Icelandic Meteorological Office - Climate summary 2013 - Published 21.1. 2014

# The weather in Iceland 2013

## **Climate summary**



Hafnarfjörður: Hvaleyrarholt, 15 December 2013. Photo: Guðrún Pálsdóttir.

The weather in Iceland in 2013 was mainly favorable, however, the spring was harsh in the North and East and the summer was on the dull side in the South and West, with precipitation and cloudiness above average. This was the dullest summer of the new century in this area of the country.

The temperature was unusually high during the first two months but for the rest of the year it was closer to the 1961 - 1990 average, relatively coldest in April when persistent snow cover caused problems in the agriculture in the Northeast. An unusually severe but short cold spell hit during the last days of April and the first days of May and resulted in new May minimum temperature records both for the country as a whole and the inhabited areas as well.

June was very warm in the Northeast and East, but the southern part of the country was beset with clouds and drizzle. In July the gloom continued in the South but it was warm in the Northeast. The last third of the month was warm in most areas and a new maximum temperature record for the highland (more than 450 meters above sea level) was established. The dull weather continued in the South and West during August, but the weather was better in the North and East. Most of September was cold and changeable. In the middle of the month the North and Northeast was hit by an unseasonably early snowstorm which caused livestock loss and infrastructure disruptions.

October was unusually dry in the West, winds were light and there was almost no snow. November was windy and difficult – the first half was cold but a very warm period reigned during the last week or so. December was bad, a severe cold spell hit in the first third and the weather around Christmas was stormy with snow and disruptions in traffic were common.

## Temperature

The year 2013 was warm, the temperature being 0.4 til 1.0°C above the 1961 - 1990 mean. It was relatively warmest in the East, but near the average in the Southwest. Even though the year was warm it was the coldest one of the present century in the Southwest. In the North and East the temperature in 2005 and 2011 was similar as in 2013.

In Reykjavík this was the 18th consecutive year of above-normal temperatures and the 15th in Akureyri in the north.

location	t-mean	dev 1961-1990	rank	total	dev 2003-2012
Reykjavík	4,9	0,6	36	143	-0,6
Stykkishólmur	4,4	0,9	26	168	-0,4
Bolungarvík	3,7	0,8	31	115	-0,4
Bergstaðir	3,5				-0,4
Akureyri	4,1	0,8	35	132	-0,4
Grímsstaðir	1,0	0,5			-0,6
Egilsstaðir	3,8	0,9	19	59	-0,1
Dalatangi	4,5	1,0	17 to 18	75	-0,1
Teigarhorn	4,6	0,9	24 to 25	140	-0,1
Höfn í Hornafirði	5,1				
Fagurhólsmýri	5,2	0,6			-0,4
Stórhöfði	5,2	0,4	44 to 45	137	-0,6
Hveravellir	-0,1	1,0	14 to 16	48	-0,5
Árnes	4,2	0,7	32 to 33	133	-0,5
Eyrarbakki	4,7	0,6	32	122	-0,6
Table legend:					

t-mean: Annual mean temperature in 2013

rank: The rank in a list of annual temperatures from the start of instrumental observations, ordered from the highest to the lowest dev 1961-1990: Temperature deviation relative to the 1961 - 1990 mean dev 2003-2012: Temperature deviation relative to 2003 - 2012



The temperature deviations were very large in January and February, April was cold, but June warm - especially in Akureyri (red bar).

The highest maximum temperature of the year was measured in Ásbyrgi in the Northeast on 21 July, 26.4°C. The lowest minimum was measured at Mývatn, also in the Northeast, on 6 December, -31.0°C. This is the lowest temperature measured in Iceland since 1998.

The highest maximum temperature in Reykjavík was measured on 27 July, 20.2°C and in Akureyri the maximum was 23.7°C on 10 July.

The lowest minimum temperature in Reykjavík was -12.8°C on 5 December, being the lowest minimum since 2008. In Akureyri the lowest minimum of the year was -16.0°C measured on 6 December.

## Precipitation

The total precipitation was above the long-term average in the country. Precipitation in January, February and September was heavy in most of the country. The summer was wet in the South and West and it was wet in the Northeast and East in September, October and December. October was particularly dry in the West.

The total precipitation measured in Reykjavík was 838 mm, about 5 percent above the 1961 - 1990 normal. In Akureyri the total precipitation was 597 mm, about 20 percent above the normal. This is the 12th consecutive year with above-normal precipitation in Akureyri.

May, September, October and December were very wet in Akureyri, but it was dry in February, June and August. In Reykjavík the precipitation was well above the normal during seven months of the year. October was very dry.



The summer (June to August) was unusually dry in the easternmost areas of the country. At Dalatangi it was the second driest on record (beginning in 1938).

The largest 24-hr precipitation total measured in the year 2013 at a manned station was 154.1 mm on 26 February at Skaftafell in the Southeast. The following day, the precipitation was 153.4 mm – a total of 307.5 mm in 48 hours. At the automatic station at Kvísker in the same area the highest 24-hour precipitation total was 176.3 mm, but the two day total was not quite as high as in Skaftafell.

The number of days with precipitation measuring 1.0 mm or more was 161 in Reykjavík, 13 days above the average. In Akureyri such days were 112, 9 days above average.

## Snow

There was not much snow in Reykjavík during the winter of 2012 to 2013 (September 2012 to May 2013). Snow covered the ground completely only on 24 days, 41 fewer than on the average 1971-2000. There was much more snow in the Northeast. Snow covered the ground completely on 129 days during this winter in Akureyri, 11 above the average.

During the whole of 2013 snow covered the ground for 42 days in Reykjavík, 23 below the average. In Akureyri the snow covered the ground during 119 days, 2 days above the average.

The greatest snow depth measured in the country was 171 cm, at Skeiðsfossvirkjun in the North on 16, 17 and 26 April.

## **Bright sunshine**

The total number of hours with bright sunshine in Reykjavík was 1350, 82 hours above the mean of 1961 - 1990. March and April were unusually sunny but during all of the months June to September the sunshine was below average. The annual number of sunshine hours in Reykjavík has now been above the 1961 to 1990 average for more than ten years.

In Akureyri the number of bright sunshine hours was slightly below the average (32 hours). June was especially sunny, but in May, July and August the sunshine was less than the long term average.

#### **Moss graphics**

Hafursey, South Iceland: Skálarfjall and Mosaland seen from Léreftshöfði (Selfjall). The black formations in the moss are called nornahringir (witches' circles), caused by fungi threads. Off track driving is forbidden; the car is on a narrow path which cannot be seen from this angle. Photo: Njáll Fannar Reynisson, 5th September 2013 at 15:00.

## Sea level pressure

The average sea level pressure in Reykjavík was 1004.9 hPa. This is 1.0 hPa below the 1961 - 1990 average. The pressure was unusually high in March and unusually low in December, but there was no new absolute monthly deviation record.

The highest sea level pressure of the year was measured at the station Fontur on the northeast tip of the country on 23 March, 1038.7 hPa. The lowest pressure of the year was measured at the station Dalatangi on the eastern coast 19 December, 942.6 hPa.

## Wind speed

The aggregate wind speed of the country was below the average during the first four months of the year as well as in June, July and October. August, November and December were windy.

The country was hit by a few bad wind- and/or snowstorms. The most extensive were: An east and northeasterly storm during 26 to 28 January, a northeasterly storm during 4 to 7 March, a northerly storm during 15 to 16 September and a northerly storm on 24 and 25 December.

The January storm caused moderate wind damage in the coastal districts of the North, communication was severely affected. The March storm was accompanied by a severe snowstorm which brought a halt to the traffic in all of the country. The last day of the snowstorm in the South and Southwest was accompanied by an unusual occurrence of blown ash from the volcanic eruptions in 2010 and 2011. The snow that was deposited during this part of the storm was very gray all over the southern and southwestern areas of the country.



The northerly wind- and snowstorm in September caused loss of livestock in the Northeast, but not as much loss as in a similar storm in September 2012. There were power grid breaks as well, but also less widespread than in the year before. During the snowstorm there were traffic disruptions in the northeastern parts of the country.

The last third of December was very windy and the wind culminated in a heavy snowstorm on 24 and 25 December that caused traffic problems and power outages in many parts of the country.

## Wind direction (vector)

The wind observations at the synoptic stations are decomposed to an easterly (positive) and northerly (positive) components and averages calculated and compared to the 1961 - 1990 mean. The easterly wind was more persisting in January and March than the average, but westerly winds in August, September and November. The northerly wind component was above average in March, April, October and December, but the southerly in January, February, June, August and November.

## A short overview of the individual months

### January

The weather was favorable except for a few days in the last week of the month when a snowstorm hit most of the northern and eastern parts of the country. January was very warm and among the ten warmest since the start of measurements in the 19th century. It was the warmest January in Reykjavík since 1987. The precipitation was above normal except for a few stations in the North and West. There was much snow in the North and Northeast.

#### February

A very warm month, the second to fourth warmest since the beginning of registrations in the 19th century. There was heavy precipitation in the South and at a few stations it was the wettest February since the beginning of precipitation measurements. There was considerable river flooding in the South by the end of the month, caused both by heavy rain and snowmelt in the very warm weather, but the damages were minor.

#### March

The weather was rather favorable except for a bad snowstorm and a cold spell early in the month that culminated on the 6th. After that, winds were mostly light and the precipitation was light. The sea level pressure was unusually high, the average of the month being the highest in March since 1962.

### April

This was a cold month, especially in the northeastern inland. The first four days were warm, but the rest of the month cold. There was considerable snow in the Northeast and East and in the northern part of the Vestfirðir peninsula. The precipitation was below average in most areas. The southwestern part was unusually sunny.

#### May

Except for the first few days, which were unusually cold, the weather in May was close to the average. The cold was record-breaking and brought the lowest minimum temperature ever recorded in May in Iceland, -21.7°C, at the glacier Brúarjökull in the eastern inland. There was also a new minimum record in inhabited areas when the temperature fell to -17.6°C at Grímsstaðir farm in the Northeast. There was still much snow persisting on ground for most of the month at the northern coast and in the northeastern inland.

#### June

June was a warm month and the weather was favorable except in the Southwest where is was dull and wet. In the North and East the average temperature was among the 4 to 6 warmest months of June ever registered. It was the warmest June in Akureyri since 1953.

#### July

The weather was wet and unfavorable in the South and West for the greater part of the month, but warm and good in the North and East. The last third was warm and favorable in most areas. During that period it was particularly warm in the highlands and the maximum temperature record of the highlands (above 450 m) was exceeded when the temperature reached 25.9°C at the station Veiðivatnahraun (647 m a.s.l.).

#### August

The unfavorable summer weather continued in the South and West with persistent precipitation and dull weather. The weather was good in the North and East.

#### September

The temperature was close to the 1961 - 1990 mean. The weather was wet. A heavy snowstorm hit the North and East by the middle of the month, causing loss of livestock and infrastructure disturbances for a few days.

#### October

This was a very dry month in the Southwest and among the driest ever recorded in that area. However, the precipitation was above the normal in the East. Winds were mostly light and there was not much snow.

#### November

The weather was very disturbed in November. The first part of the month was cold but the last week was warm. The precipitation was above the normal in most of the country.

#### December

The disturbed weather of November continued. There was a considerable cold spell from the 4th to the 8th, but later the temperature was close to the average. The precipitation was below the normal in the Southwest but far above the normal in the East. There was a bad snowstorm at Christmas causing traffic disruption and power outages in many parts of the country. The bad weather continued to the end of the year in the Northwest.