

DET KONGELIGE DEPARTEMENT  
FOR INDUSTRI OG HÅNDVERK

---

NORSK POLARINSTITUTT

# SKRIFTER

Nr. 110

MAGNETIC OBSERVATIONS  
IN SVALBARD

1596—1953

BY

KAARE Z. LUNDQUIST



I KOMMISJON HOS  
FABRITIUS & SØNNERS FORLAG  
OSLO 1957

# NORSK POLARINSTITUTT

(Formerly Norges Svalbard- og Ishavs-undersøkelser.)

Observatoriegaten 1, Oslo

## SKRIFTER

Skrifter 1—50, see numbers of Skrifter previous to No. 100.

*Resultater av De Norske statsunderstøttede Spitsbergenekspeditioner.*

- Nr. 51. BIRKELAND, B. J. et GEORG SCHOU, *Le climat de l'Eirik-Raudes-Land*. 1932. Kr. 2,00
- " 52. KLÆR, J. †, *The Downtonian and Devonian Vertebr. of Spitsb. IV. Suborder Cyatha spida*. 1932. Kr. 5,50.
- " 53. 1. MALAISE, R., *Eine neue Blattwespe*. 2. A. ROMAN, *Schlupfwespen*. 3. O. RINGDAHL, *Tachiniden und Musciden*. 4. M. GOETGHEBUER, *Chironomides du Groenland oriental, du Svalbard et de la Terre de François Joseph*. — *Zool. Res. Norw. Sc. Exp. to East-Greenland. II*. 1933. Kr. 4,00.
- " 54. VARTDAL, H., *Bibliographie des ouvrages norvégiens relatifs au Grønland (Y compris les ouvrages islandais antérieurs à Pan 1814)*. 1935. Kr. 12,00.
- " 55. OMANG, S. O. F., *Übersicht über die Hieraciumflora Ost-Grönlands*. 1933. Kr. 2,50.
- " 56. DEVOLD, J. and P. F. SCHOLANDER, *Flowering Plants and Ferns of Southeast Greenland*. 1933. Kr. 20,00.
- " 57. ORVIN, A. K., *Geology of The Kings Bay Region, Spitsbergen*. 1934. Kr. 20,00.
- " 58. JELSTRUP, H. S., *Détermination astronomique à Sabine-Øya*. 1933. Kr. 2,50.
- " 59. LYNGE, B., *On Dufourea and Dactylina. Three Arctic Lichens*. 1933. Kr. 5,00.
- " 60. VOGT, TH., *Late-Quaternary Oscillations of Level in S. E. Greenland*. 1933. Kr. 5,00.
- " 61. 1. BURTON, M., M. SC., *Report on the Sponges*. 2. ZIMMER, C., *Die Cumaceen*. — *Zool. Res. Norw. Sc. Exp. to East-Greenland. III*. 1934. Kr. 2,50.
- " 62. SCHOLANDER, P. F., *Vascular Plants from Northern Svalbard*. 1934. Kr. 15,00.
- " 63. RICHTER, S., *A Contr. to the Archæology of North-East Greenland*. 1934. Kr. 25,00.
- " 64. SOLLE, G., *Die devonischen Ostracoden Spitzbergens*. 1935. Kr. 5,50.
- " 65. 1. FRIESE, H., *Apiden*. 2. LINDBERG, H., *Hemiptera*. 3. LINNANIEMI, W. M., *Collembolen*. *Zool. Res. Norw. Sc. Exp. to East-Greenland. IV*. 1935. Kr. 2,50.
- " 66. 1. NORDENSTAM, Å., *The Isopoda*. 2. SCHELLENBERG, A., *Die Amphipoden*. 3. SIVERTSEN, E., *Crustacea Decapoda, Auphausiacea, and Mysidacea*. *Zool. Res. Norw. Sc. Exp. to East-Greenland. V*. 1935. Kr. 5,00.
- " 67. JAKHELLN, A., *Oceanographic Investigations in East Greenland Waters in the Summers of 1930—1932*. 1936. Kr. 7,00.
- " 68. FREBOLD, H. und E. STOLL, *Das Festungsprofil auf Spitzbergen. III. Stratigraphie und Fauna des Jura und der Unterkreide*. 1937. Kr. 5,50.
- " 69. FREBOLD, HANS, *Das Festungsprofil auf Spitzbergen. IV. Die Brachiopoden- und Lamellibranchiatenfauna des Oberkarbons und Unterperms*. 1937. Kr. 10,00.
- " 70. DAHL, EILIF, B. LYNGE, and P. F. SCHOLANDER, *Lichens from Southeast Greenland*. 1937. Kr. 4,50.
- " 71. 1. KNABEN, NILS, *Makrolepidopteren aus Nordostgrönland*. 2. BARCA, EMIL, *Mikrolepidopteren aus Nordostgrönland*. *Zool. Res. Norw. Sc. Exp. to East-Greenland. VI*. 1937. Kr. 3,50.
- " 72. HEINTZ, A., *Die Downtonischen und Devonischen Vertebraten von Spitzbergen. VI. Lunaspis-Arten aus dem Devon Spitzbergens*. 1937. Kr. 2,00.
- " 73. *Report on the Activities of Norges Svalbard- og Ishavs-undersøkelser 1927—1936*. 1937. Kr. 10,00.
- " 74. HØYGAARD, ARNE, *Some Investigations into the Physiology and Nosology of Eskimos from Angmagssalik in Greenland*. 1937. Kr. 1,50.
- " 75. DAHL, EILIF, *On the Vascular Plants of Eastern Svalbard*. 1937. Kr. 3,50.
- " 76. LYNGE, B., *Lichens from Jan Mayen*. 1939. Kr. 4,50.
- " 77. FREBOLD, HANS, *Das Festungsprofil auf Spitzbergen. V. Stratigraphie und Invertebratenfauna der älteren Eotrias*. 1939. Kr. 5,00.

DET KONGELIGE DEPARTEMENT  
FOR INDUSTRI OG HÅNDVERK

---

NORSK POLARINSTITUTT

# SKRIFTER

Nr. 110

MAGNETIC OBSERVATIONS  
IN SVALBARD

1596—1953

BY

KAARE Z. LUNDQUIST



I KOMMISJON HOS  
FABRITIUS & SØNNERS FORLAG  
OSLO 1957

A W. BRØGGERS BOKTRYKKERI A/S

## Contents.

	Page
Introduction .....	5
Discussion .....	6
Corrections for diurnal variation .....	6
Seasonal variation .....	10
Secular variation .....	10
Irregularities .....	11
Other remarks .....	11
Description of stations .....	32
Tables :	
Magnetic observations in the Svalbard area. (Arranged chronologically)	12
Magnetic observations in the Svalbard area. (Arranged according to latitude) .....	24
Figures :	
1. Diurnal variation of magnetic declination (all days) .....	7
2. Declination in some places 1600—1950 or in parts of this period. Below: Mean secular variation every ten years .....	8
Maps in pocket :	
Declination 1930 (Svalbard area).	
Declination 1930 (Norway to 85° N. Lat.).	
Stations of magnetic observations.	



## Introduction.

The first magnetic observations in the Svalbard area were made in the years shortly after the discovery of the islands in 1956. According to the available sources 150 years elapsed before the next observations were undertaken, and still 50 years passed before reliable measurements were made. This took place when Edward Sabine in 1823, at Indre Norskøya, carried out the first systematic observations. Later on, the islands have been visited by a great number of scientific expeditions, many of which included investigation of the earth's magnetic field in their program.

Most of these expeditions worked during the summer only and had few possibilities of examining the daily variations. Up to the present, observers on four wintering expeditions have carried out such measurements for long periods:

Aug. Wijkander in Mosselbukta 1872/73 for 8 months,  
E. Solander at Kapp Thordsen 1882/83 for 12 months,  
F. Lindholm at Sveagruva 1932/33 for 12 months and

Wlad. Lysakowski at Tunheim, Bjørnøya 1932/33 for 10<sup>1</sup>/<sub>2</sub> months.

On these occasions only a few observations were made simultaneously in other localities. During the last 25 years magnetic observations in the area have been especially scarce.

Since 1940 Magnetisk Byrå, Bergen, and Norges Sjøkartverk, Oslo, have undertaken a systematic survey of magnetic conditions in Norway, the number of stations totalling more than 1000. It seems desirable, therefore, to make a magnetic survey of the Svalbard area. The best possibility for doing this is now at hand, because during the geophysical year 1957/58 a Swedish-Finnish-Swiss expedition to Murchisonfjorden includes magnetic variometer measurements in their program.

In view of this, and as a basis for continued work, all available data as to previous magnetic observations have been collected and examined. Only the declination is dealt with here because the other magnetic data are too scanty. Since few observations have been made during the last 25 years, the year 1930 has been selected as the epoch.

The material is chiefly found in the library of the Norsk Polarinstitut and some in the University library, Oslo. All references in the sources have

been examined and it is, therefore, believed that any published observations which are not included here, are of small importance.

— — — — —

When compiling these observations, many discrepancies are revealed. These are mainly due to old fashioned instruments, incomplete corrections, insufficient carefulness as to magnetic disturbances and, of course, anomalies in the magnetic field. An evaluation of the quality of the individual observations must, therefore, often be subjective. In addition comes the fact that the descriptions of the places of observation as a rule are so inaccurate, that later observers have not been able to find the exact stations of their predecessors in spite of information as to the geographical coordinates of the positions. Some positions have been so badly described that one cannot overlook the possibility that they have been placed incorrectly on the general map. On pages 32—34 the available descriptions of the stations are given, as taken from the texts of the various publications.

In the first table (pp. 12—13) the arrangement is chronological. Geographical latitude and longitude are given as stated by the observers, while the figures in parenthesis refer to positions on the charts, Nos. 505 and 507 of the Norsk Polarinstitut. In the table on pages 24—31 the observations are arranged after these geographical latitudes. See also general map with the stations.

## Discussion.

### *Corrections for diurnal variation.*

Whenever the hours are given, the observations have been corrected for diurnal variation by means of interpolation in respect to latitude from the curves of diurnal variation shown in fig. 1. These curves represent means for all days. Corrections for magnetic storms could have been made in a few cases only and have, therefore, not been attempted.

It is assumed that the character of the diurnal variation has been nearly unaltered in the course of time. This is supported by the appearances of the curves, which differ considerably as to the year of observation, but show a good mutual agreement, when the geographical positions are taken into consideration. The two curves in August for Crozierpynten differ to a certain extent, lying on each side of the mean expected curve. The curve from 1827 is based on observations during 11 days at the beginning of the month, whereas the other, from 1899, covers 5 days at the end of the month. The periods are rather short, and magnetic storms might have had an excessive influence. Since both of them have been the basis for reductions made by several observers, new corrections for the diurnal variations have been applied using the mean curve.



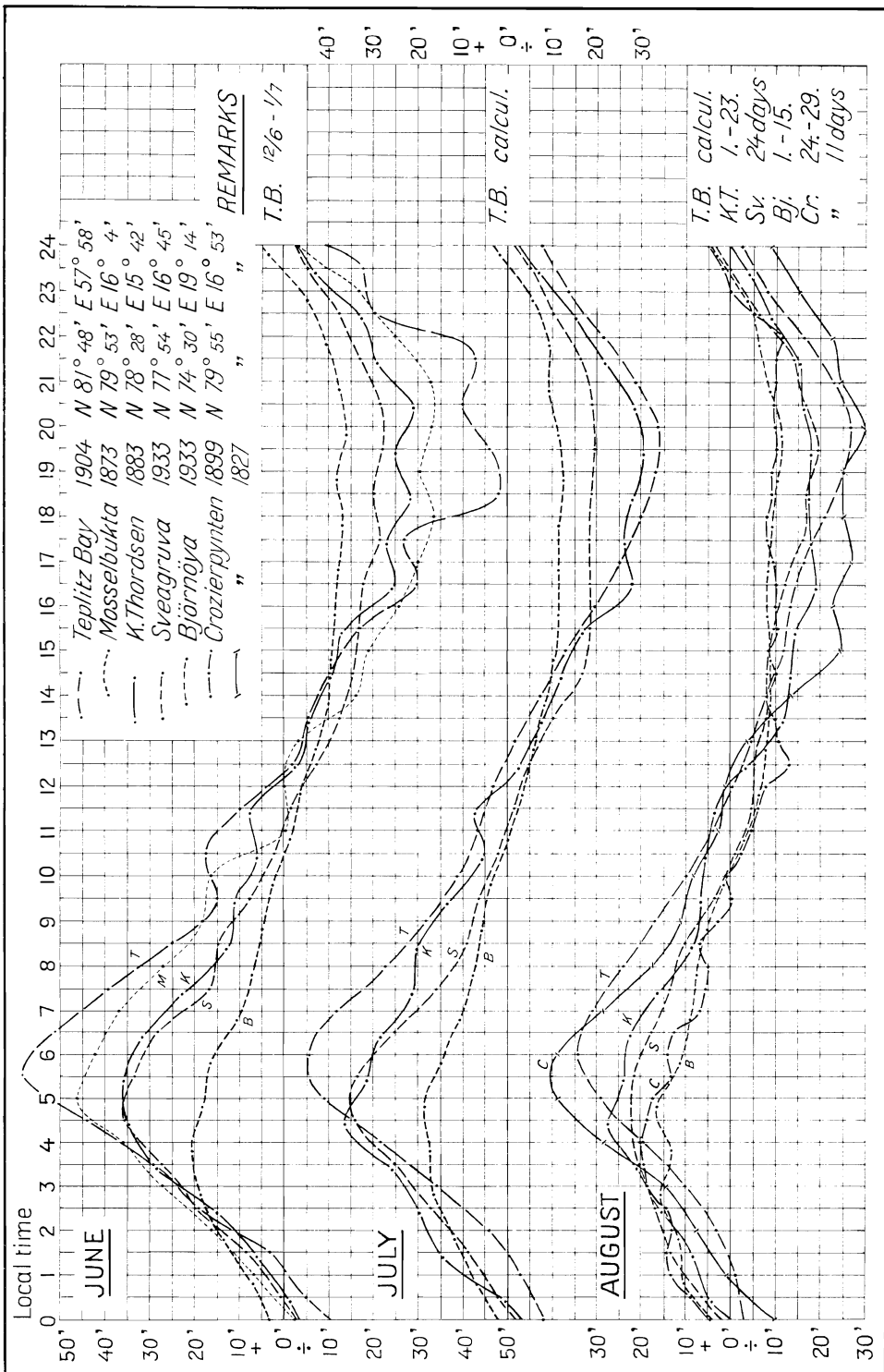


Fig. 1. Diurnal variation of magnetic declination (all days).

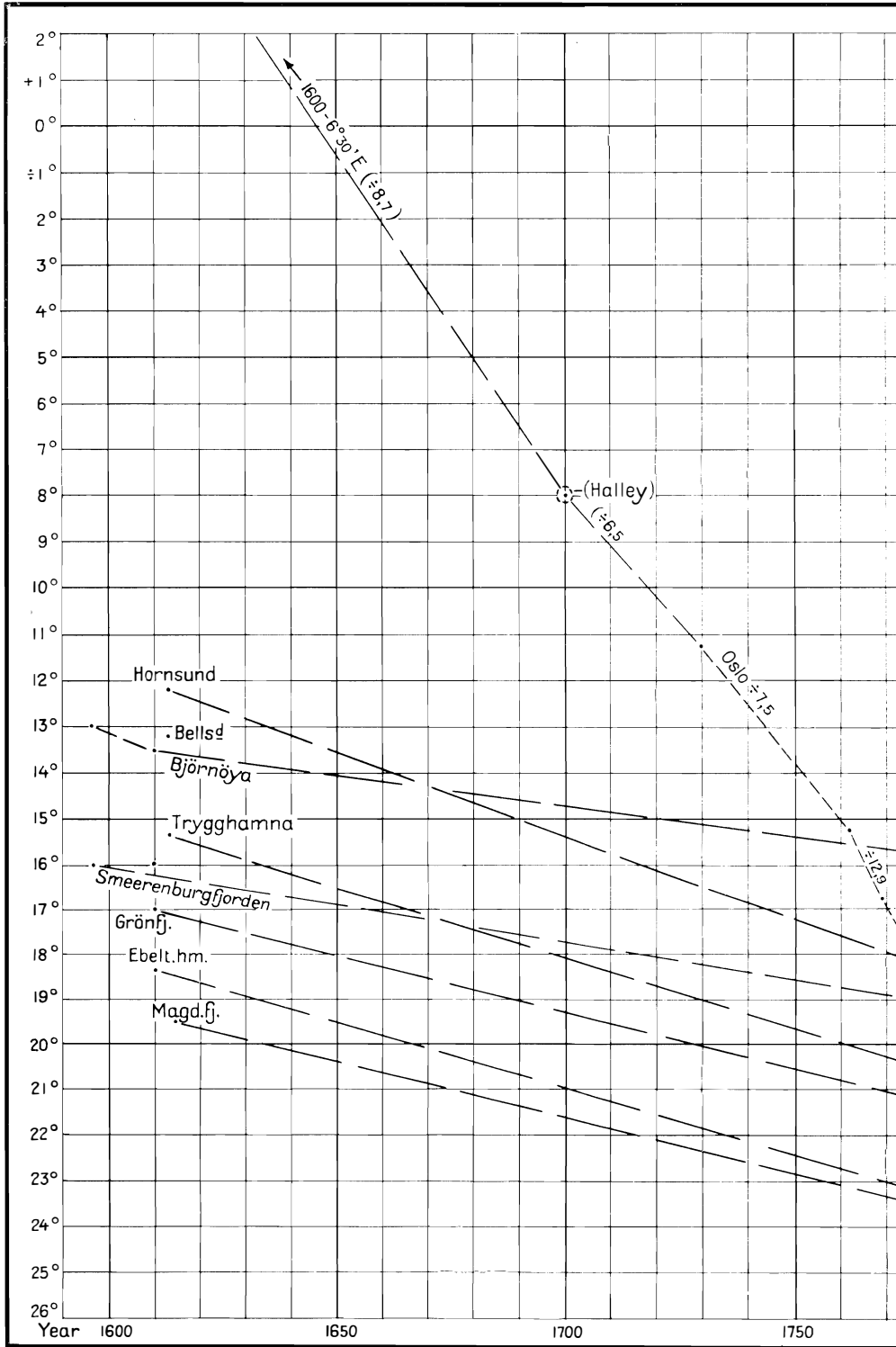
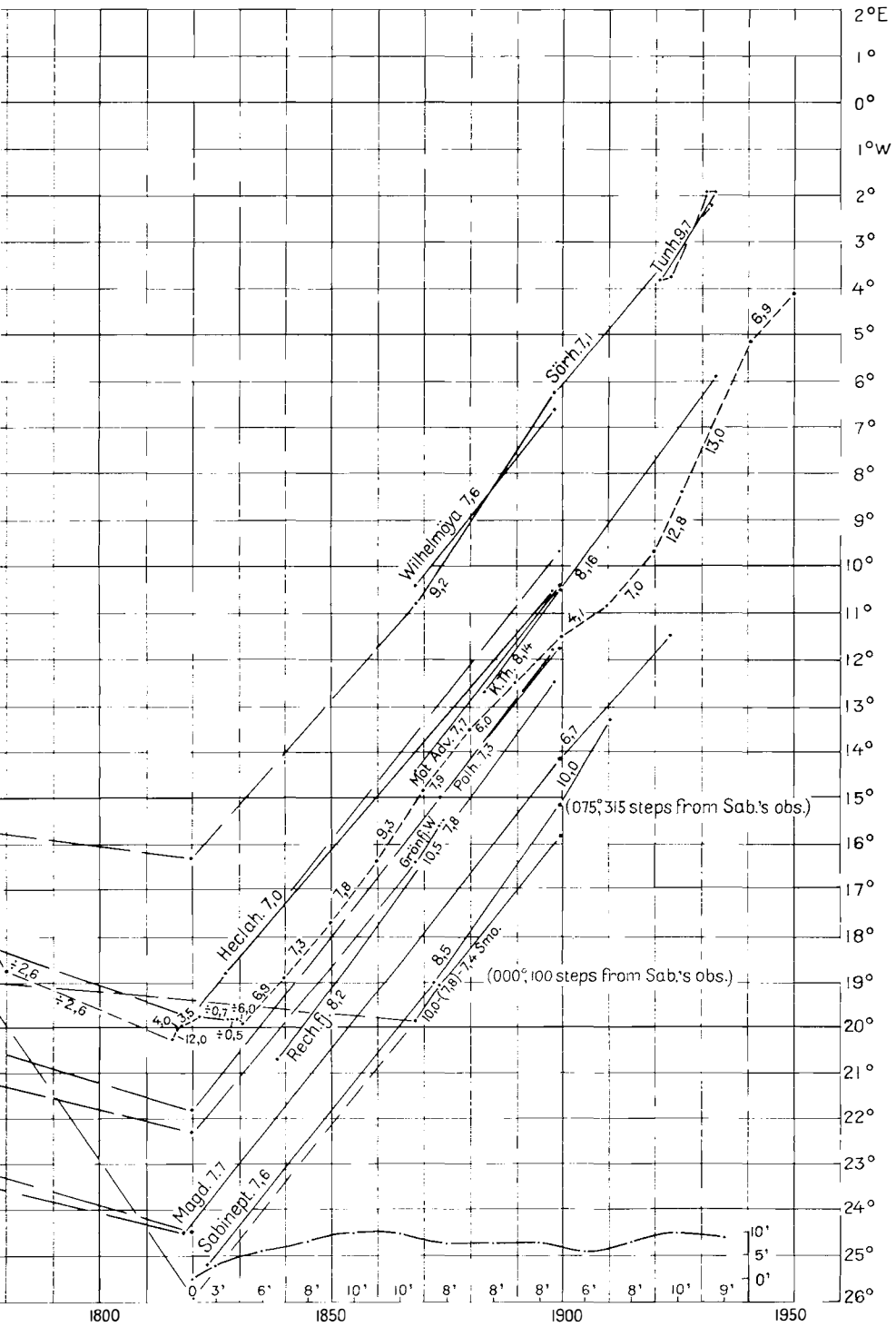


Fig. 2. Declination in some places 1600--1950 or in parts of this period.



Below: Mean secular variation every ten years.

*Seasonal variation.*

For the sake of consistency the curves of diurnal variation are based upon means for the months in question. Only two of the observation series in Svalbard give a complete mean for the year, viz. at Kapp Thordsen 1882/83 and at Sveagruba 1932/33. The difference between the mean of the year and the mean monthly values are:

	June	July	August
K. Thordsen 1882/83 . . . . .	— 3',2	— 2',1	— 4',4
Sveagruba 1932/33 . . . . .	+ 1',2	— 0',5	— 2',9

These figures include disturbances as well as annual variation. The omission of the small seasonal variation has no appreciable influence on the general aspect that is dealt with here.

*Secular variation.*

To get a basis for finding the secular variation a compilation has been made of observations which have been undertaken in the same or nearly the same positions. This is shown graphically in fig. 2, as well as the result of a comparison, namely the mean secular variation every ten years. In the existing isogonic charts the variation is increasing northwards after isopors mainly based upon calculations (Bjørnøya 10', Sørkapp 11' and Sjuøyane 14' as per Hydrographic Office, Wash., Chart No. 1706: The Variation of the Compass 1955). The graphic presentation here gives no basis for finding such zones, the observation series being too unsystematic for that purpose.

It is of interest to observe that the curves are in fair agreement with the curve for Oslo, which is also shown (from Norges Sjøkartverk, Oslo: Den Norske Los I). However, before 1750, approximately, there was a noticeable difference in the development of the declination. This agrees with Hansteen's calculation of agonics for the year 1600 (Physics of the Earth, VIII, p. 14). Here one agonic runs northward in a pocket form, comprising nearly the whole of Europe and the eastern Atlantic area up to Vestfjorden.

Considering the character of the data the curves in figure 2 agree well, showing a turning about 1820, as in Oslo. Backward to about year 1600 there is little to go on. Phipps' observations in 1773 are the only ones, and nearly all of them, namely those made onboard his ship, display such large mutual discrepancies that they are of little value. They only indicate that in 1773 the declination was 5°—11° more easterly than in 1820.

However, two observations were made ashore, on Cummingøya (south of Fuglesangen) and at Smeerenburg. These should be more reliable and they are in a fair agreement with Oslo at that time.

In "Martins resa till Spetsbergen" in 1758 (Ymer Vol. I, Sth. 1881, p. 140) there is a somewhat bewildering, but interesting remark: »— — at Nordkap (in Norway) the compass shows right, but to the east from there

more easterly. From 1724 the compass has altered  $1\frac{1}{4}$  point or  $4^\circ$  (— Misprint for  $14^\circ$ ?) more northwesterly than at present, and it is said that every 6th year the magnetic declination varies more to the northwest." From this it might possibly be concluded that the secular variation has been about the same in opposite direction, and further, that it has been another turning about 1700.

In 1951 Nordlysobservatoriet, Tromsø, established a variometer station at Herwichamna, Bjørnøya. The results from this station, when compared with earlier observations in other places on the island, indicate a variation of about  $10'$  during the period since 1930.

#### *Irregularities.*

Among the discrepancies occurring in the observations, the area around Hinlopenstretet is to be noted. The measurements here are made chiefly by Parry in 1827 and Relf in 1923 and they differ considerably. It seems as if one of the sets is subject to some systematic error. The course of the isogonics is based upon Relf's observations as the newest ones. Moreover, Parry's observations in Heclahamna also differ substantially from those of several later observers, which on their part agree well.

Other deviations from the isogonics indicate local anomalies, for example at Reinholmen (Recherchefjorden), western side of Grønfjorden and in Liefdefjorden.

#### *Other remarks.*

In order to demonstrate how the magnetic conditions in the Svalbard area fit into a larger picture, a general isogonic chart from the Norwegian coast up to  $86^\circ$  north latitude is included. The most northern observations are from the »FRAM«-expedition 1895—96, the reduction of these to 1930 having been made by a rough estimate.

*Magnetic observations*  
(Arranged)

Source	Observer	Place	Lat. N.			
Purchas His Pilgrims. Vol. XIII, XIV (Glasgow 1906).	W. Barents J. Poole	1 Bjørnøya	7430			
		2 Cross Rheed (Smeer.fj.)	7944			
	do.	W. Baffin	3 Bjørnøya, west of (ship)	7415		
			4 Hornsund, off	7655		
			5 Ebeltoftthamna (Cr. Road)	7915(09)		
			6 Grønfj.	7824(03)		
			7 Hornsund	7655		
			8 Trygghamna (Poopy B.)	7824(14)		
			9 Bellsund	7740		
			10 Magdalenefj. (Gravn.)	7934		
			C. J. Phipps: A Voyage to the North Pole, 1773 (Dublin 1775).	R. Fotherby C. J. Phipps	11 On board	7322
					12 »	7355
	13 »	7410				
	14 »	7430				
	15 »	7420				
	16 »	7748				
	17 »	7802				
	18 »	7808				
	19 »	7822				
	20 »	8012				
	F. W. Beechey: A Voyage of Discovery towards the North Pole (D. Buchanan) (London 1843).	Geo Fischer	21 Cummingøya (Fugles.)	7950		
			22 On board	8018		
			23 »	8030		
			24 »	8027		
			25 »	8035		
			26 Smeerenburg(-odden)	7944		
27 Magdalenefj. (Gravn.)			7934			
28 On the ice			7950			
29 »			8014			
30 Danskøya(-neset)			7940			
E. Sabine: Experiments to determine the Figure of the Earth (London 1825).	Edw. Sabine	31 Norskøya, inner (Sabineod.)	7950			
W. E. Parry: Narrative of an Attempt to reach the North Pole (London 1828).	W. E. Parry	32 On the ice	7956.5			
		33 »	7952.7			
		34 »	7949			
		35 »	7949.6			
		36 Waldenøya, NE-pt.	8035.6(38)			
		37 On the ice	8122			
		38 »	8145.3			
		39 »	8203.3			
		40 »	8214.5			
		41 »	8226.7			
		42 »	8239.2			
		43 »	8240.4			
		44 »	8214.4			
		45 »	8206			
		46 »	8157.5			
		47 Waldenøya. SE-pt.	8034.5(37)			
		48 Hinlopenstr., entr.	7954.8			
		49 Lågøya, W-pt.	8017.2			
50 Lomfj., shore	7936.8					
51 Fosterøyane	7934.5					
52 Heclahamna, flagst.	7955.1					

a) 19,<sup>95</sup> as per Phipps b) /- - -/ from other tables

*in the Svalbard area.  
chronologically).*

Long. E	Date	Local time	D west			L. T.	I	L.T.	H
			Obs.	D <sub>o</sub>	1930				
(1101 ?)	1596 Jun	9	13						
		23	16						
	1610 May	8	1330						
		16	16						
(1140)	Jun.	13	1816						
	Jul.	1	17						
	1613 Jun.	14	1214						
		7	1521						
	Aug.	3	1311						
(1103) b)	1614 Jun.	18	25 a)						
/0353/	1773 Jun.	24					8003		
0715		25	0730	1709	1717	0937			
0836		25	1530	0747	0736	0004 E			
/0918/		26				1430	7922		
0943		27	0730	1908	1916	1136			
0800		28				1230	8107		
0750		29	2030	1138	1110	0330	1430	8026	
/0918/		30				1230	7930		
0908	Jul.	2	1730	1455	1432	0652	1230	8045	
0556		9				1830	8152		
1002(1132)		15, 16		2038		1258		8200	
1212		26	1700	1247	1217	0437			
1514		28	0700	1156	1234	0454			
/1818/		29				1230	8202.5		
1900		31	1700	1224	1154	0414			
(1101)	Aug.	14		1857		1117		8208.8	
1130(03)	1818 Jun.	6		2430		1020		8102	
1200		13, 18, 19		2412		1002		8128	
1200	Jul.	21		2318		0908		8148	
1106	Aug.	18		2430		1020		8102.5	8380
1140(35)	1823 July			2512 c)		1107		8110.5	8260
1318	1827 May	17	0812	2242	2304	0912			
1434	Jun.	2	0930	1412	2428	1036			
1525		6	0635	1851	1930	0538			
1536		8	1715	1810.5	1740	0348			
1951.3(47)		16	1407	1742	1732	0340			
2132.6		29	0703	1530.9	1612	0220			
2423.7	Jul.	5	07	1315.7	1356	0004	07	8204.7	
2317.3		10	0646	1341.2	1421	0029			
2203.9		12	0610	1506.0	1552	0200	08—09	8216.3	
2032.2		16	0728	1727.6	1803	0411			
1952.2		21	0740	1904.5	1940	0548	07—0830	8221.9	
1925		26, 27	0602	1809.9	1854	0502	0120	8221.6	
1718.3		31	1842	2223.3	2151	0759			
1745.6	Aug.	2	07	2046.9	2119	0727			
1756.4		4	0633	2024.8	2058	0706			
1952		14					07—09	8124.3	
1729(25)		14	2338	1749	1745	0353			
1812.3(8.0)		15					20—2130	8122.9	
1753.9(41)		16	1226	1720	1716	0324			
1917		20	1144	1540	1541	0149			
1648.8(53.5)	Jul./Aug.			1846.2		0454		8055.3	

in his book c) From Wijkander.

Source	Observer	Place	Lat. N.
Aug. Wijkander: Obs. Magn. — 1872/73 (see below).	B. M. Keilhau	53 Bjørnøya (Nordhamna)	7440(30)
		54 Sørkapp	7635
		55 Kvalpynten	7725(28)
M. P. Gaimard: Voyages — — — — Recherche 1838—40 (Paris).	Fabre	56 Bellsund (Rech.fj.)	7730
		57 Magdalenefj. (Gravneset)	7934
K. Chydenius: Bidrag till kändedomen om de jordmagn. förh. vid Spetsbergen (Sv. Vet. Ak.s Förh. Årg. 19, No. 4, Stockholm 1862).	K. Chydenius	58 Danskøya (Kobbefj.)	7942
		58 »	»
		59 Sorgfj., Eoluskorset	7956.5
		60 Heclahamna (Flag staff)	7955.3(55)
		61 Verlegenuken (E-side)	8002.5(3.3)
		62 Depotøya	7959,9
		62 »	7959,9
		63 Lågøya, N-pt.	8020.2(22)
		64 Lovénberget	7924(25)
		65 Lomfjorden	7926(24)
		66 Mofen	8001.2
		67 Norskøya (Sabineodden)	7950
N. C. Dunér: Magn. inclinationsbest. på Spetsbergen (Sv. Vet. Ak.s Förhandl. Årg. 27, 1870).	N. C. Dunér	68 Kobbefjorden	7942
		69 Sorgfj. (W-side)	7955
		70 Dirksbukta	7942
		71 Norskøya, (Sabineodden)	7950
		72 Magdalenefj. (Gravn.)	7936(34)
		73 Krossfj. (Ebeltoftamna)	7909
		74 Kongsfj. (Brandalpt.)	7856
		75 Adventfj. (Hotellneset)	7815(14.6)
		76 Trygghamna	7814
K. S. Lemström: Svenska Polar-exp. 1868 (Sv. Vet. Ak.'s Förhandl. B. 8, No. 8, Stockholm 1870).	K.S.Lemström	77 Bjørnøya (Sørhamna)	7422.9(22)
		78 Grønfi. (W-side)	7803.7(03)
		79 Adventfj. (Hotellneset)	7815(14.6)
		80 Kongsfj. (Brandalpt.)	7856
		81 Kobbefj.	7942
		82 Nordkapp, E-side	8031(32.5)
		83 Lomfi., shore	7838.0
		84 On the ice	8142
		85 »	8100
		86 »	7930
		87 »	7849.5
		88 Sørgatt(islet W-end)	7940(37)
		89 Amsterdamøya (Smeer.od)	7944
		90 On the ice	8035.4
		91 Kongsfj. (Brandalpt.)	7856.5(56.0)
Aug. Wijkander: (see below).	Koldewey and Hildebrandt	92 Torellneset	7922
		93 Wilhelmøya (Tom.pt.)	7902(3.5)
Aug. Wijkander: Observations Magnet. faites pendant l'Expédition Arctique Suedoise en 1872/73 (Sv. Vet. Ak.'s Handl. B. 13, No. 15, Stockholm 1876).	Wijkander and Palander	94 Sørkapp	7630(35)
		95 Saurieberget (river)	7829
		96 Kapp Thorsden	7827(28.4)
		97 Adventfjorden (Hotelln.)	7815(14.6)
		98 Grønfi. (W-side)	7803
		99 Norskøya, Sabineodden	7950
		100 Raudfi., W-side	7947
		101 » E-side	7945
		102 » »	7948
		103 Fuglefjorden	7948(47)



Long, E	Date	L.T.	D west			L.T.	I	L.T.	H
			Obs.	D <sub>o</sub>	1930				
1830(1900)	1827 Aug. 21						7854	0820	10130
1625(34)	Sept. 3						7950	1300	9660
1700(2122)	11						7959	1123	9400
1434.2(33)	1838 Jul. 29	13	2048	2041	0747	26—27/7	7945.6		9600
1120(03)	1839 Aug. 8, 10						8041		
1131.8(1053)	1861 May 27, 30						8020.7		
»	Sept. 8					07—10	8034.4		
1640.2(42)	Jun. 7, 27						8033.4		
1648.5(53.5)	11					15	8033.9		
1654(27)	30					22	8019.8		
1757.5(1803)	Jul. 11					12—16	8034.1		
1757.5(1803)	Aug. 26					13	8034.3		
1823.3(20)	Jul. 24		(1742)		(0812)	12	8040		
1850(47)	Aug. 15					12	8021.5		
1745(37)	18					2137	8014.6		
1407.2(25)	29, 30						8027.5		
1140.5(35)	31					1650—1930	8034.7		
1059(53)	1861 May 25, 27					15	8023		
1654(40)	Jun. 19					15	8027		
1548(42)	Jul. 11					02	8033		
1140(35)	23					18	8033		
1106(03)	27					13	8025		
1142(40)	Aug. 4					18	8014		
1159(53)	15					15	8007		
1538(33)	Aug./Sep. 9					17	7953		
1357(49)	1864 Jul. 9					23	7951		
1915.3(11)	1868 Jul. 25, 27	0946	1043.4	1046	0226	09	7936.2	15	10539
1412.5(05)	Aug. 1	0943	1614.1	1617	0757	13	8013.0	14	9346
1537.8(33)	8	1147	1422.5	1425	0605	21	8007.4	19	9208
1158.8(53)	17, 18	1314	1811.5	1802	0942	14	8027.8	1215	9043
1058.8(53)	28	1556	1850.9	1837	1017	22	8051.3	12,17	8569
2022(01)	Sept. 9					18	8120.2		
1807(1747)	9					1730	8107.8	13	8769
1635	19					10	8149.2		
0430	21	1136	2842	2845	2025	12	8059		
0255	22	0855	2912	2922	2102				
0229	23					15	8047		
1107(1052)	27					11	8006.4		
1110(01)	30	1100	1948	1952	1132	1230	8001.3	1200	8560
1254.5	Oct. 3							1715	8341
1159(53)	9					0925	7933.4	1224	9025
2058(47)	1868 Aug. 26		0916		0056				
2104(2048)	Sept. 2		1024		0204				
1625(34)	1872 Jul. 25					19	7931	19	9717
1525	29					18	8024	19	9070
1542	29					11	8001		
1538(33)	Jul. 28, Aug. 1					16	8013		9272
1412(05)	Aug. 2, 4	13	1543	1535	0753	16	8013	12	9287
1140(35)	7, 11, 29	11	1853	1858	1116	14	8058	11	8566
1208(1156)	21							20	8664
1218(12)	21	11	1936	1941	1159			11	8644
1215(09)	22	13	1832	1824	1042			13	8604
1131(14)	30					13	8049	15	8634

a) calc. to  $\frac{1}{1}$ -1840.

Source	Observer	Place	Lat. N.
<p>Den norske Nordhavsexpedition 1876—78. (Christiania 1882). Obs.faites au Cap Thordsen par l'Exp. Sued. 1882—83, Tome I (Sth. 1905). Nathorstexp. 1898 (see below). Fr. Nansen: The Norw. North Polar Expedition 1893—96, Vol. II, (Christiania 1901).</p>	<p>C. Wille E. Solander English Train. Squadron. S.Scott-Hansen A. Hamberg</p>	<p>104 Polhem, Mosselbukta 105 Norskøya, ytre 106 Grønfj. W-side 107 Amsterdamøya(Smeer.odd.) 108 Skansbukta 109 Kapp Thordsen 110 Bohemanneset 111 Colesbukta 112 Heerodden 113 Nordfj. (Nathorstdalen) 114 » (Kapp Smith) 115 Bellsund (Rech.fj.) 116 On board, (off Sørkapp) 117 » 118 Kapp Thordsen  119 Recherche fj. (Reinhl.) 120 On board 121 » 122 » 123 » 124 » 125 » 126 » 127 » 128 » 129 » 130 » 131 » 132 » 133 » 134 » 135 » 136 » 137 » 138 » 139 » 140 » 141 » 142 » 143 » 144 » 145 » 146 » 147 » 148 » 149 » 150 » 151 » 152 » 153 » 154 Bjørnøya (Kvalrossb.)</p>	<p>7953.3 7951 7803 7944 7831 7827(28.4) 7822 7806(07) 7806 7855(45) 7839 7730 7627 7627 7828.4  (7729.3) 8440 8441 » 8443 8447 8443 8439 8430 8425 8418 8407 8411 8412 8406 8404 8400 8405 » » 8427 » 8401 8403 8404 8400 8356 » 8316 8314 8257 8256 8255 8301 8303 7422.3(23)</p>

Long. F	Date	D west				L.T.	I	L.T.	H
		L.T.	Obs.	D <sub>o</sub>	1930				
1604	1873 May/Jul.		1458.6		0725		8055		8556a)
1144(37)	Jul. 15	2030	1851	1821	1047	23	8059	20	8535
1412(05)	12, 20	10	1522	1528	0754	23	8005	10	9255
1111(01)	18, 19	16	1927	1904	1130	14	8051	16	8594
1606(03)	21, 22	2330	1356	1350	0616	23	8023	23	9094
1542	22							15	9212
1442(46)	24					12	8003	11	9339
1505(02)	26					11	8003	11	9540
1442(12)	27							18	9310
1545(30)	30					18	8028	19	8929
1515	31					17	8024		9098
1447(33)	Aug. 1						7951	13	9466
1700—10	1878 Aug. 5	22	1124	1114	0418				
0056 W	19	11	2554	2551	1855				
1542.3	1882 Aug.—83Aug.		1242.2		0622		8025.1		8857b)
(1433)	1895		1040		0600				
3136	1896 Jan. 27					P.M.	8318		
3131	28							1140	6212
3143	»								6190
»	29	1515	0225	0145	0215 E				
2518	Feb. 3					P.M.	8315		
2459	4							1205	6198
2438	5	1100	0800	0710	0310			1045	6245
2445	11					A.M.	8309		
2356	12					P.M.	8300		
2245	13	1100	0924	0834	0434			1100	6578
2428	24					»	8318		
2413	25							1140	6499
2411	»	1140	0814	0730	0330				
2527	Mar. 5					»	8306		
2456	6							1140	6416
2411	7	1715	0828	0738	0338			1714	6370
2456	18					A.M.	8317		
2443	19							1155	6370
2439	»					»		1710	6360
1848	Apr. 9					»	8313		
1833	»							1710	6382
1358	20	1650	1704	1604	1204	»			
1325	21					»	8307		
1312	»							1700	6462
1106	May 7					P.M.	8314		
1104	8							1130	6380
1103	»								6520
1233	Jun. 3					»		1625	6852
1303	4					»	8249		
1138	17					»	8252		
1135	18							1140	6850
1144	19	1715	1641	1541	1141				
1252	Jul. 7					»	8252		
1256	8							1655	6786
1915(11)	1898 Jun. 18	1730	0622.9	0612	0157	2000	7851	1730	10405

a) v: 53 440 b) v: 53 031





Source	Observer	Place	Lat. N.	
Polarfahrt des Matador 1900—01 (Anm. der Hydr. u. Mar. Meteor. 29. Jahrg. 1901, Heft IXu.X). Obs. Astron. faites au Sp. par l'Exp. Isachsen 1909—10 (Chria. 1912). Phillips: Filchnerexp. Spitzberg 1910 (Peterm. Mitt. Heft 179, Gotha 1914). Carnegie: The Magnetic Work of the Carnegie 1909—16.	D.O.Bauendahl	209 Backlundfjellet	7843.4	
		210 Tsjernysjovfjellet	7857.4	
		211 Virgoamna (Pikes house)	7944.5(43)	
	A. Hermansen	212 Forlandssletta	7821.0	
		213 Virgoamna (Ekholmpt.)	7943.3	
	E. Przybyllok	214 Norskøya, Sabineodden	7950	
		215 Von Postbreen	7827.2	
		216 »	7826.5	
	Diverse obs.s	217 On board	7226	
		218 »	7329	
		219 »	7328	
		220 »	7344	
		221 »	7356	
		222 »	7428	
		223 »	7432	
		224 »	7505	
		225 »	7528	
		226 »	7610	
		227 »	7707	
		228 »	7717	
229 »		7806		
230 »		7838		
231 »		7945		
Original manuscript		A. Hermansen	232 »	7928
	233 »		7913	
	234 »		7904	
	235 »		7850	
	236 »		7812	
	237 »		7711	
	238 »		7653	
	239 »		7615	
	240 »		7431	
	Original manuscript		A. Hermansen	241 Tunheim, Bjørnøya
242 Adventfj. (Longyearb.)		7813		
243 Grønfjorden, Finneset.		7802.2		
244 Ny-Ålesund		7855.4		
E. R. Relf: The Cruise of the Terningen 1923 (Spitzbergen Papers, Vol. II, Lond. 1929).	H. Henie	245 Bjørnøya, Tunheim	7429.0	
	E. R. Relf	246 Tommelpynten	(7931)	
		247 Wahlenbergfjorden	(7940)	
		248 Kapp Fanshawe	(7938)	
		249 Nordkapp	(8032.5)	
		250 Dirksbukta	7946(42)	
		251 Liefdefj. (SE-side)	(7935)	
	Oxford Univ. Exp. 1924 (do.)	E. R. Relf	252 Reinsdyrfløya (SE)	(7942)
			253 Jacobsenbukta	(7937)
			254 Magdalenefjorden	(7934)
255 Liefdefj. (Reinsdyrfløya)			(7942)	
256 Isispynten			(7945)	
R. v. d. R. Wooley: Magn. Obs. in Sp. 1927 (Terr. Magn. and Atm. Electr. Vol. 32, Nos. 3—4, 1927).	R.v.d.R.Wooley	257 Keilhaubukta	7729(28)	
		258 Tjuvfjorden (Dufvefj.)	7731(29)	

Long. E	Date	L.T.	D west			L.T.	I	L.T.	H
			Obs.	D <sub>o</sub>	1930				
1812	Aug. 17	1410	0846.5	0834	0441				
1806	31	02	0912.0	0924	0531				
1113(1055)	1900 Mar./Apr.		1540.5		1141		8148		
1158.5	1910 Jun.30/Jul.16		<i>div.</i>	1211	0911				
1107.5(1054)	Aug. 21	2345	1330.0	1330	1030				
1146(35)	22	0020	1312	1319	1019				
1803	14, 15	ca. 18	0818	0800	0500				
(1755?)	16	» 18	0810.8	0753	0453				
2020	1914 Jul. 26					1510	7755	1510	11040
1602	27					1505	7811	1505	10740
1604	28	07	0706	0716	0452				
1601	»	2250	0710	0705	0441				
1604	29					1450	7830	1450	10450
1644	30	0250	0635	0654	0430				
1653	»					1500	7832	1500	10490
1616	31	0905	0746	0751	0527				
1602	»					1440	7907	1440	10050
1515	Aug. 1	05	0837	0856	0632				
1245	»					1550	8001	1555	9260
1213	»	1730	1201	1145	0921				
0911	2	0655	1428	1445	1221				
0842	2					1425	8038	1425	8740
0841	3					1510	8120	1510	8210
1023	4	0605	1420	1444	1220				
1029	4	2035	1425	1405	1141				
1031	5					1505	8053	1505	8570
0850	5	2100	1615	1557	1333				
0655	6					1925	8043	1925	8740
0453	7					1020	8001	1020	9240
0401	8	0710	1832	1845	1621				
0248	8					1455	7943	1500	9530
0015W	9					1435	7857	1430	10140
1920(13.5)	1921 Jun. 28	1135	0350.5	0348	0218				
1540	Jul. 12	1115	0802.9	0810	0640				
1420.2(14)	28	1720	0826.9	0804	0634				
1203(1157)	Aug. 2	2015	1223.8	1206	1036				
1913.5	1923 Aug./Sept.		0351.4		0241				
(1843)	Jul. 30		0747		0637				
(2030)	Aug. 9		0537		0427				
(1814)	11		0753		0643				
(2001)	15		0701		0551				
(1542)	16		0833		0723				
(1323)			1145		1035				
(1340)	21—25		1115		1005				
(1415)			0947		0837				
(1103)	?		1129		1019				
(1340)	1924 Jul. 16, 23		1035		0935		8130		7880
(2640)	Aug. 5		0137 E		0237 E		8145		
2122	1927 Jul. 31		0240		0210				
2156	Aug. 12, 13		0109		0039				8710

Source	Observer	Place	Lat. N.
Report on the Scientific Researches by «Citta di Milano» at Sp. 1928 (Hydrographic Review No. 12, 1929). Original manuscript	G. Romagna-Manoia	259 Kapp Lee	7805
		260 Kvalvågen	7730
		261 Agardhbukta	7802
		262 Mohnbukta	7817
		263 Mistakodden	7829
		264 London, Kongsfjorden	7857.6
Swedish Polar Year Exp., Sveagruva 1932—33. Terr. Magn. (Stockholm 1939). Résultats des Obs. de l'Exp. Polon. 1932—33 a l'Ile des Ours, Fasc. 2, Erdmagn. (Warszawa 1936). Original manuscript	R. Kjær	265 Bjørnøya, Tunheim	7429
		266 » Teltvika	7428.6
		267 » Ellahytta	7423.1
		268 Adventpynten	7814.8
		268 »	7814.8
		269 Bjørnøya, Sørhamna	7422.6
Original manuscript	F. Lindholm	270 Sveagruva	7754
		271 Kapp Thordsen	7828.4
Miss L. A. Boyd's Expedition Norsk Polarinstitutt. Skrifter No. 90 (Oslo 1948) Publikasjoner fra Det Norske Institutt for Kosmisk Fysikk; Nr. 34 (Bergen 1953) Nr. 36 (Bergen 1954) Nr. 37 (Bergen 1955)	Wlad. Lysakowski	272 Bjørnøya, Tunheim	7429.8(29.0)
Original manuscript	R. Kjær J. M. le Roy H. Henie	273 Kapp Linné	7803.8
		274 Parryøya	8038.3
		275 Hopen	7630.1
		276 Bjørnøya, Herwighamna	7430.6
		277 » »	7430.6
		278 » »	7430.6



Long. E	Date	L.T.	D west			L.T.	I	L.T.	H
			Obs.	Do	1930				
2054(50)	14,21		0249		0219			18	8420
1837(00)	15		0444		0414				8660
1848(41)	16		0424		0354				8460
1858(55)	16		0426		0356				8350
2016(11)	17		0321		0251				8320
1203.6	1928 Jun./Jul.		1021.1		1001		8120.2		8050
1913.5	1931 Jun. 1	1525	0204.1	0153	0202				
1846.8	15	1820	0227.8	0215	0224				
1859.8	16	1125	0231.3	0228	0237				
1534.0	29	1710	0634.0	0612	0621				
1534.0	30	0935	0612.6	0623	0632				
1911.1	1932 Jun. 22	0920	0206.7	0210	0228				
1645	1932 Sep.—33 Aug.		0453.7		0516		8059.7		8328
1542.3(42)	1933 Aug. 19		0554.6		0622	2000	8114.3	1620	8183
1913.6	1932 Oct.—33 Aug.		0152.4		0214		7930.5		9498
1339.3	1933 Jul. 12	1445	0738.8	0726	0753				
2045.0	1938 Jul. 18	1520	0209.0	0154	0306				
2504.1	1947 Jul. 21—24		0423.7E		0158 E				
1900.9	1951 Jan./Dec.		0130.3E		0221				9211a)
1900.9	1952 Jan./Dec.		0141.0E		0221				9201b)
1900.9	1953 Jan./Dec.		0150.0E		0223				9190c)

a) v: 51 878 b) v: 51 900 c) 51 950

*Magnetic observations in the Svalbard area.*  
(Arranged according to latitude).

No.	Place	Lat. N	Long. E	Date	L. T.	Obs. D	L. T.	I	L. T.	H
124	On board	84° 47'	25° 18'	1896 Feb. 3				8315		6198
125	»	43	24 59	4					1205	6190
123	»	43	31 43	Jan. 29	1515	0225				6212
122	»	41	»	28						6245
121	»	»	31	»				8318		6245
120	»	40	36	27						6578
126	»	39	24 38	Feb. 5	1100	0800				6578
127	»	30	45	11				8309		6499
128	»	25	23 56	12				8306		6360
129	»	18	22 45	13	1100	0924				6370
132	»	12	24 11	25	1140	0814				6416
131	»	11	13	»						6370
130	»	7	28	24				8317		6382
133	»	6	25 27	Mar. 5				8313		6462
138	»	5	24 39	19						6380
137	»	»	43	»						6852
136	»	»	56	18						6786
134	»	4	»	6						6850
135	»	0	11	7						6852
139	»	27	18 48	Apr. 9	1715	0828				6786
140	»	»	33	»						6850
143	»	4	13 12	21				8307		6852
142	»	3	25	»						6786
141	»	1	58	20						6850
144	»	0	11 06	May 7	1650	1704				6852
145	»	83 56	4	8				8314		6786
146	»	»	3	»						6850
147	»	16	12 33	Jun. 3						6852
148	»	14	13 03	4						6786
153	»	3	12 56	Jul. 8				8249		6850
152	»	1	52	7				8252		6852
149	»	82 57	11 38	Jun. 17						6786
150	»	56	35	18						6850
151	»	55	44	19	1715	1641				6850

No.	Place	Lat. N	Long. E	Date	L. T.	Obs. D	L. T.	I	L. T.	H
43	On the ice	40.4	19 25	1827 Jul. 26, 27	0602	1809.9	0120	8221.6		
42	»	39.2	52.2	21	0740	1904.5	07—0830	8221.9		
41	»	26.7	20 32.2	16	0728	1727.6				
40	»	14.5	22 03.9	12	0610	1506.0	08—09	8216.3		
44	»	14.4	17 18.3	31	1842	2223.3				
45	»	06	17 45.6	Aug. 2	07	2046.9				
39	»	03.3	23 17.3	Jul. 10	0646	1341.2				
46	»	81 57.5	17 56.4	Aug. 4	0633	2024.8				
38	»	45.3	24 23.7	Jul. 5	07	1315.7	07	8204.7		
84	»	42	16 35	1868 Sep. 19			10	8149.2		
37	»	22	21 32.6	1827 Jun. 29	0703	1530.9				
85	»	0	04 30	1868 Sep. 21	1136	2842	12	8059		
161	Karl XII øyane	80 39	25 00	1898 Aug. 20	1045	0306.0	1130	8143	1045	7950
274	Parryøya	38.3	20 45	1938 Jul. 18	1520	0209.0				
36	Waldenøya, NE-pt.	38	19 47	1827 Jun. 16	1407	1742				
47	»	37	19 52	Aug. 14			07—09	8124.3		
90	On the ice	35.4	12 54.5	1868 Oct. 3						
25	On board	35	19 00	1773 Jul. 31	17	1224	18	8120.2		
82	Nordkapp	32.5	20 01	1868 Sep. 9						
249	»	(*)	(*)	1923 Aug. 15	07	0701				
23	On board	30	15 14	1773 Jul. 28						
24	»	27	/18 18/	29						
63	Lågøya, N-pt.	22	18 20	1861 Jul. 24			1230	8202.5		
22	On board	18	12 12	1773 Jul. 26	17	1742	12	8040		
49	Lågøya, W-pt.	17.2	18 08	1827 Aug. 15			20—2130	8122.9		
29	On the ice	14	12 00	1818 Jul. 21				2148		
20	On board	12	05 56	1773 Jul. 9			1830	8152		
61	Verlegenhuken, E	3.3	16 27	1861 Jun. 30			22	8019.8		
66	Moffen	1.2	14 25	Aug. 29, 30				8027.5		
170	Celsiusberget	0.7	18 46	1898 Jun. 28, 29				8119.8		
62	Depotøya	79 59.9	18 03	1861 Jul. 11	15	0844.7	02	8034.1	01	7940
»	»	»	»	Aug. 26			13	8034.3		
169	Russoya, Store	59	18 18	1898 Jul. 24				8040		
193	»	57.5	18 08.3	1899 Jul. 14, 15	ca. 14	0930.8	13	8114.3	11	8040
189	Fosterneset, E	57	17 13	20	» 01	0959.8	1540	8117.0	1335	8258
32	On the ice	56.5	13 18	1827 May 17	0812	2242	2305	8118.9	0010	8270
59	Sorgfj., Eoluskorset	»	16 42	1861 Jun. 7, 27						
52	Heclahamna, Parry's flagstaff	55.1	16 53.5	1827 Jul./Aug.				8033.4		
								8055.3		

No.	Place	Lat N	Long E	Date	L.T.	Obs. D	L.T.	I	L.T.	H
60	Heclahanna, Parry's flagstaff	»	»	1861 Jun. 11	1000		15	8033.9		8260
162	»	»	»	1898 Aug. 23	1000	1022.7	1100	8111		8208
190	»	»	»	1899 Jul./Sep.		1032.1		8119.8		8160
168	Heclahanna, Crozierpt.	55	51.5	1898 Jul. 1, 21			1730	8111.8		
69	Sorgfj., W-side	»	»	1861 Jun. 19	2338		15	8027		
48	Hinlopenstr., entr.	54.8	16 40	1827 Aug. 14		1749				
104	Mosselbukta, Polhem	53.3	16 04	1873 Mai/Jul.		1458.6				
196	»	»	»	1898 Sep. 1, 3		1205.1				8556 <sup>1</sup>
195	Sorgfj., (inner)	79° 52.8	16° 47.5	1899 Aug. 30	ca. 18	1034.0	1500	8055		8284
33	On the ice	52.7	14 34	1827 Jun. 2	ca. 17	2412		8115.6		8246
182	Klovningen	51	11 30	1899 Jul. 5	ca. 1430	1503.6	1500	8115.3		8264
105	Norskøya, ytre	»	»	1873 Jul. 15	2030	1851	23	8059		8535
184	Biskayerhuken	50.5	12 25	1899 Jul. 11	ca. 01	1400.8	0130	8120.6		8261
186	Velkomstpynten	»	»	1899 Jul. 14	» 19	1301.4	1700	8112.7		8280
21	Cummingøya, Fuglesangen	50	11 32	1773 Jul. 15, 16		8200		8200		8260
31	Norskøya, Sabineodden	»	»	1823 July		2512		8110.5		
67	»	»	»	1861 Aug. 31			1615—1930	8023.7		
71	»	»	»	» Jul. 23			18	8033		
99	»	»	»	1872 Aug. 7, 11, 29	11	1853	14	8058		8566
192	»	( )	( » )	1899 Aug. 12			12	8118.4		8237
197	»	»	»	» Sep. 4	ca. 18	1437.5	0320	8121.5		8168
214	»	»	»	»	0020	1312				
28	On the ice	»	»	1910 Aug. 22				8128		
35	»	»	»	1818 Jun. 13, 18, 19		2412				
34	»	»	»	1827 Jun. 8	1715	1810.5				
102	Raudfj., E-side	49.6	12 00	1872 Aug. 22	13	1851				8604
100	Raudfj., W-side	49	15 25	» 21		1832				8664
103	Fuglefjorden	48	12 09	1872 Aug. 21						8634
231	On board	47	11 56	» 30						8210
101	Raudfj., E-side	45	08 41	1914 Aug. 3	11	1936	13	8049		8644
194	»	»	»	1872 Aug. 21		1423.7	1510	8120		8299
256 <sup>1</sup>	Isispynten	( )	(26 40)	1899 Aug. 16	ca. 1930	0137 E	2000	8113.3		
2	Cross Rheed, (Smeer.fj.)	44	(11 01.?)	1924 Aug. 5		16		8145		
26	Amsterdamøya, Smeer.-odden	»	»	1596 Jun. 23		1857		8208.8		
89	»	»	»	1773 Aug. 14	1100	1948		8001.3		
107	»	»	»	1868 Sep. 30	16	1927		8051		
	»	»	»	1873 Jul. 18, 19						8594

<sup>1</sup>: 53440

No.	Place	Lat N	Long E	Date	L.T.	Obs. D	L.T.	I	L.T.	H
183	»	»	»	1899 Jul. ?	ca. 10	1543.0	0710	8116.8	0820	8267
163	Virgohamna, Elkholmpt.	43.4	10 54	1898 Aug. 27	1200	1604.6	1145	8109	1140	8315
180	»	»	»	1899 Jul. 2	ca. 16	1633.5	1300	8109.0	1425	8385
213	»	»	»	1910 Aug. 21	2345	1330.0				
167	Virgohamna, Pikes house	43	10 55	1898 Jun. 28	1130	1450		8148		
211	»	»	»	1900 Mar./Apr.		1540.5	1420	8111.4	1510	8323
187	Reinsdyrflya (Woodfj.)	42	13 50	1899 Jul. 15		1115		8130		
252	Reinsdyrflya, SE	42	13 40	1923 Aug. ca. 23		1035		8020.7		
255	»	»	»	1924 Jul. 16, 23				8034.4		
58	Danskøya, Kobbefj.	»	10 53	1861 May 27, 30				8051.3	12, 17	8569
»	»	»	»	Sep. 8	1556		07—10	8023		
68	»	»	»	May 25, 27			15			
81	»	»	»	1868 Aug. 28		1850.9	22	8051.3		
70	Dirksbukta	»	15 42	1861 Jul. 11			02	8033		
191	Wijdefj., (Dirksbukta ?)	(42)	(15 42)	1899 Aug. 10		0833	2230	8101.9	1845	8444
250	Dirksbukta	»	»	1923 Aug. 16		2430		8102.5		
30	Danskeneset	40	11 06	1818 Aug. 18			1200	8110.0	1310	8380
185	»	(»)	(»)	1899 Jul. 12		0537	1730	8107.8	13	8769
247	Wahlenbergfj.	(»)	(20 30)	1923 Aug. 9				8106.7	18	8490
83	Lomfj., shore	38.0	17 47	1868 Sep. 9		0753		8006.4		
248	Kapp Fanshawe	(»)	(18 14)	1923 Aug. 11			1830			
171	»	37	18 18	1898 Aug. 1			11			
88	Sorgatt (islet W-end)	»	10 52	1868 Sep. 27						
253	Jacobsenbukta	(»)	(14 15)	1923 Aug. ca. 23	1226	0947	10	8059	14	8790
50	Lomfj., shore	36.8	17 41	1827 Aug. 16		1720	0105	8113.3	0135	8314
172	»	36	»	1898 Aug. 4						
188	Wijdefj., W-side	(35)	15 13	1899 Jul. 17						
251	Liefdefj., SE	(35)	(13 23)	1923 Aug. ca. 23	1144	1145				
51	Fosterøyane	34.5	19 17	1827 Aug. 20		1540				
10	Magdalenefj., Gravneset	34	11 03	1614 Jun. 18		1930				
27	»	»	»	1818 Jun. 6		2430		8102		
57	»	»	»	1839 Aug. 8, 10				8041		
72	»	»	»	1861 Jul. 27				8025		
181	»	»	»	1899 Jul. 3	ca. 1930	1441.0	13	8116.1	1820	8255
254	»	(»)	(»)	1923		1129	2010			
246	Tommelpynten	(31)	(18 43)	Jul. 30	0855	0747				
86	On the ice	30	02 55	1868 Sep. 22	0605	2912				
232	On board	28	10 23	1914 Aug. 4		1420				

No.	Place	Lat N	Long E	Date	L.T.	Obs. D	L.T.	I	L.T.	H
64	Lovénberget	25	18 47	1861 Aug. 15			12	8021.5		
173	»	»	»	1898 Aug. 4			22	8059	22	8590
65	Lomfj.	24	17 37	1861 Aug. 18			2137	8014.6		
92	Torellneset	22	20 47	1868 Aug. 26		0916			16	8470
174	Wahlbergoya	20	20 10	1898 Aug. 6						
233	On board	13	10 29	1914 Aug. 4	2035	1425				
5	Ebeltothamna (Cross R.)	09	(11 40)	1610 Jun. 13		1816				
73	»	»	»	1861 Aug. 4			18	8014		
234	On board	04	10 31	1914 Aug. 5			1505	8053	1505	8570
93	Wilhelmoya (Thumb pt.)	03,5	20 48	1868 Sep. 2		1024				
175	»	»	»	1898 Aug. 9	22	0650.9			16	7740
176	Wijdefj., Austfj.	78 59.5	16 23	1928 Jun./Jul.	13	0851.8	14	8043.4	14	8070
264	Ny-London, Kongsfj.	57.6	12 03.6	1901 Aug. 31	02	1021.1		8120.2		8050
210	Tsjernysjovfjellet	57.4	18 06	1861 Aug. 15		0912.0				
74	Kongsfj., Brandalpt	78 56	11 53	1868 Aug. 17, 18	1314	1811.5	15	8007	1215	9043
80	»	»	»	»			14	8027.8	1224	9025
91	»	»	»	Oct. 9			0925	7933.4		
244	Ny-Alesund	55.4	11 57	1921 Aug. 2	2015	1223.8				
204	Ellevegigane	52.1	(17 49)	1900 Aug. 9	23	0943.4				
235	On board	50	08 50	1914 Aug. 5	2010	1615				
87	On the ice	49.5	02 29	1868 Sep. 23			15	8047		
160	Kongsøya	»	28 07	1898 Aug. 9	1140	0222.7E	1300	8056	1140	8905
113	Nordfj. (Nathorstalen)	45	15 30	1873 Jul. 30			18	8028	19	8929
203	Lomonosovfonna	44.7	(17 33)	1900 Jul. 30	16	0930.8				
206	Hellwaldfjellet	44	20 47	1901 Jul. 24	17	0447.3				
205	Backlundfjellet	43.4	18 12.0	1900 Sep. 3	17	0836.6				
209	»	»	»	1901 Aug. 17	1410	0846.5				
207	Sonklarbreen	43	20 38	Jul. 24	1225	0502.9				
208	»	42.7	20 20	»	21	0553.6				
159	Svenskøya	41.4	26 57.8	1898 Aug. 5	1140	0102.1	1250	8039	1140	8780
202	Lomonosovfonna	40	(18 00)	1900 Jul. 26, 27	ca. 19	0857.0				
114	Nordfj. (Kapp Smith)	39	15 15	1873 Jul. 31			17	8024		9098
230	On board	38	08 42	1914 Aug. 2			1425	8038	1425	8740
108	Skansbukta	31	16 03	1873 Jul. 21, 22	23	1356	2330	8023	23	9094
166	»	»	»	1898 Jun. 25	23	1054.6			23	8730
263	Mistakodden	29	20 11	1927 Aug. 17		0321				
95	Saurberget	»	15 25	1872 Jul. 29			18	8024	19	9070
96	Kapp Thordsen	28.4	15 42	»			11	8001		

No.	Place	Lat N	Long E	Date	L.T.	Obs. D	L.T.	I	L.T.	H
109	»	»	»	1873 Jul. 22		1242.2		8025.1	15	9212
118	»	»	»	1882 Aug./83 Aug.		1040.8	1300	8032.4		8857 <sup>1)</sup>
199	»	»	»	1899 Sep. 5	ca. 15	0554.6	2000	8114.3	1345	8854
271	»	»	»	1933 Aug. 19		0818			1620	8183
215	Von Postbreen	27.2	18 03	1910 Aug. 14, 15	ca. 18	0810.8				
216	»	26.5	(1755?)	16	»	1455				
19	On board	22	09 08	1773 Jul. 2	1730	1230		8045		
110	Bohemanneset	»	14 46	1873 Jul. 24	div.	1211		8003	11	9339
212	Forlandssletta	21	11 58.5	1910 Jun. 30, Jul. 16				8028.4	1430	8810
178	Anderssonoyane	20	20 43	1898 Sep. 3		0426				8350
262	Mohnbukta	17	18 55	1927 Aug. 16	0830	2633.8				
158	On the ice	15.6	03 10.4	1898 Jul. 30	0830	0634.0				
268	Adventfj., Adventpynten	14.8	15 34.0	1931 Jun. 29	1710	0612.6				
»	»	»	»	30	0935					
75	Adventfj., Hotellneset	14.6	15 33	1861 Aug./Sep.			17	7953		
79	»	»	»	1868 Aug. 8	1147	1422.5		8007.4	19	9208
97	Adventfj.	»	»	1872 Jul. 28, Aug. 1			21	8013		9272
165	»	»	»	1898 Jun. 24	16	1110.9	16	8021.8	16	9060
198	»	»	»	1899 Sep. 5	0930	1021.0	0800	8030.6	0845	8918
8	Trygghamna	14	»	1613 Jun. 7		1521				
76	»	»	13 49	1864 Jul. 9			23	7951		
157	»	»	»	1898 Jul. 23	2245	1200.1	2400	8027	2245	8915
242	Adventfj., (Longyearbyen)	13	15 40	1921 Jul. 12	1115	0802.9				
236	On board	12	06 55	1914 Aug. 6			1925	8043	1925	8740
18	»	08	/09 18/	1773 Jun. 30			1230	7930		
111	Colesbukta	07	15 02	1873 Jul. 26			11	8003	11	9540
229	On board	06	09 11	1914 Aug. 2	0655	1428				
112	Heerodden	»	14 12	1873 Jul. 27						
177	Kapp Lee	05	20 50	1898 Aug. 28	17	0456.5	18	8026.6	18	9310
259	»	»	»	1927 Aug. 21		0249			17	7110
273	Kapp Linné	03.8	13 39,3	1933 Jul. 12	1445	0738.8			Aug. 14, 18	8420
6	Gronfj.	03	»	1610 Jul. 1		17				
78	Gronfj., W-side	»	14 05	1868 Aug. 1	0943	1614.1	13	8013.0	14	9346
98	»	»	»	1872 Aug. 2, 4	13	1543	16	8013	12	9287
106	»	»	»	1873 Jul. 12, 20	10	1522	23	8005	10	9255
243	Gronfj., Finneset	02.2	14 14	1921 Jul. 28	1720	0826.9				
17	On board	02	07 50	1773 Jun. 29	2030	1138	1430	8026		

<sup>1)</sup>: 53031

No.	Place	Lat N	Long E	Date	L.T.	Obs. D	L.T.	I	L.T.	H
261	Agardhbukta	»	18 41	1927 Aug. 16	ca. 12	0424	0845	8022.0	1045	8460
179	Grønfj.	00.8	14 20	1899 Jun. 29		1042.7		8059.7		9070
270	Sveagruva	77 54	16 45	1932 Sep./33 Aug.		0453.7		8107		8328
16	On board	48	/08 00/	1773 Jun. 28			1230			
9	Bellsund	40		1613 Aug. 3		1311				
155	Van Keulenfj. (inner)	31.3	15 38	1898 Jul. 8, 10	1215	0945.7	0045	8008	1215	9160
56	Recherchefj.	30	14 33	1838 Jul. 29	13	2048	Jul. 26, 27	7945.6	1/1-40	9600 (calc)
115	»	»	»	1873 Aug. 1	24		15	7951	13	9466
164	»	»	»	1898 Jun. 20, 21		1232.7		8017.5	02	9140
260	Kvalvågen	»	18 00	1927 Aug. 15		0444				8660
119	Recherchefj. (Reinhl)	29.3	(14 33)	1895	1140	1109.1	1300	8006	1130	9260
156	»	»	»	1898 Jul. 12		0109				8710
258	Tjuvfj. (Duvefj.)	29	21 56	1927 Aug. 12, 13				7959	1123	9400
55	Kvalpynten	28	21 22	1827 Sep. 11		0240				
257	Kvalpynten, Keilhaubukta	»	»	1927 Jul. 31	1730	1201				
228	On board	17	12 13	1914 Aug. 7						
237	»	11	04 53							
227	»	05	12 45							
201	Hedgehogfjellet (summit)	76 57.9	17 16	1900 Jun. 24	0820	0738.4	1020	8001	1020	9240
200	Hornsund	56.3	15 53	1899 Sep. 6	ca. 18	0950.3	1550	8001	1555	9260
4	Hornsund, off	76 55		1610 May 16		16	1820	7954.6	1700	9424
7	»	»	»	1613 Jun. 14		1214				
238	On board	53	04 01	1914 Aug. 8	0710	1832				
54	Sorkapp	35	16 34	1827 Sep. 3						
94	»	»	»	1872 Jul. 25			19	7950	1300	9660
116	On board	27	1700-10	1878 Aug. 5				7931	19	9717
117	»	»	00 56 W	19	22	1124				
275	Hopen	30.1	25 04.1	1947 Jul. 21-24	11	2554				
239	On board	15	02 48	1914 Aug. 8		0423.7E	1455	7943	1500	9530
226	»	10	15 15		05	0837				
225	»	75 28	16 02	Jul. 31			1440	7907	1440	10050
224	»	07	16	»	0905	0746				
223	»	74 32	53	30						
240	»	31	00 15 W	Aug. 9			1500	7832	1500	10490
14	»	30	/09 18/	1773 Jun. 26			1435	7857	1430	10140
276	Bjørnøya, Herwighamna	30.6	19 00.9	1951 Jan./Dec.		0130.3E	1430	7922		9211 <sup>1)</sup>

1): 518 788



No.	Place	Lat N	Long E	Date	L.T.	Obs. D	L.T.	I	L.T.	H
277	Bjørnøya, Herwithamna	30,6	19 00,9	1952 Jan./Dec.		0141.0E				9201 <sup>1)</sup>
278	»	»	»	1953 »		0150.0E				9190 <sup>2)</sup>
1	Bjørnøya	30	19 00	1596 Jun. 9				7854	0820	10130
53	Bjørnøya, (Nordhamna)	»	19 00	1827 Aug. 21						
241	Bjørnøya, Tunheim	29	19 13.5	1921 Jun. 28						
245	»	»	»	1923 Aug./Sep.						
265	»	»	»	1931 Jun. 1			1135			
272	»	»	»	1932 Oct./—33 Aug.			1525	7930.5		9498
266	Bjørnøya, Teltvika	28,6	18 46.8	1931 Jun. 15			1820			
222	On board	28	16 44	1914 Jul. 30			0250			
267	Bjørnøya, Ellahytta	23.1	18 59.8	1931 Jun. 16			1125			
154	Bjørnøya, Kvalrossbukta	23	19 11	1898 Jun. 18			1730	2000	1730	10405
269	Bjørnøya, Sørhamna	22,6	»	1932 Jun. 22			0920			
77	»	22	»	1868 Jul. 25 ,27			0946	7936.2	15	10539
15	On board	20	09 43	1773 Jun. 27			0730			
3	Bjørnøya, W of (ship)	15	»	1610 May 8						
13	On board	10	08 36	1773 Jun. 25			1530			
221	»	73 56	16 04	1914 Jul. 29				7830	1450	10450
12	»	55	07 15	1773 Jun. 25			0730			
220	»	44	16 01	1914 Jul. 28			2250			
218	»	29	02	27			0700			
219	»	28	04	28				7811	1505	10740
11	»	22	/03 53/	1773 Jun. 24				8003		
217	»	72 26	20 20	1914 Jul. 26			1510	7755	1510	11040

1): 51900

2): 51950

### Description of stations.

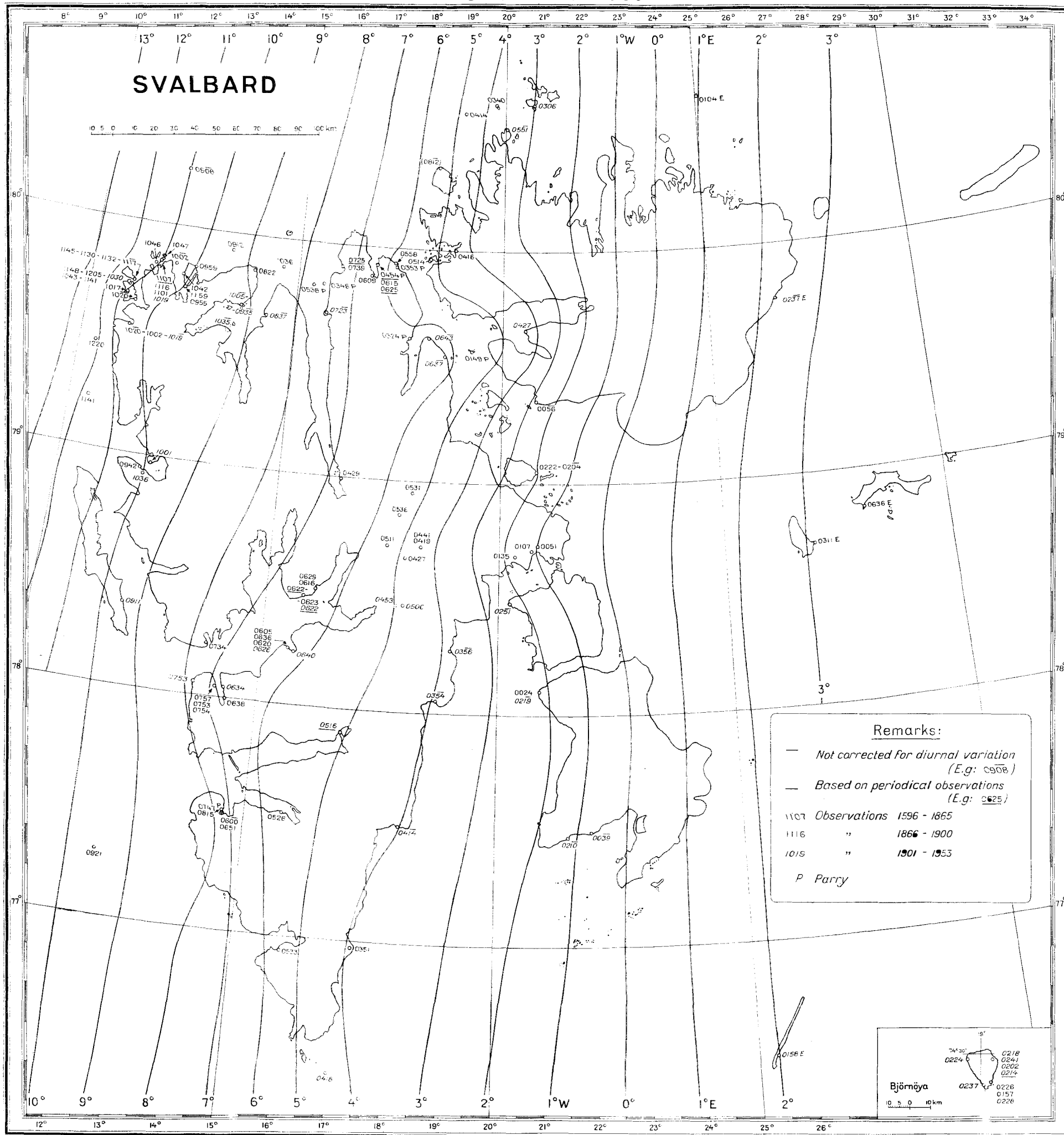
(From sources, partly abridged.)

- 21 (*Fuglesangen*). — — — a small, flat island almost in the centre of those islands which form the many good roads here (this must be *Cummingøya*).
- 31 *Norskøya, Indre- (Sabineodden)*. — Observatory on quartz rock.
- 52 *Heclahamna*. — Observatory at flagstaff, about midway between *Heclahamna* and the lagoon on the NE-side of *Crozierpynten*.
- 56 *Bellsund (Rech.fjorden)*. — About 40 m from shore, near the ruins of the Russian huts.
- 59 *Sorgfj., Eoluskorset*. — 7. June: On western shore near the cross. 27. June: Some hundred meters to the south of the latter.
- 60 *Heclahamna*. — Parry's Flagstaff.
- 63 *Lågøya, N.-pt.* — The shore of an inlet on the NE-point of the island.
- 64 *Lovénberget*. — The moraine south of the mountain.
- 65 *Lomfj.* — The northern shore of the SW-bending bay, about 900 m from the head of the fjord and the large glacier.
- 67 *Norskøya, Sabineodden*. — Sabine's station.
- 68 *Kobbefj.* — Same station as *Chydenius* (No. 58, no description).
- 69 *Sorgfj., W.-side*. — The station was far into the bay to avoid influence from the *Hyperite* at *Eoluskorset*.
- 71 *Norskøya, Sabineodden*. — Sabine's station.
- 72 *Magdalcnefj.* — Northern shore (?).
- 73 *Kongsfj.* — *Kolhamna* (?).
- 78 *Grønffj. (W.-side)*. — Western bank of the estuary.
- 79 *Adventfj. (Hotellneset)*. — Near Russian hut.
- 83 *Lomfjorden, shore*. — Near anchoring place, some distance south of the glacier.
- 94 *Sørkapp*. — Low ground near the shore.
- 95 *Saurieberget*. — "Reindeer valley", on the bank of the river.
- 96 *K. Thordsen*. — Near the houses close to the upper precipice near the landing place.
- 97 *Adventfj. (Hotellneset)*. — A: S-side of *Hotellneset*, above the Russian hut. B: At the Russian hut.
- 98 *Grønffj., W.-side*. — On the left bank of *Lakseelva* (Salmon river).
- 99 *Norskøya, I., Sabineodden*. — Sabine's observatory marked with a ring of stones.
- 100 *Raudfj., W.-side*. — Western shore, just south of the centre glacier.
- 101 *Raudfj., E.-side*. — Southern beach of the prominent point on the eastern shore (*Bruceneset*).
- 102 *Raudfj., E.-side*. — Just at the estuary on the eastern shore.
- 103 *Fuglefj.* — In the middle of a little islet, west of the large island (*Fugløya*).
- 104 *Polhem*. — A: Shed for bags of moss, just between the mansion and the astronomical observatory on the point.  
B: Snow hut in a fissure, 60 steps to the NE of the mansion.  
C: At the further end of the bay. (A-, B-, C for inclination, A-B for horizontal intensity, B for declination. Variometer-measurings 20 m to the east of the mansion.)
- 105 *Norskøya, ytre*. — Southern shore, at the old oil cookery.
- 106 *Grønffj., W.-side*. — See No. 98.
- 107 *Amsterdamøya (Smecrenb. o.)*. — Northern shore of *Danskegattet*, between the shore and the lagoon just east of the little brook.
- 108 *Skansbukta*. — Western shore, on the northern bank of the brook. *Hyperite* layers on the top of the surrounding mountains.
- 109 *K. Thordsen*. — See No. 96.
- 110 *Bohemanneset*. — Southern shore, the nearest brook east of the large coalbeds.
- 112 *K. Heer*. — The top.

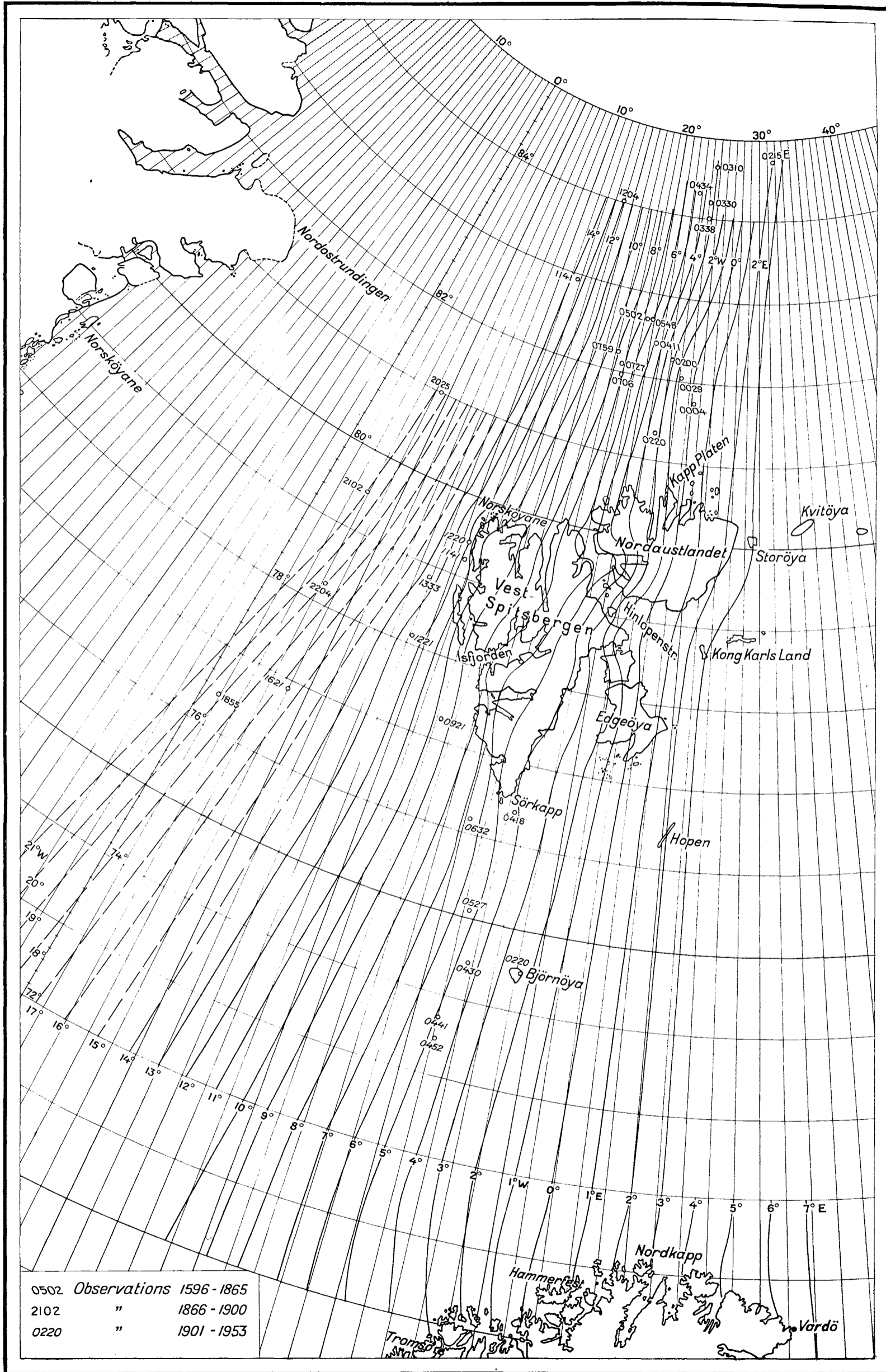
- 113 *Nordfj.* — Eastern shore, 5 nautical miles from the bottom of the fjord.
- 114 *Nordfj. (K. Smith).* — (Called Cape Polhem). The corner to the north between K. Smith and the mainland.
- 115 *Bellsund (Rech.fj.).* — Beside a pole, driven into the ground, horizontally cut and covered with stones, 2—300 feet north of the Russian hut ruins.
- 118 *K. Thordsen.* — 100 m from the mansion toward the sea.
- 154 *Bjørnøya, Kvalrossbukta.* — Some meters to the north of the mouth of Kvalross-elva; sand on Hecla formation.
- 155 *VanKeulenfj.* — West of Langneset, between the most eastern lagoon and the brook from Penckbreen. On sand — likely over jurassic and tertiary layered rocks.
- 156 *Recherchefj. (Reinholmen).* — On the same spot as the English Training Squadron (No. 117 — no description). Heclahuk formation.
- 157 *Trygghamna.* — Western shore, on the point between the two glaciers. Heclahuk formation..
- 158 *On the ice.* — On the Svenskdjupet.
- 159 *Svenskøya.* — On the extreme point of K. Weissenfels. Deep sand layer probably covering basalt.
- 160 *Kongsøya.* — K. Altmann, 1850 m from the extreme point; basalt material.
- 161 *Karl XII øyane.* — Southern part. On gneiss and amphibiotic stone.
- 162 *Heclahamna.* — Beside Parry's signal at Crozierpynten. Heclahuk formation.
- 163 *Virgohamna.* — At Ekholm's station.
- 164 *Recherchefj.* — At eastern (—!, must be western) shore of the fjord, on the ruins of an old Russian house 10 m north of a black cliff with this inscription: "H. M. S. VOLAGE August 1895 Britisher". — Bravais in 1838 and M. Wijkander in 1873 carried out their astronomical observations at the Russian cross, now destroyed, some hundred meters to the north.
- 165 *Adventfj., (Hotellneset).* — At the tourist hotel, about 1 m in front of the wooden doorstep on the NE-side.
- 166 *Skansbukta.* — Western shore of the bay opposite southern end of Skansen, about 100 m north of the brook.
- 167 *Danskøya.* — Near western wall of Andrée's balloon-house.
- 168 *Heclahamna.* — 1. July: On the southern, sandy shore of Crozierpynten, 2—300 m from the head of the little bay. 21. July: Some steps north of the stony hill with Parry's flagstaff and 20 steps from the northern shore of Crozierpynten.
- 169 *Russøya, Store.* — Eastern shore, on the northern bank of the outlet of the lagoon.
- 170 *Celsiusberget.* — About 700 m south of the promontory surrounding the inner bay.
- 171 *K. Fanshawe.* — On the moraine in front of the glacier which borders the mountain on the south.
- 172 *Lomfjorden.* — The extreme point of the level shore, in about the middle of the eastern (western?) shore of the inlet.
- 173 *Lovénberget.* — 2—300 m south of the northern border of the glacier extending on the south side of the mountain (?) Large blocks of diabase surround the station.
- 174 *Wahlbergøya.* — Near the southern point, at the head of an inlet.
- 175 *Wilhelmøya (Thumb Pt.).* — On the level shore terminating the plain ground south of the mountain, near a little brook.
- 176 *Wijdefj. (Austfj.).* — About 5 naut. miles from the head of the fjord, in the "Reindeer valley", about 500 m north of the mouth of a large river, 2—300 m south of a promontory, consisting of greenish-gray diabase like layers.
- 177 *K. Lec.* — Northern side of the promontory, extending from the west side of the mountain. A diabase-layer runs 200 steps west of the station.
- 178 *Anderssonøyane.* — On the shore opposite the islands, some hundred meters south of the large river coming from the glacier..
- 180 *Virgohamna (Ekholmpt.).* — 15 steps south of the iron-mark in the rock.

- 181 *Magdalenefj. (Gravneset)*. — 87,7 m by  $056^{\circ},6$  from the cairn of stones.  
182 *Klovningen*. — East coast, not far from the southern point.  
183 *Amsterdamøya* (Smeerenb. o.). — 1560 m by about  $039^{\circ}$  from Likholmen.  
184 *Biskayerhukkn.* — On the narrow, low part.  
185 *Danskeneset*. — On the point toward Sjørgatt (not the point with the beacon).  
186 *Velkomstpynten*. — At an old signal.  
188 *Wijdefj. W-side*. — Creek on the west side, right bank of a little brook.  
191 *Wijdefj., E-side*. — The inner fjord, in an eastward indentation.  
192 *Norskøya, Sabineodden*. — About 100 steps north of Sabine's observatory.  
196 *Mosselbukta*. — See No. 104, A.  
197 *Norskøya, Sabineodden*. — 315 steps by  $075^{\circ}$  from Sabine's observatory.  
198 *Adventfj.* — 35 steps northeastward from the SE-corner of the tourist hotel (now demolished).  
199 *K. Thordsen*. — See No. 116.  
200 *Hornsund*. — The Russian wintering station (Konstantinovka).  
245 *Bjørnøya, Tunheim*. — Near mess-building and the "C"-mine.  
264 *Ny-London, Kongsfj.* — 110 and 160 m north of astronomical station (cement block).  
270 *Sveagrava*. — Innermost part of the bay between the quay and Barryneset, about 40 m from the shore.  
271 *K. Thordsen*. — See No. 118.  
272 *Bjørnøya, Tunheim*. — Upon the outskirts of the settlement, about 200 m from the coast. (On layers of Devon sand stone.)  
275 *Høpen*. — Over the bolt, about 20 m west of the astronomical station, which is (was) 90 m south of the radio station.

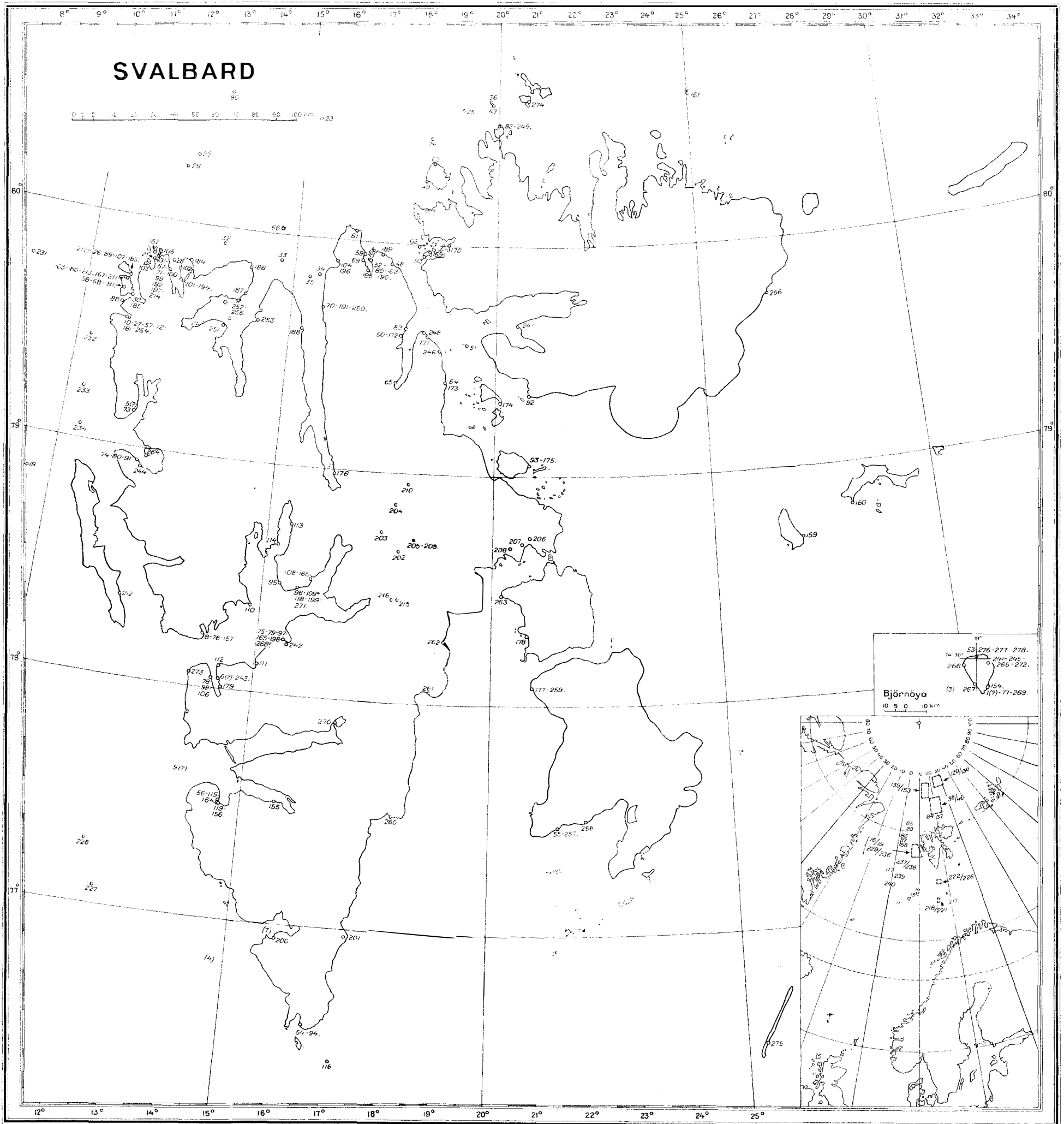
# DECLINATION 1930



# DECLINATION 1930



# STATIONS OF MAGNETIC OBSERVATIONS



- Nr. 78. ORVIN, ANDERS K., *Outline of the Geological History of Spitsbergen*. 1940. Kr. 7,00.  
 „ 79. LYNGE, B., *Et bidrag til Spitsbergens lavflora*. 1940. Kr. 1.50.  
 „ 80. *The Place-Names of Svalbard*. 1942. Kr. 50,00.  
 „ 81. LYNGE, B., *Lichens from North East Greenland*. 1940. Kr. 14,00.

*Norges Svalbard- og Ishavs-undersøkelser. Skrifter.*

- „ 82. NILSSON, TAGE, *The Downtonian and Devonian Vertebrates of Spitsbergen. VII. Order Antiarchi*. 1941. Kr. 11,50.  
 „ 83. HØEG, OVE ARBO, *The Downt. and Devonian Flora of Spitsbergen*. 1942. Kr. 33,00.  
 „ 84. FREBOLD, HANS, *Über die Productiden des Brachiopodenkalkes*. 1942. Kr. 6,00.  
 „ 85. FØYN, SVEN and ANATOL HEINTZ, *The Downtonian and Devonian Vertebrates of Spitsbergen. VIII*. 1943. Kr. 5,00.  
 „ 86. *The Survey of Bjørnøya (Bear Island) 1922—1931*. 1944. Kr. 9,00.  
 „ 87. HADAČ, EMIL, *Die Gefäßpflanzen des „Sassengebietes“ Vestspitsbergen*. 1944. Kr. 6,00.  
 „ 88. *Report on the Activities of Norges Svalbard- og Ishavs-undersøkelser 1936—1944*. 1945. Kr. 6,50.  
 „ 89. ORVIN, ANDERS K., *Bibliography of Literature about the Geology, Physical Geography, Useful Minerals, and Mining of Svalbard*. 1947. Kr. 12,00.

*Norsk Polarinstitut. Skrifter.*

- „ 90. HENIE, HANS, *Astronomical Observations on Hopen*. 1948. Kr. 3,00.  
 „ 91. RODAHL, KÅRE, *Vitamin Sources in Arctic Regions*. 1949. Kr. 6,00.  
 „ 92. RODAHL, KÅRE, *The Toxic Effect of Polar Bear Liver*. 1949. Kr. 12,50.  
 „ 93. HAGEN, ASBJØRN, *Notes on Arctic Fungi. I. Fungi from Jan Mayen. II. Fungi collected by Dr. P. F. Scholander on the Swedish-Norwegian Arctic Expedition 1931*. 1950. Kr. 2,00.  
 „ 94. FEYLING-HANSSSEN, ROLF W. and FINN A. JØRSTAD, *Quaternary Fossils*. 1950. Kr. 8,25.  
 „ 95. RODAHL, KÅRE, *Hypervitaminosis A*. 1950. Kr. 22,50.  
 „ 96. BUTLER J. R., *Geochemical Affinities of some Coals from Svalbard*. 1953. Kr. 3,00.  
 „ 97. WÅNGSJÖ, GUSTAV, *The Downtonian and Devonian Vertebrates of Spitsbergen. Part IX. Morphologic and Systematic Studies of the Spitsbergen Cephalaspids*. A. Text, and B. Plates. 1952. Kr. 75,00.  
 „ 98. FEYLING-HANSSSEN, ROLF W., *The Barnacle Balanus Balanoides (Linné, 1766) in Spitsbergen*. 1953. Kr. 8,00.  
 „ 99. RODAHL, KÅRE, *Eskimo Metabolism*. 1954. Kr. 10,00.  
 „ 100. PADGET, PETER, *Notes on some Corals from Late Paleozoic Rocks of Inner Isfjorden, Spitsbergen*. 1954. Kr. 1,00.  
 „ 101. MATHISEN, TRYGVE, *Svalbard in International Politics 1871—1925*. 1954. Kr. 18,00.  
 „ 102. RODAHL, KÅRE, *Studies on the Blood and Blood Pressure in the Eskimo and the Significance of Ketosis under Arctic Conditions*. 1954. Kr. 10,00.  
 „ 103. LØVENSKIOLD, H. L., *Studies on the Avifauna of Spitsbergen*. 1954. Kr. 16,00.  
 „ 104. HORNBEK, HELGE, *Tidal Observations in the Arctic 1946—52*. Kr. 2,50.  
 „ 105. ABS, OTTO und HANS WALTER SCHMIDT, *Die arktische Trichinose und ihr Verbreitungsweg*. 1954. Kr. 4,00.  
 „ 106. MAJOR, HARALD and THORE S. WINSNES, *Cambrian and Ordovician Fossils from Sørkapp Land, Spitsbergen*. 1955. Kr. 4,00.  
 „ 107. FEYLING-HANSSSEN, ROLF W., *Stratigraphy of the Marine Late-Pleistocene of Billefjorden, Vestspitsbergen*. 1955. Kr. 22,00.  
 „ 108. FEYLING-HANSSSEN, ROLF W., *Late-Pleistocene Deposits at Kapp Wijk, Vestspitsbergen*. 1955. Kr. 3,00.  
 „ 109. J. J. DONNER and R. G. WEST, *The Quaternary Geology of Brageneset, Nordaustlandet, Spitsbergen*. 1957. Kr. 5,00.  
 „ 110. KAARE Z. LUNDQUIST, *Magnetic Observations in Svalbard 1596—1953*. 1957. Kr. 6,00.  
 „ 111. H. U. SVERDRUP, *The Stress of the Wind on the Ice of the Polar Sea*. 1957. Kr. 2,00



## MAPS AND CHARTS

The following topographical maps and charts have been published separately:

### Maps:

- Bjørnøya. 1:25 000. 1925. New edition 1944. Kr. 3,00.  
Bjørnøya. 1:10 000. [In six sheets.] 1925. Kr. 30,00.  
Adventfjorden—Braganzavågen. 1:100 000. 1941. Kr. 2,00.  
Svalbard. 1:2 000 000. 1937. New edition 1944. Kr. 1,00.  
Topografisk kart over Svalbard. Blad C 13. Sørkapp. 1:100 000. 1947. Kr. 3,00.  
Topografisk kart over Svalbard. Blad B 10. Van Mijenfjorden. 1:100 000. 1948. Kr. 3,00.  
Topografisk kart over Svalbard. Blad C 9. Adventdalen. 1:100 000. 1950. Kr. 3,00.  
Topografisk kart over Svalbard. Blad B 11. Van Keulenfjorden. 1:100 000. 1952. Kr. 3,00.  
Topografisk kart over Svalbard. Blad B 12. Torellbreen. 1:100 000. 1953. Kr. 3,00.  
Austgrønland. Eirik Raudes Land frå Sofiasund til Youngsund. 1:200 000. 1932. Kr. 2,00.

Preliminary topographical maps [1:50 000] covering claims to land in Svalbard and a preliminary map of Hopen 1:100 000 may be obtained separately.

In addition, Norsk Polarinstittutt has prepared a wall map: Norden og Norskehavet, in 4 sheets. This map is to be obtained through H. Aschehoug & Co. (W. Nygaard), Oslo, at a price of kr. 27,80.

### Charts

- No. 501. Bjørnøya. 1:40 000. 1932. Kr. 4,00.  
” 502. Bjørnøyfarvatnet. 1:350 000. 1937. Kr. 4,00.  
” 503. Frå Bellsund til Forlandsrevet med Isfjorden. 1:200 000. 1932. Kr. 5,00.  
” 504. Frå Sørkapp til Bellsund. 1:200 000. 1938. Kr. 5,00.  
” 505. Norge—Svalbard, nordre blad. 1:750 000. 1933. Kr. 4,00.  
” 506. Norge—Svalbard, søre blad. 1:750 000. 1933. Kr. 4,00.  
” 507. NordSvalbard. 1:600 000. 1934. Kr. 4,00.  
” 508. Kongsfjorden og Krossfjorden. 1:100 000. 1934. Kr. 4,00.  
” 509. Frå Storfjordrenna til Forlandsrevet med Isfjorden. 1:350 000. 1946. Kr. 4,00.  
” 510. Frå Kapp Linné med Isfjorden til Sorgfjorden. 1:350 000. 1946. Kr. 4,00.  
” 511. Austgrønland, frå Liverpoolkysten til Store Koldeweyøya. 1:600 000. 1937. Kr. 4,00.

Prices above do not include purchase tax.