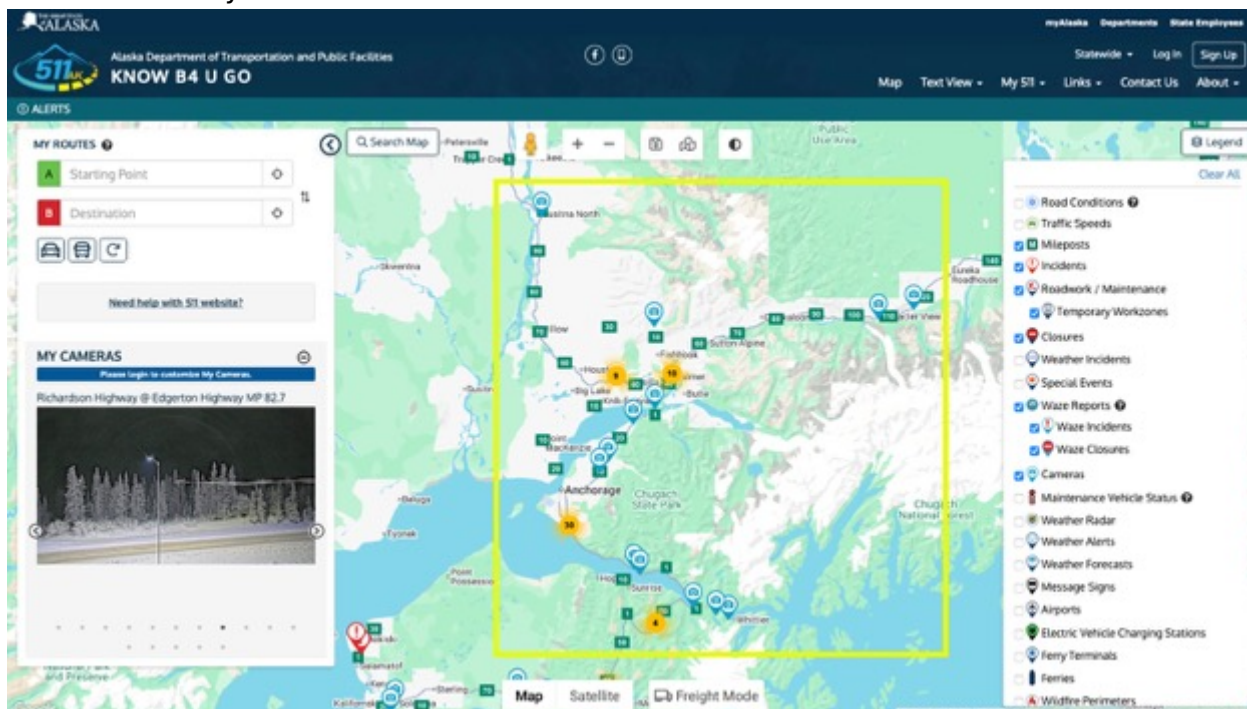
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Road Conditions – Step 3

Go to Alaska Department of Transportation and Public Facilities website at:

<https://511.alaska.gov/> Here you can check live web cams on the road conditions as well as read bulletins about sections of the roadway for ice, snow and other updates. You will want to check the bulletins and cameras for Hwy 1 - “Glennallen Hwy”, Hwy 3 - “Parks Hwy” and the “Seward Hwy



Choosing the Right Location – Step 4

Now that it has been decided to go chasing the lights, it is time to decide where to go for viewing.

1. **Eureka Roadhouse:** The **best** location is a 2:30-hour drive from Anchorage. It has the most beautiful composition for that ultimate wall hanger. On Hwy 1 (Glennallen HWY) at mile post 133, there is a pullout off (5 miles past Eureka Roadhouse at mile post 128). The entrance will be about 15 yards/meters before the 133 mile post, at which you will turn left (north) side of the road. See the screenshot for parking and viewing instructions to see the lights. Here you can see horizon to horizon with no obstructions, zero light pollution, see multiple meteors each night, and a great place to see the Milky Way with your own 2 eyes when the moon is not out!

WARNING: Do NOT go to this location unless you are a seasoned winter driver once snow and ice are on the ground, and Do NOT go without topping off with gas in Palmer. There are NO open gas/petro stations for 150 mi / 241 km! Before you go, try to let someone know where you will be and at what time you will be returning by for your safety. You never know when you might run into trouble in subzero temps.



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Pros: Great unobstructed views, zero light pollution, fantastic composition with few and far between small trees. Verizon cellphone coverage only.

Cons: Dangerous Road for unseasoned winter drivers, solid ice and/or black ice all up and down the Hwy, black ice on mountain switchbacks with dangerous drop-offs with no guardrails or shoulders, narrow 2 lane road for 1/3 of the of the trip on the mountains.

If you go to this location, you just might see Scott there with family, friends or just by himself!



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2. **Kashwitna Lake:** This is a 1:15 -hour drive from Anchorage. Second best spot is the pullout on Hwy 3 at Kashwitna Lake. This location will be on the left side of the road (west) at mile marker 76.4.



Pros: Great views of the sky, shortest drive, easy drive with no driving on mountain roads, wide roads, few vehicles all night long, no light pollution towards the viewing areas, Chance of cell coverage.

Cons: Poor composition.



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3. Talkeetna: This is a 2:15 hour drive from Anchorage. On the top of the hill mile marker 15 just before Talkeetna. Where the road makes a drop down to lake level just before the railroad tracks. Looking towards the railroad in front and the lake on your right offer some great shots.

Pros: Good views of Denali to the north, a few cars go by during the night, Talkeetna starts just a few blocks past the railroad tracks, populated area, cell coverage.

Cons: Tall trees, minimal light pollution.





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4. Turnagain Pass: This is a 1:30 hour drive towards Seward down the Seward Hwy to Turnagain Pass which has a massive pullout on the right (west) at mile post 72.5.



Pros: Decent horizon views over the mountains to the north, no trees, big pulloff, few vehicles go by, emergency call box/phone on site, no light pollution.

Cons: No cell coverage, some mountain tops, requires higher solar activity to see the lights at this location.



Anchorage and Eagle River Aurora Viewing Locations

These areas are close to town and are not prime locations and you must have higher solar activities to see the lights in the below locations. .

Glen Alps Overlook

Coordinates: 61.107222, -149.71472 (Parking Lot Blueberry Loop Trail, Anchorage, AK 99516)

Directions: From Anchorage, take Seward Hwy → O'Malley Rd → Hillside Dr. Turn left on Upper Huffman, then right on Toilsome Rd. to state park.

Point Woronzof Bluff (Park closes at 11 PM and enforced)

Coordinates: 61.20169, -150.02 (5101 Point Woronzof Rd, Anchorage, AK 99502)

Directions: Drive west on Northern Lights Blvd until it curves into Point Woronzof Rd. Parking is on the right.

Downtown Vantage Viewpoint (Earthquake Park)

Coordinates: 61.20169, -150.02 (5101 Point Woronzof Rd, Anchorage, AK 99502)

Directions: Gravel parking lot ½ mile west of Earthquake Park on the right.

Mt. Baldy / Skyline Drive

Coordinates: 61.332426, -149.461446 (Mt. Baldy Trailhead, 12900 Golden Eagle Dr. Eagle River, AK 99577)

Directions: Take Eagle River Loop Rd → West Skyline Dr. Drive 2.5 mi up to trailhead parking.

Eagle River / Hiland Road

Coordinates: 61.31, -149.56

Directions: Take Glenn Hwy → Eagle River Loop Exit → immediately turn right onto Hiland Rd.

7.5 mi to South Creek Rd

Eklutna Lake Road Pullouts

Coordinates: Various

Directions: Exit Glenn Hwy at Mile 26 → follow Eklutna Lake Rd. Good pullouts at Mile 1.8 & Mile 2

Palmer Hay Flats / Reflection Lake

Coordinates: 61.360, -149.450

Directions: Take Glenn Hwy → Knik River Access exit → follow signs to parking area by the observation tower.



Closing Remarks

The Northern Lights are worth seeing at least once in your lifetime. While nature can paint the sky with brilliant colors and more, these trips can leave you totally awestruck with nature's beauty. You might see green bands, to dancing colors across the sky as well as multiple meteors on a normal night. It is worth every single minute spent. Scott says that his method of seeing the lights is never guaranteed, but the simple Two Numbers Rule puts the odds in his favor. Through the years, Scott has spent countless nights and hours at each of the locations and states:

"We have the largest canvas in the world being painted by the hands of God. It just does not get any better than that!"

If you found this DIY guide to be helpful, consider buying Scott a cup of coffee or even a donation to his retirement. He spent a lot of time and effort in finding the locations and writing this DIY guide. He would be greatly appreciative of it. Most importantly, have fun and **Arrive Alive!**

[Donate](#)



Frequently Asked Questions

Q: Once on site, should I shut off the vehicle engine?

A: NO! If you shut the engine off, the cold could cause all kinds of problems. The battery might die from the cold, antifreeze in the engine could freeze, and the oil in the engine could turn into a solid! PLUS, you need HEAT to stay warm when the lights are not out. NEVER turn the engine off. Having no heat can take the fun out of a trip and turn it deadly in subzero temperatures fast! In Alaska, people die each year due to loss of heat in the extremely cold weather.

Q: How long should we plan to stay out?

A: A good time to leave is at 8 PM. Though the lights typically are most active between 1-3 AM, there have been many times that upon arrival of getting to a location as well as the drive to the location that I have seen the lights. You came here to see the lights, so set some time aside and enjoy them for all that you can.

Q: Why did the lights not appear?

A: It can and does happen. Rare as it may be, they sometimes just will not come out due to low geomagnetic activity. When the magnetism gets weak, the solar activity just passes us by. It is when the magnetism gets strong it, the solar radiation is attracted to the poles of the earth. When that happens, get ready for that wild night of lights!

Q: Are the outings suitable for beginners, children or someone with disabilities?

A: Yes, you will not do any walking or hiking. You will be with or very near your heated vehicle.