

Publikasjoner fra  
DET NORSKE INSTITUTT FOR KOSMISK FYSIKK  
Nr. 7

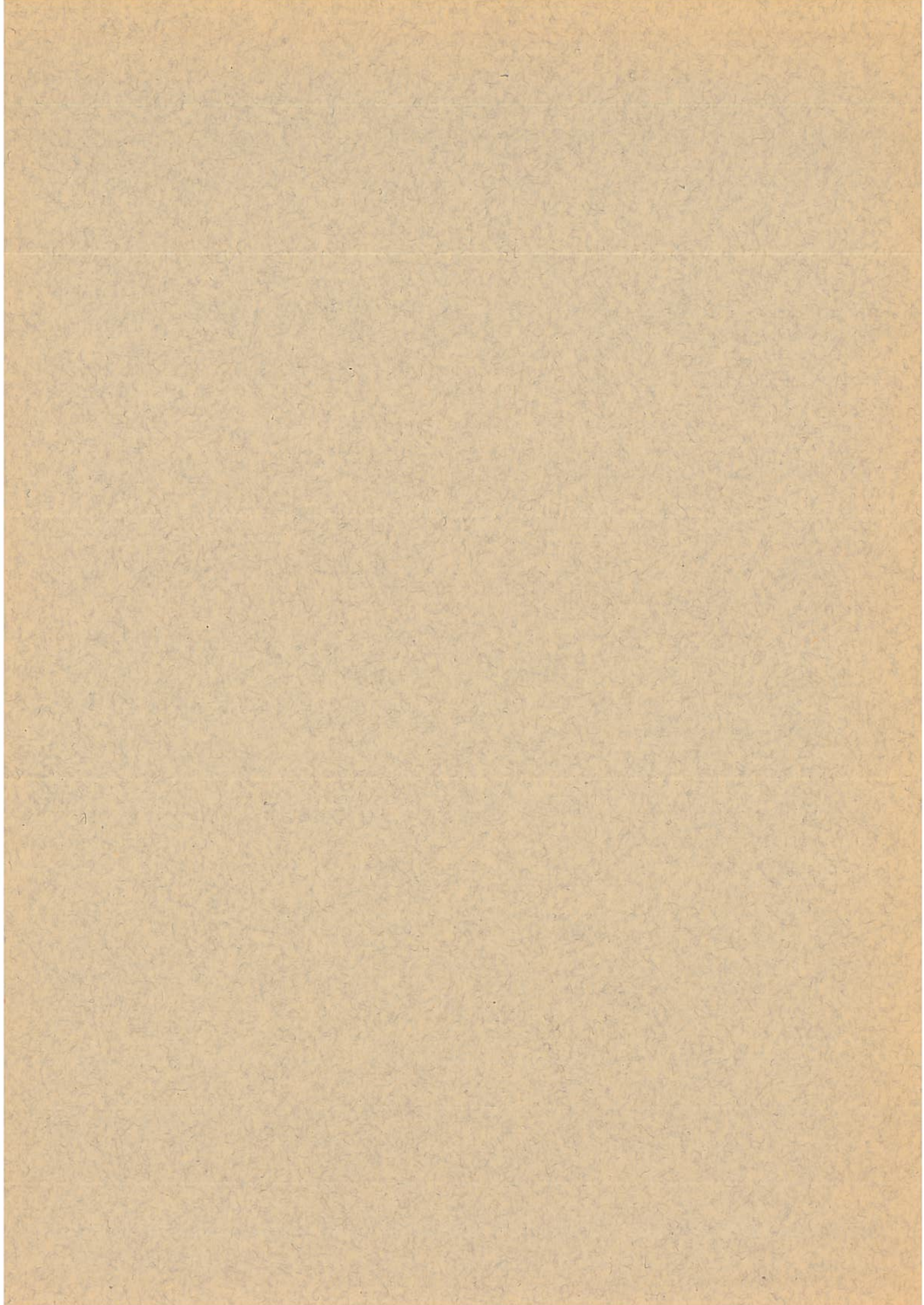
THE AURORAL OBSERVATORY AT TROMSÖ  
( $\varphi = 69^{\circ} 39'8$  N,  $\lambda = 18^{\circ} 56'9$  E Gr.)  
RESULTS OF MAGNETIC OBSERVATIONS  
FOR THE YEAR 1934

By  
LEIV HARANG and E. TÖNSBERG

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A.S JOHN GRIEGS BOKTRYKKERI, BERGEN



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## RESULTS OF MAGNETIC OBSERVATIONS FOR THE YEAR 1934

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### General Remarks.

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

The observations have been made by E. Tönsberg. The reading of the hourly values and the calculation work have been performed by student Anna Pedersen.

### Scale Values.

The following scale-values have been determined.

<i>D</i> -curves . . . . .	1.45 per mm, or 4.83 $\gamma$ per mm.
<i>H</i> -curves . . . . .	5.02 $\gamma$ per mm.
<i>V</i> -curves . . . . .	6.77 $\gamma$ per mm.

### Base-line Values.

The absolute measurements of Declination, Horizontal Intensity and Inclination result in the table given below of observed and adopted base-line values.

The temperature coefficient for the *H*-variometer is 8.0  $\gamma$  per degree Celsius. During the extremely hot summer we had the best opportunity to fix the small temperature coefficient for the *V*-variometer, and found — 1.4  $\gamma$  per degree Celsius.

*Observed and adopted Base-line Values for D, H and V.*

Date	<i>D</i> observed	<i>D</i> adopted	<i>H</i> observed	<i>H</i> adopted	<i>V</i> observed	<i>V</i> adopted
I 6.....	3° 34.2 W	3° 33.9 W	113 99 $\gamma$	113 99 $\gamma$		
23.....	33.9	.9	97	99		
II 13.....	33.9	.9	114 00	99		
23.....	33.8	.9	113 99	99		
III 13.....	33.9	.9	98	99		
28.....	33.8	.9	98	99		
IV 12.....	33.6	.6	99	99		
V 22.....	33.7	.6	99	99	502 16 $\gamma$	
VI 18.....	33.5	.6	99	99	502 20	
19.....	33.7	.6			502 25	
VIII 24.....	33.4	.6	113 72	113 72		
IX 6.....	33.6	.6	72	72		
19.....	33.1	33.1	73	72		
X 4.....	32.8	32.6	114 00	113 97	502 16	
10.....	32.5	.6	113 93	97	502 20	
IX 15.....	32.0	32.0	97	97		
28.....	31.8	.0	95	97		

**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 hourly values, and the horizontal line marked *QM* the monthly means of the *quiet* hourly values.

The second series of 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 mean. The columns headed *PS*, *NS* and *AS* give the diurnal sum of the positive, negative and absolute storminess respectively. The column headed *C* 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 this quantity for defining the character numbers. Only the strongest perturbed component, the Horizontal Intensity, is used in characterisation. Character number *O* comprises diurnal sum of the absolute storminess (*AS*) up to 400  $\gamma$ , character number *I* 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 given at the end of the year-book.

# TABLES

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Tromsø Declination. D = 3° W + Tabular Quantities expressed in Tenths of Minutes.

Gr. M. T.

JANUARY 1934

HOURLY MEAN VALUES

Table for January 1934 showing hourly mean values for declination D = 3° W. Columns include Day (1-31), hours (1-24), M, and R.

FEBRUARY

Table for February showing hourly mean values for declination D = 3° W. Columns include Day (1-29), hours (1-24), M, and R.

MARCH

Table for March showing hourly mean values for declination D = 3° W. Columns include Day (1-31), hours (1-24), M, and R.



Tromsö.

Declination. Storminess (+ W). Unit Gamma.

Gr. M. T.

JANUARY 1934

HOURLY MEAN VALUES

Table for January 1934 showing hourly mean values for declination, storminess, and unit gamma. Columns include Day (1-31), M, PS, NS, AS.

FEBRUARY

Table for February showing hourly mean values for declination, storminess, and unit gamma. Columns include Day (1-28), M, PS, NS, AS.

MARCH

Table for March showing hourly mean values for declination, storminess, and unit gamma. Columns include Day (1-31), M, PS, NS, AS.

Tromsø. Declination. D = 3° W + Tabular Quantities expressed in Tenths of Minutes.

Gr. M. T.

APRIL 1934

HOURLY MEAN VALUES

Table for April 1934 showing hourly mean values for declination. Columns include Day (1-30), Hourly values (1-24), and summary rows M and QM.

MAY

Table for May showing hourly mean values for declination. Columns include Day (1-31), Hourly values (1-24), and summary rows M and QM.

JUNE

Table for June showing hourly mean values for declination. Columns include Day (1-30), Hourly values (1-24), and summary rows M and QM.

Tromsö.

Declination. Storminess (+ W). Unit Gamma.

Gr. M. T.

APRIL 1934 HOURLY MEAN VALUES

Table for APRIL 1934 with columns: DAY (1-30), 1-24, M, PS, NS, AS. Contains hourly mean values for declination and storminess.

MAY

Table for MAY with columns: DAY (1-31), 1-23, M, PS, NS, AS. Contains hourly mean values for declination and storminess.

JUNE

Table for JUNE with columns: DAY (1-30), 1-23, M, PS, NS, AS. Contains hourly mean values for declination and storminess.

Tromsø. Declination. D = 3° W + Tabular Quantities expressed in Tenths of Minutes.

Gr. M. T.

JULY 1934

HOURLY MEAN VALUES

Table for July 1934 showing hourly mean values for declination. Columns include Day (1-31), hours (1-24), and monthly totals (M, R).

AUGUST

Table for August showing hourly mean values for declination. Columns include Day (1-31), hours (1-24), and monthly totals (M, R).

SEPTEMBER

Table for September showing hourly mean values for declination. Columns include Day (1-30), hours (1-24), and monthly totals (M, R).

Tromsø.

Declination. Storminess (+ W). Unit Gamma.

Gr. M. T.

JULY 1934

HOURLY MEAN VALUES

Table for July 1934 showing hourly magnetic observations. Columns include Day (1-31), 25 numbered columns for storminess values, and summary columns M, PS, NS, AS. Rows include data for each day and monthly totals.

AUGUST

Table for August 1934 showing hourly magnetic observations. Columns include Day (1-31), 25 numbered columns for storminess values, and summary columns M, PS, NS, AS. Rows include data for each day and monthly totals.

SEPTEMBER

Table for September 1934 showing hourly magnetic observations. Columns include Day (1-30), 25 numbered columns for storminess values, and summary columns M, PS, NS, AS. Rows include data for each day and monthly totals.

Tromsø. Declination. D = 3° W + Tabular Quantities expressed in Tenths of Minutes.

Gr. M. T.

OCTOBER 1954

HOURLY MEAN VALUES

Table for October 1954 showing hourly mean values for declination. Columns include Day, Hour (1-24), and values for M and R. Includes summary rows for M and GM.

NOVEMBER

Table for November 1954 showing hourly mean values for declination. Columns include Day, Hour (1-24), and values for M and R. Includes summary rows for M and GM.

DECEMBER

Table for December 1954 showing hourly mean values for declination. Columns include Day, Hour (1-24), and values for M and R. Includes summary rows for M and GM.

Tromsö.

Declination. Storminess (+ W). Unit Gamma.

Gr. M. T.

OCTOBER 1934

HOURLY MEAN VALUES

Table for October 1934 showing hourly mean values for declination and storminess. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS).

NOVEMBER

Table for November 1934 showing hourly mean values for declination and storminess. Columns include Day (1-30), hours (1-24), and summary statistics (M, PS, NS, AS).

DECEMBER

Table for December 1934 showing hourly mean values for declination and storminess. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS).

Tromsø. Horizontal Intensity. H = 11400 + Tabular Quantities expressed in Gamma.

Gr. M. T.

HOURLY MEAN VALUES JANUARY 1954. Table with 27 columns (DAY, 1-25, M, R) and 31 rows (1-31). Contains numerical data for January.

FEBRUARY. Table with 27 columns (DAY, 1-25, M, R) and 28 rows (1-28). Contains numerical data for February.

MARCH. Table with 27 columns (DAY, 1-25, M, R) and 31 rows (1-31). Contains numerical data for March.



Tromsö.

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

Gr. M. T.

JANUARY 1934

HOURLY MEAN VALUES

Table for January 1934 showing magnetic observations. Columns include Day (1-31), Hourly Mean Values (1-23), M, PS, NS, AS, CH, MPS, and MNS.

FEBRUARY

Table for February showing magnetic observations. Columns include Day (1-28), Hourly Mean Values (1-23), M, PS, NS, AS, CH, MPS, and MNS.

MARCH

Table for March showing magnetic observations. Columns include Day (1-31), Hourly Mean Values (1-23), M, PS, NS, AS, CH, MPS, and MNS.

Tromsø. Horizontal Intensity. H = 11400 + Tabular Quantities expressed in Gamma.

Gr. M. T.

APRIL 1934

HOURLY MEAN VALUES

Table for APRIL 1934 showing hourly mean values for days 1-30. Columns include DAY, 1-23, M, and R. Includes summary rows M and QM.

MAY

Table for MAY showing hourly mean values for days 1-31. Columns include DAY, 1-23, M, and R. Includes summary rows M and QM.

JUNE

Table for JUNE showing hourly mean values for days 1-30. Columns include DAY, 1-23, M, and R. Includes summary rows M and QM.

Tromsö.

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

Gr. M. T.

APRIL 1934

HOURLY MEAN VALUES

Table for April 1934 showing hourly magnetic observations. Columns include Day (1-30), 24 hours of intensity values, M, PS, NS, AS, and CH. Summary rows for M, PS, NS, AS, CH and MFS, MNS are provided at the bottom.

MAY

Table for May showing hourly magnetic observations. Columns include Day (1-31), 24 hours of intensity values, M, PS, NS, AS, and CH. Summary rows for M, PS, NS, AS, CH and MFS, MNS are provided at the bottom.

JUNE

Table for June showing hourly magnetic observations. Columns include Day (1-30), 24 hours of intensity values, M, PS, NS, AS, and CH. Summary rows for M, PS, NS, AS, CH and MFS, MNS are provided at the bottom.

Tromsø. Horizontal Intensity.  $H = 11400 + \text{Tabular Quantities expressed in Gamma.}$ 

Gr. M. T.

JULY 1934																										
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	0	42	30	30	40	52	42	32	32	35	50	70	63	57	53	72	90	97	85	10	52	62	55	44	305
2	35	10	-10	50	55	53	53	40	30	30	40	50	35	52	55	55	63	75	77	70	62	60	62	65	49	120
3	60	48	30	50	57	50	42	40	32	23	35	60	110	180	200	300	240	100	100	80	53	30	-70	50	79	490
4	5	-100	-110	-15	60	75	45	45	55	48	27	70	58	90	115	120	142	123	105	85	60	32	32	-20	48	310
5	-55	-60	-15	0	10	40	30	30	30	42	52	50	85	110	125	122	100	125	100	70	72	48	40	-40	54	590
6	25	-10	30	30	40	42	60	50	35	30	30	38	40	68	72	77	90	120	110	80	77	65	48	32	53	200
7	45	45	30	32	45	52	60	55	40	35	30	40	38	40	70	65	63	90	85	80	83	60	35	22	52	95
8	42	58	43	57	53	50	50	42	37	37	42	45	52	60	70	75	92	85	72	68	38	42	15	-25	50	120
9	-135	-30	48	25	5	30	42	45	48	48	58	78	100	180	130	125	80	73	60	58	53	30	-20	49	585	
10	-22	-5	30	62	62	58	48	45	40	40	42	48	50	60	60	75	77	85	92	72	60	50	42	50	140	
11	40	55	57	55	52	50	45	35	35	35	40	42	45	48	60	85	105	130	138	72	45	45	55	53	205	
12	25	40	58	62	55	52	55	43	38	37	33	40	65	65	68	72	80	82	80	78	62	60	55	62	57	110
13	62	60	60	60	60	58	58	50	35	25	25	27	35	60	65	85	110	125	125	97	75	62	60	64	150	
14	52	52	45	50	52	52	50	40	28	18	18	23	35	55	70	82	85	105	120	110	50	70	62	68	58	115
15	-75	-310	-355	-130	10	50	60	58	55	42	45	52	65	72	80	75	73	73	75	75	70	70	78	16	615	
16	10	-140	-155	25	70	42	55	55	50	40	47	40	52	65	63	63	82	115	170	100	80	78	70	68	48	505
17	62	62	62	65	65	60	50	45	35	32	32	40	53	70	68	75	75	105	105	85	50	5	0	25	55	125
18	52	60	62	68	58	55	58	48	32	30	45	35	57	97	90	60	75	100	100	87	75	70	58	60	64	90
19	60	70	70	67	65	63	58	55	55	43	35	43	45	57	62	62	65	67	72	78	75	65	60	48	60	105
20	45	52	63	68	68	62	57	42	40	40	42	48	75	80	95	120	100	113	105	75	70	60	58	50	68	90
21	38	38	70	65	68	60	55	40	35	35	35	40	45	50	60	72	80	83	92	85	80	70	35	65	58	95
22	70	68	72	77	75	65	55	48	37	40	38	50	67	70	72	72	77	88	92	88	85	68	60	65	67	85
23	60	68	70	70	70	60	52	43	42	38	42	50	58	60	70	78	78	82	82	75	68	63	70	63	85	85
24	62	68	68	70	65	58	52	45	42	45	30	50	80	90	115	170	175	180	122	107	90	20	-25	-10	74	260
25	20	60	78	82	80	75	58	50	42	35	35	37	60	65	80	85	95	115	85	72	70	70	68	35	65	165
26	25	-2	20	40	57	60	52	38	28	22	30	35	48	60	75	82	112	150	140	95	55	38	40	48	56	180
27	40	35	48	68	68	60	50	45	50	48	42	35	43	52	63	65	75	80	80	80	78	70	63	55	58	75
28	58	48	50	52	52	60	58	48	40	35	38	40	53	62	63	70	70	78	85	90	87	55	50	45	58	60
29	55	60	50	40	52	55	55	45	37	35	48	45	105	170	215	145	85	80	100	100	-40	-70	-40	20	60	450
30	62	75	75	80	45	-125	-58	10	105	110	180	350	320	355	340	260	120	37	15	25	48	40	-20	101	595	
31	-130	-30	40	48	40	42	38	32	22	20	42	27	50	60	80	150	215	95	68	48	10	45	20	5	43	525
M	19	14	24	45	53	53	46	42	38	38	40	48	67	82	96	102	104	101	96	80	60	51	39	38	58	234
QM	60	60	60	60	57	50	45	40	37	35	37	42	47	53	57	60	63	65	65	63	62	60	60	60	54	

## 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	-60	-245	-15	10	20	25	15	40	50	72	100	85	130	65	60	52	50	65	75	65	40	57	50	31	640
2	15	-32	-25	-10	37	50	48	35	20	48	65	50	63	105	60	82	90	142	110	87	55	0	-60	-70	40	315
3	-80	-20	25	40	-80	-20	35	50	37	30	95	165	235	76	70	90	115	120	-10	15	-60	-70	-110	-105	26	445
4	-130	0	60	50	52	23	18	65	80	58	35	38	62	90	102	105	145	123	55	72	-120	-260	-310	-310	4	775
5	-305	-240	-240	-130	32	58	65	63	55	55	48	48	95	100	125	78	60	70	80	80	55	25	-18	-190	3	560
6	-50	-80	-25	20	70	62	60	45	20	30	40	40	42	60	70	90	80	77	72	70	58	30	-50	-40	33	240
7	-5	46	60	58	50	40	48	48	30	28	35	90	35	120	90	95	90	90	85	70	55	-80	-120	12	570	
8	40	50	57	58	60	53	50	37	35	38	48	50	75	97	105	120	95	92	35	50	62	55	50	61	170	
9	30	27	32	35	15	32	35	50	38	32	32	35	50	72	78	78	78	80	78	80	75	70	68	70	60	85
10	58	32	-130	-2	42	52	48	52	50	35	15	30	42	50	53	70	80	92	75	65	55	20	40	35	40	300
11	35	48	62	60	55	45	38	35	35	37	42	50	72	80	97	110	140	-20	-45	-5	-155	-480	19	775		
12	-200	-150	90	80	72	60	50	40	35	28	32	30	40	80	120	150	115	68	58	52	30	20	0	10	34	615
13	35	55	52	48	50	50	58	32	30	32	38	52	95	122	110	68	60	58	58	20	-180	10	35	42	500	
14	45	60	60	60	50	32	28	28	30	38	40	50	70	65	65	60	60	77	80	100	80	45	40	-140	47	380
15	-180	-30	35	55	67	58	45	40	33	30	28	38	50	45	65	63	90	75	70	63	58	40	50	10	37	365
16	-170	-60	-30	25	40	35	30	20	30	40	40	45	52	45	58	115	78	65	72	100	120	80	72	32	38	480
17	40	50	40	38	42	45	45	40	30	27	35	42	42	42	62	78	83	95	85	87	115	95	25	-45	70	47
18	52	60	50	25	10	30	37	32	30	40	40	45	40	48	100	275	250	155	90	32	-30	-170	5	50	62	510
19	50	52	48	50	48	42	35	32	28	28	35	45	55	112	127	142	150	122	117	110	117	98	50	37	72	165
20	40	45	48	45	30	20	5	7	25	17	50	75	60	115	78	80	110	93	102	40	45	32	20	-45	47	210
21	-42	40	60	55	48	30	20	32	27	25	32	105	125	190	350	270	142	80	65	60	15	-7	10	32	74	485
22	50	46	60	58	53	48	48	45	35	35	40	45	50	55	60	50	55	62	58	63	40	-120	-5	41	330	
23	42	55	52	48	45	50	42	40	32	30	35	40	35	40	47	47	55	60	60	63	62	37	55	50	47	45
24	45	50	50	55	55	50	40	38	32	30	43	45	43	42	45	58	60	72	82	55	25	45	-10	46	155	
25	-50	15	58	55	52	45	43	43	40	42	48	48	38	45	60	80	290	150	78	75	60	65	60	-5	60	770
26	-190	-110	-220	-95	-215	-145	45	35	60	60	50	55	40	80	115	215	115	112	70	-60	-90	-220	-170	-170	-27	575
27	-90	-180	-180	-110	20	30	30	38	30	110	95	210	200	180	220	200										

Tromsö.

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

Gr. M. T.

JULY 1934

HOURLY MEAN VALUES

Table for July 1934 showing hourly mean values for horizontal intensity, storminess, and unit gamma. Columns include Day (1-31), 25 hourly values, M, PS, NS, AS, and CH.

AUGUST

Table for August showing hourly mean values for horizontal intensity, storminess, and unit gamma. Columns include Day (1-31), 25 hourly values, M, PS, NS, AS, and CH.

SEPTEMBER

Table for September showing hourly mean values for horizontal intensity, storminess, and unit gamma. Columns include Day (1-30), 25 hourly values, M, PS, NS, AS, and CH.

Tromsø.

Horizontal Intensity.  $H = 11400 +$  Tabular Quantities expressed in Gamma.

Gr. M. T.

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	35	30	25	37	45	45	30	35	18	25	15	47	25	37	35	35	37	40	40	45	40	-90	-300	-190	6	515	
2	25	37	25	33	40	42	38	35	30	30	35	42	50	90	97	67	40	45	58	40	30	32	25	35	42	150	
3	37	37	40	40	42	42	40	35	30	32	37	25	25	48	45	40	40	48	45	42	40	36	35	40	38	60	
4	40	40	40	42	42	40	35	35	30	27	25	25	27	50	50	55	32	107	90	65	38	25	-125	-95	35	325	
5	15	45	50	60	50	50	38	30	20	20	17	35	40	60	58	48	65	110	55	50	25	30	35	38	43	155	
6	38	42	42	47	47	47	40	38	30	20	15	22	32	45	45	48	62	65	70	60	65	40	-160	-20	33	340	
7	10	42	48	48	48	50	50	45	35	30	30	30	33	45	55	65	140	125	110	93	85	50	37	42	56	175	
8	43	45	45	42	42	40	40	38	30	27	45	30	20	35	40	40	40	40	42	42	42	45	35	23	38	45	
9	35	38	42	42	42	42	40	35	25	20	20	23	28	32	38	40	45	45	42	42	42	42	40	40	37	30	
10	40	40	40	40	40	40	37	32	30	22	22	23	32	37	43	43	48	48	48	48	48	45	43	47	47	39	50
11	40	40	40	40	40	40	40	35	30	25	18	15	25	32	37	40	45	48	48	48	48	48	37	37	47	37	55
12	42	20	-125	-2	47	55	47	40	30	15	7	10	45	38	35	38	42	60	87	20	-125	-175	-240	-230	-9	440	
13	-165	-30	35	25	5	50	48	38	25	37	40	32	40	35	72	110	115	110	20	5	30	-60	-72	-100	19	335	
14	-10	42	38	52	52	42	40	42	30	27	27	30	45	30	60	48	52	63	55	42	20	-20	-18	20	34	175	
15	42	40	42	38	43	50	45	35	50	42	37	20	42	50	105	190	220	145	75	-2	-120	-220	-55	65	41	670	
16	72	50	40	40	40	40	40	37	37	28	32	47	60	50	52	62	58	55	50	27	15	13	27	22	41	65	
17	-20	-65	22	35	47	47	42	40	32	27	22	30	35	40	40	42	52	50	58	-5	-140	-260	-120	30	3	440	
18	-30	-50	-55	35	55	50	50	40	33	25	27	32	32	35	42	45	48	53	65	50	42	42	45	45	32	215	
19	46	45	45	45	45	45	42	35	28	25	25	28	33	40	48	45	40	42	38	40	40	40	40	40	39	40	
20	40	40	40	40	42	40	40	37	32	30	28	28	36	48	60	55	43	70	55	20	-60	-300	-80	-75	13	560	
21	-120	-25	-10	32	55	60	55	48	38	33	30	28	27	50	48	40	40	52	67	-50	-65	-60	-5	13	16	280	
22	22	20	-2	-15	45	50	48	40	27	23	30	42	60	52	70	73	73	110	90	60	37	15	10	32	42	175	
23	15	0	20	40	42	42	40	38	32	28	25	28	30	35	40	40	42	45	47	47	47	22	-145	27	225		
24	-195	-65	45	20	-175	-195	-95	47	50	30	110	35	90	250	165	240	230	55	40	-50	-60	-70	-40	-40	19	615	
25	-55	-35	-15	28	35	43	50	52	32	35	25	33	42	65	100	100	30	-220	-40	-25	-65	-130	-175	-150	-10	735	
26	-85	-50	5	25	35	55	58	53	50	53	55	90	135	170	155	122	40	30	55	-220	5	10	5	-12	34	760	
27	-52	-15	-2	45	45	45	50	38	43	42	30	55	72	110	70	55	90	85	47	40	32	-30	-90	-90	30	315	
28	15	35	25	-40	-35	40	38	33	33	29	20	19	22	70	90	130	82	50	35	32	40	35	30	32	36	235	
29	32	30	28	35	40	42	40	33	38	33	32	32	37	48	33	33	38	38	38	38	38	35	20	8	34	50	
30	2	20	40	45	45	45	42	38	38	33	30	32	37	42	48	70	55	38	38	38	38	30	5	32	37	100	
31	40	38	38	38	40	43	43	38	28	28	30	32	35	38	42	42	52	75	40	38	38	38	33	35	39	115	
M	0	16	22	33	33	38	39	39	33	30	30	32	41	58	62	68	66	56	52	22	9	-23	-31	-15	30	273	
CM	40	40	42	42	42	43	42	40	37	35	32	30	30	35	38	40	42	42	42	40	40	40	40	40	39		

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	35	38	40	40	42	42	42	40	38	35	30	30	30	38	40	42	43	45	48	40	38	38	33	28	38	60	
2	17	-10	20	48	48	45	42	42	40	38	40	37	40	40	40	45	50	50	58	40	65	50	32	42	42	120	
3	40	40	40	40	42	38	38	33	30	30	30	25	35	48	70	93	138	130	5	-210	15	40	35	36	435		
4	38	38	38	32	30	52	43	38	36	35	37	38	58	40	45	47	48	45	50	35	25	-35	37	37	140	27	
5	48	48	45	45	43	43	40	40	42	43	42	47	48	50	50	53	110	65	40	38	-22	-115	-100	33	340		
6	-95	20	42	42	47	47	42	40	35	35	35	35	35	38	40	40	42	40	45	37	37	35	35	35	35	195	
7	35	40	40	25	35	50	50	50	45	38	45	80	160	100	80	155	50	25	80	-220	-280	-90	-240	-500	-7	805	
8	-170	-30	37	50	40	50	42	48	33	40	80	110	60	65	60	10	35	90	85	70	45	-70	-190	-20	24	560	
9	30	5	-75	-20	-50	5	42	45	85	75	30	42	30	40	38	38	40	50	50	70	10	20	-10	-30	24	250	
10	-30	12	25	35	43	45	40	40	38	38	35	35	35	40	40	43	52	55	35	45	37	25	5	20	33	195	
11	17	32	42	42	45	45	33	33	35	30	28	25	35	45	58	82	85	100	115	30	-80	-70	-30	-60	30	300	
12	-5	30	38	48	48	48	45	40	38	32	35	33	30	35	38	40	47	42	48	45	-15	-7	30	32	35	160	
13	40	40	40	40	40	38	38	38	35	33	30	30	38	85	175	145	130	110	75	-40	-150	-180	-100	-95	27	409	
14	-60	-45	-50	-20	35	40	62	50	40	35	33	38	38	38	35	42	70	45	35	35	27	20	5	35	25	190	
15	40	40	40	40	42	42	42	38	37	38	38	38	38	40	40	43	42	45	40	40	55	55	38	32	18	40	160
16	5	22	40	48	52	48	48	42	37	38	42	45	45	45	45	52	57	42	38	38	32	35	33	40	60	80	
17	35	38	38	38	42	40	32	32	32	30	30	32	45	42	42	42	45	58	50	45	10	-25	-140	29	255		
18	-25	45	42	40	45	55	55	48	42	40	40	42	42	43	43	43	48	70	60	35	-5	-10	38	38	235		
19	20	50	25	40	58	62	52	48	40	42	42	42	45	50	45	48	45	50	50	62	70	40	42	42	47	145	
20	40	40	40	43	43	43	43	40	38	38	38	38	40	40	43	42	45	40	40	55	55	38	32	18	40	70	
21	33	38	40	40	40	40	40	40	37	35	37	37	40	40	42	42	42	42	40	45	45	42	42	30	40	40	
22	40	40	40	40	40	40	40	38	35	37	40	40	42	42	42	42	42	40	40	40	42	42	40	38	40	45	
23	30	37	37	45	52	50	43	40	35	40	40	40	40	35	38	40	40	40	40	40	42	42	40	38	40	45	
24	40	40	40	43	43	47	47	48	45	45	45	45	45	40	42	50	60	-10	-115	10	40	-32	-90	-110	19	410	
25	-80	-80	20	30	62	65	50	52	38	35	35	65	70	117	200	170	105	100	85	50	35	30	28	28	54	380	
26	-5	-45	27	45	40	40	40	38	33	33	33	37	38	38	35	35	38	38	38	40	45	40	25	-10	30	135	
27	-25	20	32	55	52	50	42	38	40	40	38	40															

Tromsö.

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

Gr. M. T.

OCTOBER

HOURLY MEAN VALUES

Table for October showing hourly mean values for magnetic intensity and storminess. Columns include Day (1-31), hours (1-23), and summary statistics (M, PS, NS, AS, CH). Values range from -33 to 250.

NOVEMBER

Table for November showing hourly mean values for magnetic intensity and storminess. Columns include Day (1-30), hours (1-23), and summary statistics (M, PS, NS, AS, CH). Values range from -34 to 52.

DECEMBER

Table for December showing hourly mean values for magnetic intensity and storminess. Columns include Day (1-31), hours (1-23), and summary statistics (M, PS, NS, AS, CH). Values range from -57 to 84.

Tromsø.

Vertical Intensity. V = 50200 + Tabular Quantities expressed in Gamma.

Gr. M. T.

Table for JANUARY 1934. Columns: DAY (1-31), 1-25, M, R. Rows: hourly mean values and summary statistics.

Table for FEBRUARY. Columns: DAY (1-29), 1-25, M, R. Rows: hourly mean values and summary statistics.

Table for MARCH. Columns: DAY (1-31), 1-25, M, R. Rows: hourly mean values and summary statistics.



Tromsö.

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

Gr. M. T.

JANUARY 1934

HOURLY MEAN VALUES

Table for January 1934 showing hourly mean values for vertical intensity and storminess. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS).

FEBRUARY

Table for February 1934 showing hourly mean values for vertical intensity and storminess. Columns include Day (1-28), hours (1-24), and summary statistics (M, PS, NS, AS).

MARCH

Table for March 1934 showing hourly mean values for vertical intensity and storminess. Columns include Day (1-31), hours (1-24), and summary statistics (M, PS, NS, AS).

Tromsø.

Vertical Intensity.  $V = 50200$  + Tabular Quantities expressed in Gamma.

Gr. M. T.

APRIL 1934																											
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	5	-10	22	28	45	30	38	42	60	80	70	25	45	40	32	-30	2	175	-20	15	65	220	41	64		
2	120	-75	-55	0	20	20	30	35	35	35	35	40	70	58	40	55	60	70	75	25	-10	-2	30	-5	-12	25	38
3	-10	-2	12	20	3	20	35	32	30	25	25	28	40	40	55	60	70	75	25	-10	-2	30	-5	-12	25	38	
4	40	-40	-60	12	35	38	35	40	35	35	36	38	48	50	52	55	38	5	-60	5	115	360	30	270	51	109	
5	-70	-30	-2	15	25	25	5	2	15	2	20	20	18	10	5	-100	-20	5	-10	-75	5	42	105	52	2	62	
6	105	40	-60	-32	18	20	38	32	50	60	40	35	40	52	38	65	50	35	-12	-35	5	55	50	50	31	56	
7	150	10	-72	-40	5	12	20	35	40	32	28	30	32	32	35	30	38	32	30	-15	-2	2	12	20	21	61	
8	10	6	-10	10	16	20	20	22	30	30	30	32	25	27	25	35	52	40	58	52	38	50	-2	-32	25	24	
9	10	22	20	5	2	2	5	18	20	22	25	22	25	28	30	28	30	42	30	42	30	5	16	25	25	19	12
10	25	22	22	20	16	10	20	28	28	22	20	22	25	25	25	22	20	20	25	22	0	-20	-5	19	8		
11	-45	-15	8	18	18	20	20	22	20	18	20	28	32	30	28	28	22	20	20	20	20	20	20	20	17	15	
12	22	22	20	0	-8	2	15	20	20	20	22	20	25	32	38	42	52	40	30	25	22	20	15	15	22	13	
13	12	5	15	20	20	20	22	28	28	28	30	20	25	30	30	52	52	48	40	32	22	22	15	-2	26	10	
14	-10	-6	15	20	20	20	22	25	15	10	12	15	18	42	58	56	35	28	20	25	10	-42	-62	-58	12	26	
15	-45	-40	-45	-10	20	28	28	28	22	25	22	22	22	30	52	58	45	35	30	22	18	-5	-10	70	18	40	
16	5	12	15	30	12	2	-15	-5	20	20	16	35	48	90	75	70	38	32	45	25	75	30	20	15	30	41	
17	25	25	22	22	20	28	30	30	30	28	20	22	22	30	38	52	60	35	28	25	22	15	15	16	28	9	
18	18	25	28	30	30	30	30	30	30	30	30	22	22	20	28	30	32	30	32	28	8	0	15	26	7		
19	28	28	25	22	22	25	25	20	15	16	27	22	28	30	45	50	75	-5	-60	40	28	5	-18	2	15	29	
20	15	22	22	-5	-75	-60	-10	8	12	10	15	22	40	36	42	42	48	20	2	10	10	0	-40	-50	6	23	
21	-20	8	15	20	22	15	18	20	22	30	25	22	28	40	58	55	48	30	-5	20	8	8	5	-2	19	15	
22	-25	-25	-42	-25	-10	-2	5	12	18	20	25	25	28	85	55	52	40	58	52	30	35	25	15	18	20	24	
23	28	30	30	28	25	22	20	16	20	22	22	25	20	45	45	40	35	35	30	28	25	35	-10	-60	23	26	
24	-20	5	20	10	-25	-40	-30	2	20	20	30	45	18	18	20	22	20	20	20	20	20	20	-2	20	10	16	
25	18	18	12	0	-25	-18	-15	2	20	28	15	12	15	25	25	35	35	30	28	20	-5	-10	10	-52	9	20	
26	-60	-10	18	22	20	20	20	20	22	25	22	30	42	75	80	58	42	40	32	35	30	10	-20	-63	20	28	
27	-80	-30	-65	-48	-22	-20	-10	5	12	18	22	22	25	38	52	65	50	42	28	15	-8	-25	-30	-22	-1	28	
28	-35	-65	-68	-58	-40	-10	5	10	18	20	20	20	25	30	35	35	38	28	20	20	22	22	20	15	5	15	
29	8	18	22	25	25	22	20	20	20	20	22	25	48	40	42	42	38	40	35	-2	0	-8	0	23	10		
30	2	12	25	30	30	28	30	30	32	30	25	18	22	40	62	58	48	50	48	48	25	18	20	10	31	10	
M	8	-2	-4	5	8	11	16	20	25	25	26	27	30	39	43	41	39	31	19	18	18	24	6	15	19	30	
CM	25	25	23	22	22	23	23	25	25	25	23	22	22	22	22	22	20	20	20	20	20	22	23	25	25	25	

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	-13	-20	-10	-3	3	10	7	10	20	20	13	23	25	40	35	33	27	23	17	17	15	5	-15	12	12	
2	0	7	-5	-3	0	10	17	27	25	20	15	15	30	55	75	63	47	-3	-105	10	55	255	-20	345	39	143
3	55	-65	-145	-215	-175	-115	-90	-55	3	5	13	23	15	37	25	53	37	30	30	25	33	45	65	45	-13	104
4	-75	5	25	23	25	27	33	33	35	35	43	50	73	45	53	35	27	27	30	23	17	13	-20	25	30	
5	-23	10	23	25	23	17	20	23	20	23	25	33	45	37	30	30	25	23	27	25	23	23	-7	-20	20	13
6	5	15	13	15	7	10	15	17	27	20	23	20	23	53	60	47	37	47	10	17	40	27	-3	-32	21	22
7	-35	-47	5	25	27	25	20	23	25	33	25	23	-5	43	35	23	33	25	20	23	5	23	20	17	19	24
8	15	5	15	23	25	25	25	25	33	30	27	27	40	40	47	37	30	23	20	20	15	25	30	26	3	
9	10	23	25	20	15	20	25	25	13	10	20	20	33	65	73	55	53	45	30	20	15	13	-10	-15	25	9
10	20	-35	-35	-15	-13	-3	10	23	25	20	17	20	25	25	53	55	57	37	33	23	23	47	-135	-105	17	62
11	-45	-10	20	5	-5	-7	5	7	13	13	20	77	70	30	17	30	20	17	15	35	45	25	17	61	77	
12	-65	-30	-10	-15	-45	25	45	50	33	20	13	27	33	37	45	60	55	27	35	33	30	37	50	15	25	10
13	-35	-105	-75	-25	-10	15	27	30	15	25	15	20	53	45	47	35	30	43	25	-3	10	15	20	10	28	
14	7	5	-3	3	15	23	25	25	25	25	20	23	30	25	40	42	42	38	40	35	-2	0	-8	0	23	8
15	25	25	25	25	25	20	20	17	13	23	23	27	27	23	25	25	27	25	25	23	17	13	13	20	21	8
16	-10	17	23	20	17	23	25	25	25	25	23	25	20	20	23	30	35	43	35	25	23	27	23	23	23	10
17	25	20	17	13	17	20	25	23	23	23	25	25	25	25	25	25	25	43	35	33	25	23	23	25	26	5
18	23	23	23	20	20	17	20	25	30	30	53	83	115	-195	-365	-285	-165	-85	-7	-5	35	140	-175	265	2	112
19	215	135	-85	-45	23	30	35	37	35	30	35	20	45	47	30	73	30	17	13	7	15	33	-27	-67	28	63
20	-30	0	17	25	30	33	35	33	27	27	25	25	25	25	27	37	40	20	-30	20	45	17	23	23	22	35
21	25	23	5	10	15	27	27	27	25	35	32	37	25	25	25	47	53	10	-45	7	23	27	33	30	23	25
22	0	7	17	23	25	27	17	0	3	3	35	45	95	55	45	53	37	17	25	10	13	15	5	15	24	19
23	5	-63	-77	-25	13	23	27	30	23	17	15	25	30	33	25	17	10	35	-5	-5	-15	-33	6	20	6	20
24	-5	0	10	20	25	30	35	35	33	33	25	23	33	32	27	25	20	17	25	10	-27	-3	-15	-10	17	12
25	5	7	23	20	27	27	27	25	23	23	15	13	25	40	45	45	35	30	27	15	15	-17	-47	20	17	
26	-30	-5	-45	-103	-80	-50	0	23	23	20	42	45	37	53	50	40	25	23	20	15	17	3	10	13	6	24
27	23	23	25	27	27	27	27	27	25	27	17	17	20	23	23	25	25	25	25	23	25	25	25	23	24	3
28	23	25	25	25	25	23	23	23	23	23	23	23	23	20	17	17	23	25	25	23	23	20	20	23	23	2
29	25	25	27	27	25	25	23	23	20	23	25	25	25	40	45	57	60	57	33	33	23	17	25</			

JUL MNS	41	47	39	19	8	4	6	4	3	3	3	3	2	1	0	0	0	0	1	2	10	13	22	23
AUG MNS	64	58	59	30	23	17	6	3	3	3	2	1	2	1	1	1	1	1	8	20	47	89	113	112
SEP MNS	103	102	53	23	14	9	8	4	3	3	2	2	2	1	0	0	5	10	33	53	65	82	151	113
OCT MNS	41	25	20	10	11	7	5	3	5	6	6	3	1	0	0	0	1	9	4	23	34	64	71	55
NOV MNS	34	20	11	6	4	1	0	0	0	0	1	1	1	1	0	1	0	3	6	15	45	36	49	52
DEC MNS	35	46	28	24	18	4	2	1	2	2	1	1	1	1	0	1	0	8	12	23	25	28	56	57
MEAN	66	50	34	20	13	7	5	4	4	4	3	2	2	1	0	1	1	4	11	22	37	60	77	74
JAN MNS - MNS	-42	-19	-11	-2	1	4	4	2	0	-1	0	2	3	5	9	8	18	20	21	7	-10	-23	-44	-54
FEB MNS - MNS	-49	-45	-37	-30	-14	-7	0	-4	1	0	0	3	7	15	24	22	25	32	25	-6	-15	-61	-73	-52
MAR MNS - MNS	-138	-94	-50	-23	-20	-5	-1	-6	-5	-1	4	10	10	26	28	39	38	29	6	-24	-86	-171	-134	-141
APR MNS - MNS	-78	-45	-19	-9	-4	-5	-5	-4	-2	-10	-6	-2	3	18	21	23	30	22	-1	-29	-40	-67	-78	-77
MAY MNS - MNS	-74	-48	-34	-16	-7	-10	-9	-6	-5	-6	-6	4	14	16	29	24	23	27	9	0	-15	-45	-71	-84
JUN MNS - MNS	-70	-43	-32	-32	-17	3	3	2	0	3	5	8	8	14	24	30	44	43	28	-1	-19	-33	-57	-61
JUL MNS - MNS	-41	-46	-36	-15	-4	2	3	2	1	3	2	6	20	29	38	41	41	36	31	17	-1	-9	-20	-22
AUG MNS - MNS	-84	-57	-68	-27	-21	-15	-2	3	2	5	15	22	24	37	46	50	43	30	10	-9	-41	-86	-111	-112
SEP MNS - MNS	-102	-101	-62	-22	-11	-5	-6	-1	4	5	12	24	35	33	49	51	33	14	-17	-48	-63	-82	-150	-110
OCT MNS - MNS	-40	-25	-20	-9	-9	-5	-3	-2	-4	-3	-2	-2	11	23	24	28	24	14	10	-18	-31	-64	-71	-53
NOV MNS - MNS	-34	-19	-10	-5	-2	3	2	2	2	2	2	7	6	9	14	16	14	19	14	-5	-41	-35	-49	-52
DEC MNS - MNS	-32	-46	-28	-24	-17	-1	1	6	1	1	2	3	10	19	12	26	24	16	11	-6	-15	-21	-51	-53
MEAN	-65	-49	-32	-16	-10	-3	-1	-1	-1	0	2	7	13	20	27	30	30	25	12	-10	-31	-58	-76	-73

Vertical Intensity. Unit Gamma.

1934	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
JAN MNS	0	1	0	0	1	1	1	0	1	1	2	3	4	4	8	9	11	13	10	9	8	9	8	7
FEB MNS	5	2	1	0	1	1	0	1	1	3	1	1	1	1	18	12	12	11	7	6	3	4	1	2
MAR MNS	22	4	2	2	1	0	1	4	5	6	8	8	13	17	23	22	18	11	6	9	31	29	31	36
APR MNS	11	1	0	1	1	1	3	2	3	3	4	6	9	18	21	23	20	14	9	10	7	15	5	18
MAY MNS	8	4	0	0	0	1	3	3	2	4	4	12	14	13	17	13	7	4	2	4	15	4	23	
JUN MNS	20	0	0	0	1	1	1	2	2	3	4	5	9	11	15	18	11	8	5	6	16	9	18	16
JUL MNS	3	5	1	0	0	0	1	1	4	4	6	5	10	10	11	14	13	9	4	5	3	3	2	
AUG MNS	22	21	4	1	1	1	6	12	13	14	17	23	24	19	20	21	15	7	7	6	28	39	37	
SEP MNS	17	13	1	1	1	2	2	5	7	9	11	16	22	22	23	21	19	15	13	14	22	23	38	17
OCT MNS	2	0	0	0	0	0	2	2	5	7	9	11	14	19	19	16	12	7	4	12	13	1	0	
NOV MNS	0	1	1	1	0	1	1	3	3	4	4	7	7	12	13	15	16	12	9	12	13	8	9	7
DEC MNS	2	15	1	0	0	1	2	4	4	6	7	8	11	16	19	16	11	11	13	4	5	11	7	
MEAN	9	6	1	1	1	1	3	4	5	6	7	10	13	17	17	16	11	8	8	11	13	14	14	
JAN MNS - MNS	28	20	13	8	5	4	5	3	1	1	1	0	0	1	0	0	3	5	20	13	23	13	25	31
FEB MNS - MNS	27	20	20	21	19	17	13	8	3	2	2	5	5	6	10	15	27	22	12	23	32	23	31	33
MAR MNS - MNS	31	40	36	28	26	26	13	5	3	2	1	0	0	1	0	0	5	10	18	26	19	22	31	25
APR MNS - MNS	28	28	27	18	15	13	10	6	3	3	2	1	1	1	4	1	4	10	13	10	13	22	27	
MAY MNS - MNS	25	26	28	26	20	12	8	5	2	3	3	4	2	7	11	10	6	6	11	5	6	6	27	24
JUN MNS - MNS	16	26	25	22	24	15	7	2	1	1	2	2	1	1	1	5	2	3	7	7	5	7	9	10
JUL MNS - MNS	10	18	21	27	21	15	12	8	4	2	3	4	8	13	6	3	1	3	3	4	6	9	11	10
AUG MNS - MNS	26	19	17	31	26	20	12	4	2	1	2	1	0	1	1	2	3	1	9	9	11	15	16	24
SEP MNS - MNS	29	18	36	38	27	13	8	3	1	1	1	1	3	10	12	18	10	9	10	10	11	12	24	
OCT MNS - MNS	20	17	14	18	17	14	8	3	1	0	0	0	1	1	5	11	15	10	6	8	11	16	20	23
NOV MNS - MNS	24	18	12	8	9	5	2	2	1	1	1	0	0	0	0	0	6	12	9	3	5	10	19	22
DEC MNS - MNS	26	16	19	24	22	14	5	3	1	1	0	0	1	1	0	0	12	15	14	12	23	22	16	29
MEAN	24	22	22	22	19	14	9	4	2	2	2	2	2	3	4	5	8	8	11	11	13	14	14	24
JAN MNS - MNS	-27	-19	-13	-8	-4	-2	-5	-3	0	0	1	3	4	4	8	9	7	8	-10	-4	-16	-4	-16	-24
FEB MNS - MNS	-23	-18	-19	-21	-18	-16	-13	-7	-2	1	1	4	4	7	-9	-3	-15	-11	-5	-16	-29	-19	-30	-30
MAR MNS - MNS	-9	-36	-34	-26	-26	-12	-2	2	3	6	8	12	17	23	21	13	1	-12	-17	12	7	0	11	
APR MNS - MNS	-17	-27	-27	-17	-14	-12	-7	-4	0	0	3	5	8	17	21	19	11	-1	-3	-3	2	-17	-9	
MAY MNS - MNS	-17	-23	-28	-25	-20	-12	-5	-1	1	-1	1	1	10	7	2	7	6	1	-7	-3	-2	8	-23	-1
JUN MNS - MNS	5	-26	-25	-22	-23	-14	-6	0	1	2	1	4	8	10	14	11	9	6	-1	-1	11	3	8	5
JUL MNS - MNS	-7	-13	-21	-27	-21	-15	-12	-8	-3	2	1	2	-3	-3	4	8	13	10	7	0	-1	-6	-8	-8
AUG MNS - MNS	-4	2	-13	-31	-25	-19	-10	2	10	12	12	16	23	23	18	18	13	-2	-3	-4	13	23	13	
SEP MNS - MNS	-12	-5	-34	-37	-26	-12	-5	2	5	8	11	15	21	19	13	9	1	5	4	4	13	11	26	-7
OCT MNS - MNS	-18	-17	-14	-16	-14	-8	-2	2	4	7	9	10	13	14	8	1	2	1	-4	1	-4	-19	-23	
NOV MNS - MNS	-23	-17	-11	-8	-9	-4	-1	1	3	4	3	7	7	12	13	15	10	0	0	9	8	-2	-10	-16
DEC MNS - MNS	-24	-1	-18	-24	-21	-14	-4	-1	3	3	5	7	8	9	16	19	4	-4	-4	1	-18	-17	-5	-23
MEAN	-15	-17	-21	-22	-20	-13	-7	-2	2	3	4	7	9	11	11	12	7	4	-3	-3	-2	-1	-6	-9

Tromsø. Vertical Intensity.  $V = 50200 +$  Tabular Quantities expressed in Gamma.

Gr. M. T.

Table for July 1934 showing hourly mean values of vertical intensity. Columns include DAY (1-31), hours (1-24), and monthly totals (M, R). Values range from -10 to 145.

Table for August showing hourly mean values of vertical intensity. Columns include DAY (1-31), hours (1-24), and monthly totals (M, R). Values range from -35 to 180.

Table for September showing hourly mean values of vertical intensity. Columns include DAY (1-30), hours (1-24), and monthly totals (M, R). Values range from -105 to 187.

Tromsö.

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

Gr. M. T.

JULY 1934																													
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	PS	NS	AS		
1	32	-45	-37	-33	-47	-28	-38	-23	-17	-13	-13	-15	-5	3	-6	5	-5	0	0	-17	0	-40	-10	-3	0	-15	40	395	435
2	0	-15	-63	-50	-30	-20	-13	2	3	-5	5	3	15	5	10	3	0	0	0	0	-7	0	0	0	-7	41	801	242	
3	0	-3	-7	-10	-5	0	0	0	0	5	-17	-17	-20	88	32	23	63	-90	20	-7	40	57	72	37	12	457	176	533	
4	15	23	15	-75	-30	-6	-8	-8	8	10	13	5	20	8	22	45	11	23	15	13	13	3	5	17	7	284	127	411	
5	-28	-90	-135	-110	-57	-43	-10	-6	8	3	-3	3	15	38	47	23	21	-5	10	-3	-10	-5	-3	-15	171	623	694		
6	-3	-10	-17	-47	-37	-20	-6	-3	3	3	-5	-13	-13	11	12	3	11	-5	-30	-5	5	10	5	-8	-7	63	222	285	
7	-11	-23	-27	-27	-22	-26	-13	-6	-2	-3	3	5	10	3	2	11	5	-3	15	5	3	-5	-5	-11	-5	62	184	248	
8	-8	-5	-8	-10	-15	-16	-13	-3	-5	0	5	12	17	10	9	5	13	12	5	-3	-18	-0	-11	-11	-2	88	134	222	
9	17	-83	-53	-33	-52	-56	-36	-13	0	2	2	10	27	40	34	35	40	27	5	-10	-15	-12	2	-18	-6	241	361	622	
10	-38	-43	-43	-20	-5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	-3	-3	-17	-16	-8	-8	5	196	201	
11	0	0	2	0	0	0	0	0	0	0	0	0	0	0	-6	-9	-2	12	10	18	22	0	-6	-3	2	64	28	92	
12	-11	-20	-23	-13	-10	-8	-11	-10	-12	-13	-8	-3	-8	15	9	18	25	12	2	5	-2	2	2	0	-3	90	152	242	
13	0	0	0	0	0	0	0	0	0	0	0	0	2	0	13	32	18	18	12	0	15	8	10	7	6	153	0	153	0
14	0	0	0	-5	0	0	0	2	3	0	-8	-12	-15	-10	-3	-7	20	25	32	0	-2	-5	-6	4	1	86	73	159	
15	27	120	-60	-180	-172	-88	-58	-18	-14	-5	0	-8	-18	-10	-13	0	0	0	0	0	0	0	0	0	-21	147	644	791	
16	0	10	-15	-108	-37	-30	-28	-18	-17	-10	-3	-7	-15	-9	-3	-7	7	0	-17	-13	-22	0	0	0	-15	10	366	376	
17	0	0	0	0	0	0	0	7	5	5	0	-3	-7	-2	4	6	3	10	3	-40	-57	-100	-71	-48	-12	42	328	370	
18	-30	-20	-15	-10	-5	-8	2	7	-2	-3	-5	-7	-7	7	2	5	13	-3	-7	-5	2	0	0	-4	43	127	170		
19	-20	-12	-7	0	0	0	0	0	0	0	-3	-5	-7	0	-8	3	21	23	-20	6	5	0	0	0	-1	57	83	140	
20	-8	-7	-5	0	-2	-3	0	0	0	3	5	5	-5	-10	-5	0	0	0	0	0	0	0	-18	-15	-3	13	78	91	
21	-13	-30	-15	-7	-7	3	0	0	0	0	0	0	0	0	-8	-7	0	0	0	0	0	-15	-78	-38	-9	0	221	221	
22	-13	-10	-8	0	0	0	0	5	3	5	0	3	2	5	3	10	5	3	3	-5	0	0	0	0	-1	17	36	63	
23	0	0	0	0	0	0	-6	-6	-7	0	5	3	3	0	0	0	0	0	0	0	0	-7	-5	2	-1	13	30	43	
24	0	0	0	0	0	0	0	0	0	-3	0	-3	-5	8	7	55	33	45	35	13	15	-7	-43	-45	4	211	106	317	
25	-33	-20	-13	-10	-7	-6	-3	-6	-5	5	5	-3	-3	0	2	13	23	25	17	7	0	-3	0	0	-1	87	112	209	
26	-13	-40	-35	-30	-35	-18	-18	-8	-7	-5	-10	-6	-5	-2	12	15	30	35	-10	15	10	5	0	2	-9	124	241	365	
27	-8	-15	-20	-7	-7	0	0	0	0	0	0	-13	-12	-6	13	15	10	5	5	-5	-3	-3	-3	-2	61	97	158		
28	-5	-10	-15	-15	-17	-13	-9	-8	-7	-0	-10	-15	-15	-17	0	0	0	0	0	0	0	-27	-18	-38	-10	5	245	260	
29	-28	-15	-7	-25	-27	-38	-26	-13	2	0	5	15	30	30	37	33	48	23	10	-7	-10	-15	-48	-33	-3	231	294	525	
30	-18	-7	0	-5	-17	-38	-80	-10	-27	80	65	95	-75	-327	-189	-62	23	65	50	23	0	0	0	0	-21	416	922	1338	
31	-23	-25	-25	-7	3	2	7	4	5	3	0	20	20	28	32	8	-19	10	27	20	7	-20	-13	0	2	196	142	338	
M	-7	-13	-21	-27	-21	-15	-12	-8	-3	2	1	2	-3	-3	4	8	13	10	7	0	-1	-6	-8	-8	-5	115	221	336	
MPS	3	5	1	0	0	0	0	1	1	4	4	6	5	10	11	14	13	9	4	5	3	3	10	2					
MNS	10	18	21	27	21	15	12	8	4	2	5	4	8	13	6	3	1	3	4	6	5	9	11	8					

AUGUST

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	PS	NS	AS		
1	50	155	18	-103	-50	-22	-25	7	17	19	52	37	67	25	17	13	12	7	13	15	5	-25	-2	3	13	532	227	759	
2	-3	-20	-37	-46	-26	-17	0	5	9	12	32	37	15	40	13	27	24	13	13	3	5	23	-2	5	5	278	153	431	
3	25	-5	-22	-13	-23	-35	-25	-5	5	7	-11	32	62	55	25	25	37	-28	-147	-25	7	55	93	63	7	501	339	840	
4	115	-5	-7	-8	2	-3	3	25	27	25	17	9	22	50	40	23	2	-52	-15	30	-35	113	263	27	768	131	899		
5	245	215	33	-153	-66	-22	-2	13	15	17	19	19	12	30	37	13	22	17	21	23	3	-10	13	-37	20	767	292	1059	
6	-60	-3	-17	-16	-13	0	-2	15	37	27	17	7	15	27	20	21	27	20	8	7	5	5	-2	2	258	80	427		
7	-55	-25	-7	2	2	0	-5	5	12	18	37	37	42																
8																													
9	-15	-5	3	0	-8	0	0	-2	0	0	5	2	2	10	30	35	29	17	15	-35	-20	0	0	3	148	85	233		
10	-15	-33	-45	-43	-48	-55	-30	-3	0	0	-3	0	0	0	0	0	0	0	0	0	0	0	0	-11	0	275	275		
11	-5	-18	-35	-116	-80	-52	-25	-5	-6	9	4	0	0	-3	2	5	14	19	15	7	5	-23	-22	-17	-14	80	407	487	
12	-18	-16	0	0	0	0	0	0	0	0	0	0	0	-3	12	5	24	4	-5	-68	-63	67	255	255	18	602	175	777	
13	-83	-183	-85	-8	-6	0	3	8	12	7	7	7	7	2	-13	22	60	24	19	5	-3	8	-45	-45	-20	-10	184	437	615
14	-13	2	15	9	4	5	5	5	7	7	4	4	2	27	26	55	29	12	10	-3	2	67	-110	-47	5	289	173	472	
15	-18	2	5	4	4	3	6	15	14	4	2	4	0	22	8	3	2	4	3	2	-3	-8	-15	-34	1	107	78	185	
16	-93	-88	-47	-16	-6	3	0	-2	0	2	7	0	19	12	12	23	14	14	10	5	-8	-25	-20	-9	121	325	446		
17	-118	-88	-95	-131	-118	-85	-45	-25	-13	2	9	-11	-11	-8	-3	-4	30	4	-2	-5	-35	-8	-20	-5	-33	45	828	873	
18	-18	-13	-14	-16	-8	-5	-10	0	7	10	14	9	7	2	0	10	19	14	-5	-5	5	32	40	10	4	179	94	273	
19	-23	-5	-7	-11	-58	-3	-3	-18	-11	-13	-3	0	12	17	-40	-36	35	23	20	7	-98	-75	-15	-15	114	468	582		
20	0	0	0	0	0	0	0	0	0	0	7	14	22	25	18	13	22	19	-2	-2	-2	-8	-32	-67	1	145	113	258	
21	-20	-5	-4	-3	-8	-17	-24	-42	-23	12	22	60	54	40	30	18	32	32	10	-40	-20	-12	-12	-34	2	310	284	574	
22	-15	-10	3	0	5	-12	-20	0	7	7	12	32	87	50	-35	35	67	52	16	10	10	12	10	-12	13	413	104	517	
23	10	7	0	0	0	0	0	0	0	0	10	12	10	2	-2	-5	-3	-7	5	-8	5	13	-62	-1	69	87	156		
24	-20	0	0	0	-2	-6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-38	-24	-7	-4	0	97	97		
25	0	0	0	0	0	0	0	0	-3	0	-2	-10	-5	6	12	15	16	-42	-52	-30	-24	-40	-6	5	1	205	257		
26	-60	-55	-37	-18	-13	-2	-4	-8	-8	-13	-18	-8	2	25	12	55	45	1											

Tromsø Vertical Intensity V = 50200 + Tabular Quantities expressed in Gamma.

Gr. M. T.

Table for October 1954 showing hourly mean values for vertical intensity. Columns include Day (1-31), hours (1-24), and monthly totals (M, R).

Table for November showing hourly mean values for vertical intensity. Columns include Day (1-30), hours (1-24), and monthly totals (M, R).

Table for December showing hourly mean values for vertical intensity. Columns include Day (1-31), hours (1-24), and monthly totals (M, R).

Tromsö.

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

Gr. M. T.

OCTOBER 1934  
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	PS	NS	AS			
1	-10	-5	-4	0	-12	5	0	12	3	7	7	15	32	15	0	5	0	0	0	-5	-57	-27	-50	-3	99	174	273			
2	-30	-10	0	-10	2	0	3	7	10	10	17	22	22	47	37	42	27	15	17	-22	-20	-4	-14	-5	7	278	115	593		
3	0	0	0	0	0	0	0	0	0	0	0	8	22	25	12	34	19	7	5	12	15	3	-7	-2	6	163	9	172		
4	0	0	0	0	0	0	0	0	0	0	0	0	2	5	17	39	62	22	45	15	10	15	8	8	-69	10	506	68	374	
5	-42	-28	-5	0	0	0	0	0	0	0	5	2	17	40	35	30	27	17	-18	0	16	-5	0	0	4	189	98	287		
6	0	0	0	0	0	0	0	0	0	0	0	0	0	7	12	15	22	17	17	8	6	8	18	-50	4	138	50	188		
7	-42	-22	-5	-5	-5	-8	-8	-5	0	0	0	-5	-3	-2	17	-13	-40	-3	6	0	-10	-7	0	-7	-25	184	209			
8	0	0	0	0	0	0	0	0	0	0	0	0	7	7	2	0	0	0	0	0	0	0	0	-5	-28	-1	16	33	49	
9	-25	-12	-5	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2	-5	-2	0	51	51	
10	-2	0	0	0	0	0	0	0	0	0	0	-5	-5	-5	-3	-5	-3	0	0	-2	4	-7	-10	-5	-2	0	56	56		
11	0	0	0	0	0	0	0	0	0	-7	0	-3	-8	-2	0	0	0	0	0	-4	-4	-17	-24	-10	-3	0	79	79		
12	0	-10	-42	-120	-57	-22	-10	-8	-5	3	9	5	10	0	2	2	10	27	-19	-34	-19	-30	-67	-16	73	443	516			
13	-87	-62	-40	-32	-52	-52	-17	-5	5	3	10	9	0	5	25	37	32	5	-35	-62	-30	-14	-14	-3	-15	134	502	636		
14	-35	-17	-7	-10	-2	2	0	5	8	10	15	5	0	5	17	20	15	30	12	0	-19	-40	-60	-27	-3	144	207	351		
15	-12	-7	-10	-12	-27	-27	-14	0	0	18	15	12	0	25	27	-160	-150	-80	5	21	230	190	0	-22	1	543	521	1064		
16	0	7	0	0	0	0	0	0	0	5	14	20	37	42	37	44	42	37	22	11	-9	-22	-19	-7	11	318	57	375		
17	-10	-33	-35	-25	-20	-15	-2	0	0	0	0	0	0	0	0	0	0	7	17	-5	-47	-77	3	-10	-11	27	279	306		
18	-15	-15	-33	-60	-25	-10	-5	0	-2	0	0	0	0	0	8	12	7	2	14	-3	-12	0	-5	0	-6	43	175	218		
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	10	3	-17	-7	-7	0	0	33	31	64		
20	0	0	0	0	0	0	0	0	0	0	0	0	7	24	32	32	30	7	-33	-27	3	93	-37	-35	8	228	130	358		
21	-90	-63	-60	-55	-40	-25	-9	-3	-8	0	10	14	17	22	24	17	32	7	4	-32	-77	-112	-90	-40	-24	127	704	831		
22	-17	-17	-37	-60	-60	-30	-9	-10	-2	-2	0	12	17	32	40	74	47	40	-3	8	18	5	-9	-5	1	293	281	574		
23	-7	-15	-30	-7	-3	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-5	-19	-5	-4	5	91	91	96		
24	55	-80	-47	-47	-95	-160	-142	-50	-5	22	22	42	12	-33	-148	-168	-68	-13	-68	-62	-12	-7	-9	3	-44	156	1214	1370		
25	-25	-20	-15	-37	-25	-15	-7	7	20	22	17	4	20	12	62	14	-135	-148	-18	3	75	98	-42	-50	-8	344	540	684		
26	-65	-37	-30	-40	-30	-7	-7	-3	8	10	42	47	40	2	17	17	-78	-23	-6	-12	-77	-30	-22	-20	-13	183	487	670		
27	-5	-5	-10	-10	3	-5	3	14	18	15	24	22	40	54	67	34	17	20	27	21	5	-42	-87	-110	4	374	274	648		
28	-55	-15	-10	-30	-45	-47	-25	-13	-2	0	0	0	0	10	34	37	37	27	20	13	5	-12	-13	-7	-4	16	282	465		
29	0	0	0	0	0	0	0	0	4	2	8	10	12	14	22	12	4	4	7	12	8	3	0	-22	-47	2	122	69	191	
30	-40	-45	-10	0	0	0	0	0	0	0	0	0	8	14	27	47	50	22	4	3	3	-2	-47	-35	0	178	179	357		
31	-7	-3	0	0	-3	-3	0	0	2	5	7	12	10	10	4	7	12	17	7	3	3	-2	-12	-15	2	99	45	144		
M	-18	-17	-14	-16	-17	-14	-8	-2	2	4	7	9	10	13	14	8	1	2	1	-4	1	-4	-19	-23	-4	166	240	395		
MPS	2	0	0	0	0	0	0	2	2	5	7	9	11	14	19	19	16	12	7	4	12	13	1	0						
MNS	20	17	14	18	17	14	8	3	1	0	0	0	1	1	1	5	11	15	10	6	6	11	16	20	23					

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	PS	NS	AS	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10	-3	-7	0	-5	-8	0	15	23	38	
2	-13	-25	-40	-11	0	0	0	0	0	0	0	0	0	0	0	5	5	7	-5	5	12	9	-5	-2	48	94	142	
3	0	0	0	0	0	0	0	0	0	0	0	11	11	13	25	25	2	-5	7	25	-48	-13	-3	2	119	69	188	
4	-3	-2	0	-3	-47	-10	-4	0	0	0	5	5	0	3	3	15	7	5	7	3	-5	-58	-28	-4	58	161	219	
5	-8	-5	2	0	0	0	0	-5	-10	-5	-3	-2	15	13	5	15	12	0	-17	-17	-21	-78	-108	-9	62	276	338	
6	-98	-68	-28	-11	-4	0	0	0	0	0	0	3	3	0	5	15	2	-3	3	0	-5	-11	-8	-8	34	236	270	
7	-5	-5	-5	-21	-42	-37	-24	-30	-18	-7	-7	25	43	35	45	-5	-83	-138	-70	145	115	32	187	182	13	497	1316	
8	-105	-81	-58	-13	-10	8	10	17	22	40	40	60	30	23	35	45	-85	-68	-20	-13	-7	-3	-48	-108	-12	330	617	847
9	-30	-18	-18	-65	-92	-57	-22	17	29	37	15	18	13	3	3	2	7	23	0	-37	-43	-53	-73	-14	182	508	690	
10	-68	-43	-23	-5	-4	3	6	9	5	3	0	0	27	30	22	-5	-15	0	-5	-13	-43	-35	-6	117	259	376		
11	-21	-15	-3	5	6	3	6	7	9	13	13	13	8	18	30	43	40	25	-15	-5	-5	-48	-50	-50	1	239	212	451
12	-48	-23	-13	-8	-2	3	5	7	10	10	13	11	18	23	15	17	9	15	15	-37	-48	-43	-51	-3	174	243	417	
13	-5	0	0	0	0	0	0	0	0	0	0	5	48	45	60	57	27	20	20	62	117	22	17	21	500	5	505	
14	-5	-5	-3	-3	3	6	3	5	5	5	5	7	11	15	23	30	47	57	35	30	23	2	-43	-25	10	312	84	396
15	-23	-13	-5	-3	-7	-4	-2	2	5	5	10	13	25	15	15	27	27	20	7	10	-5	-3	-3	5	191	68	259	
16	0	0	0	0	0	0	0	5	7	5	3	3	15	23	17	17	17	13	3	-15	7	-23	5	148	38	184		
17	-85	-15	-6	-4	-7	-8	0	0	0	0	0	0	0	0	0	0	0	0	-7	3	-8	-5	-18	-6	3	158	161	
18	-8	0	2	-8	-2	18	6	7	0	0	0	0	13	20	20	17	17	5	3	-5	5	5	0	5	138	23	161	
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	-8	-5	-18	0	20	31	51	
20	-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	22	5	5	5	2	0	0	1	44	13	57
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-5	-5	-5	-5	-18	-2	0	46	46	
22	-23	-18	-8	-6	-2	0	0	-3	-3	-3	-2	0	0	0	0	0	0	0	0	-15	-5	-11	-8	-4	0	106	106	
23	-8	0	0	0	0	0	0	0	0	0	0	0	-3	-5	7	-143	-125	-25	7	77	32	-30	-9	123	339	462		
24	-13	-73	-60	-48	-34	-27	-14	-8	5	3	5	35	33	48	5	48	47	25	23	20	7	2	-3	-1	306	285	591	
25	-8	-30	-38	-18	-4	3	0	0	0	0	0	0	3	5	5	2	2	7	10	5	0	-8	-21	-4	4	131	173	
26	-58	-35	-23	-8	0	0	0	0	0	0	0	0	0	0	13	37	40	25	15	13	-3	0	-18	0	143	145	288	
27	-38	-35	-8	-5	-10																							

Resuming Tables.

Diurnal Variation.  
QUIET VALUES.

Tromsø.

Declination. Unit Gamma. + West.

1934	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
JANUARY	-2	-2	-4	-4	-2	-2	-1	1	1	2	3	3	3	3	4	4	4	3	1	-1	-2	-2	-2	-2
FEBRUARY	-2	-1	-1	-1	-1	-1	-1	-1	0	0	1	2	3	4	4	4	3	2	1	0	-1	-1	-1	-1
MARCH	-1	-2	-3	-3	-4	-5	-6	-6	-4	-2	0	3	5	5	5	5	5	4	3	2	0	-1	-1	
APRIL	-6	-8	-11	-13	-14	-14	-14	-11	-6	-1	4	9	12	11	9	6	4	2	2	1	1	-1	-4	-6
MAY	-3	-12	-14	-16	-17	-15	-12	-7	-2	3	8	13	13	11	10	10	10	8	8	8	5	1	-2	-5
JUNE	-9	-14	-17	-19	-21	-19	-17	-14	-11	-4	6	16	19	18	18	16	14	13	11	11	9	6	1	-4
JULY	-6	-11	-14	-16	-16	-16	-16	-14	-11	-6	2	9	14	14	14	12	12	12	11	11	9	6	1	-4
AUGUST	-10	-12	-15	-17	-15	-15	-13	-10	-5	0	5	10	15	15	13	12	12	10	10	10	7	2	-2	-5
SEPTEMBER	-6	-8	-11	-11	-9	-9	-8	-6	-1	4	9	12	12	9	6	4	4	4	2	1	1	-1	-4	-6
OCTOBER	-4	-4	-4	-4	-4	-4	-4	-4	-2	1	4	6	6	6	4	4	3	3	3	1	-1	-2	-4	-4
NOVEMBER	-4	-2	-2	-2	0	0	0	0	1	3	5	5	3	3	3	3	1	1	0	-2	-2	-2	-4	-4
DECEMBER	-2	-2	-2	-1	-1	1	1	1	3	3	4	4	3	3	3	1	1	-1	-2	-2	-4	-4	-4	
MEAN	-5	-7	-8	-9	-9	-8	-8	-6	-3	0	4	8	9	9	8	7	6	5	4	4	2	0	-2	-4

Horizontal Intensity. Unit Gamma.

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

Vertical Intensity. Unit Gamma.

JANUARY	-1	-1	-1	-3	-3	-3	-1	-1	-1	0	0	0	0	2	2	2	2	2	0	0	-1	-1	-3	
FEBRUARY	-3	-3	-3	-3	-1	-1	-1	0	0	0	0	0	2	2	2	2	2	2	0	0	0	-3	-3	-3
MARCH	-3	-3	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-3	
APRIL	2	2	0	-1	-1	0	0	2	2	2	0	-1	-1	-1	-1	-3	-3	-3	-3	-3	-1	0	2	
MAY	-1	1	1	1	1	1	-1	-1	-2	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	
JUNE	-1	1	1	1	1	1	1	-1	-1	-2	-2	-2	-2	-2	-2	-1	1	1	1	1	-1	-1	-1	
JULY	-3	-1	-1	-1	1	2	2	1	-1	-1	-1	0	1	2	1	1	-1	-1	-1	-1	-1	-3	-3	
AUGUST	-1	-1	1	2	2	1	1	-3	-3	-3	-3	-3	-1	-1	1	2	2	1	-1	-1	-1	-1	1	
SEPTEMBER	0	0	2	2	0	-2	-2	0	2	2	2	0	0	0	0	-2	-2	-3	-3	-3	-2	0	0	
OCTOBER	-2	-2	-2	-2	-2	-2	0	1	3	3	1	1	1	1	1	1	1	1	0	0	0	0	-2	
NOVEMBER	-1	-1	-1	-1	-2	-2	-2	-1	1	1	1	3	3	1	1	-1	-1	1	1	1	-1	-1	-1	
DECEMBER	-1	-1	-1	0	0	-1	-1	-1	0	2	2	2	2	0	-1	-1	-1	0	0	0	0	-1	-1	
MEAN	-1	-1	0	-1	0	-1	0	0	0	1	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	

Monthly Means.

DECLINATION.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
DIRECT VALUES. $D = 3^{\circ}W + \dots$	30.9	29.7	27.3	27.9	27.6	27.0	26.7	25.5	22.8	22.8	22.2	20.7	25.9
QUIET VALUES. $D_0 = 3^{\circ}W + \dots$	31.0	30.5	28.5	29.0	27.5	26.0	26.0	25.5	24.0	23.0	23.0	22.0	26.3
RANGE	45	58	86	47	48	43	31	62	84	41	33	49	52.3
QUIET RANGE	8	6	11	26	30	40	30	32	23	10	9	8	19.4
STORMINESS, MEAN (UNIT $\gamma$ )	-2	-2	-5	-1	0	1	3	-1	-4	-2	-3	-5	-1.7
DIURNAL SUM PS (UNIT $\gamma$ )	62	119	142	107	128	129	137	144	109	86	45	51	105
NS	116	175	262	135	122	112	70	165	212	139	109	165	148
AS	178	294	404	242	250	241	207	509	320	225	154	216	253
HORIZONTAL INTENSITY.													
DIRECT VALUES. $H = 11400 + \dots$	63	53	32	45	46	48	58	36	21	30	34	31	41.4
QUIET VALUES. $H_0 = 11400 + \dots$	67	63	61	60	59	55	54	50	42	39	40	38	52.3
RANGE	262	392	565	306	286	281	234	456	504	273	232	345	345
QUIET RANGE	3	7	10	20	25	30	30	30	22	13	7	5	17
STORMINESS, MEAN (UNIT $\gamma$ )	-4	-10	-30	-15	-12	-6	3	-14	-21	-9	-6	-7	-10.9
DIURNAL SUM PS (UNIT $\gamma$ )	151	229	259	178	198	263	331	337	328	184	146	213	235
NS	255	468	967	545	488	419	254	661	840	407	287	375	497
AS	406	697	1226	723	685	683	585	998	1170	591	433	588	732
VERTICAL INTENSITY.													
DIRECT VALUES. $V = 50200 + \dots$	13	10	18	19	19	23	21	28	31	28	33	28	22.6
QUIET VALUES. $V_0 = 50200 + \dots$	18	18	21	23	24	24	26	26	30	32	34	33	25.7
RANGE	27	36	57	30	32	26	19	40	50	26	24	35	33
QUIET RANGE	5	5	4	5	3	3	5	5	5	5	5	3	5
STORMINESS, MEAN (UNIT $\gamma$ )	-5	-12	-3	-2	-5	-1	-5	4	1	-4	0	-4	-3.0
DIURNAL SUM PS (UNIT $\gamma$ )	113	102	304	204	159	182	115	347	334	156	158	174	196
NS	225	388	368	260	283	201	221	245	304	240	165	277	265
AS	338	491	672	465	442	383	336	592	638	395	323	451	460



Resuming Tables.

Storminess.

Tromsø.

Declination. Unit Gamma. + West.

1934	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	0	1	1	1	1	3	3	2	2	2	4	5	6	7	4	3	4	3	5	3	2	1	1	0	
FEB MPS	1	0	0	0	0	1	2	3	2	5	7	9	11	10	8	7	6	14	9	8	7	4	2	0	
MAR MPS	0	0	0	0	0	2	4	4	4	9	13	16	16	19	13	9	7	7	7	7	3	1	0	1	
APR MPS	1	1	2	1	2	2	4	2	2	5	9	11	10	11	9	8	8	7	5	4	3	1	1	0	
MAY MPS	1	1	1	1	2	2	2	3	4	6	8	9	9	8	7	10	9	12	12	9	8	4	1	0	
JUN MPS	1	1	1	1	2	1	3	3	5	6	7	7	6	6	6	9	12	12	18	12	6	2	1	1	
JUL MPS	1	1	1	1	1	2	3	3	4	6	7	11	12	12	11	13	8	10	11	9	6	3	2	2	
AUG MPS	2	2	2	3	2	6	6	7	6	8	9	12	10	10	10	9	6	7	8	7	5	2	2	2	
SEP MPS	1	0	0	0	0	4	5	3	3	5	5	6	8	9	10	11	10	10	8	10	1	0	0	1	
OCT MPS	0	0	0	0	1	3	4	2	3	3	5	6	8	8	9	7	6	9	6	2	1	0	0	0	
NOV MPS	0	0	0	1	1	1	0	1	1	1	2	4	5	5	5	4	3	2	2	4	1	0	0	1	
DEC MPS	1	0	0	0	1	3	3	3	1	1	1	2	3	3	3	6	5	3	3	3	2	1	1	2	
MEAN	1	1	1	1	1	3	3	3	3	5	6	8	9	9	8	8	7	8	8	7	4	2	1	1	
JAN MNS	13	8	3	4	2	1	0	1	2	0	0	0	0	0	0	1	2	9	5	7	9	12	15	21	
FEB MNS	19	22	21	10	6	3	1	1	1	0	0	0	0	0	1	3	2	3	3	4	8	5	15	21	24
MAR MNS	38	29	26	17	9	3	1	1	1	0	0	0	0	0	1	1	3	4	10	8	23	31	22	33	
APR MNS	21	12	7	6	3	2	1	2	1	0	0	0	0	0	0	0	0	2	4	4	11	19	16	22	
MAY MNS	20	16	14	6	2	2	3	2	1	0	0	0	2	1	1	1	2	1	0	0	2	6	18	21	
JUN MNS	21	16	16	13	6	3	2	1	0	0	0	0	0	0	1	0	0	0	0	0	2	6	10	15	
JUL MNS	4	16	12	7	7	4	1	1	1	1	1	1	0	0	1	1	0	0	0	1	3	3	4	4	
AUG MNS	23	23	19	8	4	2	1	2	2	1	1	1	1	1	2	1	0	1	3	5	18	16	31	31	
SEP MNS	32	34	25	11	6	3	1	0	1	0	1	2	1	2	1	2	1	2	3	14	14	29	27	27	
OCT MNS	17	10	8	5	2	1	0	1	0	0	1	1	0	1	2	1	2	3	6	6	11	21	18	18	
NOV MNS	8	7	5	4	3	2	2	2	1	2	1	1	0	0	1	1	6	3	3	3	13	12	15	14	
DEC MNS	18	22	17	11	6	3	2	0	1	1	1	1	1	2	1	2	4	8	8	6	10	10	14	14	
MEAN	20	18	14	9	5	3	1	1	1	0	1	1	1	1	1	1	2	3	4	4	9	14	16	20	
JAN MPS - MNS	-13	-7	-2	-3	-1	2	3	1	0	1	3	5	6	6	4	3	2	-6	0	-4	7	-11	-14	-21	
FEB MPS - MNS	-18	-21	-21	-10	-6	-2	1	2	1	4	7	9	11	10	5	5	3	11	5	0	2	-12	-20	-24	
MAR MPS - MNS	-38	-29	-26	-17	-9	-1	3	2	4	9	13	16	16	19	12	8	4	3	-5	-1	-20	-30	-22	-32	
APR MPS - MNS	-20	-12	-5	-5	-2	0	2	1	1	5	8	11	10	11	9	7	7	5	1	0	-8	-17	-16	-22	
MAY MPS - MNS	-20	-16	-13	-6	-1	-1	-1	1	2	6	8	9	8	6	6	9	7	11	12	9	6	-2	-17	-20	
JUN MPS - MNS	-20	-14	-15	-12	-4	-2	1	1	5	6	7	7	6	6	5	9	12	12	18	12	4	-4	-9	-13	
JUL MPS - MNS	-3	-15	-11	-6	-6	-2	2	2	5	7	10	11	12	11	12	7	9	10	9	5	0	-2	-2	-2	
AUG MPS - MNS	-21	-21	-17	-5	-2	4	5	5	5	8	9	11	9	9	9	7	4	6	6	5	0	-15	-14	-29	
SEP MPS - MNS	-32	-34	-25	-11	-6	1	4	2	3	4	4	5	6	6	8	10	8	9	6	7	-12	-14	-29	-27	
OCT MPS - MNS	-16	-10	-7	-5	-1	2	4	2	2	4	6	7	7	7	7	4	6	0	-7	-11	-21	-18	-18		
NOV MPS - MNS	-8	-7	-5	-3	-3	-1	-1	-1	0	-1	1	3	5	4	2	-3	-1	0	1	-11	-11	-15	-13	-13	
DEC MPS - MNS	-18	-21	-17	-11	-6	0	1	3	0	0	1	1	2	1	2	4	2	-5	-5	-3	-8	-9	-14	-12	
MEAN	-19	-17	-14	-8	-4	0	2	2	2	4	6	7	8	8	7	7	5	5	4	2	-4	-12	-16	-19	

Horizontal Intensity. Unit Gamma.

1934	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	0	0	1	1	4	6	4	3	2	1	1	3	3	5	9	8	18	28	2	15	10	3	2	0
FEB MPS	2	1	0	1	3	3	4	3	3	2	3	3	7	16	25	23	26	34	31	19	11	5	4	2
MAR MPS	1	1	2	3	1	2	3	3	2	5	7	12	13	27	28	39	36	30	23	14	1	1	1	1
APR MPS	1	1	1	3	4	3	2	2	1	1	2	4	7	20	23	24	31	24	14	6	2	0	0	0
MAY MPS	0	1	1	2	1	1	1	2	2	3	3	10	19	19	30	24	24	28	17	8	3	0	0	0
JUN MPS	1	1	3	4	3	2	5	3	4	6	7	9	10	15	24	30	44	43	29	11	6	2	1	0
JUL MPS	0	2	3	4	4	6	9	6	4	6	5	9	22	30	39	42	41	36	32	19	9	3	1	2
AUG MPS	0	1	2	2	3	2	4	6	5	8	17	23	25	38	47	51	44	30	17	11	6	3	2	0
SEP MPS	1	1	0	1	3	4	3	3	6	8	14	26	37	34	49	51	38	24	16	5	2	0	1	2
OCT MPS	1	0	0	0	2	2	2	1	2	3	4	5	13	24	24	28	25	22	13	5	2	0	0	2
NOV MPS	0	1	1	1	2	4	2	2	2	2	2	7	8	10	14	17	14	21	20	10	4	1	0	0
DEC MPS	2	0	0	0	1	3	3	7	2	3	3	4	11	19	12	27	24	25	24	17	10	7	4	4
MEAN	1	1	1	2	3	3	4	3	3	4	6	10	15	21	27	30	31	29	20	12	7	2	1	1
JAN MNS	42	19	12	3	3	2	1	1	1	2	1	0	0	0	0	0	9	23	8	20	26	46	54	54
FEB MNS	51	46	37	31	17	10	4	6	1	2	3	2	0	0	1	1	1	2	6	25	26	66	77	54
MAR MNS	139	95	62	26	21	7	4	8	7	6	3	2	3	1	0	0	0	1	17	37	67	172	134	142
APR MNS	79	46	20	12	8	7	7	6	9	11	8	6	4	3	2	1	1	1	16	35	42	67	78	77
MAY MNS	74	49	35	18	8	11	10	7	7	8	9	6	5	3	1	0	1	1	8	8	18	45	71	64
JUN MNS	71	44	36	35	20	6	2	2	4	3	2	1	1	0	0	1	0	0	2	12	25	35	58	61

Tromsø.

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

Gr. M. T.

APRIL 1954

HOURLY MEAN VALUES

Table for April 1954 showing vertical intensity and storminess data for each day of the month. Columns include Day, 24 hours of intensity/storminess values, and summary statistics (M, PS, NS, AS).

MAY

Table for May 1954 showing vertical intensity and storminess data for each day of the month. Columns include Day, 24 hours of intensity/storminess values, and summary statistics (M, PS, NS, AS).

JUNE

Table for June 1954 showing vertical intensity and storminess data for each day of the month. Columns include Day, 24 hours of intensity/storminess values, and summary statistics (M, PS, NS, AS).

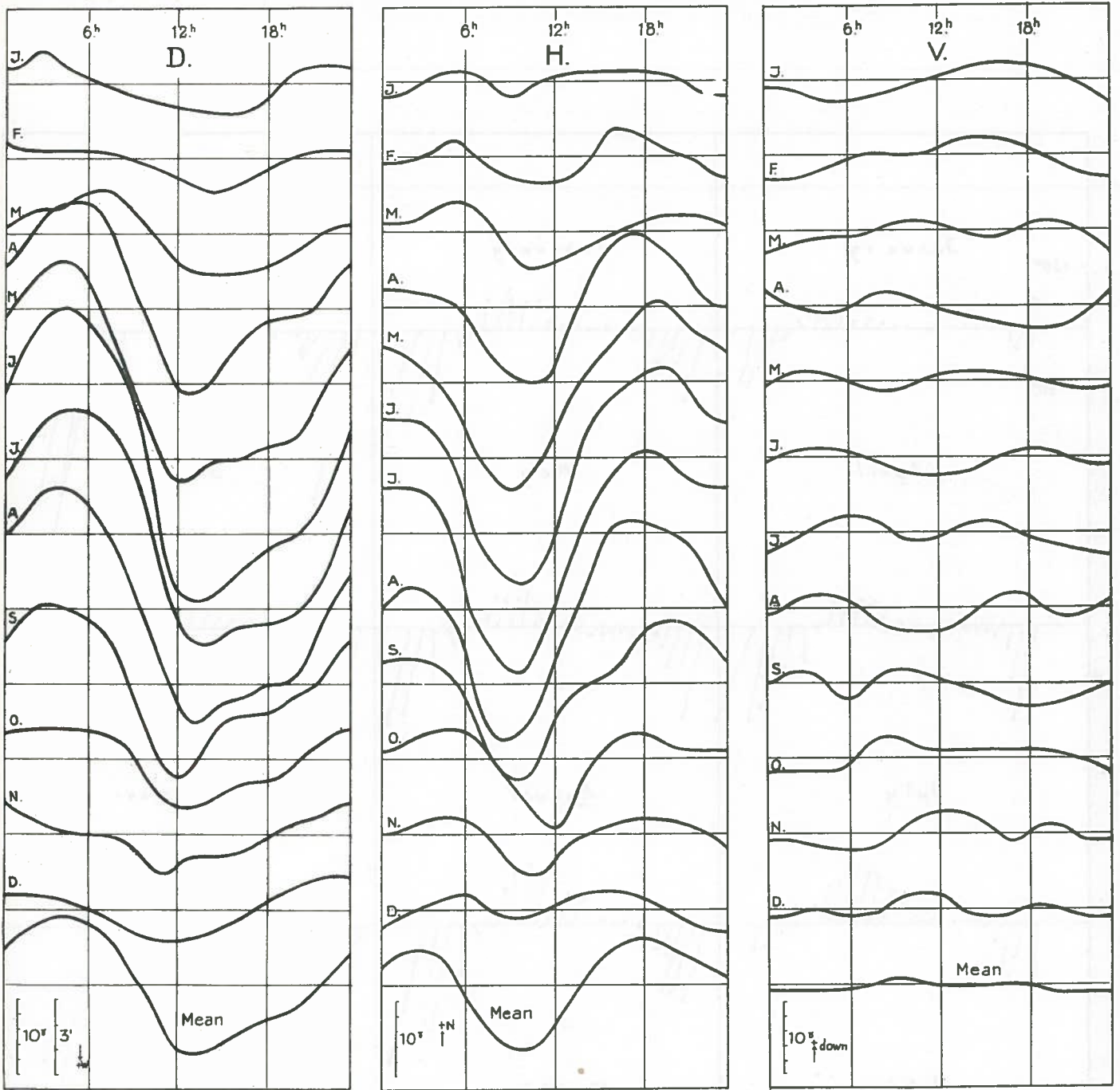


Fig. 1. The quiet Diurnal Variation, smoothed Values.

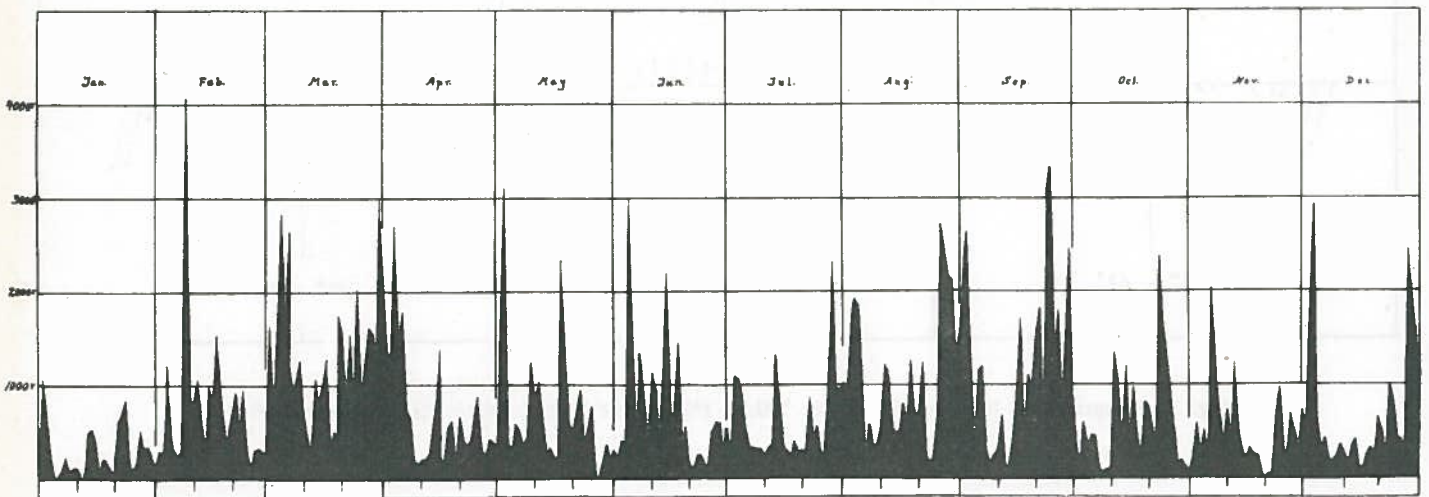


Fig. 2. The Diurnal Sum of the Absolute Storminess of H.

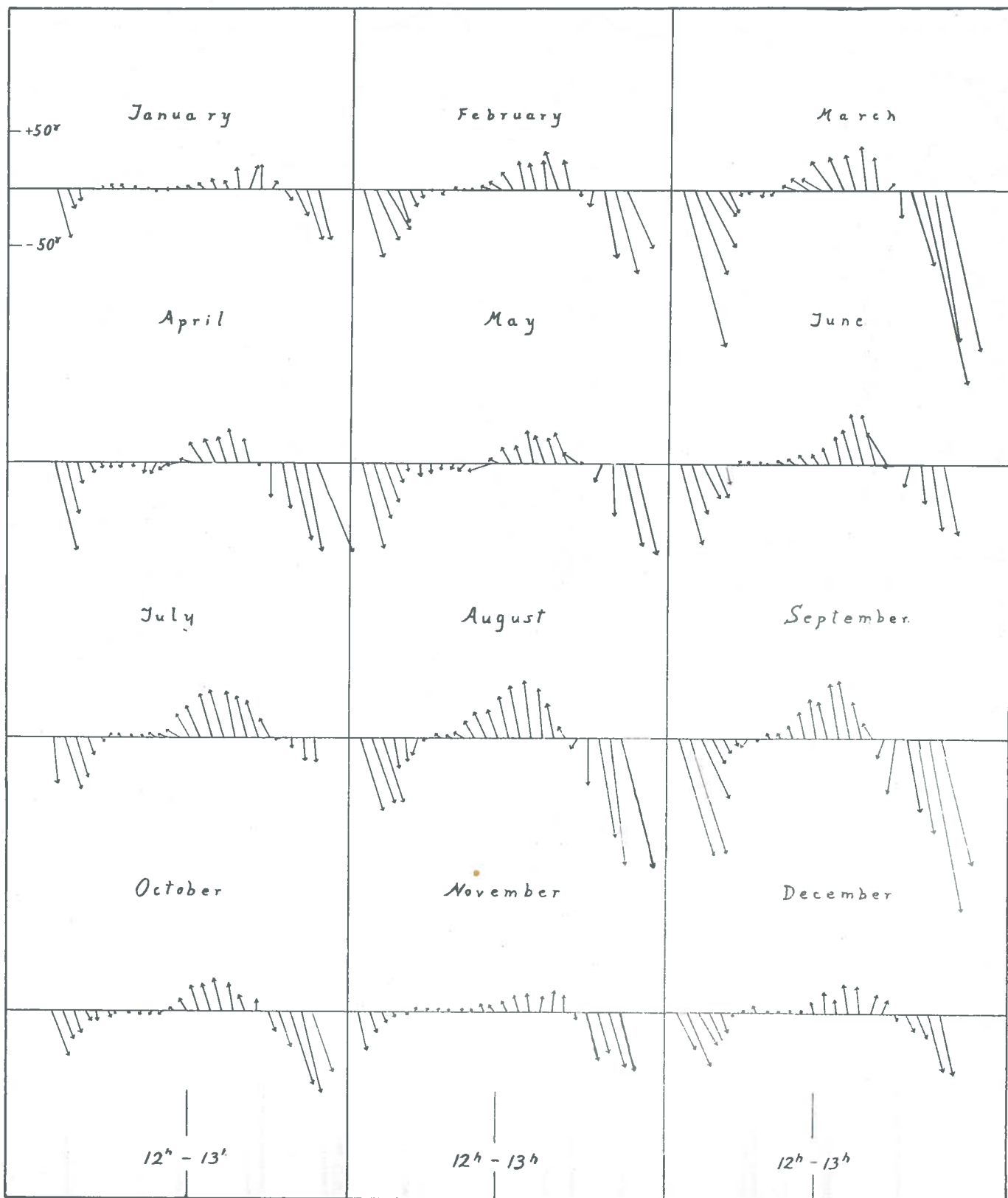


Fig. 3. Diagrams of the Monthly Mean Values (M) of the Storminess in the Horizontal Plane.

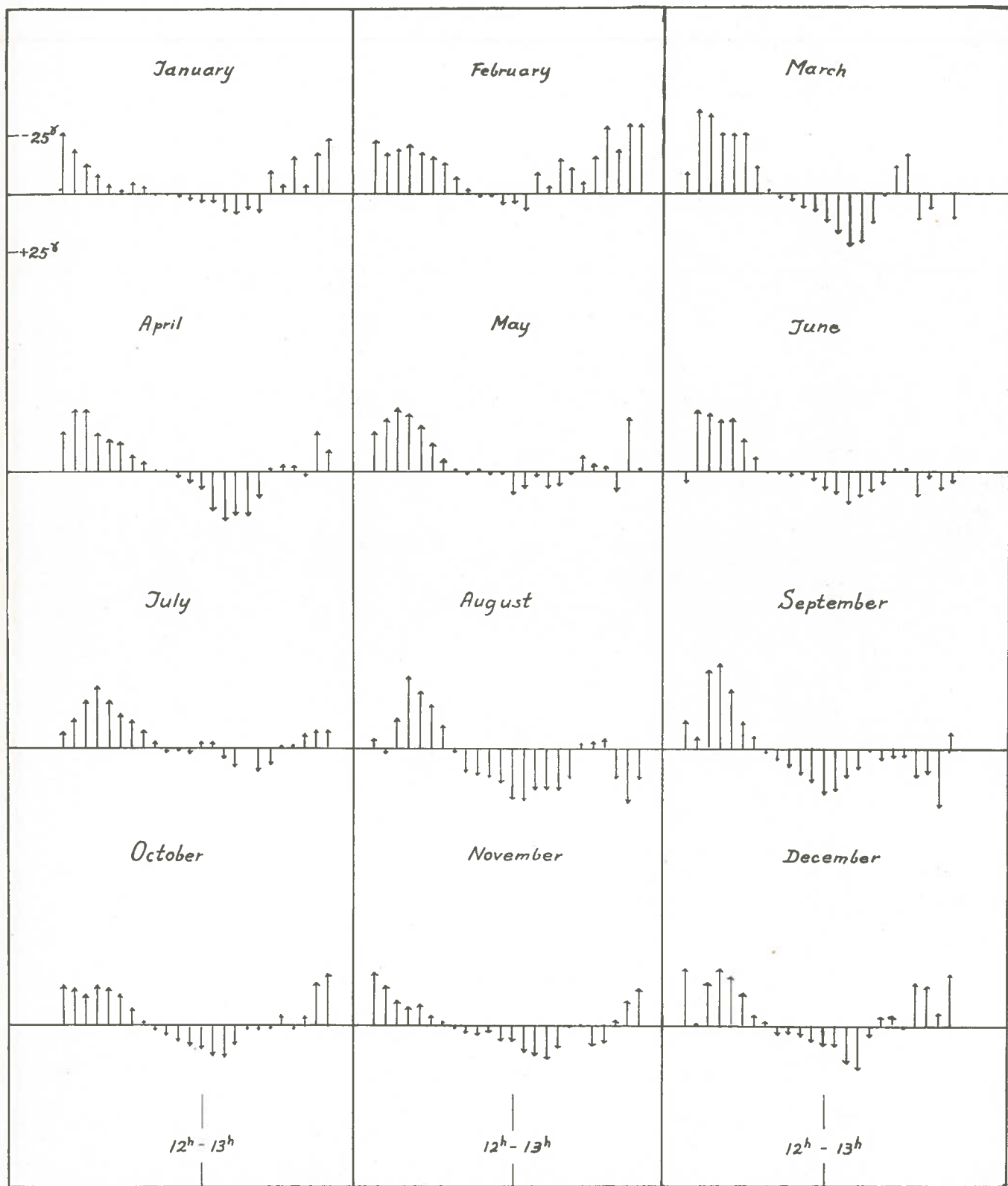


Fig. 4. Diagrams of the Monthly Mean Values (M) of the Storminess of the Vertical Intensity.



