

NORDIC LIGHTS PHENOMENON

□ Scientific Explanation:

- Auroras are the result of disturbances in the Earth's <u>magnetosphere</u> caused by the <u>solar wind</u>. Major disturbances result from enhancements in the speed of the solar wind from <u>coronal holes</u> and <u>coronal mass ejections</u>.
- These disturbances alter the trajectories of <u>charged particles</u> in the magnetospheric <u>plasma</u>. These particles, mainly <u>electrons</u> and <u>protons</u>, <u>precipitate</u> into the upper atmosphere (<u>thermosphere/exosphere</u>).
- The resulting <u>ionization</u> and excitation of atmospheric constituents emit light of varying colour and complexity. The form of the aurora, occurring within bands around both polar regions, is also dependent on the amount of acceleration imparted to the precipitating particles.

Best Viewing Conditions:

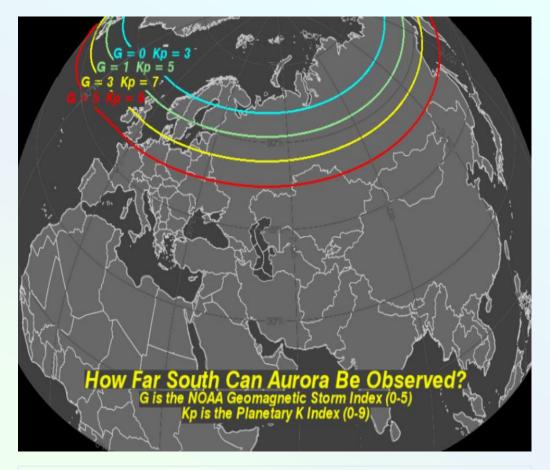
- Peak time is often between 11pm 2am
- Between the autumn and spring equinox (September21 March21).
- To see the Northern Lights, you need a clear, dark sky with minimal light pollution, and ideally, a location near the Arctic Circle
- (December January is the darkest part of winter & the weather is dried up)

□ Occurrences:

- The region of the "Auroral Oval" (Aurora Zone).
- It is visible from areas around the Arctic such as Alaska, Canada, Iceland, Greenland, the Faroe Islands Scandinavia, Finland, Scotland and Russia.

AURORAL OVAL

The level of geomagnetic activity (Kp) you need to see the northern or southern lights depends on your geomagnetic coordinates.



Aurora forecast: https://www.swpc.noaa.gov/communities/aurora-dashboard-experimental

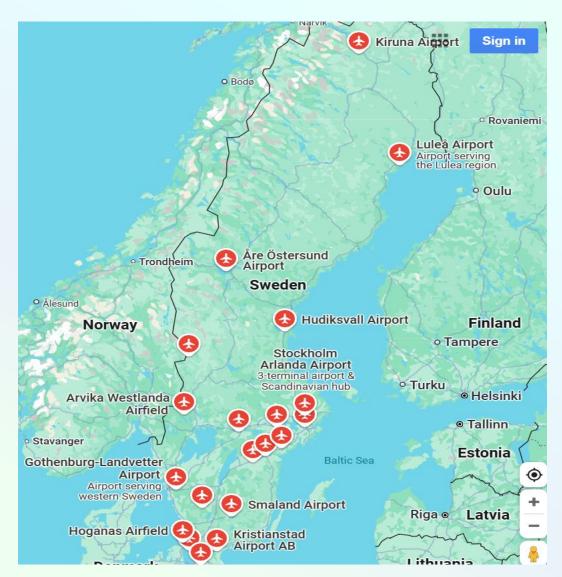
What Kp you need to see the aurora at famous northern lights photography regions:

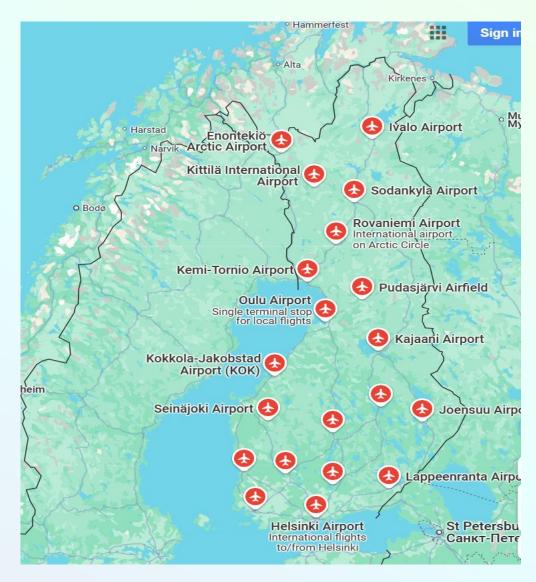
☐ Canada ■ Churchill	min Kp required for the location Kp0 / Kp0
Whitehorse	Kp2 / Kp0
Yellowknife	Kp0 / Kp0
□ Alaska	
Fairbanks	Kp1 / Kp0
□ Iceland	
Reykjavik	Kp2 / Kp0
☐ Finland	
Rovaniemi	Kp2 / Kp0
Levi	Kp1 / Kp0
□ Sweden	· ·
Kiruna	Kp1 / Kp0
□ Norway	
Tromso	Kp0 / Kp0

The Kp-index describes the disturbance of the Earth's magnetic field caused by the solar wind. The faster the solar wind blows, the greater the turbulence. The index ranges from 0, for low activity, to 9, which means that an intense geomagnetic storm is under way.

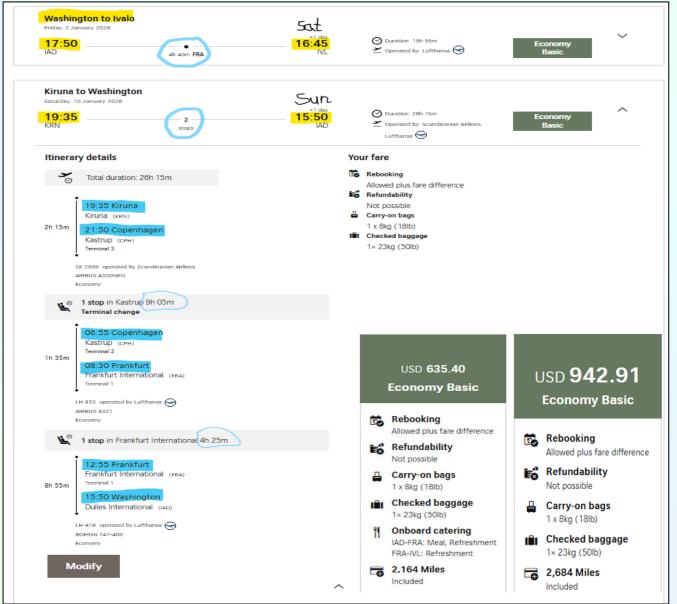
FYI: A Kp level of 2 means low display of lights even in suitable locations. Kp4 is usually when an active display of colorful lights starts.

AIRPORTS IN SWEDEN & FINLAND





FLIGHT - EXAMPLE



https://www.swiss.com/xx/en/homepage





IVOLA ACCOMMODATION

Kakslauttanen Arctic Resort-Glass Igloos -- Address (Kiilopääntie 9, 99830 Saariselkä) https://www.kakslauttanen.fi/

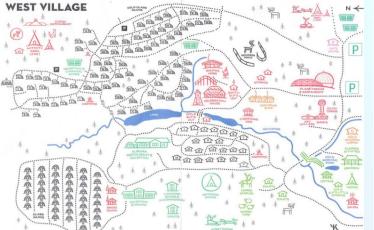
- 30min from Ivalo Airport (shuttle bus available)
- 10min to the town of Saariselkä
- Sunrise 9.30am,
 Sunset 3.30pm

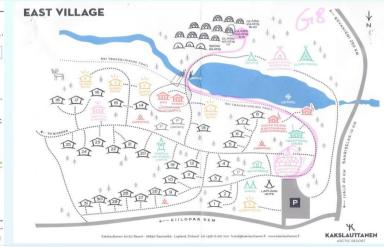




- Complimentary WIFI in all accommodations, reception and restaurant area.
- Airport Shuttle & Bus with Glass roof available for Group Rental
- Located on the premises: Smoke saunas available to reserve & The chalet has its own electric sauna
 Santa's House & Elf's Huts, Reindeer, Sheep, Horse areas & Art gallery & Planetarium & Restaurants & Souvenir shop







Resort Info: https://www.shootfromthetrip.com/glass-igloo-kakslauttanen /

IVOLA _ ACCOMMODATION (JAN3-8)

\$

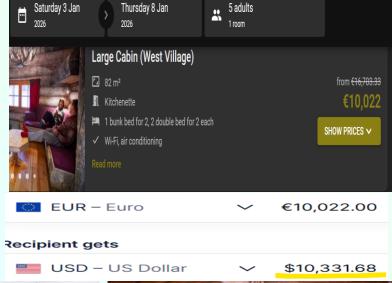
Kakslauttanen Arctic Resort-Glass Igloos https://www.kakslauttanen.fi/

Large Cabin (West Village)

- 82 m²
- · meeting roomKitchenette
- 1 bunk bed for 2, 2 double bed for 2 each
- · Wi-Fi, air conditioning

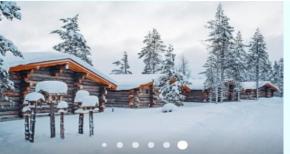
Our log cabins are made of impressively large Kelo pines – trees that once stood dead and dried out – and designed in a rugged style that fits perfectly with their wild surroundings. While you won't find widescreen TVs or dishwashers inside, you can enjoy even better sources of entertainment in every cabin – a fireplace and a private sauna.

Our large cabins are located right next to the restaurant, Safari centre, glass igloos and Celebration House and they **accommodate 6 persons**, making them ideal for a bigger group of friends or families.















TOTAL for 10ppl: \$20,664

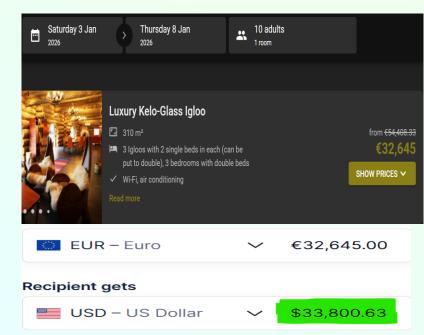
IVOLA _ ACCOMMODATION (JAN3-8)

Kakslauttanen Arctic Resort-Glass Igloos https://www.kakslauttanen.fi/

Luxury Kelo-Glass Igloo

- 310 m²
- 3 Igloos with 2 single beds in each (can be put to double), 3 bedrooms with double beds
- Wi-Fi, air conditioning

Brand new Luxury Kelo Glass Igloo, built in 310 sq. meters. One of its kind equipped with fully handmade furniture includes **3 log chalet Bedrooms with private bathroom & shower** for 2 guests each, **3 Glass Igloo bedrooms** for 2 guests each, plus a large living room & common area, and a **sauna section**. Can **accommodate a family with 12 guests** comfortably. Great accommodation for family or friend's reunion. Price includes private airport transfers, daily firewood service (before 22:00), daily cleaning, welcome basket and luggage service.





















IVOLA _ ACTIVITIES (JAN3-8)

Kakslauttanen Arctic Resort-Glass Igloos https://www.kakslauttanen.fi/

HUSKY SAFARIS REINDEER SAFARIS SNOW MOBILE SAFARIS ICE KARTING RIDING SAFARIS AURORA HUNTING ICE FISHING SAFARIS CROSS-COUNTRY SKIING ICEBREAKER SAMPO DOWNHILL SKIING &

SNOWBOARDING

2 Hours (From pick up to return)

€291.50 Own Husky dog, 1 person price Adults only • Have the whole sled by yourself • 1 Person Price •18+

15 hours (From

pick up to return)

€409.16 Shared Sleigh - 2 persons price with your Family / Friends

ICE KARTING: Professional 570meter long ice karting circuit. Provides driving experience for an advanced driver or for biginners. The circuit is energized by LED lighting and with timing system.

Horseback Riding: 2 Hours __ €134.62

ICEBREAKERS SAMPO:€1,737.34Group of 2 Price per personIncludes€1,582.58Group of 3 Price is per Person

•Transfers from and to Kakslauttanen •the dip in the icy water with a thermal suit €1,525.34 Group of 4+ Price is per Person

DOWNHILL SKIING&BOARDING: The two fells of Saariselkä, northernmost ski centre, are just a 15–min drive from Kalkslauttanern. Saariselkä boasts slopes of varying difficulty and also boasts a Freestyle Park

Activitie s video

: https://
www.yo
utube.c
om/wat
ch?v=p9Us1

VDMM

IVOLA ACTIVITIES (JAN3-8) HTTPS://WWW.ICEHOTEL.COM

Kakslauttanen Arctic Resort-Glass Igloos https://www.kakslauttanen.fi/









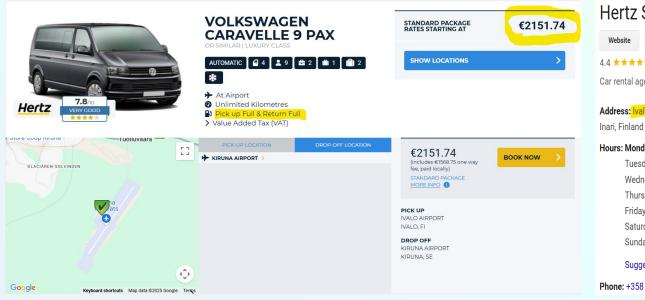


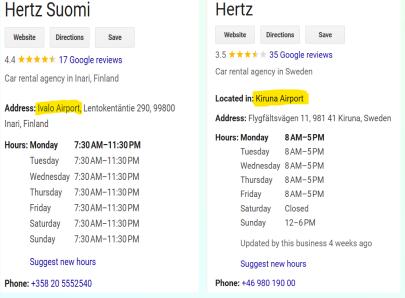


IVOLA → KIRUNA TRANSPORTATION (JAN 8)

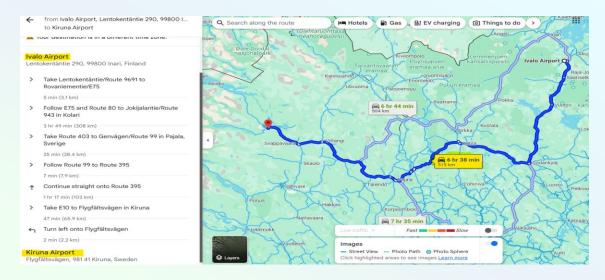


Car Rental: https://www.autoeurope.eu/results/





Route:



Fuel Cost calculation:

6.6-7 L/100km

520: 7 = 75 liter x \$1.9 = \$142

Country	Last	Previous	Reference	Unit
Finland	1.91	1.81	Feb/25	USD/Liter
Sweden	1.49	1.47	Feb/25	USD/Liter

TOTAL TRAVEL COST: \$ 2294



KIRUNA _ ACCOMMODATION (JAN 8-9)

Camp Ripan - address: Campingvägen 5, 981 35 Kiruna, Sweden https://ripan.se/en/

Hotel Cabin GIRON

•Size: 27 m2

•Number of rooms: 2

•Bed: A king size bed as well as a bunk bed in the smaller bedroom where the upper bed can be flipped up flat against the wall if you need to (each bed measures 90x200 cm).

•Ski Shed: Yes

•Parking: Yes, parking spot right outside the cabin.

•Equipment: In the kitchen, until May 1, 2025, there is a fridge, kettle, microwave, two hotplates, pots, plates, cutlery, mugs, and glasses.

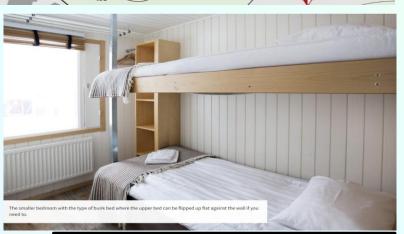
•Breakfast is always included. We are a sustainable certified hotel, if you want daily cleaning this is included in the price however let the reception know at check in

·Located on the premises:

- Spa & Gym
- Restaurant
- Andrummet,, Aurora Look-out Spot







Cabin:

Guests: 4 Adults

Arriva I: January 8, 2026

Departure: January 9, 2026 Price: SEK 2,569.00

Recipient gets

USD – US Dollar

SEK - Swedish Kro... V

kr2,569.00

TOTAL for 10ppl:

(if 1 more person can be added to each of the 2 cabins)



KIRUNA ACTIVITIES (JAN 8-9)



Camp Ripan - address: Campingvägen 5, 981 35 Kiruna, Sweden https://ripan.se/en/

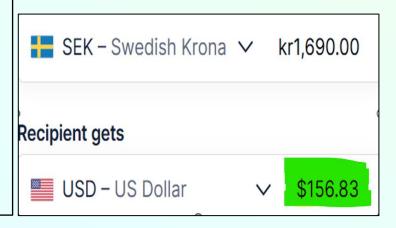
In the town of Kiruna

Walk to the Pastorat = Church, largest wooden building (1909)

Northern Lights Snow Mobile Tour

https://arcticdogsled.se/en/snowmobile-tour-northern-lights/

- 2 persons per snowmobile.
- Tour start and length: 5 pm
- Tour is about 3,5 hours long
- We provide warm clothes (shoes, overall, and gloves) and helmets.
- 1690 SEK / person. To drive your own snowmobile, SEK 550 is added to the standard price (We transfer you from required address in Kiruna City Center and drive you to our base in Laxforsen, located just outside Kiruna not far from Jukkasjärvi)



Nutti Sami Siida Cultural Retreat – address: 981 91 Jukkasjärvi, Sweden

https://nutti.se/museum-cafe/

- Márkanbáiki is an open-air museum with a focus on Sámi culture Tour start)
- Reindeer Farm
- Traditional Sami food Restaurant
- Open from 10am 5pm
- Adult: SEK 250

Jukkasjarvi Church

oldest Church in Lapland



10min walk distance from the

IceHotel

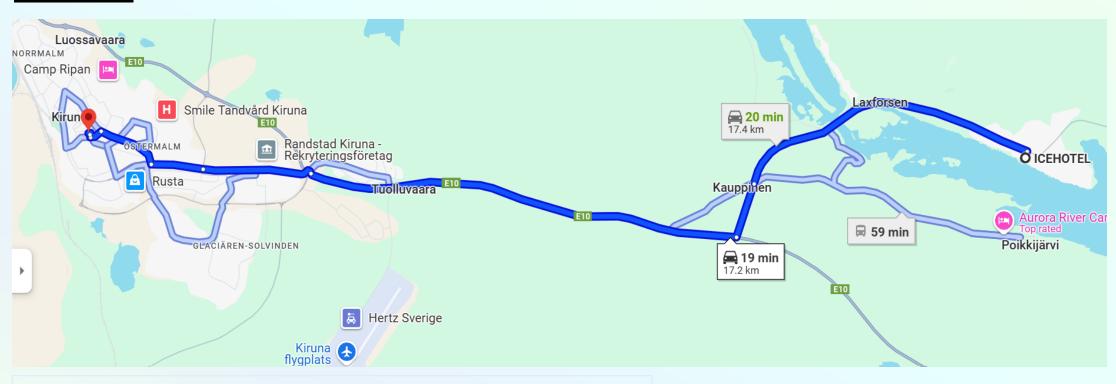
https://www.icehotel.com/ (the Ice Hotel is about 20min drive from Kiruna)

Info
on
Activ
ities
in
Kiru
na
https:
//ww
w.yo
utub
e.co
m/wa
tch?v
=qLi
MUn
ueA

KIRUNA → ICEHOTEL _ TRANSPORTATION (JAN 9-10)



IceHotel - address: Marknadsvägen 63, 981 91, Jukkasjärvi, Sweden https://www.icehotel.com

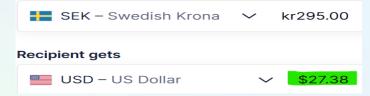


How to get to the IceHotel

- Taxi Price: Around 500 kr - 650 kr SEK - Swedish Krona V kr500.00 **Recipient gets** USD - US Dollar
- **Bus** (bus 501)
 - Bus schedule:

https://ltnbd.se/tidtabeller_print4web/print4web/Lokalalinjer/170821_180615/Lokalalinjer_501_170821_180615.pdf

Price: Around 295 SEK



KIRUNA _ ACCOMMODATION/ ACTIVITIES (JAN 9-10)

IceHotel - address: Marknadsvägen 63, 981 91, Jukkasjärvi, Sweden https://www.icehotel.com

GOOD TO KNOW FOR THE BEST EXPERIENCE

- •During the day Icehotel is open to the public. Day visitors and guests have access to see all the rooms, except reserved Deluxe Suites. This means overnight guests get their rooms at 6 pm.
- •Check-in and out for warm rooms is at 3 pm and 11 am.
- •All rooms in Icehotel Winter have curtain doors, while the Art and Deluxe Suites in Icehotel 365 all have doors.
- •There are no bathrooms (except the Deluxe Suites) or storage in the Ice rooms or Art suites. These facilities are housed in a heated service building, where you also keep your belongings during the night. The service desk is staffed 24 hours.
- •You get a locker or cubicle (if staying in an Art Suite), where you can get changed and keep your belongings.
- •The changing rooms, sauna and showers are communal for women and men respectively.
- •There are no electric sockets to charge your phone inside the cold room, so be sure to charge your phone before going to bed.
- •If you're changing between ice suites and warm accommodation, there are about 6-7 hours when you don't have a room to withdraw to. We strongly recommend you to plan one or two excursions during this time as exploring nature and local culture is a substantial part of getting the full experience.

When staying in an ice room or in one of the art suites you store your belongings in a locker or booth in the warm service building which is staffed 24 hours, located just meters from the hotel. The Deluxe suites 365 has a private bathroom with shower and toilet directly connected to the bedroom. The heated relaxation area also provides storage for your belongings

WHAT SHOULD I DO WHEN I'M THERE?

Icehotel is carefully designed and handcrafted by artists from around the world so make sure to explore the art in the hotel. Roam amongst the beautiful ice sculptures and experience the magical setting in all rooms.

We recommend that you book activities to get the most of your holiday. Dog sledding, skiing or snowmobiling in winter, or river rafting and cycling in summer, takes you into the vast uninhabited boreal forest. Fishing, midnight sun and northern lights safaris are amazing ways to experience the Arctic. Joining a class with one of our master ice sculptors is of course a must!

AROUND AND ABOUT ICEHOTEL

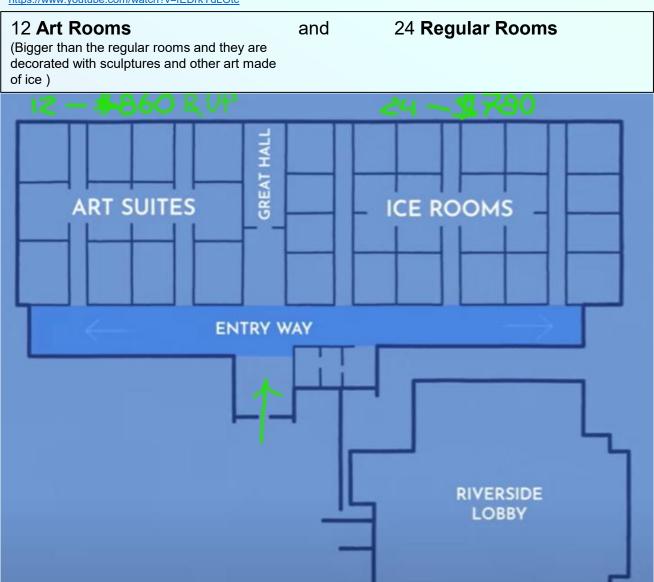
The hotel is located in the heart of the tiny village Jukkasjärvi, with about 900 residents. Besides the actual ice hotel with rooms filed with ice art, ice bar and ceremony hall made of ice, Icehotel has a restaurant, cabins, hotel rooms and lounge – all housed in warm buildings within walking distance of each other. In winter there are 53 Ice rooms, Art Suites and Deluxe Suites and in summer there are 18. All year round we have seventy warm rooms; 44 hotel rooms and 28 chalets. There is also the local homestead restaurant just ten minutes' walk away.

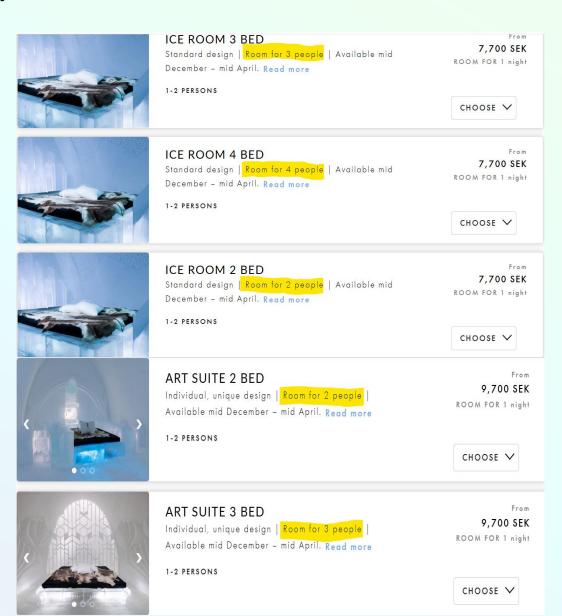
There is a local convenience store in the village, but no cash point.

KIRUNA _ ACCOMMODATION (JAN 9-10)

ICEHOTEL Winter - melts & is being resculpted every year

https://www.youtube.com/watch?v=KfQOsKmyCNYhttps://www.youtube.com/watch?v=fEDrkYdLOtc







KIRUNA _ ACCOMMODATION (JAN 9-10)

ICEHOTEL Winter – melts & is being resculpted every year

https://www.youtube.com/watch?v=KfQOsKmyCNY

https://www.youtube.com/watch?v=fEDrkYdLOtc



- Our **Standard Room** with ice décor and a bed made of ice. Spending a night in Icehotel is a surreal experience a memory for life.
- The ice room has a classic design and holds a temperature of -5 to -8 degrees
 Celsius. The bed you sleep on has a thick mattress that rests on a wooden base. The
 bed is covered with reindeer hides and you sleep in a thermal sleeping bag.
 Instead of doors the hotel rooms have curtains that you draw to give you and your
 company privacy.
- In Riverside Lobby, the warm building adjacent to Icehotel, you will find communal changing rooms, toilets and saunas for women and men. Your luggage is stored in the luggage storage room prior to your overnight stay.
 Your luggage is stored in the luggage storage room prior to your overnight stay.



- The Art Suites are individually themed and hand carved by artists commissioned from around the world and a wide range of disciplines. Spending a night in Icehotel is a surreal experience and a memory for life.
- Each suite is our individually designed and sculpted thematic suites. The artists, perhaps from Kiruna, Germany, UK or the US.
- The room holds a temperature of -5 to -8 degrees Celsius. The bed you sleep on has a thick mattress that rests on a wooden base. The bed is covered with reindeer hides and you sleep in a thermal sleeping bag. Instead of doors the hotel rooms have curtains that you draw to give you and your company privacy. Your luggage is stored in the luggage storage room prior to your overnight stay. There are communal changing rooms, toilets and saunas for women and men in the warm section of Icehotel. A complimentary private changing booth is included when you book a winter suite.

KIRUNA _ ACCOMMODATION (JAN 9-10)

ICEHOTEL 365 - resculpted periodically BC it's at a constant temperature all year

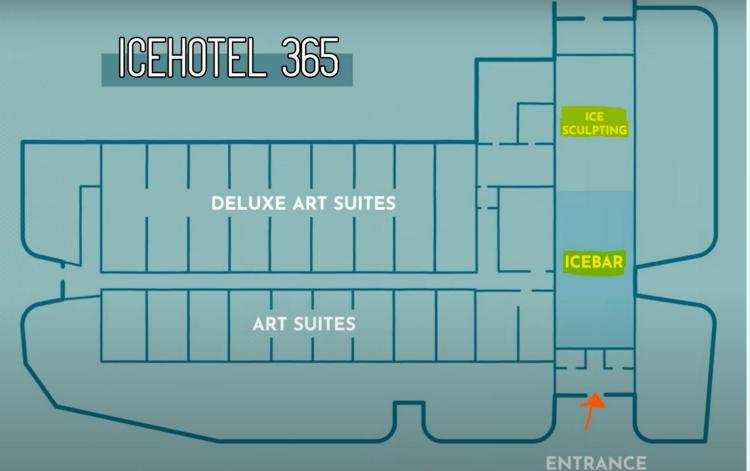
Suites range from 323–430 square feet

9 Deluxe Art Suites

• Each suite has a private bathroom with a shower and toilet, plus a heated "relax" room

11 Art Suites

• Each suite is individually themed and hand carved by artists from around the world

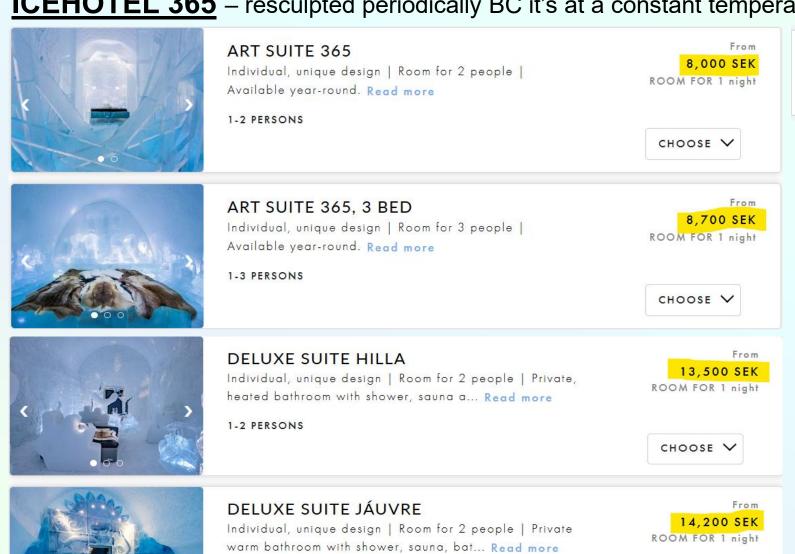






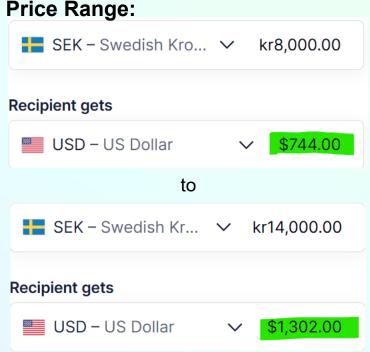
KIRUNA ACCOMMODATION (JAN 9-10)

ICEHOTEL 365 – resculpted periodically BC it's at a constant temperature all year



1-2 PERSONS







CHOOSE V

ESTIMATE OF THE TRIPS TOTAL MAX. COST/PERSON (JAN 2-10)

- FLIGHT: \$1579/person
- ACCOMODATION IVOLA Kakslauttanen Arctic Resort: \$20664/ total: 10ppl = \$2067/ person
- ACCTIVITIES in IVOLA
 - (2hrs) Aurora Hunting with Horse sleigh (incl. wine) \$476/2ppl : 2 = \$238/ person or Horseback riding \$140/ person
 - Icebreaker Sampo = Ship (15hrs): \$1565/ person
 - Husky Safari (2hrs): \$298
 - Downhill Skiing&Snowboarding (24hr Ski&Boot Rental): \$74/ person
 - Ice Karting (maybe \$225 ???)

Max Total: \$2,400/ person

- TRANSPORTATION (Taxi) Arctic Resort to Ivola Airport: around \$20/ person
- TRANSPORTATION (Rental Car) Ivola Airport to Kiruna Airport: \$2294/ total: 10ppl = \$230/ person
- TRANSPORTATION (Taxi) Kiruna Airport to Camp Ripant: around \$20/ person
- ACCOMODATION KIRUNA

 Camp Ripant (incl. Breakfast): \$478/ total: 10ppl = \$48/ person
- ACCTIVITIES in KIRUNA
 - Northern Lights Snow Mobile Tour: \$157/ person
 - Nutti Sami Siida Cultural Retreat: \$24/ person

Max Total: \$181/ person

- TRANSPORTATION (Taxi) Kiruna to IceHotel: max\$120/ total: 10ppl = \$12/ person
- ACCOMODATION IVOLA IceHotel: max\$4000/ total: 10ppl = \$400/ person

TOTAL TRAVEL COST: \$6,957/ person not including Restaurant expenses