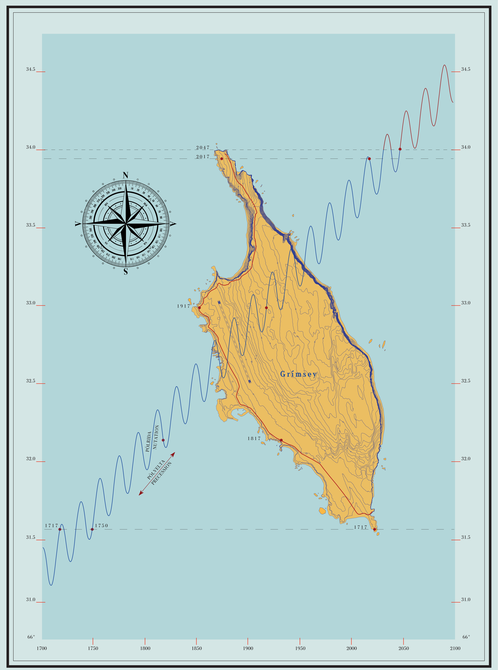
Arctic Coast Way
Norðurstrandarleið

GRÍMSEY



Heimskautsbaugurinn hreyfist sveiflukennt um Grímsey vegna áhrifa pólveltu og pólriðu. Sjá má staðsetningu baugsins um sumarsólstöður 1717, 1817 og 1917 og 2017.

The Arctic Circle wobbles on Grímsey due to polar rotation. The geographic coordinates of the Arctic Circle were registered in 1717, 1817, 1917 and 2017.

HEIMSKAUTS-BAUGAR

heita baugar sem dregnir eru nálægt 66.5° norðlægrar og suðlægrar breiddar. Þeir afmarka nokkurn veginn þau svæði við heimskaut jarðar þar sem sólin getur horfið undir sjónbaug í heilan sólarhring eða lengur að vetri, en getur þá jafnframt verið á lofti heilan sólarhring eða lengur að sumri, þannig að sjá megi miðnætursól.

Til að staðsetja heimskautsbaugana með nákvæmni, verður að gæta þess að breidd þeirra fylgir horninu sem möndull jarðar myndar við jarðbrautarflötinn. Þetta horn tekur hægum breytingum og ýmist vex eða minnkar. Aðalsveiflan, sem kölluð er pólvelta (precession), tekur um 40 þúsund ár, þannig að tíminn sem líður frá lágmarki til hámarks er um það bil 20 þúsund ár. Á síðustu fimm milljón árum hefur hornið mest orðið 68° en minnst 65,5°. Sem stendur vex hornið um 0,01° á hverri öld.

Styttri sveiflur heimskautsbaugsins stafa af svokallaðri pólriðu (nutation) sem tunglið veldur, en sveiflutími hennar er 18,6 ár og sveiflustærðin um það bil 570 metrar. Breiddarmínútan í Grímsey er 1.859 metrar. Árleg meðalhreyfing heimskautsbaugsins er 14½ metri eða 0,0078 bogamínútur. Þótt heimskautsbaugurinn hafi áður fyrr snert nyrsta odda Íslands, gerir hann það ekki lengur. Útreikningar sýna að baugurinn hafi fyrst gengið inn á Grímsey árið 1717 og verið inni á henni frá 1750. Hann hefur færst skrykkjótt norður á við um 1,5 km á öld að meðaltali og mun fara norður fyrir eyjuna árið 2031-2038 og skilja endanlega við hana árið 2047 eða því sem næst. Heimskautsbaugurinn liggur nú þvert yfir svokallaðan Eyjarfót nyrst á eyjunni og þar er listaverkið ORBIS et GLOBUS (Hringur og kúla). Kúlan í verkinu er færð á sumarsólstöðum til samræmis við hreyfingar heimskautsbaugsins. Árið 2047 mun kúlan fylgja heimskautsbaugnum norður af eyjunni.

Hnattstaða norðurodda Grímseyjar: 66°33,973′ N

Hnattstaða suðurodda Grímseyjar: 66° 31,574′ N

Byggt á útreikningum og skrifum Þorsteins Sæmundssonar stjörnufræðings.

Ár Year	Breidd Latitude	Færsla á ári Annual movement	Færsla frá 2017 Movement since 2017
2017	66 33.916	0	0
2018	66 33.888	-52	-52
2019	66 33.851	-69	-121
2020	66 33.807	-82	-203
2021	66 33.762	-83	-286
2022	66 33.728	-64	-350
2023	66 33.705	-42	-392
2024	66 33.694	-21	-413
2025	66 33.698	8	-405
2026	66 33.723	46	-359
2027	66 33.763	74	-285
2028	66 33.811	90	-195
2029	66 33.867	104	-91
2030	66 33.928	113	22
2031	66 33.985	105	127
2032	66 34.029	83	210
2033	66 34.060	58	268
2034	66 34.077	30	298
2035	66 34.074	-6	292
2036	66 34.052	-40	252
2037	66 34.019	-60	192
2038	66 33.980	-74	118
2039	66 33.935	-83	35
2040	66 33.893	-79	-44
2041	66 33.862	-57	-101
2042	66 33.845	-32	-133
2043	66 33.840	9	-124
2044	66 33.851	20	-104
2045	66 33.881	57	-47
2046	66 33.926	84	37
2047	66 33.978	96	133
2048	66 34.035	106	239
2049	66 34.096	112	351
2050	66 34.149	100	451

Hreyfing heimskautsbaugsins í metrum. Útreikningur miðast við mitt sumar. Mínustölur sýna færslu í suðurátt. Rauðar tölur tákna að heimskautsbaugurinn sé ekki inni á eyjunni.

Movement of the Arctic Circle is measured in metres, calculated annually in mid-summer. Minus figures indicate movement southwards. Red figures indicate the location of the Arctic Circle when it is not on the island.

THE ARCTIC AND ANTARCTIC CIRCLES

are virtual lines close to the 66.5° parallel in the Northern and Southern hemispheres. These mark the approximate areas where the sun never rises in winter and never sets in summer for 24 hours or longer. This is where one can see the midnight sun.

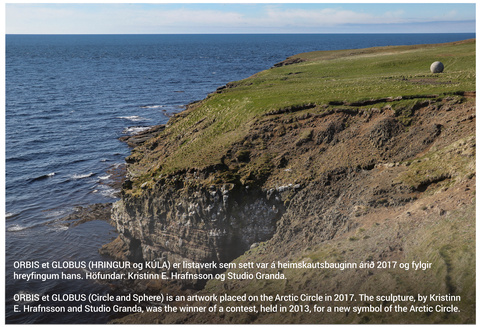
To locate the Arctic Circle with accuracy it is necessary to calculate the latitude in relation to the angle between the earth's axis and the plane of its ecliptic path about the sun. This angle is continually waxing or waning. The movement is called precession and repeats every 40 thousand years or so. Thus, the time between the highest and lowest latitude of the Arctic Circle is in the order of 20 thousand years. During the last 5 million years the highest latitude of the Arctic Circle was 68.0° and lowest 65.5° and presently the angle is waxing about 0.01° each century. A shorter fluctuation of the Arctic Circle, the nutation, is caused by the moon. It has an 18.6 year cycle with a deviation of 570 meters. A latitudinal minute in Grímsey is 1,859 meters and the average annual movement of the Arctic Circle is 14.5 meters or 0.0078 angular minutes. Long ago the Arctic Circle crossed northern Iceland and has since been moving steadily northward at an average pace of 1,5 km a century. Calculations show that it first made landfall in Grímsey in 1717 and has remained consistently over the island since 1750.

Between 2031 and 2038 it will be north of the island returning in 2039 before finally leaving, in a northward direction around 2047.

Thus, the Arctic Circle has shifted from the southernmost tip of Grímsey to the so-called Foot on the northernmost part of the island. There you will find the artwork Orbis et Globus (Ring and Sphere), moved at summer solstice each year in accordance with the wobbles of the Arctic Circle. In 2047 it will be pushed off Grímsey Island and down to the sea.

The geographic coordinates of Grímsey's most northerly point: 66°33'973" N

The geographic coordinates of Grímsey's most southerly point: 66°31'574" N



ORBIS et GLOBUS (HRINGUR og KÚLA) er listaverk sem sett var á heimskautsbauginn árið 2017 og fylgir hreyfingum hans. Höfundar: Kristinn E. Hrafnsson og Studio Granda.

ORBIS et GLOBUS (Circle and Sphere) is an artwork placed on the Arctic Circle in 2017. The sculpture, by Kristinn E. Hrafnsson and Studio Granda, was the winner of a contest, held in 2013, for a new symbol of the Arctic Circle.

Brúin og vegvísarnir eru tákn sem sett var upp árið 2003 og er eitt þekktasta kennileiti eyjarinnar. Hugmyndin var að fólk gæti gengið yfir bauginn á einhvers konar brú.

The bridge and the viewfinders, set up in 2003, are among the best known landmarks in Grímsey. The idea was to enable people to cross the Arctic Circle by a bridge of some kind.

www.visitgrimsey.is

The Arctic Coast Way leaves the much-travelled routes behind and invites you to discover the northern edge of Iceland. Here are about 900 km waiting to be explored, including 21 villages, 5 islands and 6 peninsulas.
The Arctic Coast Way invites you to slow down and unwind and to immerse yourself in the energy of elemental nature, observe outstanding wildlife habitats and experience a different way of life. It connects you to authentic coastal villages and people whose stories and culture are shaped by life on the edge, so close to the Arctic Circle.

ÓMISSANDI / MUST SEE

- Vitinn / Lighthouse
- Brúin og vegvísarnir / The bridge and the viewfinders
- Stuðlabergið / Basalt columns
- Fiske minnismerkið / Fiske memorial
- Aldamótasteinar / Century stones
- Þorpið / Village
- Fuglabjörgin / Bird cliffs
- Hringur og kúla / Orbis et Globus
- Lundinn / Puffin
- Kirkjan / The Church
- Básavíkin / Básavik Bay

HEIMAMENN SEGJA FRÁ

Hvernig ætli sé að alast upp í Grímsey?

Hlustaðu á sögu frá Huldu Signý Gylfadóttur sem er fædd og uppalin í eyjunni.

LOCAL STORY

How is childhood in Grímsey?

Listen to a story from Hulda Signý Gylfadóttir who is born and raised on the island.

TRAVEL GREEN

Please help us to keep Iceland clean!

- The nearest public toilets are by the harbour/airport
- The nearest public recycling bins are by the harbour
- Use a campsite for a sleep-out under the stars. Wild camping is forbidden
- Do not buy bottled water - our tap water is fresh, clean and drinkable
- Do not drive off-road. It is strictly forbidden
- Stay on hiking trails and respect trail limits to protect vegetation, soil and wildlife sites
- Respect restricted natural areas during the bird breeding season
- Do not damage sensitive moss and lichen
- Please stay away from cliff edges. Puffin burrows make the ground loose and unstable.

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