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# HEADQUARTERS QUARtermaster RESEARCH & DEVELOPMENT COMMAND

TECHNICAL REPORT  
EP-6

## LOW TEMPERATURES IN ALASKA



QUARtermaster RESEARCH & DEVELOPMENT CENTER  
ENVIRONMENTAL PROTECTION DIVISION

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HEADQUARTERS QUARTERMASTER RESEARCH & DEVELOPMENT COMMAND  
Quartermaster Research & Development Center, US Army  
Natick, Massachusetts

Technical Report

EP-6

FREQUENCIES OF SELECTED LOW TEMPERATURES IN ALASKA

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## Foreword

This report, a presentation of means and frequencies of selected temperatures for 33 stations in Alaska was prepared at the request of the Office of the Assistant Chief of Staff, G-4, U.S. Army. It is an elaboration of the usual method for indicating the temperature regime of an area by the use of mean values only. It provides frequencies of occurrence of daily maximum and minimum temperatures which should prove useful to authorities who must select optimum times for programming tests and field exercises and, in addition, will aid in determining the proper issue and use of clothing and equipment. Users of this report are reminded that in determining the proper clothing for troops, wind speeds as well as temperatures should be considered.

This is the second of a series of reports which deal with the frequency of low temperatures in the Northern Hemisphere: a detailed study of low temperatures at Fort Churchill, Manitoba, Canada (EP-2, July 1954) has been completed. Also, detailed temperature studies at Big Delta and Anchorage, Alaska, are in preparation. These detailed studies of low temperatures may be used to supplement the information contained in the Environmental Handbooks for Department of the Army Test Sites, e.g., Fort Churchill, Canada, Big Delta and Whittier, Alaska, and Devils Lake, North Dakota.

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## Abstract

This report presents in detail the frequency of critical low temperatures ( $68^{\circ}\text{F}$ ,  $50^{\circ}\text{F}$ ,  $32^{\circ}\text{F}$ ,  $23^{\circ}\text{F}$ ,  $14^{\circ}\text{F}$ ,  $0^{\circ}\text{F}$ ,  $-25^{\circ}\text{F}$ ,  $-40^{\circ}\text{F}$  and  $-65^{\circ}\text{F}$ ) at 33 stations in Alaska. Tables of temperature frequencies are included for each month of the year and temperature maps for the months of December, January, February and July.

Four temperature regimes may be distinguished: (1) Southeastern Alaska, (2) Gulf of Alaska, (3) Arctic Coast, and (4) Interior Alaska. In winter, the warmest area is Southeast Alaska and the coldest is the interior. In summer, highest temperatures occur in the interior and the lowest along the Arctic Coast.

Daily maximum temperatures at or below  $0^{\circ}\text{F}$  may be expected over 50 percent of the days in January at interior stations, but occur only 6 percent of the days at Anchorage and not at all at Kodiak. The greatest frequency of maximum temperatures at or below  $-40^{\circ}\text{F}$  occurs at Umiat, where 15 percent of the days in January may be expected to record this value. Minimum temperatures of  $-65^{\circ}\text{F}$  or less were recorded at only 4 interior stations (Fort Yukon, Fairbanks, Wiseman and Tanana).

In summer (July) maximum temperatures at or below  $68^{\circ}\text{F}$  occur on 13 percent of the days at Fairbanks, 40 percent of the days at Tanana and 100 percent of the days at coastal stations, e.g., Barter Island, Point Lay and Gambell Island.

## FREQUENCIES OF SELECTED LOW TEMPERATURES IN ALASKA

### 1. Introduction

Alaska occupies the northwest part of North America with the greatest portion between  $60^{\circ}$  and  $70^{\circ}$  N. latitude and  $140^{\circ}$  and  $165^{\circ}$  W. longitude (Fig. 1). In addition, there is the Alaska Peninsula and the region known as the "Panhandle", which extends southeastward along the Pacific coast in a strip approximately 125 miles wide. This report excludes the Aleutian Chain, which is also part of the Alaskan Territory but does not experience extreme cold (temperatures below  $0^{\circ}\text{F}$  have not been recorded at Aleutian stations).

Coastal plains, river valleys and flood plains, elevations of which are rarely greater than 1,000 feet, extend over one-half the total area. The remainder of the region is composed of rugged mountains: the Brooks Range in the north with individual peaks of approximately 10,000 feet and the Alaskan and Chugach Mountains in the south with several peaks reaching elevations of 15,000 to 20,000 feet.

Temperatures in Alaska are subject to both continental and maritime influences. Temperatures at stations under oceanic influence are not likely to be as high in summer or as low in winter as those at stations in the interior. Regions where conditions are continental have relatively high temperatures in summer and extremely low temperatures in winter.

Generally, warmest summers are found in the extreme southeast coastal districts where the climate is essentially maritime and in the interior Yukon valley which is influenced by continental conditions. Interior valleys (primarily the middle Yukon and Tanana) are the coldest areas in Alaska during winter and the warmest parts of the interior in summer. The radiation received during the long period of daily sunshine in summer is partly responsible for the high temperatures which occur during this season. Conversely, the long period of darkness and relatively little cloudiness during winter provide conditions favorable for the occurrence of extremely low temperatures.

The southern coasts on the Gulf of Alaska are ice free all winter and temperatures are mild in comparison to those of the interior. Along the coast of Alaska from the Bering Sea to the Beaufort Sea, the frozen sea surface during winter results in a practically continental surface cover over an extensive area. Nevertheless, temperatures at the icebound coastal stations do not reach the low extremes experienced in the interior because of the heating influence of the relatively warm water beneath this extensive ice cover.

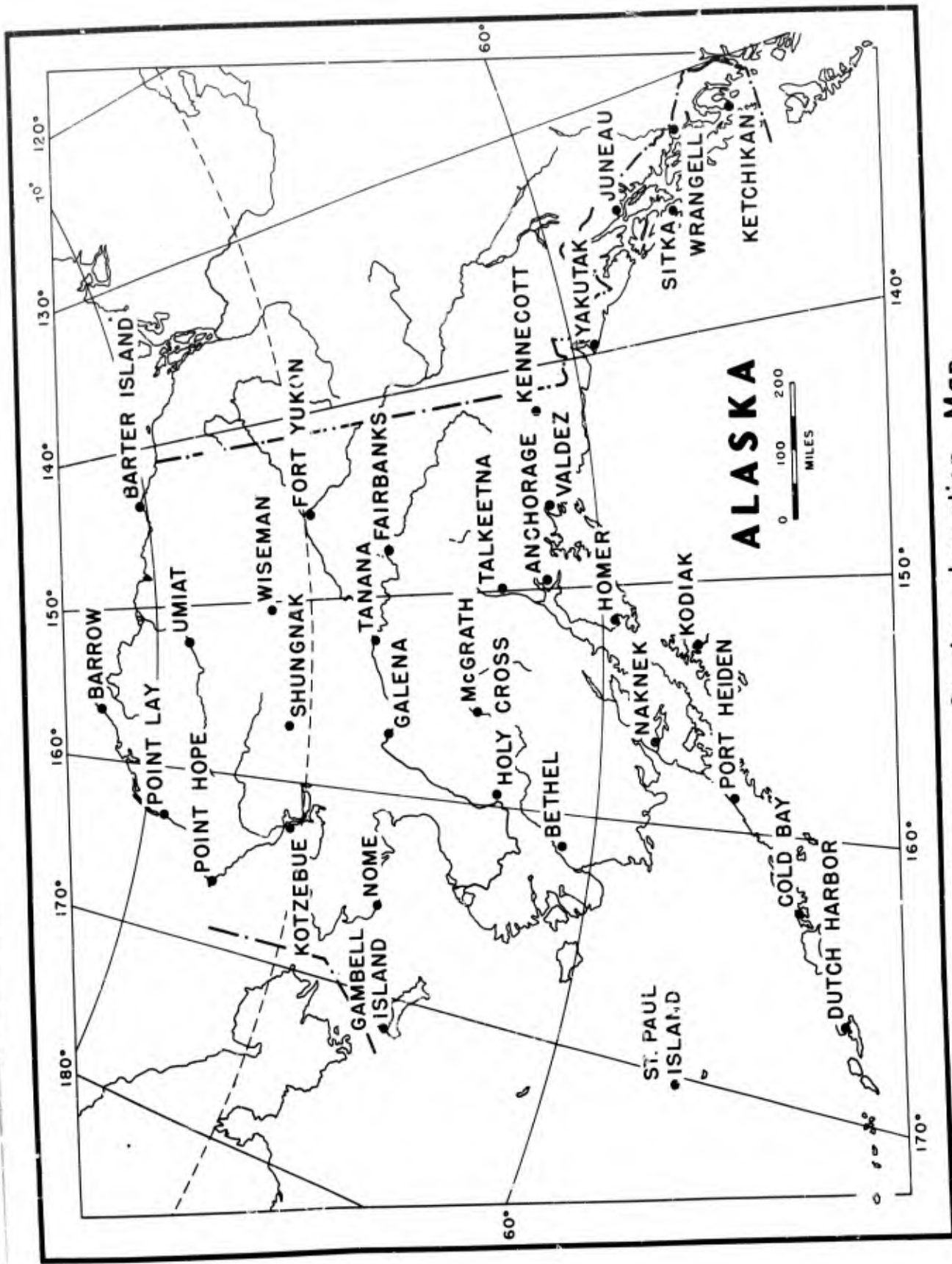


Figure 1 - Station Location Map

## 2. Source and Scope of Data

Data used in the preparation of this report were obtained from publications of the United States Weather Bureau\*, the U.S. Air Force\*\*, and U.S. Navy\*\*\*. Stations used were selected to provide the best coverage of the area together with a reliable period of record. In some instances, particularly along the arctic coast where data are scarce, it was necessary to use stations with short periods of record. Therefore, the length of record for the stations used vary from 1 to 23 years, but the majority of stations (22) have records of over 15 years. Table 2 (Appendix A) gives the period of record for each month at the stations utilized. These stations are shown on Figure 1. Temperature measurements were taken at standard instrument heights (4 to 5 feet) and it should be emphasized that there may be considerable difference between temperatures at this level and those which occur near the ground (less than one foot), especially under calm conditions.

## 3. Temperature Regimes and Extremes

Because of its geographical position and rugged terrain, this region is subject to a variety of temperature regimes and extremes which are further influenced locally by elevation and exposure. This is particularly evident in the interior where temperatures are influenced by air drainage into valleys, and near coasts where temperatures are more moderate because of the proximity of water.

January is the coldest month at most stations, with mean temperatures ranging from  $-21.6^{\circ}\text{F}$  at Umiat to  $33.3^{\circ}\text{F}$  at Ketchikan on the southeast coast. A maritime influence, due to its coastal location, is evident at Ketchikan where the difference between the January and July mean temperatures is only  $24.3^{\circ}\text{F}$  as compared to a difference of  $75.1^{\circ}\text{F}$  at Umiat, located farther inland. At Fort Yukon, in interior Alaska, the difference is  $82.2^{\circ}\text{F}$ . In July, generally the warmest month, mean temperatures range from  $39.1^{\circ}\text{F}$  at Barter Island on the arctic coast to  $61.4^{\circ}\text{F}$  at Fort Yukon, in the interior.

\* U.S. Department of Commerce, Weather Bureau. Climatological data for Alaska. 1930 to 1953.

\*\* U.S. Army Air Forces, Headquarters Weather Information Branch. Climatic atlas for Alaska. Report No. 444, September 1943. and U.S. Department of Commerce, Weather Bureau Statistics Division. Climatology of Alaska. Supplement to Report No. 444.

\*\*\* U.S. Navy Department, Hydrographic Office. Weather summary, Alaska. H.O. 526, 1944.

a. Southeastern Alaska

The southeastern portion of Alaska is dominated by two climatic regimes. The exposed coastal stations are maritime in nature whereas temperatures of the inner parts of the islands and the mainland are influenced by their interior location. Mean temperatures in January vary approximately  $5^{\circ}$  ( $27.8^{\circ}\text{F}$  to  $33.3^{\circ}\text{F}$ ), stations on the coasts being warmer than those farther inland. Mean maximum temperatures in this southeastern area range from  $31.8^{\circ}\text{F}$  to  $39.1^{\circ}\text{F}$  in January and from  $61.3^{\circ}\text{F}$  to  $66.0^{\circ}\text{F}$  in July. Mean minimum temperatures in the same months range from  $24.4^{\circ}\text{F}$  to  $29.7^{\circ}\text{F}$  and from  $48.5^{\circ}\text{F}$  to  $50.0^{\circ}\text{F}$  respectively. Coldest temperatures recorded in this area range from  $-5^{\circ}\text{F}$  to  $-15^{\circ}\text{F}$  and the warmest from  $87^{\circ}\text{F}$  to  $96^{\circ}\text{F}$ .

b. Gulf of Alaska

Temperatures are generally mild on the outer coasts bordering the Gulf of Alaska and on the Alaskan Peninsula. January mean temperatures range from  $23.1^{\circ}\text{F}$  at Homer to  $31.9^{\circ}\text{F}$  at Dutch Harbor. Farther inland it is colder; means in January range from  $4.8^{\circ}\text{F}$  at Kennicott to  $19.2^{\circ}\text{F}$  at Valdez. In July, mean temperatures vary from  $49.0^{\circ}\text{F}$  at Cold Bay to  $57.0^{\circ}\text{F}$  at Anchorage, the inner coastal stations being slightly warmer than stations more exposed to the moderating effect of the ocean. Mean maximum temperatures in January are generally  $10^{\circ}$  to  $25^{\circ}$  lower at inland stations than at stations directly on the coast, and range from  $12.8^{\circ}\text{F}$  to  $36.7^{\circ}\text{F}$ . In July, the temperature progression is reversed, with mean temperatures at the inland stations approximately  $10^{\circ}$  warmer than at well exposed coastal stations. Mean maximum temperatures in July range from  $54.0^{\circ}\text{F}$  to  $65.1^{\circ}\text{F}$ ; mean minimum temperatures in this coastal region range from  $-3.2$  to  $27.8^{\circ}\text{F}$  in January and from  $40.4^{\circ}\text{F}$  to  $48.9^{\circ}\text{F}$  in July. The lowest temperature recorded in the area was  $-39^{\circ}\text{F}$  at Kennicott, and an absolute minimum temperature of only  $8^{\circ}\text{F}$  was recorded at Dutch Harbor. Absolute maximum temperatures range from  $71^{\circ}\text{F}$  at Cold Bay to  $85^{\circ}\text{F}$  at Kodiak.

c. Arctic Coast (Bering to Beaufort Seas)

Along the arctic coast from the Bering to the Beaufort Seas the frozen sea surface during the icebound period results in a practically continental surface cover. However, because of the warming influence of the water beneath, temperatures do not reach the low extremes experienced in the interior.

Mean temperatures in January at stations south of the Seward Peninsula have a range of  $11.1^{\circ}$ . Naknek, the southernmost station having a long climatic record, has a mean temperature in January of  $14.5^{\circ}\text{F}$ . January mean temperatures decrease progressively toward the north, becoming  $3.4^{\circ}\text{F}$  at Nome on the southern coast of the Seward Peninsula. North of the peninsula from Kotzebue to Barter Island mean January temperatures vary from

-9.6°F to 16.7°F. Mean temperatures in July range from 39.1°F at Barter Island and increase southward to 54.9°F at Naknek. Mean maximum temperatures are lowest along the Bering Sea coast in January and along the arctic coast, north of the Brooks Range, in February. January mean maximums range from -10.5°F at Barrow to 21.9°F at Naknek, but the lowest mean maximum, -18.9°F, occurs at Barter Island in February. Mean minimum temperatures at most of the coastal stations are lowest in February, ranging from 11.6°F at Naknek to -32.4°F at Barter Island. In July, mean maximum temperatures range from 43.2°F at Barter Island to a high of 63.2°F at Naknek while mean minimum temperatures vary between 33.7°F at Barrow and 47.0°F at Naknek. Absolute maximum temperatures on the coast range from a low of 78°F at Barrow to 86°F at Naknek. Absolute minimum temperatures were not available for all stations. However, for all stations the lowest recorded absolute minimum (-56°F) occurred at Barrow and the highest recorded absolute minimum temperature (-43°F) occurred at Naknek, in the south.

d. Interior Alaska

The interior of Alaska has, for the most part, continental type climate. The influence of the Gulf of Alaska is rarely felt because of the mountains to the south and the Brooks Range which serves as a barrier to maritime influence from the north. During the cold season, when the Bering Sea is frozen, marine influences are at a minimum; in summer, however, temperatures may be affected for considerable distances inland by winds which pass over the cool waters of the Bering Sea. In the interior, between the Alaska Range to the south and the Brooks Range to the north, mean temperatures in January vary from -0.5°F at Holy Cross to -20.8°F at Fort Yukon in the Yukon River Valley. Umiat, the only inland station north of the Brooks Range for which data were available, has a slightly lower January mean temperature of -21.6°F. In July, mean temperatures in the deep interior of Alaska are higher than at stations nearer the coast which are occasionally influenced by cool and moist ocean winds. Fort Yukon has the highest mean July temperature (61.4°F) of all interior stations utilized and Umiat the lowest (53.5°F). Mean maximum temperatures in the interior in January range from 10.0°F at Holy Cross to -10.9°F at Fort Yukon. At Umiat, north of the Brooks Range, the mean maximum temperature in January is -12.4°F. In July a mean maximum temperature of 72.2°F at Fort Yukon is the highest of all stations in the interior. This station also had the highest absolute maximum temperature: 100.0°F. The range of July mean maximums is rather small at interior stations, varying from 67.0°F at Holy Cross to 72.2°F at Fort Yukon. The lowest absolute maximum temperature was 82°F at McGrath.

Mean minimum temperatures in January range from -30.8°F at Umiat to -5.1°F at Holy Cross (which is at times subject to maritime influence). July mean minimum temperatures range from 43.1°F at Umiat to 51.8°F at Galena. Of the stations in the interior, the lowest absolute minimum temperature was -76°F recorded at Tanana in January, and the highest absolute minimum was -55°F at McGrath in January.

#### 4. Frequency of Occurrence of Selected Temperatures

Tables 5 to 18 (Appendix A) show the percentage frequency of occurrence of daily maximum and minimum temperatures at or below the following selected values: 68°F, 50°F, 32°F, 23°F, 14°F, 0°F, -25°F, -40°F and -65°F. Use of the tables provides detailed information of maximum and/or minimum temperature expectancies, which are of greater value and have wider application than previously discussed mean values. Tables of the frequencies of daily maximum temperatures at or below -65°F and of daily minimum temperatures at or below 68°F are not included since the frequencies are 0 percent and 100 percent, respectively, at all stations in every month.

The temperature values (listed above) selected for use in this study, with the exception of 0°F, directly influence the issue of clothing and equipment or are specifically mentioned in Special Regulation "Operation and Protection of Materiel Under Adverse Conditions of Temperature".\* These values are also contained in Military Standard "Climatic Extremes for Military Equipment".\*\*

The frequency of occurrence of maximum and minimum temperatures for the selected values varies considerably depending to a large extent on the climatic influences at any one station. In July, for example, maximum temperatures at or below 68°F occur on 13 percent of the days at Fairbanks and 40 percent of the days at Tanana, as compared to 100 percent of the days at coastal and island stations such as Barter Island, Point Lay, Gambell Island and St. Paul Island. The latter stations have a higher percentage of occurrence of temperatures in this range due primarily to their maritime exposure and its moderating effect on temperatures. Inland stations, more sheltered from oceanic influence, experience a greater percentage of temperatures above 68°F. Conversely, in winter, interior stations, not under the influence of warmer ocean winds, are much colder. Daily maximum temperatures at or below 0°F occur 51 percent of the days in January at Fairbanks and 68 percent of the days in January at Fort Yukon; but only 6 percent at Anchorage and 0 percent at Kodiak in the same month. The greatest frequency of maximum temperatures at or below -40°F occurs at Umiat (4 percent for the year and 15 percent in January).

Daily minimum temperatures at or below 0°F do not occur at any of the stations from June through August and only at Umiat and Wiseman in September. In October, however, over half the stations have occurrences of temperatures at or below 0°F with frequencies ranging to a maximum of 32 percent at Umiat. Minimum Temperatures at or below -25°F occur most frequently from December through February and to a lesser extent in November, March and April. In October the only stations with occurrences of temperatures at or below -25°F, each with less than one percent, are Fairbanks, Fort Yukon, Tanana and Wiseman. Minimum temperatures at or below -40°F occur from November through

\* SR 705-70-5.

\*\* MIL-STD-210, 1 June 1953.

March, January being the month of most frequent occurrence. In April, only Kotzebue, with less than one percent, recorded temperatures at or below  $-40^{\circ}\text{F}$ .

Only 4 of the stations recorded temperatures at or below  $-65^{\circ}\text{F}$ . Fort Yukon has the greatest percentage in any one month with 3 percent of the days with minimums at or below  $-65^{\circ}\text{F}$  in December. In January, Fairbanks and Wiseman have less than 1 percent occurrences and Fort Yukon and Tanana 2 percent and 1 percent respectively. In February, Fort Yukon with less than 1 percent occurrence is the only station which records temperatures this low.

Isolines of frequencies of monthly occurrence of maximum temperatures are shown on the maps in Figures 24 through 55, and of minimum temperatures in Figures 56 through 91 (Appendix B). In addition, the annual frequencies of the selected maximum and minimum temperatures are shown in Figures 92 to 108.

Due to the relatively small number of stations in this area, considerable judgment was required in drawing the isolines of frequencies. Interpolation between stations should, therefore, be carefully considered, keeping in mind both the length of record at the nearest station and the topography of the area.

## 5. Summary

Temperature values expressed in terms of averages or means do not adequately portray the actual temperature conditions of areas in which men and equipment may be called upon to operate and function. Although they do provide an indication of the temperature regime and the severity of the climate they do not indicate the critical values and the frequency of these extremes. The frequency of occurrence of critical temperatures is of major importance in the Arctic and Subarctic due to the variability of temperatures in such areas and the stress imposed on men and equipment by the extreme cold.

The variability of frequencies of critical temperatures at stations having approximately the same mean temperatures is indicated by the following example: The mean temperature at Barter Island in February is  $-25.5^{\circ}\text{F}$  while Umiat, in the same month, has a comparable mean of  $-26.6^{\circ}\text{F}$ . Mean maximum temperatures differ only slightly, being  $-18.9^{\circ}\text{F}$  at Barter Island and  $-18.3^{\circ}\text{F}$  at Umiat, and mean minimum temperatures are  $-32.4^{\circ}\text{F}$  and  $-34.9^{\circ}\text{F}$  respectively, a difference of only  $2.5^{\circ}\text{F}$ . These average values indicate that Umiat is only slightly colder than Barter Island, but do not indicate a significant difference. If only the above values were considered it would be justifiable to consider the temperature regimes at the two locations as comparable. However, on investigating the frequencies of maximum and minimum temperatures, a significant difference becomes apparent. At Barter Island, in February, maximum temperatures at or below

-40°F occur only 4 percent of the days while at Umiat the frequency increases to 12 percent of the days. Minimum temperatures of the same value occur 28 percent of the days at Barter Island and 46 percent of the time at Umiat.

From the example given above it is evident that frequency values are more reliable, and offer more significant information, than mean values when planning operations and tests.

#### 6. Acknowledgments

Appreciation is expressed to Sir Hubert Wilkins for his review of this report and his many helpful suggestions; to Miss Elizabeth Mason, Chief, Cartographic Section, Mrs. Odette Taft and Miss Gertrude Barry for preparing maps and graphs; and to Mr. Owen S. Parmele for assisting in compiling the data.

Appendix A

Temperature Tables

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2. Length of Climatic Records Used in Computing Frequencies	14
Frequency (percent) of Daily Maximum Temperatures At or Below Specified Values for Selected Stations in Alaska	
3. 68°F	15
4. 50°F	16
5. 32°F	17
6. 23°F	18
7. 14°F	19
8. 0°F	20
9. -25°F	21
10. -40°F	22
Frequency (percent) of Daily Minimum Temperatures At or Below Specified Values for Selected Stations in Alaska	
11. 50°F	23
12. 32°F	24
13. 23°F	25
14. 14°F	26
15. 0°F	27
16. -25°F	28
17. -40°F	29
18. -65°F	30
19. Absolute Maximum and Minimum Temperatures (°F) and Length of Record for Selected Stations in Alaska	31

#### Sources of Data

Data presented in the following tables (1 through 19) were obtained from publications of the U.S. Weather Bureau, the U.S. Air Force and the U.S. Navy.

TABLE 1: MEAN TEMPERATURES (°F) AND LENGTH OF RECORDS FOR SELECTED STATIONS IN ALASKA

Station	Length of Record (Yrs)	Temperature	MONTH												Oct.	Nov.	Dec.	Year
			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.							
Anchorage	23 - 26	Mean	11.9	18.6	23.7	35.4	45.0	53.5	57.0	55.6	47.8	36.0	22.4	13.3	35.0			
	22 - 25	Mean Max	19.2	27.1	33.2	44.0	54.3	62.1	65.1	63.6	56.5	43.5	29.6	20.1	43.2			
	23 - 25	Mean Min	4.6	9.4	12.6	27.2	35.6	44.2	48.9	47.3	39.1	28.8	15.5	6.0	26.6			
Barrow	26 - 31	Mean	-16.7	-16.9	-14.8	-0.2	19.5	34.7	40.0	38.5	31.0	16.6	0.0	-11.7	10.0			
	25 - 29	Mean Max	-10.5	-10.6	-7.4	7.6	25.3	40.0	46.7	44.0	35.0	21.8	5.8	-5.2	16.0			
	25 - 28	Mean Min	-23.3	-23.8	-22.0	-7.5	13.6	29.4	33.7	33.1	27.0	11.7	-6.3	-18.0	4.0			
Barter Island	3 - 4	Mean	-15.2	-25.5	-12.2	0.6	19.1	33.1	39.1	39.5	34.1	18.1	6.0	-15.9	9.2			
	3 - 4	Mean Max	-7.6	-18.9	-5.1	8.1	24.6	36.3	43.2	44.1	35.3	23.1	11.6	-10.1	15.4			
	3 - 4	Mean Min	-22.7	-32.4	-19.5	-6.6	13.5	30.0	34.8	35.1	29.6	12.7	0.3	-16.7	-4.8			
Bethel	17 - 19	Mean	6.7	8.7	12.1	27.4	40.3	53.1	54.3	52.7	45.3	31.4	17.2	8.1	29.8			
	16 - 18	Mean Max	15.8	16.7	21.6	36.4	49.9	63.4	62.8	60.6	52.8	38.3	24.0	15.4	38.1			
	17 - 18	Mean Min	-0.7	0.0	2.5	17.9	30.7	42.5	46.0	45.0	37.7	24.3	10.6	0.2	21.4			
Cold Bay	4	Mean	28.0	29.0	26.0	32	39	46	49	51	46	41	33	27	37			
	4	Mean Max	32	34	31	36	43	50	54	55	51	45	37	32	42			
	4	Mean Min	24	25	22	28	34	41	45	47	42	36	29	22	33			
Dutch Harbor	24 - 26	Mean	31.9	31.7	33.9	36.1	40.8	46.1	51.3	52.9	48.7	42.1	36.5	33.2	40.4			
	22 - 24	Mean Max	36.7	36.0	38.6	41.3	46.4	51.7	57.5	59.1	54.0	46.9	41.1	37.5	45.6			
	22 - 24	Mean Min	27.8	27.0	28.4	30.6	35.2	38.9	45.0	46.4	43.0	37.2	31.6	28.6	35.0			
Fairbanks	36 - 38	Mean	20.8	1.2	9.6	29.4	46.9	58.4	60.0	55.1	43.6	26.6	3.4	-7.1	26.1			
	11	Mean Max	1.7	4.9	22.2	42.5	58.1	69.8	70.7	64.1	53.5	34.8	11.5	-0.2	35.8			
	11	Mean Min	-20.6	-17.3	-6.2	19.9	34.9	46.1	48.4	43.9	34.4	20.1	-4.2	-16.1	15.2			
Fort Yukon	21 - 27	Mean	-20.8	-15.6	0.3	21.5	43.1	58.4	61.4	55.1	42.4	20.6	-5.5	-20.3	20.0			
	19 - 21	Mean Max	-10.9	-6.1	12.6	35.0	55.8	69.8	72.2	66.0	51.9	27.9	2.1	-11.3	30.4			
	19 - 21	Mean Min	-27.4	-26.1	-12.2	8.2	31.6	47.2	50.5	44.9	33.0	13.3	-11.5	-28.3	10.3			
Galena	4	Mean	-9.5	-11.8	6.0	23.0	42.8	55.6	59.5	54.1	44.2	24.7	6.2	-10.1	23.8			
	4	Mean Max	-1.2	-0.3	17.9	32.7	52.6	63.8	67.1	60.7	50.9	31.5	13.1	-2.1	32.2			
	4	Mean Min	-17.7	-23.0	-6.0	13.6	33.0	47.3	51.8	47.5	37.4	17.9	-0.7	-18.0	15.3			
Gambell Is.	4 - 8	Mean	1.1	2.3	7.3	19.6	30.0	38.6	46.4	47.7	42.6	31.7	25.5	11.2	25.3			
	2 - 6	Mean Max	3.0	7.2	14.0	25.6	34.3	43.7	54.3	56.3	49.2	38.2	29.6	16.9	31.0			
	2 - 6	Mean Min	-6.7	-3.1	0.8	16.7	25.6	34.7	42.7	43.0	38.6	30.0	21.2	6.0	20.8			
Holy Cross	35 - 44	Mean	-0.5	4.9	12.7	26.5	41.6	54.5	56.6	53.5	44.3	29.7	11.8	0.8	28.0			
	21 - 23	Mean Max	10.0	13.5	22.5	37.2	50.8	66.5	67.0	62.7	52.5	36.7	16.9	10.4	37.4			
	21 - 23	Mean Min	-5.1	-1.6	3.3	18.7	32.6	44.6	47.8	45.6	37.5	23.5	6.1	-5.1	20.7			

TABLE 1: MEAN TEMPERATURES (°F) AND LENGTH OF RECORDS FOR SELECTED STATIONS IN ALASKA (Continued)

Station	Length of Record (Yrs)	Temperature	MONTH												Year
			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
Homer	8 - 12	Mean	23.1	28.4	29.2	36.4	43.2	50.5	54.6	53.4	47.1	38.8	29.9	25.3	38.3
	7 - 11	Mean Max	29.9	34.8	36.7	43.6	51.8	59.8	63.6	60.5	55.5	45.4	37.1	31.9	45.9
	7 - 11	Mean Min	16.1	20.9	20.6	28.4	34.6	41.2	46.0	46.1	38.5	32.3	23.8	19.5	30.7
Juneau	44 - 48	Mean	27.8	30.1	33.8	40.8	47.7	54.2	56.7	55.4	50.4	43.3	35.7	30.9	42.2
	44 - 48	Mean Max	31.8	34.5	38.9	47.0	55.3	62.4	63.7	61.6	56.0	48.1	40.1	34.7	47.8
	43 - 47	Mean Min	24.4	25.5	29.1	34.3	40.2	46.2	50.0	49.4	44.5	38.7	31.4	26.9	36.7
Kenicott	26 - 29	Mean	4.8	11.4	18.8	30.7	42.1	50.9	52.4	49.8	42.2	31.4	14.9	5.3	25.6
	24 - 25	Mean Max	12.8	20.2	28.6	40.8	52.6	64.2	64.7	60.8	53.1	38.9	22.8	12.4	39.3
	25 - 25	Mean Min	-3.2	2.7	8.8	21.1	31.6	38.5	40.4	39.3	33.9	23.1	8.1	-1.6	20.2
Ketchikan	30 - 31	Mean	33.3	34.8	37.8	42.5	48.5	54.6	57.6	58.4	53.6	46.6	40.1	35.1	45.2
	23 - 24	Mean Max	39.1	40.6	44.1	50.2	56.2	63.1	65.2	66.3	61.2	52.6	45.7	40.1	52.0
	23 - 24	Mean Min	29.7	28.3	31.3	34.9	40.2	46.2	50.0	51.1	46.7	41.4	35.5	30.9	38.9
Kodiak	36 - 42	Mean	30.1	31.8	33.4	36.9	43.2	49.9	54.3	54.7	50.1	42.3	35.2	31.3	41.1
	20 - 22	Mean Max	35.0	37.0	38.5	42.8	48.2	56.0	60.4	60.3	56.1	48.0	40.3	32.9	46.3
	20 - 22	Mean Min	25.8	27.4	27.7	31.8	37.3	43.5	47.5	48.4	44.0	37.5	31.0	27.5	35.8
Kotzebue	12 - 19	Mean	-9.6	-5.6	-0.7	14.2	29.8	43.7	52.5	50.6	40.9	24.3	5.6	-3.8	20.2
	8 - 12	Mean Max	-1.0	0.2	3.5	22.7	36.4	50.4	57.7	55.7	45.7	29.6	11.9	2.9	26.3
	8 - 11	Mean Min	-14.1	-14.4	-14.5	7.0	24.6	38.4	46.3	45.8	36.7	20.6	1.7	-8.5	14.1
McGrath	10	Mean	-6.7	0.8	8.3	24.7	43.3	55.7	58.7	53.4	44.1	27.6	3.2	-7.6	25.5
	10	Mean Max	3.3	12.7	21.7	37.6	53.7	66.3	68.2	61.9	52.5	34.6	11.5	0.7	35.4
	10	Mean Min	-16.6	-11.0	-5.0	12.8	32.9	45.1	49.2	44.9	36.7	20.6	-5.0	-15.8	15.7
Naknek	13 - 19	Mean	14.5	19.6	22.6	34.8	43.1	51.9	54.9	54.4	48.3	36.4	22.9	15.5	34.9
	12 - 18	Mean Max	21.9	26.0	30.4	42.7	52.1	61.0	63.2	61.6	55.6	43.4	29.5	22.1	42.5
	13 - 19	Mean Min	7.7	11.6	13.1	25.5	33.9	42.8	47.0	47.0	40.7	29.4	15.8	8.1	26.9
Nome	34 - 36	Mean	3.4	5.6	8.7	19.6	34.1	45.6	49.9	49.6	41.7	29.3	15.9	7.5	25.9
	33 - 35	Mean Max	10.6	12.7	16.7	27.0	40.6	52.8	56.0	55.3	47.5	34.6	21.4	13.9	32.4
	34 - 35	Mean Min	-3.7	-2.0	0.5	11.9	27.6	38.3	43.9	43.5	35.6	24.0	10.3	1.1	19.9
Point Hope	7 - 8	Mean	-3.1	-5.9	-2.5	8.6	24.5	35.9	44.3	44.8	38.3	27.3	15.1	-0.1	18.9
	6 - 8	Mean Max	4.6	2.4	6.3	18.5	32.9	41.1	50.0	50.4	42.2	32.6	21.1	6.6	25.7
	6 - 8	Mean Min	-10.7	-13.0	-11.8	0.6	16.1	30.7	41.2	39.6	32.6	21.9	9.2	-6.8	12.5
Point Lay	9 - 11	Mean	-13.3	-16.2	-14.1	3.8	21.9	37.8	45.9	42.3	33.1	18.7	5.9	-9.9	13.0
	8 - 10	Mean Max	-5.5	-8.3	-6.4	11.6	27.3	42.4	53.0	46.7	37.8	24.1	12.6	-2.5	19.4
	8 - 10	Mean Min	-21.1	-24.0	-22.3	-4.4	14.0	30.7	37.7	40.8	28.7	13.2	1.5	-16.9	6.5

TABLE 1: MEAN TEMPERATURES (°F) AND LENGTH OF RECORDS FOR SELECTED STATIONS IN ALASKA (Continued)

Station	Length of Record (Yrs)	Temperature	MONTH												Dec.	Year
			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.			
Port Heiden	1 - 2	Mean	29	29	24	31	40	48	52	53	47	40	31	27	38	
	1 - 2	Mean Max	34	35	30	37	47	55	57	57	52	44	36	33	43	
	1 - 2	Mean Min	24	23	18	25	33	42	46	48	42	35	26	21	32	
St. Paul Is.	29 - 32	Mean	24.8	23.4	24.8	28.8	35.1	41.6	45.9	47.6	45.3	39.2	33.5	28.5	34.8	
	24 - 27	Mean Max	28.5	27.7	29.7	33.6	39.2	46.0	49.6	50.8	48.5	42.3	36.6	32.4	38.7	
	24 - 27	Mean Min	21.3	19.2	20.6	25.0	30.9	37.1	42.1	44.4	41.9	35.7	30.0	25.4	31.1	
Shungnak	6 - 8	Mean	-1.8	-4.8	0.4	16.6	36.7	52.9	58.4	50.2	39.6	23.2	0.5	-8.2	22.0	
	6 - 8	Mean Max	5.9	5.3	11.0	27.6	45.7	63.1	68.6	58.1	47.3	29.8	7.9	-1.7	30.7	
	6 - 8	Mean Min	-9.5	-12.8	-10.1	5.8	26.3	42.8	48.4	42.3	31.8	16.6	-6.9	-17.3	13.1	
Sitka	58 - 60	Mean	32.6	34.4	36.9	41.5	46.8	51.8	55.0	55.9	52.0	46.0	38.9	35.3	43.9	
	44 - 47	Mean Max	38.1	40.4	43.1	48.1	54.0	59.0	61.3	62.3	58.8	52.1	44.5	40.4	50.2	
	44 - 47	Mean Min	26.9	28.4	29.8	33.8	39.0	44.3	48.5	49.1	45.2	39.9	33.1	29.9	37.3	
Talkeetna	21 - 24	Mean	8.3	16.7	21.1	34.4	44.9	54.7	57.9	55.0	46.1	34.1	20.1	9.8	33.6	
	20 - 23	Mean Max	18.5	27.1	33.5	46.3	58.3	67.8	70.1	66.2	56.8	43.1	29.0	19.1	44.6	
	20 - 23	Mean Min	-2.9	5.7	7.9	22.1	31.4	41.1	45.7	43.6	35.3	25.5	12.1	0.5	22.3	
Tanana	34 - 41	Mean	-12.1	-4.4	5.8	24.8	44.0	57.0	58.4	53.4	41.3	23.5	1.0	-9.9	23.6	
	33 - 38	Mean Max	-4.0	4.7	17.6	36.4	55.6	70.0	70.5	65.0	50.9	30.9	8.3	-2.1	33.6	
	34 - 40	Mean Min	-20.9	-13.1	-6.2	12.0	31.9	43.6	46.2	41.8	32.3	16.9	-5.7	-15.9	13.6	
Umiat	4 - 6	Mean	-21.6	-26.6	-17.1	1.1	20.2	42.2	53.5	47.2	31.8	12.4	0.0	-19.3	10.3	
	4 - 6	Mean Max	-12.4	-18.3	-8.2	11.4	27.5	50.0	63.8	56.5	38.2	19.5	8.0	-8.5	18.9	
	4 - 6	Mean Min	-30.8	-34.9	-26.0	-9.2	13.0	34.3	43.1	38.1	25.4	5.2	-8.1	-27.2	1.9	
Valdez	26 - 31	Mean	19.2	21.6	25.7	34.4	42.6	50.0	53.3	52.0	46.1	37.7	26.6	21.1	35.9	
	22 - 28	Mean Max	26.1	28.9	33.6	42.9	50.6	58.1	60.2	59.7	53.4	43.7	33.0	27.5	43.1	
	21 - 28	Mean Min	12.5	13.9	17.1	28.4	34.1	41.5	45.4	44.2	38.7	31.9	21.1	14.4	28.6	
Wiseman	7 - 8	Mean	-11.4	-6.9	1.2	20.6	39.7	56.6	55.9	52.0	40.6	21.8	-0.3	-7.1	21.9	
	6 - 7	Mean Max	-2.1	0.0	14.0	24.9	51.3	69.5	67.3	62.9	50.8	30.1	8.1	0.9	32.3	
	6 - 8	Mean Min	-21.0	-16.6	-12.4	5.2	28.1	43.3	45.2	40.8	30.7	15.8	-8.7	-16.6	11.2	
Wrangell	25 - 27	Mean	29.4	31.7	35.5	42.8	48.9	55.3	58.1	57.3	51.8	44.8	37.7	31.5	43.7	
	17 - 21	Mean Max	35.7	37.4	42.6	50.3	57.9	64.2	66.0	64.9	59.5	50.8	43.1	36.5	50.7	
	17 - 21	Mean Min	25.2	26.8	30.1	35.1	40.2	45.9	49.1	48.9	44.5	38.9	32.7	28.0	37.1	
Yakutat	18 - 22	Mean	29.5	30.4	32.6	38.1	43.5	50.4	52.9	53.0	48.6	42.2	35.2	30.9	40.6	
	17 - 21	Mean Max	34.2	35.0	37.9	43.8	49.8	56.7	58.3	58.6	54.6	47.2	40.3	35.1	46.0	
	17 - 21	Mean Min	25.4	26.0	26.9	32.3	37.2	44.1	47.7	47.6	42.6	37.3	30.8	27.1	35.4	

TABLE 2: LENGTH OF CLIMATIC RECORDS (Yrs.) OF DATA  
USED IN COMPUTING FREQUENCIES

<u>STATION</u>	<u>MONTH</u>											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Anchorage	23	23	22	21	23	21	21	22	22	22	21	22
Barrow	21	20	21	20	22	20	20	20	21	22	20	19
Barter Island	4	4	4	4	4	3	3	3	3	4	4	3
Bethel	23	23	22	21	23	21	21	22	22	22	21	22
Cold Bay	2	1	3	3	3	2	2	2	2	2	2	2
Dutch Harbor	15	15	14	13	15	13	14	13	13	13	12	13
Fairbanks	23	23	22	21	22	22	20	20	22	22	21	21
Fort Yukon	20	20	19	18	18	17	18	19	19	19	20	18
Galena	8	8	8	8	8	6	7	7	7	7	6	6
Gambell Island	15	15	12	14	15	11	14	12	12	12	12	13
Holy Cross	22	22	20	21	23	21	22	20	21	20	20	21
Homer	18	17	17	16	18	16	16	16	15	17	16	18
Juneau	23	23	23	23	23	21	22	22	22	22	22	22
Kennicott	18	18	16	16	18	18	18	17	17	17	17	17
Ketchikan	23	23	23	23	23	20	22	22	22	22	22	22
Kodiak	21	21	19	20	22	21	21	22	21	22	21	21
Kotzebue	20	19	18	17	21	18	18	18	20	20	20	18
McGrath	11	11	11	11	11	10	11	11	11	11	11	11
Naknek	20	22	19	19	20	17	18	17	18	18	17	16
Nome	23	23	22	21	23	21	22	22	22	22	20	20
Point Hope	7	8	8	8	7	5	8	8	6	6	5	6
Point Lay	7	8	10	9	8	4	3	6	6	7	8	8
Port Heiden	4	4	4	4	4	2	3	3	3	4	5	5
St. Paul Island	19	20	19	18	20	17	18	18	18	18	17	17
Shungnak	8	8	8	8	8	7	8	7	6	6	6	6
Sitka	23	22	22	21	23	20	22	22	22	22	22	22
Talkeetna	21	20	19	18	21	20	21	21	20	21	20	21
Tanana	20	21	21	19	20	18	20	22	22	21	18	20
Umiat	6	6	6	6	6	4	5	5	5	5	4	5
Valdez	21	21	20	19	18	17	19	18	20	20	18	20
Wiseman	16	17	16	16	16	15	15	16	15	14	14	16
Wrangell	23	23	21	21	23	19	21	21	21	20	20	22
Yakutat	17	18	18	18	18	18	18	17	16	16	15	16

TABLE 3: FREQUENCY (PERCENT) OF DAILY MAXIMUM TEMPERATURE  
AT OR BELOW 68°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	100	100	100	100	99	85	75	81	99	100	100	100	95
Barrow	100	100	100	100	100	100	93	100	100	100	100	100	99
Barter Island	100	100	100	100	100	100	100	100	100	100	100	100	100
Bethel	100	100	100	100	100	77	80	93	99	100	100	100	96
Cold Bay	100	100	100	100	100	100	100	100	100	100	100	100	100
Dutch Harbor	100	100	100	100	100	100	100	90	100	100	100	100	99
Fairbanks	100	100	100	100	89	41	31	70	96	100	100	100	86
Fort Yukon	100	100	100	100	91	38	13	67	98	100	100	100	87
Galena	100	100	100	100	97	68	51	97	100	100	100	100	93
Gambell Island	100	100	100	100	100	100	100	100	100	100	100	100	100
Holy Cross	100	100	100	100	98	61	57	85	99	100	100	100	92
Homer	100	100	100	100	100	96	95	94	100	100	100	100	99
Juneau	100	100	100	100	94	79	79	81	98	100	100	100	94
Kennicott	100	100	100	100	98	67	68	89	100	100	100	100	93
Ketchikan	100	100	100	99	92	83	73	69	89	100	100	100	92
Kodiak	100	100	100	100	99	97	93	89	99	100	100	100	98
Kotzebue	100	100	100	100	100	96	91	97	100	100	100	100	99
McGrath	100	100	100	100	94	60	53	83	99	100	100	100	91
Naknek	100	100	100	100	97	89	84	89	98	100	100	100	97
Nome	100	100	100	100	100	95	99	99	100	100	100	100	99
Point Hope	100	100	100	100	100	100	100	99	100	100	100	100	100
Point Lay	100	100	100	100	100	100	96	100	100	100	100	100	100
Port Heiden	100	100	100	100	100	100	96	94	100	100	100	100	99
St. Pauli Island	100	100	100	100	100	100	100	100	100	100	100	100	100
Shungnak	100	100	100	100	98	75	50	92	100	100	100	100	92
Sitka	100	100	100	100	98	94	98	91	98	100	100	100	99
Talkeetna	100	100	100	100	93	57	47	69	99	100	100	100	88
Tanana	100	100	100	100	93	43	40	80	100	100	100	100	89
Umiat	100	100	100	100	100	99	65	88	100	100	100	100	96
Valdez	100	100	100	100	100	93	92	91	98	100	100	100	98
Wiseman	100	100	100	100	97	52	48	82	99	100	100	100	90
Wrangell	100	100	100	99	93	84	77	78	95	100	100	100	94
Yakutat	100	100	100	100	98	96	98	97	100	100	100	100	99

TABLE 4: FREQUENCY (PERCENT) OF DAILY MAXIMUM TEMPERATURE  
AT OR BELOW 50°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	100	99	100	82	21	<1	0	0	17	81	99	99	59
Barrow	100	100	100	100	100	92	63	84	99	100	100	100	95
Barter Island	100	100	100	100	100	97	82	79	98	100	100	100	97
Bethel	100	100	100	95	55	9	2	2	37	94	99	100	67
Cold Bay	100	100	100	100	92	77	39	13	58	97	100	100	82
Dutch Harbor	98	99	99	97	87	42	4	1	25	78	88	99	70
Fairbanks	100	100	99	80	18	2	<1	2	34	87	100	99	61
Fort Yukon	100	100	100	92	29	2	0	2	50	99	100	100	68
Galena	100	100	100	100	37	9	0	4	52	98	100	100	67
Gambell Island	100	100	100	100	100	94	67	64	91	99	100	100	87
Holy Cross	100	100	100	94	41	3	<1	<1	40	94	100	100	64
Homer	100	100	100	93	54	5	<1	0	14	82	99	100	63
Juneau	99	90	98	76	34	6	<1	0	13	71	92	99	57
Kennicott	100	100	100	93	31	<1	1	3	35	93	100	100	62
Ketchikan	96	96	85	61	15	2	0	0	<1	31	83	96	47
Kodiak	100	100	99	93	71	26	3	<1	15	73	100	100	65
Kotzebue	100	100	100	100	94	59	14	21	82	100	100	100	82
McGrath	99	100	100	86	33	0	<1	1	38	94	100	100	63
Naknek	100	100	98	87	44	5	<1	0	14	81	100	100	62
Nome	100	100	100	100	86	41	27	21	68	98	100	100	78
Point Hope	100	100	100	100	98	96	54	75	93	100	100	100	92
Point Lay	100	100	100	100	100	86	38	61	98	100	100	100	94
Port Heiden	100	100	100	99	76	50	14	5	26	90	100	100	78
St. Paul Island	100	100	100	100	99	90	66	45	71	99	100	100	89
Shungnak	100	100	100	100	65	5	2	15	68	100	100	100	71
Sitka	98	98	91	70	32	7	<1	0	2	37	83	95	52
Talkeetna	100	100	99	76	25	1	0	1	19	83	100	100	58
Tanana	100	100	100	85	28	2	0	2	47	99	100	100	64
Uniat	100	100	100	100	99	52	9	26	88	100	100	100	83
Valdez	100	100	100	91	54	10	<1	3	28	88	100	100	65
Wiseman	100	100	100	96	43	1	<1	6	60	99	100	100	67
Wrangell	97	97	19	60	9	2	0	0	3	44	91	97	50
Yakutat	100	99	94	88	48	13	1	0	5	72	100	100	60

TABLE 5: FREQUENCY (PERCENT) OF DAILY MAXIMUM TEMPERATURE  
AT OR BELOW 32°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	80	69	40	4	<1	0	0	0	0	10	68	83	30
Barrow	100	100	100	98	87	22	<1	3	47	96	99	100	72
Barter Island	100	100	98	99	89	14	1	2	31	94	98	100	73
Bethel	79	76	72	31	5	0	0	0	0	24	70	81	37
Cold Bay	35	45	30	27	2	0	0	0	0	0	2	31	14
Dutch Harbor	23	26	19	4	0	0	0	0	0	0	<1	16	8
Fairbanks	95	94	72	18	<1	0	0	0	<1	41	91	95	43
Fort Yukon	98	100	94	37	2	0	0	0	2	63	99	100	54
Galena	99	97	92	46	5	0	0	0	<1	48	92	99	48
Gambell Island	97	97	98	85	44	2	0	0	0	28	76	96	54
Holy Cross	91	81	75	26	2	0	0	0	0	28	79	88	39
Homer	53	36	29	4	<1	0	0	0	0	2	35	59	19
Juneau	45	37	12	2	0	0	0	0	0	<1	19	40	13
Kennicott	82	70	56	6	0	0	0	0	0	20	74	80	32
Ketchikan	16	13	1	0	0	0	0	0	0	<1	2	11	4
Kodiak	24	20	17	2	<1	0	0	0	0	<1	12	25	8
Kotzebue	99	100	99	79	28	<1	0	0	<1	56	96	100	56
McGrath	96	83	79	19	3	0	0	0	<1	42	90	98	43
Naknek	64	55	50	15	1	0	0	0	0	8	53	72	27
Nome	93	92	92	59	16	0	0	0	0	32	82	94	47
Point Hope	100	99	97	94	40	0	0	0	7	46	92	99	59
Point Lay	99	100	100	96	69	7	0	0	20	80	97	100	74
Port Heiden	54	77	51	28	5	0	0	0	0	2	23	54	28
St. Paul Island	49	60	54	26	4	0	0	0	0	0	17	39	21
Shungnak	96	98	93	63	16	0	0	0	<1	49	94	98	51
Sitka	18	13	3	0	0	0	0	0	0	<1	3	17	4
Talkeetna	86	69	47	<1	0	0	0	0	0	11	7	86	31
Tanana	100	98	90	29	3	0	0	0	<1	50	97	98	47
Umiat	100	100	99	94	68	3	0	0	26	92	97	100	67
Valdez	72	59	27	4	0	0	0	0	0	4	43	72	24
Wiseman	100	99	90	41	3	0	0	0	<1	55	98	99	49
Wrangell	33	24	7	<1	0	0	0	0	0	<1	10	24	8
Yakutat	41	28	8	<1	0	0	0	0	0	<1	10	33	10

TABLE 6: FREQUENCY (PERCENT) OF DAILY MAXIMUM TEMPERATURE AT OR BELOW 23°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	54	36	14	<1	<1	0	0	0	0	0	33	59	17
Barrow	95	99	100	92	48	<1	0	0	3	49	90	97	57
Barter Island	93	100	98	93	36	0	0	0	3	45	85	100	58
Bethel	63	58	52	11	1	0	0	0	0	3	48	64	25
Cold Bay	15	10	10	1	0	0	0	0	0	0	0	0	3
Dutch Harbor	6	5	1	0	0	0	0	0	0	0	0	<1	1
Fairbanks	89	79	50	5	<1	0	0	0	0	16	78	89	35
Fort Yukon	95	97	79	14	<1	0	0	0	0	26	92	98	44
Galena	97	89	69	19	1	0	0	0	0	15	73	91	37
Gambell Island	86	82	79	45	5	0	0	0	0	1	0	71	32
Holy Cross	76	67	50	7	<1	0	0	0	0	5	59	74	28
Homer	25	17	7	<1	0	0	0	0	0	0	9	30	7
Juneau	22	18	4	0	0	0	0	0	0	<1	5	18	10
Kennicott	65	51	23	1	0	0	0	0	0	7	54	61	22
Ketchikan	66	<1	0	0	0	0	0	0	0	0	0	0	<1
Kodiak	10	5	3	<1	0	0	0	0	0	0	1	6	2
Kotzebue	86	99	86	47	9	0	0	0	0	19	75	91	43
McGrath	88	73	53	8	<1	0	0	0	0	9	76	88	33
Naknek	48	37	26	4	<1	0	0	0	0	<1	33	50	17
Nome	68	71	64	23	2	0	0	0	0	3	47	73	30
Point Hope	82	89	87	66	12	0	0	0	0	8	51	89	44
Point Lay	89	93	97	80	31	0	0	0	2	38	80	94	60
Port Heiden	23	30	15	5	0	0	0	0	0	<1	8	21	11
St. Paul Island	21	27	24	5	0	0	0	0	0	0	0	10	7
Shungnak	77	82	72	32	7	0	0	0	0	20	74	76	37
Sitka	4	3	0	0	0	0	0	0	0	0	<1	4	<1
Talkeetna	60	35	13	<1	0	0	0	0	0	2	31	60	17
Tanana	96	87	67	10	0	0	0	0	0	16	88	93	38
Umiat	90	98	97	78	33	0	0	0	9	62	90	95	56
Valdez	34	26	4	0	0	0	0	0	0	0	0	0	9
Wiseman	90	90	72	17	<1	0	0	0	0	24	84	94	39
Wrangell	11	8	0	0	0	0	0	0	0	0	0	0	3
Yakutat	11	7	<1	0	0	0	0	0	0	0	1	9	2

TABLE 7: FREQUENCY (PERCENT) OF DAILY MAXIMUM TEMPERATURES  
AT OR BELOW 14°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	31	16	2	<1	0	0	0	0	0	0	7	28	7
Barrow	90	96	96	78	13	0	0	0	0	19	61	92	46
Barter Island	85	97	95	76	9	0	0	0	0	14	43	96	46
Bethel	52	43	36	4	<1	0	0	0	0	0	28	52	18
Cold Bay	0	3	0	0	0	0	0	0	0	0	0	0	<1
Dutch Harbor	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairbanks	80	65	27	<1	0	0	0	0	0	2	59	81	27
Fort Yukon	90	90	45	4	0	0	0	0	0	5	74	94	35
Galena	77	75	47	5	<1	0	0	0	0	2	44	75	27
Gambell Island	70	67	67	20	<1	0	0	0	0	0	0	49	24
Holy Cross	58	49	33	1	0	0	0	0	0	<1	35	56	19
Homer	13	5	1	0	0	0	0	0	0	0	2	9	3
Juneau	6	7	<1	0	0	0	0	0	0	0	<1	7	2
Kennicott	47	31	9	<1	0	0	0	0	0	2	35	48	14
Ketchikan	2	0	0	0	0	0	0	0	0	0	0	0	<1
Kodiak	3	<1	<1	0	0	0	0	0	0	0	0	<1	<1
Kotzebue	71	72	66	20	1	0	0	0	0	3	53	72	30
McGrath	76	58	33	2	0	0	0	0	0	2	48	75	25
Naknek	33	25	13	<1	0	0	0	0	0	0	15	34	10
Nome	49	50	41	7	<1	0	0	0	0	<1	24	53	19
Point Hope	70	77	75	40	4	0	0	0	0	0	18	76	33
Point Lay	82	86	92	67	9	0	0	0	0	8	52	84	48
Port Heiden	18	19	2	<1	0	0	0	0	0	0	5	10	5
St. Paul Island	9	11	8	<1	0	0	0	0	0	0	0	2	3
Shungnak	67	65	52	16	2	0	0	0	0	0	52	66	27
Sitka	<1	<1	0	0	0	0	0	0	0	0	0	1	<1
Talkeetna	36	17	3	<1	0	0	0	0	0	0	10	33	8
Tanana	86	71	39	1	0	0	0	0	0	3	63	85	29
Umiat	78	92	95	65	15	0	0	0	0	26	68	92	46
Valdez	10	8	0	0	0	0	0	0	0	0	3	9	3
Wiseman	78	75	37	4	0	0	0	0	0	4	66	83	29
Wrangell	2	1	0	0	0	0	0	0	0	0	0	3	<1
Yakutat	2	2	0	0	0	0	0	0	0	0	<1	1	<1

TABLE 8: FREQUENCY (PERCENT) OF DAILY MAXIMUM TEMPERATURE  
AT OR BELOW 0°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	6	<1	<1	0	0	0	0	0	0	0	<1	5	1
Barrow	74	87	79	29	<1	0	0	0	0	1	32	66	31
Barter Island	69	95	75	30	0	0	0	0	0	0	18	82	32
Bethel	29	19	11	<1	0	0	0	0	0	0	0	0	0
Cold Bay	0	0	0	0	0	0	0	0	0	0	0	0	0
Dutch Harbor	0	0	0	0	0	0	0	0	0	<1	25	48	14
Fairbanks	51	33	5	0	0	0	0	0	0	<1	35	67	22
Fort Yukon	68	62	14	0	0	0	0	0	0	0	22	44	14
Galena	46	43	16	<1	0	0	0	0	0	0	0	11	9
Gambell Island	30	28	21	0	0	0	0	0	0	0	9	27	8
Holy Cross	33	21	6	0	0	0	0	0	0	0	0	<1	<1
Homer	2	<1	0	0	0	0	0	0	0	0	0	<1	<1
Juneau	1	<1	0	0	0	0	0	0	0	0	0	26	6
Kennicott	28	12	<1	<1	0	0	0	0	0	0	0	0	0
Ketchikan	0	0	0	0	0	0	0	0	0	0	0	0	0
Kodiak	0	0	0	0	0	0	0	0	0	0	0	0	0
Kotzebue	46	40	35	6	0	0	0	0	0	0	18	32	15
McGrath	42	24	8	0	0	0	0	0	0	0	22	44	12
Naknek	17	10	<1	0	0	0	0	0	0	0	1	14	4
Nome	25	19	12	<1	0	0	0	0	0	0	4	15	6
Point Hope	45	50	31	6	0	0	0	0	0	0	5	33	16
Point Lay	67	74	79	30	0	0	0	0	0	0	16	61	33
Port Heiden	3	2	0	0	0	0	0	0	0	0	0	0	<1
St. Paul Island	0	<1	<1	0	0	0	0	0	0	0	29	43	14
Shungnak	33	36	27	3	0	0	0	0	0	0	0	0	0
Sitka	0	0	0	0	0	0	0	0	0	0	1	8	2
Talkeetna	8	3	<1	0	0	0	0	0	0	0	1	8	2
Tanana	53	35	9	0	0	0	0	0	0	<1	26	49	14
Umiat	67	85	78	30	0	0	0	0	0	2	27	74	32
Valdez	1	<1	0	0	0	0	0	0	0	0	0	<1	<1
Wiseman	44	42	11	<1	0	0	0	0	0	0	27	44	14
Wrangell	0	0	0	0	0	0	0	0	0	0	0	0	0
Yakutat	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 9: FREQUENCY (PERCENT) OF DAILY MAXIMUM TEMPERATURE  
AT OR BELOW -25°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Anchorage	0	0	0	0	0	0	0	0	0	0	0	0	0
Barrow	14	16	3	0	0	0	0	0	0	0	<1	4	3
Barter Island	20	40	<1	0	0	0	0	0	0	0	3	17	7
Bethel	4	<1	0	0	0	0	0	0	0	0	0	1	<1
Cold Bay	0	0	0	0	0	0	0	0	0	0	0	0	0
Dutch Harbor	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairbanks	14	5	0	0	0	0	0	0	0	0	1	13	3
Fort Yukon	20	14	0	0	0	0	0	0	0	0	0	23	6
Galena	20	5	0	0	0	0	0	0	0	0	3	13	3
Gambell Island	0	0	0	0	0	0	0	0	0	0	0	0	0
Holy Cross	4	0	0	0	0	0	0	0	0	0	0	<1	<1
Homer	0	0	0	0	0	0	0	0	0	0	0	0	0
Juneau	0	0	0	0	0	0	0	0	0	0	0	0	0
Kennicott	1	<1	0	0	0	0	0	0	0	0	0	2	<1
Ketchikan	0	0	0	0	0	0	0	0	0	0	0	0	0
Kodiak	0	0	0	0	0	0	0	0	0	0	0	0	0
Kotzebue	11	3	2	0	0	0	0	0	0	0	<1	4	2
McGrath	12	1	0	0	0	0	0	0	0	0	1	12	2
Naknek	0	0	0	0	0	0	0	0	0	0	0	0	0
Nome	<1	<1	0	0	0	0	0	0	0	0	0	<1	<1
Point Hope	<1	<1	0	0	0	0	0	0	0	0	0	0	<1
Point Lay	13	14	3	0	0	0	0	0	0	0	2	7	3
Port Heiden	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Paul Island	0	0	0	0	0	0	0	0	0	0	0	0	0
Shungnak	12	7	0	0	0	0	0	0	0	0	7	10	3
Sitka	0	0	0	0	0	0	0	0	0	0	0	0	0
Talkeetna	<1	0	0	0	0	0	0	0	0	0	0	<1	<1
Tanana	13	4	0	0	0	0	0	0	0	0	2	11	3
Umiat	39	44	13	0	0	0	0	0	0	0	6	26	11
Valdez	0	0	0	0	0	0	0	0	0	0	0	0	0
Wiseman	8	6	<1	0	0	0	0	0	0	0	4	10	2
Wrangell	0	0	0	0	0	0	0	0	0	0	0	0	0
Yakutat	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 10: FREQUENCY (PERCENT) OF DAILY MAXIMUM TEMPERATURE  
AT OR BELOW -40°F FOR SELECTED STATIONS IN ALASKA

<u>STATION</u>	<u>MONTH</u>												<u>YEAR</u>
	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	
Barrow	<1	<1	0	0	0	0	0	0	0	0	0	<1	<1
Barter Island	2	4	0	0	0	0	0	0	0	0	0	1	<1
Fairbanks	6	<1	0	0	0	0	0	0	0	0	0	4	<1
Fort Yukon	9	2	0	0	0	0	0	0	0	0	<1	13	2
Galena	10	<1	0	0	0	0	0	0	0	0	0	3	1
Holy Cross	<1	0	0	0	0	0	0	0	0	0	0	0	<1
Kotzebue	<1	0	0	0	0	0	0	0	0	0	0	<1	<1
McGrath	5	<1	0	0	0	0	0	0	0	0	0	2	<1
Point Lay	0	<1	0	0	0	0	0	0	0	0	0	0	<1
Shungnak	6	0	0	0	0	0	0	0	0	0	3	1	<1
Tanana	5	<1	0	0	0	0	0	0	0	0	<1	3	<1
Umiat	15	12	0	0	0	0	0	0	0	0	3	11	4
Wiseman	2	<1	0	0	0	0	0	0	0	0	<1	1	<1

TABLE 11: FREQUENCY (PERCENT) OF DAILY MINIMUM TEMPERATURE  
AT OR BELOW 50°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	100	100	100	100	100	91	67	76	98	100	100	100	94
Barrow	100	100	100	100	100	100	100	100	100	100	100	100	100
Barter Island	100	100	100	100	100	100	100	100	100	100	100	100	100
Bethel	100	100	100	100	100	87	86	89	99	100	100	100	97
Cold Bay	100	100	100	100	100	100	100	87	100	100	100	100	99
Dutch Harbor	100	100	100	100	100	100	94	83	95	100	100	100	97
Fairbanks	100	100	100	100	99	78	63	89	99	100	100	100	94
Fort Yukon	100	100	100	100	98	67	46	82	99	100	100	100	92
Galena	100	100	100	100	98	76	29	79	100	100	100	100	90
Gambell Island	100	100	100	100	100	100	100	100	100	100	100	100	100
Holy Cross	100	100	100	100	100	86	71	87	99	100	100	100	95
Homer	100	100	100	100	99	99	93	88	97	100	100	100	98
Juneau	100	100	100	100	99	88	65	72	94	99	100	100	93
Kennicott	100	100	100	100	100	100	100	100	100	100	100	100	100
Ketchikan	100	100	100	100	99	80	41	31	66	93	100	100	84
Kodiak	100	100	100	100	100	97	83	63	95	100	100	100	95
Kotzebue	100	100	100	100	100	96	74	85	100	100	100	100	96
McGrath	100	100	100	100	99	91	58	89	99	100	100	100	95
Naknek	100	100	100	100	100	99	87	79	96	100	100	100	97
Nome	100	100	100	100	100	98	93	95	100	100	100	100	99
Point Hope	100	100	100	100	100	100	97	99	100	100	100	100	100
Point Lay	100	100	100	100	100	100	99	99	100	100	100	100	100
Port Heiden	100	100	100	100	100	100	99	88	99	100	100	100	99
St. Paul Island	100	100	100	100	100	100	100	100	100	100	100	100	100
Shungnak	100	100	100	100	99	88	61	77	99	100	100	100	94
Sitka	100	100	100	100	98	94	64	56	86	98	100	100	91
Talkeetna	100	100	100	100	100	90	81	88	99	100	100	100	87
Tanana	100	100	100	100	100	83	70	98	100	100	100	100	96
Umiat	100	100	100	100	100	100	90	97	100	100	100	100	99
Valdez	100	100	100	100	100	99	99	98	100	100	100	100	99
Wiseman	100	100	100	100	100	92	83	97	100	100	100	100	98
Wrangell	100	100	100	100	98	86	58	62	85	99	100	100	91
Yakutat	100	100	100	100	100	99	81	83	98	100	100	100	97

TABLE 12: FREQUENCY (PERCENT) OF DAILY MINIMUM TEMPERATURE  
AT OR BELOW 32°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	99	98	99	80	20	<1	0	<1	16	66	98	99	57
Barrow	100	100	100	100	98	81	41	52	90	99	100	100	89
Barter Island	100	100	100	100	100	84	39	17	77	100	100	100	87
Bethel	98	98	99	95	55	3	<1	<1	22	77	97	98	62
Cold Bay	79	79	80	70	22	2	0	0	3	15	60	87	42
Dutch Harbor	65	71	73	53	14	<1	0	0	<1	10	47	68	34
Fairbanks	100	100	100	95	33	<1	0	5	43	93	100	100	65
Fort Yukon	100	100	100	99	51	3	<1	7	51	98	100	100	68
Galena	100	100	100	98	32	<1	0	1	30	92	100	100	63
Gambell Island	100	100	100	100	98	35	<1	0	8	73	97	100	70
Holy Cross	99	100	99	91	43	2	<1	<1	23	80	98	99	61
Homer	92	88	92	73	29	4	0	1	14	52	88	90	53
Juneau	77	73	69	28	8	0	0	<1	2	19	52	67	33
Kennicott	100	99	99	95	54	8	<1	4	38	81	99	99	64
Ketchikan	50	54	44	16	<1	0	0	<1	0	5	25	46	20
Kodiak	68	66	73	44	5	0	0	0	<1	20	55	72	34
Kotzebue	100	100	100	100	85	24	<1	1	25	90	100	100	70
McGrath	100	100	100	88	39	<1	0	4	33	90	100	100	63
Naknek	93	92	96	85	33	1	0	0	16	61	91	95	56
Nome	99	100	100	96	72	14	1	4	35	80	99	99	67
Point Hope	100	100	100	100	98	64	8	4	47	96	100	100	75
Point Lay	100	100	100	100	98	59	10	11	69	99	100	100	86
Port Heiden	89	97	86	89	52	10	1	0	0	40	73	95	59
St. Paul Island	85	94	94	91	57	4	0	0	4	24	62	82	50
Shungnak	100	100	100	99	66	4	0	9	54	97	99	100	69
Sitka	66	67	66	34	9	<1	0	0	1	16	41	61	30
Talkeetna	100	99	100	93	53	6	1	5	35	75	97	100	63
Tanana	100	100	100	96	55	5	2	13	49	95	100	100	68
Umiat	100	100	100	100	99	43	5	28	85	100	100	100	82
Valdez	100	100	99	88	36	3	0	0	13	57	97	100	59
Wiseman	100	100	100	98	60	3	<1	16	57	97	100	100	69
Wrangell	74	75	57	23	3	0	0	<1	1	14	49	63	31
Yakutat	87	86	85	60	21	2	0	0	7	26	67	80	44

TABLE 13: FREQUENCY (PERCENT) OF DAILY MINIMUM TEMPERATURE  
AT OR BELOW 23°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	89	79	75	21	1	0	0	0	2	22	75	88	38
Barrow	100	100	100	99	87	12	<1	<1	19	82	99	100	68
Barter Island	100	100	100	99	83	3	0	0	10	80	100	100	69
Bethel	88	87	88	54	13	0	0	0	0	35	74	90	44
Cold Bay	37	50	26	14	0	0	0	0	0	0	7	35	13
Dutch Harbor	21	26	19	6	0	0	0	0	0	0	2	16	8
Fairbanks	99	97	96	56	6	0	0	<1	6	58	98	99	52
Fort Yukon	100	100	100	88	15	0	0	0	15	76	100	100	59
Galena	100	100	98	75	16	0	0	0	9	49	96	99	54
Gambell Island	96	97	97	76	29	<1	0	0	0	18	56	93	49
Holy Cross	95	92	89	50	12	0	0	0	1	37	85	93	46
Homer	68	55	52	17	2	0	0	0	<1	10	58	66	28
Juneau	43	36	20	5	0	0	0	0	0	3	18	35	13
Kennicott	93	88	89	49	4	0	0	0	5	40	86	90	44
Ketchikan	20	16	5	<1	0	0	0	0	0	<1	4	17	5
Kodiak	30	26	23	4	<1	0	0	0	0	<1	14	31	11
Kotzebue	99	99	99	93	39	0	0	0	2	53	95	100	56
McGrath	100	94	95	66	12	0	0	0	4	51	95	98	52
Naknek	77	68	65	29	3	0	0	0	1	26	68	80	35
Nome	88	89	90	75	27	<1	0	0	5	46	82	92	50
Point Hope	100	100	100	97	66	3	0	0	6	56	93	99	61
Point Lay	100	100	99	99	83	11	0	0	19	78	98	100	76
Port Heiden	69	74	54	42	8	0	0	0	0	3	35	65	33
St. Paul Island	47	54	57	21	2	0	0	0	0	<1	11	32	19
Shungnak	97	96	98	84	30	0	0	0	15	55	95	99	56
Sitka	25	22	13	2	0	0	0	0	0	1	9	22	8
Talkeetna	93	85	85	44	7	0	0	0	6	31	79	91	43
Tanana	99	99	98	66	16	<1	0	<1	13	65	98	99	54
Umiat	100	100	100	99	80	<1	0	0	30	91	99	100	69
Valdez	84	82	67	30	0	0	0	0	<1	10	61	78	36
Wiseman	100	100	99	87	19	0	0	<1	19	74	99	100	58
Wrangell	39	33	11	1	0	0	0	0	0	0	13	30	11
Yakutat	48	44	32	12	<1	0	0	0	0	3	22	38	17

TABLE 14: FREQUENCY (PERCENT) OF DAILY MINIMUM TEMPERATURE  
AT OR BELOW 14°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	66	54	45	8	<1	0	0	0	0	6	49	63	25
Barrow	100	100	100	95	51	1	0	0	4	52	95	99	59
Barter Island	99	100	100	96	43	0	0	0	0	54	84	100	60
Bethel	77	74	73	29	3	0	0	0	0	10	57	77	33
Cold Bay	16	14	4	1	0	0	0	0	0	0	0	8	3
Dutch Harbor	3	3	3	<1	0	0	0	0	0	0	0	<1	<1
Fairbanks	99	94	89	31	<1	0	0	0	1	27	90	96	45
Fort Yukon	100	100	96	65	5	0	0	0	0	46	97	100	51
Galena	100	100	98	75	16	0	0	0	9	49	96	99	54
Garbell Island	86	88	88	51	7	0	0	0	0	<1	22	73	36
Holy Cross	72	80	73	24	2	0	0	0	0	13	68	82	34
Homer	42	31	25	4	<1	0	0	0	0	<1	24	43	15
Juneau	22	22	5	<1	0	0	0	0	0	<1	7	20	6
Kennicott	83	69	64	14	<1	0	0	0	<1	19	68	81	33
Ketchikan	9	4	2	0	0	0	0	0	0	0	0	4	2
Kodiak	12	10	6	<1	0	0	0	0	0	0	3	7	3
Kotzebue	94	92	93	73	20	0	0	0	0	23	81	93	48
McGrath	95	86	86	38	4	0	0	0	0	25	81	92	42
Naknek	63	53	49	12	<1	0	0	0	0	5	49	65	25
Nome	75	78	77	43	12	0	0	0	0	14	62	80	37
Point Hope	95	98	96	89	29	0	0	0	<1	18	64	91	50
Point Lay	96	98	98	95	51	0	0	0	5	44	89	98	67
Port Heiden	40	49	25	8	<1	0	0	0	0	<1	23	38	18
St. Paul Island	25	30	31	7	0	0	0	0	0	0	<1	12	9
Shungnak	90	83	88	62	17	0	0	0	3	35	81	79	45
Sitka	11	8	1	0	0	0	0	0	0	0	2	9	3
Talkeetna	74	61	66	20	<1	0	0	0	<1	14	58	74	30
Tanana	98	96	92	41	4	0	0	0	3	34	91	96	46
Umiat	98	100	100	96	49	0	0	0	9	73	94	99	62
Valdez	59	55	34	6	0	0	0	0	<1	2	29	49	20
Wiseman	99	97	94	67	8	0	0	0	5	47	93	99	51
Wrangell	21	16	2	0	0	0	0	0	0	0	2	15	5
Yakutat	27	21	11	5	<1	0	0	0	0	0	6	17	7

TABLE 15: FREQUENCY (PERCENT) OF DAILY MINIMUM TEMPERATURE  
AT OR BELOW 0°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	33	27	15	1	0	0	0	0	0	<1	12	29	10
Barrow	92	98	98	72	12	0	0	0	0	14	68	92	46
Barter Island	92	99	98	78	15	0	0	0	0	15	43	97	40
Bethel	54	48	48	10	<1	0	0	0	0	<1	25	53	20
Cold Bay	0	0	0	0	0	0	0	0	0	0	0	3	<1
Dutch Harbor	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairbanks	87	77	63	12	<1	0	0	0	0	5	64	84	33
Fort Yukon	91	93	78	24	<1	0	0	0	0	12	74	93	40
Galena	77	81	66	24	2	0	0	0	0	3	48	73	31
Gambell Island	58	61	58	13	<1	0	0	0	0	0	4	36	20
Holy Cross	59	54	46	8	<1	0	0	0	0	1	32	58	21
Homer	18	9	2	<1	0	0	0	0	0	0	2	10	4
Juneau	7	5	<1	0	0	0	0	0	0	0	<1	5	2
Kennicott	58	45	22	4	0	0	0	0	0	4	40	54	19
Ketchikan	<1	0	0	0	0	0	0	0	0	0	0	0	<1
Kodiak	2	<1	<1	0	0	0	0	0	0	0	0	0	<1
Kotzebue	76	71	73	34	5	0	0	0	0	2	46	72	32
McGrath	78	69	62	16	<1	0	0	0	0	5	54	69	30
Naknek	38	30	24	2	0	0	0	0	0	<1	17	38	13
Nome	52	53	53	17	1	0	0	0	0	<1	24	50	21
Point Hope	81	85	86	55	9	0	0	0	0	<1	21	74	36
Point Lay	90	91	97	73	11	0	0	0	0	9	51	85	51
Port Heiden	10	27	5	<1	0	0	0	0	0	0	6	10	6
St. Paul Island	3	4	5	0	0	0	0	0	0	0	0	0	1
Shungnak	64	64	64	28	3	0	0	0	0	10	56	60	29
Sitka	1	<1	0	0	0	0	0	0	0	0	0	<1	<1
Talkeetna	55	37	30	5	0	0	0	0	0	2	27	48	17
Tanana	84	77	63	17	<1	0	0	0	0	8	64	81	33
Umiat	92	98	97	79	18	0	0	0	3	32	71	95	51
Valdez	19	13	3	2	0	0	0	0	0	0	2	14	5
Wiseman	85	79	74	31	2	0	0	0	<1	14	70	73	36
Wrangell	2	<1	0	0	0	0	0	0	0	0	0	2	<1
Yakutat	12	6	1	0	0	0	0	0	0	0	<1	4	2

TABLE 16: FREQUENCY (PERCENT) OF DAILY MINIMUM TEMPERATURE  
AT OR BELOW -25°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Anchorage	3	1	0	0	0	0	0	0	0	0	0	<1	<1
Barrow	43	46	34	6	0	0	0	0	0	0	4	22	13
Barter Island	44	73	35	23	0	0	0	0	0	0	12	49	20
Bethel	17	9	5	0	0	0	0	0	0	0	<1	7	3
Cold Bay	0	0	0	0	0	0	0	0	0	0	0	0	0
Dutch Harbor	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairbanks	38	31	11	<1	0	0	0	0	0	<1	13	33	11
Fort Yukon	51	52	19	2	0	0	0	0	0	<1	26	51	17
Galena	43	38	19	1	0	0	0	0	0	0	14	38	13
Gambell Island	0	2	<1	0	0	0	0	0	0	0	0	0	<1
Holy Cross	20	10	6	<1	0	0	0	0	0	0	2	14	4
Homer	0	0	0	0	0	0	0	0	0	0	0	0	0
Juneau	0	0	0	0	0	0	0	0	0	0	0	0	0
Kennicott	11	7	<1	<1	0	0	0	0	0	0	4	11	3
Ketchikan	0	0	0	0	0	0	0	0	0	0	0	0	0
Kodiak	0	0	0	0	0	0	0	0	0	0	0	0	0
Kotzebue	30	23	21	2	0	0	0	0	0	0	0	17	9
McGrath	37	29	19	1	0	0	0	0	0	0	15	35	11
Naknek	6	1	0	0	0	0	0	0	0	0	0	2	<1
Nome	12	10	5	<1	0	0	0	0	0	0	<1	3	3
Point Hope	27	18	12	1	0	0	0	0	0	0	<1	2	6
Point Lay	48	56	43	9	0	0	0	0	0	0	4	35	20
Port Heiden	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Paul Island	0	0	0	0	0	0	0	0	0	0	0	0	0
Shungnak	28	35	29	6	0	0	0	0	0	0	33	32	14
Sitka	0	0	0	0	0	0	0	0	0	0	0	0	0
Talkeetna	13	9	3	<1	0	0	0	0	0	0	<1	8	3
Tanana	37	29	16	1	0	0	0	0	0	<1	16	34	11
Umiat	65	75	59	23	0	0	0	0	0	0	18	54	26
Valdez	0	<1	0	0	0	0	0	0	0	0	0	0	<1
Wiseman	33	33	19	3	0	0	0	0	0	<1	18	36	12
Wrangell	0	0	0	0	0	0	0	0	0	0	0	0	0
Yakutat	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 17: FREQUENCY (PERCENT) OF DAILY MINIMUM TEMPERATURE  
AT OR BELOW -40°F FOR SELECTED STATIONS IN ALASKA

STATION	MONTH												YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Anchorage	0	0	0	0	0	0	0	0	0	0	0	0	0
Barrow	7	9	2	0	0	0	0	0	0	0	<1	1	2
Barter Island	14	28	0	0	0	0	0	0	0	0	<1	6	4
Bethel	3	<1	0	0	0	0	0	0	0	0	0	<1	<1
Cold Bay	0	0	0	0	0	0	0	0	0	0	0	0	0
Dutch Harbor	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairbanks	16	13	<1	0	0	0	0	0	0	0	<1	12	4
Fort Yukon	26	29	5	0	0	0	0	0	0	0	9	30	8
Galena	24	12	2	0	0	0	0	0	0	0	3	17	5
Gambell Island	0	0	0	0	0	0	0	0	0	0	0	0	0
Holy Cross	7	2	<1	0	0	0	0	0	0	0	0	1	<1
Homer	0	0	0	0	0	0	0	0	0	0	0	0	0
Juneau	0	0	0	0	0	0	0	0	0	0	0	0	0
Kennicott	1	1	0	0	0	0	0	0	0	0	0	<1	<1
Ketchikan	0	0	0	0	0	0	0	0	0	0	0	0	0
Kodiak	0	0	0	0	0	0	0	0	0	0	0	0	0
Kotzebue	5	3	2	<1	0	0	0	0	0	0	<1	2	1
McGrath	20	12	2	0	0	0	0	0	0	0	1	16	4
Naknek	0	0	0	0	0	0	0	0	0	0	0	0	0
Nome	0	<1	0	0	0	0	0	0	0	0	0	0	<1
Point Hope	0	1	<1	0	0	0	0	0	0	0	0	0	<1
Point Lay	13	12	5	0	0	0	0	0	0	0	<1	4	3
Port Heiden	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Paul Island	0	0	0	0	0	0	0	0	0	0	0	0	0
Shungnak	17	14	7	0	0	0	0	0	0	0	7	14	5
Sitka	0	0	0	0	0	0	0	0	0	0	0	0	0
Talkeetna	2	<1	<1	0	0	0	0	0	0	0	0	<1	<1
Tanana	19	12	3	0	0	0	0	0	0	0	3	19	5
Umiat	33	46	19	0	0	0	0	0	0	0	6	30	12
Valdez	0	0	0	0	0	0	0	0	0	0	0	0	0
Wiseman	11	8	3	0	0	0	0	0	0	0	3	11	3
Wrangell	0	0	0	0	0	0	0	0	0	0	0	0	0
Yakutat	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 18: FREQUENCY (PERCENT) OF DAILY MINIMUM TEMPERATURE  
AT OR BELOW -65°F FOR SELECTED STATIONS IN ALASKA

<u>STATION</u>	<u>MONTH</u>												
	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>YEAR</u>
Fairbanks	<1	0	0	0	0	0	0	0	0	0	0	0	<1
Fort Yukon	2	<1	0	0	0	0	0	0	0	0	0	3	<1
Tanana	1	0	0	0	0	0	0	0	0	0	0	0	<1
Wiseman	<1	0	0	0	0	0	0	0	0	0	0	0	<1

TABLE 19: ABSOLUTE MAXIMUM AND MINIMUM TEMPERATURES  
(°F) AND LENGTH OF RECORDS FOR SELECTED  
STATIONS IN ALASKA

Station	Length of Record (yrs)	Temper-ature	MONTH												Year
			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
Anchorage	22-25	Abs. Max	56	55	56	63	71	84	81	82	73	63	62	53	84
		Abs. Min	-33	-32	-19	-15	20	29	34	31	19	-6	-18	-36	-36
Barrow	22-25	Abs. Max	33	35	33	42	45	65	78	73	59	42	39	34	78
	25-30	Abs. Min	-52	-56	-52	-42	-18	8	22	20	4	-25	-43	-55	-56
Barter Is.	1-5	Abs. Max	16	21	7	35	34	39	65	65	64	Msg.	29	30	65
	1-5	Abs. Min	-50	-59	-38	-37	-7	25	29	25	16	Msg.	-51	-38	-59
Bethel	16-18	Abs. Max	47	51	53	59	76	90	79	84	76	62	60	49	90
	17-18	Abs. Min	-46	-40	-34	-25	3	28	30	30	18	-5	-27	-40	-46
Cold Bay	4-5	Abs. Max	41	47	47	49	57	63	69	71	59	55	51	47	71
	4-5	Abs. Min	-5	0	4	4	20	30	38	32	30	28	8	-1	-5
Dutch Harbor	22-26	Abs. Max	56	60	69	61	66	73	79	80	80	65	58	56	80
	17-19	Abs. Min	10	8	9	13	20	30	36	34	29	12	16	10	8
Fairbanks	11	Abs. Max	42	45	55	69	80	91	89	87	77	64	54	58	91
	11	Abs. Min	-66	-54	-44	-25	4	32	34	28	12	-28	-38	-59	-66
Fort Yukon	22-27	Abs. Max	40	41	50	65	85	100	93	87	79	61	40	37	100
	23-27	Abs. Min	-67	-70	-50	-41	-3	25	25	22	7	-30	-61	-71	-71
Galena	4	Abs. Max	32	35	40	51	72	87	84	82	67	56	38	35	87
	4	Abs. Min	-64	-49	-46	-29	-1	35	40	30	19	-7	-46	-52	-64
Gambell Is.	4-8	Abs. Max	33	33	37	45	50	64	71	68	62	53	54	42	71
	4-9	Abs. Min	-27	-31	-31	-18	3	25	30	32	21	15	0	-25	-31
Holy Cross	29-34	Abs. Max	48	53	56	67	76	93	88	86	79	65	53	55	93
	36-41	Abs. Min	-58	-57	-55	-31	-4	24	31	28	15	-14	-50	-50	-58
Homer	7-11	Abs. Max	49	53	55	59	72	79	79	76	65	60	58	48	79
	7-11	Abs. Min	-17	-6	-2	0	24	29	36	33	24	15	-6	-5	-17
Juneau	43-47	Abs. Max	54	57	61	69	80	87	89	87	77	66	64	59	89
	42-47	Abs. Min	-15	-15	-5	13	24	33	38	36	29	13	-1	-10	-15
Ketchikan	26-30	Abs. Max	46	56	54	58	71	80	79	75	74	61	58	51	80
	26-29	Abs. Min	-39	-39	-29	-18	11	27	29	29	11	-18	-30	-36	-39
Kodiak	28-31	Abs. Max	61	61	69	72	93	96	92	84	80	72	62	60	96
	28-31	Abs. Min	-8	2	9	12	25	28	36	34	28	21	11	0	-8

TABLE 19: ABSOLUTE MAXIMUM AND MINIMUM TEMPERATURES  
(°F) AND LENGTH OF RECORDS FOR SELECTED  
STATIONS IN ALASKA  
(Continued)

Station	Length of Record (yrs)	Temperature	MONTH												Year
			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
Kotzebue	12-18	Abs. Max	32	34	40	47	64	81	82	75	65	57	38	33	82
		Abs. Min	-55	-50	-58	-29	-15	20	30	26	18	-17	-37	-49	-58
McGrath	6	Abs. Max	40	35	50	58	67	82	82	74	64	52	38	35	82
		Abs. Min	-55	-47	-42	-16	17	38	45	39	25	-3	-40	-54	-55
Naknek	11-18	Abs. Max	46	54	59	64	75	84	86	80	75	61	55	48	86
		Abs. Min	-43	-31	-24	-6	34	32	34	34	22	-2	-28	-31	-43
Nome	33-35	Abs. Max	42	45	44	60	66	79	84	80	66	58	50	40	84
		Abs. Min	-47	-41	-38	-30	-6	20	28	23	16	-4	-26	-42	-47
Point Hope	1-5	Abs. Max	26	38	30	35	48	59	68	69	62	48	Mag.	Mag.	69
		Abs. Min	-47	-45	-49	-37	-11	23	34	30	30	8	-9	-28	-49
Point Lay	1-5	Abs. Max	32	12	31	41	55	68	77	65	53	43	32	26	77
		Abs. Min	-45	-54	-50	-43	7	29	31	32	11	-7	-18	-33	-54
Port Heiden	2-3	Abs. Max	44	50	54	52	66	72	72	82	68	54	48	46	82
		Abs. Min	-14	-12	-10	-6	13	31	37	39	31	19	5	-2	-14
St. Paul Is.	33-38	Abs. Max	48	44	44	49	56	63	62	64	59	56	50	52	63
		Abs. Min	-26	-21	-15	-1	14	26	29	35	30	22	7	-7	-26
Shungnak	1-7	Abs. Max	41	36	38	55	76	90	87	80	62	45	26	33	90
		Abs. Min	-61	-55	-59	-27	5	32	35	35	25	20	-28	-53	-61
Sitka	53-57	Abs. Max	60	60	65	74	80	84	87	86	82	70	62	64	87
		Abs. Min	-4	-4	-1	6	28	30	34	30	28	16	1	-5	-5
Talkleetna	20-23	Abs. Max	45	49	55	65	79	90	90	88	76	68	52	47	90
		Abs. Min	-48	-38	-30	-23	13	25	26	27	11	-14	-30	-41	-48
Tanana	35-37	Abs. Max	40	43	53	64	82	90	89	90	78	57	42	46	90
		Abs. Min	-76	-68	-57	-40	-4	23	29	18	3	-27	-55	-68	-76
Umiat	36-40	Abs. Max	30	28	35	40	55	73	85	77	63	45	43	31	85
		Abs. Min	-62	-63	-50	-46	-22	20	31	24	-6	-19	-53	-56	-63
Valdez	1-3	Abs. Max	50	59	52	63	78	83	84	84	82	69	59	48	84
		Abs. Min	5	3	8	10	26	30	38	31	24	15	11	3	3
Wiseman	5-7	Abs. Max	35	34	49	59	75	88	89	86	72	51	34	36	89
		Abs. Min	-62	-55	-47	-39	-4	32	32	21	-2	-12	-48	-58	-62
Wrangell	20-24	Abs. Max	56	63	61	73	82	91	92	85	82	72	65	60	92
		Abs. Min	-2	-5	7	16	34	38	34	30	18	11	11	-6	-6
Yakutat	17-21	Abs. Max	58	53	57	62	75	82	75	71	66	63	53	49	82
		Abs. Min	5	3	8	10	26	30	38	31	24	15	11	3	3

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FIG. 2-5: MEAN TEMPERATURES

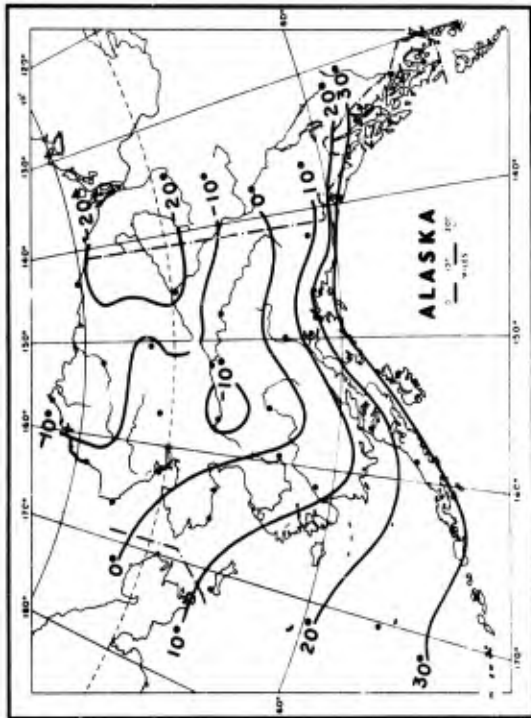


Figure 2: Mean Temperature (°F) during December

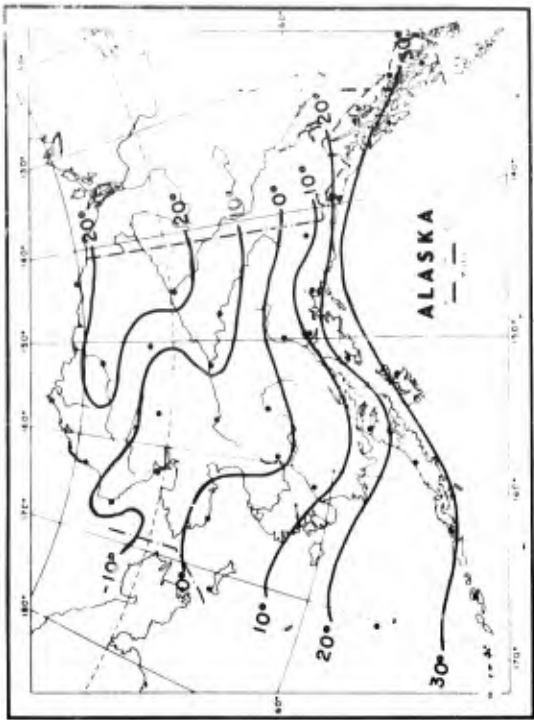


Figure 3: Mean Temperature (°F) during January

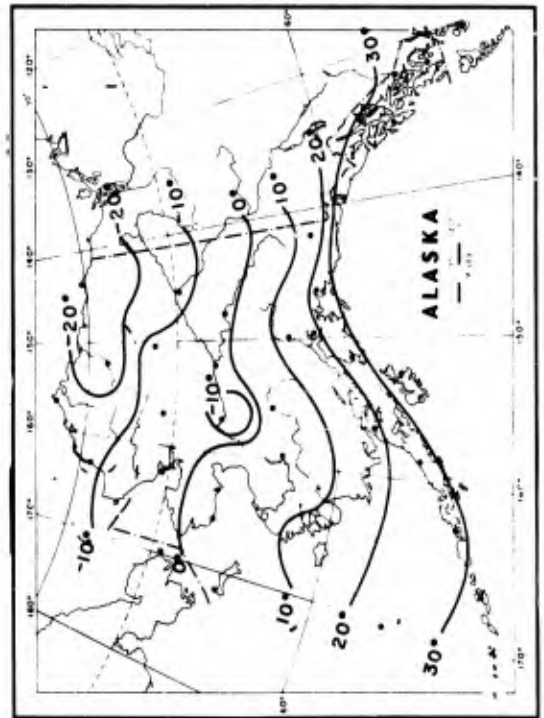


Figure 4: Mean Temperature (°F) during February

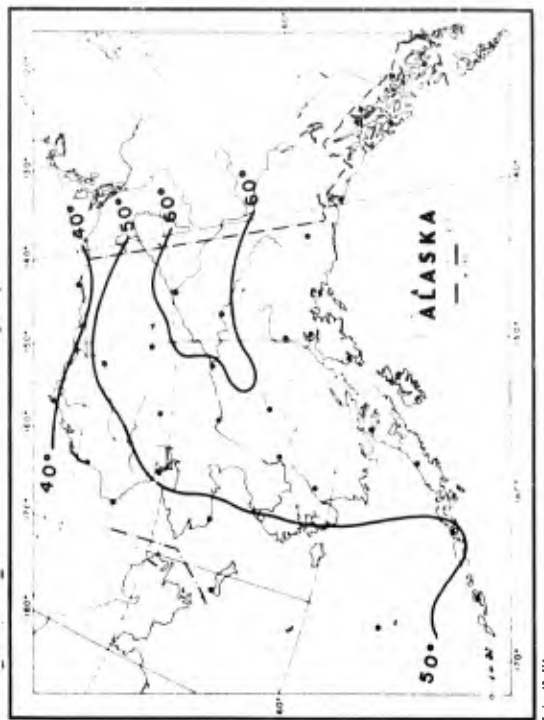


Figure 5: Mean Temperature (°F) during July

FIG. 6-9: MEAN MAXIMUM TEMPERATURES

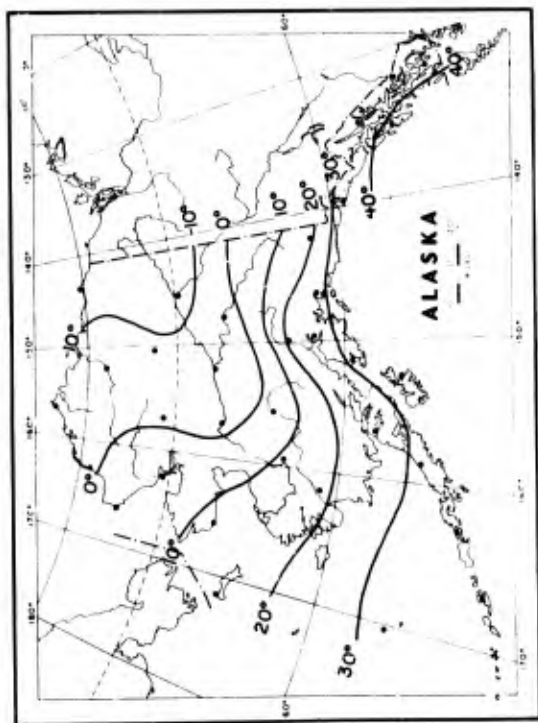


Figure 6: Mean Maximum Temperature (°F) during December

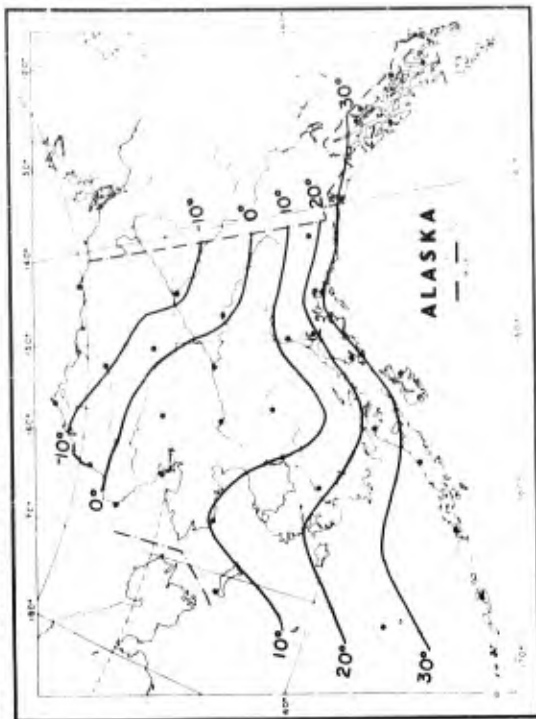


Figure 7: Mean Maximum Temperature (°F) during January

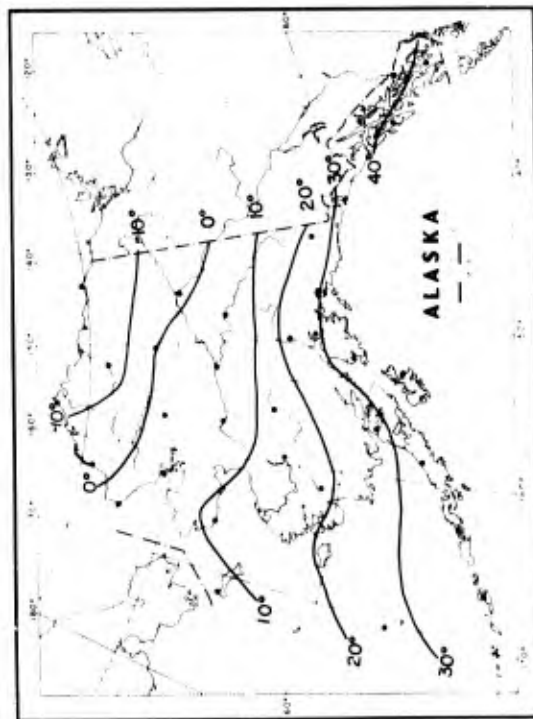


Figure 8: Mean Maximum Temperature (°F) during February

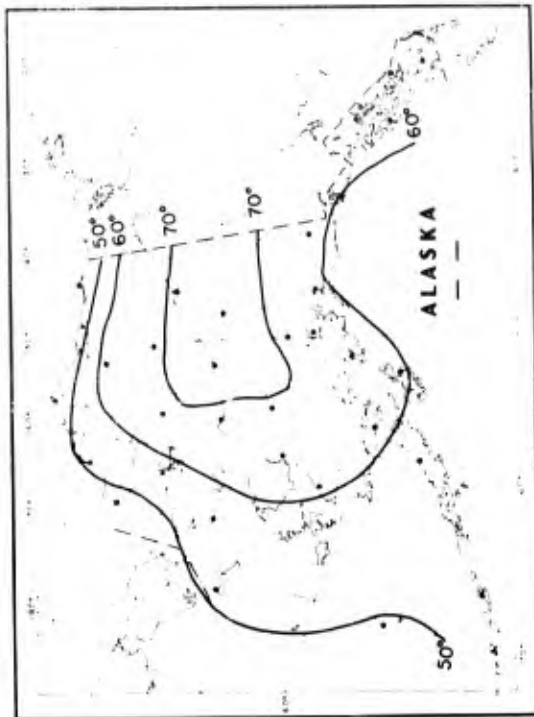


Figure 9: Mean Maximum Temperature (°F) during July

FIG. 10-13: MEAN MINIMUM TEMPERATURES

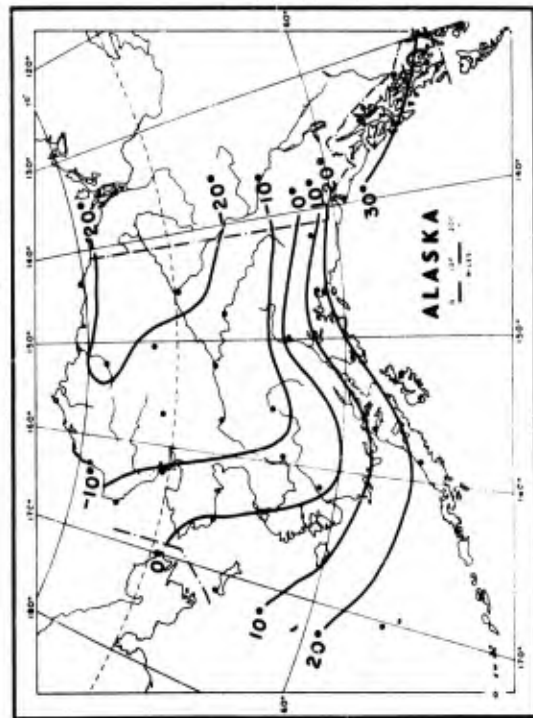


Figure 10: Mean Minimum Temperature (°F) in December

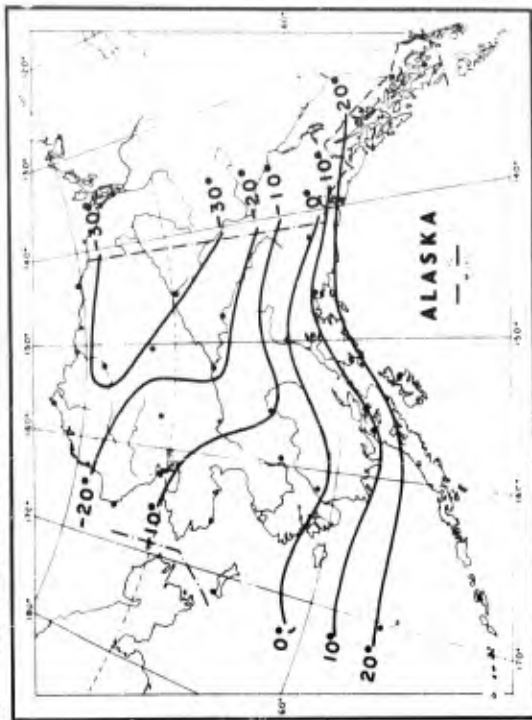


Figure 11: Mean Minimum Temperature (°F) in January

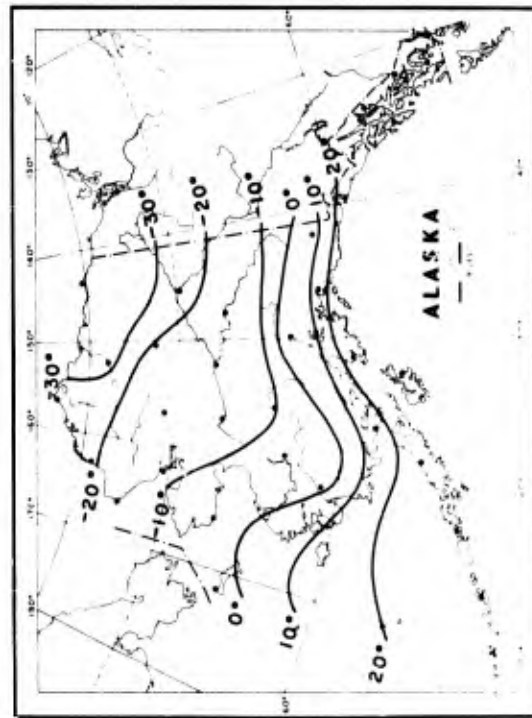


Figure 12: Mean Minimum Temperature (°F) in February

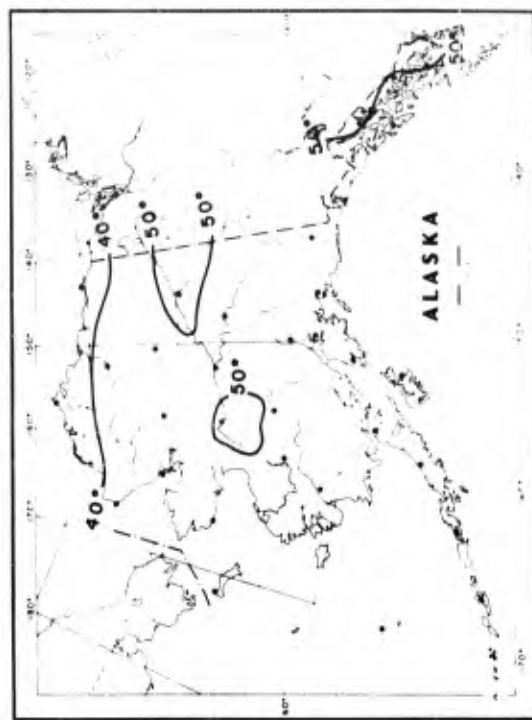


Figure 13: Mean Minimum Temperature (°F) in July

FIG. 14 - 15: ABSOLUTE MAXIMUM AND MINIMUM TEMPERATURES

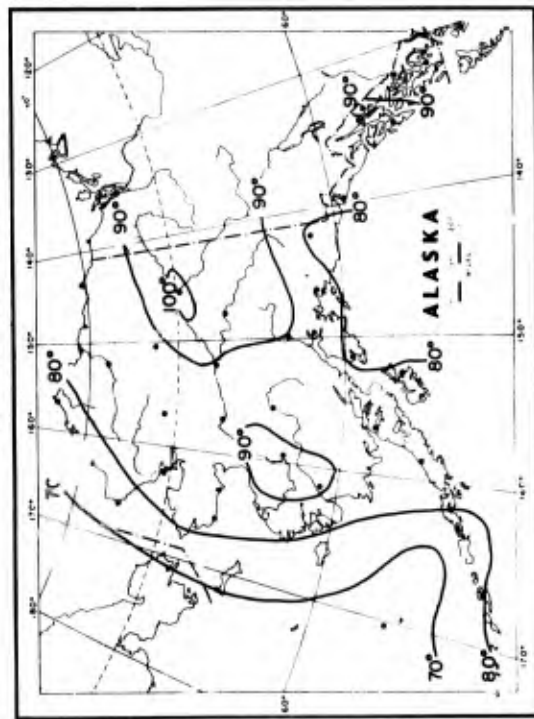


Figure 14: Absolute Maximum Temperature (°F)

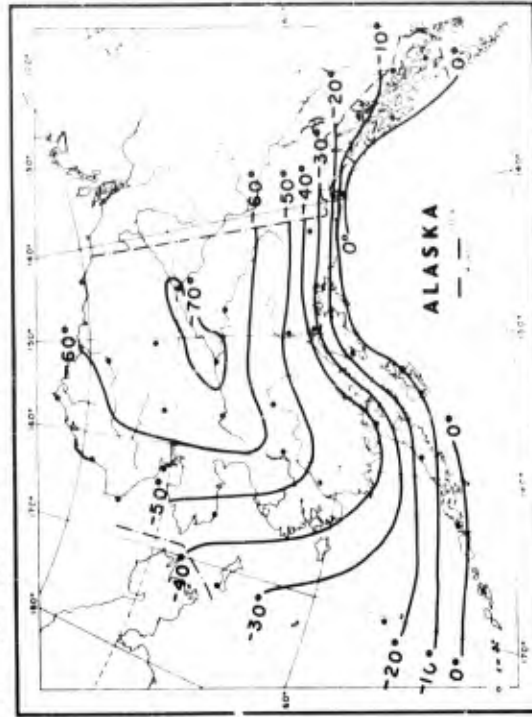


Figure 15: Absolute Minimum Temperature (°F)

FIG. 16-19: ABSOLUTE MAXIMUM TEMPERATURES FOR FOUR MONTHS

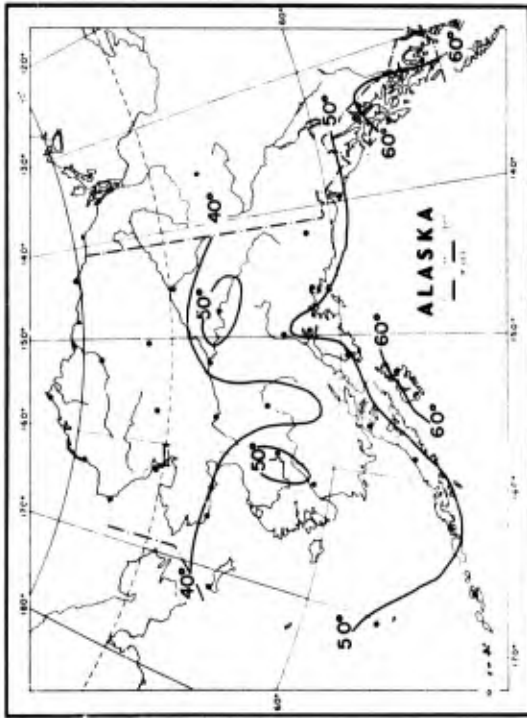


Figure 16 Absolute Maximum Temperature (°F) in December

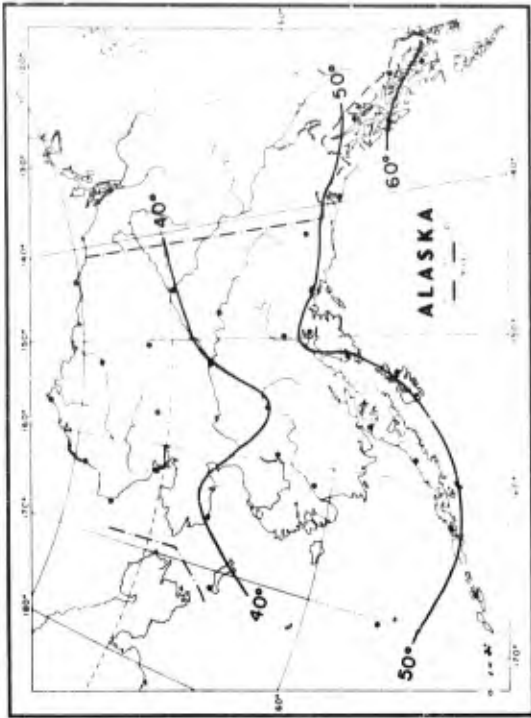


Figure 17 Absolute Maximum Temperature (°F) in January

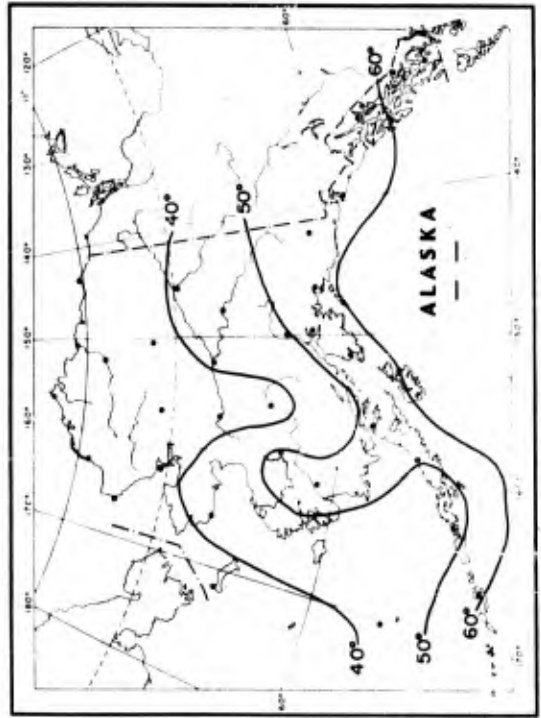


Figure 18 Absolute Maximum Temperature (°F) in February

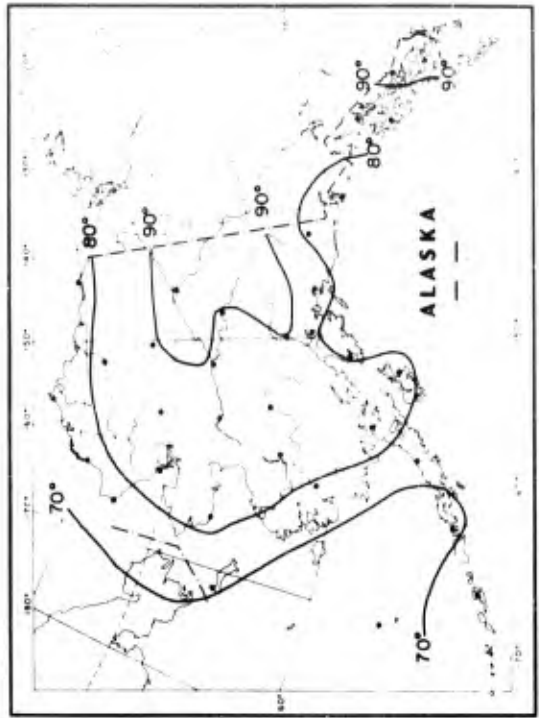


Figure 19 Absolute Maximum Temperature (°F) in July

FIG. 20-23: ABSOLUTE MINIMUM TEMPERATURES FOR FOUR MONTHS

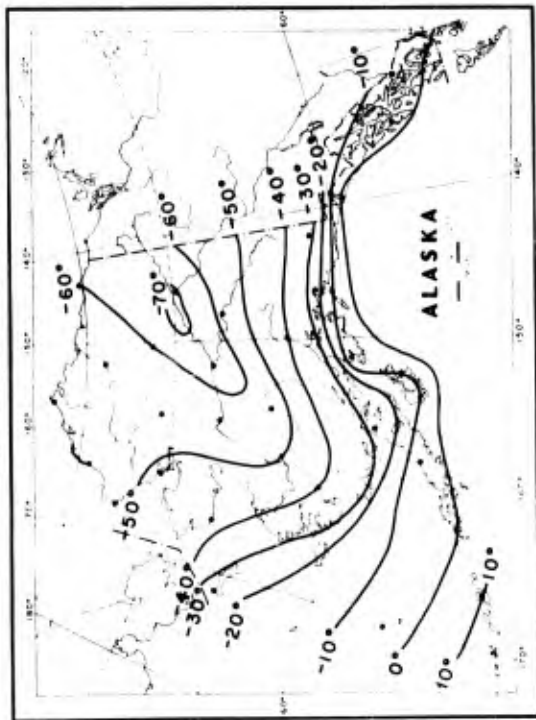


Figure 20 Absolute Minimum Temperature (°F) in December

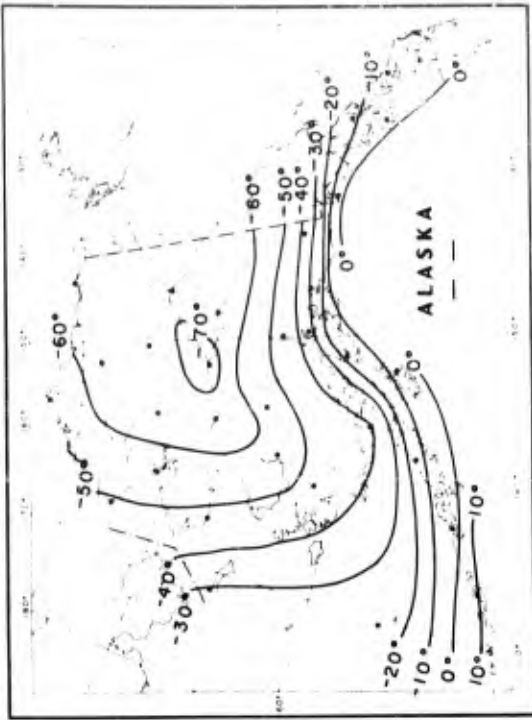


Figure 21 Absolute Minimum Temperature (°F) in January

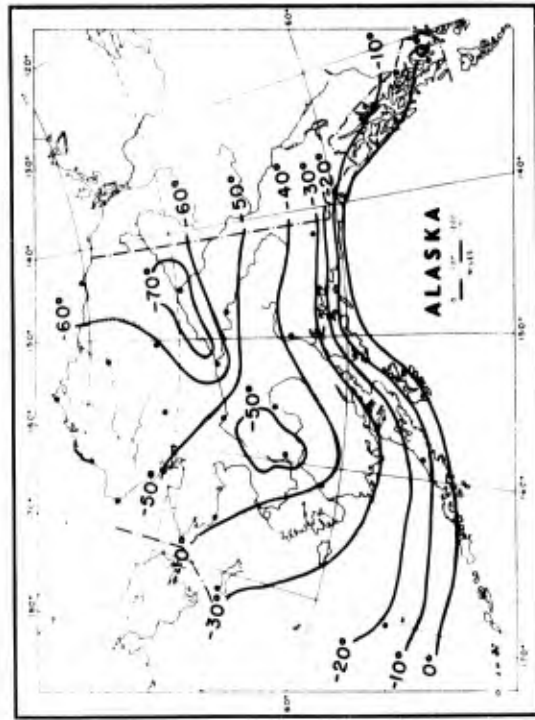


Figure 22 Absolute Minimum Temperature (°F) in February

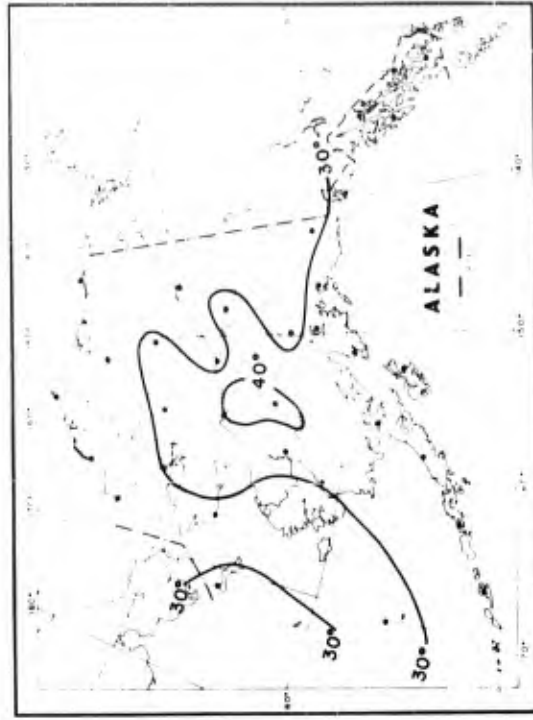


Figure 23 Absolute Minimum Temperature (°F) in July

FIG. 24-27: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW 68°F

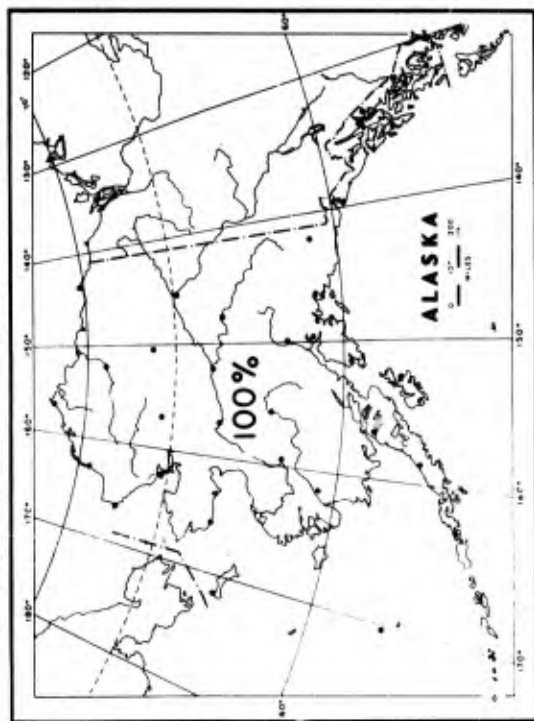


Figure 24: Frequency (percent) of Daily Maximum Temperature At or Below 68°F during December.

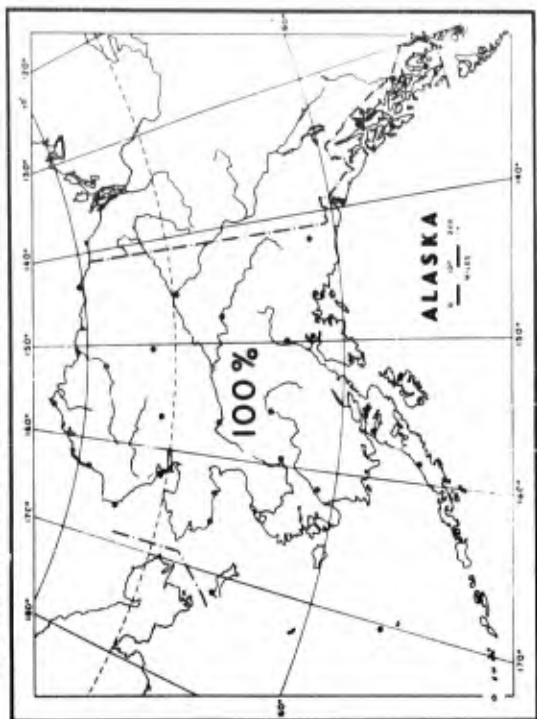


Figure 25: Frequency (percent) of Daily Maximum Temperature At or Below 68°F during January.

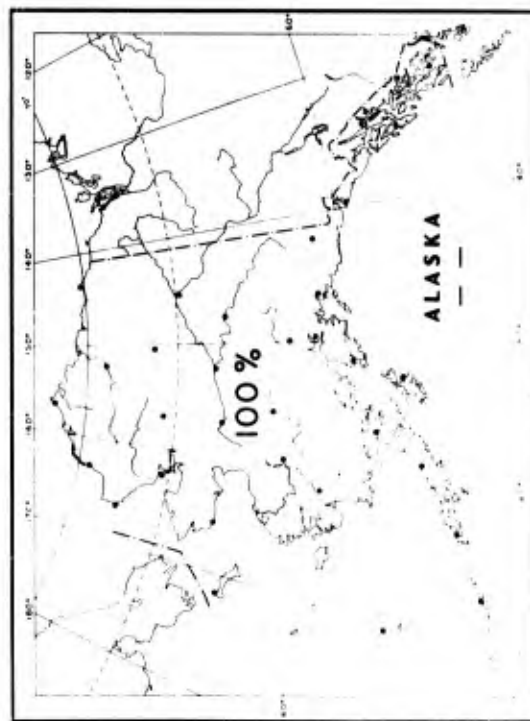


Figure 26: Frequency (percent) of Daily Maximum Temperature At or Below 68°F during February.

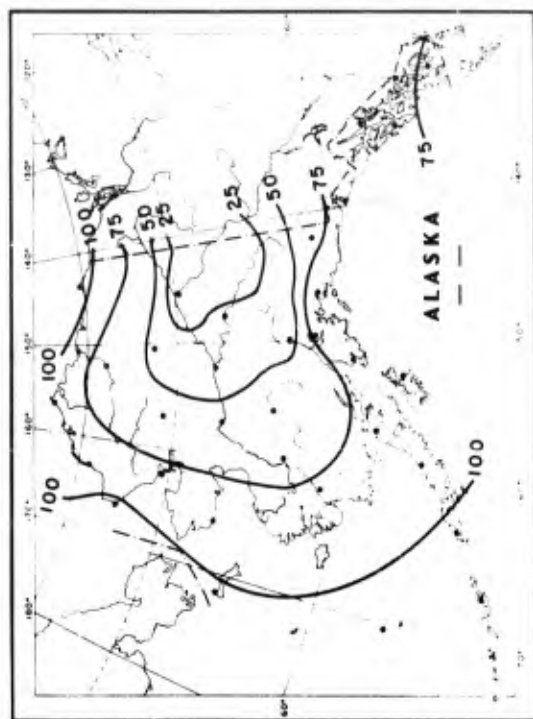


Figure 27: Frequency (percent) of Daily Maximum Temperature At or Below 69°F during July.

FIG. 28-31: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW 50°F.

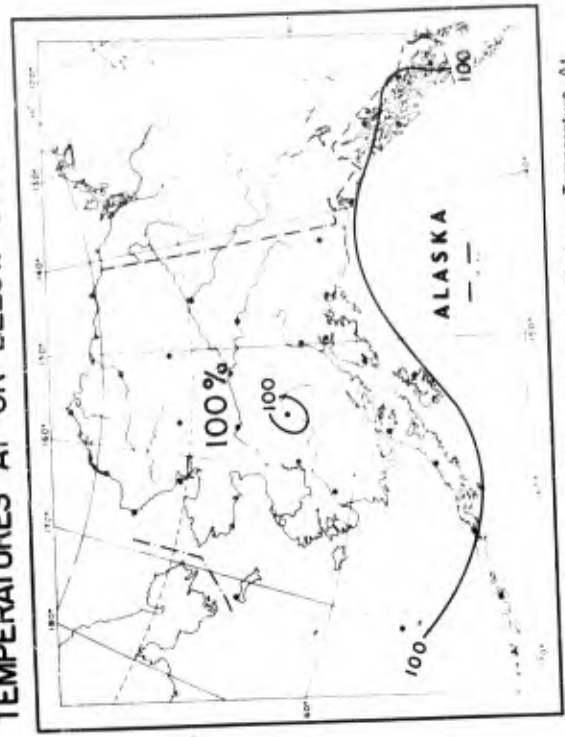


Figure 29: Frequency (percent) of Daily Maximum Temperature At or Below 50°F during January

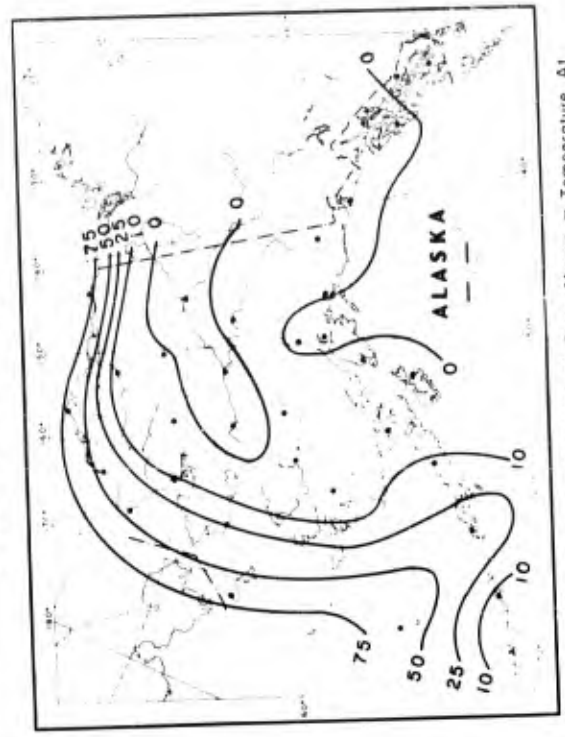


Figure 31: Frequency (percent) of Daily Maximum Temperature At or Below 50°F during July

FIG. 28-31: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW 50°F.

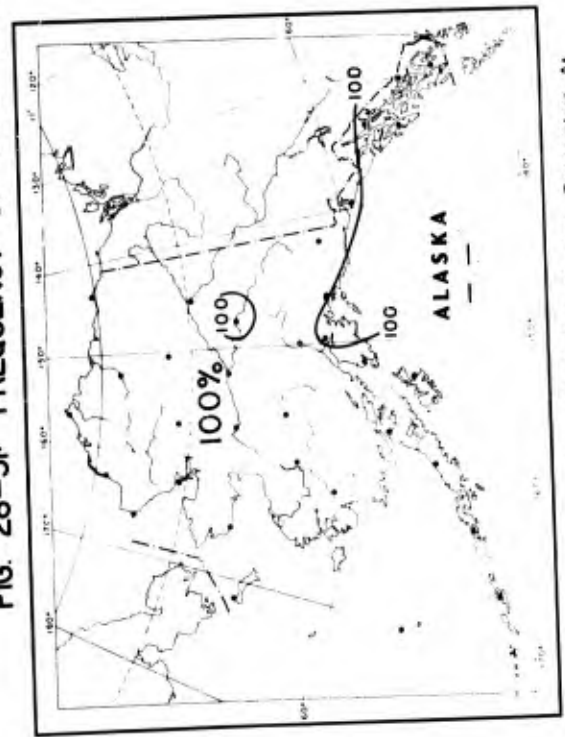


Figure 28: Frequency (percent) of Daily Maximum Temperature At or Below 50°F during December

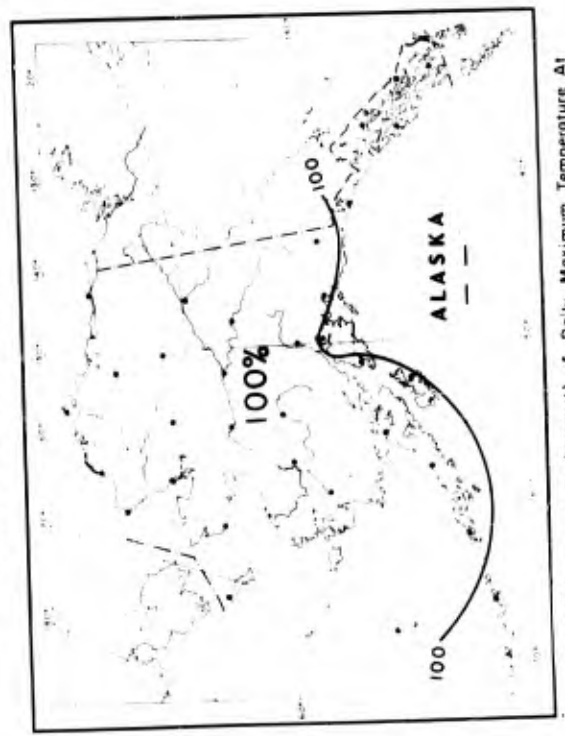


Figure 30: Frequency (percent) of Daily Maximum Temperature At or Below 50°F during February.

FIG. 32-35: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW 32°F.

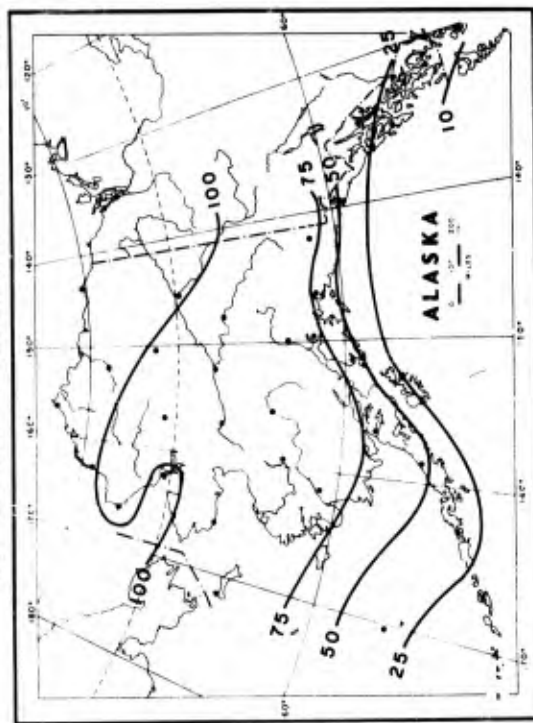


Figure 32: Frequency (percent) of Daily Maximum Temperature At or Below 32°F during December.

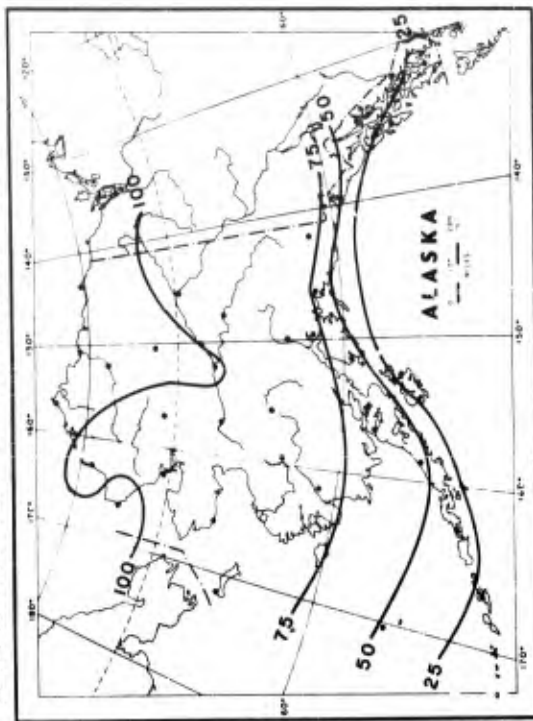


Figure 33: Frequency (percent) of Daily Maximum Temperature At or Below 32°F during January.

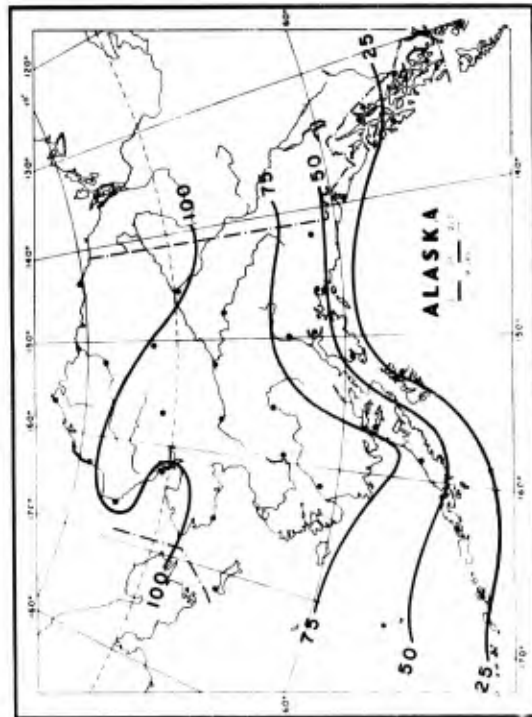


Figure 34: Frequency (percent) of Daily Maximum Temperature At or Below 32°F during February.

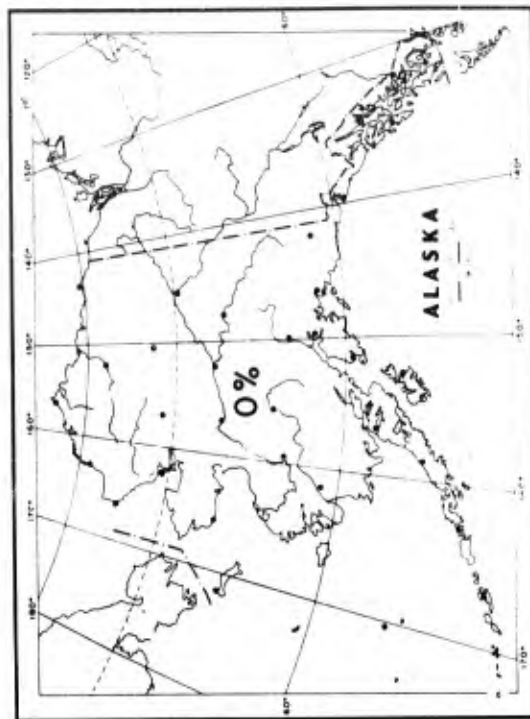


Figure 35: Frequency (percent) of Daily Maximum Temperature At or Below 32°F during July.

FIG. 36-39: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW 23°F

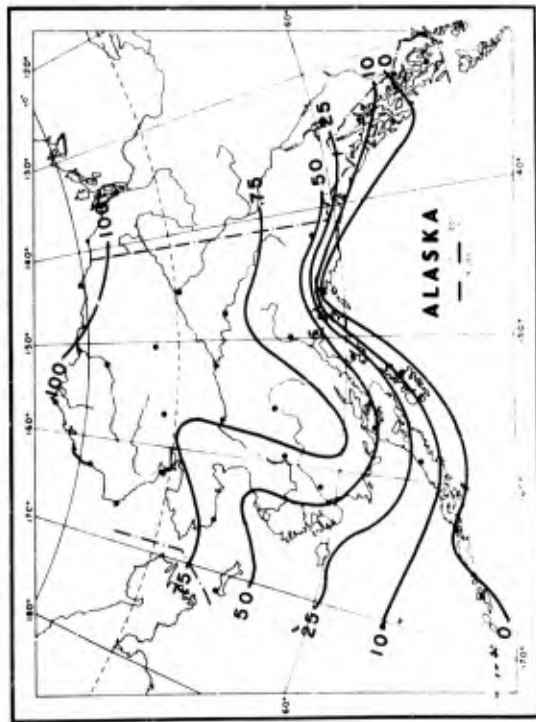


Figure 36: Frequency (percent) of Daily Maximum Temperature At or Below 23°F during December.

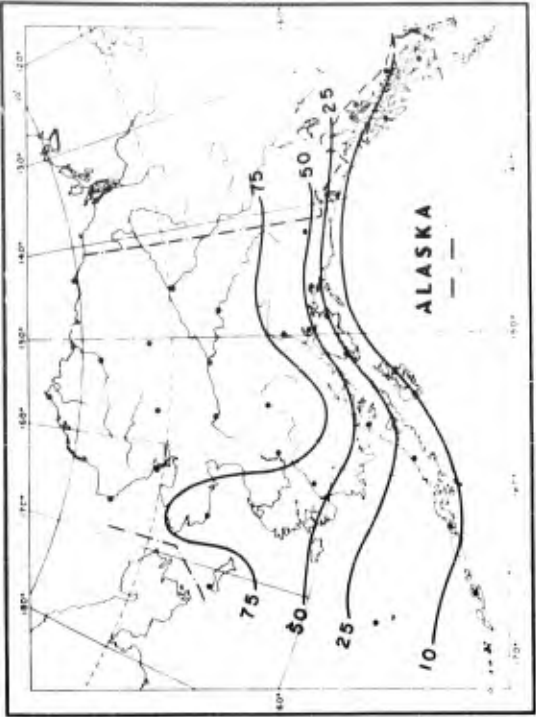


Figure 37: Frequency (percent) of Daily Maximum Temperature At or Below 23°F during January.

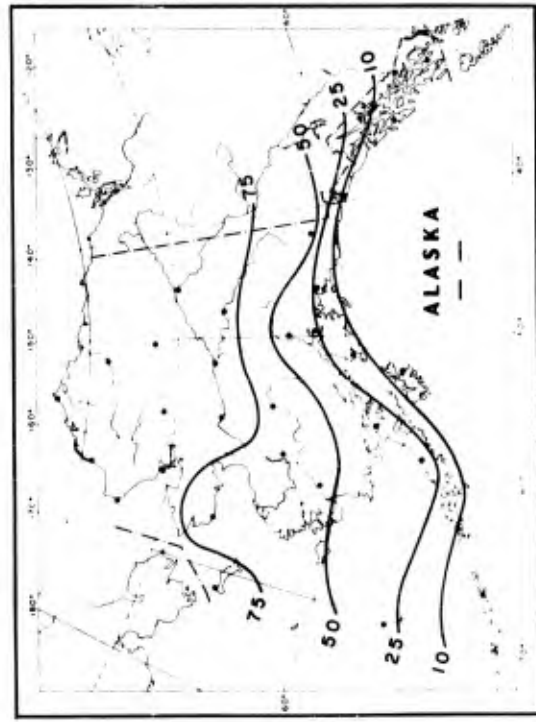


Figure 38: Frequency (percent) of Daily Maximum Temperature At or Below 23°F during February.

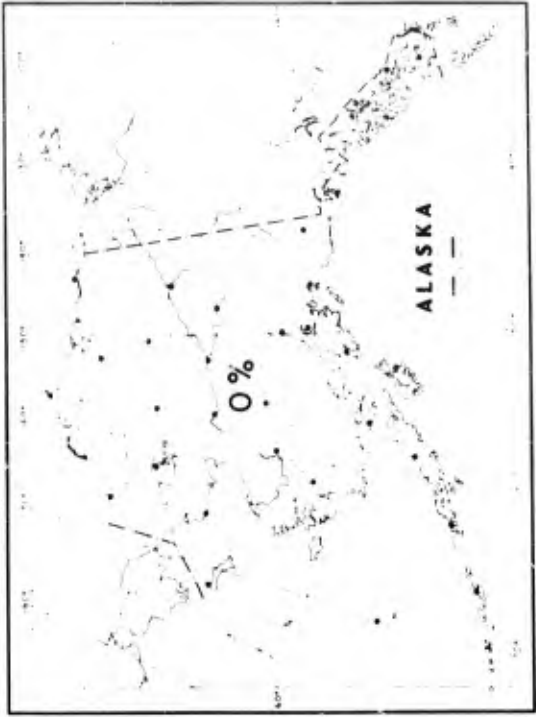


Figure 39: Frequency (percent) of Daily Maximum Temperature At or Below 23°F during July.

FIG. 40-43: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW 14°F

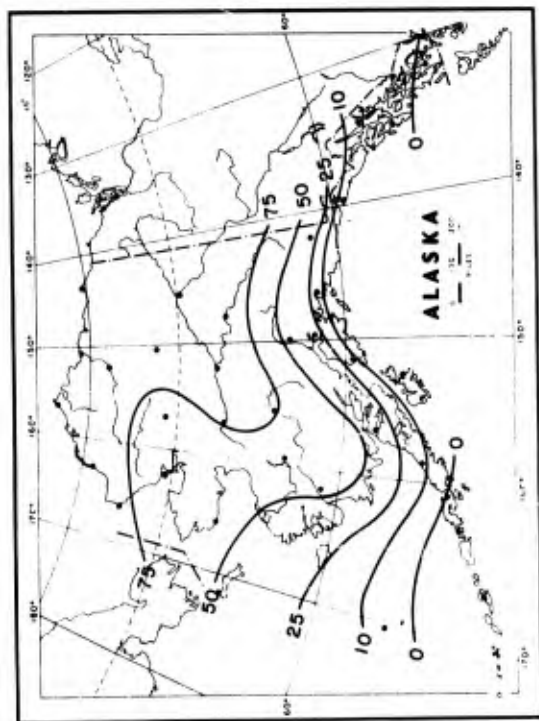


Figure 40: Frequency (percent) of Daily Maximum Temperature At or Below 14°F during December.

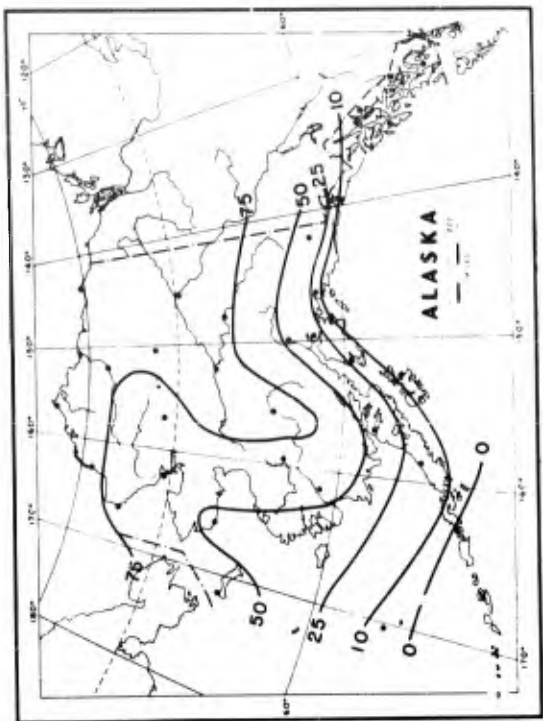


Figure 41: Frequency (percent) of Daily Maximum Temperature At or Below 14°F during January.

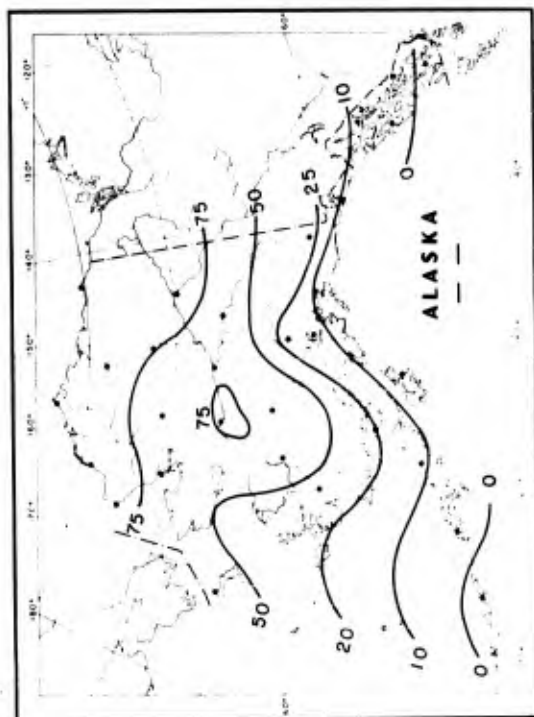


Figure 42: Frequency (percent) of Daily Maximum Temperature At or Below 14°F during February.

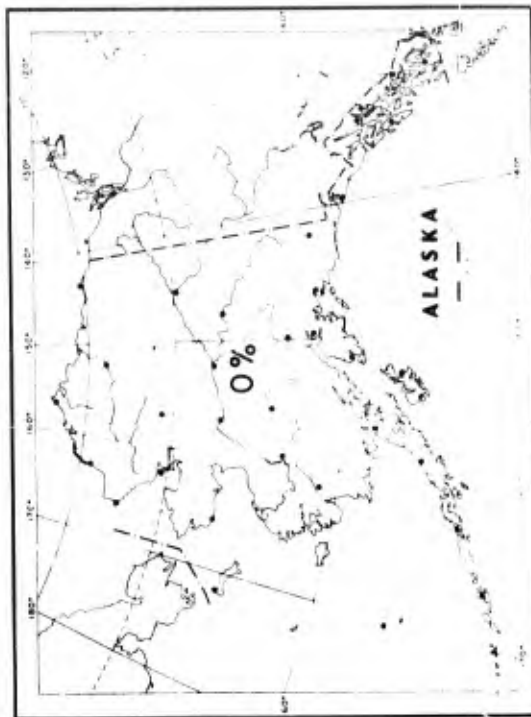


Figure 43: Frequency (percent) of Daily Maximum Temperature At or Below 14°F during July.

FIG. 44-47: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW 0°F.

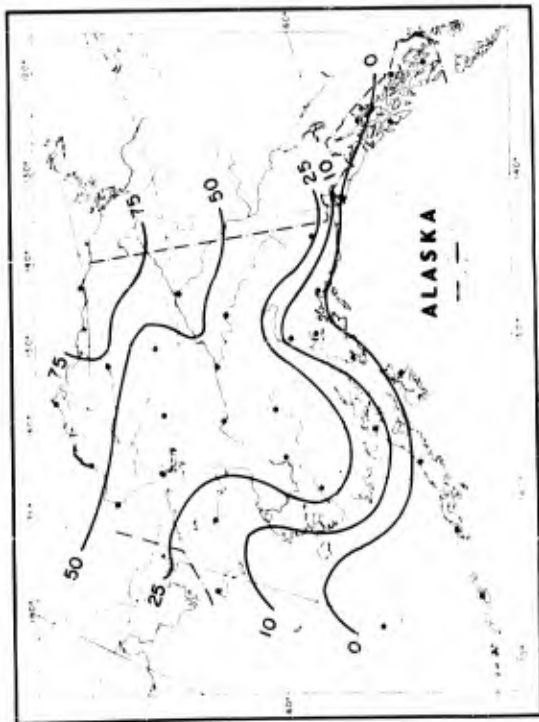


Figure 44: Frequency (percent) of Daily Maximum Temperature At or Below 0°F during December.

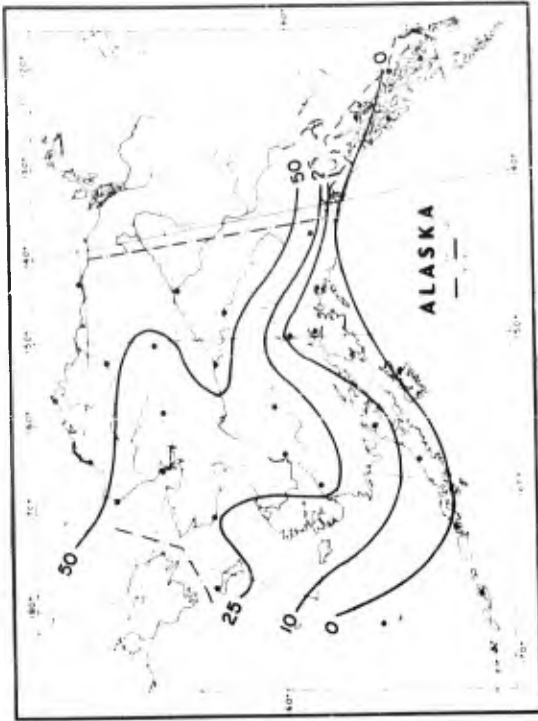


Figure 45: Frequency (percent) of Daily Maximum Temperature At or Below 0°F during January.

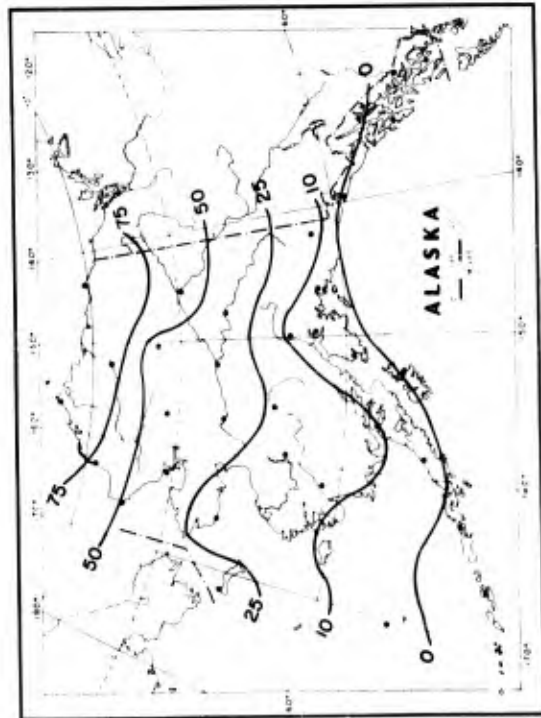


Figure 46: Frequency (percent) of Daily Maximum Temperature At or Below 0°F during February.

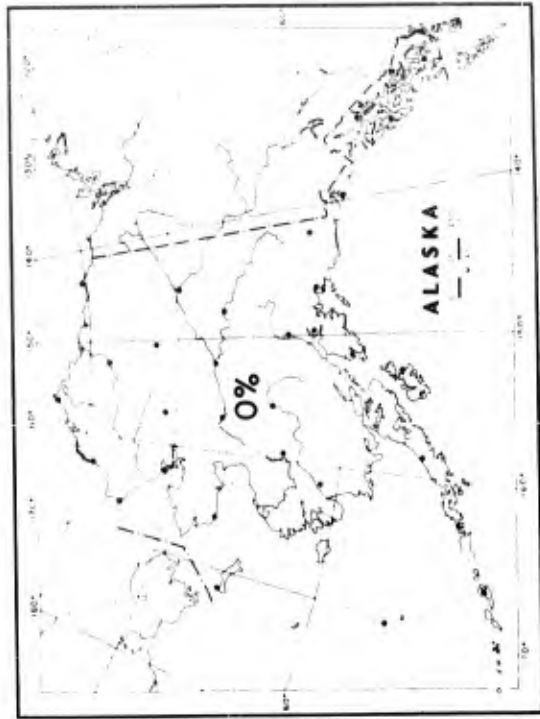


Figure 47: Frequency (percent) of Daily Maximum Temperature At or Below 0°F during July.

FIG. 48-51: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW  $-25^{\circ}\text{F}$ .

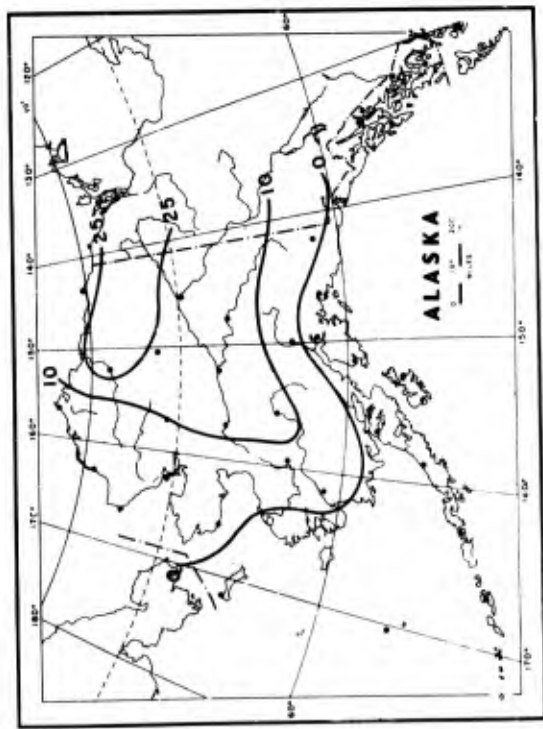


Figure 48: Frequency (percent) of Daily Maximum Temperature At or Below  $-25^{\circ}\text{F}$  during December.

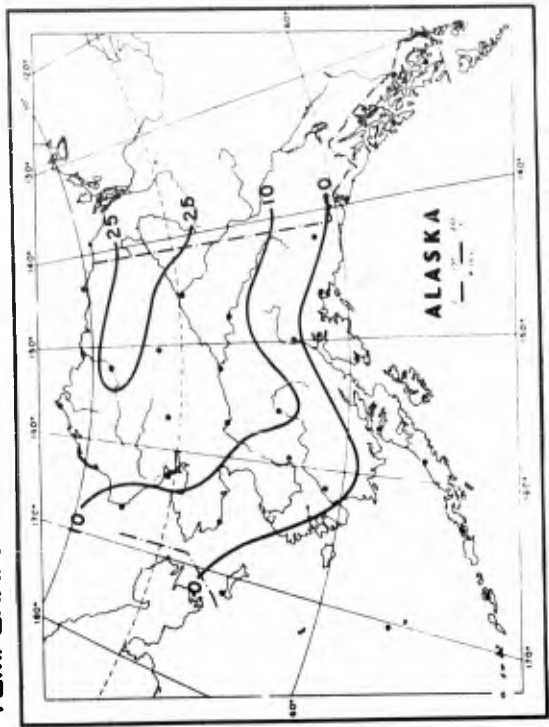


Figure 49: Frequency (percent) of Daily Maximum Temperature At or Below  $-25^{\circ}\text{F}$  during January.

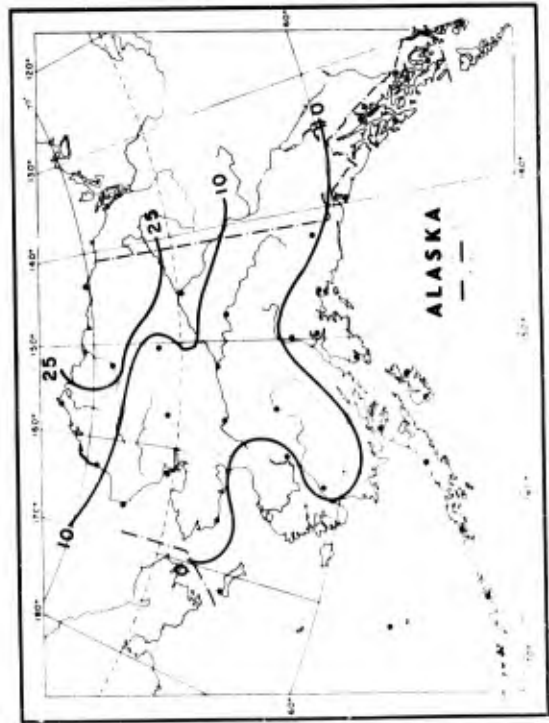


Figure 50: Frequency (percent) of Daily Maximum Temperature At or Below  $-25^{\circ}\text{F}$  during February.

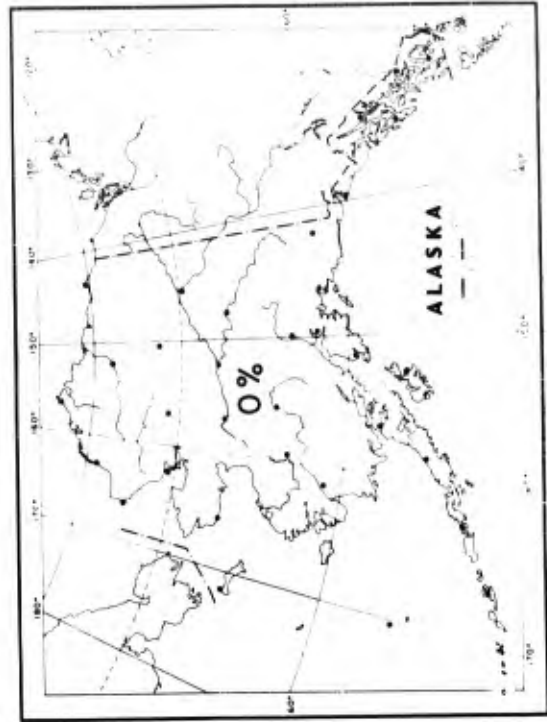


Figure 51: Frequency (percent) of Daily Maximum Temperature At or Below  $-25^{\circ}\text{F}$  during July.

FIG. 52-55: FREQUENCY OF DAILY MAXIMUM TEMPERATURES AT OR BELOW  $-40^{\circ}\text{F}$ .

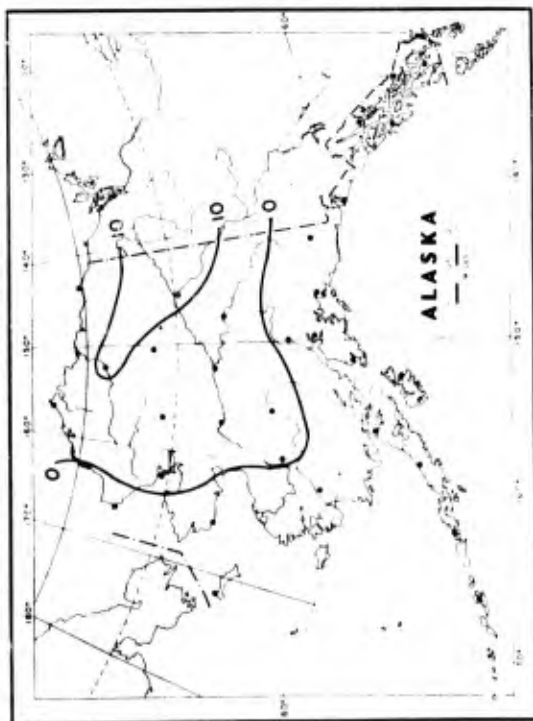


Figure 52: Frequency (percent) of Daily Maximum Temperature At or Below  $-40^{\circ}\text{F}$  during December.

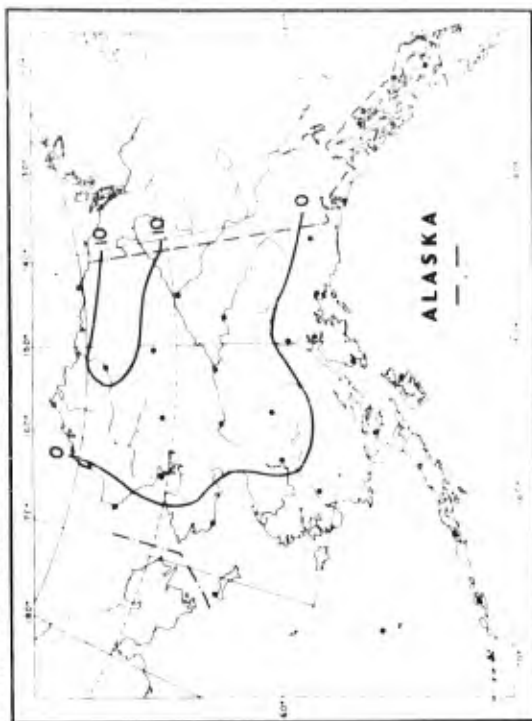


Figure 53: Frequency (percent) of Daily Maximum Temperature At or Below  $-40^{\circ}\text{F}$  during January.



Figure 54: Frequency (percent) of Daily Maximum Temperature At or Below  $-40^{\circ}\text{F}$  during February.

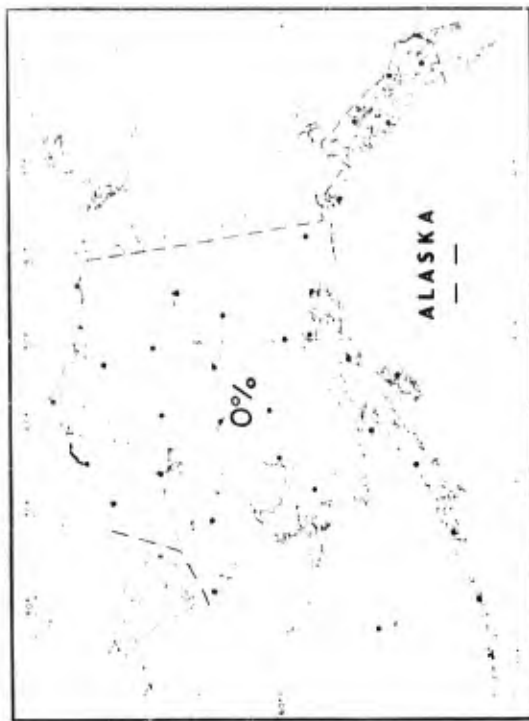


Figure 55: Frequency (percent) of Daily Maximum Temperature At or Below  $-40^{\circ}\text{F}$  during July.

**FIG. 56-59: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW 68°F.**

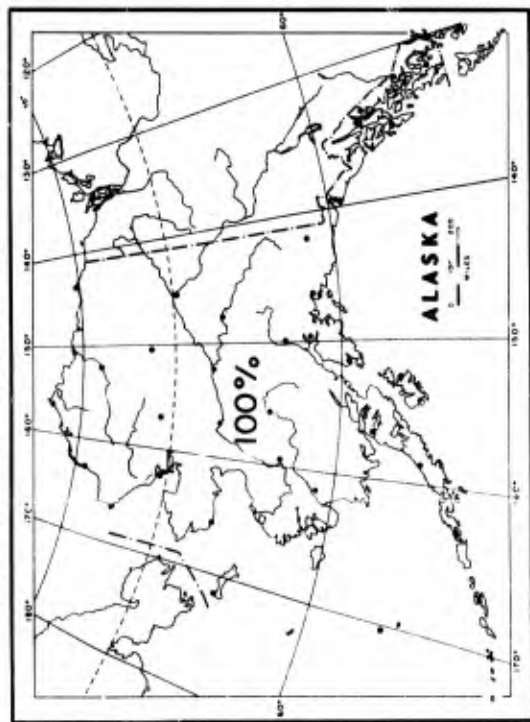


Figure 56: Frequency (percent) of Daily Minimum Temperature At or Below 68°F during December.

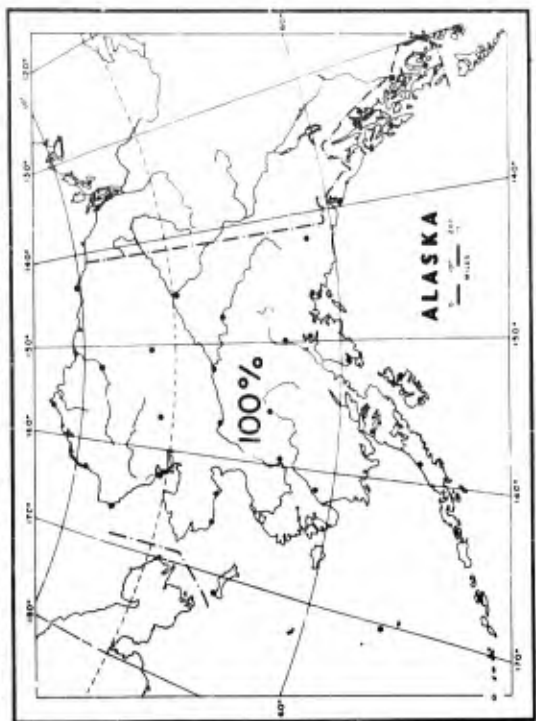


Figure 57: Frequency (percent) of Daily Minimum Temperature At or Below 68°F during January.

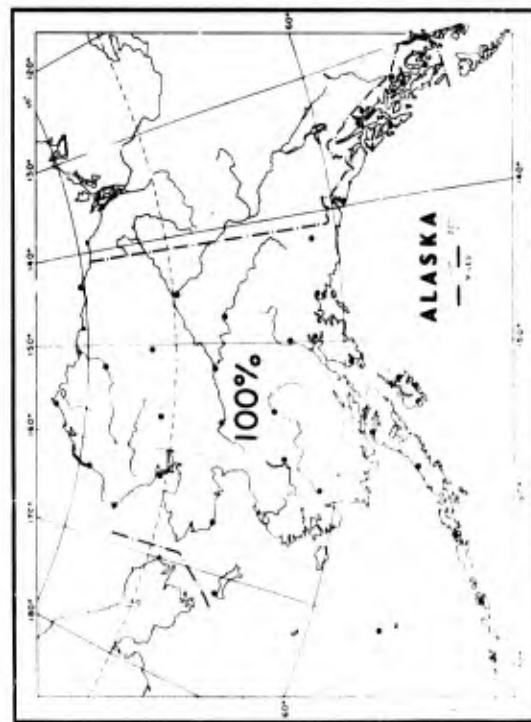


Figure 58: Frequency (percent) of Daily Minimum Temperature At or Below 68°F during February.

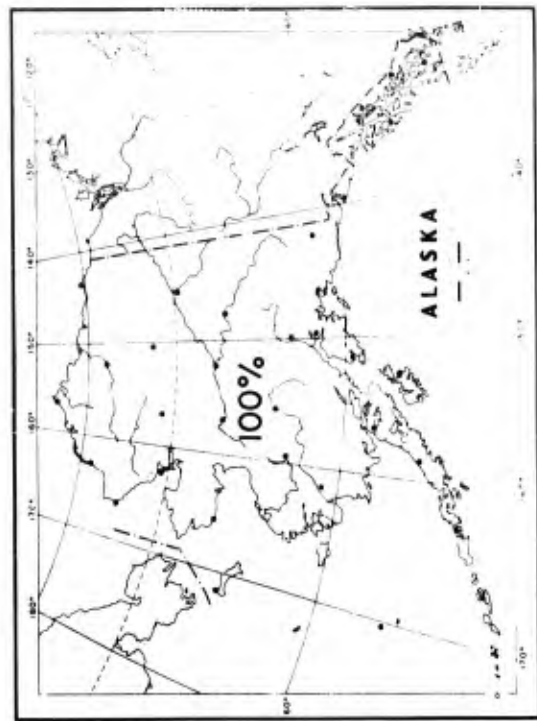


Figure 59: Frequency (percent) of Daily Minimum Temperature At or Below 68°F during July.

FIG. 60-63: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW 50°F.

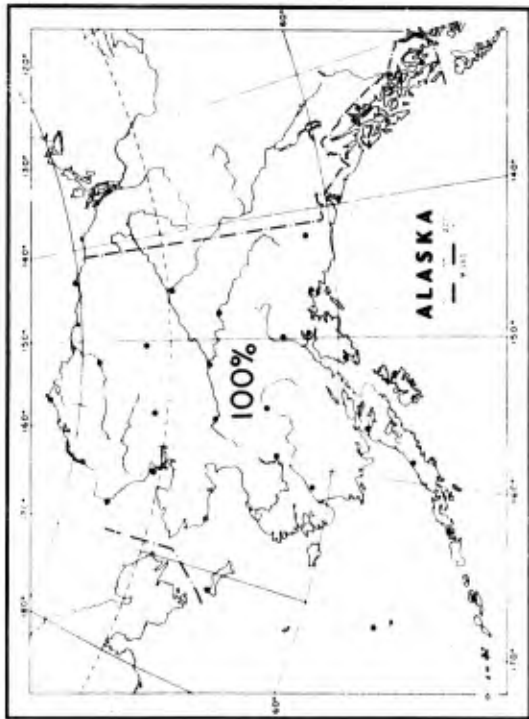


Figure 60: Frequency (percent) of Daily Minimum Temperature At or Below 50°F during December.

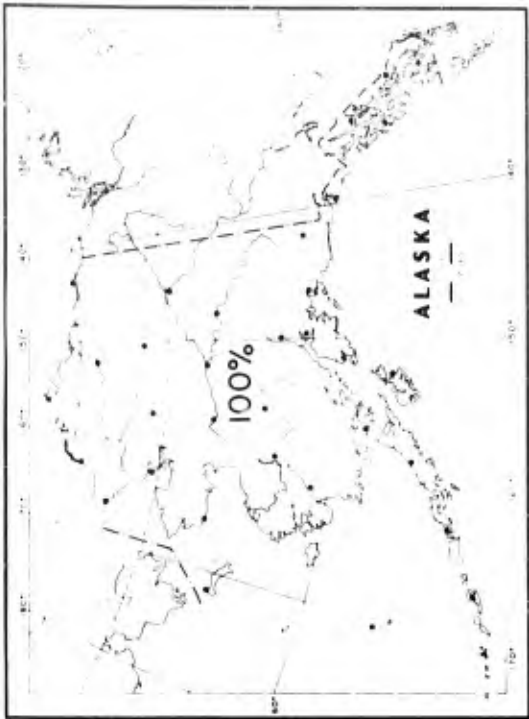


Figure 61: Frequency (percent) of Daily Minimum Temperature At or Below 50°F during January.

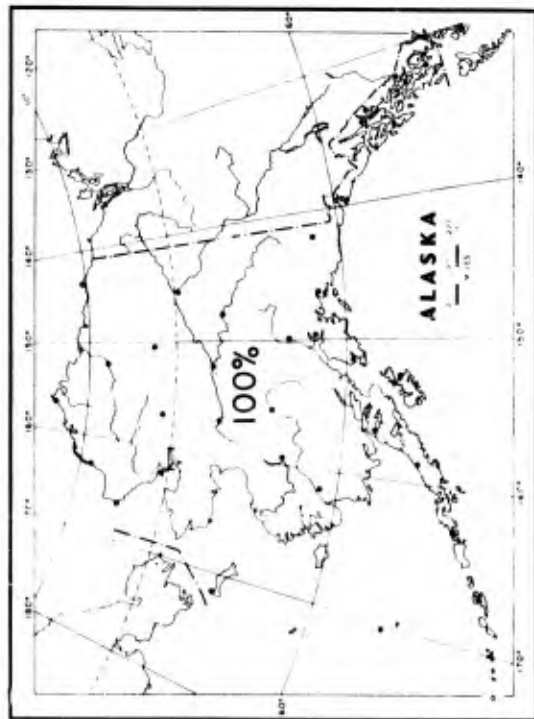


Figure 62: Frequency (percent) of Daily Minimum Temperature At or Below 50°F during February.

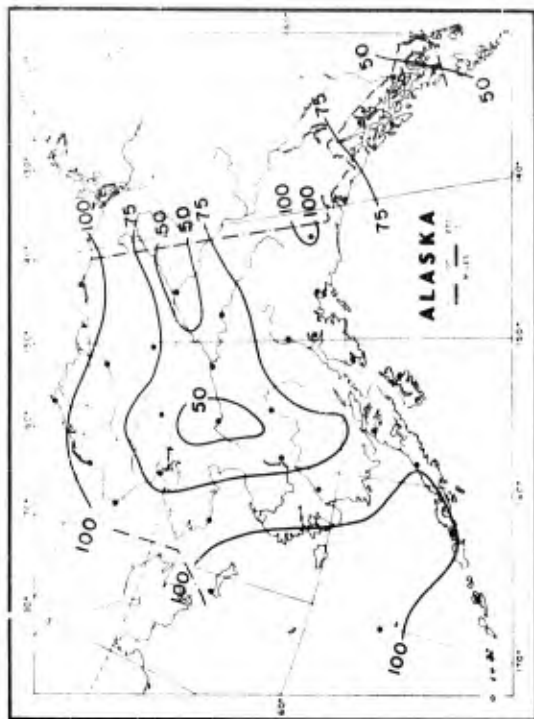


Figure 63: Frequency (percent) of Daily Minimum Temperature At or Below 50°F during July.

FIG. 64 - 67: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW 32°F

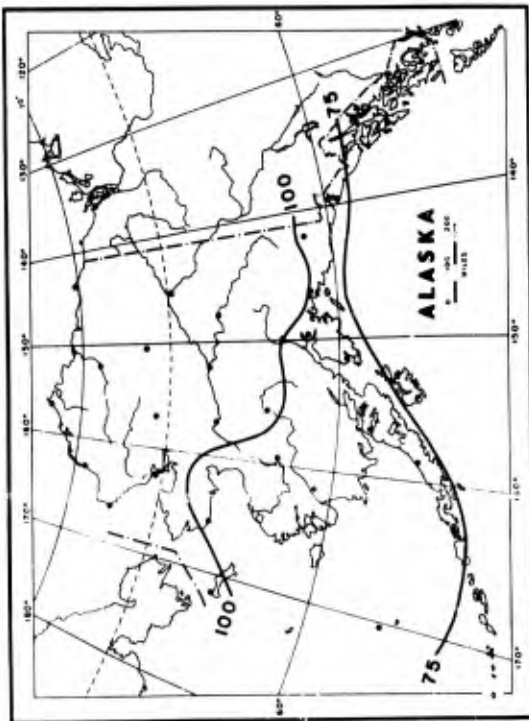


Figure 64: Frequency (percent) of Daily Minimum Temperature At or Below 32°F during December.

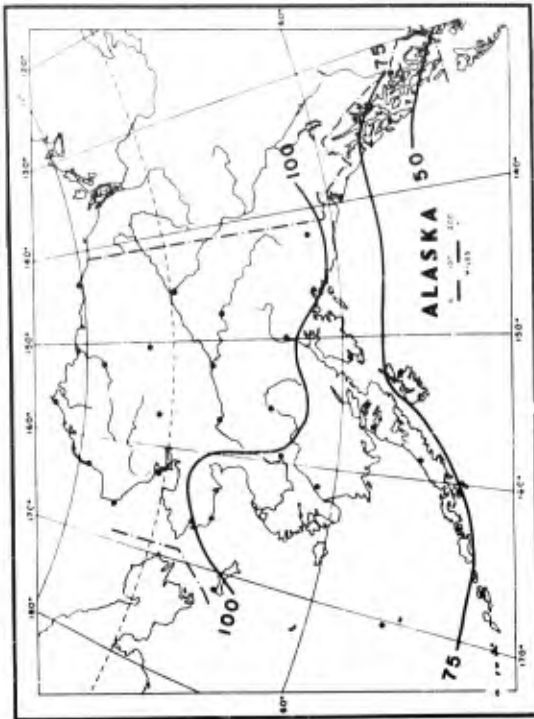


Figure 65: Frequency (percent) of Daily Minimum Temperature At or Below 32°F during January.

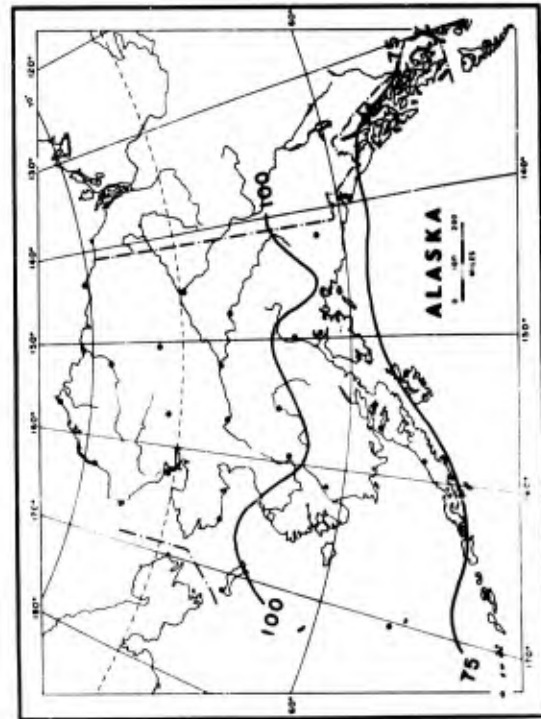


Figure 66: Frequency (percent) of Daily Minimum Temperature At or Below 32°F during February.

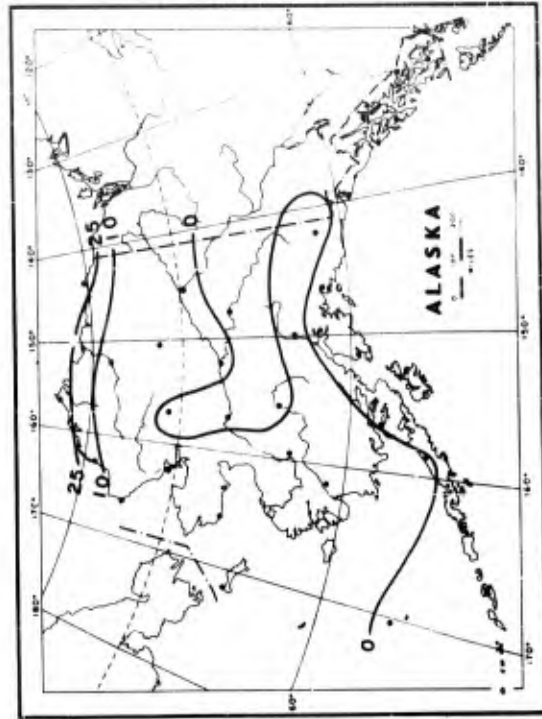


Figure 67: Frequency (percent) of Daily Minimum Temperature At or Below 32°F during July.

FIG. 68-71: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW 23°F.

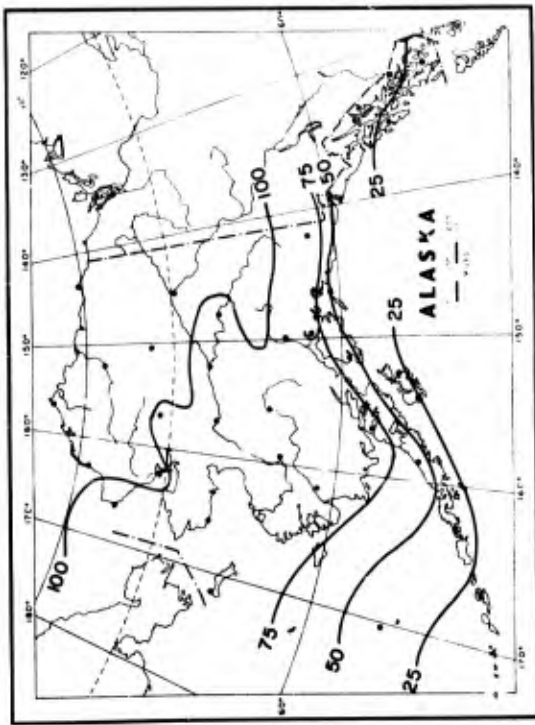


Figure 68: Frequency (percent) of Daily Minimum Temperature At or Below 23°F during December.

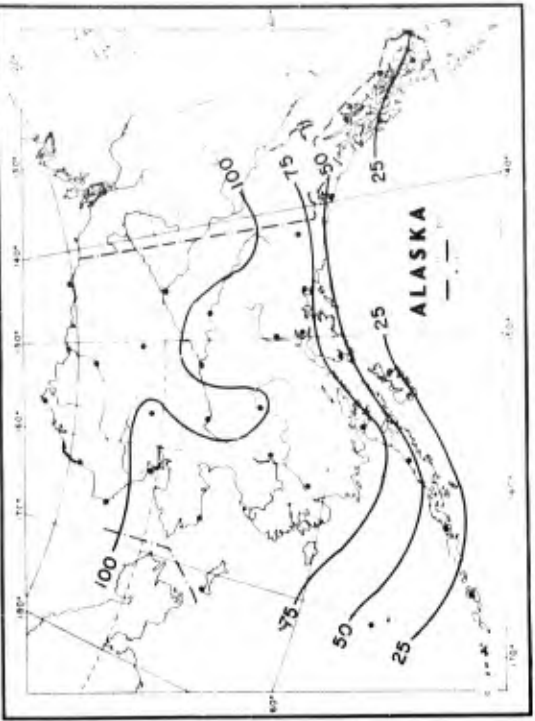


Figure 69: Frequency (percent) of Daily Minimum Temperature At or Below 23°F during January.

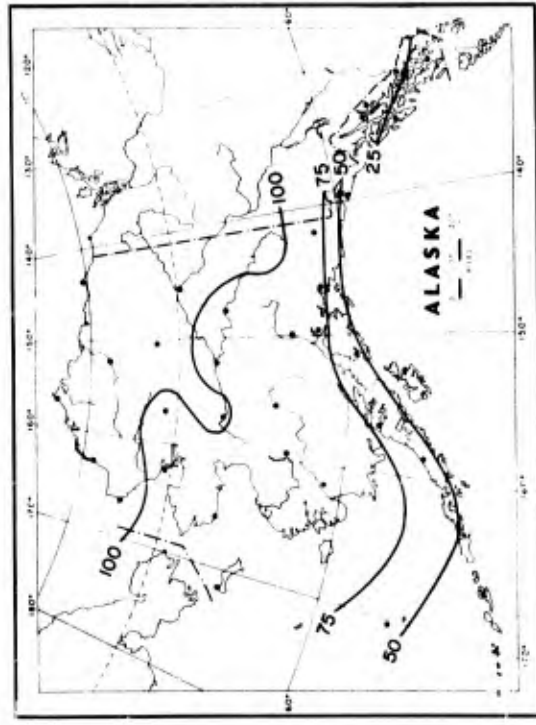


Figure 70: Frequency (percent) of Daily Minimum Temperature At or Below 23°F during February.

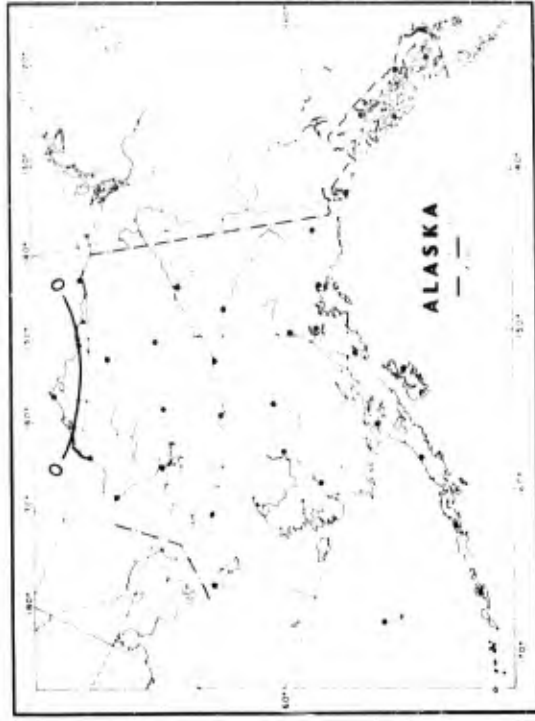


Figure 71: Frequency (percent) of Daily Minimum Temperature At or Below 23°F during July.

FIG. 72-75: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW 14°F

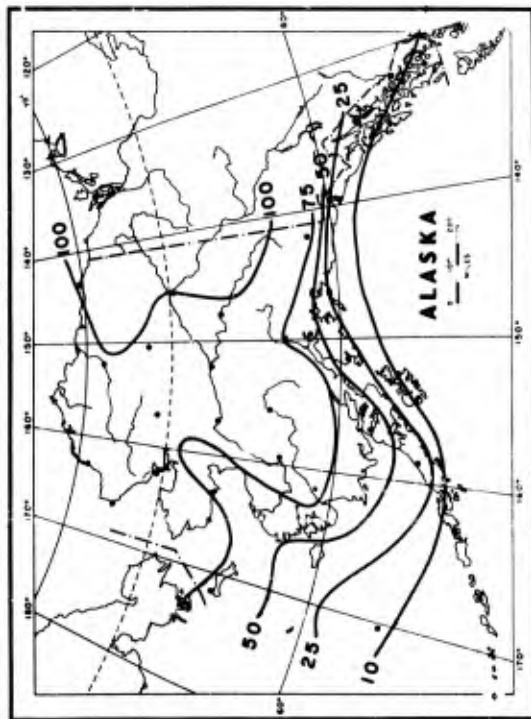


Figure 72: Frequency (percent) of Daily Minimum Temperature At or Below 14°F during December.

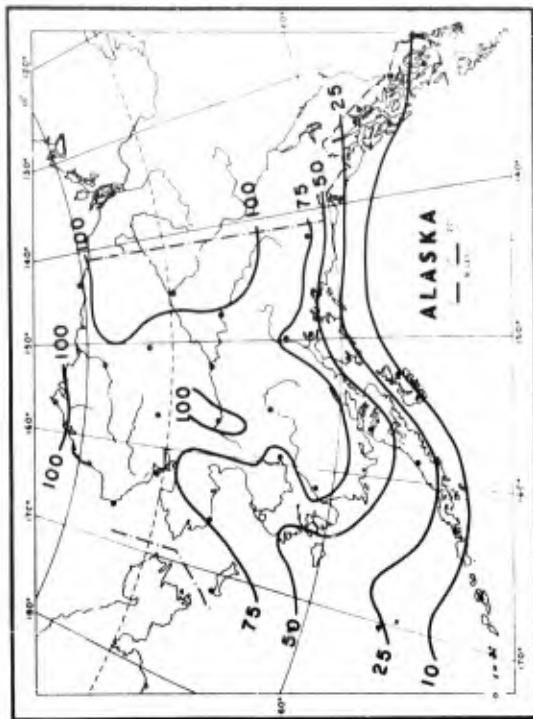


Figure 73: Frequency (percent) of Daily Minimum Temperature At or Below 14°F during January.

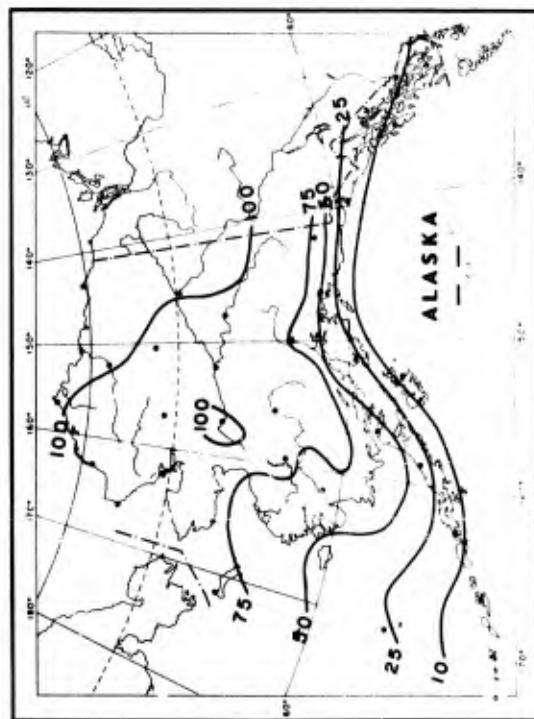


Figure 74: Frequency (percent) of Daily Minimum Temperature At or Below 14°F during February.

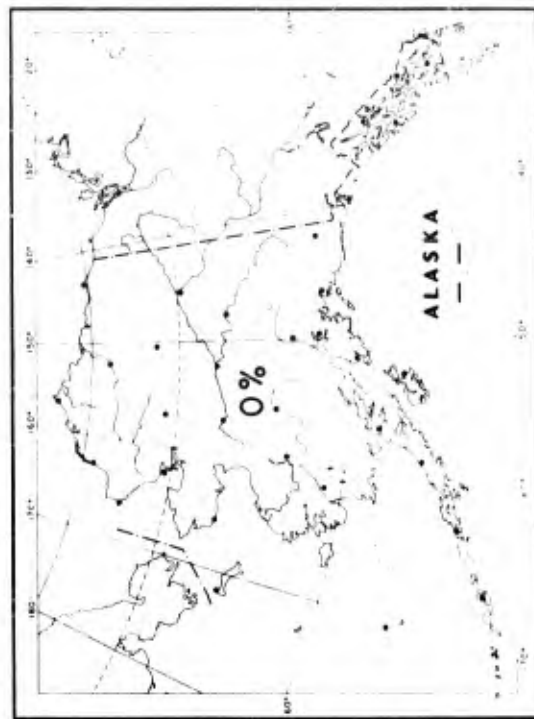


Figure 75: Frequency (percent) of Daily Minimum Temperature At or Below 14°F during July.

FIG. 76-79: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW 0°F

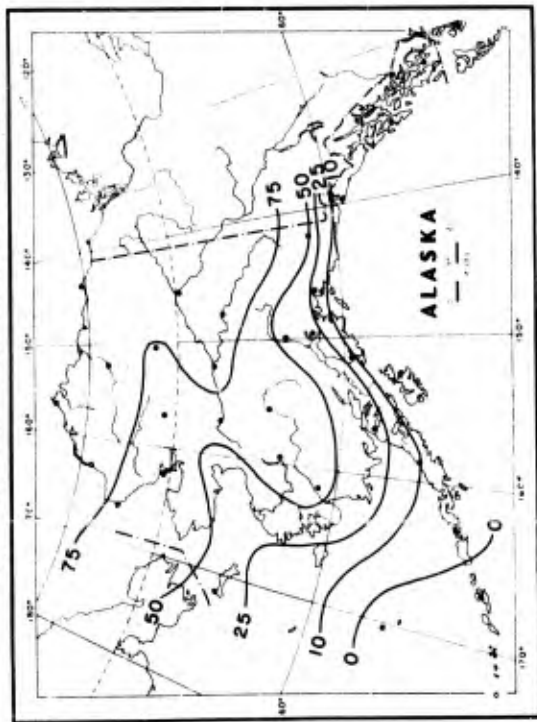


Figure 76: Frequency (percent) of Daily Minimum Temperature At or Below 0°F during December.

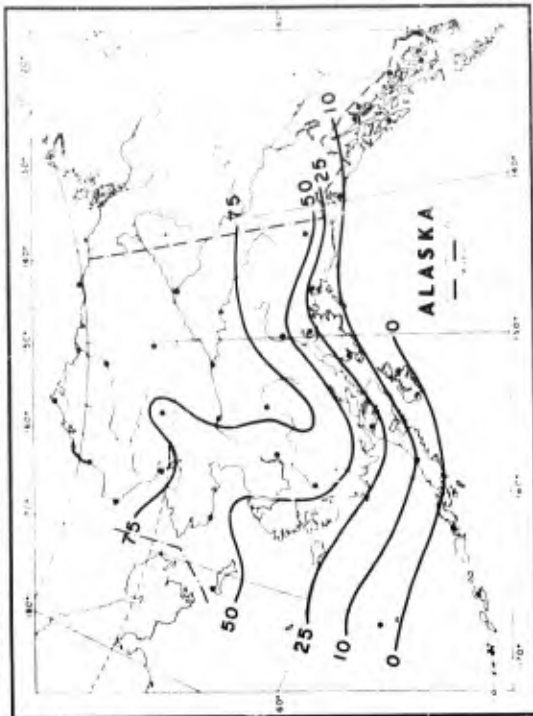


Figure 77: Frequency (percent) of Daily Minimum Temperature At or Below 0°F during January.

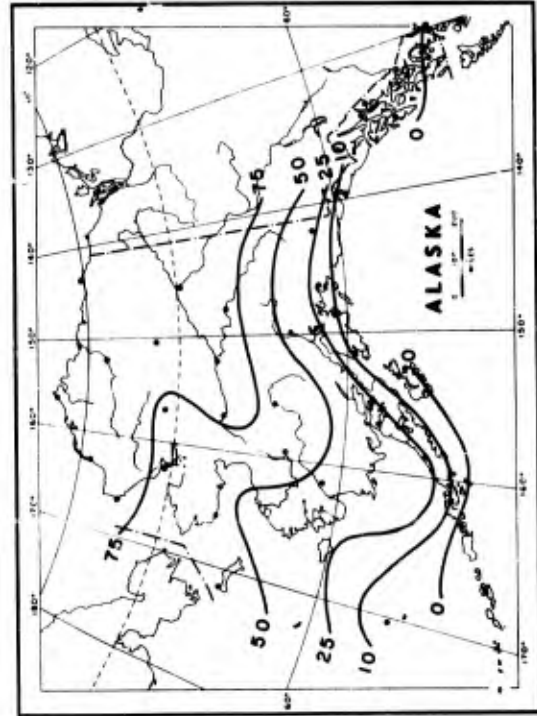


Figure 78: Frequency (percent) of Daily Minimum Temperature At or Below 0°F during February.

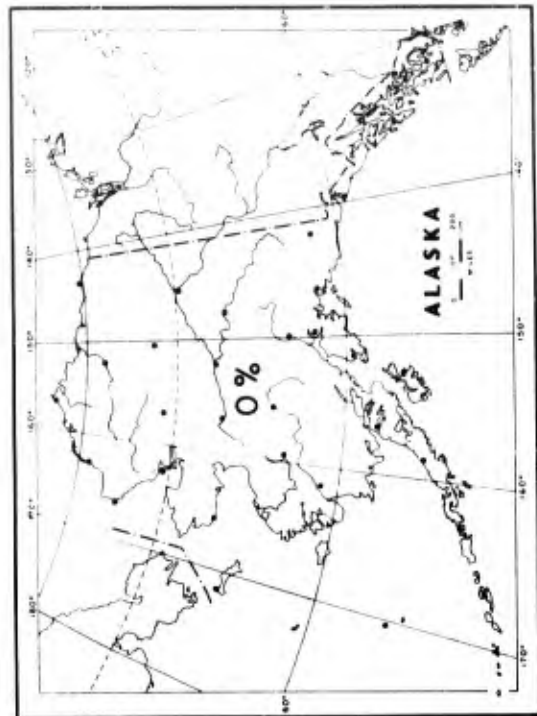


Figure 79: Frequency (percent) of Daily Minimum Temperature At or Below 0°F during July.

FIG. 80-83: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW  $-25^{\circ}\text{F}$

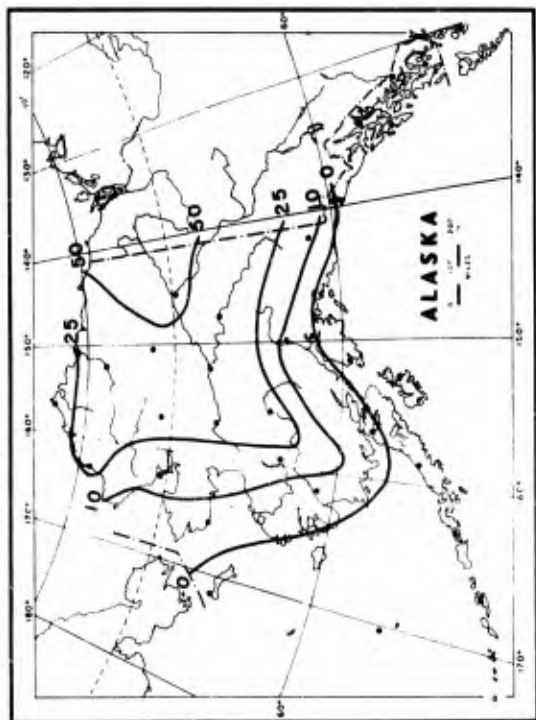


Figure 80: Frequency (percent) of Daily Minimum Temperature At or Below  $-25^{\circ}\text{F}$  during December.

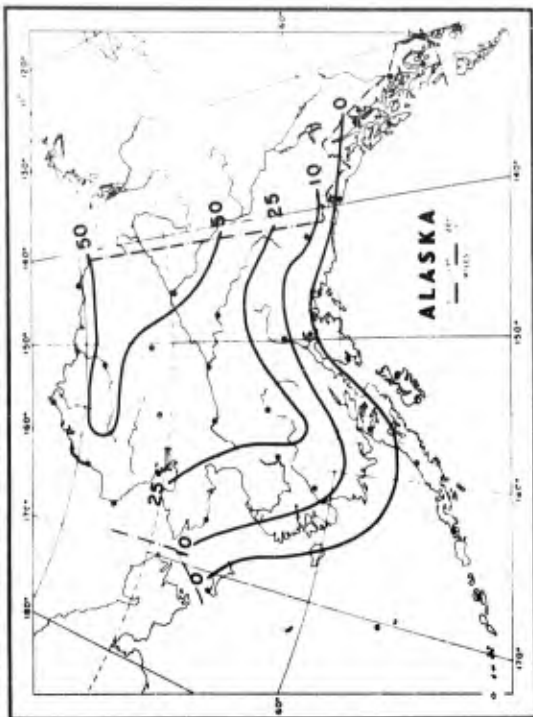


Figure 81: Frequency (percent) of Daily Minimum Temperature At or Below  $-25^{\circ}\text{F}$  during January.

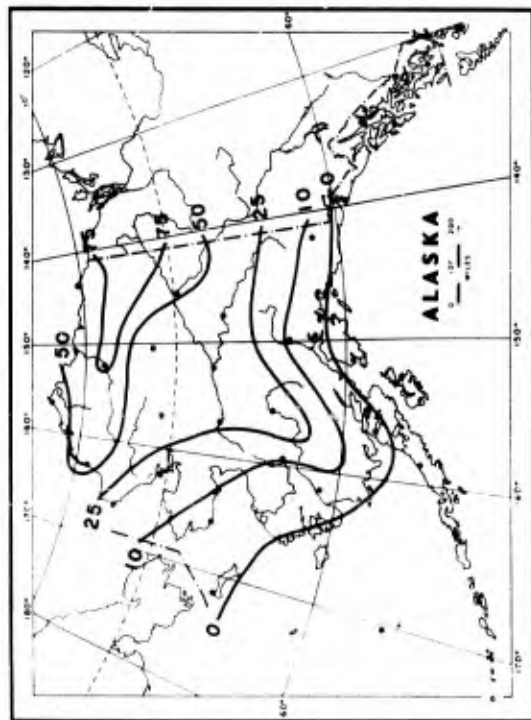


Figure 82: Frequency (percent) of Daily Minimum Temperature At or Below  $-25^{\circ}\text{F}$  during February.

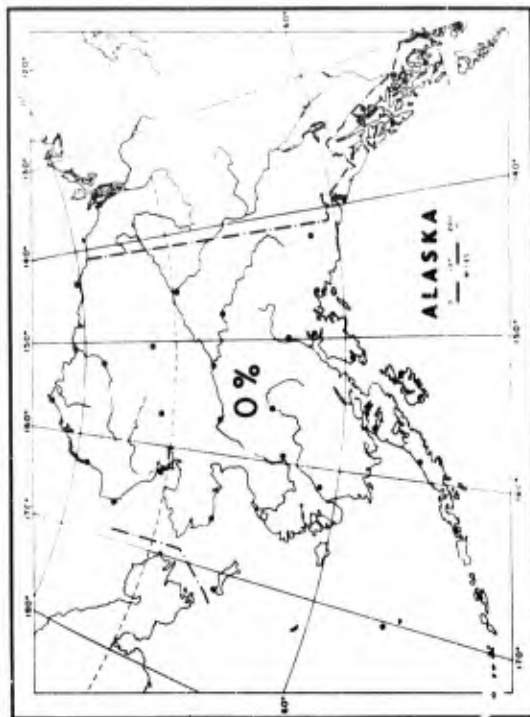


Figure 83: Frequency (percent) of Daily Minimum Temperature At or Below  $-25^{\circ}\text{F}$  during July.

FIG. 84 - 87: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW  $-40^{\circ}\text{F}$ .

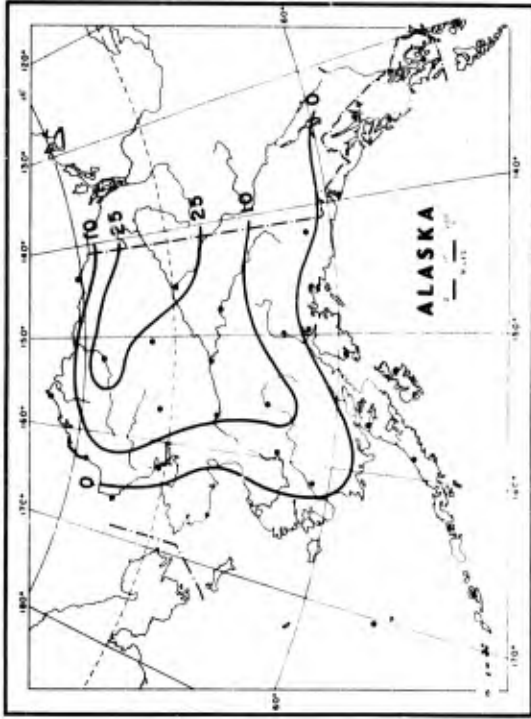


Figure 84: Frequency (percent) of Daily Minimum Temperature At or Below  $-40^{\circ}\text{F}$  during December.

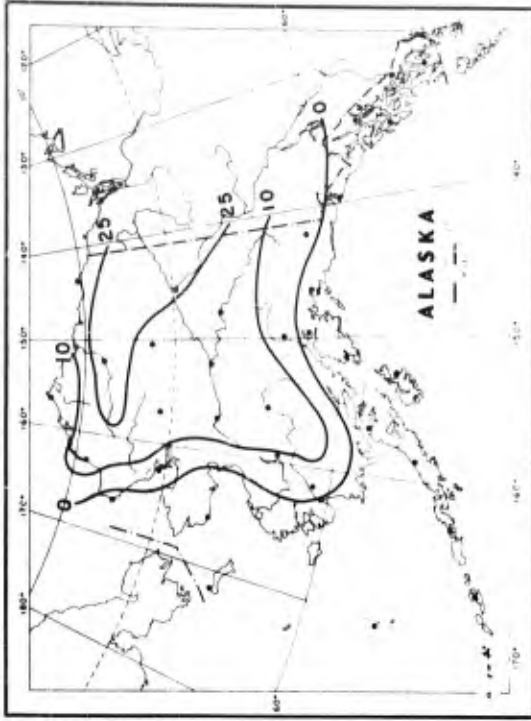


Figure 85: Frequency (percent) of Daily Minimum Temperature At or Below  $-40^{\circ}\text{F}$  during January.

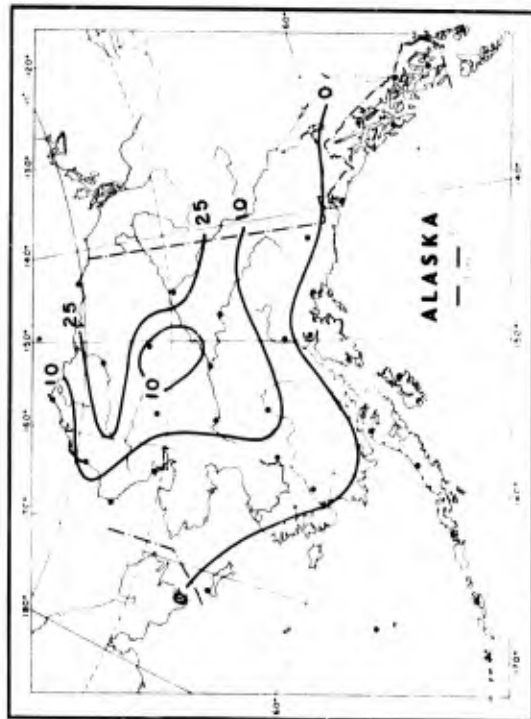


Figure 86: Frequency (percent) of Daily Minimum Temperature At or Below  $-40^{\circ}\text{F}$  during February.

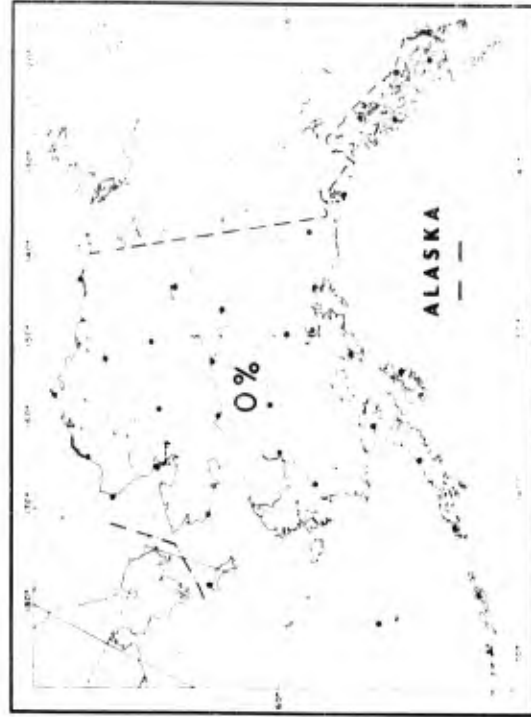


Figure 87: Frequency (percent) of Daily Minimum Temperature At or Below  $-40^{\circ}\text{F}$  during July.

FIG. 88-91: FREQUENCY OF DAILY MINIMUM TEMPERATURES AT OR BELOW -65°F.

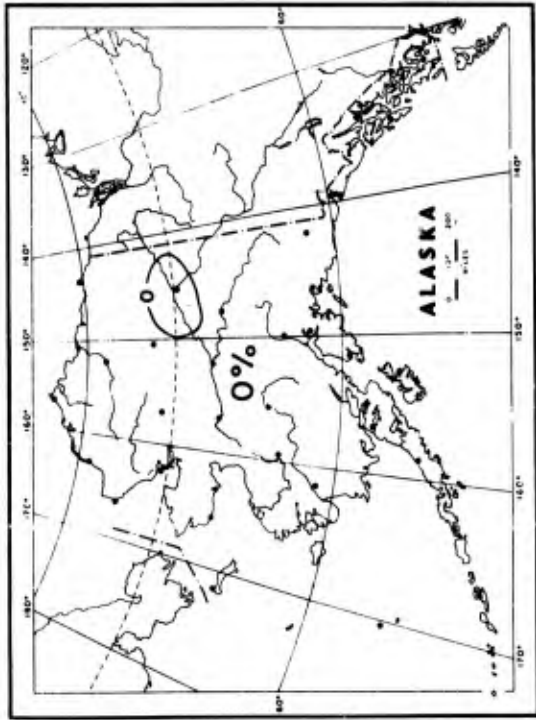


Figure 88: Frequency (percent) of Daily Minimum Temperature At or Below -65°F during December.

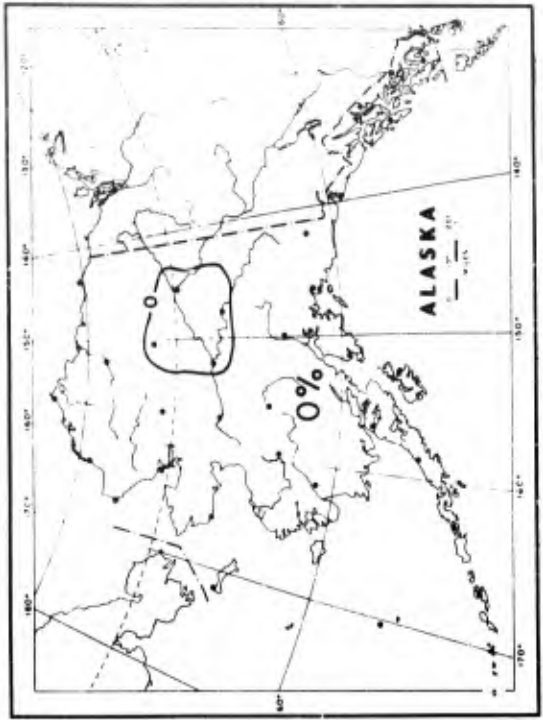


Figure 89: Frequency (percent) of Daily Minimum Temperature At or Below -65°F during January.

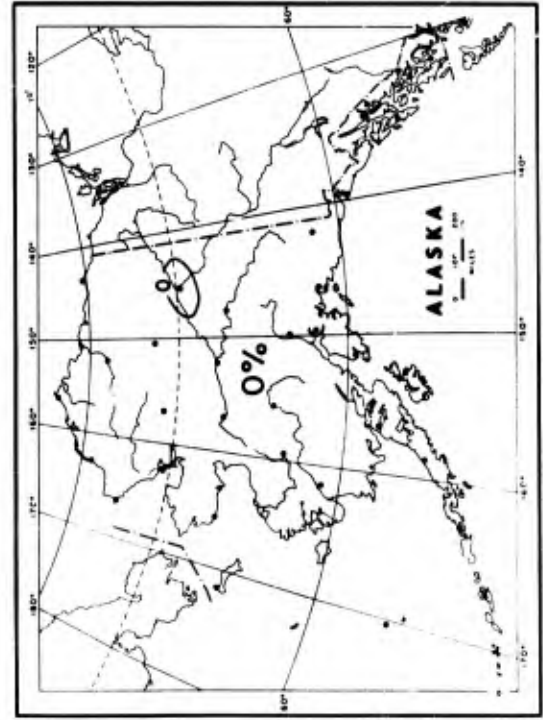


Figure 90: Frequency (percent) of Daily Minimum Temperature At or Below -65°F during February.

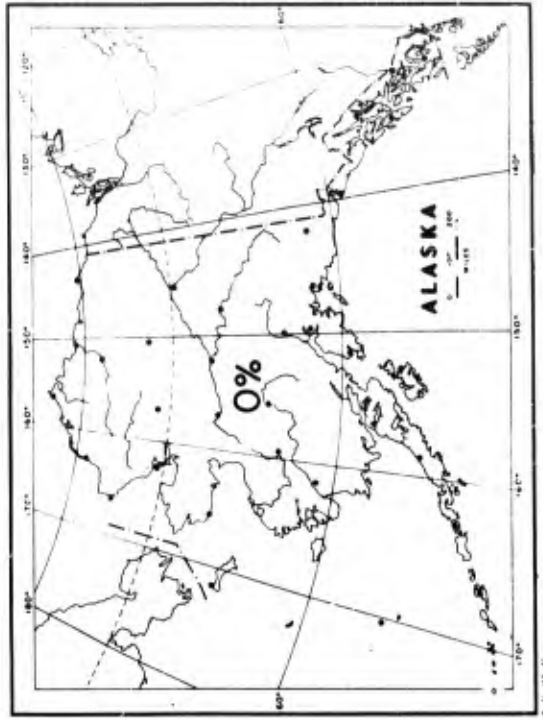


Figure 91: Frequency (percent) of Daily Minimum Temperature At or Below -65°F during July.

FIG. 92-95: ANNUAL FREQUENCY OF SELECTED DAILY MAXIMUM TEMPERATURES

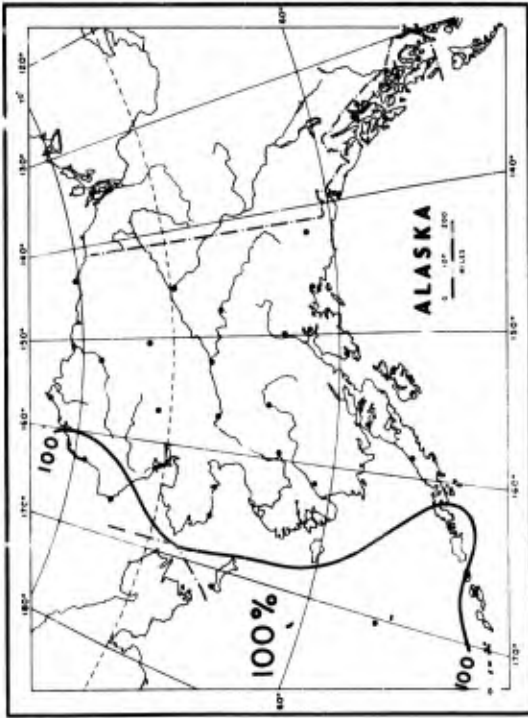


Figure 92: Annual Frequency (percent) of Daily Maximum Temperature At or Below 68°F.

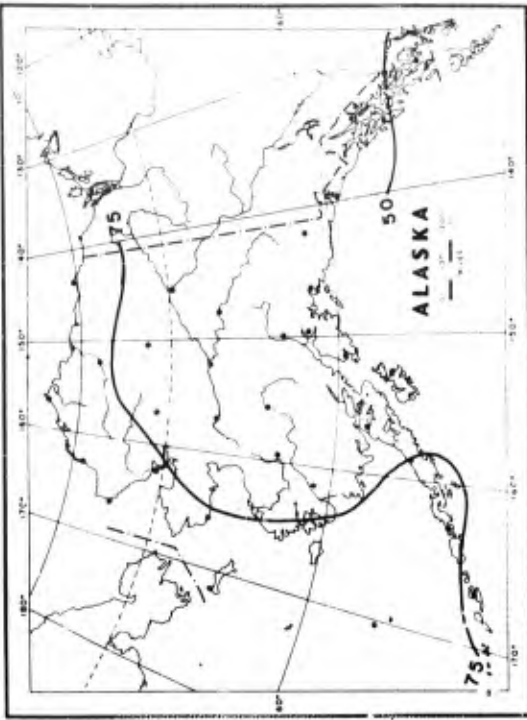


Figure 93: Annual Frequency (percent) of Daily Maximum Temperature At or Below 50°F.

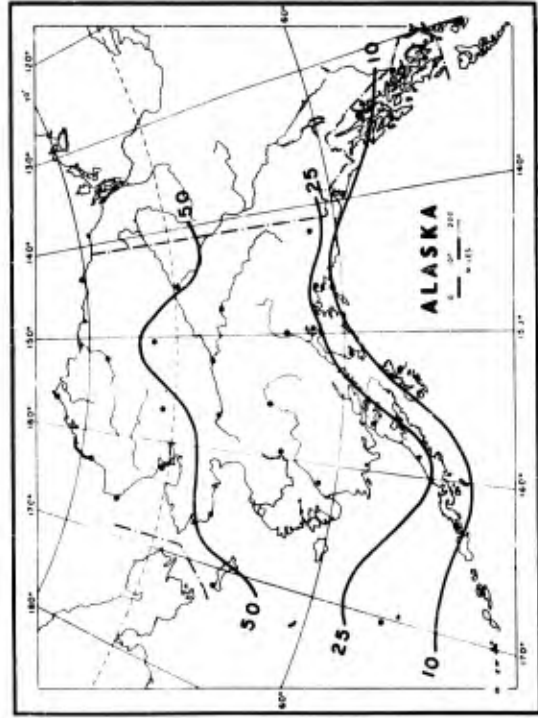


Figure 94: Annual Frequency (percent) of Daily Maximum Temperature At or Below 32°F.

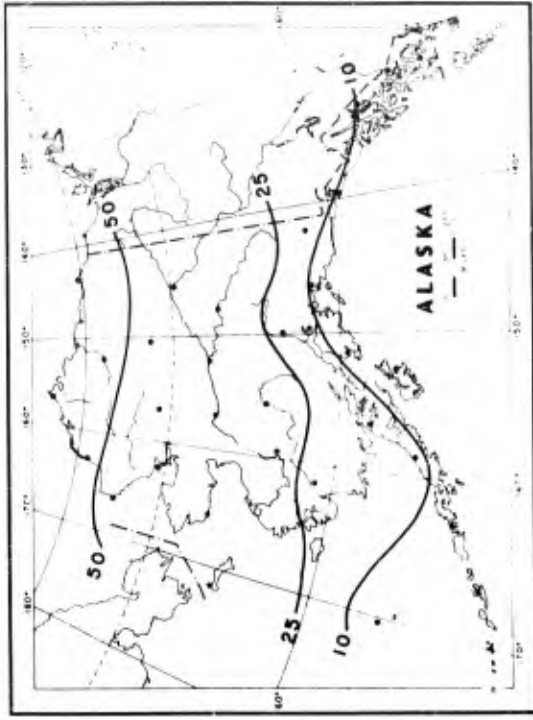


Figure 95: Annual Frequency (percent) of Daily Maximum Temperature At or Below 23°F.

FIG. 96-99: ANNUAL FREQUENCY OF SELECTED DAILY MAXIMUM TEMPERATURES

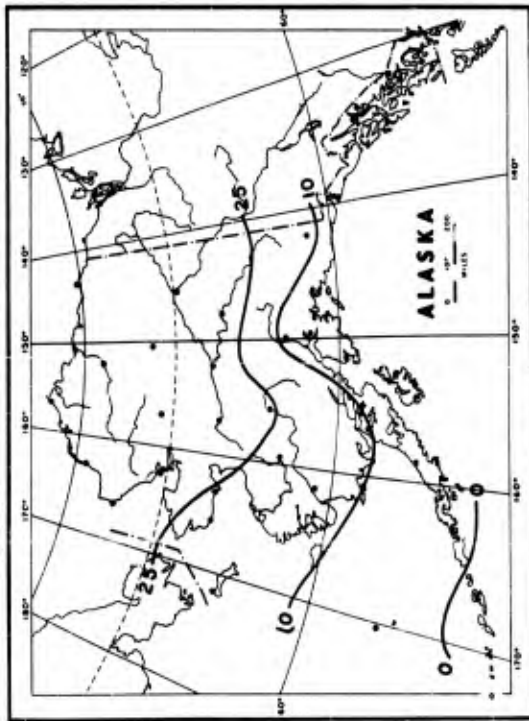


Figure 96: Annual Frequency (percent) of Daily Maximum Temperature At or Below 14°F.

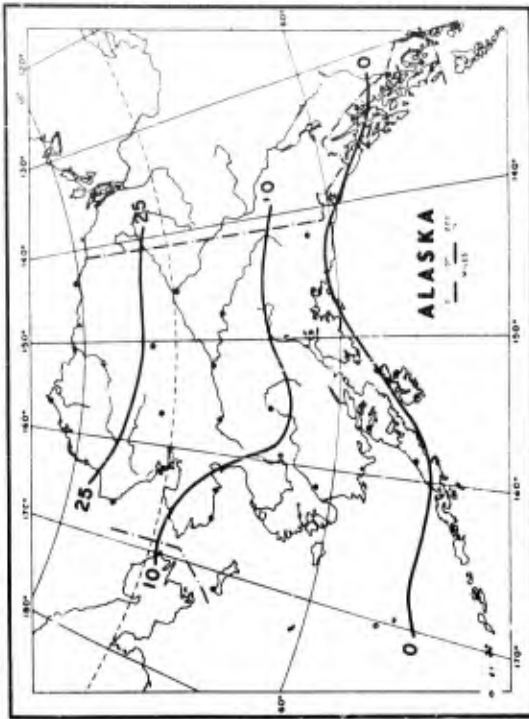


Figure 97: Annual Frequency (percent) of Daily Maximum Temperature At or Below 0°F.

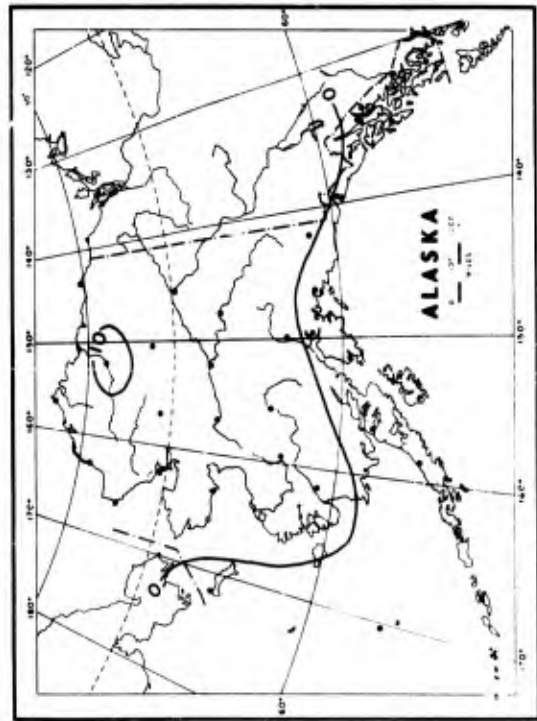


Figure 98: Annual Frequency (percent) of Daily Maximum Temperature At or Below -25°F.

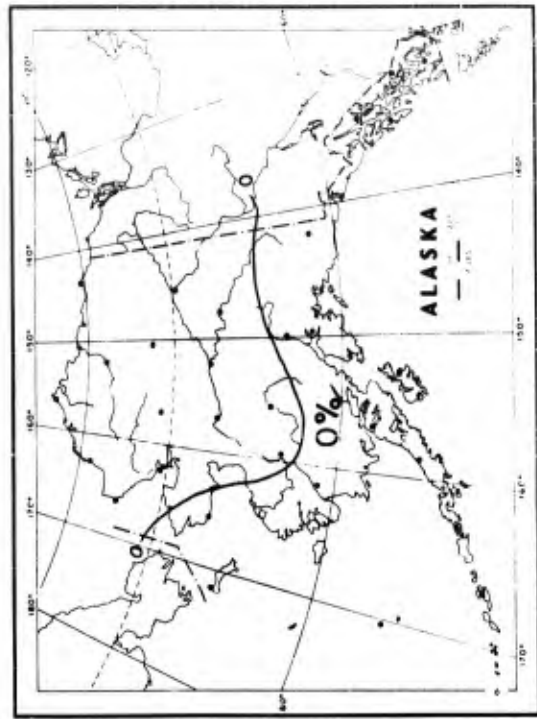


Figure 99: Annual Frequency (percent) of Daily Maximum Temperature At or Below -40°F.

FIG. 100-103: ANNUAL FREQUENCY OF SELECTED DAILY MINIMUM TEMPERATURES

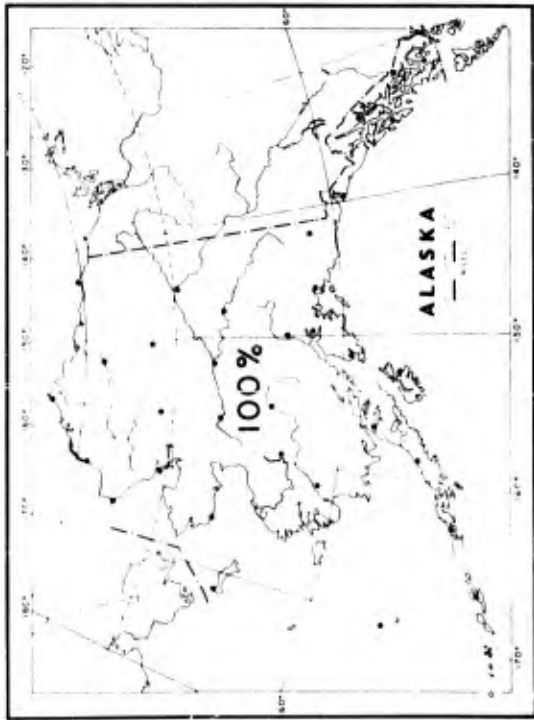


Figure 100: Annual Frequency (percent) of Daily Minimum Temperature At or Below 68°F.

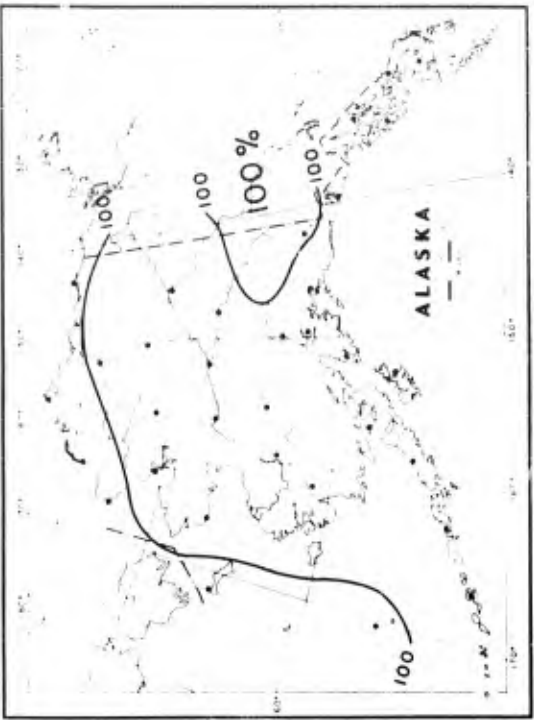


Figure 101: Annual Frequency (percent) of Daily Minimum Temperature At or Below 50°F.

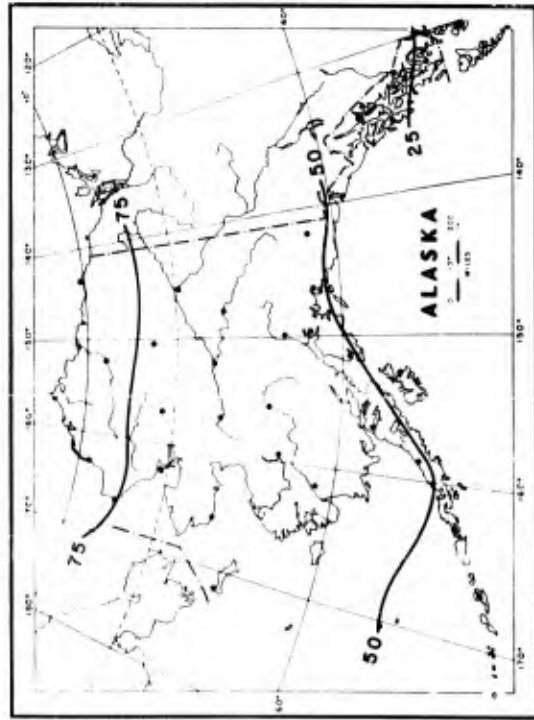


Figure 102: Annual Frequency (percent) of Daily Minimum Temperature At or Below 32°F.

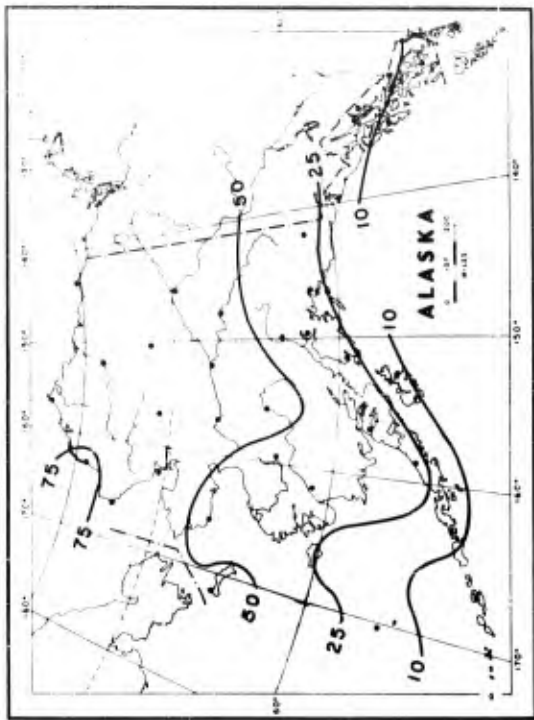


Figure 103: Annual Frequency (percent) of Daily Minimum Temperature At or Below 23°F.

FIG. 104-107: ANNUAL FREQUENCY OF SELECTED DAILY MINIMUM TEMPERATURES

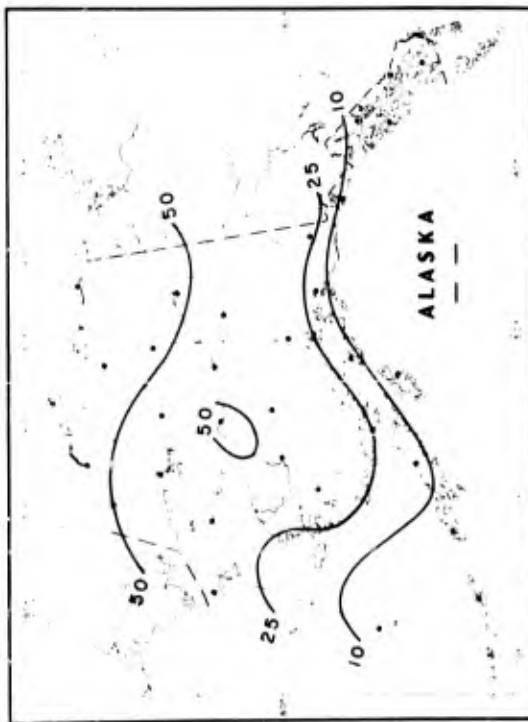


Figure 104: Annual Frequency (percent) of Daily Minimum Temperature At or Below 14°F

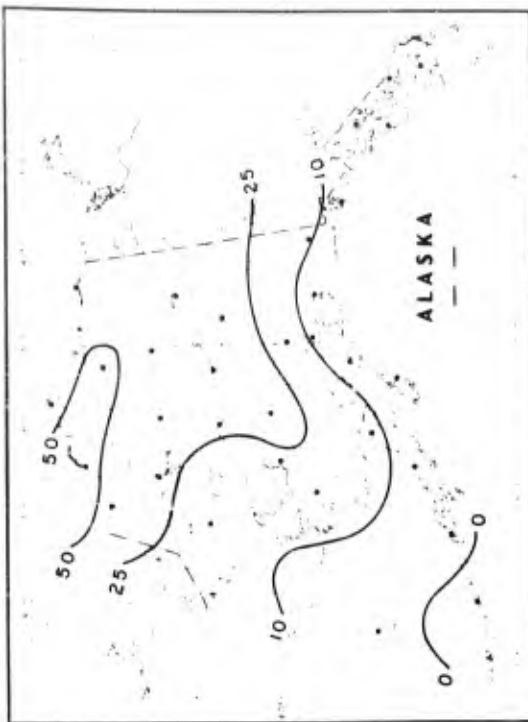


Figure 105: Annual Frequency (percent) of Daily Minimum Temperature At or Below 0°F

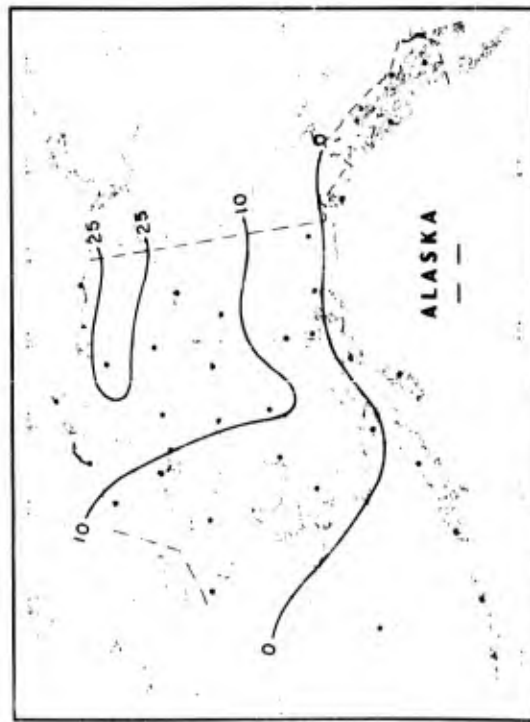


Figure 106: Annual Frequency (percent) of Daily Minimum Temperature At or Below -25°F

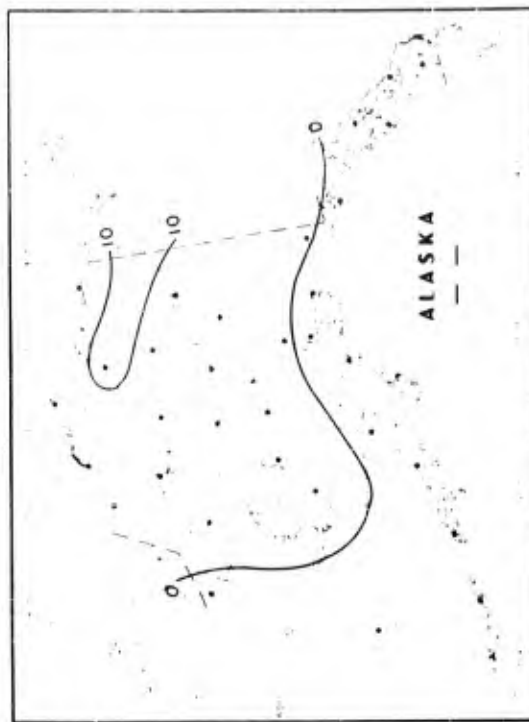


Figure 107: Annual Frequency (percent) of Daily Minimum Temperature At or Below -40°F

FIG. 108: ANNUAL FREQUENCY OF SELECTED DAILY MINIMUM TEMPERATURE

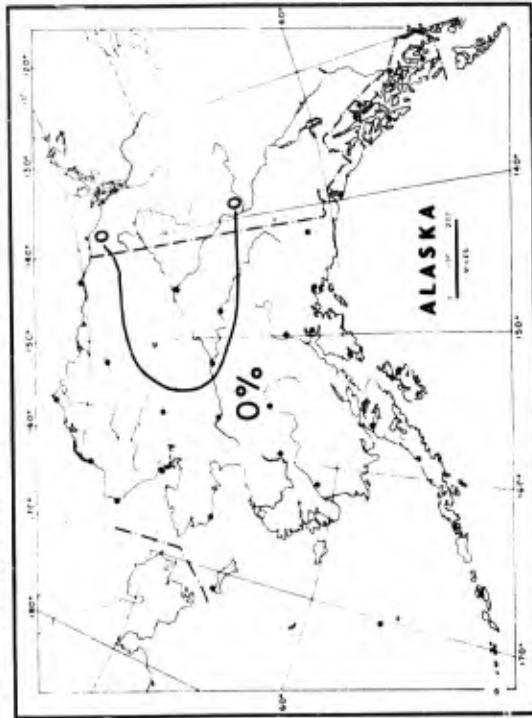


Figure 108: Annual Frequency (percent) of Daily Minimum Temperature At or Below  $-65^{\circ}\text{F}$ .

Figure 109  
 FREQUENCY OF DAILY MINIMUM  
 TEMPERATURES FOR SELECTED VALUES  
 AT BARROW, ALASKA

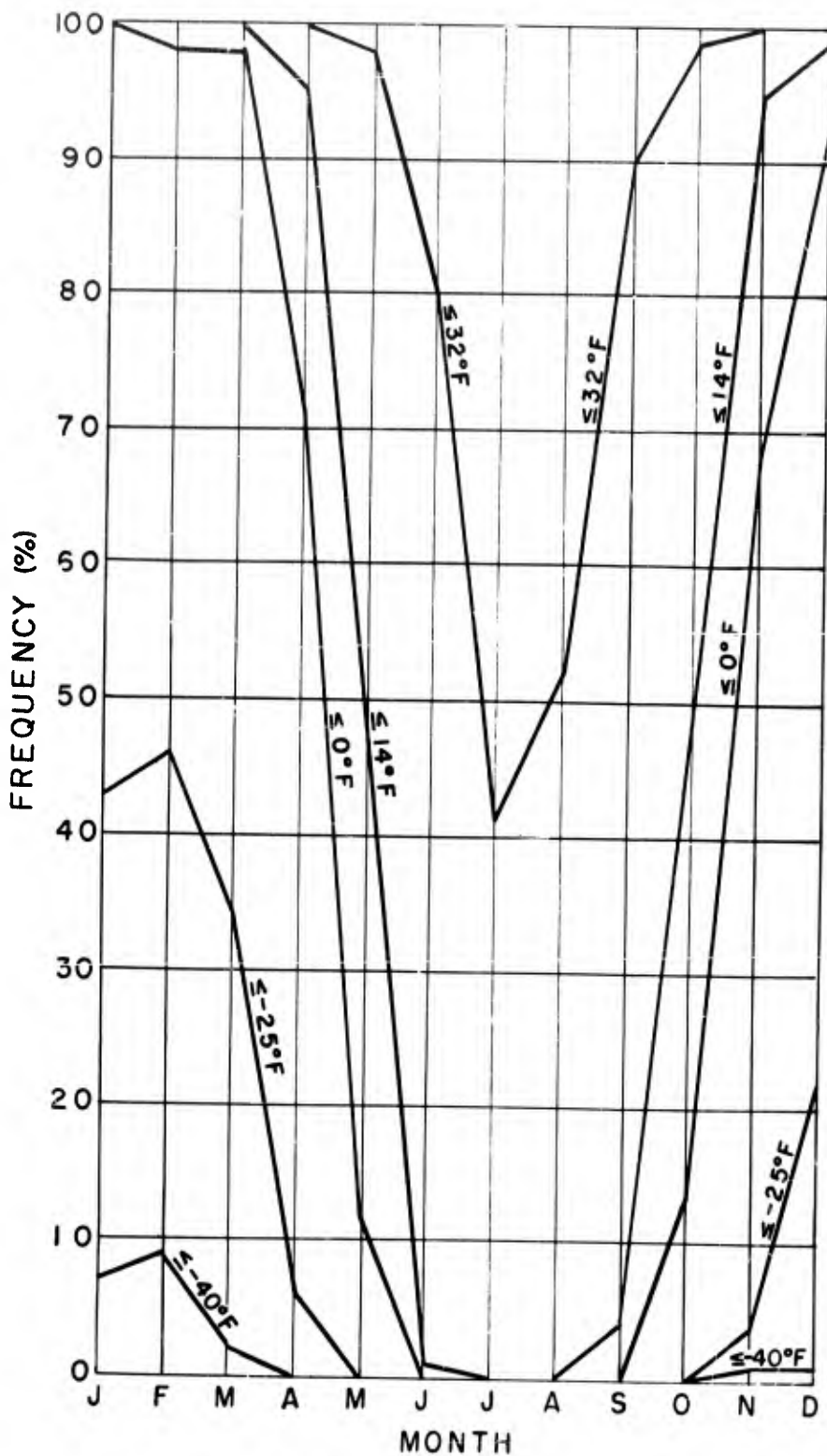


Figure 110  
 FREQUENCY OF DAILY MINIMUM  
 TEMPERATURES FOR SELECTED VALUES  
 AT FAIRBANKS, ALASKA

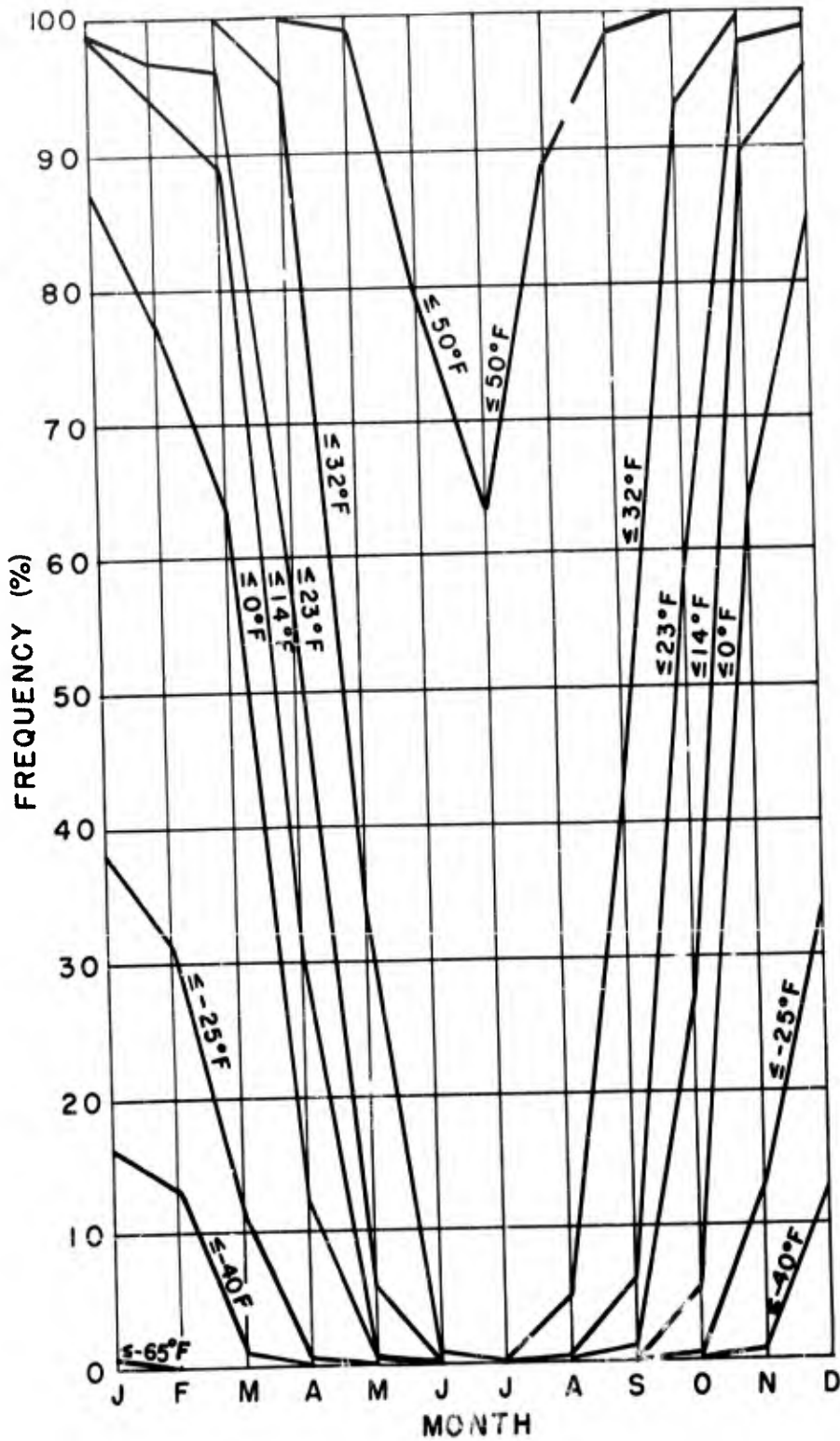


Figure III  
 FREQUENCY OF DAILY MINIMUM  
 TEMPERATURES FOR SELECTED VALUES  
 AT KODIAK, ALASKA

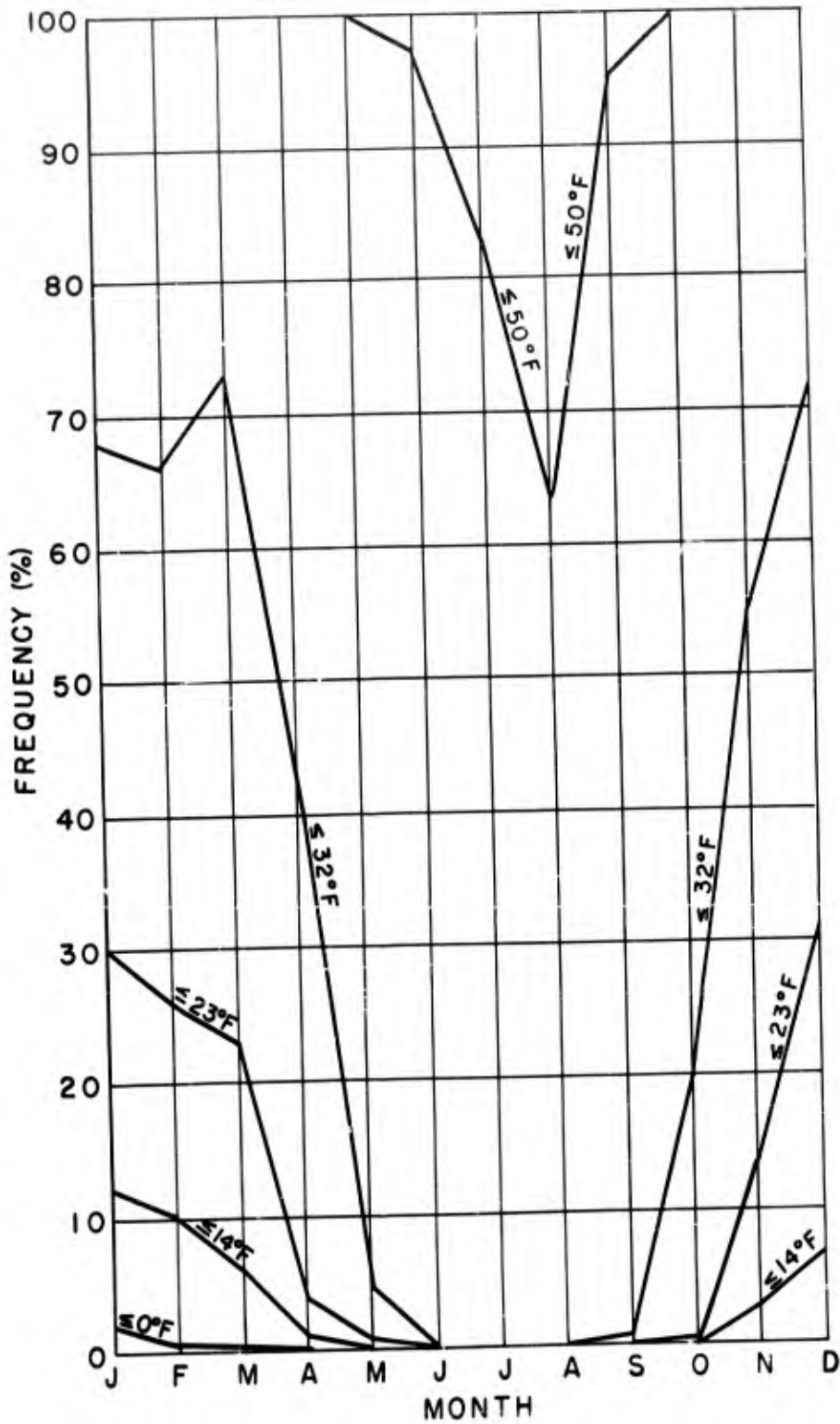
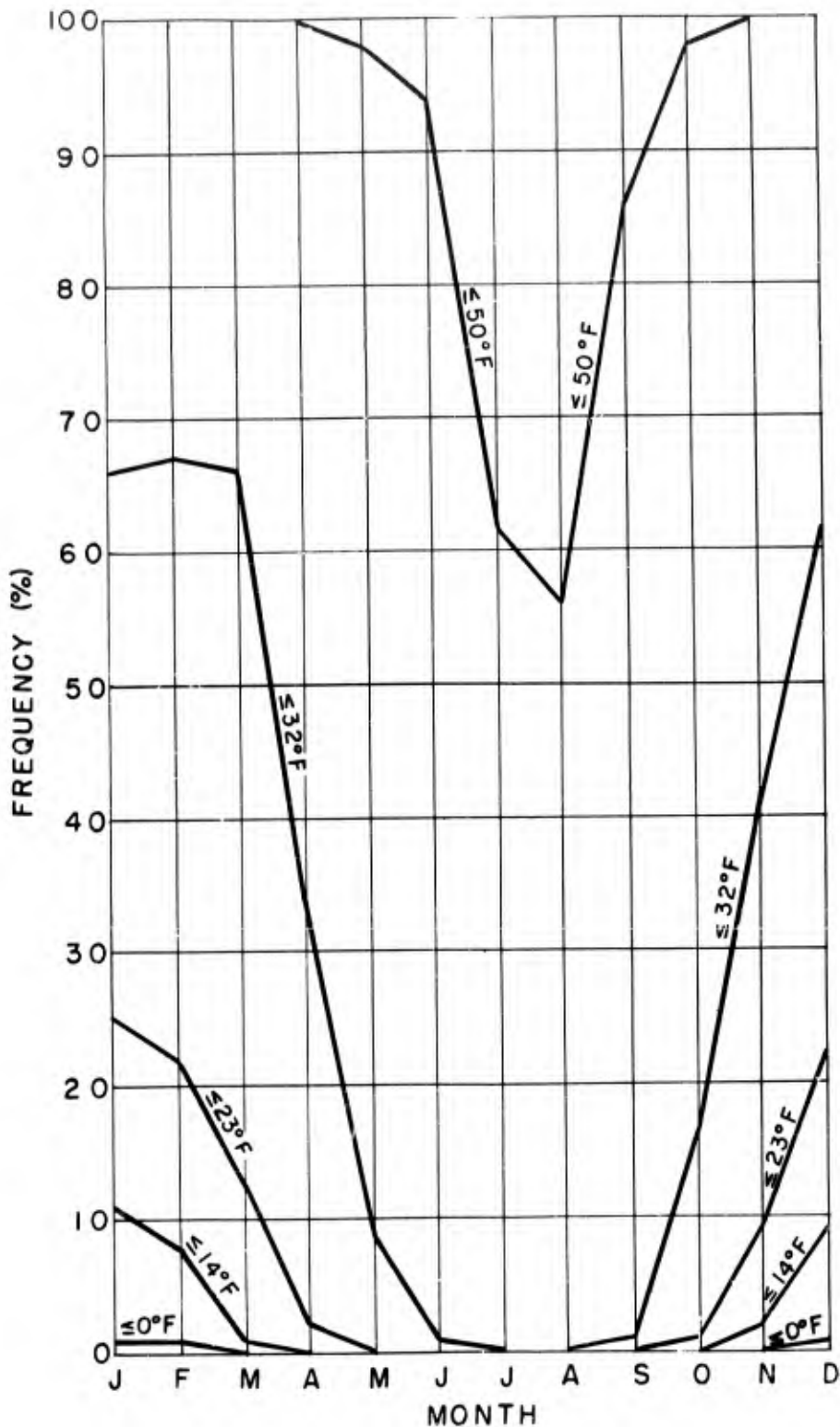


Figure 112  
 FREQUENCY OF DAILY MINIMUM  
 TEMPERATURES FOR SELECTED VALUES  
 AT SITKA, ALASKA



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