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The Climate of The Faroe Islands - with Climatological Standard Normals, 1961-1990

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Front cover picture

Gásadalur located north west of Sørvágur on the western part of the island of Vágar. Heinanøv Fjeld, 813 m high can be seen in the north and Mykinesfjørdur in the west.

The heliport is located to the right in the picture - near the river Dalsá.

The photo was taken during a helicopter trip in May 1986.

Photographer: Helge Faurby

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1. Introduction

To detect climate trends and changes above the fluctuating background, accurate and systematic observations with calibrated instruments are required from all around the world. These observations form the basis for preparation of data series and calculation of standard normals to be used in climate studies, a increasingly important task both nationally and internationally.

This report presents the observed climate of the Faroe Islands, mainly from 1961, based on climatological data series and normals, but a more general description of the weather and climate is also included together with trends in temperature, precipitation and sunshine in Tórshavn from the beginning of the 1920s.

The main purpose of this report is to publish the various climatological parameters observed in the Faroes since 1961, including the climatological standard normals from the period 1961-1990, which is the latest standard normal period defined by the World Meteorological Organisation (WMO). WMO Technical Regulations define climatological standard normals as “averages of climatological data computed for the following consecutive periods of 30 years: 1 January 1901 to 31 December 1930, 1 January 1931 to 31 December 1960, etc.”. Climatological normals are defined from the same regulations as “period averages computed for a uniform and relatively long period comprising at least three consecutive ten-year periods”. Shorter series and series not sufficiently homogeneous must be referred to as provisional “normal” average values.

Thus this report presents:

Climatological standard normals from the period 1961-1990 for precipitation based on complete series of observations from six different sites in the Faroes.

Climatological standard normals from the period 1961-1990 for temperature, cloud cover and relative humidity based on complete series of observations from two different sites (Tórshavn and Akraberg Fyr).

Climatological standard normals from the period 1961-1990 for sunshine, wind, atmospheric pressure, snow and fog based on complete series of observations from one site (Tórshavn).

Climatological normals or provisional normals covering other periods within the interval 1961-1997 for precipitation (5 sites), temperature (5 sites), cloud cover (1 site), wind (2 sites) and relative humidity (1 site).

All monthly values on which calculation of the normals is based (144 data series).

Three longer data series covering temperature, precipitation and hours of bright sunshine from Tórshavn/Hoyvík in the period 1922-1997.

The Faroe Islands are located in the North Atlantic between Scotland, Iceland and Norway and their climate is greatly influenced by the ocean. Section 2 of this report describes this climate in general terms with an overview of the "normal" climate of the Faroe Islands based on observations from the

normal period 1961-1990. An similar overview for the period 1931-1960 was published by Lysgaard (1969).

Section 3 and 4 describe the various observations, station history, metadata and the methods used to calculate mean values for the period 1961-1990.

The problems of studying long series of data and calculating long-term averages in cases where instruments, observation sites etc. have changed are also covered in this report. The rationale and methodology involved are explained in detail in section 5 and 7.

Section 7 also present trends in temperature, precipitation and hours of bright sunshine for the period 1922-1997 observed in Tórshavn.

The normals for the various parameters are presented in section 6 and conclusions concerning the observed climate and the variations are presented in section 8.

Besides tables and graphics, the enclosed floppy disk contains the climatological standard normals, monthly values and information concerning the different measuring sites.

2. Weather and climate in the Faroe Islands

The Faroe Islands (Føroyar) are situated at approximately latitude 62° N, longitude 7° W and consist of 18 small, hilly islands. The islands have a total area of 1399 km², and extend 113 km from north to south and 75 km from east to west. The highest elevations, reaching nearly 890 m above sea level are found in the northern islands.

The climate in the Faroe Islands is greatly influenced by the warm Gulf Stream and by the passage of frequent cyclones, which arrive from the south and west depending on the position of the polar frontal zone. Consequently the climate is humid, unsettled and windy, with mild winters and cool summers.

The Azores High is sometimes displaced towards the islands, in which case settled summer weather with fairly high temperatures may prevail for several weeks. During the winter time the course of the lows may be more southerly than normal, in which case cold air from the north dominates the weather. This situation may cause sunny weather with an unusually high frequency of days with frost and also snowfall. The latter occurs in conjunction with the build up of showers in the cold air above the relatively warm sea water. The northern part of the islands particularly almost always experiences wintry weather with snow or frost for a prolonged period during the winter time - occasionally some of the fiords freeze over with a thin layer of ice.

The maritime climate is also influenced by the bifurcation of the East Iceland current (polar current), a branch of which is directed from eastern Iceland towards the Faroes. This sea current flows round the Faroe Islands in a clockwise direction. The mixing of the water masses causes a relatively large difference in the sea temperatures to the north and to the south or south west of the Faroe Islands as well as local variations in sea surface temperatures.

The cooling of humid air masses by the cold sea water is a contributory cause of frequent fog in June, July and August.

The precipitation pattern reflects the topography of the islands, the precipitation being smallest near the coastal areas and rising to a peak at the centre of the hilliest islands. Nearly all coastal areas receive around 1000 mm per year, rising to above 3000 mm in the central parts. Recent investigations (Davidsen et al.) have shown that some places receive more than 4000 mm.

This precipitation distribution is attributable to both topographical and meteorological conditions. The topographical orographic precipitation occurs in conjunction with lows moving east and north east. The land lifts the air masses, leading to a discharge of precipitation. The amount and intensity of the precipitation are of course also determined by the wind speed and the instability of the air.

Being close to the common cyclone tracks in the North Atlantic region the islands have a windy climate. The air in the lower atmosphere is affected by the hilly islands, causing considerable local winds, as a result from stowing, channelling and turbulence. This and the fact that the sea currents between the islands are very strong, sometimes causes problems for navigational problems for ships. The turbulence in the mountain regions also causes problems for air traffic.

Intensive cyclone developments frequently give unstable weather, especially in autumn and winter. Drops in atmospheric pressure of about 20 hPa in 24 hours occur in nearly all months but sometimes the

pressure falls more rapidly - occasionally more than 80 hPa in 24 hours - and such situations cause very high wind speeds and considerable damages all over the islands.

Weather is defined as the momentary state of the atmosphere, while climate is the mean weather over a period. In accordance with international standards, normal climate is related to a period of 30 years. A summary is provided below of the behaviour of the most important climate elements in the Faroe Islands. The data are from the period 1961-1997 and are presented in detail in section 6 and in the form of data files on the enclosed floppy disk. The description is mainly based on the data from Tórshavn, but figures from all available stations are included.

Atmospheric pressure: The normal atmospheric pressure observed in Tórshavn and reduced to mean sea level is 1008 hPa (millibar), lowest from October through January (1004 - 1005 hPa) and highest in May (1014 hPa). The lowest recorded in the period was 948,6 hPa 11 January 1986 and the highest being 1046 hPa recorded on 20 February 1965. Surprisingly, not only relatively long periods of low atmospheric pressure, but also relatively long periods of high pressure are common. The mean maximum atmospheric pressure per month is almost 1030 hPa.

The Faroe Islands are situated close to the common cyclone tracks and the atmospheric pressure is subject to frequent and substantial changes as mentioned above. A 20 hPa rise and fall within 24 hours is possible in all months. The average annual range in atmospheric pressure is approximately 80 hPa. The atmospheric pressure is more changeable in the winter months than in the summer months. The range in the winter months is approximately double that in the summer months.

Air temperature: During the normal period 1961-1990 the annual mean temperature in Tórshavn was approx. 6,5°C. Mean temperatures were around 3,5°C in January and February and about 10,5°C in July and August. The annual temperature fluctuates in the islands, the lowest being at Vága Floghavn, 6,0°C and the highest at Sandur on the island of Sandoy, 7,0°C.

The temperature fluctuations are generally small, but it does happen that the temperature reaches 20°C. The absolute maximum is 24°C observed at Vága Floghavn on 30 July 1980 at midday. During wintertime the temperature sometimes drops below 0°C. The absolute minimum is -11,7°C, which was observed at Vága Floghavn early in the morning of 7 February 1969.

Precipitation: The normal annual precipitation at Tórshavn is 1284 mm. Precipitation totals are highest in autumn and winter, lowest in the summer period.

There are large geographical variations in the annual rainfall. In the southern part of the island at Akraberg Fyr, the total is about 884 mm, at Mykines Fyr in the west 823 mm, while in the northern part of the islands, which have the most massive and highest mountains, the annual precipitation is above 3000 mm, at Hvalvík almost 3300 mm. Most of this variation is due to orographic differences. The rather low amount of precipitation at Akraberg Fyr and Mykines Fyr could also be caused by the special wind conditions at these exposed coastal stations.

The number of days with precipitation greater than 0,1 mm varies from 206 days at Strond Kraftstation to 300 at Hvalvík. Number of days with precipitation of more than 10 mm also varies, from fewer than 20 days at Akraberg Fyr to more than 100 at Hvalvík and Hellur.

The highest 24 hour precipitation figure registered in the period 1961-1997 was 180 mm recorded in the morning of 16 May 1971.

In the wintertime the precipitation often falls as snow. Tórshavn has an average of 44 days with snow, the majority being in December and January. June, July and August are completely free of snow, while snow is possible in September. The number of days with snow cover follows the same pattern as days with snow, with 45 days in an average year, mostly in December and January.

Wind: In Tórshavn west and south-westerly winds were the most frequent in the period 1961-1990, easterly winds being the most infrequent. At Akraberg Fyr the most frequent winds were south -westerly, south and easterly winds being the most infrequent. At Mykines Fyr, winds from the north, south west and south east predominated in the period 1961-1969, while winds from the east and west were the most infrequent. The highest 10 minutes' average wind measured during the period 1961-1990 at the three sites was 43,2 m/s from 250 degrees (nearly west) at Akraberg Fyr in the evening of 19 February 1990.

The mean wind speed is generally high in the Faroe Islands, particularly in the autumn and winter. It is normally lowest during summer (4,5-6 m/s) and highest during winter (6,5-10 m/s). April to August are normally without strong winds, ie. a full gale, while autumn and winter are particularly windy with numerous gales, usually blowing from the west and south west.

Vigorous development of cyclones are typically an autumn and winter phenomenon, sometimes with wind speeds of more than 40 m/s and gusts above 70 m/s.

Though the general climate is very windy, calm periods do occur, most often in midsummer, but then only for very short periods.

Hours of bright sunshine: The annual normal total for hours of bright sunshine observed in Tórshavn in the period 1961-1990 was 840. The highest number of hours of bright sunshine observed in Tórshavn normally occurred in May and June, ie. 124 and 125 hours, respectively. The highest ever was 232 hours in May 1948, which is equivalent to over 40% of the possible maximum, while the highest number of hours of bright sunshine recorded in a day was 16,5 hours, measured on 3 June 1971. Sometimes in December no hours of bright sunshine are recorded at all.

Cloud cover: The oceanic location, combined with the polar front and frequent passages of cyclones, causes an extremely large number of cloudy days, 221 days in Tórshavn. During the period 1961-1990 an average of only 1,9 days per year in Tórshavn could be classified as clear, ie. with a cloud cover of less than 20%. In the same period the average cloud cover was 81%, the highest being 84% in July and August and the lowest being 79% in April.

Relative humidity: The climate of the Faroe Islands is very humid. The relative humidity is high, normally 88% annually in Tórshavn. It is highest around August as a result of the frequent fog at that time of the year. The difference between night-time and daytime relative humidity is small, which is normal in a maritime climate.

The annual number of days with fog in Tórshavn is 40, less frequent than in most locations in Denmark. June, July and August are the foggiest months with an average of more than seven foggy days per month.

3. Observations and methods

3.1 General methods

As a rule air temperatures and relative humidity are measured using a louvered Stevenson screen at 2 m above ground level. Precipitation and wind are measured at 1,5 and 10 m above ground 1evel, respectively. Atmospheric pressure is reduced to mean sea level. Wind speed as well as wind direction are defined as 10-minute averages. Hours of bright sunshine are recorded as a burnt trace on card board.

Parameters such as cloud cover, snow, snow cover and fog are visual observations (subjective judgements carried out by observers following certain general rules).

From place to place and from time to time deviations from the above may occur and for that reason it is important to check the different series of data for inhomogeneity, cf. section 4 concerning station history and section 5 describing the Standard Normal Homogeneity Test.

Wind speed data are difficult to homogenise, however, because of several changes in observation procedures. The switch from estimating wind on a 12 - point scale (Beaufort) to anemometer measurements at varying heights above the ground is troublesome. The optimal procedure in connection with such a change would be to have parallel observations for a number of years at the same location. Unfortunately such a procedure has not been followed in the Faroe Islands.

Before calculation of mean values all datasets were checked for inhomogeneities. Outliers and other suspicious data were also checked and if necessary replaced. Stations not suitable for this investigation were removed from the study at this stage.

As a general principle, all datasets were plotted as time series for visual interpretation as a basis for further investigations. In addition, temperature was checked by comparing (Tn+Tx)/2 with the mean temperature and cases with excessive differences were removed or corrected.

In cases of dubious data, comparison was made with neighbouring stations.

3.2 Observations

Where the climatological standard normals for the period 1961-1990 are concerned, these were able to be constructed for precipitation at six sites and for other elements at one or two sites. These sites are marked on the map in Fig. 3-1 and in the adjoining table on the next page. These station records were required to meet the following two criteria: The station must have been operating for the whole of the 1961-1990 period, and it had to be possible to replace all missing observations during the period 1961-1990 with values constructed on the basis of observations from nearby stations.

In addition to the 1961-1990 series, other sites have been selected as interesting. These latter series cannot satisfy the construction criteria for 1961-1990 climatic normals, but they do represent interesting locations on the islands. The sites of these series can be seen on the same map in Fig. 3-1. This map shows the position of all stations considered in this report together with the overall current status of DMI's meteorological network in the Faroe Islands at 31 December 1997. The number, name, latitude,

longitude and elevation of each station, together with the meteorological elements observed there, are listed below. The start and end year of the applied observation period are also shown. The same information, plus an estimate of the quality of the various series are appendixed hereto and contained on the enclosed floppy disk included.

Observation sites/climatological elements used in the report

Stat. No.	Station name	Latitude (degrees, min. N)	Longitude (degrees, min. W)	Elevation (m.a.s.)	Element	Observation period used	
						Start	End
06005	Mykines Fyr	62° 06'	7° 41'	105	T, H, W, C	1961	1969
06009	Akraberg Fyr	61° 24'	6° 40'	101	T, H, C	1961	1990
					W	1962	1990
					P	1987	1990
06010	Vága Floghavn	62° 04'	7° 17'	84	T	1968	1997
					P	1988	1997
06011	Tórshavn	62° 01'	6° 46'	54	T, P	1958	1997
					H, W, C, AP, SN, F	1961	1990
33000	Mykines Fyr	62° 06'	7°41'	105	P	1961	1969
33020	Fossáverkið	62° 09'	7° 09'	2	P	1961	1990
33037	Hvalvík	62° 11'	7° 02'	14	P	1988	1997
33045	Hellur	62° 16'	6° 52'	11	P	1987	1997
33051	Kirkja	62° 19'	6° 19'	53	T, P	1988	1997
33054	Strond Kraftstation	62° 16'	6° 35'	6	P	1961	1990
33060	Hoyvík	62° 02'	6° 45'	20	T	1922	1957
					P	1922	1981
					S	1922	1983
33069	Tórshavn Radiosonde	62° 01'	6° 46'	57	S	1984	1997
33080	Nólsoy Fyr	61° 57'	6° 36'	80	T	1971	1994
					P	1961	1990
33090	Sandur	61° 51'	6° 41'	5	T	1973	1996
					P	1961	1990
33110	Akraberg Fyr	61° 24'	6° 40'	101	P	1961	1987

Legend: **T = air temperature, P = precipitation, S = hours of bright sunshine**

C = cloud cover, W = wind speed and -direction

H = relative humidity, AP = atmospheric pressure

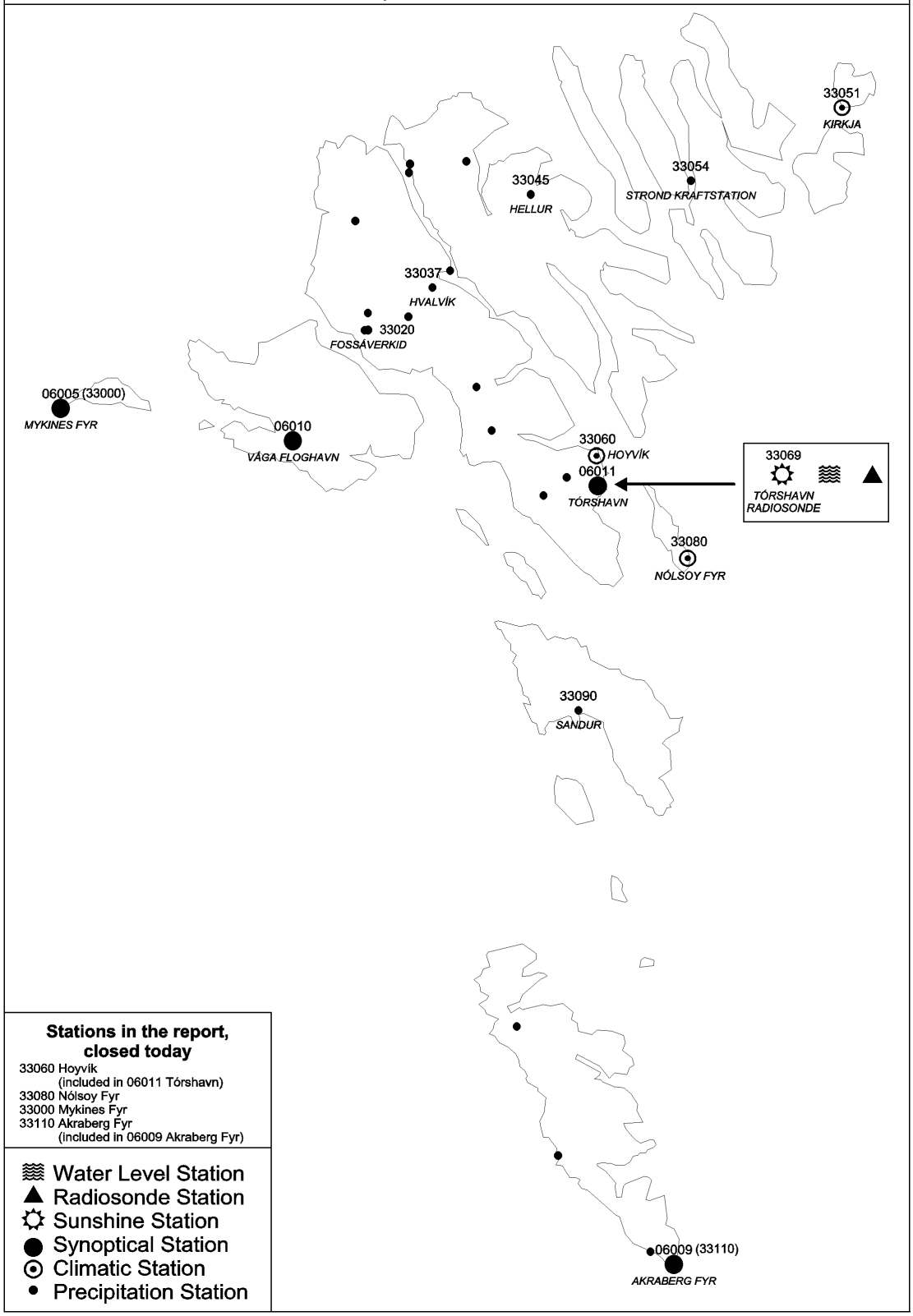
SN = snow and snow cover, F = fog

Table 3-1. Observation sites/climatological elements and the observation period used in the report.

Figure 3-1. (Opposite page) Map of stations.

DMI meteorological network in The Faroe Islands, 31.12.1997

-stations included in the report have been named and numbered



4. Station history and metadata

Three different kinds of stations are used in this study:

- A *synoptical station* is a station where temperature, wind, precipitation, atmospheric pressure, relative humidity, etc. are measured every three hours day and night.

  06005 Mykines Fyr: No information about exact location of instruments. Stevenson screen OK, ie. 2 m above ground level (a.g.l.) and painted white. Relative humidity measured with ventilated wet- and drybulb thermometer. The station was finally closed in 1975. A new station was opened on 29 October 1996 in the light house with automatic equipment.
  Observation period used: 1961-1969.

  06009 Akraberg Fyr: Stevenson screen OK. Top of rain gauge 1,3 m a.g.l. Anemometer 6,5 m a.g.l (at present 16 m a.g.l). Relative humidity measured with hair hygrometer. The station was closed in April 1995. A new station was opened in the light house in March 1996 with automatic equipment.
  Observation period used: 1961-1990.

  06010 Vága Floghavn: Stevenson screen OK. The instruments were moved to a more open location on 2 December 1981. After this date the temperature sensor was placed on a mast 2 m a.g.l. Precipitation was recorded with an automatic rain gauge (raindrop counter) 1,32 m a.g.l. Night-time observations are missing.
  Observation period used: 1968-1997.

  06011 Tórshavn: Stevenson screen OK. Wind speed and direction measured 8 m a.g.l. from 1961-1962, 25 m a.g.l. from 1962- 1979, and 18 m a.g.l. from 1979-1992 (at present 10 m a.g.l). The barometer is of the mercury type. Relative humidity measured with hair hygrometer. Top of rain gauge 1,5 m a.g.l. The station was moved on 1 June 1962 60 m northwards from Tinghúsvegur 74 to Tinghúsvegur 76, the difference in elevation being +8 m from 35 to 43 m. The station was moved again on 1 January 1993, 1000 m NNE to the Radiosonde station. This site is more open and higher, 54 m above sea level. A detailed history of Tórshavn station for the period 1872-1994 can be found in Brandt, 1994. The station is still manually operated.
  Observation period used: 1958-1997.

- A *climatological station* basically measures the same elements, but only three times during the daytime, ie. at 8:00, 14:00 and 21:00 hours local time.

  33000 Mykines Fyr: No information about exact location of instruments. Stevenson screen OK, ie. 2 m a.g.l. and painted white. Top of rain gauge (height a.g.l.) unknown. The station was closed in 1970.
  Observations period used: 1961-1969.

  33051 Kirkja: Stevenson screen OK. Top of rain gauge 1,5 m a.g.l. throughout the period.
  Observation period used: 1988-1997.

33060 Hoyvík: Stevenson screen OK. Relative humidity measured with ventilated wet- and drybulb thermometer. Hours of bright sunshine measured with a Fuess sun recorder of Campbell-Stokes type. Top of rain gauge 0,95 m a.g.l. The station was closed in 1983.
Observation period used: 1922-1981.

33080 Nólsoy Fyr: Stevenson screen OK. Top of rain gauge 1,25 m a.g.l. in the period 1 January 1961 to 30 April 1986. 1,5 m a.g.l. during rest of period. The station was closed in November 1995.
Observation period used: 1961-1994.

33090 Sandur: Stevenson screen OK. Top of rain gauge 2,0 m a.g.l. in the period 1 January 1961 to 1 May 1986. 1,5 m a.g.l. during rest of period. From 2 January 1997 Sandur functioned as a precipitation station (see below).
Observation period used: 1961-1996.

33110 Akraberg Fyr: Stevenson screen OK. Top of rain gauge 1,3 m a.g.l.
Observation period used: 1961-1987. The station was closed in 1987.

- A *precipitation station* measures only precipitation and only once a day, usually at 8 a.m. local time.

33020 Fossáverkið: Rain gauge 1,8 m a.g.l. throughout the period. Rather poor location as the gauge is surrounded by buildings.
Observation period used: 1961-1990.

33037 Hvalvík: Rain gauge 1,5 m a.g.l. throughout the period.
Observation period used: 1961-1990.

33045 Hellur: Rain gauge 1,5 m a.g.l. throughout the period.
Observation period used: 1961-1990.

33054 Strond Kraftstation: Rain gauge 1,55 m a.g.l. during the period 1 January 1961 to 27 May 1987. After this date the gauge was relocated 20 m northwards to a better position with top of rain gauge 1,5 m a.g.l.
Observation period used: 1961-1990.

- A *sunshine station* measures only hours of bright sunshine during the day.

33069 Tórshavn Radiosonde: Hours of bright sunshine measured with a Fuess sunrecorder. The exact same instrument as used at 33060 Hoyvík (see above) .
Observation period used: 1984-1997.

5. Standard Normal Homogeneity Test

5.1 Background

Temporal and spatial homogeneity of observations is critical to any kind of analysis. The homogeneity of a series requires the local measurement to have been carried out with the same type of instrument and according to instructions unchanged over time. For spatial homogeneity the individual instruments are also required to follow the same calibration as their neighbours.

Inhomogeneity occurs when one or more factors change during the observation period. The relocation of a station will not necessarily lead to abrupt inhomogeneity, but most relocations do, because the surroundings such as buildings, vegetation, elevation etc. are very important for the measurements.

Changes in the instrumentation set-up ie. the introduction of automatic equipment can also have a effect. The same applies to changes in observers, especially with regard to visual (subjective) observations like the judgement of cloud cover.

When one or more factors change slowly, the series will show a non-natural trend in observations. One example of slow change could be the growth of vegetation. Another example (when instructions concerning maintenance and regular cleaning of the instruments are not observed!) could be gradual accumulation of dirt in the rain gauge in the form of dust, mud or bird droppings. Both cases would normally lead to incorrect precipitation readings.

Since 1961 both abrupt and gradual changes have occurred at the observation sites in the Faroe Islands, but not all these changes have significantly affected the homogeneity of the series.

A method is therefore needed to separate significant changes from insignificant ones. The method must also be able to detect both abrupt and gradual inhomogeneities. Furthermore, the existence of multiple breaks must be considered.

The problem of homogeneity - testing for existing series has been solved by using software developed at DMI (Steffensen, 1996). This software ensures uniform treatment of the series.

5.2 Testing for homogeneity

The above-mentioned software (SNHT) performs a standard normal homogeneity test (Steffensen, 1996). This is a statistical test to compare a test series and several reference series. In this way *actual* changes in climate over time do not emerge as inhomogeneities. The test is performed on both annual and seasonal aggregates of the different climate elements, such as temperature, precipitation, hours of bright sunshine etc.

The test output gives the year(s) of possible break(s) or trend, and the size and significance of the break(s) or trend.

In the case of precipitation from Tórshavn which could not be adjusted due to a lack of overlap caused by a station relocation, SNHT was used to find the adjustment factors (see also section 7).

All the final series in this report have been labelled according to the test results (see station and element catalogue, Appendix 1). Series comprising less than 10 years cannot be tested by this method. In addition many series labelled N (= not tested) could not be tested because of a lack of suitable reference sites.

The test result may be homogeneous (labelled H), in which case the series can be used for all kinds of spatial and temporal analysis. Inhomogeneous series are labelled I, and care should be taken when using these series for further analysis. A third group of series is labelled T, meaning they have been tested but are not perfectly

homogeneous. This can be due to either breaks or trends near the end of the series or to multiple breaks, which cancel out over the 30-year period. T may also indicate that one or more seasons shows an inhomogeneity but that this cannot be explained by any known physical changes at the stationThe quality labelling system is listed in table 5-1.

Quality label	Description
H	Homogeneous, rigorously tested and possibly adjusted
T	Tested, possibly adjusted but not perfectly homogeneous
N	Not tested, but not necessarily inhomogeneous
I	Inhomogeneous series that is presently unadjustable

Table 5-1. The quality label for each station/element can be seen in Appendix 1.

6. Climatological normals

The tables below show normal statistics - monthly and yearly values - for temperature, humidity, fog precipitation, snow, hours of bright sunshine, cloud cover, wind and atmospheric pressure from the sites shown on the map in Fig. 3-1. The normals for the period 1961-1990 are synonymous with the climatological standard normals for the same period. The monthly data and the calculated normals are available on the enclosed floppy disk, see Appendix 3 for record -layout.

6.1 Temperature

There are six tables, one for each weather element, showing mean temperature, mean maximum temperature, highest maximum temperature with indication of date, mean minimum temperature, lowest minimum temperature with indication of date and finally number of days with frost, for seven stations. The data are shown for each month and for the year as a whole.

Mean maximum temperature and mean minimum temperature are calculated as the mean of daily extremes. The maximum generally occurs in the afternoon and the minimum around sunrise.

Figure 6-1-1. The climate station 33051 Kirkja on the island of Fugloy. The Stevenson screen and the rain gauge are located in the foreground, the island of Svinoy is visible in the background. Photographer: Jens Juncher Jensen.

Mean temperature in °C
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	3,5	3,5	3,5	4,8	6,2	8,5	9,2	9,6	8,7	7,4	4,6	3,3	**6,1**
06009 Akraberg Fyr 1961-1990	3,8	3,9	4,0	4,8	6,6	8,4	9,6	10,0	8,9	7,5	5,1	4,2	**6,4**
06010 Vága Floghavn 1968-1997	2,7	2,7	3,1	4,3	6,6	8,7	10,2	10,4	8,6	6,8	4,2	3,3	**6,0**
06011 Tórshavn 1961-1990	3,4	3,6	3,8	5,0	7,0	9,1	10,3	10,5	9,1	7,4	4,6	3,7	**6,5**
33051 Kirkja 1988-1997	4,6	3,7	4,3	5,2	7,0	9,0	10,6	11,2	9,7	7,5	5,8	4,4	**6,9**
33080 Nólsoy Fyr 1971-1994	3,5	3,8	3,9	4,7	6,7	8,5	9,9	10,2	8,8	7,3	5,0	4,0	**6,3**
33090 Sandur 1973-1996	3,9	4,1	4,3	5,5	7,7	9,6	11,0	11,2	9,5	7,8	5,4	4,2	**7,0**

Table 6-1-1. Climatological normals - mean temperature per month and for the year as a whole - at the sites shown on the map in Fig. 3-1.

In the case of the climate stations Nólsoy Fyr and Sandur, for which only three observations per day exist, ie. 8:00, 14:00 and 21:00 hours local time, adjustments has been made for the missing night-time observations. The same applies to Vagá Floghavn, for which night-time observations are also missing.

Mean maximum temperature in °C
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	5,1	5,1	5,2	6,6	8,0	10,2	10,9	11,3	10,2	8,8	6,0	4,9	**7,7**
06009 Akraberg Fyr 1961-1990	5,4	5,4	5,5	6,5	8,1	9,9	11,1	11,4	10,2	8,8	6,6	5,8	**7,9**
06010 Vága Floghavn 1968-1997	4,8	4,8	5,2	6,4	8,8	10,8	12,1	12,3	10,4	8,6	6,1	5,3	**8,0**
06011 Tórshavn 1961-1990	5,3	5,5	5,9	7,2	9,2	11,4	12,6	12,8	11,2	9,3	6,6	5,8	**8,6**
33051 Kirkja 1988-1997	6,7	5,8	6,5	7,2	9,2	11,2	12,8	13,4	11,8	9,5	7,5	6,6	**9,0**
33080 Nólsoy Fyr 1971-1994	5,2	5,5	5,8	6,8	8,8	10,6	11,9	12,2	10,6	8,9	6,8	5,9	**8,2**
33090 Sandur 1973-1996	5,7	5,9	6,3	7,5	9,8	11,8	13,0	13,2	11,3	9,5	7,1	6,1	**8,9**

Table 6-1-2. Climatological normals - mean maximum temperature per month and for the year as a whole - at the sites shown on the map in Fig. 3-1.

Only nine years of observations are shown for Mykines Fyr as, this station was closed at the start of the 1970s. An annual temperature of only 6,1°C and daily mean range of 3,3° characterise this the westernmost island.

For Akraberg Fyr, the lighthouse at the southernmost point of the Faroe Islands, the annual and daily temperature range are comparable with those for Mykines Fyr.

Absolute maximum temperature in °C
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	**9,0**	**9,5**	**10,0**	**12,5**	**13,0**	**15,0**	**16,0**	**16,0**	**14,0**	**11,5**	**10,6**	**9,5**	**16,0**
Date	3/1	19/2	11/3	30/4	27/5	15/6	23/7	3/8	13/9	2/10	6/11	13/12	3/8
Year	1964	1961	1964	1965	1969	1966	1965	1969	1968	1966	1962	1968	1969
06009 Akraberg Fyr 1961-1990	**9,6**	**8,8**	**9,2**	**13,0**	**15,2**	**17,2**	**17,6**	**18,4**	**17,2**	**11,8**	**10,8**	**9,8**	**18,4**
Date	19/1	25/2	11/3	20/4	24/5	6/6	8/7	5/8	11/9	9/10	17/11	19/12	5/8
Year	1989	1976	1964	1981	1977	1961	1983	1982	1971	1972	1982	1972	1982
06010 Vága Floghavn 1968-1997	**10,3**	**9,5**	**12,5**	**14,8**	**20,8**	**21,6**	**24,0**	**23,5**	**20,5**	**14,0**	**12,0**	**12,2**	**24,0**
Date	10/1	25/2	1/4	29/4	28/5	6/6	31/7	13/8	11/9	13/10	18/11	27/12	31/7
Year	1971	1976	1974	1984	1992	1984	1980	1997	1971	1970	1997	1972	1980
06011 Tórshavn 1961-1990	**11,6**	**11,0**	**12,0**	**15,0**	**19,7**	**19,0**	**20,2**	**22,0**	**19,5**	**14,2**	**12,2**	**13,2**	**22,0**
Date	10/1	4/2	10/3	20/4	24/5	5/6	19/7	22/8	11/9	16/10	3/11	27/12	22/8
Year	1971	1975	1961	1981	1977	1970	1987	1976	1971	1990	1971	1972	1976
33051 Kirkja 1988-1997	**13,4**	**12,0**	**13,0**	**14,9**	**19,8**	**20,0**	**21,3**	**20,8**	**20,6**	**18,8**	**13,0**	**14,5**	**21,3**
Date	14/1	6/2	31/3	1/5	28/5	13/6	23/7	13/8	3/9	8/10	14/11	28/12	23/7
Year	1992	1995	1997	1997	1992	1992	1996	1997	1991	1992	1996	1991	1996
33080 Nolsoy Fyr 1971-1994	**12,1**	**10,6**	**10,8**	**13,3**	**18,2**	**18,6**	**18,0**	**17,8**	**17,2**	**14,0**	**12,2**	**11,5**	**18,6**
Date	10/1	14/2	27/3	25/4	22/5	13/6	8/7	5/8	11/9	11/10	19/11	2/12	13/6
Year	1971	1993	1991	1984	1987	1992	1983	1982	1971	1986	1993	1983	1992
33090 Sandur 1973-1996	**11,1**	**13,2**	**12,2**	**13,2**	**18,9**	**19,0**	**21,4**	**19,8**	**15,4**	**14,8**	**12,4**	**12,4**	**21,4**
Date	28/1	3/2	31/3	20/4	30/5	9/6	9/7	5/8	5/9	24/10	8/11	2/12	9/7
Year	1989	1975	1974	1981	1992	1990	1991	1982	1996	1996	1978	1983	1991

Table 6-1-3. Climatological normals - highest maximum temperature with indication of date per month plus year - at the sites shown on the map in Fig. 3-1. Note that for all the weather elements "the meteorological day" (ie. 24 hours) begins at 6:00 or 7:00 hours local time depending on summer or winter time, thus ending at 6:00 or 7:00 hours local time the following day. In the tables concerning extremes the date of the observed extremes eg. the highest maximum temperature, is determined as the date of the end of the meteorological day in question. As an example, the absolute highest temperature march may occur on 1 April, as was the case for Vága Floghavn in the period 1968-1997.

Vagá Floghavn, with the lowest annual temperature of 6,0°C and a daily mean range of 4,1°C illustrates increasing continentality towards the centre of the islands. The winter months particularly are colder at Vagá Floghavn than at the other stations and the absolute highest and lowest temperatures for the period 1961-1990 are both found here.

The 1961-1990 figures from Tórshavn represent the present observation site at Tórshavn Radiosonde - which is an exposed easterly station. In addition mean temperatures for Tórshavn covering 1922-1997 are dealt with in section 7.

Nólsoy Fyr is located on a small island less than 10 km east of Tórshavn. As for the other stations in the Faroe Islands it is remarkable how similar the temperatures are in February and March.

Mean minimum temperature in °C
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	1,7	1,5	1,5	3,0	4,7	7,1	7,8	8,2	7,3	5,7	2,7	1,5	**4,4**
06009 Akraberg Fyr 1961-1990	1,9	2,0	2,0	2,9	5,0	6,9	8,1	8,5	7,2	5,8	3,2	2,2	**4,6**
06010 Vága Floghavn 1968-1997	0,5	0,6	0,9	2,1	4,4	6,6	8,3	8,5	6,7	4,8	2,1	1,1	**3,9**
06011 Tórshavn 1961-1990	1,2	1,5	1,5	2,7	4,9	7,1	8,4	8,5	7,0	5,4	2,6	1,6	**4,4**
33051 Kirkja 1988-1997	2,4	1,5	1,8	2,9	4,9	7,0	8,8	9,3	7,7	5,5	3,8	2,2	**4,8**
33080 Nólsoy Fyr 1971-1994	1,2	1,6	1,6	2,5	4,8	6,6	8,2	8,4	6,8	5,2	2,8	1,6	**4,3**
33090 Sandur 1973-1996	1,6	1,9	2,1	3,2	5,4	7,5	9,1	9,4	7,5	5,8	3,2	1,9	**4,9**

Table 6-1-4. Climatological normals - mean minimum temperature per month plus year - at the sites shown on the map in Fig. 3-1.

The figures from Sandur, which shows a warm station with the highest mean temperature of all the stations could be caused by the low elevation (5 m a.g.l.) and possibly by the black sand which gives the village its name.

Kirkja on Fugloy - which is the easternmost island and observation site in the Faroes - also represents a relatively warm site.

Absolute minimum temperature in °C
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	**-7,0**	**-11,0**	**-8,0**	**-10,0**	**-2,6**	**1,0**	**4,1**	**4,2**	**0,4**	**-5,0**	**-7,0**	**-7,0**	**-11,0**
Date	4/1	7/2	1/4	2/4	7/5	11/6	30/7	5/8	1/10	31/10	29/11	29/12	7/2
Year	1968	1969	1968	1968	1968	1968	1965	1967	1969	1968	1965	1961	1969
06009 Akraberg Fyr 1961-1990	**-7,2**	**-10,6**	**-7,0**	**-9,3**	**-4,0**	**0,0**	**2,0**	**3,0**	**0,0**	**-2,6**	**-5,6**	**-8,4**	**-10,6**
Date	4/1	7/2	20/3	2/4	3/5	2/6	8/7	24/8	1/10	1/11	21/21	29/12	7/2
Year	1968	1969	1979	1968	1979	1975	1978	1980	1969	1968	1977	1961	1969
06010 Vága Floghavn 1968-1997	**-10,0**	**-11,7**	**-10,6**	**-9,9**	**-5,0**	**-0,3**	**1,4**	**1,0**	**-2,5**	**-6,4**	**-10,0**	**-10,9**	**-11,7**
Date	3/1	7/2	12/3	2/4	4/5	16/6	2/7	31/8	30/9	31/10	17/11	19/12	7/2
Year	1978	1969	1969	1968	1988	1994	1996	1979	1995	1968	1973	1973	1969
06011 Tórshavn 1961-1990	**-8,0**	**-11,0**	**-8,4**	**-9,9**	**-3,0**	**0,0**	**1,5**	**1,5**	**-0,6**	**-4,5**	**-7,2**	**-10,5**	**-11,0**
Date	2/1	7/2	12/3	2/4	8/5	2/6	31/7	5/8	1/10	1/11	17/11	30/12	7/2
Year	1977	1969	1969	1968	1980	1975	1965	1967	1969	1968	1971	1961	1969
33051 Kirkja 1988-1997	**-6,2**	**-5,5**	**-9,1**	**-4,2**	**-2,4**	**1,5**	**4,1**	**4,9**	**0,9**	**-2,0**	**-3,2**	**-6,2**	**-9,1**
Date	25/1	27/2	14/3	6/4	5/5	2/6	3/7	26/8	29/9	15/10	19/11	20/12	14/3
Year	1993	1993	1992	1997	1997	1989	1996	1995	1995	1993	1996	1995	1992
33080 Nolsoy Fyr 1971-1994	**-7,6**	**-6,8**	**-8,4**	**-6,6**	**-2,6**	**0,4**	**2,7**	**2,4**	**1,0**	**-4,0**	**-7,2**	**-9,2**	**-9,2**
Date	27/1	10/2	15/3	28/4	3/5	2/6	8/7	30/8	10/9	15/10	17/11	19/12	19/12
Year	1979	1983	1992	1973	1982	1975	1978	1994	1986	1993	1971	1973	1973
33090 Sandur 1973-1996	**-7,8**	**-6,0**	**-7,9**	**-5,1**	**-2,4**	**0,7**	**4,4**	**3,1**	**0,8**	**-2,3**	**-6,1**	**-9,3**	**-9,3**
Date	25/1	11/2	14/3	28/4	2/5	2/6	702	20/8	29/9	17/10	20/11	19/12	19/12
Year	1993	1981	1992	1973	1982	1975	1996	1973	1995	1973	1977	1973	1973

Table 6-1-5. Climatological normals - lowest minimum temperature with indication of time per month plus year - at the sites shown on the map in Fig. 3-1.

Number of days with frost
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	8,4	7,3	8,4	4,3	1,0	0	0	0	0	1,2	5,7	9,8	**46**
06009 Akraberg Fyr 1961-1990	7,7	6,3	6,9	4,3	1,1	0,2	0	0	0	0,7	4,2	6,7	**38**
06010 Vága Floghavn 1968-1997	13	10	10	7,0	2,2	0	0	0	0,2	1,6	7,4	11	**62**
06011 Tórshavn 1961-1990	10	8,0	8,4	5,2	1,0	0	0	0	0,1	0,9	6,0	9,4	**49**
33051 Kirkja 1988-1997	5,7	6,5	7,1	4,3	1,2	0	0	0	0	0,6	3,4	6,9	**36**
33080 Nólsoy Fyr 1971-1994	9,6	6,4	8,2	5,1	0,9	0	0	0	0	0,7	4,7	8,0	**44**
33090 Sandur 1973-1996	9,2	6,6	6,9	3,9	0,8	0	0	0	0	0,5	4,8	8,1	**41**

Table 6-1-6. Climatological normals - number of days with frost (lowest minimum temperature below 0 degrees C) per month plus year - at the sites shown on the map in Fig. 3-1.

6.2 Humidity

There are three tables, one for each weather element, showing mean relative humidity, mean day-time relative humidity (9-15 utc) and mean night-time relative humidity (18-6 utc) for Mykines Fyr, Akraberg Fyr and Tórshavn. The data are shown for each month and for the year as a whole.
During summer the highest relative humidity occurs at Akraberg. This phenomenon is ascribed to more frequent fog situations near the southern islands and difference in altitude.

There is remarkably little difference between day-time and night-time relative humidity, which is indicative of the maritime influence.

Mean relative humidity in %
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	82	81	83	83	84	87	86	87	85	84	81	80	**84**
06009 Akraberg Fyr 1961-1990	85	85	85	85	88	89	91	91	89	87	84	84	**87**
06011 Tórshavn 1961-1990	89	88	88	87	87	88	89	90	89	89	88	89	**88**

Table 6-2-1. Climatological normals - mean relative humidity per month and for the year as a whole - at the sites shown on the map in Fig. 3-1.

Mean day-time relative humidity in %
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	81	81	82	81	82	86	85	86	84	84	81	81	**83**
06009 Akraberg Fyr 1961-1990	85	85	85	85	87	89	90	90	88	87	84	84	**86**
06011 Tórshavn 1961-1990	89	87	87	85	85	86	86	87	87	88	88	89	**87**

Table 6-2-2. Climatological normals - mean day-time relative humidity per month and for the year as a whole - at the sites shown on the map in Fig. 3-1.

Mean night-time relative humidity in %
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	82	81	83	83	83	87	87	88	85	84	81	80	**84**
06009 Akraberg Fyr 1961-1990	85	86	86	86	89	90	91	91	89	87	84	84	**87**
06011 Tórshavn 1961-1990	89	89	89	88	89	89	90	91	90	90	88	89	**89**

Table 6-2-3. Climatological normals - mean night-time relative humidity per month and for the year as a whole - at the sites shown on the map in Fig. 3-1.

6.3 Fog

There is one table, showing the number of days with fog (visibility below 1 km) for Tórshavn for each month and for the year as a whole.

Foggy weather is most frequent in the summer - June, July and August.

Number of days with fog 1961-1990
06011 Tórshavn

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06011 Tórshavn 1961-1990	0,7	0,6	0,8	2,1	5,3	7,1	7,2	7,6	4,2	2,9	0,7	0,2	**40**

Table 6-3-1. Climatological normals - number of days with fog per month plus year - at the site shown on the map in Fig. 3-1.

6.4 Precipitation

There are 5 tables, one for each element, showing mean precipitation, highest 24 hour precipitation with indication of date and number of days with precipitation greater than or equal to 0.1, 1 and 10 mm respectively. The data are shown for 11 stations for each month and for the year as a whole.

Mean precipitation in mm
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06009 Akraberg Fyr 1961-90	90	60	77	48	43	51	65	65	94	108	90	95	**884**
06010 Vága Floghavn 1988-97	163	122	141	120	83	81	115	133	151	164	140	142	**1555**
06011 Tórshavn 1961-90	133	95	132	88	70	61	70	83	128	155	127	142	**1284**
33000 Mykines Fyr 1961-69	77	56	88	53	31	49	47	61	96	95	80	90	**823**
33020 Fossáverkið 1961-90	271	209	250	150	113	95	108	131	208	283	255	263	**2334**
33037 Hvalvík 1988-97	441	334	318	228	131	118	163	220	296	309	332	372	**3261**
33045 Hellur 1987-97	491	362	365	218	123	111	113	179	259	309	342	371	**3242**
33051 Kirkja 1988-97	94	87	94	84	67	66	80	83	85	111	97	93	**1040**
33054 Strond Kraftstation 1961-90	286	225	274	177	170	117	123	168	266	316	306	283	**2710**
33080 Nólsoy Fyr 1961-90	99	72	92	59	56	54	60	66	107	126	107	109	**1006**
33090 Sandur 1961-90	133	89	110	69	64	58	71	78	118	146	125	131	**1193**

Table 6-4-1. Climatological normals - mean precipitation per month and for the year as a whole - at the sites shown on the map in Fig. 3-1.

The figures reflect the geographical distribution of the precipitation in the islands. In the southern and western islands the precipitation totals are smaller than in the northern islands, but the same seasonal pattern is evident. The westernmost station Mykines Fyr and the southernmost station Akraberg exhibits the lowest annual precipitation.

Number of days with precipitation ≥ 0,1 mm
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06009 Akraberg Fyr 1961-90	25	21	24	20	18	17	19	19	23	26	24	25	**260**
06010 Vága Floghavn 1988-97	28	24	27	23	19	17	21	25	23	25	24	26	**281**
06011 Tórshavn 1961-90	26	23	26	22	19	18	19	20	23	26	26	27	**273**
33000 Mykines Fyr 1961-69	25	21	26	21	19	20	21	21	23	26	26	28	**278**
33020 Fossáverkið 1961-90	23	21	25	21	19	18	19	20	24	27	24	24	**264**
33037 Hvalvík 1988-97	29	26	29	25	20	20	22	25	25	25	26	28	**300**
33045 Hellur 1987-97	28	23	27	22	19	17	18	22	22	26	25	26	**275**
33051 Kirkja 1988-97	25	23	25	17	18	15	17	19	21	23	25	23	**250**
33054 Strond Kraftstation 1961-90	20	17	20	15	15	12	13	15	20	21	20	20	**206**
33080 Nólsoy Fyr 1961-90	26	21	25	21	19	18	19	20	24	26	25	26	**270**
33090 Sandur 1961-90	25	20	23	19	16	16	17	17	22	24	23	24	**245**

Table 6-4-2. Climatological normals - number of days with precipitation greater than or equal to 0,1 mm per month plus year - at the sites shown on the map in Fig. 3-1.

Number of days with precipitation ≥ 1 mm
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06009 Akraberg Fyr 1961-90	18	13	17	12	10	11	12	12	16	18	17	19	**173**
06010 Vága Floghavn 1988-97	23	19	21	18	13	11	15	18	19	20	18	20	**215**
06011 Tórshavn 1961-90	22	17	21	16	12	12	13	13	18	22	21	22	**209**
33000 Mykines Fyr 1961-69	17	12	18	13	9,2	12	12	11	15	18	16	19	**171**
33020 Fossáverkið 1961-90	21	18	22	18	15	14	15	15	21	24	21	22	**225**
33037 Hvalvík 1988-97	25	23	25	19	15	13	16	20	20	21	22	25	**243**
33045 Hellur 1987-97	25	21	25	18	15	13	15	18	19	23	22	24	**236**
33051 Kirkja 1988-97	18	17	18	12	13	9,8	9,7	13	15	17	18	15	**175**
33054 Strond Kraftstation 1961-90	19	16	18	14	13	10	11	13	18	19	19	19	**189**
33080 Nólsoy Fyr 1961-90	19	15	18	13	12	11	12	13	18	20	19	20	**189**
33090 Sandur 1961-90	19	15	18	13	11	11	12	11	16	19	17	19	**179**

Table 6-4-3. Climatological normals - number of days with precipitation greater than or equal to 1 mm per month plus year - at the sites shown on the map in Fig. 3-1.

The observation period from Mykines Fyr is only 10 years and thus not fully comparable with the other stations. Furthermore these coastal stations - combined with their special location on high cliffs - are more affected by wind conditions, causing a relatively larger loss of precipitation.

An overall pronounced maximum in autumn and at the start of the winter and a similar minimum in summer are characteristics of the maritime climate of the Faroe Islands.

Number of days with precipitation ≥ 10 mm
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06009 Akraberg Fyr 1961-90	1,8	1,1	1,4	0,4	0,7	1,0	1,6	1,6	2,7	3,1	2,0	2,1	**20**
06010 Vága Floghavn 1988-97	6,3	3,9	4,1	3,9	2,6	2,2	3,5	4,3	5,7	5,8	5,3	4,1	**52**
06011 Tórshavn 1961-90	4,9	3,4	4,1	2,6	1,9	1,7	2,5	2,5	4,8	6,0	4,8	5,6	**45**
33000 Mykines Fyr 1961-69	1,7	1,0	1,9	0,6	0,3	0,7	0,7	1,7	2,7	2,2	1,8	1,4	**17**
33020 Fossáverkið 1961-90	9,3	6,8	8,4	4,9	3,6	2,9	3,5	4,4	7,3	9,7	8,9	9,0	**79**
33037 Hvalvík 1988-97	14	11	11	7,6	4,1	3,9	5,2	6,9	9,5	10	9,5	12	**104**
33045 Hellur 1987-97	16	12	12	8,1	4,1	3,8	4,3	5,8	7,6	9,1	11	12	**106**
33051 Kirkja 1988-97	2,0	2,1	2,2	2,3	1,7	1,5	3,0	2,5	2,2	3,1	2,4	2,3	**27**
33054 Strond Kraftstation 1961-90	9,6	7,7	9,6	5,9	5,6	3,7	4,1	4,9	8,3	9,9	10	9,6	**89**
33080 Nólsoy Fyr 1961-90	2,1	1,6	1,8	0,7	1,0	1,0	1,1	1,1	2,5	3,3	2,8	2,5	**22**
33090 Sandur 1961-90	3,8	2,6	2,9	1,7	1,6	1,5	2,0	2,2	3,7	4,3	3,2	3,7	**33**

Table 6-4-4. Climatological normals - number of days with precipitation greater than or equal to 10 mm per month plus year - at the sites shown on the map in Fig. 3-1.

Highest 24 hour precipitation in mm
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06009 Akraberg Fyr 1961-1990	**28,5**	**24,0**	**23,0**	**21,0**	**19,5**	**22,0**	**40,5**	**37,0**	**40,5**	**43,5**	**32,0**	**35,4**	**43,5**
Date	29/1	4/2	16/3	27/4	17/5	26/6	10/7	12/8	7/9	16/10	3/11	10/12	16/10
Year	1966	1968	1973	1968	1962	1965	1982	1962	1972	1976	1979	1973	1976
06010 Vága Floghavn 1988-1997	**29,0**	**30,0**	**44,0**	**37,0**	**37,0**	**36,0**	**42,0**	**45,0**	**49,0**	**60,0**	**39,0**	**31,0**	**60,0**
Date	18/1	15/2	20/3	30/4	18/5	21/6	25/7	21/8	20/9	25/10	16/11	14/12	25/10
Year	1994	1996	1989	1990	1991	1988	1988	1997	1988	1995	1997	1990	1995
06011 Tórshavn 1961-1990	**53,2**	**47,0**	**45,8**	**53,0**	**50,0**	**39,5**	**48,0**	**43,0**	**77,0**	**60,1**	**39,6**	**54,5**	**77,0**
Date	3/1	17/2	17/3	30/4	30/5	4/6	25/7	20/8	8/9	7/10	27/10	19/12	8/9
Year	1984	1961	1971	1990	1982	1974	1988	1990	1970	1978	1964	1962	1970
33000 Mykines Fyr 1961-1969	**18,2**	**32,0**	**29,5**	**26,8**	**16,3**	**29,5**	**16,2**	**27,3**	**32,5**	**38,8**	**21,0**	**29,5**	**38,8**
Date	13/1	4/2	8/3	26/4	14/5	26/6	30/7	8/8	12/9	26/10	24/11	23/12	26/10
Year	1965	1962	1967	1968	1964	1965	1963	1963	1961	1968	1964	1968	1968
33020 Fossáverkið 1961-1990	**85,0**	**95,5**	**78,0**	**70,0**	**51,0**	**56,7**	**57,2**	**57,5**	**94,5**	**97,0**	**79,0**	**125,0**	**125,0**
Date	29/1	1/3	1/4	21/4	5/5	14/6	30/7	18/8	1/10	31/10	28/11	20/12	20/12
Year	1966	1989	1980	1983	1982	1962	1963	1965	1988	1986	1976	1981	1981
33037 Hvalvík 1988-1997	**127,2**	**110,2**	**78,0**	**98,4**	**55,7**	**68,0**	**65,6**	**94,3**	**126,2**	**94,3**	**127,5**	**137,5**	**137,5**
Date	22/1	29/2	31/3	5/4	11/5	21/6	25/7	21/8	1/10	6/10	16/11	3/12	3/12
Year	1992	1992	1987	1996	1988	1988	1988	1991	1988	1994	1997	1995	1995
33045 Hellur 1987-1997	**115,1**	**83,2**	**96,0**	**62,0**	**45,4**	**62,5**	**56,2**	**65,1**	**82,0**	**92,8**	**95,0**	**82,8**	**115,1**
Date	11/1	15/2	31/3	21/4	28/5	17/6	25/7	11/8	1/10	3/10	16/11	31/12	11/1
Year	1992	1996	1994	1992	1995	1995	1988	1989	1988	1991	1997	1997	1992
33051 Kirkja 1988-1997	**28,1**	**65,2**	**33,8**	**44,5**	**22,1**	**94,0**	**53,2**	**33,1**	**35,5**	**44,5**	**33,1**	**40,1**	**94,0**
Date	9/1	28/2	17/3	15/4	23/5	29/6	24/7	15/8	26/9	27/10	16/11	18/12	29/6
Year	1988	1989	1995	1989	1990	1996	1991	1988	1988	1988	1997	1996	1996
33054 Strond Kraftstation 1961-1990	**85,0**	**137,0**	**154,4**	**163,5**	**180,0**	**86,5**	**101,0**	**113,8**	**90,0**	**136,5**	**111,5**	**130,5**	**180,0**
Date	16/1	28/2	31/3	30/4	16/5	26/6	24/7	22/8	8/9	27/10	20/11	8/12	16/5
Year	1962	1989	1970	1977	1971	1979	1988	1965	1970	1968	1964	1976	1971
33080 Nólsoy Fyr 1961-1990	**40,0**	**33,5**	**44,6**	**33,1**	**31,2**	**37,0**	**47,0**	**61,5**	**48,0**	**40,4**	**32,0**	**43,0**	**61,5**
Date	3/1	20/2	29/3	26/4	6/5	26/6	2/7	22/8	26/9	11/10	22/11	19/12	22/8
Year	1984	1973	1965	1968	1977	1965	1964	1965	1965	1985	1980	1962	1965
33090 Sandur 1961-1990	**60,5**	**54,3**	**44,2**	**34,0**	**55,4**	**35,7**	**48,8**	**57,0**	**75,3**	**72,8**	**90,5**	**55,1**	**90,5**
Date	18/1	6/2	15/3	26/4	13/5	26/6	24/7	25/8	8/9	12/10	10/11	2/12	10/11
Year	1971	1974	1968	1968	1969	1965	1988	1982	1970	1979	1986	1985	1986

Table 6-4-5. Climatological normals - highest 24 hour precipitation with indication of date per month plus year - at the sites shown on the map in Fig. 3-1.

6.5 Snow and snow cover

There are two tables, one for each weather element, showing the number of days with snow and the number of days with snow cover for Tórshavn. The data are shown for each month and for the year as a whole.

The islands never experience snow in June, July and August of the period 1961-1990, but snow was common during the wintertime.

Number of days with snow, 1961-1990
06011 Tórshavn

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06011 Tórshavn 1961-1990	8,3	6,6	8,0	4,4	1,5	0	0	0	0,1	1,4	5,5	8,2	**44**

Table 6-5-1. Climatological normals - number of days with snow per month plus year - at the site shown on the map in Fig. 3-1.

Number of days with snow cover, 1961-1990
06011 Tórshavn

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06011 Tórshavn 1961-1990	10,8	7,6	7,6	3,4	0,5	0	0	0	0	0,7	5,5	8,8	**45**

Table 6-5-2. Climatological normals - number of days with snow cover per month plus year - at the site shown on the map in Fig. 3-1.

6.6 Hours of bright sunshine

There are two tables, one for each weather element, showing hours of bright sunshine and daily maximum hours of bright sunshine for Tórshavn Radiosonde, for each month and for the year as a whole.

As a whole the islands receive half the amount of sunshine received in Denmark, the maximum occurring in May and June and the minimum in December.

Hours of bright sunshine, 1961-1990
33069 Tórshavn Radiosonde

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
33069 Torshavn Radiosonde 1961-1990	14	36	71	107	124	125	111	97	79	48	20	7,0	**840**

Table 6-6-1. Climatological normals - hours of bright sunshine per month and for the year as a whole - at the site shown on the map in Fig. 3-1.

Daily maximum hours of bright sunshine, 1961-1990
33069 Tórshavn Radiosonde

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
33069 Torshavn Radiosonde 1961-1990	**5,8**	**7,7**	**11,2**	**14,7**	**16,4**	**16,5**	**16,0**	**14,8**	**12,3**	**9,3**	**6,3**	**3,4**	**16,5**
Date	27/1	28/2	30/3	9/4	28/5	3/6	3/7	11/8	4/9	1/10	11/11	14/12	3/6
Year	1973	1961	1965	1976	1984	1971	1984	1968	1984	1987	1961	1966	1971

Table 6-6-2. Climatological normals - daily maximum hours of bright sunshine with indication of date per month plus the year as a whole - at the site shown on the map in Fig. 3-1.

6.7 Cloud cover

There are three tables, one for each weather element, showing mean cloud cover plus number of clear and cloudy days for Mykines Fyr, Akraberg Fyr and Tórshavn. The data are shown for each month and for the year as a whole.

Mean cloud cover in %
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	80	80	82	79	83	85	86	83	82	83	80	81	**82**
06009 Akraberg Fyr 1961-1990	79	78	77	77	79	83	85	83	80	80	77	78	**80**
06011 Tórshavn 1961-1990	81	80	80	79	81	83	84	84	82	81	80	80	**81**

Table 6-7-1. Climatological normals - mean cloud cover (%) per month plus year - at the sites shown on the map in Fig. 3-1.

Number of clear days (less than 20% cloud cover)
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	0,1	0,8	0,2	0,3	0,2	0	0	0,1	0,2	0	0,2	0,2	**2,4**
06009 Akraberg Fyr 1961-1990	0	0	0,2	0,2	0,3	0,1	0,1	0,3	0,2	0,1	0,1	0,1	**1,7**
06011 Tórshavn 1961-1990	0,1	0	0,2	0,2	0,5	0,3	0,2	0,2	0	0,1	0,1	0,1	**1,9**

Table 6-7-2. Climatological normals - number of clear days (less than 20% cloud cover) per month plus year - at the sites shown on the map in Fig. 3-1.

Number of cloudy days (more than 80% cloud cover)
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	17	17	20	18	21	21	23	21	20	20	17	18	**233**
06009 Akraberg Fyr 1961-1990	16	14	15	15	17	19	21	20	17	17	14	15	**199**
06011 Tórshavn 1961-1990	18	16	18	16	19	20	21	21	18	19	17	18	**221**

Table 6-7-3. Climatological normals - number of cloudy days (more than 80% cloud cover) per month plus year - at the sites shown on the map in Fig. 3-1.

6.8 Wind

Wind data are presented by means of one wind rose and one wind frequency table per station. In addition to the wind roses there are seven tables, one for each element, showing mean wind speed, maximum wind speed with indication of time, most frequent wind direction with indication of frequency and finally number of windy, stormy, storm and hurricane days for Mykines Fyr, Akraberg Fyr and Tórshavn. The data are shown for each month and for the year as a whole.

At Mykines Fyr (NB: period is 1961-1969) the wind blows for more than 40% of the time from either the north or south east. Winds from the north west seldom occur. As this picture differs markedly from that at the other stations it is assumed that local topography is causing this variation.

Winds from the south west to west occur most often at Akraberg Fyr. At this southernmost point in the islands the climate is very windy, and the highest mean 10 - minutes wind speed (10,2 m/s) occurs here in December.

Tórshavn shows more or less the same frequency of wind direction as Akraberg Fyr, but generally the winds are weaker. The percentage of calm is higher at Tórshavn than at the other stations.

Note that the mean wind speed differs in table 6-8-1 from the frequency tables in figure 6-8-1 to 6-8-3. The reason is that the calculations behind table 6-8-1 include all recorded observations, while the data used to calculate the mean wind speed in the frequency tables excludes wind speeds less than or equal to 0,2 m/s, which is defined as calm.

Mean wind speed in m/s
The Faroe Islands

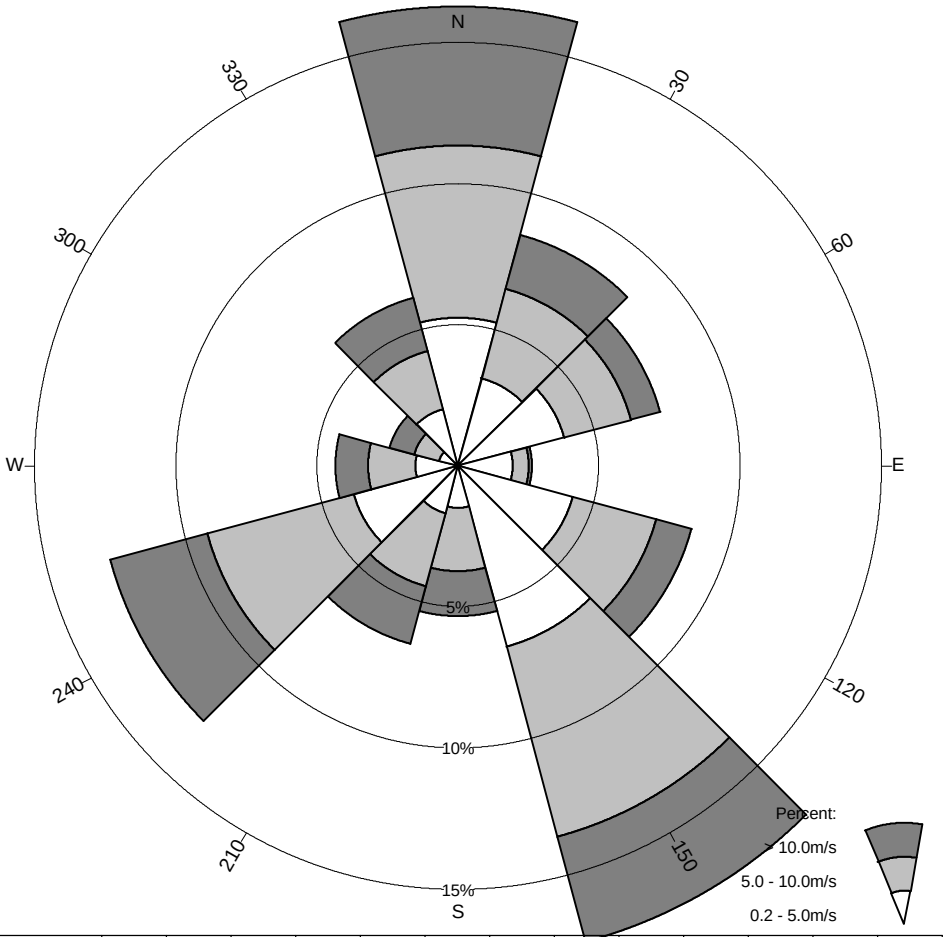
Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	8,9	8,9	9,4	7,4	6,3	5,6	5,6	5,8	7,3	8,6	9,7	9,7	**7,8**
06009 Akraberg Fyr 1962-1990	10,1	9,3	9,2	7,7	6,8	6,0	6,0	6,2	7,5	8,8	9,2	10,2	**8,1**
06011 Tórshavn 1961-1990	6,9	6,6	6,7	5,7	4,9	4,6	4,7	4,5	5,7	6,5	6,5	7,1	**5,9**

Table 6-8-1. Climatological normals - mean wind speed per month plus year - at the sites shown on the map in Fig. 3-1.

Station 06005

MYKINES FYR

01-01-61 - 31-12-69



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	16.3	8.5	7.4	2.6	8.6	17.5	5.3	6.5	12.8	4.4	2.5	6.2	98.5
% 0.2-5.0m/s	5.3	3.2	3.9	2.0	4.2	6.6	1.5	1.7	3.8	1.5	0.7	2.1	36.6
% 5.0-10.0m/s	6.1	3.3	2.4	0.6	3.1	7.0	2.2	2.7	5.4	1.7	0.9	2.1	37.4
% > 10.0m/s	4.9	2.0	1.1	0.1	1.3	3.9	1.6	2.1	3.6	1.2	0.9	1.9	24.5
Mean wind speed	8.7	7.7	6.2	4.4	6.5	7.6	8.7	9.2	8.4	8.2	9.5	8.9	7.9
Max wind speed	35.0	30.9	22.6	30.9	22.6	30.9	26.8	30.9	30.9	30.9	35.0	38.1	38.1

Number of observations = 25206 Source: DMI

Calm defined as wind speed <= 0.2m/s

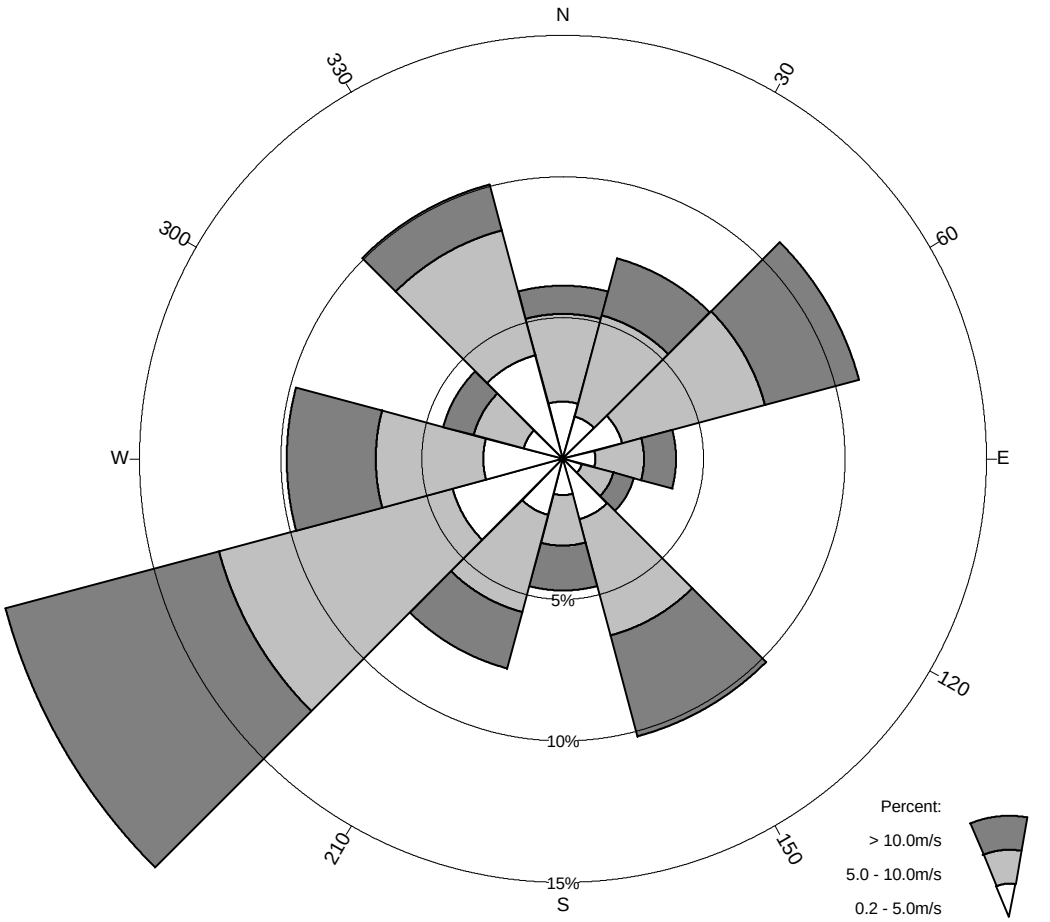
Number of observations with calm/varying wind direction: 380 = 1.5%

Figure 6-8-1. Wind rose and frequency table, 1961-1969, 06005 Mykines Fyr.

Station 06009

AKRABERG FYR

01-09-61 - 31-12-90



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	6.1	7.4	10.9	4.0	2.6	10.2	4.7	7.7	20.4	9.8	4.4	10.1	98.2
% 0.2-5.0m/s	2.0	1.6	2.2	1.2	0.7	2.2	1.3	2.1	4.1	2.8	1.5	3.8	25.4
% 5.0-10.0m/s	3.1	3.7	5.2	1.7	1.2	4.3	1.8	3.5	8.6	3.8	1.8	4.6	43.3
% > 10.0m/s	1.0	2.1	3.4	1.1	0.7	3.7	1.6	2.1	7.8	3.2	1.1	1.7	29.5
Mean wind speed	6.7	8.1	8.4	7.7	7.8	8.8	8.6	8.0	9.3	8.4	7.7	6.6	8.2
Max wind speed	23.0	29.8	29.8	28.8	22.6	37.0	31.0	38.1	43.2	36.0	36.0	29.8	43.2

Number of observations = 82472 Source: DMI

Calm defined as wind speed <= 0.2m/s

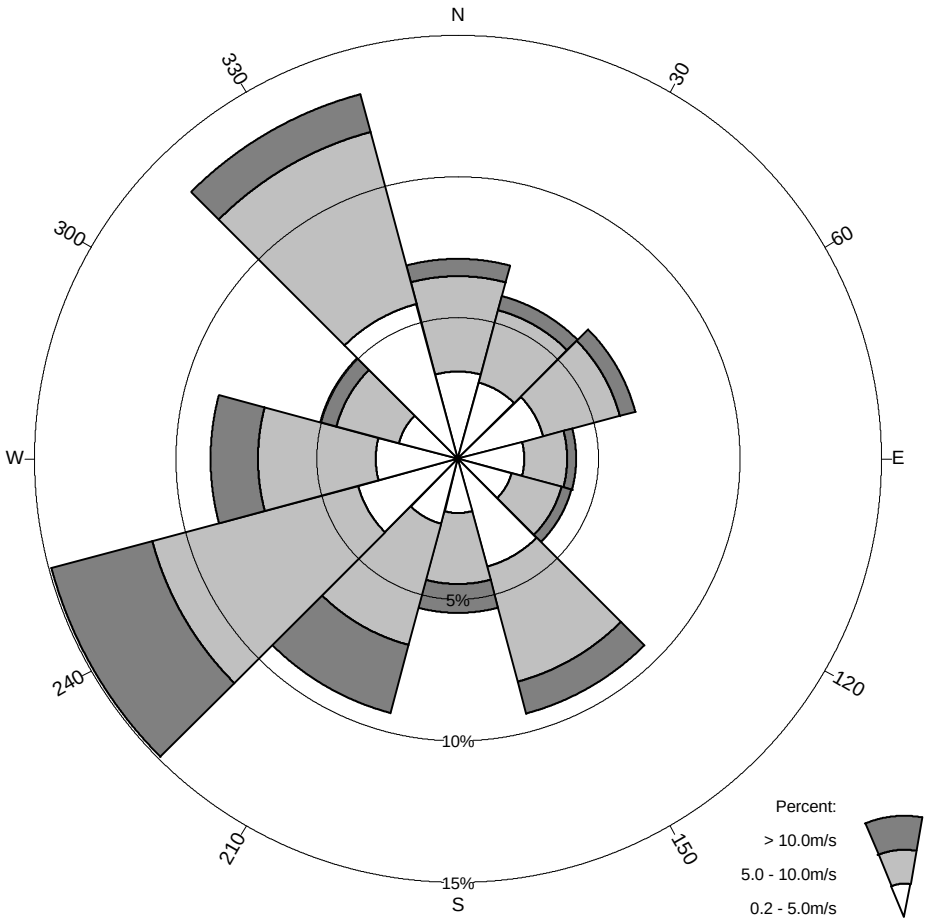
Number of observations with calm/varying wind direction: 1455 = 1.8%

Figure 6-8-2. Wind rose and frequency table, 1961-1990, 06009 Akraberg Fyr.

Station 06011

TORSHAVN

01-01-61 - 31-12-90



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	7.1	6.0	6.5	4.2	4.2	9.3	5.5	9.3	14.9	8.8	5.1	13.4	94.2
% 0.2-5.0m/s	3.1	2.8	3.1	2.4	2.0	4.0	1.9	2.4	3.7	2.9	2.2	5.7	36.1
% 5.0-10.0m/s	3.4	2.7	2.8	1.5	1.8	4.2	2.5	4.4	7.6	4.2	2.3	6.3	43.7
% > 10.0m/s	0.6	0.5	0.6	0.3	0.4	1.2	1.0	2.5	3.7	1.7	0.6	1.4	14.4
Mean wind speed	5.5	5.3	5.4	4.8	5.4	5.9	6.6	7.6	7.4	6.7	5.8	5.7	6.2
Max wind speed	22.1	21.1	19.5	15.4	20.6	26.0	26.8	30.9	29.9	25.2	25.7	26.0	30.9

Number of observations = 87091 Source: DMI

Calm defined as wind speed <= 0.2m/s

Number of observations with calm/varying wind direction: 5065 = 5.8%

Figure 6-8-3. Wind rose and frequency table, 1961-1990, 06011 Tórshavn.

Maximum wind speed (10 - minutes averages) in m/s
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	**30,9**	**35,0**	**35,0**	**26,8**	**26,8**	**22,6**	**22,6**	**24,7**	**30,9**	**30,9**	**35,0**	**38,1**	**38,1**
Date	11/1	13/2	20/3	17/4	13/5	16/6	4/7	12/8	29/9	29/10	29/11	4/12	4/12
Year	1969	1965	1967	1967	1964	1962	1968	1962	1969	1969	1965	1967	1967
06009 Akraberg Fyr 1962-1990	**38,1**	**43,2**	**36,0**	**26,8**	**27,0**	**19,5**	**21,6**	**21,9**	**32,9**	**32,0**	**31,0**	**41,1**	**43,2**
Date	10/1	20/2	8/3	26/4	4/5	29/6	3/7	30/8	25/9	31/10	27/11	22/12	20/2
Year	1988	1990	1990	1990	1982	1989	1988	1977	1989	1983	1984	1988	1990
06011 Tórshavn 1961-1990	**26,0**	**29,9**	**25,7**	**26,8**	**21,0**	**17,5**	**21,0**	**21,0**	**23,0**	**26,0**	**26,0**	**30,9**	**30,9**
Date	23/1	25/2	29/3	26/4	26/5	25/6	8/7	27/8	25/9	31/10	27/11	22/12	22/12
Year	1984	1976	1990	1990	1985	1964	1982	1983	1983	1983	1984	1988	1988

Table 6-8-2. Climatological normals - maximum wind speed with indication of date per month plus year - at the sites shown on the map in Fig. 3-1.

Most frequent wind direction and frequency in %
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1962-1969	N	N	N	N	N	N	N	N	N	S	N	N	**N**
Frequency (%)	23	26	29	24	31	21	31	35	25	24	32	34	**28**
06009 Akraberg Fyr 1962-1990	W	W	W	W	N	W	W	W	W	W	W	W	**W**
Frequency (%)	24	22	23	23	18	22	28	22	25	23	24	25	**23**
06011 Tórshavn 1961-1990	W	S/W	S	N	N	SW	SW	SW	W	S	N	W	**W**
Frequency (%)	18	19/19	18	20	18	16	18	16	19	18	19	20	**17**

Table 6-8-3. Climatological normals - most frequent wind direction and frequency of most frequent wind direction, per month plus the year as a whole, at the sites shown on the map in Fig. 3-1.

Number of windy days (wind speed ≥ 11 m/s)
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	20	16	20	13	9,9	7,7	7,0	8,3	12	18	21	22	**176**
06009 Akraberg Fyr 1962-1990	23	18	20	14	11	8,2	7,8	9,4	14	20	19	23	**187**
06011 Tórshavn 1961-1990	14	12	13	7,7	4,4	3,7	4,4	4,2	8,0	13	12	16	**113**

Table 6-8-4. Climatological normals - number of windy days (at least one observation of wind speed greater than or equal to 11 m/s) per month plus year - at the sites shown on the map in Fig. 3-1.

Number of stormy days (wind speed ≥ 21 m/s)
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	1,8	2,1	2,3	1,3	0,3	0,2	0,3	0,2	0,9	1,6	2,8	4,2	**18**
06009 Akraberg Fyr 1962-1990	3,9	2,7	2,4	0,6	0,2	0	0	0,1	0,8	1,7	2,0	4,0	**19**
06011 Tórshavn 1961-1990	0,6	0,4	0,2	0,1	0	0	0	0	0,2	0,5	0,2	0,5	**2,8**

Table 6-8-5. Climatological normals - number of stormy days (at least one observation of wind speed greater than or equal to 21 m/s) per month plus year - at the sites shown on the map in Fig. 3-1.

Number of days with storm (wind speed ≥ 26 m/s)
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	0,4	1,0	1,0	0,3	0,2	0	0	0,1	0,4	0,4	1,1	1,7	**6,8**
06009 Akraberg Fyr 1962-1990	2,0	1,0	0,9	0,1	0,1	0	0	0	0,4	0,7	0,7	1,5	**7,3**
06011 Tórshavn 1961-1990	0,1	0,1	0,1	0,1	0	0	0	0	0	0,1	0,1	0,1	**0,6**

Table 6-8-6. Climatological normals - number of days with storm (at least one observation of wind speed greater than or equal to 26 m/s) per month plus year - at the sites shown on the map in Fig. 3-1.

Number of days with hurricane (wind speed ≥ 31 m/s)
The Faroe Islands

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06005 Mykines Fyr 1961-1969	0,22	0,56	0,56	0	0	0	0	0	0,44	0,11	0,33	0,89	**3,1**
06009 Akraberg Fyr 1962-1990	0,79	0,34	0,28	0	0	0	0	0	0,17	0,10	0,10	0,38	**2,2**
06011 Tórshavn 1961-1990	0	0,03	0	0	0	0	0	0	0	0	0	0,03	**0,07**

Table 6-8-7. Climatological normals - number of days with hurricane (at least one observation of wind speed greater than or equal to 31 m/s) per month plus year - at the sites shown on the map in Fig. 3-1.

6.9 Atmospheric pressure

There are three tables, one for each weather element, showing mean atmospheric pressure, absolute maximum atmospheric pressure and absolute minimum atmospheric pressure with indication of time for Tórshavn. The data are shown for each month and for the year as a whole.

The absolute minimum, 948,6 hPa observed on 11 January 1986, reflects the high frequency of intensive cyclone developments during the winter. However, the very high maximum occurring nearly every month - but most extreme during the winter - reflects the fact that high pressure weather also occurs all year round and sometimes for prolonged periods.

Mean atmospheric pressure at mean sea level (hPa), 1961 - 1990
06011 Tórshavn

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06011 Tórshavn 1961-1990	1004	1008	1006	1012	1014	1013	1012	1011	1008	1005	1005	1004	**1008**

Table 6-9-1. Climatological normals - mean atmospheric pressure at mean sea level (hPa) per month plus year - at the site shown on the map in Fig. 3-1.

Absolute maximum atmospheric pressure at mean sea level (hPa), 1961-1990
06011 Tórshavn

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06011 Tórshavn 1961-1990	**1044,9**	**1046,0**	**1042,5**	**1042,8**	**1040,6**	**1036,9**	**1033,0**	**1037,8**	**1037,4**	**1042,1**	**1042,2**	**1043,1**	**1046,0**
Date	31/1	20/2	14/3	10/4	28/5	3/6	29/7	26/8	17/9	18/10	6/11	2/12	20/2
Year	1963	1965	1984	1986	1975	1979	1968	1968	1977	1972	1980	1987	1965

Table 6-9-2. Climatological normals - absolute maximum atmospheric pressure at mean sea level (hPa) with indication of time per month plus year - at the site shown on the map in Fig. 3-1.

Absolute minimum atmospheric pressure at mean sea level (hPa), 1961 - 1990
06011 Tórshavn

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
06011 Tórshavn 1961-1990	**948,6**	**950,4**	**956,2**	**970,8**	**976,6**	**983,1**	**970,4**	**976,2**	**963,1**	**957,9**	**955,3**	**949,0**	**948,6**
Date	11/1	20/2	6/3	11/4	22/5	25/6	8/7	12/8	19/9	27/10	10/11	20/12	11/1
Year	1986	1990	1986	1965	1986	1965	1964	1989	1990	1967	1972	1982	1986

Table 6-9-3. Climatological normals - absolute minimum atmospheric pressure at mean sea level (hPa) with indication of time per month plus year - at the site shown on the map in Fig. 3-1.

7. Temperature, precipitation and hours of bright sunshine observed at Hoyvík/Tórshavn, 1922-1997

Observations of a variety of climatological elements at a variety of observation sites and using a variety of instruments have been performed since 1873 in Tórshavn. This report presents three 76-year series of observations covering temperature, precipitation and hours of bright sunshine, respectively.

7.1 Adjustment of original observations

The temperature series has been constructed from observations recorded at 33060 Hoyvík during the period 1922-1957 and at 06011 Tórshavn during the period 1958-1997. Today Hoyvík is located in the northern part of Tórshavn, but previously it was a small village outside the town. The two series of observational records are therefore not fully comparable without adjustments. These adjustments have been performed in the Hoyvík data for 1922-1957 using the 1958-1983 overlap period between the stations.

The result, which represents the present observation site, can be seen below in Fig. 7-1 showing the annual mean temperature at Tórshavn for 1922-1997.

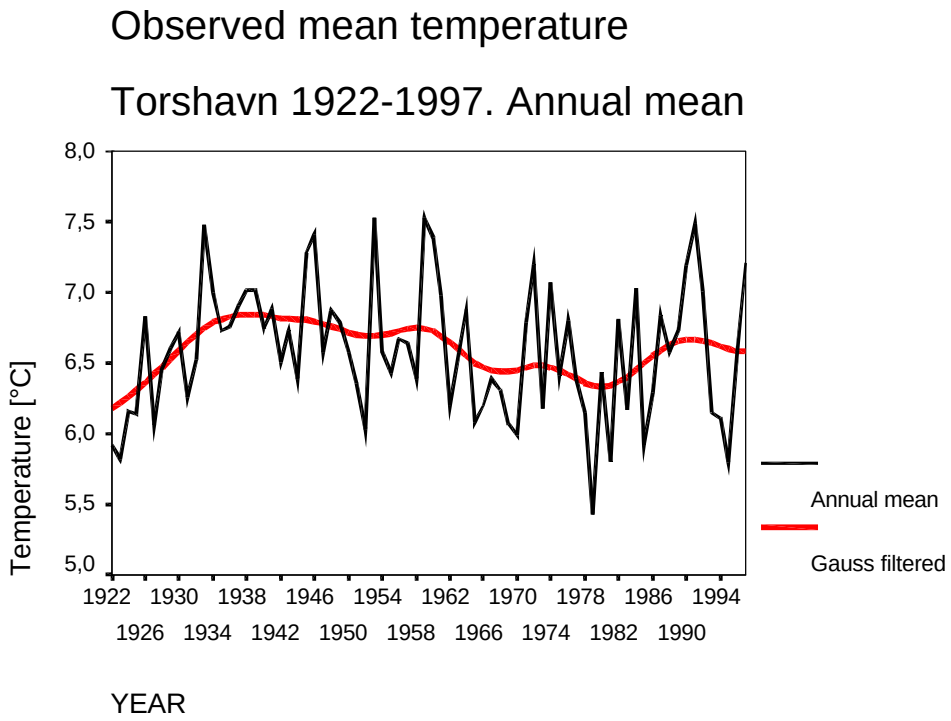


Figure 7-1. Annual temperature means, Tórshavn, 1922-1997. The heavy line represents filtered values using a 4 - year gauss filter.

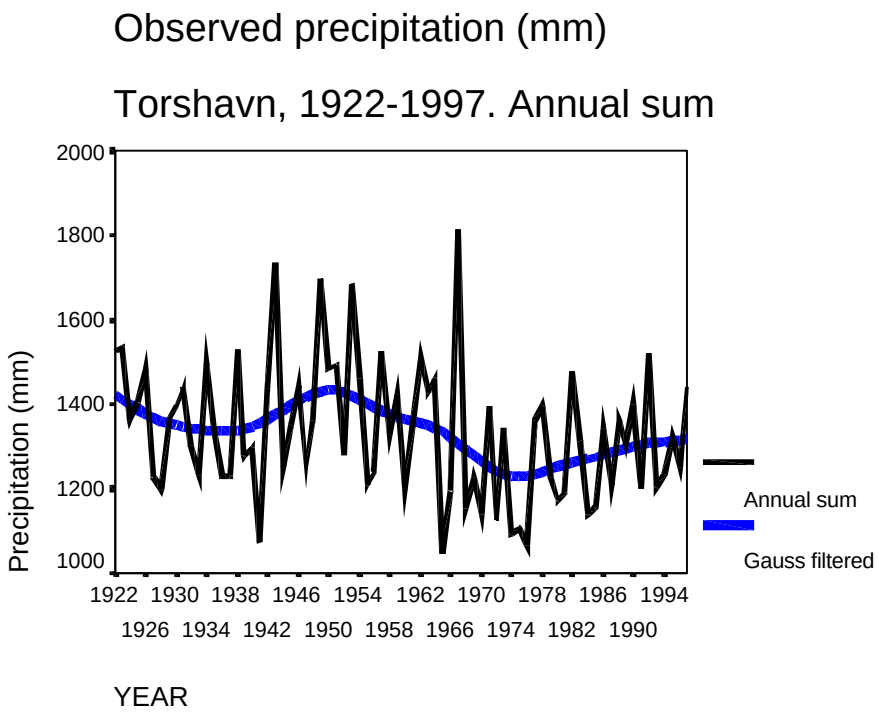


Figure 7-2. Annual precipitation totals, Tórshavn, 1922-1997. The heavy line represents filtered values using a 4 - year gauss filter.

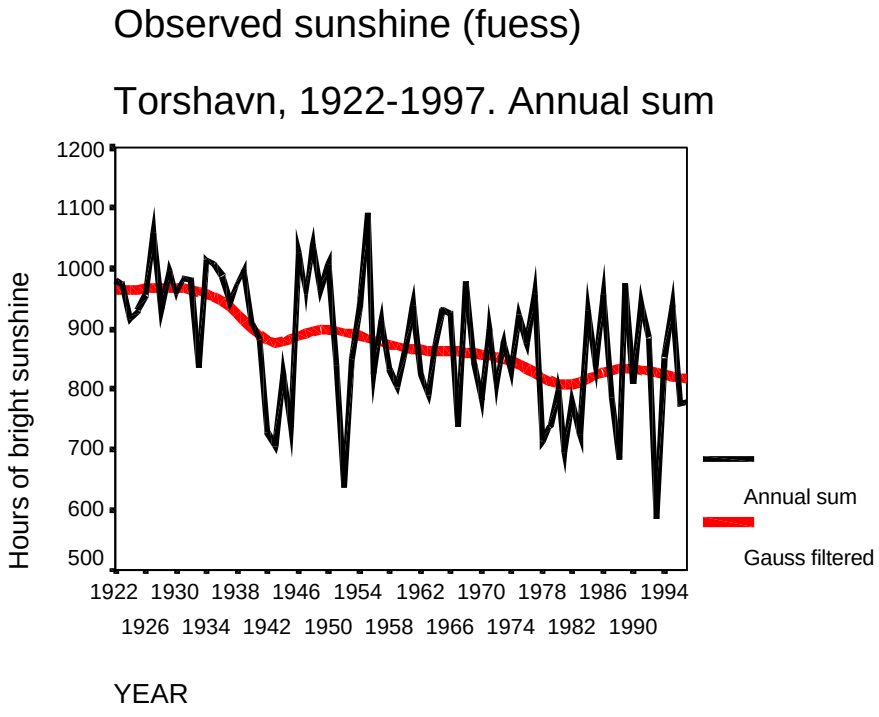


Figure 7-2. Annual total hours of bright sunshine, Tórshavn, 1922-1997. The heavy line represents filtered values using a 4 - year gauss filter.

A long precipitation record has been constructed in a similar way. Observations of precipitation from 33060 Hoyvík concerning the period 1922-1981 have been compounded with precipitation observations from 06011 Tórshavn for 1982-1997. It was not possible to adjust the Hoyvík series using an overlap period, so adjustment has been performed using the SHNT-test described in section 5, based on the a priori knowledge that the break can be found in 1982. The Tórshavn station was relocated on 1 January 1993, causing a new break in the series and the SNHT-test was used again. These adjustments were finally used from 1922-1992.

The monthly accumulated precipitation for 1922-1997 thus made comparable with the present observation site in Tórshavn is presented in Fig. 7-2.

Observations of bright sunshine from Hoyvík for 1922 to May 1983 have been compounded with observations from 33069 Tórshavn Radiosonde for January 1984 - 1997. The same recording instrument used in Hoyvík, was used at Tórshavn Radiosonde from 1984 and is actually still in use. Missing sunshine observations in the period June 1983 to December 1983 and a few other months, have been replaced with constructed values using monthly mean values for the rest of the series and cloud cover from Tórshavn.

The monthly accumulated hours of bright sunshine for the period 1922-1997 from Tórshavn are presented in Fig. 7-3.

7.2 Trends, 1922-1997

Trends in the Tórshavn series for 1922-1997 can be seen on the three annual plots (Fig. 7-1 to 7-3) and 12 seasonal plots (Fig. 7-4 to 7-6), and in table 7-1 on the opposite page, showing seasonal totals during four periods.

A common feature was a general increase in temperature during the 1920s and 1930s, peaking at a high in the 1940s and 1950s. This picture is repeated almost worldwide. A slight decrease in the 1960s and 1970s was then followed by an increase in the 1980s and the early 1990s. Only the winter mean temperature exhibits a different trend.

The difference - minus 0,3 °C annually - between the two “full” standard normal periods 1931-1960 and 1961-1990, is almost consistent throughout the seasons.

Where precipitation is concerned another picture is evident. A high level in the 1920s was followed by a decrease annually and for the winter and spring seasons, while the reverse applies for the summer. The 1940s and 1950s generally show a local maximum which is higher than in the 1960s, 1970s and 1980s, but the level has been raised particularly by winter and summer precipitation in the last 20 years.

The difference - a decrease of 93 mm annually - between the two “full” standard normal periods 1931-1960 and 1961-1990, is consistent throughout the seasons except for autumn, the level being the same for both periods.

Hours of bright sunshine in Tórshavn have generally decreased in all seasons, the lowest level being at present. Looking at all seasons as a whole, however, the last 20 years have been almost stable, cf. Fig. 7-6.

The difference - a decrease of 63 hours annually - between the two “full” standard normal periods 1931-1960 and 1961-1990, is consistent throughout the seasons. Attention is drawn to the remarkable change in the level between the 1920s and the 1990s - almost 150 hours!

Torshavn, 1922-1997. Seasonal means.
Mean temperature (°C)

Period	Winter	Spring	Summer	Autumn	Year
1922-1930	4,0	5,0	9,6	6,6	6,3
1931-1960	3,8	5,5	10,2	7,7	6,8
1961-1990	3,6	5,2	10,0	7,1	6,5
1991-1997	3,8	5,2	10,1	7,3	6,6

Torshavn, 1922-1997. Seasonal totals.
Precipitation (mm)

Period	Winter	Spring	Summer	Autumn	Year
1922-1930	424	321	216	409	1388
1931-1960	413	316	236	410	1377
1961-1990	374	291	214	410	1284
1991-1997	420	296	227	363	1311

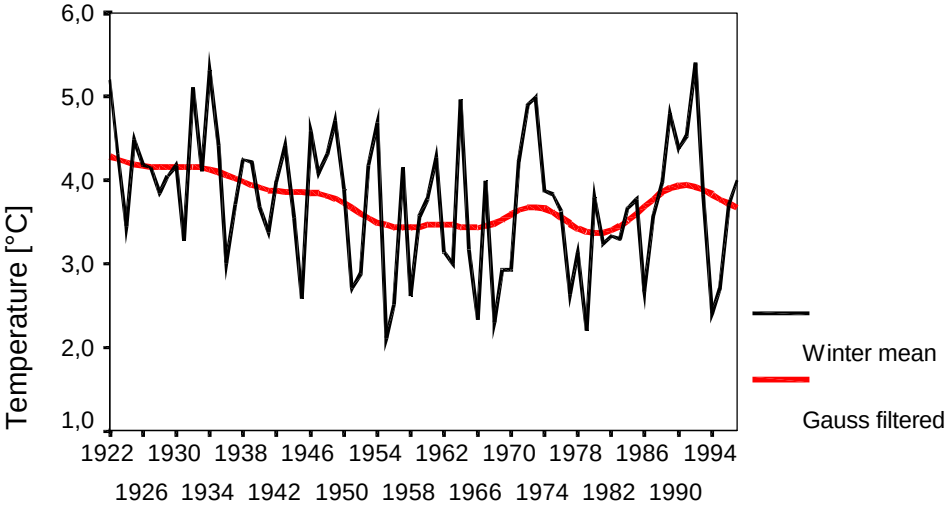
Torshavn, 1922-1997. Seasonal totals.
Hours of bright sunshine (FUESS level)

Period	Winter	Spring	Summer	Autumn	Year
1922-1930	59	342	373	193	967
1931-1960	63	326	352	163	903
1961-1990	57	302	333	148	840
1991-1997	50	296	324	151	821

Table 7-1. Mean seasonal totals for temperature, precipitation and hours of bright sunshine - at four successive intervals - Tórshavn, 1922-1997.

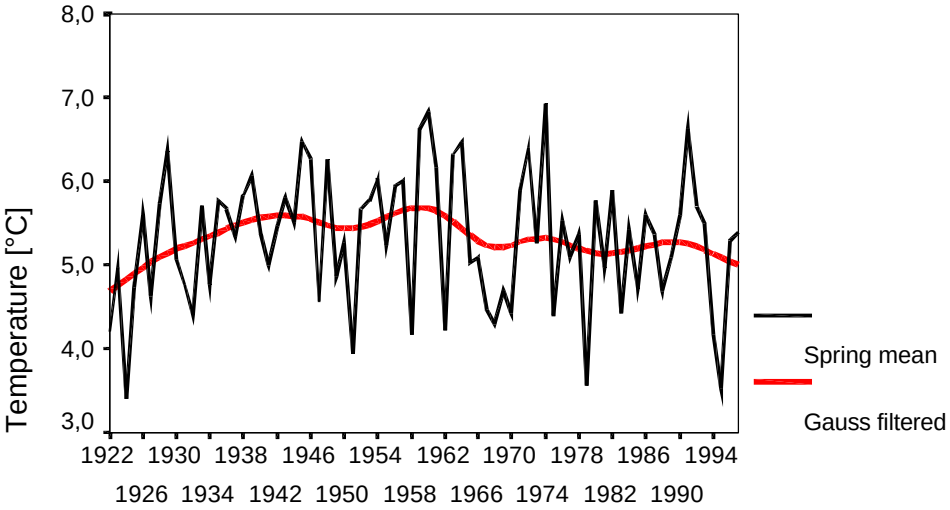
Observed mean temperature

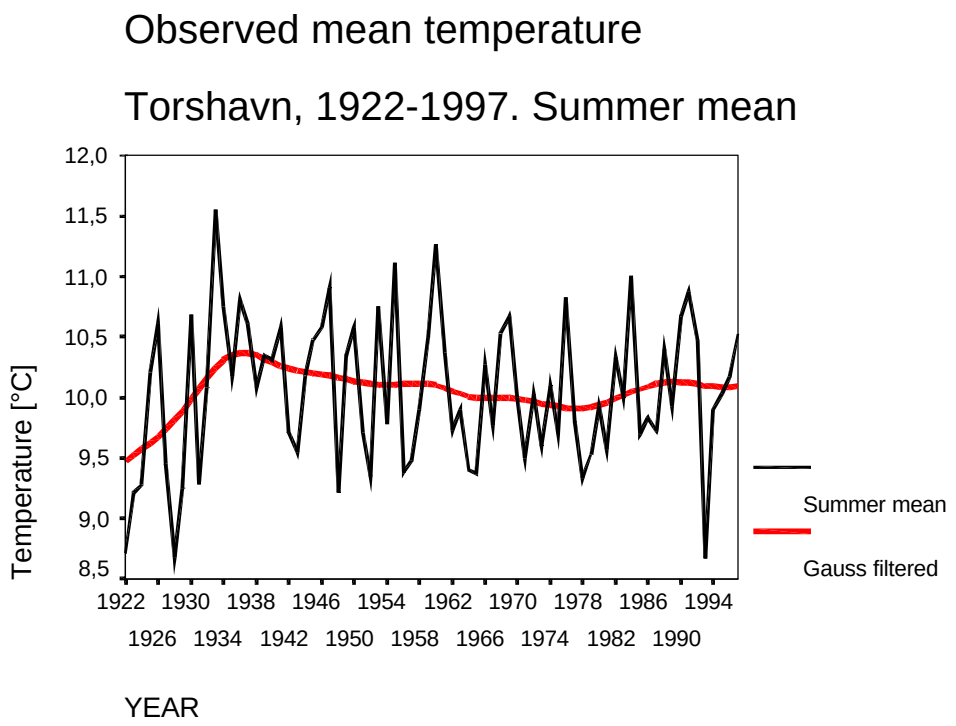
Torshavn, 1922-1997. Winter mean



Observed mean temperature

Torshavn, 1922-1997. Spring mean





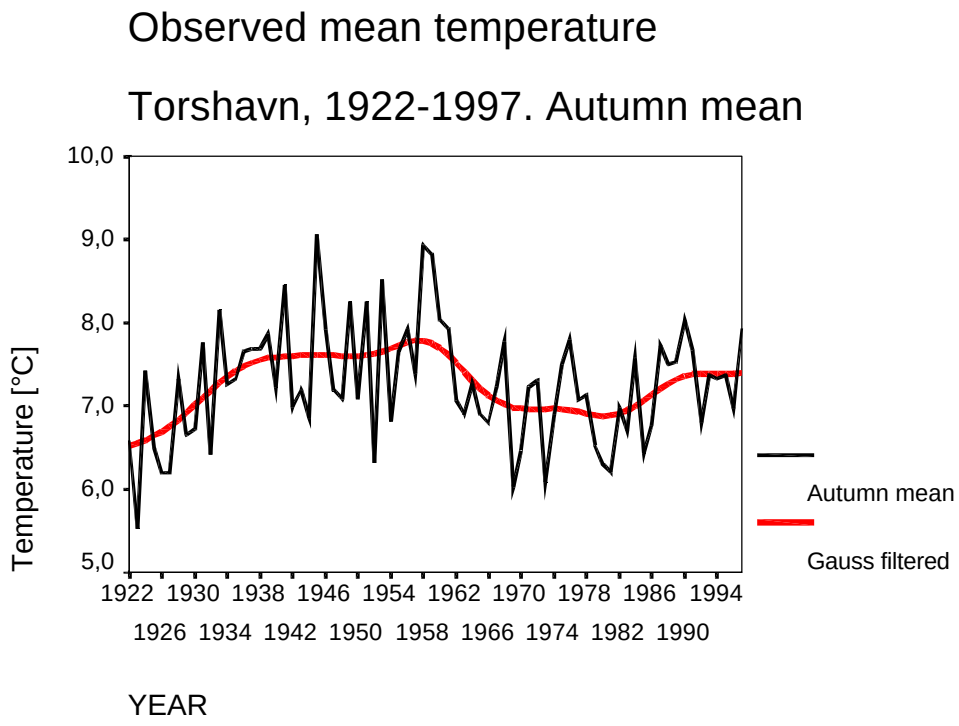
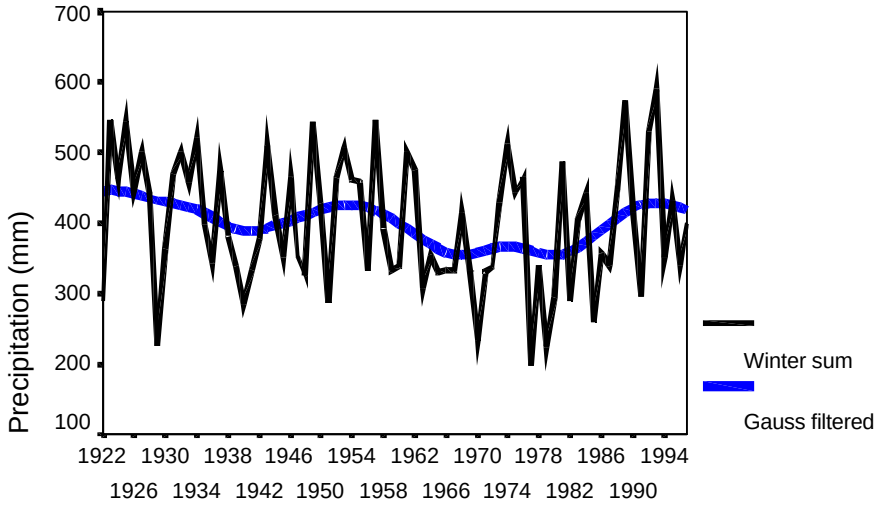


Figure 7-4. Mean temperature - split into the four seasons: winter, spring, summer and autumn - Tórshavn, 1922-1997. The heavy line represents filtered values using a 4-year gauss filter.

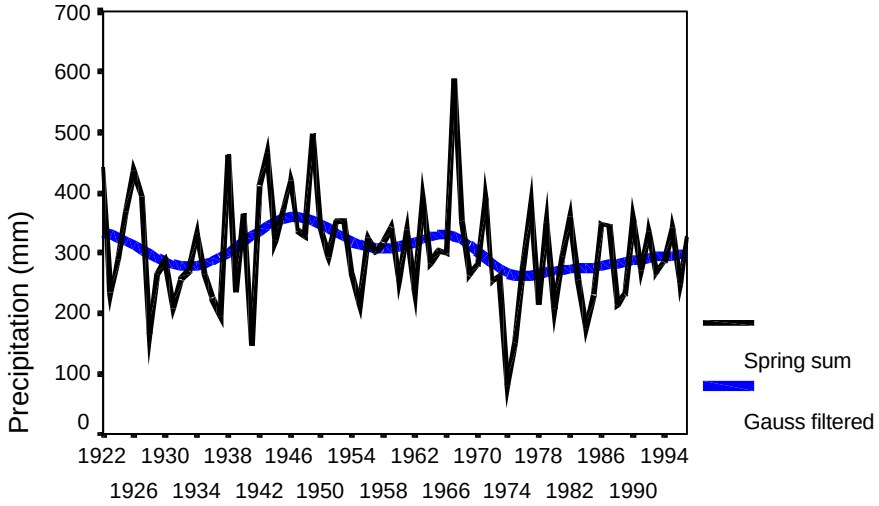
Observed precipitation (mm)

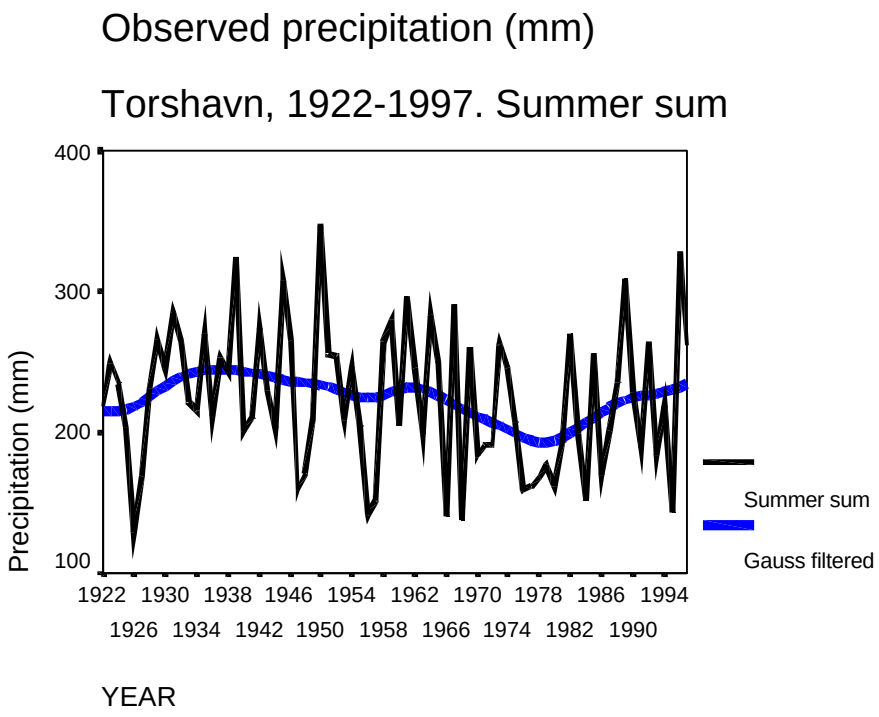
Torshavn, 1922-1997. Winter sum



Observed precipitation (mm)

Torshavn, 1922-1997. Spring sum





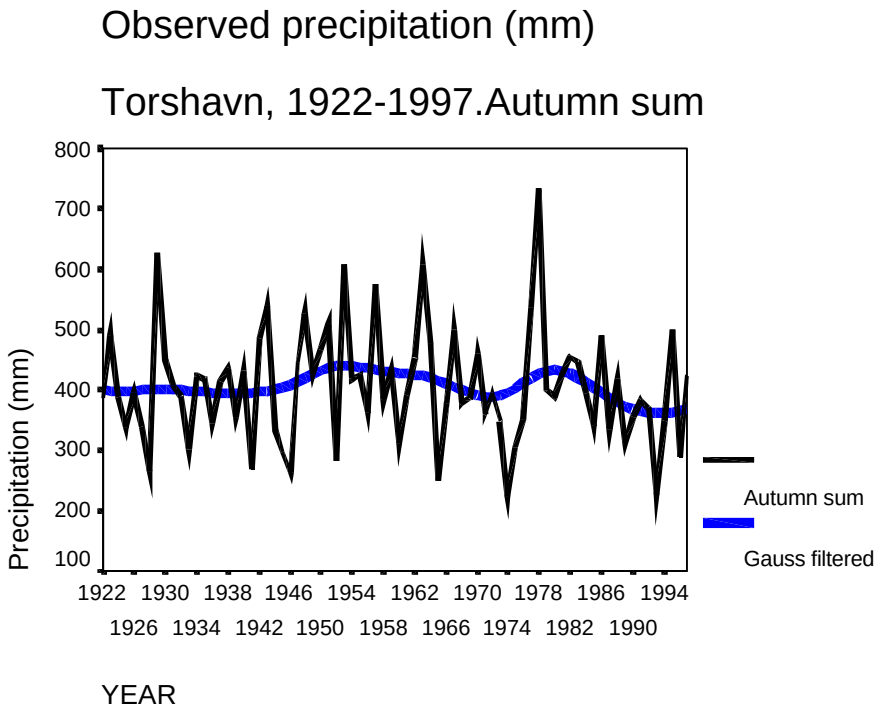
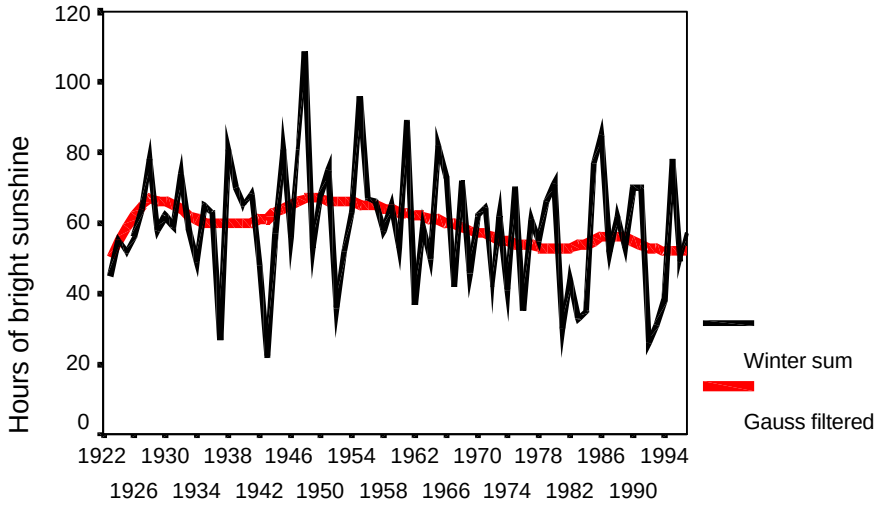


Fig. 7-5. Precipitation - split into the four seasons: winter, spring, summer and autumn - Tórshavn, 1922-1997. The heavy line represents filtered values using a 4-year gauss filter.

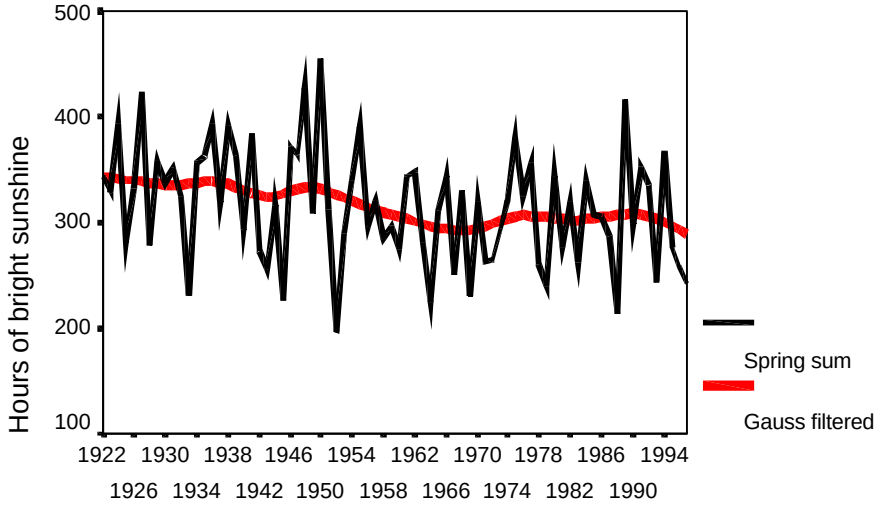
Observed sunshine (fuess)

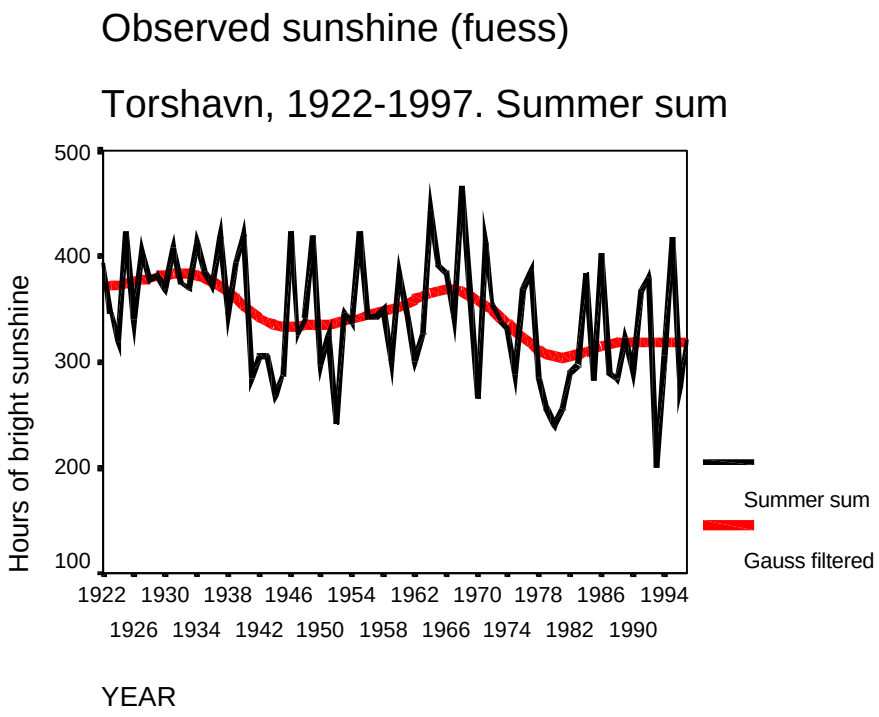
Torshavn, 1922-1997. Winter sum



Observed sunshine (fuess)

Torshavn, 1922-1997. Spring sum





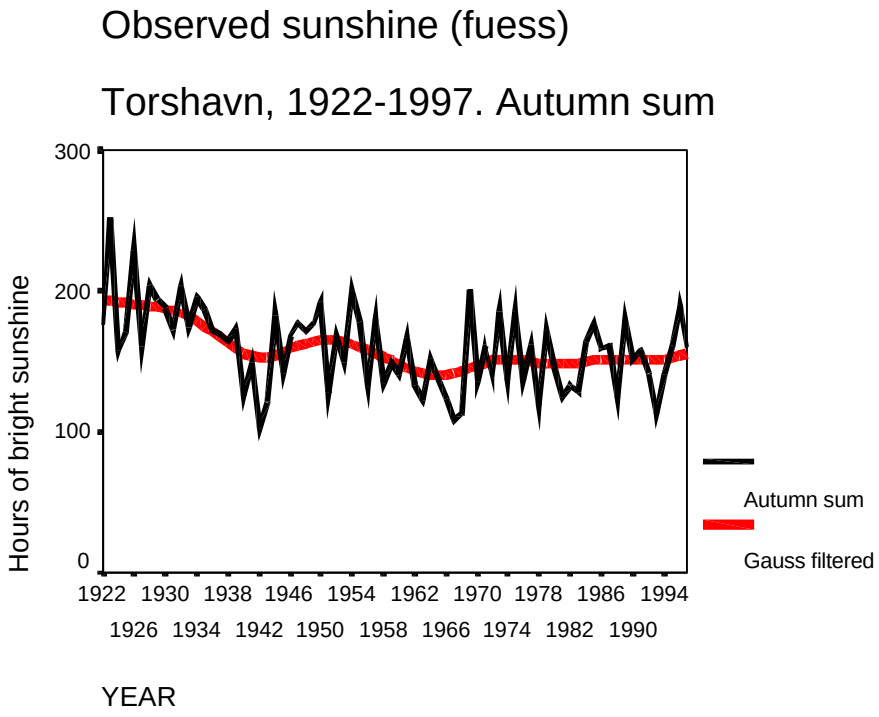


Fig. 7-6. Hours of bright sunshine - split into the four seasons: winter, spring, summer and autumn - Tórshavn, 1922-1997. The heavy line represents filtered values using a 4-year gauss filter.

8. Conclusions

The descriptions and tables in the preceding sections show that the climate in the Faroe Islands is heavily influenced by the surrounding ocean. Indeed, the islands have a maritime climate, with marked differences in several of the elements between one place and another, caused by both meteorological and topographic conditions.

The data presented mainly relate to the standard normal period 1961-1990, a relatively short period when discussing climate change. For this reason three 76-year series of observations from Tórshavn covering temperature, precipitation and hours of bright sunshine, respectively are presented in section 7. This material together with statistics from the previous standard normal period 1931-1960 (Lysgaard, 1969), could form the basis for a general picture of climate change in the Faroe Islands between the two periods.

Off course great care must be taken when comparing 1961-1990 values presented in this report with 1931-1960 values published earlier (Lysgaard,1969). Several observation sites have been relocated and a number of meteorological instruments have been changed. This could easily introduce artificial trends into the material, masking natural trends.

Below, the three 76-year data series form the principal basis for conclusions regarding changes between the two normal periods 1931-1960 and 1961-1990. Significant (and identical) trends emerging from comparison with the earlier published material are also included. The 1931-1960 period is referred to as the past, the period 1961-1990 being referred to as the present.

Temperature has decreased in all seasons compared to the past. On a monthly basis the decrease is most notable during late autumn/early winter (November to December) and during late summer (July to September). A slight increase can be seen in the first summer month (June) and in the winter period (January to February).

Precipitation has increased in March and September-October. A decrease has been observed in all other months but most notable in the adjoining months of February, April, August, November and December.

Generally the number of hours of bright sunshine have decreased throughout the year, except July and December/January where the status quo has been maintained. Cloud cover has increased in many months, but correlations between hours of bright sunshine and cloud cover are not significant, especially during wintertime. More significant are the correlations between increased cloud cover and relative humidity. This increase can be seen in virtually the same months.

West- and south-westerly winds currently predominate on an annual basis, their frequencies being virtually unchanged from the past. Wind speed is difficult because the observation methods have been changed in terms both of the number of observations per day (8 as opposed to 3) and the way in which the measurements are performed (estimated Beaufort forces versus anemometer readings).

Only minor changes have been observed in atmospheric pressure.

The above mentioned changes present a picture of a colder, more humid but slightly drier and certainly less sunny climate in the Faroe Islands at present compared to the past.

Particular emphasis can be given to colder summers and colder autumns/early winters and a slightly warmer late winter. Emphasis can also be given to notable increase in precipitation in the transitional months, mostly in the autumn, while a decrease in precipitation is discernible in the rest of the year, the net result being an overall annual decrease in precipitation. Finally emphasis can be given to the substantial, overall decrease in hours of bright sunshine.

9. References

Brandt, M.L., 1994: Dokumenteret stationshistorie for klima- og synopstationer i Tórshavn og Mykines, Færøerne 1872-1994. DMI Technical Report 94-18. 67 pp.

Davidsen, E. et al.: Orographically enhanced precipitation on the Faroe Islands. Personal note, 1997.

Lysgaard, L., 1969: Foreløbig oversigt over klimaet på Færøerne. Hovedsagligt baseret på observationer i normalperioden 1931-60 og på en del observationer fra et kortere åremål. Det Danske Meteorologiske Institut, Meddelelser nr. 20.

Steffensen, P., 1996: Standard Normal Homogeneity Test for Windows®, User Guide. DMI Technical Report 96-13. 35 pp.

Appendixes

Appendix 1. Station and element catalogue

Station No.	Element No.	Station Name	Latitude (degrees,min. N)	Longitude (degrees,min. W)	Elevation (m.a.s.)	Quality
06005	101	Mykines Fyr	62,06	7,41	105	N
06005	111	Mykines Fyr	62,06	7,41	105	N
06005	112	Mykines Fyr	62,06	7,41	105	N
06005	121	Mykines Fyr	62,06	7,41	105	N
06005	122	Mykines Fyr	62,06	7,41	105	N
06005	125	Mykines Fyr	62,06	7,41	105	N
06005	201	Mykines Fyr	62,06	7,41	105	N
06005	202	Mykines Fyr	62,06	7,41	105	N
06005	203	Mykines Fyr	62,06	7,41	105	N
06005	301	Mykines Fyr	62,06	7,41	105	N
06005	302	Mykines Fyr	62,06	7,41	105	N
06005	311	Mykines Fyr	62,06	7,41	105	N
06005	321	Mykines Fyr	62,06	7,41	105	N
06005	326	Mykines Fyr	62,06	7,41	105	N
06005	331	Mykines Fyr	62,06	7,41	105	N
06005	360	Mykines Fyr	62,06	7,41	105	N
06005	801	Mykines Fyr	62,06	7,41	105	N
06005	802	Mykines Fyr	62,06	7,41	105	N
06005	803	Mykines Fyr	62,06	7,41	105	N
06009	101	Akraberg Fyr	61,24	6,40	101	N
06009	111	Akraberg Fyr	61,24	6,40	101	N
06009	112	Akraberg Fyr	61,24	6,40	101	N
06009	121	Akraberg Fyr	61,24	6,40	101	N
06009	122	Akraberg Fyr	61,24	6,40	101	N
06009	125	Akraberg Fyr	61,24	6,40	101	N
06009	201	Akraberg Fyr	61,24	6,40	101	N
06009	202	Akraberg Fyr	61,24	6,40	101	N
06009	203	Akraberg Fyr	61,24	6,40	101	N
06009	301	Akraberg Fyr	61,24	6,40	101	N
06009	302	Akraberg Fyr	61,24	6,40	101	N
06009	311	Akraberg Fyr	61,24	6,40	101	N
06009	321	Akraberg Fyr	61,24	6,40	101	N
06009	326	Akraberg Fyr	61,24	6,40	101	N
06009	331	Akraberg Fyr	61,24	6,40	101	N
06009	360	Akraberg Fyr	61,24	6,40	101	N
06009	601	Akraberg Fyr	61,24	6,40	101	H
06009	602	Akraberg Fyr	61,24	6,40	101	N
06009	604	Akraberg Fyr	61,24	6,40	101	H
06009	605	Akraberg Fyr	61,24	6,40	101	H
06009	606	Akraberg Fyr	61,24	6,40	101	H
06009	801	Akraberg Fyr	61,24	6,40	101	N
06009	802	Akraberg Fyr	61,24	6,40	101	N
06009	803	Akraberg Fyr	61,24	6,40	101	N
06010	101	Vága Floghavn	62,04	7,17	84	N
06010	111	Vága Floghavn	62,04	7,17	84	N
06010	112	Vága Floghavn	62,04	7,17	84	N

06010	121	Vága Floghavn	62,04	7,17	84	N
06010	122	Vága Floghavn	62,04	7,17	84	N
06010	125	Vága Floghavn	62,04	7,17	84	N
06010	601	Vága Floghavn	62,04	7,17	84	T
06010	602	Vága Floghavn	62,04	7,17	84	N
06010	604	Vága Floghavn	62,04	7,17	84	H
06010	605	Vága Floghavn	62,04	7,17	84	H
06010	606	Vága Floghavn	62,04	7,17	84	H
06011	101	Tórshavn	62,01	6,46	54	N
06011	111	Tórshavn	62,01	6,46	54	N
06011	112	Tórshavn	62,01	6,46	54	N
06011	121	Tórshavn	62,01	6,46	54	N
06011	122	Tórshavn	62,01	6,46	54	N
06011	125	Tórshavn	62,01	6,46	54	N
06011	201	Tórshavn	62,01	6,46	54	N
06011	202	Tórshavn	62,01	6,46	54	N
06011	203	Tórshavn	62,01	6,46	54	N
06011	301	Tórshavn	62,01	6,46	54	N
06011	302	Tórshavn	62,01	6,46	54	N
06011	311	Tórshavn	62,01	6,46	54	N
06011	321	Tórshavn	62,01	6,46	54	N
06011	326	Tórshavn	62,01	6,46	54	N
06011	331	Tórshavn	62,01	6,46	54	N
06011	360	Tórshavn	62,01	6,46	54	N
06011	401	Tórshavn	62,01	6,46	54	N
06011	410	Tórshavn	62,01	6,46	54	N
06011	420	Tórshavn	62,01	6,46	54	N
06011	601	Tórshavn	62,01	6,46	54	H
06011	602	Tórshavn	62,01	6,46	54	H
06011	604	Tórshavn	62,01	6,46	54	H
06011	605	Tórshavn	62,01	6,46	54	H
06011	606	Tórshavn	62,01	6,46	54	H
06011	607	Tórshavn	62,01	6,46	54	N
06011	701	Tórshavn	62,01	6,46	54	N
06011	702	Tórshavn	62,01	6,46	54	N
06011	801	Tórshavn	62,01	6,46	54	N
06011	802	Tórshavn	62,01	6,46	54	N
06011	803	Tórshavn	62,01	6,46	54	N
33000	601	Mykines Fyr	62,06	7,41	105	H
33000	602	Mykines Fyr	62,06	7,41	105	N
33000	604	Mykines Fyr	62,06	7,41	105	H
33000	605	Mykines Fyr	62,06	7,41	105	H
33000	606	Mykines Fyr	62,06	7,41	105	H
33020	601	Fossáverkið	62,09	7,09	2	T
33020	602	Fossáverkið	62,09	7,09	2	N
33020	604	Fossáverkið	62,09	7,09	2	T
33020	605	Fossáverkið	62,09	7,09	2	T
33020	606	Fossáverkið	62,09	7,09	2	T
33037	601	Hvalvík	62,11	7,02	14	H
33037	602	Hvalvík	62,11	7,02	14	N
33037	604	Hvalvík	62,11	7,02	14	H
33037	605	Hvalvík	62,11	7,02	14	H

33037	606	Hvalvík	62,11	7,02	14	H
33045	601	Hellur	62,16	6,52	11	H
33045	602	Hellur	62,16	6,52	11	N
33045	604	Hellur	62,16	6,52	11	H
33045	605	Hellur	62,16	6,52	11	H
33045	606	Hellur	62,16	6,52	11	H
33051	101	Kirkja	62,19	6,19	53	N
33051	111	Kirkja	62,19	6,19	53	N
33051	112	Kirkja	62,19	6,19	53	N
33051	121	Kirkja	62,19	6,19	53	N
33051	122	Kirkja	62,19	6,19	53	N
33051	125	Kirkja	62,19	6,19	53	N
33051	601	Kirkja	62,19	6,19	53	H
33051	602	Kirkja	62,19	6,19	53	N
33051	604	Kirkja	62,19	6,19	53	H
33051	605	Kirkja	62,19	6,19	53	H
33051	606	Kirkja	62,19	6,19	53	H
33054	601	Strond Kraftstation	62,16	6,35	6	T
33054	602	Strond Kraftstation	62,16	6,35	6	N
33054	604	Strond Kraftstation	62,16	6,35	6	T
33054	605	Strond Kraftstation	62,16	6,35	6	T
33054	606	Strond Kraftstation	62,16	6,35	6	T
33069	501	Tórshavn Radiosonde	62,01	6,46	57	N
33069	502	Tórshavn Radiosonde	62,01	6,46	57	N
33080	101	Nólsoy Fyr	61,57	6,36	80	N
33080	111	Nólsoy Fyr	61,57	6,36	80	N
33080	112	Nólsoy Fyr	61,57	6,36	80	N
33080	121	Nólsoy Fyr	61,57	6,36	80	N
33080	122	Nólsoy Fyr	61,57	6,36	80	N
33080	125	Nólsoy Fyr	61,57	6,36	80	N
33080	601	Nólsoy Fyr	61,57	6,36	80	T
33080	602	Nólsoy Fyr	61,57	6,36	80	N
33080	604	Nólsoy Fyr	61,57	6,36	80	T
33080	605	Nólsoy Fyr	61,57	6,36	80	T
33080	606	Nólsoy Fyr	61,57	6,36	80	T
33090	101	Sandur	61,51	6,41	5	N
33090	111	Sandur	61,51	6,41	5	N
33090	112	Sandur	61,51	6,41	5	N
33090	121	Sandur	61,51	6,41	5	N
33090	122	Sandur	61,51	6,41	5	N
33090	125	Sandur	61,51	6,41	5	N
33090	601	Sandur	61,51	6,41	5	H
33090	602	Sandur	61,51	6,41	5	N
33090	604	Sandur	61,51	6,41	5	H
33090	605	Sandur	61,51	6,41	5	H
33090	606	Sandur	61,51	6,41	5	H

For each series in this report, the number of the station and the element number (explained in Appendix 2) are given, together with the station position in geographical coordinates and a quality label (see Appendix 3).

Appendix 2. Element description

ELEM	No.	DESCRIPTION	UNIT	METHOD
T	101	Mean temperature	0.1°C	mean
Tx	111	Mean maximum temperature	0.1°C	mean
Th	112	Highest maximum temperature + date	0.1°C	max
Tn	121	Mean minimum temperature	0.1°C	mean
Tl	122	Lowest minimum temperature + date	0.1°C	min
Fd	125	Number of days with frost (tmin < 0°C)	days	total
RH	201	Mean relative humidity	%	mean
RHD	202	Mean daytime relative humidity (9-15 UTC)	%	mean
RHN	203	Mean nighttime relative humidity (18-6 UTC)	%	mean
FF	301	Mean wind speed (10 minutes average)	0,1 m/s	mean
Fx	302	Maximum wind speed (10 minutes average) + date	0.1 m/s	mean
F11	311	Number of windy days (FF ≥ 11 m/s)	days	total
F21	321	Number of stormy days (FF ≥ 21 m/s)	days	total
F26	326	Number of days with storm (FF ≥ 26 m/s)	days	total
F31	331	Number of days with hurricane (FF ≥ 31 m/s)	days	total
D	360	Most frequent wind direction + frequency	1-9*	
P	401	Mean pressure	0.1 hPa	mean
Px	410	Maximum pressure + date	0.1 hPa	max
Pn	420	Minimum pressure + date	0.1 hPa	min
S	501	Hours of bright sunshine (SUN ≥ 200 w/m**2)	hours	total
Sx	502	Daily maximum hours of bright sunshine + date	0.1 hours	max
R	601	Precipitation total	0.1 mm	total
Rx	602	Highest 24 hour precipitation + date	0.1 mm	max
R01	604	Number of days with R ≥ 0.1 mm	days	total
R1	605	Number of days with R ≥ 1 mm	days	total
R10	606	Number of days with R ≥ 10 mm	days	total
Sn	607	No of days with snow (R ≥ 0.1 mm)	days	total
dsc	701	Number of days with snow cover (> 50 % covered)	days	total
dfg	702	Number of days with fog (visibility < 1 km)	days	total
N	801	Mean cloud cover	%	mean
Kv	802	Number of clear days (N < 20 %)	days	total
Sv	803	Number of cloudy days (N > 80 %)	days	total

* 1 = N, 2 = NE, 3 = E, 4 = SE, 5 = S, 6 = SW, 7 = W, 8 = NW, 9 = calm and varying wind

Appendix 3. Contents of 3.5” floppy disks

The two 3.5” HD disks contain 3 type of files (**station.dat, normal.dat, <element number>.dat**) in fixed ASCII format, one in Microsoft Word format (**readme.doc**) and one in ASCII text format (**readme.txt**). Data from the disks may only be used with proper reference to the accompanying report (Cappelen, J. & E.V. Laursen, 1998: The Climate of the Faroe Islands - with Climatological Standard Normals, 1961-1990. DMI Technical Report 98-14).

Station file: station.dat

The station catalogue contained in the file **station.dat** describes the number, element number, name, position, elevation and quality of the stations in this report. Each record in the file contains information about one station/element. The file is sorted by station number/element number and has the following layout:

Position	Format	Description
1-8	F8.0	Station number
9-16	F8.0	Element number
17-36	A20	Station name
37-44	F8.2	Latitude (degrees N, minutes N)
45-52	F8.2	Longitude (degrees E, minutes E)
53-56	F4.0	Elevation (metres above sea level)
57-58	A2	Quality of time series (cf. below)

Quality label	Description
H	Homogeneous, rigorously tested and possibly adjusted
T	Tested, possibly adjusted but not perfectly homogeneous
N	Not tested, but not necessarily inhomogeneous
I	Inhomogeneous series that is presently unadjustable

Normal files: normal.dat

Normal values for the standard normal period 1961-1990 and other periods are contained in the file **normal.dat**. The file contains normal values for all stations described in the station and element catalogue, see appendix 1. The file is sorted by station number/element number. Each record in the file contains the mean monthly and annual values - *all in units 0,1* - from one station/element number in the following format. *Please note that the unit is 1 and the scale is 1-9 (see Appendix 2) for element number 360 - Most frequent wind direction*:

Position	Format	Description
1-6	F6.0	Station number
7-12	F6.0	Element number
13-20	F8.2	First (year, month) in normal period
21-28	F8.2	Last (year, month) in normal period
29-34	F6.0	January normal value
35-40	F6.0	February normal value
41-46	F6.0	March normal value
47-52	F6.0	April normal value
53-58	F6.0	May normal value
59-64	F6.0	June normal value
65-70	F6.0	July normal value
71-76	F6.0	August normal value
77-82	F6.0	September normal value
83-88	F6.0	October normal value
89-94	F6.0	November normal value
95-100	F6.0	December normal value
101-106	F6.0	Annual normal value

Monthly Files: <element number>.dat

Time series for all the stations presented in this report are contained in the files **<element number>.dat**. The files are sorted by station number/element number, year and month (month 13 gives the annual total). Each record in the files contains one monthly or annual value for one station/element number in the following format. The units of the values can be seen in the table in Appendix 2. Please also note that the "Date" variable only exists in the files concerned with extreme values (format is [month][day] ie. 825 for 25 August). Furthermore the "Frequency" variable only exists in the file concerned with element number 360 - Most frequent wind direction (unit is %):

Position	Format	Description
1-6	F6.0	Station number
7-12	F6.0	Element number
13-18	F6.0	Year
19-24	F6.0	Month (1-12 and 13 for annual)
25-30	F6.0	Value
31-36	F6.0	Date/Frequency.