

# **MET** info

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## The weather in Norway

Climatological monthly overview August 2024

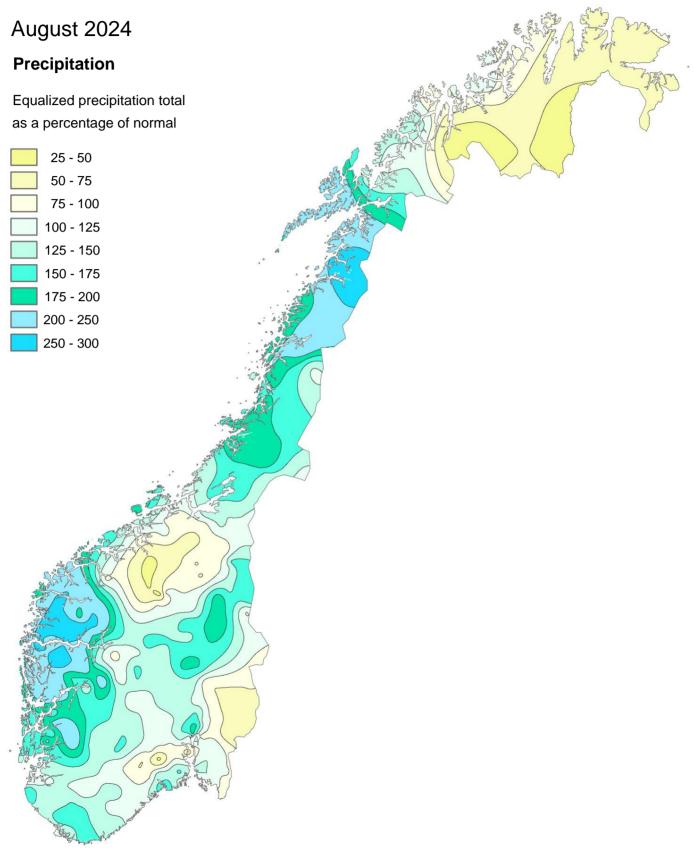
Lars Grinde, Jostein Mamen, Ketil Tunheim and Signe Aaboe



Bø in Vesterålen on August 6. Photo: Jan-Helge Andersen

# Meteorologisk

# Climatological monthly overview

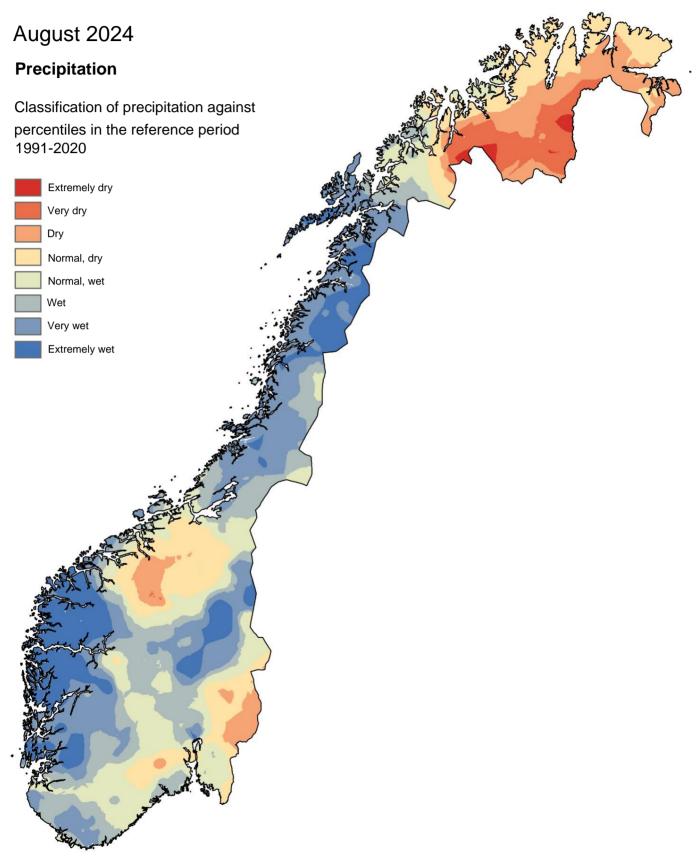


The normal period is 1991 - 2020

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# Climatological monthly overview



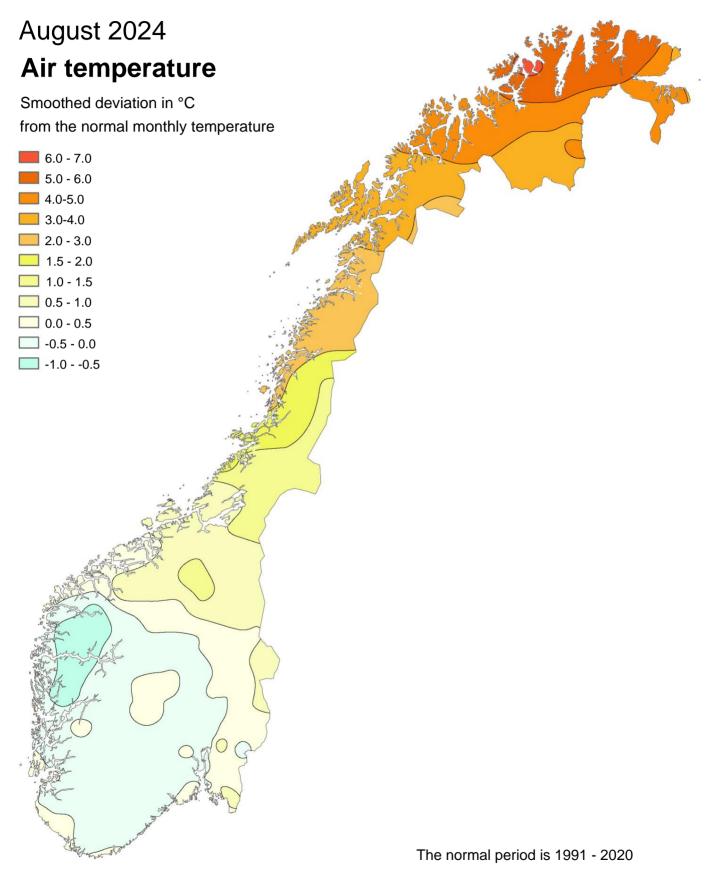
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## Climatological monthly overview

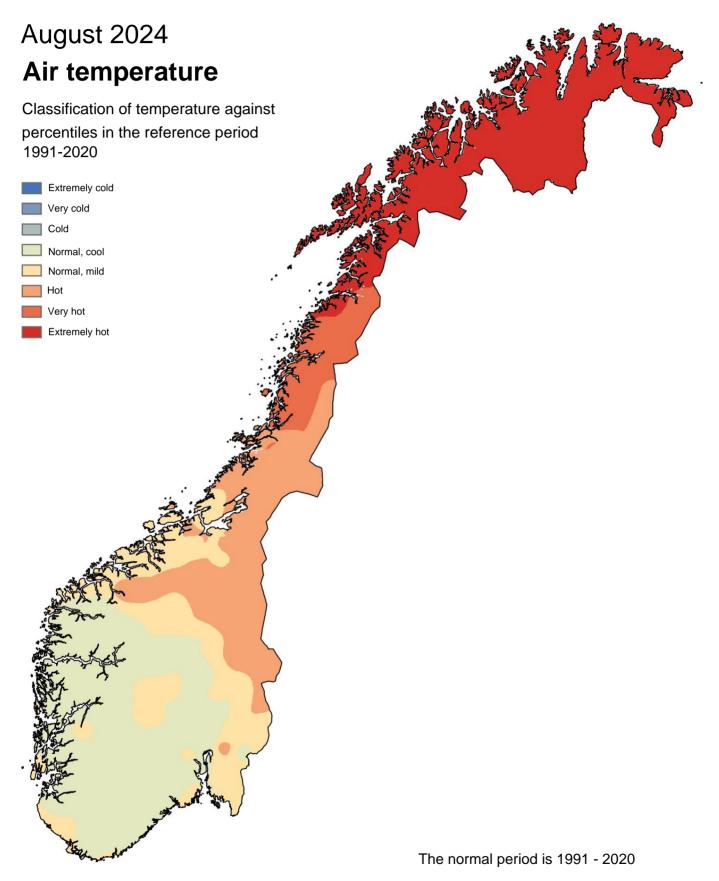


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# August 2024: record hot in Troms and Finnmark, record wet in Western Norway

The classification of precipitation in southern Norway in August varied between "Extremely wet" in large parts of Western Norway, but also smaller areas in the north of Eastern Norway, to "Dry" in parts of Møre and Romsdal and the East Afjelske. In Northern Norway, the month varied from "Extremely wet" areas in Nordland to "Extremely dry" areas in the interior of Troms and Finnmark. For the whole country seen as a whole, 30% more rainfall than normal was recorded. In northern Norway, August was "Extremely warm" in Finnmark, Troms and the northern part of Nordland, and mostly "Very warm" otherwise. In southern Norway, the month was mainly on the cold side of normal, but in parts of Møre and Romsdal, Trøndelag and north-eastern areas of østafjells, the month was "Warm". The national temperature was 1.5 °C above normal.

### Air temperature

In northern Norway, August was "Extremely warm" in Finnmark, Troms and the northern part of Nordland, and mostly "Very warm" otherwise. In southern Norway, the month was mainly on the cold side of normal, but in parts of Møre and Romsdal, Trøndelag and north-eastern areas of østafjells, the month was "Warm". The national temperature was 1.5 °C above normal, and the month is the 7th warmest August month recorded in a series of measurements going back to 1901. The warmest is 2002 with a deviation of 2.8 °C above normal, while 1907 is coldest with 3.3 °C below normal. The deviations in August this year ranged from 4-6 °C above normal at a number of weather stations in Finnmark and Troms, to around 1 °C below normal at a couple of stations in Vestland.

The hottest stations were

- 27500 Færder lighthouse (Vestfold) 17.6 °C (0.1 °C above normal)
- 17000 Strømtangen lighthouse (Fredrikstad, Østfold) 17.5 °C (0.2 °C above normal)
- 29950 Svenner lighthouse (Larvik, Vestfold) 17.3 °C (0.2 °C above normal)

The coldest stations were

- 15270 Juvvasshøe (Lom, Innlandet, 1894 masl) and 31970 Gaustatoppen (Tinn, Telemark, 1804 masl) 4.3 °C (equal to normal and 0.3 °C below normal, respectively)
- 15262 Juvflye Mimisbrunnr climate park (Lom, Innlandet, 1844 m above sea level) 4.7 °C (0.1 °C below normal)
- 55425 Spørteggbu (Luster, Vestland, 1566 m above sea level) 5.0 °C (0.4 °C below normal)

The highest maximum temperature was 28.5 °C, and was recorded on the 14th at 69100 Værnes (Stjørdal, Trøndelag). The lowest minimum temperature was -2.1 °C, and was recorded on the 1st at 54710 Filefjell - Kyrkjestølane (Vang, Inlandet).

The two counties of Troms and Finnmark recorded the warmest month of August, respectively 3.9 °C and 4.7 °C above normal. The old records were respectively 2.4 °C above normal from 1930 and 3.3 °C above normal from 1937. Nordland county recorded the 6th warmest August month with 2.4 °C above normal.

Here, August 1969 is the warmest with 2.9 °C above normal. The region of Northern Norway thus also had the warmest August on record with 3.8 °C above normal. The old record was a deviation of +2.7 °C from 1937.

Around 60 records were set for high monthly temperature, most of them in northern Norway and on Svalbard. Among these, the following stations have at least 50 years of measurements: Bodø (start in 1946), Skrova lighthouse (1931), Andøya (1958), Bardufoss (1941), Tromsø (1920), Torsvåg lighthouse (1934), Nordstraum in Kvænangen (1965) ), Alta airport (1964), Kautokeino (1889), Fruholmen lighthouse (1954), Banak (1957), Slettnes lighthouse (1925), Cuovddatmohkki (1966), Makkaur lighthouse (1928), Vardø (1829, continuous series since 1840), Kirkenes airport (1957), Bjørnøya (1922), Hopen (1946), Svalbard airport (1975), Ny -Ålesund (1974) and Jan Mayen (1921).

Four records were also set for maximum temperature. See the record table at the back of the report.

#### Precipitation

The classification in southern Norway varied between "Extremely wet" in large parts of Western Norway, but also smaller areas in the north of Eastern Norway, to "Dry" in parts of Møre and Romsdal and the East Afjelske. In Northern Norway, the month varied from "Extremely wet" areas in parts of Nordland to "Extremely dry" areas in the interior of Troms and Finnmark. For the whole country seen as a whole, 30% more rainfall than normal was recorded. The month was the 7th wettest August month in the measurement series that goes back to 1901. In this series, 1951 is the wettest with 50% more precipitation than normal, while 1937 is the driest with 60% less precipitation than normal.

The wettest stations were

- 50865 Gullfjellet (Bergen, Vestland) 757.9 mm (120% more precipitation than normal)
- 52930 Brekke in Sogn (Gulen, Vestland) 635.8 mm (148% more precipitation than normal)
- 56520 Hovlandsdal (Fjaler, Vestland) 632.2 mm (164% more precipitation than normal)

The driest stations were

- 61630 Bjorli (Lesja, Inlandet) 17.0 mm (74% less precipitation than normal)
- 91380 Skibotn II (Storfjord, Troms) 17.6 mm (63% less precipitation than normal)
- 94680 Honningsvåg Airport (Nordkapp, Finnmark) 19.7 mm (no normal yet)

The highest daily rainfall was 89.2 mm, and was recorded on 10 August at 50351 Samnanger II (Vestland).

The region of Vestlandet recorded the second wettest August month with 75% more rainfall than normal, beaten only by 1929 with 85% above normal.

The wettest weather station, Gullfjellet, received the second highest monthly rainfall recorded in Norway in August with 757.9 mm. Lurøy (Nordland) holds the Norwegian record with 829.3 mm from 1983. 757.9 mm is also the largest monthly rainfall measured in August in Western Norway. The old record was 592.8 mm recorded at Basura (Etne) in 2019.

Around 40 records were set for high monthly rainfall and 4 station records for daily rainfall. See the record table at the back of the report.

#### **Snow conditions**

The snow map on page 6 expires in the summer season.

## Arctic

## Air temperature

Bjørnøya and Longyeardalen – Central were the warmest stations with an average of 11.1 °C (respectively 5.4 °C above normal and no normal yet). Kongsøya was the coldest with 5.9 °C on average (no normal yet).

Ny-Ålesund had an average temperature of 8.4 °C, which is 3.8 °C above normal. At Hopen, the monthly temperature was 8.0 °C, which is 4.2 °C above normal. Svalbard Airport had an average temperature of 11.0 °C, which is 5.0 °C above normal. Jan Mayen had a monthly temperature of 8.5 °C, which is 2.2 °C above normal.

All five weather stations with long measurement series, Bjørnøya, Hopen, Svalbard Airport, Ny-Ålesund and Jan Mayen set records for the warmest August, and both Bjørnøya and Svalbard Airport exceeded 10 degrees as an average temperature in August for the first time. See the record table at the back of the report.

The month's highest maximum temperature was 22.5 °C, and was measured on 8 August on Bjørnøya. In addition, more than 20 degrees were measured for the first time at Svalbard Airport in August. The lowest minimum temperature was measured at Klauva on 28 August with 0.4 °C.

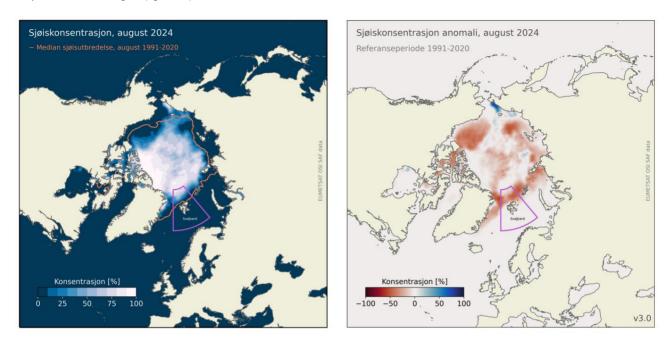
The daily average temperature of 18.0 °C, which was measured at Svalbard Airport on 11 August, is the highest recorded at a Norwegian Arctic weather station. The station itself held the old record of 17.8 °C from 28 July 2020.

### Precipitation

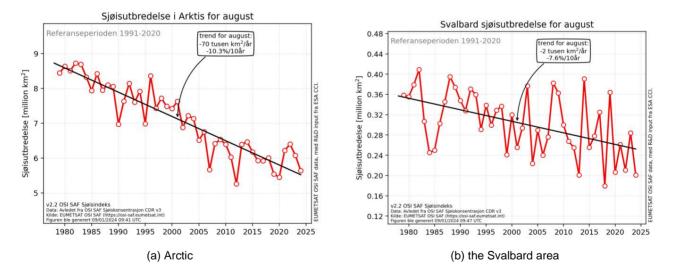
Hornsund recorded the most precipitation of the arctic stations with 109.0 mm (the station has no normal yet). Jan Mayen received the second most with 98.0 mm (100% more precipitation than normal, that is twice as much as normal). Bjørnøya was the driest with 6.0 mm (81% less precipitation than normal). Hornsund also measured the largest daily rainfall of the Arctic stations with 32.9 mm on 22 August.

### Sea

**ice** In August, the extent of sea ice in the Arctic (figure 1) was measured at 5.64 million , which is the 4th lowest prevalence km2 for August recorded with satellite measurements1 (figure 2a). Compared to the reference period, this is defined as a very low prevalence. Around Svalbard, the ice extent is now 0.20 million km2 recorded, which corresponds to a \_\_\_\_\_, the 3rd lowest which is very low extent for August (figure 2b).



**Figure** 1: Left: The sea ice concentration in the Arctic for August 2024, where blue represents open sea and white represents 100% ice cover. The orange contour marks the middle ice extent (median) for the period 1991–2020. Right: Deviation in percentage of the ice concentration from the reference period 1991–2020. Red areas have less ice than normal while blue have more. The purple box indicates the Svalbard region shown in Figure 2b.



**Figure** 2: Sea ice extent (a) in the Arctic and (b) for the Svalbard area for August in the period 1979–2024. The trend is calculated in relation to the reference period 1991–2020. The Svalbard area is marked on the map in Figure 1.

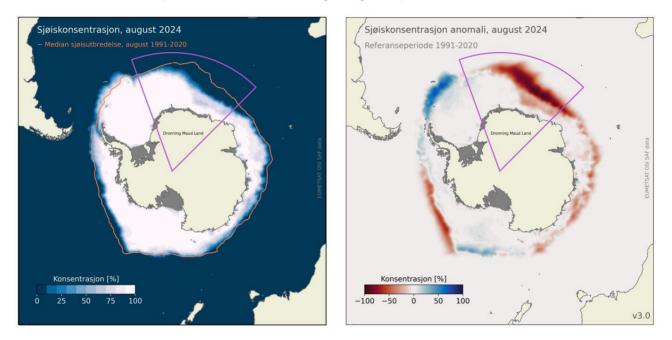
1We have satellite observations of sea ice back to October 1978.

## Antarctica

## Sea

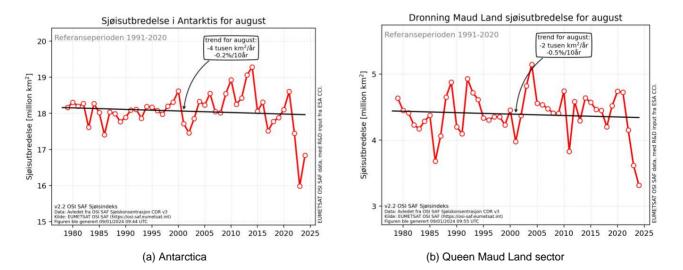
ice In the southern hemisphere (figure 3), the sea ice extent for August was measured at 16.84 million km2, which is the second lowest extent that has been recorded for August, and defined as extremely low compared to the reference period (figure 4a). In the sea area outside Dronning Maud Land, the ice extent is 3.31 million km2

, which is a record low prevalence in this area for August (figure 4b).



**Figure** 3: Left: The sea ice concentration in Antarctica for August 2024, where blue represents open sea and white represents 100% ice cover. The orange contour marks the middle ice extent (median) for the period 1991–2020. Right: Deviation in percentage of the ice concentration from the reference period 1991–2020. Red areas have less ice than normal while blue have more. The gray areas towards land represent ice shelves.

The purple box indicates the sea area outside Dronning Maud Land shown in Figure 4b.



**Figure** 4: Sea ice extent (a) in Antarctica and (b) for a sector outside Queen Maud Land (b) for August in the period 1979–2024. The trend is calculated in relation to the reference period 1991–2020. The Queen Maud Land sector is marked on the map in Figure 3.

See more updated graphs for sea ice on MET's website about the cryosphere https://cryo.met.no/nb/sjoe-is-indeks.

## Records

Data from weather and precipitation stations that report daily, and which have been in operation for fifteen years or more. "Start" indicates the first year of local August measurements. \* means tangent of record.

## Stations with a new August record for 24-hour rainfall

Stnr	Name	Municipality	mm Date Start Previous mm
55820 F	ærland - The Glacier Museum	Sogndal (Westland)	61.4 11 2005 31.08.2019 39.7
56850 V	iksdalen in Gaular	Sunnfjord (Westland)	59.6 8 1992 31 08.2019 57.3
82000 S	etså	Saltdal (Nordland)	49.9 11 2009 20.08.2018 36.2
99754 H	ornsund	Svalbard (Svalbard)	32.9 22 1985 22.08.2004 32.4

### Stations with a new August record for high monthly rainfall

Stnr	Name	Municipality	mm Sta	rt 243.2	Previous etc	
25830 Fi	insevatn	Ulvik (Westland)	2003 21	9.8 2007	2018 224 6	
45870 Fi	ist -	Hjelmeland (Rogaland)			2017 211 3	
	Sigmundstad					
46850 H	undseid in Vikedal	Vindafjord (Rogaland)	523.7 19	36 432.9	2019	473.7
47820 E	ikemo	Etne (Westland)	1961 31	2.8 2005	2018	428.7
50070 K	vamsøy	Kvam (Westland)	533.4 20	006	2019	302.6
50310 K	vamskogen -	Kvam (Westland)			2019	427.8
	Jonshøgdi					
50450 F	ana - Stand	Bergen (Westland)	404.9 18	96 473.4	1929	367.0
50540 Be	ergen - Florida 50810	Bergen (Westland)	1949 39	0.8 2003	2019	399.6
Åsane 5'	1250	Bergen (Westland)	533.2 19	44 300.9	2019	374.4
Øvstedal		Voss (Westland)	1999 48	4.3 1895	1982	397.3
51800 M	ljølfjell Uh	Voss (Westland)	443.5 19	68 465.2	2019	273.8
52170 E	ksingedal	Vaksdal (Westland)	1895 52	4.2 1950	1982	423.0
52400 E	ikanger - Myr	Elves (Westland)	635.8 19	39 243.8	2016	365.1
52750 F	rozen	Masfjorden (Westland)	1972 19	5.7 1995	1909	402.0
52860 T	ackle	Gulen (Westland)	334.2 19	77 291.1	1982	475.7
52930 B	rekke in Parish	Gulen (Westland)	1972 31	1.1 2005	1989	541.0
52990 O	rtnevik	Høyanger (Westland)			2018	202.1
53101 V	angsnes	Vik (Westland)			2018	195.3
53160 Jo	ordalen - Nåsen	Voss (Westland)			2019	294.8
55670 V	eitastrond	Luster (Westland)			2018	218.2
55820 Fj	erland - The Glacier Museum	Sogndal (Westland)			2018	234.4
55930 B	alestrand Fire station	Sogndal (Westland)	275.5	1994	2018	228.3
56010 H	øyanger works	Høyanger (Westland)	389.8	1981	2018	284.2
	ureneset	Fjaler (Westland)	382.1	1972	2018	337.7
56520 H	ovlandsdal	Fjaler (Westland)	632.2	1899	1909	515.2
56780 S	ygna	Sunnfjord (Westland)	459.7	1996	2018	305.3
	iksdalen in Gaular Sunnfjor		444.9	1992	2018	317.3
56960 H		Sunnfjord (Westland)	481.4	1895	1909	356.0
57480 B	otnen in Førde	Sunnfjord (Westland)	506.1	1895	1909	476.9
57660 E	imhjellen	Gloppen (Westland)	537.8	1981	1982	421.0

57810 Svelgen II	Bremanger (Westland)	441.7	1973	1982	383.8
57850 Daviknes	Bremanger (Westland)	338.0	1990	2009	326.7
57940 Ålfoten II	Bremanger (Westland)	385.5	1943	1974	278.4
57990 Gjengedal	Gloppen (Westland)	441.3	1972	1982	385.7
58070 Sandane	Gloppen (Westland)	212.4	1957	2009	202.9
58320 Myklebust in Breim	Gloppen (Westland)	280.9	1895	1940	249.9
58480 Oldedalen	Stryn (Westland)	220.6	1940	2018	208.6
58780 Nordfjordeid -	City (Westland)	285.3	1972	1982	230.4
Nymark					
58900 Stryn - Kroken	Stryn (Westland)	219.7 20	02 201.3	2016	190.7
65370 Smøla - Moldstad	Smøla (Møre and	1963		1998	179.7
	Romsdal)				
82000 Setså	Saltdal (Nordland)	191.3 2	009	2018	154.9

## Stations with a new August record for low monthly rainfall

Stnr I	Name Municipality mm Start Previous mm		Previous mm
16560 Dombås - Nord	digard Dovre (Inland)	29.6 200	06 39.2 2015
61630 Bjørli	Lesja (Inland)	17.0 201	0 27.9 2019

## Stations with a new August record for high monthly mean temperature

Stnr	Name	Municipality	°C	Start	Previous	٥C
9160	Folldal - Fredheim	Folldal (Inland)	11.6 2	010	2019	11.5
73550 Ga	utland	Grong (Trøndelag)	14.5* 2	008 14.9	2023	14.5
74350 Na	msskogan	Namsskogan (Trøndelag)	2007 1	4.0	2009	14.7
77425 Ma	avatn V	Grane (Nordland)	2008 1	3.7*	2015	13.6
79764 Hja	artåsen	Rana (Nordland)	2009 1	5.8 2008	2023	13.7
80102 So	lvær III	Luroy (Nordland)	15.4 2	009 15.3	2015	15.2
80740 Re	ipå	Meløy (Nordland)	2009 1	6.0 1953	2023	15.0
82000 Se	tså	Saltdal (Nordland)	15.6 2	005 16.1	2023	14.9
82290 Bo	đø	Bodø (Nordland)	2004 1	6.2	1969	15.8
82410 Ho	ly Week II	Bodø (Nordland)	2008 1	6.3 1931	2023	15.1
84970 E	venes Airport	Evenes (Nordland)	15.9 2	004 15.6	2023	14.9
85040 Ro	ot weather	Lødingen (Nordland)	2005 1	5.0	2023	14.8
85380 Ski	rova lighthouse	Vågan (Nordland)	2005 1	4.8	1934	16.2
85450 S	volvær Airport	Vågan (Nordland)	2003 1	5.6	2023	15.6
85560 L	eknes Airport	Vestvågøy (Nordland)	2005 1	6.1	2023	15.0
85840 Va	erøy heliport	Værøy (Nordland)	2003 1	5.1 1958	2023	14.4
85890 F	øst Airport	Voice (Nordland)	15.9 2	004 15.9	2023	14.1
86600 Sto	kmarknes Lh - Skagen Hadsel (N	ordland)	1980 1	5.7 1941	2023	14.2
86740 Bø	i Vesterålen III	Bø (Nordland)	14.3 2	010 15.5	2023	14.9
87110 An	døya	Andøy (Nordland)	1995 1	5.5 1920	2023	13.7
87640 Ha	istad stadium	Harstad (Troms)	15.3 1	965 16.5	2023	14.6
88690 He	kkingen lighthouse	Senja (Troms)	2010 1	5.3 2010	2023	13.7
89350 Ba	rdufoss	Målselv (Troms)			1950	14.5
89940 Div	/dalen II	Målselv (Troms)			2023	13.2
90400 Tro	omsø - Holt	Tromsø (Troms)			2023	13.5
90450 Tro	omsø	Tromsø (Troms)			1930	14.0
90490 Tro	msø - Langnes	Tromsø (Troms)			2023	13.3
90720 Må	isvik	Tromsø (Troms)			2023	14.0
90760 TI	e subject	Karlsøy (Troms)			2023	12.7

90800 Torsvåg lighthouse	Karlsøy (Troms)	15.8 1	934 16.7	1934	13.4
91380 Skibotn II	Storfjord (Troms)	2005	4.0	2023	14.4
91430 Rihpojavri	Storfjord (Troms)	2010	16.7	2023	12.4
91740 Sørkjosen Airport	Nordreisa (Troms)	2006	16.7	2023	14.4
92350 Nordstraum in Kvænangen Kvæna	ngen (Troms)	1965	16.4	2023	14.1
92750 Hasvik Airport	Hasvik (Finnmark)	2006	4.2	2023	13.7
93000 Hasvik - Sluskfjellet	Hasvik (Finnmark)	2008	17.1	2023	11.5
93140 Alta Airport	Alta (Finnmark)	1964	13.9	2023	14.6
93301 Suplovuopmi - Lulit	Kautokeino (Finnmark)	2005	14.5	2023	12.4
93700 Kautokeino	Kautokeino (Finnmark)	1889	16.9	1937	14.3
94280 Hammerfest Airport	Hammerfest (Finnmark)	2004	15.2	2023	13.8
94500 Fruholmen lighthouse	Måsøy (Finnmark)	1954	15.6	2023	12.2
94680 Honningsvåg Airport	North Cape (Finnmark)	2004	6.8	2023	12.8
95350 Banak	Porsanger (Finnmark)	1957	16.2	2022	14.0
96310 Mehamn Airport	Gamvik (Finnmark)	2004	15.0	2023	13.4
96400 Slettnes lighthouse	Gamvik (Finnmark)	1928	14.9	2022	12.1
97251 Karasjok - Markannjarga	Karasjok (Finnmark)	2004	14.9	2023	13.6
97350 Cupvddatmohkki	Karasjok (Finnmark)	1966	16.2	2023	13.3
98090 Berlevåg Airport	Berlevåg (Finnmark)	2004	5.5 2006	2022	12.7
98360 Båtsfjord - Straumsnesaxla	Båtsfjord (Finnmark)			2023	13.1
98400 Makkaur lighthouse	Båtsfjord (Finnmark) 15.9 1925	\$		1937	13.3
98550 Vardø radio	Vardø (Finnmark) 13.5 1829			1937	12.7
98580 Vardø Airport	Vardø (Finnmark) 13.8 2007			2022	12.5
98790 Vadsø Airport	Vadsø (Finnmark) 14.6 2004			2023	13.4
99370 Kirkenes Airport	Sør-Varanger (Finnmark) 15.9	1957		2023	14.5
99460 Pasvik - Svanvik	Sør-Varanger (Finnmark) 15.9	2009		2023	14.4
99710 Bjørnøya	Svalbard (Svalbard) 11.1 1922			2013	8.2
99720 Hopen	Svalbard (Svalbard) 8.0 1946			2023	5.8
99754 Hornsund	Svalbard (Svalbard) 7.4 2007			2023	6.0
99840 Svalbard Airport	Svalbard (Svalbard) 11.0 1975			2023	8.4
99910 Ny-Ålesund	Svalbard (Svalbard) 8.4 1974			2023	6.4
99935 Karl XII Island	Svalbard (Svalbard) 6.3 2000			2018	3.4
99950 Jan Mayen	Jan Mayen (Jan Mayen) 8.5 192	21		1934	7,8

## Stations with new August record for maximum temperature

Stnr	Name	Municipality	⁰C Date	e Start F	Previous	°C
90490 T	romsø - Langnes	Tromsø (Troms)	26.1* 7 1	964 02.	08.1994 2	6.1
99710 B	ørnøya	Svalbard (Svalbard)	22.5 8 1	937 07.	08.1989 2	1.5
99754 H	ornsund	Svalbard (Svalbard)	16.2 10	1995 O	.08.2015	15.1
99840 \$	valbard Airport	Svalbard (Svalbard)	20.3 11	1975 31	.08.1997	18.1