

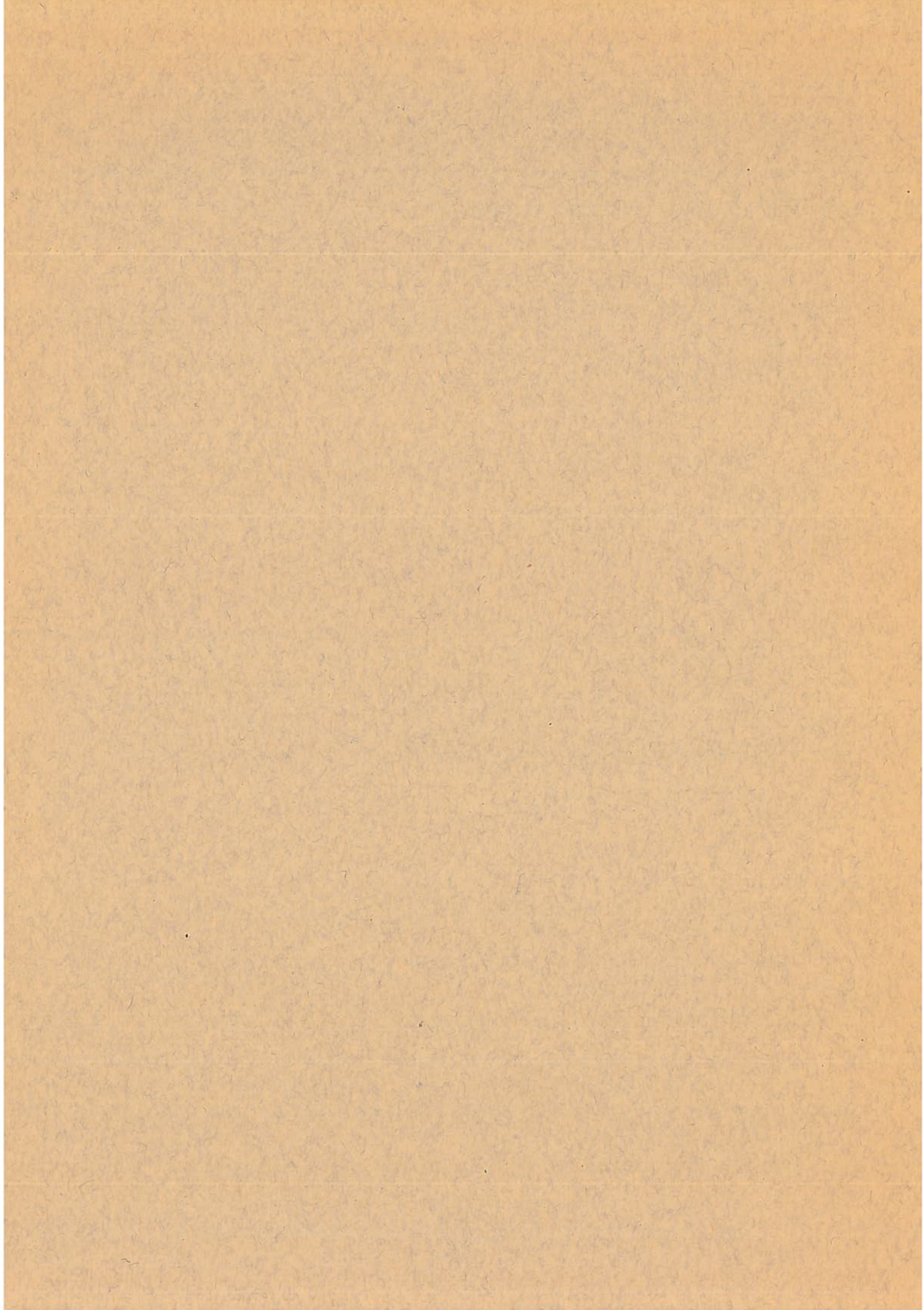
Publikasjoner fra  
DET NORSKE INSTITUTT FOR KOSMISK FYSIKK  
Nr. 19

**THE AURORAL OBSERVATORY AT TROMSØ**  
( $\varphi = 69^{\circ} 39'.8$  N,  $\lambda = 18^{\circ} 56'.6$  E Gr.)  
**RESULTS OF MAGNETIC OBSERVATIONS**  
**FOR THE YEAR 1939**

BY  
**LEIV HARANG and E. TÖNSBERG**

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1941  
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GENERAL REMARKS

The instrumental equipment employed for the magnetic measurements is the same as that previously employed, a description of which is given in No. 1 of the present series of publications.

The observations were made by E. TÖNSBERG. The reading of the hourly values and the calculation work have been performed by Mrs. ANNA JAKLIN.

SCALE VALUES

The following scale-values were determined:

D-curves: 1.45 or 4.78  $\gamma$  per mm  
H-curves: .....5.10  $\gamma$  per mm  
V-curves: .....6.80  $\gamma$  per mm

BASE-LINE VALUES

The absolute measurements of Declination and Horizontal Intensity result in the table given below of observed and adopted base-line values. The Vertical Intensity base-line value — 50 220  $\gamma$  — from the preceding years is still employed, as we are trusting more to the stability of the V-variometer than to the accuracy of the Inclination measurements. The mean Inclination value through the year is  $77^{\circ} 20'.0$ .

The temperature coefficient for the H-variometer is 8.0  $\gamma$  per degree Celcius and for the V-variometer  $\div 1.3$   $\gamma$  per degree Celcius.

OBSERVED AND ADOPTED BASE-LINE VALUES FOR  $D$  AND  $H$ 

Date	$D$ observed	$D$ adopted	$H$ observed	$H$ adopted
I 29	2° 44'.9 W	2° 44'.9 W	11 399 $\gamma$	11 396 $\gamma$
II 1	.9	.9	95	96
23	.3	.3	96	96
III 21	.2	.3	99	96
IV. 1	.2	.3	96	96
27	.3	.3	98	96
V. 25	.6	.3	96	96
VI. 10	.4	.3	94	96
23	.2	.3	96	96
VII. 4	.4	.3	97	96
VIII. 31	.3	.3	98	96
IX. 30	.3	.3	98	96
XI. 3	.3	.3	95	96
XII. 4	2° 51'.1 W	2° 51'.2 W	95	96
28	.3	.2	95	96

## EXPLANATION OF THE TABLES

For each of the components  $D$ ,  $H$  and  $V$  two series of tables are given. One series gives in the usual way the hourly mean values centered at half hours Gr. M. T. In these tables the column headed  $M$  gives the ordinary diurnal means.  $R$  designates the range, i. e. the difference between the maximum and minimum value measured on the magnetogram. The horizontal line marked  $M$  gives the monthly means of the *quiet* hourly values.

The second series of the tables gives the hourly values of the storminess («average perturbing force» or «activity»). As to the definition of the storminess and the method for separating it, we refer to No. 2 and No. 4 in the present series of publications. In the storminess tables the column headed  $M$  gives the diurnal means. The columns headed  $PS$ ,  $NS$  and  $AS$  give the diurnal sum of the positive, negative and absolute storminess respectively. The column headed  $CH$  gives the magnetic character numbers. We consider the diurnal sum of the absolute storminess as the best expression for the magnetic activity during a day, and we will use the quantity for defining the character numbers. Only the strongest perturbed component, the Horizontal Intensity, is used in characterisation. Character number 0 comprises the diurnal sum of the absolute storminess ( $AS$ ) up to 400  $\gamma$ , character number 1 from 400  $\gamma$  to 1200  $\gamma$  and character number 2 greater than 1200  $\gamma$ . The horizontal line marked  $M$  contains the monthly means of the hourly values, and the two lines marked  $MPS$  and  $MNS$  give the monthly means of the positive and negative storminess respectively.

In  $D$  the storminess is reckoned positive towards magnetic west, in  $H$  positive towards magnetic north, and in  $V$  positive downwards.

In addition to the main tables, resuming tables, figures and vector diagrams are entered at the end of the year-book.

TABLE I. *Thermal Conductivities of Various Solids*

Material	Temperature (°C)	Thermal Conductivity (W/m·K)
Aluminum	0	204
Aluminum	100	201
Aluminum	200	198
Aluminum	300	195
Aluminum	400	192
Aluminum	500	189
Aluminum	600	186
Aluminum	700	183
Aluminum	800	180
Aluminum	900	177
Aluminum	1000	174
Copper	0	398
Copper	100	394
Copper	200	390
Copper	300	386
Copper	400	382
Copper	500	378
Copper	600	374
Copper	700	370
Copper	800	366
Copper	900	362
Copper	1000	358
Iron	0	79.7
Iron	100	79.0
Iron	200	78.3
Iron	300	77.6
Iron	400	76.9
Iron	500	76.2
Iron	600	75.5
Iron	700	74.8
Iron	800	74.1
Iron	900	73.4
Iron	1000	72.7
Steel	0	50.2
Steel	100	49.8
Steel	200	49.4
Steel	300	49.0
Steel	400	48.6
Steel	500	48.2
Steel	600	47.8
Steel	700	47.4
Steel	800	47.0
Steel	900	46.6
Steel	1000	46.2
Lead	0	35.3
Lead	100	34.9
Lead	200	34.5
Lead	300	34.1
Lead	400	33.7
Lead	500	33.3
Lead	600	32.9
Lead	700	32.5
Lead	800	32.1
Lead	900	31.7
Lead	1000	31.3
Mercury	0	8.3
Mercury	100	8.1
Mercury	200	7.9
Mercury	300	7.7
Mercury	400	7.5
Mercury	500	7.3
Mercury	600	7.1
Mercury	700	6.9
Mercury	800	6.7
Mercury	900	6.5
Mercury	1000	6.3
Water	0	0.562
Water	100	0.680
Water	200	0.645
Water	300	0.610
Water	400	0.575
Water	500	0.540
Water	600	0.505
Water	700	0.470
Water	800	0.435
Water	900	0.400
Water	1000	0.365
Ice	0	2.22
Ice	100	2.18
Ice	200	2.14
Ice	300	2.10
Ice	400	2.06
Ice	500	2.02
Ice	600	1.98
Ice	700	1.94
Ice	800	1.90
Ice	900	1.86
Ice	1000	1.82

# TABLES

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Aluminum	200	198
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Aluminum	500	189
Aluminum	600	186
Aluminum	700	183
Aluminum	800	180
Aluminum	900	177
Aluminum	1000	174
Copper	0	398
Copper	100	394
Copper	200	390
Copper	300	386
Copper	400	382
Copper	500	378
Copper	600	374
Copper	700	370
Copper	800	366
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Copper	1000	358
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Aluminum	900	177
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Steel	300	49.0
Steel	400	48.6
Steel	500	48.2
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Tromsø. Declination.  $D = 2^\circ \ddot{W} +$  Tabular Quantities expressed in Tenths of Minutes.

Gr. M. T.

JANUARY 1939.

HOURLY MEAN VALUES

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R		
1	345	390	405	410	405	405	420	420	425	425	425	405	420	435	420	375	390	420	430	430	405	390	360	375	405	43	
2	410	410	410	410	410	410	425	430	435	440	440	450	450	455	450	465	435	420	420	410	410	405	390	360	375	405	429
3											430	410	410	405	410	410	400	405	405	405	400	375	390	405	405	427	72
4	405	410	410	410	410	410	405	405	410	410	410	420	420	420	420	425	430	430	425	420	410	435	430	410	417	14	
5	410	420	420	420	420	420	430	430	430	430	440	450	470	500	480	510	510	470	480	470	410	450	390	260	432	239	
6	375	380	380	390	375	390	390	365	405	405	410	420	425	450	435	450	480	450	525	465	375	330	345	315	408	206	
7	360	435	360	375	360	360	385	390	405	420	410	430	440	410	410	420	430	410	420	440	450	290	300	350	393	139	
8	270	330	320	350	350	360	380	390	390	400	410	410	420	420	410	440	440	440	450	390	440	150	360	390	450	381	344
9	210	210	270	300	330	420	410	410	420	470	420	390	390	390	390	410	410	440	450	480	510	480	380	380	387	268	
10	350	370	350	380	440	390	410	410	440	440	420	470	470	470	430	470	440	410	410	390	300	440	420	380	408	129	
11	360	380	360	420	380	360	390	410	420	430	420	430	420	420	440	470	390	500	450	470	540	450	360	300	414	392	
12	320	380	380	360	390	390	390	400	420	440	440	440	470	470	440	410	420	420	410	410	420	390	420	410	408	72	
13	380	360	380	390	390	400	400	405	410	420	420	435	425	435	435	480	440	435	420	410	410	405	365	450	414	129	
14	210	300	300	375	360	390	420	420	420	430	440	440	470	470	430	440	440	400	400	400	390	240	210	350	378	166	
15	410	420	410	420	420	430	420	420	420	390	450	440	440	440	420	420	420	410	405	395	380	390	375	375	414	46	
16	390	375	380	395	395	405	410	410	420	420	435	440	435	420	420	435	450	450	495	330	390	360	390	414	392		
17	240	120	0	210	375	375	375	405	420	405	420	420	435	435	400	400	390	420	410	300	330	350	380	380	346	363	
18	300	225	360	380	420	420	460	450	420	390	405	420	420	420	420	410	410	410	410	405	405	390	375	350	396	182	
19	375	330	375	390	390	405	400	490	400	405	420	410	410	410	410	410	410	410	405	375	330	270	255	30	372	167	
20	150	105	195	285	375	405	465	450	435	435	435	440	440	435	420	420	405	410	435	470	420	390	375	330	381	148	
21	250	160	320	360	410	410	400	390	420	420	430	430	430	390	500	480	510	530	270	390	410	390	390	390	390	201	
22	390	390	410	420	420	420	410	400	420	410	410	410	390	410	440	420	410	300	320	390	350	200	120	378	210		
23	140	270	300	330	420	410	420	420	410	380	440	440	430	350	410	420	400	410	390	390	390	400	400	361	172	351	
24	290	400	400	390	410	480	440	420	390	380	400	410	430	410	410	400	390	390	400	410	360	380	170	320	390	268	
25	375	380	375	380	390	390	380	360	390	4-5	405	350	405	405	420	400	395	395	400	390	390	395	395	395	396	35	
26	395	400	395	395	395	395	390	390	390	395	405	410	420	410	410	410	410	410	405	400	395	390	380	380	399	14	
27	390	395	395	395	395	395	395	395	395	395	395	410	425	425	420	410	410	410	410	405	400	400	400	400	405	10	
28	400	400	400	405	405	410	410	410	410	410	410	430	430	430	435	440	440	420	425	420	390	380	375	195	405	143	
29	50	120	345	490	420	420	410	410	410	405	405	410	430	420	420	420	420	420	435	440	345	330	330	378	167	147	
30	345	375	395	400	390	410	400	390	390	410	420	435	435	445	440	440	440	435	425	420	410	435	410	410	411	57	
31	410	410	410	420	410	410	410	410	410	410	410	420	430	440	440	450	430	420	410	410	410	410	390	390	414	29	
M	327	339	354	378	393	402	408	408	411	414	435	426	432	428	426	432	426	426	414	414	393	381	357	345	438	154	
QM	400	400	395	390	390	390	395	405	410	410	420	430	445	445	430	425	420	410	410	410	405	400	400	395	408		

FEBRUARY.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	380	380	370	380	360	360	365	380	380	435	435	495	450	510	540	480	480	510	660	570	450	300	195	435	301	
2	210	230	140	300	390	360	390	420	440	450	430	430	470	470	440	420	570	240	450	440	470	270	290	375	387	210
3	330	350	350	360	380	380	380	400	410	420	450	410	450	420	440	410	410	430	420	380	380	350	330	300	387	86
4	280	350	330	360	360	350	330	390	440	410	430	390	420	440	440	450	410	450	440	420	390	390	350	390	201	201
5	360	270	270	390	350	380	390	390	440	390	390	330	270	180	320	570	1200	720	540	450	420	210	90	405	626	626
6	80	390	330	480	80	240	300	360	450	420	390	440	450	480	530	500	450	570	420	600	560	390	330	300	291	631
7	255	255	300	390	375	375	375	380	380	380	380	380	400	390	390	405	425	425	435	390	375	315	120	270	387	255
8	330	330	320	345	360	375	375	380	400	410	440	440	420	480	405	410	450	450	180	510	510	270	390	315	387	335
9	180	300	210	180	320	360	390	390	380	380	390	420	480	480	480	450	500	300	500	440	420	380	350	270	370	244
10	320	240	90	30	290	390	380	390	390	410	390	450	450	450	450	390	380	390	350	360	380	370	390	380	351	382
11	380	380	375	360	370	375	380	390	395	395	395	405	410	410	410	405	425	420	410	395	390	380	390	390	396	24
12	395	395	395	390	390	390	390	390	395	400	410	420	420	405	410	420	420	435	435	420	480	270	300	390	399	148
13	390	410	405	390	405	390	395	405	405	410	420	425	420	405	405	400	420	425	300	390	410	405	395	402	124	124
14	380	300	150	270	390	410	420	420	410	420	450	450	450	480	450	440	470	480	410	390	360	350	350	396	148	148
15	360	380	330	80	140	380	420	440	420	440	420	450	450	450	390	570	480	360	440	440	380	90	300	350	372	335
16	360	380	360	360	390	390	420	420	440	420	440	420	440	420	440	420	390	400	360	200	360	330	320	378	210	210
17	270	270	380	390	420	420	440	440	480	470	450	480	500	390	410	440	420	410	430	390	390	350	500	170	408	339
18	300	270	350	360	360	420	480	450	410	450	440	440	450	390	390	380	410	420	420	390	240	350	350	384	148	148
19	380	380	360	375	375	380	375	375	380	390	410	420	420	420	410	300	330	435	405	405	390	360	375	335	384	124
20	390	400	390	360	390	380	380	380	390	405	420	425	425	420	410	410	410	405	405	400	395	395	400	402	24	24
21	395	390	390	380	380	380	380	380	390	395	425	450														



Tromsø.

Declination. Hourly ( + W ). Unit Gamma.

Gr. M. T.

JANUARY 1939.

HOURLY MEAN VALUES

Table for January 1939 showing hourly mean values for declination. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -18 to 30.

FEBRUARY.

Table for February showing hourly mean values for declination. Columns include Day (1-30), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -28 to 30.

MARCH.

Table for March showing hourly mean values for declination. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -27 to 48.

Tromsø. Declination. D = 2° W + Tabular Quantities expressed in Tenths of Minutes.

Gr. M. T.

Table for APRIL 1959. HOURLY MEAN VALUES. Columns: DAY, 1-23, M, R. Rows: 1-30, M, QM.

Table for MAY. HOURLY MEAN VALUES. Columns: DAY, 1-23, M, R. Rows: 1-31, M, QM.

Table for JUNE. HOURLY MEAN VALUES. Columns: DAY, 1-23, M, R. Rows: 1-30, M, QM.

Tromsø.

Declination. Storminess (+ W). Unit Gamma.

Gr. M. T.

APRIL 1939.

HOURLY MEAN VALUES

Table for April 1939 showing magnetic observations (Declination, Storminess) and monthly means (M, PS, NS, AS) for each day from 1 to 30.

MAY.

Table for May 1939 showing magnetic observations (Declination, Storminess) and monthly means (M, PS, NS, AS) for each day from 1 to 31.

JUNE.

Table for June 1939 showing magnetic observations (Declination, Storminess) and monthly means (M, PS, NS, AS) for each day from 1 to 30.

Tromsø. Declination.  $D = 2^\circ W$  + Tabular Quantities expressed in Tenths of Minutes. HOURLY MEAN VALUES

Gr. M. T.

Table for July 1939 with columns DAY, 1-25, M, R. Rows 1-31. Includes summary rows M and QM.

AUGUST.

Table for August with columns DAY, 1-23, M, R. Rows 1-31. Includes summary rows M and QM.

SEPTEMBER.

Table for September with columns DAY, 1-25, M, R. Rows 1-30. Includes summary rows M and QM.

Tromsö.

Declination. Storminess (+ W). Unit Gamma.

Gr. M. T.

JULY 1939.

HOURLY MEAN VALUES

Table for July 1939 showing magnetic observations for Tromsö. Columns include Day (1-31), 23 declination values (1-23), and summary statistics (M, PS, HS, AS). Summary values: M=287, PS=285, HS=572.

AUGUST.

Table for August 1939 showing magnetic observations for Tromsö. Columns include Day (1-31), 23 declination values (1-23), and summary statistics (M, PS, HS, AS). Summary values: M=171, PS=295, HS=465.

SEPTEMBER.

Table for September 1939 showing magnetic observations for Tromsö. Columns include Day (1-30), 23 declination values (1-23), and summary statistics (M, PS, HS, AS). Summary values: M=242, PS=146, HS=388.

Tromsø.

Declination.  $D = 2^\circ W +$  Tabular Quantities expressed in Tenths of Minutes.

Gr. M. T.

OCTOBER 1939.

HOURLY MEAN VALUES

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	180	200	90	210	240	270	300	310	330	350	360	380	380	380	370	370	390	420	440	410	350	310	290	312	201	
2	300	290	290	290	260	260	260	280	310	350	360	380	380	380	370	360	360	340	330	320	320	320	320	327	33	
3	310	320	320	320	290	290	290	290	290	310	410	450	380	510	450	510	540	590	690	620	510	620	300	399	384	
4	270	-180	-60	-330	-120	170	210	270	330	350	380	420	360	450	440	390	410	120	260	360	270	260	270	231	583	
5	150	180	180	210	290	270	300	290	320	330	330	410	420	420	410	390	360	390	110	-90	50	300	290	210	287	
6	-150	-330	-330	-210	-60	-110	170	270	300	320	330	360	380	390	420	390	360	360	350	0	300	380	300	186	641	
7	275	270	285	275	270	270	280	300	315	360	390	420	390	360	420	540	540	350	270	230	240	200	140	318	539	
8	240	180	200	240	270	240	270	270	300	315	345	360	360	390	365	360	375	390	390	405	285	360	285	315	158	
9	210	0	30	300	300	270	200	0	450	440	390	380	530	360	610	630	280	450	480	330	280	270	270	300	330	
10	320	300	285	285	285	290	300	300	290	315	330	330	345	345	335	335	335	335	330	320	320	300	225	225	310	148
11	255	270	270	285	285	300	300	300	350	350	360	370	390	360	360	380	390	380	350	350	350	150	0	509	249	
12	165	300	330	255	270	280	285	290	300	380	345	350	360	350	330	345	330	345	350	350	350	315	285	315	105	
13	270	290	230	150	270	-120	-60	110	260	410	380	410	440	390	410	450	650	510	270	670	60	150	180	-300	284	
14	-110	30	-30	270	180	-80	-360	120	30	60	150	300	210	140	210	330	680	150	90	90	110	180	-50	800	180	
15	-240	-480	-90	30	-240	-120	60	180	260	270	270	380	360	390	380	240	300	350	330	300	90	150	30	180	155	
16	90	230	240	240	240	300	290	240	300	350	360	440	300	500	390	530	750	500	360	90	260	180	50	312	589	
17	210	140	0	240	210	300	290	320	300	360	330	380	395	470	440	280	450	210	360	250	230	230	291	435	359	
18	230	170	80	180	300	300	320	330	350	350	360	420	420	440	300	750	690	570	590	390	900	210	270	345	445	
19	390	-210	-80	-80	180	270	230	240	210	210	300	410	480	510	630	600	480	420	330	300	50	170	280	260	273	
20	265	270	240	285	300	285	285	300	330	345	350	360	360	360	340	330	340	340	330	318	300	290	290	315	540	
21	290	300	300	270	290	290	300	315	330	330	335	360	375	395	375	365	340	360	450	120	315	360	300	-30	291	
22	180	275	290	270	290	290	300	300	380	330	360	360	380	405	375	365	335	360	150	120	315	360	300	-30	291	
23	170	270	290	280	290	300	300	300	320	330	360	360	360	360	350	350	350	350	350	120	180	270	270	360	300	
24	330	310	300	300	300	290	290	290	300	350	380	390	410	270	170	200	200	420	390	360	360	330	150	90	336	
25	60	170	240	270	290	290	270	270	290	300	320	350	380	340	350	350	340	330	350	340	320	310	320	320	294	153
26	285	270	290	270	270	285	275	290	290	300	330	370	380	375	330	330	340	330	335	330	330	305	300	290	315	62
27	290	290	290	290	290	290	280	280	290	300	330	380	390	380	390	400	380	350	330	60	180	260	330	306	143	
28	330	300	300	300	290	290	290	290	290	290	310	330	360	360	375	360	350	365	390	420	450	435	285	330	150	
29	240	210	180	245	200	300	320	320	320	320	330	350	360	380	360	360	340	350	380	260	300	270	290	303	208	
30	240	170	140	180	240	280	290	290	290	300	320	370	360	360	420	470	350	350	360	300	290	350	180	300	158	
31	180	260	290	300	300	290	290	290	300	320	345	370	380	400	375	350	330	345	330	315	285	300	300	315	96	
M	198	159	174	207	228	231	237	267	291	315	339	366	384	372	393	395	414	405	348	318	264	276	249	195	297	326
GM	300	300	290	290	285	285	290	300	315	330	350	350	380	350	350	345	340	340	330	320	310	300	290	290	318	

NOVEMBER.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	290	285	260	285	270	290	300	315	330	345	375	375	390	350	345	330	350	360	270	290	280	260	240	312	100	
2	290	260	285	285	330	335	345	350	380	330	350	345	330	345	320	330	315	305	305	310	345	315	300	300	318	67
3	270	290	290	290	290	290	300	310	320	310	330	350	350	360	380	360	390	380	380	350	320	320	110	312	139	
4	280	260	260	300	300	300	300	315	315	315	360	330	335	335	330	350	350	345	335	320	320	315	290	275	312	
5	270	275	290	300	300	300	300	305	320	345	345	355	360	365	380	375	360	360	315	315	310	305	310	327	62	
6	305	300	300	300	290	285	300	300	315	320	330	345	360	360	360	360	375	370	390	390	315	225	240	225	321	
7	60	210	240	290	300	300	300	305	315	335	345	330	330	340	375	300	360	345	300	230	270	240	270	291	177	
8	265	300	300	285	280	260	260	260	270	275	275	270	270	310	310	300	300	300	300	300	300	290	290	298	29	
9	300	300	300	290	285	290	300	300	305	305	320	320	320	320	320	320	350	360	345	345	320	315	315	290	298	
10	290	290	290	285	300	305	305	305	310	315	320	320	320	330	330	330	330	320	330	305	300	285	290	285	309	
11	290	290	300	315	305	300	300	300	305	305	310	320	320	330	330											
12																										
13																										
14																										
15	120	60	135	270	330	335	330	300	285	315	315	345	360	350	365	210	150	210	345	360	390	165	60	-300	288	
16	245	300	330	330	330	320	315	315	315	320	330	335	330	350	350	340	240	360	350	270	270	380	320	318	91	
17	315	315	320	315	315	315	315	315	330	350	350	360	360	360	360	360	375	390	405	300	270	315	300	300	335	
18	330	330	330	330	320	320	320	315	320	320	335	350	350	350	350	350	350	350	350	350	345	345	345	315	336	
19	300	300	305	305	305	305	305	305	310	315	320	320	320	320	320	320	320	320	320	320	315	315	290	275	312	
20	180	200	315	300	285	300	300	300	300	300	305	380	320	330	330	340	350	340	350	315	270	240	255	300	143	
21	275	260	260	260	275	285	300	300	300	300	315	360	330	330	330	330	330	320	315	305	300	300	300	300	303	67
22	290	290	290	290	300	300	300	300	300	310	320	330	330	330	330	330	330	320	320	315	315	330	285	270	312	
23	290	310	305	305	300	315	320	320	320	320	320	320	320	320	320	320	320	320	320	320	315	315	315	315	318	
24																										

Tromsø.

Declination. Storminess (+ W). Unit Gamma.

Gr. M. T.

OCTOBER 1939.

HOURLY MEAN VALUES

Table for October 1939 showing hourly mean values for declination and storminess. Columns include Day (1-31), M, PS, NS, AS, and summary rows for M, PS, NS, AS, MFS, and MNS.

NOVEMBER.

Table for November showing hourly mean values for declination and storminess. Columns include Day (1-30), M, PS, NS, AS, and summary rows for M, PS, NS, AS, MFS, and MNS.

DECEMBER.

Table for December showing hourly mean values for declination and storminess. Columns include Day (1-31), M, PS, NS, AS, and summary rows for M, PS, NS, AS, MFS, and MNS.

Tromsø. Horizontal Intensity. H = 11300 + Tabular Quantities expressed in Gamma.

Gr. M. T.

JANUARY 1939.

HOURLY MEAN VALUES

Table for January 1939 showing hourly mean values for horizontal intensity. Columns include Day (1-31), hours (1-24), and summary statistics (M, R).

FEBRUARY

Table for February showing hourly mean values for horizontal intensity. Columns include Day (1-28), hours (1-24), and summary statistics (M, R).

MARCH

Table for March showing hourly mean values for horizontal intensity. Columns include Day (1-31), hours (1-24), and summary statistics (M, R).



Tromsø.

Horizontal Intensity. Storminess (+ N). Unit Gamma.

Gr. M. T.

JANUARY 1939.

HOURLY MEAN VALUES

Table for January 1939 showing hourly mean values for magnetic intensity and storminess. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS, CH).

FEBRUARY.

Table for February 1939 showing hourly mean values for magnetic intensity and storminess. Columns include Day (1-29), hours (1-24), and summary statistics (M, PS, NS, AS, CH).

MARCH.

Table for March 1939 showing hourly mean values for magnetic intensity and storminess. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS, CH).

Tromsø.

Horizontal Intensity. H = 11300 + Tabular Quantities expressed in Gamma.

Gr. M. T.

APRIL 1939.

HOURLY MEAN VALUES

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	-350	-265	-400	-80	-85	-110	0	10	10	-20	40	70	50	45	155	140	155	0	30	-230	-140	-170	-200	-280	-69	925
2	-300	-430	-190	-270	40	10	10	0	0	10	13	23	30	135	127	90	167	80	-45	15	-180	-220	-460	-56	915	
3	-140	-25	-90	-110	10	30	28	-10	0	-10	35	60	100	75	125	130	50	-50	-40	-140	-170	-195	-8	525		
4	-230	-110	-50	-130	-50	20	20	10	15	18	-10	-8	-5	30	20	30	25	42	83	-110	-65	-50	-10	10	-21	380
5	10	-30	-120	-70	35	25	20	20	0	25	40	30	10	170	130	90	50	48	55	30	-25	10	22	25	375	
6	22	22	22	18	22	18	15	20	8	-8	-5	5	38	15	30	30	35	33	30	35	28	30	30	22	75	
7	26	25	25	27	30	30	18	10	5	-5	0	-10	-2	10	12	70	98	95	77	60	-30	-30	20	23	175	
8	28	20	20	20	20	28	22	10	0	0	-5	10	40	40	68	90	115	165	70	75	20	-30	10	34	340	
9	20	-45	-100	-20	38	35	30	15	8	10	0	15	70	85	100	130	180	80	-175	-80	-60	-70	-110	-240	-6	545
10	-370	-115	10	40	-30	0	-15	15	10	30	15	65	170	270	150	200	118	125	160	-470	-200	-70	-60	-370	-13	1195
11	-460	-30	40	20	20	40	30	15	0	50	100	95	35	80	110	155	120	-20	-210	0	-380	-370	-300	-150	-42	760
12	-75	-50	-70	-150	90	-20	0	20	20	80	180	65	125	90	20	25	50	40	45	27	-20	-120	-180	-140	0	445
13	-120	-80	20	30	25	20	5	-20	10	-5	0	-10	5	30	50	55	48	60	50	0	-45	-150	-20	5	2	310
14	0	-90	-125	-35	20	28	10	0	-8	0	-5	20	30	40	55	60	90	80	77	20	-100	-140	-100	-130	-8	420
15	20	30	30	25	20	25	15	3	5	0	2	7	10	35	60	93	95	80	50	25	10	-30	-35	-5	24	155
16	15	27	22	25	27	25	20	12	0	-7	-7	-5	5	10	15	18	20	30	38	38	35	48	20	0	18	85
17	-55	-20	-90	-260	-155	-400	-430	-380	-170	65	100	365	360	250	-20	120	0	45	-250	-160	-90	-20	-48	1363		
18	10	0	-15	-10	10	0	-5	-20	30	15	25	30	270	230	240	70	40	-300	-80	-220	-130	-195	-155	-490	-27	1075
19	-330	-375	-230	60	30	10	-45	-20	5	20	25	48	180	350	340	260	210	-230	30	0	-100	-300	-190	-310	-23	945
20	-280	-260	-240	-180	-240	-65	10	22	45	95	90	200	170	90	220	190	120	80	105	-30	-110	-160	-155	-270	-24	615
21	-340	-260	-260	-105	-50	-75	-60	10	45	30	50	210	270	425	290	195	180	170	105	50	-120	-140	-140	-150	14	835
22	-130	-130	-100	-30	50	20	12	10	-10	5	7	7	70	250	280	225	200	120	-260	-100	-50	-60	-200	-250	-3	840
23	-170	-170	-120	-130	-290	-370	-650	-500	-20	90	180	500	700	450	180	210	300	200	90	-175	-40	-80	-30	-140	1	1605
24	-205	-100	0	40	30	10	5	0	-10	-8	-10	-10	15	0	12	10	20	130	40	-180	-650	-400	-50	-450	-77	1115
25	-530	-260	-95	-50	-10	20	10	40	55	90	190	260	200	80	235	170	140	120	-80	-250	-95	-180	-290	-450	-28	1065
26	-370	-160	-250	-60	-30	20	10	-5	-10	-15	-20	-18	-10	0	20	30	67	75	58	27	20	-10	-110	-20	-32	545
27	12	12	18	20	20	12	0	-10	-5	-10	-10	-10	0	20	12	60	90	125	55	23	-10	-320	-700	-350	-39	1310
28	-300	-110	-165	-100	-15	-10	-5	20	20	27	50	75	80	110	170	100	80	70	93	30	-200	-253	-190	-160	-24	840
29	-20	30	-15	-80	-10	25	16	8	0	30	5	60	45	75	50	60	30	80	0	25	-70	-45	-100	-210	0	360
30	-240	-150	10	30	27	20	10	0	-10	-10	-8	-8	-10	25	70	95	125	130	145	-5	0	25	-15	-40	9	470
M	-171	-104	-64	-50	-13	-20	-30	-22	1	20	32	70	100	114	109	108	99	65	24	-48	-92	-126	-126	-174	-15	687
GM	22	23	23	23	22	20	18	12	7	2	0	3	7	13	18	23	28	32	33	33	32	30	27	23	20	

MAY.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	-80	-50	-35	-15	0	10	20	0	10	45	130	230	200	120	340	275	190	110	40	20	-140	-360	-440	-270	15	970
2	-540	-580	-270	-40	-230	-330	-280	-50	-20	95	110	190	285	280	170	310	190	180	90	30	-120	-80	-190	-300	-48	1185
3	-260	-360	-680	-400	-325	-150	-85	-50	0	40	65	70	75	160	185	140	80	75	30	-30	-80	-50	-130	-67	970	
4	-815	-90	-60	20	10	35	28	15	10	5	-25	-10	-5	10	85	40	95	130	90	10	15	20	13	-5	7	410
5	5	5	0	-10	-35	-40	-45	-20	20	-10	0	10	20	35	90	95	100	135	125	110	25	-190	-20	65	22	620
6	120	80	50	60	10	25	10	20	10	0	60	-10	230	310	220	255	280	185	80	-10	-280	-250	-370	-380	29	1215
7	-360	-210	-660	-690	-80	-190	-50	50	30	0	180	100	140	190	290	250	240	215	130	40	-160	-120	-200	-140	-44	1120
8	-90	-100	-260	-270	-100	30	-15	-70	-25	10	50	80	50	85	240	380	130	100	130	25	-150	-100	-190	-300	-15	1060
9	-370	-350	-360	-380	-140	10	-30	20	45	60	130	200	150	160	180	130	50	70	60	20	-90	-40	-180	-25	840	
10	-160	-40	-85	10	30	10	0	0	-10	-5	20	-5	0	15	20	45	90	170	70	45	40	10	-10	5	14	245
11	0	10	20	20	20	10	10	-5	0	-5	0	45	0	75	40	55	55	50	43	38	20	10	8	10	22	200
12	-20	-80	10	22	10	12	8	0	-3	0	0	20	30	50	68	55	48	80	85	60	40	33	20	20	27	190
13	25	30	27	20	28	27	7	-10	0	-18	-10	10	115	60	50	60	100	110	90	65	-30	-70	-50	-40	24	265
14	-8	35	20	28	25	20	18	10	10	2	-3	0	40	45	35	35	40	45	53	55	50	30	30	20	26	85
15	30	35	38	20	10	-20	0	10	-15	-12	-20	30	140	260	210	260	110	65	50	-10	-30	-100	-75	45	485	
16	-80	10	-80	-250	-290	-150	-85	-25	40	90	30	10	70	30	35	12	20	30	33	68	55	20	-70	-40	-22	515
17	-20	25	20	23	20	5	0	-5	-15	-10	5	20	95	130	180	260	200	145	-10	-180	-60	-40	-90	-120	24	530
18	-240	-420	-440	-290	-80	20	30	28	0	-5	30	55	140	215	285	255	150	80	50	30	-10	-110	-235	-285	-31	840
19	-300	-290	-320	-240	-90	-35	-10	20	70	60	25	80	35	50	55	55	80	95	85	50	-70	-320	-235	-50	580	
20	-250	-320	-360	-300	-175	-80	0	15	5	20	50	80	60	75	105	230	210	140	115	65	10	30	5	-55	-14	1020
21	-230	-220	-225	-160	-85	65	25	5	10	15	0	20	60	280	430	485	250	155	80	20	-25	-70	-190	-95	25	500
22	-215	-290	-195	-40	-90	-70	-30	30	35	130	300	50	75	85	245	290	180	120	85	90	35	-10	10	-350	20	800
23	-280	-275	-540	-280	-125	-20	-5	10	50	70	130	100	100	20	140	200	120	-10	-120	-70	-110	-120	-430	-51	860	
24	-310	-120	-370	-300	-230	-70	65	50	5	-5	-5	0	30	20	180	250	195	140	80	-110	-240	-280	-160	-59	805	
25	-160	-440	-350	-300	0	25	20	25	10	20	15	50	110	115	190	200	130	60	30	0	-110	-240	-290	-310	-60	1055
26	-350	-340	-260	-150	-310	-110	30	80	45	70	170	90	70	160	175	295	115	90	75	-240	-140	-120	-175	-320	-44	680
27	-220	-140	-210	-130	-20	-15	0																			

Tromsø.

Horizontal Intensity. Storminess (+ N). Unit Gamma.

Gr. M. T.

APRIL 1939.

HOURLY MEAN VALUES

Table for April 1939 showing hourly magnetic observations. Columns include Day (1-30), 24 hours (1-24), M, PS, NS, AS, CH. Data values range from -305 to 305.

MAY.

Table for May 1939 showing hourly magnetic observations. Columns include Day (1-31), 24 hours (1-24), M, PS, NS, AS, CH. Data values range from -178 to 310.

JUNE.

Table for June 1939 showing hourly magnetic observations. Columns include Day (1-30), 24 hours (1-24), M, PS, NS, AS, CH. Data values range from -156 to 310.

Tromsø. Horizontal Intensity. H = 11300 + Tabular Quantities expressed in Gamma.

Gr. M. T.

Table for July 1959 showing hourly mean values for horizontal intensity. Columns include Day (1-31), hours (1-24), and monthly totals (M, R). Values range from -450 to 340.

AUGUST.

Table for August showing hourly mean values for horizontal intensity. Columns include Day (1-31), hours (1-24), and monthly totals (M, R). Values range from -76 to 390.

SEPTEMBER.

Table for September showing hourly mean values for horizontal intensity. Columns include Day (1-30), hours (1-24), and monthly totals (M, R). Values range from -52 to 462.

Tromsø.

Horizontal Intensity. Storminess (+ N). Unit Gamma.

Gr. M. T.

JULY 1939.

HOURLY MEAN VALUES

Table for July 1939 showing magnetic observations. Columns include DAY (1-31), 25 numbered columns (1-25), M, PS, NS, AS, CH. Rows contain numerical data for each day and summary rows for M, MPS, and MNS.

AUGUST.

Table for August 1939 showing magnetic observations. Columns include DAY (1-31), 25 numbered columns (1-25), M, PS, NS, AS, CH. Rows contain numerical data for each day and summary rows for M, MPS, and MNS.

SEPTEMBER.

Table for September 1939 showing magnetic observations. Columns include DAY (1-30), 25 numbered columns (1-25), M, PS, NS, AS, CH. Rows contain numerical data for each day and summary rows for M, MPS, and MNS.

Tromsø. Horizontal Intensity. H = 11300 + Tabular Quantities expressed in Gamma.

Gr. M. T.

Table for October 1959 showing hourly mean values for horizontal intensity. Columns include Day (1-31), hours (1-24), and monthly totals (M, R). Values range from -140 to 320.

Table for November showing hourly mean values for horizontal intensity. Columns include Day (1-30), hours (1-24), and monthly totals (M, R). Values range from -140 to 320.

Table for December showing hourly mean values for horizontal intensity. Columns include Day (1-31), hours (1-24), and monthly totals (M, R). Values range from -160 to 320.

Tromsø.

Horizontal Intensity. Storminess (+ N). Unit Gamma.

Gr. M. T.

OCTOBER 1939.

HOURLY MEAN VALUES

Table for October 1939 showing hourly mean values for horizontal intensity and storminess. Columns include Day (1-31), 24 hours of intensity/storminess values, and summary statistics (M, PS, NS, AS, CH).

NOVEMBER.

Table for November 1939 showing hourly mean values for horizontal intensity and storminess. Columns include Day (1-30), 24 hours of intensity/storminess values, and summary statistics (M, PS, NS, AS, CH).

DECEMBER.

Table for December 1939 showing hourly mean values for horizontal intensity and storminess. Columns include Day (1-31), 24 hours of intensity/storminess values, and summary statistics (M, PS, NS, AS, CH).

Tromsø.

Vertical Intensity.  $V = 50300 +$  Tabular Quantities expressed in Gamma.

Gr. M. T.

JANUARY 1939.

HOURLY MEAN VALUES

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R
1	-5	15	30	35	32	28	30	30	30	30	33	50	45	48	55	70	60	50	50	45	25	20	18	36	95
2	30	38	38	35	32	27	20	20	25	28	30	40	45	48	48	45	42	40	40	40	20	30	38	24	38
3																									27
4	38	37	55	33	33	33	33	33	33	38	42	45	45	47	50	50	50	50	50	45	35	42	40	41	326
5	30	30	30	30	32	35	32	28	27	27	30	35	35	60	60	55	35	65	70	55	90	160	40	10	46
6	10	35	-5	20	30	32	35	37	35	33	40	45	48	42	55	55	0	30	55	58	15	-70	-10	5	26
7	30	-10	0	30	35	30	30	30	32	35	45	40	45	50	50	43	55	50	35	10	210	-10	30	80	41
8	-5	40	-10	-49	5	35	25	30	35	40	40	45	48	48	50	60	70	35	-30	100	-45	-5	20	10	25
9	-10	-20	-40	0	-10	-5	30	50	30	50	65	55	45	40	45	40	50	50	20	15	30	-120	-45	10	16
10	40	35	23	0	-50	-25	15	20	25	30	50	50	70	60	55	60	55	45	38	35	-70	-60	20	35	23
11	0	-10	25	-10	0	0	10	30	32	35	45	48	55	45	40	50	75	70	60	40	-40	-5	20	42	27
12	20	30	40	28	20	30	30	30	32	33	35	38	40	42	50	70	58	50	40	38	38	-10	20	25	116
13	45	30	28	30	35	35	33	33	37	37	38	40	43	43	40	40	65	50	45	40	40	40	-10	37	158
14	40	-15	-10	20	15	20	25	30	35	33	40	50	50	50	90	70	100	40	30	30	30	-10	-70	-35	27
15	20	40	30	20	0	-10	25	25	32	45	50	55	60	65	70	65	50	40	48	42	30	20	15	10	35
16	0	-10	20	25	28	28	28	28	30	37	40	40	45	42	40	65	60	50	20	130	-25	20	25	50	34
17	120	50	0	-60	-80	-45	-10	25	40	30	40	55	65	70	65	50	45	42	35	-20	-70	-5	0	10	19
18	0	-5	25	25	5	-10	5	20	30	35	38	38	38	45	48	48	45	43	42	40	40	45	-70	-20	23
19	30	38	32	32	28	25	25	32	35	35	35	38	40	47	43	40	50	45	40	38	30	-20	-20	31	190
20	-10	80	-110	-60	-35	-20	-30	-10	15	30	50	50	40	45	50	48	55	50	40	5	50	55	40	75	21
21	-10	-10	-30	-10	20	38	35	35	35	42	42	45	48	90	95	115	70	-45	-50	0	45	45	38	32	30
22	30	20	30	30	25	25	32	35	35	35	38	42	43	50	45	45	50	50	-10	-50	30	50	-55	30	27
23	-90	-70	-10	-20	0	15	42	50	55	70	60	55	40	50	100	80	85	70	55	30	15	10	20	28	51
24	30	28	28	20	-30	-20	15	50	55	40	35	40	50	50	45	40	40	42	50	50	40	-10	-30	29	224
25	10	25	30	30	30	27	33	40	42	45	40	35	55	50	45	48	42	42	45	45	48	40	40	33	38
26	30	30	30	30	30	32	35	37	37	37	37	38	40	50	48	45	43	38	38	38	38	37	33	30	37
27	30	27	25	25	27	30	30	33	35	35	35	32	30	28	35	35	35	35	37	37	37	37	32	30	32
28	28	25	25	23	23	20	18	20	22	22	25	28	30	32	32	32	32	32	33	33	33	25	28	20	23
29	-10	-35	0	15	30	32	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	28
30	32	30	27	20	10	18	20	27	30	40	42	48	50	55	65	65	50	42	40	38	38	37	33	38	75
31	10	25	28	30	28	28	30	32	32	32	35	40	42	45	45	48	50	50	48	45	45	40	35	33	37
M	17	17	12	13	13	16	23	29	33	37	40	43	45	49	53	54	55	44	34	35	30	18	12	20	31
QM	35	36	37	37	35	33	32	30	33	35	38	40	43	45	45	45	45	44	43	42	41	40	39	38	59

FEBRUARY.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	25	10	0	10	20	25	25	23	20	20	23	28	30	75	100	110	75	45	10	-60	30	60	110	100	38	340
2	110	180	100	18	10	25	35	30	25	45	40	50	50	80	75	58	0	-90	60	30	85	110	0	49	429	
3	30	68	35	30	-30	-35	-10	10	20	30	40	53	60	50	70	55	70	0	-10	-25	-10	-60	25	55	22	
4	90	50	50	20	45	40	38	35	30	38	50	60	55	50	42	55	48	48	60	48	40	40	20	30	45	
5	5	20	15	30	30	25	5	15	25	25	50	50	50	45	45	55	60	65	65	65	-5	40	-90	40	30	
6	110	110	30	20	30	-5	-30	-10	10	20	50	-75	-100	-200	-250	-160	-110	-180	130	110	120	180	275	310	17	
7	70	65	150	20	-70	-20	-20	-10	10	50	45	50	40	30	80	-80	-30	-80	30	-5	80	75	100	24		
8	110	55	20	40	55	55	50	45	45	48	50	53	55	68	68	60	60	70	30	20	65	105	60	55	57	
9	65	35	25	42	50	40	45	50	50	50	70	90	75	78	55	60	40	100	-150	45	110	35	140	52		
10	-10	25	25	0	-30	30	60	55	50	48	48	48	50	90	80	85	30	-10	-50	40	35	80	90	160	43	
11	40	0	130	-40	-60	0	35	40	35	45	60	70	60	70	75	55	50	40	20	40	30	20	25	38	374	
12	30	35	33	30	32	35	35	35	35	37	38	38	40	50	50	60	60	60	60	60	60	60	60	60	44	
13	40	40	38	38	37	35	33	30	32	38	40	42	45	48	48	48	48	48	48	48	48	48	48	48	44	
14	30	30	10	20	23	28	25	30	35	40	45	55	60	60	55	40	40	60	60	35	40	40	35	30	39	
15	35	40	-50	-60	-10	-5	10	30	40	40	50	60	65	55	70	75	50	65	20	15	10	45	50	25	30	
16	28	30	30	65	30	-10	38	45	60	60	55	60	70	75	80	85	60	40	50	40	60	50	10	30	47	
17	35	40	30	30	40	25	30	35	65	60	60	60	80	90	40	50	10	60	60	40	-110	-50	30	80	38	
18	100	10	25	25	30	30	45	50	55	55	60	65	70	50	40	75	55	40	40	10	130	-10	-155	39		
19	-95	-25	-10	20	0	-10	-5	10	35	40	50	60	75	60	80	70	55	50	50	30	-100	-35	10	20	18	
20	30	25	8	15	20	30	35	38	38	38	38	35	35	50	65	90	70	80	70	30	10	-20	-10	35	211	
21	0	25	40	40	58	55	50	48	45	45	48	48	48	45	43	40	45	45	45	45	40	38	35	33	42	
22	27	30	38	38	37	37	37	35	32	32	40	43	40	42	50	50	60	68	60	30	42	38	48	42	61	
23	60	-10	-50	0	20	20	30	35	38	38	40	40	40	30	45	48	55	50	40	30	10	-10	10	25	26	
24	90	90	50	-20	10	35	40	40	40	42	35	25	50	70	-60	-210	-300	-120	-60	50	150	600	260	320	51	
25	600	550	110	0	60	120	150	70	30	30	-10	50	40	-10	210	-140	-380	-110	180	100	60	250	135	60	89	
26	25	75	85	70	75	70	70	65	65	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63	
27	25	65	60	60	60	60	58	58	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63	
28	48	45	45	45	45	45	48	48	48	48	50	50	50	50	55	60	65	60	-40	-90	35	10	110	140	165	
M	62	61	38	22	22	28																				



Tromsø.

Vertical Intensity. Storminess (+ Down). Unit Gamma.

Gr. M. T.

JANUARY 1939.

HOURLY MEAN VALUES

Table for January 1939 showing magnetic observations. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -45 to 20.

FEBRUARY.

Table for February 1939 showing magnetic observations. Columns include Day (1-28), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -48 to 72.

MARCH.

Table for March 1939 showing magnetic observations. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -93 to 57.

Tromsø. Vertical Intensity.  $V = 50300 +$  Tabular Quantities expressed in Gamma.

Gr. M. T.

APRIL 1939.

HOURLY MEAN VALUES

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	100	100	95	-40	40	-85	-10	50	80	95	75	85	120	80	50	80	-80	10	40	190	60	85	75	230	69	639
2	-70	200	-95	-25	-5	40	80	55	65	60	70	90	65	90	100	50	5	-25	50	100	120	270	-80	54	628	54
3	90	-5	-5	-40	-50	25	55	60	80	85	70	75	65	100	100	75	85	35	-5	80	95	170	185	250	61	462
4	120	45	50	105	-40	-10	35	50	50	60	58	70	55	55	70	65	70	55	30	210	160	280	175	130	61	428
5	110	100	120	75	50	60	50	60	70	45	70	90	60	108	95	100	75	50	60	65	60	50	50	-75	143	
6	55	55	55	50	50	50	60	50	55	60	55	45	55	78	75	80	70	60	55	55	50	45	45	45	57	41
7	45	50	48	45	45	45	48	50	55	55	48	55	50	50	60	50	78	80	85	60	60	40	40	30	55	82
8	40	50	50	55	50	55	55	60	60	60	55	55	65	95	105	95	0	40	60	110	150	45	65	65	65	333
9	55	110	90	15	25	35	40	45	45	55	65	60	60	90	110	80	75	40	-95	-70	60	240	140	150	63	612
10	380	-50	-60	5	20	25	30	35	100	105	80	65	60	-10	65	40	40	45	30	50	-5	75	130	290	64	802
11	30	-30	15	20	30	45	45	50	80	70	95	110	110	80	80	90	75	40	-90	-220	0	60	380	120	54	1061
12	10	40	85	70	70	30	65	55	90	60	75	80	80	90	70	80	78	70	55	60	50	60	30	63	306	63
13	40	5	30	40	45	45	50	70	60	58	60	70	80	75	75	70	30	-5	50	60	0	25	20	45	177	67
14	40	50	25	-15	20	40	48	50	55	58	60	58	60	80	80	100	70	60	65	105	100	30	20	58	299	68
15	25	60	60	55	60	50	50	50	55	58	65	58	55	60	80	75	80	55	30	20	15	30	25	51	102	51
16	40	58	60	55	52	48	48	53	60	60	60	55	58	55	55	50	48	48	48	48	48	50	45	65	52	68
17	110	5	-20	190	410	300	-20	0	-210	-40	-30	-175	-120	-240	-340	-250	-220	-95	40	210	430	270	95	100	17	116
18	85	80	85	75	80	80	80	105	75	85	70	60	-35	-10	-100	-110	-60	130	120	220	90	210	310	430	88	707
19	85	-50	90	-20	60	65	50	30	40	40	50	55	30	-100	-245	-190	-225	200	-65	110	120	140	155	90	21	911
20	280	180	100	-10	75	-60	10	50	70	70	80	100	130	115	40	75	-25	80	75	80	155	195	220	330	100	517
21	160	140	130	-20	-5	20	40	55	70	95	70	60	105	-10	-10	15	40	80	95	50	120	145	110	60	68	415
22	70	90	-30	-40	65	80	70	75	75	70	78	82	65	70	-15	-130	-30	60	210	135	180	115	210	170	69	694
23	290	200	65	90	20	140	550	-260	-160	10	-5	-255	-310	-90	-270	-230	40	25	45	85	100	120	250	8	1108	8
24	210	80	50	65	75	80	85	80	78	75	80	85	90	85	85	78	75	0	-190	10	380	130	60	530	100	938
25	470	360	350	120	20	60	80	90	85	80	95	-10	35	105	40	15	-10	30	80	165	95	215	120	380	128	700
26	235	70	130	50	60	73	80	82	80	78	75	70	73	75	78	80	90	100	65	80	78	60	40	50	81	258
27	68	70	72	73	75	75	73	72	70					70	80	65	85	70	85	78	60	140			347	483
28														80	120	110	75	85	70	30	15	170	280	190	71	197
29	70	65	75	60	0	45	68	75	80	70	80	75	105	110	80	55	75	50	65	50	70	120	120	68	163	
30	90	70	50	70	70	70	70	70	70	68	65	65	65	60	70	80	100	75	30	45	70	60	80	60		
M	112	78	63	42	52	56	70	49	53	62	64	47	49	52	31	30	29	59	37	73	104	127	132	150	68	458
GM	47	48	49	49	48	47	45	45	47	50	53	55	57	57	57	55	53	52	50	49	48	47	46	45	50	

MAY

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	80	60	70	60	50	40	50	70	55	60	70	-10	-400	-350	-320	-160	-190	-50	20	120	290	350	310	350	26	938
2	500	250	160	90	150	240	40	0	-10	20	80	80	70	125	80	-20	-110	110	70	130	225	200	330	140	123	809
3	260	360	140	30	90	75	110	40	40	95	110	80	90	120	105	110	95	100	60	30	50	75	200	107	632	67
4	190	10	10	50	60	85	70	75	75	78	83	85	90	85	80	78	70	78	85	65	30	-70	80	70	72	292
5	60	60	65	65	55	40	65	50	70	105	85	65	60	75	115	90	65	120	95	55	55	200	150	170	86	415
6	185	145	100	80	70	55	60	60	70	65	100	120	30	-190	-160	-210	-90	-30	75	115	330	285	450	360	86	898
7	280	500	360	240	315	190	120	130	120	150	130	115	105	75	40	20	5	15	25	80	155	140	150	310	159	578
8	330	400	300	15	-10	70	110	130	100	110	120	130	100	30	-130	70	85	65	-15	15	90	300	160	90	111	850
9	100	200	100	210	-45	15	40	60	70	115	80	85	75	90	95	110	35	-20	75	80	105	170	70	95	84	568
10	75	80	80	60	70	75	70	68	68	60	65	75	68	75	68	60	45	75	90	88	80	75	75	71	82	82
11	75	70	60	58	55	60	60	60	60	60	75	75	90	120	90	105	90	78	70	70	65	60	65	65	73	109
12	50	40	55	55	60	60	63	63	63	63	70	70	72	100	110	95	80	75	70	65	75	60	70	65	70	95
13	70	65	60	58	55	52	58	65	72	75	55	45	55	130	90	73	70	80	70	60	100	100	60	70	177	70
14	65	68	63	62	62	65	58	60	60	60	60	62	85	100	85	70	70	70	70	70	70	68	60	65	67	61
15	60	58	58	55	50	20	0	10	30	40	60	65	65	0	60	60	100	90	50	50	45	20	15	77	163	47
16	80	30	-20	50	-15	-100	-45	20	30	50	75	45	65	90	65	70	50	50	48	60	50	85	150	80	44	326
17	60	60	65	65	60	65	40	42	47	48	50	50	75	72	65	45	-50	30	40	70	35	85	90	95	54	313
18	110	120	110	-70	-120	-230	-180	-65	10	40	60	60	80	110	75	40	55	50	80	65	60	90	120	180	34	660
19	220	140	25	-50	-100	-15	25	40	60	60	63	70	70	78	82	80	75	60	5	30	50	140	365	280	76	558
20	285	220	125	35	80	80	45	55	75	55	45	70	75	70	75	60	45	45	65	70	60	55	75	70	79	482
21	45	20	-10	-80	-90	-90	-40	-10	30	40	40	40	60	70	-40	-70	10	30	85	50	105	130	340	200	56	680
22	300	160	215	90	75	35	15	20	75	65	-30	65	65	90	60	30	95	100	105	85	90	150	185	240	88	524
23	150	150	155	-65	-45	-45	15	50	70	60	50	85	80	140	80	50	10	-40	40	140	155	185	200	460	89	748
24	110	-75	170	-70	-125	-45	0	60	75	70	65	70	30	40	30	45	35	90	200	240	150	240	65	673	67	673
25	220	290	75	60	-5	25	60	75	60	65	70	65	70	50	-10	35	90	80	80	130	160	260	320	101	632	101
26	360	245	-75	-180	-140	-100	-20	55	75	85	85	70	10													

Tromsø.

Vertical Intensity. Storminess (+ Down). Unit Gamma.

G. M. T.

APRIL 1939.

HOURLY MEAN VALUES

Table for April 1939 showing hourly mean values for vertical intensity and storminess. Columns include Day (1-30), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -117 to 359.

MAY.

Table for May showing hourly mean values for vertical intensity and storminess. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -110 to 247.

JUNE.

Table for June showing hourly mean values for vertical intensity and storminess. Columns include Day (1-30), hours (1-24), and summary statistics (M, PS, NS, AS). Values range from -123 to 107.

Tromsø.

Vertical Intensity.  $V = 50300 +$  Tabular Quantities expressed in Gamma.

Gr. M. T.

JULY 1959.

HOURLY MEAN VALUES

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R		
1	-10	10	15	35	50	70	75	80	75	80	120	105	80	105	125	100	85	85	70	55	50	50	65	95	69	190	
2	125	40	-75	10	30	40	45	60	65	60	55	70	70	65	105	85	55	50	45	55	75	90	20	55	305	55	
3	35	35	0	20	-110	-45	20	55	95	-110	165	90	-310	-420	-265	-280	-40	-75	170	65	65	120	110	190	-7	768	
4	140	60	30	25	45	65	70	73	73	73	80	65	50	30	10	-30	-65	-10	140	245	340	290	145	84	598	145	
5	125	150	200	310	430	650	700	390	420	260	210	110	-330	-250	-260	-150	-160	-110	-85	80	95	200	290	250	149	1306	
6	340	400	360	390	0	20	35	55	70	100	95	100	105	100	110	110	100	90	80	70	75	73	80	65	126	585	
7	60	68	65	68	72	70	70	65	63	65	68	73	75	80	80	78	75	70	65	63	58	60	60	62	68	48	
8	48	45	53	58	60	60	60	62	63	63	58	60	75	55	60	90	70	75	70	85	110	100	100	125	71	102	
9	150	120	50	20	50	55	60	60	58	58	55	45	50	70	70	70	80	80	75	68	75	70	55	67	102	67	
10	55	60	45	30	40	50	60	60	60	60	50	45	55	60	65	70	70	68	60	65	63	65	63	58	57	48	
11	60	60	60	60	60	58	53	45	43	40	40	35	20	10	75	100	65	50	-10	30	55	60	60	60	50	218	
12	55	55	55	50	50	50	50	48	43	40	40	40	45	80	130	55	10	-80	-30	40	180	110	110	65	53	374	
13	40	45	50	50	40	55	55	55	58	60	60	65	75	85	90	100	85	75	55	40	60	60	100	35	62	109	
14	40	40	5	35	30	50	80	150	50	40	70	130	125	150	75	-100	-30	90	50	70	110	140	210	260	78	381	
15	200	140	50	55	-10	30	60	60	65	45	50																
16											75	110	110	80	105	65	55	50	20	40	120	110	130	220		394	
17	310	190	-10	-35	-10	30	65	70	75	60	35	45	80	75	70	75	85	50	35	25	40	90	70	125	69	476	
18	130	140	-80	-60	-15	40	60	70	60	65	40	75	85	75	80	70	70	40	25	45	35	45	80	60	57	435	
19	60	50	40	50	60	65	65	45	50	55	55	50	40	50	65	75	75	75	40	55	35	165	160	70	63	340	
20	340	80	-30	-45	-20	25	-15	20	50	80	120	145	-20	-240	-320	-110	-150	30	30	90	220	350	40	30	29	864	
21	30	40	60	60	55	60	75	75	67	65	70	110	-25	-270	-110	10	-140	0	60	70	80	75	110	105	31	605	
22	110	190	195	40	60	10	30	40	60	70	80	80	95	130	100	75	65	70	75	50	-45	40	85	195	63	15	
23	260	180	20	30	40	50	50	50	55	60	65	60	60	60	60	85	65	70	70	60	60	65	50	65	69	422	
24	40	35	40	50	55	55	60	60	65	60	65	60	50	45	65	150	110	75	80	75	70	50	55	60	70	85	136
25	75	40	15	25	55	85	45	35	75	80	65	75	80	125	105	115	120	100	85	70	75	73	72	68	73	75	
26	68	65	58	50	60	90	-40	20	150	125	120	80	75	90	115	20	90	40	0	5	55	125	170	170	74	367	
27	160	115	120	135	60	15	10	25	60	55	60	105	125	95	70	55	60	70	70	75	75	125	220	55	94	475	
28	75	25	20	50	60	60	65	40	40	50	100	95	110	125	90	75	60	75	65	70	80	160	190	76	326	6	
29	-50	-10	15	30	50	55	50	55	60	65	55	50	55	50	70	80	85	60	50	10	15	45	55	55	44	190	
30	60	50	15	0	40	40	50	50	55	55	50	50	50	55	70	85	90	50	60	55	50	55	50	55	51	116	
31	60	65	60	50	45	35	30	45	45	55	60	60	70	72	70	73	75	70	70	60	30	40	-5	25	53	116	
M	106	86	50	55	47	66	69	67	76	72	75	76	41	32	41	43	42	43	51	57	78	102	107	102	66	363	
GM	60	61	62	62	60	58	57	55	57	60	63	65	68	70	70	70	69	68	67	65	63	62	61	60	63		

AUGUST.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	70	20									48	45	50	70	70	60	60	65	55	53	48	40	10	30		88
2	40	50	50	55	50	48	45	40	40	43	45	48	50	60	60	60	60	58	55	55	52	50	45	35	50	34
3	40	50	55	55	50	50	48	48	45	45	48	50	50	55	55	72	80	80	70	55	47	40	40	40	53	27
4	50	50	53	50	40	48	48	48	48	48	52	60	60	70	100	120	130	85	55	55	55	55	60	20	61	156
5	20	40	40	40	35	40	43	43	43	43	40	45	45	48	55	58	50	50	50	50	50	40	20	43	48	
6	25	20	35	40	40	45	48	48	40	40	48	48	48	50	55	55	60	65	60	55	55	30	30	45	54	
7	40	40	30	40	55	55	50	50	45	38	40	40	40	55	60	65	65	65	58	50	55	55	48	50	34	
8	48	48	48	45	50	50	50	48	40	38	38	40	45	50	48	40	50	40	50	50	40	38	70	55	40	47
9	58	58	58	55	55	50	50	48	48	53	70	60	48	50	70	60	75	75	70	60	55	60	60	60	58	48
10	60	60	60	60	55	48	45	40	40	42	75	125	50	70	60	60	55	-100	25	80	100	90	105	52	306	
11	130	125	60	10	40	48	50	60	48	50	50	60	50	55	75	75	50	70	20	20	40	-5	10	170	56	354
12	175	60	185	240	350	180	165	180	200	190	255	10	10	90	65	80	15	20	65	380	200	300	275	154	564	
13	330	420	320	230	10	55	80	85	90	90	110	75	100	70	75	50	70	45	75	135	170	125	140	165	127	347
14	100	140	85	70	75	60	75	65	70	70	70	80	90	80	75	75	75	70	70	68	68	68	68	68	77	156
15	72	75	78	78	75	70	68	65	65	60	58	60	67	70	75											
16																										
17	270	340	30	-70	-35	-15	25	60	90	100	105	110	120	145	110	110	120	105	90	70	70	78	75	92	904	
18	70	72	72	72	65	75	75	70	68	68	70	78	90	110	120	110	80	45	90	80	90	105	140	30	81	272
19	40	55	50	30	40	50	65	65	65	65	65	45	50	60	80	-40	-95	65	95	75	50	50	60	65	48	238
20	65	65	63	65	68	70	70	55	55	55	45	50	50	60	60	80	95	80	80	70	60	60	60	58	64	197
21	68	68	68	70	70	68	60	52	48	60	80	78	80	95	85	85	95	70	45	50	70	195	350	87	1020	
22	60	310	450	420	-50	-20	-10	5	30	85	90	125	-160	-370	-350	-170	120	110	270	420	320	600	650	107	1292	
23	550	420	500	420	180	220	260	210	60	-170	70	120	75	-180	-10	50	75	105	240	150	200	300	250	200	179	1129
24	320	125	45	75	60	70	73	95	95	110	120	125	75	100	110	120	120	90	90	90	80	85	90	95	102	428
25	135	0	20	30	35	30	50	55	60	75	110	100	105	170	160	140	125	90	50	45	60	70	150	130	83	238
26	45	45	50	30	40	60	75	70	70	85	100	105	120	100	110	105	85	70	55	85	100	105	120	80	156	
27	10	0	30	-50	30	75	70	68	68	65	75	90	9													

Tromsö.

Vertical Intensity. Storminess (+ Down). Unit Gamma.

Gr. M. T.

JULY 1939.

HOURLY MEAN VALUES

Table for July 1939 showing magnetic observations. Columns include DAY (1-31), hours (1-24), M, PS, NS, AS, and summary rows (MPS, MNS).

AUGUST.

Table for August 1939 showing magnetic observations. Columns include DAY (1-31), hours (1-24), M, PS, NS, AS, and summary rows (MPS, MNS).

SEPTEMBER.

Table for September 1939 showing magnetic observations. Columns include DAY (1-30), hours (1-24), M, PS, NS, AS, and summary rows (MPS, MNS).

Tromsø. Vertical Intensity.  $V = 50300 +$  Tabular Quantities expressed in Gamma.

Gr. M. T.

OCTOBER 1939.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R		
1	115	125	30	40	45	60	65	70	70	65	70	65	70	75	73	60	60	35	25	50	50	50	60	62	326		
2	70	75	73	70	70	68	68	65	60	58	55	60	65	75	60	60	55	60	60	60	60	60	58	63	286		
3	58	60	55	55	55	55	70	75	80	95	100	30	-80	-180	-150	-50	-130	130	200	205	225	300	325	70	616		
4	430	390	330	500	120	-40	35	70	80	75	75	90	60	60	120	110	60	25	-10	45	120	80	80	123	623		
5	180	55	10	40	65	80	90	100	90	90	100	110	100	110	130	115	70	65	-40	-85	20	100	190	78	462		
6	310	220	100	-75	310	160	-30	15	50	95	85	110	135	145	130	75	40	30	25	120	110	0	65	80	96	646	
7	80	70	75	75	78	78	78	78	78	80	75	75	95	110	80	-75	-20	110	420	190	155	290	90	101	857		
8	50	125	80	70	75	80	75	85	78	75	75	75	80	80	80	78	75	67	40	45	70	75	85	74	326		
9	100	110	20	50	65	75	90	100	15	45	65	70	45	-125	-130	-35	-25	20	60	70	60	95	70	41	456		
10	80	80	60	77	75	75	75	75	82	82	80	100	90	85	80	80	80	80	80	78	55	70	135	50	80	177	
11	70	60	50	55	55	60	65	65	65	72	80	75	80	80	90	80	80	85	90	80	75	75	80	110	74	170	
12	50	45	80	85	70	70	70	75	75	75	80	80	80	80	80	80	78	75	90	80	70	80	75	50	73	143	
13	30	20	-30	-70	-130	-40	-100	-30	40	30	45	50	75	70	-20	0	160	140	400	230	440	150	61	1136	66		
14	-55	115	240	180	-250	-70	-10	-20	0	-20	5	0	-170	0	25	65	-10	-110	-100	40	280	10	60	290	21	898	
15	580	550	100	480	80	130	-55	-55	75	95	105	100	100	100	110	90	25	-70	-70	35	130	125	165	210	120	1088	
16	175	60	10	30	50	60	75	110	110	105	130	90	95	-50	-110	-170	-170	0	140	190	220	390	170	76	775		
17	0	50	110	75	60	60	75	100	90	90	105	105	110	100	75	0	-40	-115	250	30	120	170	140	210	62	653	
18	145	140	150	-20	40	20	80	85	85	110	120	100	100	-20	-70	-160	-250	-90	50	90	300	180	160	310	66	972	
19	160	50	-10	0	10	45	70	105	120	115	90	85	105	60	-50	-40	10	30	150	150	250	90	115	120	76	537	
20	100	80	75	70	70	75	80	85	95	105	118	120	105	95	90	88	90	95	95	95	95	95	80	75	90	82	
21	70	75	78	78	78	75	75	75	70	80	85	85	85	110	120	125	105	90	65	110	10	80	220	30	87	435	
22	30	60	75	78	75	75	75	80	85	85	90	90	90	90	85	80	80	78	75	60	-10	-55	20	65	65	211	
23	100	80	78	78	75	75	73	85	120	120	125	90	-40	70	-30	-20	90	30	85	80	105	105	200	75	571		
24	160	-10	20	35	75	85	85	85	85	88	90	92	90	80	80	78	75	78	80	85	90	88	88	80	73	84	68
25	78	73	75	75	75	78	78	80	82	82	83	88	90	105	120	90	85	80	82	90	88	88	80	73	84	68	
26	72	72	72	70	68	70	70	70	68	75	78	78	80	85	90	95	95	92	60	25	-10	25	65	70	88	129	
27	80	78	73	72	72	70	72	75	75	75	75	75	77	75	75	70	70	75	80	78	72	65	65	70	88	27	
28	67	67	68	68	68	70	73	70	70	70	70	65	105	95	90	80	75	65	60	20	40	75	70	80	70	177	
29	50	70	30	-30	-40	10	50	70	70	75	85	80	95	120	105	95	90	50	110	110	35	30	45	50	61	279	
30	100	-10	-45	5	35	60	75	75	73	70	70	96	125	90	100	125	85	90	90	70	75	30	40	67	279		
31	15	45	65	65	75	78	80	80	85	80	85	80	85	95	120	125	105	100	85	95	85	85	60	65	80	163	
M	108	99	71	75	53	57	59	65	71	79	82	82	74	66	60	54	32	32	73	86	103	89	122	116	75	429	
QM	70	72	73	73	72	71	70	70	72	73	75	77	78	78	78	78	77	76	75	73	72	70	69	68	73		

NOVEMBER.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	M	R	
1	50	50	35	30	40	50	70	75	82	80	73	90	105	110	110	95	93	75	80	70	70	60	50	25	70	116
2	35	45	50	50	30	45	55	70	75	75	75	78	80	90	85	80	73	73	80	50	70	73	65	64	95	
3	40	40	30	35	50	55	60	65	73	80	85	80	105	100	105	115	100	95	60	55	90	100	35	70	72	126
4	0	50	45	50	60	63	67	63	67	70	75	80	80	78	72	70	75	75	75	75	72	68	65	65	65	88
5	50	55	60	63	63	60	65	67	68	70	85	85	70	63	78	80	90	72	72	70	73	70	69	75	75	88
6	70	68	68	58	65	65	65	68	68	68	68	70	72	72	75	72	65	15	35	75	15	50	45	61	204	
7	-40	-20	-10	60	75	75	70	68	70	70	75	75	70	68	35	-25	75	72	30	60	60	60	25	49	204	
8	50	50	65	65	60	58	58	63	60	63	65	65	68	72	72	70	68	68	65	65	65	63	63	64	48	
9	65	65	63	60	45	50	60	65	65	72	73	73	70	70	70	70	80	100	95	90	75	50	40	50	67	109
10	60	65	65	62	55	55	57	60	60	60	63	67	67	70	70	70	73	80	55	45	40	30	25	59	68	
11	45	50	55	50	55	60	62	67	67	68	70	70	78	80	82	75	75	-10	45	100	165	140	150	74	340	
12	110	10	40	60	70	65	62	60	60	63	85	105	105	90	110	100	110	80	80	120	160	125	150	67	238	
13	210	190	0	95	-50	0	70	100	110	75	0	-130	-90	-80	-120	90	40	-80	-55	155	320	35	95	42	680	
14	160	250	-10	-105	-80	-20	45	60	75	80	100	80	75	80	100	60	15	-60	40	140	390	170	69	666		
15	60	30	-60	10	60	75	80	90	100	90	80	80	90	105	95	105	70	95	70	-10	-20	40	75	25	60	245
16	35	50	65	70	70	70	70	70	70	68	68	80	76	78	78	85	80	55	70	60	55	60	68	68	102	
17	68	62	68	65	62	60	60	65	68	70	73	75	80	75	72	65	70	72	45	5	40	40	50	50	61	143
18	65	70	70	68	65	65	67	68	70	75	75	70	68	75	80	83	85	82	78	78	72	72	72	72	72	72
19	70	65	65	63	63	63	65	67	68	68	68	65	65	65	60	85	70	-10	-120	30	55	25	60	80	53	401
20	65	20	25	50	60	30	45	65	70	80	75	75	72	72	75	75	72	70	50	60	65	60	65	60	62	116
21	70	70	45	40	50	55	60	70	70	70	80	75	80	70	68	68	65	65	65	65	65	65	65	65	65	68
22	65	65	63	62	60	60	60	60	62	65	65	65	65	67	67	62	60	60	60	60	60	62	63	63	67	27
23	68	70	68	63	60	55	57	58	63	65	65	65	65	63	70	68	70	80	50	10	40	130	200	105	70	381
24	67	65	63	62	58	58	58	58	58	57	58	58	63	70	68	70	80	50	10	40	130	200	105	70	381	
25	120	110	45	30	35	60	25	5	50	85	80	85	60	75	90	95	110	95	90	80	200	290	180	65	90	490
26	140	185	70	25	45	60	70	80	85	95	75	85	70	75	75	90	105	85	90	55	25	10	5	35	72	347
27	50	65	65	75	50	30	55	70	75	85	90	80	75	75	72	75	78	20	50	7						

Tromsø.

Vertical Intensity. Storminess (+ Down). Unit Gamma.

Gr. M. T.

OCTOBER 1939.

HOURLY MEAN VALUES

Table for October 1939 showing magnetic observations. Columns include DAY (1-31), 24 hourly values (1-24), M, PS, NS, AS. Includes summary rows for MFS and MNS.

NOVEMBER.

Table for November 1939 showing magnetic observations. Columns include DAY (1-30), 24 hourly values (1-24), M, PS, NS, AS. Includes summary rows for MFS and MNS.

DECEMBER.

Table for December 1939 showing magnetic observations. Columns include DAY (1-31), 24 hourly values (1-24), M, PS, NS, AS. Includes summary rows for MFS and MNS.

Resuming Tables.

Diurnal Variation.  
QUIET VALUES.

Tromsø.

Declination. Unit Gamma + West.

1939.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
JANUARY	-3	-3	-4	-5	-6	-6	-4	-1	1	2	4	7	9	9	8	6	4	2	1	0	-1	-2	-3	-4
FEBRUARY	-5	-5	-6	-7	-8	-7	-5	-3	0	2	5	7	7	7	6	5	4	3	2	1	0	-1	-2	-3
MARCH	-5	-5	-7	-9	-10	-12	-10	-7	-5	0	8	13	13	13	10	8	6	5	4	3	1	-2	-4	-7
APRIL	-9	-9	-11	-12	-14	-14	-12	-9	-6	-1	6	14	16	16	13	11	9	8	6	4	1	-2	-6	-9
MAY	-8	-10	-11	-12	-13	-13	-11	-8	-3	0	7	14	17	17	14	12	10	7	4	2	-1	-3	-5	-8
JUNE	-15	-17	-20	-23	-25	-25	-17	-10	-2	5	12	17	22	22	20	18	17	15	12	10	7	0	-7	-10
JULY	-12	-15	-19	-22	-24	-24	-22	-17	-7	1	10	18	21	21	20	18	16	15	13	10	8	3	-2	-7
AUGUST	-11	-15	-20	-23	-25	-25	-18	-8	2	10	17	19	20	20	19	18	17	15	12	10	5	-1	-6	-8
SEPTEMBER	-8	-10	-13	-15	-18	-20	-16	-11	-6	2	9	15	17	17	15	14	12	10	7	4	2	0	-3	-6
OCTOBER	-6	-6	-8	-9	-11	-11	-9	-6	-1	4	12	13	14	12	11	9	7	6	4	1	-3	-6	-7	-8
NOVEMBER	-8	-9	-10	-11	-13	-11	-6	-3	1	6	9	11	12	12	11	9	7	6	4	1	-3	-6	-7	-8
DECEMBER	-6	-5	-4	-3	-3	-3	-2	-1	0	2	4	5	7	7	5	4	2	0	-1	-2	-3	-4	-5	-6
MEAN	-8	-9	-11	-13	-14	-14	-12	-8	-3	2	8	15	16	14	13	11	9	8	6	4	1	-2	-4	-7

Horizontal Intensity. Unit Gamma.

JANUARY	-1	0	1	3	4	4	3	1	-2	-4	-6	-5	-4	-3	-2	-1	0	1	1	1	0	0	-1	-1
FEBRUARY	1	1	2	2	2	1	0	-1	-4	-8	-11	-9	-8	-6	-3	2	4	6	6	4	3	2	1	1
MARCH	3	4	5	6	6	3	-1	-4	-7	-12	-14	-11	-9	-7	-4	-1	1	3	4	6	6	5	4	3
APRIL	2	3	3	3	2	0	-2	-8	-13	-18	-20	-17	-13	-7	-2	3	8	12	13	13	12	10	7	3
MAY	2	4	5	5	2	-3	-5	-10	-16	-20	-26	-18	-8	0	2	7	10	12	14	14	12	10	7	4
JUNE	2	4	5	5	4	0	-5	-13	-18	-24	-28	-16	-6	-1	5	7	9	11	12	12	11	9	7	4
JULY	12	13	13	8	2	-5	-13	-20	-25	-27	-28	-20	-10	-3	2	7	10	13	15	15	14	13	10	7
AUGUST	2	5	7	7	4	-7	-10	-16	-23	-26	-28	-28	-18	-8	2	9	14	20	22	22	19	12	5	2
SEPTEMBER	6	9	11	11	9	6	1	-6	-18	-23	-24	-23	-19	-14	-9	-1	6	9	12	12	12	11	9	7
OCTOBER	6	8	8	6	5	3	-2	-10	-14	-20	-22	-19	-12	-9	-4	-2	3	11	15	15	13	10	6	6
NOVEMBER	-2	0	1	3	3	2	0	-2	-5	-7	-10	-7	-4	-2	1	5	6	6	6	6	5	3	1	0
DECEMBER	-1	1	3	4	4	3	1	-1	-2	-4	-6	-4	-3	-2	-1	0	1	1	1	1	0	-1	-1	-2
MEAN	3	4	5	5	4	1	-3	-8	-12	-17	-19	-15	-10	-5	-1	3	6	9	10	10	9	8	6	3

Vertical Intensity. Unit Gamma.

JANUARY	-4	-3	-2	-2	-4	-6	-7	-9	-6	-4	-1	1	4	6	6	6	5	4	3	2	1	0	-1	-1
FEBRUARY	-5	-3	-1	0	0	-1	-2	-3	-2	-1	0	2	5	5	5	4	3	2	1	0	-1	-3	-5	-6
MARCH	-3	-2	-1	-1	-2	-3	-4	-6	-6	-3	-1	1	3	6	7	7	7	6	4	3	2	1	-1	-3
APRIL	-3	-2	-1	-1	-2	-3	-5	-5	-3	0	3	5	7	7	7	5	3	2	0	-1	-2	-3	-4	-5
MAY	-4	-3	-2	-2	-3	-5	-7	-7	-5	-2	0	3	5	7	8	8	8	6	5	3	0	-2	-4	-7
JUNE	-7	-6	-5	-5	-6	-7	-7	-3	0	2	3	5	6	7	8	8	8	7	5	3	0	-2	-3	-5
JULY	-3	-2	-1	-1	-3	-5	-6	-6	-6	-3	0	2	5	7	7	7	6	6	4	2	0	-1	-2	-3
AUGUST	-1	1	1	-1	-2	-4	-6	-7	-7	-4	-2	1	4	6	6	6	5	4	3	1	-1	-2	-3	-4
SEPTEMBER	-4	-2	-1	0	1	1	-1	-1	0	1	1	2	3	3	2	1	1	0	-1	-2	-3	-4	-4	-4
OCTOBER	-3	-1	0	0	-1	-2	-3	-3	-1	0	2	4	5	5	5	4	3	2	0	-1	-3	-4	-5	-5
NOVEMBER	-2	0	0	-2	-2	-3	-4	-4	0	1	3	4	5	5	5	4	3	2	1	0	-1	-2	-2	-2
DECEMBER	-4	-3	-1	-1	-1	-2	-3	-3	-1	1	2	3	4	4	4	4	4	3	2	1	-1	-3	-4	-4
MEAN	-4	-2	-1	-1	-2	-3	-4	-5	-3	-1	1	3	5	6	6	5	5	4	3	1	-1	-2	-3	-4

Monthly Means.

DECLINATION.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
DIRECT VALUES. $D = 2^{\circ}W + \dots$	43.8	38.4	37.2	35.1	35.1	35.4	35.1	33.6	35.7	29.7	30.9	30.0	35.0
QUIET VALUES. $D_0 = 2^{\circ}W + \dots$	40.8	39.9	39.6	38.7	38.4	37.5	35.1	35.4	33.9	31.8	31.8	30.9	36.2
RANGE	154	275	341	397	381	283	322	234	205	326	106	226	270
QUIET RANGE	15	15	25	30	30	47	45	46	37	25	23	15	29
STORMINESS, MEAN (UNIT $\gamma$ ).	-3	-4	-8	-12	-11	-7	0	-5	4	-9	-2	-3	-5
DIURNAL SUM PS (UNIT $\gamma$ ).	57	184	181	240	314	225	287	171	242	170	51	126	187
NS	145	276	368	522	580	390	285	295	146	377	98	188	306
AS	202	460	549	762	894	615	572	465	388	547	149	314	493
HORIZONTAL INTENSITY.													
DIRECT VALUES. $H = 11300 + \dots$	-21	5	-8	-13	-9	11	8	4	0	-22	1	5	-3
QUIET VALUES. $H_0 = 11300 + \dots$	29	26	24	20	23	23	20	18	11	12	12	14	19
RANGE	319	455	630	687	711	534	521	442	462	626	314	422	510
QUIET RANGE	10	17	20	33	40	40	43	60	36	37	16	10	29
STORMINESS, MEAN (UNIT $\gamma$ ).	-8	-20	-31	-32	-33	-12	-12	-13	-11	-36	-12	-9	-19
DIURNAL SUM PS (UNIT $\gamma$ ).	185	323	494	681	782	752	700	509	426	478	229	321	490
NS	360	800	1241	1448	1571	1035	976	824	679	1346	511	526	943
AS	545	1123	1735	2129	2353	1787	1675	1353	1105	1824	740	846	1435
VERTICAL INTENSITY.													
DIRECT VALUES. $V = 50300 + \dots$	31	42	53	66	76	68	66	76	73	75	66	58	62
QUIET VALUES. $V_0 = 50300 + \dots$	39	43	46	50	57	60	63	64	69	73	67	66	58
RANGE	218	371	435	458	490	337	353	333	300	429	206	301	353
QUIET RANGE	15	11	13	12	15	15	15	13	7	10	9	8	13
STORMINESS, MEAN (UNIT $\gamma$ ).	-6	-1	7	18	17	-2	3	14	2	1	0	-8	4
DIURNAL SUM PS (UNIT $\gamma$ ).	90	367	504	784	820	334	520	607	335	494	211	169	436
NS	244	387	558	440	406	393	444	275	285	461	224	366	357
AS	334	754	861	1224	1226	787	964	882	620	955	435	535	793



Resuming Tables.

Storminess.

Tromsø.

Declination. Unit Gamma. + West.

1939.			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
JAN	MPS		1	1	1	2	3	3	3	2	1	2	2	1	1	2	2	4	4	4	4	5	4	3	1	1
FEB	MPS		0	0	0	1	1	2	3	3	3	4	4	6	7	8	10	11	13	12	21	22	16	5	2	0
MAR	MPS		1	0	0	0	0	2	5	2	4	4	4	8	12	14	17	19	20	20	23	12	10	3	1	1
APR	MPS		0	0	0	0	1	2	1	2	0	1	4	5	8	19	26	25	35	33	31	28	8	5	5	1
MAY	MPS		0	2	0	0	0	0	1	2	4	5	10	13	12	14	23	30	36	40	38	36	25	17	5	1
JUN	MPS		1	0	0	0	1	2	1	1	2	1	3	7	8	9	19	22	20	27	28	28	22	11	7	4
JUL	MPS		2	1	0	1	2	4	4	6	4	3	5	7	9	14	16	25	31	32	34	32	31	16	5	1
AUG	MPS		1	0	0	0	1	1	1	2	4	4	7	11	17	11	11	22	16	12	13	13	9	8	5	3
SEP	MPS		2	2	1	2	3	4	4	5	5	8	10	14	19	16	19	20	22	23	20	17	17	3	2	1
OCT	MPS		2	0	1	0	1	1	1	1	2	3	1	4	9	10	15	18	21	25	17	15	10	7	2	2
NOV	MPS		0	1	2	2	3	4	2	1	0	0	0	1	2	2	2	3	3	8	5	4	4	1	1	1
DEC	MPS		1	2	1	1	2	4	6	5	3	3	3	5	5	5	10	11	13	14	11	10	9	2	1	1
MEAN			1	1	1	1	2	2	3	3	3	3	4	7	9	10	14	17	19	23	21	18	15	7	5	1
JAN	MNS		24	20	15	7	3	1	1	1	1	2	1	1	2	4	3	2	2	1	3	3	8	9	15	18
FEB	MNS		28	40	37	32	15	7	5	3	2	1	2	4	5	5	3	1	6	3	7	15	23	28	28	
MAR	MNS		48	44	55	46	25	10	6	5	5	4	2	2	2	0	1	0	4	1	8	11	19	38	35	
APR	MNS		58	65	59	52	31	25	36	37	22	11	4	3	5	5	1	2	1	3	2	2	10	19	24	44
MAY	MNS		57	87	104	85	64	44	51	16	8	4	4	3	3	1	3	2	1	0	0	0	2	5	19	39
JUN	MNS		33	55	70	63	32	12	13	18	21	24	12	12	2	2	0	1	1	0	0	0	0	1	9	20
JUL	MNS		25	48	36	33	20	13	8	6	8	11	8	9	8	6	2	1	0	0	0	0	0	4	16	23
AUG	MNS		30	37	45	41	22	12	12	8	8	11	6	6	3	1	2	2	3	3	1	1	5	11	8	17
SEP	MNS		19	13	18	22	13	7	7	2	2	1	1	0	0	0	0	1	2	1	0	1	1	7	9	15
OCT	MNS		36	47	41	28	20	19	11	9	7	6	2	2	4	2	2	1	2	11	14	25	15	20	34	
NOV	MNS		10	7	4	1	0	0	0	0	1	2	3	2	2	1	1	3	5	4	1	3	7	8	12	18
DEC	MNS		25	17	16	13	7	2	0	1	2	1	1	0	0	0	7	3	6	2	6	2	7	19	22	29
MEAN			33	40	42	34	21	13	12	9	7	7	4	3	3	2	2	2	2	2	3	3	8	11	18	27
JAN	MPS	MNS	-23	-19	-14	5	0	2	2	1	0	0	1	0	-1	-2	-1	2	2	3	1	2	-3	-6	-14	-16
FEB	MPS	MNS	-28	-40	-37	-31	-14	-5	-2	-1	1	2	2	5	5	4	5	7	10	41	15	18	9	-10	-21	-28
MAR	MPS	MNS	-47	-44	-55	-46	-22	-8	-1	-3	-1	0	2	6	11	14	16	19	16	19	25	4	-1	-16	-37	-34
APR	MPS	MNS	-58	-65	-59	-52	-30	-24	-35	-36	-21	-10	-1	2	4	14	26	23	34	30	29	26	-3	-14	-19	-43
MAY	MPS	MNS	-57	-85	-104	-85	-64	-44	-30	-15	-4	1	6	10	9	13	20	27	36	40	38	36	23	12	-14	-37
JUN	MPS	MNS	-33	-52	-70	-52	-31	-10	-12	-17	-19	-24	-8	-5	6	7	19	21	19	27	28	28	22	10	-3	-16
JUL	MPS	MNS	-23	-48	-36	-32	-18	-9	-4	0	-4	-8	-3	-1	1	8	13	25	31	32	34	32	31	11	-11	-22
AUG	MPS	MNS	-29	-37	-43	-41	-21	-12	-11	-6	-4	-7	2	5	14	10	9	20	13	9	12	11	5	-3	-3	-14
SEP	MPS	MNS	-16	-11	-16	-20	-11	-3	-3	3	3	6	9	14	19	16	18	19	21	22	20	16	16	-4	-6	-14
OCT	MPS	MNS	-34	-46	-40	-28	-19	-19	-18	-10	-7	-5	-5	2	7	6	13	16	25	23	6	-1	-15	-8	-18	-33
NOV	MPS	MNS	-10	-7	-2	0	2	4	2	1	0	-2	-2	-1	-1	0	1	-2	-2	-1	7	3	-3	-4	-11	-17
DEC	MPS	MNS	-24	-15	-14	-13	-5	2	5	4	1	2	2	6	5	5	3	7	6	12	5	9	2	-17	-21	-29
MEAN			-32	-39	-41	-33	-19	-11	-9	-7	-5	-4	0	3	7	8	12	15	18	21	18	14	7	-4	-15	-25

Horizontal Intensity. Unit Gamma.

1939.			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
JAN	MPS		2	2	1	3	2	1	2	1	5	4	4	4	3	8	14	20	25	20	22	19	10	6	5	2
FEB	MPS		0	1	0	2	2	2	4	2	8	9	15	21	28	39	44	43	55	50	18	9	5	1	2	2
MAR	MPS		0	1	0	0	1	3	2	6	5	10	19	36	42	61	63	69	60	53	21	6	7	3	4	4
APR	MPS		0	0	1	2	6	3	1	3	6	22	35	70	94	102	92	84	72	56	28	3	0	1	0	0
MAY	MPS		3	3	1	1	2	4	4	8	10	21	48	56	75	84	111	139	95	67	33	13	3	1	0	1
JUN	MPS		0	0	0	2	1	3	3	5	8	24	39	48	79	84	100	107	94	73	46	24	9	1	1	0
JUL	MPS		0	0	0	2	1	2	2	3	7	21	34	51	97	96	100	99	77	54	33	18	2	0	1	1
AUG	MPS		0	0	0	0	3	4	8	6	12	22	32	44	58	67	72	59	54	34	19	8	5	4	4	1
SEP	MPS		0	0	0	1	1	1	3	4	5	13	26	33	54	59	61	53	43	32	22	13	3	0	0	0
OCT	MPS		3	3	3	3	5	6	9	9	4	13	27	38	63	70	61	61	35	22	11	5	3	1	1	3
NOV	MPS		1	0	0	2	2	3	4	3	4	5	12	15	19	17	29	22	23	26	22	9	4	3	1	0
DEC	MPS		1	2	1	1	3	5	6	7	7	6	7	10	16	27	36	47	36	35	28	19	9	7	4	0
MEAN			1	1	1	2	2	3	4	5	7	14	25	36	53	58	66	67	56	42	25	12	5	2	2	1
JAN	MNS		47	35	23	15	11	9	4	2	1	1	1	1	1	0	1	1	1	1	5	7	40	41	61	58
FEB	MNS		69	76	66	51	27	17	12	7	2	2	2	1	1	4	2	3	18	29	37	36	47	103	109	81
MAR	MNS		140	105	121	105	43	20	15	6	5	4	3	1	1	1	1	1	3	11	29	68	108	146	158	151
APR	MNS		184	127	107	76	41	43	48	36	11	3	3	2	1	2	0	1	23	37	83	122	154	151	195	
MAY	MNS		193	180	225	171	105	59	32	14	7	4	6	2	2	1	1	1	0	0	3	31	78	117	151	179
JUN	MNS		137	169	151	88	70	38	18	8	6	2	1	1	1	1	0	0	0	0	1	8	30	70	99	136

JUL	MNS	125	125	79	72	52	45	37	16	6	1	1	1	1	0	0	1	3	3	19	10	47	94	129	121	
AUG	MNS	95	107	110	92	24	12	6	2	2	2	1	1	0	0	0	3	1	11	16	37	71	69	75	84	
SEP	MNS	69	56	63	61	39	15	11	4	4	2	2	1	0	1	2	1	2	4	10	29	54	78	79	93	
OCT	MNS	130	130	129	125	102	44	17	17	6	1	1	1	1	1	1	1	6	24	52	92	124	97	105	137	
NOV	MNS	54	62	53	20	18	9	6	1	1	1	0	0	1	0	1	1	2	3	5	17	43	76	82	76	
DEC	MNS	74	37	37	54	18	7	4	0	2	3	1	1	0	0	0	1	4	8	23	38	71	90	76		
MEAN		110	101	95	76	46	27	18	10	4	2	2	1	1	1	1	1	3	9	19	38	66	92	107	116	
JAN	MPS	MNS	-45	-33	-22	-12	-9	-7	-2	-1	3	3	3	3	3	8	13	19	24	19	17	13	-30	-36	-56	-55
FEB	MPS	MNS	-69	-74	-66	-49	-25	-15	-7	-5	7	7	14	20	27	36	42	40	17	2	-19	-27	-42	-102	-107	-79
MAR	MPS	MNS	-159	-104	-120	-106	-41	-16	-13	1	0	6	16	34	41	60	62	66	77	42	-8	-62	-99	-144	-154	-147
APR	MPS	MNS	-183	-127	-107	-74	-35	-40	-47	-33	-5	18	32	68	92	101	91	84	70	33	-9	-80	-122	-154	-151	-195
MAY	MPS	MNS	-190	-187	-224	-170	-104	-65	-28	-6	3	17	43	54	73	83	110	139	95	66	30	-19	-74	-116	-151	-178
JUN	MPS	MNS	-137	-169	-150	-86	-68	-35	-15	-4	2	22	38	47	78	83	99	107	94	73	45	16	-21	-69	-96	-136
JUL	MPS	MNS	-125	-125	-79	-70	-51	-44	-35	-13	1	20	33	60	96	95	100	99	74	52	14	8	-45	-64	-128	-120
AUG	MPS	MNS	-95	-107	-110	-92	-22	-8	-4	3	10	21	31	42	58	67	72	56	53	23	4	-29	-66	-64	-71	-85
SEP	MPS	MNS	-69	-56	-63	-60	-38	-14	-8	-1	10	10	24	32	53	58	60	53	42	28	12	-17	-52	-78	-79	-93
OCT	MPS	MNS	-127	-127	-126	-122	-97	-38	-8	-8	-2	11	26	36	62	69	80	60	30	-2	-42	-87	-121	-96	-104	-134
NOV	MPS	MNS	-53	-62	-32	-19	-16	-6	-2	2	3	4	12	15	19	17	28	21	21	23	17	-8	-38	-73	-81	-76
DEC	MPS	MNS	-73	-34	-36	-32	-15	-2	1	6	5	3	6	9	16	27	36	47	36	30	20	-4	-29	-64	-86	-76
MEAN			-109	-100	-95	-74	-43	-23	-14	-5	2	11	23	34	52	50	66	66	53	32	7	-25	-62	-90	-106	-114

Vertical Intensity. Unit Gamma.

1939.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
JAN	MPS	5	2	0	0	0	0	0	2	2	3	4	4	4	6	9	10	11	4	3	6	8	5	1	3	
FEB	MPS	37	32	14	2	3	4	6	3	3	4	5	8	9	14	23	15	10	8	17	9	13	13	37	40	
MAR	MPS	34	38	26	7	3	3	3	7	11	15	18	18	18	18	19	15	8	6	11	30	36	51	54	52	
APR	MPS	73	15	28	14	18	18	26	12	18	15	14	13	17	18	18	17	17	18	16	35	54	75	87	116	
MAY	MPS	110	95	55	15	15	13	7	8	12	14	16	17	17	20	14	10	7	10	8	14	50	72	102	117	
JUN	MPS	41	43	8	3	4	2	2	6	11	8	11	15	13	10	7	6	5	3	3	6	12	33	34	47	
JUL	MPS	57	37	21	22	12	23	24	17	20	15	17	17	11	16	15	10	7	4	6	6	23	43	50	47	
AUG	MPS	51	49	45	37	15	10	13	13	10	11	2	4	12	21	15	15	15	16	38	31	54	67			
SEP	MPS	20	16	18	12	2	0	1	3	5	7	7	10	10	12	19	15	18	11	12	17	25	30	32	33	
OCT	MPS	50	39	20	29	10	6	3	7	6	10	11	11	11	14	12	9	7	2	19	29	49	31	57	52	
NOV	MPS	14	16	0	2	1	1	2	4	5	5	4	6	6	8	9	12	10	10	5	7	19	23	28	14	
DEC	MPS	13	6	8	7	0	1	1	3	4	6	5	5	6	7	8	7	6	5	3	9	8	18	19	16	
MEAN		34	32	20	13	7	7	7	7	9	9	10	11	11	14	15	12	10	8	10	15	28	35	46	47	
JAN	MNS	20	18	22	20	18	14	8	3	1	0	0	0	0	1	1	2	4	11	12	18	26	27	19		
FEB	MNS	12	11	16	23	23	18	13	8	5	3	3	6	7	13	15	24	44	34	18	22	22	51	16	16	
MAR	MNS	12	10	10	24	38	22	15	4	1	0	3	4	5	15	30	41	30	25	19	13	7	12	15		
APR	MNS	13	40	19	25	17	12	7	13	16	5	5	21	24	27	45	44	43	15	31	17	5	3	2	8	
MAY	MNS	1	8	11	43	52	45	27	13	6	3	4	4	17	25	33	35	34	21	12	5	4	1	2	1	
JUN	MNS	9	27	41	52	36	24	13	6	3	5	10	14	14	17	18	24	22	13	11	12	6	4	6	7	
JUL	MNS	10	11	32	28	24	14	12	6	2	2	5	4	37	54	44	38	35	30	22	13	8	3	4	7	
AUG	MNS	7	10	11	18	16	8	4	3	2	10	18	16	13	34	31	34	25	8	10	6	3	5	5	6	
SEP	MNS	26	17	17	15	19	14	8	7	3	4	4	2	3	11	17	29	19	9	11	9	5	10	16	13	
OCT	MNS	13	12	22	27	29	21	15	14	8	5	6	16	26	30	33	52	45	22	16	18	14	5	4		
NOV	MNS	12	13	21	18	17	12	4	3	1	0	3	7	6	5	7	1	4	16	22	14	10	11	10	10	
DEC	MNS	17	21	18	19	25	21	8	4	2	3	1	2	1	2	20	19	38	34	22	19	21	18	20	15	
MEAN		13	23	20	26	24	19	11	7	5	3	5	7	12	18	22	26	30	22	16	14	11	13	10	9	
JAN	MPS	MNS	-16	-16	-21	-20	-18	-14	-7	-1	1	3	4	4	3	5	8	9	9	0	-9	-5	-9	-21	-26	-16
FEB	MPS	MNS	25	21	-4	-21	-21	-14	-7	-5	-2	1	2	3	2	1	8	-9	-34	-26	-1	-12	-9	38	21	24
MAR	MPS	MNS	22	28	16	-18	-35	-19	12	3	11	14	18	15	14	14	4	-15	-33	-23	-14	11	24	44	42	37
APR	MPS	MNS	60	25	9	-11	1	6	20	-1	1	10	9	-8	-7	-8	-28	-27	-26	2	-16	18	49	72	84	108
MAY	MPS	MNS	110	88	44	-28	-37	-32	-20	-5	6	11	12	13	0	-5	-19	-25	-27	-11	-4	9	46	71	100	116
JUN	MPS	MNS	33	16	-33	-49	-32	-22	-11	0	7	4	2	1	-1	-6	-12	-17	-17	-10	-8	-6	6	28	28	40
JUL	MPS	MNS	47	26	-11	-6	-12	-8	12	12	18	13	12	13	-26	-38	-29	-28	-28	-25	-16	-7	15	40	47	40
AUG	MPS	MNS	44	38	34	19	-1	2	8	10	8	2	17	12	-1	-13	-9	-15	-10	8	5	10	35	26	49	61
SEP	MPS	MNS	-6	-1	2	-3	-17	-13	-7	-4	2	3	3	7	7	1	2	-14	-1	2	1	8	19	20	18	20
OCT	MPS	MNS	37	27	-2	2	-19	-16	-12	-7	-2	4	6	4	-5	-12	-18	-24	-45	-43	-3	13	30	17	58	48
NOV	MPS	MNS	2	2	-21	-16	-16	-11	-8	1	4	5	2	-1	0	3	3	12	6	-6	-17	-8	9	13	17	6
DEC	MPS	MNS	-4	-14	-10	-12	-24	-20	-7	-1	2	3	3	3	5	5	-11	-11	-31	-29	-19	-10	-13	0	-1	-1
MEAN			30	20	0	-14	-19	-13	-2	0	6	6	8	6	-1	-4	-8	-15	-20	-13	-8	1	19	30	36	37

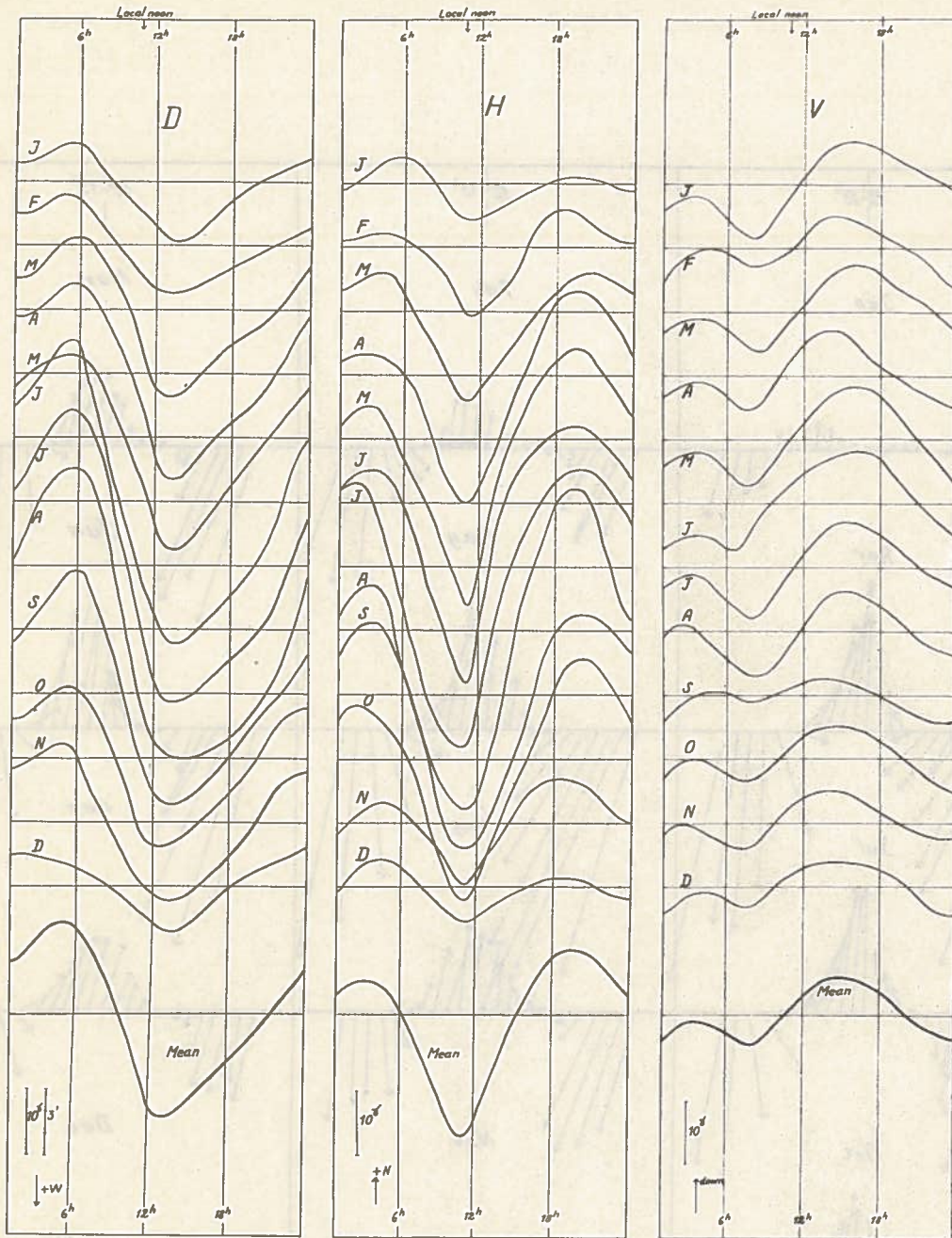


Fig. 1. The quiet Diurnal Variation, smoothed Values.

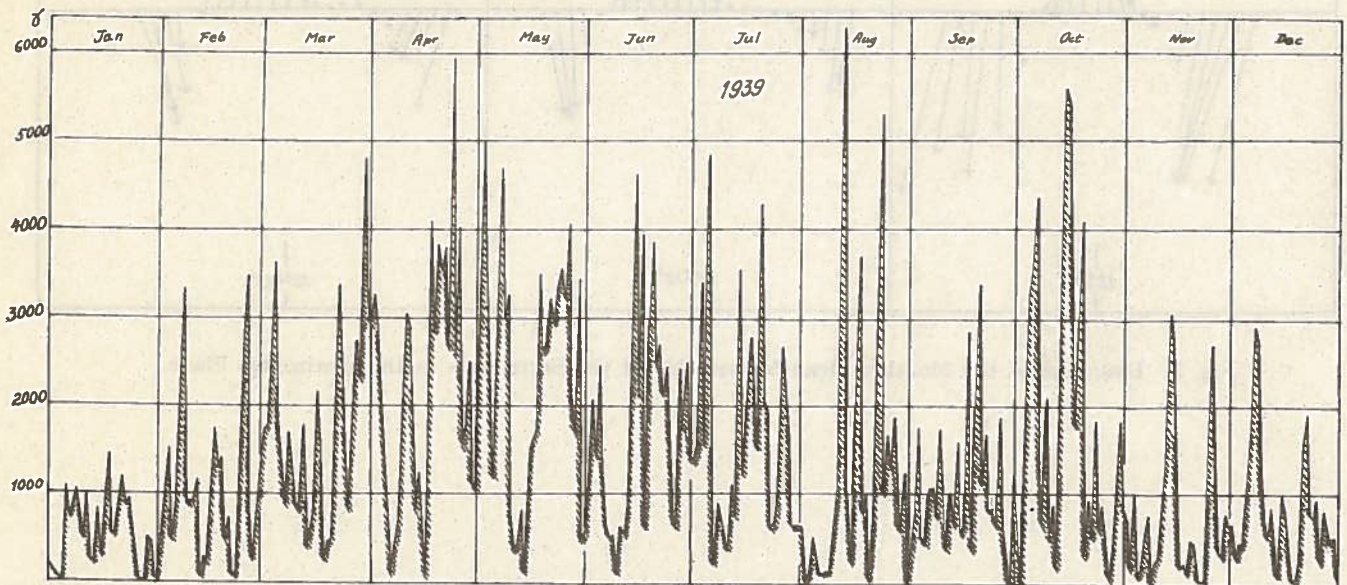


Fig. 2. The Diurnal Sum of the Absolute Storminess of H.

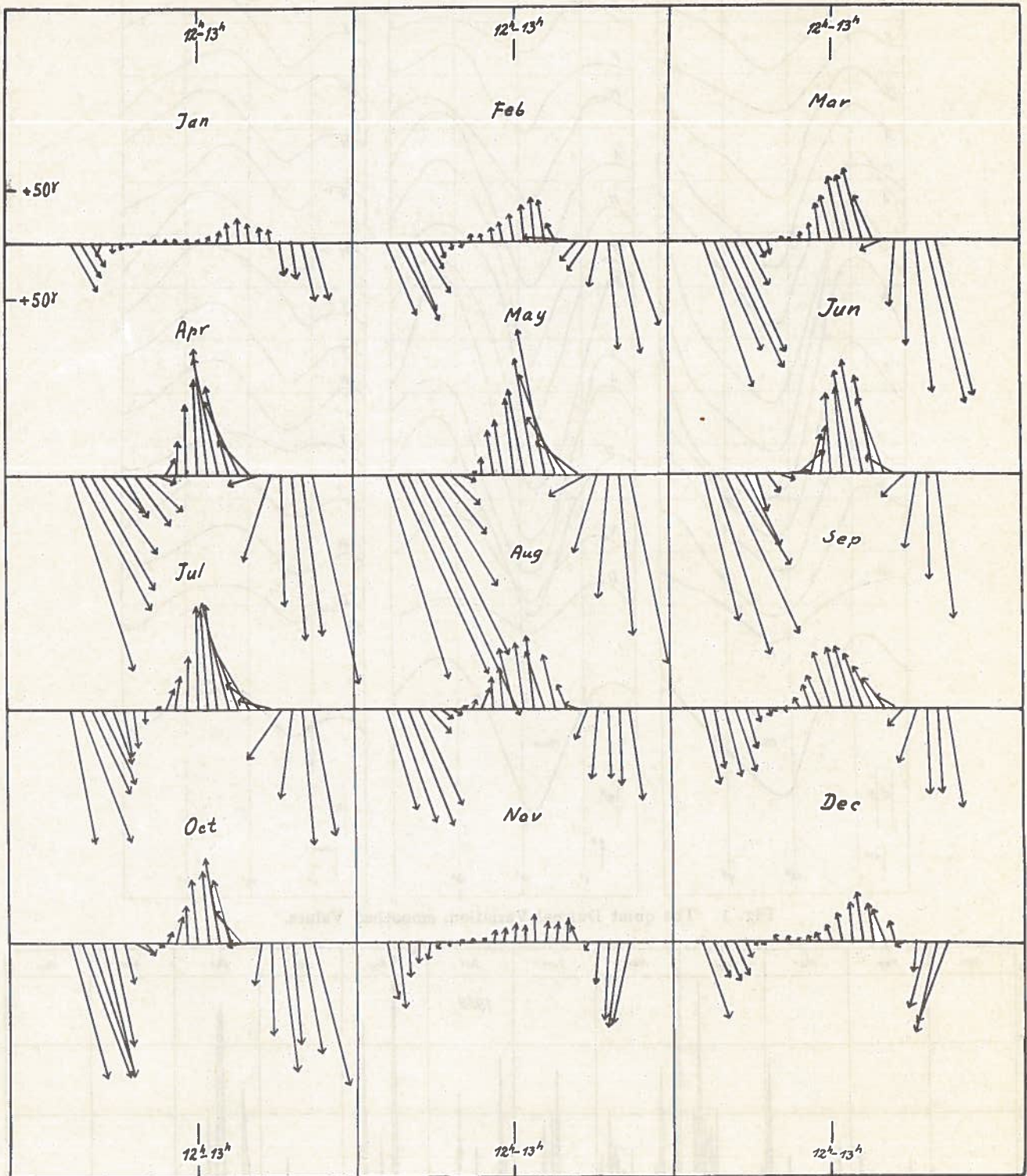


Fig. 3. Diagrams of the Monthly Mean Values ( $M$ ) of the Storminess in the Horizontal Plane.

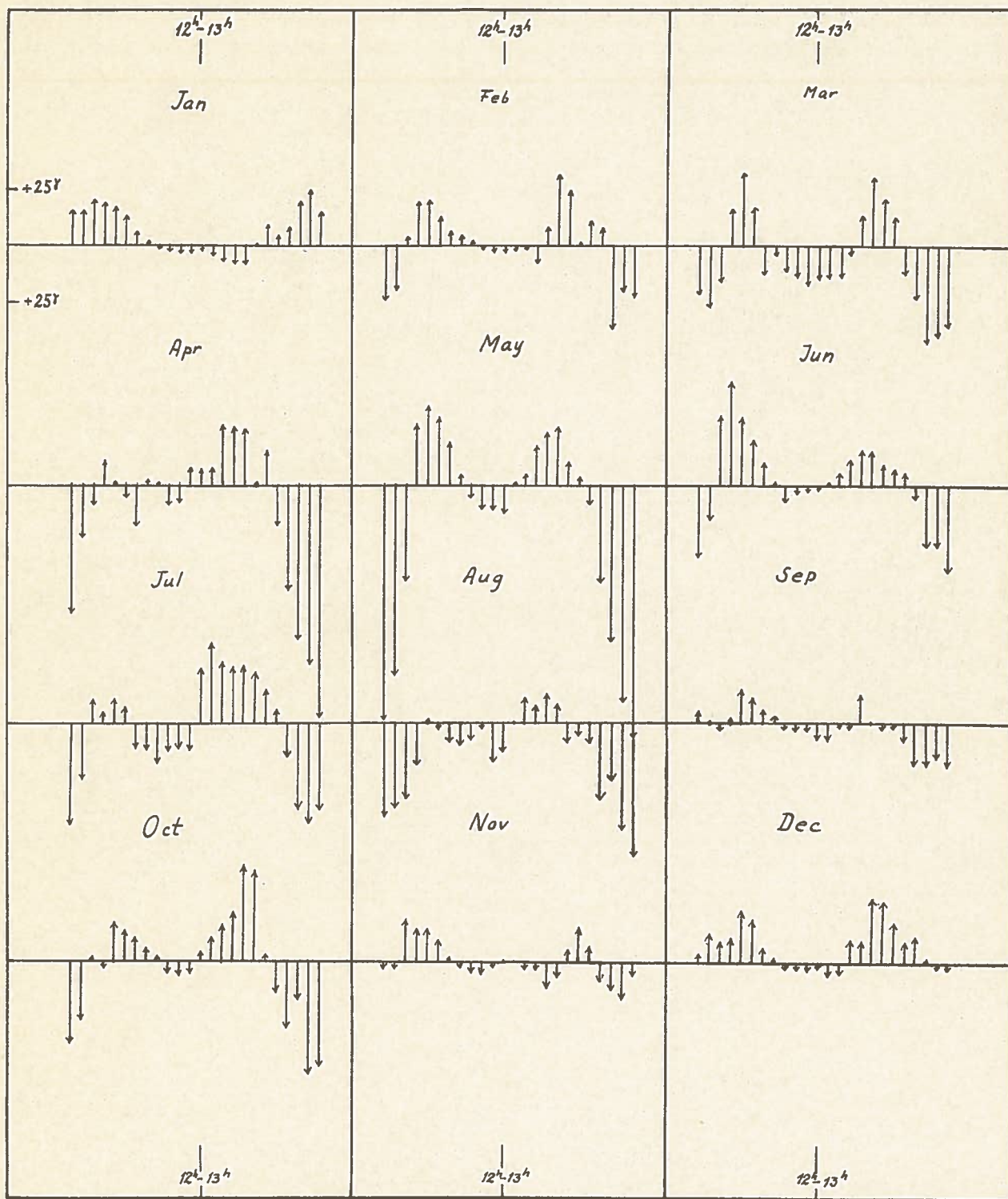


Fig. 4. Diagrams of the Monthly Mean Values ( $M$ ) of the Storminess of the Vertical Intensity.



