



Spitsbergen

Triplog - October 10-17, 2011

SV Noorderlicht



The Noorderlicht was originally built in 1910, in Flensburg. For most of her life she served as a light vessel on the Baltic. Then, in 1991 the present owners purchased the ship and re-rigged and re-fitted her thoroughly, according to the rules of 'Register Holland'. Noorderlicht is 46 metres long and 6.5 metres breadth, a well-balanced, two-masted schooner rig that is able to sail all seas.

With:

Captain: Gert Ritzema (Netherlands)
First mate: Jeroen van Zal (Netherlands)
Second mate: Peter Dijkstra (Netherlands)
Chef: Sonja van Berkel (Netherlands)
Expedition leader: Rolf Stange (Germany)
Additional Polar bear safety: Kristina Hochauf (Germany)
Astronomer: Lothar Kurze (Germany)

And 18 brave polar explorers from Denmark, France, Germany, The Netherlands, Poland, Spain (including Catalonia), The United Kingdom (including Scotland) and the USA

October 10, 2011 – Longyearbyen

GPS Noon Position: 78°13'N and 15°25'E. Air temperature: -3°C.

Longyearbyen is one of the World's most northernmost settlements, with only 2000 inhabitants. Some of us had already spent some days here, the other ones came with the scheduled flight today and where met at the airport by Rolf, our expedition leader and guide, before we went on the bus to town, where we still had a little bit of time to visit the museum or do some shopping before we went to the harbour to the *Noorderlicht*, the beautiful two-mast sailing ship that was going to be our home for the next seven days.

Once we had all moved into our cabins, we were officially welcomed, introduced to the crew and given some important safety instructions which we hoped we would never have to practice beyond the little drill that was soon to follow. With favourable winds blowing from the east, we could soon hoist the sails and sailed quietly into Isfjord, enjoying this beautiful way of travelling that has such a long tradition here in Spitsbergen, where the first ships under sail appeared in 1596, with the famous Dutch explorer Willem Barentsz.

A beautiful full moon appear above the blue, partly snow-covered mountains, and while we were enjoying dinner, we set course for Trygghamna near the west coast. Movements of the ship were mostly rather gently, and sacrifices to king Neptune were heard of only in a few cases.



Longyearbyen - goodbye to zivilisation for a week's time.

October 11, 2011 – Isfjord: Trygghamna

Position at 0800: 78°14.8'N / 13°50'E. Overcast, strong westerly breeze, -3°C, 999 hPa.

Sunrise at the above position: 08.43, sunset 17.00, sun above horizon: 06 hours 17 min

We awoke after a calm night at anchor and enjoyed a hearty breakfast, before getting down to business with a detailed introduction into Zodiac operations, safety measures and environmental regulations before venturing on our first landing. We stepped ashore on the east side of Trygghamna, under a range of jagged, snow-covered mountains, to start a first, easy walk along the beach, getting used to the arctic environment and our equipment while enjoying the great scenery and the fantastic colours. A more careful look revealed plenty of fossils, which crowded this area when it was a shallow tropical sea near the equator in the Permian, more than 250 million years ago.

A curious seal appeared for some moments and some reindeer were looking for something to chew on higher up on the slopes, and finally the *Noorderlicht* appeared near the beach and Peter came with the Zodiac to pick us up again.

We did not move far during lunch, but stayed in Trygghamna to make a second landing there after lunch, this time on



First impressions from Trygghamna:

Zodiac transfer ashore – spine of a marine reptile that died more than 200 million years ago.

Reindeer antler – Noorderlicht in Trygghamna, with Alkhornet in the background.

the western shore near Alkhornet. Rolf explained that the rather modern hut belonged to the Sysselmannen and cannot be used by anyone else, not even in case of emergency (unless you happen to have the key) and from a small moraine hill we had good views over large parts of Isfjord, from Tempelfjorden over Longyearbyen and Colesbukta to Barentsburg, and when we had reached the tundra plain south of Alkhornet, we could also see Isfjord Radio/Kapp Linné on the southern side of the entrance to Isfjord.

Even now in October, the tundra seemed exceptionally green, which is due to fertilization from the nearby birdcliff (now off course deserted) at Alkhornet. Two reindeer were grazing in the optically warm light of the evening sun (well, actually it was not even 15.30 and anything but warm), and we passed some well-developed ice wedges (permafrost phenomena) before we returned to the landing beach. Getting into the Zodiac and off the beach turned out to be a bit of a wet operation as the wind was standing on the shore, but Rolf, Lothar and Peter managed this without further problems.

Soon, the sails went up into the cold air and we moved silently across Isfjorden, passing Kapp Linné in evening light, before we had to start the engine because there was not enough wind for an agreeably efficient journey down south to Bellsund, our destination for tomorrow.

After dinner, we made use of the calm condition by assembling for Rolf's presentation about the geology of Spitsbergen in the *Noorderlicht* lecture hall alias the lower messroom.



Walk from Trygghamna to Alkhorneret – reindeer on autumn tundra.

Name-giving scenery of Spitsbergen – boarding in light surf.

October 12, 2011 – Bellsund. Recherchefjord: Recherchebreen, Van Keulenfjord: Ahlstrandhalvøya

Position at 0800: 77°29,8'N / 14°34,5'E. Mostly clear, calm, -3°C 1001 hPa.

Sunrise at the above position: 08.40, sunset 16.56. Sun above horizon: 08 hours 14 min

The anchor had gone down around midnight in Recherchefjord, the southernmost and smallest of the three branches of Bellsund, so we had enjoyed a calm night and good sound sleep.

Even before breakfast, in the very first rays of the new rising sun, Rolf spotted a Polar bear on shore – a small, light-grey triangle lying on the ground, and it took a while for most of us to see it, but there it was, our very first bear, a real one out there in the arctic wilderness! Quite delighted, we went for breakfast. Rolf announced that Polar bears would usually get up at 9 a.m., and indeed, with a delay of just two minutes our friend stood up and started to walk around! Talk about luck, now it was very evident that it was a bear, and very much alive indeed. After some metres, it started to eat something that was lying on the tundra; it could have been a reindeer. Anyway, our bear looked rather healthy and



Polar bear under Observatoriefjellet, Recherchefjord



Snow, ice and light: gallery with impressions from Recherchebreen.

well-fed.

Much to our annoyance, it was occupying the very area that we had in mind for a morning walk, but we were flexible and moved around the corner, to the eastern side of Observatoriefjellet, to land near Recherchebreen. This was not the largest of Spitsbergen's many glaciers, but certainly amongst the most beautiful ones. Its glacier front was situated behind a large lagoon, to which we could easily walk across a snow-covered outwash plain. The lagoon turned out to be almost completely frozen over. A lot of small pieces of glacier ice („bergy bits“ and „growlers“, as the whalers would have called them) that had been drifting in the water were now caught in the young ice. The morning sun was just appearing above the glacier and cast really beautiful light over the whole scenery. Stunning! It was definitely a matter of being at the right time at the right place.

After having a look at the strong tidal current in the channel that connected the lagoon to the fjord, we went back on board for lunch.

While enjoying another one of Sonja's hearty meals, we repositioned a bit to the northeast into Van Keulenfjord, where we soon went ashore again in a small bay near a hut. The hut, which was called Bamsebu („bear house“), was quite large and solid, it had once been built by Norwegian hunters and was definitely situated in one of the most beautiful areas one could imagine. It was on the eastern side of a low-lying peninsula called Ahlstrandhalvøya, which was under



Ahlstrandhalvøya: old hut Bamsebu and Beluga bones.

Sunset behind Recherchefjord and old whale hunting boats.

the steep slopes of the jagged mountain Berzeliustinden, more than 1000 metres high.

On the beach near the hut, we found large amounts of Beluga bones, silent and sad evidence of Beluga hunting in the early 20th century.

We started walking across Ahlstrandhalvøya to the outer point of the peninsula, near which the *Noorderlicht* had meanwhile dropped anchor. Crossing some small streams which now appeared in shape of clear, slippery ice covering stones and mosses, we reached a ridge from which we had some splendid views over several small peninsulas and islands situated near Ahlstrandhalvøya, as well as the overall scenery which was just stunning. The mountains displayed very nice structures that showed increasing geological deformation from the east to the west, towards the coast, dating back to the separation from once-neighbouring Greenland many tens of million years ago.

We passed by three old wooden boats that had once been used in the business of Beluga hunting, before we were picked up after a very nice, nearly 3 hours long afternoon walk; exactly at the right time because now the light really started to disappear. We repositioned a few miles across the fjord to a nicely protected bay named Van Keulenhamna.

Dinner was followed by an introduction to the mystery of the Aurora borealis by our fellow astronomer Lothar Kurze.

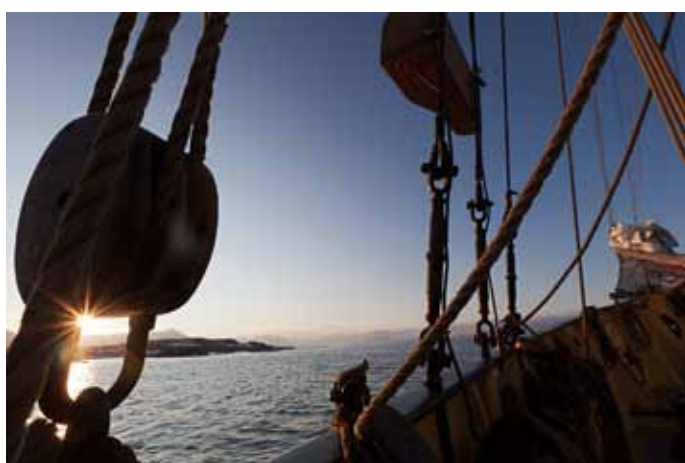
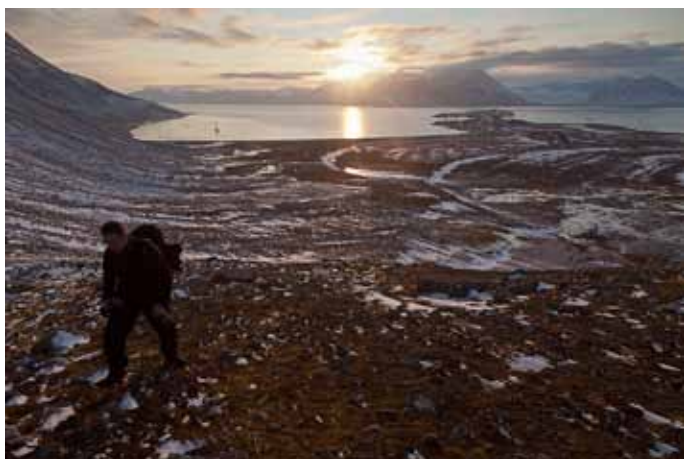
October 13, 2011 – Bellsund. Van Keulenfjord: Forsbladodden. Midterhukhamna

Position at 0800: 77°37,4'N / 14°53,8'E. Mostly clear, calm, -2°C, 1010 hPa.

Sunrise at the above position: 08.47, sunset 16.46, sun above horizon: 07 hours 59 min

After a delightfully calm night at anchor and a hearty breakfast, we went ashore on the peninsula called Forsbladodden, just east of Van Keulenhamna. The scenery was completely dominated by the dramatic geology: hard layers of Permian limestones and cherts were tilted into a steeply dipping position. An outcrop provided not only insight into the intricate details of Earth history, but also a nice opportunity to look for fossils – and even collect some, as this was not part of any protected area.

In lovely light conditions of the low sun, we went on across the plain of Forsbladodden, the surface of which was made up of a series of fossil beach ridges. Rolf told the story of post-glacial land uplift that was the key to understand the beach ridges, and going a step further, he included the episode of relative land rise of the climatic optimum of the post-glacial period (Holocene), which was the reason for the small fossil coastal cliff, about 6000-8000 years old, the we then climbed up.



Scenery of Bellsund and Van Keulenffjord in October light.

The real ascent followed then to reach the almost (well, just almost) breathtaking altitude of 142 metres, which provided a view over Van Keulenffjord that can only be described as stunning, especially given the dramatic light conditions. From there, we walked back to board the *Noorderlicht* again for lunch.

We repositioned just a few miles further northeastwards to drop anchor again in Midterhukhamna. The small hunting hut dating back to 1898 was not accessible anymore since 2010, thanks to Norwegian legislation that was rather difficult to understand – after having survived visitors for more than 100 years, it would have survived us as well, but so we left it alone. This afternoon, we had the pleasure of having the choice between two different options, as our first mate Jeroen offered a hike up to the western ridge of Midterhukfjellet called Gåskilen (approximate translation: „Goose ridge“) to an altitude of just under 300 metres, from where splendid views over Bellsund and its northern branch Van Mijenfjord could be obtained. Rolf went with the other group nearer sea level at first to the rather spectacular, wave-sculptured coast south of our landing site and then to the outer point west of Gåskilen, from where we had similar views as the other group, just from a lower elevation.

In mid-afternoon (it felt rather like the evening, considering the light conditions) we were all gathered again on board the *Noorderlicht*, where Rolf soon offered a presentation about polar bears.

The evening saw most of us either engaged with conversation in the bar or writing postcards, as this was a rather rare opportunity of doing so in some length – even despite of the short days, this was a rather busy trip indeed!



Midterhukhamna in Bellsund: Boot changing session – afternoon light over Bellsund.

Lichens and deformed veins in basement rocks – view towards Ingeborgfjellet.

October 14, 2011 – Bellsund. Van Mijenfjord: Mariasundet, Fridtjovhamna.

Position at 0800: 77°38,3'N / 14°47'E. Overcast, fresh easterly breeze, -2°C, 1013 hPa.

Sunrise at the above position: 08.56, sunset 16.38, sun above horizon: 07 hours 42 min

As the wind had picked up considerably during the night and the latest weather forecast promised even stronger winds for the next night, we decided to go for one landing today rather than two in order to make some of the distance to Isfjord during the afternoon. After breakfast, the anchor went up and we sailed around Midterhuken and through Mariasundet, a short, narrow passage between Midterhuken and Akseløya – a brilliant piece of navigation by Captain Gert and his second mate Peter and a dramatic bit of scenery, with beautifully folded strata exposed on the steep slopes of Midterhukfjellet, optically even enhanced by a thin curtain of fresh snow.

We then followed the eastern side of Akseløya northwards, gently moving in the waves that came out of Van Mijenfjord. Shortly after 10 a.m. we entered Fridtjovhamna, a well-sheltered bay on the northern side of Van Mijenfjord, and got ready for a landing. Soon we found ourselves on a dark beach under a moraine ridge and started to walk up the



Mariasundet, between Akseløya and Midterhukfjellet: Fascinating scenery and an interesting bit of navigation.



View towards Fridtjovbreen – gusts of 20 m/s and more in Fridtjovhamna.

ridge. The wind was picking up, but so far the views of the glacier that calved into Fridtjovhamna, aptly named Fridtjovbreen (-glacier) and the surrounding alpine scenery were stunning, pretty rough and wild in this kind of weather and atmosphere.

We moved up to an altitude of near 120 metres to enjoy the view from an elevated position, but it was quite obvious that going any further wouldn't make much sense today, as it was starting to get difficult even to stand and walk on this rather exposed ridge, so we headed back to the landing site. Meanwhile, the crew had lifted the anchor to manoeuvre the *Noorderlicht* a bit closer to the coast, so getting back on board was a swift operation and less wet than we had feared.

After 2 ½ days, it was time to say goodbye to the beautiful Bellsund area; any further landings were out of question under these conditions, so we set the foresail and moved into Akselsundet, the strait on the northern side of Akseløya, and out towards the west. Winds and waves had picked up quite a bit, so the movement of the ship was occasionally considerable and we secured everything and ourselves as much as possible for the journey up north, to Isfjord.

According to the forecast, it should have been a fresh breeze, but it blew up to a veritable gale when we left Bellsund and turned north. At times, we made about 11 knots, only using the foresail! The wind had reached a force 8, in gales even 9, on the Beaufort scale.



Sailing from Bellsund to Isfjord with winds up to force 8 and even up to 9 on the Beaufort scale.



Noorderlicht alongside in Barentsburg – Hello Mr Lenin!

The benefit was the good speed that we made on the passage north, and as we kept at least reasonable speed once we had turned into Isfjord, we went alongside at the pier of Barentsburg as early as 8 p.m. and could enjoy a calm dinner. Most of us went for a short city walk in the evening, and the atmosphere of this Russian mining settlement in darkness and snowfall was in its on way quite impressive.

October 15, 2011 – Barentsburg, Isfjord.

Position at 0800: 78°04'N / 14°09'E. Overcast, snowfall, strong southerly breeze, 0°C, 996 hPa.

Sunrise at the above position: 09.12, sunset 16.26, sun above horizon: 07 hours 14 min

The night had been without movement, but as the wind had been picking up again, good old *Noorderlicht* had indeed developed surprising musical talents to entertain us longer than we were actually able to appreciate it.

As the weather outside was rather unpleasant, Rolf gave as a slightly more extensive introduction to Barentsburg, including some general history of Spitsbergen and the legal framework provided by the 1920 Spitsbergen Treaty (usually



Impressions from a visit to another world: Barentsburg. Getting off the ship was the greatest challenge – memories from past times – warming up again in the bar – the biggest (well, the only) flower we have seen during the whole trip.

known as “Svalbard Treaty”, but the original text does not know the term Svalbard) before we headed up the long wooden staircase to downtown Barentsburg. We went for a walk around Barentsburg and stopped as Rolf offered explanations to give some insight into this rather unusual community – a strong contrast to everything else we had experienced on this trip and certainly a strong visual experience of a different kind. Luckily, we found someone to open the hotel bar for us – nobody seemed to care about re-building work going on at the same time – and the museum.

Once we were all assembled again on board for lunch, we departed and set course for Skansbukta in Billefjord, inner Isfjord, as we could not expect any landings to be possible on the northern side of Isfjord. So we hoisted the sails and enjoyed the passage eastwards into Isfjord, old style under sail and with a world disappeared into the dark grey of arctic snowfall around us.



Sailing in the arctic winter.

In the later afternoon, Rolf introduced us to a different season and way of travelling in Spitsbergen by showing slides from a ski voyage to Newton toppen, Spitsbergen's highest mountain. Once at anchor in Gipsvika, the sky started to clear up a little bit, so Lothar made a presentation about the northern sky and then put his telescope up on deck. Clouds kept moving in and out, but we got very clear views of the moon and Jupiter with 3 or 4 of its moons.

October 16, 2011 – Billefjord: Skansbukta. Anservika-Gipsvika.

Position at 0800: 78°31'N/16°00'E. Overcast, strong westerly breeze, -2°C, 999 hPa.

Sunrise at the above position: 09.21, sunset 16.02, sun above horizon: 06 hours 41 min

After a calm night at anchor, we gave the day a relatively early start with a landing at 9 a.m. to get most of the remaining time. An easy walk under the stunning slopes of Skansfjellet took us to the remains of an early 20th century gypsium mine and a Norwegian hut. We had good views of the near-by parts of Isfjord and had a look at some fine outcrops of solid gypsium, as provided by nature and nearly 300 million years old. Up on the slopes, a blue fox was running, trying to catch some ptarmigan. Passing by an old, wooden boat once used to ship the gypsium out to larger ships, we went back to the landing site. Most of the country was now covered with a more or less thin snow cover, and the low sun cast beautiful, calm light over the whole scenery.



Remains of an old gypsium mine in Skansbukta.

A short passage across the fjord (Billefjord) took us to a new position, where we started our last landing at 1 p.m. in Anservika, a small bay just on the corner that separates Billefjord from Sassenfjord/Tempelfjord. Some reindeer moved slowly about, trying to find something to eat and providing stunning silhouettes against the sun that was just about to disappear behind the mountains on the horizon.

We walked across a stony plain (Gipshuksletta) and went to an old, small hunter's cabin dating back to the early 20th century, before we climbed a little rocky hill and down on the other side, where we were met and picked up by Peter to return to the ship. It was hard to believe, but our arctic adventure had now come to an end, far too soon.



Reindeer in Anservika (Billefjord) – old trapper's hut at Gipsvika (Sassenfjord/Tempelfjord).

Back on board, we quickly gathered in the bar to go through's tomorrow's logistics and then proceeded to a presentation where Rolf showed a photographic summary of our journey. Incredible that we had seen all this in such a short time! We had been lucky with the weather, resulting in plenty of good photo opportunities.

Around 6 p.m. we arrived in the little harbour of Longyearbyen. The final event of the day was *Gerd's dinner*, indeed a remarkable deviation from *Noorderlicht's* usual meal operations.

October 17, 2011 – Longyearbyen

Position at 0800: 78°13'N/15°25'E. Overcast, strong westerly breeze, -3°C, 1007 hPa.

Sunrise at the above position: 09.27, sunset 15.59, sun above horizon: 05 hours 32 min

It was hard to say goodbye to the *Noorderlicht*, that had been our home during an exciting week, her crew and our fellow passengers when a bus was ready to take us to Longyearbyen at 0900. There, we had some hours to explore the various excitements including the museum and the cafe, before most of us boarded the airport bus at 1300. It was difficult to believe that within a few hours we should be back to the haze and dazzle of big city life in Oslo and soon elsewhere on earth. Most of us were pretty sure that this would not have been the last time to the far north.

**Thank you very much
for travelling with us!
See you again,
somewhere between the poles!**

This triplog has been written and layouted, complete with map and photos, by Rolf.
It can be downloaded together with the group photo, from: www.Spitsbergen-Svalbard.net

*For more information, please see
www.oceanwide-expeditions.com
www.noorderlicht.nu*

| Lectures, presentations... | | |
|----------------------------|--|--|
| October 11 | Geology of Spitsbergen | Rolf Stange |
| October 12 | Northern lights | Lothar Kurze |
| October 13 | Polar bears | Rolf Stange |
| October 15 | Barentsburg; history and politics of Spitsbergen | Rolf Stange (on board, continued on shore in Barentsburg) |
| October 15 | Introduction to the northern sky | Lothar Kurze |
| October 16 | What have we done? Slideshow of our journey | Rolf Stange |

Further interesting links related to astronomy, provided by Lothar Kurze:

Space weather forecast (including aurora activity and latest images of northern lights):

www.spaceweather.com

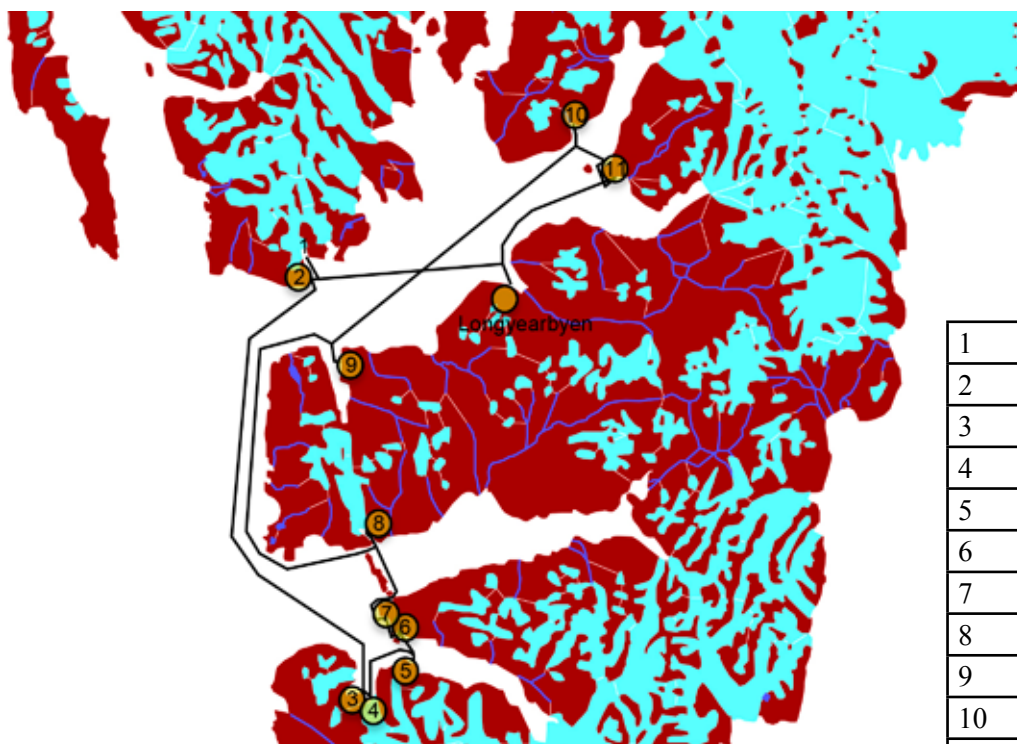
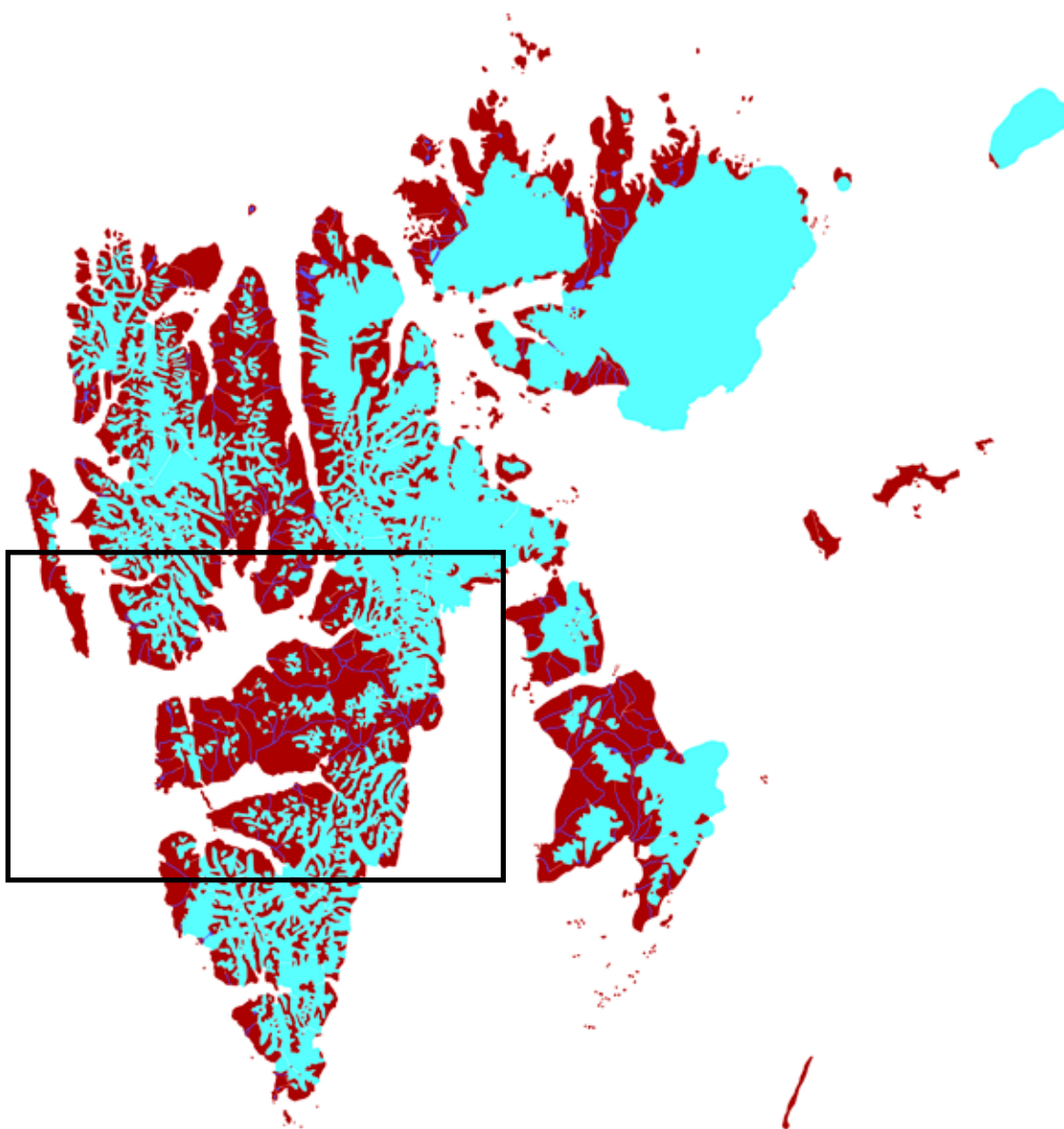
Current aurora activity plot:

<http://www.swpc.noaa.gov/pmap/>

Lothar's Website (German):

www.sternwarte-weinheim.de





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| 1 | Trygghamna |
| 2 | Alkhornet |
| 3 | Recherchefjord |
| 4 | Recherchebreen |
| 5 | Ahlstrandhalvøya |
| 6 | Van Keulenhamna |
| 7 | Midterhukhamna |
| 8 | Fridtjovhamna |
| 9 | Barentsburg |
| 10 | Skansbukta |
| 11 | Anservika-Gipsvika |