SVERIGES GEOLOGISKA UNDERSÖKNING

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A GENERAL EARTH MAGNETIC INVESTIGATION OF SWEDEN

CARRIED OUT DURING THE PERIOD 1928—1934 BY THE GEOLOGICAL SURVEY OF SWEDEN

PART 1. — DECLINATION

BY

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With 4 Plates

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PREFACE.

In September 1925 the Swedish National Committee of the International Union for Geodesy and Geophysics presented to the Swedish Government a scheme for a detailed magnetic survey of the mainland of Sweden. The initiative to this investigation was taken by the late Prof. *V. Carlheim-Gyllensköld* who, in collaboration with the undersigned, worked out the general plan for it. The Government brought the proposal before the Parliament in a bill 1928, and after that the means had been granted, the Geological Survey of Sweden was entrusted by the Government with the task to carry out this investigation.

The Geological Survey had the great fortune to acquire, as the main leader of these researches, Dr. Phil. Kurt Molin, Örebro, who had, through earlier work within the sphere, documented himself as highly qualified for the task. As assistants under Dr. Molin were engaged a number of scientifically educated men who, having been instructed by Dr. Molin, have assisted in the field works and in the first calculations of the field results.

During the years 1928—1930 it was necessary to establish a magnetic registration station at Näs in Jämtland. This station was managed, as long as required by the field works, by Mrs. Karin Molin.

According to the original program, the field measurements should be carried out during the period 1928—1934 and comprehend 1357 stations with an average distance of about 18 km from each other. As the scheme, in the former part of 1934, was carried through, about 2000 stations had been investigated, accordingly about 50 per cent more than had been calculated from the beginning. Because, during the progress of the work, it had been found highly desirable to complete the investigations with a greater number of stations, especially in the Southern parts of Sweden and in Gotland, Dr. Molin has — immediately after the termination of the field work according to the plan named above — during the later part of the year 1934 carried on investigations at about 350 new stations by means of subventions granted him by two Swedish scientific foundations (the »Hierta-Retzius Stiftelsen» and the »Längmanska kulturfonden»). As it has been possible to make use also of the last mentioned investigations, the present work is based on measurements at 2359 stations.

Owing to practical demands, it has been found appropriate first to prepare and publish the results concerning the declination. As soon as possible there will follow publications dealing with I, H and Z, the secular changes and, as conclusion of the work, a general discussion of the results, *inter alia* from geological points of view.

In presenting this first result of the above investigations, I wish to express the gratitude of the Geological Survey to all who have, in different ways, contributed to the performance of the work.

In the first place I bring my thanks to Dr. Molin who has the whole time in a most exceptional and self-sacrificing way devoted himself to these investigations. It is thanks to indefatigable efforts of Dr. Molin that it has been possible to bring the work to an end with the rather modest means which were at our disposal. I also bring our best thanks to Mrs. Karin Molin who has in so many ways assisted in the work, and especially during the three years 1928—1930 managed the magnetic registration station in Näs. Further, I express our thanks to all the other assistants in the work for their often very painstaking labour.

For the courtesy shown at the comparisons of instruments at the earth-magnetic observatories at Lovö, Rude Skov in Denmark and Sodankylä in Finland, as well as for the great readiness, with which the registrerings were placed at our disposal, from these observatories, as well as from the observatory of Tromsö in Norway, I beg to pronounce our gratitude towards the former and present Chiefs of the Royal Hydrographic Service, Commodore G. Reinius and Commodore E. Bouveng, the Superintendent of the earth-magnetic Department of the Hydrographic Service, Dr. G. Ljungdahl and the Assistant Mag. Phil. S. Åslund, the Director of the Meteorological Institute of Denmark, Prof. D. La Cour, the Director of the Meteorological Institute of Finland, Prof. J. Keränen and the Superintendent of the earth-magnetic observatory in Sodankylä, E. Sucksdorff, as well as towards the Superintendent of the magnetical observatory in Tromsö, Leiv Harang.

I equally express our gratitude towards Prof. M. Siegbahn in Upsala for having allowed us to avail ourselves, at so many opportunities during all these years, of his Institute for our work.

For carrying out the investigation, we were to a large extent depending on the loan of instruments from other institutions. For such loans we are first of all indebted to the Royal Academy of Science which has placed at our disposal the instruments Chasselon, as well as a movable magnet-house. Further, I have to acknowledge with thanks the loan of certain magnetic instruments from the Hydrographic Service of Sweden, from the Meteorological Institute of Finland and from the Navigation School of Stockholm.

Stockholm, in October 1936.

AXEL GAVELIN.

CONTENTS.

Plates:

Introduction.

The earth-magnetic investigations of the mainland of Sweden, carried out by the Geological Survey of Sweden, started in the year of 1928, continued without intermission during seven measure-periods, and were concluded, as to the fieldwork, in 1934.[1] All in all the earth-magnetic elements D, H and I are measured at 2359 observation places — one from 1935 — evenly distributed all over the country. The above-mentioned sum includes 35 observation-stations in Norway, completing our measurements in the boundary region, 8 stations at the limit between Sweden and Finland, belonging to the Finnish earth-magnetic network and 34 out of the 86 repeat-stations in Sweden, measured in the years of 1928—1930 by the Hydrographic Service at Stockholm.

As to the distribution of the different elements, measured at the 2359 observation places, we have:

D	H	I	. . . . .	1862	—	H	— 12
—	H	I	. . . . .	271	—	—	I 119
D	H	—	. . . . .	144	—	—	— Z 14
D	—	I	. . . . .	5	—	—	I Z 9
D	—	—	. . . . .	34	—	H	— Z 10

Thus, the total amounts are as follows:

D:			. . . . .	2045
H:	2289	observed + 9 computed =	. . . . .	2298
I:	2257	observed + 10 computed =	. . . . .	2267
Z:	2133	computed + 14 observed =	. . . . .	2147

This summary involves only 33 out of the amount of Z-determinations, made at the observation places, with Ad. Schmidt's Vertical field balance.

Detailed descriptions of all the field-stations, including sketches, detail-maps, azimuths of the reference marks, sometimes photographs, geological notes and information regarding older measurements are collected in archives.[2] The observation places are chronologically numbered. For special studies of maps and tables a tabular summary is made of the geographical position of all field-stations. Table 1.

The geological notes on every station, generally too detailed to be entirely published here, are reduced to a system of geological determinations.

In order to facilitate a future remeasurement or to make possible a connection of separate measurements later on, the Geological Survey has 293 marked field-stations in Sweden. In general these fixed stations are marked out by a brass bolt, firmly cemented in the rock, in some cases the points are marked by a bore-hole. Further some points of triangulation have been used as fixed stations. In the general index stations with brass bolt, bore-hole and at triangulation-points are marked with b, o and △, respectively.

For the field-measurements 21 expeditions in total have been at work, in which the following measurers have taken part: Fil. Dr. Kurt Molin, Fil. Kand. Sture Werner, Fil. Mag. Folke Tyrén, Fil. Mag. Karl Rothstein, Fil. Lic. V. H. Sanner, Captain Axel Edwards, Fil. Kand. Erland von Hofsten and Fil. Kand. Tryggve Johansson.

The instruments used are: magnetic theodolites: Askania No. 84065, Chasselon No. 83, Bamberg No. 2312, Bamberg No. 12014; Dip circles: Dover No. 60, Dover No. 72, Dover No. 230, Casella No. 2005 and further a Ad. Schmidt's Vertical field balance.

For connection comparisons have been carried out at the earth-magnetic observatories of Lovö, Rude Skov and Sodankylä. In order to compare the magnetometers used, measurements are also made in the Uppsala absolute house and at some fixed points close to the magnetic registration station at Näs which, in the years of 1928, 1929 and 1930, was kept going during the summer months as long as required by the field-measurements.

The reduction to the middle of the year is done by means of the records from the base-observatories of Lovö, Rude Skov, Sodankylä, Tromsö and Näs, and further reduction to the epochs 1929.5 and 1933.5 by aid of the annual means for »all days» from Lovö, Rude Skov, Sodankylä, Pavlovsk and Tromsö. All maps refer to our main-epoch 1933.5.

[1] For details in the planning of this work is referred to: Kurt Molin: Summary report of the earth-magnetic investigations, carried out in the mainland of Sweden. — Geological Survey of Sweden. Stockholm 1930.

[2] Descriptions of points can, at request, be copied and supplied by the Geological Survey of Sweden.

Table 1. Tabular summary of the geographical position of all the stations belonging to the network of the Geological Survey.

Longitude counted from the observatory of Stockholm, 18° 03′.5 E. Gr.

	7°—6° W	6°—5° W	5°—4° W	4°—3° W	3°—2° W	2°—1° W	1°—0°	0°—1° E	1°—2° E	2°—3° E	3°—4° E	4°—5° E	5°—6° E	6°—7° E
69° 30′—69°										1784—1788				
69°—68° 30′										1774 1776—1783 1789—1795 1826—1827	1773 1796—1800			
68° 30′—68°				1728	1727	1740—1741 1746—1747	1355 1725—1726 1748—1750	620—623 1372—1376 1841—1842	624—629 1377 1830—1831 1843—1845	1775 1821—1825 1828—1829 1832—1838	731—732 736—737 1756—1757 1760—1772 1818—1820 1839	733—735 1759 1801—1807 1811—1815 1817	756—758 1808 1810	
68°—67° 30′				1738—1739	1736—1737	1742—1745	1348—1354 1356—1360	1347 1361—1366 1381—1390	631 1367—1370 1378—1380 1391—1394	618—619 630 725—727 1371 1395—1398 1751—1753 1840	724 728—730 738—739 741 1754—1755 1758	740 1816	751—755 759—760 1809	
67° 30′—67°				1729—1730	1731 1733—1735	1301—1307 1732	1308—1311 1325—1327 1342—1343	1321—1324 1334—1341 1344—1346	634 1329—1333	615—617 633 720—721	614 714—719 722—723	742—747 781—782	748—750 761—765 778	
67°—66° 30′						926—927 1276 1287—1300	1279—1286 1312—1318 1850—1852	705 1319—1320 1853—1856	632 635—638 704 706—707 1328	639 703 711—712 1720—1724	612—613 709—710 713	611 708 779—780 783—784	766—771 774—777	
66° 30′—66°			915	888—891	908—914 916—917	907 918—921 925 931—932	372 376—377 922—924 928—930 1274—1275 1277—1278 1849	373—375 1848 1857—1860	397—400	401 640—643 701—702 1719	583—585 699—700 1714—1718	592—597 606 608—610 785	607 772—773 786—790 799—800 802—803	

66°—65° 30′				688—689 691—692 883—887	685—687 690 693 882 892—893 899	894—898 900—902 906	351 903—905 933—936	371 378—384	369 385—392 515 697 1847	393—396 402—405 550 552—553 698 1846	554 560 562 564—573 576—578 580—582 644—645 805 1713	574—575 579 586—591 598—599 604—605	600—603 791 794—798 801 804	792—793
65° 30′—65°				483—484 486—491 493	485 492 494—495 694 876—881	678—684 874—875	193—194 326—327 350 352	348 353—358 370	359 366—368 511—514 516—517 696 2359	518—523 533—539 548—549 551	540—547 555—559 561 563 806			
65°—64° 30′			153 475—477 479	466 472—474 478 480—482	471 496—501 508—509	103 105 188—192 502—505 873	102 104 320—321 349	195 322—324 328—329 336 342—347 695	196 200—201 340—341 360—365 510	202—204 406—411 524—525 528—531	205 412 526—527 532 807			
64° 30′—64°		150 155	151—152 156	460 463 467—470 666	452—454 456—459 461 464—465 507	184—187 225 306—307 506	100—101 308 310—317 319	305 309 318 325 330—332	197—199 206—207 334—335 337—339 429—431	414—417 419—421 423 425—428 432	413			
64°—63° 30′		25—26 31 133 144—147 149 154	143 148 157 656—659	90—91 660—665 672—673	88—89 92 96 183 455 462 676—677	95 97 223—224 280 282—283 285—286	98—99 284 287—295	214—215 297—302 304 443 448 450	208—209 212—213 303 333 434—440 442	210—211 418 422 424 433				
63° 30′—63°		24 27—28 125—132 141	21—23 29—30 32 139—140 142 653—655 668	16—20 38 86 652 667 669—671 674—675 940—941 944—945 1051 2348—2349	87 93 267—272 281	94 178—180 222 273—279	176—177 219—221 808 814 819—825	216—218 296 445—447 449 809—813	441 444 451					

	7°—6° W	6°—5° W	5°—4° W	4°—3° W	3°—2° W	2°—1° W	1°—0°	0°—1° E	1°—2° E	2°—3° E	3°—4° E	4°—5° E	5°—6° E	6°—7° E
63°—62° 30′		2—4 120—124	67 118—119 135—138	1 12—15 33 68—69 116—117 134 158—159 651 937—939 942—943 946 1044—1050 1052—1057 2350—2353	34—37 160 166 182 226 265—266 842 947—950	181 837—841 843—845 851—852	171—175 817—818 826—836 853	815—816						
62° 30′—62°		5—6 56 58—62	7—9 51 63 65—66 110—112 2354	10—11 64 70—72 106 113—115 650 1058—1064	85 161—164 264 649 850	80—84 167—168 846—849 855—858 951—952	169—170 854 859—861							
62°—61° 30′		50 53—55 57	41 48—49 52 1099 1101—1102	73 75 107—109 260 1065—1071 1073	74 76—77 165 261—263 648 961 2319 2322	78—79 866—870 953—954 1158 1160 2301—2311	862—865 1159 1161—1162							
61° 30′—61°		1197	39—40 42—47 1094 1096—1098 1100	258—259 966 1072 1074—1083 2326—2327 2355	256—257 958—960 962—965 2317—2318 2320—2321 2323—2325	646—647 871—872 955—957 1150—1157 2299 2312—2316 2346	1163—1166 2296—2298 2300							

61°—60° 30′		1194—1196 1198—1199	1088—1093 1095 1103 1192—1193 2188 2329 2357	1084—1087 1104—1105 1109 1114—1116 1118 1120—1122 2328 2330—2333 2356	254—255 1110—1113 1117 1119 1123—1131 1146—1147 2171 2174—2175 2334—2341 2344	1019—1022 1024—1027 1132—1145 1148—1149 2261 2292 2342—2343 2345 2347	1023 1167—1169 2291 2293—2295							
60° 30′—60°		1200—1203 1225	1188—1191 1204 2187 2189—2191	967—970 989—991 993—996 1106—1108 2153—2154 2179—2186	250—253 992 997—1007 1016 1041 1170 2155—2156 2161—2166 2169—2170 2172—2173 2176—2178	1008—1015 1017—1018 1028—1031 1033 2167—2168 2257—2260 2262	2263—2265 2280 2285—2289	2277 2281—2283 2290						
60°—59° 30′	1228 1230—1231	1206—1214 1222—1224 1226—1227 1229 1232	1179 1184—1187 1205	971—975 980—985 988 1178 2144—2145 2151—2152 2192—2197	249 986—987 1039 1042—1043 2137 2146—2150 2157—2160	1032 1034—1038 1040 1985—1986 1991 2242—2246 2249—2256	1171 1988—1990 2106 2238—2241 2247—2248 2267—2269 2271—2272	2273—2276 2278—2279 2284						
59° 30′—59°	1233 1245 1264	1215 1217 1219—1221 1234—1236	1180—1183 1216	228—231 976—979 1173—1177 2114—2117 2119—2120 2141 2198—2204	227 232—248 1868 1984 1992—1995 2093—2094 2118 2122—2125 2138—2140 2142—2143 2205	1865—1867 2089—2090 2092 2126—2128 2130—2136	1862—1864 1987 2086—2087 2129 2266 2358	1861 2270						

	7°—6° W	6°—5° W	5°—4° W	4°—3° W	3°—2° W	2°—1° W	1°—0°	0°—1° E	1°—2° E	2°—3° E	3°—4° E	4°—5° E	5°—6° E	6°—7° E
59°—58° 30′	1244 1246—1249 1258—1263 1265	1237—1243 1250—1251 1254	1218 1401 1403—1405 1407 1435—1439	1172 1399—1400 1402 1408—1414 1871 1981—1983 2097—2098 2104—2105 2107—2113 2121	1869—1870 1996—1998 2001—2003 2068—2074 2095—2096 2103	2066—2067 2075—2079 2088 2091	2080—2085							
58° 30′—58°	1252 1257 1266—1271	1253 1255—1256 1440—1455	1406 1416—1418 1429—1434	1415 1872—1874 1975—1980 2005 2007—2008 2010 2012—2013 2015 2017 2099 2100—2102	1999—2000 2004 2006 2009 2011 2038—2044 2048 2060 2062	2045—2046 2055—2059 2061 2063—2065								
58°—57° 30′	1272 1476	1273 1456—1463 1465 1711—1712	1419 1423—1426 1428 1466—1468 1471 1474	1420—1422 1427 1469 1875 1961—1974 2014 2016	2018—2026 2034—2037	2031—2033 2047 2049—2054		2211 2220—2232 2237						
57° 30′—57°		1464 1477—1483 1506	1472—1473 1475 1484—1489 1505 1710	1470 1490—1495 1876—1878 1960	1919—1922 1955—1959 2027	1925—1926 1942—1948 1952—1954 2028—2030		2206—2210 2212—2219 2233—2234 2236						
57°—56° 30′		1504 1507—1509 1511—1512 1514	1497—1503 1510 1513 1518 1520—1522	1496 1523—1524 1879—1883 1897—1899	1893—1896 1911 1916—1918 1923	1912 1914—1915 1924 1927—1930 1935—1941 1949—1951		2235						

56° 30′—56°		1515—1516 1535—1569 1580	1517 1519 1525—1534 1581 1687—1688	1692—1700 1885—1887 1900—1904	1701—1709 1884 1888—1892 1905—1908 1910	1909 1913 1931—1934								
56°—55° 30′		1570—1579 1600—1601 1628—1629	1582—1599 1602—1627 1653—1654 1669 1671—1681 1683—1686 1689	1666—1668 1670 1682 1690—1691										
55° 30′—55°		1631—1635	1630 1636—1652 1655—1658 1660—1661	1659 1662—1665										

Summary of the geological determinations.

The geological and petrographical determinations of the bedrock of the field-stations are worked out by Dr. Alvar Högbom and Dr. N. H. Magnusson. The grouping of the determinations of the rocks to the following system is made by Fil. Lic. Sven Gavelin.

A. Sedimentary rocks (sandstones, shales, alum-shales, limestones, mostly belonging to Cambrian and Post-Cambrian formations) . . . . . s
B. Cambro-Silurian sediments of the Caledonian mountain range, more or less metamorphosed (shales, phyllites, mica-schists, mica-gneisses, quartzites etc.) . . . . . f
C. Leptites, hälleflinta, porphyries L
D. Homogeneous archaean granites, syenites and gneisses. (Among types not particularly defined, the groups of granite and gneiss in general, some inhomogeneous types may appear) . . . . . g
E. Mixed rocks: archaean rocks and sediments with dikes or layers of diabase and greenstone, inhomogeneous gneisses and leptitic rocks, boundary areas between different rocks . . . . . m
F. Archaean schists and slates . . . . . st
G. Basic eruptives: Gabbro, diorite, porphyrite, greenstone in general . . . . . d
H. Diabases and hyperites . . . . . D

I. Granites.

1. a. *Granite in general.*
2. b. *Migmatite granite.*
3. c. *Mylonite granite and granitbreccia.*
4. d. *Oldest archaean granite and gneissgranite in general.*
5. *α*) Grey and basic granite.
6. *β*) Granite in the neighbourhood of, or in contact with leptites, porphyries or schists and phyllites.
7. *γ*) Granite in the neighbourhood of gabbro or greenstone in general.
   e. *Younger archaean granites.*
8. Stockholm, Örebro and Fellingsbro granites.
9. Revsund granites (mostly course porphyritic grey granite).
10. *α*) Granite in the neighbourhood of or in contact with greenstone.
11. *β*) Granite in the neighbourhood of or in contact with leptite, phyllite or migmatite.
12. *γ*) Granite with diabase.
13. Muscovite granite.
14. Småland and Filipstad granite in general.
15. *α*) Basic granite.
16. *β*) Granite with greenstone in general.
17. *γ*) Granite with porphyry or leptite.
18. Lina granite.
19. Bohus granite.
20. f. *Youngest archaean granites. Dala, Järna, Rätan and Sorsele granites.*
21. g. *Rapakivi granites.*
22. h. *Caledonian granites.*

II. Syenites.

23. a. *Archaean syenite in general.*
24. *α*) Syenite with gabbro.
25. *β*) Syenite with leptite.
26. b. *Caledonian syenites.*

III. Greenstones and associated basic eruptives.

27. a. *Greenstone in general (Amphibolites etc.).*
28. b. *Caledonian greenstones (Amphibolites, diorite schists etc.).*
29. c. *»Effusive greenstones».*
30. d. *Diorite and gabbro.*
31. e. *Hyperite.*
32. f. *Diabase.*

IV. Porphyries and porphyrites.

33. a. *Porphyries in general.*
34. *α)* Porphyries with iron ore.
35. *β)* Porphyries with diabase.
36. b. *Porphyrites.*

V. Gneisses (mostly of igneous origin, partly supercrustal rocks, highly metamorphosed and intruded by granites).

37. a. *Archaean gneiss in general.*
38. *α)* Grey gneiss.
39. *β)* Red gneiss.
    b. *Archaean granite gneiss.*
40. *α)* Granite gneiss, frequently red.
41. *β)* Granite gneiss, grey.
42. c. *Archaean migmatite, veined gneiss.*
43. d. *Archaean graphite gneiss.*
44. e. *Archaean gneiss, garnetbearing.*
45. f. *Archaean gneiss with greenstone in general.*
46. g. *Archaean gneiss with hyperite.*
47. h. *Archaean gneiss with diabase.*
48. i. *Caledonian porphyritic gneiss.*

VI. Leptites and hälleflinta (Archaean leptite formation).

49. Leptite and hälleflinta in general.
50. Leptite with limestone.
51. » » slates.
52. » » iron ore.
53. » » sulphide ore.
54. » » pegmatite.
55. » » greenstone in general.
56. » » diabase.

VII. Pre-Cambrian sediments (schists, slates, shales, graywackes, quartzites, sandstones).

    a. *Schists, slates and graywackes belonging to the leptite formation.*
57. *α)* Black, frequently graphite- and sulphide-bearing slates and black phyllites.
58. *β)* Grey slates and graywackes.
59. *γ)* Mica-schists, sometimes leptitic.
60. b. *Other Pre-Jotnian sediments (quartzites, slates, shales. Older archaean quartzites, Dalsland series).*
61. c. *Jotnian sandstone (Dala sandstone etc.).*
62. Jotnian sandstone with diabase.

63. **VIII. Visingsö series (sandstones and shales).**

IX. Cambro-Silurian.

64. a. *Cambro-Silurian in general.*
65. b. *Cambrian in general.*
66. *α*) Cambrian sandstone.
67. *β*) Alum-shales.
68. c. *Ordovician in general.*
69. *Ortoceras*-limestone.
d. *Silurian.*
70. *α*) *Pentamerus*-limestone.
71. *β*) *Colonus*-shales.
72. e. *Cambro-Silurian in the neighbourhood of or in contact with Pre-Cambrian rocks.*
73. f. *Cambro-Silurian sediments and diabases.*

X. Rocks of the Caledonian mountain range (mostly more or less metamorphosed Cambro-Silurian sediments).

74. a. *Sandstones, shales, phyllites in general.*
75. b. *Sparagmite and quartzite formations* (»*Fjällrandbildningar*»).
76. c. *Metamorphic Caledonian schists in general, quartzites.*
77. d. »*Kölischists*».
78. e. »*Seveschists*».
79. f. Limestone.

80. **XI. Kågeröd series.**

XII. Lias.

81. a. *Lias in general.*
82. b. *Lias in contact with Silurian.*

83. **XIII. Jurassic.**

XIV. Cretaceous.

84. a. *Cretaceous in general.*
85. b. *Senonian.*
86. c. *Danien.*
87. d. *Cretaceous in contact with archaean rocks.*

Density of distribution of Declination points.

The working-out of the observation material which has been going on simultaneously with the field-work from 1928, indicates, as the most practical way, to have the different elements published separately, the declination as a first part.

The distribution of the declination places, measured before 1928 in Sweden, is seen from a map made by Molin.[1]

[1] Kurt Molin, Ibid. Map. 1.

According to our plan, drawn up in 1925 by the Swedish National Committee for Geodesy and Geophysic, remeasurements are obtained at a number of these older field-stations with the intention of augmenting our knowledge of the secular change in Sweden and the above-mentioned part of Norway. As to D, about 220 remeasurements have been carried out.

The distribution of our 2,045 declination observations is given in Fig. 1.

Going out from a value of 440,000 km² on the surface of the whole land, the density of the D-observation points in Sweden is, on an average, one D-observation in 218 km², adequate to an average distance between the D-points of 14.8 km.

Field work and instrumental equipment.

The instrumental equipment of the field expeditions has been dependent on the transport possibilities. For the mountainous districts expeditions have been equipped with the light magnetic theodolite, Chasselon No. 83, belonging to the Academy of Science. In districts, where the use of railways and omnibus-lines facilitated the field-work, the expeditions have used magnetic theodolites of the Bamberg pattern. The theodolite Bamberg No. 2312, belonging to the Hydrographic Service at Stockholm, had kindly been placed at the disposal of the Geological Survey for the years of 1929—1931. The theodolite Bamberg No. 12014, used during the years of 1931 and 1932, is borrowed from the Navigation School of Stockholm. Our motor-car expeditions have worked with the rather heavy theodolite, Askania No. 84065.

Computation of an azimuth.

The chronometer correction on M. E. T. is obtained by means of the radio time signals at $12^h\ 58^m$—13^h. The corrections of time signals, published in *Astronomische Nachrichten*, are neglected, when they do not amount to 0.07^s. As ephemeris we have used The Nautical Almanac, abridged for the use of seamen.

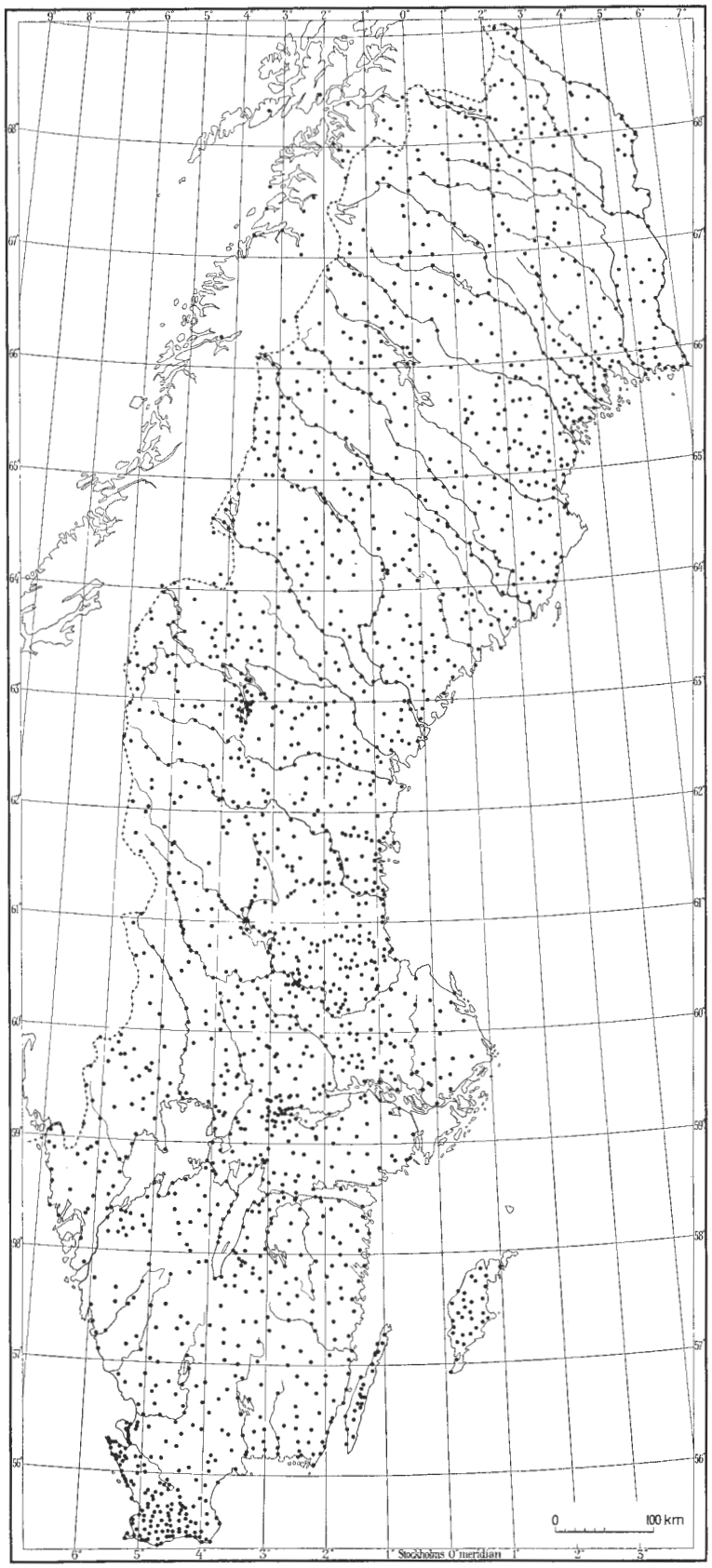

Fig. 1. Distribution of the 2045 declination points measured by the Geological Survey in 1928—1934.

For the computation of an azimuth, A, the following formulas are used, A counted as positive from south around by west,

$$A_m = A_\odot - L_\odot + L_m; \quad \operatorname{tg} A_\odot = \frac{\operatorname{tg} t_\odot \cos \vartheta}{\sin(\varphi - \vartheta)}; \quad \operatorname{tg} \vartheta = \frac{\operatorname{tg} \delta_\odot}{\cos t_\odot},$$

where the quadrant for the auxiliary angle ϑ is selected, so that the signs of $\sin \vartheta$ and $\operatorname{tg} \delta_\odot$, as well as those of $\cos \vartheta$ and $\cos t_\odot$ agree. When obtaining a contact of only one limb of the sun, we have reduced our observation to the centre of the sun by means of the value of the sun radius R, as given in the ephemeris. If dt denotes the time requested and q the parallactic angle, we obtain

$$dt = \frac{R}{\cos \delta_\odot \cos q}.$$

q is computed from the equations

$$\operatorname{tg} N = \operatorname{cotg} \varphi \cdot \cos t_\odot; \quad n = \frac{\sin \varphi}{\cos N}; \quad \operatorname{tg} q = \frac{\cos \varphi \cdot \sin t_\odot}{n \cos(\delta_\odot + N)}.$$

When $A_\odot$ is computed, we get q from the formula

$$\sin q = \frac{\sin A_\odot \cos \varphi}{\cos \delta_\odot}$$

employed as a control.

Azimuth-determinations with the instrument Askania No. 84065.

This instrument, provided with an upper part, alidade, may be used as a theodolite, with the telescope centrically mounted. This construction permits of no straight telescope inversion. The telescope must be taken out of its mounting, when the alidade is to be turned. The mounting of the telescope is placed in the centre of an earth inductor which can be secured in one position only, fixed by a tap. We can only place the telescope in its mounting from one side, but in two positions, 180° apart, occupied by a movement about the optical axis of the telescope. Observations, thus, can be made in four positions, denoted with α, β, α' and β'. If i denotes the angle between the horizontal axis of the theodolite and the horizon, c the collimation error and h the altitude of the sun, the following formula will hold in reading the position of the telescope on the azimuth circle of the theodolite:

$$L = L \pm i \operatorname{tg} h \pm \frac{c}{\cos h} \Big\{ \begin{matrix} \alpha \\ \beta \end{matrix},$$

with i' and c' for the positions α', β' respectively. In order to simplify the field measurements, azimuth observations are made in one position and generally in the α—one, for which we obtain as to the azimuth of the reference mark:

$$A_m = A_\odot - L_\odot + L_m - i \operatorname{tg} h_\odot - c \frac{1 - \cos h_\odot}{\cos h_\odot}.$$

The collimation error c, oscillating about zero, generally showed a value of $< 0'.5$ and never exceeded $1'$. The expression $c(1 - \cos h_\odot) : \cos h_\odot$ does not come up to an amount of $0'.3$, when $h_\odot$ is $< 50°$.

The instrumental error i is determined partly directly, partly by comparisons with azimuth values of the reference marks at Uppsala, Näs and Abisko, obtained by means of the instruments: Chasselon No. 83, Bamberg No. 2312 and Bamberg No. 12014. Since the value of i has been fairly constant from 1928—1936, the average value of $i = + 3'.45$ is employed for all the measurements.

A comparison between our values and those of the Hydrographic Service[1] as to the common reference marks, may be seen from Table No. 2.

[1] Gustaf S. Ljungdahl: Punktbeskrivningar till de åren 1928, 1929 och 1930 uppmätta jordmagnetiska sekulärstationerna. – Kungl. Sjökarteverket. Bilaga till Jordmagnetiska publikationer Nr. 9. Stockholm, 1934.

Table 2.

G. S.: Instrument Askania No. 84065.

Station	G. S. Reg.	No.	G. S. Az. S → W	H. S.	Difference G. S.—H. S.
Färila	77	M 29	Mark 1: — 17° 58′.3	60′.6	+ 2′.3
			2: — 36 44.3	46.5	+ 2.2
Fredrika	305	E 30	: — 91 13.0	14.2	+ 1.2
Lycksele	323	E 30	1: —221 06.3	04.0	— 2.3
Vindeln	337	E 30	1: —163 16.7	14.9	— 1.8
			2: —160 57.7	56.8	— 0.9
Ånge	37 II	W 31	: + 34 57.8	57.8	0.0
Abisko	623 II	W 31	: — 39 12.8	12.1	— 0.7
Muonionalusta	759	W 31	: — 20 45.8	45.6	— 0.2
Viken	1411	W 33	1: —122 21.4	20.5	— 0.9
Ulricehamn	1466	W 33	1: + 148 56.7	60.0	— 3.3
			2: + 90 58.0	60.4	— 2.4
Kåseberga	1662	T 33	1: + 173 42.3	41.8	+ 0.5
			2: + 158 15.6	15.5	+ 0.1
Baskemölla	1667	T 33	1: —195 12.9	12.6	— 0.3
			2: — 35 39.9	39.8	— 0.1
Gränna	1874	W 34	: + 117 27.8	29.3	— 1.5
Traneryd	2016	T 34	: —177 41.4	39.7	— 1.7
Vimmerby	2034	T 34	: —121 41.3	41.6	+ 0.3

Azimuth-determinations with the instrument Chasselon No. 83.

The theodolite Chasselon[1] No. 83 has the telescope eccentrically mounted. We have generally had a complete determination consisting of four observations, two with the telescope to the right and two to the left. In the mean value the errors arising from i and c are eliminated. As a control of the measurements the differences $\frac{1}{2}[(A_\odot - L_\odot)^l - (A_\odot - L_\odot)^r]$ are graphically collocated as a function of the altitude of the sun, computed by means of the formula

$$\sin h_\odot = \sin \varphi \cdot \sin \delta_\odot + \cos \varphi \cdot \cos \delta_\odot \cdot \cos t_\odot .$$

These curves have also been used for getting, in a convenient way, the correction, necessary in cases, where it has been possible to obtain observations only in one position of the telescope. Among the curves of the above-mentioned type which I have worked out, one representing Werner's measurements from May 23th until Sept. 21th in 1933 is given as an example in the diagram Fig. 2.

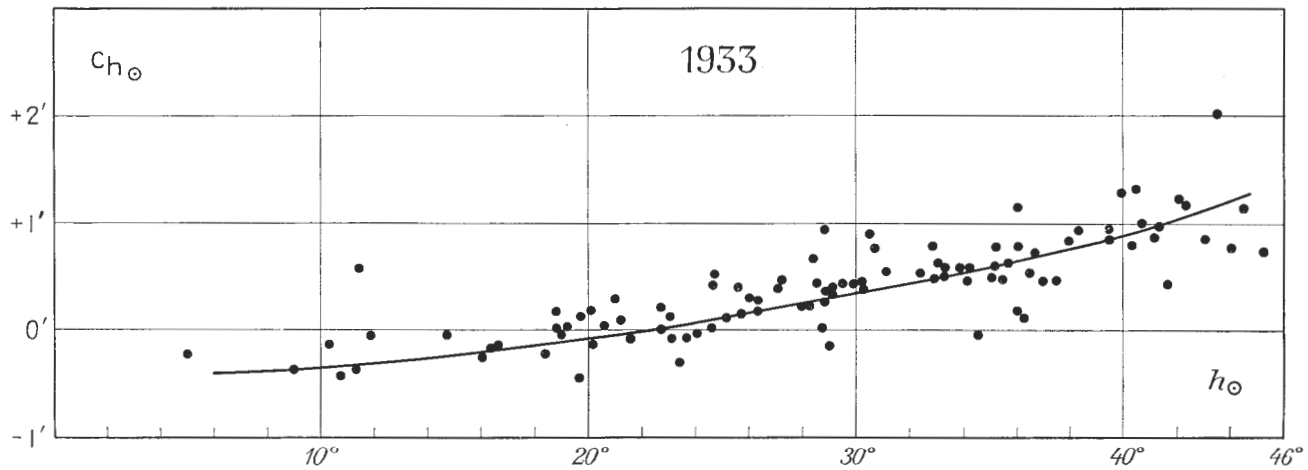

Fig. 2. $\frac{1}{2}[(A_\odot - L_\odot)^l - (A_\odot - L_\odot)^r]$ plotted against the sun's altitude. Instr. Chasselon No. 83. — For the period from May 23 to Sept. 21 in 1933.

[1] The instrument is described in E. Mascart: Traité de Magnétisme Terrestre. Paris, 1900. P. 212.

Table 3 gives the differences between our azimuth values and those of the Hydrographic Service concerning the common reference marks.

Table 3.

G. S.: Instrument Chasselon No. 83.

Station	G. S. Reg. No.	G. S. Az. S → W	H. S.	Difference G. S.—H. S.
Flåsjön	452 R 30	Mark 1: — 92° 09.′6	10′.6	+ 1′.0
		2: — 118 33.5	34.7	+ 1.2
Jäkkvik	921 R 31	2: + 121 48.4	48.3	+ 0.1
Abisko	623 II W 31	1: — 39 13.1	12.1	— 1.0
Vittangi	1758 W 33	1: — 26 48.9	48.3	— 0.6
		2: — 17 09.7	09.9	+ 0.2
Karesuando	1759 W 33	1: + 134 47.0	46.5	+ 0.5
		2: + 31 32.7	32.8	— 0.1
		3: + 48 52.0	51.6	+ 0.4
Bredsel	1846 W 33	: — 39 29.3	29.2	— 0.1
Arvidsjaur	1847 W 33	: + 56 27.2	27.0	+ 0.2
Arjeploug	1848 W 33	: — 57 14.1	15.3	+ 1.2
Burgsvik	2236 W 34	1: — 90 21.9	20.8	— 1.1
		4: — 66 13.8	12.0	— 1.8
Edsbyn	2317 S 34	1: — 2 12.4	12.0	— 0.4
Linsäll	2354 S 34	1: + 22 20.9	20.6	+ 0.3
		2: + 53 27.9	27.8	+ 0.1

Azimuth-determinations with the instruments Bamberg No. 2312 and No. 12014.

These magnetometers of the Neumayer pattern have the telescope with a broken tube and the object glass mounted immediately in front of the prism. Also with these instruments two observations with the eye-piece to the right and two with the eye-piece to the left have generally been made. The quantity $\frac{1}{2}[(A_\odot - L_\odot)^l - (A_\odot - L_\odot)^r]$ is investigated in the same way as mentioned above for the application of correction to incomplete measurements of azimuth.

Concerning these instruments I only have two stations for comparison, the results of which are tabulated below:

Table 4.

Station	Instrument Bamberg	G. S. Reg. No.	G. S. Az. S → W	H. S.	Difference G. S.—H. S.
Abisko	No. 2312	623 II W 30	Mark 1: — 39° 12′.4	12′.1	— 0′.3
Vänge—Långharpan	No. 12014	1171 T 32	: + 126 10.7	10.9	— 0.2

Determination of the magnetic meridian.

The secure placing of the instrument during the measuring was controlled by the repeated reading of one or more reference marks. If these readings turned out differently at the azimuth and magnetic meridian determinations, the calculation was done in the following manner: if L_m denotes the mean value of the readings of the reference mark, before and after the determination of $(A_\odot - L_\odot)$, we have $A_m = A_\odot - L_\odot + L_m$.

If L'_m is the mean value of the readings before and after the determination of the magnetic meridian, M.M., we obtain for the declination $D = M.M. + (A_\odot - L_\odot) - (L'_m - L_m) - 180°$. Where several reference marks have been observed, a mean value of the quantity $(L'_m - L_m)$ was introduced in the above formula. Thus, the reading of the reference mark after the azimuth determination becomes of double weight, as the same enters into L'_m as well as L_m.

During 1928 suspension of the magnet in a bronze filament was used at the Askania instrument No. 84065, observations being made in two positions, "mark up" and "mark down". The difference between these positions was constant during the measuring period. The collimation error of the mirror became by comparisons — 20′.2, which value was used for the whole of the measuring period.

From 1929 suspension on pivot was used for magnometers with hair cross and lens, as well as a removable tap for inversion. The reading is done on the eyepiece scale of the telescope with a scale value of 5′.08, which admits of a reading accuracy of 0′.3. Two needles have been used: during 1929 and 1930 the so called old needle, and after that a new needle, somewhat longer, but lighter and showing greater accuracy. As an example the following measuring may be cited:

In.str. Askania No. 84065. The new needle. 1931. Sept. 2.
Station: Domsjö. Observer: S. Werner.

			nonie		red. to 20°.0		D
M. E. T.	18^h29^m—31^m.	Mark up.	208° 05′.3	20°.00	05′.3		
	33 —36 .	» down.	207 48.0	20.49	45.5	207° 55′.4	— 2° 20′.3
	38 —40 .	» up.	208 05.2	19.98	05.3	55.4	20.3
	44 —47 .	» down.	207 46.4	20.12	45.8	55.6	20.1

$A_\odot - L_\odot = -88° 45′.9$. $L_m - l_m = 58° 30′.2$.

To the instrument Chasselon No. 83 belong 2 magnets, marked $\dot{M}$ and $\ddot{M}$, respectively, as well as a smaller magnet, here called Mn. In order to eliminate the torsion of the suspension filament, there is a copper rod of the same dimensions as the magnets. Different field measurers have proceeded somewhat differently, but, in the main, they have followed Moureaux' measuring scheme.[1]

During the years of 1928 and 1932—1934 the filament had been adjusted into a torsionfree position before the determination of the magnetic meridian. As a rule this determination was made with both the magnets $\dot{M}$ and $\ddot{M}$. The complete determination comprises 8 different positions, as may be seen from the following example.

Instr. Chasselon No. 83. $\dot{M}$. 1933, Sept. 28.
Station: Lovö-observatory. Observer: S. Werner.
Reference mark: 215° 27′.47. Azimuth: S 35° 41′.8 W.

Gr. M. T.	6^h	22^m	1 TW	W—O	S: 176° 49′.25.	$D_{Lovö}$: — 2° 24′.1
		25	2 »	»	N: 177 39.75	26.7
		26	3 »	O—E	N: 178 04.75	26.6
		28	4 »	»	S: 176 49.75	26.6
		30	5 TE	W—O	S: 177 51.5	26.6
		32	6 »	»	N: 176 34.75	26.4
		33	7 »	O—E	N: 177 00.75	26.4
		34	8 »	»	S: 177 53.75	26.6

Reference mark: 215° 27′.45.

	D ($\dot{M}$)	D Lovö
$\frac{1}{2}(1+8) = 177° 21′.50$	— 2° 24′.16	— 2° 25′.35
$\frac{1}{2}(2+7) = 20.25$	25.41	26.55
$\frac{1}{2}(3+6) = 19.75$	25.91	26.50
$\frac{1}{2}(4+5) = 20.63$	25.03	26.60
Means	— 2° 25′.13	— 2° 26′.25
Correction:	— 1′.1	

During the years of 1929—1931 the magnet Mn was used in connection with either or both of the two other magnets. After that the respective measurements had been corrected for disturbances, I calculated the torsion correction for the magnets $\dot{M}$ and $\ddot{M}$ according to the formula[2] $D_{corr.} = D' + (D' - D'')\,\mu'' : (\mu' - \mu'')$ where D' stands for the magnets $\dot{M}$ and $\ddot{M}$, respectively, and D'' for the magnet Mn. The relations between the magnetic moments of the needles, μ, have been determined to $\ddot{\mu} : \dot{\mu} : \mu_{Mn} = 356.5 : 244.5 : 83.0$.

[1] Th. Moureaux: Détermination des Éléments magnétiques en France. — Annales du Bureau Central Météorologique de France. I. Étude des orages en France et Mémoires divers. — Paris 1886. P. 65.
[2] Ad. Schmidt: Encyklopädie der Mathematischen Wissenschaften. Bd. VI: 1. B. P. 323. — 1917.

As to the Bamberg instruments, a complete determination is given in the following example:

Instr. Bamberg No. 12014. Needle II. 1932. June 13.
Station: Laxå A. Observer: F. Tyrén.

M. E. T.	$14^h\ 35^m$	Mark up:	TE	n	162° 50′	TE:	163° 04′.7
			»	s	163 07.5		
			TW	s	162 46.0	TW:	163° 03.6
	$14^h\ 41^m$		»	n	163 03.5		
	$14^h\ 44^m$	Mark down:	»	n	163 25	Mean:	163° 04′.2
			»	s	163 00		
			TE	s	163 19	$A_\odot - L_\odot =$	−166° 46′.7
	$14^h\ 49^m$		»	n	163 02.3		
						D =	− 3° 42′.5

The declination at a point was always determined by means of two needles. The difference »Mark up—Mark down» was tabulated as control from year to year, and, for the respective needles, the mean value kept reliably constant. Further, the difference between the declination values for needle I and needle II was computed, and the mean value of these differences proved, for both instruments, to agree with the differences, obtained at the comparisons.

During some measuring periods, observations were only made in either of the positions TE and TW, as may be further seen from the table 6 of the needle corrections.

Comparisons of Instruments and needle-corrections.

All the instruments have been compared at the Lovö observatory and at the Uppsala magnet house. Further the instrument Chasselon was compared at Rude Skov (1930, 1931) and at Sodankylä (1932). As no recording was done in the Uppsala magnet house, with the exception of certain short periods during 1928, our measurements there were reduced to the respective yearly means with the Lovö records, and, where these are lacking, with those of Rude Skov.

Generally, all the instruments were compared at the beginning and at the end of every measuring period. The results of all our comparisons enter into those needle-corrections which were applied and are as follows:

The Askania Instrument No. 84065.

1928. Suspension in filament: Collimation correction for magnet II in observation position, telescope south: — 20′.2.

Magnetometer suspended on pivot.

1929. Needle correction of the old magnetometer = 0′.0

1930. » » » » » » = — 2.3 .

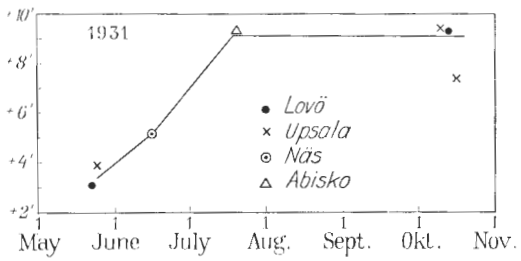

Fig. 3. Needle corrections of the new magnetometer belonging to the Askania instrument No. 84065 in 1931.

The new magnetometer showed in the beginning of the measuring period, 1931, a continued variation of the needle correction towards a constant value, as may be seen from the diagram Fig. 3, used at the graphic determination of the needle correction during the time May 24th to July 19th 1931. After this latter date the needle correction + 9′.1 was used. The value of June 15th at Näs was obtained by a comparison there with the instruments Bamberg No. 2312 and No. 12014. As to the Abisko value of July 19th, the same was obtained by a comparison with our measurements there during 1930 with the Bamberg No. 2312, and during 1932 and 1933 with the Chasselon No. 83.

During 1932 the instrument was not used.

1933. Needle-correction of the new magnetometer = + 10′.0.

1934. » » » » » » = + 10′.0.

The Chasselon instrument No. 83.

The needle corrections applied are to be seen from the table below.

Table 5.

Needle-corrections applied.

	1928—1931	1932	1933	1934
Magnet $\dot{M}$	0	— 0′.4	— 0′.3	— 1′.3
$\dot{M}$	0	— 0.5	— 0.5	— 1.3
Mn		— 0.6		

Comparisons from the years of 1930 and 1931 have given the following results:

Rude Skov. 1930.	Needle-correction,	$\ddot{M}$	+ 0′.2 ± 0′.8
» » 1930.		$\dot{M}$	+ 3.3 ± 0.4
» » 1931.		$\ddot{M}$	+ 0.3 ± 1.0
Lovö »		$\dot{M}$	— 0.7

As the mean value of the needle correction for the magnet $\ddot{M}$ for the years of 1930 and 1931 differs from zero with an amount below the error limits, no needle correction was applied, which procedure was also extended to the years of 1928 and 1929.

As during the period of 1929—1931 the measurements only show, on an average, a small difference between the values obtained with $\dot{M}$ and $\ddot{M}$, without any needle corrections, the comparison value of + 3′.3 for $\dot{M}$ from 1930 was considered as of no significance. Thus no needle correction was used for this magnet either during 1928—1931.

The needle corrections for the Bamberg instruments were the following:

Table 6.

				Needle I	Needle II
Instr.	Bamberg	No.	2312.	1929, 1930. TW:	— 2′.8 TW: + 1′.7
»	»	»	»	» » TE:	+ 1.1 TE: — 4.6
»	»	»	»	1931. TW:	— 3.1 TW: + 2.6
»	»	»	»	» TE:	+ 1.5 TE: — 5.3
»	»	»	12014.	»	— 1.9 — 1.6
»	»	»	»	1932.	— 0.1 + 0.1

As the error in the difference between the quantities of the needle corrections enters into the average error, as stated in the main table, it is possible to judge from the absence of »course» in the average error that the difference of the needle corrections kept constant within the respective periods of time.

Reduction of the declination observed to the middle of the year.

At any given moment, the declination may be considered as consisting of the following elements: D_E coming from secular change, D_T from diurnal variation, D_S from disturbance and D_A from so-called non-cyclic effect. The quantities denoted with index ° refer in this chapter to a magnetic observatory. D_A contains a constant deal united with D_E, and a variable one, approximatively eliminated in the computation of the mean value of the year, D°_M, for the observatory. D°_T and D°_S, too, are eliminated in D°_M, and in consequence, D°_E is represented by D°_M. Further, the normal value of the observatory is identified with D°_M. The momentary value D° of the recording station at the time of a field measurement may be written

$$D^\circ = D^\circ_B + U^\circ = D^\circ_M + \Delta D^\circ, \quad \ldots \ldots \ldots \ldots \ldots \quad (1)$$

where D°_B denotes the base-value and U° the distance measured from the base-line to the registration-curve expressed in ′. ΔD° consists of D°_T, D°_S, a part of D°_A and the quantity ΔD°_E of the annual change from the middle of the year, July 1st, to the time of the field measurement.

If D denotes the simultaneous value observed at a field station, the normal value of this place for the middle of the year, D_M, is obtained from the relation

$$D_M = D - \Delta D \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2).$$

Assuming that ΔD_E for a field station is equal to ΔD°_E for the observatory, ΔD_E accordingly is regarded as independent of longitude and latitude for the same year. Then, at reduction to the middle of the year, only D_S and D_T are considered.

1) Correction for the longitude-difference between the field station and the observatory.

At the field station and at the observatory ΔD is assumed to be approximatively the same function of universal time (t') as well as of local time (t_Ω). As to D_T, which is dependent on the local time, it is necessary to consider the longitude difference between the field station and the observatory. At reduction of the observed value to the middle of the year by means of the record at the observatory, we have to count with the universal time as to D_S and with the local time of the field station in relation to the observatory as to D_T. We can determine D_T from a curve, $D^{\circ m}_T$, representing the hourly mean values of the quiet days of the respective month.

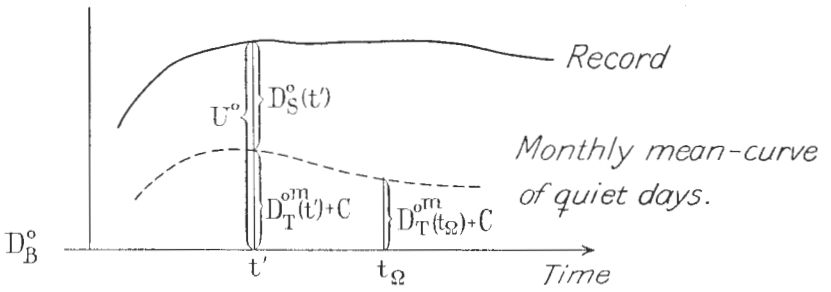

Fig. 4.

Let t denote M. E. T. at the field station, Ω the local time of the field station and Ω_o that of the observatory, both of them in relation to M. E. T., the following formula will hold as to t_Ω, the time in G. M. T. at the observatory corresponding to the local time of the field station:

$$t_\Omega = t - 1^h + \Omega - \Omega_o = t' + \Delta\lambda \quad \ldots\ldots\ldots\ldots\ldots\ldots (3).$$

As showed by the Fig. 4, ΔD can be written

$$\left.\begin{aligned} \Delta D = D^{\circ m}_T(t_\Omega) + D^\circ{}_S(t') - D^\circ{}_M = D^{\circ m}_T(t_\Omega) + D^\circ - D^{\circ m}_T(t') - D^\circ{}_M = \\ = D^\circ{}_B + U^\circ - D^\circ{}_M + D^{\circ m}_T(t_\Omega) - D^{\circ m}_T(t') \end{aligned}\right\} \quad \ldots\ldots\ldots (4).$$

The difference $D^{\circ m}_T(t_\Omega) - D^{\circ m}_T(t')$ may be expressed by means of the derivatives $D^{\circ m'}_T$, $D^{\circ m''}_T$ of the monthly mean-curve of quiet days at the moment $(t' + \frac{1}{2}\Delta\lambda)$.

Then the expression of ΔD becomes:

$$\Delta D = \Delta D^\circ + D^{\circ m'}_T(t' + \tfrac{1}{2}\Delta\lambda)\cdot\Delta\lambda + \tfrac{1}{2}D^{\circ m''}_T(t' + \tfrac{1}{2}\Delta\lambda)\cdot(\Delta\lambda)^2 \quad \ldots\ldots\ldots (5).$$

From (2) and (5) we get the complete formula to compute D_M:

$$D_M = D - \Delta D = D + D^\circ{}_M - D^\circ{}_B - U^\circ - D^{\circ m'}_T(t' + \tfrac{1}{2}\Delta\lambda)\cdot\Delta\lambda \quad \ldots\ldots\ldots (6).$$

As the term including the second derivative, only under unfavourable circumstances, exceeded an amount of 0'.3, it has been neglected. The diagram, Fig. 5, gives as an example a first derivative curve, computed from the D-curve at Näs obtained from the quiet days of July 1929.

The following values of Ω_o have been used:

Tromsö: $+ 15.8^m$; Sodankylä: $+ 46.6^m$; Näs: $- 1.7^m$;
Lovö: $+ 11.3^m$; Rude Skov: $- 10.2^m$.

2) Correction for the disturbance depending on the latitude.

If the reduction-quantities obtained from the observatories, ΔD_T, ΔD_S, ΔD_N, ΔD_L, ΔD_{RS}, differed from each other by an amount less than 1'.4, ΔD was determined as an arithmetical mean of the values. The limit-value, 1'.4, has been chosen in consideration of the average error, arising from the reduction to epochs of the mean values of the years.

When the difference between the reduction-quantities exceeds 1.'4, the disturbance D_S was considered being a function of the latitude, φ.

a) As to field stations south of 60° latitude, D_S is assumed to be a linear function of φ; therefore only records from Lovö and Rude Skov are used, and the disturbance determined by linear interpolation. From (4) we obtain, if, for simplicity, D°_B and D°_M here are assumed to be equal:

$$\left.\begin{aligned} \Delta D_L &= U^\circ_L + D^{\circ m}_{TL}(t_{\Omega L}) - D^{\circ m}_{TL}(t') = S^\circ_L + D^{\circ m}_{TL}(t_{\Omega L}) \\ \Delta D_R &= U^\circ_R + D^{\circ m}_{TR}(t_{\Omega R}) - D^{\circ m}_{TR}(t') = S^\circ_R + D^{\circ m}_{TR}(t_{\Omega R}) \end{aligned}\right\} \quad \ldots\ldots\ldots\ldots (7).$$

where we have substituted S°_R for D°_{SR}, etc.

As to the disturbance S, of the field station at the universal time t', we find that

$$S = S^\circ_R + (S^\circ_L - S^\circ_R)\cdot(\varphi - \varphi_R) : (\varphi_L - \varphi_R) \quad \ldots\ldots\ldots\ldots\ldots (8).$$

From the formulas (7) we obtain $S^\circ_L - S^\circ_R = \Delta D_L - \Delta D_R - [D^{\circ m}_{TL}(t_{\Omega L}) - D^{\circ m}_{TR}(t_{\Omega R})]$. If we introduce the longitude-difference between Lovö and Rude Skov, $\Delta\lambda_{LR}$, and assume that $t_{\Omega L}$ for the field station can be

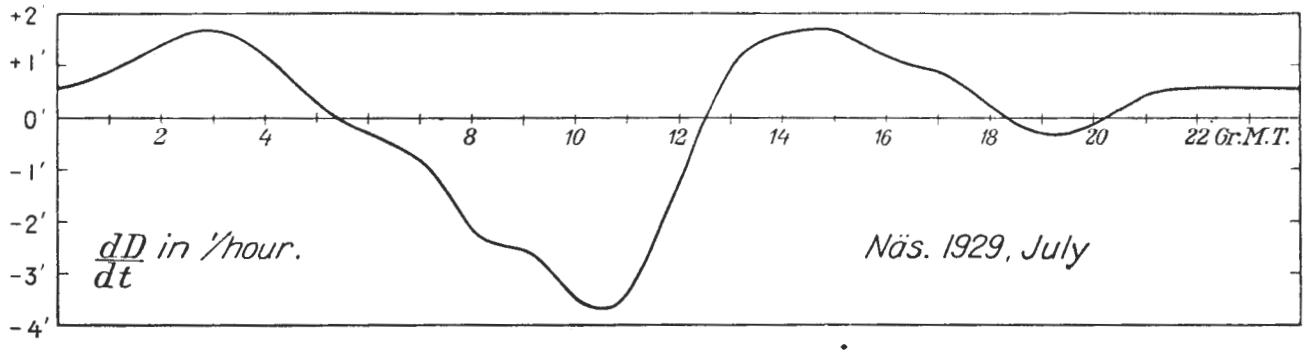

Fig. 5. $\frac{dD}{dt}$ for Näs computed from the quiet days of July 1929.

written $t_{\Omega L} = t' - \frac{1}{n}\Delta\lambda_{LR}$, then $t_{\Omega R} = t' + \frac{n-1}{n}\cdot\Delta\lambda_{LR}$. When the difference $D^{\circ m}_{TL}(t_{\Omega L}) - D^{\circ m}_{TR}(t_{\Omega R})$ is expanded, we obtain $D^{\circ m}_{TL}(t') - D^{\circ m}_{TR}(t') - D^{\circ m'}_{Tt'}\left(\frac{1}{n}\Delta\lambda_{LR} + \frac{n-1}{n}\Delta\lambda_{LR}\right)$, if $D^{\circ m'}_{TL}$ and $D^{\circ m'}_{TR}$ are assumed to be equal. Thus the difference is independent of n or the longitude of the field station. A comparison between the derivative curves of those months, during which time field measurements are going on, has proved that we are right in neglecting the difference between $D^{\circ m'}_{TL}$ and $D^{\circ m'}_{TR}$ as to the present correction-quantity.

In order to show the magnitude of the expression $D^{\circ m}_{TL}(t') - D^{\circ m}_{TR}(t') - D^{\circ m'}_{Tt'}(\Delta\lambda_{LR})$, its value for April 1934 is indicated:

Table 7.

G. M. T.	5—6h	6—7h	7—8h	8—9h	9—10h	10—11h	11—12h	12—13h
$D^{\circ m}_{TL}(t') - D^{\circ m}_{TR}(t')$:	— 0'.1	+ 0'.2	+ 0'.3	+ 0'.6	+ 0'.4	+ 0'.2	— 0'.2	— 0'.2
$D^{\circ m'}_{TRt'}\cdot(\Delta\lambda_{LR})$:	— 0.25	— 0.21	+ 0.18	+ 0.71	+ 1.10	+ 1.04	+ 0.54	— 0.18
$D^{\circ m'}_{TLt'}(\Delta\lambda_{LR})$:	— 0.18	— 0.14	+ 0.28	+ 0.75	+ 1.00	+ 0.91	+ 0.46	— 0.18
	+ 0.12	+ 0.38	+ 0.07	— 0.13	— 0.65	— 0.78	— 0.70	— 0.02

13—14h	14—15h	15—16h	16—17h	17—18h	18—19h	19—20h
— 0'.1	+ 0'.2	+ 0'.4	+ 0'.4	+ 0'.6	+ 0'.5	— 0'.3
— 0.68	— 0.63	— 0.43	— 0.18	0.00	0.00	— 0.14
— 0.57	— 0.57	— 0.36	— 0.13	+ 0.04	— 0.11	— 0.34
+ 0.53	+ 0.80	+ 0.80	+ 0.57	+ 0.58	+ 0.56	— 0.06

In the Table 7 the westerly declination is counted as positive. The mean limit value of the expression tabulated becomes $\pm$ 0'.8. A period related to the diurnal one is seen.

From the formula (8) we then obtain:

$$S + D^{\circ m}_{TR}(t_{\Omega R}) = \Delta D_R + (\Delta D_L - \Delta D_R) \cdot (\varphi - \varphi_R) : (\varphi_L - \varphi_R),$$

where

$$S + D^{\circ m}_{TR}(t_{\Omega R}) = S + D^{\circ m}_{TR}(t') + D^{\circ m'}_{TR} \cdot \Delta\lambda_R = \Delta D,$$

The error we commit by substituting

$$\Delta D = \Delta D_R + (\Delta D_L - \Delta D_R) \cdot (\varphi - \varphi_R) : (\varphi_L - \varphi_R) \quad \ldots \ldots \ldots \ldots \ldots \quad (9).$$

for formula (8) can be determined to an amount between 0′.7 and 0′.3. The value of the quantity given in Table 7 seems to be varying, no regularity is found by a comparison between the hour values of the different months. Only the amount of $\pm$ 0′.8 seems altogether to be a limit of the quantity, which quantity is neglected, not in the error $\delta(\Delta D)$, but in the computation of the reduction.

b) At field-stations situated north of 60° latitude, graphic interpolation method was used for the determination of ΔD. The reduction quantities obtained from the recording stations in question, corresponding to the moment of every separate D-determination, were plotted into a diagram, similar to that shown in Fig. 6.

In cases of great disturbances, every reading was reduced separately; this specially with regard to the measurements with the Chasselon instrument, where 8 readings enter into one D-determination.

Where the reduction quantities were such that it proved impossible to draw a curve of an uniform character, either the reduction quantities alone from the registry station nearest to the observation point were used, or the mean value of all the reduction quantities was applied.

It has occurred — particularly with regard to the northern field-stations — that the field measurements have decidedly followed the reduction quantities from only one ovservatory, f. inst. Näs, Sodankylä or Tromsö.

The curves in Fig. 6 are based upon the values given in Table 8, where S stands for $D^{\circ}{}_{M} - D^{\circ}{}_{B} - U^{\circ}$ and T for $D^{\circ m'}_{T}(t' + \frac{1}{2}\Delta\lambda) \cdot \Delta\lambda$. Compare the formula No. 6.

Table 8.

		Rude Skov			Lovö			Näs			Sodankylä			Tromsö			ΔD
		S	T	ΔD_R	S	T	ΔD_L	S	T	ΔD_N	S	T	ΔD_S	S	T	ΔD_T	
a	I.	— 2′.05	+0′.03	— 2′.02	— 7′.90	—0′.22	— 8′.12	—12′.57	—0′.15	—12′.72	—18′.52	—0′.18	—18′.70				—13′.5
	II.	— 1.42	—0.51	— 1.93	— 3.80	—0.16	— 3.96				—14.65	+1.20	—13.45	—16′.45	—0′.01	—16′.46	— 8.9
	III.	+12.13	—0.18	+11.95				+15.05	—0.19	+14.86	+20.70	+1.19	+21.89				+14.9
	IV.	+ 5.93	+0.71	+ 6.64	+ 7.81	+0.15	+ 7.96				+17.22	—0.48	+16.74				+11.1
	V.	+10.39	+0.07	+10.46	+12.60	—0.05	+12.55	+13.43	+0.01	+13.44	+19.59	—0.46	+19.13				+15.4
	VI.	+ 8.40	+0.23	+ 8.63	+11.35	+0.09	+11.44	+14.52	+0.09	+14.61	+20.25	—0.22	+ 20.03				+17.3
	VII.	+ 1.90	—1.58	+ 0.32	+ 2.87	—0.84	+ 2.03	+ 6.50	—1.38	+ 5.12	+15.21	+ 0.48	+15.69				+11.0
	VIII.	— 6.68	+1.33	— 5.35							— 9.99	—0.71	—10.70	—12.50	+0.19	—12.31	—11.5
	IX.	+ 4.66	—0.05	+ 4.61	+ 5.51	+0.01	+ 5.52				+ 8.00	+ 0.97	+ 8.97	+ 3.45	+0.08	+ 3.53	+ 5.7
	X.	+ 2.15	—0.41	+ 1.74	+ 2.20	+0.03	+ 2.23				— 2.86	+ 1.23	— 1.63	— 7.00	+0.20	— 6.80	— 1.1
	XI.	+ 2.50	—0.64	+ 1.86	+ 3.00	+0.04	+ 3.04				— 1.37	+1.42	+ 0.05	— 6.40	+0.20	— 6.20	— 0.3
b	I.	— 1.60	+0.17	— 1.43	— 2.66	+0.04	— 2.62	— 4.55	+0.18	— 4.37	— 6.55	—0.23	— 6.78				— 5.5
	II.	— 0.70	+0.80	+ 0.10	— 2.87	+0.30	— 2.57	— 4.66	+0.51	— 4.15	— 5.48	—0.68	— 6.16				— 5.0
	III.	+ 3.40	—1.75	+ 1.65	+ 4.03	—0.64	+ 3.39	+ 7.59	—1.30	+ 6.29	+ 8.40	+ 0.94	+ 9.34				+ 7.8
	IV.	+ 0.90	+0.02	+ 0.92	— 1.21	+0.95	— 0.26	— 2.28	+0.38	— 1.90	— 8.06	+ 2.86	— 5.20				— 1.9
	V.	+ 0.07	—0.41	— 0.34	— 3.60	+0.04	— 3.56				—12.16	+1.52	—10.64				— 4.5
	VI.	+ 2.82	—0.59	+ 2.23	+ 0.90	+0.09	+ 0.99				— 3.95	+1.96	— 1.99				+ 0.5
	VII.	+ 3.38	—0.50	+ 2.88	+ 3.66	+0.26	+ 3.92	+ 5.09	—0.20	+ 4.89	+ 4.46	+ 2.08	+ 6.54				+ 4.5
	VIII.	+ 4.65	—0.70	+ 3.95	+ 6.01	—0.37	+ 5.64	+ 8.02	—0.61	+ 7.41	+ 9.97	+ 0.47	+ 10.44				+ 9.2
	IX.	+ 1.00	—0.91	+ 0.09	+ 2.24	—0.44	+ 1.80	+ 4.12	—0.78	+ 3.34	+ 6.56	+0.51	+ 7.07				+ 5.5
	X.	+ 4.00	+0.06	+ 4.06	+ 3.08	+0.05	+ 3.13	+ 2.06	+0.19	+ 2.25	+ 1.03	—0.20	+ 0.83				+ 1.2

Altogether, the reduction method tended, first towards a reduction to the longitude of the field-stations, and secondly towards an interpolation with regard to the latitude. I have thereby opined that, by this graphic interpolation, sufficient regard has been taken to the dependence of ΔD_S, as well as of ΔD_T on the latitude.

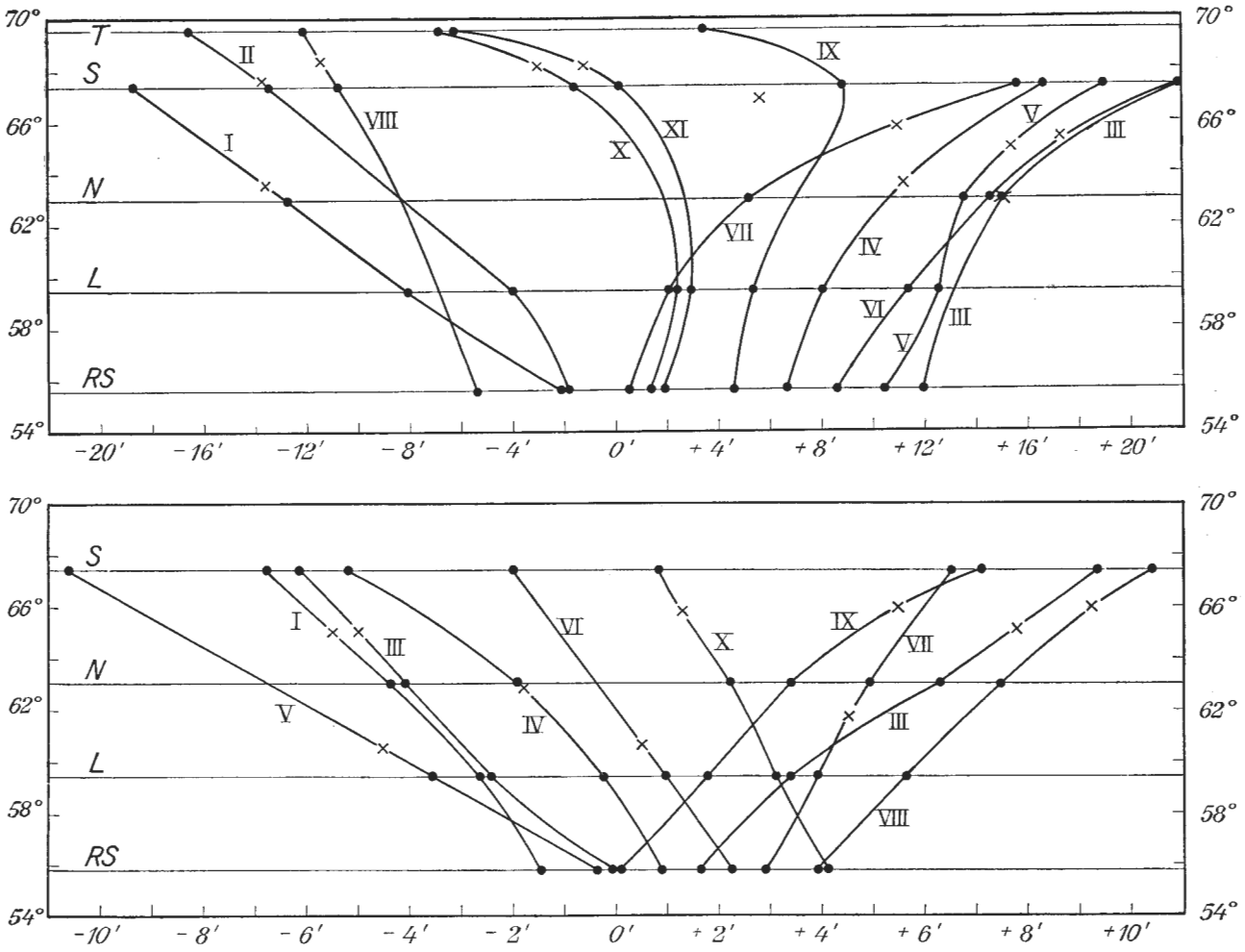

Fig. 6. Some examples of the graphic determination of ΔD.

Diagram a).

				Gr. M. T.	φ
I. Rör	31	M 28	Aug. 5	17h 10m	63°.6
II. Tjuonajokk . .	1366	W 32	Aug. 28	7 39	67°.6
III. Nyland . . .	175	W 29	July 11	7 00	63°.0
IV. Hörnsjö . . .	212	W 29	Aug. 16	15 49	63°.8
V. Stornäs . . .	485	R 30	July 25	17 28	65°.0
VI. Gölaberget . .	547	W 30	June 27	17 58	65°.4
VII. Nyborg . . .	601	W 30	Aug. 11	10 21	65°.8
VIII. Idivuoma II .	733	W 31	July 23	14 47	68°.3
IX. Pieskejaure . .	1299	W 32	July 9	6 34	67°.0
X. Elvegård . . .	1749	W 33	June 21	8 05	68°.3
XI. » . . .	»	»	» »	8 31	»

Diagram b).

				Gr. M. T.	φ
I. Kusmark . . .	529	W 30	June 12	17h 20m	64°.9
II. Ålund	533	W 30	June 16	13 42	65°.1
III. Jakobsfors . .	534	W 30	June 17	9 07	65°.2
IV. Gamla Nedal-stugan . . .	123	R 29	July 4	9 08	62°.9
V. Harnäs	2291	S 34	July 30	7 52	60°.6
VI. Hemlingby . .	2295	S 34	Aug. 1	8 20	60°.7
VII. Färila	77	M 29	July 7	8 25	61°.8
VIII. Bondersbyn .	604	W 30	Aug. 15	7 27	65°.9
IX. » .	»	»	» »	7 45	»
X. Sävast	577	W 30	July 22	19 57	65°.8

Reduction to epoch.

The distribution of the number of measured points on the seven years of field work is as follows:

1928	1929	1930	1931	1932	1933	1934
67	159	419	525	228	462	498

These numbers of points give 1932.2 as the central point of time for all our measurements. Instead of the middle of year lying nearest to, we have decided on 1933.5, thereby attaining agreement with the new epoch of Finland as well as with the epoch of the polar year. For the reduction we have used values, not from

our remeasurements during 1928—1934, but only from the observatories. Considering that Rude Skov, Lovö, Sodankylä and Tromsö are not far separated in longitude, values from Pavlovsk are also used in order to increase the influence of the longitude upon our formulæ.

The longitudes and latitudes of the observatories are:

Tromsö	Lat. 69° 39.′8	Long. 17° 10′ E. Gr.
Sodankylä	67° 22.′0	26° 39.′0
Lovö	59° 20.′7	17° 49.′6
Rude Skov	55° 50.′6	12° 27.′4
Pavlovsk	59° 41.′0	30° 29.′0

The annual means of »all days» are given in the following Table:

Table 9.

Observatory	1928.5	1929.5	1930.5	1931.5	1932.5	1933.5	1934.5
Tromsö	—	—	— 4°07′.7	— 3°59′.6	— 3°49′.0	— 3°37′.3	— 3°26′.0
Sodankylä	+ 2°18′.9	+ 2°27′.0	+ 2°35.1	+ 2°45.0	+ 2°55.1	+ 3°03.8	+ 3°13.0
Lovö	— 3°18.6	— 3°08.3	— 2°58.5	— 2°49.7	— 2°40.0	— 2°30.6	— 2°20.5
Rude Skov	— 6°22.0	— 6°11.0	— 6°00.4	— 5°50.4	— 5°39.9	— 5°29.6	— 5°19.3
Pavlovsk	+ 3°50.4	+ 3°57.3	+ 4°04.5	+ 4°10.1	+ 4°17.1	+ 4°24.1	+ 4°30.5

Hence the following values of the annual change have been obtained:

Table 10.

Observatory	1929.5—1928.5	1930.5—1929.5	1931.5—1930.5	1932.5—1931.5	1933.5—1932.5	1934.5—1933.5
Tromsö	—	—	8′.1	10′.6	11′.7	11′.3
Sodankylä	8′.1	8′.1	9.9	10.1	8.7	9.2
Lovö	10.3	9.8	8.8	9.7	9.4	10.1
Rude Skov	10.9	10.6	10.0	10.5	10.3	10.3
Pavlovsk	6.9	7.2	5.6	7.0	7.0	6.4

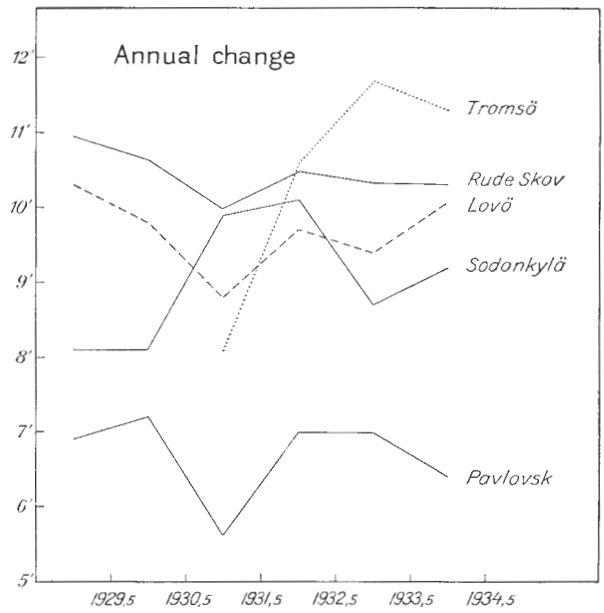

Fig. 7. Annual change of the declination.

The values from Table 10 are plotted in the diagram Fig. 7.

As to Rude Skov, Lovö, Tromsö and Pavlovsk the course of the annual change is fairly parallel. The curve from Sodankylä seems, on the contrary, to have a maximum simultaneous with the minima of the other observatories. Neglecting this difference in phase the annual change has been considered as depending only upon the latitude and the longitude. The quantity of reduction of any annual mean to the epoch may therefore be written:

$$\Delta D_t = \Delta D_{ot} + \frac{\delta(\Delta D)}{\delta\varphi}(\varphi - \varphi_o) + \frac{\delta(\Delta D)}{\delta\lambda}(\lambda - \lambda_o) \ \ldots,$$

where $\varphi_o = 61°$ and $\lambda_o = 15°$ E. Gr.

An equal formula is used by KERÄNEN[1] for the reduction of the Finnish net-work.

As our coefficients in the formula above have appeared to be inaddable, it was necessary to compute

[1] J. Keränen: On the secular change of the earth's magnetic force in Northern Europe during the period 1910—1925. *Suomalaisen tiedeaktemian toimituksia.* Sarja A. Nid. XXVIII, No. 3.

their values for every interval of time. Instead of computing the coefficients by means of the method of least squares directly, I have combined the values from observatories three at a time, thereby attaining that the values from the different observatories with equal weight are included in the mean values of the coefficients. Hence we get a view of the influence of the values from the different observatories. To illustrate this course of computing, the following example may be given.

Table 11.

Coefficients for reduction from 1931.5 to 1933.5.

S: Sodankylä; L: Lovö; RS: Rude Skov; T: Tromsö; P: Pavlovsk.

Observatories					ΔD_{ot}	$\frac{\delta(\Delta D)}{\delta\varphi}$	$\frac{\delta(\Delta D)}{\delta\lambda}$
S	RS	L			+ 23′.72	+ 1′.06	— 1′.01
S		L		P	+ 20.96	+ 0.42	— 0.41
	RS	L		P	+ 21.66	+ 0.39	— 0.46
S	RS			P	+ 20.48	+ 0.14	— 0.41
S		L	T		+ 20.43	+ 0.29	— 0.30
S	RS		T		+ 21.11	+ 0.22	— 0.32
	RS	L	T		+ 20.97	+ 0.28	— 0.50
S			T	P	+ 18.50	+ 0.50	— 0.25
		L	T	P	+ 20.73	+ 0.28	— 0.41
	RS		T	P	+ 21.02	+ 0.26	— 0.43
Means					20′.96	+ 0′.38	— 0′.45
η					± 0.74	± 0′.17	± 0′.12

It has been considered desirable to have our values reduced to 1929.5, the epoch used by the Hydrographic Service.[1] With regard to the Magnetic Survey of Finland,[2] reduced to July 1, 1930, I have also computed

Table 12.

Coefficients for a reduction to the epochs 1933.5; 1930.5; 1929.5.

	ΔD_{ot}	$\frac{\delta(\Delta D)}{\delta\varphi}$	$\frac{\delta(\Delta D)}{\delta\lambda}$
1928.5—1933.5	+ 53′.70 ± 1′.32	+ 0′.99 ± 0′.37	— 1′.36 ± 0′.29
1929.5—1933.5	+ 43.19 ± 2.13	+ 1.04 ± 0.59	— 1.22 ± 0.44
1930.5—1933.5	+ 32.96 ± 2.38	+ 1.05 ± 0.66	— 1.05 ± 0.51[3]
1931.5—1933.5	+ 20.96 ± 0.74	+ 0.38 ± 0.17	— 0.45 ± 0.12
1932.5—1933.5	+ 10.61 ± 0.34	+ 0.17 ± 0.07	— 0.26 ± 0.05
1934.5—1933.5	— 10.58 ± 0.56	— 0.15 ± 0.11	+ 0.19 ± 0.09
1928.5—1930.5	+ 20.73 ± 1.04	— 0.06 ± 0.32	— 0.31 ± 0.23
1929.5—1930.5	+ 10.23 ± 0.24	— 0.01 ± 0.07	— 0.17 ± 0.05
1931.5—1930.5	— 11.26 ± 1.36	— 0.54 ± 0.38	+ 0.48 ± 0.30
1932.5—1930.5	— 22.79 ± 1.89	— 0.89 ± 0.56	+ 0.81 ± 0.44
1933.5—1930.5	— 32.96 ± 2.38	— 1.05 ± 0.66	+ 1.05 ± 0.51[3]
1928.5—1929.5	+ 10.51 ± 0.80	— 0.05 ± 0.22	— 0.14 ± 0.17
1930.5—1929.5	— 10.23 ± 0.24	+ 0.01 ± 0.07	+ 0.17 ± 0.05
1931.5—1929.5	— 21.49 ± 1.12	— 0.54 ± 0.31	+ 0.65 ± 0.24
1932.5—1929.5	— 32.79 ± 1.78	— 0.89 ± 0.50	+ 0.95 ± 0.38
1933.5—1929.5	— 43.19 ± 2.13	— 1.04 ± 0.59	+ 1.22 ± 0.44
1934.5—1929.5	— 53.97 ± 1.42	— 1.19 ± 0.40	+ 1.41 ± 0.31

[1] Gustaf S. Ljungdahl: A Magnetic Survey of Sweden made by the Hydrographic Service in the years 1928—1930. — *Kungl. Sjökarteverkets jordmagnetiska publikationer* No. 9. Stockholm 1934.

[2] J. Keränen: A Magnetic Survey of Finland on July 1, 1930. — *Meteorologische Zentralanstalt des Finnischen Staates.* Erdmagnetische Untersuchungen No. 17. Helsinki 1933.

[3] The value 8′.1 for the annual change at Tromsö in 1931′.5—1930′.5 is not included in the computation of these coefficients for the years of 1930.5—1933.5.

the coefficients for a reduction to this epoch. All coefficients for a reduction to the epochs 1933.5, 1930.5 and 1929.5 will be found in Table 12.[1]

The difference between observed and computed values of the annual change for the above-mentioned observatories may be found in Table 13.

Table 13.

Observed—computed values of the annual change.

	1928.5 —1933.5	1929.5 —1933.5	1930.5 —1933.5	1931.5 —1933.5	1932.5 —1933.5	1934.5 —1933.5
Sodankylä	+ 0′.8	+ 1′.20	+ 1′.60	+ 0′.6	+ 0′.01	+ 0′.07
Lovö	— 0.2	— 0.32	— 0.40	+ 0.15	— 0.21	— 0.32
Rude Skov	+ 0.26	+ 0.50	+ 0.58	+ 0.70	— 0.07	+ 0.01
Pavlovsk	+ 2.5	+ 3.87	+ 4.30	+ 0.5	+ 0.58	+ 0.98
Tromsö	—	—	—	— 1.0	+ 0.20	+ 0.17
η	0′.94	1′.47	1′.72	0′.59	0′.21	0′.31

	1928.5 —1930.5	1929.5 —1930.5	1931.5 —1930.5	1932.5 —1930.5	1933.5 —1930.5	
Sodankylä	— 0′.46	— 0′.13	— 0′.75	+ 1′.38	— 1′.60	
Lovö	+ 0.15	+ 0.03	+ 0.20	+ 0.53	+ 0.40	
Rude Skov	— 0.22	— 0.05	— 0.31	— 0.19	— 0.58	
Pavlovsk	— 1.90	— 0.43	— 2.50	— 3.52	— 4.30	
η	0′.68	0′.16	0′.94	1′.40	1′.72	

	1928.5 —1929.5	1930.5 —1929.5	1931.5 —1929.5	1932.5 —1929.5	1933.5 —1929.5	1934.5 —1929.5
Sodankylä	— 0′.43	+ 0′.13	— 0′.62	— 0′.71	— 1′.20	— 0′.83
Lovö	+ 0.12	— 0.03	+ 0.18	+ 0.33	+ 0.32	+ 0.22
Rude Skov	— 0.18	+ 0.05	— 0.22	— 0.49	— 0.50	— 0.37
Pavlovsk	— 1.46	+ 0.43	— 2.02	— 2.89	— 3.87	— 2.59
$\lvert\eta\rvert$	0′.55	0′.16	0′.76	1′.10	1′.47	1′.00

Since the values from the five observatories in question admit the determination of two of the three coefficients of the second degree in the development of the quantity of reduction, a quadratic formula is computed for the reduction from 1930.5 to 1933.5, where the terms acting the greatest influence on the dependence of the latitude are selected.

$$\Delta D_t = 30'.304 + 0'.232(\varphi - 61°) - 0'.586(\lambda - 15°) - 0'.0245(\varphi - 61°)^2 + \\ + 0'.0638(\varphi - 61°)(\lambda - 15°) \quad \ldots \quad (1933.5—1930.5).$$

The same primary material is expressed by the linear formula, the coefficients of which are computed by means of the method of least squares:

$$\Delta D_t = 30'.288 + 0'.351\,(\varphi - 61°) - 0'.559\,(\lambda - 15°). \qquad 1933.5—1930.5.$$
$$\pm 1.557 \quad \pm 0.228 \qquad\qquad \pm 0.180$$

The differences between the values of the secular change in these three years computed from these formulas are for the following stations:

Sodankylä	Lovö	Rude Skov	Pavlovsk	Tromsö	Mean
+ 2′.69	— 0′.23	+ 0′.89	— 1′.57	— 1′.71	± 1′.4.

[1] Comparing my coefficients with those of Keränen, computed on the basis of annual means from Sodankylä, Pavlovsk and Rude Skov, we observe that his values are in general lower.
J. Keränen: Ibid.

1910.5—1915.5		$\Delta D_0 = 43'.77$	$\frac{\delta(\Delta D)}{\delta\varphi} = + 0'.10$	$\frac{\delta(\Delta D)}{\delta\lambda} = - 0'.44$
1915.5—1918.5	$\varphi = 61°$ $\lambda = 15°$ E. Gr.	$= 25'.84$	$= - 0'.10$	$= - 0'.32$
1918.5—1922.5		$= 42'.55$	$= + 0'.10$	$= - 0'.73$
1922.5—1925.5		$= 35'.28$	$= + 0'.16$	$= - 0'.56$
1925.5—1930.5		$= 54'.91$	$= - 0'.04$	$= - 1'.05$

The investigations I have made, may indicate that nothing is to be gained by employing formulas of the second degree on the material in hand, where possible, if only values from these registering observatories are taken into consideration.

The quantities used for the reduction to the epochs have been calculated with a view to trying to follow, as nearly as possible, the fine-structure of the annual change. If, on the contrary, a calculation of an expression for the mean annual change during 1928.5—1934.5 is wanted, it is necessary to consider that, thereby, all details in the annual changes will be smoothed out. In this calculation have been included differences from the observatories, with the exception of Pavlovsk, and from remeasurements of our own points, as well as of those of the repeat-station of the Hydrografic Service,[1] whereby the differences were formed between the measuring years of the respective points. As the same reference marks have been used, corrections have been made for disagreements in the azimuth determinations.

With the annual mean change from 34 points the following formula has been computed by the method of least squares. Table 14 contains the primary statements, together with the values computed according to the said formula. Compare Fig. 12.

$$\Delta D_t^m = \underset{\pm 0.18}{10.'23} + \underset{\pm 0.053}{0.'055} \cdot (\varphi - 61°) - \underset{\pm 0.071}{0.'217}\,(\lambda - 15°). \qquad 1934.5—1928.5.$$

Table 14.

Station	G. S. Reg.	G. S. No.		Obs.	Calc.	Obs.—calc.
Tromsö			1934.5—1930.5	10′.4	10′.2	+ 0′.2
Sodankylä			1934.5—1928.5	9.0	8.1	+ 0.9
Lovö			1934.5—1928.5	9.7	9.5	+ 0.2
Rude Skov			1934.5—1928.5	10.4	10.5	— 0.1
Abisko	623 I	W	1933.5—1930.5	10.0	9.8	+ 0.2
Näs			1934.5—1928.5	10.2	10.4	— 0.2
Sveg	1064	S	1934.5—1931.5	10.9	10.4	+ 0.5
Burgsvik	2236	W 34	1934.5—1928.5	9.6	9.3	+ 0.3
Fredrika	305	E 30	1930.5—1929.5	9.9	9.7	+ 0.2
Ånge	37 II	W 31	1931.5—1929.5	12.4	10.2	+ 2.2
Muonionalusta	759	W 31	1931.5—1929.5	7.1	8.8	— 1.7
Rämsle	822	W 31	1931.5—1929.5	7.1	9.9	— 2.8
Jäkkvik	921	R 31	1931.5—1929.5	11.8	10.1	+ 1.7
Vänge-Långharpan	1171	T 32	1932.5—1930.5	8.9	9.6	— 0.7
Laggåsen	1188	T 32	1932.5—1929.5	8.6	10.4	— 1.8
Saltoluokta	1336	W 32	1932.5—1930.5	10.2	9.8	+ 0.4
Viken	1411	W 33	1933.5—1930.5	10.4	10.2	+ 0.2
Östra Bitterna	1453	W 33	1933.5—1930.5	10.1	10.5	— 0.4
Ulricehamn	1466	W 33	1933.5—1930.5	10.9	10.4	+ 0.5
Torpa	1501	T 33	1933.5—1930.5	9.8	10.3	— 0.5
Kåseberga	1662	T 33	1933.5—1930.5	10.5	10.1	+ 0.4
Baskemölla	1667	T 33	1933.5—1930.5	10.8	10.1	+ 0.7
Karesuando	1759	W 33	1933.5—1929.5	8.7	9.1	— 0.4
Bredsel	1846	W 33	1933.5—1929.5	9.9	9.3	+ 0.6
Arvidsjaur	1847	W 33	1933.5—1929.5	9.3	9.6	— 0.3
Arjeploug	1848	W 33	1933.5—1929.5	9.6	9.8	— 0.2
Gränna	1874	W 34	1934.5—1930.5	10.2	10.2	0.0
Gemla	1880	W 34	1934.5—1930.5	9.8	10.1	— 0.3
Traneryd	2016	T 34	1934.5—1930.5	10.5	10.1	+ 0.4
Vimmerby	2034	T 34	1934.5—1930.5	10.3	9.9	+ 0.4
Edsbyn	2317	S 34	1934.5—1929.5	9.7	10.1	— 0.4
Leksand	2333	S 34	1934.5—1929.5	10.1	10.2	— 0.1
Linsäll	2354	S 34	1934.5—1929.5	10.4	10.5	— 0.1
Limedsforsen	2357	S 34	1934.5—1929.5	10.4	10.6	— 0.2

The mean error of one point is $\pm \sqrt{\frac{[\Delta\Delta]}{n-1}} = \pm 0.'89$.

[1] Gustaf S. Ljungdahl: Ibid.

From the above calculation the following points are excluded: Lycksele (323 E 30), Vindeln (337 E 30), Flåsjön (452 R 30), Vittangi (1758 W 33), with the respective values of 15′.3, 15′.2, 21′.1 and 3′.7 on the mean annual change.

Vittangi, for which the value calculated is 9.′2, is situated in a large gabbro district. In this connection may be mentioned Vittanki (1796 W 33) and Palojuensuu (1810 W 33), giving values for the secular change which considerably deviate from those obtained for the surrounding points. (See Table 37.) These abnormal values are certainly not depending upon errors in the measurements, but indicate that for the strong anomalies in question anomal secular variations may possibly be taken into consideration which, in these cases, manifested themselves, partly by one too small value and partly by two too big values. As a comparison our measurements at Näs, situated within the Jämtland anomaly, show a secular variation which deviates from the calculated one by 6′ in 6 years.

The Declination at the Uppsala Magnet house.

Latitude 59° 51.′2 N; Longitude 17° 37.′7 E. Gr.

As a rule the field measurers have got their training at Uppsala, in the magnet house belonging to the Physical Institution. The expeditions were generally prepared there and finished with measurements in the magnet house.

Great care has been taken in order to compare the instruments there as to the determination of the geographic meridian. For the central pillar in the magnet house the following values were obtained: the azimuth for reference mark No. 1, the spire on the roof of the Cathedral, N 45 ° 05.′3 E, and for reference mark No. 2, the lightning rod of the Epidemic Hospital, N 39° 55.′8 W.

As to the declinometer there of the Lamont pattern, irregularities in the base-value have sometimes been found. I am therefore of the opinion that more reliable and homogenous results may be obtained by using the Lovö records all through for the reduction to the middle of the year. As a first step in the treatment of the Uppsala measurements, the needle corrections found at the comparisons at the observatories have been applied. Thereupon, all the values for the middle of the year were reduced to 1931.5 with the annual changes of Lovö, when we attained: $D_{1931.5} = -3°\ 02.'1 \pm 0.'9$. The thus smoothed values are:

1928.5	1929.5	1930.5	1931.5	1932.5	1933.5	1934.5
−3°30′.9	−3°20′.7	−3°10′.8	−3°02′.1	−2°52′.6	−2°43′.0	−2°32′.9

These values have been used for the determination of the needle corrections of every separate measurement in the magnet house. At the calculation of the definite needle corrections, given in pp. 20—21, the Uppsala values have received half the weight compared with those of the observatories. This because, at the Uppsala magnet house, we are without any independent value for the middle of the year.

As final declination values for the Uppsala magnet house the following were obtained:

Table 15.

Declination at the Uppsala Magnet house.

	D	Red. to 1929.5	Red. to 1933.5
1929.5	−3°21′.6	−3°21′.6	−2°42′.8
1930.5	−3 09′.9	−3 19′.7	−2 40′.9
1931.5	−3 01′.9	−3 21′.1	−2 42′.6
1932.5	−2 51′.7	−3 21′.0	−2 42′.0
1933.5	−2 42′.7	−3 21′.5	−2 42′.7
1934.5	−2 33′.2	−3 22′.1	−2 43′.1
	Means	−3 21′.2 ± 0′.4	−2 42′.4 ± 0′.6

The values reduced to the epochs may be found in Table 21.

The difference between the Uppsala magnet house and the Lovö observatory, computed from the above material, is: D (Uppsala) — D (Lovö) = −12.′2 ± 0.′5.

The Declination at the Abisko Absolute house.

Latitude 68° 21.′5 N.; Longitude 18° 49.′4 E. Gr.

The result of the measurements at the absolute house belonging to this station may be seen from the following table:

Table 16.

Declination at The Abisko Absolute house. — Observer S. Werner.

Date	Instrument		D	n	1929.5	1933.5
1930 $^{3}/_{9}$	Bamberg No.	2312	1930.5 : — 2°05′.4	4	— 2°14′.9	— 1°28′.7
1931 $^{19}/_{7}$	Askania	84065	1931.5 : — 1 55.4	10	— 2 18.4	— 1 33.3
1932 $^{2}/_{9}$, $^{27}/_{9}$	Chasselon	83	1932.5 : — 1 43.0	5	— 2 18.7	— 1 32.1
1933 $^{31}/_{5}$, $^{23}/_{6}$, $^{23}/_{8}$, $^{23}/_{8}$	Chasselon	83	1933.5 : — 1 35.4	8	— 2 21.5	— 1 35.3
				Means	— 2 18.4	— 1 32.3

The values — 2° 18′ and — 1° 32′ may be found in Table 21 under the Registry No. 623. I.

The Registration-station at Näs, Jämtland.

Latitude 62° 58.′4 N.; Longitude 14° 34.′5 E. Gr.

a) The House for magnetic registrations.

This registration-station, erected in the summer of 1928, was kept going during the summer months of 1928, 1929 and 1930 and was managed by Mrs. Karin Molin. The house for magnetic registrations belongs to the Academy of Science. It is a wooden pavilion with double walls and a wide, protecting roof, specially

Fig. 8. The registration-station at Näs, Jämtland.

constructed for the circulation of air. The house is 5 m long and 2.7 m wide, had the entrance and a photographic dark-room towards the south. It lay on lime-stone rock, and, from June 1929, the instruments have been standing on cement-pillars, cast from the rocky foundation through wide holes cut in the floor.

The house and the cement-pillar for determinations of the base-line values, about 10 m south of the magnet-house, may be seen from Fig. 8.

The variometers are supplied by Toepfer & Sohn, Potsdam, and belong to the Academy of Science. They are placed behind each other, as indicated in Fig. 9. The registering apparatus is placed at the south and, counting from the same towards the north, the variometers stand in the following order: H, D and Z. The needles of the D- and H-variometers are suspended in quarts filaments.

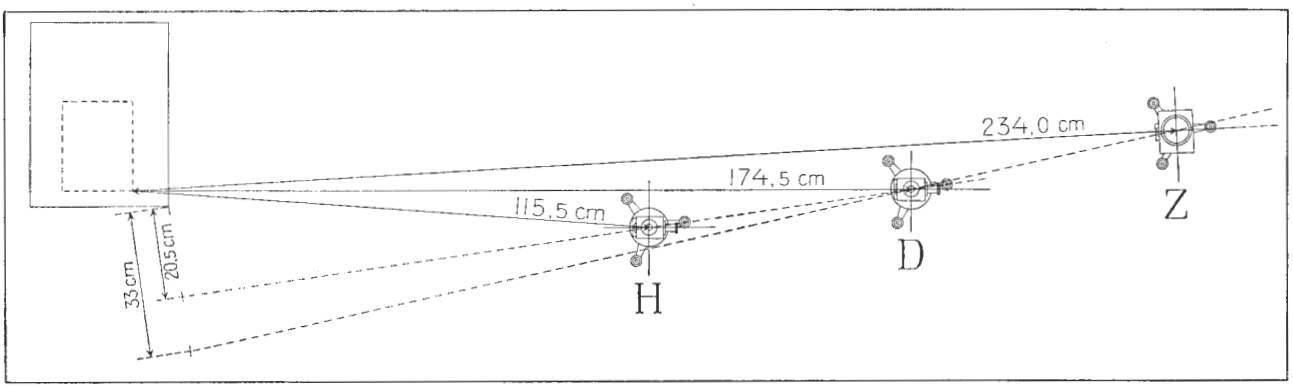

Fig. 9. The arrangement of the variometers at Näs.

b) Scale value of the declinometer.

The scale value of the declinometer, expressed in minutes per mm, is w_D. r_D is the distance from the mirror of the declinometer to the drum, expressed in mm; here the »glass-effects» of the lenses and the mirror are included, as may be seen:

$$r_D = 1{,}745 - 2.4 - 32 = 1{,}710.5 \text{ mm.}$$

The scale value is computed from the formula

$$w_D = \frac{180 \cdot 60}{2 r_D \pi}(1 + \theta)(1 + \delta).$$

$\theta = \frac{\gamma}{\alpha - \gamma}$, where α is the angle at which the quartz-fibre is turned, and γ is the corresponding angle, at which the magnet will be deflected. The same filament was used for all the three years. Determinations of θ were made by K. Molin on the following days

1930 Aug. 12th . . . . . $\theta = 0.0705$
1931 June 16th . . . . . $\theta = 0.0699$.

The mean value $\theta = 0.070$ has been used all the time. With regard to the deformation of the paper by developing, the factor $(1 + \delta)$ is applicated, where the assumed value for δ is $1.5 : 200 = 0.0075$. Thus we have $w_D = 1.'083$ per mm.

c) Base-line values.

For statement of the base-line values all observations at our five points at Näs are used, by means of the difference in D between every point and the cement-pillar. These differences are found by the respective values at the middle of the year; thus the influence of the annual change is avoided. The average differences, computed from all D-determinations in the years of 1928—1934, are the following:

Reg. Station No.	1 (S. G. U. 43)	—	Cement-pillar	= 0′.0
» »	» 68 (The brass bolt)	—	»	= + 2.3
» »	» 159 (S. G. U. 34)	—	»	= + 5.8
» »	» 158 (S. G. U. 33)	—	»	= + 9.3

The adopted base-line values are given in the Table below. On July 24, 1928, at 18^h and on July 18, 1929, at 11^h—17^h Gr.M.T. the base-mirror of the declinometer was adjusted.

Table 17.

Adopted base-line values for the declinometer at Näs.

1928 $^{13}/_{7}$—$^{21}/_{7}$ 18^{h}	$D_B = -6°04'.1$
» $^{21}/_{7}$ 18^{h}—$^{15}/_{8}$	— 5 36.1
1929 $^{25}/_{6}$—$^{18}/_{7}$ 11^{h}	— 6 52.9
» $^{18}/_{7}$ 17^{h}—$^{3}/_{8}$	— 6 56.0
1930 $^{11}/_{6}$—$^{30}/_{9}$	— 5 21.1

The differences between the mean value of every day for Näs and for the four observatories mentioned have been computed, which control has proved the reliability of the base values used.

d) Determinations of the values for the middle of the year.

The determination of the respective values for the middle of the year has been done by means of differences, obtained at the observatories of Rude Skov, Lovö, Sodankylä and Tromsö, which correspond to our recording periods. The values concerning »all days» are given in the Table 18.

Table 18.

Näs	Monthly Means	RS.	Lovö	Sod.	Tromsö	Mean		
1928 July	— 7°24′.2	— 0′.96	— 0′.96	— 1′.05	—	— 1.0	— 7°25′.2	
» Aug.	24.9	— 0.81	— 0.79	+ 0.02		— 0.5	25.4	25′.3
1929 June	— 7 15.9	+ 0.79	+ 1.03	+ 0.94		+ 0.9	— 7 15.0	
» July	14.5	— 0.23	— 0.12	— 0.38		— 0.2	14.7	
» Aug.	13.6	— 1.25	— 1.41	— 1.56		— 1.4	15.0	14.9
1930 June	— 7 08.2	+ 0.66	+ 0.60	+ 1.02	+ 1.1	+ 0.8	— 7 07.4	
» July	06.6	— 0.23	— 0.17	+ 0.05	— 1.2	— 0.4	07.0	
» Aug.	05.6	— 0.92	— 0.61	— 0.21	— 1.1	— 0.7	06.3	
» Sept.	04.5	— 1.83	— 1.63	— 2.11	— 3.8	— 2.3	06.8	06.9

Hourly mean values of the declination at Näs for the summer months of 1928, 1929 and 1930.

By

Karin Molin.

Twice daily the time was marked on the recording paper. The time was fixed by the broad-casting time signals at 13 o'clock.

Declination. D = 7° W + Tabular Quantities expressed in Minutes.

1928 July Hourly mean values. Gr. M. T.

Day	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	M
13 Q																			26′.3	26′.1	24′.8	25′.0	25′.2	23′.8	
14	24′.1	25′.3	24′.0	19′.5	19′.4	19′.1	19′.5	21′.0	22′.2	23′.1	25′.2	27′.3	29′.2	28′.0	27′.2	25′.1	25′.7	25′.0	24.2	25.2	26.2	26.1	26.4	25.2	24′.3
15 Q	21.9	17.9	17.5	16.7	16.2	15.9	16.2	18.3	22.1	25.3	26.6	28.5	28.8	28.1	25.8	24.4	24.8	25.2	25.7	25.9	27.8	27.6	27.7	21.6	23.2
16 Q	19.6	20.3	19.4	19.9	15.9	16.8	17.1	18.8	19.8	21.9	26.3	31.3						23.2	23.2	24.4	25.1	23.5	24.1	23.8	
17 Q	23.1	20.8	20.0	18.8	17.7	16.6	16.7	17.7	19.6	24.4	29.3	32.5	35.2	35.0	31.9	28.0	25.2	25.2	25.8	26.5	25.0	25.1	23.7	22.4	24.4
18	21.2	20.6	19.5	17.4	15.6	15.4	18.1	20.2	23.8	27.5	30.9	36.3	36.2	35.0	30.5	29.6	27.5	27.4	26.7	26.4	27.4	25.2	27.6	18.7	25.2
19	15.7	13.2	17.4	19.5	18.0	18.8	17.7	17.9	21.0	23.0				28.6	29.1	28.8	27.2	25.4	25.2	23.2	25.1	25.3	25.3	24.2	
20 Q	22.1	20.9	21.3	23.1	23.3	23.2	21.1	18.7	18.0	21.0	25.2	28.5	33.7	35.3	35.7	34.0	30.9	28.8	27.6	26.3	25.1	24.4	24.2	27.6	25.8
21	20.8	18.9	18.8	17.6	14.7	14.0	13.7	14.5	16.8	19.1	23.6	29.1	33.2	35.2	34.1	31.7	30.5	28.3	26.0	26.5	26.3	24.5	24.9	24.4	23.6
22	33.0	18.6	20.5	27.8	17.9	22.1	34.1	22.0	16.8	17.7	25.2	29.9	31.8	33.5	33.6	32.0	31.9	29.0	30.0	30.0	28.0	22.6	19.3	21.0	26.2
23	15.0	13.4	11.4	12.1	17.6	16.7	16.4	17.1	16.7	17.9	21.9	25.6	27.8	28.7	27.8	28.5	26.2	25.8	25.2	25.1	24.4	25.3	22.3	19.3	21.2
24	15.7	17.7	22.3	17.4	17.4	18.7	19.7	20.9	20.9	22.8	24.9	29.4	33.6	33.8	31.9	30.6	27.4	35.3	15.2	23.1	22.2	23.2	18.0	20.2	23.4
25	20.6	18.9	17.8	16.8	17.7	13.6	13.5	13.7	15.5	18.1	23.0	28.0	33.1	33.7	31.4	30.5	27.7	25.6	24.3						
26															35.3	30.7	27.9	26.9	27.0	26.8	27.2	27.1	26.5	21.8	
27	23.4	18.4	16.3	15.6	14.9	15.7	15.2	17.1	20.2	23.3	27.0	30.7	30.9	29.8	29.3	29.1	25.7	24.3	24.4	25.4	26.7	25.3	24.5	25.1	23.3
28	27.5	24.3	20.0	18.0	17.8	23.4	27.7	26.9	26.8	27.3	28.7	30.6	32.0	33.3	32.0	24.5	26.5	27.5	27.7	28.7	26.7	24.1	25.9	25.8	26.4
29	22.2	18.3	20.1	21.2	26.1	23.4	20.1	18.4	16.9	19.1	22.1	25.5	27.8	25.9	25.4	25.6	26.5	26.4	26.5	25.5	24.9	24.7	25.6	24.1	23.4
30	22.1	21.3	20.3	19.6	19.1	18.9	19.9	21.0	22.3	24.9	28.1	29.8	30.3	28.4	26.8	25.5									
31																									
M	21.7	19.3	19.2	18.9	18.1	18.3	19.2	19.0	20.0	22.3	25.9	29.5	31.7	31.5	30.5	28.7	27.4	26.8	25.4	26.0	25.8	24.7	24.2	23.1	24.2
Q M	21.7	20.0	19.6	19.9	18.3	18.1	17.8	18.4	19.9	23.2	26.9	30.2	32.6	32.8	31.1	28.8	27.0	25.6	25.7	25.8	25.6	25.1	25.0	23.8	24.5

1928 August

1																									
2														29′.1	28′.8	28′.0	26′.7	25′.5	24′.5	25′.1	25′.5	25′.8	21′.7	21′.3	
3	20′.3	20′.4	18′.0	17′.8	17′.7	16′.4	15′.4	15′.7	18′.7	21′.3	25′.4	30′.5	32′.1	32.2	29.9	25.2	25.3	25.3	24.9	24.7	24.6	23.3	22.3	21.2	22′.9
4	21.2	20.3	20.7	22.5			17.9	16.8	20.1	24.3	26.7	30.8	33.2	33.5	33.7	30.5	27.7	28.8	29.7	30.8	26.5	22.5	22.3	19.0	
5							38.5	29.5	23.9	23.5	24.4	31.2	35.1				38.4	42.6	34.0	35.9	27.0	31.9	23.5	20.2	
6										24.5	27.8	29.4	30.7												
7														28.6	26.7	23.3	24.4	25.2	26.4	24.7	23.9	23.1	23.2	22.7	
8	22.1	22.1	20.7	21.3	19.8	18.0	18.9	20.0	23.4	25.5	26.8	29.5													
9																									
10 Q															27.7	26.5	24.6	24.6	25.9	26.5	25.5	26.1	24.8	23.3	
11	23.3	24.2	24.7	21.2	21.2	18.9	23.6	23.4	27.8	28.2	28.7	29.8	28.8	29.4	27.9	25.4	23.8	23.2	24.6	26.5	26.4	25.4	24.3	22.3	25.1
12	22.3	21.9	22.3	23.6	24.1	22.5	20.2	20.3	25.7	26.7	28.7	31.0	33.9	33.4	31.7	29.8	31.7	32.1	29.8	24.5	16.3	23.4	23.1	21.5	25.9
13	20.0	16.4	26.7	24.7	23.0	20.8	23.6	24.0	24.4	26.2	28.5	28.6	30.8	29.6	27.4	23.2	22.1	23.9	26.5	26.7	26.6	24.5	24.6	24.7	24.9
14 Q	25.1	24.3	21.2	18.4	17.5	17.3	18.9	21.2	23.2	26.5	29.9	31.8	31.7	30.7	27.8	25.4	23.2	24.0	24.7	25.5	25.6	25.4	25.7	25.6	24.6
15 Q	22.0	21.0	20.6	20.0	17.9	17.8	18.7	20.0	22.1	26.4															
M	22.0	21.6	21.9	21.2	20.2	18.8	21.7	21.2	23.3	25.3	27.4	30.3	32.0	30.8	29.1	26.4	26.8	27.5	27.1	27.1	24.8	25.1	23.6	22.2	24.9
Q M	23.6	22.7	20.9	19.2	17.7	17.6	18.8	20.6	22.7	26.5	29.9	31.8	31.7	30.7	27.8	26.0	23.9	24.3	25.3	26.0	25.6	25.8	25.3	24.5	24.5

Declination. D = 6° W + Tabular Quantities expressed in Minutes.

1929 June Hourly mean values. Gr. M. T.

Day	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	M
25															79′.0	79′.0	77′.9	76′.7	76′.7	76′.6	76′.7	76′.6	76′.7	76′.4	
26 Q	75′.6	76′.7	72′.5	70′.1	69′.1	69′.0	69′.1	70′.3	72′.3	74′.6	78′.4	82′.9	85′.4	83′.8	82.0	78.8	77.5	76.7	75.7	76.5	76.2	75.7	75.5	75.3	75′.8
27	74.5	73.5	71.9	70.1	67.0	63.9	63.5	65.4	69.2	74.5	78.0	82.0	83.2	82.8	82.7	79.9	76.7	75.5	75.1	74.6	77.5	77.8	76.5	77.8	74.7
28	78.8	76.6	75.6	72.2	70.2	72.4	71.2	72.3	70.1	74.5	79.0	82.7	83.2	86.1	84.4	85.5	84.3	82.7	80.0	73.5	74.8	79.3	79.5	79.0	77.8
29	76.7	76.2	75.1	73.5	71.3	68.6	67.0	67.0	71.3	75.6	79.0	81.6	83.2	82.1	80.0	77.3	76.2	75.5	76.6	76.7	76.2	75.6	74.0	73.3	75.4
30	72.4	73.6	75.7	76.6	72.4	68.1	69.0	71.5	74.7	78.9	81.1	84.2	83.2	82.7	82.1	80.1	80.0	80.5	79.9	78.9	78.0	72.4	59.5	66.0	75.9
M	75.6	75.3	74.2	72.5	70.0	68.4	68.0	69.3	71.5	75.6	79.1	82.7	83.6	83.5	81.7	80.1	78.8	77.9	77.3	76.1	76.6	76.2	73.6	74.6	75.9
1929 July																									
1	61′.0	54′.0	55′.1	59′.4	66′.0	68′.2	67′.0	65′.7	68′.3	71′.1	72′.6	77′.8	80′.2	81′.3	81′.0	78′.7	76′.8	75′.1	75′.1	76′.6	76′.7	76′.7	75′.6	73′.9	71′.4
2	71.8	72.3	71.7	76.6	71.5	73.5	70.0	69.1	70.4	73.6	78.0	81.0	82.1	81.3	81.5	81.6	80.5	78.9	77.8	77.3	77.3	75.8	74.7	73.5	75.9
3	72.4	71.3	69.1	68.1	68.0	68.0	67.7	69.0	70.4	72.4	75.7	79.1	81.0	81.6	80.1	80.0	80.0	80.0	78.3	77.3	76.8	77.7	74.6	73.6	74.7
4	73.5	71.5	69.2	69.1	67.2	67.1	68.8	72.4	77.9	76.7	76.9	81.2	82.7	81.8	80.0	76.8	76.7	76.7	77.4	76.8	77.9	76.8	75.2	73.7	75.2
5	72.9	72.3	70.8	68.1	65.7	64.8	67.0	69.0	70.9	73.4	77.8	82.0	86.2	87.6	87.6	87.6	91.0	79.4	80.0	81.7	80.0	72.2	67.1	70.1	76.1
6	69.7	68.1	70.4	68.6	67.9	70.1	84.3	82.1	72.6	76.5	80.0	83.5	85.9	85.4	82.2	81.8	80.5	78.2	79.8	77.9	76.7	76.6	74.5	76.2	77.1
7	71.4	69.1	65.9	65.9	65.9	66.0	66.1	69.0	70.6	73.5	77.9	81.1	81.7	81.1	78.9	76.1	75.1	76.2	77.3	78.3	77.2	76.2	75.1	74.5	73.7
8	73.5	73.5	72.5	70.6	67.0	64.8	65.0	65.9	69.1	73.1	76.7	80.9	82.2	81.2	80.3	78.9	75.7	76.2	75.5	74.5	75.6	75.7	75.1	74.6	74.1
9 Q	73.6	73.5	72.4	68.6	66.9	64.9	64.8	66.0	68.8	73.5	78.7	82.7	83.4	81.7	79.9	77.7	76.3	75.5	75.5	76.5	76.0	75.4	75.6	75.6	74.2
10	75.1	73.5	71.8	69.0	68.0	68.0	67.2	66.3	70.2	71.3	75.7	77.3	80.9	87.6	95.1	85.4	95.0	95.1	87.5	86.7	82.0	82.7	80.0	61.6	78.0
11	64.7	65.8	59.8	63.9	63.2	66.5	64.8	62.4	64.8	67.4	72.9	80.9	83.2	80.1	78.9	78.9	77.3	77.5	75.6	77.8	76.6	76.6	72.6	72.9	71.9
12	77.8	69.5	70.1	69.1	68.1	68.2	68.2	69.1	69.0	70.2	73.6	78.9	80.6	80.1	79.2	78.4	75.6	74.0	72.6	74.0	74.6	75.0	76.7	73.5	73.6
13 Q	71.3	71.2	71.3	69.1	67.2	66.3	66.0	66.6	69.7	73.4	76.7	78.3	79.5	79.1	78.0	77.1	75.6	73.9	73.7	71.5	73.5	74.0	73.4	71.4	72.8
14	69.7	68.0	70.1	70.1	68.0	66.0	64.8	64.7	66.9	70.4	74.6	79.9	81.3	81.9	80.9	78.9	75.1	76.1	80.5	68.1	69.2	61.6	57.3	48.5	70.5
15	42.1	58.2	59.4	75.8	74.6	76.9	71.2	74.6	72.4	75.3	78.3	81.6	82.7	82.7	81.3	80.0	79.2	80.0	74.4	77.5	76.2	65.8	63.6	58.3	72.6
16	59.8	62.8	61.7	59.9	60.7	66.0	65.5	69.7	71.6	75.7	80.3	80.3	77.4	75.1	78.0	1014	95.1	83.2	83.9	73.6	71.5	79.0	78.0	76.6	74.5
17	75.2	76.7	72.7	70.2	68.2	68.6	68.0	74.0	76.8	75.5	79.9	83.5	81.0	77.8	82.0	79.6	76.6	75.4	74.6	76.5	75.7	74.5	74.6	73.9	75.5
18	72.0	70.3	68.8	68.4	66.9	64.7	64.7	67.0	68.9	71.3	75.7							74.4	74.4	75.5		73.4	73.2	76.1	
19 Q	73.9	70.4	69.0	69.1	69.0	69.3	70.0	68.4	69.1	70.2	73.5	77.6	79.3	77.7	76.6	76.5	76.5	75.7	75.5	75.4	74.9	74.4	74.0	74.0	73.3
20	73.9	72.9	72.2	71.3	69.9	67.9	68.9	72.8	74.9	78.2	82.2	85.8	87.2	88.5	86.3	78.8	80.4	79.8	79.6	78.8	75.3	70.0	73.5	75.5	76.9
21	80.0	73.3	71.2	69.2	66.4	66.3	65.8	69.6	72.1	76.6	79.9	82.2	83.3	84.9	83.1	78.8	77.9	76.8	73.8	77.1	77.2	75.5	74.6	74.0	75.4
22	74.4	71.3	70.6	70.1	65.4	65.6	65.7	67.2	69.3	72.9	75.4	78.2	80.9	77.9	77.6	77.7	76.2	75.1	72.3	74.4	76.5	76.6	75.5	76.7	73.5
23	75.6	74.8	72.4	69.1	68.4	67.8	68.9	72.1	73.8	76.5	79.1	82.0	83.1	81.4	78.6	75.5	72.6	73.3	75.0	76.2	76.0	76.0	76.0	76.6	75.0
24	74.6	72.0	70.4	69.0	67.7	69.3	71.2	71.7	72.1	74.3	77.7	81.0	82.6	83.2	75.6	75.6	77.6	80.9	73.9	75.5	78.4	78.9	76.4	75.6	75.2
25	73.4	72.2	75.4	73.4	73.9	74.0	71.2	71.7	73.3	73.3	76.5	79.3	81.4	81.0	79.8	76.6	75.5	76.0	74.9	74.5	73.9	72.1	73.0	69.2	74.8
26	67.8	68.8	63.5	67.9	68.3	69.6	69.3	70.6	71.9	74.4	78.7	80.9	82.1	81.1	79.7	77.6	75.3	75.3	73.8	74.7	75.3	74.5	73.3	72.3	73.8
27	73.3	72.9	73.1	70.6	70.1	72.7	70.0	70.2	71.7	73.4	77.5	80.6	81.9	80.9	78.8	77.7	76.5	76.6	74.9	74.4	76.1	76.5	76.6	75.3	75.1
28 Q	74.0	72.4	72.0	70.3	69.7	70.3	70.3	70.5	71.9	74.3	76.6	79.8	80.9	80.8	79.8	77.8	76.5	75.3	74.3	75.5	75.5	75.1	74.6	73.9	74.3
29 Q	74.3	73.1	71.0	70.1	67.8	68.1	69.1	70.2	73.1	74.5	78.2	82.5	84.4	84.2	82.0	80.7	78.5	77.2	77.5	77.7	77.6	76.7	75.0	74.5	75.8
30	72.3	72.4	72.1	69.0	67.3	67.3	67.3	69.0	72.2	75.5	78.7	80.9	81.8	82.5	81.8	79.5	77.6	77.8	77.7	75.3	77.8	76.6	70.3	72.3	74.8
31	70.8	68.4	69.0	67.9	67.3	68.1	69.9	71.2	73.4	76.7	79.8	82.1	83.1	81.6	80.7	78.6	77.7	76.6	76.6	76.6	78.9	77.8	75.1	73.5	75.1
M	71.2	70.2	69.3	69.0	67.8	68.2	68.3	69.6	71.2	73.7	77.3	80.7	82.1	81.4	80.8	79.7	79.0	77.5	76.6	76.3	76.2	75.0	73.7	72.3	74.5
Q M	73.4	72.1	71.1	69.4	68.1	67.8	68.0	68.3	70.5	73.2	76.7	80.2	81.5	80.7	79.3	78.0	76.7	75.5	75.3	75.3	75.5	75.1	74.5	73.9	74.2
1929 August																									
1	73′.7	68′.4	57′.3	57′.7	61′.5	63′.6	64′.2	64′.8	65′.7	71′.2	74′.2	80′.2	89′.2	87′.4	82′.1	87′.1	79′.1	78′.0	81′.8	76′.7	75′.1	56′.5	58′.6	59′.5	71′.3
2	60.4	64.7	67.0	66.8	73.0	75.4	73.1	72.2	76.4	79.7	80.0	82.0							75.8	76.0	75.1	76.6	73.3	74.0	
3	70.5	68.9	70.0	68.4	68.5	68.3	69.1	70.2	73.7	75.6	77.7	79.9	79.9						74.5	75.9	75.7	73.0	73.3	72.9	
4	70.2	69.0	70.0	69.3	69.1	66.8	68.3	68.9	72.0	75.4	79.2	82.1	81.9	79.8	78.6	76.6	75.6	76.0	76.7	76.7	76.5	74.4	69.1	66.3	73.7
5	69.1	61.2	73.3	66.6	64.8	64.8	65.5	68.9	72.1	76.2	78.8	81.9	83.2	82.1	78.2	76.6	76.6	74.2	75.5	76.5	75.0	73.4	70.2	74.2	73.3
6	71.2	69.9	69.4	68.2	67.2	66.2	66.9	68.3	70.6	73.3	76.2	77.6	78.7	78.8	77.8	74.6	74.1	74.5	75.6	75.6	75.4	74.8	74.2	73.2	73.0
7 Q	70.4	69.2	68.6	67.9	67.2	67.9	69.0	71.9	74.3	76.6	79.5	81.9	81.9	80.4	78.1	76.0	74.9	74.8	75.3	76.4	76.2	74.5	73.4	72.4	74.1
8 Q	72.1	71.3	70.5	69.0	67.5	67.5	68.5	70.8	73.4	76.4	78.8	80.8	81.9	81.2	78.5	76.7	75.4	74.6							
M	69.7	61.8	68.4	66.7	67.4	67.6	68.1	69.5	72.6	75.6	78.1	80.8	82.4	81.6	78.9	77.9	76.0	75.4	76.5	76.3	75.6	71.9	70.3	70.4	73.6
Q M	71.3	70.3	69.6	68.5	67.4	67.7	68.8	71.4	73.9	76.5	79.2	81.4	81.9	80.8	78.3	76.4	75.2	74.7	75.3	76.4	76.2	74.5	73.4	72.4	74.2

Declination. D = 6° W + Tabular Quantities expressed in Minutes.

1930 June Hourly mean values. Gr. M. T.

Day	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	M
11 Q													76′.6	73′.7	72′.7	70′.9	70′.1	69′.5	68′.9	70′.5	70′.5	69′.4	68′.1	66′.8	
12	67′.0	63′.4	61′.3	60′.2	58′.7	56′.1	59′.8	60′.6	60′.2	67′.0	72′.1	77′.2	82.3	82.4	79.2	81.3	75.0	74.7	73.7	64.1	64.5	71.1	74.2	70.5	69′.0
13	55.9	62.0	65.1	64.5	63.0	61.7	62.8	67.5	70.6	71.6	73.7	72.9	75.8	76.3	75.8	70.6	68.3	72.4	71.9	73.7	72.8	73.6	71.6	69.9	69.3
14	74.8	67.2	68.3	66.0	61.8	59.3	68.3	65.0	65.1	69.2	69.3	72.5	73.7	72.7	71.6	69.6	69.7	70.4	70.1	69.5	69.4	68.5	68.3	66.9	68.6
15 Q	66.2	65.6	65.1	64.0	63.9	62.9	61.1	60.4	61.1	66.0	70.8	75.9	76.9	77.0	75.4	72.7	73.6	71.6	70.9	70.9	70.7	70.5	70.5	69.4	68.9
16	68.3	66.2	65.7	67.1	71.4	78.6	78.1	67.0	70.6	65.6	53.6	64.1	61.7	71.1	69.9	72.7	70.5	71.8	73.0	77.0	68.9	58.6	43.4	54.5	67.1
17	60.7	65.3	67.8	67.3	64.0	65.1	64.6	64.0	62.9	65.1	65.1	71.6	74.5	74.7	73.1	72.7	71.0	72.7	72.7	63.6	64.8	66.2	62.4	64.6	67.4
18	68.4	68.5	66.5	66.2	62.0	61.0	63.7	64.8	62.4	63.1	66.5	69.0	70.2	68.3	64.9	72.5	75.7	68.3	72.1	71.6	71.7	70.5	70.3	61.8	67.5
19	66.2	67.2	66.2	62.9	64.0	64.1	61.6	62.9	65.1	67.8	68.4	70.5	72.2	73.7	70.3	72.1	67.2	71.4	71.7	71.6	71.5	70.2	69.9	70.6	68.3
20	73.7	69.4	66.2	66.8	69.5	66.2	65.9	63.9	64.3	67.2	70.1	72.7	74.6	74.6	70.3	70.5	67.2	71.0	69.3	69.5	68.3	66.0	67.1	70.1	68.9
21	68.5	64.5	63.4	62.4	61.8	60.6	60.7	60.7	64.5	67.2	70.6	73.8	74.8	71.0	74.6	72.7	65.1	69.6	70.6	71.6	71.3	70.6	70.8	69.4	68.0
22	68.4	64.0	63.0	63.6	64.0	64.0	65.1	65.9	68.4	67.1	68.8	70.6	72.4	72.4	70.5	68.9	68.3	69.4	69.0	69.4	67.1	68.3	68.2	66.2	67.6
23 Q	66.2	67.5	65.1	62.9	61.9	62.4	62.9	62.9	63.4	65.1	68.5	73.0	74.8	74.5	72.7	70.5	68.2	68.3	68.9	69.0	69.8	70.1	69.0	67.2	67.7
24 Q	67.1	65.4	65.2	64.0	65.0	61.8	60.7	61.0	63.1	65.6	68.8	71.8	73.6	73.1	71.6	70.3	69.3	69.4	67.3	68.5	70.5	69.4	69.0	67.2	67.4
25 Q	66.8	66.7	65.7	64.0	62.9	64.4	65.6	65.6	68.2	71.6	73.6	74.9	74.8	73.8	73.5	71.6	70.4	69.9	70.6	71.6	71.1	69.9	68.6	68.8	69.4
26	69.2	67.8	68.4	66.2	64.6	63.6	65.1	66.2	69.6	70.5	72.5	76.4	74.8	73.3	74.7	71.6	71.2	71.6	71.4	70.5	68.3	69.4	70.5	69.9	69.9
27	69.9	71.5	61.3	52.6	54.4	55.9	54.5	61.8	67.2	69.2	71.5	77.1	80.0	81.3	80.9	76.2	74.2	68.2	66.3	70.5	70.5	61.3	58.0	63.0	67.4
28	64.3	55.3	53.6	53.2	61.0	65.3	64.0	61.8	60.7	68.3	69.8	73.7	74.8	77.0	81.0	72.9	75.9	76.9	73.6	64.0	65.3	73.7	60.6	59.5	66.9
29	65.1	66.9	64.1	72.1	74.6	64.0	59.9	60.7	62.5	64.0	67.3	72.8	72.8	71.0	72.8	74.9	74.7	75.8	72.7	72.9	69.4	69.4	67.9	68.9	69.1
30	61.8	58.8	62.9	62.4	65.9	77.0	70.6	64.0	62.4	64.5	66.5	71.1	75.0	73.7	72.5	72.7	72.7	73.6	67.2	71.6	69.6	68.2	66.2	70.4	68.4
M	66.8	65.4	64.5	63.6	63.9	63.9	63.9	63.5	64.9	67.1	68.8	72.7	74.3	74.3	73.4	72.4	70.9	71.3	70.6	70.1	69.3	68.7	66.7	66.8	68.2
Q M	66.6	66.3	65.3	63.7	63.4	62.9	62.6	62.5	64.0	67.1	70.4	73.9	75.3	74.4	73.2	71.2	70.3	69.7	69.3	70.1	70.5	69.9	69.0	67.9	68.3

1930 July

1	67′.9	62′.8	63′.6	63′.0	62′.9	62′.8	60′.1	59′.9	61′.1	63′.6	68′.2	71′.8	73′.2	75′.9	72′.3	72′.9	72′.7	68′.1	73′.0	70′.7	68′.4	67′.0	66′.6	63′.9	67′.2
2	60.5	61.0	59.7	60.6	61.8	61.9	59.9	60.0	62.3	64.4	68.2	71.1	72.1	74.6	72.4	72.7	74.1	74.2	71.6	73.2	66.3	66.2	69.6	63.0	66.7
3	63.3	59.1	61.1	62.6	63.1	61.7	62.8	63.9	67.0	68.4	72.0	74.1	77.0	78.4	78.1	73.1	73.0	72.9	71.7	65.1	67.5	63.2	66.9	65.8	68.0
4	62.0	68.0	67.8	63.1	61.9	61.2	61.4	61.0	66.2	67.5	70.8	72.3	72.4	70.4	68.5	72.8	76.1	71.8	68.8	71.8	71.7	68.5	70.7	62.0	67.9
5	62.8	60.1	60.5	59.9	61.5	60.0	62.8	62.0	62.7	67.2	70.8	74.1	73.7	73.7	70.6	69.6	70.6	69.6	71.8	74.0	66.5	67.7	69.6	72.5	67.3
6	66.0	61.9	65.8	68.4	65.4	62.6	61.2	62.0	63.1	64.2					70.7	69.6	67.5	69.7	68.5	68.5	67.1	67.5	66.9	66.5	
7	65.3	63.6	63.7	66.4	67.3	63.1	60.4	59.9	62.5	67.7	70.1	75.1	75.2	74.1	71.7	70.7	69.9	70.3	71.0	60.4	65.9	67.5	67.5	66.2	67.3
8 Q	64.9	66.9	66.4	63.1	62.0	62.0	62.1	64.2	65.5	67.0	69.4	70.7	71.9	71.6	70.1	68.5	69.6	69.6	68.9	69.8	70.5	69.1	65.3	65.3	67.3
9	60.9	65.0	63.1	62.5	62.6	61.6	61.9	64.2	67.3	68.5	67.3	70.7	72.2	71.9	71.6	76.1	77.1	77.2	79.9	79.0	69.2	65.4	63.4	60.9	68.3
10	60.9	51.0	66.6	52.0	56.4	58.3	55.5	59.9	59.7	61.1	68.1	69.6	73.7	73.8	74.1	72.4	70.7	67.8	69.7	70.7	70.4	61.0	57.5	58.9	64.2
11	53.5	51.1	66.2	51.4	48.6	54.4	56.7	61.9	64.3	66.4	68.4	67.9	69.4	70.9	72.5	71.6	69.3	69.8	68.3	63.1	58.5	63.3	67.2	64.5	63.3
12	63.7	65.4	59.4	66.4	71.9	75.7	63.5	67.1	66.3	68.6	67.3														
13														62.9	73.3	72.3	69.3	69.9	69.7	67.7	67.5	63.2	65.5	65.4	
14	64.2	62.9	61.9	61.1	60.4	62.1	64.1	63.3	64.1	67.2	69.6	71.8	71.7	70.6	72.5	69.7	67.5	69.4	67.9	68.0	67.2	66.3	66.0	65.4	66.5
15	65.4	67.3	65.1	61.8	64.4	61.1	62.7	62.3	63.4	65.7	67.2	71.1	72.3	68.5	68.4	67.6	63.2	63.8	69.9	71.2	68.5	68.6	67.2	64.8	66.3
16	68.3	65.6	64.4	64.2	64.1	65.9	69.0	74.2	74.4	74.1	77.7	75.5	76.0	77.1	72.7	71.9	72.0	71.0	73.2	68.1	64.2	59.9	62.1	71.5	69.9
17	69.0	66.0	62.1	59.0	61.0	59.7	63.6	64.9	66.2	67.2	66.4	64.6	66.3	65.1	63.6	66.4	68.2	65.5	68.5	69.8	69.6	66.6	64.2	64.9	65.4
18	61.9	61.8	62.4	62.8	63.0	64.6	68.3	69.7	69.3	65.9	68.5	70.7	71.9	72.1	70.5	65.5	69.2	69.6	70.8	70.5	69.3	68.2	66.4	66.3	67.5
19	65.5	64.8	65.0	64.5	61.5	60.1	60.9	61.9	63.6	66.0	68.6	69.7	69.8	69.3	67.6	67.1	67.2	68.9	69.4	68.6	63.9	64.2	62.6	60.1	65.5
20 Q	61.3	62.0	61.2	64.1	64.4	62.9	64.9	67.3	68.5	70.9	72.0	72.8	73.1	69.8	69.7	70.1	70.5	70.8	70.8	70.2	66.2	66.7	67.1	65.7	67.6
21 Q	66.7	69.5	65.0	61.8	60.7	63.2	69.6	74.0	70.5	67.2	65.5	66.4	67.2	67.3	68.5	68.5	68.9	69.0	69.1	67.8	68.4	67.5	66.4	77.3	67.8
22 Q	66.5	66.3	65.6	64.3	64.2	64.3	64.4	66.3	66.8	69.4	71.9	74.3	74.7	73.1	71.0	69.9	69.8	69.8	68.5	67.5	66.5	66.8	67.9	68.4	68.3
23 Q	67.8	65.3	63.3	62.5	62.0	61.1	61.4	62.7	64.3	67.2	71.9	74.0	72.9	69.7	68.9	67.9	69.4	69.7	66.7	69.1	70.3	70.4	69.0	68.3	67.3
24	66.4	63.6	63.7	64.0	62.9	62.0	61.2	61.3	61.6	64.9	68.5	70.2	69.4	69.3	68.3	67.5	66.5	67.2	69.9	70.6	72.8	70.5	69.6	51.3	66.0
25	32.9	45.3	44.6	44.7	51.7	54.4	55.1	56.8	64.9	67.6	75.1	77.5	77.2	75.1	72.7	72.7	75.8	64.1	69.1	69.4	73.3	68.5	58.8	67.3	63.1

Declination. D = 6° W + Tabular Quantities expressed in Minutes.

1930 July — Continued. Hourly mean values. Gr. M. T.

Day	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	M
26	62.6	63.1	56.8	61.4	63.6	74.2	69.3	74.0	68.2	67.5	68.5	69.7	72.7	73.6	66.0	68.5	69.6	69.4	63.7	68.9	68.4	68.6	67.0	64.2	67.5
27	63.0	55.2	51.0	58.4	59.1	59.4	60.9	62.1	63.7	65.7	68.2	71.6	70.7	71.9	70.3	66.2	69.4	69.4	65.5	67.7	69.5	69.2	65.8	69.2	65.1
28	60.7	55.6	59.4	61.9	58.5	58.5	59.4	61.5	62.3	65.6	70.3	73.0	74.2	73.7	71.5	71.6	67.8	69.4	70.7	70.6	59.8	64.6	64.9	68.1	65.6
29	64.6	59.7	60.7	64.9	66.4	61.0	57.9	60.3	60.9	63.2	67.3	69.8	71.2	74.2	74.0	72.3	70.5	70.3	71.5	66.0	67.5	67.0	70.9	61.7	66.4
30	59.1	60.7	59.8	58.6	63.7	62.0	61.6	67.3	58.5	67.1	68.3	69.6	71.7	71.4	70.7	70.6	73.7	65.8	69.6	69.4	66.8	67.3	65.3	63.7	65.9
31	66.6	58.0	57.9	60.1	60.3	60.0	59.1	59.0	61.5	63.3	65.2	66.9	68.9	69.9	69.6	69.1	68.6	69.7	68.8	62.8	57.7	64.1	64.5	65.2	64.0
M	62.8	61.6	61.8	61.3	61.9	62.1	62.1	63.8	64.7	66.7	69.4	71.3	72.2	71.7	70.3	70.2	70.3	69.5	69.9	69.0	67.3	66.5	66.1	65.3	66.6
Q M	65.4	66.0	64.3	63.2	62.7	62.7	64.5	66.9	67.1	68.3	70.1	71.6	72.0	70.3	69.6	69.0	69.6	69.8	68.8	68.9	68.4	68.1	67.1	69.0	67.6

1930 August

1	65′.3	67′.3	65′.6	60′.4	59′.7	62′.1	62′.6	62′.8	65′.7	67′.9	67′.9	70′.6	74′.8	73′.8	73′.6	70′.7	70′.7	69′.8	66′.0	67′.3	68′.5	66′.6	64′.4	66′.0	671′.
2 Q	64.4	62.0	62.0	61.9	63.2	65.1	63.1	62.5	63.1	65.2	68.2	71.8	72.8	71.7	73.0	74.0	72.7	67.1	67.5	68.4	67.3	66.5	68.2	67.5	67.1
3 Q	67.3	65.2	64.1	62.8	63.0	62.0	60.9	61.8	63.3	65.1	68.3	71.4	72.0	73.0	72.8	71.0	69.5	69.6	67.6	67.5	68.4	66.8	68.3	60.0	66.7
4 Q	60.9	59.9	61.7	58.8	60.3	62.9	65.7	64.3	65.0	66.2	69.0	70.6	72.7	72.7	71.5	74.6	68.6	67.6	66.9	66.3	64.4	65.8	65.9	65.0	66.2
5	61.2	60.0	60.9	60.2	59.7	60.0	60.9	62.0	64.1	66.8	69.3	72.5	74.1	75.4	74.6	72.2	72.8	67.3	66.3	64.9	66.0	69.8	59.8	67.3	66.2
6	65.4	67.3	68.4	63.1	68.4	83.2	82.4	71.8	68.3	70.6	70.5	70.3	69.2	67.1	82.8	69.5	76.2	73.6	63.6	58.9	56.3	64.1	63.3	63.8	69.1
7	61.0	59.7	59.8	58.8	58.8	68.3	71.7	72.7	68.7	65.5	62.1	64.0	69.5	70.4	65.2	64.8	68.9	70.9	63.1	65.3	65.3	71.8	68.2	60.3	65.6
8	57.8	48.1	52.2	62.3	74.5	70.6	65.7	62.9	69.2	68.1	65.9	67.3	73.1	74.7	66.3	71.1	67.5	69.6	66.8	70.3	65.6	60.9	65.4	61.0	65.7
9	64.2	66.2	62.6	67.1	65.7	68.6	62.8	65.6	61.4	61.3	64.0	64.1	67.3	67.3	66.3	64.4	65.1	64.0	67.8	64.5	66.4	56.4	66.0	61.2	64.6
10	59.0	60.5	61.2	64.9	64.3	65.4	65.5	65.5	65.3	66.3	68.3	70.4	70.7	67.3	69.3	67.0	68.5	58.7	68.4	67.7	67.8	66.4	66.2	61.3	65.7
11	54.8	57.3	63.6	62.9	63.2	61.5	63.0	61.9	62.8	63.6	63.3	69.3	70.8	66.4	68.4	61.8	65.8	64.6	60.9	61.9	63.0	64.2	63.6	65.1	63.5
12	66.4	67.2	63.2	67.6	71.8	66.9	63.2	65.7	64.1	65.1	68.1	70.7	71.8	69.5	67.7	66.0	61.0	64.8	68.3	67.3	66.4	65.4	62.6	57.4	66.2
13	58.0	65.0	67.2	61.4	65.6	65.2	63.2	64.6	63.1	65.0	68.4	68.8	65.0	66.4	68.3	68.2	67.0	57.7	64.8	65.2	65.3	65.0	68.0	65.5	65.1
14	69.9	64.2	63.6	63.0	61.9	60.9	63.8	61.9	66.4	66.4	67.4	68.4	67.2	69.9	69.5	67.5	65.1	65.1	65.7	60.9	48.5	63.1	61.4	61.4	64.3
15	61.9	67.5	62.8	63.8	67.1	71.9	71.9	64.0	68.6	69.4	69.9	72.1	71.5	69.4	68.4	66.4	65.6	68.1	67.7	67.3	66.4	65.1	64.2	64.1	67.3
16	62.9	62.9	64.2	67.3	65.1	67.9	68.8	71.7	68.5	66.6	67.3	68.4	71.1	68.5	70.8	71.7	71.0	66.6	64.3	62.3	63.7	64.4	63.2	58.0	66.6
17 Q	57.2	61.0	61.2	61.7	59.8	58.8	58.8	60.1	62.7	64.3	66.4	68.5	70.8	71.1	70.7	67.7	68.2	68.5	64.3	64.3	67.3	65.4	66.4	70.8	64.8
18	64.3	61.9	64.7	62.5	60.8	60.2	62.0	63.6	65.2	67.5	68.5	69.7	69.2	70.4	69.6	67.5	67.3	66.3	66.3	63.8	58.8	58.8	56.3	58.8	64.3
19	61.5	61.3	68.4	63.4	59.9	62.0	62.8	65.5	66.2	67.5	73.0	74.8	76.3	77.2	70.7	71.6	63.4	66.0	67.0	67.2	66.0	66.4	65.2	64.4	67.0
20	64.1	65.0	66.6	64.3	61.9	59.1	59.4	60.2	63.6	65.9	67.7	69.6	70.4	69.5	69.6	68.6	68.0	66.0	68.5	63.9	54.7	56.2	63.9	63.9	64.6
21	62.5	64.2	57.6	57.6	58.7	59.9	61.1	62.9	64.9	66.4	68.8	71.9	73.3	70.3	74.1	76.8	71.1	73.5	71.7	58.4	55.6	51.4	52.9	64.9	64.6
22	73.0	59.7	50.2	65.0	67.3	65.1	66.0	65.2	67.3	69.5	71.6	71.4	69.4	72.5	69.5	68.2	67.2	68.3	67.3	66.2	56.7	66.4	65.2	66.6	66.5
23	65.1	56.3	56.6	61.0	61.7	60.7	57.8	59.7	60.9	64.2	68.6	72.8	75.1	76.9	68.1	69.3	66.4	64.3	66.7	67.7	67.3	55.3	73.4	64.2	65.0
24	69.8	65.4	57.9	60.6	64.1	60.5	60.5	60.6	62.8	65.7	67.3	68.6	73.1	71.6	69.2	65.9	63.9	67.1	68.2	68.2	63.2	63.0	61.7	64.1	65.1
25	70.1	64.1	58.8	59.5	61.9	60.9	60.3	60.2	61.7	65.9	69.6	72.9	74.5	72.4	71.6	68.6	67.2	67.2	67.5	64.3	59.8	64.8	64.9	66.4	65.6
26	65.2	63.6	61.3	61.0	60.4	57.7	57.8	60.1	64.6	68.2	70.5	73.4	74.1	72.9	72.3	67.0	63.2	65.8	67.3	65.4	64.1	64.3	63.4	62.0	65.2
27	63.2	63.9	62.3	60.7	66.6	61.8	62.0	64.5	64.1	65.5	68.9	72.7	74.2	73.7	70.9	69.4	69.1	65.3	66.5	67.1	60.0	63.9	65.2	65.4	66.1
28 Q	65.0	63.6	63.6	63.8	60.8	60.2	59.8	60.6	62.0	64.1	66.5	69.4	70.6	69.6	68.7	66.7	66.6	67.2	61.5	66.9	65.9	59.2	61.8	64.3	64.5
29	72.7	57.9	58.6	57.6	58.8	57.7	58.0	59.2	60.6	62.3	65.7	69.3	70.7	69.6	69.7	67.5	67.2	67.8	65.5	59.2	55.9	60.0	62.6	62.5	63.2
30	63.0	63.4	60.6	58.7	63.6	60.6	61.1	61.6	62.9	65.1	67.5	69.1	69.7	70.3	69.5	67.5	66.6	66.3	66.8	65.9	67.2	56.5	59.7	53.5	64.0
31	56.5	64.3	62.4	53.3	53.4	60.2	58.6	60.3	64.3	67.1	68.9	70.9	74.2	73.3	71.9	69.6	68.3	65.9	65.7	66.3	66.0	65.2	61.6	62.0	64.6
M	63.7	62.4	61.7	61.8	63.0	63.5	63.3	63.4	64.6	66.1	68.0	70.2	71.6	71.1	70.5	68.8	67.7	66.8	66.3	65.2	63.1	63.2	64.0	63.2	65.6
Q M	63.0	62.3	62.5	61.8	61.4	61.8	61.7	61.9	63.2	65.0	67.7	70.3	71.8	71.6	71.3	70.8	69.1	68.0	65.6	66.7	66.7	64.7	66.1	65.5	65.9

1930 September

1	68′.4	65′.1	60′.9	60′.9	74′.8	78′.3	69′.0	69′.7	66′.3	66′.8	66′.8	69′.0	70′.6	64′.1	73′.3	68′.4	59′.8	63′.4	63′.0	65′.3	65′.2	62′.4	61′.9	63′.4	66′.5
2	64.9	77.5	64.3	62.4	57.8	62.1	63.9	61.6	63.0	64.0	65.2	68.0	71.7	71.8	70.6	69.3	69.0	68.4	66.3	65.9	66.3	65.1	64.3	65.1	66.2
3	66.7	64.2	61.8	62.3	63.1	64.6	63.7	64.1	69.1	67.1	70.9	73.4	69.4	79.5	75.0	86.4	68.4	69.8	67.5	61.0	65.3	55.8	46.2	47.9	66.0
4	51.2	66.2	64.2	71.5	64.9	62.8	62.8	62.0	66.2	69.1	67.8	70.2	72.3	71.6	70.4	67.2	65.9	67.0	65.6	64.3	62.6	66.2	63.9	66.0	65.9
5	64.5	66.0	65.4	65.9	63.2	62.1	62.4	61.4	63.2	65.7	69.5	72.0	68.5	72.9	68.3	65.7	67.2	65.7	65.5	65.2	53.3	60.9	61.9	60.9	64.9

Declination. D = 6° W + Tabular Quantities expressed in Minutes.

1930 September — Continued. Hourly mean values Gr. M. T.

Day	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	M
6	62.5	65.6	68.0	63.8	59.4	61.5	63.8	66.4	68.4	67.8	64.3	72.3	71.8	71.6	61.8	65.3	63.8	53.2	61.1	63.8	63.3	62.7	60.0	64.4	64.4
7	64.0	64.2	62.4	62.9	62.0	61.2	59.5	64.1	65.4	68.0	66.2	69.4	69.4	67.2	59.7	62.9	63.9	61.8	62.0	62.1	62.7	62.4	60.6	62.0	63.6
8	56.6	54.5	55.5	54.9	55.4	57.7	61.1	60.0	62.0	66.4	68.4	70.4	70.7	69.9	67.0	65.6	66.4	62.6	64.3	61.5	60.4	64.2	64.4	64.4	62.7
9	64.0	63.8	63.9	62.9	61.3	61.6	61.6	61.6	65.3	66.4	71.0	72.1	73.4	76.8	68.5	68.3	63.7	49.6	61.7	61.9	52.7	62.9	63.7	66.7	64.4
10	61.9	63.0	66.8	57.2	61.9	61.6	61.7	61.1	64.1	66.2	67.1	68.4	68.9	67.1	65.6	63.1	64.1	65.5	63.9	59.8	63.2	65.2	66.4	65.2	64.1
11	64.9	64.5	64.0	61.4	61.2	59.9	61.0	62.3	67.5	71.0	74.0	74.4	72.9	71.9	69.8	65.9	63.9	64.8	61.1	62.7	66.2	66.7	63.7	60.1	65.7
12	62.0	62.6	62.0	60.5	60.9	62.9	61.5	64.7	65.9	67.9	68.5	70.6	70.7	70.7	69.0	65.4	64.3	64.5	63.2	58.4	58.8	66.9	51.2	49.9	63.5
13	54.0	61.1	61.0	65.2	61.1	58.9	58.4	60.0	62.6	65.4	67.5	69.7	70.1	68.6	67.5	66.3	65.0	64.3	64.2	64.3	62.8	59.3	61.7	63.8	64.0
14 Q	53.1	51.1	48.4	56.5	59.1	59.0	58.5	59.9	62.0	66.0	69.9	72.2	73.8	71.9	69.9	66.0	64.4	64.4	64.8	65.3	58.5	61.6	61.8	62.9	62.5
15 Q	60.1	61.7	59.9	59.2	59.7	62.0	67.1	67.3	64.8	66.4	66.5	68.3	68.3	67.5	65.7	64.2	63.3	64.2	65.2	64.5	64.1	64.6	65.3	65.1	64.4
16 Q	63.7	63.1	63.0	62.4	61.8	60.6	59.8	60.5	62.3	65.0	68.2	69.5	70.5	69.0	67.5	66.6	57.6	58.8	65.2	64.1	65.2	65.2	65.1	65.0	64.1
17	64.1	64.2	63.4	63.3	63.4	62.4	60.4	60.1	62.1	65.9	69.5	73.8	75.0	75.9	74.7	69.5	67.0	66.5	65.8	65.3	65.5	64.6	64.2	64.1	66.3
18	64.1	63.6	63.0	63.0	63.0	62.7	61.9	61.9	62.9	65.1	65.3	73.8	80.3	83.6	86.0	79.5	80.7	71.7	62.8	72.7	50.0	44.5	49.6	57.0	66.2
19	39.0	43.4	55.6	57.6	59.4	65.5	63.2	61.1	60.6	65.1	67.9	65.4	69.6	70.5	65.8	58.9	67.0	59.4	62.2	65.1	65.1	64.8	57.5	50.5	60.8
20	62.1	62.1	64.3	63.1	63.1	62.1	61.2	60.9	61.8	63.3	64.5	68.4	69.7	70.9	67.6	68.1	68.0	65.9	65.3	59.6	59.9	63.3	64.3	64.7	64.3
21	64.2	63.7	63.2	63.1	63.1	63.0	62.8	64.0	63.9	67.2	69.2	71.6	70.9	73.2	72.9	70.9	68.6	65.5	64.4	64.3	62.2	63.0	61.0	59.8	65.7
22	64.2	63.8	59.3	59.4	59.8	60.7	61.0	63.0	64.3	66.2	68.0	68.4	68.5	67.3	65.9	64.6	64.8	64.6	64.8	64.4	64.2	64.1	63.1	63.2	64.1
23	61.9	60.9	60.7	61.1	62.0	61.0	60.4	60.4	63.8	66.9	66.9	68.0	69.3	69.6	68.1	67.6	66.6	67.6	58.8	64.1	64.4	63.0	59.4	57.7	63.8
24	58.4	65.4	59.3	58.3	59.9	60.5	60.8	63.1	63.2	63.1	67.6	71.9	71.1	68.5	69.4	68.5	62.0	63.0	63.1	63.8	63.1	62.1	63.9	66.3	64.0
25	68.3	63.0	61.8	61.9	62.0	61.8	61.1	60.9	62.6	66.2	68.5	70.6	70.7	72.2	70.2	67.8	65.3	65.7	51.2	52.4	61.9	64.0	57.6	57.3	63.5
26 Q	61.7	61.9	63.0	61.8	62.0	62.6	61.1	62.0	64.2	66.5	68.4	68.9	70.1	70.1	66.5	65.8	66.4	65.5	64.3	65.3	67.2	64.1	63.1	63.3	64.8
27 Q	63.2	62.0	64.2	63.1	62.1	62.1	61.4	63.0	60.0	66.4	67.7	68.8	69.6	69.5	67.3	63.3	64.4	65.1	65.3	63.7	62.1	62.0	62.9	61.9	64.2
28	63.2	61.8	62.4	65.1	62.1	60.6	65.4	63.1	65.3	64.8	68.3	71.0	72.8	72.0	74.8	72.3	68.3	67.3	50.3	51.5	54.4	47.5	58.0	61.7	63.5
29	63.1	70.6	67.5	64.3	70.5	70.5	71.0	67.3	63.0	60.9	65.1	72.9	73.0	71.6	75.0	69.0	60.5	62.4	55.8	49.0	55.0	62.0	69.5	60.7	65.4
30	55.5	53.2	67.6	84.9			72.9	70.4	62.1	66.8	66.5	66.4	66.6	68.1	67.5	65.3	64.9	63.6							
M	61.2	62.5	62.2	62.7	62.1	62.5	62.7	62.9	63.9	66.1	67.8	70.3	71.0	71.2	69.4	67.6	65.5	64.1	62.7	62.5	61.6	62.1	61.3	61.4	64.5
Q M	60.4	60.0	59.7	60.6	60.9	61.3	61.6	62.5	62.7	66.1	68.1	69.5	70.5	69.6	67.4	65.2	63.2	63.6	65.0	64.6	63.4	63.5	63.6	63.6	64.0

The Declination at the field-stations at Näs, Jämtland.

For the cement-pillar we have obtained the following *D*-values:

1928.5	1929.5	1930.5	1931.5	1934.5
— 7°25′.3	— 7°14′.9	— 7°06′.9	— 6°56′.8	— 6°24′.0

When reduced to the epochs by means of the constants given in Table 12, we have

		Red. to 1929.5	Red. to 1933.5
From	1928.5	— 7°14′.8	— 6°29′.1
	1929.5	14.9	29.2
	1930.5	17.2	31.4
	1931.5	19.6	34.9
	1934.5	20.9	35.0
Station No. 69	Means	— 7 17.5	— 6 31.9

In these values we observe a graduate change of 6′ principally due to our reductions to the epochs. In order to state the final result, different alternatives may come into question. For the epoch of 1929.5 one way would be to state only the value for the middle of the year — 7° 14.′9, or to add to the same the mean value from 1928.5 and 1930.5, when — 7° 15.′5 is obtained. These two values may be considered as equally probable, and they are undoubtedly the most representative ones for the epoch.

As to the epoch of 1933.5, the values reduced from 1931.5 and 1934.5 give the same result — 6° 35′. In this interval of time, our reduction formulæ give, for the station in question, values which agree with the mean annual change observed on the point. The value stated must be looked upon as the most probable one for 1933.5.

But for the sake of consequence, so that all values in the main table may be analogously formed, the mean values stated above, — 7° 18′ and — 6° 32′, were tabulated.

By using the above differences between the cement-pillar and the four neighbouring stations, the following smoothed mean values were entered in the principal table:

	1929.5	1933.5
Reg. No. 1 (S. G. U. 43)	— 7°18′	— 6°32′
» » 68 (The brass bolt)	— 7 15	— 6 30
» » 158 (S. G. U. 33)	— 7 08	— 6 23
» » 159 (S. G. U. 34)	— 7 12	— 6 26.

Computation of the Anomalies.

In order to smooth the material of observation five points, Nos. 629, 1387, 1394, 1507 and 1821, were excluded to begin with as being extremely locally disturbed. Further the values from neighbouring observation places were joined in mean values. Hereby the number of points is reduced to 1984. The whole region is divided into 60 squares, $\Delta\varphi \cdot \Delta\lambda$, with $\Delta\varphi = 2°$ and $\Delta\lambda = 1°$. For each square the mean values of D, φ and λ resp. are computed. These values may be found in Table 19. If the declination is expressed by a linear formula

$$D = D_o + \frac{\delta D}{\delta \varphi}(\varphi - 61°) + \frac{\delta D}{\delta \lambda}(\lambda - 15°),$$

the following constants are obtained by the method of least squares applied to the sixty equations of the type mentioned

$$D_{1933.5} = \underset{\pm 5'.3}{-4°05'.20} + \underset{\pm 1'.4}{1'.98}(\varphi - 61°) + \underset{\pm 1'.7}{33'.53}(\lambda - 15°) \ldots \quad \text{(I)}$$

As the whole material, with the exception of the five points mentioned, is included into the constants of the formula above, I have regarded the formula as *representative* of the smoothed declination of the region. The difference between the observed value of the declination, reduced to the epoch 1933.5 and the value computed by means of the coordinates of the point according to the formula, is an expression of the anomaly in general of the observation place. These differences are under the heading of obs. — calc. written in our main table, and form the basis for the map of anomalies.

In the values of the sixty squares the anomalies are to a certain degree eliminated, but very extensive regional ones still remain, and to get a view of those the values from Table 19 are plotted in Diagram 10. The curve for 68° latitude, for instance, shows the existence of the considerable anomalies in *Norrbotten*. Further the large anomaly in the Cambro-Silurian region of *Jämtland*, ranging from 62° to 64° latitude, is noticed by its great values of westerly declination. Moreover the curve of 60° latitude is chiefly noteworthy for its uniformity as representing *Bergslagen*. The curve for 58° latitude notifies, as to *Småland*, a lower westerly declination than computed. In the same curve the anomaly of the area of *Trosa* is involved, appearing with a high westerly declination. Noteworthy is that the curve for 56° latitude, referring to *Skåne* and *Blekinge*, lies entirely under the computed one. Furthermore the curves for the latitudes 62°, 64° and 66° have the quality in common that their westerly declination in the Norwegian region, as well as in the boundary of Norway, is lower than computed.

The anomalies in general within the district may be illustrated by a statistic summary. If going out from the difference »obs. — calc.» and dividing the same in groups, the per-cent numbers are obtained which are to be found in Table 20, whereby is to be noted that the points gathered at Näs are represented in the calculation only with one value.

Table 19.

The squares Longitud from Sthlm		Means D	Means φ	Means $\lambda_{E\,Gr}$	Number of points	D_{comp}	D »obs.»—comp.
67°—69°	3°W—4°W	—4° 30′.6	67° 38′.4	14° 42′.0	5	—4° 02′.0	—0° 28′.6
	2°W—3°W	—3 46.2	67 33.6	15 38.4	5	—3 30.6	—0 15.6
	1°W—2°W	—3 09.6	67 43.8	16 34.2	9	—2 59.1	—0 10.5
	0° —1°W	—0 34.2	67 48.6	17 38.4	16	—2 23.1	+1 48.9
	1°E —0°	—0 51.0	67 46.2	18 33.6	22	—1 52.4	+1 01.4
	2°E —1°E	—1 25.2	67 54.0	19 28.2	20	—1 21.7	—0 03.5
	3°E —2°E	—1 18.0	68 07.2	20 33.6	38	—0 44.7	—0 33.3
	4°E —3°E	—0 54.0	67 53.4	21 31.2	32	—0 13.0	—0 41.0
	5°E —4°E	+1 05.4	67 55.2	22 27.0	15	+0 18.2	+0 47.2
	6°E —5°E	+1 12.0	67 44.4	23 27.0	17	+0 51.4	+0 20.6
65°—67°	4°W—5°W	—4 03.6	66 13.8	13 35.4	1	—4 42.0	+0 38.4
	3°W—4°W	—3 24.6	65 37.8	14 45.0	21	—4 04.3	+0 39.7
	2°W—3°W	—3 53.4	65 42.0	15 30.0	28	—3 39.0	—0 14.4
	1°W—2°W	—3 42.6	66 00.0	16 34.2	33	—3 02.6	—0 40.0
	0° —1°W	—2 28.2	66 01.2	17 32.4	32	—2 29.7	+0 01.5
	1°E —0°	—2 10.8	65 58.2	18 33.6	16	—1 56.0	—0 14.8
	2°E —1°E	—0 46.8	65 51.6	19 38.4	31	—1 20.0	+0 33.2
	3°E —2°E	—0 04.2	65 48.0	20 39.0	42	—0 46.3	+0 42.1
	4°E —3°E	+0 11.4	65 46.2	21 33.6	53	—0 15.9	+0 27.3
	5°E —4°E	+0 33.6	66 08.4	22 27.6	29	+0 15.0	+0 18.6
	6°E —5°E	+0 30.0	66 11.4	23 31.2	28	+0 50.6	—0 20.6
	7°E —6°E	+0 16.2	65 51.6	24 06.6	2	+1 09.7	—0 53.5
63°—65°	5°W—6°W	—4 51.6	63 31.8	12 36.6	23	—5 20.2	+0 28.6
	4°W—5°W	—5 01.2	63 46.2	13 37.2	26	—4 45.9	—0 15.3
	3°W—4°W	—5 22.2	63 45.0	14 29.4	42	—4 16.8	—1 05.4
	2°W—3°W	—4 15.6	64 03.6	15 34.2	37	—3 40.0	—0 35.6
	1°W—2°W	—3 39.0	63 57.0	16 33.0	39	—3 07.4	—0 31.6
	0° —1°W	—2 45.6	63 49.2	17 33.0	41	—2 34.1	—0 11.5
	1°E —0°	—1 54.0	64 01.8	18 35.4	39	—1 58.9	+0 04.9
	2°E —1°E	—1 10.2	64 10.2	19 36.0	36	—1 24.8	+0 14.6
	3°E —2°E	—0 49.8	64 22.8	20 37.8	30	—0 49.8	00.0
	4°E —3°E	—0 25.8	64 46.2	21 12.6	5	—0 29.6	+0 03.8
61°—63°	5°W—6°W	—4 49.2	62 16.2	12 36.6	21	—5 22.7	+0 33.5
	4°W—5°W	—4 44.4	61 57.6	13 30.6	34	—4 53.2	+0 08.8
	3°W—4°W	—6 10.8	62 10.2	14 32.4	70	—4 18.3	—1 52.5
	2°W—3°W	—4 16.8	62 02.4	15 34.2	43	—3 44.0	—0 32.8
	1°W—2°W	—3 29.4	61 52.2	16 32.4	66	—3 11.9	—0 17.5
	0° —1°W	—2 55.8	62 10.2	17 22.8	35	—2 43.1	—0 12.7
59°—61°	6°W—7°W	—5 57.6	59 25.2	11 45.0	6	—5 56.2	—0 01.4
	5°W—6°W	—5 24.0	59 48.6	12 36.6	31	—5 27.7	+0 03.7
	4°W—5°W	—4 36.0	60 13.2	13 35.4	29	—4 54.0	+0 18.0
	3°W—4°W	—4 34.8	59 57.0	14 36.0	75	—4 20.7	—0 14.1
	2°W—3°W	—4 07.8	59 58.8	15 29.4	102	—3 50.8	—0 17.0
	1°W—2°W	—3 18.0	60 09.0	16 34.2	83	—3 14.3	—0 03.7
	0° —1°W	—2 49.8	59 56.4	17 27.6	39	—2 44.9	—0 04.9
	1°E —0°	—2 18.0	59 54.6	18 19.8	11	—2 15.8	—0 02.2
57°—59°	6°W—7°W	—6 09.6	58 36.6	11 39.0	18	—6 02.2	—0 07.4
	5°W—6°W	—5 33.6	58 04.2	12 31.2	40	—5 34.1	+0 00.5
	4°W—5°W	—4 52.8	58 00.0	13 36.0	34	—4 58.1	+0 05.3
	3°W—4°W	—3 43.8	58 11.4	14 36.0	67	—4 24.2	+0 40.4
	2°W—3°W	—3 28.8	58 06.6	15 31.8	52	—3 53.2	+0 24.4
	1°W—2°W	—3 28.2	57 52.8	16 32.4	42	—3 19.9	—0 08.3
	0° —1°W	—4 02.4	58 51.6	17 23.4	4	—2 49.4	—1 13.0
	1°E —0°	—2 21.6	57 26.4	18 29.4	29	—2 15.4	—0 06.2
55°—57°	5°W—6°W	—5 14.4	56 10.2	12 49.2	54	—5 27.9	+0 13.5
	4°W—5°W	—4 45.0	55 49.8	13 30.6	100	—5 05.5	+0 20.5
	3°W—4°W	—3 48.6	56 10.2	14 28.2	36	—4 32.6	+0 44.0
	2°W—3°W	—3 36.6	56 25.2	15 39.0	25	—3 52.6	+0 16.0
	1°W—2°W	—3 03.0	56 38.4	16 28.8	24	—3 24.3	+0 21.3
	1°E —0°	—2 20.4	56 55.2	18 07.8	1	—2 28.5	+0 08.1

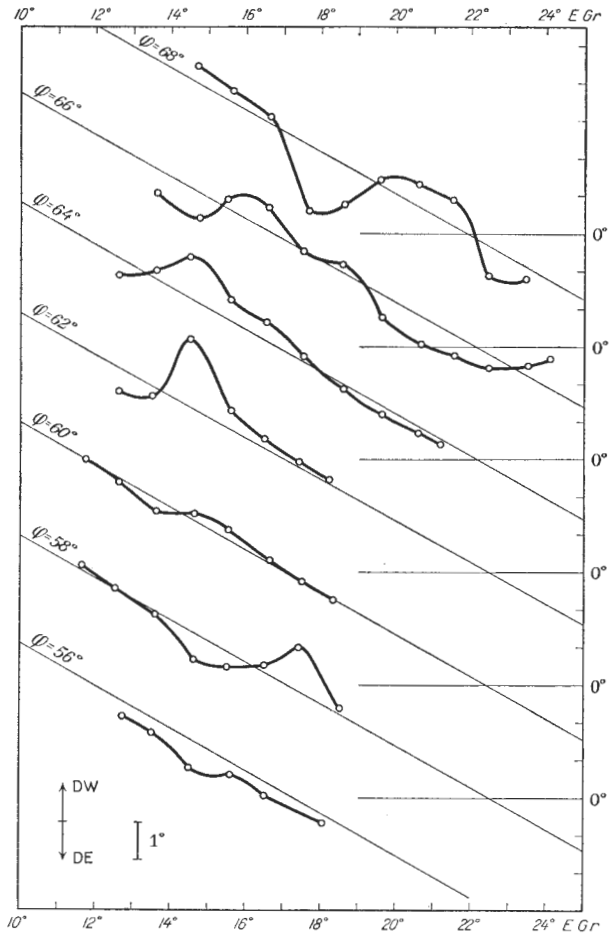

Fig. 10. D-anomalies in a very smoothed form at some selected latitudes.

Table 20.

Obs.—calc.	0—5′	0—10′	0—15′	0—20′	0—30′	0—40′	0—50′	0—60′	0—90′	0—2°	0—4°	Σ
positive	5.5	9.8	13.6	16.9	23.1	28.4	32.7	35.9	41.1	43.6	46.3	46.9 %
negative	5.5	10.8	16.0	20.2	27.8	33.4	37.4	40.8	46.3	48.8	52.6	53.1 %
neg.—pos.	0.0	1.0	2.4	3.3	4.7	5.0	4.7	4.9	5.2	5.2	6.3	6.2 %
pos. + neg.	11.0	20.6	29.6	37.1	50.9	61.8	70.1	76.7	87.4	92.4	98.9	100.0 %

The difference in per-cent numbers, tabulated under the heading »neg. — pos.» in Table 20, is plotted in the diagrams Fig. 11, partly against the limit value of the groups selected and partly against the corresponding

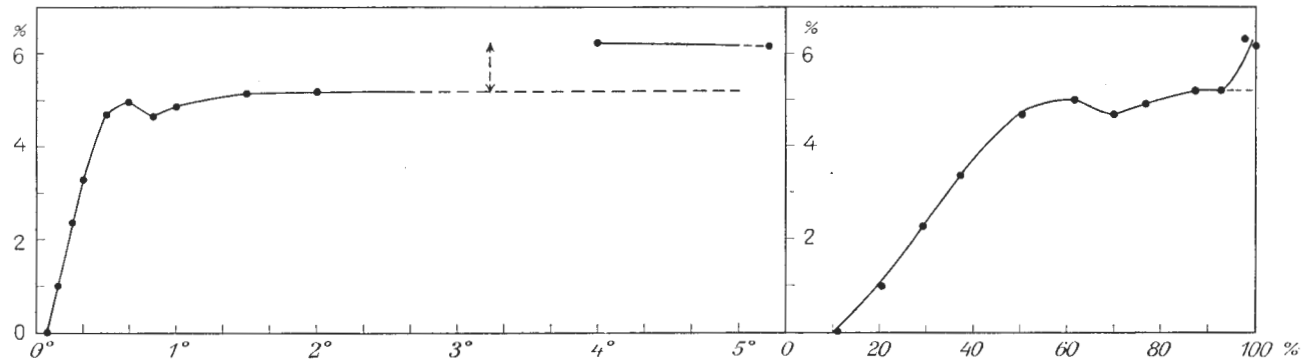

Fig. 11. The exceeding westerly D-anomaly.

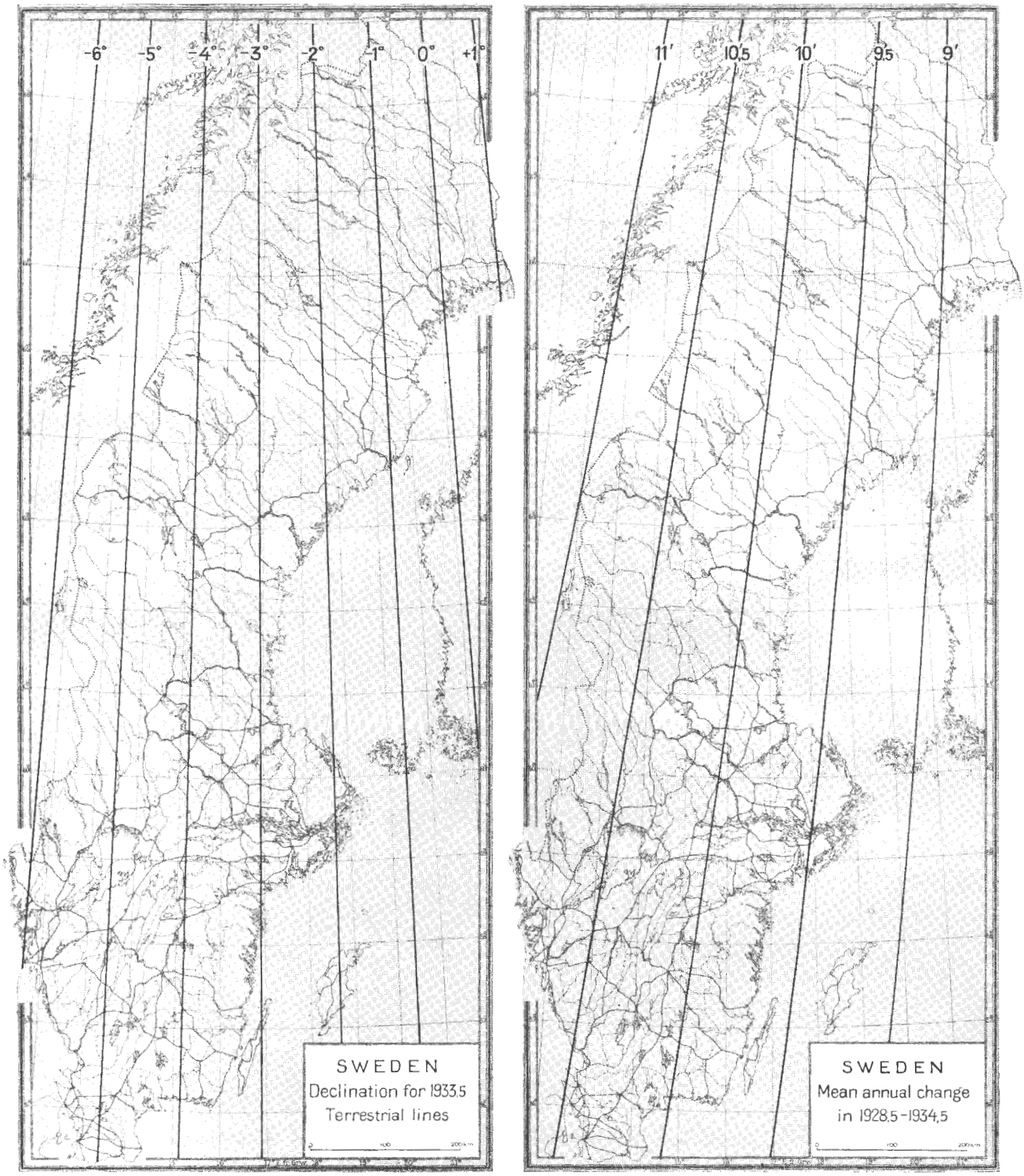

Fig. 12. Terrestrial lines of D for 1933.5 and lines of mean annual change in 1928.5—1934.5.

total per-cent number. From the diagram may be seen how the westerly declination prevails over the easterly one, and how this difference approaches the limit value of 5.2 %. The sudden increase of 1 % which occurs at differences between 3° and 4°, may be attributed to the greater density of points within the Jämtland anomaly.[1]

Computation of Terrestrial Value for Declination at the epoch of 1933.5.

To obtain the normal or terrestrial lines for declination anomalies are eliminated, as objectively as possible. As to the sixty points included in Table 19, the mean error of one point is computed to be $\pm\sqrt{\frac{[\Delta\Delta]}{n-1}} = \pm 34'.42$. Taking away the points with the difference observed — computed, exceeding by its absolute amount the mean error obtained, 45 points are left. The computation of the formula for the terrestrial lines is based upon these 45 points. The method of least squares gives the following constants

$$D_{1933.5} = -4°05'.11 + 0'.42\,(\varphi - 61°) + 34'.41\,(\lambda - 15°) \ldots \quad \text{(II)},$$
$$\pm\,2'.96 \quad \pm\,0'.83 \qquad\qquad \pm\;\; 0'.99$$

this formula being considered as the expression of the terrestrial lines of declination of the region.[2] Such lines are to be seen from Diagram 12.

The difference between the formulæ I and II:

$$D^{\mathrm{I}}_{60} - D^{\mathrm{II}}_{45} = -0'.09 + 1'.56\,(\varphi - 61°) - 0'.88\,(\lambda - 15°)$$

is so inconsiderable that it is practically of no account, on which of them the computation of the anomalies may be based.

The main declination table.

The D-determinations amount to the number of about 6850, but only the mean value for every field-station is tabulated. The average error η, defined by the expression $\frac{1}{n}\Sigma\,\Delta$, gives an idea of the accuracy in every special case. Under the heading of »A m» the altitude of the observation place is tabulated, expressed in meter. G stands for Geology; the explanation of the designations used is given on page 12.

In connection with the name of a observation place K. Sj. K. V. denotes the Hydrographic Service (H. S.) and indicates that the point is in common.

[1] Gustaf S. Ljungdahl has found from the material of the Hydrographic Service the amplitudes of the disturbance as to the declination at the epoch of 1929, 5
greater than 15′ at 67 % of 86 stations and at 67 % of 1200 stations
» » 20′ » 60 % » » » » » 57 % » » »
» » 60′ » 24 % » » » » » 22 % » » »
where 86 is the number of main repeat-stations and 1200 denotes stations along the coasts of Sweden, 940 land stations and 275 sea stations. — Arkiv f. Mat. Astr. o. Fysik. Bd. 25 B. No. 12. P. 2. — 1936.

[2] A comparison between the formula of the Hydrographic Service for the epoch of 1929, 5 (Gustaf S. Ljungdahl, Ibid. P. 21),

$$D^{\mathrm{H.\,S.}}_{1929,5} = -4°\,15'.7 + 0'.1\,(\varphi - 62°) + 34'.9\;(\lambda - 16°),$$
$$\pm 7'.2 \quad \pm\,2'.1 \qquad\qquad \pm\;\; 2'.7$$

and our formulæ I and II, gives the following results:

$$D^{\mathrm{H.\,S.}}_{1933.5} = D^{\mathrm{H.\,S.}}_{1929.5} + \Delta D_t = -4°\,50'.7 + 0'.1\,(\varphi - 61°) + 34'.9\,(\lambda - 15°) + 43'.19 +$$
$$+\,1'.04\,(\varphi - 61°) - 1'.22\,(\lambda - 15°) = -4°\,07'.51 + 1'.14\;(\varphi - 61°) + 33'.68\;(\lambda - 15°).$$

Hence the differences:

$$D^{\mathrm{G.\,S.}}_{(\mathrm{I})\,1933.5} - D^{\mathrm{H.\,S.}}_{1933.5} = +\,2'.31 + 0'.84\,(\varphi - 61°) - 0'.15\,(\lambda - 15°)$$
$$D^{\mathrm{G.\,S.}}_{(\mathrm{II})\,1933.5} - D^{\mathrm{H.\,S.}}_{1933.5} = +\,2'.40 - 0'.72\,(\varphi - 61°) + 0'.73\,(\lambda - 15°).$$

Table 21.

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1928.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
	I. 1928. K. Molin. Instr. Askania No. 84065.											
1	Näs. (S. G. U. 43) . . . . b	62° 58′ 26″	3° 29′ 03″ W	358	s 69					— 7° 18′	— 6° 32′	— 2° 16′
2	Fjällnäs	62 38 37	5 58 50 W	834	g 48	VII 14	— 6° 20′.6	3	0′.4	— 6 10	— 5 21	+ 0 18
3	Östra Malmagen . . . . . b	62 35 14	5 51 04 W	785	f 76	15	— 6 16.9	3	0.8	— 6 06	— 5 18	+ 0 18
4	Funnäsdalen	62 32 55	5 32 25 W	585	f 76	16	— 5 53.9	1		— 5 43	— 4 55	+ 0 30
5	Valmåsen	62 26 53	5 17 17 W	590	f 76	16	— 4 41.4	1		— 4 31	— 3 43	+ 1 34
6	Medskogsbygget	62 25 16	5 00 49 W	502	g 48	17	— 6 04.6	3	0.1	— 5 54	— 5 07	+ 0 01
7	Långå	62 26 34	4 48 54 W	442	s 61	17, 18	— 5 05.8	5	0.8	— 4 55	— 4 08	+ 0 53
8	Hedeviken	62 24 31	4 21 49 W	420	g 20	18	— 6 28.5	1		— 6 18	— 5 32	— 0 46
9	Vemdalen	62 26 34	4 11 56 W	411	g 20	19	— 4 22.5	3	1.0	— 4 12	— 3 26	+ 1 15
10	Utanbergsvallarna	62 28 54	3 49 40 W	468	g 20	19	— 5 02.0	2	0.3	— 4 51	— 4 06	+ 0 22
11	Rätansbyn	62 27 57	3 30 42 W	355	g 20	20	— 5 20.8	2	2.5	— 5 10	— 4 25	— 0 08
12	Svensta	62 45 36	3 38 07 W	326	g 20	20	— 9 16.7	2	0.9	— 9 06	— 8 21	— 4 00
13	Hovermo	62 53 33	3 41 56 W	312	f 75	21	—11 26.2	2	0.3	—11 16	—10 30	— 6 07
14	Gillhov	62 39 54	3 18 10 W	340	g 2	25	— 6 23.5	2	0.0	— 6 13	— 5 28	— 1 18
15	Våle	62 46 05	3 03 12 W	340	g 9	25	— 5 05.6	2	1.3	— 4 55	— 4 10	— 0 09
16	Fanbyn, Storsjön	63 08 00	3 36 00 W	313	s 69	27	— 6 16.0	2	2.2	— 6 06	— 5 20	— 1 01
17	Sörviken	63 04 19	3 15 30 W	350	s 69	27	— 6 26.4	2	0.1	— 6 16	— 5 32	— 1 25
18	Stocke	63 11 06	3 32 57 W	400	s 69	29	— 5 59.4	2	0.4	— 5 49	— 5 03	— 0 46
19	Kungsgården, Frösön	63 10 03	3 34 29 W	295	s 69	29	— 6 42.7	2	1.5	— 6 32	— 5 46	— 1 28
20	Trusta, Rödön	63 15 15	3 38 16 W	346	s 64	30	— 5 58.5	3	0.8	— 5 48	— 5 02	— 0 42
22	Alsen . . . . . b	63 23 27	4 07 05 W	400	s 70	31	— 4 43.2	1		— 4 33	— 3 46	+ 0 50
23	Uppland	63 19 00	4 28 06 W	330	s 64	VIII 1	— 5 33.6	2	0.7	— 5 23	— 4 36	+ 0 12
24	Stalltjärnsstugan	63 28 36	5 29 30 W	495	s 64	2	— 5 50.7	3	0.4	— 5 40	— 4 51	+ 0 32
25	Skalstugan A . . . . . b	63 38 52	5 46 20 W	600	s 64	2	— 4 42.3	2	1.7	— 4 32	— 3 42	+ 1 48
27	Forsa B	63 23 41	5 09 16 W	390	f 74	3	— 6 00.6	4	1.8	— 5 50	— 5 02	+ 0 09
28	Hamre	63 23 48	5 07 53 W	400	L 33	4	— 6 31.7	2	3.7	— 6 21	— 5 33	— 0 23
29	Romo	63 19 00	4 45 09 W	400	s 64	4	— 5 43.2	1		— 5 33	— 4 45	+ 0 12
30	Kall	63 28 19	4 48 53 W	430	f 76	5	— 5 50.0	2	2.1	— 5 39	— 4 52	+ 0 07
31	Rör . . . . . b	63 33 14	5 01 55 W	385	s 70	5	— 6 14.0	6	1.6	— 6 03	— 5 15	— 0 09
33	Ålsta	62 58 55	3 28 18 W	330	s 69	7	— 7 12.2	2	1.6	— 7 02	— 6 16	— 2 01
34	Fanbyn, Sundsjön	62 57 47	2 54 57 W	305	g 9	9	— 4 57.3	1		— 4 47	— 4 02	— 0 05
36	Jämtkrogen	62 37 50	2 24 51 W	266	D 32	11	— 4 35.4	2	0.2	— 4 25	— 3 41	— 0 01
38	Marby	63 07 49	3 46 06 W	324	s 69	13	— 6 30.6	2	1.1	— 6 20	— 5 34	— 1 09
	II. 1928. T. Johansson. Instr. Chasselon No. 83.											
39	Älvdalen	61 13 44	4 01 18 W	235	L 33	VII 9	— 5 59.1	1		— 5 49	— 5 04	— 0 28
40	Hållstugan	61 19 53	4 28 06 W	440	L 33	8	— 6 32.2	1		— 6 22	— 5 36	— 0 45
41	Mosseberg	61 32 19	4 13 00 W	615	g 20	11	— 6 04.2	1		— 5 54	— 5 08	— 0 25
43	Mångsbodarna . . . . . △	61 04 58	4 26 05 W	443	s 61	12	— 5 15.3	1		— 5 05	— 4 20	+ 0 32
44	Nornäs	61 26 01	4 48 30 W	448	s 61	13	— 6 07.1	1		— 5 56	— 5 11	— 0 08
45	Lövnäs	61 21 03	4 41 30 W	440	s 61	14	— 5 27.1	1		— 5 16	— 4 31	+ 0 28
46	Evertsberg . . . . . △	61 07 56	4 04 54 W	478	L 33	16	— 7 08.0	1		— 6 57	— 6 13	— 1 34
47	Lillåsbyn	61 16 13	4 14 36 W	260	D 32	17	— 6 19.2	1		— 6 09	— 5 24	— 0 39
48	Särna	61 41 46	4 54 18 W	430	s 61	26	— 5 33.5	1		— 5 23	— 4 37	+ 0 29
50	Hedefoskdalen	61 54 31	5 07 18 W	670	s 61	19	— 5 29.8	1		— 5 19	— 4 32	+ 0 40
51	Häggberget	62 01 53	4 58 12 W	685	s 61	20	— 5 44.2	1		— 5 34	— 4 47	+ 0 20
53	Mörkret	61 39 02	5 18 12 W	530	s 61	31	— 5 43.9	1		— 5 33	— 4 47	+ 0 32
54	Gördalen	61 35 50	5 33 06 W	654	m 62	VIII 2	— 5 24.2	1		— 5 13	— 4 27	+ 1 01
55	Drevdagen	61 46 01	5 38 48 W	737	L 33	4	— 6 41.9	1		— 6 31	— 5 44	— 0 14
56	Storsätern	62 03 36	5 43 54 W	670	f 75	5	— 5 39.8	1		— 5 29	— 4 41	+ 0 51
57	Gröveldalsvallen	61 58 51	5 30 06 W	536	f 75	6	— 5 32.8	1		— 5 22	— 4 35	+ 0 50
58	Foskros	62 00 07	5 23 30 W	566	f 75	7	— 5 58.9	1		— 5 48	— 5 01	+ 0 20
60	Hågådalen	62 09 02	5 24 30 W	715	f 75	10	— 5 58.4	1		— 5 48	— 5 00	+ 0 21
61	Fjätdalen	62 16 18	5 20 36 W	800	s 61	12	— 5 22.4	1		— 5 12	— 4 24	+ 0 55
62	Sörvattenbodarna	62 08 23	5 00 42 W	863	s 61	14	— 5 41.2	1		— 5 31	— 4 44	+ 0 25

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1928.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
63	Lofsdalen	62°07′06″	4°47′12″ W	600	f 75	VIII 15	— 6°01′.3	1		— 5°51′	— 5°04′	— 0°03′
64	Glissjöberg △	62 08 00	3 59 12 W	394	g 20	18	— 6 29.4	1		— 6 19	— 5 33	— 0 59
65	Råndalen	62 14 56	4 42 48 W	511	s 61	19	— 6 15.8	1		— 6 05	— 5 19	— 0 21
66	Dalsvallen	62 13 05	4 27 24 W	470	L 33	20	— 6 03.9	1		— 5 53	— 5 07	— 0 17
67	Särvsjön	62 37 11	4 51 54 W	631	f 75	22	— 5 46.6	1		— 5 36	— 4 49	+ 0 14
	III. 1929. K. Molin. Instr. Askania No. 84065.						1929			1929.5		
68	Näs, »The brass bolt» b	62 58 26	3 29 03 W	360	s 69					— 7 15	— 6 30	— 2 14
69	Näs, Cement-pillar	62 58 26	3 29 03 W	345	s 69					— 7 18	— 6 32	— 2 16
70	Vitvattskrogen	62 22 28	3 22 38 W	325	g 20	VII 2	— 8 40.9	2	0′.5		— 7 56	— 3 43
71	Ytterhogdal	62 10 18	3 06 20 W	265	g 20	3	— 8 59.1	2	0.2		— 8 15	— 4 10
72	Aspan	62 04 23	3 06 56 W	305	g 20	3	— 7 32.1	9	1.5		— 6 48	— 2 43
73	Ängersjö	61 58 58	3 11 11 W	410	g 20	4	— 5 59.6	5	2.1		— 5 15	— 1 08
74	Karsvall	61 50 12	2 52 30 W	480	st 59	5	— 5 36.3	4	1.7		— 4 53	— 0 55
75	Rullbo	61 46 50	3 10 45 W	340	L 49	5	— 6 04.9	4	0.2		— 5 21	— 1 13
76	Mysingsborg	61 45 33	2 35 45 W	390	m 42	6	— 4 21.9	5	0.4		— 3 39	+ 0 09
77	Färila K. Sj. K. V.	61 48 42	2 12 41 W	170	m 42	7	— 4 16.7	6	1.4		— 3 34	+ 0 01
80	Brändbo	62 04 00	1 50 21 W	223	g 39	10	— 4 21.3	3	4.0		— 3 39	— 0 16
81	Furuberg	62 04 11	1 29 32 W	245	m 42	10	— 4 11.0	2	1.3		— 3 29	— 0 18
82	Bäckaräng	62 07 37	1 22 28 W	167	m 42	11	— 4 11.6	5	2.2		— 3 29	— 0 23
83	Gryttjen	62 14 41	1 07 40 W	152	m 42	11	— 3 40.2	4	2.8		— 2 58	0 00
84	Flata	62 25 45	1 41 44 W	200	m 42	12	— 4 53.8	4	0.7		— 4 11	— 0 54
85	Kölsillre	62 22 25	2 50 53 W	250	m 42	12	— 5 29.9	4	1.9		— 4 46	— 0 50
86	Lit	63 18 18	3 12 19 W	300	s 69	19	— 6 23.1	3	1.7		— 5 37	— 1 32
87	Ollsta ○	63 26 15	2 55 20 W	450	s 69	20	— 5 59.4	4	0.6		— 5 14	— 1 18
88	Hammerdal	63 35 51	2 41 40 W	308	s 67	20	— 4 59.3	3	0.7		— 4 14	— 0 26
89	Hedningsflokälen b	63 51 57	2 56 14 W	420	s 69	21	— 5 47.9	1			— 5 02	— 1 07
90	Laxsjö ○	63 48 34	3 15 52 W	340	s 64	21	— 5 30.2	3	0.7		— 4 44	— 0 38
91	Föllinge ○	63 40 10	3 26 21 W	300	s 69	22	— 6 20.3	3	0.4		— 5 34	— 1 21
92	Gåxsjö ○	63 40 25	2 57 18 W	316	s 69	22	— 5 52.0	3	0.5		— 5 06	— 1 10
93	Skyttmon	63 24 49	2 28 08 W	265	g 9	23	— 4 59.9	2	0.1		— 4 15	— 0 34
94	Björkhöjden b	63 24 53	1 57 40 W	510	g 9	23	— 5 30.2	3	1.3		— 4 46	— 1 22
95	Nordantjäl	63 38 56	1 35 41 W	200	g 9	25	— 4 50.7	2	2.8		— 4 07	— 0 56
96	Krokfors	63 38 48	2 02 56 W	280	g 9	25	— 5 12.4	5	1.9		— 4 28	— 1 02
97	Vängelsbyn	63 42 54	1 50 00 W	245	g 9	26	— 5 04.7	3	1.1		— 4 20	— 1 02
98	Västanbäck	63 47 36	0 58 18 W	254	m 42	27	— 3 45.1	3	1.3		— 3 02	— 0 12
99	Hällaström	63 56 41	0 46 26 W	298	g 9	27	— 3 20.0	4	1.3		— 2 37	+ 0 06
100	Åsele	64 10 06	0 41 22 W	300	m 42	27	— 2 26.6	3	0.8		— 1 43	+ 0 57
101	Torvsjö	64 22 28	0 47 52 W	345	g 9	28	— 3 38.3	3	1.2		— 2 54	— 0 12
102	Siksjö ○	64 32 28	0 56 00 W	370	g 9	28	— 3 51.7	3	1.1		— 3 07	— 0 21
103	Lövlid b	64 39 26	1 28 06 W	380	g 9	29	— 4 07.9	4	0.5		— 3 23	— 0 18
104	Bäsksjön	64 41 49	0 56 14 W	450	g 9	29	— 4 05.6	3	0.9		— 3 21	— 0 34
105	Södra Tresund	64 52 36	1 27 28 W	420	g 9	30	— 4 29.6	2	0.7		— 3 44	— 0 41
	IV. 1929.K. Rothstein. Instr. Chasselon No. 83.											
106	Sveg	62 02 06	3 40 49 W	350	g 20	VI 18	— 7 08.4	1			— 6 23	— 2 00
107	Lillhärdal	61 51 08	3 58 48 W	450	s 61	18	— 6 52.8	1			— 6 08	— 1 33
108	Ällnäset	61 47 28	3 54 20 W	430	L 33	18	— 6 47.7	1			— 6 03	— 1 31
109	Härjåbro	61 54 47	3 51 01 W	400	g 20	19	— 5 50.6	1			— 5 06	— 0 36
110	Håberget	62 18 47	4 02 46 W	400	g 20	20	— 5 32.3	2	0.8		— 4 47	— 0 11
111	Linsäll	62 09 46	4 09 56 W	430	g 20	21	— 4 47.7	1			— 4 02	+ 0 38
112	Ortholmen	62 17 52	4 15 28 W	405	g 20	21	— 3 48.2	2	7.9		— 3 02	+ 1 41
113	Storfäringen	62 12 43	3 57 00 W	390	g 20	22	— 7 13.6	1			— 6 28	— 1 56
114	Älvros	62 03 50	3 28 00 W	350	g 20	23	— 6 12.7	1			— 5 28	— 1 11
115	Bryngelhögen	62 24 14	3 36 46 W	360	g 20	26	— 7 22.7	1			— 6 37	— 2 17

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1929.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
116	Kvarnsjö	62° 33′ 39″	3° 39′ 31″ W	390	g 20	VI 26	— 7° 00′.8	1			— 6° 15′	— 1° 53′
117	Skålan	62 38 46	3 53 31 W	440	f 75	29	— 5 49.0	2	0′.5		— 5 03	— 0 33
118	Börtnan	62 45 10	4 12 19 W	450	g 20	29	— 5 35.7	2	0.9		— 4 49	— 0 09
119	Torsborg	62 49 37	4 35 28 W	498	g 20	30	— 5 53.5	2	0.0		— 5 07	— 0 14
120	Storsjö	62 48 03	5 00 00 W	567	f 75	VII 1	— 5 11.9	1			— 4 25	+ 0 42
121	Ljungdalen	62 51 02	5 14 51 W	615	f 75	2	— 5 31.1	1			— 4 43	+ 0 32
122	Gröndörren	62 52 05	5 25 24 W	925	f 75	3	— 5 38.3	1			— 4 50	+ 0 30
123	Gamla Nedalsstugan	62 52 47	5 42 21 W	850	d 28	4	— 6 06.5	1			— 5 18	+ 0 12
124	Stortjärn	62 56 22	5 52 57 W	820	d 28	4	— 5 58.2	1			— 5 10	+ 0 26
125	Sylfjällets turiststation	63° 03′ 38″	5° 46′ 47″ W	900	d 28	7	— 5° 24′.7	2	0′.3		— 4° 36′	+ 0° 56′
126	Storulvåstugan	63 10 05	5 41 36 W	705	f 78	8	— 5 31.9	1			— 4 43	+ 0 46
127	Handöl	63 15 57	5 37 41 W	525	f 78	8	— 6 00.9	1			— 5 12	+ 0 15
128	Enafors	63 17 19	5 42 44 W	560	f 78	10, 12	— 5 28.2	2	3.3		— 4 39	+ 0 50
129	Storlien	63 19 01	5 56 19 W	625	f 78	11	— 4 46.7	1			— 3 58	+ 1 39
130	Rensjösätern	63 25 03	5 50 22 W	610	f 78	12	— 5 24.0	2	0.9		— 4 35	+ 0 58
131	Ånn	63 19 06	5 29 54 W	525	f 78	13	— 6 35.7	1			— 5 47	— 0 25
132	Bunnerviken	63 13 37	5 29 53 W	525	s 64	13	— 5 29.8	3	1.2		— 4 41	+ 0 41
133	Häggsjön	63 30 56	5 21 03 W	435	f 76	14	— 6 11.0	2	0.2		— 5 22	— 0 06
134	Fjösåsen	62 57 38	3 48 59 W	400	s 64	19	— 6 29.2	1			— 5 43	— 1 16
135	Landsombodarna	62 52 58	4 03 05 W	640	f 75	20	— 6 17.7	2	0.1		— 5 31	— 0 57
136	Arådalen	62 56 20	4 24 02 W	805	f 75	21	— 5 41.3	1			— 4 55	— 0 08
137	Oldbergsbodarna	62 55 43	4 34 14 W	785	f 75	22	— 6 06.1	1			— 5 19	— 0 27
138	Tossåsen	62 56 17	4 47 30 W	790	f 75	25	— 5 38.2	2	0.3		— 4 51	+ 0 08
139	Lundörrstugan	63 03 44	4 59 09 W	775	f 76	26	— 6 00.8	2	0.0		— 5 13	— 0 08
140	Vallbo	63 09 32	4 58 52 W	575	f 75	27	— 6 23.8	2	1.0		— 5 36	— 0 31
141	Norra Bottenvallen	63 14 20	5 08 02 W	495	L 33	28	— 6 40.9	2	0.7		— 5 53	— 0 43
142	Dalen	63 18 55	4 59 25 W	475	d 28	29	— 5 56.1	2	0.9		— 5 08	— 0 03
143	Sulviken	63 37 05	4 52 21 W	430	d 28	30, 31	— 6 04.8	4	0.2		— 5 17	— 0 16
144	Kallsedet	63 41 55	5 06 58 W	385	s 64	31	— 6 07.4	1			— 5 19	— 0 10
145	Melen	63 42 46	5 35 15 W	425	d 28	VIII 1	— 5 47.3	2	0.2		— 4 58	+ 0 26
146	Åsingsvallen	63 46 52	5 35 28 W	430	d 28	1	— 5 40.1	2	1.1		— 4 51	+ 0 34
147	Sundet	63 40 11	5 11 45 W	390	s 64	3	— 4 40.4	2	0.6		— 3 52	+ 1 19
148	Överäng	63 46 43	4 59 05 W	430	d 28	4	— 6 17.6	2	0.3		— 5 29	— 0 25
149	Sandnäset	63 54 00	5 06 33 W	410	d 28	5	— 5 37.2	2	0.7		— 4 49	+ 0 20
150	Gaundalen, Norway	64 01 03	5 22 49 W	420	f 77	6	— 5 22.5	3	0.6		— 4 33	+ 0 44
151	Skaale, Norway	64 10 04	4 11 11 W	345	f 76	8	— 6 14.0	4	0.8		— 5 26	— 0 49
152	Arvas, Norway	64 03 40	4 16 00 W	570	s 64	8, 9	— 6 14.4	3	0.8		— 5 27	— 0 47
153	Kvelien, Norway	64 31 20	4 22 00 W	370	f 76	10	— 5 54.5	2	0.1		— 5 06	— 0 24
154	Torrön	63 58 45	5 18 47 W	410	d 28	13	— 5 31.7	2	0.3		— 4 43	+ 0 32
155	Björkedet	64 02 40	5 06 39 W	445	f 76	13, 14	— 5 42.7	3	2.8		— 4 54	+ 0 14
156	Burvattnet	64 01 30	4 47 52 W	565	g 20	14, 15	— 6 03.8	6	3.2		— 5 15	— 0 18
157	Mjölkvattnet	63 55 09	4 42 11 W	545	L 33	15	— 6 18.7	2	0.1		— 5 31	— 0 36

V. 1929. S. Werner. Instr. Bamberg No. 2312.

158	Näs (S. G. U. 33) b	62 58 15	3 28 18 W	330	s 69		— 7 08				— 6 23	— 2 07
159	Näs (S. G. U. 34) b	62 58 21	3 28 41 W	340	s 69		— 7 12				— 6 26	— 2 10
160	Dysjön	62 37 06	2 32 05 W	295	m 42	VI 25	— 5 10.1	2	0.9		— 4 26	— 0 42
161	Östavall	62 25 54	2 34 30 W	240	m 42	26	— 3 27.4	2	0.4		— 2 43	+ 1 03
162	Mellansjö	62 18 36	2 22 47 W	325	m 42	27	— 4 39.5	3	0.3		— 3 56	— 0 16
163	Ramsjö	62 09 35	2 22 25 W	220	m 42	27	— 3 45.6	2	1.0		— 3 02	+ 0 38
164	Hennan	62 01 25	2 08 58 W	220	g 40	28	— 4 57.7	3	1.2		— 4 15	— 0 42
165	Tallåsen	61 52 09	2 02 41 W	140	g 40	29	— 4 24.5	3	0.6		— 3 42	— 0 12
166	Erikslund	62 32 09	2 06 35 W	125	m 42	30	— 4 41.9	3	1.0		— 3 58	— 0 28
167	Stöde	62 25 21	1 27 49 W	65	m 42	VII 2	— 4 24.0	3	0.4		— 3 41	— 0 33

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1929.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
168	Vattjom	62° 21′ 49″	1 02′ 46″ W	60	m 42	VII 3	— 3° 45′.9	3	0′.6		— 3° 04′	— 0° 09′
169	Njurunda	62 16 22	0 41 02 W	10	m 42	4	— 3 37.9	3	0.3		— 2 56	— 0 13
170	Gnarp	62 03 17	0 48 14 W	70	m 42	5	— 3 30.5	3	1.0		— 2 49	— 0 02
171	Stavreviken	62 33 00	0 39 02 W	15	m 42	5	— 3 41.4	2	0.5		— 3 00	— 0 18
172	Härnösand	62 37 54	0 09 03 W	35	m 42	6	— 3 42.1	3	0.8		— 3 01	— 0 36
173	Veda	62 47 36	0 08 06 W	25	m 42	7	— 3 38.2	3	0.6		— 2 57	— 0 33
174	Kramfors	62 55 16	0 16 18 W	10	m 42	8, 10	— 3 28.2	5	0.9		— 2 47	— 0 19
175	Nyland	62 59 58	0 17 47 W	15	m 42	11	— 3 18.0	3	1.4		— 2 36	— 0 08
176	Gårdnäs	63 09 54	0 32 44 W	15	m 42	11	— 3 43.8	3	1.6		— 3 01	— 0 25
177	Långsele	63 10 52	0 59 30 W	100	m 42	12	— 3 56.8	3	0.4		— 3 14	— 0 22
178	Graninge	63 05 21	1 11 39 W	190	m 42	12	— 4 08.8	2	0.5		— 3 26	— 0 27
179	Bispgården	63 01 32	1 26 03 W	150	m 42	13	— 5 08.8	3	1.8		— 4 26	— 1 19
180	Håsjö	63 01 30	1 46 49 W	265	g 9	14	— 4 35.2	3	1.1		— 3 52	— 0 33
181	Kälarne	62 58 47	1 58 15 W	290	g 9	15	— 4 37.9	3	0.4		— 3 54	— 0 29
182	Grötingen	62 51 18	2 33 54 W	280	g 9	15	— 4 47.1	2	1.8		— 4 03	— 0 18
183	Ulriksfors	63 49 54	2 25 46 W	285	g 9	19	— 5 16.8	3	0.8		— 4 31	— 0 53
184	Hoting	64 07 01	1 51 23 W	260	g 9	19	— 0 54.0	3	0.7		— 0 09	+ 3 10
185	Dorotea A	64 15 31	1 38 46 W	285	g 9	21	— 4 24.9	3	0.5		— 3 40	— 0 29
186	Granberget	64 21 37	1 21 52 W	360	m 42	22	— 4 04.1	3	0.8		— 3 20	— 0 18
188	Volgsjöfors	64 32 31	1 18 40 W	330	g 4	25	— 4 10.5	3	0.4		— 3 26	— 0 26
189	Vilhelmina	64 37 18	1 24 11 W	335	g 9	26	— 4 25.3	3	0.3		— 3 40	— 0 38
190	Aronsjölid A	64 44 13	1 26 21 W	360	g 9	26	— 3 51.9	3	1.0		— 3 07	— 0 03
191	Vojmån	64 47 37	1 14 39 W	400	g 9	28	— 3 58.0	3	1.0		— 3 13	— 0 16
192	Norrhed	64 54 38	1 02 15 W	440	g 9	29	— 3 57.9	3	0.6		— 3 13	— 0 24
193	Vinlidsberg	65 00 45	0 57 50 W	420	g 9	30	— 3 48.6	3	0.2		— 3 04	— 0 17
194	Storuman	65 06 03	0 55 55 W	350	g 9	31	— 4 10.3	3	0.7		— 3 25	— 0 40
195	Lycksele	64 35 33	0 37 16 E	210	g 9	VIII 1	— 2 33.3	3	0.5		— 1 51	+ 0 04
197	Skatan	64 26 43	1 22 28 E	230	g 9	2	— 2 00.8	3	0.5		— 1 19	+ 0 11
198	Hällnäs	64 18 32	1 33 56 E	230	m 42	3	— 2 02.9	3	0.7		— 1 22	+ 0 02
199	Ekträsk	64 29 44	1 45 36 E	250	g 9	4	— 3 01.5	3	0.8		— 2 21	— 1 04
200	Åsträsk	64 36 47	1 55 09 E	250	g 9	5	— 1 26.6	3	1.0		— 0 46	+ 0 26
201	Bastuträsk	64 47 05	1 59 10 E	240	m 42	6	— 1 01.2	3	0.4		— 0 20	+ 0 48
202	Finnforsfallet	64 46 40	2 17 04 E	200	st 57	7	— 1 10.9	2	0.0		— 0 30	+ 0 29
203	Klutmark	64 43 39	2 35 14 E	90	g 4	7	— 1 31.7	3	0.4		— 0 52	— 0 03
204	Skellefteå	64 44 38	2 53 22 E	20	m 6	8	— 0 48.7	3	0.4		— 0 09	+ 0 30
205	Kallholmen	64 41 01	3 10 23 E	5	g 4	10	— 1 59.7	3	0.3		— 1 20	— 0 51
206	Vindeln I	64 12 16	1 39 49 E	175	m 42	11	— 2 54.6	3	0.8		— 2 14	— 0 53
207	Tvärålund	64 05 53	1 37 34 E	170	m 42	12	— 2 25.1	3	0.1		— 1 44	— 0 23
208	Vännäs	63 54 23	1 41 10 E	95	m 42	13	— 0 33.0	3	0.0		+ 0 07	+ 1 28
209	Brännland	63 52 47	1 59 46 E	70	m 42	13	— 1 39.5	3	0.2		— 1 00	+ 0 11
210	Umeå	63 49 04	2 10 49 E	10	m 42	14	— 1 32.9	3	1.6		— 0 53	+ 0 11
211	Holmsund	63 42 53	2 18 27 E	5	m 42	15	— 1 19.6	3	0.3		— 0 40	+ 0 20
212	Hörnsjö	63 47 30	1 26 59 E	160	m 42	16	— 1 59.1	3	0.8		— 1 19	+ 0 10
213	Brattsbacka	63 47 13	1 07 49 E	175	m 42	17	— 2 17.5	3	0.3		— 1 37	+ 0 03
214	Trehörningsjö	63 41 24	0 48 48 E	175	m 42	18	— 2 35.7	3	0.5		— 1 54	— 0 04
215	Björna	63 33 20	0 32 32 E	130	g 9	19	— 2 22.8	3	0.2		— 1 41	+ 0 18
216	Mellansel	63 25 49	0 15 02 E	60	m 42	19	— 2 48.8	3	1.0		— 2 07	+ 0 02
217	Örnsköldsvik	63 17 03	0 39 03 E	120	g 9	20	— 2 29.2	3	0.3		— 1 48	+ 0 08
218	Anundsjö	63 25 33	0 05 45 E	180	m 42	21	— 2 50.5	3	0.2		— 2 09	+ 0 06
219	Skorped	63 23 03	0 12 05 W	160	m 42	22	— 3 08.8	3	0.8		— 2 27	— 0 03
220	Aspeå	63 23 16	0 32 57 W	245	m 42	22	— 3 35.9	3	0.5		— 2 53	— 0 17
221	Selsjön	63 18 40	0 50 15 W	145	m 42	23	— 3 45.1	3	0.7		— 3 02	— 0 16
222	Ådalsliden	63 26 30	1 10 19 W	85	m 42	24	— 4 10.1	3	0.4		— 3 27	— 0 30
223	Tågsjöberg	63 40 36	1 18 33 W	200	g 9	25	— 4 06.2	3	0.7		— 3 22	— 0 21
224	Backe	63 48 21	1 37 41 W	220	g 9	26	— 4 33.0	3	0.5		— 3 49	— 0 37
225	Flybäcken	64 00 33	1 45 12 W	225	g 9	27	— 4 44.4	3	0.6		— 3 59	— 0 44
226	Bräcke	62 45 11	2 37 56 W	295	g 9	28	— 4 49.9	3	0.7		— 4 05	— 0 18

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1930.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
	VI. 1930. A. Edvards. Instr. Askania No. 84065.											
227	Karlslund	59° 16′ 50″	2° 53′ 43″ W	30	s 66	V 3	— 4° 09′.9	2	0′.2	— 4° 20′	— 3° 39′	+ 0° 24′
228	Tysslinge	59 17 14	3 01 15 W	45	s 66	3	— 4 17.1	2	0.2	— 4 27	— 3 46	+ 0 21
229	Sanna	59 15 01	3 01 09 W	42	s 66	4	— 4 09.4	2	0.3	— 4 20	— 3 38	+ 0 29
230	Norra Folkavi	59 12 03	3 02 43 W	57	s 66	4	— 4 08.0	3	0.2	— 4 18	— 3 37	+ 0 32
231	Hardemo	59 07 02	3 02 28 W	55	s 66	4	— 4 43.7	2	1.2	— 4 54	— 4 13	— 0 04
232	Mosås	59 12 19	2 52 21 W	40	m 42	4	— 4 32.0	1		— 4 42	— 4 01	+ 0 01
233	Hjälmarsberg	59 15 53	2 45 30 W	26	s 66	5	— 4 22.4	3	3.0	— 4 33	— 3 52	+ 0 07
234	Almbro	59 11 42	2 48 09 W	90	m 42	5	— 4 40.3	1		— 4 51	— 4 10	— 0 09
235	Norrbyås	59 11 30	2 40 12 W	120	g 40	5	— 5 11.0	1		— 5 21	— 4 40	— 0 45
236	Hjälmarsnäs b	59 15 00	2 37 17 W	25	m 72	6, 26	— 4 27.0	5	2.2	— 4 37	— 3 56	— 0 02
237	Almby	59 15 14	2 48 38 W	38	s 66	6	— 4 35.0	1		— 4 45	— 4 04	— 0 04
238	Kullen, Örebro	59 15 10	2 51 16 W	30	s 66	12	— 4 40.3	5	1.1	— 4 51	— 4 09	— 0 08
239	Nasta, Rinkaby	59 20 00	2 42 00 W	32	g 8	13	— 2 53.8	1		— 3 04	— 2 23	+ 1 34
240	Krematoriet, Örebro ○	59 18 22	2 49 31 W	38	g 8	13	— 4 39.3	1		— 4 50	— 4 08	— 0 08
241	Ervalla	59 26 00	2 49 46 W	40	g 8	14	— 3 20.1	1		— 3 30	— 2 49	+ 1 12
242	Dylta	59 22 43	2 48 50 W	50	g 8	14	— 3 54.8	1		— 4 05	— 3 24	+ 0 36
243	Lillkyrka	59 19 36	2 33 38 W	36	m 56	15	— 4 29.6	1		— 4 40	— 3 59	— 0 07
244	Götlunda	59 21 07	2 23 53 W	31	L 49	15	— 4 21.0	1		— 4 31	— 3 51	— 0 04
245	Örebro b	59 17 15	2 49 00 W	35	g 8	16—23	— 4 32.2	5	1.7	— 4 42	— 4 01	— 0 01
246	Ödeby ○	59 24 36	2 39 03 W	35	g 4	17	— 6 06.3	1		— 6 17	— 5 35	— 1 41
247	Frötuna	59 25 30	2 29 13 W	20	g 8	17	— 4 31.0	1		— 4 41	— 4 00	— 0 11
248	Stora Mellösa	59 12 35	2 32 55 W	27	s 66	18	— 4 51.2	3	1.9	— 5 01	— 4 21	— 0 29
249	Uttersberg	59 45 00	2 24 25 W	90	st 59	27	— 3 51.3	1		— 4 01	— 3 20	+ 0 26
250	Söderbärke	60 04 29	2 30 46 W	120	g 4	28	— 4 45.2	2	2.0	— 4 55	— 4 14	— 0 25
251	Smedjebacken	60 08 40	2 38 11 W	130	L 49	29	— 4 15.2	2	0.3	— 4 25	— 3 44	+ 0 09
252	Bommarsbo	60 15 07	2 34 13 W	160	g 4	29	— 6 47.4	1		— 6 58	— 6 16	— 2 25
253	Rusgården	60 19 21	2 30 07 W	210	L 49	30	— 5 06.5	1		— 5 17	— 4 35	— 0 47
254	Ornäs	60 30 30	2 30 05 W	110	L 49	31	— 5 18.6	2	2.5	— 5 29	— 4 47	— 0 59
257	Dalbyn, Furudal	61 09 13	2 55 00 W	202	s 64	VI 3	— 6 44.4	1		— 6 55	— 6 11	— 2 11
258	Högheds fäbod	61 14 53	3 22 40 W	380	L 33	3	— 6 29.8	2	1.0	— 6 40	— 5 56	— 1 41
259	Noppikoski	61 29 44	3 12 47 W	330	s 60	4	— 7 03.9	2	4.5	— 7 14	— 6 30	— 2 21
260	Hamra	61 39 42	3 03 47 W	445	m 44	4	— 5 53.4	2	3.3	— 6 04	— 5 20	— 1 16
261	Los	61 44 37	2 54 04 W	425	d 30	5	— 4 52.7	2	0.0	— 5 03	— 4 19	— 0 21
262	Kårböle Skans	61 58 37	2 43 33 W	230	m 44	6	— 7 08.3	2	0.3	— 7 19	— 6 35	— 2 43
264	Tevansjö	62 05 56	2 36 00 W	300	m 44	7	— 5 40.0	2	0.0	— 5 50	— 5 06	— 1 19
265	By	62 30 05	2 46 33 W	250	m 42	8	— 4 33.6	1		— 4 44	— 3 59	— 0 07
266	Östbyn	62 59 50	2 40 02 W	300	m 42	12	— 4 47.6	2	2.8	— 4 58	— 4 13	— 0 25
267	Boggsjö	63 04 40	2 39 40 W	340	m 42	13	— 5 16.3	2	2.6	— 5 26	— 4 42	— 0 54
268	Sänsjölandet	63 11 39	2 52 40 W	280	g 5	13	— 5 33.6	1		— 5 44	— 4 59	— 1 04
269	Fugelsta	63 02 38	2 17 47 W	460	m 42	14	— 4 40.6	1		— 4 51	—4 06	— 0 31
270	Stugun b	63 10 05	2 28 11 W	210	m 42	14	— 5 00.6	2	1.3	— 5 11	— 4 26	— 0 45
271	Köttsjön	63 19 42	2 03 03 W	360	g 9	15	— 4 58.0	2	0.2	— 5 08	— 4 24	— 0 57
272	Överammer	63 12 52	2 05 18 W	215	m 42	16	— 4 39.2	2	0.1	— 4 49	— 4 05	— 0 37
273	Krokvåg	63 08 57	1 47 15 W	135	D 32	16	— 4 55.2	4	1.6	— 5 05	— 4 21	— 1 03
274	Böle	63 03 35	1 01 28 W	205	m 42	16	— 3 46.2	2	0.5	— 3 56	— 3 13	— 0 21
275	Lövliden	63 10 43	1 22 32 W	380	g 21	18	— 4 36.3	1		— 4 46	— 4 03	— 0 59
276	Helgum	63 13 44	1 14 09 W	120	m 42	19	— 4 23.0	2	0.8	— 4 33	— 3 50	— 0 50
277	Stensjö	63 16 06	1 37 02 W	425	m 42	19	— 4 27.4	2	3.3	— 4 37	— 3 54	— 0 41
278	Gideåberg	63 18 47	1 25 00 W	140	m 42	20	— 4 26.5	2	0.1	— 4 36	— 3 53	— 0 47
279	Lövåsen	63 21 45	1 47 48 W	402	m 42	20	— 4 40.5	1		— 4 51	— 4 06	— 0 49
280	Ramsele	63 31 38	1 35 02 W	205	g 9	21	— 4 35.3	2	0.3	— 4 45	— 4 01	— 0 51
282	Strömnäs b	63 35 29	1 29 58 W	190	g 9	26	— 4 18.4	2	2.0	— 4 28	— 3 44	— 0 37

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1930.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
284	Omsjö	63° 31′ 50″	0° 55′ 34″ W	245	m 42	VI 27	— 3° 42′.2	2	0′.8	— 3° 52′	— 3° 09′	— 0° 20′
285	Holaforsen	63 32 20	1 13 00 W	175	m 42	28	— 3 58.4	1		— 4 08	— 3 25	— 0 26
286	Junsele	63 41 35	1 10 48 W	200	g 9	28	— 3 50.3	2	0.4	— 4 00	— 3 17	— 0 20
287	Grundtjärn	63 32 04	0 42 12 W	255	m 42	29	— 3 24.9	2	0.6	— 3 35	— 2 52	— 0 11
288	Östansjö	63 38 42	0 59 19 W	215	m 42	29	— 2 40.0	1		— 2 50	— 2 06	+ 0 44
289	Tjäl	63 51 01	0 40 38 W	353	g 9	30	— 4 27.7	2	0.0	— 4 38	— 3 54	— 1 15
290	Solberg	63 47 02	0 23 52 W	370	m 42	30	— 3 08.5	2	0.6	— 3 18	— 2 35	— 0 05
291	Pengsjö	63 40 20	0 15 22 W	260	g 9	VII 1	— 2 59.8	1		— 3 10	— 2 27	— 0 01
292	Högtjäl	63 40 50	0 03 27 W	320	m 42	1	— 2 45.8	2	2.6	— 2 56	— 2 13	+ 0 07
293	Kubbe	63 31 34	0 00 47 W	115	m 42	2	— 2 49.5	1		— 2 59	— 2 17	+ 0 01
294	Myckelgensjö	63 34 29	0 28 06 W	200	m 42	2	— 3 16.0	2	2.6	— 3 26	— 2 43	— 0 10
295	Skalmsjö	63 30 30	0 13 21 W	125	m 42	3	— 2 58.8	2	1.2	— 3 09	— 2 25	0 00
296	Gottne b	63 25 55	0 23 48 E	40	m 42	3	— 2 33.3	2	5.6	— 2 43	— 2 01	+ 0 03
297	Uttersjö	63 34 35	0 15 28 E	162	m 42	4	— 2 42.2	2	0.2	— 2 52	— 2 10	— 0 01
298	Hemling	63 39 21	0 28 28 E	200	m 42	4	— 2 28.0	2	1.0	— 2 38	— 1 56	+ 0 06
299	Nyliden b	63 43 15	0 26 28 E	235	g 9	5	— 2 33.8	2	1.6	— 2 43	— 2 02	+ 0 01
300	Aspsele	63 51 03	0 25 14 E	243	g 9	5	— 2 45.2	2	2.8	— 2 55	— 2 13	— 0 10
301	Stennäs	63 55 23	0 26 30 E	325	m 42	6	— 2 43.7	2	1.6	— 2 53	— 2 11	— 0 09
302	Nedre Nyland	63 52 31	0 51 44 E	180	m 11	6	— 2 14.9	2	1.3	— 2 25	— 1 43	+ 0 05
303	Bjurholm	63 55 44	1 08 28 E	150	m 42	7	— 2 12.7	2	1.3	— 2 22	— 1 41	— 0 03
304	Övre Nyland	63 57 21	0 45 57 E	220	m 11	7	— 2 21.0	2	4.0	— 2 31	— 1 49	+ 0 02
305	Fredrika A	64 04 46	0 21 10 E	292	m 42	12	— 3 02.0	1		— 3 12	— 2 29	— 0 25
	Fredrika B, K. Sj. K. V.	64 04 36	0 19 42 E	290	m 42	13	— 3 04.4	2	1.0	— 3 14	— 2 32	— 0 26
306	Dorotea B b	64 15 49	1 37 52 W	340	g 9	9	— 4 06.8	3	3.8	— 4 17	— 3 32	— 0 21
307	Lavsjön	64 11 35	1 22 52 W	355	g 9	11	— 3 54.7	2	2.5	— 4 05	— 3 20	— 0 18
308	Borgsjö	64 11 42	0 15 26 W	512	g 9	12	— 3 05.8	2	0.4	— 3 16	— 2 32	— 0 07
309	Storlögda	64 08 31	0 17 46 E	372	m 42	14	— 1 47.7	2	1.2	— 1 57	— 1 15	+ 0 52
310	Tallsjö	64 08 30	0 01 21 W	310	m 11	14	— 2 56.5	2	1.4	— 3 06	— 2 23	— 0 06
311	Övre Rissjö b	64 03 21	0 23 44 W	337	m 11	15	— 3 04.4	2	0.4	— 3 14	— 2 31	— 0 01
312	Älgsjö b	64 12 36	0 34 03 W	400	m 42	16	— 2 53.5	2	1.2	— 3 03	— 2 20	+ 0 16
313	Breviken	64 09 13	0 42 32 W	303	m 42	16	— 3 19.9	2	1.8	— 3 30	— 2 46	— 0 06
314	Stamsjön	64 10 36	0 46 23 W	303	g 9	17	— 3 20.0	2	1.0	— 3 30	— 2 46	— 0 04
315	Tallberg b	64 16 49	0 24 58 W	404	m 42	17	— 3 10.0	2	0.5	— 3 20	— 2 36	— 0 06
316	Forsvik	64 12 44	0 44 36 W	305	m 11	18	— 3 28.9	2	2.0	— 3 39	— 2 55	— 0 14
317	Lillögda b	64 21 31	0 08 58 W	425	m 42	18	— 3 02.3	1		— 3 12	— 2 30	— 0 09
318	Norrfors b	64 14 20	0 13 18 E	412	m 11	19	— 2 54.5	2	0.8	— 3 04	— 2 22	— 0 13
319	Västermyrriset	64 23 46	0 03 33 W	525	m 42	20	— 2 59.0	2	2.0	— 3 09	— 2 26	— 0 08
320	Kroksjö	64 30 23	0 03 50 W	500	m 11	20	— 4 32.9	2	0.5	— 4 43	— 3 59	— 1 42
321	Gransjöriset △	64 30 12	0 30 28 W	526	g 9	21	— 3 30.3	2	1.2	— 3 40	— 2 56	— 0 24
322	Brattfors b	64 31 44	0 19 13 E	325	g 9	21	— 2 39.7	2	0.2	— 2 49	— 2 07	— 0 02
323	Lycksele K. Sj. K. V.	64 35 18	0 38 03 E	212	g 9	22	— 2 16.4	2	0.9	— 2 26	— 1 44	+ 0 11
324	Öravan b	64 37 48	0 00 39 E	400	m 42	23	— 2 50.9	2	1.4	— 3 01	— 2 17	— 0 02
325	Gäddträsk	64 24 10	0 46 49 E	265	m 42	23	— 2 19.0	2	1.8	— 2 29	— 1 47	+ 0 03
326	Barsele b	65 02 23	0 35 25 W	300	st 57	24	— 3 19.4	2	0.9	— 3 29	— 2 45	— 0 10
327	Gunnarn b	65 01 03	0 23 44 W	265	m 51	24	— 2 36.1	2	0.2	— 2 46	— 2 02	+ 0 26
328	Gamla Rusele b	64 50 29	0 02 12 E	265	g 9	25	— 1 44.0	2	0.1	— 1 54	— 1 10	+ 1 03
329	Umgransele b	64 42 12	0 18 29 E	260	g 9	26	— 2 34.8	1		— 2 44	— 2 02	+ 0 03
332	Örträsk b	64 08 12	0 56 14 E	240	g 9	28	— 2 03.4	2	0.7	— 2 13	— 1 31	+ 0 14
333	Bracksele b	63 56 26	1 23 02 E	165	m 42	29	— 1 56.5	2	3.2	— 2 06	— 1 25	+ 0 06
334	Granön b	64 14 05	1 17 17 E	190	m 11	29	— 1 46.7	2	0.2	— 1 56	— 1 15	+ 0 18
335	Granölund	64 21 11	1 05 23 E	180	m 42	30	— 1 54.8	1		— 2 04	— 1 23	+ 0 17
336	Ekorrträsk	64 30 02	0 59 50 E	220	g 9	30	— 2 00.0	1		— 2 10	— 1 28	+ 0 15
337	Vindeln II, K. Sj. K. V.	64 13 18	1 38 55 E	175	m 42	31	— 0 26.2	2	0.7	— 0 36	+ 0 05	+ 1 26
338	Strycksele	64 22 31	1 20 22 E	170	m 42	VIII 1	— 0 58.0	2	1.4	— 1 08	— 0 26	+ 1 05
339	Ekorrsele b	64 26 23	1 09 24 E	178	g 9	1	— 1 54.6	2	0.3	— 2 04	— 1 23	+ 0 15

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1930.5	n	$\pm\eta$	D 1929.5	D 1933.5	1933.5 obs.-calc.
341	Mårdsele	64° 39′ 14″	1° 12′ 48″ E	200	g 9	VIII 2	— 1° 51′.8	2	1′.2	— 2° 01′	— 1° 20′	+ 0° 15′
342	Falträsk	64 47 45	0 29 08 E	255	g 9	3	— 2 45.0	2	2.0	— 2 55	— 2 12	— 0 13
343	Gravmark	64 52 19	0 16 50 E	305	g 9	3	— 2 49.8	2	1.5	— 2 59	— 2 16	— 0 11
345	Vormträsk b	64 54 37	0 49 19 E	265	g 9	5	— 2 05.8	2	1.7	— 2 15	— 1 33	+ 0 15
346	Vormsele	64 54 09	0 38 15 E	250	g 9	5	— 2 21.2	2	0.5	— 2 31	— 1 48	+ 0 06
347	Björksele b	64 59 17	0 26 12 E	255	g 9	6	— 2 07.6	1		— 2 17	— 1 34	+ 0 26
348	Vindelgransele	65 06 49	0 14 14 E	265	m 51	6	— 2 29.8	4	4.1	— 2 39	— 1 56	+ 0 10
349	Skarvsjö b	64 57 50	0 56 58 W	425	m 10	7	— 3 51.4	1		— 4 01	— 3 17	— 0 30
350	Gubbträsk	65 10 58	0 31 08 W	365	m 11	8	— 2 58.0	2	0.6	— 3 08	— 2 23	+ 0 09
351	Bure I	65 33 15	0 11 15 W	380	L 33	9	— 2 27.9	2	0.1	— 2 38	— 1 53	+ 0 27
352	Blattnicksele	65 20 07	0 27 36 W	330	g 9	9	— 2 44.6	2	1.3	— 2 54	— 2 10	+ 0 20
354	Vännäs	65 14 00	0 20 00 E	385	m 11	10	— 2 12.2	2	2.2	— 2 22	— 1 38	+ 0 25
356	Malå	65 10 51	0 40 43 E	315	d 30	12	— 2 08.7	2	0.5	— 2 18	— 1 35	+ 0 16
358	Rentjärn	65 05 24	0 54 18 E	365	g 9	13	— 1 55.9	2	1.5	— 2 05	— 1 23	+ 0 22
359	Lilla Holmträsk b	65 00 53	1 06 37 E	310	g 9	15	— 1 30.1	1		— 1 40	— 0 57	+ 0 40
360	Risliden	64 47 30	1 21 30 E	310	m 42	14	— 1 20.1	2	1.7	— 1 30	— 0 48	+ 0 42
361	Norsjö	64 53 47	1 24 13 E	325	m 11	15	— 1 18.3	1		— 1 28	— 0 46	+ 0 42
363	Hemminge	64 46 40	1 36 03 E	350	m 11	16	— 1 29.8	2	1.3	— 1 39	— 0 58	+ 0 24
364	Bjursele	64 53 01	1 39 21 E	300	m 10	16	— 1 17.8	2	0.8	— 1 27	— 0 46	+ 0 34
365	Bjurträsk	64 58 29	1 38 16 E	225	L 49	17	— 1 00.7	2	0.9	— 1 10	— 0 29	+ 0 51
370	Hedberg ⊗	65 25 48	0 45 48 E	455	g 9	19	— 2 18.1	2	1.2	— 2 28	— 1 45	+ 0 04
372	Arjeploug I	66 03 09	0 08 36 W	425	g 9	23	— 3 54.2	2	0.5	— 4 04	— 3 19	— 1 02
375	Hällnäs färja b	66 18 40	0 05 33 E	450	g 4	22	— 4 52.7	2	0.1	— 5 02	— 4 18	— 2 08
376	Sikselet	66 13 24	0 04 56 W	470	m 6	22	— 5 09.2	2	1.4	— 5 19	— 4 34	— 2 19
377	Galtisjaure ⊗	66 08 46	0 01 56 W	430	g 4	22	— 3 00.3	2	1.4	— 3 10	— 2 25	— 0 12
379	Allejaure ⊗	65 52 26	0 21 23 E	485	g 4	24	— 4 48.9	2	1.4	— 4 59	— 4 14	— 2 14
381	Långträsk	65 40 53	0 45 24 E	412	g 4	25	— 2 37.1	2	1.3	— 2 47	— 2 03	— 0 15
384	Brännudden	65 58 18	0 50 48 E	365	L 33	26	— 1 11.6	1		— 1 21	— 0 38	+ 1 07
386	Auktsjaur	65 44 58	1 21 43 E	400	L 49	27	— 2 47.5	2	0.9	— 2 57	— 2 14	— 0 47
387	Akkavare	65 38 49	1 10 00 E	450	L 33	27	— 2 40.0	2	0.5	— 2 50	— 2 07	— 0 32
388	Norra Lindås	65 33 20	1 55 22 E	347	L 33	28	— 2 04.5	2	1.1	— 2 14	— 1 32	— 0 23
389	Lauker	65 38 47	1 45 48 E	360	g 4	28	— 2 17.8	2	0.3	— 2 27	— 1 45	— 0 31
390	Fjällbonäs	65 35 02	1 18 48 E	370	L 33	28	— 1 11.3	2	0.3	— 1 21	— 0 38	+ 0 52
391	Rättsel	65 45 00	1 45 00 E	375	L 33	29	— 1 36.7	2	0.5	— 1 46	— 1 04	+ 0 11
392	Ljusträsk	65 49 43	1 51 12 E	285	L 33	29	— 2 03.3	2	1.5	— 2 13	— 1 30	— 0 19
393	Vistbäcken	65 41 31	2 26 30 E	115	g 4	30	— 1 03.6	2	1.9	— 1 13	— 0 32	+ 0 20
394	Agntjärn	65 41 15	2 34 37 E	110	L 49	30	— 2 34.8	2	0.9	— 2 44	— 2 03	— 1 16
396	Bredsel	65 51 06	2 22 38 E	50	g 9	IX 4	— 0 06.2	1		— 0 16	+ 0 26	+ 1 20
397	Tårajaure b	66 25 03	1 37 48 E	365	g 9	1	— 1 01.3	2	2.8	— 1 11	— 0 28	+ 0 50
398	Stenträsk	66 19 32	1 46 53 E	412	g 9	1	— 1 05.6	2	1.0	— 1 15	— 0 32	+ 0 40
399	Kåbdalis	66 08 32	1 56 04 E	335	g 9	1	— 0 33.0	2	0.4	— 0 42	0 00	+ 1 08
400	Vargisjaure ⊗	66 02 05	1 28 10 E	325	g 4	2	— 1 19.8	2	12.0	— 1 29	— 0 46	+ 0 37
401	Holmträsk	66 08 03	2 20 34 E	272	g 4	3	+ 0 06.0	2	0.4	— 0 03	+ 0 39	+ 1 33
402	Vitbäcken	65 56 24	2 13 13 E	110	g 9	3	— 1 55.0	1		— 2 04	— 1 22	— 0 24
403	Långträsk	65 57 24	2 28 28 E	295	g 4	4	+ 1 36.9	1		+ 1 28	+ 2 09	+ 2 59
404	Grundvattnet	65 49 36	2 08 23 E	205	L 49	4	— 1 13.2	2	0.2	— 1 23	— 0 41	+ 0 21
405	Lindviken	65 49 38	2 50 40 E	105	g 4	5	— 1 18.2	2	0.2	— 1 27	— 0 46	— 0 09
406	Skråmträsk	64 40 12	2 34 07 E	70	g 9	6	— 1 20.6	2	0.1	— 1 30	— 0 50	0 00
407	Ljusvattnet	64 36 52	2 24 58 E	155	g 9	6	— 1 07.6	2	3.5	— 1 17	— 0 37	+ 0 18
408	Burträsk	64 31 28	2 35 16 E	85	m 42	6	— 0 31.4	2	2.4	— 0 41	— 0 01	+ 0 48
410	Ragvaldsträsk b	64 38 17	2 47 36 E	110	g 40	7	— 0 50.8	2	0.1	— 1 00	— 0 20	+ 0 22
414	Vebomark	64 24 14	2 57 23 E	40	m 42	9	— 2 24.6	2	0.6	— 2 34	— 1 54	— 1 18
415	Nysätra b	64 16 30	2 59 18 E	25	m 42	9	— 1 08.9	2	1.7	— 1 18	— 0 39	— 0 03

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1930.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
416	Flarken b	64° 18′ 10″	2° 48′ 14″ E	55	m 42	IX 10	— 1° 08′.4	2	0′.9	— 1° 18′	— 0° 38′	+ 0° 04′
417	Sikeå b	64 09 58	2 53 02 E	57	m 42	10	— 1 05.0	2	2.6	— 1 14	— 0 35	+ 0 05
418	Umeå, Hamringsberg b	63 49 30	2 14 25 E	50	m 42	11	— 1 12.9	2	1.3	— 1 22	— 0 43	+ 0 20
419	Bygdsiljum	64 21 12	2 27 09 E	135	m 42	12	— 3 24.2	2	0.8	— 3 34	— 2 54	— 2 00
420	Överklinten b	64 14 53	2 35 29 E	120	m 42	12	— 0 54.8	2	0.0	— 1 04	— 0 24	+ 0 25
421	Rickleå b	64 07 27	2 51 25 E	20	m 42	13	— 0 52.5	2	1.1	— 1 02	— 0 23	+ 0 18
422	Ratan b	63 59 34	2 50 29 E	15	m 42	13	— 0 54.2	1		— 1 03	— 0 24	+ 0 17
423	Djäkneboda b	64 00 10	2 45 20 E	25	m 42	14	— 0 54.0	2	2.3	— 1 03	— 0 24	+ 0 21
424	Sävar b	63 54 27	2 30 41 E	20	m 42	14	— 1 08.0	2	0.6	— 1 17	— 0 38	+ 0 15
426	Bullmark	64 02 14	2 25 00 E	60	m 42	15	— 1 07.0	2	0.5	— 1 16	— 0 37	+ 0 19
428	Botsmark b	64 15 10	2 11 15 E	220	m 42	16	— 2 44.0	1		— 2 53	— 2 13	— 1 10
430	Överrödå b	64 08 07	1 53 59 E	150	m 42	17	— 1 59.3	2	4.7	— 2 09	— 1 28	— 0 16
431	Tavelsjö	64 01 31	1 58 02 E	110	m 42	17	— 1 40.4	2	0.3	— 1 50	— 1 10	+ 0 01
432	Kroksjö b	64 05 13	2 07 55 E	155	m 42	18	— 0 36.2	2	0.6	— 0 46	— 0 05	+ 1 00
433	Ersmark	63 53 05	2 15 38 E	37	m 42	18	— 1 19.0	2	1.0	— 1 28	— 0 49	+ 0 13
434	Hössjö b	63 47 04	1 46 41 E	75	m 42	19	— 1 42.1	2	2.1	— 1 52	— 1 11	+ 0 06
435	Sörmjöle b	63 40 52	1 56 42 E	10	m 42	19	— 1 32.8	1		— 1 42	— 1 02	+ 0 10
436	Norrbyn b	63 33 47	1 45 54 E	10	m 42	20	— 1 32.6	2	2.2	— 1 42	— 1 02	+ 0 17
437	Örsbäck	63 39 58	1 34 16 E	45	m 42	20	— 1 48.8	2	1.3	— 1 58	— 1 18	+ 0 07
438	Levar b	63 34 01	1 28 24 E	20	m 42	22	— 1 56.4	1		— 2 06	— 1 26	+ 0 03
439	Nyåker b	63 44 48	1 16 13 E	180	m 42	21	— 1 59.6	2	0.1	— 2 09	— 1 28	+ 0 06
441	Järnäs udde b	63 26 07	1 36 59 E	5	g 9	22	— 1 48.5	2	0.8	— 1 58	— 1 18	+ 0 06
443	Häggnäs	63 47 43	0 55 15 E	160	m 42	23	— 2 17.5	2	1.9	— 2 27	— 1 46	+ 0 01
444	Saluböle b	63 27 07	1 12 37 E	40	m 42	23	— 2 08.5	2	1.7	— 2 18	— 1 38	0 00
445	Nävertjäl b	63 22 40	0 36 14 E	100	m 42	24	— 2 17.9	1		— 2 28	— 1 46	+ 0 11
449	Gideå b	63 28 37	0 55 47 E	125	m 42	26	— 2 22.0	2	1.5	— 2 32	— 1 51	— 0 04
450	Långviken	63 38 56	1 00 01 E	165	m 42	26	— 2 11.9	2	0.1	— 2 21	— 1 40	+ 0 04
451	Önska b	63 21 34	1 07 36 E	20	m 42	26, 27	— 2 12.5	2	1.1	— 2 22	— 1 42	— 0 01

VII. 1930. K. Rothstein. Instr. Chasselon No. 83.

452	Flåsjön, K. Sj. K. V.	64 13 35	2 32 05 W	268	s 64	VI 13, 14	— 4 29.6	6	1.5	— 4 40	— 3 54	— 0 13
453	Alanäset	64 09 45	2 21 26 W	270	s 67	14	— 4 11.8	2	1.4	— 4 22	— 3 36	— 0 01
454	Alavattnet	64 03 31	2 29 58 W	352	s 69	15	— 4 18.9	4	1.1	— 4 29	— 3 43	— 0 03
455	Strand	63 54 17	2 32 00 W	295	s 69	16	— 4 36.5	5	2.3	— 4 47	— 4 01	— 0 19
456	Brattbäcken	64 15 27	2 16 22 W	249	s 67	17, 18	— 3 17.2	5	2.0	— 3 27	— 2 42	+ 0 51
457	Västra Tåsjö	64 22 06	2 21 30 W	249	s 67	19	— 4 20.5	4	1.4	— 4 31	— 3 45	— 0 10
458	Norråker	64 25 53	2 27 45 W	252	f 75	19, 20	— 4 50.4	6	1.8	— 5 01	— 4 15	— 0 36
459	Harrsjön	64 23 06	2 42 26 W	390	s 61	21	— 4 22.4	4	0.5	— 4 33	— 3 46	0 00
460	Bågede	64 20 42	3 13 54 W	288	f 76	22	— 5 08.1	3	0.6	— 5 18	— 4 32	— 0 27
461	Storån	64 20 02	2 53 35 W	293	g 20	23	— 4 49.9	5	2.5	— 5 00	— 4 14	— 0 21
462	Äspnäset	63 59 54	2 40 06 W	290	s 64	25	— 4 53.8	3	1.7	— 5 04	— 4 18	— 0 32
463	Svaningen	64 16 56	3 02 04 W	300	g 20	25, 26	— 5 14.2	3	2.3	— 5 24	— 4 38	— 0 40
464	Hillsand	64 06 50	2 44 23 W	295	s 64	26	— 5 19.5	3	0.7	— 5 30	— 4 44	— 0 55
465	Gärdnäs	64 11 14	2 48 57 W	288	s 64	27	— 5 09.9	3	1.0	— 5 20	— 4 34	— 0 43
466	Gäddede	64 30 30	3 54 05 W	325	f 76	28	— 5 23.4	9	1.4	— 5 34	— 4 46	— 0 20
467	Fågelberget	64 23 12	3 31 13 W	315	f 76	29, 30	— 5 23.7	12	1.9	— 5 34	— 4 47	— 0 33
468	Häggnäset	64 22 55	3 42 11 W	315	f 78	VII 3	— 5 39.1	4	2.3	— 5 49	— 5 02	— 0 42
469	Västra Fiskåvattnet	64 26 05	3 19 44 W	311	f 78	4	— 4 58.8	2	1.0	— 5 09	— 4 22	— 0 15
470	Flyberg	64 28 30	3 04 02 W	410	f 78	5	— 4 38.6	3	1.6	— 4 49	— 4 02	— 0 03
471	Hovde	64 32 11	2 58 27 W	445	f 78	6	— 4 49.3	2	0.3	— 5 00	— 4 13	— 0 18
472	Sjougdnäs	64 35 48	3 08 26 W	446	f 78	6	— 4 39.4	3	0.9	— 4 50	— 4 03	— 0 02
473	Blomhöjden	64 36 14	3 20 09 W	567	f 78	7	— 5 04.9	5	0.9	— 5 15	— 4 28	— 0 21
475	Frostviken	64 38 37	4 18 54 W	320	s 64	12, 13	— 5 37.3	8	1.9	— 5 48	— 4 59	— 0 19
476	Sandnäset	64 37 35	4 10 12 W	312	s 64	13, 14	— 5 35.3	4	3.5	— 5 46	— 5 00	— 0 25
477	Lermon	64 33 52	4 02 00 W	312	f 78	14	— 5 44.3	3	0.7	— 5 55	— 5 07	— 0 36

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1930.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
478	Kycklingvattnet	64° 35′ 22″	3° 56′ 15″ W	360	f 78	VII 15	— 5° 32′.4	3	0′.9	— 5° 43′	— 4° 55′	— 0° 27′
479	Jormvattnet	64 42 50	4 02 00 W	346	s 64	16, 17	— 5 15.2	3	1.4	— 5 26	— 4 37	— 0 07
480	Blåsjön	64 50 10	3 58 07 W	435	s 64	17, 18	— 4 42.6	2	4.0	— 4 53	— 4 05	+ 0 23
481	Ankarvattnet	64 52 12	3 48 54 W	449	s 64	19	— 4 34.0	2	0.4	— 4 44	— 3 56	+ 0 26
482	Raukasjön	64 55 05	3 30 15 W	512	s 64	21	— 4 16.6	3	2.0	— 4 27	— 3 39	+ 0 33
483	Klimpfjäll	65 03 24	3 16 03 W	580	f 76	22, 23	— 3 24.2	5	2.0	— 3 34	— 2 47	+ 1 17
484	Lövberg	65 03 28	3 09 57 W	541	f 76	23	— 4 12.5	2	1.1	— 4 23	— 3 35	+ 0 25
485	Stornäs	65 02 46	2 57 11 W	541	f 76	25	— 4 12.1	3	1.7	— 4 22	— 3 35	+ 0 18
486	Tjåkkola	65 11 22	3 28 58 W	700	f 74	28	— 4 25.5	2	1.8	— 4 36	— 3 48	+ 0 23
487	Remdalen	65 15 47	3 33 14 W	770	f 74	29	— 3 58.1	2	0.1	— 4 08	— 3 20	+ 0 53
488	Avasjö	65 18 29	3 23 24 W	620	f 74	30	— 4 07.8	1		— 4 18	— 3 30	+ 0 38
489	Västra Daibmosjön	65 22 31	3 30 57 W	761	f 74	VIII 31, 1	— 3 53.6	5	3.1	— 4 04	— 3 16	+ 0 56
490	Gränsjön	65 25 12	3 14 52 W	552	d 27	2, 3	— 0 20.2	3	3.0	— 0 30	+ 0 18	+ 4 20
491	Boitikken	65 24 34	3 04 14 W	640	f 74	4	— 4 12.6	4	1.9	— 4 23	— 3 35	+ 0 22
492	Gielas	65 19 35	2 58 28 W	580	f 74	5	— 4 40.1	2	4.8	— 4 50	— 4 03	— 0 09
493	Ljusliden	65 15 15	3 06 42 W	603	f 74	6	— 4 15.3	2	0.8	— 4 26	— 3 38	+ 0 21
494	Ransarluspen	65 10 28	2 58 50 W	584	f 74	6, 7	— 4 15.5	4	3.3	— 4 26	— 3 38	+ 0 16
495	Fatmomakk	65 05 15	2 55 14 W	550	f 76	8	— 4 09.0	2	0.1	— 4 19	— 3 32	+ 0 20
496	Saxnäs	64 58 21	2 41 36 W	546	f 76	9, 11	— 4 34.3	6	1.1	— 4 44	— 3 58	— 0 13
497	Kultsjöluspen	64 57 52	2 36 50 W	560	f 75	11	— 4 58.3	2	0.6	— 5 08	— 4 22	— 0 39
498	Stalon	64 56 05	2 10 47 W	343	f 75	12	— 5 03.2	2	0.4	— 5 13	— 4 27	— 0 59
499	Bångnäs	64 55 24	2 25 21 W	495	g 1	12, 13	— 4 27.7	5	5.7	— 4 38	— 3 51	— 0 15
500	Marsvik	64 52 52	2 05 13 W	344	f 75	13	— 4 49.4	1		— 4 59	— 4 13	— 0 49
501	Malgomaj	64 48 10	2 02 08 W	350	s 64	14	— 4 34.2	3	0.1	— 4 44	— 3 58	— 0 35
502	Rönnäs	64 46 10	1 54 28 W	370	s 64	15	— 4 48.3	2	3.8	— 4 58	— 4 13	— 0 54
503	Skansholm	64 41 13	1 45 59 W	346	m 72	15, 16	— 4 10.7	4	1.4	— 4 21	— 3 35	— 0 21
504	Laxbäcken	64 38 06	1 39 39 W	356	g 9	17	— 4 10.9	2	3.0	— 4 21	— 3 36	— 0 25
505	Djupdal	64 33 09	1 40 46 W	500	s 66	17	— 4 33.4	1		— 4 44	— 3 58	— 0 46
506	Avaträsk	64 20 31	1 47 15 W	280	g 9	19	— 4 16.5	2	1.2	— 4 27	— 3 41	— 0 25
507	Ormsjö	64 24 47	2 02 20 W	264	s 64	19, 20	— 5 00.2	3	2.6	— 5 10	— 4 25	— 1 01
508	Bredsele	64 32 38	2 10 21 W	293	s 64	21	— 4 29.6	3	0.7	— 4 40	— 3 54	— 0 26
509	Storbäck	64 38 49	2 22 05 W	360	s 64	21	— 4 19.8	2	3.4	— 4 30	— 3 44	— 0 09

VIII. 1930. S. Werner. Instr. Bamberg No. 2312.

510	Kusfors	64 56 31	1 56 00 E	195	L 33	V 30	— 1 31.4	3	0.8	— 1 41	— 1 00	+ 0 11
511	Jörn	65 03 09	1 59 06 E	250	g 4	31	— 1 37.4	3	0.6	— 1 47	— 1 06	+ 0 03
512	Stensträsk	65 11 50	1 45 04 E	340	g 4	31	— 1 29.1	3	0.7	— 1 39	— 0 57	+ 0 19
513	Glommersträsk	65 15 58	1 33 19 E	380	L 33	VI 1	— 1 27.4	2	1.4	— 1 37	— 0 55	+ 0 27
514	Abborrträsk	65 26 51	1 21 41 E	350	L 33	2	— 2 09.9	3	1.2	— 2 19	— 1 37	— 0 09
515	Arvidsjaur B	65 35 30	1 07 52 E	380	g 4	2	— 2 03.8	3	1.0	— 2 13	— 1 30	+ 0 05
516	Siksjö	65 24 13	1 42 19 E	320	d 36	3	— 0 36.2	3	2.5	— 0 46	— 0 04	+ 1 13
517	Högbacken	65 23 13	1 58 21 E	330	L 33	3	— 1 47.9	3	2.2	— 1 57	— 1 16	— 0 08
518	Långträsk	65 22 54	2 17 11 E	320	d 27	4	— 2 27.9	3	1.0	— 2 37	— 1 56	— 0 59
519	Myrheden	65 18 12	2 09 45 E	240	m 6	5	— 2 30.6	2	1.0	— 2 40	— 1 59	— 0 57
520	Träskholm	65 13 57	2 02 40 E	330	g 4	5	— 1 44.8	3	1.3	— 1 54	— 1 13	— 0 07
521	Österjörn	65 01 36	2 06 12 E	250	m 6	6	— 2 23.6	2	0.6	— 2 33	— 1 52	— 0 48
522	Stavaträsk	65 02 23	2 24 10 E	220	m 10	6	+ 0 01.1	2	2.1	— 0 08	+ 0 33	+ 1 27
523	Degerträsk	65 07 18	2 26 06 E	240	st 57	7	+ 1 30.9	3	1.1	+ 1 22	+ 2 02	+ 2 55
524	Kankberget	64 55 35	2 13 42 E	210	L 49	8	— 1 08.3	3	1.6	— 1 18	— 0 37	+ 0 23
525	Boliden	64 52 05	2 21 50 E	200	m 53	9	— 3 41.4	3	0.7	— 3 51	— 3 10	— 2 14
526	Ursviken	64 42 36	3 07 32 E	10	g 4	10	— 0 47.1	3	1.3	— 0 56	— 0 17	+ 0 14
527	Bure	64 37 10	3 08 34 E	5	g 4	11	— 0 35.4	3	0.8	— 0 45	— 0 05	+ 0 25
528	Kåge	64 50 20	2 55 54 E	10	g 9	12	— 0 21.4	2	0.2	— 0 31	+ 0 09	+ 0 46
529	Kusmark	64 52 40	2 45 19 E	50	g 9	12	— 1 13.4	4	1.4	— 1 23	— 0 43	0 00

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1930.5	n	$\pm\eta$	D 1929.5	D 1933.5	1933.5 obs.-calc.
530	Storselet	64° 55′ 45″	2° 30′ 00″ E	110	m 51	VI 13	— 2° 25′.8	3	0′.2	— 2° 35′	— 1° 55′	— 1° 04′
531	Frostkåge	64 52 49	2 58 00 E	65	g 9	14	— 0 56.9	2	2.0	— 1 06	— 0 26	+ 0 09
532	Byske	64 57 13	3 08 38 E	10	m 42	14	— 0 41.4	3	1.1	— 0 51	— 0 11	+ 0 19
533	Ålund	65 07 56	2 57 10 E	90	m 42	16	— 0 42.1	4	0.7	— 0 51	— 0 12	+ 0 24
534	Jakobsfors	65 09 17	2 50 51 E	100	m 42	17	— 0 55.4	3	0.6	— 1 05	— 0 24	+ 0 15
535	Fällfors	65 07 45	2 44 50 E	180	g 9	17	— 0 35.3	3	1.5	— 0 45	— 0 04	+ 0 38
536	Stryckfors	65 10 54	2 34 47 E	180	m 42	17	— 3 09.5	3	1.0	— 3 19	— 2 38	— 1 50
537	Åselet	65 13 33	2 23 09 E	190	m 42	18	— 2 02.2	3	1.3	— 2 12	— 1 31	— 0 36
538	Norrlångträsk	65 01 26	2 41 18 E	175	m 42	19	— 0 55.6	3	1.7	— 1 05	— 0 25	+ 0 20
539	Selet	65 02 14	2 55 39 E	100	m 42	19	+ 6 33.7	3	1.2	+ 6 25	+ 7 05	+ 7 41
540	Tåmeträsk	65 01 52	3 07 38 E	60	m 42	20	— 0 28.5	3	0.8	— 0 38	+ 0 02	+ 0 32
541	Åbyn	65 02 07	3 16 50 E	10	m 42	21	— 1 01.4	2	0.9	— 1 11	— 0 31	— 0 06
542	Källbomark	65 04 29	3 12 22 E	40	m 42	22	— 0 16.8	3	1.0	— 0 26	+ 0 14	+ 0 41
543	Kinnbäck	65 04 25	3 23 46 E	5	m 42	23	+ 1 11.6	3	0.9	+ 1 03	+ 1 42	+ 2 03
544	Jävre	65 09 26	3 25 45 E	15	m 42	24	+ 1 05.4	3	1.1	+ 0 56	+ 1 36	+ 1 55
545	Pitsund	65 14 04	3 27 14 E	10	m 42	25	+ 0 40.5	3	0.7	+ 0 31	+ 1 11	+ 1 30
546	Blåsmark	65 15 27	3 14 10 E	40	m 42	27	+ 0 56.3	3	0.8	+ 0 47	+ 1 27	+ 1 53
547	Gölaberget △	65 22 15	3 08 45 E	110	m 42	27	+ 0 46.1	6	3.3	+ 0 37	+ 1 17	+ 1 46
548	Önusberg	65 19 32	2 41 30 E	360	m 42	28	— 0 52.3	3	1.6	— 1 02	— 0 21	+ 0 23
549	Koler	65 29 45	2 27 03 E	280	g 4	29	— 1 24.5	4	2.2	— 1 34	— 0 53	— 0 01
550	Storsund	65 34 19	2 34 01 E	210	d 30	30	— 3 01.7	3	1.0	— 3 11	— 2 30	— 1 42
551	Åträsk	65 26 07	2 52 06 E	130	m 42	VII 1	— 0 10.8	3	0.7	— 0 20	+ 0 21	+ 0 58
552	Granträsk	65 31 50	2 53 39 E	125	m 42	2	— 0 27.8	3	1.3	— 0 37	+ 0 04	+ 0 41
553	Älvsby	65 40 38	2 55 55 E	40	g 4	3	+ 0 29.1	2	0.6	+ 0 20	+ 1 01	+ 1 36
554	Tvärå	65 34 10	3 02 49 E	40	m 42	3	+ 0 15.5	3	0.5	+ 0 06	+ 0 47	+ 1 19
555	Arnemark	65 29 21	3 09 26 E	10	m 42	4	+ 0 50.6	3	1.0	+ 0 41	+ 1 22	+ 1 50
556	Bölebyn	65 22 38	3 15 12 E	2	m 42	4	+ 1 08.9	3	0.7	+ 1 00	+ 1 40	+ 2 05
557	Piteå	65 18 53	3 26 15 E	2	m 42	5	+ 1 19.0	3	0.2	+ 1 10	+ 1 50	+ 2 09
558	Porsnäs	65 25 23	3 26 11 E	5	m 42	6	+ 0 08.7	3	1.7	0 00	+ 0 40	+ 0 58
559	Rosvik	65 25 55	3 38 06 E	10	g 4	7	+ 0 05.2	3	1.3	— 0 04	+ 0 36	+ 0 48
560	Ersnäs	65 32 02	3 44 14 E	10	g 4	7	+ 0 00.6	3	0.4	— 0 09	+ 0 31	+ 0 40
561	Hålfjärden	65 26 08	3 50 15 E	1	g 4	8	— 0 00.1	3	2.3	— 0 09	+ 0 30	+ 0 36
562	Sjulsmark	65 31 17	3 26 15 E	20	g 4	9	— 0 32.7	3	0.6	— 0 42	— 0 02	+ 0 17
563	Nybyn	65 29 13	3 21 15 E	30	m 42	9	— 0 59.5	2	0.6	— 1 09	— 0 29	— 0 07
564	Backträsk	65 32 41	3 14 40 E	30	m 42	10	+ 1 15.6	2	1.1	+ 1 07	+ 1 47	+ 2 12
565	Brännberg	65 47 23	3 10 38 E	80	m 42	11	+ 1 08.3	3	2.2	+ 0 59	+ 1 40	+ 2 06
566	Vändträsk	65 45 30	3 27 18 E	75	g 4	12	+ 1 58.4	2	0.0	+ 1 49	+ 2 30	+ 2 47
567	Boden I	65 49 43	3 38 10 E	20	m 7	13	— 1 20.6	3	0.8	— 1 30	— 0 50	— 0 39
	Boden II	65 49 37	3 40 06 E	15	m 7	13	+ 1 06.7	3	0.6	+ 0 58	+ 1 38	+ 1 48
	Boden III	65 49 23	3 40 45 E	15	m 7	13	+ 0 03.9	3	1.8	— 0 05	+ 0 35	+ 0 45
568	Hednoret	65 49 24	3 28 51 E	20	g 4	14	+ 0 44.1	3	1.4	+ 0 35	+ 1 15	+ 1 32
569	Avan	65 40 56	3 45 13 E	10	g 4	15	— 1 13.9	3	0.2	— 1 23	— 0 43	— 0 36
570	Västmark	65 40 22	3 32 38 E	80	g 4	16	— 0 47.7	3	0.8	— 0 57	— 0 17	— 0 02
571	Klöverträsk	65 38 23	3 21 12 E	80	L 49	17	— 1 19.4	3	0.6	— 1 29	— 0 48	— 0 27
572	Rosfors	65 34 37	3 25 45 E	30	L 49	18	— 0 06.0	3	0.6	— 0 15	+ 0 25	+ 0 44
573	Gäddvik	65 35 16	3 57 54 E	5	g 4	19	+ 1 36.6	3	1.2	+ 1 28	+ 2 07	+ 2 08
574	Luleå	65 34 45	4 03 14 E	20	m 42	20	— 0 22.3	3	1.2	— 0 31	+ 0 08	+ 0 06
575	Persön	65 45 00	4 07 36 E	3	m 42	21	— 0 51.6	3	1.0	— 1 01	— 0 21	— 0 26
576	Gammelstad	65 38 21	3 58 13 E	10	m 42	22	— 0 51.1	3	0.5	— 1 00	— 0 21	— 0 20
577	Sävast	65 45 42	3 42 27 E	10	g 4	22	— 1 03.4	3	0.7	— 1 13	— 0 33	— 0 24
578	Smedsbyn	65 48 21	3 59 27 E	5	g 4	23	— 0 31.9	3	0.8	— 0 41	— 0 01	— 0 02
579	Ängesbyn	65 46 43	4 00 49 E	3	g 4	24	— 0 32.0	3	0.7	— 0 41	— 0 02	— 0 03
580	Gemträsk	65 52 46	3 58 33 E	15	g 4	24	— 0 37.2	2	0.5	— 0 46	— 0 07	— 0 07
581	Skogså	65 52 40	3 49 36 E	15	d 30	25	— 7 01.6	3	2.2	— 7 11	— 6 31	— 6 26
582	Hundsjö	65 57 02	3 45 13 E	30	m 6	26	— 0 33.2	2	2.4	— 0 42	— 0 02	+ 0 05

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1930.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
583	Degerselet	66° 00′ 38″	3° 52′ 18″ E	23	L 49	VII 26	+ 0° 18′.2	3	0′.5	+ 0° 09′	+ 0° 49′	+ 0° 52′
584	Gunnarsbyn	66 04 50	3 46 47 E	30	L 49	27	+ 0 21.3	3	0.7	+ 0 12	+ 0 52	+ 0 58
585	Valvfors	66 08 36	3 39 19 E	40	L 49	28	— 1 02.8	3	0.4	— 1 12	— 0 32	— 0 21
586	Orrbyn	65 56 55	4 06 21 E	15	st 57	29	+ 0 06.3	2	2.0	— 0 03	+ 0 37	+ 0 32
587	Prästholmen	65 54 22	4 09 28 E	10	st 57	30	+ 0 06.9	3	0.9	— 0 02	+ 0 37	+ 0 31
588	Råneå	65 51 15	4 14 03 E	5	m 42	30	— 0 40.6	3	0.4	— 0 50	— 0 10	— 0 19
589	Sundom	65 46 28	4 14 24 E	0	m 42	31	+ 0 31.0	3	0.2	+ 0 22	+ 1 01	+ 0 52
590	Strömsundet	65 52 33	4 19 12 E	10	m 42	VIII 1	+ 0 16.6	3	0.5	+ 0 08	+ 0 47	+ 0 35
591	Vitå	65 56 00	4 21 30 E	15	m 42	2	+ 2 18.9	3	0.3	+ 2 10	+ 2 49	+ 2 36
592	Avafors I	66 02 07	4 14 47 E	110	m 6	3	— 0 20.4	3	0.8	— 0 29	+ 0 10	+ 0 01
	Avafors II	66 02 10	4 14 42 E	120	m 6	3	— 0 21.6	3	0.6	— 0 31	+ 0 09	0 00
593	Bjurå	66 01 17	4 06 52 E	40	m 6	4	+ 0 17.4	3	1.0	+ 0 08	+ 0 48	+ 0 43
594	Hovlös	66 06 05	4 11 43 E	135	g 4	5	— 1 18.0	3	1.1	— 1 27	— 0 47	— 0 55
595	Långsel	66 11 27	4 06 00 E	150	m 6	5	— 0 14.0	3	1.3	— 0 23	+ 0 17	+ 0 12
596	Morjärv I	66 03 38	4 40 15 E	30	m 11	6	+ 0 48.7	5	1.9	+ 0 40	+ 1 19	+ 0 55
	Morjärv II	66 04 04	4 40 17 E	30	m 11	7	+ 0 04.2	3	1.4	— 0 05	+ 0 34	+ 0 11
597	Västanäs	66 05 49	4 39 58 E	30	m 11	7	— 1 20.9	3	0.2	— 1 30	— 0 51	— 1 14
598	Töre	65 54 54	4 35 14 E	5	m 11	8	+ 0 28.6	3	1.2	+ 0 20	+ 0 59	+ 0 38
599	Månsbyn	65 52 35	4 56 45 E	10	m 10	9	+ 0 02.6	4	2.1	— 0 06	+ 0 32	0 00
600	Grötnäs	65 50 50	5 04 49 E	5	g 9	10	— 0 07.2	3	1.2	— 0 16	+ 0 22	— 0 15
601	Nyborg	65 46 58	5 09 26 E	5	st 57	11	+ 1 06.5	3	2.2	+ 0 58	+ 1 36	+ 0 56
602	Risön	65 48 17	5 12 02 E	0	st 57	11	+ 2 02.1	3	1.6	+ 1 53	+ 2 31	+ 1 50
604	Bondersbyn	65 55 10	4 51 24 E	10	m 42	15	+ 0 42.1	3	0.8	+ 0 33	+ 1 12	+ 0 42
605	Kamlunge	65 59 47	4 48 18 E	30	g 9	15	+ 0 10.8	4	1.8	+ 0 02	+ 0 41	+ 0 13
606	Överkalix	66 18 47	4 47 25 E	35	g 9	16	— 0 29.4	4	1.0	— 0 38	+ 0 01	— 0 28
607	Posjärvi	66 26 49	5 00 50 E	110	m 42	17	+ 0 18.2	3	0.6	+ 0 09	+ 0 48	+ 0 12
608	Kesasjärvi	66 17 15	4 18 57 E	140	m 42	18	+ 0 59.4	3	1.2	+ 0 51	+ 1 30	+ 1 18
609	Gyljen I	66 22 09	4 40 21 E	55	m 11	19	+ 0 45.6	3	1.2	+ 0 37	+ 1 16	+ 0 52
610	Landsån	66 29 26	4 25 45 E	75	g 9	20	— 0 27.1	3	1.0	— 0 36	+ 0 04	— 0 13
611	Övre Lansjärv	66 39 04	4 10 00 E	90	g 1	21	+ 1 13.3	3	0.2	+ 1 04	+ 1 45	+ 1 36
612	Skröven	66 45 29	3 51 00 E	100	g 18	22	— 1 22.3	3	1.4	— 1 31	— 0 51	— 0 48
613	Hakkas	66 54 52	3 31 02 E	270	d 30	23	— 2 13.9	4	5.1	— 2 23	— 1 42	— 1 29
614	Leipojärvi	67 02 46	3 09 40 E	280	g 18	25	— 2 06.6	2	0.7	— 2 16	— 1 34	— 1 09
615	Sikträsk	67 10 24	2 23 31 E	400	m 55	27	— 1 52.8	2	1.4	— 2 02	— 1 19	— 0 29
616	Linaälv	67 15 13	2 11 14 E	450	L 33	27	+ 5 01.4	3	1.0	+ 4 52	+ 5 35	+ 6 32
617	Risbäck	67 19 11	2 08 37 E	470	m 10	28	— 2 28.8	2	1.5	— 2 38	— 1 55	— 0 56
618	Fjällåsen	67 30 59	2 02 44 E	500	L 33	28	— 7 14.3	3	1.1	— 7 24	— 6 40	— 5 39
619	Kalixfors	67 44 24	2 09 41 E	450	d 30	29	— 2 14.5	3	1.3	— 2 24	— 1 40	— 0 43
621	Kopparåsen	68 24 27	0 26 36 E	420	g 1	IX 1	— 2 52.1	3	0.7	— 3 02	— 2 15	— 0 22
622	Björkliden	68 23 08	0 38 14 E	370	f 79	2	— 3 18.3	3	0.1	— 3 28	— 2 42	— 0 55
623	Abisko I, Absolute house	68 21 28	0 45 56 E	388	g 3					— 2 18	— 1 32	+ 0 10
	Abisko II, K. Sj. K. V.	68 21 27	0 45 48 E	388	g 3	4	— 2 08.5	3	1.4	— 2 18	— 1 32	+ 0 10
624	Stordalen	68 20 10	1 01 55 E	400	f 74	4	— 1 34.8	3	0.4	— 1 44	— 0 58	+ 0 35
625	Kaisepakte	68 17 05	1 15 40 E	350	g 3	5	— 4 38.2	3	0.1	— 4 48	— 4 02	— 2 36
626	Stenbacken	68 15 11	1 27 24 E	350	g 37	6	— 1 37.8	3	1.7	— 1 47	— 1 02	+ 0 17
627	Torneträsk	68 13 21	1 39 37 E	355	d 28	6	— 0 28.1	2	0.9	— 0 38	+ 0 08	+ 1 20
628	Borgfors	68 08 54	1 43 58 E	500	g 23	7	— 5 08.7	6	1.0	— 5 18	— 4 33	— 3 23
629	Rensjön I	68 04 14	1 47 00 E	500	d 30	8	—56 23.2	3	2.1	—56 33	—55 48	
	Rensjön II	68 04 08	1 47 13 E	500	d 30	8	—15 06.8	2	0.1	—15 16	—14 32	
630	Krokvik	67 55 36	2 00 35 E	450	d 30	9	— 2 34.0	2	0.3	— 2 43	— 1 59	— 0 58
631	Rautas	67 59 42	1 50 45 E	470	d 30	9	— 5 59.5	2	0.7	— 6 09	— 5 24	— 4 17
632	Porjus	66 57 35	1 45 40 E	370	m 6	10	— 0 23.1	2	0.4	— 0 33	+ 0 11	+ 1 23
633	Kuosakåbbå	67 09 11	2 03 14 E	450	L 33	11	+ 1 10.8	2	0.6	+ 1 02	+ 1 45	+ 2 47
634	Jutsajaure	67 03 23	1 52 11 E	400	L 49	11	— 3 06.9	2	0.1	— 3 16	— 2 33	— 1 25
636	Ligga	66 45 06	1 49 49 E	290	g 4	13	+ 0 20.2	3	0.6	+ 0 11	+ 0 54	+ 2 04

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1930.5	n	±γ	D 1929.5	D 1933.5	1933.5 obs.-calc.
637	Jokkmokk	66° 35′ 44″	1° 48′ 03″ E	230	d 27	IX 14	— 0° 09′.3	3	0′.2	— 0° 19′	+ 0° 24′	+ 1° 36′
638	Mattisudden	66 33 28	1 56 48 E	230	m 6	15	— 0 36.7	3	1.1	— 0 46	— 0 03	+ 1 03
639	Skällarim	66 30 12	2 12 08 E	200	g 4	16	— 1 08.5	3	0.7	— 1 18	— 0 35	+ 0 23
640	Padjerim	66 27 22	2 26 39 E	130	d 27	17	— 0 01.8	3	1.1	— 0 11	+ 0 31	+ 1 21
641	Vuollerim	66 25 26	2 34 12 E	100	g 4	17	— 1 03.4	3	1.4	— 1 13	— 0 31	+ 0 15
642	Storsand	66 16 45	2 46 37 E	55	g 4	18, 19	+ 1 48.7	10	3.9	+ 1 40	+ 2 21	+ 3 00
643	Harads	66 05 01	2 55 15 E	35	m 6	19	+ 0 06.8	3	0.2	— 0 02	+ 0 39	+ 1 14
644	Nedre Svartlå	65 59 56	3 08 35 E	30	st 57	20	— 0 22.9	3	0.4	— 0 32	+ 0 09	+ 0 36
645	Bredåker I	65 54 22	3 16 48 E	20	g 4	21	+ 0 20.2	3	0.5	+ 0 11	+ 0 52	+ 1 15
	Bredåker II	65 54 25	3 16 33 E	20	g 4	21	+ 0 36.4	3	0.3	+ 0 27	+ 1 08	+ 1 31
	IX. 1931. S. Werner. Instr. Askania No. 84065.						1931.5					
646	Skog	61 10 18	1 14 18 W	50	m 44	V 25	— 2 58.1	2	1.1	— 3 19	— 2 37	+ 0 27
647	Österböle	61 22 00	1 24 18 W	100	g 40	26	— 3 03.4	2	0.4	— 3 24	— 2 43	+ 0 26
648	Letsbo	61 56 00	2 10 54 W	150	g 40	27	— 4 12.4	1		— 4 33	— 3 52	— 0 18
649	Tallnäs	62 07 15	2 22 00 W	230	g 40	27	— 3 11.3	2	0.4	— 3 33	— 2 50	+ 0 50
37	Ånge II, K. Sj. K. V.	62 32 18	2 19 42 W	150	g 41	28	— 4 10.0	5	3.3	— 4 32	— 3 49	— 0 11
651	Oviken b	62 59 32	3 39 31 W	390	s 69	30	— 6 50.4	2	0.6	— 7 13	— 6 28	— 2 07
652	Hallen	63 10 54	3 58 00 W	300	s 64	30	— 5 47.4	3	0.8	— 6 11	— 5 25	— 0 54
653	Mattmar b	63 18 24	4 09 36 W	380	s 70	31	— 5 32.7	2	1.7	— 5 56	— 5 10	— 0 33
654	Bleckåsen	63 23 00	4 17 24 W	320	s 70	VI 9	— 5 09.5	3	0.2	— 5 33	— 4 47	— 0 05
655	Åflo b	63 29 30	4 11 30 W	330	s 70	10	— 4 49.6	3	0.3	— 5 13	— 4 27	+ 0 11
656	Tångeråsen	63 34 36	4 13 24 W	390	s 70	4	— 5 15.0	2	2.4	— 5 39	— 4 53	— 0 14
657	Rönnefors b	63 38 42	4 12 42 W	340	f 76	4	— 5 19.6	3	1.5	— 5 43	— 4 57	— 0 19
658	Ytterolden	63 42 00	4 27 24 W	360	s 64	4	— 5 47.5	3	0.5	— 6 11	— 5 25	— 0 38
659	Vejmon	63 41 12	4 08 30 W	450	f 76	4	— 5 20.3	3	1.1	— 5 44	— 4 58	— 0 22
660	Tjärnåsen	63 37 06	3 58 30 W	370	f 78	5	— 6 16.5	3	0.8	— 6 40	— 5 54	— 1 24
661	Landön	63 34 06	3 46 36 W	350	s 64	6	— 6 18.5	3	0.6	— 6 42	— 5 56	— 1 32
662	Lillholmsjön	63 38 36	3 40 18 W	410	f 74	6	— 7 14.7	3	1.9	— 7 38	— 6 53	— 2 32
663	Södra Skärvången	63 46 12	3 43 12 W	370	s 70	7	— 6 35.7	3	1.0	— 6 59	— 6 13	— 1 52
664	Häggsjön b	63 54 36	3 50 00 W	340	f 76	7,9	— 6 13.1	5	1.0	— 6 37	— 5 51	— 1 25
665	Hotagen b	63 59 18	3 49 42 W	330	f 76	8	— 6 04.1	3	1.1	— 6 28	— 5 42	— 1 17
666	Valsjö	64 04 18	3 54 24 W	360	f 76	8	— 6 04.5	2	0.5	— 6 28	— 5 42	— 1 15
667	Tulleråsen	63 27 30	3 51 48 W	420	s 70	9	— 6 04.3	4	1.3	— 6 28	— 5 42	— 1 15
668	Offerdal b	63 27 54	4 03 04 W	360	f 76	10	— 5 03.0	3	1.3	— 5 27	— 4 41	— 0 07
669	Åse	63 19 00	3 57 30 W	370	s 64	10	— 5 31.6	3	1.3	— 5 55	— 5 09	— 0 39
13	Hovermo	62 53 33	3 41 56 W	312	f 75	15	—10 48.5	3	0.4	—11 12	—10 27	— 6 04
671	Aspås	63 22 00	3 34 00 W	400	s 69	16	— 7 06.5	4	0.2	— 7 30	— 6 44	— 2 27
672	Lundsjön	63 30 54	3 31 30 W	390	s 69	16	— 7 12.3	5	0.5	— 7 35	— 6 50	— 2 35
673	Gravarvågen	63 33 18	3 19 00 W	290	s 64	17	— 6 06.8	3	0.9	— 6 30	— 5 45	— 1 36
674	Ringsta b	63 23 54	3 17 48 W	320	s 69	17	— 6 35.8	3	0.4	— 6 59	— 6 14	— 2 06
676	Gisselås	63 41 00	2 39 06 W	320	s 69	18	— 5 09.5	4	2.0	— 5 32	— 4 48	— 1 02
677	Österkälen b	63 55 12	2 20 18 W	390	s 69	19	— 4 57.1	6	1.6	— 5 20	— 4 35	— 1 00
678	Långvattnet b	65 06 12	1 22 36 W	440	m 72	20	— 4 38.7	4	1.2	— 5 01	— 4 17	— 1 16
679	Gaskeluokt	65 13 00	1 16 24 W	350	g 9	20	— 4 39.0	3	0.4	— 5 02	— 4 17	— 1 20
680	Rönnlidens kolonat	65 08 18	1 15 24 W	560	s 64	21	— 4 20.6	4	0.5	— 4 43	— 3 59	— 1 02
681	Laisbäck	65 11 36	1 03 18 W	348	g 9	21	— 4 08.8	4	0.5	— 4 31	— 3 47	— 0 58
683	Ankarsund b	65 23 06	1 32 54 W	360	f 75	29	— 5 22.3	3	0.2	— 5 45	— 5 00	— 1 54
684	Slussfors b	65 25 42	1 47 00 W	365	f 78	23	— 4 12.8	3	0.7	— 4 36	— 3 51	— 0 37
685	Ytterviken b	65 36 18	2 31 18 W	480	f 78	23	— 5 09.2	4	1.3	— 5 33	— 4 47	— 1 09
686	Tärna b	65 42 30	2 47 42 W	470	f 78	24	— 4 29.7	3	0.2	— 4 54	— 4 07	— 0 20
687	Västansjö	65 44 54	2 58 00 W	480	f 77	24	— 4 35.0	3	1.2	— 4 59	— 4 12	— 0 20
688	Ström	65 44 18	3 11 19 W	480	f 77	25	— 4 13.3	3	1.9	— 4 37	— 3 51	+ 0 10
689	Joesjö b	65 43 30	3 25 48 W	490	s 64	25	— 3 42.4	3	1.0	— 4 07	— 3 20	+ 0 49

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1931.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
690	Mo . . . . . b	65° 39′ 36″	2° 54′ 48″ W	415	f 77	VI 26	— 4° 31′.1	3	0′.8	— 4° 55′	— 4° 08′	— 0° 18′
691	Umfors	65 57 24	3 00 42 W	540	f 78	27	— 3 41.6	4	0.7	— 4 06	— 3 19	+ 0 35
692	Klippen	65 51 48	3 02 12 W	500	f 77	27	— 4 07.9	5	0.3	— 4 32	— 3 45	+ 0 11
693	Norra Fjällnäs . . . . . b	65 45 30	2 34 48 W	500	f 77	28	— 4 44.1	4	0.4	— 5 08	— 4 22	— 0 42
694	Forsmark . . . . . b	65 29 06	2 14 30 W	390	d 28	29	— 3 57.0	5	0.8	— 4 20	— 3 35	— 0 06
695	Husbondliden . . . . . b	64 44 18	0 36 48 E	270	g 9	30	— 2 19.7	4	1.1	— 2 41	— 1 59	— 0 04
696	Högberget	65 07 42	1 28 06 E	280	L 33	VII 1	— 2 04.5	4	0.8	— 2 25	— 1 44	— 0 19
697	Gråträsk . . . . . b	65 34 30	1 59 42 E	360	L 33	1	— 1 52.0	4	1.2	— 2 13	— 1 32	— 0 25
698	Övre Grundsel . . . . . b	65 39 42	2 10 18 E	250	g 4	2	— 0 53.2	3	0.1	— 1 14	— 0 33	+ 0 28
699	Gransjö	66 03 36	3 21 06 E	160	g 4	2	— 1 51.7	4	0.4	— 2 12	— 1 32	— 1 11
700	Gullträsk	66 11 42	3 08 54 E	170	L 49	3	— 1 20.8	4	0.5	— 1 41	— 1 01	— 0 34
702	Murjek	66 28 30	2 50 00 E	270	g 4	4	+ 0 42.2	4	0.8	+ 0 22	+ 1 03	+ 1 40
704	Junkarhällan . . . . . b	66 37 18	1 32 30 E	275	d 30	5	— 1 25.3	4	0.9	— 1 47	— 1 04	+ 0 16
705	Luovus	66 38 36	0 48 12 E	425	g 4	6	— 2 21.2	5	1.3	— 2 43	— 2 00	— 0 15
706	Piertinjaur	66 35 36	1 02 30 E	375	g 4	6	+ 2 41.0	5	0.2	+ 2 19	+ 3 02	+ 4 39
707	Puornak	66 35 18	1 21 30 E	320	g 4	6	— 0 26.8	4	0.5	— 0 48	— 0 06	+ 1 20
708	Ängeså	66 44 36	4 15 06 E	100	g 18	7	+ 0 00.6	4	0.3	— 0 19	+ 0 21	+ 0 09
709	Järämä	66 53 36	3 53 18 E	240	g 18	8	+ 0 12.3	6	0.6	— 0 08	+ 0 32	+ 0 33
712	Nattavaara	66 45 24	2 58 30 E	330	L 49	10	— 0 26.6	5	0.5	— 0 47	— 0 06	+ 0 26
713	Sattisvaara	66 45 00	3 24 18 E	310	g 18	10	— 2 10.3	5	1.0	— 2 31	— 1 50	— 1 33
714	Dokkas	67 04 12	3 17 12 E	235	g 18	11	+ 0 43.7	5	1.6	+ 0 23	+ 1 04	+ 1 24
715	Ullatti	67 00 36	3 46 12 E	220	m 42	12	— 1 34.4	4	0.5	— 1 55	— 1 14	— 1 10
716	Nilivaara	67 13 18	3 33 06 E	310	g 18	12	+ 0 26.0	4	0.3	+ 0 05	+ 0 46	+ 0 58
717	Kääntöjärvi	67 22 54	3 46 48 E	340	g 18	13	+ 0 37.7	6	1.1	+ 0 17	+ 0 58	+ 1 01
718	Vcttasjärvi	67 22 42	3 37 48 E	360	g 18	13	— 0 16.0	4	0.9	— 0 37	+ 0 04	+ 0 13
719	Markitta	67 10 18	3 32 00 E	300	g 18	14	— 1 23.9	6	0.7	— 1 44	— 1 04	— 0 51
720	Sakajärvi	67 05 06	2 56 54 E	295	g 18	14	— 2 04.5	4	0.6	— 2 25	— 1 44	— 1 12
721	Muorjevaara	67 11 18	2 56 06 E	420	L 49	15	— 3 23.7	4	0.9	— 3 45	— 3 03	— 2 31
722	Moskojärvi	67 21 48	3 02 18 E	410	g 18	15	— 1 37.5	3	0.4	— 1 59	— 1 17	— 0 49
724	Svappavaara I . . . . . b	67 36 24	3 03 42 E	400	L 49	16	— 2 35.0	4	0.9	— 2 56	— 2 14	— 1 47
725	Mertainen II	67 44 54	2 36 15 E	410	m 34	17	+ 0 50.5	4	0.9	+ 0 29	+ 1 12	+ 1 52
727	Laxforsen	67 51 18	2 27 12 E	340	L 33	18	+ 6 06.6	4	0.2	+ 5 45	+ 6 28	+ 7 15
728	Äijöjärvi . . . . . b	67 40 12	3 21 18 E	310	g 4	20	— 1 08.9	5	0.9	— 1 30	— 0 48	— 0 31
729	Övre Parakka	67 30 12	3 34 36 E	360	g 18	21	+ 0 27.0	5	0.2	+ 0 06	+ 0 48	+ 0 57
731	Övre Soppero	68 05 30	3 39 12 E	370	L 49	22	— 2 08.5	4	0.3	— 2 30	— 1 48	— 1 42
733	Idivuoma II . . . . . b	68 20 24	4 08 12 E	380	L 49	23, 24	— 2 52.7	8	2.1	— 3 14	— 2 32	— 2 41
735	Kuttanen	68 23 06	4 46 48 E	315	g 9	24	+ 1 33.3	5	1.0	+ 1 13	+ 1 54	+ 1 21
736	Lannavaara	68 02 36	3 55 36 E	360	d 27	25	— 3 18.8	5	3.6	— 3 40	— 2 58	— 3 01
737	Nedre Soppero	68 02 30	3 40 24 E	370	L 49	25, 26	— 0 59.5	6	1.4	— 1 20	— 0 39	— 0 33
738	Ounistunturi	67 55 18	3 33 00 E	420	L 49	26	+ 0 00.4	7	0.7	— 0 21	+ 0 21	+ 0 31
739	Kuoksu färja	67 38 12	3 52 48 E	245	L 49	27	+ 0 18.0	6	0.8	— 0 03	+ 0 38	+ 0 38
740	Lainio	67 45 48	4 17 48 E	310	g 18	27	— 3 26.4	5	0.5	— 3 47	— 3 06	— 3 21
741	Merasjärvi . . . . . b	67 32 42	3 53 06 E	320	g 4	28	+ 0 34.6	7	4.3	+ 0 14	+ 0 55	+ 0 55
742	Masugnsbyn . . . . . b	67 26 48	4 03 00 E	280	g 4	28	+ 1 20.0	8	1.6	+ 1 00	+ 1 40	+ 1 34
743	Saittajärvi	67 20 06	4 11 36 E	235	L 49	29	+ 8 48.0	5	1.2	+ 8 28	+ 9 08	+ 8 58
745	Kangos	67 28 42	4 37 24 E	230	g 23	30	— 2 26.3	7	0.4	— 2 46	— 2 06	— 2 31
746	Lovikka	67 19 48	4 34 12 E	190	L 49	30	— 0 31.5	5	1.2	— 0 52	— 0 12	— 0 35
747	Auttis	67 15 30	4 44 00 E	170	g 23	31	— 1 13.5	4	0.8	— 1 33	— 0 54	— 1 22
748	Tuomaniemi	67 13 48	5 16 54 E	170	m 42	31	— 0 29.4	6	0.9	— 0 49	— 0 10	— 0 57
751	Kihlanki	67 33 42	5 24 30 E	175	g 23	VIII 1	+ 0 32.0	4	0.8	+ 0 13	+ 0 52	0 00
752	Parkajoki	67 44 00	5 25 12 E	200	g 18	1	+ 0 51.9	4	2.7	+ 0 32	+ 1 12	+ 0 19
753	Kitkiöjoki	67 46 24	5 11 36 E	240	g 18	2	+ 1 40.9	4	1.1	+ 1 21	+ 2 01	+ 1 16
754	Kitkiöjärvi	67 49 00	5 06 24 E	270	g 18	2	+ 0 13.0	4	0.5	— 0 07	+ 0 33	— 0 09
755	Muodoslompolo	67 57 00	5 23 18 E	260	g 18	2	+ 3 30.0	5	1.0	+ 3 10	+ 3 50	+ 2 58
756	Sääskivuopio	68 03 06	5 19 48 E	250	g 18	3	+ 0 24.9	4	0.2	+ 0 05	+ 0 45	— 0 06

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1931.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
758	Naalisvaara	68° 06′ 42″	5° 16′ 48″ E	260	g 18	VIII 4	— 1° 09′.6	4	0′.4	— 1° 30′	— 0° 50′	— 1° 38′
759	Muonionalusta färja K.Sj.K.V.	67 54 30	5 30 24 E	210	m 42	4	— 1 54.5	6	0.5	— 2 14	— 1 35	— 2 30
760	Muoniovaara	67 56 36	5 36 24 E	235	g 18	5	+ 0 45.0	7	1.5	+ 0 25	+ 1 05	+ 0 06
761	Areavaara	67 26 54	5 25 54 E	170	s 60	6	+ 5 36.0	6	1.0	+ 5 17	+ 5 56	+ 5 04
762	Ajrivaara	67 23 18	5 40 48 E	160	st 58	6	+ 1 35.4	4	0.3	+ 1 16	+ 1 55	+ 0 55
763	Pajala	67 12 00	5 21 42 E	160	m 42	7	— 1 11.0	3	0.4	— 1 30	— 0 52	— 1 41
764	Kassa	67 06 06	5 36 06 E	130	st 58	7	— 0 26.0	6	2.0	— 0 45	— 0 07	— 1 04
768	Svansten	66 39 12	5 48 24 E	65	m 42	11	+ 2 02.9	4	0.3	+ 1 44	+ 2 22	+ 1 19
769	Rantajärvi b	66 41 48	5 38 42 E	125	m 42	11	+ 0 23.7	4	0.5	+ 0 05	+ 0 43	— 0 15
770	Aapua	66 51 30	5 28 00 E	205	m 42	11	— 2 24.3	7	1.5	— 2 43	— 2 05	— 2 57
771	Juoksengi	66 32 48	5 44 24 E	65	m 42	11	+ 0 13.7	4	0.8	— 0 05	+ 0 33	— 0 28
772	Torakankorva	66 28 00	5 37 06 E	60	m 42	12	— 2 01.1	4	0.3	— 2 20	— 1 42	— 2 38
773	Matarengi b	66 23 30	5 36 06 E	80	g 18	12	— 1 56.6	5	0.5	— 2 15	— 1 38	— 2 33
774	Ruokojärvi	66 36 42	5 14 30 E	160	m 42	13	+ 0 34.2	6	0.3	+ 0 15	+ 0 54	+ 0 10
775	Kivijärvi	66 43 48	5 07 06 E	175	m 42	13	+ 1 55.7	4	0.5	+ 1 36	+ 2 15	+ 1 35
779	Korpilombolo	66 51 00	5 00 06 E	180	m 6	15	+ 1 16.0	4	1.1	+ 0 57	+ 1 36	+ 0 59
783	Teurajärvi	66 47 12	4 52 00 E	150	g 4	18	— 1 02.1	3	0.3	— 1 21	— 0 43	— 1 15
784	Ansvar	66 36 00	4 42 36 E	50	m 42	19	+ 0 27.1	5	0.7	+ 0 08	+ 0 47	+ 0 20
785	Strömnäsets färja	66 28 42	4 43 30 E	40	g 9	19	— 0 10.0	7	0.7	— 0 29	+ 0 10	— 0 17
786	Puostijoki	66 26 06	5 16 06 E	110	g 4	20	+ 1 18.6	5	1.3	+ 1 00	+ 1 38	+ 0 53
787	Ruskola	66 21 42	5 36 36 E	50	g 18	20	— 1 45.9	5	1.4	— 2 05	— 1 27	— 2 23
788	Hedenäset	66 13 36	5 37 24 E	60	g 18	21	— 1 01.3	7	1.4	— 1 20	— 0 42	— 1 38
789	Skogskärr b	66 07 42	5 51 00 E	35	st 57	21, 22	+ 1 11.8	8	4.1	+ 0 55	+ 1 32	+ 0 29
790	Karungi	66 02 42	5 54 24 E	30	st 57	22	+ 0 20.7	3	0.0	+ 0 02	+ 0 40	— 0 26
792	Bäverbäck	65 53 30	6 02 42 E	15	st 57	23	+ 0 39.7	6	0.5	+ 0 22	+ 0 58	— 0 11
793	Haparanda	65 49 36	6 03 36 E	15	d 30	24	— 0 45.2	6	0.3	— 1 03	— 0 27	— 1 37
794	Salmis	65 48 24	5 57 30 E	2	g 4	24	+ 0 18.8	4	0.2	+ 0 01	+ 0 38	— 0 29
795	Koski	65 48 18	5 47 18 E	5	d 30	25	+ 1 39.3	6	2.6	+ 1 21	+ 1 58	+ 0 57
796	Säivis	65 50 00	5 37 12 E	15	st 57	25	+ 0 27.9	4	0.8	+ 0 09	+ 0 47	— 0 08
797	Sangis	65 52 06	5 27 06 E	10	st 57	26	— 0 22.4	4	0.6	— 0 41	— 0 03	— 0 53
798	Björkfors	65 54 42	5 24 30 E	10	st 57	26	— 0 21.0	4	0.4	— 0 40	— 0 02	— 0 50
799	Koutojärvi b	66 05 48	5 26 06 E	110	g 18	27	— 1 00.5	6	0.6	— 1 20	— 0 41	— 1 31
800	Järvenpää	66 09 30	5 25 42 E	85	m 42	27	— 0 41.2	4	0.6	— 1 00	— 0 22	— 1 12
801	Lappträsk II	65 59 30	5 25 18 E	30	g 18	28	— 0 25.1	4	0.8	— 0 44	— 0 06	— 0 55
802	Vitvattnet b	66 02 54	5 08 48 E	50	g 4	28	+ 0 08.3	4	1.3	— 0 11	+ 0 28	— 0 13
803	Orrträsk	66 00 06	5 05 36 E	70	g 4	29	— 1 02.6	4	0.6	— 1 22	— 0 43	— 1 21
804	Kälsjärv	65 55 06	5 07 18 E	40	g 9	29	+ 2 29.3	4	0.3	+ 2 11	+ 2 49	+ 2 10
805	Måttsund	65 32 42	3 50 30 E	5	g 4	30	+ 0 05.0	4	0.8	— 0 15	+ 0 25	+ 0 30
806	Lappviksberget	65 26 24	3 34 54 E	55	g 4	30	— 0 03.2	3	0.4	— 0 23	+ 0 17	+ 0 30
807	Furugrund b	64 54 36	3 10 00 E	30	m 42	31	— 0 33.8	4	0.2	— 0 53	— 0 14	+ 0 15
446	Brösta b	63 18 48	0 43 12 E	30	m 55	IX 1	— 2 25.3	4	0.3	— 2 46	— 2 05	— 0 11
808	Djupsjö	63 20 00	0 01 30 W	150	g 13	2	— 2 38.1	3	0.2	— 2 59	— 2 18	+ 0 01
809	Sidensjö	63 17 42	0 14 36 E	120	m 11	2	— 2 31.0	4	0.3	— 2 52	— 2 11	— 0 01
810	Domsjö b	63 15 24	0 39 30 E	20	m 42	2	— 2 11.4	3	0.1	— 2 32	— 1 51	+ 0 05
813	Käxed b	63 03 54	0 22 24 E	20	g 21	4	— 2 04.2	6	1.7	— 2 25	— 1 44	+ 0 22
814	Almsjönäs	63 04 00	0 00 00	110	m 42	5	— 3 02.3	6	1.2	— 3 23	— 2 42	— 0 23
815	Ullånger b	63 00 00	0 07 06 E	20	L 49	5	— 2 49.0	4	0.8	— 3 10	— 2 29	— 0 14
817	Hornö b	62 48 42	0 05 54 W	150	m 11	6	— 3 16.9	7	0.7	— 3 38	— 2 57	— 0 35
818	Herrskog b	62 55 06	0 01 42 W	40	g 13	7	— 3 10.7	5	0.4	— 3 31	— 2 50	— 0 31
819	Gålsjö bruk b	63 11 30	0 14 00 W	180	m 42	8	— 2 59.2	5	0.5	— 3 20	— 2 39	— 0 13
820	Björksjön	63 15 00	0 28 48 W	70	m 42	8	— 3 08.9	4	0.4	— 3 30	— 2 48	— 0 14
821	Åkvistland	63 17 54	0 31 48 W	130	m 42	8	— 3 13.6	3	0.9	— 3 35	— 2 53	— 0 17
822	Rämsle, Sollefteå, K. Sj. K. V.	63 11 24	0 48 24 W	70	st 57	9	— 3 34.4	6	1.0	— 3 56	— 3 14	— 0 28

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1931.5	n	$\pm\eta$	D 1929.5	D 1933.5	1933.5 obs.-calc.
825	Bollsta bruk	63° 00′ 24″	0° 22′ 36″ W	5	m 42	IX 11	— 2° 58′.0	4	0′.4	— 3° 19′	— 2° 38′	— 0° 06′
826	Storvattnet b	62 55 00	0 27 06 W	200	m 42	11	— 3 16.9	4	0.3	— 3 38	— 2 56	— 0 23
827	Storsela	62 49 24	0 26 00 W	200	m 42	11	— 3 28.3	4	0.1	— 3 49	— 3 08	— 0 34
828	Mark b	62 36 36	0 17 54 W	105	m 42	12	— 3 40.9	5	0.2	— 4 02	— 3 21	— 0 51
829	Stigsjö b	62 38 30	0 23 00 W	60	m 42	12	— 3 43.3	6	1.1	— 4 04	— 3 23	— 0 51
830	Nordanå	62 44 42	0 37 00 W	100	m 47	13	— 3 32.0	4	0.4	— 3 53	— 3 11	— 0 31
831	Åkroken	62 56 18	0 49 18 W	230	m 42	13	— 3 22.4	4	0.6	— 3 44	— 3 02	— 0 15
832	Bredsjön b	62 42 18	0 58 30 W	150	m 42	14	— 3 22.8	4	0.6	— 3 44	— 3 02	— 0 10
833	Ljustorp b	62 37 00	0 42 00 W	50	m 42	14	— 3 26.7	6	1.2	— 3 48	— 3 06	— 0 23
836	Kävsta b	62 33 48	0 55 36 W	90	m 42	16	— 3 12.6	4	1.5	— 3 34	— 2 52	— 0 01
837	Järkvistle	62 48 06	1 22 48 W	120	m 42	16	— 4 01.2	4	0.2	— 4 23	— 3 40	— 0 35
838	Långliden	62 54 48	1 21 48 W	120	m 42	17	— 3 41.7	5	0.5	— 4 03	— 3 21	— 0 16
840	Sandnäset	62 42 00	1 39 48 W	202	m 42	18	— 4 14.2	3	0.1	— 4 36	— 3 53	— 0 38
841	Sörbygden b	62 47 48	1 50 12 W	230	m 42	18	— 4 15.8	4	0.3	— 4 38	— 3 55	— 0 34
842	Alanäset b	62 47 00	2 01 18 W	225	g 9	19	— 4 33.8	6	0.5	— 4 56	— 4 13	— 0 46
843	Hällesjö b	62 54 06	1 49 24 W	280	m 42	19	— 4 11.9	4	0.3	— 4 34	— 3 51	— 0 31
844	Norra Nordanede	62 33 36	1 36 54 W	195	m 42	20	— 4 08.6	4	0.5	— 4 30	— 3 48	— 0 34
845	Hullsjön	62 32 24	1 22 54 W	305	m 42	20	— 3 58.0	4	0.7	— 4 19	— 3 37	— 0 31
846	Storulvsjön	62 16 30	1 44 48 W	425	m 42	21	— 4 06.0	4	2.3	— 4 27	— 3 45	— 0 27
847	Hjältanstorp	62 20 42	1 41 24 W	340	m 42	21	— 4 21.8	4	0.3	— 4 43	— 4 01	— 0 44
848	Tjälen	62 24 54	1 49 48 W	215	m 42	22	— 3 59.6	4	0.8	— 4 21	— 3 39	— 0 18
849	Finnsjö	62 20 54	1 54 30 W	390	m 42	22	— 4 10.6	4	0.5	— 4 32	— 3 50	— 0 26
850	Lillmörtsjö	62 24 30	2 02 12 W	355	m 42	23	— 4 11.3	4	0.4	— 4 33	— 3 50	— 0 22
851	Holm b	62 39 12	1 25 00 W	210	st 57	23	— 3 53.1	8	3.2	— 4 14	— 3 32	— 0 25
852	Sulå	62 32 24	1 05 18 W	155	m 42	24	— 3 13.2	4	0.7	— 3 34	— 2 53	+ 0 04
853	Gårdtjärn	62 30 06	0 57 00 W	80	m 42	24	— 3 18.4	4	1.2	— 3 39	— 2 58	— 0 06
854	Sättna b	62 28 00	0 54 42 W	50	m 42	25	— 3 13.1	4	0.8	— 3 34	— 2 53	— 0 02
855	Sörfors	62 17 30	1 00 18 W	30	D 32	26	— 3 22.3	5	0.3	— 3 43	— 3 02	— 0 08
856	Hassel b	62 15 42	1 19 48 W	190	m 42	28	— 3 47.7	3	0.1	— 4 09	— 3 27	— 0 22
858	Malingen b	62 09 42	1 07 06 W	215	m 42	28	— 3 28.3	3	0.1	— 3 49	— 3 08	— 0 10
859	Björkön	62 14 12	0 30 54 W	35	m 42	28	— 3 10.0	4	0.6	— 3 31	— 2 49	— 0 12
862	Bergsjö b	61 59 00	0 57 06 W	50	m 42	30	— 3 25.9	4	0.1	— 3 47	— 3 06	— 0 13
864	Arnön b	61 42 06	0 39 54 W	40	m 42	X 1	— 3 16.2	5	0.5	— 3 37	— 2 56	— 0 13
865	Hudiksvall b	61 44 48	0 57 54 W	30	m 42	1	— 3 25.4	9	1.2	— 3 46	— 3 05	— 0 12
867	Backmo b	61 48 48	1 15 00 W	50	g 40	3	— 5 02.9	5	0.7	— 5 24	— 4 42	— 1 40
868	Bjuråker b	61 51 36	1 29 18 W	70	g 40	3	— 3 29.9	4	0.9	— 3 51	— 3 09	+ 0 02
869	Långsbo	61 45 12	1 38 12 W	170	g 40	3	— 3 31.1	4	0.3	— 3 52	— 3 11	+ 0 06
870	Järvsö	61 42 42	1 52 30 W	120	g 40	4	— 3 35.7	4	0.3	— 3 57	— 3 15	+ 0 09
871	Bollnäs b	61 20 12	1 39 18 W	68	g 40	4	— 4 00.5	4	0.4	— 4 21	— 3 40	— 0 22
872	Kilafors b	61 13 24	1 28 42 W	55	m 42	5	— 4 13.2	9	0.8	— 4 34	— 3 53	— 0 41

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873	Norra Långstrand	64 57 21	1 33 36 W	415	s 64	VI 15	— 4 26.2	2	2.1	— 4 49	— 4 04	— 0 57
874	Vikennäs	65 03 20	1 42 00 W	425	s 64	16	— 4 12.3	3	0.6	— 4 35	— 3 50	— 0 39
875	Dajkanvik	65 08 24	1 46 00 W	425	f 75	17	— 4 52.7	2	2.7	— 5 16	— 4 31	— 1 17
876	Dikanäs	65 14 00	2 03 25 W	480	f 75	19	— 4 24.3	1		— 4 47	— 4 02	— 0 39
877	Matsdal	65 19 10	2 12 00 W	490	d 28	20	— 4 27.1	1		— 4 50	— 4 05	— 0 37
878	Mörrösjön	65 05 44	2 14 50 W	631	f 75	23	— 4 12.4	1		— 4 36	— 3 50	— 0 20
879	Henriksfjäll	65 15 13	2 29 29 W	500	f 76	25	— 5 18.4	1		— 5 42	— 4 56	— 1 19
880	Nedre Fättjaure	65 17 58	2 46 24 W	580	f 74	27	— 4 59.6	1		— 5 23	— 4 37	— 0 50
881	Virisen	65 25 58	2 49 31 W	630	f 76	29	— 4 54.7	1		— 5 18	— 4 32	— 0 44
882	Björknäs	65 32 20	2 40 18 W	382	d 28	30	— 1 38.7	1		— 2 02	— 1 16	+ 2 27
883	Abelvattsbleriken	65 33 59	3 02 18 W	644	f 77	VII 3	— 4 02.0	1		— 4 26	— 3 39	+ 0 18
884	Ropen	65 35 20	3 16 11 W	677	f 77	4	— 4 15.7	1		— 4 40	— 3 53	+ 0 10

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1931.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
885	Arevattnet	65° 30′ 52″	3° 30′ 30″ W	675	d 28	VII 5	— 4° 08′.0	1		— 4° 32′	— 3° 45′	+ 0° 26′
886	Risbäcken	65 40 46	3 28 15 W	610	g 1	6, 7	— 4 08.4	2	0′.8	— 4 33	— 3 46	+ 0 24
887	Rödingsfjäll	65 53 47	3 27 00 W	550	f 78	10	— 4 17.1	1		— 4 42	— 3 54	+ 0 14
888	Högstaby	66 05 30	3 18 18 W	526	f 78	11	— 4 07.3	1		— 4 32	— 3 44	+ 0 19
889	Strimasund	66 02 58	3 10 12 W	527	f 77	12	— 3 48.5	1		— 4 13	— 3 26	+ 0 33
890	Gräsvattsstugan	66 05 07	3 28 17 W	590	f 77	16	— 4 14.6	1		— 4 39	— 3 52	+ 0 17
891	Umbugta, Norway	66 09 40	3 27 43 W	540	d 28	18	— 0 42.4	1		— 1 07	— 0 19	+ 3 49
892	Syterstugan	65 53 30	2 39 15 W	650	f 77	23	— 5 09.8	1		— 5 34	— 4 47	— 1 05
893	Biellojaure	65 47 37	2 20 50 W	594	f 77	26	— 4 36.9	1		— 5 01	— 4 14	— 0 43
894	Aivak	65 48 18	1 56 11 W	490	f 78	28	— 4 46.3	2	1.4	— 5 10	— 4 24	— 1 06
895	Diksele	65 40 13	1 45 00 W	470	f 75	30	— 4 45.0	2	1.6	— 5 08	— 4 23	— 1 11
896	Fjällsjönäs	65 37 23	1 26 16 W	409	f 75	31	— 4 25.3	2	0.7	— 4 48	— 4 03	— 1 02
897	Ammarnäs	65 57 23	1 50 25 W	404	f 75	VIII 2	— 4 45.5	2	1.4	— 5 09	— 4 23	— 1 09
898	Djupfors	65 55 29	1 45 00 W	400	f 74	3	— 4 25.9	1		— 4 49	— 4 04	— 0 52
899	Rödingvik	65 58 01	2 05 49 W	580	f 75	4	— 4 21.6	2	0.2	— 4 45	— 3 59	— 0 36
900	Övre Sandsele	65 49 13	1 24 58 W	348	f 78	5	— 3 49.3	1		— 4 12	— 3 27	— 0 27
901	Hemfjärd	65 47 51	1 08 11 W	350	s 64	6	— 3 33.3	2	2.0	— 3 56	— 3 11	— 0 20
902	Storsjö	65 45 58	1 00 57 W	337	g 20	7	— 3 36.9	2	0.6	— 4 00	— 3 15	— 0 28
903	Vindelgrannäs	65 40 57	0 45 30 W	344	g 20	8, 13	— 2 37.8	4	2.1	— 3 00	— 2 16	+ 0 23
904	Sorsele	65 31 45	0 32 03 W	342	g 20	11, 12	— 1 43.2	2	2.4	— 2 06	— 1 22	+ 1 10
906	Guobme	65 57 21	1 29 30 W	600	f 75	16	— 4 17.4	2	1.2	— 4 41	— 3 55	— 0 53
907	Aitelnas	66 04 54	1 53 25 W	500	f 78	19	— 4 13.2	2	1.0	— 4 37	— 3 51	— 0 35
908	Vitnjulstugan	66 08 57	2 02 34 W	560	f 78	21	— 3 54.7	2	1.8	— 4 18	— 3 32	— 0 12
909	Mankefors	66 10 18	2 13 32 W	595	f 78	24	— 4 22.9	2	0.2	— 4 47	— 4 00	— 0 34
910	Dalovardo	66 11 11	2 24 25 W	640	f 77	25, 26	— 4 38.8	2	0.2	— 5 03	— 4 16	— 0 43
911	Åkroken	66 04 54	2 32 46 W	610	f 78	26	— 3 36.8	1		— 4 01	— 3 14	+ 0 24
912	Övre Älsvattnet	66 10 18	2 42 22 W	687	f 77	27	— 3 59.0	1		— 4 23	— 3 36	+ 0 07
914	Andfjällnäs, Norway	66 26 25	2 54 00 W	390	f 76	29	— 3 49.9	2	1.7	— 4 14	— 3 27	+ 0 22
915	Osmoodden, Norway	66 14 04	4 28 30 W	30	f 78	IX 2	— 4 27.3	2	0.2	— 4 53	— 4 04	+ 0 38
916	Nasafjäll	66 28 08	2 40 08 W	1100	g 22	4	— 3 26.9	2	7.0	— 3 51	— 3 04	+ 0 37
917	Laisdalens vaktstuga	66 24 33	2 07 27 W	600	f 74	6	— 3 45.3	2	1.6	— 4 09	— 3 23	0 00
918	Fjällfors	66 20 27	1 37 54 W	475	f 74	7, 8	— 3 39.3	2	0.7	— 4 03	— 3 17	— 0 10
919	Adolfsström	66 16 35	1 23 22 W	466	f 75	9	— 4 16.0	2	0.2	— 4 39	— 3 54	— 0 55
920	Hällbacken	66 14 15	1 05 07 W	428	f 75	10	— 3 24.8	1		— 3 48	— 3 03	— 0 14
921	Jäkkvik, K. Sj. K. V.	66 22 55	1 03 40 W	430	f 75	17, 18	— 2 54.0	3	1.5	— 3 17	— 2 32	+ 0 16
922	Rebakudden	66 10 32	0 15 20 W	427	L 49	11	— 0 32.0	1		— 0 55	— 0 10	+ 2 10
372	Arjeploug	66 02 32	0 09 45 W	422	g 9	12	— 2 33.3	2	0.4	— 2 56	— 2 12	+ 0 06
923	Racksund	66 02 41	0 25 26 W	422	g 20	14	— 1 40.8	2	1.1	— 2 03	— 1 19	+ 1 08
924	Loholm	66 06 53	0 45 45 W	421	g 4	16	— 3 24.8	2	2.0	— 3 48	— 3 03	— 0 25
925	Ballasviken	66 28 10	1 30 00 W	470	f 74	19, 20	— 3 52.2	5	0.8	— 4 16	— 3 31	— 0 29
926	Vuoggatjålme	66 34 10	1 42 25 W	486	f 74	21, 23	— 3 15.8	3	2.4	— 3 39	— 2 53	+ 0 15
927	Merkenes	66 39 36	1 55 54 W	550	f 74	22	— 3 16.4	3	0.3	— 3 40	— 3 54	— 0 38
928	Högheden	66 19 17	0 43 38 W	430	s 64	24	— 3 55.8	1		— 4 19	— 3 34	— 0 58
929	Laisvik	66 13 46	0 40 44 W	430	g 20	25	— 3 22.4	2	0.4	— 3 45	— 3 01	— 0 26
372	Arjeploug II	66 02 32	0 09 45 W	422	g 9	25	— 2 34.6	1		— 2 57	— 2 13	+ 0 04
930	Laisvall	66 05 34	0 52 57 W	26	s 64	26, 29	— 3 58.4	1		— 4 21	— 3 37	— 0 55
931	Puollamvardo	66 04 00	1 11 50 W	500	f 76	30	— 3 46.9	2	0.8	— 4 10	— 3 25	— 0 32
932	Buoitjokk	66 05 22	1 28 40 W	600	f 76	X 1	— 3 20.3	2	1.5	— 3 44	— 2 58	+ 0 04
933	Ackerforsen	65 57 11	0 52 13 W	425	g 20	4	— 3 18.2	2	0.7	— 3 41	— 2 56	— 0 14
934	Björkliden	65 53 07	0 42 17 W	400	g 20	5	— 2 37.9	2	1.2	— 3 01	— 2 16	+ 0 20
935	Persbacka	65 47 08	0 28 01 W	295	g 20	6	— 0 59.4	2	0.7	— 1 22	— 0 38	+ 1 51
904	Sorsele	65 31 45	0 32 03 W	342	g 20	8	— 1 39.0	1		— 2 01	— 1 17	+ 1 14
351	Bure II	65 32 35	0 11 48 W	377	d 29	9	— 2 16.3	2	0.0	— 2 38	— 1 55	+ 0 25

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1931.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
	XI. 1931. E. v. Hofsten. Instr. Bamberg No. 12014.											
937	Näkten A ○	62° 58′ 14″	3° 30′ 00″ W	340	s 69	VI 10	— 7° 02′.9	2	0′.3	— 7° 26′	— 6° 41′	— 2° 25′
	Näkten B ○	62 57 58	3 30 00 W	335	s 69	11	— 7 12.3	4	0.6	— 7 35	— 6 50	— 2 34
938	Kårgärde	62 58 58	3 34 12 W	315	s 69	12	— 7 58.1	2	0.2	— 8 21	— 7 36	— 3 18
939	Hackås	62 55 37	3 32 02 W	325	s 69	12	— 7 47.3	2	0.3	— 8 10	— 7 25	— 3 08
940	Nedre Måläng	63 03 09	3 30 26 W	415	s 69	13	— 6 27.5	2	1.1	— 6 50	— 6 06	— 1 49
941	Stackris	63 05 10	3 33 03 W	400	s 69	13	— 6 16.0	2	0.3	— 6 39	— 5 54	— 1 37
942	Vinälven b	62 56 04	3 32 49 W	345	s 69	15	— 7 41.6	2	0.8	— 8 05	— 7 20	— 3 02
943	Gärde b	62 57 22	3 33 47 W	325	s 69	15	— 8 52.8	2	0.6	— 9 16	— 8 31	— 4 13
944	Brunflo	63 04 34	3 13 58 W	305	s 69	16	— 5 56.6	4	1.0	— 6 19	— 5 35	— 1 28
945	Lockne A	63 02 20	3 10 20 W	335	D 32	17	— 5 52.5	2	0.6	— 6 15	— 5 31	— 1 26
	Lockne B	63 02 20	3 10 20 W	335	D 32	17	— 6 04.1	1		— 6 27	— 5 42	— 1 38
946	Pilgrimstad	62 57 24	3 00 42 W	290	g 9	17	— 5 28.7	4	0.4	— 5 51	— 5 07	— 1 07
947	Gällö	62 54 55	2 49 44 W	310	g 9	18	— 5 10.3	2	0.1	— 5 33	— 4 49	— 0 55
948	Gastsjön	62 57 35	2 12 11 W	335	g 9	19	— 4 36.7	3	1.4	— 4 59	— 4 15	— 0 43
949	Nyhem	62 53 25	2 26 14 W	275	g 9	19	— 4 27.5	2	1.1	— 4 50	— 4 06	— 0 25
950	Dockmyr	62 57 12	2 18 36 W	375	g 9	20	— 4 08.8	2	0.1	— 4 31	— 3 47	— 0 11
951	Torpshammar	62 28 09	1 42 47 W	70	m 42	21	— 4 02.3	2	0.8	— 4 24	— 3 41	— 0 24
952	Lo	62 24 09	1 19 42 W	85	m 42	22	— 3 47.0	2	0.1	— 4 08	— 3 26	— 0 22
953	Ljusdal	61 49 44	1 56 56 W	130	g 40	23	— 4 07.4	2	1.7	— 4 29	— 3 47	— 0 21
954	Lörstrand	61 39 32	1 53 10 W	115	g 40	24	— 3 40.8	2	1.3	— 4 02	— 3 20	+ 0 05
955	Arbrå	61 28 13	1 40 41 W	110	g 40	24	— 4 06.3	2	0.2	— 4 27	— 3 46	— 0 28
956	Söräng	61 20 33	1 50 12 W	95	m 42	24	— 4 02.6	2	1.5	— 4 24	— 3 42	— 0 18
957	Alfta	61 21 03	1 59 10 W	95	g 40	25	— 4 10.8	2	0.9	— 4 32	— 3 50	— 0 22
958	Viksjöfors	61 20 23	2 06 14 W	160	g 39	25	— 4 05.8	2	0.2	— 4 27	— 3 45	— 0 13
959	Edsbyn	61 22 33	2 14 32 W	175	g 39	25	— 4 45.0	2	0.0	— 5 06	— 4 24	— 0 47
960	Lövriset	61 28 57	2 37 22 W	210	m 42	26	— 5 16.6	2	0.8	— 5 38	— 4 56	— 1 06
961	Lobonäs	61 39 59	2 43 40 W	215	d 30	26	— 4 40.1	2	0.3	— 5 02	— 4 19	— 0 26
962	Tungsen	61 17 38	2 33 23 W	280	m 44	27	— 4 27.9	2	0.5	— 4 49	— 4 07	— 0 19
963	Voxna	61 20 24	2 29 05 W	200	m 44	27	— 4 39.4	2	0.7	— 5 01	— 4 19	— 0 34
964	Åssjöbo	61 15 59	2 37 23 W	255	m 44	28	— 4 47.0	6	0.9	— 5 08	— 4 26	— 0 36
965	Göringen	61 13 43	2 40 54 W	250	g 41	29	— 6 23.6	2	0.6	— 6 45	— 6 03	— 2 11
966	Skattungbyn A	61 11 07	3 12 08 W	290	m 72	29	— 6 04.0	2	2.8	— 6 26	— 5 43	— 1 33
	Skattungbyn B	61 11 46	3 11 18 W	230	m 72	30	— 6 12.4	2	0.5	— 6 34	— 5 51	— 1 42
967	Vakern	60 22 00	3 55 32 W	325	L 33	30	— 3 33.4	2	0.2	— 3 55	— 3 12	+ 1 23
968	Sågen	60 15 42	3 55 12 W	265	L 33	VII 1	— 4 26.7	2	0.9	— 4 48	— 4 06	+ 0 30
969	Neva	60 10 13	3 55 50 W	282	L 33	1	— 3 27.0	2	1.1	— 3 49	— 3 06	+ 1 30
970	Rämen	60 01 26	3 56 51 W	265	m 16	1	— 4 59.9	2	0.7	— 5 21	— 4 39	— 0 02
971	Långban	59 51 35	3 47 14 W	245	m 52	2	—10 43.9	2	0.1	—11 05	—10 23	— 5 51
972	Nyhyttan	59 42 34	3 50 04 W	205	g 14	3	— 5 08.2	4	1.4	— 5 30	— 4 47	— 0 14
973	Loka	59 38 07	3 35 13 W	200	g 14	4	— 4 21.7	4	0.7	— 4 43	— 4 01	+ 0 25
974	Herrhult	59 39 06	3 44 57 W	230	g 14	4	— 4 50.2	2	0.6	— 5 11	— 4 29	+ 0 02
975	Storfors A	59 32 00	3 47 17 W	130	g 14	6	— 4 52.7	2	1.8	— 5 14	— 4 32	+ 0 01
	Storfors B	59 32 35	3 46 33 W	120	g 14	6	— 4 45.9	2	0.1	— 5 07	— 4 25	+ 0 07
976	Nässundet	59 26 18	3 49 15 W	115	g 14	7	— 5 24.0	5	2.0	— 5 45	— 5 03	— 0 30
977	Björneborg	59 14 48	3 48 09 W	120	g 14	8	— 5 39.5	2	1.7	— 6 01	— 5 19	— 0 45
978	Strömtorp	59 15 02	3 38 13 W	115	g 14	8	— 4 38.9	2	0.3	— 5 00	— 4 18	+ 0 10
979	Kortfors A	59 25 11	3 22 50 W	160	g 14	10	— 3 22.1	4	0.6	— 3 43	— 3 02	+ 1 18
	Kortfors B	59 24 49	3 22 53 W	155	g 14	10	— 3 26.4	2	0.3	— 3 47	— 3 06	+ 1 13
980	Flosjöhyttan	59 34 14	3 28 28 W	170	g 14	11	— 4 01.0	2	0.7	— 4 22	— 3 40	+ 0 41
981	Grängen	59 43 36	3 13 08 W	147	L 49	12	— 4 39.7	2	1.5	— 5 01	— 4 19	— 0 06
982	Bredsjö	59 49 58	3 19 28 W	180	L 49	12	— 4 43.6	2	1.4	— 5 05	— 4 23	— 0 07
983	Hällefors	59 46 44	3 32 07 W	200	st 58	13	— 4 30.3	6	1.2	— 4 52	— 4 10	+ 0 14
984	Grythyttehed	59 42 28	3 31 29 W	182	st 58	13	— 5 17.8	2	0.6	— 5 39	— 4 57	— 0 34

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1931.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
985	Kopparberg	59° 52′ 38″	3° 04′ 06″ W	165	L 49	VII 14	— 3° 13.7′	3	0′.9	— 3° 35′	— 2° 53′	+ 1° 15′
986	Vasselhyttan	59 45 01	2 55 00 W	95	m 54	14	— 3 20.3	2	0.9	— 3 41	— 3 00	+ 1 03
987	Kallernäs A	59 41 18	2 54 20 W	64	m 17	14	— 3 55.5	2	1.0	— 4 16	— 3 35	+ 0 28
989	Fredriksberg A	60 08 28	3 41 10 W	302	D 27	15	— 5 50.3	2	1.9	— 6 12	— 5 29	— 1 01
990	Nittkvarn	60 02 43	3 19 08 W	288	L 49	17	— 5 10.5	2	1.6	— 5 32	— 4 50	— 0 34
991	Gravendal	60 02 25	3 31 38 W	276	g 14	17	— 4 52.4	2	0.3	— 5 14	— 4 32	— 0 09
992	Klenshyttan	60 06 28	2 56 57 W	215	g 4	18	— 4 36.6	4	1.7	— 4 58	— 4 16	— 0 13
993	Stensbo	60 14 19	3 01 49 W	160	m 6	19	— 4 22.2	2	1.7	— 4 43	— 4 02	+ 0 04
994	Salån	60 23 11	3 14 18 W	240	L 49	19, 20	— 5 32.7	4	1.2	— 5 54	— 5 12	— 0 59
995	Skallberget	60 21 37	3 10 20 W	197	g 8	20	— 4 59.6	2	2.9	— 5 21	— 4 39	— 0 29
996	Nyhammar	60 17 37	3 05 13 W	185	L 49	20	— 4 34.1	2	0.6	— 4 55	— 4 13	— 0 06
997	Gonäs	60 08 31	2 57 16 W	175	L 49	21	— 3 59.6	2	1.1	— 4 21	— 3 39	+ 0 24
998	Rämshyttan	60 17 58	2 50 05 W	245	g 40	22	— 5 01.7	2	0.2	— 5 23	— 4 41	— 0 42
999	Ulvshyttan	60 19 52	2 41 53 W	210	m 47	22	— 4 39.7	2	0.1	— 5 01	— 4 19	— 0 25
1000	Sellnäs	60 24 56	2 40 16 W	137	g 40	22	— 4 53.8	4	2.2	— 5 15	— 4 33	— 0 40
1001	Rommehed	60 26 01	2 33 00 W	145	g 38	23	— 4 37.0	2	0.4	— 4 58	— 4 17	— 0 27
1002	Buskåker	60 26 56	2 34 25 W	140	g 37	23	— 4 35.3	2	0.3	— 4 56	— 4 15	— 0 25
1003	Stora Tuna	60 26 37	2 33 35 W	143	g 37	23	— 4 34.3	2	0.3	— 4 55	— 4 14	— 0 24
1004	Gustafs	60 24 10	2 27 49 W	155	L 49	23	— 4 49.0	2	2.2	— 5 10	— 4 29	— 0 42
1005	Säter	60 20 58	2 17 42 W	155	L 49	23	— 6 10.1	2	0.3	— 6 31	— 5 50	— 2 09
1006	Vikmanshyttan	60 17 58	2 11 26 W	115	g 37	24	— 4 13.7	4	1.4	— 4 34	— 3 53	— 0 16
1007	Hedemora	60 16 39	2 04 22 W	110	g 37	24	— 3 51.6	2	0.5	— 4 12	— 3 31	+ 0 02
1008	Avesta	60 08 51	1 53 13 W	90	g 40	25	— 3 32.4	2	2.4	— 3 53	— 3 12	+ 0 15
1009	Jularbo	60 09 32	1 47 48 W	110	g 40	25	— 4 01.0	2	1.0	— 4 21	— 3 41	— 0 16
1010	Åsgarn	60 14 47	1 48 34 W	80	g 1	25	— 3 34.5	2	0.5	— 3 55	— 3 14	+ 0 10
1011	Fors	60 12 31	1 44 50 W	70	g 40	25	— 4 34.4	2	1.7	— 4 55	— 4 14	— 0 51
1012	Horndal	60 18 13	1 38 17 W	135	g 1	26	— 3 20.2	2	0.1	— 3 40	— 3 00	+ 0 19
1013	By Kyrkby	60 11 49	1 35 47 W	70	g 40	26	— 3 52.5	2	0.4	— 4 13	— 3 32	— 0 14
1014	Morshyttan	60 15 40	1 40 53 W	95	L 49	26	— 3 11.4	2	0.7	— 3 32	— 2 51	+ 0 29
1015	Byvalla	60 21 07	1 38 04 W	135	L 49	27	— 3 34.0	6	0.9	— 3 54	— 3 14	+ 0 05
1016	Långshyttan	60 27 17	2 01 09 W	115	g 4	28	— 4 12.7	2	3.0	— 4 33	— 3 52	— 0 21
1017	Dalaåsbo	60 23 25	1 45 25 W	145	g 37	28	— 4 00.9	2	0.9	— 4 21	— 3 41	— 0 18
1018	Stjärnsund	60 26 02	1 50 52 W	110	g 37	28	— 3 56.5	4	1.4	— 4 17	— 3 36	— 0 11
1019	Torsåker	60 30 48	1 34 24 W	70	g 40	29, 30	— 1 31.4	8	1.0	— 1 52	— 1 11	+ 2 05
1020	Kungsgården	60 36 08	1 26 01 W	65	g 39	30	— 3 20.8	2	0.2	— 3 41	— 3 01	+ 0 11
1021	Sandviken	60 37 10	1 15 50 W	65	s 61	30	— 3 09.7	2	1.6	— 3 30	— 2 50	+ 0 16
1022	Forsbacka	60 38 17	1 10 11 W	60	s 61	30	— 3 14.1	2	1.1	— 3 34	— 2 54	+ 0 09
1023	Ängeltofta	60 42 20	0 48 42 W	2	g 39	31	— 2 57.9	4	0.3	— 3 18	— 2 38	+ 0 12
1024	Oslättfors	60 46 28	1 04 31 W	70	g 39	VIII 1	— 3 12.2	2	0.2	— 3 32	— 2 52	+ 0 07
1025	Kolforsen	60 50 33	1 12 18 W	75	g 39	1	— 4 30.4	2	0.2	— 4 51	— 4 10	— 1 07
1026	Rörberg	60 35 08	1 05 07 W	70	m 44	1	— 3 17.8	2	0.3	— 3 38	— 2 58	+ 0 02
1027	Främlingshem	60 30 00	1 06 48 W	70	m 44	2	— 2 32.4	2	0.5	— 2 52	— 2 13	+ 0 48
1028	Hedesunda	60 23 54	1 03 23 W	70	g 20	2	— 1 53.9	2	0.8	— 2 14	— 1 34	+ 1 25
1029	Gysinge	60 17 27	1 10 08 W	55	m 44	3	— 2 59.6	2	0.1	— 3 20	— 2 40	+ 0 24
1030	Tärnsjö	60 09 33	1 07 51 W	70	g 4	3	— 2 28.4	4	1.5	— 2 48	— 2 09	+ 0 54
1031	Runhällen	60 01 48	1 14 02 W	75	m 6	3	— 3 26.9	2	0.3	— 3 47	— 3 07	— 0 01
1032	Broddbo	59 59 20	1 34 47 W	80	m 6	4	— 3 50.8	2	0.8	— 4 11	— 3 31	— 0 13
1033	Rosshyttan	60 04 20	1 42 02 W	85	g 4	4	— 3 51.8	4	0.8	— 4 12	— 3 32	— 0 10
1034	Sala	59 55 11	1 26 36 W	55	g 4	4	— 4 01.3	2	0.2	— 4 21	— 3 42	— 0 28
1035	Ransta	59 48 53	1 24 43 W	50	m 55	5	— 4 20.2	2	0.7	— 4 40	— 4 00	— 0 48
1036	Tillberga	59 41 29	1 26 10 W	35	g 37	5	— 4 09.7	2	1.0	— 4 29	— 3 50	— 0 36
1037	Skultuna	59 43 56	1 37 16 W	35	g 37	5	— 4 36.9	2	1.5	— 4 57	— 4 17	— 0 58
1038	Ramnäs	59 47 19	1 52 27 W	72	d 27	6	— 4 06.2	2	0.5	— 4 26	— 3 46	— 0 18
1039	Ängelsberg	59 57 38	2 02 13 W	168	g 8	6	— 4 05.5	2	0.4	— 4 26	— 3 45	— 0 12
1040	Virsbo	59 52 30	1 58 02 W	75	g 8	6	— 2 08.3	2	1.1	— 2 29	— 1 48	+ 1 43
1041	Vad	60 01 59	2 24 47 W	105	g 5	6	— 4 17.0	2	1.7	— 4 38	— 3 57	— 0 11
1042	Dagarn	59 54 36	2 20 21 W	132	g 8	6	— 4 17.4	2	0.2	— 4 38	— 3 57	— 0 14

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1931.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
	XII. 1931. V. H. Sanner. Instr. Bamberg No. 2312.											
651	Oviken	62° 59′ 32″	3° 39′ 31″ W	390	s 69	VI 12	— 6° 54′.4	2	2′.2	— 7° 17′	— 6° 32′	— 2° 11′
1047	Ångron, Myssjö	62 54 47	3 40 19 W	320	s 69	12	— 7 07.2	2	2.8	— 7 30	— 6 45	— 2 23
1055	Vikbäcken	62 52 47	3 31 47 W	320	g 1	16	— 7 09.1	2	0.3	— 7 32	— 6 47	— 2 30
1056	Skanderåsen	62 48 15	3 35 12 W	310	g 1	17	— 7 15.8	2	1.8	— 7 39	— 6 54	— 2 35
1057	Brånan	62 41 35	3 39 10 W	380	g 20	17	— 7 39.3	3	1.1	— 8 02	— 7 17	— 2 56
1058	Röjan	62 28 51	3 41 19 W	400	g 20	18	— 7 15.9	2	0.7	— 7 39	— 6 54	— 2 31
1059	Sörtjärn	62 20 53	3 25 37 W	300	g 20	18	— 6 09.2	2	0.2	— 6 32	— 5 48	— 1 33
1061	Ytterhogdal	62 11 57	3 11 46 W	300	g 20	19	— 8 11.7	2	0.1	— 8 34	— 7 50	— 3 43
1063	Överberget	62 03 55	3 46 29 W	395	g 20	20	— 5 58.3	2	0.1	— 6 21	— 5 37	— 1 10
1064	Sveg	62 01 59	3 41 27 W	351	g 20	21	— 6 35.8	2	0.7	— 6 58	— 6 14	— 1 50
1065	Bodarsjön	61 58 04	3 32 54 W	365	g 20	22	— 5 31.1	2	0.8	— 5 53	— 5 10	— 0 50
1066	Kropptjärn	61 53 15	3 29 23 W	435	g 20	22	— 6 58.7	2	0.5	— 7 21	— 6 37	— 2 19
1067	Fågelsjö B	61 47 56	3 24 51 W	410	g 20	23	— 6 24.7	2	0.4	— 6 47	— 6 03	— 1 49
1068	Sidertjärn	61 44 31	3 20 30 W	465	m 44	24	— 6 59.2	2	0.3	— 7 21	— 6 38	— 2 25
1069	Tandsjöborg	61 41 49	3 18 28 W	485	L 49	24	— 7 08.3	2	0.2	— 7 30	— 6 47	— 2 35
1070	Lillhamra	61 38 32	3 15 07 W	425	L 33	25	— 6 53.0	2	0.4	— 7 15	— 6 32	— 2 21
1072	Gråtbäck	61 24 56	3 18 22 W	520	L 33	26	— 6 46.6	2	0.5	— 7 09	— 6 25	— 2 13
1073	Vassjö	61 34 05	3 16 04 W	455	L 33	26	— 5 48.7	2	0.9	— 6 11	— 5 27	— 1 16
1074	Tallhed	61 12 42	3 20 21 W	200	m 73	26	— 5 57.7	2	0.9	— 6 20	— 5 37	— 1 22
1075	Emådalen	61 19 18	3 19 34 W	430	m 35	27	— 7 05.2	2	1.8	— 7 27	— 6 44	— 2 30
1076	Orsa	61 07 22	3 26 52 W	165	m 72	27	— 5 22.8	2	2.4	— 5 45	— 5 02	— 0 44
1077	Mora	61 00 50	3 29 05 W	170	s 64	29	— 5 23.6	2	1.4	— 5 45	— 5 02	— 0 43
1078	Noreberg	61 00 23	3 28 12 W	175	L 33	29	— 5 27.7	2	0.4	— 5 50	— 5 07	— 0 48
1079	Gopshus	61 06 01	3 48 37 W	210	L 33	29	— 5 50.5	2	1.4	— 6 13	— 5 29	— 0 59
1081	Oxberg	61 07 40	3 52 57 W	205	g 20	30	— 5 15.1	2	0.4	— 5 37	— 4 54	— 0 21
1082	Gåsvarv	61 11 00	3 57 58 W	250	L 33	VII 1	— 5 25.4	2	0.9	— 5 48	— 5 04	— 0 29
1083	Blyberg	61 09 15	3 55 12 W	240	L 33	1	— 4 52.5	2	1.6	— 5 15	— 4 31	+ 0 03
1084	Utmeland	60 59 42	3 31 26 W	165	s 64	2	— 5 38.1	2	0.1	— 6 00	— 5 17	— 0 56
1085	Vimo	60 50 51	3 46 43 W	290	L 33	2	— 4 33.4	2	0.8	— 4 55	— 4 12	+ 0 17
1088	Malung	60 41 06	4 20 58 W	300	s 61	4	— 4 45.6	2	0.2	— 5 08	— 4 24	+ 0 25
1089	Malungsfors	60 44 13	4 30 22 W	310	s 61	4	— 4 48.7	2	0.5	— 5 11	— 4 27	+ 0 27
1090	Vallerås	60 42 50	4 26 12 W	310	s 61	5	— 4 53.3	2	0.8	— 5 16	— 4 32	+ 0 20
1091	Lima	60 56 08	4 41 52 W	360	m 62	7	— 3 44.5	2	0.6	— 4 07	— 3 23	+ 1 38
1093	Limedsforsen	60 53 41	4 40 21 W	355	s 61	8	— 4 15.7	2	1.1	— 4 38	— 3 54	+ 1 05
1095	Torgåsmon	60 58 35	4 43 13 W	345	m 62	11	— 4 17.4	2	1.6	— 4 40	— 3 56	+ 1 05
1096	Horrmund	61 18 34	4 53 51 W	440	m 62	11	— 4 26.8	2	1.0	— 4 50	— 4 05	+ 1 01
1097	Sälen	61 09 16	4 47 22 W	350	m 62	12	— 4 31.4	2	0.1	— 4 54	— 4 10	+ 0 53
1098	Högstrand	61 14 09	4 50 40 W	350	m 62	12	— 4 24.4	2	0.3	— 4 47	— 4 03	+ 1 02
1099	Öjvallberget	61 31 02	4 58 01 W	450	s 61	13	— 4 44.3	2	0.4	— 5 07	— 4 22	+ 0 46
1100	Sörsjön	61 25 00	4 55 24 W	430	s 61	13	— 4 35.4	2	1.1	— 4 58	— 4 13	+ 0 53
1101	Byggevallen	61 37 40	4 55 04 W	485	s 61	13	— 4 44.7	2	1.2	— 5 08	— 4 23	+ 0 44
1102	Särna B.	61 41 58	4 55 43 W	435	m 62	13	— 5 17.1	2	1.3	— 5 40	— 4 55	+ 0 12
1103	Öje	60 44 35	4 11 41 W	300	m 62	14	— 4 20.0	2	1.3	— 4 42	— 3 59	+ 0 45
1104	Vansbro	60 30 43	3 50 10 W	255	g 20	15	— 3 47.0	2	0.2	— 4 09	— 3 26	+ 1 06
1105	Dala-Järna	60 32 37	3 41 38 W	230	g 20	17	— 6 18.2	2	0.7	— 6 40	— 5 57	— 1 30
1106	Nås	60 28 04	3 33 13 W	230	g 20	17	— 5 23.1	2	1.0	— 5 45	— 5 02	— 0 39
1107	Björbo	60 27 19	3 19 21 W	205	g 20	18	— 7 00.8	2	0.8	— 7 22	— 6 40	— 2 25
1109	Mockfjärd	60 30 20	3 05 31 W	160	g 8	18	— 5 38.0	2	0.6	— 5 59	— 5 17	— 1 10
1110	Komtillmåtta	60 33 45	2 57 20 W	170	g 37	19	— 5 31.8	2	0.4	— 5 53	— 5 11	— 1 09
1111	Amsberg	60 31 35	2 41 53 W	165	g 20	19	— 4 53.9	2	0.9	— 5 15	— 4 33	— 0 39
1112	Gagnef	60 35 41	2 58 45 W	180	g 8	19	— 5 55.7	2	0.1	— 6 17	— 5 35	— 1 32
1113	Insjön-Åhl	60 40 39	2 58 00 W	180	g 37	19	— 5 49.5	2	0.5	— 6 11	— 5 29	— 1 26

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1931.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1114	Leksand B	60° 42′ 37″	3° 02′ 05″ W	180	m 6	VII 21	— 5° 46′.2	2	0′.7	— 6° 08′	— 5° 25′	— 1° 20′
1116	Leksboda	60 46 43	3 01 45 W	195	g 20	22	— 5 47.2	2	1.4	— 6 09	— 5 26	— 1 22
1117	Tinaby	60 50 29	2 57 51 W	205	s 64	22	— 5 34.1	2	1.7	— 5 56	— 5 13	— 1 11
1118	Stumsnäs	60 52 47	3 06 28 W	165	g 20	23	— 5 33.6	2	0.9	— 5 55	— 5 13	— 1 06
1119	Rättvik	60 53 11	2 55 34 W	165	s 64	23	— 5 38.9	2	1.8	— 6 00	— 5 18	— 1 17
1120	Vikarbyn	60 54 32	3 01 39 W	170	m 72	24	— 5 30.4	2	0.6	— 5 52	— 5 10	— 1 05
1121	Garsås	60 55 00	3 13 58 W	170	g 20	24	— 7 18.7	2	0.5	— 7 40	— 6 58	— 2 47
1122	Fu	60 57 48	3 21 22 W	185	g 20	24	— 5 43.8	2	1.4	— 6 06	— 5 23	— 1 07
1123	Slättberg	60 46 53	2 49 29 W	250	g 20	25	— 5 00.8	2	1.8	— 5 22	— 4 40	— 0 42
1124	Sågmyra	60 42 58	2 46 22 W	210	L 49	25	— 5 43.6	2	0.1	— 6 05	— 5 23	— 1 27
1125	Bergsgården	60 40 00	2 30 47 W	130	g 39	25	— 4 48.8	2	1.2	— 5 10	— 4 28	— 0 41
1126	Gryckskbo	60 41 27	2 34 21 W	140	L 49	25	— 4 41.4	2	0.2	— 5 02	— 4 21	— 0 31
1127	Korsnäs	60 35 30	2 20 13 W	115	g 39	26	— 4 46.2	2	0.3	— 5 07	— 4 26	— 0 44
1128	Aspeboda	60 33 47	2 33 10 W	125	g 39	28	— 4 35.0	2	0.4	— 4 56	— 4 14	— 0 25
1130	Bomsarvet	60 32 40	2 37 56 W	165	g 39	28	— 4 36.7	2	1.0	— 4 58	— 4 16	— 0 24
1131	Ryggen	60 35 29	2 07 04 W	210	g 4	29	— 4 35.9	2	0.1	— 4 57	— 4 16	— 0 41
1134	Hofors	60 34 20	1 47 17 W	165	g 38	30	— 3 39.6	2	1.0	— 4 00	— 3 19	+ 0 04
1135	Granstanda	60 35 18	1 41 06 W	180	g 38	30	— 2 57.8	2	0.3	— 3 18	— 2 38	+ 0 42
1136	Storvik	60 35 30	1 30 56 W	65	g 38	31	— 3 39.5	2	0.1	— 4 00	— 3 19	— 0 05
1137	Åshammar	60 38 52	1 30 34 W	95	g 38	31	— 3 32.2	2	0.9	— 3 53	— 3 12	+ 0 02
1138	Järbo	60 42 52	1 26 58 W	95	g 38	VIII 1	— 3 12.6	2	1.3	— 3 33	— 2 53	+ 0 19
1139	Medskogsheden	60 47 36	1 21 34 W	120	g 4	1	— 3 41.2	2	2.7	— 4 02	— 3 21	— 0 12
1140	Ockelbo	60 53 37	1 20 33 W	75	g 38	2	— 4 02.8	2	1.2	— 4 23	— 3 43	— 0 35
1025	Kolforsen	60 50 36	1 12 19 W	75	g 39	2	— 4 31.5	2	0.4	— 4 52	— 4 11	— 1 08
1141	Brattfors	60 50 46	1 23 27 W	110	g 38	3	— 3 58.9	2	0.2	— 4 19	— 3 39	— 0 29
1142	Jädraås	60 50 40	1 35 00 W	205	g 38	3	— 3 51.5	2	0.3	— 4 12	— 3 31	— 0 15
1143	Tallås	60 52 15	1 38 47 W	200	g 38	4	— 4 10.1	2	0.7	— 4 31	— 3 50	— 0 32
1144	Lilla Björnmossan	60 51 39	1 52 10 W	310	g 38	5	— 4 40.9	2	0.6	— 5 02	— 4 21	— 0 55
1145	Svartbäcken	60 52 04	1 44 34 W	265	g 38	5	— 3 29.2	2	1.0	— 3 50	— 3 09	+ 0 12
1146	Linghed	60 47 25	2 09 48 W	140	g 37	6	— 4 50.4	2	0.4	— 5 11	— 4 29	— 0 53
1147	Vintjärn	60 49 59	2 00 19 W	330	g 38	6	— 3 02.5	2	1.2	— 3 23	— 2 42	+ 0 48
1148	Vittersjö	60 52 45	1 09 41 W	75	g 38	7	— 3 44.9	2	1.5	— 4 05	— 3 25	— 0 23
1149	Hedsjön	60 59 19	1 21 43 W	135	g 38	8	— 3 55.9	2	0.7	— 4 16	— 3 36	— 0 27
1150	Lingbo	61 03 02	1 22 17 W	90	g 38	9	— 3 58.4	2	0.8	— 4 19	— 3 38	— 0 30
1151	Röstbo	61 10 46	1 23 01 W	100	g 38	9	— 3 28.5	2	1.6	— 3 49	— 3 08	0 00
1153	Landafors	61 16 01	1 24 32 W	50	g 38	11	— 3 48.0	2	2.3	— 4 09	— 3 28	— 0 18
1154	Mobodarna	61 16 52	1 19 30 W	85	g 38	11	— 3 30.8	2	1.5	— 3 51	— 3 11	— 0 04
1155	Kinstaby	61 17 19	1 08 39 W	40	g 38	11	— 3 39.5	2	0.4	— 4 00	— 3 19	— 0 19
1156	Norrala	61 21 38	1 06 18 W	10	g 39	12	— 3 36.2	4	1.0	— 3 57	— 3 16	— 0 17
1157	Lindefallet	61 29 08	1 07 06 W	50	g 38	12	— 3 14.3	2	0.4	— 3 35	— 2 54	+ 0 05
1158	Enånger	61 32 47	1 04 34 W	40	g 38	13	— 3 20.5	2	0.5	— 3 41	— 3 00	— 0 03
1159	Idenor	61 41 21	0 55 04 W	20	g 38	13	— 3 16.1	2	0.8	— 3 37	— 2 56	— 0 04
1160	Njutånger	61 37 02	1 00 05 W	20	g 38	13	— 3 21.3	2	0.1	— 3 42	— 3 01	— 0 06
1161	Rogsta	61 45 55	0 52 39 W	20	g 38	15	— 3 22.6	2	0.8	— 3 43	— 3 02	— 0 12
1162	Via	61 48 34	0 51 17 W	25	g 40	15	— 3 31.2	2	0.4	— 3 52	— 3 11	— 0 21
1163	Stugsund	61 18 10	0 56 29 W	5	g 38	16	— 3 27.8	2	0.8	— 3 48	— 3 08	— 0 14
1164	Sandarna	61 16 05	0 54 26 W	10	g 38	16	— 3 13.0	2	1.0	— 3 33	— 2 53	0 00
1165	Ljusne	61 12 50	0 55 20 W	5	g 38	17	— 2 57.3	2	0.4	— 3 18	— 2 37	+ 0 16
1166	Maråkerby	61 09 53	0 54 36 W	5	g 38	17	— 1 35.0	2	0.3	— 1 55	— 1 15	+ 1 38
1168	Trödje	60 49 02	0 51 32 W	10	g 38	18	— 3 08.9	2	0.3	— 3 29	— 2 49	+ 0 03
1169	Oppala	60 46 05	0 51 52 W	15	g 38	18	— 3 23.3	2	0.8	— 3 43	— 3 03	— 0 11

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1932.5	n	$\pm\eta$	D 1929.5	D 1933.5	1933.5 obs.-calc.
	XIII. 1932. F. Tyrén. Instr. Bamberg No. 12014.											
1171	Vänge-Långharpan, K. Sj. K. V.	59° 53′ 48″	0° 39′ 36″ W	30	g 4	VI 12	— 2° 53′.1	2	1′.8	— 3′ 23′	— 2° 43′	+ 0° 04′
1172	Laxå A	58 59 18	3 26 14 W	95	g 37	13	— 3 38.2	2	0.0	— 4 10	— 3 28	+ 0 54
	Laxå B	58 59 18	3 26 14 W	95	g 37	14	— 4 00.6	2	0.9	— 4 32	— 3 50	+ 0 32
1173	Svartå	59 07 46	3 32 12 W	95	g 37	14	— 4 21.7	2	2.7	— 4 53	— 4 11	+ 0 14
1174	Storbjörboda	59 07 13	3 29 28 W	95	g 39	15	— 4 02.1	2	1.6	— 4 34	— 3 52	+ 0 32
1175	Degerfors A	59 13 57	3 36 52 W	95	g 14	15	— 4 07.8	2	1.5	— 4 40	— 3 57	+ 0 30
	Degerfors B	59 13 57	3 36 52 W	95	g 14	16	— 4 01.8	2	0.7	— 4 34	— 3 51	+ 0 36
1176	Kristinehamn A	59 19 01	3 57 03 W	52	g 14	16	— 5 08.0	2	2.4	— 5 40	— 4 57	— 0 19
	Kristinehamn B	59 19 01	3 57 15 W	52	g 14	18	— 5 03.9	2	1.0	— 5 36	— 4 53	— 0 15
1177	Gärdsberg	59 17 00	3 55 11 W	60	g 14	20	— 5 16.2	2	0.3	— 5 48	— 5 06	— 0 28
1178	Bjurbäcken A	59 35 43	3 52 49 W	120	g 1	21	— 4 56.3	2	1.4	— 5 29	— 4 46	— 0 10
	Bjurbäcken B	59 35 43	3 52 49 W	120	g 1	22	— 5 01.2	2	0.3	— 5 34	— 4 51	— 0 15
1179	Kungsskogen	59 30 46	4 00 34 W	130	g 1	22	— 4 45.2	2	1.3	— 5 18	— 4 35	+ 0 05
1180	Rudsberg	59 22 00	4 06 50 W	60	g 39	24	— 5 30.9	2	0.5	— 6 03	— 5 20	— 0 37
1181	Karlstad B	59 22 38	4 33 16 W	53	g 39	25	— 6 36.9	2	0.7	— 7 10	— 6 26	— 1 28
	Karlstad A	59 22 38	4 33 16 W	53	g 39	25	— 6 36.5	2	1.5	— 7 09	— 6 26	— 1 27
	Karlstad C	59 22 38	4 33 16 W	53	g 39	26	— 6 47.6	2	0.4	— 7 20	— 6 37	— 1 39
1182	Alstern	59 25 40	4 29 12 W	53	g 14	26	— 6 21.3	2	0.1	— 6 54	— 6 11	— 1 14
1183	Skåre A	59 25 40	4 36 18 W	46	g 38	27	— 5 54.6	2	0.5	— 6 28	— 5 44	— 0 44
	Skåre B	59 25 37	4 36 20 W	46	g 38	28	— 6 37.8	2	0.5	— 7 11	— 6 27	— 1 27
	Skåre C	59 25 46	4 36 08 W	44	g 38	28	— 6 07.1	2	2.0	— 6 40	— 5 56	— 0 56
1184	Prästbol	59 31 14	4 49 02 W	95	g 38	29	— 4 47.1	2	1.1	— 5 20	— 4 36	+ 0 31
1186	Sunnemo	59 53 08	4 19 54 W	157	g 14	VII 1	— 4 36.4	2	0.3	— 5 09	— 4 26	+ 0 24
1187	Motjärnshyttan	59 55 53	4 04 36 W	208	g 14	1	— 3 44.2	2	0.7	— 4 17	— 3 34	+ 1 08
1188	Laggåsen, K. Sj. K. V.	60 10 06	4 12 42 W	250	g 39	3	— 4 34.3	2	1.4	— 5 08	— 4 24	+ 0 22
1189	Edebäck	60 03 42	4 29 24 W	137	g 14	4	— 6 09.7	2	0.0	— 6 43	— 5 59	— 1 04
1190	Ekshärad	60 10 39	4 33 22 W	160	g 14	4	— 4 36.2	2	1.3	— 5 10	— 4 25	+ 0 32
1191	Stöllet	60 24 27	4 47 05 W	149	m 17	5	— 4 21.9	2	0.5	— 4 56	— 4 11	+ 0 53
1192	Hålia fäbod	60 34 58	4 29 00 W	455	m 17	6	— 4 39.9	2	1.3	— 5 14	— 4 29	+ 0 25
1193	Granberget	60 29 50	4 36 33 W	435	m 17	6	— 4 21.1	2	0.1	— 4 55	— 4 10	+ 0 48
1194	Likenäs	60 36 54	5 01 12 W	148	m 17	7	— 4 33.1	2	0.6	— 5 07	— 4 22	+ 0 50
1195	Sysslebäck	60 43 52	5 11 13 W	155	g 14	8	— 4 09.6	2	1.4	— 4 44	— 3 59	+ 1 19
1196	Klaråsen	60 58 05	5 34 40 W	280	m 17	9	— 4 17.5	2	0.5	— 4 53	— 4 06	+ 1 23
1197	Långflon	61 02 28	5 27 42 W	295	g 14	10	— 4 34.8	2	1.0	— 5 10	— 4 24	+ 1 02
1198	Bograngen	60 42 14	5 26 39 W	325	m 46	11	— 5 04.3	2	0.3	— 5 39	— 4 53	+ 0 32
1199	Medskogen	60 41 48	5 34 30 W	240	m 46	11	— 5 19.0	2	3.2	— 5 54	— 5 08	+ 0 22
1200	Nyskoga kapell	60 28 19	5 10 35 W	360	m 46	12	— 4 55.8	2	0.9	— 5 30	— 4 45	+ 0 33
1201	Torsby A	60 08 08	5 03 00 W	80	g 39	13	— 5 14.0	2	0.4	— 5 48	— 5 03	+ 0 11
	Torsby C	60 07 56	5 03 27 W	80	g 39	13	— 4 52.6	2	0.9	— 5 27	— 4 42	+ 0 32
1203	Kläggen	60 14 56	5 14 26 W	88	g 37	15	— 5 26.3	2	0.2	— 6 01	— 5 15	+ 0 04
1204	Väsby	60 02 06	4 59 32 W	170	g 37	16	— 5 32.4	2	0.4	— 6 06	— 5 22	— 0 10
1205	Sunne C	59 50 19	4 54 07 W	82	g 39	19	— 5 06.9	2	0.5	— 5 40	— 4 56	+ 0 14
	Sunne D	59 50 07	4 54 00 W	80	g 39	19	— 5 21.0	2	0.3	— 5 55	— 5 10	0 00
1206	Tobyn	59 46 35	5 14 09 W	170	g 37	20	— 5 14.4	2	0.4	— 5 48	— 5 03	+ 0 17
1207	Lerhol	59 38 11	5 15 10 W	75	g 38	20	— 5 35.3	2	0.7	— 6 09	— 5 24	— 0 03
1208	Edane	59 37 47	5 13 17 W	170	g 38	21	— 5 26.5	2	1.5	— 6 00	— 5 16	+ 0 05
1209	Boda B	59 33 25	5 00 28 W	85	g 38	22	— 5 34.6	2	0.4	— 6 08	— 5 24	— 0 10
1211	Åmotfors	59 46 10	5 41 11 W	72	g 38	24	— 6 29.9	2	0.4	— 7 04	— 6 19	— 0 43
1212	Strand	59 45 48	5 40 04 W	72	g 38	24	— 5 36.7	2	0.9	— 6 11	— 5 26	+ 0 10
1213	Charlottenberg	59 53 07	5 44 54 W	130	m 42	25	— 6 18.2	2	1.2	— 6 53	— 6 07	— 0 30
1214	Högerud	59 34 26	5 20 50 W	47	g 37	25	— 5 55.1	2	0.5	— 6 29	— 5 44	— 0 19
1215	Värmskog	59 27 17	5 08 23 W	60	g 39	26	— 5 23.0	2	0.7	— 5 56	— 5 12	+ 0 06
1216	Varpnäs	59 24 17	4 47 44 W	55	g 37	26	— 5 24.8	2	0.4	— 5 58	— 5 14	— 0 08
1217	Värmlandsbro	59 11 12	5 02 45 W	48	m 42	27	— 5 25.1	2	0.2	— 5 58	— 5 14	+ 0 01
1218	Rosenborg	58 55 10	4 49 48 W	49	m 42	28	— 4 23.3	2	0.3	— 4 56	— 4 13	+ 0 56

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1932.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1219	Lönnskog	59° 21′ 12″	5° 31′ 28″ W	230	d 27	VII 29	— 6 12′.5	2	0′.2	— 6° 46′	— 6° 02′	— 0° 31′
1220	Nysäter	59 17 05	5 16 39 W	72	m 42	30	— 5 28.2	2	0.1	— 6 02	— 5 17	+ 0 06
1221	Hällsbäck	59 23 17	5 15 24 W	60	g 1	30	— 5 51.4	2	0.2	— 6 25	— 5 41	— 0 18
1222	Glava	59 33 20	5 29 42 W	60	g 37	31	— 5 58.9	2	0.3	— 6 33	— 5 48	— 0 18
1223	Älgå	59 38 44	5 35 02 W	61	m 42	VIII 1	— 5 58.5	2	0.6	— 6 33	— 5 48	— 0 15
1224	Gunnarskog A	59 48 53	5 29 25 W	110	m 42	2	— 5 55.0	2	0.2	— 6 29	— 5 44	— 0 15
1226	Norra Emterud	59 55 27	5 46 30 W	100	g 38	4	— 6 05.4	2	0.1	— 6 40	— 5 54	— 0 16
1227	Adolfsfors	59 48 00	5 50 33 W	120	g 38	5	— 5 52.6	2	0.5	— 6 27	— 5 42	— 0 01
1228	Högsäter	59 53 41	6 04 26 W	148	m 42	5	— 6 45.8	2	0.9	— 7 21	— 6 35	— 0 46
1229	Järnskog	59 41 21	5 54 35 W	115	m 42	6	— 5 48.5	2	0.4	— 6 23	— 5 37	+ 0 06
1230	Bön	59 38 11	6 11 50 W	114	g 38	7	— 6 17.4	2	1.1	— 6 52	— 6 06	— 0 13
1231	Hån	59 30 34	6 15 52 W	115	g 37	7	— 5 53.6	2	0.1	— 6 28	— 5 42	+ 0 13
1232	Karlanda	59 31 50	5 59 30 W	145	m 42	8	— 6 21.4	2	1.4	— 6 56	— 6 10	— 0 24
1233	Lennartsfors	59 19 06	6 09 27 W	105	m 42	9	— 4 59.4	2	2.3	— 5 34	— 4 48	+ 1 04
1234	Torrskog	59 10 09	5 58 28 W	103	g 4	9	— 6 01.8	2	1.1	— 6 36	— 5 51	— 0 04
1235	Sillerud	59 19 08	5 45 00 W	116	m 42	10	— 5 38.7	2	0.1	— 6 13	— 5 28	+ 0 11
1236	Åmål	59 02 56	5 21 14 W	50	g 40	11	— 6 01.7	2	1.8	— 6 35	— 5 51	— 0 25
1237	Tösse	58 58 19	5 24 58 W	60	L 33	11	— 5 19.9	2	1.3	— 5 53	— 5 09	+ 0 19
1238	Ånimskog	58 52 53	5 29 16 W	55	g 40	12	— 6 13.1	2	0.7	— 6 46	— 6 02	— 0 31
1239	Mellerud	58 42 27	5 35 30 W	52	g 41	12	— 5 31.3	2	0.5	— 6 05	— 5 20	+ 0 14
1240	Upperud	58 48 28	5 37 06 W	55	s 60	13	— 5 41.5	2	0.9	— 6 15	— 5 31	+ 0 05
1242	Ödsköld	58 52 04	5 51 45 W	120	g 41	14	— 6 05.0	2	0.4	— 6 39	— 5 54	— 0 11
1243	Bäckefors	58 48 33	5 52 58 W	150	g 41	15	— 5 58.6	2	0.1	— 6 32	— 5 48	— 0 04
1244	Västra Ed	58 54 46	6 07 28 W	142	g 38	18	— 6 11.9	2	1.3	— 6 46	— 6 01	— 0 08
1245	Nössemark	59 08 03	6 15 28 W	127	g 38	16	— 5 53.7	2	0.8	— 6 28	— 5 43	+ 0 14
1246	Hökedalen	58 53 19	6 10 05 W	140	g 38	18	— 6 05.1	2	0.8	— 6 39	— 5 54	0 00
1247	Håbol	58 58 21	6 01 58 W	150	g 41	19	— 5 52.4	2	1.8	— 6 26	— 5 41	+ 0 07
1248	Loviseholm	58 51 12	6 20 47 W	140	g 37	19	— 6 13.1	2	0.7	— 6 47	— 6 02	— 0 02
1249	Gesäter	58 47 00	6 14 28 W	100	g 38	20	— 6 19.7	2	0.1	— 6 54	— 6 09	— 0 13
1250	Stora Torp	58 43 11	5 58 00 W	120	g 41	21	— 6 08.9	2	0.4	— 6 42	— 5 58	— 0 11
1252	Nättjebacka	58 28 19	6 02 10 W	100	g 4	22	— 6 12.7	2	0.2	— 6 46	— 6 02	— 0 12
1253	Frändefors	58 29 50	5 46 42 W	65	g 39	23	— 6 12.3	2	0.4	— 6 45	— 6 01	— 0 20
1254	Brålanda A	58 33 32	5 42 04 W	66	g 39	24	— 6 21.8	2	0.9	— 6 55	— 6 11	— 0 32
	Brålanda B	58 33 32	5 42 04 W	66	g 39	24	— 6 07.6	2	0.1	— 6 41	— 5 57	— 0 18
1255	Öxnered	58 21 55	5 46 45 W	180	g 39	25	— 5 51.2	2	0.1	— 6 24	— 5 40	+ 0 01
1256	Vänersborg I	58 22 53	5 44 07 W	150	g 40	25	— 5 35.8	2	0.3	— 6 09	— 5 25	+ 0 15
	Vänersborg A, Skräckle Udden	58 23 19	5 43 40 W	150	g 37	27	— 5 27.2	2	0.7	— 6 00	— 5 16	+ 0 24
	Vänersborg B, Skräckle Udden	58 23 19	5 43 40 W	153	g 37	27	— 5 21.2	2	1.1	— 5 54	— 5 10	+ 0 30
1257	Gustafsberg	58 19 38	6 09 06 W	12	g 1	28	— 6 28.9	2	0.5	— 7 02	— 6 18	— 0 24
1258	Hällevadsholm	58 34 57	6 31 45 W	20	g 19	29	— 6 52.3	2	0.4	— 7 26	— 6 41	— 0 35
1259	Grebbestad A	58 41 40	6 48 06 W	15	g 19	30	— 6 38.4	2	0.2	— 7 13	— 6 27	— 0 12
	Grebbestad B	58 41 40	6 48 06 W	15	g 19	30	— 6 47.7	2	2.0	— 7 22	— 6 37	— 0 21
	Grebbestad C	58 41 41	6 48 18 W	15	g 19	31	— 6 23.9	2	0.1	— 6 58	— 6 13	+ 0 03
1260	Skee	58 55 00	6 47 49 W	5	g 19	IX 1	— 6 28.4	2	0.5	— 7 03	— 6 17	— 0 03
1262	Krokstrand	58 59 54	6 37 20 W	40	g 19	3	— 6 30.8	2	0.9	— 7 05	— 6 20	— 0 11
1263	Strömstad	58 56 20	6 53 25 W	8	g 19	3	— 6 25.8	2	0.1	— 7 00	— 6 15	+ 0 03
1264	Hogdal	59 01 25	6 49 29 W	5	g 19	3	— 7 02.5	2	0.1	— 7 37	— 6 51	— 0 36
1265	Fjällbacka	58 35 48	6 46 09 W	10	g 19	4	— 5 58.0	2	0.1	— 6 32	— 5 47	+ 0 28
1266	Hunnebostrand	58 26 25	6 45 05 W	10	g 19	5	— 6 43.3	2	0.3	— 7 17	— 6 32	— 0 18
1267	Lysekil	58 16 18	6 37 21 W	1	g 19	5	— 6 39.3	2	0.4	— 7 13	— 6 28	— 0 18
1270	Uddevalla	58 21 00	6 07 21 W	3	g 40	8	— 6 45.1	2	1.0	— 7 18	— 6 34	— 0 41
1271	Stenungsön A	58 04 09	6 15 00 W	7	g 37	9	— 6 14.7	2	0.1	— 6 48	— 6 04	— 0 06
	Stenungsön B	58 04 09	6 15 00 W	7	g 37	9	— 6 04.9	2	0.5	— 6 38	— 5 54	+ 0 04
1272	Ytterby	57 51 37	6 07 48 W	25	g 37	10	— 5 36.3	2	1.3	— 6 09	— 5 25	+ 0 29
1273	Borås, Övre	57 43 36	5 07 06 W	145	g 37	12	— 6 34.2	2	1.3	— 7 06	— 6 24	— 1 03
1273	Borås	57 43 36	5 07 06 W	145	g 37	12	— 6 41.5	2	1.0	— 7 13	— 6 31	— 1 10

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1932.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
	XIV. 1932. S. Werner. Instr. Chasselon No. 83.											
1274	Vaksnäs	66° 21′ 00″	0° 41′ 24″ W	430	f 74	VI 24	— 4° 14′.4	2	1′.1	— 4° 50′	— 4° 04′	— 1° 28′
1275	Vuonatjviken	66 29 00	0 48 48 W	510	f 74	25	— 2 48.5	2	0.7	— 3 24	— 2 38	+ 0 01
1276	Rebnis	66 34 06	1 02 06 W	510	f 74	26	— 3 47.0	2	1.0	— 4 23	— 3 36	— 0 50
1277	Labbas	66 25 24	0 34 48 W	550	L 49	27	— 2 17.9	2	0.2	— 2 53	— 2 07	+ 0 24
1278	Långudden	66 22 42	0 14 54 W	500	L 49	28	— 1 14.8	2	0.6	— 1 50	— 1 04	+ 1 16
1279	Stenudden	66 32 18	0 23 00 W	460	m 6	29	— 1 31.8	2	0.3	— 2 07	— 1 21	+ 1 03
1280	Västerfjäll	66 41 42	0 36 42 W	460	f 74	30	— 3 50.2	2	0.1	— 4 26	— 3 39	— 1 08
1284	Vildok	66 46 01	0 49 00 W	480	f 78	VII 1	— 0 53.0	2	0.4	— 1 29	— 0 42	+ 1 57
1288	Luoddejaure	66 50 24	1 11 30 W	500	f 78	2	— 3 01.9	2	0.1	— 3 38	— 2 51	0 00
1289	Juobmojaure	66 51 42	1 21 18 W	530	f 77	3	— 3 28.7	4	0.9	— 4 05	— 3 18	— 0 21
1294	Mavasjaure III	66 54 06	1 55 00 W	548	f 77	5	— 3 43.6	2	0.3	— 4 21	— 3 32	— 0 17
1296	Ikisjaure	66 49 18	1 51 12 W	760	f 78	6	— 4 10.7	2	0.3	— 4 48	— 3 59	— 0 46
1299	Pieskejaure II	66 57 06	1 27 54 W	585	f 77	8, 9	— 3 23.1	5	1.3	— 4 00	— 3 12	— 0 12
1301	Sulitelma	67 02 30	1 22 48 W	750	f 77	9	— 3 20.9	2	0.2	— 3 58	— 3 10	— 0 13
1303	Hadetjokk	67 06 18	1 22 54 W	800	f 77	10	— 3 01.2	2	0.6	— 3 38	— 2 50	+ 0 07
1307	Vuolle Puolejaure	67 14 36	1 08 48 W	762	f 77	14	— 1 53.3	2	0.4	— 2 30	— 1 42	+ 1 06
1311	Tarrejokk	67 03 12	0 51 12 W	700	f 77	16	— 3 10.8	2	0.6	— 3 47	— 3 00	— 0 21
1315	Kvikkjokk	66 56 48	0 19 00 W	305	f 74	26	— 2 45.1	2	1.0	— 3 21	— 2 34	— 0 13
1320	Tjåmotes	66 54 18	0 31 00 E	300	g 4	21	— 2 43.7	2	2.2	— 3 18	— 2 33	— 0 40
1321	Blackälven	67 01 06	0 29 18 E	440	f 76	22	— 1 36.8	2	0.4	— 2 12	— 1 26	+ 0 28
1323	Aktse	67 08 00	0 15 18 E	500	f 76	24	— 6 04.2	2	0.0	— 6 39	— 5 53	— 3 51
1325	Kalakjokk	67 02 54	0 00 48 W	600	g 4	25	+ 1 19.3	2	0.3	+ 0 44	+ 1 30	+ 3 41
1327	Stuor Tata	67 00 12	0 14 24 W	530	f 74	25	— 1 46.5	2	0.2	— 2 22	— 1 36	+ 0 43
1328	Björkholmen	66 47 30	1 01 12 E	310	g 4	27	— 1 11.0	2	0.8	— 1 45	— 1 01	+ 0 36
1329	Stuorsuolo	67 05 12	1 34 30 E	400	L 33	29	+ 0 19.4	2	0.4	— 0 14	+ 0 30	+ 1 48
1331	Bierna	67 10 12	1 15 48 E	373	g 4	30	+ 0 30.7	2	0.3	— 0 04	+ 0 41	+ 2 09
1333	Ruoptojokk	67 16 06	1 15 06 E	371	g 4	31	+ 1 34.5	2	0.3	+ 1 00	+ 1 45	+ 3 19
1335	Langas	67 23 00	0 42 00 E	382	f 76	VIII 2	— 0 47.3	3	1.0	— 1 22	— 0 37	+ 1 10
1336	Saltoluokta, K. Sj. K. V.	67 23 30	0 28 48 E	380	f 76	3	— 1 14.6	4	2.0	— 1 50	— 1 04	+ 0 50
1338	Ausutsjokk	67 17 04	0 27 06 E	650	f 74	5	+ 0 11.5	2	0.3	— 0 24	+ 0 22	+ 2 17
1340	Situojaure	67 17 54	0 06 36 E	655	g 22	6	— 1 10.0	2	0.3	— 1 45	— 0 59	+ 1 07
1342	Sarjektjåkko	67 22 42	0 05 24 W	800	d 28	8	— 0 22.2	2	0.2	— 0 58	— 0 11	+ 2 02
1344	Slugga	67 26 00	0 06 18 E	650	g 22	9	— 2 59.5	2	0.6	— 3 35	— 2 49	— 0 42
1348	Ritsemjokk I	67 42 42	0 35 48 W	445	f 77	11	+ 0 30.9	2	0.3	— 0 06	+ 0 42	+ 3 11
1351	Autajaure	67 48 30	0 25 24 W	635	f 78	13	— 1 11.7	5	1.3	— 1 48	— 1 01	+ 1 23
1353	Lietejaure	67 53 12	0 12 12 W	800	f 77	15	— 1 23.1	2	0.0	— 1 59	— 1 12	+ 1 04
1354	Padnakjokk	67 56 42	0 27 00 W	626	f 77	16	+ 2 18.7	2	0.5	+ 1 42	+ 2 30	+ 4 54
1355	Sitasjaure, Norway	68 05 00	0 50 18 W	600	f 77	16	— 2 55.8	2	0.4	— 3 33	— 2 45	— 0 08
1357	Vaisaluokte	67 40 06	0 46 42 W	430	f 78	19	— 0 26.4	2	0.3	— 1 03	— 0 15	+ 2 20
1360	Alemusjaure	67 37 54	0 26 24 W	430	f 78	21	— 0 56.7	2	0.2	— 1 33	— 0 46	+ 1 39
1361	Vakotavare	67 34 36	0 03 18 E	450	g 22	23	+ 1 14.9	2	0.2	+ 0 39	+ 1 26	+ 3 34
1363	Teusajaure	67 41 36	0 06 24 E	503	f 78	24	— 2 22.3	2	0.7	— 2 58	— 2 11	— 0 06
1364	Övre Kaitumjaure	67 43 18	0 25 48 E	590	d 28	25	— 2 27.4	2	0.7	— 3 03	— 2 17	— 0 22
1365	Paltajokk	67 41 42	0 36 30 E	587	f 76	26	— 1 49.0	3	0.4	— 2 24	— 1 38	+ 0 11
1366	Tjuonajokk	67 37 00	0 56 42 E	588	L 33	28	— 0 18.2	3	0.5	— 0 53	— 0 08	+ 1 31
1367	Teuna	67 38 18	1 16 30 E	590	L 33	29	— 0 50.7	4	0.5	— 1 25	— 0 40	+ 0 47
1370	Kamasjaure	67 34 54	1 56 36 E	510	L 33	31	— 1 51.5	2	0.7	— 2 25	— 1 41	— 0 37
1371	Lappberget	67 35 36	2 09 18 E	500	L 33	31	— 4 25.0	2	0.0	— 4 59	— 4 15	— 3 17
1375	Allesjokk	68 09 36	0 44 24 E	765	g 23	IX 6	— 1 45.3	2	0.1	— 2 21	— 1 35	+ 0 09
1377	Rautasjärvi II	68 04 00	1 19 12 E	560	g 26	9	— 2 27.8	2	0.2	— 3 03	— 2 17	— 0 53
1381	Nikkoluokta	67 50 54	0 58 48 E	470	L 33	13	+ 0 45.7	2	0.3	+ 0 11	+ 0 56	+ 2 33
1382	Vistesajokk I	67 56 42	0 51 36 E	500	L 33	14	— 0 43.2	2	0.2	— 1 19	— 0 32	+ 1 08
1385	Sälkastugan	67 55 30	0 13 36 E	770	f 77	17	+ 0 30.1	2	0.4	— 0 06	+ 0 41	+ 2 42

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1932.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1387	Singisstugan	67° 50′ 18″	0° 16′ 00″ E	700	d 28	IX 18	+ 6° 36′.6	2	0′.6	+ 6° 01′	+ 6° 48′	+ 8° 48′
1381	Nikkoluokta	67 50 54	0 58 48 E	470	L 33	21	+ 0 44.3	2	0.9	+ 0 09	+ 0 55	+ 2 31
1391	Paijtasluspa	67 50 12	1 27 24 E	470	L 33	21	— 3 40.5	2	0.2	— 4 15	— 3 30	— 2 10
1392	Laukuluspa	67 49 42	1 34 00 E	470	L 33	22	— 4 15.1	2	0.1	— 4 50	— 4 05	— 2 48
1393	Holmajärvi	67 48 30	1 44 48 E	470	d 30	22	— 3 35.3	2	0.1	— 4 10	— 3 25	— 2 14
1394	Kaalasluspa	67 44 54	1 57 48 E	465	d 27	23	+ 8 20.8	2	1.0	+ 7 47	+ 8 31	+ 9 35
1396	3 km north of Kalixfors	67 46 00	2 11 30 E	474	d 27	24	— 4 40.1	2	3.3	— 5 14	— 4 30	— 3 34
1397	6 km north of Kalixfors	67 47 18	2 12 18 E	480	d 27	25	— 3 34.3	2	0.6	— 4 08	— 3 24	— 2 29

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							1933	1933.5				
1399	Finnerödja	58 56 06	3 37 55 W	90	g 37	IV 7	— 4 20.1	6	0.4	— 5 02		+ 0 08
1400	Gullspång ○	58 59 00	3 56 16 W	75	d 30	7	— 4 32.7	4	0.2	— 5 15		+ 0 06
1401	Sjötorp	58 50 20	4 04 30 W	45	g 37	8	— 4 50.4	4	0.3	— 5 33		— 0 07
1402	Lyrestad	58 48 37	3 59 50 W	60	g 14	13	— 4 26.7	4	0.2	— 5 09		+ 0 14
1403	Hasslerör	58 45 05	4 06 39 W	60	g 37	13	— 5 14.9	6	1.5	— 5 57		— 0 30
1405	Ek	58 35 53	4 14 05 W	60	s 66	10	— 5 16.0	6	0.3	— 5 58		— 0 27
1406	Skövde I	58 23 21	4 12 58 W	150	s 67	11	— 4 54.3	4	0.1	— 5 36		— 0 05
	Skövde II	58 23 45	4 12 35 W	150	s 67	11	— 4 53.5	4	0.4	— 5 35		— 0 04
1407	Väring	58 30 54	4 06 04 W	80	D 31	12	— 4 57.4	4	0.0	— 5 39		— 0 12
1408	Töreboda	58 42 17	3 55 25 W	91	g 37	12	— 4 58.4	6	1.0	— 5 40		— 0 20
1409	Hajstorp	58 45 00	3 56 53 W	90	g 37	13	— 4 51.9	6	0.9	— 5 34		— 0 12
1410	Älgarås	58 48 33	3 48 12 W	125	g 37	14	— 4 48.8	4	0.4	— 5 31		— 0 14
1411	Viken, K. Sj. K. V.	58 38 18	3 42 36 W	92	g 14	14	— 4 57.6	9	0.5	— 5 39		— 0 26
1414	Rödesund	58 32 19	3 33 00 W	95	s 63	16	— 5 05.6	8	0.5	— 5 47		— 0 39
1415	Tibro	58 25 40	3 53 16 W	113	g 14	16	— 4 48.5	8	1.1	— 5 30		— 0 10
1416	Värsås	58 20 47	4 00 48 W	133	g 37	17	— 4 48.3	8	0.4	— 5 30		— 0 06
1417	Fröjered	58 14 56	4 02 43 W	132	g 37	17	— 4 34.2	8	0.4	— 5 16		+ 0 10
1419	Habo	57 53 24	4 02 00 W	223	g 14	21	— 3 19.5	6	0.4	— 4 01		+ 1 24
1427	Jönköping	57 45 43	3 52 50 W	90	s 63	21	— 3 08.3	8	0.2	— 3 49		+ 1 31
1428	Mullsjö	57 55 06	4 10 27 W	240	g 37	22	— 4 12.7	8	1.3	— 4 54		+ 0 36
1429	Kettilstorp I	58 02 24	4 20 30 W	239	g 37	22	— 4 48.5	6	0.3	— 5 40		— 0 05
	Kettilstorp II	58 02 25	4 20 51 W	239	g 37	23	— 4 38.2	4	0.2	— 5 20		+ 0 16
1430	Åsaka b	58 03 43	4 23 44 W	215	g 37	23	— 4 48.2	7	0.3	— 5 30		+ 0 08
1431	Falköping	58 10 35	4 29 54 W	220	s 69	24	— 4 41.5	8	0.3	— 5 24		+ 0 18
1432	Stenstorp	58 16 21	4 20 26 W	167	s 69	24	— 4 59.5	8	0.6	— 5 41		— 0 06
1433	Bjurum	58 16 32	4 34 00 W	130	g 37	25	— 4 43.9	7	0.7	— 5 26		+ 0 17
1434	Skara I b	58 22 55	4 36 53 W	116	g 37	25	— 4 32.3	6	0.3	— 5 15		+ 0 30
	Skara II b	58 23 16	4 36 37 W	116	g 37	26	— 5 00.3	6	0.7	— 5 43		+ 0 02
1435	Götene	58 32 30	4 33 05 W	75	g 37	27	— 5 02.1	8	0.2	— 5 45		— 0 02
1436	Österäng	58 38 05	4 28 50 W	70	g 37	27	— 5 13.6	8	0.3	— 5 56		— 0 16
1437	Råbäck	58 36 35	4 40 37 W	80	s 67	28	— 5 00.4	8	0.7	— 5 43		+ 0 04
1438	Husaby	58 31 42	4 41 30 W	100	s 66	28	— 5 14.0	6	0.5	— 5 57		— 0 09
1439	Lidköping I	58 30 24	4 53 20 W	45	g 37	29	— 4 23.9	8	0.4	— 5 07		+ 0 48
	Lidköping II	58 29 50	4 53 40 W	50	g 37	29	— 4 56.0	8	1.1	— 5 39		+ 0 16
1440	Norra Kedum b	58 28 41	5 09 36 W	52	g 37	30	— 4 49.7	8	0.4	— 5 33		+ 0 30
1441	Grästorp	58 20 28	5 22 00 W	55	g 37	30	— 5 23.9	8	0.7	— 6 07		+ 0 04
1442	Salstad	58 20 49	5 27 42 W	50	g 37	V 1	— 5 09.8	10	0.7	— 5 53		+ 0 21
1443	Lilleskog	58 22 00	5 35 38 W	130	D 32	1	— 5 49.6	4	0.2	— 6 33		— 0 14
1444	Trollhättan b	58 17 35	5 44 00 W	50	g 37	2	— 5 25.0	6	0.2	— 6 09		+ 0 15
1445	Upphärad	58 09 34	5 44 48 W	60	g 37	2	— 5 49.9	7	0.2	— 6 33		— 0 09
1446	Koberg	58 09 45	5 37 56 W	85	g 37	3	— 5 19.4	10	0.6	— 6 03		+ 0 18
1447	Stora Mellby	58 09 03	5 28 55 W	90	g 37	3	— 5 14.0	4	0.1	— 5 57		+ 0 18
1448	Lunnabo b	58 13 03	5 31 00 W	70	g 37	4	— 5 26.5	8	0.6	— 6 10		+ 0 07

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1933.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1449	Frambo . . . . . b	58° 16′ 04″	5° 25′ 24″ W	70	g 37	V 4	— 5° 13′.6	10	1′.0	— 5° 57′		+ 0° 16′
1450	Håkantorp	58 18 37	5 09 00 W	80	g 37	5	— 4 39.7	8	1.2	— 5 23		+ 0 41
1451	Södra Kedum . . . . . b	58 14 37	5 10 41 W	90	g 37	5	— 4 59.1	8	0.6	— 5 42		+ 0 23
1452	Bäreberg . . . . . b	58 12 21	5 20 06 W	100	g 37	6	— 5 03.2	11	0.9	— 5 46		+ 0 24
1453	Östra Bitterna, K. Sj. K. V. .	58 08 33	5 01 39 W	115	g 37	6, 7	— 5 21.0	12	0.3	— 6 04		— 0 03
1460	Partille	57 44 45	5 57 35 W	70	g 37	10	— 5 53.8	10	0.2	— 6 37		— 0 05
1462	Fritsla I	57 33 31	5 15 49 W	83	g 37	12	— 4 49.0	6	0.6	— 5 31		+ 0 37
1464	Björketorp	57 25 48	5 32 18 W	20	g 37	13	— 5 54.3	4	0.1	— 6 37		— 0 19
1465	Borgstena	57 53 09	5 02 32 W	180	g 37	14	— 5 30.7	8	0.3	— 6 13		— 0 13
1466	Ulricehamn, K. Sj. K. V. . . .	57 47 53	4 40 53 W	180	g 37	15	— 4 54.2	8	0.6	— 5 36		+ 0 12
1467	Torhults hälsobrunn . . . . b	57 46 10	4 19 30 W	310	g 37	15	— 4 36.0	8	0.3	— 5 17		+ 0 18

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1472	Gnosjö	57 20 28	4 19 25 W	172	g 37	V 18	— 5 00.7	4	0.3	— 5 52		— 0 06
1473	Hestra	57 26 01	4 28 41 W	172	g 37	18	— 5 28.8	4	0.1	— 6 10		— 0 31
1474	Limmared	57 32 10	4 42 22 W	160	g 37	19	— 5 39.5	4	0.2	— 6 21		— 0 32
1475	Svenljunga	57 29 40	4 56 32 W	147	g 37	20	— 5 17.4	4	0.2	— 5 59		— 0 02
1462	Fritsla I	57 33 31	5 15 49 W	83	g 37	20	— 4 44.0	4	0.3	— 5 26		+ 0 42
	Fritsla II	57 33 34	5 15 43 W	83	g 37	20	— 5 00.0	3	0.1	— 5 42		+ 0 26
1463	Kinna	57 30 08	5 23 08 W	25	g 37	20	— 5 48.5	4	0.3	— 6 31		— 0 18
1477	Kungsbacka	57 29 29	5 58 49 W	1	m 45	21	— 5 19.5	6	1.2	— 6 03		+ 0 31
1478	Åsa	57 21 16	5 56 04 W	10	g 37	21	— 5 29.4	4	0.3	— 6 12		+ 0 19
1479	Backa . . . . . b	57 15 13	5 51 46 W	14	g 37	22	— 5 48.4	4	0.6	— 6 31		— 0 02
1480	Väddige	57 16 18	5 43 18 W	15	g 37	23	— 5 40.8	4	0.1	— 6 23		+ 0 01
1481	Varberg . . . . . b	57 06 47	5 47 47 W	25	m 45	23	— 6 11.6	4	0.1	— 6 54		— 0 27
1482	Ullared	57 08 13	5 19 54 W	80	m 45	24	— 5 42.4	4	0.3	— 6 24		— 0 13
1483	Älvsered	57 14 27	5 10 37 W	120	g 37	24	— 5 52.8	8	0.3	— 6 35		— 0 29
1484	Hylte Bruk	57 00 10	4 44 58 W	156	g 37	25	— 6 00.5	4	0.2	— 6 42		— 0 51
1485	Jäluntofta	57 03 18	4 31 34 W	171	g 37	25	— 5 17.5	4	0.3	— 5 58		— 0 15
1486	Refteled	57 10 40	4 27 46 W	145	d 27	26	— 5 09.7	4	0.2	— 5 51		— 0 10
1488	Gislaved	57 18 14	4 28 15 W	192	g 37	27	— 4 50.5	8	0.4	— 5 32		+ 0 09
1489	Kärda	57 10 06	4 08 05 W	195	g 37	27	— 4 36.7	4	0.3	— 5 17		+ 0 12
1490	Klevshult	57 21 10	3 57 47 W	196	g 37	28	— 4 24.9	4	0.2	— 5 05		+ 0 18
1491	Nydala	57 19 22	3 42 56 W	210	g 37	29	— 3 27.7	4	0.5	— 4 08		+ 1 07
1492	Ohs Bruk	57 11 30	3 43 18 W	200	g 37	29	— 4 46.0	4	1.3	— 5 26		— 0 11
1493	Lamhult	57 10 22	3 28 16 W	225	m 17	30	— 4 00.6	8	0.7	— 4 40		+ 0 26
1494	Tagel	57 01 16	3 40 42 W	210	g 37	30	— 3 34.5	4	0.4	— 4 14		+ 0 59
1495	Moheda	57 00 16	3 28 24 W	178	d 27	31	— 3 25.8	8	0.4	— 4 05		+ 1 01
1496	Alvesta . . . . . b	56 54 15	3 30 03 W	180	g 37	31	— 2 46.2	8	0.4	— 3 26		+ 1 42
1497	Tutaryd	56 51 00	4 00 42 W	167	m 46	VI 1	— 4 07.3	8	0.4	— 4 47		+ 0 38
1498	Ljungby	56 49 52	4 06 54 W	130	m 45	1	— 4 11.5	8	0.4	— 4 52		+ 0 37
1499	Tannåker . . . . . b	56 57 49	4 17 14 W	170	g 37	2	— 4 35.7	8	0.2	— 5 16		+ 0 19
1500	Bolmen I	56 49 01	4 21 11 W	150	d 27	2	— 4 58.3	8	0.6	— 5 39		— 0 02
	Bolmen II	56 49 01	4 21 11 W	150	d 27	3	— 4 57.4	4	0.3	— 5 38		— 0 01
1501	Torpa, K. Sj. K. V.	56 42 42	4 29 12 W	165	g 37	3, 4	— 4 06.4	12	0.2	— 4 47		+ 0 55
1502	Lidhult	56 49 43	4 36 47 W	190	g 37	4	— 5 10.0	8	0.4	— 5 51		— 0 05
1503	Skallinge	56 46 54	4 51 46 W	95	g 37	4	— 5 06.4	4	0.2	— 5 47		+ 0 08
1504	Fröslida	56 52 42	5 00 24 W	62	g 37	5	— 4 53.0	8	0.5	— 5 34		+ 0 26
1505	Kinnared II	57 01 36	4 56 42 W	87	g 37	5	— 4 51.2	8	0.5	— 5 33		+ 0 25
	Kinnared I	57 01 38	4 57 02 W	87	g 37	6	— 6 23.0	4	0.6	— 7 04		— 1 07
1506	Ätran	57 07 24	5 06 06 W	110	m 45	6	— 5 43.2	4	0.9	— 6 25		— 0 22
1507	Skrea . . . . . b	56 53 03	5 30 19 W	10	g 37	7	— 2 50.1	4	0.3	— 3 32		+ 2 45
1508	Getinge	56 49 12	5 19 24 W	20	g 37	7, 8	— 6 22.5	14	1.6	— 7 04		— 0 53

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1933.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1509	Sennan	56° 46′ 24″	5° 04′ 42″ W	20	g 37	VI 8	— 5° 33.′3	8	0′.4	— 6° 15′		— 0° 12′
1510	Breared	56 43 37	4 55 14 W	100	g 37	9	— 5 27.2	8	1.2	— 6 08		— 0 11
1512	Eldsberga	56 56 05	5 04 00 W	35	g 37	10	— 5 14.3	12	0.7	— 5 56		+ 0 06
1513	Mästocka	56 36 30	4 47 55 W	170	g 37	10	— 5 09.5	4	0.2	— 5 50		+ 0 02
1514	Laholm	56 30 48	5 00 36 W	3	g 37	11	— 5 20.9	8	0.2	— 6 02		— 0 01
1515	Båstad	56 26 10	5 12 56 W	1	m 87	11	— 5 59.1	8	0.1	— 6 40		— 0 32
1516	Grevie	56 23 31	5 16 30 W	75	g 37	12	— 5 48.9	8	0.2	— 6 30		— 0 20
1517	Växtorp	56 25 12	4 56 45 W	56	g 37	12	— 5 47.1	8	0.2	— 6 28		— 0 30
1518	Knäred	56 31 35	4 44 16 W	81	g 37	13	— 5 21.4	8	0.4	— 6 02		— 0 11
1519	Markaryd b	56 28 20	4 29 14 W	112	g 37	13	— 4 56. 0	8	0.4	— 5 36		+ 0 06
1520	Hinneryd	56 37 11	4 26 46 W	186	g 37	14	— 5 03.9	8	0.7	— 5 44		— 0 04
1521	Strömsnäs Bruk b	56 32 49	4 19 24 W	124	g 37	14	— 4 13.1	8	0.1	— 4 53		+ 0 43
1522	Pjätteryd	56 38 46	4 01 47 W	140	g 37	15	— 4 02.8	4	0.6	— 4 43		+ 0 44
1523	Liatorp	56 39 45	3 46 54 W	178	g 37	15	— 4 03.7	8	0.4	— 4 43		+ 0 34
1524	Älmhult	56 33 16	3 54 51 W	165	g 37	16	— 3 38.2	8	0.5	— 4 18		+ 1 04
1525	Ousby	56 22 54	4 04 07 W	84	g 37	16	— 4 04.9	8	0.2	— 4 45		+ 0 43
1526	Visseltofta	56 25 44	4 11 59 W	103	g 37	17	— 4 37.6	8	0.4	— 5 17		+ 0 15
1527	Vittsjö	56 20 21	4 23 26 W	113	g 37	17	— 4 28.3	12	0.2	— 5 08		+ 0 31
1531	Röke	56 13 59	4 31 56 W	130	g 37	20	— 5 14.0	4	0.4	— 5 54		— 0 10
1532	Örkelljunga	56 16 48	4 47 18 W	73	g 37	20	— 4 55.8	8	0.4	— 5 36		+ 0 17
1533	Perstorp b	56 08 32	4 39 54 W	98	g 37	21	— 5 20.0	4	0.2	— 6 00		— 0 12
1534	Klippan	56 08 05	4 55 40 W	45	s 81	21	— 5 00.7	8	0.2	— 5 41		+ 0 17
1535	Kvidinge	56 07 55	5 00 13 W	38	s 81	21	— 5 26.2	4	0.1	— 6 07		— 0 06
1536	Åstorp	56 08 13	5 05 38 W	35	s 81	22	— 5 04.0	8	0.3	— 5 45		+ 0 19
1537	Vilhelmsfält	56 13 00	5 12 08 W	15	s 81	22	— 4 53.1	4	0.1	— 5 34		+ 0 33
1538	Ängelholm	56 14 42	5 11 48 W	3	s 81	23	— 4 38.1	4	0.4	— 5 19		+ 0 48
1539	Ängelholms hamn	56 16 24	5 13 12 W	1	s 81	23	— 5 12.3	8	0.2	— 5 53		+ 0 15
1542	Brödalt	56 23 50	5 06 52 W	171	g 37	25	— 5 01.6	6	0.3	— 5 43		+ 0 22
1543	Östra Karup	56 25 21	5 06 41 W	30	g 37	25	— 5 25.8	8	0.3	— 6 07		— 0 03
1544	Skottorp	56 26 56	5 05 32 W	10	s 84	25	— 5 34.5	4	0.3	— 6 15		— 0 12
1545	Boarp	56 26 05	5 16 50 W	143	g 37	26	— 5 39.9	4	0.2	— 6 21		— 0 11
1546	Stora Nötte b	56 24 10	5 14 38 W	120	g 37	26	— 5 49.6	4	0.1	— 6 31		— 0 22
1547	Förslöv	56 21 28	5 14 09 W	59	g 37	27	— 6 26.6	4	0.2	— 7 08		— 0 59
1548	Vantinge	56 19 16	5 12 51 W	30	s 81	27	— 5 50.0	4	0.5	— 6 31		— 0 23
1549	Ängeltofta	56 18 24	5 12 35 W	20	s 81	27	— 5 16.7	4	0.1	— 5 58		+ 0 10
1550	Barkåkra	56 17 40	5 13 25 W	20	s 81	28	— 5 14.6	6	0.6	— 5 56		+ 0 12
1551	Tånga	56 12 38	5 17 04 W	5	s 81	28	— 5 38.4	4	0.1	— 6 19		— 0 09
1553	Kattarp	56 08 43	5 16 28 W	10	s 81	29	— 5 33.2	8	0.4	— 6 14		— 0 04
1554	Svedberg	56 09 31	5 21 17 W	16	s 81	30	— 5 32.0	4	0.0	— 6 13		0 00
1555	Jonstorp	56 13 43	5 23 24 W	8	s 68	30	— 5 52.1	6	0.6	— 6 33		— 0 19
1556	Arild I	56 16 27	5 28 18 W	2	g 37	30	— 5 09.5	8	0.8	— 5 51		+ 0 26
1557	Arild II	56 16 07	5 27 38 W	8	g 37	VII 1	— 5 47.4	4	0.3	— 6 29		— 0 12
1558	Kullagård	56 17 55	5 34 46 W	50	g 37	1	— 5 31.7	4	0.1	— 6 13		+ 0 07
1559	Vattenmöllan	56 16 13	5 32 51 W	1	s 64	2	— 5 34.6	8	0.6	— 6 16		+ 0 04
1560	Krapperup b	56 15 27	5 32 14 W	1	s 64	2	— 5 45.0	4	0.6	— 6 26		— 0 07
1561	Höganäs	56 11 38	5 30 06 W	1	s 81	3	— 5 29.6	4	0.5	— 6 11		+ 0 07
1562	Viken	56 09 23	5 29 18 W	2	s 81	4	— 5 15.2	4	0.3	— 5 56		+ 0 21
1563	Döshult	56 08 27	5 25 12 W	12	s 81	4	— 5 17.9	4	0.3	— 5 59		+ 0 16
1565	Sofiero	56 05 13	5 24 17 W	2	s 81	5	— 5 08.5	4	0.0	— 5 49		+ 0′ 25
1566	Allerum	56 06 34	5 21 41 W	40	s 81	5	— 5 23.8	4	0.1	— 6 05		+ 0 08
1567	Fleninge	56 06 34	5 16 12 W	18	s 81	5	— 5 22.5	4	0.1	— 6 03		+ 0 07
1568	Källstorp	56 04 17	5 19 47 W	45	s 81	6	— 5 17.6	4	0.3	— 5 58		+ 0 12
1570	Råå	55 59 33	5 18 15 W	3	s 81	8	— 4 54.1	4	0.5	— 5 35		+ 0 36
1571	Örenäs	55 56 34	5 16 32 W	25	s 81	8	— 4 50.4	4	0.3	— 5 31		+ 0 39
1572	Hildesborg	55 55 02	5 14 33 W	10	s 86	8	— 4 51.1	4	0.3	— 5 32		+ 0 37

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1933.5	n	$\pm\eta$	D 1929.5	D 1933.5	1933.5 obs.-calc.
1573	Säbyholm	55° 53′ 41″	5° 13′ 31″ W	15	s 86	VII 9	— 4° 55′.9	4	0′.2	— 5° 36′		+ 0° 32′
1574	Vadensjö	55 54 22	5 09 18 W	70	s 84	9	— 4 37.9	4	0.2	— 5 18		+ 0 48
1575	Lilla Hörstad	55 52 30	5 07 26 W	20	s 86	10	— 4 43.1	4	0.2	— 5 24		+ 0 41
1576	Landskrona	55 52 16	5 13 42 W	4	s 86	10	— 4 52.5	8	0.2	— 5 33		+ 0 36
1579	Bulstofta	55 58 54	5 03 10 W	80	s 80	11	— 4 47.2	4	0.1	— 5 28		+ 0 35
1580	Billesholms Gruva	56 03 28	5 04 34 W	40	s 81	12	— 4 59.0	8	0.5	— 5 40		+ 0 23
1581	Stenestad b	56 03 15	4 57 52 W	208	g 37	12	— 5 52.8	4	0.3	— 6 33		— 0 34
1582	Kågeröd	55 59 57	4 57 48 W	60	m 73	13	— 5 07.6	4	0.2	— 5 48		+ 0 11
1584	Södervidinge	55 49 13	4 55 40 W	25	s 80	14	— 4 26.8	4	0.1	— 5 07		+ 0 51
1585	Kävlinge	55 47 37	4 56 58 W	15	s 80	15	— 4 17.1	4	0.0	— 4 57		+ 1 02
1587	Eslöv	55 49 43	4 45 47 W	55	m 82	16	— 5 02.9	4	0.0	— 5 43		+ 0 10
1588	Bosarp	55 53 25	4 44 23 W	70	s 64	16	— 5 41.5	4	0.3	— 6 21		— 0 30
1589	Stehag I	55 53 58	4 38 13 W	57	m 73	17	— 4 53.4	4	0.1	— 5 33		+ 0 15
	Stehag II	55 53 48	4 39 38 W	57	m 73	17	— 5 03.9	8	0.2	— 5 44		+ 0 05
1590	Munkarp	55 56 33	4 35 33 W	65	g 37	17	— 5 05.4	4	0.1	— 5 45		+ 0 01
1592	Nyby	55 53 54	4 32 13 W	63	s 81	19	— 4 48.2	4	0.1	— 5 28		+ 0 17
1593	Klinta b	55 51 20	4 33 38 W	70	s 64	19	— 4 34.9	4	0.3	— 5 15		+ 0 31
1594	Skarhult	55 48 23	4 41 23 W	60	s 71	20	— 4 35.6	4	0.2	— 5 15		+ 0 35
1595	Örtofta	55 47 49	4 47 43 W	36	m 73	20	— 4 26.9	4	0.5	— 5 07		+ 0 47
1596	Västra Odarslöv	55 45 05	4 48 11 W	85	m 73	20	— 4 40.4	4	0.1	— 5 20		+ 0 34
1597	Knästorp	55 40 34	4 51 10 W	20	s 86	21	— 4 34.5	4	0.2	— 5 14		+ 0 41
1598	Lund II	55 41 59	4 52 06 W	30	s 86	22	— 4 39.6	4	0.2	— 5 20		+ 0 37
1601	Barsebäcks hamn b	55 45 39	5 08 52 W	1	s 86	24	— 5 28.9	4	0.6	— 6 09		— 0 04
1602	Åkarp	55 39 19	4 55 50 W	25	s 86	24	— 4 53.7	6	1.1	— 5 34		+ 0 25
1603	Bulltofta	55 36 25	4 59 58 W	10	s 86	25	— 4 52.5	4	0.5	— 5 33		+ 0 28
1604	Bjärshög	55 35 38	4 54 16 W	23	s 86	26	— 4 42.3	4	0.1	— 5 22		+ 0 35
1605	Klågerup	55 35 54	4 47 27 W	20	s 86	26	— 4 34.2	4	0.4	— 5 14		+ 0 40
1606	Toppeladugård	55 35 47	4 41 30 W	40	s 86	26	— 4 28.3	4	0.4	— 5 08		+ 0 42
1607	S. Ugglarp	55 38 19	4 38 18 W	50	g 37	27	— 4 47.6	4	0.1	— 5 27		+ 0 21
1608	Bonderup	55 38 14	4 42 39 W	35	s 86	27	— 4 28.6	4	0.1	— 5 08		+ 0 43
1609	Dalby b	55 41 11	4 42 15 W	30	s 83	28	— 4 59.7	4	0.2	— 5 39		+ 0 11
1610	Revinge	55 42 29	4 36 55 W	23	s 64	29	— 4 27.1	4	0.5	— 5 07		+ 0 41
1612	Harlösa	55 43 21	4 31 23 W	35	s 64	30	— 5 13.6	4	0.3	— 5 53		— 0 09
1613	Våmb	55 40 20	4 30 32 W	25	s 85	30	— 4 35.0	4	0.0	— 5 14		+ 0 29
1614	Veberöd	55 37 39	4 33 26 W	39	s 84	31	— 4 14.7	4	0.3	— 4 54		+ 0 52
1615	Husagården	55 36 25	4 34 03 W	129	g 37	31	— 4 52.2	4	0.2	— 5 32		+ 0 14
1616	Bastakullen	55 34 29	4 33 12 W	188	g 37	31	— 4 47.9	4	0.1	— 5 27		+ 0 18
1620	Skönabäck	55 32 37	4 32 34 W	90	s 84	VIII 2	— 4 23.8	4	0.2	— 5 03		+ 0 42
1621	Rockarp	55 32 04	4 36 36 W	80	s 84	2	— 4 30.6	4	0.5	— 5 10		+ 0 38
1623	Kalthus	55 33 29	4 41 22 W	70	s 84	3	— 4 11.9	4	0.1	— 4 51		+ 0 59
1624	Börringe Kloster	55 30 26	4 43 36 W	60	s 84	3	— 4 07.1	4	0.1	— 4 47		+ 1 05
1625	Svedala	55 30 35	4 49 17 W	55	s 84	4	— 4 00.1	4	0.1	— 4 40		+ 1 15
1626	Yddinge	55 33 19	4 48 01 W	55	s 84	4	— 4 29.4	4	0.2	— 5 09		+ 0 45
1627	Oxie	55 32 50	4 57 38 W	35	s 84	4	— 4 33.7	4	0.2	— 5 14		+ 0 46
1628	Hyllie	55 33 41	5 06 38 W	5	s 86	5	— 4 58.3	4	0.6	— 5 38		+ 0 26
1629	Klagshamn	55 31 59	5 07 26 W	5	s 86	6	— 4 48.9	4	0.3	— 5 29		+ 0 35
1630	Västra Ingelstad	55 29 25	4 56 42 W	50	s 86	6	— 4 25.5	4	0.2	— 5 05		+ 0 54
1631	Vällinge II	55 27 38	5 03 47 W	5	s 86	7	— 4 43.7	4	0.2	— 5 24		+ 0 40
1632	Stora Hammar	55 25 42	5 04 23 W	3	s 86	7	— 4 43.4	4	0.2	— 5 23		+ 0 40
1634	Skanör I	55 24 26	5 12 11 W	2	s 86	8	— 4 47.8	4	0.1	— 5 28		+ 0 40
	Skanör II	55 26 17	5 11 31 W	2	s 86	8	— 4 34.1	4	0.2	— 5 14		+ 0 54
1635	Falsterbo	55 23 00	5 14 25 W	1	s 86	9	— 4 44.0	4	0.2	— 5 24		+ 0 46
1636	Skegrie	55 24 14	4 59 32 W	14	s 86	9	— 4 28.1	4	0.0	— 5 08		+ 0 53
1637	Västra Tommarp	55 23 32	4 57 33 W	8	s 86	10	— 4 34.7	4	0.1	— 5 14		+ 0 45
1638	Trälleborg	55 22 23	4 53 25 W	2	s 86	10	— 4 23.4	4	0.1	— 5 03		+ 0 54

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1933.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1639	Kyrkoköpinge	55° 23′ 09″	4° 52′ 20″ W	12	s 86	VIII 10	— 4° 23′.9	4	0′.1	— 5° 04′		+ 0° 53′
1640	Västra Alstad	55 27 16	4 51 10 W	55	s 86	11	— 4 04.5	4	0.2	— 4 44		+ 1 12
1641	Stävesjö	55 27 37	4 43 49 W	48	s 84	11	— 4 27.5	4	0.1	— 5 07		+ 0 45
1642	Östra Klagstorp II	55 23 44	4 40 52 W	27	s 86	13	— 4 32.4	4	0.6	— 5 12		+ 0 38
1643	Östra Torp	55 20 24	4 42 11 W	2	s 86	12	— 4 19.2	4	0.1	— 4 59		+ 0 52
1644	Espöholm	55 21 11	4 39 30 W	2	s 86	13	— 4 16.2	4	0.2	— 4 56		+ 0 54
1645	Tullstorp	55 24 50	4 35 28 W	45	s 84	13	— 4 27.2	4	0.4	— 5 06		+ 0 40
1646	Näsbyholm	55 28 37	4 37 41 W	59	s 84	13	— 4 28.2	4	0.2	— 5 08		+ 0 40
1647	Skurup	55 28 29	4 32 47 W	56	s 84	14	— 4 24.9	4	0.2	— 5 04		+ 0 41
1648	Villie	55 28 38	4 27 51 W	41	s 84	14	— 4 39.0	4	0.1	— 5 18		+ 0 24
1649	Skivarp	55 25 27	4 29 49 W	32	s 84	15	— 4 35.5	4	0.2	— 5 15		+ 0 29
1650	Nöbbelöv	55 26 08	4 26 33 W	25	s 84	15	— 4 53.8	4	0.1	— 5 33		+ 0 09
1652	Marsvinsholm	55 27 42	4 20 48 W	33	s 84	16	— 4 58.4	4	0.5	— 5 37		+ 0 01
1653	Prästhejdan	55 30 35	4 20 49 W	59	s 84	16	— 6 04.9	4	0.1	— 6 44		— 1 06
1655	Bromma	55 28 18	4 15 29 W	30	s 86	17	— 2 12.3	4	0.1	— 2 51		+ 2 44
1656	Ystad	55 25 51	4 14 28 W	2	s 86	17	— 4 34.8	4	0.0	— 5 14		+ 0 21
1657	Ystad Saltsjöbad	55 26 07	4 10 52 W	2	s 85	18	— 3 57.0	4	0.3	— 4 36		+ 0 57
1658	Stora Köpinge	55 28 09	4 06 32 W	19	s 85	18	— 5 01.6	4	0.3	— 5 40		— 0 10
1659	Henriksfält	55 28 07	3 59 52 W	39	s 64	19	— 4 50.0	4	0.6	— 5 29		— 0 03
1660	Kabusa	55 25 15	4 04 06 W	1	s 85	19	— 5 09.4	4	0.1	— 5 48		— 0 19
1661	Hedvigsdal	55 25 15	4 00 07 W	9	s 85	20	— 4 54.7	4	0.1	— 5 33		— 0 07
1662	Kåseberga, K. Sj. K. V.	55 23 10	3 59 07 W	40	s 85	20	— 5 04.2	8	0.6	— 5 43		— 0 17
1663	Hagestaborg	55 23 41	3 55 10 W	5	s 85	21	— 4 52.7	4	0.1	— 5 31		— 0 08
1664	Sandhammarens fyr	55 22 59	3 52 17 W	2	s 85	21	— 4 23.7	4	0.0	— 5 02		+ 0 20
1666	Simrishamn I	55 33 17	3 42 32 W	2	s 66	22	— 4 31.7	4	0.1	— 5 10		+ 0 06
	Simrishamn II	55 32 57	3 42 05 W	3	s 66	22	— 4 31.6	4	0.2	— 5 10		+ 0 06
	Simrishamn III	55 33 53	3 43 17 W	12	s 66	23	— 4 53.3	4	0.3	— 5 32		— 0 15
1667	Baskemölla, K. Sj. K. V.	55 35 58	3 44 56 W	1	s 64	23	— 4 52.1	8	0.8	— 5 31		— 0 13
1668	S:t Olov b	55 37 59	3 56 20 W	135	s 64	24	— 4 58.2	4	0.4	— 5 37		— 0 13
1669	Tomelilla II	55 32 52	4 05 57 W	49	s 71	25	— 4 09.4	4	0.2	— 4 48		+ 0 41
1670	Gärsnäs	55 32 42	3 52 34 W	49	s 65	25	— 4 36.0	4	0.3	— 5 15		+ 0 07
1671	Ramsåsa	55 33 36	4 09 47 W	64	s 64	25	— 4 57.6	4	0.0	— 5 37		— 0 05
1672	Baldringe	55 31 47	4 12 40 W	29	s 85	26	— 4 32.8	4	0.2	— 5 12		+ 0 22
1673	Kurremölla b	55 35 01	4 15 32 W	36	s 83	26	— 5 39.7	4	0.3	— 6 19		— 0 44
1674	Vanstadtorp	55 37 09	4 13 06 W	74	s 71	26	— 5 05.3	4	0.1	— 5 44		— 0 11
1675	Snogeholm	55 33 31	4 20 42 W	43	s 84	27	— 4 52.6	4	0.2	— 5 32		+ 0 06
1676	Sjöbo	55 38 20	4 20 52 W	39	s 85	27	— 5 25.0	4	0.2	— 6 04		— 0 26
1677	Bjärsjölagård	55 43 35	4 21 32 W	114	s 64	28	— 5 08.2	4	0.3	— 5 48		— 0 09
1678	Östra Kärrstorp	55 42 56	4 19 46 W	101	s 64	28	— 5 27.5	4	0.1	— 6 07		— 0 29
1679	Skallebacken	55 40 17	4 21 32 W	71	s 64	29	— 6 55.0	4	0.1	— 7 34		— 1 56
1680	Vollsjö	55 42 00	4 16 25 W	83	s 64	30	— 5 14.0	4	0.5	— 5 53		— 0 18
1681	Andrarum	55 42 40	4 05 25 W	100	s 64	30	— 5 10.2	4	0.3	— 5 49		— 0 20
1682	Brösarp	55 44 00	3 55 56 W	45	g 37	31	— 4 10.3	4	0.2	— 4 49		+ 0 35
1683	Hörröd b	55 46 39	4 00 37 W	122	g 37	31	— 4 45.1	4	0.1	— 5 24		+ 0 02
1685	Ö. Vedåkra	55 47 44	4 22 43 W	124	s 64	IX 2	— 5 20.5	4	0.1	— 6 00		— 0 21
1686	Hörby	55 51 25	4 23 41 W	80	s 81	2	— 5 17.4	4	0.2	— 5 57		— 0 17
1687	Sösdala	56 01 40	4 22 14 W	100	g 37	3	— 4 57.4	4	0.2	— 5 37		+ 0 02
1688	Nävlinge	56 03 50	4 13 28 W	100	g 37	3	— 4 22.0	4	0.2	— 5 02		+ 0 32
1689	Tollarp	55 56 11	4 04 20 W	45	m 87	3	— 4 11.0	4	0.4	— 4 50		+ 0 38
1690	Everöd II	55 54 12	3 57 49 W	25	s 85	4	— 4 01.0	4	0.3	— 4 40		+ 0 45
1691	Åhus	55 55 38	3 45 28 W	5	s 85	4	— 3 22.0	4	0.3	— 4 01		+ 1 17
1692	Kristianstad I	56 01 45	3 54 14 W	1	s 85	5	— 3 39.2	4	0.1	— 4 18		+ 1 04
	Kristianstad II	56 01 26	3 53 26 W	1	s 85	6	— 3 50.9	4	0.2	— 4 30		+ 0 52
1693	Kviinge	56 09 31	3 57 29 W	12	s 85	6	— 3 36.9	4	0.2	— 4 16		+ 1 08
1694	Glimåkra b	56 18 19	3 54 55 W	20	g 37	7	— 4 14.4	4	0.2	— 4 54		+ 0 29

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1933.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1695	Immeln	56° 12′ 31″	3° 48′ 23″ W	27	g 37	IX 7	— 2° 36′.3	4	0′.1	— 3° 15′		+ 2° 04′
1696	Jämshög	56 14 26	3 31 16 W	20	g 37	8	— 4 21.9	4	0.0	— 5 01		+ 0 08
1697	Sölvesborg	56 02 31	3 28 55 W	2	s 85	8	— 2 18.5	4	0.2	— 2 57		+ 2 11
1698	Mörrum Södra	56 10 36	3 20 18 W	5	g 38	9	— 3 06.2	8	0.5	— 3 45		+ 1 18
1699	Mörrum Norra	56 11 06	3 19 24 W	5	g 38	9	— 2 34.7	4	0.2	— 3 13		+ 1 49
1701	Bredåkra	56 14 53	2 48 22 W	10	g 8	10	— 0 47.0	4	0.2	— 1 25		+ 3 19
1702	Ronneby Brunn I	56 11 50	2 45 57 W	8	g 8	11	— 5 01.6	4	0.2	— 5 39		— 0 57
	Ronneby Brunn III	56 11 50	2 45 57 W	8	g 8	11	— 3 54.1	4	0.4	— 4 32		+ 0 11
1703	Torskors	56 13 13	2 25 28 W	25	g 4	12	— 3 54.5	4	0.1	— 4 32		— 0 01
1704	Karlskrona II	56 10 24	2 27 21 W	2	g 37	12	— 3 48.9	4	0.1	— 4 27		+ 0 06
1705	Sandhamn	56 05 41	2 11 35 W	2	g 37	13	— 2 30.0	4	0.4	— 3 07		+ 1 16
1707	Orranäs	56 11 32	2 06 28 W	9	s 65	15	— 3 40.7	4	0.2	— 4 18		+ 0 02
1708	Kristianopel	56 15 30	2 01 06 W	4	s 65	15	— 3 13.4	4	0.1	— 3 50		+ 0 26
1709	Gullabo	56 27 53	2 14 47 W	100	d 30	15	— 3 41.7	4	0.1	— 4 19		+ 0 05
1710	Håcksvik b	57 18 58	4 54 29 W	140	g 37	16	— 2 59.5	4	0.4	— 3 41		+ 2 15
1711	Sätila	57 32 20	5 38 20 W	20	g 37	19	— 5 46.1	4	0.1	— 6 29		— 0 08

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1713	Ljusås	65 58 44	3 33′ 00 E	50	m 55	V 23	+ 0 21.2	2	0.3	— 0 19		+ 0 35
1714	Sandträsk	66 07 17	3 16 23 E	160	g 4	23	— 2 13.3	2	0.4	— 2 54		— 1 50
1715	Lakaträsk	66 16 20	3 05 08 E	160	g 4	24	+ 2 10.8	2	0.2	+ 1 30		+ 2 40
1716	Vuoddas	66 24 43	3 42 37 E	207	g 1	24	+ 0 13.0	2	0.3	— 0 28		+ 0 21
1717	Pålkem	66 22 54	3 34 00 E	260	m 51	25	— 0 26.1	2	0.5	— 1 07		— 0 14
1718	Mårdsel	66 18 04	3 19 47 E	150	st 57	25	— 2 03.3	2	0.6	— 2 44		— 1 43
1719	Näsberg	66 22 00	2 57 46 E	250	g 4	26	+ 0 19.8	2	0.3	— 0 22		+ 0 53
1720	Polcirkeln	66 33 08	2 57 49 E	300	g 4	26	+ 0 52.3	2	0.0	+ 0 11		+ 1 25
1721	Koskivaara	66 38 33	2 56 39 E	310	g 4	27	+ 1 25.0	2	0.4	+ 0 43		+ 1 58
1722	Kilvo	66 49 18	2 50 37 E	350	g 18	27	— 2 34.6	2	0.1	— 3 17		— 1 59
1723	Nuortikon	66 52 36	2 46 06 E	375	g 18	28	+ 0 57.0	2	0.1	+ 0 15		+ 1 35
1724	Ripats	66 57 38	2 41 00 E	400	g 18	29	+ 0 21.7	2	1.0	— 0 21		+ 1 03
1725	Björnefjäll, Norway	68 26 17	0 02 28 W	460	g 1	VI 2	— 0 21.9	2	0.9	— 1 09		+ 1 47
1726	Narvik, Norway	68 26 42	0 37 00 W	70	f 76	3	+ 2 01.5	2	0.2	+ 1 14		+ 4 30
1727	Lödingen, Norway	68 24 46	2 03 12 W	50	g 1	6	— 5 07.2	2	0.2	— 5 57		— 1 51
1728	Svolvær, Norway b	68 13 36	3 28 40 W	5	g 1	7	— 6 14.3	2	0.4	— 7 06		— 2 10
1729	Bodö, Norway	67 16 42	3 41 07 W	10	g 1	8	— 4 35.3	2	1.0	— 5 26		— 0 22
1730	Mjönes, Norway	67 19 12	3 02 35 W	15	g 1	9	— 3 36.9	1		— 4 27		+ 0 15
1731	Finneid, Norway	67 15 19	2 37 26 W	9	f 76	9	— 3 08.7	2	0.2	— 3 58		+ 0 29
1734	Rognan, Norway	67 06 00	2 39 15 W	20	f 79	11	— 3 23.9	2	0.3	— 4 13		+ 0 15
1735	Rösvik, Norway	67 28 52	2 35 46 W	4	f 76	12	— 3 46.9	2	0.1	— 4 36		— 0 10
1737	Sörfjordskaret, Norway	67 34 34	2 10 14 W	5	f 76	12	— 3 22.6	2	0.1	— 4 12		0 00
1738	Kjerringöy, Norway b	67 31 08	3 17 30 W	10	f 76	13	— 4 02.9	2	0.2	— 4 53		— 0 03
1739	Grötö, Norway	67 50 15	3 17 13 W	5	g 1	14	— 4 17.7	2	1.3	— 5 08		— 0 19
1741	Kjerrvik, A, Norway b	68 01 47	1 43 48 W	1	f 76	15, 16	— 3 31.8	3	1.7	— 4 21		— 0 25
1742	Grunnfjordbotn, B, Norway	67 55 04	1 35 11 W	3	g 1	16	— 2 09.1	2	0.6	— 2 58		+ 0 53
1743	Hellemobotn, A, Norway	67 48 55	1 32 10 W	2	g 1	17	— 2 59.6	2	0.1	— 3 48		+ 0 01
1745	Mannfjord, Norway	67 58 35	1 31 48 W	3	g 1	17	— 3 10.5	2	0.1	— 3 59		— 0 11
1746	Hullöyhamn, Norway b	68 03 47	1 43 44 W	5	f 76	18	— 5 30.0	1		— 6 19		— 2 24
1747	Tjelbotn, Norway b	68 24 28	1 22 25 W	20	f 76	19	— 3 25.9	2	0.1	— 4 15		— 0 32
1748	Hundalen, Norway ○	68 24 00	0 05 10 W	365	g 1	20	— 0 24.3	2	0.4	— 1 12		+ 1 47
1749	Elvegård, Norway	68 15 30	0 38 17 W	40	g 1	21	— 2 29.6	2	0.1	— 3 17		0 00
1750	Bokholmen, Norway	68 10 41	0 30 07 W	70	g 1	21	— 1 49.6	2	0.1	— 2 37		+ 0 36
1751	Sautusjärvi	67 53 11	2 42 42 E	330	d 29	25	— 2 19.8	2	1.1	— 3 03		— 1 42
1752	Vittangi älv	67 56 09	2 47 33 E	310	d 29	26	— 1 07.3	2	0.1	— 1 51		— 0 32

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1933.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1754	Sekkujoki I	67° 58′ 08″	3° 03′ 19 E	330	d 29	VI 27	— 1° 50.′4	2	0′.0	— 2° 33′		— 1° 24′
1756	Nalmoinen	68 01 43	3 18 28 E	400	d 29	29	— 2 07.1	2	1.3	— 2 50		— 1 49
1758	Vittangi, K. Sj. K. V.	67 42 06	3 34 48 E	275	d 30	VII 1	— 5 42.2	2	0.9	— 6 24		— 5 33
1759	Karesuando, K. Sj. K. V.	68 21 00	4 08 30 E	400	g 4	1	— 1 55.2	2	0.0	— 2 37		— 2 06
1761	Lainio älv II	68 09 36	3 34 21 E	380	g 4	3	— 1 09.9	1		— 1 53		— 1 01
1763	Lainio älv IV	68 16 48	3 23 14 E	420	g 4	4	— 1 44.5	2	0.4	— 2 27		— 1 30
1765	Pulsujoki II	68 22 36	3 11 48 E	520	g 18	4	+ 0 11.7	2	1.1	— 0 32		+ 0 33
1766	Pulsujoki III	68 23 15	3 06 33 E	520	g 18	5	— 0 50.0	2	0.2	— 1 33		— 0 26
1770	Lainio älv VII	68 22 06	3 30 35 E	436	g 18	7	— 1 05.9	2	0.0	— 1 49		— 0 56
1772	Lainio älv IX	68 28 23	3 25 00 E	470	g 1	8	— 0 36.6	2	0.5	— 1 20		— 0 23
1774	Lainio älv XI	68 32 43	2 59 41 E	530	g 1	9	— 1 25.4	2	0.3	— 2 09		— 0 58
1776	Taava eno II	68 30 49	2 45 27 E	545	g 1	10	— 0 33.2	2	0.8	— 0 11		+ 1 08
1778	Taava eno IV	68 32 40	2 26 00 E	570	g 1	11	— 1 46.3	2	0.2	— 2 31		— 1 00
1780	Rosto eno II	68 41 42	2 47 12 E	650	g 1	14	— 0 30.3	2	0.1	— 1 14		+ 0 04
1782	Ala Termäsvaara	68 49 28	2 42 00 E	900	g 1	15	+ 0 10.5	2	0.3	— 0 34		+ 0 47
1784	Kilpisjärvi, Finland ⊗	69 00 25	2 51 51 E	480	g 1	16	— 1 15.5	2	0.5	— 2 00		— 0 45
1785	Koltolahti	69 02 54	2 34 23 E	480	f 76	17	— 1 15.8	2	0.1	— 2 01		— 0 35
1789	Kummajärvi	68 55 50	2 20 42 E	600	g 1	19	— 0 16.2	2	0.1	— 1 01		+ 0 32
1791	Kummajoki II	68 52 30	2 27 30 E	690	g 1	19	— 1 24.2	2	0.3	— 2 09		— 0 40
1793	Kummavuopio	68 54 13	2 49 42 E	463	g 1	22	— 1 23.3	2	0.2	— 2 08		— 0 51
1794	Purravaara	68 58 50	2 41 23 E	800	f 76	21	— 1 39.0	2	0.1	— 2 24		— 1 02
1795	Keinovuopio	68 52 50	2 59 15 E	460	g 1	22	— 0 36.7	2	0.0	— 1 21		— 0 10
1796	Vittanki, Finland ⊗	68 48 18	3 12 30 E	446	g 1	23	— 2 32.2	2	0.4	— 3 16		— 2 13
1797	Iito, Finland	68 43 54	3 22 16 E	410	g 1	24	— 0 53.6	2	0.5	— 1 37		— 0 39
1798	Naimakka, Finland ⊗	68 40 42	3 28 14 E	407	g 1	24	— 0 20.2	2	0.4	— 1 03		— 0 09
1800	Kelottijärvi, Finland	68 32 27	3 56 11 E	372	g 1	25	+ 1 08.4	2	0.9	+ 0 26		+ 1 04
1801	Maunu	68 28 36	4 09 14 E	335	f 76	26	+ 0 22.0	2	0.5	— 0 20		+ 0 11
1802	Jatuni, Finland ⊗	68 26 09	4 34 59 E	325	g 9	27	+ 1 06.9	2	0.7	+ 0 25		+ 0 41
1806	Suijajärvi	68 12 21	4 42 26 E	355	g 1	VIII 3	+ 3 57.4	3	0.1	+ 3 16		+ 3 28
1808	Kätkesuando, Finland	68 06 43	5 17 59 E	260	g 18	VII 31	+ 0 19.0	2	0.2	— 0 21		— 0 30
1809	Muonio, Finland ⊗	67 56 37	5 37 54 E	260	g 18	VIII 1	+ 1 14.2	2	0.1	+ 0 34		+ 0 14
1810	Palojuensuu, Finland	68 17 20	5 01 22 E	290	g 1	2	+ 4 18.3	2	0.1	+ 3 37		+ 3 38
1814	Palanenlaki	68 05 29	4 34 07 E	440	g 18	4	+ 4 06.1	2	0.1	+ 3 25		+ 3 42
1816	Viikusjärvi	67 59 08	4 18 50 E	380	g 18	5, 6	+ 3 45.8	3	10.2	+ 3 04		+ 3 30
1817	Nunasvaara	68 02 34	4 08 24 E	440	s 60	6	+ 1 01.8	2	0.4	+ 0 20		+ 0 52
1818	Rasikajokk I	68 05 42	3 21 20 E	500	g 4	10	+ 0 28.4	2	0.2	— 0 14		+ 0 45
1820	Åggojokk	68 10 41	3 05 22 E	583	g 4	11	— 1 35.4	2	0.0	— 2 19		— 1 11
1821	Kirkeåive	68 15 11	2 57 16 E	650	g 4	12	— 9 16.1	2	0.0	—10 00		— 8 47
1823	Pirtimusvuoma II	68 21 48	2 44 00 E	660	g 4	13	— 1 07.3	2	0.6	— 1 51		— 0 31
1827	Kiepamajärvi	68 30 00	2 12 25 E	650	g 18	15	— 2 21.4	2	0.4	— 3 06		— 1 28
1829	Vuoskojärvi	68 22 30	2 00 25 E	505	g 4	16	— 5 31.8	2	0.3	— 6 17		— 4 31
1830	Kattovuoma	68 17 17	1 50 42 E	352	g 4	17	+ 4 22.0	2	0.3	+ 3 37		+ 5 29
1832	Salmis	68 12 54	2 09 37 E	360	g 4	19	— 1 37.2	2	0.1	— 2 22		— 0 41
1834	Raggisvaara II	68 09 39	2 22 12 E	520	g 4	20	— 0 15.5	2	0.4	— 1 00		+ 0 34
1835	Vittangijärvi	68 05 34	2 36 37 E	445	d 29	21	— 4 20.0	2	0.0	— 5 04		— 3 39
1836	Sevuvuoma	68 00 46	2 33 27 E	346	g 4	22	— 1 17.1	2	0.3	— 2 01		— 0 34
1837	Tahkojärvi	68 03 17	2 48 24 E	428	d 29	23	— 0 24.5	2	0.2	— 1 08		+ 0 10
1838	Sekkujärvi	68 06 07	2 58 48 E	430	d 29	24	— 1 35.3	2	1.3	— 2 19		— 1 07
1840	Kurravaara	67 56 38	2 18 22 E	330	d 29	27	— 1 20.0	2	0.3	— 2 04		— 0 29
1841	Pålnoviken	68 28 30	0 32 44 E	345	s 64	30	— 0 05.0	2	0.5	— 0 52		+ 1 45
1842	Jebrenjokk	68 25 39	0 49 26 E	345	f 76	IX 1	— 1 14.9	2	0.1	— 2 01		+ 0 26
1843	Ortojokk	68 22 48	1 05 42 E	343	g 22	1	— 2 40.7	2	0.7	— 3 27		— 1 09
1844	Tuoptijokk	68 20 28	1 20 27 E	345	g 9	2	— 0 59.6	2	0.0	— 1 45		+ 0 24
1845	Laimolahti	68 18 36	1 35 12 E	345	g 9	2	— 1 56.5	2	0.5	— 2 42		— 0 42
1846	Bredsel, K. Sj. K. V.	65 51 18	2 23 12 E	100	g 1	5	+ 0 03.0	2	0.1	— 0 39		+ 0 56

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1933.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1847	Arvidsjaur, K. Sj. K. V.	65° 34′ 35″	1° 09′ 54 E	375	g 4	IX 7, 8	— 1° 39′.2	3	0.4′	— 2° 22′		— 0° 05′
1848	Arjeploug, K. Sj. K. V.	66 02 00	0 00 54 E	500	g 4	9, 10, 11	— 3 18.3	8	0.5	— 4 03		— 1 06
1849	Häika	66 28 00	0 07 26 W	440	f 75	12	— 5 42.5	2	0.2	— 6 28		— 3 27
1850	Tjeggelvas	66 36 33	0 25 00 W	455	f 74	13	— 1 52.5	2	0.3	— 2 38		+ 0 33
1851	Parkajokk	66 46 48	0 24 33 W	700	s 64	15	— 2 15.2	2	0.1	— 3 01		+ 0 10
1853	Karats, Lillselet	66 44 50	0 11 41 E	420	g 4	16	— 1 05.2	2	0.5	— 1 50		+ 1 00
1854	Järvas	66 41 49	0 29 44 E	420	g 4	18	— 2 49.3	2	2.4	— 3 35		— 0 54
1857	Arvliden	66 25 05	0 27 26 E	430	g 4	20	— 1 47.5	2	0.7	— 2 32		+ 0 09
1858	Mårsum	66 18 42	0 35 51 E	430	g 4	21	— 1 51.3	2	0.0	— 2 36		+ 0 01
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1864	Mariefred b	59 15 46	0 50 33 W	20	g 38	IV 10	— 2 29.1	4	0.3	— 3 18	— 2 39	+ 0 15
1865	Dunker	59 09 47	1 09 50 W	90	m 47	10	— 2 10.5	4	0.4	— 3 00	— 2 20	+ 0 45
1867	Fjällskäfte	59 06 56	1 40 20 W	60	m 44	11	— 3 33.2	4	0.5	— 4 23	— 3 43	— 0 21
1868	Vingåker	59 02 45	2 11 00 W	36	g 37	11	— 3 36.2	4	0.1	— 4 27	— 3 46	— 0 07
1869	Hällestad b	58 43 18	2 28 48 W	60	g 14	12	— 3 32.1	4	0.3	— 4 23	— 3 42	+ 0 08
1870	Malfors b	58 31 11	2 32 10 W	70	m 72	12	— 3 04.8	4	0.4	— 3 55	— 3 15	+ 0 38
1871	Motala	58 32 23	3 00 42 W	120	m 72	13	— 3 30.0	4	0.3	— 4 21	— 3 40	+ 0 28
1872	Vadstena	58 26 56	3 10 14 W	90	s 64	13	— 3 32.6	4	0.2	— 4 24	— 3 43	+ 0 31
1873	Ödeshög b	58 14 35	3 23 42 W	140	g 14	13	— 4 46.2	4	0.3	— 5 37	— 4 56	— 0 35
1874	Gränna, K. Sj. K. V.	58 00 12	3 35 36 W	165	s 63	14	— 1 57.3	4	0.9	— 2 49	— 2 08	+ 2 22
1875	Hok	57 30 51	3 46 39 W	190	g 37	16	— 2 01.6	4	0.2	— 2 52	— 2 12	+ 2 25
1876	Sävsjö	57 24 05	3 23 18 W	218	L 33	16	— 3 46.4	4	0.5	— 4 37	— 3 57	+ 0 27
1877	Ramkvilla b	57 12 44	3 07 32 W	195	g 14	17	— 3 23.2	4	0.2	— 4 13	— 3 33	+ 0 42
1878	Söraby	57 00 58	3 11 01 W	182	g 14	17	— 3 37.2	4	0.2	— 4 27	— 3 47	+ 0 30
1880	Gämla, K. Sj. K. V.	56 53 12	3 23 36 W	155	g 14	18	— 3 33.0	4	0.5	— 4 23	— 3 43	+ 0 42
1881	Vislanda	56 47 12	3 35 42 W	154	g 37	18	— 3 30.7	2	0.3	— 4 20	— 3 41	+ 0 51
1882	Jät	56 41 05	3 13 20 W	140	g 14	19	— 2 23.0	3	0.2	— 3 12	— 2 33	+ 1 46
1883	Tingsryd	56 31 08	3 03 43 W	133	g 14	19	— 3 03.0	4	0.4	— 3 52	— 3 13	+ 1 01
1885	Hunnamåla	56 23 22	3 01 24 W	77	g 8	20	— 3 09.3	4	0.4	— 3 58	— 3 19	+ 0 54
1887	Kroksjön b	56 16 40	3 02 43 W	40	g 8	20	— 2 59.5	4	0.1	— 3 48	— 3 09	+ 1 05
1888	Möljeryd	56 19 18	2 46 07 W	70	g 8	21	— 5 57.6	4	0.4	— 6 46	— 6 07	— 2 03
1889	Eringsboda	56 26 15	2 42 00 W	117	g 8	21	— 2 48.8	4	0.2	— 3 37	— 2 59	+ 1 04
1890	Holmsjö	56 25 21	2 30 35 W	95	m 17	22	— 4 45.3	4	0.2	— 5 33	— 4 55	— 0 59
1891	Spjutsbygd	56 18 42	2 27 44 W	80	g 14	22	— 4 04.2	4	0.2	— 4 52	— 4 14	— 0 20
1894	Vissefjärda	56 32 00	2 26 18 W	123	g 15	23	— 3 29.3	4	0.8	— 4 17	— 3 39	+ 0 14
1895	Emmaboda	56 37 40	2 30 47 W	120	m 16	24	— 4 08.8	2	0.1	— 4 57	— 4 19	— 0 23
1896	Lessebo	56 45 05	2 47 37 W	150	m 17	24	— 3 25.9	4	0.0	— 4 17	— 3 36	+ 0 29
1897	Åryd A	56 49 48	3 04 26 W	165	g 14	25	— 3 52.1	4	0.2	— 4 41	— 4 02	+ 0 12
1898	Torne	56 41 36	3 26 47 W	141	g 14	25	— 3 16.1	2	0.1	— 4 06	— 3 26	+ 1 01
1899	Ålshult	56 32 08	3 22 38 W	141	L 33	26	— 5 00.3	4	0.2	— 5 49	— 5 10	— 0 45
1900	Hemsjö	56 19 30	3 21 19 W	80	g 37	26	— 3 38.3	4	0.5	— 4 27	— 3 48	+ 0 36
1901	Gäddviksås	56 23 21	3 12 13 W	115	g 14	27	— 2 43.5	3	0.3	— 3 32	— 2 53	+ 1 26
1902	Vilshult	56 21 01	3 34 30 W	90	g 37	27	— 3 14.1	4	2.0	— 4 03	— 3 24	+ 1 08
1903	Örkene	56 23 49	3 44 00 W	130	g 37	27	— 3 43.9	4	0.3	— 4 33	— 3 54	+ 0 43
1904	Granefors	56 12 34	3 10 14 W	32	m 12	28	— 3 56.6	4	0.2	— 4 45	— 4 07	+ 0 12
1905	Bräkne-Hoby	56 13 22	2 55 51 W	27	g 8	28	— 3 23.4	4	0.2	— 4 12	— 3 33	+ 0 37
1906	Lyckeby	56 11 46	2 23 44 W	20	g 40	29	— 2 28.3	2	0.1	— 3 16	— 2 38	+ 1 14
1907	Jämjö	56 11 26	2 14 16 W	35	g 40	29	— 3 45.7	4	0.2	— 4 33	— 3 55	— 0 08
1908	Brömsebro	56 18 23	2 02 43 W	10	s 66	29	— 3 30.2	4	0.5	— 4 17	— 3 40	+ 0 01
1909	Bergkvara	56 23 56	1 59 51 W	15	s 66	30	— 2 58.7	4	0.2	— 3 46	— 3 08	+ 0 30
1910	Fjärdsjömåla	56 20 25	2 18 53 W	90	g 14	30	— 3 19.2	4	0.4	— 4 07	— 3 29	+ 0 21
1911	Påryd	56 34 28	2 07 00 W	72	g 14	30	— 3 38.1	4	0.2	— 4 26	— 3 48	— 0 05
1912	Ekenäs	56 30 39	1 52 40 W	1	s 66	V 1	— 2 37.4	4	0.1	— 3 24	— 2 47	+ 0 48

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1934.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1913	Värnanäs	56° 29′ 49″	1° 54′ 27″ W	8	s 66	V 1	— 2° 40′.8	4	0′.1	— 3° 28′	— 2° 51′	+ 0° 45′
1914	Kalmar	56 39 34	1 41 30 W	3	s 66	2	— 2 09.3	6	1.1	— 2 56	— 2 19	+ 1 09
1915	Trekanten	56 42 00	1 56 30 W	35	g 14	2	— 3 21.0	4	0.2	— 4 08	— 3 31	+ 0 06
1916	Nybro	56 44 54	2 09 03 W	82	g 14	2	— 3 06.4	4	0.1	— 3 54	— 3 16	+ 0 27
1917	Orrefors	56 50 02	2 18 30 W	135	m 17	3	— 3 36.0	4	0.3	— 4 24	— 3 46	+ 0 03
1918	Målerås	56 54 50	2 28 57 W	204	L 33	3	— 3 22.6	4	0.4	— 4 11	— 3 33	+ 0 22
1919	Sävsjöström	57 00 13	2 38 46 W	240	L 33	3	— 3 09.7	4	0.7	— 3 58	— 3 20	+ 0 40
1920	Åsheda	57 11 09	2 42 47 W	255	g 14	4	— 1 31.2	4	0.5	— 2 20	— 1 41	+ 2 20
1921	Fagerhult	57 09 06	2 22 57 W	193	m 16	4	— 1 51.6	4	0.2	— 2 40	— 2 02	+ 1 49
1922	Kråksmåla b	57 01 33	2 10 40 W	129	g 14	5	— 3 00.6	4	0.6	— 3 49	— 3 10	+ 0 33
1923	Bäckebo	56 54 16	2 00 40 W	81	g 14	5	— 2 40.8	4	0.1	— 3 28	— 2 51	+ 0 48
1924	Pataholm	56 55 07	1 37 30 W	4	s 66	5	— 2 05.2	4	0.3	— 2 52	— 2 15	+ 1 10
1925	Mönsterås	57 02 37	1 36 24 W	2	m 17	6	— 2 15.2	4	0.5	— 3 02	— 2 25	+ 1 00
1926	Ruda	57 06 22	1 54 41 W	75	g 14	6	— 3 29.2	4	0.0	— 4 17	— 3 39	— 0 05
1927	Tveta b	56 39 31	1 29 30 W	39	s 64	7	— 3 06.8	4	0.4	— 3 53	— 3 16	+ 0 05
1928	Norra Möckleby	56 38 53	1 23 00 W	15	s 64	7	— 2 36.0	4	0.3	— 3 22	— 2 46	+ 0 32
1929	Gårdby	56 36 36	1 24 32 W	14	s 64	8	— 3 11.2	4	0.6	— 3 58	— 3 21	— 0 02
1930	Ekelunda	56 34 23	1 28 30 W	15	s 64	8	— 3 37.4	4	0.0	— 4 24	— 3 47	— 0 26
1931	Gösslunda b	56 29 16	1 31 22 W	14	s 64	8	— 3 21.1	4	0.3	— 4 08	— 3 31	— 0 08
1932	Solberga b	56 20 34	1 33 48 W	14	s 64	9	— 3 44.2	4	0.2	— 4 31	— 3 54	— 0 30
1933	Grönhögen	56 16 05	1 38 56 W	10	s 64	9	— 3 27.5	4	0.4	— 4 14	— 3 37	— 0 10
1934	Smedby	56 24 28	1 37 11 W	40	s 64	9	— 3 43.7	4	0.1	— 4 30	— 3 53	— 0 27
1935	Mörbylånga	56 31 43	1 40 50 W	1	s 64	10	— 3 32.9	4	0.3	— 4 20	— 3 43	— 0 15
1936	Gillsättra b	56 42 52	1 27 27 W	34	s 64	10	— 1 36.6	4	0.4	— 2 23	— 1 46	+ 1 34
1937	Ölands Bäck E b	56 40 50	1 22 27 W	39	s 64	10	— 1 50.8	4	0.5	— 2 37	— 2 00	+ 1 17
1938	Ölands Bäck W	56 40 48	1 23 02 W	21	s 64	11	— 1 50.4	4	0.7	— 2 37	— 2 00	+ 1 18
1939	Gärdslösa b	56 47 03	1 21 55 W	23	s 64	11	— 4 19.2	4	0.4	— 5 06	— 4 29	— 1 12
1940	Ölands Lindby b	56 49 27	1 21 49 W	18	s 64	11	— 3 08.4	4	0.2	— 3 55	— 3 18	— 0 01
1941	Löt	56 55 17	1 14 00 W	15	s 64	12	— 2 57.3	4	0.7	— 3 44	— 3 07	+ 0 05
1942	Föra	57 01 17	1 11 29 W	8	s 64	12	— 3 39.5	4	0.2	— 4 26	— 3 49	— 0 39
1943	Sandvik I	57 04 05	1 12 02 W	5	s 64	12	— 3 57.8	4	0.1	— 4 45	— 4 07	— 0 57
1944	Sandvik II	57 03 54	1 12 34 W	7	s 64	13	— 3 44.2	4	0.2	— 4 31	— 3 54	— 0 43
1945	Källaberg	57 07 25	1 06 26 W	6	s 64	13	— 5 14.1	4	0.3	— 6 01	— 5 24	— 2 16
1946	Alvedsjöbodar I	57 10 12	1 08 00 W	5	s 64	13	— 5 36.4	4	0.1	— 6 23	— 5 46	— 2 38
	Alvedsjöbodar II	57 10 08	1 08 00 W	1	s 64	14	— 5 36.7	4	0.4	— 6 23	— 5 46	— 2 38
1947	Vedborn	57 12 50	1 03 11 W	10	s 64	14	— 0 45.0	2	0.0	— 1 32	— 0 55	+ 2 11
1948	Böda	57 18 40	1 02 45 W	15	s 64	14	— 3 50.2	4	0.2	— 4 37	— 4 00	— 0 55
1949	Borgholm I	56 53 07	1 24 11 W	1	s 64	15	— 2 18.3	4	0.3	— 3 05	— 2 28	+ 0 50
	Borgholm II	56 52 20	1 24 27 W	44	s 64	15	— 2 09.8	4	0.2	— 2 57	— 2 19	+ 0 58
1950	Kristvalla	56 49 42	1 59 13 W	72	L 33	16	— 2 47.3	4	0.3	— 3 35	— 2 57	+ 0 41
1951	Ryssby	56 47 44	1 41 34 W	10	s 64	16	— 1 46.8	4	0.1	— 2 34	— 1 57	+ 1 31
1952	Påskallavik	57 10 16	1 37 37 W	15	m 17	16	— 2 44.2	4	1.0	— 3 32	— 2 54	+ 0 31
1953	Oskarshamn	57 15 20	1 34 38 W	15	m 17	17	— 0 56.0	4	0.4	— 1 43	— 1 06	+ 2 17
1954	Bohult	57 13 45	1 53 47 W	68	L 33	17	— 2 42.9	4	0.4	— 3 31	— 2 53	+ 0 41
1955	Mörlunda	57 19 25	2 11 08 W	90	d 27	18	— 2 38.9	2	0.4	— 3 27	— 2 49	+ 0 54
1956	Målilla	57 23 11	2 17 24 W	91	g 14	18	— 1 25.9	4	0.4	— 2 15	— 1 36	+ 2 11
1957	Tälläng	57 23 59	2 37 46 W	135	g 37	18	— 2 58.8	4	0.8	— 3 48	— 3 09	+ 0 49
1958	Vetlanda	57 25 46	2 58 06 W	183	L 33	19	— 2 48.4	4	0.6	— 3 38	— 2 58	+ 1 11
1959	Korsberga	57 19 23	2 56 07 W	210	g 14	19	— 2 36.7	4	0.2	— 3 26	— 2 47	+ 1 22
1960	Lannaskede Brunn	57 22 41	3 11 36 W	226	g 14	20	— 3 18.9	4	0.2	— 4 09	— 3 29	+ 0 48
1961	Eksjö	57 39 09	3 04 27 W	200	g 14	20	— 2 03.0	4	0.3	— 2 53	— 2 13	+ 1 59
1962	Assjön I	57 48 18	3 05 17 W	253	g 14	21	— 1 38.9	4	0.1	— 2 29	— 1 49	+ 2 24
	Assjön II	57 48 33	3 06 42 W	255	g 14	21	— 2 29.7	4	0.5	— 3 20	— 2 40	+ 1 33
1964	Aneby	57 50 21	3 14 18 W	210	g 14	22	— 2 14.3	4	0.4	— 3 05	— 2 24	+ 1 53
1965	Ralången	57 51 05	3 13 19 W	170	L 33	22	— 2 03.8	4	0.3	— 2 54	— 2 14	+ 2 03

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1934.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
1966	Järsnäs	57° 46′ 36″	3° 29′ 54″ W	260	g 14	V 22	— 3° 30′.2	4	0′.3	— 4° 21′	— 3° 40′	+ 0° 46′
1967	Huskvarna	57 46 09	3 46 40 W	95	g 3	24	— 2 51.3	4	0.5	— 3 42	— 3 01	+ 1 34
1968	Tenhult	57 42 36	3 43 09 W	250	g 14	24	— 2 57.0	4	0.7	— 3 48	— 3 07	+ 1 27
1969	Forserum b	57 42 32	3 36 03 W	265	L 49	24	— 3 55.3	4	0.3	— 4 46	— 4 06	+ 0 24
1970	Nässjö	57 39 38	3 21 10 W	300	m 62	25	— 3 32.5	4	0.0	— 4 23	— 3 43	+ 0 39
1971	Mosseryd	57 55 15	3 22 56 W	240	g 14	25	— 2 28.9	2	0.1	— 3 20	— 2 39	+ 1 43
1972	Viredaholm	57 54 49	3 24 45 W	230	L 33	25	— 2 50.3	4	0.3	— 3 41	— 3 01	+ 1 23
1973	Språxmålen	57 55 57	3 24 57 W	290	g 15	26	— 2 25.5	2	0.1	— 3 16	— 2 36	+ 1 48
1974	Björkenäs	57 57 18	3 27 54 W	230	m 17	26	— 2 15.8	2	0.1	— 3 07	— 2 26	+ 1 59
1975	Brandstorp	58 05 33	3 51 20 W	160	g 14	27	— 3 47.0	4	0.5	— 4 39	— 3 57	+ 0 41
1976	Lunnebacken	58 08 46	3 50 28 W	130	s 63	27	— 3 46.3	4	0.5	— 4 38	— 3 57	+ 0 40
1977	Vrångebäck	58 13 31	3 47 44 W	110	s 63	28	— 4 10.2	4	0.2	— 5 02	— 4 21	+ 0 16
1978	Hjo	58 17 19	3 46 53 W	115	s 63	28	— 4 15.2	4	0.3	— 5 07	— 4 26	+ 0 09
1979	Grevbäck	58 21 03	3 43 32 W	130	s 63	28	— 4 22.8	4	0.3	— 5 15	— 4 33	— 0 01
1980	Bredvik	58 26 00	3 38 55 W	100	s 63	29	— 4 25.9	4	0.3	— 5 18	— 4 36	— 0 06
1981	Dölpan b	58 42 55	3 19 16 W	100	g 14	29	— 4 07.4	5	0.7	— 4 59	— 4 18	+ 0 01
1982	Askersund b	58 53 53	3 07 06 W	125	g 14	30	— 4 00.3	4	0.3	— 4 52	— 4 11	+ 0 01
1983	Lerbäck	58 57 09	3 00 35 W	115	g 37	30	— 3 55.4	4	0.6	— 4 47	— 4 06	+ 0 02
1984	Björskog	59 26 59	2 05 25 W	15	st 59	31	— 3 29.4	4	0.5	— 4 20	— 3 40	— 0 04
1985	Kärrbo	59 33 05	1 18 12 W	22	g 37	31	— 3 33.4	4	0.1	— 4 23	— 3 43	— 0 34
1986	Enköpings-Näs	59 33 31	1 02 29 W	17	g 37	VI 1	— 3 15.5	4	0.3	— 4 05	— 3 26	— 0 25
1987	Torsvi	59 29 15	0 44 01 W	25	g 4	1	— 2 55.4	4	0.3	— 3 44	— 3 05	— 0 15
1988	Löt	59 34 21	0 44 21 W	5	g 4	1	— 3 00.7	4	0.2	— 3 50	— 3 11	— 0 20
	XIX. 1934. F. Tyrén. Instr. Askania No. 84065.											
1989	Fresta b	59 30 57	0 05 36 W	20	g 8	VI 5	— 2 14.7	2	0.1	— 3 03	— 2 25	+ 0 04
1990	Haga b	59 40 45	0 21 27 W	20	g 8	5	— 2 27.4	4	0.9	— 3 16	— 2 37	0 00
1991	Munktorp b	59 32 22	1 54 50 W	22	g 8	7	— 3 18.3	4	0.8	— 4 09	— 3 28	+ 0 01
1992	Himmeta b	59 29 25	2 11 33 W	35	st 59	7	— 3 50.5	4	0.5	— 4 42	— 4 01	— 0 22
1993	Forsäter	59 25 57	2 35 26 W	39	L 49	8	— 6 00.2	4	0.5	— 6 52	— 6 11	— 2 18
1994	Sköllersta	59 08 14	2 42 16 W	40	s 64	8	— 3 46.8	4	0.7	— 4 38	— 3 57	0 00
1995	Svennevad	59 01 04	2 40 06 W	75	g 8	9	— 3 57.4	4	0.2	— 4 49	— 4 08	— 0 12
1996	Hjortkvarn, Bo	58 55 43	2 31 51 W	81	m 6	9	— 3 48.6	4	0.8	— 4 39	— 3 59	— 0 07
1997	Tjällmo	58 42 55	2 42 44 W	63	g 14	9	— 3 09.5	4	0.5	— 4 00	— 3 20	+ 0 38
1998	Unnekulla	58 38 06	2 44 37 W	70	g 14	10	— 4 00.7	4	0.1	— 4 51	— 4 11	— 0 12
1999	Vreta Kloster b	58 29 00	2 31 54 W	70	s 64	10	— 2 52.1	4	0.6	— 3 42	— 3 02	+ 0 50
2000	Berg	58 29 16	2 31 41 W	75	s 64	11	— 2 35.0	4	0.1	— 3 25	— 2 45	+ 1 07
2001	Högsäter	58 33 34	2 32 08 W	85	g 14	11	— 2 13.2	4	1.2	— 3 04	— 2 23	+ 1 29
2002	Klockrike	58 30 41	2 42 47 W	100	s 64	12	— 3 09.5	4	0.4	— 4 00	— 3 20	+ 0 39
2003	Borensberg	58 33 52	2 46 00 W	80	g 5	12	— 3 01.9	4	0.6	— 3 53	— 3 12	+ 0 48
2004	Fågelsta	58 27 04	2 58 20 W	105	s 64	12	— 3 22.2	4	0.2	— 4 13	— 3 32	+ 0 35
2005	Hagebyhöga b	58 28 36	3 02 02 W	35	s 64	13	— 3 54.1	4	0.5	— 4 45	— 4 04	+ 0 05
2006	Skänninge	58 23 37	2 58 09 W	88	s 64	13	— 3 02.8	4	0.2	— 3 54	— 3 13	+ 0 54
2007	Borghamn	58 23 03	3 22 16 W	35	s 64	13	— 3 27.8	2	0.3	— 4 19	— 3 38	+ 0 43
2009	Mjölby I	58 19 43	2 57 21 W	110	g 14	15	— 3 26.1	2	0.5	— 4 17	— 3 36	+ 0 31
2010	Boxholm b	58 13 12	3 02 50 W	128	g 14	15	— 3 41.9	6	2.2	— 4 33	— 3 52	+ 0 18
2011	Mjölby II, Hulterstad b	58 17 33	2 56 28 W	108	g 14	16	— 3 54.2	4	0.3	— 4 45	— 4 04	+ 0 02
2013	Boet b	58 09 36	3 20 52 W	170	g 14	17	— 2 50.6	2	0.1	— 3 42	— 3 01	+ 1 20
2014	Bunnström	57 59 45	3 34 49 W	197	g 15	17	— 1 49.6	4	0.3	— 2 41	— 2 00	+ 2 29
2015	Adelöv b	58 01 41	3 22 16 W	195	g 14	17	— 1 46.8	2	0.2	— 2 38	— 1 57	+ 2 25
2016	Traneryd, K. Sj. K. V.	57 58 48	3 08 24 W	200	g 14	18	— 2 49.3	4	0.2	— 3 40	— 2 59	+ 1 15
2017	Tranås Säteri	58 02 55	3 02 24 W	147	g 14	18	— 3 21.1	4	0.4	— 4 12	— 3 31	+ 0 39
2018	Olstorp b	57 50 17	2 58 10 W	235	g 14	18	— 2 03.3	4	0.3	— 2 53	— 2 13	+ 1 55
2019	Asbysand	57 55 17	2 51 17 W	165	g 14	19	— 4 27.3	4	0.3	— 5 17	— 4 37	— 0 33
2020	Norra Vi I	57 53 03	2 41 44 W	166	m 17	19	— 5 00.3	4	0.1	— 5 50	— 5 10	— 1 11

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1934.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
2020	Norra Vi II	57° 53′ 08″	2° 41′ 47″ W	166	m 17	VI 19	— 4° 45′.7	2	0′.1	— 5° 36′	— 4° 56′	— 0° 56′
2021	Ydrefors	57 47 43	2 30 58 W	170	g 14	19	— 3 40.8	4	0.4	— 4 30	— 3 51	+ 0 03
2022	Svinhult b	57 45 14	2 40 27 W	327	L 33	20	— 3 08.2	2	0.5	— 3 58	— 3 18	+ 0 40
2023	Bruzaholm	57 38 28	2 47 23 W	180	g 14	20	— 1 58.6	2	0.3	— 2 48	— 2 09	+ 1 54
2025	Kråkshult b	57 32 30	2 37 34 W	283	g 14	21	— 2 43.6	2	0.0	— 3 33	— 2 54	+ 1 04
2026	Mariannelund	57 37 18	2 29 28 W	145	m 17	21	— 3 04.2	4	0.5	— 3 53	— 3 14	+ 0 39
2027	Hultsfred b	57 29 40	2 11 08 W	110	g 14	22	— 2 45.8	4	0.1	— 3 34	— 2 56	+ 0 47
2028	Kristdala b	57 23 59	1 50 47 W	87	g 14	23	— 2 17.0	2	0.1	— 3 05	— 2 27	+ 1 05
2030	Misterhult b	57 27 56	1 30 00 W	25	g 14	23	— 3 42.4	2	0.1	— 4 30	— 3 52	— 0 32
2031	Blankaholm b	57 36 43	1 31 22 W	5	s 60	24	— 4 11.0	4	0.3	— 4 59	— 4 21	— 1 00
2032	Getterum	57 35 19	1 43 40 W	95	g 14	24	— 3 02.4	4	0.3	— 3 50	— 3 12	+ 0 15
2033	Tuna	57 34 38	1 56 47 W	44	g 14	25	— 3 19.8	4	0.1	— 4 08	— 3 30	+ 0 05
2034	Vimmerby, K. Sj. K. V.	57 42 00	2 15 24 W	140	g 14	25	— 3 19.7	4	0.5	— 4 09	— 3 30	+ 0 15
2035	Södra Flaka b	57 49 45	2 16 14 W	168	g 14	25	— 3 57.7	4	0.2	— 4 47	— 4 08	— 0 23
2036	Gröninge b	57 54 52	2 09 28 W	105	g 14	25, 26	— 5 12.4	4	0.3	— 6 01	— 5 22	— 1 41
2037	Kisa	57 58 48	2 25 01 W	100	g 14	26	— 3 06.6	2	0.3	— 3 56	— 3 17	+ 0 33
2039	Ulrika b	58 07 32	2 36 46 W	180	g 14	27	— 4 29.6	2	0.2	— 5 20	— 4 40	— 0 44
2041	Nykil b	58 17 23	2 35 54 W	110	g 14	27	— 3 43.5	2	0.2	— 4 34	— 3 54	+ 0 02
2042	Linköping b	58 24 25	2 26 06 W	90	g 14	28	— 3 45.5	4	0.8	— 4 36	— 3 56	— 0 06
2043	Bjärka-Säby b	58 16 29	2 19 17 W	85	g 14	28	— 3 25.7	2	0.2	— 4 15	— 3 36	+ 0 10
2044	Åtvidaberg, Adelsnäs	58 11 11	2 03 42 W	95	d 27	28	— 3 21.0	4	0.3	— 4 10	— 3 31	+ 0 06
2045	Falerum, Finntorp	58 07 38	1 48 49 W	16	st 59	29	— 4 25.5	4	0.2	— 5 14	— 4 35	— 1 06
2046	Nelhammar	58 05 25	1 43 59 W	20	g 4	30	— 3 48.1	4	0.6	— 4 37	— 3 58	— 0 32
2047	Överum	57 59 11	1 43 39 W	160	g 14	30	— 3 08.3	2	0.1	— 3 57	— 3 18	+ 0 09
2049	Odensvi	57 53 52	1 53 13 W	105	g 14	VII 1	— 4 26.0	2	0.2	— 5 15	— 4 36	— 1 04
2050	Locknevi b	57 47 47	1 58 08 W	140	g 14	1	— 3 34.1	2	0.7	— 4 23	— 3 44	— 0 09
2051	Ankarsrum	57 42 04	1 42 49 W	75	g 14	1	— 3 42.3	4	0.9	— 4 30	— 3 52	— 0 26
2052	Västervik	57 45 50	1 24 39 W	2	s 60	2	— 3 27.2	4	0.3	— 4 15	— 3 37	— 0 21
2053	Gamleby b	57 53 31	1 39 35 W	25	d 27	2	— 4 49.2	4	0.2	— 5 38	— 4 59	— 1 35
2054	Källvik	57 53 52	1 20 00 W	10	g 4	3	— 2 07.2	2	0.2	— 2 55	— 2 17	+ 0 56
2055	Vindö b	58 01 54	1 25 38 W	15	g 4	3	— 2 39.0	2	0.5	— 3 27	— 2 49	+ 0 28
2056	Gryt b	58 11 13	1 15 22 W	10	g 4	4	— 1 55.5	2	0.1	— 2 44	— 2 05	+ 1 05
2057	Valdemarsvik b	58 11 38	1 25 25 W	5	g 4	4	— 2 48.5	2	0.1	— 3 37	— 2 58	+ 0 18
2058	Gusum	58 15 29	1 33 53 W	38	g 4	4	— 4 08.4	4	0.1	— 4 57	— 4 18	— 0 58
2059	S:t Anna	58 20 46	1 21 00 W	15	g 4	5	— 3 42.5	2	0.2	— 4 31	— 3 52	— 0 39
2060	Björsäter b	58 20 33	2 01 42 W	80	g 14	5	— 3 14.9	2	0.1	— 4 04	— 3 25	+ 0 11
2061	Östra Ryd b	58 24 22	1 53 11 W	50	g 14	5	— 3 55.3	2	0.2	— 4 45	— 4 05	— 0 34
2062	Skärkind I	58 27 55	2 03 41 W	60	m 42	6	— 3 48.3	4	0.1	— 4 38	— 3 58	— 0 22
	Skärkind II	58 28 23	2 03 55 W	55	m 42	6	— 4 00.9	2	0.2	— 4 51	— 4 11	— 0 34
2063	Söderköping	58 28 56	1 43 28 W	5	g 37	6	— 2 37.0	4	0.4	— 3 26	— 2 47	+ 0 39
2064	Kåreholm b	58 25 21	1 20 07 W	15	g 37	6	— 2 52.1	4	0.6	— 3 41	— 3 02	+ 0 10
2066	Östra Husby b	58 34 52	1 29 36 W	24	g 4	8	— 3 11.0	2	0.2	— 4 00	— 3 21	— 0 04
2067	Dagsberg b	58 35 02	1 43 54 W	30	g 4	8	— 3 33.8	4	0.0	— 4 23	— 3 44	— 0 18
2062	Skärkind II	58 28 23	2 03 55 W	55	m 42	8	— 4 00.6	4	0.2	— 4 50	— 4 11	— 0 34
2068	Norsholm	58 30 31	2 04 41 W	33	g 14	9	— 4 34.4	2	0.1	— 5 24	— 4 44	— 1 07
2069	Rundstorp	58 30 56	2 07 38 W	34	g 39	9	— 3 43.0	2	0.4	— 4 33	— 3 53	— 0 14
2070	Restad b	58 36 07	2 13 11 W	34	g 14	9	— 4 34.0	4	1.5	— 5 24	— 4 44	— 1 02
2071	Risinge b	58 42 08	2 12 44 W	43	g 14	10	— 3 59.0	2	0.2	— 4 49	— 4 09	— 0 28
2072	Ruggestorp b	58 39 33	2 30 48 W	70	g 14	10	— 2 44.7	2	0.1	— 3 35	— 2 55	+ 0 57
2073	Regna	58 53 47	2 21 39 W	51	L 49	10	— 3 50.5	2	0.1	— 4 41	— 4 01	— 0 15
2074	Rejmyra b	58 49 52	2 07 26 W	58	g 4	11	— 4 10.8	2	0.2	— 5 01	— 4 21	— 0 43
2075	Simonstorp b	58 46 59	1 53 36 W	66	g 4	11	— 3 30.5	2	0.4	— 4 20	— 3 41	— 0 10
2077	Kila b	58 44 52	1 30 05 W	25	m 42	12	— 3 53.9	4	0.3	— 4 43	— 4 04	— 0 46
2078	Stenbro	58 46 24	1 02 53 W	24	g 37	12	— 1 27.3	2	0.1	— 2 16	— 1 37	+ 1 25
2079	Tunaberg	58 38 37	1 09 14 W	20	m 53	12	— 3 00.4	2	0.1	— 3 49	— 3 10	— 0 04

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1934.5	n	$\pm\eta$	D 1929.5	D 1933.5	1933.5 obs.-calc.
2081	Sätersta . . . . . b	58° 53′ 38″	0° 49′ 40″ W	23	g 37	VII 13	— 4° 43′.6	2	0′.2	— 5° 32′	— 4° 53′	— 1° 59′
2082	Bälinge	58 50 42	0 45 19 W	16	g 37	13	— 2 59.6	2	0.3	— 3 48	— 3 09	— 0 17
2083	Dalbyö I	58 50 26	0 34 47 W	2	g 37	14	— 5 10.3	2	0.0	— 5 58	— 5 20	— 2 34
2084	Hagstugan	58 51 53	0 29 59 W	1	g 37	14	— 2 35.7	2	0.1	— 3 24	— 2 46	— 0 02
2086	Pilkrog . . . . . b	59 05 07	0 26 34 W	10	m 44	16	— 2 29.1	2	0.2	— 3 17	— 2 39	+ 0 02
2087	Gnesta	59 02 54	0 45 09 W	15	g 37	16	— 2 39.4	2	0.1	— 3 28	— 2 49	+ 0 03
2088	Husby-Oppunda	58 54 40	1 14 51 W	30	g 37	17	— 3 30.7	2	0.2	— 4 20	— 3 41	— 0 32
2090	Flen	59 03 17	1 27 49 W	25	g 37	18	— 3 52.5	2	0.1	— 4 42	— 4 03	— 0 47
2091	Broby, Tunbro	58 54 41	1 34 04 W	19	g 37	18	— 3 11.2	2	0.4	— 4 01	— 3 21	— 0 02
2092	Katrineholm . . . . . b	59 00 00	1 51 29 W	45	g 37	19	— 3 27.8	4	0.2	— 4 18	— 3 38	— 0 09
2093	Sävstaholm	59 02 49	2 10 33 W	40	g 37	19	— 3 07.7	4	0.2	— 3 58	— 3 18	+ 0 22
2094	Kilsmo . . . . . b	59 04 02	2 30 24 W	75	g 8	19	— 3 30.0	2	0.2	— 4 21	— 3 40	+ 0 10
2095	Godegård	58 44 55	2 53 20 W	115	m 6	20	— 3 37.1	2	0.0	— 4 28	— 3 47	+ 0 17
2096	Bona . . . . . b	58 38 26	2 58 14 W	40	g 14	20	— 3 14.7	2	0.0	— 4 06	— 3 25	+ 0 42
2098	Medevi . . . . . b	58 41 17	3 03 46 W	50	g 14	22	— 3 26.7	2	0.1	— 4 18	— 3 37	+ 0 33
2099	Nässja	58 27 56	3 13 52 W	34	s 64	21	— 4 18.4	2	0.2	— 5 10	— 4 29	— 0 13
2100	Källstad	58 23 00	3 16 27 W	33	s 64	21	— 3 32.3	2	0.2	— 4 24	— 3 43	+ 0 35
2101	Hovgården	58 22 32	3 08 22 W	33	s 64	21	— 3 43.2	2	0.1	— 4 34	— 3 53	+ 0 20
2105	Östraby	58 48 55	3 04 58 W	30	g 14	22	— 3 13.1	2	0.1	— 4 05	— 3 23	+ 0 47
2107	Långvik	58 50 39	3 01 27 W	35	g 14	23	— 3 32.6	2	0.1	— 4 24	— 3 43	+ 0 25
2108	Donafors	58 51 22	3 15 32 W	40	g 14	23	— 3 18.8	2	0.1	— 4 11	— 3 29	+ 0 47
2109	Stjärnsund . . . . . b	58 51 00	3 08 05 W	35	g 14	23	— 3 35.7	4	0.2	— 4 27	— 3 46	+ 0 26
2110	Torsäng . . . . . b	58 47 34	3 12 49 W	40	g 14	24	— 3 35.2	2	0.1	— 4 27	— 3 46	+ 0 29
2111	Stenkulla	58 47 21	3 19 52 W	48	g 14	24	— 3 45.2	2	0.3	— 4 37	— 3 56	+ 0 23
2112	Bosjötorp . . . . . b	58 48 16	3 25 32 W	70	g 14	24	— 4 34.1	2	0.4	— 5 26	— 4 44	— 0 22
2113	Melltorp	58 55 46	3 50 14 W	110	g 14	25	— 1 56.6	2	0.6	— 2 49	— 2 07	+ 2 29
2114	Slätåsen . . . . . b	59 04 44	3 40 55 W	115	g 14	25	— 3 52.0	2	0.3	— 4 45	— 4 02	+ 0 27
2115	Hygn	59 07 07	3 57 25 W	52	g 14	25	— 4 59.6	4	0.4	— 5 53	— 5 10	— 0 31
2116	Björneborgs Bruk	59 14 10	3 48 52 W	106	g 14	26	— 5 14.8	2	0.1	— 6 08	— 5 25	— 0 51
2117	Lanna	59 14 20	3 08 01 W	65	s 64	26	— 3 14.6	2	0.4	— 4 07	— 3 25	+ 0 46
2118	Råby . . . . . b	59 12 15	2 57 22 W	40	m 42	26	— 4 05.8	2	0.1	— 4 58	— 4 16	— 0 11
2122	Hallsberg	59 04 12	2 57 24 W	32	s 64	28	— 3 29.0	2	0.2	— 4 21	— 3 39	+ 0 26
2123	Säbylund	59 09 38	2 52 49 W	44	m 72	28	— 3 53.0	2	0.2	— 4 45	— 4 03	0 00
2125	Läppe	59 08 07	2 13 47 W	22	m 42	29	— 3 40.4	2	0.0	— 4 31	— 3 51	— 0 09
2126	Julita	59 08 45	1 59 45 W	31	g 37	29	— 3 20.9	2	0.1	— 4 11	— 3 31	+ 0 02
2127	Näshulta . . . . . b	59 13 41	1 42 54 W	40	g 38	30	— 3 36.7	2	0.1	— 4 27	— 3 47	— 0 23
2129	Över-Enhörna . . . . . b	59 18 05	0 39 22 W	10	g 37	31	— 2 27.9	2	0.4	— 3 17	— 2 38	+ 0 10
2130	Strängnäs	59 22 25	1 01 17 W	2	g 37	31	— 2 55.1	2	0.5	— 3 44	— 3 05	— 0 05
2131	Barva	59 22 22	1 16 22 W	20	g 37	31	— 3 20.5	2	0.5	— 4 10	— 3 31	— 0 22
2132	Fiholm	59 25 56	1 19 11 W	5	g 8	31	— 3 35.6	2	0.2	— 4 25	— 3 46	— 0 36
2133	Jäder	59 24 44	1 21 25 W	14	g 37	VIII 1	— 3 32.1	2	0.1	— 4 22	— 3 42	— 0 31
2135	Stora Sundby	59 16 01	1 56 00 W	26	g 37	1	— 4 02.6	2	0.4	— 4 53	— 4 13	— 0 42
2136	Kungsör	59 26 10	1 58 37 W	3	L 49	1	— 3 40.2	2	0.1	— 4 31	— 3 50	— 0 18
2137	Fanttorp	59 31 02	2 01 48 W	15	g 4	2	— 3 20.0	2	0.3	— 4 11	— 3 30	+ 0 04
2138	Arboga . . . . . b	59 24 05	2 11 59 W	10	m 55	2	— 3 24.0	2	0.2	— 4 15	— 3 34	+ 0 05
2139	Glanshammar	59 19 01	2 39 19 W	37	m 50	3	— 4 03.6	2	0.2	— 4 55	— 4 14	— 0 18
2141	Klockhammar	59 22 53	3 01 17 W	78	m 42	3	— 3 54.0	2	0.6	— 4 46	— 4 04	+ 0 03
2142	Närikes Kil	59 22 20	2 58 33 W	50	g 8	3	— 3 33.4	2	0.1	— 4 25	— 3 44	+ 0 22
2143	Axbergshammar . . . . . b	59 25 29	2 51 19 W	47	g 8	4	— 2 57.5	2	0.6	— 3 49	— 3 08	+ 0 54
2144	Nora, Husby	59 32 52	3 00 05 W	84	L 49	4	— 3 24.3	2	0.0	— 4 17	— 3 35	+ 0 31
2147	Gusselby	59 38 42	2 51 12 W	62	g 4	5	— 3 18.9	2	0.7	— 4 11	— 3 29	+ 0 32
2148	Spannarboda . . . . . b	59 35 11	2 32 52 W	65	g 8	6	— 3 17.1	2	0.2	— 4 09	— 3 27	+ 0 24
2149	Morskoga	59 42 09	2 39 54 W	110	g 4	6	— 3 39.8	2	0.1	— 4 32	— 3 50	+ 0 04
2150	Östra Löa	59 47 38	2 52 03 W	107	L 49	6	— 3 52.8	2	0.2	— 4 45	— 4 03	— 0 02
2151	Bångbro	59 51 54	3 01 13 W	145	L 49	7	— 3 18.7	2	0.5	— 4 11	— 3 29	+ 0 37

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1934.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
2152	Kroktjärn	59° 56′ 29″	3° 13′ 03″ W	75	g 4	VIII 7	— 4° 49′.3	2	0′.0	— 5° 42′	— 5° 00′	— 0° 47′
2153	Lilla Nitten	60 05 14	3 19 46 W	98	L 49	7	— 4 48.1	2	0.3	— 5 41	— 4 59	— 0 43
2154	Rävåla	60 09 31	3 04 59 W	60	g 8	8	— 4 09.9	2	0.1	— 5 03	— 4 20	— 0 13
2155	Hällsjön	60 03 52	2 52 45 W	185	L 49	8	— 3 52.4	2	0.2	— 4 45	— 4 03	— 0 02
2156	Saxen	60 03 10	2 46 48 W	152	L 49	8	— 3 34.9	2	0.2	— 4 27	— 3 45	+ 0 12
2157	Malingsbo	59 55 52	2 37 09 W	140	m 10	9	— 3 45.1	2	0.2	— 4 37	— 3 55	— 0 03
2158	Skinnskatteberg	59 49 52	2 22 21 W	120	g 4	9	— 3 27.5	2	0.4	— 4 19	— 3 38	+ 0 07
2160	Gunnilbo	59 48 21	2 12 35 W	95	L 49	10	— 3 07.3	2	0.1	— 3 59	— 3 18	+ 0 22
2161	Västra Djupkärra b	60 03 54	2 16 02 W	163	g 4	10	— 2 48.1	2	0.1	— 3 40	— 2 58	+ 0 42
2162	Vibberbo b	60 08 04	2 30 21 W	115	g 4	10	— 3 55.1	2	0.2	— 4 47	— 4 05	— 0 17
2166	Ingålsbenning	60 10 05	2 04 28 W	154	m 6	12	— 3 23.2	2	0.1	— 4 15	— 3 34	0 00
2167	Norra Nävde	60 13 26	1 56 09 W	95	m 6	12	— 3 36.3	2	0.2	— 4 28	— 3 47	— 0 18
2168	Kloster	60 22 38	1 52 49 W	130	g 4	13	— 2 50.7	2	0.2	— 3 42	— 3 01	+ 0 26
2169	Husby	60 23 28	2 02 58 W	90	g 4	13	— 3 53.0	2	0.1	— 4 45	— 4 03	— 0 31
2170	St. Skedvi	60 24 25	2 15 07 W	105	g 4	13	— 4 10.5	2	0.1	— 5 03	— 4 21	— 0 42
2171	Vika	60 30 52	2 20 11 W	115	g 4	14	— 4 22.4	2	0.3	— 5 15	— 4 33	— 0 51
2172	Torsång	60 28 00	2 29 25 W	109	g 4	14	— 4 25.1	2	0.2	— 5 18	— 4 36	— 0 48
2173	Norr Hesse	60 26 35	2 35 00 W	135	g 4	14	— 4 34.7	2	0.1	— 5 27	— 4 45	— 0 55
2175	Båtstad	60 30 38	2 40 50 W	160	g 1	15	— 4 01.7	2	0.4	— 4 55	— 4 12	— 0 19
2176	Bäck	60 26 17	2 43 21 W	182	g 1	15	— 4 02.9	2	0.1	— 4 56	— 4 13	— 0 18
2179	Norstorp	60 15 25	3 18 12 W	245	L 49	16	— 5 00.8	2	0.4	— 5 54	— 5 11	— 0 57
2181	Frösaråsen	60 13 28	3 34 57 W	390	L 49	17	— 5 33.5	2	0.0	— 6 27	— 5 44	— 1 20
2183	Laggsundet	60 05 40	3 50 34 W	224	L 33	17	— 3 30.9	2	0.3	— 4 25	— 3 42	+ 0 52
2184	Flatbyn	60 17 05	3 47 55 W	383	L 49	18	— 4 32.4	2	0.0	— 5 27	— 4 43	— 0 12
2185	Lindesnäs	60 20 46	3 32 24 W	230	m 42	18	— 4 41.7	2	0.4	— 5 36	— 4 52	— 0 30
2186	Orsala	60 24 33	3 34 41 W	230	g 8	18	— 4 53.1	2	0.3	— 5 47	— 5 04	— 0 40
2187	Äppelbo	60 29 25	4 03 01 W	274	g 14	19	— 3 07.1	2	0.6	— 4 02	— 3 18	+ 1 22
2188	Yttermalung	60 34 51	4 14 17 W	288	g 14	19	— 3 56.7	2	0.2	— 4 52	— 4 07	+ 0 38
2191	Gustaf-Adolf	60 04 08	4 11 14 W	208	g 14	20	— 3 58.6	2	0.1	— 4 53	— 4 09	+ 0 36
2193	Sikfors	59 47 49	3 28 38 W	181	m 55	21	— 4 20.1	2	0.3	— 5 13	— 4 31	— 0 09
2195	Loka Brunn	59 36 22	3 34 29 W	184	g 14	21	— 3 59.5	2	0.1	— 4 53	— 4 10	+ 0 15
2197	Stadra	59 33 49	3 19 10 W	177	L 49	22	— 3 16.5	2	0.1	— 4 09	— 3 27	+ 0 50
2198	Vikersvik	59 28 31	3 08 32 W	114	m 56	22	— 5 48.2	2	0.1	— 6 41	— 5 59	— 1 48
2199	Kedjeåsen	59 28 31	3 34 27 W	160	g 14	22	— 3 04.3	2	0.3	— 3 57	— 3 15	+ 1 11
2201	Hult	59 12 41	3 58 57 W	48	g 14	23	— 5 01.8	2	0.2	— 5 55	— 5 12	— 0 33
2204	Villingsberg	59 17 01	3 21 47 W	144	g 14	24	— 3 35.9	2	0.6	— 4 28	— 3 46	+ 0 32
2205	Gräve	59 16 59	2 59 20 W	46	s 64	24	— 3 48.0	2	0.2	— 4 40	— 3 58	+ 0 08

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2206	Vänge	57 27 15	0 26 50 E	50	s 64	VI 5	— 3 38.3	2	0.1	— 4 23	— 3 48	— 1 33
2207	Buttle	57 24 06	0 28 13 E	46	s 64	6	— 2 47.0	2	0.1	— 3 32	— 2 56	— 0 42
2208	Ardre	57 22 31	0 37 54 E	35	s 64	6	— 1 22.2	2	0.2	— 2 07	— 1 32	+ 0 37
2209	Gammelgarn	57 24 24	0 45 00 E	19	s 64	7	— 1 53.8	2	0.0	— 2 38	— 2 03	+ 0 02
2210	Kräklingbo	57 26 49	0 39 20 E	19	s 64	7	— 2 02.2	2	0.2	— 2 47	— 2 12	— 0 04
2211	Björke	57 30 26	0 21 42 E	36	s 64	8	— 2 44.4	2	0.5	— 3 29	— 2 54	— 0 36
2212	Mästerby	57 28 20	0 14 41 E	35	s 64	8	— 2 21.5	2	0.1	— 3 07	— 2 31	— 0 09
2213	Hejde	57 24 56	0 17 42 E	44	s 64	8	— 1 26.5	2	0.0	— 2 12	— 1 36	+ 0 44
2214	Klintehamn	57 22 52	0 07 27 E	1	s 64	9	— 2 10.5	2	0.1	— 2 56	— 2 20	+ 0 06
2215	Fröjel	57 19 23	0 09 30 E	25	s 64	9	— 2 20.9	2	0.7	— 3 06	— 2 30	— 0 06
2216	Ekstа	57 16 19	0 08 31 E	17	s 64	10	— 2 23.2	2	0.1	— 3 08	— 2 33	— 0 07
2217	Hablingbo	57 11 19	0 12 23 E	18	s 64	10	— 2 52.3	2	0.0	— 3 37	— 3 02	— 0 38
2218	Eke	57 10 03	0 19 28 E	24	s 64	11	— 2 57.9	2	0.5	— 3 43	— 3 08	— 0 48
2219	Hemse	57 14 39	0 17 44 E	19	s 64	11	— 2 19.8	2	0.7	— 3 05	— 2 29	— 0 09
2220	Dalhem	57 33 05	0 28 41 E	26	s 64	12	— 1 47.2	2	0.2	— 2 32	— 1 57	+ 0 17
2221	Follingbo	57 33 54	0 21 15 E	39	s 64	12	— 3 18.4	2	0.0	— 4 04	— 3 28	— 1 10

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1934.5	n	±r	D 1929.5	D 1933.5	1933.5 obs.-calc.
2222	Visby	57° 38′ 52″	0° 14′ 30″ E	20	s 64	VI 13	— 3° 32′.5	2	0′.6	— 4° 18′	— 3° 42′	— 1° 21′
2223	Hejdeby	57 37 53	0 23 00 E	54	s 64	13	— 2 38.7	2	0.4	— 3 24	— 2 48	— 0 31
2226	Tingstäde	57 43 58	0 32 40 E	51	s 64	15	— 2 01.4	2	0.5	— 2 46	— 2 11	0 00
2227	Stenkyrka	57 47 26	0 29 11 E	53	s 64	15	— 2 04.9	2	0.1	— 2 50	— 2 14	— 0 02
2228	Hangvar	57 50 16	0 38 07 E	21	s 64	15	— 1 12.8	2	0.4	— 1 58	— 1 22	+ 0 46
2229	Bunge	57 51 13	0 58 05 E	26	s 64	16	— 0 20.5	2	0.3	— 1 05	— 0 30	+ 1 27
2230	Lärbro	57 47 10	0 44 44 E	16	s 64	16	— 0 15.3	2	0.2	— 1 00	— 0 25	+ 1 39
2231	Boge	57 41 10	0 42 31 E	6	s 64	16	— 1 41.2	2	0.1	— 2 26	— 1 51	+ 0 15
2232	Gothem	57 34 32	0 40 21 E	15	s 64	17	— 1 34.8	2	0.5	— 2 19	— 1 44	+ 0 23
2233	Garde	57 18 49	0 32 03 E	28	s 64	17	— 1 57.8	2	0.2	— 2 42	— 2 07	+ 0 05
2234	Burs	57 15 16	0 26 25 E	13	s 64	18	— 2 25.9	2	0.5	— 3 11	— 2 35	— 0 20
2235	Hoburgen	56 55 26	0 04 30 E	25	s 64	18	— 2 10.8	2	0.7	— 2 56	— 2 20	+ 0 08
2236	Burgsvik, K. Sj. K. V.	57 02 10	0 11 16 E	5	s 64	19	— 3 06.0	2	0.2	— 3 51	— 3 15	— 0 51
2237	Tofta	57 32 06	0 07 23 E	33	s 64	19	— 2 37.8	2	0.5	— 3 23	— 2 47	— 0 22
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2106	Upsala II	59 51 37	0 26 07 W	8	g 5	VI 22	— 2 34.1	2	0.1	— 3 23	— 2 44	— 0 05
2238	Örsundsbro	59 44 04	0 44 47 W	13	g 4	25	— 2 46.2	2	0.1	— 3 35	— 2 56	— 0 06
2239	Långtora	59 43 21	0 55 01 W	15	g 37	25	— 3 01.1	2	0.3	— 3 51	— 3 11	— 0 15
2240	Grillby	59 37 49	0 48 14 W	25	m 42	26	— 3 06.7	2	0.1	— 3 56	— 3 17	— 0 24
2241	Enköping	59 38 37	0 58 32 W	24	g 4	26	— 3 15.3	2	0.2	— 4 05	— 3 25	— 0 27
2243	Tortuna	59 40 28	1 20 24 W	35	g 4	27	— 3 39.9	2	0.2	— 4 30	— 3 50	— 0 40
2244	Svanå	59 46 21	1 42 41 W	70	g 4	28	— 3 51.3	2	0.1	— 4 42	— 4 01	— 0 39
2245	Sevalla	59 44 08	1 21 08 W	45	g 4	28	— 3 49.8	2	0.1	— 4 40	— 4 00	— 0 49
2246	Lillhärad	59 38 30	1 41 44 W	35	g 37	29	— 4 08.6	2	0.1	— 4 59	— 4 19	— 0 57
2247	Österby	59 52 13	0 45 28 W	35	g 4	30	— 2 46.9	2	0.7	— 3 36	— 2 57	— 0 07
2248	Bredsjö	59 54 34	0 52 10 W	60	g 4	30	— 3 04.4	2	0.0	— 3 54	— 3 14	— 0 20
2249	Vittinge	59 53 44	1 03 40 W	56	g 5	VII 2	— 2 58.4	2	0.2	— 3 48	— 3 08	— 0 08
2250	Heby	59 56 44	1 11 52 W	52	g 4	2	— 3 06.5	2	0.3	— 3 57	— 3 17	— 0 12
2251	Frösthult	59 45 14	1 05 27 W	16	g 37	3	— 3 23.6	2	0.6	— 4 13	— 3 34	— 0 32
2252	Altuna	59 50 45	1 08 41 W	45	g 4	3	— 3 31.5	2	0.2	— 4 21	— 3 42	— 0 38
2253	Tomta	59 48 07	1 29 41 W	61	g 37	5	— 3 38.0	2	0.1	— 4 28	— 3 48	— 0 33
2254	Väster-Färnebo	59 56 58	1 46 29 W	70	g 37	5	— 3 56.3	2	0.5	— 4 47	— 4 06	— 0 42
2255	Fläckebo	59 52 32	1 42 48 W	70	g 4	6	— 4 00.5	2	0.3	— 4 51	— 4 11	— 0 49
2256	Saladamm	59 59 01	1 25 27 W	57	g 4	6	— 3 41.8	2	0.1	— 4 32	— 3 52	— 0 40
2257	Möklinta	60 05 13	1 30 25 W	83	g 37	6	— 3 18.7	2	0.0	— 4 09	— 3 29	— 0 14
2259	Hedesunda	60 23 33	1 02 17 W	60	g 8	8	— 0 43.6	2	0.8	— 1 34	— 0 54	+ 2 05
2260	Öster-Färnebo	60 18 44	1 15 06 W	65	g 39	8	— 1 47.4	2	0.1	— 2 38	— 1 58	+ 1 08
2261	Årsunda	60 30 49	1 19 03 W	70	s 61	9	— 1 58.9	2	0.4	— 2 50	— 2 09	+ 1 00
2262	Bastfallet	60 24 07	1 20 26 W	100	g 39	9	— 2 19.6	2	0.2	— 3 20	— 2 30	+ 0 39
2263	Horrskog	60 13 39	0 56 50 W	66	g 37	10	— 2 53.9	2	0.3	— 3 44	— 3 04	— 0 08
2264	Lindsbro	60 08 59	0 51 10 W	40	g 4	10	— 2 53.3	2	0.2	— 3 43	— 3 03	— 0 10
2265	Kipplinge krog	60 01 17	0 46 07 W	48	g 4	11	— 2 30.2	2	0.0	— 3 20	— 2 40	+ 0 10
2266	Stäket	59 28 17	0 15 30 W	10	g 8	12	— 2 30.2	2	0.1	— 3 18	— 2 40	— 0 06
2267	Håtuna	59 37 23	0 26 33 W	17	m 42	12	— 2 42.7	2	0.3	— 3 31	— 2 53	— 0 12
2268	Väsby	59 31 17	0 08 42 W	20	g 5	13	— 2 12.8	2	0.2	— 3 01	— 2 23	+ 0 08
2269	Knivsta	59 43 35	0 15 38 W	7	g 5	14	— 2 12.6	2	0.1	— 3 01	— 2 22	+ 0 12
2270	Åkersberga	59 28 53	0 15 00 E	30	g 4	14	— 2 12.5	2	0.0	— 3 00	— 2 22	— 0 05
2271	Östfora	59 59 06	0 51 45 W	69	g 5	15	— 2 51.4	2	0.1	— 3 41	— 3 01	— 0 08
2272	Husby-Långhundra	59 45 02	0 02 05 W	27	st 59	16	— 2 26.9	2	0.1	— 3 15	— 2 37	— 0 11
2273	Lindholmen	59 34 58	0 03 30 E	15	m 42	16	— 2 18.5	2	0.5	— 3 06	— 2 28	— 0 05
2274	Rimbo	59 44 40	0 19 05 E	27	g 8	17	— 2 03.7	2	0.1	— 2 51	— 2 13	+ 0 01
2275	Norrtälje	59 45 50	0 38 51 E	45	g 38	17	— 2 17.1	2	0.1	— 3 04	— 2 27	— 0 23
2276	Stångberga	59 36 29	0 15 43 E	30	g 38	18	— 2 12.5	2	0.2	— 3 00	— 2 22	— 0 05
2277	Hallstavik	60 03 13	0 31 54 E	10	g 37	18	— 2 15.3	2	0.1	— 3 03	— 2 25	— 0 18
2280	Vattholma	60 01 26	0 19 40 W	39	L 49	22	— 2 28.7	2	0.3	— 3 18	— 2 39	— 0 03

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1934.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
2281	Öregrund	60° 20′ 20″	0° 23′ 22″ E	2	g 38	VII 23	— 2° 16′.3	2	0′.1	— 3° 05′	— 2° 26′	— 0° 15′
2282	Östhammar	60 15 42	0 18 44 E	4	L 49	23	— 2 02.1	2	0.3	— 2 50	— 2 12	+ 0 02
2283	Gimo	60 10 27	0 07 56 E	8	g 5	24	— 2 11.4	2	0.8	— 3 00	— 2 21	— 0 01
2284	Faringe	59 55 09	0 03 16 E	19	g 4	24	— 1 52.1	2	0.1	— 2 40	— 2 02	+ 0 21
2285	Örbyhus	60 13 20	0 20 46 W	28	g 39	25	— 1 35.6	2	0.3	— 2 25	— 1 46	+ 0 50
2286	Tierp	60 18 32	0 34 10 W	25	L 49	25	— 3 24.6	2	0.2	— 4 14	— 3 35	— 0 51
2287	Söderfors	60 23 24	0 48 27 W	50	g 8	26	— 3 06.9	2	0.1	— 3 57	— 3 17	— 0 26
2288	Skärplinge	60 28 11	0 17 59 W	5	g 39	26	— 2 24.7	2	0.2	— 3 14	— 2 35	— 0 01
2289	Vigelsbo	60 17 26	0 03 49 W	38	g 37	27	— 2 39.4	2	0.4	— 3 28	— 2 49	— 0 23
2290	Alunda	60 03 48	0 01 41 E	18	g 5	27	— 1 48.6	2	0.2	— 2 37	— 1 58	+ 0 25
2291	Harnäs	60 38 59	0 41 16 W	10	g 39	30	— 2 27.0	2	0.0	— 3 17	— 2 37	+ 0 09
2292	Mackmyra	60 38 19	1 04 12 W	45	D 32	30	— 2 21.8	2	0.2	— 3 13	— 2 32	+ 0 27
2293	Gävle	60 40 46	0 56 10 W	21	s 61	31	— 2 41.1	2	0.7	— 3 32	— 2 51	+ 0 04
2294	Bönan	60 44 27	0 44 36 W	15	m 42	31	— 2 26.3	2	0.2	— 3 17	— 2 36	+ 0 12
2295	Hemlingby	60 39 29	0 53 27 W	20	g 39	VIII 1	— 2 42.3	2	0.1	— 3 33	— 2 52	+ 0 01
2296	Axmars by	61 00 12	0 55 33 W	10	m 42	2	— 2 43.8	2	0.5	— 3 35	— 2 54	— 0 01
2297	Axmars bruk	61 03 01	0 54 30 W	15	m 44	2	— 2 41.4	2	0.2	— 3 32	— 2 52	+ 0 02
2298	Söderhamn	61 18 13	0 58 50 W	15	m 44	3	— 3 01.5	2	0.1	— 3 53	— 3 12	— 0 17
2299	Trönö	61 23 42	1 13 01 W	42	g 39	3	— 3 19.5	2	0.3	— 4 11	— 3 30	— 0 27
2300	Långvinds bruk	61 27 34	0 55 25 W	10	g 38	3	— 2 43.6	2	1.8	— 3 35	— 2 54	— 0 01
2301	Nianfors	61 36 03	1 17 06 W	158	g 40	4	— 2 34.0	2	0.2	— 3 26	— 2 44	+ 0 20
2302	Forsa	61 43 43	1 05 28 W	40	g 38	4	— 3 17.5	2	0.1	— 4 10	— 3 28	— 0 30
2303	Näsviken	61 45 38	1 10 49 W	38	g 40	4	— 3 32.8	2	0.1	— 4 25	— 3 43	— 0 42
2304	Delsbo	61 48 00	1 29 49 W	80	g 40	5	— 3 12.7	2	0.5	— 4 05	— 3 23	— 0 12
2305	Sandudden	61 46 55	1 21 11 W	80	g 40	5	— 3 44.5	2	0.7	— 4 37	— 3 55	— 0 49
2306	Långbacka	61 48 02	1 35 06 W	80	g 40	5	— 3 01.4	2	0.4	— 3 54	— 3 12	+ 0 02
2307	Karsjö	61 38 36	1 47 43 W	125	g 40	6	— 3 03.6	2	0.0	— 3 57	— 3 14	+ 0 07
2308	Fluren	61 32 53	1 59 26 W	300	g 40	6	— 3 19.3	2	0.6	— 4 12	— 3 30	— 0 02
2309	Simeå	61 34 35	1 44 29 W	125	g 41	7	— 3 16.5	2	0.5	— 4 09	— 3 27	— 0 07
2310	Vallsta	61 31 19	1 41 16 W	130	g 40	7	— 3 37.9	2	0.3	— 4 31	— 3 48	— 0 30
2311	Nordsjö	61 34 20	1 32 41 W	135	g 40	7	— 3 06.6	2	0.5	— 3 59	— 3 17	— 0 04
2312	Galven	61 27 31	1 50 44 W	173	g 39	8	— 3 38.6	2	0.1	— 4 31	— 3 49	— 0 26
2313	Växbo	61 24 22	1 30 33 W	109	g 39	8	— 3 25.3	2	0.4	— 4 18	— 3 36	— 0 23
2314	Finnfara	61 16 22	1 48 29 W	155	s 60	9	— 3 34.8	2	0.1	— 4 27	— 3 45	— 0 22
2315	Annefors	61 14 42	1 54 55 W	182	s 60	9	— 3 17.7	2	0.4	— 4 10	— 3 28	— 0 02
2316	Runemo	61 21 23	1 55 11 W	98	L 49	9	— 3 42.5	2	0.1	— 4 35	— 3 53	— 0 27
2317	Edsbyn, K. Sj. K. V.	61 23 24	2 16 01 W	240	g 39	10	— 4 12.6	2	0.2	— 5 06	— 4 23	— 0 46
2318	Skräddarbo	61 13 36	2 10 59 W	230	L 49	10	— 3 38.7	2	0.0	— 4 32	— 3 49	— 0 14
2319	Öjung	61 35 43	2 29 20 W	347	L 49	11	— 3 51.5	2	0.0	— 4 45	— 4 02	— 0 17
2321	Homna	61 20 32	2 23 04 W	185	L 49	12	— 4 00.3	2	0.1	— 4 54	— 4 11	— 0 29
2322	Lomsjön	61 37 34	2 48 27 W	240	L 49	13	— 5 52.1	2	0.1	— 6 47	— 6 03	— 2 07
2323	Grycksmyra	61 29 50	2 37 33 W	220	L 49	13	— 4 30.2	2	0.0	— 5 24	— 4 41	— 0 51
2326	Kallholn	61 10 13	3 21 02 W	190	s 64	14	— 5 32.5	2	0.2	— 6 27	— 5 43	— 1 29
2327	Våmhus	61 07 45	3 34 56 W	180	s 64	15	— 5 09.8	2	0.5	— 6 05	— 5 21	— 0 58
2328	Vika	60 57 06	3 34 33 W	188	s 64	15	— 5 20.8	2	0.1	— 6 15	— 5 32	— 1 09
2329	Venjan	60 57 09	4 09 08 W	276	s 61	15	— 4 43.8	2	0.1	— 5 39	— 4 55	— 0 13
2330	Sollerö	60 55 15	3 26 34 W	202	s 64	16	— 5 51.0	2	0.1	— 6 45	— 6 02	— 1 44
2331	Gesunda	60 53 19	3 30 23 W	210	g 20	17	— 5 23.3	2	0.0	— 6 18	— 5 34	— 1 14
2333	Leksand, K. Sj. K. V.	60 46 42	3 05 06 W	200	g 4	18	— 6 06.2	2	0.3	— 7 00	— 6 17	— 2 11
2334	Ingels	60 56 56	2 49 25 W	200	s 64	18	— 4 53.1	2	0.3	— 5 47	— 5 04	— 1 06
2335	Sörskog	60 49 08	2 40 34 W	400	g 38	19	— 4 06.0	2	0.1	— 4 59	— 4 17	— 0 24
2336	Svärdsjö	60 44 43	2 09 14 W	140	g 38	19	— 2 27.0	2	0.5	— 3 19	— 2 37	+ 0 58
2337	Marnäs	60 50 52	2 24 11 W	180	g 40	22	— 4 28.0	2	0.1	— 5 21	— 4 38	— 0 55
2338	Dådran	60 56 34	2 30 35 W	210	g 37	22	— 4 18.8	2	0.2	— 5 12	— 4 29	— 0 42
2339	Backa	60 43 02	2 16 26 W	120	m 6	22	— 4 03.6	2	0.1	— 4 56	— 4 14	— 0 35

No.	Station	Latitude	Long. from Sthlm	A m	G	Date	D 1934.5	n	±η	D 1929.5	D 1933.5	1933.5 obs.-calc.
2342	Lumsheden	60° 42′ 41″	1° 48′ 10″ W	180	g 38	VIII 24	— 3° 19′.7	2	0′.2	— 4° 12′	— 3° 30′	— 0° 06′
2343	Stocksbo	60 41 01	1 42 43 W	150	g 38	24	— 2 58.0	2	0.2	— 3 50	— 3 08	+ 0 12
2344	Enviken	60 48 39	2 17 46 W	158	g 39	25	— 3 58.5	2	0.4	— 4 51	— 4 09	— 0 29
2345	Åmots bruk	60 58 01	1 36 02 W	150	L 49	25	— 3 08.2	2	0.1	— 4 00	— 3 19	— 0 02
2346	Katrineberg	61 04 07	1 44 59 W	255	L 49	25	— 3 09.7	2	0.2	— 4 02	— 3 20	+ 0 01
2347	Råhällan	60 49 05	1 06 07 W	75	g 39	26	— 1 36.4	2	0.2	— 2 27	— 1 47	+ 1 13
2348	Västeråsen	63 01 20	3 44 50 W	371	s 64	29	— 6 27.0	2	0.1	— 7 24	— 6 38	— 2 14
2349	Månsåsen	63 04 07	3 43 47 W	359	s 64	29	— 6 16.8	2	0.1	— 7 14	— 6 28	— 2 04
2351	Kövra	62 54 58	3 43 02 W	323	s 64	IX 1	— 6 17.0	2	0.0	— 7 14	— 6 28	— 2 05
2352	Dalåsen	62 51 50	3 45 55 W	380	f 78	1	— 6 18.0	2	1.1	— 7 15	— 6 29	— 2 04
2353	Petersburg	62 49 05	3 38 55 W	353	g 20	1	— 8 16.8	2	0.5	— 9 14	— 8 28	— 4 07
2354	Linsäll, K. Sj. K. V.	62 09 54	4 09 48 W	400	g 20	3	— 4 03.6	2	0.1	— 5 01	— 4 15	+ 0 25
1064	Sveg	62 01 59	3 41 27 W	351	g 20	3	— 6 03.1	2	0.0	— 6 59	— 6 14	— 1 50
2357	Limedsforsen, K. Sj. K. V.	60 54 54	4 39 54 W	450	s 61	5	— 3 36.5	2	0.2	— 4 33	— 3 47	+ 1 12
2358	Stockholm	59 20 34	0 00 00	10	g 8	7	— 2 43.5	2	0.4	— 3 31	— 2 53	— 0 27
	1935. S. Werner. Instr. Chasselon No. 83.						1935.5					
2359	Örträsk	65 00 32	1 33 14 E	225	d 29	IX 15	— 0 20.4	2	0.1	— 1 23	— 0 41	+ 0 42
	1928–1934.											
	Uppsala I. Magnet-house	59 51 12	0 25 48 W	20	g 5					— 3 21	— 2 42	— 0 03

Remarks and comparisons.

D red. to the epoch of 1933.5

1) Hovermo 13M28 . . . . . = — 10° 30′
   13W31 . . . . . = — 10 27
   The observation places differ from each other less than 10 meters.
2) Oviken 651W31 b . . . . . = — 6 28
   651S31 b . . . . . = — 6 32
3) Kolforsen 1025H31 . . . . . = — 4 10
   1025S31 . . . . . = — 4 11
4) Sorsele 904R31 Aug. 11 and 12 . . . . . = — 1 22
   Oct. 8 . . . . . = — 1 17
5) Arjeploug 372 I E30 Distance E—R: 1 km . . . . . = — 3 19
   372 II R31 Sept. 12. » E—W: 8 km . . . . . = — 2 12
   » Sept. 25. » R—W: 7.4 km . . . . . = — 2 13
   1848 W33 K. Sj. K. V. . . . . = — 3 18
6) Bure 351 I E30 . . . . . = — 1 53
   351 II R31 . . . . . = — 1 55
   The points are situated at a distance of about 1 km from each other.
7) Sveg 106R29 . . . . . = — 6 23
   1064S31 . . . . . = — 6 14
   1064S34 . . . . . = — 6 14
   The field-stations Nos. 106 and 1064 are located 200 m from each other.
8) Fritsla 1462 I W33 . . . . . = — 4 49
   1462 I T33 . . . . . = — 4 44
   The points are situated on the same rock and the distance may surely not exceed 3 m.
9) Särna A 48J28 . . . . . = — 4 37
   B 1102S31 . . . . . = — 4 55
   Distance 0.6 km.

10) Linsäll 111R29 . . . . . = — 4 02
2354S34 K. Sj. K. V. . . . . = — 4 15
Distance 100 m.
11) Dorotea A 185W29 . . . . . = — 3 40
B 306 E30 . . . . . = — 3 32
Distance 1 km.
12) Lycksele 195W29 . . . . . = — 1 51
323 E30 K. Sj. K. V. . . . . = — 1 44
Distance 0.5 km.
13) Bredsel 396 E30 . . . . . = + 0 26
1846W33 K. Sj. K. V. . . . . = + 0 03
Distance 0.4 km.
14) Arvidsjaur B 515W30 . . . . . = — 1 30
1847W33 K. Sj. K. V. . . . . = — 1 39
Distance 2.4 km.
15) Hedesunda 1028H31 . . . . . = — 1 34
2259 S34 . . . . . = — 0 54
Distance of about 50 m.
16) Björneborg 977H31 . . . . . = — 5 19
Björneborgs bruk 2116 T34 . . . . . = — 5 25
Distance 1.5 km.
17) Umeå 210W29 . . . . . = — 0 53
418 E30 . . . . . = — 0 43
Distance 3 km.

18) Comparison between the values of the Geological Survey and those of the Hydrographic Service at the common points.

Table 22.

		1929.5 G.S.	1929.5 H.S.	G.S.—H.S.
Näs, »The brass bolt»	68	— 7° 15′	— 7° 11′.8	— 3′.2
Färila	77 M 29	— 4 16.7	— 4 20.0	+ 3.3
Fredrika	305 E 30	— 3 14.0	— 3 15.5	+ 1.5
Lycksele	323 E 30	— 2 26.0	— 2 29.4	+ 3.4
Vindeln	337 E 30	— 0 35.6	— 0 40.0	+ 4.4
Flåsjön	452 R 30	— 4 39.7	— 4 51.8	+ 12.1
Abisko II	623 W 30	— 2 18	— 2 18.6	+ 0.6
Ånge II	37 W 31	— 4 31.9	— 4 34.8	+ 2.9
Muonionalusta	759 W 31	— 2 14.2	— 2 08.5	— 5.7
Rämsle	822 W 31	— 3 55.6	— 3 48.5	— 7.1
Jäkkvik	921 R 31	— 3 17.1	— 3 17.7	+ 0.6
Vänge-Långharpan	1171 T 32	— 3 22.6	— 3 20.7	— 1.9
Laggåsen	1188 T 32	— 5 07.5	— 5 00.2	— 7.3
Saltoluokta	1336 W 32	— 1 49.7	— 1 45.3	— 4.4
Viken	1411 W 33	— 5 39.1	— 5 38.3	— 0.8
Östra-Bitterna	1453 W 33	— 6 03.6	— 6 01.9	— 1.7
Ulricehamn	1466 W 33	— 5 36.0	— 5 34.7	— 1.3
Torpa	1501 T 33	— 4 46.9	— 4 46.3	— 0.6
Vittangi	1758 W 33	— 6 24.3	— 5 56.7	— 27.6
Karesuando	1759 W 33	— 2 37.3	— 2 30.4	— 6.9
Kåseberga	1662 T 33	— 5 42.7	— 5 46.4	+ 3.7
Baskemölla	1667 T 33	— 5 30.5	— 5 35.0	+ 4.5
Bredsel	1846 W 33	— 0 38.6	— 0 36.5	— 2.1
Arvidsjaur	1847 W 33	— 2 22.0	— 2 16.6	— 5.4
Arjeploug	1848 W 33	— 4 03.0	— 3 57.9	— 5.1
Gämla	1880 W 34	— 4 22.5	— 4 22.4	— 0.1
Gränna	1874 W 34	— 2 48.5	— 2 46.9	— 1.6
Traneryd	2016 T 34	— 3 39.8	— 3 39.9	+ 0.1
Vimmerby	2034 T 34	— 4 08.6	— 4 11.5	+ 2.9
Burgsvik	2236 W 34	— 3 50.7	— 3 52.0	+ 1.3
Edsbyn	2317 S 34	— 5 05.9	— 5 00.7	— 5.2
Leksand	2333 S 34	— 6 59.9	— 6 56.5	— 3.4
Linsäll	111 S 34	— 5 00.5	— 4 55.8	— 4.7
Limedsforsen	2357 S 34	— 4 32.6	— 4 28.4	— 4.2

As the differences include observation errors as well as those from reductions to the middle of the year and to the epoch in question, a discussion must be rather complicated. The field-stations are therefore only chronologically grouped in order to facilitate an appearance of a time-dependence which may emanate from the reductions to the epoch.

Remeasurements at older observation places.

In order to obtain material for augmenting our knowledge of the secular change by means of remeasurements of older points, it is necessary to estimate the importance of the long intervening time in relation to the incompleteness in available older descriptions of points. In the range of possibility we have therefore tried to assign the value of older points one by one as fit for remeasurements. Thus the measurers have had, as to professor Carlheim-Gyllensköld's observation places from the year of 1892, photographic reproductions of all his original sketches, and, as to the Finnish marked points, sketch copies, for which I am indebted to Professor J. Keränen. I am also indebted to professor S. Sæland for his, at our request years after his own measurements drawn sketches of some of his points in Norway, valuable to us as giving us an opportunity to attain an approximate agreement. To systematize the quality of agreement, as well as the actual earth-magnetic value of the point, the following scheme is adjusted:

m = agreement exact: marked point.
* = agreement good: within a circle with a radius of about 15 m.
* * = agreement fairly good: within a circle with a radius of about 100 m.
— — — = the distance given in metres.
* * * = the description of point incomplete.
\+ = the older point of no value, because of later building.
\+ \+ = the older point without description; the coordinates uncertain with regard to the older chart material.
p = the measurer had a sketch for finding the point.

Because of a planned work, intended to treat the secular change for all magnetic elements in common, I have here published only the primary declination material from our remeasurements without discussion. The differences are only computed as control.

Table 23.

Olav. Petr. Hiorter: K. V. A. Handl. Vol. VIII, p. 28, 1747.

Station	G. S. Reg. No.	D	D 1933.5	D calc.	Diff.	Geology
Salberg 1746	1034 H 31	—9°	—3°42′	—3°13′	+5°18′	g 4
Hedemora »	1007 H 31	—9 10′	—3 31	—3 34	5 39	g 37
Söderbärke »	250 E 30	—9 15	—4 14	—3 49	5 01	g 4
Lindesberg »	2147 T 34	—9 36	—3 29	—4 01	6 05	g 4
Kungsör »	2136 T 34	—9 30	—3 50	—3 32	5 40	L 49
Upsala »		—8 45	—2 42	—2 39	5 03	g 5

The older points are without description. (++).

Table 24.

Nils Marelius: K. V. A. Handl. Vol. XXIV, p. 306, 1763; Vol. XXXII, p. 192, 1771.

Station	G. S. Reg. No.	D	D 1933.5	D calc.	Diff.	Geology
Goundalen 1759	150 R 29	—12°	—4°33′	—5°17′	+7°27′	f 77
Årevattnet »	152 R 29	—12 30′	—5 27	—4 40	7 03	s 64
Skaal »	151 R 29	—12 45	—5 26	—4 37	7 19	f 76
Quedlie 1760	153 R 29	—12 45	—5 06	—4 42	7 39	f 76
Uhme Capell 1761	210 W 29	—10 45	—0 52	—1 04	9 53	m 42
»	418 E 30		—0 43	—1 03	10 02	m 42

Table 25.

Nath. Gerh. Schultén: K. V. A. Handl. Vol. XX, p. 114, 1799; Vol. XXVII, p. 149, 1806.

Station	G. S. Reg. No.	D	D 1933.5	D calc.	Diff.	Geology
Sala 1798	1034 H 31	— 16°	— 3° 42′	— 3° 13′	+ 12° 18′	g 4
Avesta »	1008 H 31	— 17 40′	— 3 12	— 3 28	14 28	g 40
Falun »	Interpol.	— 18 45	— 4 27	— 3 45	14 18	
Norrbärke »	251 E 30	— 17 35	— 4 14	— 3 49	13 21	g 4
Nya Kopparberget »	985 H 31	— 19 25	— 2 53	— 4 08	disturbed	L 49
Nora »	2144 T 34	— 18 35	— 3 35	— 4 06	15 00	L 49
Örebro »	245 E 30	— 17 13	— 4 01	— 4 01	13 12	g 8
Arboga »	2138 T 34	— 17 25	— 3 34	— 3 39	13 51	m 55
Köping »	2137 T 34	— 17 15	— 3 30	— 3 34	13 45	g 4
Kullens fyr 1803	1558 T 33	— 21	— 6 41	— 5 39	14 19	g 37
Strömstad 1804	1263 T 32	— 18	— 6 15	— 6 18	11 45	g 19

The older points are without description. (+ +).

Table 26.

Christoph Hansteen und Due: Resultate Magnetischer, Astronomischer und Meteorologischer Beobachtungen auf einer Reise nach dem östlichen Sibirien in den Jahren 1828—1830. Christiania 1863, p. 84.

Station	G. S. Reg. No.	D	D 1933.5	D calc.	Diff.	Geology
Motala 1828	1871 W 34	— 16° 38′	— 3° 40′	— 4° 08′	+ 12° 58′	m 72
Rödesund »	1414 W 33	— 17 26	— 5 06	— 4 27	12 20	s 63

Table 27.

N. G. Sefström: K. V. A. Handl. Vol. 11, p. 93, 1845.

Station		G. S. Reg. No.	D 1838—1844	D 1933.5	D calc.	Difference	Notes	Geology
Falun	1838	Interpol.	— 16° 47′.8	—4° 27′	— 3° 44′.5	+12° 20′.8		
»	1840	Interpol.	16 38	4 27	— 3 44.5	12 11		
Torsåker	1840	1019 H 31	15 19.0	1 11.4	— 3 16.3	14 07.6	* * *	g 40
Kilafors	1840	872 W 31	15 02.2	3 52.9	— 3 11.8	11 09.3	* * *	m 42
Järvsö	1840	870 W 31	15 25.5	3 15.0	— 3 23.9	12 10.5	* * *	g 40
Sörfors	1840	855 W 31	15 17.0	3 01.8	— 2 53.6	12 15.2	* * *	D 32
Bollsta	1840	825 W 31	14 37.2	2 37.5	— 2 31.4	11 59.7	* * *	m 42
Härnösand	1840	172 W 29	15 50.0	3 00.8	— 2 24.5	12 49.2	* * *	m 42
Lögdö bruk	1840	171 W 29	15 50	2 59.5	— 2 41.4	12 50.5	* * *	m 42
Gävle	1840	2293 S 34	14 40	2 51.2	— 2 54.8	11 48.8	* * *	s 61
Ankarsrum	1841	2051 T 34	15 53.7	3 52.1	— 3 26.6	12 01.6	* * *	g 14
Torsåker	1841	1019 H 31	14 52.3	1 11.4	— 3 16.3	13 40.9	* * *	g 40
Österby bruk	1841	Interpol.	15 22.5	2 00	— 2 29.6	13 22.5		
Hargs bruk	1843	Interpol.	13 41	2 12	— 2 12.5	11 29		
Kalmar	1844	1914 W 34	13 55.8	2 19.0	— 3 28.0	11 36.8	* * *	s 66
Torshälla	1844	Interpol.	13 21.0	3 50	— 3 19.0	9 31		
Bjuråker	1844	868 W 31	14 48.4	3 09.3	— 3 10.9	11 39.1	* * *	g 40
Harvom	1844	836 W 31	15 02.9	2 52.0	— 2 50.7	12 10.9	* * *	m 42
Ekebyholm	1844	2274 S 34	13 10.2	2 13.4	— 2 14.5	10 56.8	* * *	g 8

Table 28.

C. H. Wegelin: K. V. A. Handl. Vol. II, p. 92, 1845.

Station	G. S. Reg. No.	D 1843	D 1933.5	D calc. 1933.5	Difference 1933.5—1843	Notes	Geology
Skattungbyn	966 A. H 31	−17°00′.2	−5°42′.9	−4°09′.5	+11°17′.3	* *	m 72
Tansjö. Orsa	1069 S 31	15 30.0	6 47.0	−4 12.2	8 43.0	* * *	L 49
		1844			1933.5—1844		
Upland. (Mörsil)	23 M 28	−17 21.8	4 35.7	−4 47.8	12 46.1	* * *	s 64
Skaltjärnstugan	24 M 28	17 29.3	4 51.2	−5 23.3	12 38.1	* * *	s 64
Viken. (Hede)	8 M 28	17 32.1	5 31.6	−4 45.9	12 00.5	* * *	g 20
Kårböle	262 E 30	18 10.9	6 34.7	−3 52.2	11 36.2	* * *	m 44

Table 29.

C. B. Lilliehöök: K. V. A. Handl. Vol. XL, No. 4, p. 3, 1883.

Station	G. S. Reg. No.	D	D 1933.5	D calc.	Diff.	Geology
Haparanda 1845	793 W 31	−11°12′	−0°27′	+1°10′	+10°45′	d 30
Karlskrona 1846	1704 T 33	−14 06	−3 49	−3 55	10 17	g 37

Table 30.

af Klint: V. Carlheim-Gyllensköld, Öfvers. af K. V. A. Förh. Vol. 51, 1894, No. 2.

Station	G. S. Reg. No.	D 1852.5	D 1933.5	D calc. 1933.5	Difference 1933.5—1852.5	Notes	Geology
Visby	2222 W 34	−13°20′	−3°42′	−2°21′.4	+9°38′	+ +	s 64
Ölands N. udde	1948 W 34	13 38	4 00	−3 05.2	9 38	+ +	s 64
N. Möckleby	1928 W 34	12 55	2 46	−3 17.6	10 09	+ +	s 64
Kalmar	1914 W 34	12 19	2 19	−3 28.0	10 00	+ +	s 66
Bergkvara	1909 W 34	13 29	3 08	−3 38.6	10 21	+ +	s 66
Kristianopel	1708 T 33	13 40	3 13	−3 39.8	10 27	+ +	s 65
Ölands S. udde	1933 W 34	14 18	3 37	−3 27.4	10 41	+ +	s 64
Åhus	1691 T 33	14 11	3 22	−4 38.8	10 49	+ +	s 85
Simbrishamn	1666 I T 33	14 15	4 32	−4 37.9	10 43	+ +	s 66
Ystad	1656 T 33	15 13	4 35	−4 55.9	10 38	+ +	s 86
Skanör	1634 T 33	12 50	4 41	−5 27.9	8 09	+ +	s 86
		1853.5			1933.5—1853.5		
Åmål	1236 T 32	15 55	5 51	−5 25.8	10 04	+ +	g 40
Vänersborg	1256 T 32	16 10	5 17	−5 39.9	10 53	+ +	g 37
Lidköping	1439 W 33	15 12	4 40	−5 11.5	10 32	+ +	g 37

Table 31.

G. Pettersson: V. Carlheim-Gyllensköld, Öfvers. af K. V. A. Förh. Vol. 51, 1892, No. 2.

Station	G. S. Reg. No.	D 1855.5	D 1933.5	D calc. 1933.5	Difference 1933.5—1855.5	Notes	Geology
Varberg	1481 T 33	−17°21′.0	−6°11′.5	−5°44′.8	+11°09′.4	+ +	m 45
Falkenberg	1508 T 33	16 48.2	6 22.5	−5 29.3	10 25.7	+ +	g 37
Torekov	1545 T 33	15 54.3	5 39.9	−5 28.7	10 14.4	+ +	g 37
Höganäs	1561 T 33	15 34.6	5 29.6	−5 36.6	10 05.0	+ +	s 81
Skanör	1634 T 33	14 20.3	4 41.0	−5 27.9	9 39.3	+ +	s 86

Table 32.

Th. Arwidsson: K. V. A. Handl. Vol. 27. No. 8. 1894.

Station	G. S. Reg. No.	D 1860	D 1933.5	D calc. 1933.5	Difference 1933.5—1860	Notes	Geology
Strömsundet	590 W 30	— 8° 08′.4	+ 0° 46′.9	+ 0° 11′.8	+ 8° 55′.3	+ +	m 42
Haparanda	793 W 31	8 33.6	— 0 26.5	+ 1 10.0	8 07.1	+ +	d 30
Salmis A.	794 W 31	9 10.5	+ 0 37.6	+ 1 06.6	9 48.1	0.7 km d	g 4
Piteå	557 W 30	8 11.3	+ 1 49.7	— 0 18.8	10 01.0	1 km	m 42
Furugrund	807 W 31	9 09.7	— 0 14.1	— 0 28.7	8 55.6	1 km	m 42
Ursviken	526 W 30	9 12.9	— 0 16.7	— 0 30.8	8 56.2	+ +	g 4
Ratan A.	422 E 30	9 26.4	— 0 24.3	— 0 41.6	9 02.1	* * *	m 42
Järnäs udde A.	441 E 30	10 26.1	— 1 17.9	— 1 23.6	9 08.2	* * *	g 9
Örnsköldsvik A.	217 W 29	10 55.6	— 1 48.2	— 1 56.4	9 07.4	1 km	g 9
Härnösand	172 W 29	11 52.8	— 3 00.8	— 2 24.5	8 52.0	1.5 km	m 42
Hudiksvall	865 W 31	12 18.4	— 3 05.1	— 2 53.4	9 13.3	3 km	m 42
Stugsundet	1163 S 31	11 44.4	— 3 07.7	— 2 53.6	8 36.7	+ +	g 38
Gävle B.	2293 S 34	11 01.9	— 2 51.2	— 2 54.8	8 10.7	+ +	s 61
Öregrund	2281 S 34	11 21.1	— 2 26.1	— 2 10.9	8 55.0	0.6 km	g 38
Stockholm A. B.	2358 S 34	11 49.1	— 2 53.2	— 2 26.0	8 55.9	*	g 8
Sjötorp	1401 W 33	14 37.7	— 4 50.4	— 4 43.7	9 47.3	50 m	g 37
Motala	1871 W 34	13 19.1	— 3 40.2	— 4 08.4	9 38.9	+ +	m 72
Vänersborg	1256 II A.B. T 32	14 24.7	— 5 13.4	— 5 39.9	9 11.3	* *	g 37
Västervik	2052 T 34	12 54.8	— 3 37.0	— 3 16.4	9 17.8	+ +	s 60
Visby	2222 W 34	11 56.7	— 3 41.9	— 2 21.4	8 14.8	0.7 km	s 64
Oskarshamn	1953 W 34	11 36.9	— 1 05.7	— 3 23.1	10 31.2	2 km	m 17
Varberg	1481 T 33	15 09.3	— 6 11.6	— 5 44.8	8 57.7	* *	m 45
Hoburgen	2235 W 34	11 49.7	— 2 20.2	— 2 28.5	9 29.5	1.3 km	s 64
Kalmar	1914 W 34	11 49.8	— 2 19.0	— 3 28.0	9 30.8	0.3 km	s 66
Karlskrona	1704 T 33	13 23.9	— 3 48.9	— 3 54.4	9 35.0	* * *	g 37
Åhus	1691 T 33	12 36.2	— 3 22.0	— 4 38.8	9 14.2	1 km	s 85
Ystad	1656 T 33	13 55.9	— 4 34.8	— 4 55.9	9 21.1	+ +	s 86

Table 33.

V. Carlheim-Gyllensköld: K. V. A. Handl. Vol. XXIII, No. 9, 1889.

Station	G. S. Reg. No.	D 1886.6	D 1933.5	D calc. 1933.5	Difference 1933.5—1886.6	Notes	Geology
Upsala	2106 S 34	— 8° 07′.6	— 2° 44′.0	— 2° 39′.4	+ 5° 23′.6	* *	g 5
Stockholm	2358 S 34	8 32.8	2 53.2	— 2 26.0	5 39.6	*	g 8
Dalbyö	2083 I T 34	10 59.5	5 20.1	— 2 46.4	5 39.4	*	g 37
Norsholm	2068 T 34	10 41.3	4 44.4	— 3 37.4	5 56.9	* *	g 14
Söderköping III	2063 I T 34	8 43.2	2 46.9	— 3 25.4	5 56.3	*	g 37
Skärkind III	2062 I T 34	9 49.2	3 58.3	— 3 36.8	5 50.9	*	m 42
II	II T 34	10 02.3	4 10.9	— 3 36.8	5 51.4	*	m 42
Björsäter	2060 T 34	9 07.2	3 24.9	— 3 36.0	5 42.3	+ 500 m	g 14
Åtvidaberg III	2044 T 34	8 17.7	3 31.0	— 3 37.3	4 46.7	+ 2 km	d 27
Falerum	2045 T 34	8 55.0	4 35.4	— 3 29.1	4 19.6	+ 3 km	st 59
Nelhammar	2046 T 34	10 15.8	3 58.0	— 3 26.5	6 17.8	*	g 4
Tranås	2017 T 34	9 10.9	3 31.2	— 4 10.4	5 39.7		g 14
Asby Sand	2019 T 34	10 08.2	4 37.4	— 4 04.3	5 30.8	* *	g 14
Viredaholm	1972 W 34	9 09.2	3 00.5	— 4 23.1	6 08.7	200 m	L 33
Gamleby	2053 T 34	10 10.2	4 59.0	— 3 24.5	5 11.2	1.5 km	d 27
Norra Vi	2020 I T 34	11 23.4	5 10.3	— 3 59.5	6 13.1	*	m 17
Aneby	1964 W 34	8 32.5	2 24.4	— 4 17.6	6 08.1	+ 175 m	g 14
Assjö	1962 I W 34	8 03.5	1 49.0	— 4 12.9	5 49.1	600 m	g 14
	II W 34		2 39.8	— 4 12.9		2 km	g 14
Västervik	2052 T 34	8 54.8	3 37.0	— 3 16.4	5 17.8	1 km	s 60
Ankarsrum	2051 T 34	9 42.8	3 52.1	— 3 26.6	5 50.7	* *	g 14

Table 33. — Continued.

Station	D. S. Reg. No.	D 1886.6	D 1933.5	D calc. 1933.5	Difference 1933.5—1886.5	Notes	Geology
Tuna	2033 T 34	— 9° 41′.8	— 3° 29′.7	— 3 34′.9	+ 6° 12′.1	*	g 14
Vetlanda	1958 W 34	8 46.3	2 58.4	— 4 09.3	5 47.9	+ * *	L 33
Lannaskede	1960 W 34	8 31.9	3 29.0	— 4 16.8	5 02.9	* * *	g 14
Mörlunda	1955 W 34	7 01.1	2 48.8	— 3 43.1	4 12.3	* *	d 27
Oskarshamn	1953 W 34	7 17.5	1 05.7	— 3 23.1	6 11.8	1 km	m 17
Bohult	1954 W 34	8 53.1	2 52.7	— 3 33.9	6 00.4	350 m	L 33
Alvedsjöbodar	1946 W 34	11 22.7	5 46.0	— 3 08.2	5 36.7	70 m	s 64
Mönsterås	1925 W 34	7 59.6	2 24.9	— 3 24.5	5 34.7	+ 40 m	m 17
Sävsjöström	1919 W 34	9 21.9	3 19.6	— 3 59.5	6 02.3	+ 50 m	L 33
Målerås	1918 W 34	9 20.7	3 32.5	— 3 54.0	5 48.2	+ 50 m	L 33
Borgholm	1949 I W 34	8 17.0	2 27.9	— 3 17.8	5 49.1	200 m	s 64
Orrefors	1917 W 34	9 40.8	3 45.8	— 3 48.4	5 55.0	* *	m 17
Åryd	1897 A W 34	9 53.2	4 02.0	— 4 13.9	5 51.2	*	g 14
Lessebo	1896 W 34	8 54.6	3 35.8	— 4 04.7	5 18.8	24 m	m 17
Nybro	1916 W 34	9 10.0	3 16.2	— 3 43.2	5 53.8	* *	g 14
Trekanten	1915 W 34	9 20.9	3 30.7	— 3 36.7	5 50.2	60 m	g 14
Kalmar	1914 W 34	8 32.0	2 19.0	— 3 28.0	6 13.0	500 m	s 66
Emmaboda	1895 W 34	9 57.1	4 18.6	— 3 55.5	5 38.5	15 m	m 16
Ålshult	1899 W 34	11 01.7	5 10.2	— 4 24.9	5 51.5	*	L 33
Mörbylånga	1935 W 34	9 38.9	3 42.5	— 3 27.9	5 56.4	40 m	s 64
Ekenäs	1912 W 34	8 51.2	2 47.1	— 3 34.7	6 04.1	40 m	s 66
Värnanäs	1913 W 34	8 46.4	2 50.5	— 3 35.7	5 55.9	*	s 66
Holmsjö	1890 W 34	10 49.3	4 55.1	— 3 55.9	5 54.2	* *	m 17
Hemsjö	1900 W 34	9 45.5	3 48.1	— 4 24.3	5 57.4	+ 45 m	g 37
Spjutsbygd	1891 W 34	10 11.9	4 14.0	— 3 54.5	5 57.9	* *	g 14
Torskors	1703 T 33	9 43.8	3 54.5	— 3 53.3	5 49.3	* *	g 4
Lyckeby	1906 W 34	8 24.9	2 38.0	— 3 52.4	5 46.9	* *	g 40
Ronneby I	1702 T 33	9 40.9	4 27.9	— 4 04.8	5 13	* * d	g 8
Karlskrona	1704 II T 33	9 12.0	3 48.9	— 3 54.4	5 23.1	* *	g 37

Table 34.

V. Carlheim-Gyllensköld: Bihang till K. V. A. Handl. Bd. 20. Avd. I. No. 8. 1895.

Station	G. S. Reg. No.	D 1889.5	D 1933.5	D calc. 1933.5	Difference 1933.5—1889.5	Notes	Geology
Stockholm	2358 S 34	— 8° 30′.7	— 2° 53′.2	— 2° 26′.0	+ 5° 37′.5	*	g 8
Norsholm	2068 T 34	10 33.3	4 44.4	— 3 37.4	5 48.9	* *	g 14
Lake Sommen	2017 T 34	9 13.2	3 31.2	— 4 10.4	5 42.0	500 m	g 14
Lake Bunnen	2014 T 34	7 32.7	1 59.8	— 4 28.6	5 32.9	700 m	g 15
Lake Ören	1974 W 34	8 17.7	2 26.0	— 4 24.7	5 51.7	800 m	m 17
Lake Öasjön	1973 W 34	8 22.4	2 35.7	— 4 23.4	5 46.7	700 m	g 15
Lake Mosserydsjön	1971 W 34	8 28.2	2 39.1	— 4 22.1	5 49.1	400 m	g 14
Viredaholm	1972 W 34	8 54.8	3 00.5	— 4 23.1	5 54.3	200 m	L 33
Lake of Viredaholm	1972 W 34	8 25.6	3 00.5	— 4 23.1	5 25.1	300 m	L 33
Lake Ralången	1965 W 34	8 13.9	2 13.9	— 4 16.9	6 00.0	1 km	L 33
Lake Assjön	1962 I W 34	7 55.8	1 49.0	— 4 12.9	5 41.4	400 m	g 14
	II W 34		2 39.8	— 4 12.9		1.3 km	g 14

Table 35.

V. Carlheim-Gyllensköld: Nova acta R. Soc. Sc. Ups., Ser. III. — Uppsala, 1896.

Station	G. S. Reg. No.	D 1892.67	D 1933.5	D calc. 1933.5	Difference 1933.5—1892.67	Notes	Geology
Upsala IV	2106 S 34	— 7° 35′.1	— 2° 44′.0	— 2° 39′.4	+ 4° 51′.1	* *	g 5
Stockholm	2358 S 34	8 14.9	2 53.2	— 2 26.0	5 21.7	*	g 8
Hallsberg	2122 T 34	9 04.2	3 39.3	— 4 05.7	5 24.9	* *	s 64
Åmål	1236 T 32	11 26.3	5 50.8	— 5 25.8	5 35.5	* p	g 40
Vingåker	1868 W 34	8 46.5	3 46.3	— 3 39.6	5 00.2	* *	g 37
Lerbäck	1983 W 34	9 08.8	4 05.7	— 4 07.6	5 03.1	220 m	g 37
Strömstad	1263 T 32	12 02.4	6 14.6	— 6 17.6	5 47.8	* p	g 19
Västra Ed	1244 T 32	11 38.2	6 00.9	— 5 52.6	5 37.3	* p	g 38
Hökedalen	1246 T 32	11 38.7	5 54.0	— 5 53.6	5 44.7	* p	g 38
Bäckefors	1243 T 32	11 13.4	5 47.6	— 5 44.0	5 25.8	200 m p	g 41
Godegård	2095 T 34	9 07.0	3 47.3	— 4 04.0	5 19.7	* *	m 6
Mellerud	1239 T 32	10 56.3	5 20.4	— 5 34.5	5 35.9	* p	g 41
Grebbestad III	1259 C T 32	11 24.3	6 12.7	— 6 15.5	5 11.6	* p	g 19
II	B	12 00.9	6 36.5	— 6 15.5	5 24.4	* p	g 19
I	A	12 11.6	6 27.2	— 6 15.5	5 44.4	* p	g 19
Fjällbacka	1265 T 32	12 00.6	5 46.8	— 6 14.3	6 13.8	* p	g 19
Brålanda I	1254 B T 32	11 43.1	5 56.7	— 5 38.5	5 46.4	* * p	g 39
II	A	11 42.7	6 10.9	— 5 38.5	5 31.8	* p	g 39
Motala	1871 W 34	9 04.3	3 40.2	— 4 08.4	5 24.1	+ 55 m p	m 72
Rödesund	1414 W 33	9 43.2	5 05.6	— 4 26.5	4 37.6	+ * * p	s 63
Lidköping	1439 I W 33	10 14.2	4 23.9	— 5 11.5	5 50.3	+ 200 m p	g 37
Tibro	1415 W 33	10 22.7	4 48.5	— 4 38.2	5 34.2	* * p	g 14
Skövde	1406 I W 33	10 22.4	4 54.3	— 4 49.3	5 28.1	+ 75 m p	s 67
Skara	1434 I W 33	10 03.4	4 32.3	— 5 02.4	5 31.1	+ 160 m p	g 37
Vänersborg	1256 I T 32	10 45.4	5 24.9	— 5 39.9	5 20.5	* p	g 40
Salstad	1442 W 33	11 13.6	5 09.8	— 5 30.9	6 03.8	+ 150 m p	g 37
Håkantorp	1450 W 33	10 21.8	4 39.7	— 5 20.6	5 42.1	25 m p	g 37
Lysekil	1267 T 32	12 21.3	6 28.2	— 6 09.9	5 53.1	+ * p	g 19
Stenstorp	1432 W 33	10 43.8	4 59.5	— 4 53.5	5 44.3	120 m p	s 69
Falköping	1431 W 33	10 14.9	4 41.5	— 4 59.1	5 33.4	70 m p	s 69
Upphärad	1445 W 33	11 21.7	5 49.9	— 5 41.0	5 31.8	* p	g 37
Kettilstorp I	1429 I W 33	10 36.9	4 58.5	— 4 54.0	5 38.4	* * p	g 37
II	II	10 11.9	4 38.2	— 4 54.0	5 33.7	* p	g 37
Mullsjö I	1428 W 33	9 30.3	4 12.7	— 4 48.6	5 17.6	+ 156 m p	g 37
Borgstena	1465 W 33	10 58.2	5 30.7	— 5 17.8	5 27.5	* p	g 37
Partilled	1460 W 33	11 13.8	5 53.8	— 5 48.9	5 20.0	* * p	g 37
Borås övre	1273 T 32	11 26.7	6 23.6	— 5 20.8	5 03.1	+ * p	g 37
Nässjö	1970 W 34	8 14.0	3 42.6	— 4 21.6	4 31.4	+ 190 m p	m 62
Fritsla I	1462 II W 33	10 41.2	5 00.0	— 5 25.8	5 41.2	* p	g 37
II	I	10 15.8	4 46.0	— 5 25.8	5 29.8	30 m p	g 37
Hook	1875 W 34	7 52.6	2 11.8	— 4 36.3	5 40.8	* p	g 37
Svenljunga	1475 T 33	10 52.9	5 17.4	— 5 15.2	5 35.5	* p	g 37
Kungsbacka	1477 T 33	10 52.3	5 19.5	— 5 50.0	5 32.8	* p	m 45
Björketorp	1464 W 33	11 04.9	5 54.3	— 5 35.4	5 10.6	* p	g 37
Sävsjö	1876 W 34	9 16.2	3 56.5	— 4 23.5	5 19.7	+ 130 m p	L 33
Klefshult	1490 T 33	9 58.6	4 24.9	— 4 42.7	5 33.7	* * p	g 37
Åsa I	1478 T 33	11 13.6	5 29.4	— 5 48.7	5 44.2	15 m p	g 37
Väddige	1480 T 33	11 06.0	5 40.8	— 5 41.8	5 25.2	45 m p	g 37
Backa	1479 T 33	11 05.9	5 48.4	— 5 46.5	5 17.5	600 m	g 37
Refteled, övre	1486 T 33	10 23.2	5 09.7	— 4 59.7	5 13.5	* p	d 27
Kärda	1489 T 33	10 15.5	4 36.7	— 4 48.7	5 38.8	* p	g 37
Lamhult	1493 T 33	9 33.6	4 00.6	— 4 26.6	5 33.0	* p	m 17
Ätran	1506 T 33	11 18.8	5 43.2	— 5 21.3	5 35.6	+ 75 m p	m 45
Varberg	1481 T 33	12 30.3	6 11.6	— 5 44.8	6 18.7	700 m	m 45
Kinnared II	1505 II T 33	10 14.8	4 51.2	— 5 16.5	5 23.6	* p	g 37
I	I	11 52.3	6 23.0	— 5 16.5	5 29.3	* p	g 37
Alvestad	1496 T 33	8 40.2	2 46.2	— 4 28.1	5 54.0	100 m p	g 37

Table 35. — Continued.

Station	G. S. Reg. No.	D 1892.67	D 1933.5	D calc. 1933.5	Difference 1933.5—1892.67	Notes	Geology
Fröslida	1504 T 33	— 10° 30′.0	— 4° 53′.0	— 5° 18′.8	+ 5° 37′.0	* p	g 37
Tutaryd	1497 T 33	9 50.3	4 07.3	— 4 45.3	5 43.0	* p	m 46
Ljungby	1498 T 33	9 41.2	4 11.5	— 4 48.7	5 29.7	+ 20 m p	m 45
Lidhult	1502 T 33	10 10.2	5 10.0	— 5 05.5	5 00.2	* p	g 37
Getinge	1508 T 33	11 49.3	6 22.5	— 5 29.3	5 26.8	* p	g 37
Bolmen I	1500 I T 33	10 16.5	4 58.3	— 4 56.8	5 18.2	* p	d 27
II	II	10 12.1	4 57.4	— 4 56.8	5 14.7	* p	d 27
Vislanda	1881 W 34	8 57.1	3 40.8	— 4 31.4	5 16.3	*	g 37
Skallinge I	1503 T 33	11 12.6	5 06.4	— 5 13.9	6 06.2	160 m p	g 37
II		12 05.5				200 m p	g 37
Sennan	1509 T 33	10 35.7	5 33.3	— 5 21.3	5 02.4	* * p	g 37
Liatorp	1523 T 33	9 33.2	4 03.7	— 4 38.0	5 29.5	* *	g 37
Eldsberga	1512 T 33	11 19.9	5 14.3	— 5 20.7	6 05.6	40 m p	g 37
Älmhult	1524 T 33	9 06.1	3 38.2	— 4 42.6	5 27.9	+ 30 m p	g 37
Laholm II	1514 T 33	11 07.5	5 20.9	— 5 19.5	5 46.6	* p	g 37
Grevie I	1516 T 33	11 02.2	5 48.9	— 5 28.5	5 13.3	* p	g 37
Vittsjö	1527 T 33	11 21.5	4 28.3	— 4 59.1	6 53.2	*	g 37
Ängelholms hamn	1539 T 33	10 47.5	5 12.3	— 5 27.0	5 35.2	* p	s 81
Ängelholm	1538 T 33	10 27.9	4 38.1	— 5 26.1	5 49.8	* p	s 81
Kviinge backe	1693 T 33	9 26.1	3 36.9	— 4 45.0	5 49.2	* p	s 85
Kattarp	1553 T 33	11 42.1	5 33.2	— 5 29.0	6 08.9	* p	s 81
Perstorp	1533 T 33	10 52.0	5 20.0	— 5 08.5	5 32.0	+ 400 m p	g 37
Åstorp I	1536 T 33	10 38.5	5 04.0	— 5 22.9	5 37.0	+ 800 m p	s 81
II		10 43.6				+ 800 m p	s 81
Klippan I	1534 T 33	10 30.3	5 00.7	— 5 17.6	5 36.4	+ 50 m p	s 81
II		10 43.9				+ 27 m p	s 81
Billesholms gruva I	1580 T 33	10 32.6	4 59.0	— 5 22.4	5 33.6	* * p	s 81
Sölvesborg	1697 T 33	7 35.8	2 18.5	— 4 29.2	5 17.3	+ 1 km p	s 85
Kristianstad	1692 I T 33	9 16.1	3 39.2	— 4 43.3	5 36.9	*	s 85
Tollarp	1689 T 33	10 03.5	4 11.0	— 4 49.2	5 52.5	+ 60 m p	m 87
Åhus	1691 T 33	8 38.7	3 22.0	— 4 38.8	5 16.7	30 m p	s 85
Hildesborg	1572 T 33	10 56.7	4 51.1	— 5 28.4	6 05.6	* *	s 86
Everöd	1690 II T 33	10 00.2	4 01.0	— 4 45.6	5 59.2	1 km	s 85
Landskrona	1576 T 33	10 54.3	4 52.5	— 5 28.2	6 01.8	+ p	s 86
Hörby	1686 T 33	10 32.3	5 17.4	— 5 00.0	5 14.9	+ * * p	s 81
Eslöv	1587 T 33	10 41.8	5 02.9	— 5 12.5	5 38.9	+ 1 km p	m 82
Kävlinge	1585 T 33	9 53.3	4 17.1	— 5 18.6	5 36.2	* p	s 80
Vollsjö	1680 T 33	11 11.8	5 14.0	— 4 56.3	5 57.8	* p	s 64
Lund II	1598 II T 33	9 33.1	4 39.6	— 5 16.4	4 53.5	* * p	s 86
Simrishamn	1666 T 33	9 54.7	4 31.6	— 4 37.9	5 23.1	+ * p	s 66
Tomelilla	1669 II T 33	8 43.0	4 09.4	— 4 50.6	4 33.6	+ * p	s 71
Svedala	1625 T 33	7 19.9	4 00.1	— 5 15.1	3 19.8	* p	s 84
Rydsgård	1648 T 33	10 25.3	4 39.0	— 5 03.1	5 46.3	400m	s 84
Ystad	1656 T 33	10 15.8	4 34.8	— 4 55.9	5 41.0	* *	s 86
Klagstorp	1642 II T 33	10 25.8	4 32.4	— 5 10.7	5 53.4	* p	s 86
Trälleborg	1638 T 33	7 14.4	4 23.4	— 5 17.8	2 51.0	20 m p	s 86

At our remeasurements in 1933 at Kinnared the same reference marks was chosen as stated by Carlheim-Gyllensköld. By the computation I have found that Carlheim-Gyllensköld has reversed his reference marks for the points I and II. The description of the reference marks is conformed by Carlheim-Gyllensköld's original sketch. Thus Carlheim-Gyllensköld's mean value for D is not altered, but the values for his points Nos. I and II are considerable modified. Thanks to his manner to publish all details, the recalculation was easily done.

Table 36.

Sem Sæland: Jordmagnetiske Maalinger i Nordland i 1905 og 1906. — Archiv for mathematik og naturvidenskab. Bd. XXVIII. Nr. 5. — Kristiania, 1907.

Station	G. S. Reg. No.	D 1905.5	D 1933.5	D calc. 1933.5	Difference 1933.5—1905.5	Notes	Geology
Narvik	1726 W 33	−2° 39′.6	+2° 01′.5	−2° 28′.6	+4° 41′.1	* * d	f 76
Lödingen	1727 W 33	9 03.0	−5 07.2	−3 16.5	3 55.8	* *	g 1
Tjelbotn	1747 W 33	7 22.0	−3 25.9	−2 53.8	3 56.1	* *	f 76
Svolvær	1728 W 33	10 53.3	−6 14.3	−4 04.8	4 39.0	* *	g 1
Grötö	1739 W 33	8 30.6	−4 17.7	−3 59.2	4 12.9	m	g 1
Kjerringöy	1738 W 33	8 20.6	−4 02.9	−3 59.9	4 17.7	* *	f 76
Rösvik	1735 W 33	7 58.0	−3 46.9	−3 36.5	4 11.1	*	f 76
Bodö	1729 W 33	8 47.5	−4 35.3	−4 13.4	4 12.2	* *	g 1
Finneid	1731 W 33	7 19.8	−3 08.7	−3 38.0	4 11.1	*	f 76
Rognan	1734 W 33	7 33.4	−3 23.9	−3 39.3	4 09.5	* * *	f 79
		1906.5			1933.5—1906.5		
Svolvær	1728 W 33	10 49.1	−6 14.3	−4 04.8	+4 34.8	* *	g 1
Grötö	1739 W 33	8 26.8	−4 17.7	−3 59.2	4 09.1	m	g 1

Table 37.

J. Keränen: Results of magnetic observations made in 1915 in north Finland. Helsingfors, 1917.

Station	G. S. Reg. No.	D 1915.5	D 1933.5	D calc. 1933.5	Difference 1933.5—1915.5	Notes	Geology
Kilpisjärvi	1784 W 33	−4° 06′.1	−1° 15′.5	−0° 30′.9	+2° 50′.6	m p	g 1
Vittanki	1796 W 33	−6 19.7	−2 32.2	−0 19.6	3 47.5	m p	g 1
Naimakka	1798 W 33	−3 13.3	−0 20.2	−0 11.1	2 53.1	m p	g 1
Kelottijärvi	1800 W 33	−1 49.3	+1 08.4	+0 04.4	2 57.7	* p	g 1
Jatuni	1802 W 33	−1 38.9	+1 06.9	+0 25.6	2 45.8	m p	g 9
Palojuensuu	1810 W 33	+1 01.4	+4 18.3	+0 40.1	3 16.9	* p	g 1
Kätkesuando	1808 W 33	−2 20.4	+0 19.0	+0 49.1	2 39.4	* p	g 18
Muonio	1809 W 33	−1 31.8	+1 14.2	+0 59.8	2 46.0	m p	g 18

Table 38.

K. Molin: K. V. A. Handl. Bd. 58. No. 10. — Stockholm, 1919.

Station	G. S. Reg. No.	D 1915.67	D 1933.5	D calc. 1933.5	Difference 1933.5—1915.67	Notes	Geology
Sveg	1064 S 31 34	— 8° 54′	— 6° 14′.2	— 4° 24′.3	+ 2° 39′.8	* *	g 20
Långbacka	2306 S 34	6 13	3 11.8	— 3 14.0	3 01.2	0.8 km	g 40
Fågelsjö A. B.	1067 B S 31	9 26	6 03.3	— 4 14.3	3 22.7	0.5 km	g 20
Rogsta	1161 S 31	6 09	3 02.3	— 2 50.7	3 06.7	* *	g 38
Forsa	2302 S 34	6 20	3 27.8	— 2 57.7	2 52.2	* *	g 38
Lillhamra A.	1070 S 31	9 17	6 31.7	— 4 10.3	2 45.3	* *	L 33
Lobonäs	961 H 31	7 15	4 19.1	— 3 53.1	2 55.9	* *	d 30
Edsbyn	959 H 31	7 02	4 24.3	— 3 37.0	2 37.7	*	g 39
Bollnäs	871 W 31	6 23	3 40.0	— 3 17.6	2 43.0	+ 1.5 km	g 40
Alfta	957 H 31	6 45	3 50.2	— 3 28.7	2 54.8	* *	g 40
Voxna	963 H 31	7 42	4 18.6	— 3 45.1	3 23.4	* *	m 44
Kinstaby	1155 S 31	6 13	3 19.3	— 3 00.3	2 53.7	*	g 38
Tallheden	1074 S 31	8 22	5 36.5	— 4 14.2	2 45.5	* *	m 73
Skattungsbyn	966 B H 31	8 38	5 51.3	— 4 09.5	2 46.7	* *	m 72
Oxberg	1081 S 31	7 40	4 53.7	— 4 32.4	2 46.3	250 m	g 20
Orsa	1076 S 31	7 50	5 01.6	— 4 18.0	2 48.4	* *	m 72
Mora	1077 S 31	8 13	5 02.4	— 4 19.3	3 10.6	* *	s 64
Vika	2328 S 34	8 31	5 31.5	— 4 22.7	2 59.5	* *	s 64
Sollerö	2330 S 34	8 43	6 01.6	— 4 18.1	2 41.4	* *	s 64
Limedsforsen	1093 S 31	6 53	3 54.0	— 4 59.4	2 59.0	* *	s 61
Rättvik	1119 S 31	8 01	5 18.0	— 4 00.7	2 43.0	* *	s 64
Malungsfors	1089 S 31	7 58	4 27.2	— 4 54.0	3 30.8	* *	s 61
Leksand B	1114 B S 31	8 12	5 25.4	— 4 05.1	2 46.6	* *	m 6
Stöllet	1191 T 32	7 03	4 10.9	— 5 04.0	2 52.1	*	m 17
Torsby	1201 AC T 32	7 47	4 52.3	— 5 13.6	2 54.7	A 0.5 C 1 km	g 39
Edebäck	1189 T 32	8 59	5 58.9	— 4 55.0	3 00.1	* *	g 14
Sunne	1205 D T 32	8 10	5 10.1	— 5 09.8	2 59.9	* *	g 39
Åmot	1211 T 32	9 33	6 18.8	— 5 35.8	3 14.2	* *	g 38
Edane	1208 T 32	8 08	5 15.6	— 5 20.3	2 52.4	* *	g 38
Älvdalen	39 J 28	8 28	5 03.9	— 4 36.0	3 24.1	* *	L 33

Table 39.

G. S. Ljungdahl: Kungl. Sjökarteverkets Jordmagnetiska publikationer.

Station	G. S. Reg. No.	D 1914.5	D 1933.5	D calc. 1933.5	Difference 1933.5—1914.5	Notes	Geology
Morjärv I	596 I W 30	−1°33′.6	+1°18′.9	+0°23′.9	+2°52′.5	* *	m 11
Avafors I	592 II W 30	−3 02.9	+0 10.2	+0 09.4	3 13.1	40 m	m 6
II	I W 30	−2 47.8	+0 09.0	+0 09.4	2 56.8	*	m 6
Långsele A	177 W 29	−6 36.8	−3 13.9	−2 51.5	3 22.9	* *	m 42
		1916.5			1933.5—1916.5		
Rudsberg	1180 T 32	−8 16	−5 20.3	−4 43.6	2 55.7	500 m	g 39
Åmål	1236 T 32	9 07	5 50.8	−5 25.8	3 16.2	150 m	g 40
Lyrestad	1402 W 33	7 04	4 26.7	−4 41.1	2 37.3	* *	g 14
Hasslerör	1403 W 33	8 23	5 14.9	−4 44.9	3 08.1	40 m	g 37
Mellerud	1239 T 32	8 26	5 20.4	−5 34.5	3 05.6	* *	g 41
Österäng	1436 W 33	8 28	5 13.6	−4 57.5	3 14.4	180 m	g 37
Råbäck	1437 W 33	7 44	5 00.4	−5 04.3	2 43.6	125 m	g 67
Brälanda	1254 B T 32	9 06	5 56.7	−5 38.5	3 09.3	* *	g 39
Lidköping	1439 II W 33	8 02	4 56.0	−5 11.5	3 06.0	*	g 37
Vänersborg	1256 II T 32	8 40	5 13.4	−5 39.9	3 26.6	* *	g 37
Lilleskog	1443 W 33	8 24	5 49.6	−5 35.2	2 34.4	*	D 32
Grästorp	1441 W 33	8 34	5 23.9	−5 27.9	3 10.1	200 m	g 37
		1917.5			1933.5—1917.5		
N. Mörrum	1699 T 33	−5 37.4	−2 34.7	−4 23.6	3 02.7	*	g 38
S. Mörrum	1698 T 33	6 02.3	3 06.2	−4 24.2	2 56.1	* *	g 38
Sölvesborg	1697 T 33	5 19.5	2 18.5	−4 29.2	3 01.0	*	s 85
Everöd	1690 II T 33	6 55.8	4 01.0	−4 45.6	2 54.8	140 m	s 85
Brösarp	1682 T 33	7 13.6	4 10.3	−4 44.9	3 03.3	* *	g 37
Simrishamn N.	1666 T 33	7 54.5	4 53.3	−4 37.9	3 01.2	*	s 66
Simrishamn S.	1666 II T 33	7 27.5	4 31.7	−4 37.9	2 55.8	* *	s 66
Tomelilla	1669 II T 33	7 10.8	4 09.4	−4 50.6	3 01.4	*	s 71
Gärsnäs	1670 T 33	7 42.2	4 36.0	−4 43.3	3 06.2	20 m	s 65
Vällinge	1631 I T 33	7 46.4	4 43.7	−5 23.3	3 02.7	*	s 86
St. Hammar	1632 T 33	7 45.5	4 43.4	−5 23.7	3 02.1	500 m	s 86
Skanör	1634 I T 33	7 52.9	4 47.8	−5 28.1	3 05.1	*	s 86
Hagestaborg	1663 T 33	7 52.3	4 52.7	−4 45.2	2 59.6	*	s 85
V. Tommarp	1637 T 33	7 43.6	4 34.7	−5 20.1	3 08.9	* *	s 86
Espöholmen	1644 T 33	7 19.6	4 16.2	−5 10.1	3 03.4	*	s 86
		1919.5			1933.5—1919.5		
Vänge	2206 W 34	−6 15.6	−3 47.7	−2 14.7	2 27.9	* *	s 64
Buttle	2207 W 34	5 18.8	2 56.4	−2 14.1	2 22.4	*	s 64
Klintehamn	2214 W 34	4 48.9	2 19.9	−2 25.9	2 29.0	* *	s 64
Burgsvik	2236 W 34	5 44.6	3 15.4	−2 24.2	2 29.2	m	s 64
		1922.5			1933.5—1922.5		
Alvedsjöbodar	1946 II W 34	−7 44.0	5 46.3	−3 08.2	1 57.7	*	s 64
Sandviken	1944 II W 34	5 50.1	3 53.8	−3 11.1	1 56.3	* *	s 64
Borgholm S.	1949 II W 34	4 22.2	2 19.4	−3 17.8	2 02.8	*	s 64
Ölands Bäck. E	1937 W 34	4 00.5	2 00.4	−3 17.2	2 00.1	*	s 64
Ölands Bäck. W	1938 W 34	4 01.8	2 00.0	−3 17.6	2 01.8	*	s 64
Gårdby	1929 W 34	5 25.9	3 20.8	−3 18.7	2 05.1	25 m	s 64
Arild	1556 I T 33	7 21.8	5 09.5	−5 35.4	2 12.3	*	g 37
Vattenmöllan	1559 T 33	7 47.2	5 34.6	−5 38.1	2 12.6	* *	s 64
Grönhögen	1933 W 34	5 35.6	3 37.1	−3 27.4	1 58.5	*	s 64
Kristianopel	1708 T 33	5 19.1	3 13.4	−3 39.8	2 05.7	*	s 65
Viken	1562 T 33	7 25.8	5 15.2	−5 36.3	2 10.6	*	s 81
Simrishamn S.	1666 II T 33	6 34.8	4 31.7	−4 37.9	2 03.1	* *	s 66
Sandhammaren	1664 T 33	6 33.1	4 23.7	−4 43.6	2 09.4	* *	s 85

The Declination and Anomaly maps.

By request, the declination determinations of the Hydrographic Service[1] carried out by Dr. G. Ljungdahl, Aktuarie H. Odelsiö and Fil. Mag. S. Åslund from 1913 to 1934 have been taken into consideration at the work of our declination-charts. Figure 13 gives the distribution of their observation places, some of which are lying too close together to be distinctly marked off from each other here. Points of the Hydrographic Service remeasured by the Geological Survey are not plotted on this chart (Fig. 13), since they are already included in the chart Figure 1 as points of our network. For connection, I have reduced the D-values of the Hydrographic Service for the epoch 1929.5 to the epoch 1933.5 by means of the formula, employed at the reduction of our measurements for the same period.

$$\Delta D_t = 43'.19 + 1'.04\ (\varphi - 61°) - 1'.22\ (\lambda - 15°).$$

Attention is also paid to the values for the D-anomalies of the Hydrographic Service for the epoch 1929.5, computed from the formula[1]:

$$A_{1929.5} = \overline{D}_{\text{obs.}} - \left[\begin{matrix} -4°50'.7 + 0'.1\ (\varphi - 61°) + 34'.9\ (\lambda - 15°) \\ \pm 7'.2 \quad \pm 2'.1 \qquad\qquad \pm 2'.7. \end{matrix}\right].$$

As the anomaly-values for short periods keep constant, the above-mentioned values have been directly plotted on our anomaly-chart. If the D-values from 1929.5 were at first reduced to the epoch 1933.5, and the anomalies were afterwards computed by means of our formula I, page 39, then

$$A_{1933.5} = \overline{D}_{\text{obs.}} + 43'.19 + 1'.04\ (\varphi - 61°) - 1'.22\ (\lambda - 15°) + 4°05'.2 - 1'.98\ (\varphi - 61°) - 33'.53\ (\lambda - 15°) =$$
$$= \overline{D}_{\text{obs.}} + \begin{matrix} 4°48'.39 - 0'.94\ (\varphi - 61°) - 34'.75\ (\lambda - 15°) \\ \pm 5'.7 \quad \pm 1'.52 \qquad\qquad \pm 1'.76 \end{matrix};$$

the difference between the direct anomaly values and the reduced ones would be

$$\Delta A = A_{1929.5} - A_{1933.5} = \begin{matrix} 2'.31 + 0'.84\ (\varphi - 61°) - 0'.15\ (\lambda - 15°) \\ \pm 9'.19 \pm 2'.59 \qquad\qquad \pm 3'.22 \end{matrix},$$

where the added errors in the constants are computed from the formula $\sqrt{\Sigma e^2}$ these errors showing the justness of our method comprising a direct plotting of the anomaly-values of the Hydrographic Service.

Our original maps for isogones and anomalies of declination are made on the scale of 1 : 400,000. The lines of equal declination and those of equal anomaly are computed by means of a linear interpolation. Besides the smoothing[2] of the lines brought on by a consideration on the result of an interpolation between different, adjacent points, a graphic smoothing is made at the reproduction of our charts on the scale of 1 : 2 mill. This scale is selected in order to bring our charts in connection with the Finnish earth magnetic charts.

As in a case like this, the correspondence between the magnetic charts and the tectonic outlines is of a deciding importance, the smoothing of the lines ought on principle not to be carried too far. On the other hand it should be mentioned, that the geological conditions have had no influence on the construction of the lines of equal declination, or of those of equal anomaly. As cases arise, where the values because of fewness do not make a definite solution possible, and the construction therefore is going to be subjective, a further chart with the numerical values of the anomalies is subjoined. The negative (red figures), resp. positive (blue figures) anomaly-values indicate a greater westerly, resp. easterly declination than computed, since the anomalies are expressed by the differences obs.-calc. and the westerly declination is thought negative.

As a complement to the statistic summary of our anomaly-values, contained in Table 20, page 41, the result of a planimetry of the surfaces between the anomaly-curves, performed on the chart on the scale of 1 : 400 000, is noted in Table 40. The planimetry was carried out twice over. The difference between the results was 0.06 %, corresponding to the error of 265 km². The surface amounts to 441 775 km² including the mainland with all the lakes, except Lake Vänern and Lake Vättern, and furthermore the border district in Norway except the part between 67° and 69° latitude, because there we have a small number of points.

[1] G. S. Ljungdahl: Earth magnetic researches along the coasts of Sweden. Part I. — Magnetic declination at the epoch July 1, 1929. — Kungl. Sjökarteverket. Stockholm 1936.

[2] Se, for instance, B. Weinberg, Terr. Mag. **27**, 137—155 (1922). **40**, 325—331 (1935).
W. N. McFarland, Terr. Mag. **35**, 73—80 (1930).

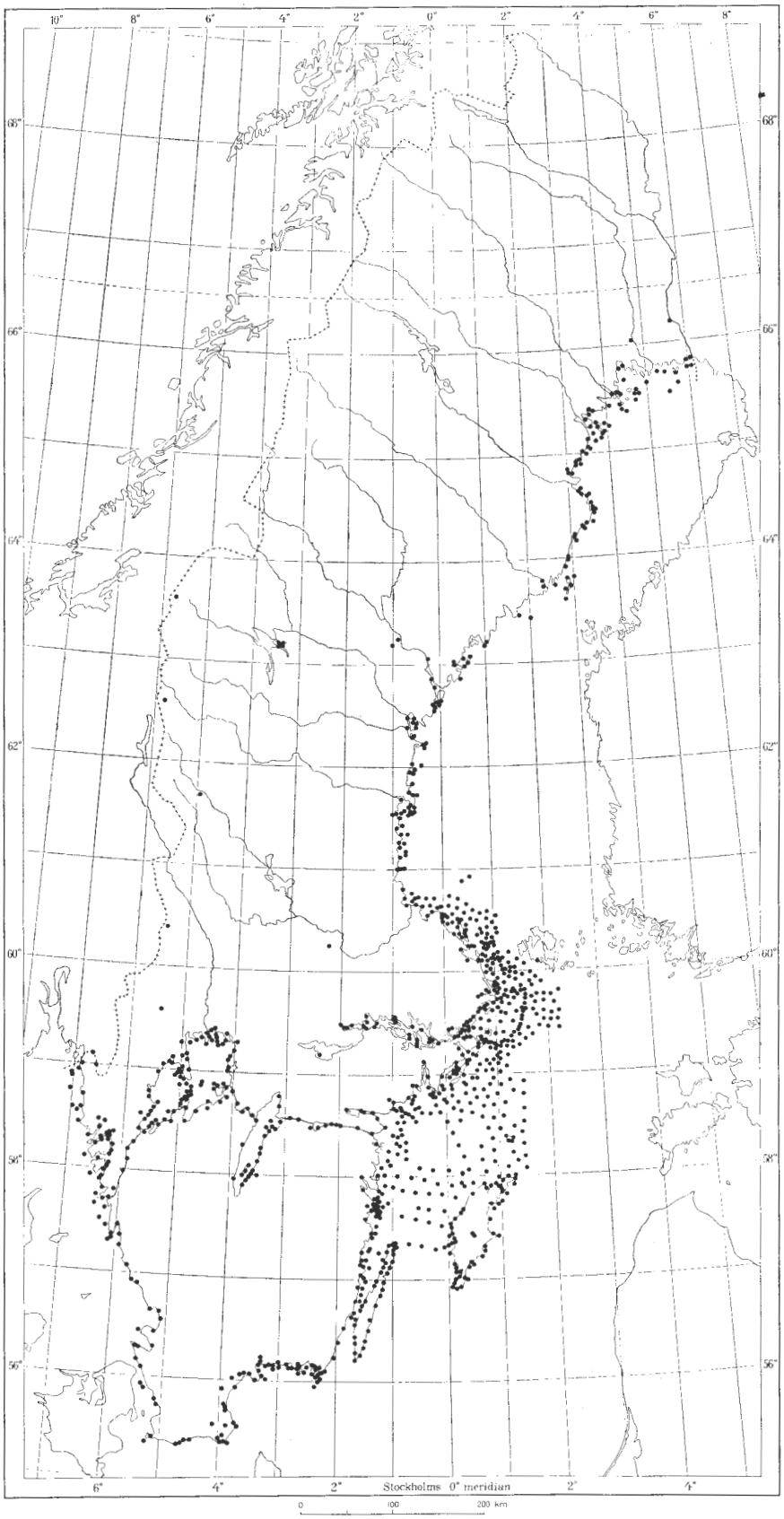


Fig. 13. The Declination points of the Hydrographic Service, incorporated with the charts of the Geological Survey.

Table 40.

The surfaces between the lines of equal anomaly expressed in km².

Anomaly negative	0 → — 1°	—1° → —2°	—2° → —3°	— 3° →	Σ (—)
55°—59°	34 524	1 195	41	—	35 760
59 —63	67 277	12 824	3 397	848	84 346
63 —67	73 295	14 675	1 589	38	89 597
67 —69	15 120	5 165	2 214	1 739	24 238
55 —69	190 216	33 859	7 241	2 625	233 941
Surface in %	43.05 %	7.67 %	1.64 %	0.59 %	52.95 %

Anomaly positive	0 → + 1°	+1° → +2°	+2° → +3°	+ 3° →	Σ (+)
55°—59°	46 653	11 246	957	—	58 856
59 —63	44 867	5 418	—	—	50 285
63 —67	60 106	11 302	2 443	627	74 478
67 —69	10 824	8 549	3 018	1 824	24 215
55 —69	162 450	36 515	6 418	2 451	207 834
Surface in %	36.77 %	8.28 %	1.45 %	0.55 %	47.05 %

Between 55° and 59° the positive anomaly has a surplus of 24.4 %.
» 59° » 63° » negative » » » » » 25.3 %.
» 63° » 67° » » » » » » » 9.2 %.
» 67° » 69° » » » » » » » 0.05 %.

For the whole country the negative anomaly has a surplus of 5.9 %. If we regard the limits of the anomaly values up to ± 1°, ± 2° and ± 3°, we get 6.28 %, 5.67 % and 5.86 %, respectively. 0.05 % as the expression for the surplus of the negative anomaly of the Swedish surface between 67° and 69° latitude changes to 5.45 %, if the corresponding Norwegian part is included. The whole area measured by the planimetry then attains the dimensions of 457 700 km², and the total value of 5.9 % increases to 6.5 %. The agreement between these two, last-mentioned values and the statistical result of 6.2 % (the limit value of 5.2 % resp.) may be considered as a proof of the reliability of our anomaly-chart as constructed by linear interpolation.

On the isogone-chart, as well as on the anomaly-chart, a large regional anomaly is prominent, lying in a northerly direction from Väster-Dalälven, south of Lake Siljan, to Hotagen in the north of Jämtland, revealing itself by high values of westerly declination, resp. negative anomaly-values. I succeeded to find this anomaly in the summer of 1928, and to meet with its extreme effect on the southern part of Lake Storsjön, where the Cambro-Silurian sediments from the north are abruptly replaced by the Rätan-granite. See Figure 14. In the continued measurement of this regional anomaly-body all measurers mentioned on page 5 have taken part. Pronounced negative maxima range from Emådalen (1075) to Kropptjärn (1066), from Kårböle (262) by Ytterhogdal (1061) to Röjan (1058), from Hoverberget to Månsåsen (2349) and from Aspås (671) to Lillholmsjön (662). Another maximum lying round Lake Storuman (194), trends towards 66° latitude. The anomaly continues to the top of Lake Tjeggelvas (1280); its boundary on the east runs between 64°.5 and 66°.5 latitude, approximately, along the meridian 1° W from Stockholm.

Wedgewise a positive anomaly, with its maxima from Rusele (328) by Sorsele (904) to Laisvall (930) and from Racksund (923) by Rebakudden (922) to Långudden (1278), sunders from the south the above negative regional anomaly from another one lying between Allejaure (379)—Häika (1849)—Tjåmotes (1320) up to Aktse (1323).

The large negative anomaly occupies a central locality on the anomaly-chart. With its maxima lying in a south-northerly direction, it has furthermore an extent in a north-westerly direction from Bottniska viken — the stretch of coast from Hudiksvall (865) to Ullånger (815) — across Sweden to the Norwegian boundary-line — the distance between Mjölkvattnet (157) and Frostviken (475—479). This zone divides Sweden in a north-westerly direction into two parts, related, it seems, to each other with regard to the anomaly of the declination.

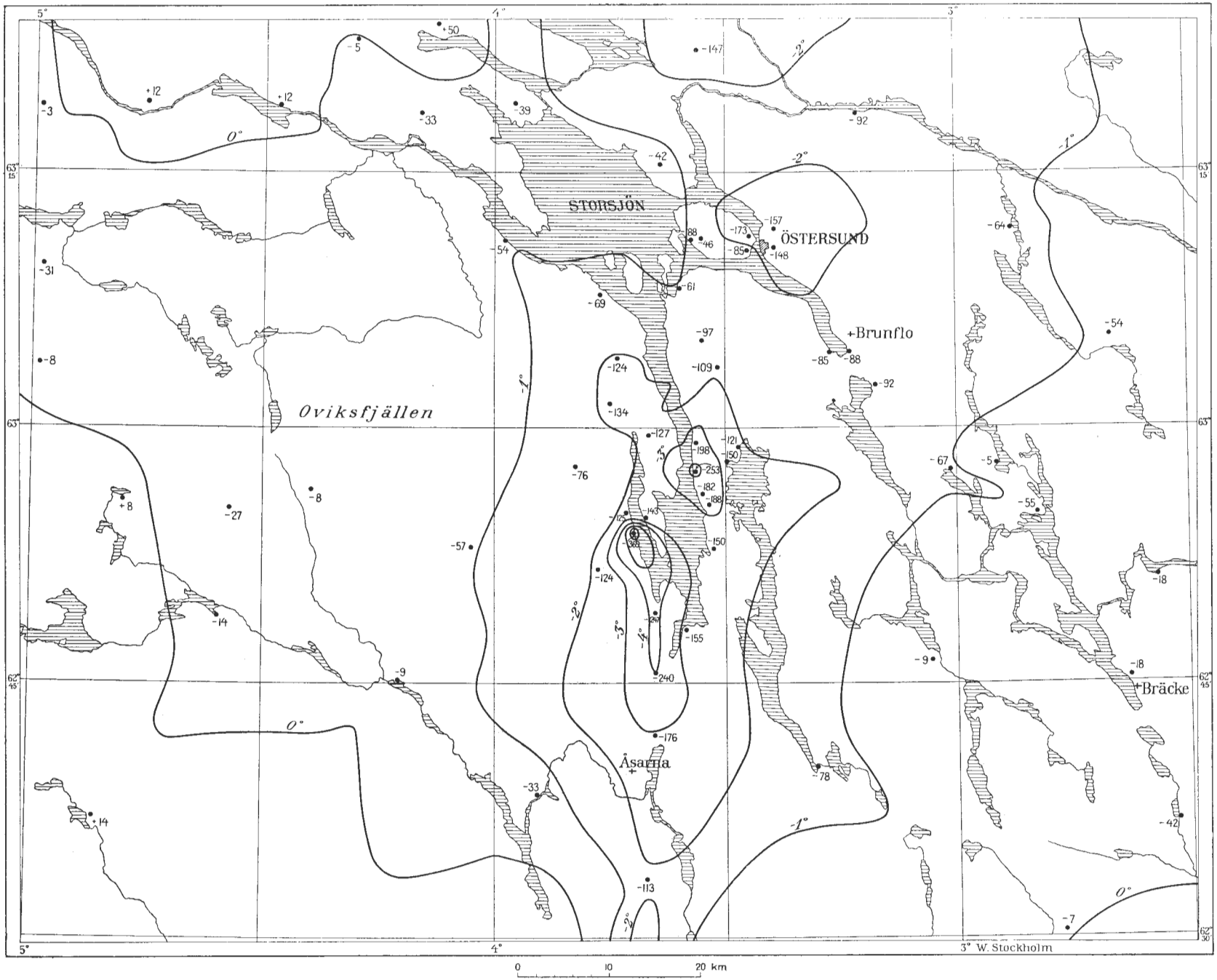


Fig. 14. The negative *D*-anomaly at the southern part of Lake Storsjön in Jämtland.

A second characteristic fact to notice on the anomaly-chart is that the fjeld-ridge region between 60° and 68° latitude shows a positive anomaly, except between 64° and 64°.5 latitude, where the large negative anomaly breaks through.

The districts bordering on Finland show great disturbances. At some places we have succeeded in completing some of these, found in the year 1915 by Professor J. Keränen. Fil. Kand. S. Werner, for instance, has been able to follow a disturbance with an anomaly value of + 3°.5 from Palojuensuu (1810) a distance of 45 kms into Sweden to Viikusjärvi (1816).

A negative anomaly at Vittangi (1758), one around the stretch from Krokvik (630) by Rautas (631) to Bergfors (628) and another ending on SW at Vittangijärvi (1835) are coinciding with the gabbro localities. That is also the case with the positive anomalies round Kattuvuoma (1830)—Torneträsk (627) and round Linaälv (616)—Ruoptojokk (1333)—Ausutsjokk (1338). On the other hand something corresponding to the positive anomalies at Saittajärvi (743)—Nilivaara (716)—Parakka (729), at Laxforsen (727)—Mertainen (725), at Kaalasluspa (1394)—Teuna lappläger (1367) and the negative ones at Lainio (740)—Kangos (745), at Muorjevaara (721)—Sakajärvi (720)—Leipojärvi (614), at Liukattijärvi—Fjällåsen (618) is not to be seen on the geological map.[1] Some positive anomalies of smaller extent lying within the fjeld-ridge region between 65°.3 and 66°.2 latitude, should be mentioned: at Umbugta (891) + 3° 49′, at Björknäs (882) + 2° 27′ and at Gränssjön (490) + 4° 20′, coinciding with the gabbro localities.[2]

A third characteristic fact to be observed at the chart is that the largest part of Småland, Blekinge and the north-east of Skåne present a positive anomaly with the maxima around Gränna and Sölvesborg. To the north this positive anomaly continues to the tract west of Örebro, and extends from there sector-like in a north-easterly direction towards Gävle. A northwardly continuation then goes from the top of Ullångerfjorden up to Piteå (557), which continuity is interrupted by a negative anomaly running in easterly direction and situated around Ekträsk (199)—Botsmark (428)—Bygdsiljum (419)—Vebomark (414). From Piteå (557) the above positive anomaly went on to NNW up to Narvik (1726), presenting separate maxima of great anomaly values.

Gotland is divided by a line parallel with a meridian of 0°.5 E from Stockholm, into a negative western anomaly and a positive eastern one.

As to Skåne, where the density of the field-stations for Malmöhus län is one D-observation in 39.6 km², adequate to an average distance between the points of 6.3 km, a special chart of the D-anomaly is given in Pl. 4, reproduced upon the geological map which is made at the Geological Survey by J. Eklund.

On our isogone-chart Norway has three 4° W-isogones between 64° and 66° latitude, one of which, coming from the north, seems to have quite a regular position. The central one forms the east boundary of our large negative anomaly, and the third indicates a prominent, positive anomaly arising out of the Norwegian region.

Between 60° and 63° latitude, in Värmland, Dalarna, Härjedalen and Jämtland, there are two 5° W-isogones, being on the whole parallel, the easterly one forming the western boundary of the central anomaly. In the intervening area between 60° and 62° latitude a declination amounting to 5° W has not been observed. That may be seen from Table 41.

Table 41.

Mean value of D for the surface between the 5° W-isogones.
(between the meridians 4° and 5° W fr. Sthlm.)

Latitude	Number of D-points	Mean value of D
62° —63°	25	— 4° 37′ ± 27′
61.5—62	8	— 4° 35′ ± 9′
61 —61.5	7	— 4° 15′ ± 8′
60 —61	31	— 4° 06′ ± 23′

The mean D-value of the district between 61° and 61°.5 latitude forms a transition to the small D-values which here between 60° and 61° latitude separate the 5° W-isogones mentioned from each other. These small D-values group themselves about Motjärnshyttan (1187) — 3° 34′, Neva (969) — 3° 06′, Vakern (967) — Vansbro (1104)—Äppelbo (2187) with the values — 3° 12′, — 3° 26′ and — 3° 18′ resp. and about Lima (1091) with the value — 3° 23′. The values given refer to 1933.5.

[1] Per Geijer: Geological map of the iron-bearing region Kiruna—Gällivare—Pajala. — Sveriges Geologiska Undersökning, Ser. C, N:o 366. Stockholm 1931.

[2] Axel Gavelin och N. H. Magnusson: Geologisk Översiktskarta över Norden. Stockholm 1935.

SWEDEN

MAGNETIC DECLINATION

for the epoch July 1, 1933

Compiled at the

GEOLOGICAL SURVEY OF SWEDEN

by

KURT MOLIN

Isogonic lines and values of the Declination red.
Terrestrial lines grey.
Westerly Declination —.
Easterly Declination +.
Green lines indicate the topographical map-sheets.

Scale 1: 2 000 000

0 50 100 km

GENERALSTABENS LITOGR. ANSTALT. STHLM 1937

SWEDEN

LINES OF EQUAL ANOMALY OF DECLINATION

Computed for the epoch July 1, 1933

by

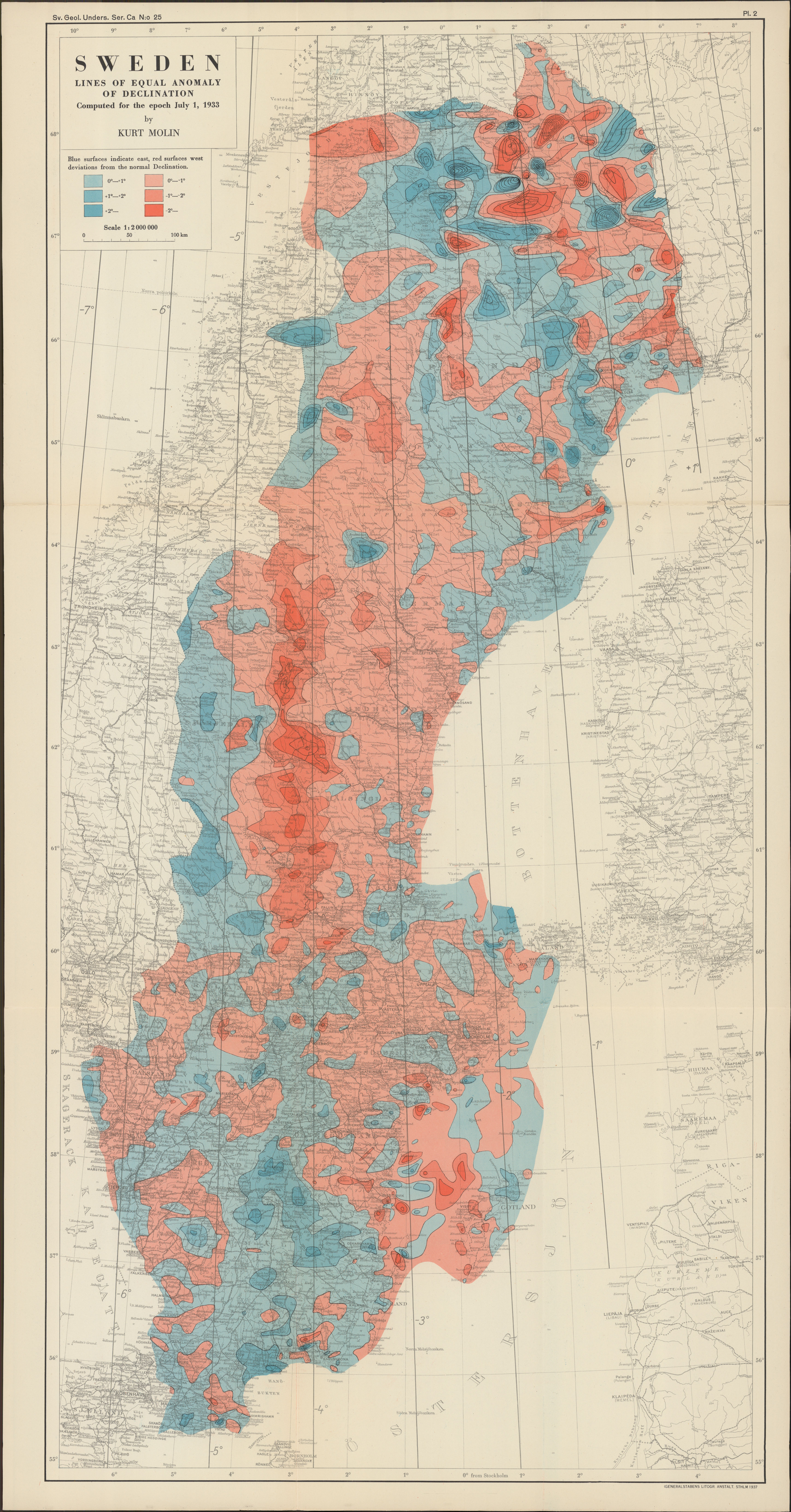
KURT MOLIN

Blue surfaces indicate east, red surfaces west deviations from the normal Declination.

0°—+1°	0°—-1°
+1°—+2°	-1°—-2°
+2°—	-2°—

Scale 1:2 000 000

0 50 100 km



IGENERALSTABENS LITOGR. ANSTALT. STHLM 1937

SWEDEN

ANOMALY OF DECLINATION

Computed for the epoch July 1, 1933

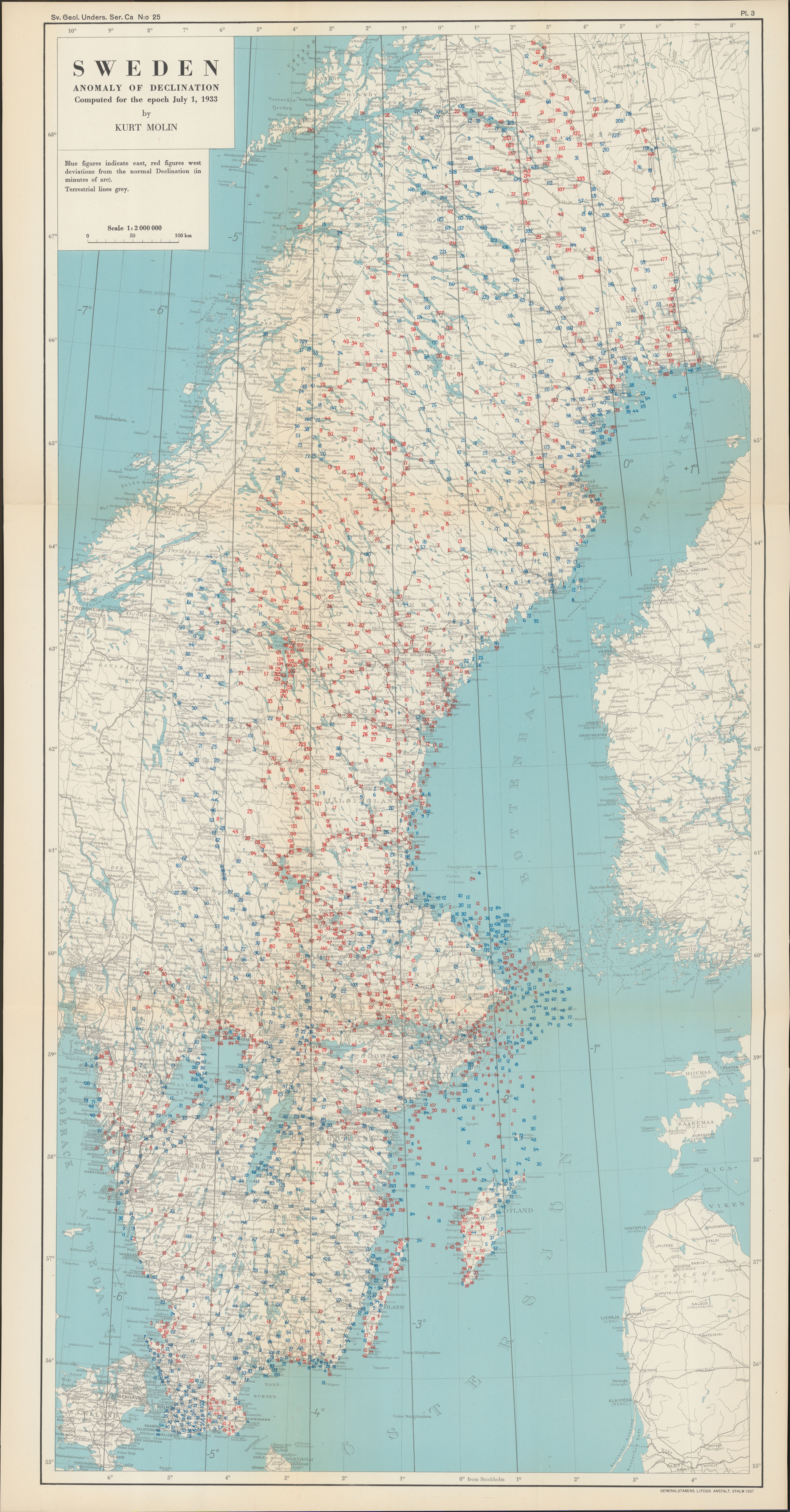
by

KURT MOLIN

Blue figures indicate east, red figures west deviations from the normal Declination (in minutes of arc).
Terrestrial lines grey.

Scale 1: 2 000 000

0 50 100 km



GENERALSTABENS LITOGR. ANSTALT. STHLM 1937

ANOMALY OF DECLINATION IN SKÅNE by Kurt Molin

4° W. fr. Stockholm

56°30′

56°

55°30′

1:400 000

Computed for the epoch July 1, 1933.
Blue figures indicate east, red figures west deviations from the normal declination (in minutes of arc).

- Gas showings
- Basalt and Rhyolite
- T Tertiary, mainly erratics
- Danien, (above sea level)
- Senonian and Kaolin, (above sea level)
- Cretaceous (0—50 m below sea level)
- Cretaceous (more than 50 m below sea level)
- Jurrassic, ferrugenous
- Jurassic, not ferrugenous
- Jurassic, (more than 50 m below sea level)
- Keuper, Rhætic and lower Lias
- Area of workable coal seams
- Kågeröd-formation (Rothliegendes?)
- Konga and Tolånga Diabase (Rothliegendes?)
- Silurian and Ordovician
- Ortoceras-limestone
- Alum-shale
- Cambrian Sandstone
- Pre-Cambrian Diabase
- Amphibolite and Syenite

Other Archean blank

Geology compiled by J. Eklund

GENERALSTABENS LITOGR. ANSTALT. 1937