

Veröffentlichungen des Preußischen Meteorologischen Instituts

Herausgegeben durch dessen Direktor

H. von Ficker

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Nr. 389

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**Ergebnisse**

der

**Magnetischen Beobachtungen  
in Seddin**

im Jahre 1930

Von

**A. Nippoldt**

Mit 1 Kurventafel und 10 losen Kurvenblättern



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Berlin 1932

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Zi. 14  
Bibl

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Vorrede

Verlag von Julius Springer

in Berlin

1890

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Magnetischen Beobachtungen

in Sibirien

im Jahre 1889

A. Nipkow

Verlag von Julius Springer



Berlin 1890

Verlag von Julius Springer

in Berlin

## Einleitung.

Die hier für 1930 gebrachten Ergebnisse beruhen auf Beobachtungen, die ausschließlich in dem Filialobservatorium in Seddin angestellt wurden.

Da im Laufe des Jahres der Observator Dr. Boek (Bk) mehr und mehr mit den Installationsarbeiten im neuen „Adolf Schmidt-Observatorium für Erdmagnetismus“ in Niemeck zu tun hatte und schließlich dorthin übersiedelte, lag die Anstellung der absoluten Messungen in Seddin fast ganz in den Händen von Dr. Fanselau (Fa), der deshalb in Folgendem auch über ihre Ergebnisse berichtet. Die Verarbeitung der Registrierungen geschah in Potsdam selbst. Die alten Instrumente in Seddin betreute, wie seither, Professor Dr. Venske (Ve).

Am 23. Juli 1930 wurde das neue Observatorium in Niemeck unter Anteilnahme vieler deutscher und österreichischer Fachleute und unter Beteiligung aller an seiner Errichtung mitwirkenden Reichs-, Landes- und städtischen Behörden feierlich eingeweiht. Der Tag war zugleich der 70. Geburtstag des vorigen Leiters des Magnetischen Observatoriums, Herrn Geheimrats Professor Dr. Adolf Schmidt und wurde durch seine Gegenwart ausgezeichnet.

Die Tätigkeit in Niemeck bestand in der Hauptsache im Ausbau der Installationen für Gas, Wasser, Elektrizität, Heizung usw., in der Festlegung der Störungsfreiheit der Hauptpfeiler und der Aufstellung eines Probensystems von Variometern. Seine Registrierungen ergaben, daß Niemeck vollkommen frei ist von dem störenden Einfluß vagabundierender Starkströme. Außerdem wurde der 4-Walzen-Registrierapparat der Askania-Werke-Friedenau eingebaut und justiert.

Am 1. April wurden der Hilfsrechner Bredée und der Arbeiter Brauer in Niemeck angestellt und bezogen bald darauf dorten ihre Wohnungen.

In Seddin sind keine Änderungen eingetreten; es wird vermutlich im Jahre 1932 seine Messungen einstellen, die dann ganz nach Niemeck übersiedeln werden.

Die Form des tabellarischen Teils der vorliegenden Ergebnisse lehnt sich streng an die seitherige an. Neu aufgenommen ist eine Tabelle der neuen Aktivitätszahlen; auf Vorschlag von Dr. Crichton-Mitchell in Verehrung von Adolf Schmidt durch den Buchstaben S bezeichnet. Näheres über diese, auf der Innsbrucker Tagung 1931 der Internationalen Kommission für Erdmagnetismus und Luftpotelektrizität eingeführten Zahlen siehe unter dem Abschnitt „Ergebnisse“.

Die seit 1917 nicht mehr abgedruckten Tabellen der Stundenmittel für die einzelnen Tage werden handschriftlich wie seither weitergeführt und stehen Fachgenossen im Observatorium zur Verfügung. Nach besonderer Verabredung können auch Abschriften davon geliefert werden. Weitere Abzüge der dem Heft beigegebenen, von Professor Dr. Venske überwachten Störungskurven (Lfd. Nr. 253—262) werden auf Wunsch übermittelt. Sie werden an Hand der Originalkurven der Seddiner Registrierungen mit Hilfe des Pantographen von Ad. Schmidt-Toepler hergestellt, Beschreibung: R. Luyken, Zeitschrift für Instrumentenkunde Band 29, Jahrgang 1909, S. 1 ff.

## Beobachtungen.

### Arbeiten und Beobachtungen am neuen System in Seddin und Absolute Messungen.

Von G. Fanselau.

Die absoluten Messungen der Deklination, Horizontalintensität und Inklination fanden auch in diesem Jahre unverändert in der absoluten Hütte in Seddin statt. In instrumenteller Hinsicht trat nur eine Änderung bei den Messungen der Inklination ein, wo Anfang 1930 der Erdinduktor Schulze 1, der ja lange Jahre das Potsdamer Standardinstrument gewesen war, in Seddin an Stelle des bisher dort benutzten Reiseinduktors Schulze 65 wieder in Betrieb genommen wurde, nachdem er vorher überholt worden war. Zum Anschluß der nun neu beginnenden Meßreihe an die alte wurde mehrmals mit beiden Instrumenten gleichzeitig gemessen. Dabei ergab sich:

|                    |         |    | $\Delta$ (65—1) | Mittel        |
|--------------------|---------|----|-----------------|---------------|
| 1930, Februar, 18: | Schulze | 1  | 66° 50'.00      |               |
|                    | »       | 65 | 66° 51'.24      | 1'.24         |
|                    | »       | 1  | 66° 49'.44      | 1'.80         |
|                    |         |    |                 | 1'.43 ± 0'.19 |
| März, 6:           | »       | 65 | 66° 51'.62      |               |
|                    | »       | 1  | 66° 50'.38      | 1'.24         |

Als nunmehrige endgültige Korrektur wurde für Schulze I: + 1'.40 angenommen<sup>1)</sup>. Die absoluten Messungen wurden auf die D-H-Registrierung des Südraums bezogen, nur die Variationen von Z (I-Messungen) wurden dem X-Y-Z-System im Nordraum entnommen. Die Skalenwerte des D-H-Systems wurden durch Anschluß an das System im Nordraum gewonnen. Es wurden im Jahre 1930 zweimal solche Bestimmungen vorgenommen, und zwar im Anfang des Jahres (Januar—Februar) und am Ende (September—Dezember). Dabei fand sich im

|                         |                            | E            | M            | n  |
|-------------------------|----------------------------|--------------|--------------|----|
| Januar—Februar 1930     | D: $\varepsilon = -0'.589$ | $\pm 0'.029$ | $\pm 0'.007$ | 17 |
|                         | H: $\varepsilon' = +2'.33$ | $\pm 0'.11$  | $\pm 0'.03$  | 14 |
| September—Dezember 1930 | D: $\varepsilon = -0'.593$ | $\pm 0'.017$ | $\pm 0'.005$ | 13 |
|                         | H: $\varepsilon' = +2'.30$ | $\pm 0'.17$  | $\pm 0'.04$  | 17 |

mit E als dem Fehler der Einzelbestimmung, M dem des Mittels und n der Anzahl der Einzelbestimmungen. Die Temperaturregistrierung am H-Variometer wurde wieder täglich zweimal mit den Augenablesungen am Thermometer verglichen. Sie zeigte dabei, auch nach Verstellungen, eine ausgezeichnete Konstanz. Der Umrechnungsfaktor von Millimetern der Temperaturregistrierung in Grade Celsius von 0'.113 wurde unverändert beibehalten, da selbst Schwankungen in der Registrierung von 50 mm und mehr in den Vergleichen keine Änderung hervorriefen. Dergleichen blieb auch der Temperaturkoeffizient des H-Variometers 1'.54 für einen Millimeter der Temperaturregistrierung erhalten. Die Art der Beobachtungen sowie der Reduktionen sind genau die gleichen geblieben, wie im Vorjahre. Die einzelnen Reduktionsfaktoren weisen gegenüber dem Vorjahr nur ganz geringfügige Änderungen auf, sodaß hier auf die Werte im Jahrbuch 1929 verwiesen werden kann.

**Deklination.** Im Laufe des Jahres wurden im Monat durchschnittlich zwei Messungen ausgeführt (Tab. I). Während sich zu Anfang und Ende des Jahres gut konstante Basiswerte des D-Variometers ergeben, zeigen sich in der Mitte des Jahres während der warmen Jahreszeit — allerdings mit einer kleinen Phasenverschiebung: Juni—September — größere Sprünge in den absoluten Messungen verbunden mit einem deutlichen Anstieg des Basis-

Tabelle I. Absolute Messungen der westlichen Deklination.  
Bezogen auf die Hilfsbasis der D-Registrierung  $n=80$ .

| 1930<br>Tag | Weltzeit | Mire | Starker<br>Magnet<br>(M <sub>10</sub> ) | Schwacher<br>Magnet<br>(M <sub>9</sub> ) | Torsions-<br>korrektur | Magnet.<br>Meridian | Astronom.<br>Meridian | D <sub>80</sub> | Beob.               |    |
|-------------|----------|------|---|--|------------------------|---------------------|-----------------------|-----------------|---------------------|----|
| Januar      | 7.       | 11.5 | 162 41.60                               | 22 48.49                                 | 22 46.14               | 2.35                | 22 50.84              | 28 30.50        | 5 39.66             | Fa |
| »           | 21.      | 12.7 | 41.61                                   | 48.40                                    | 46.01                  | 2.39                | 50.79                 | 30.51           | 39.72               | Fa |
| Februar     | 5.       | 10.6 | 41.56                                   | 48.72                                    | 46.56                  | 2.16                | 50.88                 | 30.46           | 39.58               | Fa |
| März        | 6.       | 14.2 | 41.55                                   | 48.58                                    | 46.33                  | 2.25                | 50.83                 | 30.45           | 39.62               | Fa |
| »           | 11.      | 10.4 | 41.58                                   | 48.62                                    | 46.57                  | 2.05                | 50.67                 | 30.48           | 39.81               | Fa |
| April       | 16.      | 10.9 | 41.56                                   | 48.70                                    | 46.67                  | 2.03                | 50.73                 | 30.46           | 39.73               | Fa |
| »           | 26.      | 12.1 | 41.54                                   | 48.68                                    | 46.70                  | 1.98                | 50.66                 | 30.44           | 39.78               | Fa |
| Mai         | 9.       | 11.8 | 41.53                                   | 48.90                                    | 47.02                  | 1.88                | 50.78                 | 30.43           | 39.65 <sup>1)</sup> | Fa |
| »           | 20.      | 10.2 | 41.54                                   | 48.96                                    | 47.02                  | 1.94                | 50.90                 | 30.44           | 39.54               | Fa |
| »           | 27.      | 9.6  | 41.54                                   | 48.95                                    | 47.00                  | 1.95                | 50.90                 | 30.44           | 39.54               | Fa |
| Juni        | 9.       | 15.7 | 41.54                                   | 48.87                                    | 47.11                  | 1.76                | 50.63                 | 30.44           | 39.81               | Fa |
| »           | 23.      | 13.6 | 41.58                                   | 48.75                                    | 47.13                  | 1.62                | 50.37                 | 30.48           | 40.11               | Fa |
| Juli        | 3.       | 9.8  | 41.54                                   | 49.26                                    | 47.90                  | 1.36                | 50.62                 | 30.44           | 39.82               | Fa |
| »           | 10.      | 10.1 | 41.56                                   | 49.17                                    | 47.88                  | 1.29                | 50.46                 | 30.46           | 40.00               | Fa |
| August      | 18.      | 9.5  | 41.56                                   | 49.10                                    | 48.00                  | 1.10                | 50.20                 | 30.46           | 40.26               | Fa |
| »           | 1.       | 9.2  | 41.56                                   | 49.40                                    | 48.36                  | 1.04                | 50.44                 | 30.46           | 40.02               | Fa |
| »           | 14.      | 9.9  | 41.50                                   | 49.37                                    | 48.56                  | 0.81                | 50.18                 | 30.40           | 40.22               | Fa |
| »           | 29.      | 9.6  | 41.53                                   | 49.59                                    | 48.82                  | 0.77                | 50.36                 | 30.43           | 40.07               | Fa |
| September   | 10.      | 11.4 | 156 30.64                               | 16 38.49                                 | 16 37.72               | 0.77                | 16 39.26              | 22 19.54        | 40.28 <sup>2)</sup> | Fa |
| »           | 29.      | 12.3 | 30.64                                   | 38.96                                    | 38.29                  | 0.67                | 39.63                 | 19.54           | 39.91               | Fa |
| Oktober     | 9.       | 10.3 | 30.66                                   | 39.20                                    | 38.50                  | 0.70                | 39.90                 | 19.56           | 39.66               | Fa |
| »           | 14.      | 12.7 | 30.72                                   | 38.99                                    | 38.20                  | 0.79                | 39.78                 | 19.62           | 39.84               | Fa |
| November    | 20.      | 12.6 | 30.71                                   | 39.12                                    | 38.42                  | 0.70                | 39.82                 | 19.61           | 39.79               | Fa |
| »           | 27.      | 10.3 | 30.69                                   | 39.06                                    | 38.39                  | 0.67                | 39.73                 | 19.59           | 39.86               | Fa |
| Dezember    | 15.      | 12.4 | 30.69                                   | 39.11                                    | 38.54                  | 0.57                | 39.68                 | 19.59           | 39.91               | Fa |

1) Vor der Messung Fernrohr neu justiert.

2) Teilkreis gesäubert und dabei verstellt.

wertes. Dies verrät zweifellos einen thermischen Einfluß wahrscheinlich der Torsion des D-Variometers. Zur Kontrolle des Torsionsfaktors des Fadens im Theodoliten wurde am 30. Juli 30 eine ausführliche Torsionsbestimmung mit beiden Magneten gemacht. Sie ergab bei Torsion um 360° für M<sub>9</sub>: 5° 37'.42, für M<sub>10</sub>: 2° 49'.04. Hieraus folgt für den Torsionsfaktor: 1.0038, so daß der runde Werte von 1.00 auch noch in diesem Jahre beibehalten werden konnte. Die Distanz der Okularfäden im Fernrohr des Theodoliten war bei M<sub>10</sub>: 13'.45, bei M<sub>9</sub>: 13'.54; die doppelte Kollimation der Magnetpiegel betrug bei M<sub>10</sub>: 21'.09, bei M<sub>9</sub>: 25'.91.

1) Dieser Wert ist in Übereinstimmung mit Vergleichen zwischen Schulze I und mehreren anderen neuen Nummern der Schulze'schen Werkstätte.

**Horizontalintensität.** Es wurde ausschließlich mit Magnet 2 beobachtet, und zwar durchschnittlich alle 12 Tage (Tab. II). Zur Bestimmung des Moments von Magnet 1 wurde außerdem noch eine Messung mit

Tabelle II. Absolute Messungen der Horizontalintensität mit Magnet 2.  
Hilfsbasenänderungen und Sprünge s. Fußnote.

| 1930<br>Tag | Weltzeit | Lage | Reduzierter<br>Ablenkungs-<br>winkel | Reduzierte<br>Schwingungs-<br>dauer | Moment                   | Mittel                   | Horizontal-<br>intensität | Mittel                  | Beob. |
|-------------|----------|------|--------------------------------------|-------------------------------------|--------------------------|--------------------------|---------------------------|-------------------------|-------|
| Januar      | 7.       | h    |                                      |                                     | $\Gamma$ cm <sup>3</sup> | $\Gamma$ cm <sup>3</sup> | $\Gamma$ $\gamma$         | $\Gamma$ $\gamma$       |       |
|             | 9.1      | Bo   | 19 49.49                             | 4.73260                             | 830.81                   | 830.85                   | 0.18419.5                 | 0.18421.5               | Fa    |
|             |          | u    | 49.35                                | 4.73183                             | 89                       |                          | 423.5                     |                         |       |
| »           | 21.      | Bo   | 19 49.67                             | 4.73204                             | 830.96                   | 830.96                   | 0.18420.3                 | 0.18421.4               | Fa    |
|             |          | u    | 49.49                                | 4.73180                             | 95                       |                          | 422.6                     |                         |       |
| »           | 25.      | Bo   | 19 49.63                             | 4.73138                             | 831.07                   | 830.92                   | 0.18423.2                 | 0.18421.4               | Fa    |
|             |          | u    | 49.41                                | 4.73270                             | 0.76                     |                          | 419.7                     |                         |       |
| Februar     | 1.       | Bo   | 19 49.74                             | 4.73199                             | 831.00                   | 831.00                   | 0.18420.0                 | 0.18418.5               | Fa    |
|             |          | u    | 49.95                                | 4.73237                             | 00                       |                          | 417.0                     |                         |       |
| »           | 24.      | Bo   | 19 49.85                             | 4.73222                             | 830.99                   | 831.05                   | 0.18418.7                 | 0.18417.7               | Fa    |
|             |          | u    | 50.13                                | 4.73210                             | 1.11                     |                          | 416.7                     |                         |       |
| März        | 11.      | Bo   | 19 49.87                             | 4.73301                             | 830.86                   | 830.90                   | 0.18415.0                 | 0.18416.0               | Fa    |
|             |          | u    | 49.86                                | 4.73249                             | 95                       |                          | 417.1                     |                         |       |
| »           | 25.      | Bo   | 19 58.41                             | 4.74926                             | 830.86                   | 830.99                   | 0.18289.2                 | 0.18288.9 <sup>1)</sup> | Fa    |
|             |          | u    | 58.83                                | 4.74860                             | 1.12                     |                          | 288.6                     |                         |       |
| April       | 2.       | Bo   | 19 58.79                             | 4.75068                             | 830.74                   | 830.81                   | 0.18280.8                 | 0.18280.6               | Fa    |
|             |          | u    | 59.03                                | 4.75033                             | 88                       |                          | 280.5                     |                         |       |
| »           | 16.      | Bo   | 19 46.95                             | 4.72800                             | 830.76                   | 830.78                   | 0.18456.3                 | 0.18457.4 <sup>2)</sup> | Fa    |
|             |          | u    | 46.88                                | 4.72758                             | 81                       |                          | 458.5                     |                         |       |
| »           | 26.      | Bo   | 19 47.63                             | 4.72835                             | 830.93                   | 830.87                   | 0.18449.9                 | 0.18449.0               | Fa    |
|             |          | u    | 47.59                                | 4.72892                             | 81                       |                          | 448.0                     |                         |       |
| Mai         | 9.       | Bo   | 19 47.33                             | 4.72860                             | 830.78                   | 830.74                   | 0.18451.1                 | 0.18450.3               | Fa    |
|             |          | u    | 47.30                                | 4.72809                             | 69                       |                          | 449.5                     |                         |       |
| »           | 27.      | Bo   | 19 47.13                             | 4.72932                             | 830.62                   | 830.60                   | 0.18449.1                 | 0.18449.4               | Fa    |
|             |          | u    | 47.08                                | 4.72938                             | 58                       |                          | 449.6                     |                         |       |
| Juni        | 4.       | Bo   | 19 47.04                             | 4.72935                             | 830.56                   | 830.58                   | 0.1845.04                 | 0.18449.6               | Fa    |
|             |          | u    | 47.20                                | 4.72947                             | 59                       |                          | 448.8                     |                         |       |
| »           | 9.       | Bo   | 19 46.95                             | 4.72775                             | 830.81                   | 830.70                   | 0.18457.3                 | 0.18454.6               | Fa    |
|             |          | u    | 47.01                                | 4.72902                             | 60                       |                          | 451.9                     |                         |       |
| »           | 24.      | Bo   | 19 50.72                             | 4.73690                             | 830.46                   | 830.48                   | 0.18393.6                 | 0.18393.7 <sup>3)</sup> | Fa    |
|             |          | u    | 50.74                                | 4.73681                             | 49                       |                          | 393.8                     |                         |       |
| Juli        | 10.      | Bo   | 19 50.96                             | 4.73763                             | 830.41                   | 830.48                   | 0.18389.0                 | 0.18390.2               | Fa    |
|             |          | u    | 51.01                                | 4.73693                             | 55                       |                          | 391.4                     |                         |       |
| August      | 1.       | Bo   | 19 51.43                             | 4.73863                             | 830.40                   | 830.44                   | 0.18381.6                 | 0.18383.2               | Fa    |
|             |          | u    | 51.33                                | 4.73800                             | 48                       |                          | 384.8                     |                         |       |
| »           | 20.      | Bo   | 19 51.15                             | 4.73911                             | 830.22                   | 830.26                   | 0.18381.9                 | 0.18382.7               | Ja    |
|             |          | u    | 51.16                                | 4.73868                             | 30                       |                          | 383.5                     |                         |       |
| September   | 6.       | Bo   | 19 51.51                             | 4.73895                             | 830.37                   | 830.40                   | 0.18379.8                 | 0.18380.0               | Fa    |
|             |          | u    | 51.57                                | 4.73872                             | 43                       |                          | 380.3                     |                         |       |
| »           | 10.      | Bo   | 19 51.75                             | 4.73972                             | 830.31                   | 830.30                   | 0.18375.0                 | 0.18375.5               | Fa    |
|             |          | u    | 51.67                                | 4.73943                             | 30                       |                          | 376.0                     |                         |       |
| »           | 24.      | Bo   | 19 51.69                             | 4.73956                             | 830.32                   | 830.32                   | 0.18376.1                 | 0.18376.3               | Fa    |
|             |          | u    | 51.65                                | 4.73954                             | 31                       |                          | 376.5                     |                         |       |
| »           | 29.      | Bo   | 19 51.84                             | 4.74060                             | 830.19                   | 830.24                   | 0.18371.0                 | 0.18371.4               | Fa    |
|             |          | u    | 51.95                                | 4.74014                             | 31                       |                          | 371.9                     |                         |       |
| Oktober     | 9.       | Bo   | 19 51.85                             | 4.73954                             | 830.38                   | 830.36                   | 0.18375.0                 | 0.18373.8               | Fa    |
|             |          | u    | 51.95                                | 4.74001                             | 33                       |                          | 372.5                     |                         |       |
| »           | 24.      | Bo   | 19 51.92                             | 4.73900                             | 830.39                   | 830.36                   | 0.18374.2                 | 0.18372.9 <sup>4)</sup> | Fa    |
|             |          | u    | 52.01                                | 4.74012                             | 33                       |                          | 371.6                     |                         |       |
| November    | 11.      | Bo   | 19 51.75                             | 4.74074                             | 830.14                   | 830.27                   | 0.18371.1                 | 0.18372.8               | Bk    |
|             |          | u    | 51.89                                | 4.73952                             | 40                       |                          | 374.6                     |                         |       |
| »           | 20.      | Bo   | 19 44.01                             | 4.72535                             | 830.24                   | 830.32                   | 0.18488.7                 | 0.18489.7 <sup>5)</sup> | Fa    |
|             |          | u    | 44.11                                | 4.72466                             | 39                       |                          | 490.7                     |                         |       |
| Dezember    | 10.      | Bo   | 19 42.61                             | 4.72736                             | 829.42                   | 829.44                   | 0.18491.3                 | 0.18490.6               | Fa    |
|             |          | u    | 42.78                                | 4.72741                             | 46                       |                          | 489.8                     |                         |       |
| »           | 23.      | Bo   | 19 42.60                             | 4.72794                             | 829.31                   | 829.46                   | 0.18489.1                 | 0.18490.3               | Fa    |
|             |          | u    | 42.87                                | 4.72680                             | 60                       |                          | 491.5                     |                         |       |

Jahres-Mittel 830.53

Messung mit Magnet 1.

|  |                    |    |          |         |  |        |           |           |    |
|--|--------------------|----|----------|---------|--|--------|-----------|-----------|----|
| September 6.   | 12 <sup>h</sup> .0 | Bo | 20 36.63 | 4.69631 | 860.72   | 860.80 | 0.18379.3 | 0.18380.9 | Fa |
|  |                    | u  | 36.65    | 4.69546 | 88   |        | 382.5     |           |    |
| Hilfsbasen: D: 80, H: 0, T: 80, von Januar 7. — März 11. |                    |    |          |         | D: 80, H: 60, T: 60, von Juni 24. — Oktober 9. |        |           |           |    |
| D: 80, H: 100, T: 80, „ März 25. — April 2.              |                    |    |          |         | D: 80, H: 100, T: 0, „ Oktober 24. — Nov. 11.  |        |           |           |    |
| D: 80, H: 100, T: 40, „ April 16. — Juni 9.              |                    |    |          |         | D: 80, H: 20, T: 60, „ Nov. 20. — Dez. 23.     |        |           |           |    |

- 1) Übergang zum anderen H-Punkt und Hilfsbasenänderung.  
 2) Temperatur verstellt. 3) Hilfsbasenänderung. 4) Hilfsbasenänderung.  
 5) Übergang zum anderen H-Punkt, Temperaturverstellung und Hilfsbasenänderung.

diesem Magneten ausgeführt. Ferner wurde zur Kontrolle der Ablenkungsfunktion von Magnet 2 am Januar 25. in beiden Entfernungen gemessen. Es ergab sich für den Ablenkungswinkel bei

$$e \sim 30 \text{ cm: } B_0 \ 19^\circ \ 49'.63 \quad E \sim 40 \text{ cm: } B_0 \ 8^\circ \ 25'.45 \\ B_u \quad 49'.41 \quad \quad \quad B_u \quad 25'.31$$

Hieraus errechnet sich nach dem von Ad. Schmidt im Jahrbuch 1911 (S. 11—13) angegebenen Verfahren die Ablenkungsfunktion für die beiden Lagen des Magnets (Bezeichnung oben, Bezeichnung unten)

$$k_0 = 1.01546, k_u = -1.01574; \text{ Mittel: } k = 1.01560 \pm 0.00014.$$

Tabelle III. Absolute Messungen der Inklination in Seddin.  
Hilfsbasen s. unten.

| Tag<br>1930 | Weltzeit | Kreislage | Nadirpunkt | Reduzierte<br>Inklinations-<br>richtung | Inklination<br>reduziert | Mittel   | Induktor<br>Schulze    |       |    |
|-------------|----------|-----------|------------|---|--------------------------|----------|------------------------|-------|----|
| Januar      | 20.      | 15.3      | Ost        | 179 57.08                               | 246 48.28                | 66 51.20 | 65                     | Fa    |    |
|             |          |           | West       | 57.04                                   | 113 5.72                 | 51.32    |                        |       |    |
| Februar     | 18.      | 10.5      | Ost        | 180 23.43                               | 247 13.23                | 66 49.80 | 1                      | Fa    |    |
|             |          |           | West       | 24.01                                   | 113 33.81                | 50.20    |                        |       |    |
| »           | 18.      | 13.5      | Ost        | 179 57.23                               | 246 48.29                | 66 51.06 | 65                     | Fa    |    |
|             |          |           | West       | 57.16                                   | 113 5.74                 | 51.42    |                        |       |    |
| »           | 18.      | 15.0      | Ost        | 180 23.92                               | 247 13.32                | 66 49.49 | 1                      | Fa    |    |
|             |          |           | West       | 23.81                                   | 113 33.24                | 50.57    |                        |       |    |
| März        | 6.       | 10.2      | Ost        | 179 57.20                               | 246 48.54                | 66 51.34 | 65                     | Fa    |    |
|             |          |           | West       | 57.12                                   | 113 5.22                 | 51.90    |                        |       |    |
| »           | 6.       | 13.1      | Ost        | 180 23.24                               | 247 13.30                | 66 50.06 | 1                      | Fa    |    |
|             |          |           | West       | 23.45                                   | 113 32.75                | 50.70    |                        |       |    |
| »           | 25.      | 12.8      | Ost        | 180 23.46                               | 247 22.42                | 66 58.96 | 66 59.20 <sup>1)</sup> | 1     | Fa |
|             |          |           | West       | 23.13                                   | 113 23.70                | 59.43    |                        |       |    |
| April       | 8.       | 13.2      | Ost        | 180 22.51                               | 247 21.38                | 66 58.87 | 1                      | Fa    |    |
|             |          |           | West       | 23.74                                   | 113 24.34                | 59.40    |                        |       |    |
| Mai         | 9.       | 13.7      | Ost        | 180 23.48                               | 247 11.74                | 66 48.26 | 66 48.46 <sup>2)</sup> | 1     | Fa |
|             |          |           | West       | 23.92                                   | 113 35.26                | 48.66    |                        |       |    |
| »           | 20.      | 10.6      | Ost        | 180 23.45                               | 247 11.67                | 66 48.22 | 1                      | Fa    |    |
|             |          |           | West       | 23.89                                   | 113 35.59                | 48.39    |                        |       |    |
| Juni        | 17.      | 9.7       | Ost        | 180 24.36                               | 247 15.17                | 66 50.81 | 66 51.06 <sup>3)</sup> | 1     | Fa |
|             |          |           | West       | 22.54                                   | 113 31.23                | 51.31    |                        |       |    |
| Juli        | 3.       | 15.5      | Ost        | 180 22.58                               | 247 13.35                | 66 50.77 | 1                      | Fa    |    |
|             |          |           | West       | 22.76                                   | 113 31.63                | 51.13    |                        |       |    |
| »           | 12.      | 18.1      | Ost        | 180 22.29                               | 247 13.44                | 66 51.15 | 1                      | Fa    |    |
|             |          |           | West       | 22.46                                   | 113 30.82                | 51.64    |                        |       |    |
| »           | 30.      | 12.9      | Ost        | 180 25.35                               | 247 16.33                | 66 50.98 | 1                      | Fa    |    |
|             |          |           | West       | 25.78                                   | 113 34.34                | 51.44    |                        |       |    |
| August      | 14.      | 13.3      | Ost        | 180 25.22                               | 247 17.04                | 66 51.82 | 1                      | Fa    |    |
|             |          |           | West       | 25.82                                   | 113 33.86                | 51.96    |                        |       |    |
| »           | 29.      | 12.8      | Ost        | 180 25.88                               | 247 17.05                | 66 51.77 | 1                      | Fa    |    |
|             |          |           | West       | 26.28                                   | 113 34.22                | 52.06    |                        |       |    |
| September   | 10.      | 13.0      | Ost        | 180 25.92                               | 247 17.66                | 66 51.74 | 1                      | Fa    |    |
|             |          |           | West       | 26.19                                   | 113 34.14                | 52.05    |                        |       |    |
| »           | 22.      | 16.1      | Ost        | 180 24.91                               | 247 17.50                | 66 52.59 | 1                      | Bk    |    |
|             |          |           | West       | 25.94                                   | 113 33.30                | 52.64    |                        |       |    |
| Oktober     | 6.       | 11.9      | Ost        | 180 25.40                               | 247 18.08                | 66 52.68 | 1                      | Fa    |    |
|             |          |           | West       | 25.46                                   | 113 32.35                | 53.11    |                        |       |    |
| »           | 14.      | 10.1      | Ost        | 180 25.24                               | 247 17.66                | 66 52.42 | 66 52.74 <sup>4)</sup> | 1     | Fa |
|             |          |           | West       | 25.45                                   | 113 32.39                | 53.06    |                        |       |    |
| »           | 24.      | 13.4      | Ost        | 180 25.25                               | 247 17.96                | 66 52.71 | 1                      | Fa    |    |
|             |          |           | West       | 25.29                                   | 113 31.98                | 53.31    |                        |       |    |
| November    | 11.      | 14.3      | Ost        | 180 25.22                               | 247 18.95                | 66 53.73 | 1                      | Bk/Fa |    |
|             |          |           | West       | 25.20                                   | 113 31.41                | 53.79    |                        |       |    |
| »           | 27.      | 12.0      | Ost        | 180 25.35                               | 247 11.58                | 66 46.23 | 66 46.06 <sup>5)</sup> | 1     | Fa |
|             |          |           | West       | 25.15                                   | 113 39.25                | 45.90    |                        |       |    |
| Dezember    | 12.      | 16.1      | Ost        | 180 21.35                               | 247 6.62                 | 66 45.27 | 1                      | Bk    |    |
|             |          |           | West       | 21.48                                   | 113 35.96                | 45.52    |                        |       |    |
| »           | 16.      | 12.8      | Ost        | 180 21.04                               | 247 7.05                 | 66 46.01 | 1                      | Bk    |    |
|             |          |           | West       | 21.72                                   | 113 36.05                | 45.67    |                        |       |    |
| »           | 22.      | 15.4      | Ost        | 180 22.02                               | 247 8.52                 | 66 46.50 | 1                      | Bk    |    |
|             |          |           | West       | 21.50                                   | 113 35.06                | 46.44    |                        |       |    |

Hilfsbasen siehe Fußnote bei Tab. II. Hilfsbasis für Z dauernd unverändert: 40.

1) siehe 1) bei Tab. II. 2) siehe 2) bei Tab. II. 3) siehe 3) bei Tab. II. 4) siehe 4) bei Tab. II. 5) siehe 5) bei Tab. II.

Das Mittel ist hierbei gebildet unter der Annahme, daß die Ablenkungsfunktion in beiden Lagen keine systematischen Unterschiede zeigt; eine Annahme, die innerhalb der erreichbaren Genauigkeit gestattet ist. (Vgl. Jahrbuch 1911, S. 14, oben.) Der hier errechnete Wert von 1.01560 stimmt gut mit dem Mittel der vier Bestim-

mungen aus dem Jahre 1927 überein: 1.01570 (Jahrbuch 1927, S. 8). Beide Werte sind freilich etwas größer als der früher gefundene 1.01527 (Jahrbuch 1918—1920, S. 4 unten). Immerhin besteht wegen der geringen Schärfe der Einzelbestimmung wohl noch kein Anlaß, irgendwelche Änderungen der Ablenkungsfunktion anzunehmen. Benutzt zur Rechnung wurde demnach nach wie vor der alte Wert. Zur Bestimmung der Torsion des Fadens im Schwingungskasten wurden mit Magnet 2 vier, mit Magnet 1 zwei ausführliche Torsionsmessungen gemacht; dabei fand sich für Magnet 2:  $2.005 \pm 0.004$ , für Magnet 1:  $1.927 \pm 0.011$ . Ein Maß für die Genauigkeit der absoluten Messungen gibt ein Vergleich der auf alle störenden Einflüsse reduzierten Messungen in den beiden Lagen des Magneten (Bez. oben, Bez. unten). Die Jahresmittel der Abweichungen dieser Messungen gegen ihr Mittel sind:

|                          |                               |
|--------------------------|-------------------------------|
| Ablenkungswinkel . . .   | 0'.06                         |
| Schwingungsdauer . . .   | 0 <sup>s</sup> .00026         |
| Moment . . . . .         | 0.05 $\Gamma$ cm <sup>3</sup> |
| Horizontalfeldstärke . . | 1'.0                          |

Ein Vergleich dieser Zahlen mit den entsprechenden Zahlen des vorigen und früherer Jahre zeigt eine weitere kleine Erhöhung der inneren Genauigkeit der H-Messungen.

**Inklination.** Abgesehen von den Anschlußmessungen der beiden Induktoren wurde durchschnittlich alle 14 Tage eine absolute Messung gemacht (Tab. III). Die beiden Lagen des Instruments (Kreis Ost, Kreis West) weisen eine ziemlich konstante Differenz auf. Im Mittel aller Messungen ist diese vom Betrag  $0'.31 \pm 0'.06$  im Sinne Kreis Ost—Kreis West. Faßt man diese Differenz als Fehler der Messungen auf, was an sich nicht ohne

Tabelle IV. Basiswerte für das DH-System Seddin S-Raum an den Dekadentagen.

| Tag          | D                 | H     | Tag         | D                 | H     |
|--------------|-------------------|-------|-------------|-------------------|-------|
|              |                   | $I'$  |             |                   | $I'$  |
|              |                   | 0.18+ |             |                   | 0.18+ |
|              | —5 <sup>a</sup> — |       |             | —5 <sup>a</sup> — |       |
| 1929 Dez. 28 | 40'.54            | 415.0 | 1930 Juli 6 | 40'.96            | 382.2 |
| 1930 Jan. 7  | 54                | 414.0 | » 16        | 99                | 379.8 |
| » 17         | 53                | 413.7 | » 26        | 41.00             | 377.6 |
| » 27         | 52                | 413.1 | Aug. 5      | 01                | 375.8 |
| Febr. 6      | 52                | 412.0 | » 15        | 03                | 374.5 |
| » 16         | 52                | 410.7 | » 25        | 05                | 373.1 |
| » 26         | 52                | 409.7 | Sept. 4     | 02                | 371.6 |
| März 8       | 53                | 408.8 | » 14        | 40.95             | 369.4 |
| » 18         | 54                | 408.4 | » 24        | 85                | 366.7 |
| » 28         | 55                | 277.6 | Okt. 4      | 75                | 365.9 |
| April 7      | 55                | 270.2 | » 14        | 69                | 365.6 |
| » 17         | 54                | 449.6 | » 24        | 67                | 365.5 |
| » 27         | 54                | 445.0 | Nov. 3      | 67                | 365.6 |
| Mai 7        | 53                | 443.4 | » 13        | 69                | 481.9 |
| » 17         | 51                | 443.5 | » 23        | 71                | 482.2 |
| » 27         | 50                | 444.3 | Dez. 3      | 74                | 482.4 |
| Juni 6       | 55                | 445.9 | » 13        | 75                | 482.7 |
| » 16         | 70                | 385.6 | » 23        | 75                | 483.2 |
| » 26         | 86                | 384.1 | 1931 Jan. 2 | 76                | 484.0 |

Diesen Basiswerten liegen die absoluten Messungen der Tabellen I und II zugrunde, aus denen alles Nähere über Sprünge, Hilfsbasen usw. zu ersehen ist.

weiteres berechtigt ist, so haben die 24 Messungen mit Induktor Schulze I im Mittel aller Messungen die Genauigkeit:  $\pm 0'.21$ . Die Unterschiede zwischen Drehung + und Drehung — blieben auch ziemlich konstant bei Kreis Ost mit im Mittel  $1'.63$  etwas größer als bei Kreis West mit  $1'.07$ .

Im allgemeinen haben die Basiswerte, worauf ja schon bei den absoluten Messungen der Deklination hingewiesen wurde, unter der Temperaturungeschütztheit des Seddiner Variationshauses stark zu leiden. Da die Variometer keine Temperaturkompensation besitzen, treten vor allen Dingen bei H starke Gänge in den Basiswerten auf, die sich noch besonders unangenehm durch die Notwendigkeit häufiger Hilfsbasenänderung bemerkbar machen. Zu diesen hierdurch hervorgerufenen fiktiven Sprüngen treten im Jahr noch zwei weitere wirkliche Sprünge hinzu durch Verstellen der Temperaturkurve. Näheres über alle diese Änderungen ersieht man aus den Fußnoten der Tabellen der absoluten Messungen. Tabelle IV liefert eine Zusammenstellung der Basiswerte der D- und H-Variometer von Seddin.

## Arbeiten und Beobachtungen am alten System in Seddin im Jahre 1930.

Von O. Venske.

Im Jahre 1930 fanden wie im Vorjahre laufende Registrierungen statt mit dem XYZ-System des Nord-Raumes und des Süd-Raumes. Die Bedienung der Registrierapparate lag wie früher in den Händen von Frau Hauswart Derdey und Herrn Förster Hillebrand. Am 22. Januar fand infolge Unvorsichtigkeit zweier Beobachter bei dem Versuche der Heizung mit einem Petroleumofen eine völlige Verrußung beider Registrierräume statt. Im Zusammenhang hiermit blieb am 24. Februar die Registrieruhr des alten S-Raum-Systemes, die stark verschmutzt war, stehen. Da am gleichen Tage auch infolge falscher Lampenstellung die Z-Registrierung des N-Raumes versagte, mußte die Z-Kurve unter Benutzung der wenigen vorhandenen Spuren interpolatorisch ergänzt werden. Da es sich um einen wenig gestörten Tag handelte, konnte dies auch ohne größere Unsicherheit geschehen. In sonstigen Fällen, wo die N-Raum-Registrierung versagte, konnten die ausgefallenen Werte sicher durch Benutzung der S-Raum-Registrierung ergänzt werden.

**Die Instrumente.** Wegen zu tiefer Lage des registrierenden X-Punktes wurde am 3. März der Torsionskopf des X-Instrumentes von  $51^{\circ}58'.4$  auf  $51^{\circ}39'.4$  gestellt, wodurch sich der registrierende Punkt um 35.4 mm hob.

Die jährlich einmal notwendige Verstellung des Y-Instrumentes geschah am 10. November durch Drehung des Torsionskopfes von  $189^{\circ}63'.5$  auf  $189^{\circ}72'.6$ . Die dadurch herbeigeführte Senkung des Registrierpunktes betrug 22.6 mm.

Bei der Waage des N-Raumes war, abgesehen von dem Wechsel des Trockenmittels am 3. März, der aber ohne Einfluß auf den Stand blieb, kein Eingriff erforderlich. Ebensovienig war dies nötig bei der Temperaturregistrierung des Y-Instrumentes. Es gilt daher für diese, wenn mit  $n^Y$  die jeweilige Ablesung von der Basis bei der Y-Registrierung bezeichnet wird, die Formel:

$$T = 10^{\circ}.03 + 0.0755 (n^Y + 51) = 10^{\circ}.03 + 0.0755 (n_0^Y - 155).$$

Hier bezeichnet T die Temperatur in Celsius Graden und die Indices u und o weisen auf die untere und obere Temperaturkurve hin. Die analoge Formel für die Temperaturregistrierung bei Z lautet:

$$T = 11^{\circ}.90 + 0.0988 (n^Z + 34.5) = 11^{\circ}.90 + 0.0988 (n_0^Z - 127).$$

Bei dem D-Instrument, dem Registrierapparat und den S-Raum-Instrumenten waren nur kleine, hier nicht aufzuzählende Nachhilfen erforderlich.

Am 3. März wurde die kleine Toepfersche Waage, die seit 21. Juli 1928 auf dem südwestlichen Eckbrett des N-Raumes gestanden hatte, aus dem Instrumentenhaus entfernt. Dadurch traten im N-Raum folgende Standänderungen ein, bei Z:  $-0.9$  mm, bei D:  $-4.6$  mm, und im S-Raum bei X:  $+1.8$  mm.

Von bemerkenswerten natürlichen Störungen zeigten sich auf den Kurven vom 17. Oktober, 27. Oktober, 14. November Nordlichtstörungen und vom 7. Oktober eine Erdbebenstörung (Süddeutschland).

Die durch die vagabundierenden Ströme der Stadtbahn verursachten Störungen des Y-Instrumentes haben sich wie im Vorjahre auf der Höhe von  $\pm 1\gamma$  gehalten.

**Die Skalenwerte.** Die Skalenwertsbestimmungen wurden wie in den früheren Jahren nach der galvanischen Methode mit Hilfe der an den Instrumenten vorgesehenen vier Kreisringe ausgeführt. Zur Messung der Stromstärke diente wieder das D-Variometer des N-Raumes, bei dem der Wert eines Teiles der Glasskala  $0.983\gamma$  betrug.

Die bei den einzelnen Bestimmungen erhaltenen Werte eines Millimeters der Registrierung gibt folgende Tabelle:

Beobachtete Skalenwerte.

|              | $\epsilon_x$<br>$\gamma$ | $\epsilon_y$<br>$\gamma$ | $\epsilon_z$<br>$\gamma$ |              | $\epsilon_x$<br>$\gamma$ | $\epsilon_y$<br>$\gamma$ | $\epsilon_z$<br>$\gamma$ |
|--------------|--------------------------|--------------------------|--------------------------|--------------|--------------------------|--------------------------|--------------------------|
| 1929 Dez. 31 | 2.15                     | 2.23                     | 2.48                     | 1930 Juli 14 | 2.07                     | 2.23                     | 2.52                     |
| 1930 Jan. 25 | 2.08                     | 2.13                     | 2.47                     | Sept. 18     | 2.10                     | 2.15                     | 2.46                     |
| März 3       | 2.14                     | 2.14                     | 2.53                     | Nov. 10      | 2.14                     | 2.24                     | 2.54                     |
| April 14     | 2.07                     | 2.18                     | 2.49                     | 1931 Jan. 26 | 2.08                     | 2.15                     | 2.52                     |
| Mai 20       | 2.08                     | 2.19                     | 2.46                     |              |                          |                          |                          |

Nach diesen Bestimmungen wurden die endgültigen Skalenwerte folgendermaßen angenommen:

Endgültige Skalenwerte.

|            | $\epsilon_x$<br>$\gamma$ | $\epsilon_y$<br>$\gamma$ | $\epsilon_z$<br>$\gamma$ |             | $\epsilon_x$<br>$\gamma$ | $\epsilon_y$<br>$\gamma$ | $\epsilon_z$<br>$\gamma$ |
|------------|--------------------------|--------------------------|--------------------------|-------------|--------------------------|--------------------------|--------------------------|
| 1930 Jan.  | 2.09                     | 2.18                     | 2.48                     | 1930 Juli   | 2.09                     | 2.20                     | 2.50                     |
| Feb., März | 2.10                     | 2.17                     | 2.50                     | Aug.        | 2.09                     | 2.19                     | 2.49                     |
| April      | 2.09                     | 2.18                     | 2.50                     | Sept., Okt. | 2.10                     | 2.20                     | 2.50                     |
| Mai        | 2.10                     | 2.18                     | 2.48                     | Nov.        | 2.11                     | 2.20                     | 2.50                     |
| Juni       | 2.10                     | 2.19                     | 2.49                     | Dez.        | 2.11                     | 2.19                     | 2.51                     |

Im Mittel hat der Skalenwert von X gegen das Vorjahr um 0.8%, der von Y um 0.2% zugenommen.

**Die Basiswerte.** Die absoluten Messungen, welche den Basiswerten des XYZ-Systems zugrunde liegen, wurden in dem 1925/26 erbauten absoluten Häuschen ausgeführt (s. o.). Wie im Jahre vorher mußten die gemessenen D-Werte um  $+0'.9$  und die gemessenen H-Werte um  $-7.6\gamma$  korrigiert werden. Über die Korrekturen an den I-Werten ist oben schon das Nähere gesagt worden.

Diese so verbesserten Werte für D, H, I wurden in Komponenten umgerechnet, aus denen dann auf Grund der Nachtstundenvergleiche SR—NR die rohen Basiswerte hervorgingen. Sie wurden noch einer leichten Ausgleichung unterzogen, welche auf die in der folgenden Tabelle V zusammengestellten Zahlen führte.

Tabelle V. Ausgeglichene Basiswerte für das XYZ-System  
Seddin N-Raum um  $15^h$  an den Dekadentagen.

| Tag          | $X_{40/60}$        | $Y_{40}$            | $Z_{40}$           | Tag         | $X_{60}$           | $Y_{40}$            | $Z_{40}$           |
|--------------|--------------------|---------------------|--------------------|-------------|--------------------|---------------------|--------------------|
|              | $\Gamma$<br>0.183+ | $\Gamma$<br>-0.019+ | $\Gamma$<br>0.430+ |             | $\Gamma$<br>0.183+ | $\Gamma$<br>-0.019+ | $\Gamma$<br>0.430+ |
|              | $\Upsilon$         | $\Upsilon$          | $\Upsilon$         |             | $\Upsilon$         | $\Upsilon$          | $\Upsilon$         |
| 1929 Dez. 28 | 96.5               | 56.1                | 82.5               | 1930 Juli 6 | 56.7               | 54.1                | 55.8               |
| 1930 Jan. 7  | 97.2               | 56.6                | 82.0               | » 16        | 57.0               | 53.0                | 50.7               |
| » 17         | 97.5               | 57.1                | 81.3               | » 26        | 57.4               | 52.9                | 48.7               |
| » 27         | 96.8               | 57.4                | 80.4               | Aug. 5      | 57.7               | 52.8                | 47.8               |
| Febr. 6      | 96.1               | 57.7                | 78.0               | » 15        | 58.0               | 52.7                | 48.4               |
| » 16         | 96.0               | 57.9                | 77.2               | » 25        | 58.4               | 52.6                | 49.5               |
| » 26         | 95.3 <sup>1)</sup> | 57.6                | 77.0 <sup>2)</sup> | Sept. 4     | 58.8               | 52.4                | 52.2               |
| März 8       | 59.4               | 57.3                | 77.5               | » 14        | 59.3               | 52.3                | 55.8               |
| » 18         | 58.7               | 57.0                | 79.0               | » 24        | 60.0               | 52.4                | 60.0               |
| » 28         | 58.5               | 56.9                | 81.0               | Okt. 4      | 60.8               | 52.5                | 65.7               |
| April 7      | 58.3               | 56.8                | 82.1               | » 14        | 61.8               | 52.6                | 71.0               |
| » 17         | 58.0               | 56.7                | 83.0               | » 24        | 62.6               | 52.7                | 75.5               |
| » 27         | 57.6               | 56.5                | 84.1               | Nov. 3      | 63.3               | 52.8 <sup>3)</sup>  | 80.0               |
| Mai 7        | 57.2               | 56.3                | 83.0               | » 13        | 64.0               | 102.4               | 85.0               |
| » 17         | 56.8               | 56.1                | 81.0               | » 23        | 64.6               | 102.4               | 90.0               |
| » 27         | 56.6               | 56.2                | 77.7               | Dez. 3      | 65.1               | 102.5               | 95.0               |
| Juni 6       | 56.6               | 56.2                | 73.0               | » 13        | 65.6               | 102.5               | 99.8               |
| » 16         | 56.6               | 56.3                | 67.8               | » 23        | 66.1               | 102.5               | 103.6              |
| » 26         | 56.6               | 55.2                | 61.4               | 1931 Jan. 2 | 66.5               | 102.5               | 106.0.             |

- 1) März 3. 12<sup>h</sup> Sprung um  $-35.0\gamma$ , Übergang zur Hilfsbasis 60.  
2) März 3. 14<sup>h</sup> Sprung um  $+2.2\gamma$ .  
3) Nov. 10. 12<sup>h</sup> Sprung um  $+49.6\gamma$ .

## Ergebnisse.

### Erläuterungen und Ergänzungen zu den Tabellen.

**Allgemeines.** X zählt nach Norden, Y nach Osten und Z nach unten als positiv. Dementsprechend ist positiv eine östlich gezählte Deklination und eine nördliche Inklination. Zur Zeit ist die Deklination in Seddin noch westlich, also negativ. Alle Zeitangaben bedeuten, wenn nichts anderes bemerkt ist, Weltzeit, d. h. Gr. M. Z. In dieser Zeit gilt 0<sup>h</sup> als Mitternacht.

Alle Zahlen der Tabellen S. 17 bis 23 sind aus Mitteln der ganzen Kurvenstrecken zwischen zwei vollen Stunden nach Gr. M. Z. abgeleitet, also auch die Tagesmittel und die Extreme. Die absoluten Maxima und Minima werden nicht bekanntgegeben. Der Vergleichbarkeit wegen mit Observatorien, die noch nach Einzelwerten zu vollen Stunden veröffentlichen, enthalten die Seiten 24 bis 26 auch die Monats- und Jahresmittel nach stündlichen Werten. Über die Ableitung der stündlichen Werte aus Stundenmittelzahlen vgl. Erg. 1905, S. 40—43; hier findet sich auch der Einfluß dieses Übergangs auf die harmonische Analyse.

Großfette Ziffern bedeuten Maximal-, kleinfette Minimalwerte der betreffenden Größe.

Die **Potsdamer Werte** erhält man aus den Seddiner durch Zufügen von

|                |                |                |        |                |        |               |
|----------------|----------------|----------------|--------|----------------|--------|---------------|
| in X           | in Y           | in Z           | in D   | in H           | in I   | in F          |
| -36.0 $\gamma$ | +13.0 $\gamma$ | +15.0 $\gamma$ | +1'.30 | -38.0 $\gamma$ | +3'.00 | -2.0 $\gamma$ |

**Jährlicher Gang.** Nachstehende Tabelle VI gibt den jährlichen Gang aller Elemente und Komponenten einschließlich des Anteils der Säkularvariation in der Form von Abweichungen der Monatsmittel vom Jahresdurchschnitt.

Tabelle VI.

| 1930 | Januar | Februar | März   | April  | Mai    | Juni   | Juli   | August | Septbr. | Oktbr. | Novbr. | Dezbr. |
|------|--------|---------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| D    | - 4.71 | - 3.59  | - 3.05 | - 1.91 | - 1.04 | - 0.32 | + 0.32 | + 0.88 | + 1.87  | + 3.35 | + 3.80 | + 4.37 |
| I    | - 0.83 | - 0.68  | - 0.55 | - 0.20 | - 0.32 | - 0.03 | - 0.76 | - 0.66 | + 0.31  | + 1.32 | + 1.13 | + 1.25 |
| H    | + 11.0 | + 6.7   | + 5.6  | + 2.6  | + 6.1  | + 2.8  | + 3.6  | - 1.6  | - 8.9   | - 15.6 | - 7.7  | - 4.3  |
| F    | + 1.6  | - 4.8   | - 3.4  | + 0.2  | + 5.4  | + 6.1  | - 14.9 | - 24.9 | - 12.9  | + 2.3  | + 16.3 | + 28.8 |
| X    | + 8.5  | - 4.8   | + 4.0  | + 1.6  | + 5.6  | + 2.6  | + 3.8  | - 1.0  | - 7.8   | - 13.7 | - 5.6  | - 1.9  |
| Y    | - 26.3 | - 19.9  | - 16.9 | - 10.5 | - 6.2  | - 2.0  | + 1.3  | + 4.8  | + 10.2  | + 19.4 | + 21.0 | + 23.7 |
| Z    | - 3.0  | - 8.0   | - 6.1  | - 1.0  | + 3.3  | + 5.4  | - 17.7 | - 26.4 | - 10.1  | + 9.2  | + 21.1 | + 33.3 |

**Extreme Stundenmittel und Amplituden.** Die nachstehende Tabelle VII gibt eine übersichtliche Zusammenstellung der äußersten und des mittleren Wertes der Stundenmittel im Monat, sowie der Amplituden zwischen den höchsten und niedrigsten Beträgen dieser Stundenmittel.

**Aktivität.** In den Tabellen S. 17 bis 19 bedeuten die Zahlen unter  $n$  den von Herrn Professor Venske festgesetzten Charakter des ganzen Tages in der internationalen Skala 0 bis 2.  $\nu$  ist die laut Katalog von De Bilt (Tableau II) für die ganze Erde gültige mittlere Charakterzahl des Tages in derselben Zählung.  $a$  bedeutet die Aktivität in Seddin, definiert als Summe der Tagesamplituden der drei Komponenten.

Seit 1921 wird die Aktivität an dieser Stelle noch in einer anderen Weise zahlenmäßig erfaßt, nämlich als die interdiurne Änderung (von Tagesanfang zu Tagesanfang, gültig für die Mitte des zwischenliegenden Tages) der Tagesmittel der Nordkomponente X, multipliziert mit  $\text{cosec } \theta \sec \psi$ , worin  $\theta$  die magnetische Breite gegen die Achse durch den Nordlichtpol und  $\psi$  den Winkel des magnetischen gegenüber dem astronomischen Meridian bedeutet, das Ganze noch multipliziert mit  $10^{-2}$ . Als Nordlichtpol gilt der Austrittspunkt aus der Erdoberfläche jenes Erddurchmessers, der der Achse des quasi homogenen Falls parallel ist, also kurz gesagt der nördliche Achsenpunkt der Erde. Er liegt unter der Länge  $291^\circ$  östl. v. Gr. und  $78^\circ.5$  nördl. Breite.

Für Seddin ist der Reduktionsfaktor 0.01745. Die sich derartig ergebenden Zahlen  $u$  waren:

| 1930 | Jan. | Febr. | März | April | Mai  | Juni | Juli | Aug. | Sept. | Okt. | Nov. | Dez. | Jahr |
|------|------|-------|------|-------|------|------|------|------|-------|------|------|------|------|
| $u$  | 0.76 | 1.11  | 0.90 | 0.90  | 1.39 | 1.17 | 0.72 | 0.99 | 1.12  | 1.34 | 0.99 | 1.01 | 1.03 |

Sie gelten für die ganze Erde, und zwar für das System des Ringstromes. Über die Einführung der Zahlen vgl. Erg. 1921, S. 6—7 und J. Bartels, Erdmagnetische Aktivität 1836—1923 in Abhdl. d. Meteorol. Inst. Lfd. Nr. 332, Berlin 1925.

Auf der Tagung der Internationalen Kommission für Erdmagnetismus und Lufterlektrizität im September 1931 in Innsbruck wurde auf Vorschlag von Dr. Crichton Mitchell eine neue Aktivitätszahl eingeführt, welche die Bezeichnung „S“ erhielt. Sie ist definiert durch

$$S = (XR_x + YR_y + ZR_z) : 10000.$$

Für  $R_x, R_y, R_z$  sind die absoluten Unterschiede zwischen den höchsten und niedrigsten Stundenmittelwerten jeden Tages genommen worden. Die Komponenten sind in  $\gamma$  auszudrücken. Jede Teilsumme ist durch 10000 dividiert auf ganze Zahlen abzurunden. X, Y, Z sollen auf der ganzen Erde überall positiv angesetzt werden und für das ganze Jahr auf die drei ersten Stellen abgerundet werden.

Für 1930 bringen wir dem Beschluß entsprechend zum ersten Mal die Zahlen S für Seddin. Es war  $X = 18\,300 \gamma$ ,  $Y = 1900 \gamma$ ,  $Z = 43\,000 \gamma$ . Angegeben ist für jeden Tag  $XR_x : 10\,000$ ,  $YR_y : 10\,000$ ,  $ZR_z : 10\,000$  und deren Summe S.

Indem sich das Potsdamer Observatorium hiermit einem internationalen Beschluß fügt, kann es jedoch die neuen Aktivitätszahlen nicht mit großen Hoffnungen begrüßen. Die alten Zahlen  $n, \nu, a$  und vornehmlich die Werte  $u$  sind ein bedeutend besseres Maß der Aktivität.

**Ruhige und gestörte Tage.** Die nach dem Katalog von De Bilt als ruhig bezeichneten fünf Tage jedes Monats tragen als Kennzeichen ein \*, die fünf ausgesuchten gestörten Tage (meist nicht die am meisten gestörten Tage erfassend) ein †. Sie sind in Mittel zusammengefaßt und für sich bearbeitet worden.

Tabelle VII.

| Monat         | Nordkomponente     |                    |                    |       | Ostkomponente       |                     |                     |       | Vertikalkomponente |                    |                    |       |
|---------------|--------------------|--------------------|--------------------|-------|---------------------|---------------------|---------------------|-------|--------------------|--------------------|--------------------|-------|
|               | Tages-             |                    |                    |       | Tages-              |                     |                     |       | Tages-             |                    |                    |       |
|               | Mittel             | Max.               | Min.               | Ampl. | Mittel              | Max.                | Min.                | Ampl. | Mittel             | Max.               | Min.               | Ampl. |
| 1930          | $\Gamma$<br>0.183+ | $\Gamma$<br>0.183+ | $\Gamma$<br>0.183+ |       | $\Gamma$<br>-0.019+ | $\Gamma$<br>-0.019+ | $\Gamma$<br>-0.019+ |       | $\Gamma$<br>0.430+ | $\Gamma$<br>0.430+ | $\Gamma$<br>0.430+ |       |
| Januar        |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 87.0               | 119                | 77                 | 95    | 69.9                | 130                 | 49                  | 106   | 79.2               | 111                | 68                 | 54    |
| Mittlerer »   | 75.2               | 94                 | 54                 | 41    | 59.0                | 86                  | 38                  | 48    | 68.9               | 79                 | 60                 | 20    |
| Niedrigster » | 44.9               | 73                 | 01                 | 13    | 52.2                | 65                  | 04                  | 20    | 58.7               | 62                 | 50                 | 5     |
| Februar       |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 90.3               | 120                | 74                 | 133   | 81.0                | 191                 | 51                  | 187   | 72.0               | 112                | 61                 | 74    |
| Mittlerer »   | 71.5               | 95                 | 42                 | 52    | 65.4                | 101                 | 38                  | 63    | 63.9               | 78                 | 51                 | 27    |
| Niedrigster » | 37.0               | 75                 | -13                | 27    | 56.9                | 71                  | 04                  | 34    | 53.1               | 57                 | 22                 | 7     |
| März          |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 88.3               | 145                | 74                 | 149   | 91.4                | 163                 | 45                  | 143   | 72.7               | 115                | 67                 | 79    |
| Mittlerer »   | 70.7               | 99                 | 35                 | 65    | 68.4                | 101                 | 36                  | 65    | 65.8               | 83                 | 51                 | 33    |
| Niedrigster » | 51.5               | 84                 | -38                | 21    | 60.0                | 79                  | 20                  | 34    | 56.7               | 63                 | 22                 | 11    |
| April         |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 85.8               | 133                | 68                 | 127   | 89.1                | 156                 | 56                  | 109   | 83.3               | 130                | 61                 | 82    |
| Mittlerer »   | 68.3               | 105                | 27                 | 79    | 74.8                | 111                 | 35                  | 76    | 70.9               | 93                 | 48                 | 45    |
| Niedrigster » | 51.9               | 88                 | -11                | 27    | 64.4                | 90                  | 10                  | 46    | 63.5               | 70                 | 19                 | 22    |
| Mai           |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 88.9               | 147                | 68                 | 177   | 88.5                | 147                 | 56                  | 119   | 81.8               | 129                | 72                 | 101   |
| Mittlerer »   | 72.3               | 110                | 34                 | 76    | 79.1                | 113                 | 43                  | 70    | 75.2               | 96                 | 52                 | 44    |
| Niedrigster » | 45.5               | 90                 | -56                | 35    | 71.1                | 94                  | 17                  | 42    | 66.0               | 78                 | 09                 | 16    |
| Juni          |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 86.9               | 149                | 64                 | 165   | 89.3                | 133                 | 68                  | 104   | 95.0               | 122                | 79                 | 77    |
| Mittlerer »   | 69.3               | 106                | 27                 | 79    | 83.3                | 115                 | 52                  | 63    | 77.3               | 95                 | 57                 | 38    |
| Niedrigster » | 45.0               | 86                 | -54                | 37    | 77.0                | 100                 | 19                  | 39    | 61.5               | 79                 | 31                 | 10    |
| Juli          |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 85.6               | 145                | 61                 | 140   | 97.9                | 159                 | 80                  | 120   | 69.9               | 103                | 56                 | 84    |
| Mittlerer »   | 70.5               | 103                | 36                 | 67    | 86.6                | 114                 | 57                  | 57    | 54.2               | 70                 | 37                 | 32    |
| Niedrigster » | 59.9               | 83                 | -09                | 30    | 72.8                | 99                  | 23                  | 28    | 38.0               | 52                 | 02                 | 17    |
| August        |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 78.6               | 116                | 58                 | 127   | 97.0                | 144                 | 72                  | 94    | 55.7               | 104                | 43                 | 88    |
| Mittlerer »   | 65.7               | 97                 | 30                 | 67    | 90.1                | 117                 | 59                  | 59    | 45.5               | 63                 | 28                 | 35    |
| Niedrigster » | 45.8               | 80                 | -12                | 35    | 81.8                | 99                  | 33                  | 36    | 37.8               | 45                 | 07                 | 15    |
| September     |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 71.5               | 110                | 42                 | 143   | 107.2               | 177                 | 77                  | 184   | 69.9               | 141                | 57                 | 97    |
| Mittlerer »   | 58.9               | 86                 | 17                 | 69    | 96.1                | 128                 | 57                  | 71    | 61.8               | 79                 | 44                 | 35    |
| Niedrigster » | 31.0               | 70                 | -33                | 33    | 87.2                | 110                 | -24                 | 35    | 50.3               | 60                 | 05                 | 9     |
| Oktober       |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 71.2               | 127                | 61                 | 143   | 116.1               | 219                 | 94                  | 171   | 106.0              | 177                | 85                 | 113   |
| Mittlerer »   | 53.0               | 83                 | 17                 | 67    | 104.7               | 141                 | 74                  | 67    | 81.1               | 99                 | 67                 | 32    |
| Niedrigster » | 21.2               | 64                 | -62                | 15    | 95.9                | 109                 | 48                  | 28    | 70.5               | 80                 | 39                 | 9     |
| November      |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 75.9               | 102                | 63                 | 118   | 122.8               | 192                 | 101                 | 146   | 102.1              | 145                | 96                 | 95    |
| Mittlerer »   | 61.1               | 80                 | 37                 | 43    | 106.3               | 133                 | 87                  | 46    | 93.0               | 103                | 83                 | 20    |
| Niedrigster » | 31.8               | 60                 | -16                | 17    | 99.4                | 106                 | 46                  | 20    | 85.0               | 87                 | 50                 | 5     |
| Dezember      |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 77.6               | 101                | 71                 | 180   | 119.0               | 214                 | 105                 | 164   | 133.7              | 244                | 103                | 157   |
| Mittlerer »   | 64.8               | 79                 | 47                 | 32    | 109.0               | 134                 | 92                  | 43    | 105.2              | 116                | 90                 | 19    |
| Niedrigster » | 25.2               | 48                 | -79                | 10    | 103.5               | 104                 | 40                  | 11    | 99.0               | 102                | 71                 | 5     |
| Jahr          |                    |                    |                    |       |                     |                     |                     |       |                    |                    |                    |       |
| Höchster Wert | 90.3               | 149                | 77                 | 180   | 122.8               | 219                 | 105                 | 187   | 133.7              | 244                | 103                | 157   |
| Mittlerer »   | 66.8               | 95                 | 34                 | 61    | 85.2                | 116                 | 56                  | 61    | 71.9               | 88                 | 56                 | 32    |
| Niedrigster » | 21.2               | 48                 | -79                | 10    | 52.2                | 65                  | -24                 | 11    | 37.8               | 45                 | 02                 | 5     |

**Einfluß des Mondes.** Die Ableitung des Mondeinflusses erfolgte in derselben Weise wie in den letzten sieben Jahren (vgl. Erg. 1922, S. 28 u. f.), und zwar unter Ausschneiden aller Tage, deren internationale Charakterzahl  $\nu$  über 1.1 hinausgeht; diese Tage sind in der untenstehenden Tabelle durch ( ) gekennzeichnet.

Als Ausgangswert für die Gruppierung der Tage dienten  $\mu_0 = 22.8$   $\pi_0 + \mu_0 = 11.0$   $\varrho_0 + \mu_0 = 16.1$ .

Diese Zahlen sind den Tabellen in Erg. 1922, S. 8 und 29 entnommen. Für die einzelnen Tage ergaben sich daraus folgende Werte für  $\mu$  = Anzahl der Mondstunden, um welche die obere Kulmination des Mondes vor jener der Sonne eintritt ( $\mu_0$  ist dieser Wert im Gr. M. Mittag am 1. Januar 1930).

Die Zahlen  $\mu$  für jeden Tag des Jahres 1930.

| 1930    | 1     | 2  | 3    | 4  | 5    | 6    | 7    | 8    | 9  | 10   | 11   | 12   | 13   | 14   | 15   | 16  | 17  | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25   | 26   | 27   | 28 | 29   | 30   | 31   |
|---------|-------|----|------|----|------|------|------|------|----|------|------|------|------|------|------|-----|-----|----|----|----|----|----|----|----|------|------|------|----|------|------|------|
| Januar  | .23   | 22 | 21   | 20 | (20) | (19) | 18   | 17   | 16 | 16   | 15   | 14   | 13   | 12   | 11   | 11  | 10  | 9  | 8  | 7  | 7  | 6  | 5  | 4  | 3    | 3    | 2    | 1  | 0    | 23   | 22   |
| Februar | 22    | 21 | 20   | 19 | 18   | 18   | 17   | 16   | 15 | 14   | 14   | (13) | (12) | (11) | (10) | 9   | 8   | 7  | 6  | 5  | 5  | 4  | 3  | 2  | 1    | 1    | 0    |    |      |      |      |
| März    | ...23 | 22 | 21   | 20 | 20   | 19   | 18   | 17   | 16 | 16   | 15   | (14) | (13) | (12) | 12   | 11  | 10  | 9  | 8  | 7  | 7  | 6  | 5  | 4  | 3    | 3    | 2    | 1  | 0    | 23   | 22   |
| April   | ...22 | 21 | 20   | 19 | 18   | 18   | (17) | (16) | 15 | 14   | 14   | 13   | 12   | 11   | 10   | 9   | 8   | 7  | 6  | 5  | 4  | 3  | 3  | 2  | 1    | 1    | 0    | 23 | 22   | 21   | 20   |
| Mai     | ...21 | 20 | 20   | 19 | (18) | 17   | 16   | 16   | 15 | 14   | 13   | 12   | 12   | 11   | 10   | (9) | (8) | 7  | 7  | 6  | 5  | 4  | 3  | 3  | 2    | 1    | 0    | 23 | 23   | 22   | (21) |
| Juni    | ...20 | 19 | 18   | 18 | 17   | 16   | 15   | 14   | 14 | 13   | 12   | 11   | 10   | 10   | 9    | (8) | 7   | 6  | 5  | 5  | 4  | 3  | 2  | 1  | 1    | 0    | 23   | 22 | 21   | 21   |      |
| Juli    | ...20 | 19 | 18   | 17 | 16   | 16   | 15   | 14   | 13 | (12) | (12) | 11   | 10   | 9    | 8    | 8   | 7   | 6  | 5  | 4  | 3  | 3  | 2  | 1  | (0)  | 23   | 23   | 22 | 21   | 20   | 19   |
| August  | .19   | 18 | 17   | 16 | 15   | (14) | (14) | (13) | 12 | 11   | 10   | 10   | 9    | 8    | 7    | 6   | 6   | 5  | 4  | 3  | 2  | 1  | 1  | 0  | 23   | 22   | 21   | 21 | 20   | 19   | 18   |
| Sept.   | ...17 | 17 | (16) | 15 | 14   | 13   | 12   | 12   | 11 | 10   | 9    | 8    | 8    | 7    | 6    | 5   | 4   | 4  | 3  | 2  | 1  | 0  | 23 | 23 | 22   | 21   | 20   | 19 | (19) | (18) |      |
| Okt.    | ...17 | 16 | 15   | 15 | 14   | 13   | 12   | 11   | 10 | 10   | 9    | 8    | 7    | 6    | 6    | 5   | (4) | 3  | 2  | 2  | 1  | 0  | 23 | 22 | 21   | (21) | (20) | 19 | 18   | 17   | 17   |
| Nov.    | ...16 | 15 | 14   | 13 | 13   | 12   | 11   | 10   | 9  | 8    | 8    | 7    | 6    | 5    | 4    | 4   | 3   | 2  | 1  | 0  | 0  | 23 | 22 | 21 | (20) | 19   | 19   | 18 | 17   | 16   |      |
| Dez.    | ...15 | 15 | (14) | 13 | 12   | 11   | 11   | 10   | 9  | 8    | 7    | 6    | 6    | 5    | 4    | 3   | 2   | 2  | 1  | 0  | 23 | 22 | 22 | 21 | 20   | 19   | 18   | 17 | 17   | 16   | 15   |

$\pi$  bedeutet den Abstand des mittleren Mondes vom Perigäum,  $\varrho$  vom aufsteigenden Knoten längs seiner Bahn, beides in Mondstunden. Die eingeklammerten Tage sind die ausgelassenen gestörten.

**Harmonische Analyse.** Für die Entwicklung der mittleren täglichen Gänge der drei Komponenten des erdmagnetischen Feldes kam der Ansatz zur Anwendung:

$\Delta E = \sum_n (a_n \cos n\omega t + b_n \sin n\omega t)$  mit  $\omega = 15^\circ$  und  $t$  in Stunden. Epoche ist 0<sup>h</sup> m. Gr. Z. Das Material bilden die 24 einzelnen Werte zu den Augenblicken der vollen Stunden, abgeleitet nach Erg. 1911, S. 39 aus den Gängen der Stundenmittel. Die Rechnung beschränkt sich auf die Mittel aus allen und aus den fünf internationalen ruhigen Tagen.

**Transformationsformeln.** Zur Berechnung der Variationen der Elemente aus denen der Komponenten und umgekehrt gelten 1930 folgende numerische Formeln:

$$\begin{aligned} \Delta D &= 5.37 \cdot \overset{\gamma}{\Delta D} & \Delta D &= 0.1863 \cdot \overset{\gamma}{\Delta D} \\ \Delta I &= 13.63 \cdot \overset{\gamma}{\Delta J} & \Delta I &= 0.0734 \cdot \overset{\gamma}{\Delta I} \\ \Delta H &= 0.394 \cdot \overset{\gamma}{\Delta F} - 0.919 \cdot \overset{\gamma}{\Delta I} & \Delta X &= 0.995 \cdot \overset{\gamma}{\Delta H} + 0.0984 \cdot \overset{\gamma}{\Delta D} \\ \Delta H &= 0.995 \cdot \overset{\gamma}{\Delta X} - 0.0984 \cdot \overset{\gamma}{\Delta Y} & \Delta Y &= -0.0984 \cdot \overset{\gamma}{\Delta H} + 0.995 \cdot \overset{\gamma}{\Delta D} \\ \Delta D &= 0.0984 \cdot \overset{\gamma}{\Delta X} + 0.995 \cdot \overset{\gamma}{\Delta Y} & \Delta Z &= 0.919 \cdot \overset{\gamma}{\Delta F} + 0.394 \cdot \overset{\gamma}{\Delta I} \\ \Delta I &= -0.919 \cdot \overset{\gamma}{\Delta H} + 0.394 \cdot \overset{\gamma}{\Delta Z} & \Delta Z &= 2.33 \cdot \overset{\gamma}{\Delta H} + 2.54 \cdot \overset{\gamma}{\Delta I} \\ \Delta F &= 0.394 \cdot \overset{\gamma}{\Delta H} + 0.919 \cdot \overset{\gamma}{\Delta Z} & \Delta F &= 2.54 \cdot \overset{\gamma}{\Delta H} + 2.33 \cdot \overset{\gamma}{\Delta I} \end{aligned}$$

1) Im vorigen Jahrgang ist statt  $-0.1013 \cdot \Delta D$  hier  $+0.1013 \cdot \Delta D$  zu setzen.

# Ergebnisse der Beobachtungen im Jahre 1930.

Seddin.

Variationshaus:  $\varphi = 52^{\circ} 16'.7$ ,  $\lambda = 13^{\circ} 0'.6 = 0^h 52^m 2^s.4$  E. v. Grw. 45 m über N. N.

| 1930 | Januar | Februar | März  | April | Mai   | Juni  | Juli  | August | Septbr. | Oktbr. | Novbr. | Dezbr. | Jahr  |       |
|------|--------|---------|-------|-------|-------|-------|-------|--------|---------|--------|--------|--------|-------|-------|
| D    | -5°—   | 43.28   | 42.16 | 41.62 | 40.48 | 39.61 | 38.89 | 38.25  | 37.69   | 36.70  | 35.22  | 34.77  | 34.20 | 38.57 |
| I    | +66°+  | 47.47   | 47.62 | 47.75 | 48.10 | 47.98 | 48.27 | 47.54  | 47.64   | 48.61  | 49.62  | 49.43  | 49.55 | 48.30 |
| H    | 0.18+  | 467.2   | 462.9 | 461.8 | 458.8 | 462.3 | 459.0 | 459.8  | 454.6   | 447.3  | 440.6  | 448.5  | 451.9 | 456.2 |
| F    | 0.46+  | 861.2   | 854.8 | 856.2 | 859.8 | 865.0 | 865.7 | 844.7  | 834.7   | 846.7  | 861.9  | 875.9  | 888.4 | 859.6 |
| X    | +0.18+ | 375.2   | 371.5 | 370.7 | 368.3 | 372.3 | 369.3 | 370.5  | 365.7   | 358.9  | 353.0  | 361.1  | 364.8 | 366.7 |
| Y    | -0.01— | 841.0   | 834.6 | 831.6 | 825.2 | 820.9 | 816.7 | 813.4  | 809.9   | 803.9  | 795.3  | 793.7  | 791.0 | 814.7 |
| Z    | +0.43+ | 068.9   | 063.9 | 065.8 | 070.9 | 075.2 | 077.3 | 054.2  | 045.5   | 061.8  | 081.1  | 093.0  | 105.2 | 071.9 |

Normalwerte für den Jahresanfang, d. h. Mittelwerte für die Zeit von Anfang Juli 1929 bis Ende Juni 1930.

| 1930.0  | D          | I          | H         | F         | X         | Y          | Z         |
|---------|------------|------------|-----------|-----------|-----------|------------|-----------|
| Seddin  | -5° 43'.80 | 66° 47'.12 | 0.18467.7 | 0.46851.4 | 0.18375.4 | -0.01843.8 | 0.43058.1 |
| Potsdam | 42.50      | 50.12      | 429.7     | 849.4     | 339.4     | 830.8      | 073.1     |

Mittlerer fortschreitender Gang an allen, an den ruhigen und an den gestörten Tagen jedes Monats.

| 1930 | Januar | Februar | März | April | Mai  | Juni | Juli  | August | Septbr. | Oktbr. | Novbr. | Dezbr. | Jahr |      |
|------|--------|---------|------|-------|------|------|-------|--------|---------|--------|--------|--------|------|------|
| X    | Y      | Y       | Y    | Y     | Y    | Y    | Y     | Y      | Y       | Y      | Y      | Y      | Y    |      |
|      | A. T.  | +0.1    | -0.4 | +0.2  | +0.3 | -1.0 | +0.7  | -0.1   | -0.2    | -0.7   | +0.3   | +0.2   | +0.5 | 0.0  |
|      | R. T.  | +1.1    | +1.3 | -1.1  | +0.9 | +8.3 | +11.8 | +2.1   | +5.6    | +0.8   | +3.3   | +2.2   | +2.7 | +3.2 |
| Y    | Y      | Y       | Y    | Y     | Y    | Y    | Y     | Y      | Y       | Y      | Y      | Y      | Y    |      |
|      | A. T.  | +0.1    | +0.1 | +0.2  | +0.1 | +0.8 | -0.4  | +0.2   | -0.2    | +0.5   | +0.4   | -0.1   | -0.1 | +0.1 |
|      | R. T.  | -2.8    | +0.7 | +1.3  | -0.8 | -3.5 | -3.3  | -2.7   | -5.1    | -5.8   | -1.0   | -0.4   | 0.0  | -2.0 |
| Z    | Y      | Y       | Y    | Y     | Y    | Y    | Y     | Y      | Y       | Y      | Y      | Y      | Y    |      |
|      | A. T.  | -0.3    | +0.2 | 0.0   | +0.3 | -0.1 | -0.2  | -0.8   | +0.2    | +0.8   | +0.5   | +0.4   | +0.1 | +0.1 |
|      | R. T.  | -1.5    | -0.8 | +0.1  | +1.1 | -4.2 | -4.1  | -1.4   | -3.1    | +2.7   | -0.3   | -0.1   | -1.4 | -1.1 |

Mittlere und äußerste Werte der Tages-Mittel, Extreme und Amplituden während des ganzen Jahres.

| 1930           | X - 18300 $\gamma$ |        |      |      | Y + 1900 $\gamma$ |        |       |      | Z - 43000 $\gamma$ |        |      |       |       |     |     |
|----------------|--------------------|--------|------|------|-------------------|--------|-------|------|--------------------|--------|------|-------|-------|-----|-----|
|                | Tages-             | Mittel | Max. | Min. | Ampl.             | Mittel | Max.  | Min. | Ampl.              | Mittel | Max. | Min.  | Ampl. |     |     |
| Mittlerer Wert | Y                  | 66.8   | 95   | 34   | 61                | Y      | 85.2  | 116  | 56                 | 61     | Y    | 71.9  | 88    | 56  | 32  |
| Höchster »     | Y                  | 90.3   | 149  | 77   | 180               | Y      | 122.8 | 219  | 105                | 187    | Y    | 133.7 | 244   | 103 | 157 |
| Niedrigster »  | Y                  | 21.2   | 48   | -79  | 10                | Y      | 52.2  | 65   | -24                | 11     | Y    | 37.8  | 45    | 02  | 5   |

Die als relatives Maß der Aktivität der einzelnen Tage unter der Bezeichnung  $\alpha$  angegebene Summe der Amplituden der drei Komponenten hatte während des Jahres den mittleren Betrag 154; der höchste Wert war 498 am 3. Dezember, der niedrigste 29 am 17. Dezember.

Abweichung der fortlaufend gebildeten Tagesmittel vom Normalwert.

Seddin

Weltzeit

1930

| Tag | Stunde |    | Januar |     |     |     |     |     | Februar |     |     |      |     |    | März |     |     |      |     |     | April |     |     |      |     |     |  |
|-----|--------|----|--------|-----|-----|-----|-----|-----|---------|-----|-----|------|-----|----|------|-----|-----|------|-----|-----|-------|-----|-----|------|-----|-----|--|
|     |        |    | I      |     |     | II  |     |     | I       |     |     | II   |     |    | I    |     |     | II   |     |     | I     |     |     | II   |     |     |  |
|     |        |    | X      | Y   | Z   | X   | Y   | Z   | X       | Y   | Z   | X    | Y   | Z  | X    | Y   | Z   | X    | Y   | Z   | X     | Y   | Z   | X    | Y   | Z   |  |
| I   | 16     | 0  | 33     | 15  | 100 | 61  | 27  | 96  | 59      | 0   | -4  | -143 | 121 | 81 | -56  | -22 | 31  | -111 | 12  | 98  | 14    | -17 | 18  | -56  | 90  | 48  |  |
|     |        | 6  | -15    | 27  | 116 | 37  | 34  | 114 | 37      | 18  | 14  | -118 | 123 | 53 | -41  | 10  | 40  | -117 | -9  | 49  | -2    | -22 | 36  | -70  | 57  | 1   |  |
|     |        | 12 | 5      | 29  | 107 | 50  | 8   | 105 | 17      | 20  | 26  | -92  | 134 | 33 | -41  | 1   | 28  | -86  | 15  | 18  | -5    | -45 | 35  | -35  | 76  | -17 |  |
|     |        | 18 | -4     | 27  | 120 | 61  | 4   | 99  | 1       | 31  | 22  | -129 | 145 | 50 | -64  | 21  | 33  | -94  | 47  | 17  | -17   | -25 | 50  | -47  | 78  | -13 |  |
|     |        | 0  | -3     | 25  | 111 | 63  | -5  | 94  | 0       | 36  | 26  | -84  | 143 | 56 | -89  | 30  | 39  | -105 | 42  | 23  | -2    | -34 | 68  | -56  | 66  | -13 |  |
| 2   | 17     | 6  | 40     | 30  | 98  | 51  | -66 | 98  | 7       | 14  | 11  | -69  | 176 | 51 | -72  | 37  | 36  | -82  | 52  | 32  | 36    | -37 | 50  | -32  | 73  | -12 |  |
|     |        | 12 | 42     | 11  | 94  | -16 | -54 | 155 | 28      | 29  | 5   | -99  | 149 | 67 | -80  | 35  | 39  | -77  | 44  | 41  | 58    | -25 | 49  | -64  | 59  | 4   |  |
|     |        | 18 | 50     | 2   | 94  | -52 | -39 | 176 | 18      | 16  | 14  | -86  | 76  | 88 | -83  | 30  | 46  | -42  | 9   | 28  | 79    | -26 | 37  | -36  | 53  | 39  |  |
|     |        | 0  | 57     | -16 | 102 | -93 | -32 | 176 | 0       | 17  | 16  | -79  | 78  | 85 | -60  | 29  | 54  | -5   | 37  | 32  | 70    | -6  | 36  | -15  | 48  | 58  |  |
|     |        | 6  | -2     | -3  | 131 | -82 | 24  | 160 | 8       | 50  | 30  | -98  | 24  | 73 | -60  | -4  | 27  | -13  | 17  | 28  | 69    | -10 | 29  | -43  | 34  | 83  |  |
|     |        | 12 | -37    | 18  | 154 | -23 | 14  | 115 | -9      | 29  | 26  | -88  | 37  | 73 | -39  | -6  | 19  | -8   | 69  | 31  | 53    | -35 | 30  | -33  | 74  | 87  |  |
|     |        | 18 | -40    | 2   | 153 | 9   | 28  | 90  | -3      | 35  | 31  | -83  | 43  | 60 | -39  | 13  | 20  | -35  | 110 | 31  | 48    | -23 | 50  | -17  | 91  | 88  |  |
|     |        | 0  | -123   | 17  | 161 | 20  | 11  | 88  | -9      | 43  | 31  | -85  | 55  | 58 | 9    | 40  | 9   | -52  | 84  | 16  | 55    | -14 | 43  | 3    | 80  | 75  |  |
|     |        | 6  | -187   | 9   | 196 | -6  | -1  | 113 | 7       | 5   | 16  | -70  | 80  | 50 | 20   | 45  | 8   | -67  | 89  | -1  | 61    | -5  | 28  | 11   | 85  | 47  |  |
|     |        | 12 | -168   | 51  | 200 | 15  | 7   | 107 | 23      | 1   | 15  | -66  | 54  | 45 | 16   | 33  | 13  | -91  | 21  | 1   | 61    | -5  | 30  | 24   | 54  | 61  |  |
|     |        | 18 | -215   | 127 | 192 | 12  | -11 | 107 | 37      | -12 | 11  | -61  | 64  | 55 | 43   | 28  | 23  | -56  | 1   | 9   | 69    | 0   | 22  | 0    | 26  | 69  |  |
|     |        | 0  | -233   | 120 | 195 | 26  | -1  | 93  | 60      | -12 | 14  | -42  | 53  | 53 | 47   | 12  | 14  | -46  | 14  | 17  | 104   | -20 | 3   | -66  | -19 | 86  |  |
|     |        | 6  | -247   | 130 | 201 | 64  | -18 | 74  | 43      | -15 | 22  | -31  | 41  | 45 | 46   | -8  | -5  | -41  | 26  | 34  | 129   | -20 | -2  | -97  | 11  | 164 |  |
|     |        | 12 | -291   | 141 | 206 | 11  | 22  | 97  | 38      | -34 | 25  | -37  | 50  | 58 | 41   | -16 | -7  | -23  | 38  | 27  | 136   | -21 | -14 | -134 | 10  | 173 |  |
|     |        | 18 | -268   | 76  | 118 | 2   | 47  | 99  | 38      | -23 | 30  | -48  | 66  | 64 | 45   | -15 | -9  | -35  | 38  | 35  | 131   | -36 | -22 | -151 | 19  | 150 |  |
|     |        | 0  | -198   | 66  | 112 | -43 | 56  | 121 | 52      | -16 | 18  | -62  | 71  | 72 | 54   | -3  | -1  | -36  | 40  | 40  | 136   | -23 | -16 | -155 | 71  | 153 |  |
|     |        | 6  | -162   | 77  | 108 | -73 | 77  | 130 | 64      | -8  | 6   | -59  | 61  | 75 | 76   | -5  | -5  | -13  | 30  | 44  | 81    | -45 | 37  | -150 | 64  | 124 |  |
|     |        | 12 | -137   | 84  | 197 | -39 | 33  | 105 | 76      | -8  | 0   | -37  | 31  | 54 | 87   | -10 | -13 | -40  | 15  | 82  | 30    | 37  | 60  | -129 | 42  | 89  |  |
|     |        | 18 | -157   | 91  | 187 | -27 | 23  | 111 | 85      | -15 | -6  | -19  | 37  | 48 | 94   | -10 | -16 | 10   | 32  | 52  | 3     | 92  | 40  | -134 | 32  | 47  |  |
|     |        | 0  | -179   | 108 | 203 | -3  | 23  | 108 | 80      | -23 | 2   | -4   | 35  | 36 | 100  | -21 | -25 | 4    | 28  | 9   | -49   | 90  | 41  | -117 | 23  | 47  |  |
|     |        | 6  | -137   | 132 | 183 | 13  | 45  | 102 | 88      | -33 | 3   | 18   | 34  | 13 | 97   | -20 | -28 | -23  | 35  | -1  | -44   | 110 | 42  | -96  | 23  | 44  |  |
|     |        | 12 | -125   | 110 | 185 | -2  | 48  | 107 | 95      | -35 | -3  | 18   | 37  | 10 | 97   | -27 | -31 | -23  | 34  | -21 | -39   | 122 | 24  | -96  | 43  | 39  |  |
|     |        | 18 | -123   | 131 | 200 | -7  | 26  | 109 | 101     | -32 | -5  | 29   | 35  | 7  | 99   | -30 | -34 | -63  | 15  | 28  | -100  | 201 | -26 | -92  | 61  | 78  |  |
|     |        | 0  | -128   | 112 | 180 | 6   | 14  | 122 | 93      | -30 | -7  | 56   | 16  | 6  | 103  | -32 | -42 | -28  | 32  | 69  | -179  | 201 | 8   | -77  | 48  | 81  |  |
|     |        | 6  | -87    | 90  | 149 | 17  | 7   | 117 | 60      | -40 | 5   | 64   | 6   | 23 | 105  | -29 | -42 | 26   | 2   | 54  | -239  | 250 | 30  | -54  | 48  | 63  |  |
|     |        | 12 | -55    | 12  | 128 | 24  | 0   | 109 | 12      | -13 | 30  | 81   | -9  | 21 | 108  | -31 | -43 | 65   | -17 | 44  | -203  | 192 | 36  | -51  | 60  | 64  |  |
|     |        | 18 | -40    | -1  | 130 | 30  | 8   | 103 | -11     | 2   | 38  | 98   | -44 | 20 | 117  | -25 | -44 | 74   | -46 | 22  | -159  | 107 | 103 | -52  | 31  | 84  |  |
|     |        | 0  | -14    | 26  | 142 | 46  | 23  | 87  | -4      | 7   | 33  | 84   | -48 | 22 | 134  | -23 | -39 | -22  | -83 | 31  | -127  | 107 | 91  | -62  | 35  | 73  |  |
|     |        | 6  | 4      | 8   | 135 | 51  | 19  | 82  | 58      | 12  | 8   | 67   | -27 | 30 | 147  | -28 | -37 | -110 | -65 | 75  | -91   | 66  | 81  | -62  | 55  | 69  |  |
|     |        | 12 | 8      | 4   | 133 | 49  | 17  | 84  | 105     | -24 | -22 | 57   | -3  | 44 | 155  | -24 | -41 | -133 | -50 | 86  | -120  | 85  | 83  | -86  | 17  | 90  |  |
|     |        | 18 | 34     | 4   | 128 | 54  | 29  | 79  | 133     | -39 | -35 | 38   | -16 | 43 | 155  | -32 | -44 | -147 | -26 | 110 | -143  | 61  | 51  | -67  | 21  | 88  |  |
|     |        | 0  | 52     | 12  | 116 | 68  | 4   | 73  | 138     | -44 | -44 | -27  | -4  | 73 | 138  | -42 | -57 | -55  | -4  | 90  | -199  | 31  | 47  | -41  | 59  | 90  |  |
|     |        | 6  | 49     | 20  | 109 | 72  | -1  | 69  | 98      | -49 | -38 | -72  | 31  | 94 | 150  | -65 | -68 | 0    | -6  | 56  | -185  | 31  | 57  | -58  | 45  | 96  |  |
|     |        | 12 | 53     | 21  | 102 | 87  | -15 | 54  | 83      | -43 | -35 | -85  | 105 | 68 | 142  | -55 | -64 | 23   | -14 | 43  | -196  | -3  | 62  | -44  | 47  | 83  |  |
|     |        | 18 | 55     | 18  | 100 | 89  | -34 | 51  | 80      | -47 | -42 | -105 | 138 | 50 | 132  | -45 | -58 | 25   | -42 | 21  | -182  | 17  | 72  | -39  | 31  | 68  |  |
|     |        | 0  | 77     | 27  | 98  | 88  | -20 | 40  | 108     | -42 | -57 | -75  | 147 | 20 | 140  | -44 | -53 | 4    | -41 | 20  | -142  | 16  | 69  | -37  | 15  | 48  |  |
|     |        | 6  | 87     | 19  | 86  | 108 | -17 | 24  | 152     | -34 | -70 | -44  | 142 | -3 | 128  | -46 | -57 | 8    | -46 | 21  | -136  | 46  | 54  | -41  | 5   | 30  |  |
|     |        | 12 | 88     | 5   | 82  | 122 | -23 | 10  | 170     | -38 | -81 | -40  | 48  | 10 | 106  | -19 | -31 | 5    | -44 | 27  | -91   | 80  | 35  | -37  | 18  | 26  |  |
|     |        | 18 | 98     | 3   | 78  | 131 | -33 | 3   | 169     | 8   | -80 | -18  | 25  | 26 | 96   | 104 | -65 | 30   | -27 | 43  | -69   | 59  | 26  | -29  | 57  | 43  |  |
|     |        | 0  | 92     | -4  | 74  | 135 | -11 | -2  | 170     | 6   | -83 | -7   | 16  | 26 | -1   | 89  | -86 | -17  | -30 | 63  | -73   | 64  | 20  | -46  | 58  | 61  |  |
|     |        | 6  | 82     | -14 | 84  | 128 | -5  | 0   | 96      | -51 | -63 | 24   | -13 | 11 | -133 | 159 | 11  | -33  | -19 | 76  | -42   | 60  | 12  | -32  | 69  | 70  |  |
|     |        | 12 | 93     | -18 | 82  | 134 | -6  | -4  | 66      | 58  | -72 | 37   | 0   | -3 | -212 | 256 | 28  | -54  | 24  | 78  | -69   | 44  | 18  | -33  | 50  | 73  |  |
|     |        | 18 | 114    | -30 | 74  | 141 | -6  | -8  | -69     | 140 | -87 | 31   | 7   | -8 | -284 | 130 | 24  | -70  | 11  | 66  | -107  | 43  | 16  | -48  | 14  | 68  |  |
|     |        | 0  | 119    | -37 | 57  | 141 | -31 | -11 | -206    | 155 | -53 | 23   | -15 | -7 | -273 | 150 | 72  | -60  | 25  | 57  | -91   | 51  | 28  | 7    | 15  | 64  |  |
|     |        | 6  | 132    | -45 | 37  | 154 | -46 | -23 | -284    | 194 | 7   | -29  | -10 | 29 | -232 | 130 | 72  | -60  | 30  | 58  | -92   | 53  | 33  | 54   | 19  | 63  |  |
|     |        | 12 | 121    | -40 | 43  | 124 | -35 | -15 | -362    | 193 | 75  | -33  | -4  | 43 | -178 | 100 | 42  | -24  | -2  | 40  | -99   | 40  | 53  | 72   | -2  | 65  |  |
|     |        | 18 | 104    | -15 | 49  | 130 | -50 | -17 | -326    | 137 | 88  | -24  | -34 | 29 | -173 | 161 | 62  | -38  | 1   | 26  | -79   | 58  | 76  | 106  | 21  | 78  |  |
|     |        | 0  | 89     | -13 | 63  | 116 | -40 | -5  | -278    | 114 | 89  |      |     |    | -181 | 163 | 61  | -28  | 5   | 33  | -67   | 68  | 79  | 110  | 18  | 60  |  |
|     |        | 6  | 92     | -2  | 75  | 61  | -18 | 23  | -267    | 174 | 111 |      |     |    | -166 | 138 | 52  | -13  | 14  | 40  | -87   | 49  | 56  | 83   | -61 | 63  |  |
|     |        | 12 | 100    | -6  | 69  | 67  | -14 | 23  | -240    | 131 | 97  |      |     |    | -159 | 126 | 64  | -30  | -4  | 47  | -77   | 97  | 46  | 110  | -43 | 49  |  |
|     |        | 18 | 89     | -14 | 71  | 52  | -2  | 28  | -221    | 95  | 106 |      |     |    | -143 | 115 | 46  | -20  | -10 | 70  | -49   | 102 | 32  | 70   | -22 | 44  |  |
|     |        | 0  | 92     | -6  | 72  | 42  | -10 | 30  | -226    | 113 | 111 |      |     |    | -148 | 127 | 31  | -15  | -6  | 78  | -62   | 118 | 21  | 10   | -16 | 79  |  |
|     |        | 6  | 97     | -11 | 68  | 6   | 5   | 47  | -206    | 90  | 106 |      |     |    | -130 | 144 | 44  | -5   | 4   | 62  | -72   | 139 | 49  | 29   | 8   | 69  |  |
|     |        | 12 | 83     | 17  | 77  | 10  | 20  | 43  | -184    | 79  | 105 |      |     |    | -139 | 75  | 53  | -10  | 9   | 63  | -69   | 85  | 50  | 41   | -23 | 97  |  |
|     |        | 18 | 66     | 29  | 85  | -7  | 20  | 45  | -133    | 123 | 88  |      |     |    | -131 | 25  | 92  | -9   | 41  | 65  | -91   | 80  | 58  | 67   | -51 | 103 |  |
|     |        | 0  |        |     |     | -18 | 40  | 43  |         |     |     |      |     |    |      |     |     |      |     |     | -1    | 41  | 61  |      |     |     |  |
|     |        | 6  |        |     |     | 26  | 39  | 19  |         |     |     |      |     |    |      |     |     |      |     |     | -9    | 20  | 59  |      |     |     |  |
|     |        | 12 |        |     |     | 32  | 18  | 16  |         |     |     |      |     |    |      |     |     |      |     |     | -2    | 26  | 56  |      |     |     |  |
|     |        | 18 |        |     |     | 52  | 22  | -2  |         |     |     |      |     |    |      |     |     |      |     |     | 9     | -2  | 41  |      |     |     |  |



Abweichung der fortlaufend gebildeten Tagesmittel vom Normalwert.

Seddin

Weltzeit

1930

| Tag | Weltzeit |    |           |     |      |      |      |      |         |     |     |      |     |     |          |     |     |      |     |     |          |     |     |      |     |     |  |
|-----|----------|----|-----------|-----|------|------|------|------|---------|-----|-----|------|-----|-----|----------|-----|-----|------|-----|-----|----------|-----|-----|------|-----|-----|--|
|     | I II     |    | September |     |      |      |      |      | Oktober |     |     |      |     |     | November |     |     |      |     |     | Dezember |     |     |      |     |     |  |
|     |          |    | I         |     |      | II   |      |      | I       |     |     | II   |     |     | I        |     |     | II   |     |     | I        |     |     | II   |     |     |  |
|     |          |    | X         | Y   | Z    | X    | Y    | Z    | X       | Y   | Z   | X    | Y   | Z   | X        | Y   | Z   | X    | Y   | Z   | X        | Y   | Z   | X    | Y   | Z   |  |
| 1   | 16       | 0  | -38       | -81 | -286 | -18  | 19   | -180 | -232    | 38  | -58 | -128 | 46  | 6   | -141     | 112 | 87  | -118 | 23  | 158 | -78      | 39  | 198 | 21   | -27 | 219 |  |
|     |          | 6  | -113      | -33 | -214 | -6   | 14   | -181 | -241    | 52  | -26 | -116 | 51  | 3   | -185     | 103 | 112 | -93  | 28  | 150 | -81      | 27  | 198 | 39   | -12 | 218 |  |
|     |          | 12 | -163      | -16 | -179 | 3    | 9    | -180 | -223    | 56  | -25 | -116 | 63  | 0   | -199     | 83  | 145 | -85  | 29  | 143 | -53      | 6   | 190 | 46   | -17 | 207 |  |
| 2   | 17       | 0  | -180      | 31  | -159 | 53   | -22  | -189 | -197    | 79  | -38 | -120 | -10 | 12  | -158     | 65  | 165 | -95  | 29  | 150 | -32      | -3  | 190 | 65   | -18 | 196 |  |
|     |          | 6  | -111      | -14 | -229 | 14   | -71  | -178 | -170    | 48  | -46 | -247 | -32 | 190 | -118     | 36  | 143 | -102 | 39  | 156 | -15      | -3  | 178 | 74   | -23 | 186 |  |
|     |          | 12 | -63       | -43 | -251 | 25   | -73  | -185 | -149    | 68  | -49 | -472 | 171 | 274 | -85      | 24  | 125 | -95  | 28  | 155 | -15      | 2   | 172 | 79   | -25 | 184 |  |
| 3   | 18       | 0  | -35       | -52 | -210 | -41  | -86  | -173 | -148    | 21  | -50 | -619 | 286 | 349 | -100     | 69  | 108 | -67  | 28  | 151 | 45       | -49 | 143 | 88   | -32 | 186 |  |
|     |          | 6  | -97       | -58 | -83  | -159 | -112 | -77  | -166    | 61  | 0   | -531 | 282 | 203 | -62      | 57  | 78  | -62  | 26  | 151 | -201     | -59 | 349 | 98   | -37 | 185 |  |
|     |          | 12 | -149      | 23  | -64  | -207 | -5   | -67  | -206    | 84  | 0   | -334 | 99  | 158 | -58      | 39  | 71  | -46  | 40  | 140 | -423     | 124 | 518 | 103  | -40 | 184 |  |
| 4   | 19       | 0  | -230      | 50  | -105 | -393 | 103  | -89  | -249    | 120 | 10  | -225 | 60  | 107 | -30      | -58 | 63  | -42  | 43  | 131 | -709     | 224 | 486 | 121  | -42 | 174 |  |
|     |          | 6  | -199      | 95  | -210 | -293 | 201  | -150 | -241    | 109 | -8  | -190 | 84  | 96  | -83      | -49 | 93  | -25  | 30  | 123 | -579     | 212 | 337 | 103  | -57 | 173 |  |
|     |          | 12 | -184      | 40  | -209 | -300 | 124  | -138 | -213    | 90  | 0   | -160 | 81  | 65  | -89      | -23 | 96  | -25  | 7   | 122 | -422     | 51  | 215 | 105  | -51 | 169 |  |
| 5   | 20       | 0  | -101      | 35  | -149 | -166 | 79   | -87  | -204    | 71  | -3  | -175 | 67  | 26  | -105     | 47  | 98  | 8    | -11 | 120 | -266     | 53  | 326 | 109  | -59 | 165 |  |
|     |          | 6  | -86       | 46  | -127 | -141 | 44   | -117 | -220    | 72  | -2  | -181 | 106 | 39  | -75      | 60  | 80  | 15   | -6  | 119 | -159     | 89  | 288 | 82   | -32 | 180 |  |
|     |          | 12 | -60       | 63  | -136 | -120 | 35   | -122 | -241    | 43  | -3  | -164 | 89  | 30  | -78      | 62  | 75  | 21   | -5  | 115 | -119     | 74  | 263 | 21   | 30  | 217 |  |
| 6   | 21       | 0  | -92       | 34  | -132 | -153 | -6   | -123 | -193    | 60  | -13 | -115 | 83  | 26  | -57      | 38  | 84  | 29   | -16 | 108 | -88      | 54  | 248 | -142 | 51  | 261 |  |
|     |          | 6  | -110      | 40  | -102 | -183 | -18  | -93  | -153    | 38  | -32 | -99  | 39  | 5   | -41      | 29  | 81  | 34   | -21 | 108 | -73      | 45  | 244 | -210 | 129 | 303 |  |
|     |          | 12 | -135      | 21  | -87  | -201 | -12  | -81  | -138    | 68  | -39 | -100 | 40  | 8   | -31      | 1   | 82  | 41   | -28 | 108 | -62      | 48  | 240 | -191 | 101 | 289 |  |
| 7   | 22       | 0  | -153      | 56  | -57  | -145 | 25   | -80  | -97     | 71  | -42 | -72  | 34  | 25  | -14      | -3  | 74  | 36   | -32 | 112 | -11      | 40  | 223 | -155 | 107 | 291 |  |
|     |          | 6  | -132      | 64  | -85  | -93  | 53   | -119 | -95     | 80  | -53 | -56  | 63  | 20  | 6        | -14 | 63  | 46   | -40 | 108 | -26      | 29  | 225 | -121 | 64  | 270 |  |
|     |          | 12 | -122      | 75  | -101 | -82  | 37   | -137 | -81     | 96  | -65 | -73  | 52  | 26  | -1       | 0   | 66  | 61   | -51 | 100 | -16      | 17  | 220 | -113 | 47  | 265 |  |
| 8   | 23       | 0  | -87       | 124 | -140 | -84  | 44   | -142 | -165    | 16  | -57 | -58  | 51  | 29  | -2       | 12  | 76  | 116  | -58 | 84  | -22      | 7   | 216 | -78  | 48  | 257 |  |
|     |          | 6  | -87       | 91  | -152 | -94  | 21   | -134 | -229    | 19  | -11 | -49  | 16  | 26  | -20      | -8  | 90  | 70   | -62 | 92  | 0        | 7   | 204 | -72  | 54  | 255 |  |
|     |          | 12 | -74       | 69  | -145 | -81  | 34   | -131 | -261    | -18 | 19  | -30  | 8   | 21  | -1       | 3   | 95  | -21  | 32  | 124 | 16       | -1  | 198 | -69  | 50  | 255 |  |
| 9   | 24       | 0  | -41       | -14 | -109 | -72  | 30   | -157 | -204    | 51  | 13  | -14  | -7  | 19  | -17      | 28  | 78  | -141 | 57  | 117 | 48       | -11 | 187 | -58  | 27  | 253 |  |
|     |          | 6  | -76       | 1   | -76  | -77  | 38   | -156 | -144    | 31  | -42 | -1   | -4  | 15  | -8       | 37  | 81  | -196 | 104 | 156 | 39       | -16 | 185 | -83  | 9   | 259 |  |
|     |          | 12 | -87       | 17  | -77  | -75  | 21   | -160 | -97     | 28  | -64 | 9    | -15 | 12  | -14      | 23  | 78  | -169 | 84  | 148 | 35       | -19 | 185 | -92  | 16  | 264 |  |
| 10  | 25       | 0  | -103      | 51  | -104 | -56  | 0    | -159 | -57     | 47  | -60 | 45   | -16 | -5  | 1        | -12 | 88  | -260 | 63  | 130 | 21       | -25 | 190 | -98  | 27  | 270 |  |
|     |          | 6  | -78       | 46  | -127 | -31  | 18   | -171 | -43     | 52  | -60 | 32   | -48 | 0   | 6        | -14 | 73  | -341 | 151 | 199 | 36       | -27 | 192 | -48  | 14  | 252 |  |
|     |          | 12 | -77       | 23  | -129 | -21  | 24   | -176 | -69     | 56  | -48 | 30   | 4   | 8   | 11       | -21 | 62  | -358 | 178 | 195 | 47       | -25 | 187 | -36  | 4   | 242 |  |
| 11  | 26       | 0  | -65       | 23  | -103 | -26  | 31   | -171 | -71     | 56  | -43 | 21   | 13  | -58 | 6        | -12 | 57  | -397 | 219 | 238 | 58       | -25 | 185 | -28  | 11  | 242 |  |
|     |          | 6  | -49       | 5   | -107 | -27  | 33   | -163 | -84     | 34  | -33 | -64  | -17 | -54 | 1        | 0   | 54  | -345 | 228 | 250 | 59       | -19 | 182 | 7    | 5   | 230 |  |
|     |          | 12 | -53       | -17 | -118 | -24  | 41   | -164 | -98     | 26  | -24 | -217 | 46  | 84  | 11       | 14  | 48  | -237 | 172 | 180 | 61       | -15 | 179 | 3    | 6   | 223 |  |
| 12  | 27       | 0  | -37       | -14 | -117 | -27  | -7   | -166 | -103    | 5   | -15 | -256 | 6   | 73  | 9        | 1   | 47  | -211 | 104 | 185 | 55       | -23 | 179 | 6    | 15  | 219 |  |
|     |          | 6  | -50       | -4  | -122 | -9   | 10   | -166 | -103    | 5   | -7  | -310 | -9  | 120 | 19       | -5  | 42  | -161 | 97  | 211 | 55       | -26 | 177 | 1    | 15  | 217 |  |
|     |          | 12 | -53       | 11  | -131 | -21  | 20   | -148 | -83     | 17  | -7  | -342 | 30  | 149 | 22       | -11 | 52  | -149 | 84  | 202 | 75       | -34 | 174 | 3    | 25  | 215 |  |
| 13  | 28       | 0  | -48       | 23  | -134 | -29  | -6   | -143 | -61     | 18  | -8  | -263 | 109 | 80  | 18       | -6  | 60  | -139 | 75  | 192 | 66       | -61 | 178 | 9    | 28  | 212 |  |
|     |          | 6  | -59       | 60  | -147 | -21  | -2   | -145 | -41     | 8   | -21 | -253 | 145 | 81  | 12       | -5  | 61  | -139 | 67  | 194 | 69       | -29 | 187 | 10   | 11  | 211 |  |
|     |          | 12 | -49       | 70  | -157 | -13  | 2    | -149 | -33     | 3   | -28 | -251 | 135 | 107 | 17       | -16 | 67  | -136 | 63  | 196 | 59       | -10 | 184 | 23   | 8   | 212 |  |
| 14  | 29       | 0  | -36       | 85  | -159 | 13   | 0    | -167 | -25     | -6  | -25 | -232 | 136 | 113 | 33       | -16 | 68  | -130 | 55  | 204 | 39       | -6  | 186 | 25   | 3   | 217 |  |
|     |          | 6  | -19       | 80  | -183 | -32  | 32   | -154 | -25     | -16 | -21 | -222 | 66  | 87  | 53       | -24 | 66  | -121 | 14  | 202 | 0        | 9   | 202 | 45   | -9  | 214 |  |
|     |          | 12 | -17       | 43  | -188 | -51  | 32   | -145 | -28     | -10 | -16 | -239 | 85  | 110 | 81       | -30 | 64  | -107 | 9   | 197 | -9       | 16  | 212 | 52   | -25 | 212 |  |
| 15  | 30       | 0  | -8        | 68  | -208 | -84  | 15   | -166 | -10     | -25 | -25 | -223 | 90  | 111 | 106      | -3  | 53  | -103 | 13  | 202 | -23      | 2   | 224 | 52   | -23 | 211 |  |
|     |          | 6  | 0         | 55  | -201 | -175 | -10  | -148 | 66      | -40 | -68 | -259 | 102 | 120 | 123      | -6  | 34  | -75  | 25  | 192 | -19      | -1  | 229 | 56   | -22 | 216 |  |
|     |          | 12 | -14       | 48  | -187 | -259 | 33   | -93  | 65      | -69 | -86 | -262 | 111 | 137 | 124      | -39 | 32  | -73  | 32  | 186 | 23       | 40  | 220 | 79   | -37 | 216 |  |
| 15  | 31       | 0  | -4        | 18  | -164 | -323 | 73   | -210 | -133    | 106 | -47 | -219 | 104 | 118 | -158     | 74  | 171 | -81  | 48  | 195 | 33       | 14  | 202 | 60   | -4  | 231 |  |
|     |          | 6  | -2        | 18  | -179 | -405 | 77   | -231 | -253    | 148 | 7   | -171 | 99  | 109 | -264     | 102 | 213 | -79  | 28  | 194 | 21       | 20  | 208 | 55   | -13 | 224 |  |
|     |          | 12 | -2        | 44  | -185 | -337 | 59   | -281 | -286    | 200 | 25  | -150 | 123 | 100 | -332     | 140 | 245 | -73  | 36  | 197 | 16       | -17 | 208 | 33   | -8  | 227 |  |
|     | 31       | 0  | -10       | 12  | -179 | -322 | 40   | -106 | -154    | 44  | 15  | -151 | 93  | 102 | -187     | 39  | 173 | -69  | 22  | 194 | 19       | -20 | 217 | 50   | -31 | 215 |  |
|     |          | 6  |           |     |      |      |      |      |         |     |     |      |     |     |          |     |     |      |     |     |          |     |     |      |     |     |  |
|     |          | 12 |           |     |      |      |      |      |         |     |     |      |     |     |          |     |     |      |     |     |          |     |     |      |     |     |  |
|     |          | 18 |           |     |      |      |      |      |         |     |     |      |     |     |          |     |     |      |     |     |          |     |     |      |     |     |  |

Einheit der Zahlen: o.i.

Normalwerte für den Jahresschluß: X = 18366.9, Y = -1789.4, Z = 43084.0. (Nach vorläufiger Berechnung.)

Aktivitätszahlen, Tagesmittel, höchste und niedrigste Stundenwerte der Komponenten.

Seddin

Begrenzung der Tage und Stunden nach Weltzeit.

1930

| Tag     | Aktivität |     |     | X - 18300 γ |      |      | Y + 1900 γ |      |      | Z - 43000 γ |      |       | Tag    | Aktivität |     |     | X - 18300 γ |      |      | Y + 1900 γ |      |      | Z - 43000 γ |      |      |
|---------|-----------|-----|-----|-------------|------|------|------------|------|------|-------------|------|-------|--------|-----------|-----|-----|-------------|------|------|------------|------|------|-------------|------|------|
|         | n         | v   | α   | T.-M.       | Max. | Min. | T.-M.      | Max. | Min. | T.-M.       | Max. | Min.  |        | n         | v   | α   | T.-M.       | Max. | Min. | T.-M.      | Max. | Min. | T.-M.       | Max. | Min. |
| Januar  |           |     |     |             |      |      |            |      |      |             |      | März  |        |           |     |     |             |      |      |            |      |      |             |      |      |
| 1       | 1         | 0.7 | 139 | 74.6        | 100  | 48   | 58.1       | 98   | 37   | 69.0        | 80   | 54    | 1†     | 2         | 1.4 | 204 | 68.8        | 100  | 21   | 64.2       | 109  | 30   | 65.2        | 88   | 42   |
| 2       | 1         | 0.3 | 68  | 78.3        | 84   | 69   | 56.4       | 78   | 40   | 67.7        | 74   | 59    | 2†     | 2         | 1.4 | 186 | 64.9        | 88   | 12   | 67.8       | 110  | 42   | 66.4        | 94   | 52   |
| 3†      | 2         | 1.3 | 149 | 70.3        | 97   | 38   | 57.3       | 95   | 35   | 73.8        | 89   | 59    | 3      | 1         | 0.9 | 127 | 69.0        | 102  | 32   | 63.8       | 82   | 44   | 64.5        | 72   | 53   |
| 4†      | 2         | 1.5 | 227 | 57.2        | 104  | 09   | 60.7       | 122  | 37   | 78.5        | 109  | 62    | 4      | 1         | 0.5 | 104 | 74.5        | 91   | 54   | 67.9       | 90   | 44   | 64.0        | 75   | 54   |
| 5†      | 2         | 1.6 | 219 | 44.9        | 73   | 01   | 69.9       | 125  | 32   | 79.2        | 111  | 57    | 5*     | 0         | 0.0 | 88  | 76.9        | 90   | 57   | 63.1       | 83   | 42   | 62.0        | 66   | 52   |
| 6†      | 2         | 1.6 | 233 | 60.3        | 92   | 19   | 64.3       | 130  | 24   | 78.3        | 110  | 56    | 6      | 0         | 0.1 | 91  | 81.5        | 92   | 59   | 63.9       | 87   | 41   | 61.5        | 67   | 55   |
| 7†      | 2         | 1.3 | 172 | 61.5        | 94   | 41   | 67.1       | 127  | 45   | 77.2        | 93   | 56    | 7*     | 0         | 0.0 | 85  | 82.5        | 91   | 63   | 62.4       | 85   | 40   | 59.8        | 64   | 52   |
| 8       | 1         | 0.9 | 104 | 68.4        | 92   | 47   | 57.4       | 80   | 38   | 71.6        | 81   | 64    | 8*     | 0         | 0.0 | 81  | 83.6        | 92   | 67   | 62.1       | 82   | 40   | 58.6        | 63   | 49   |
| 9       | 1         | 0.4 | 57  | 74.7        | 85   | 64   | 56.8       | 66   | 40   | 72.1        | 76   | 66    | 9*     | 0         | 0.0 | 66  | 88.3        | 95   | 74   | 63.0       | 79   | 45   | 58.9        | 63   | 52   |
| 10      | 1         | 0.3 | 58  | 79.2        | 92   | 68   | 58.6       | 69   | 45   | 69.1        | 73   | 63    | 10*    | 0         | 0.0 | 97  | 86.9        | 97   | 68   | 60.0       | 80   | 30   | 56.7        | 63   | 45   |
| 11*     | 0         | 0.0 | 39  | 82.7        | 90   | 76   | 57.2       | 69   | 49   | 67.2        | 70   | 65    | 11     | 1         | 1.1 | 153 | 83.3        | 101  | 54   | 63.8       | 101  | 31   | 66.0        | 84   | 48   |
| 12*     | 1         | 0.1 | 62  | 83.2        | 94   | 69   | 55.0       | 67   | 42   | 67.2        | 74   | 62    | 12†    | 2         | 1.9 | 399 | 51.5        | 111  | -38  | 91.4       | 163  | 20   | 66.0        | 99   | 22   |
| 13*     | 1         | 0.7 | 88  | 85.9        | 119  | 69   | 53.0       | 65   | 42   | 63.4        | 71   | 56    | 13†    | 2         | 1.7 | 225 | 54.9        | 92   | 24   | 76.0       | 125  | 36   | 67.5        | 107  | 39   |
| 14*     | 1         | 0.3 | 70  | 83.8        | 99   | 64   | 56.5       | 69   | 44   | 66.1        | 70   | 60    | 14†    | 2         | 1.6 | 250 | 56.8        | 105  | 23   | 78.7       | 134  | 35   | 69.8        | 115  | 46   |
| 15      | 1         | 0.7 | 85  | 82.1        | 92   | 70   | 59.0       | 95   | 44   | 67.0        | 74   | 62    | 15     | 2         | 1.4 | 231 | 58.7        | 94   | 27   | 73.8       | 118  | 33   | 68.7        | 115  | 36   |
| 16      | 1         | 0.3 | 59  | 78.8        | 93   | 70   | 58.2       | 71   | 44   | 69.8        | 75   | 66    | 16     | 2         | 1.2 | 180 | 64.0        | 119  | 32   | 67.9       | 101  | 38   | 65.3        | 85   | 55   |
| 17      | 1         | 1.0 | 165 | 72.2        | 90   | 49   | 52.2       | 89   | 44   | 74.9        | 102  | 63    | 17     | 1         | 1.1 | 155 | 64.9        | 99   | 34   | 71.0       | 96   | 40   | 67.7        | 86   | 52   |
| 18      | 1         | 0.6 | 100 | 71.4        | 88   | 48   | 59.1       | 85   | 41   | 71.0        | 78   | 62    | 18     | 2         | 1.2 | 206 | 71.8        | 145  | 52   | 73.6       | 117  | 40   | 66.7        | 84   | 48   |
| 19      | 1         | 0.8 | 131 | 75.2        | 102  | 55   | 58.6       | 93   | 31   | 70.2        | 83   | 61    | 19     | 1         | 1.1 | 151 | 63.5        | 84   | 31   | 69.0       | 98   | 28   | 63.8        | 74   | 46   |
| 20      | 2         | 1.1 | 150 | 74.8        | 88   | 56   | 60.2       | 111  | 26   | 69.3        | 87   | 54    | 20     | 1         | 0.8 | 129 | 70.2        | 96   | 42   | 70.8       | 84   | 39   | 66.5        | 86   | 56   |
| 21      | 1         | 0.9 | 132 | 69.8        | 109  | 45   | 61.5       | 86   | 34   | 70.3        | 77   | 61    | 21     | 1         | 0.8 | 145 | 68.5        | 97   | 46   | 68.7       | 96   | 35   | 72.1        | 93   | 60   |
| 22      | 1         | 0.7 | 94  | 73.5        | 89   | 47   | 63.2       | 76   | 37   | 70.7        | 77   | 64    | 22     | 1         | 1.1 | 207 | 70.2        | 116  | 38   | 70.7       | 105  | 33   | 61.8        | 93   | 36   |
| 23      | 1         | 0.5 | 72  | 76.0        | 89   | 59   | 58.5       | 75   | 40   | 70.7        | 75   | 68    | 23     | 1         | 0.7 | 134 | 79.0        | 99   | 51   | 65.8       | 99   | 31   | 68.4        | 77   | 59   |
| 24      | 1         | 0.4 | 61  | 78.5        | 89   | 69   | 60.4       | 72   | 45   | 68.3        | 77   | 63    | 24     | 2         | 1.4 | 235 | 59.2        | 94   | -35  | 62.6       | 98   | 31   | 72.7        | 95   | 56   |
| 25      | 1         | 0.3 | 61  | 82.3        | 90   | 77   | 57.3       | 76   | 35   | 65.4        | 68   | 61    | 25     | 1         | 0.7 | 124 | 74.7        | 102  | 55   | 66.4       | 90   | 39   | 68.4        | 81   | 55   |
| 26*     | 0         | 0.0 | 61  | 85.8        | 93   | 76   | 56.7       | 67   | 36   | 61.0        | 66   | 53    | 26     | 1         | 0.9 | 153 | 72.9        | 90   | 28   | 63.5       | 93   | 26   | 66.9        | 80   | 56   |
| 27*     | 0         | 0.0 | 59  | 87.0        | 96   | 72   | 58.5       | 73   | 46   | 59.7        | 62   | 54    | 27     | 1         | 1.1 | 169 | 67.0        | 92   | 17   | 70.5       | 109  | 37   | 72.1        | 83   | 61   |
| 28      | 1         | 0.3 | 89  | 85.9        | 100  | 66   | 55.8       | 72   | 34   | 58.7        | 67   | 50    | 28     | 2         | 1.2 | 213 | 70.0        | 118  | 10   | 68.1       | 109  | 35   | 68.3        | 86   | 55   |
| 29      | 1         | 0.8 | 109 | 80.2        | 100  | 42   | 58.0       | 79   | 42   | 62.5        | 70   | 56    | 29     | 2         | 1.1 | 188 | 69.4        | 99   | 18   | 68.0       | 99   | 35   | 69.1        | 91   | 48   |
| 30      | 1         | 1.1 | 149 | 74.5        | 96   | 29   | 61.6       | 105  | 44   | 64.6        | 79   | 58    | 30     | 1         | 0.6 | 145 | 71.3        | 99   | 32   | 69.5       | 102  | 41   | 70.8        | 79   | 62   |
| 31      | 1         | 0.7 | 89  | 76.7        | 102  | 49   | 61.5       | 74   | 45   | 62.0        | 66   | 59    | 31     | 1         | 0.5 | 141 | 72.1        | 94   | 32   | 71.3       | 104  | 37   | 70.2        | 76   | 64   |
| Mittel  | 1.1       | 0.7 | 108 | 75.2        | 94   | 54   | 59.0       | 86   | 38   | 68.9        | 79   | 60    | Mittel | 1.2       | 0.9 | 162 | 70.7        | 99   | 35   | 68.4       | 101  | 36   | 65.8        | 83   | 51   |
| Max.    | 2         | 1.6 | 233 | 87.0        | 119  | 77   | 69.9       | 130  | 49   | 79.2        | 111  | 68    | Max.   | 2         | 1.9 | 399 | 88.3        | 145  | 74   | 91.4       | 163  | 45   | 72.7        | 115  | 67   |
| Min.    | 0         | 0.0 | 39  | 44.9        | 73   | 01   | 52.2       | 65   | 04   | 58.7        | 62   | 50    | Min.   | 0         | 0.0 | 66  | 51.5        | 84   | -38  | 60.0       | 79   | 20   | 56.7        | 63   | 22   |
| Februar |           |     |     |             |      |      |            |      |      |             |      | April |        |           |     |     |             |      |      |            |      |      |             |      |      |
| 1       | 2         | 1.1 | 148 | 75.2        | 101  | 50   | 61.9       | 106  | 34   | 62.5        | 74   | 49    | 1      | 1         | 0.8 | 161 | 71.8        | 96   | 42   | 64.4       | 96   | 26   | 68.1        | 90   | 53   |
| 2       | 1         | 1.0 | 141 | 76.2        | 103  | 45   | 62.9       | 109  | 45   | 61.0        | 71   | 52    | 2      | 1         | 0.6 | 135 | 78.1        | 105  | 53   | 66.5       | 90   | 27   | 69.6        | 80   | 60   |
| 3       | 2         | 1.2 | 157 | 72.5        | 101  | 38   | 63.1       | 112  | 49   | 63.2        | 76   | 54    | 3*     | 0         | 0.5 | 159 | 77.6        | 101  | 41   | 65.7       | 103  | 27   | 67.8        | 80   | 57   |
| 4       | 1         | 0.6 | 104 | 75.7        | 103  | 44   | 60.4       | 74   | 39   | 62.2        | 68   | 58    | 4*     | 0         | 0.2 | 130 | 78.3        | 92   | 47   | 68.8       | 101  | 40   | 67.8        | 76   | 52   |
| 5       | 1         | 0.5 | 88  | 77.2        | 92   | 54   | 57.1       | 71   | 34   | 63.2        | 70   | 57    | 5*     | 0         | 0.3 | 105 | 85.8        | 95   | 68   | 67.4       | 94   | 38   | 63.5        | 70   | 48   |
| 6*      | 1         | 0.2 | 79  | 81.0        | 96   | 64   | 59.8       | 76   | 39   | 60.8        | 66   | 56    | 6      | 1         | 1.3 | 208 | 75.2        | 95   | 58   | 73.3       | 123  | 27   | 71.0        | 106  | 31   |
| 7       | 0         | 0.4 | 85  | 82.9        | 101  | 59   | 57.3       | 73   | 37   | 60.6        | 64   | 57    | 7†     | 1         | 1.6 | 268 | 68.3        | 126  | 33   | 82.0       | 134  | 25   | 67.5        | 108  | 42   |
| 8*      | 1         | 0.3 | 109 | 74.5        | 94   | 46   | 59.6       | 77   | 32   | 64.0        | 73   | 57    | 8†     | 2         | 1.7 | 302 | 51.9        | 109  | -11  | 89.1       | 156  | 56   | 68.7        | 101  | 19   |
| 9*      | 0         | 0.1 | 90  | 83.8        | 94   | 60   | 58.7       | 79   | 36   | 58.8        | 65   | 52    | 9      | 2         | 1.3 | 206 | 60.1        | 99   | 22   | 78.6       | 107  | 29   | 73.5        | 100  | 49   |
| 10*     | 1         | 0.1 | 98  | 81.6        | 100  | 52   | 56.9       | 73   | 32   | 57.6        | 63   | 54    | 10†    | 2         | 1.5 | 254 | 52.5        | 98   | -09  | 69.9       | 103  | 22   | 71.5        | 107  | 41   |
| 11      | 0         | 0.3 | 70  | 90.3        | 101  | 74   | 57.6       | 72   | 38   | 53.1        | 57   | 48    | 11     | 2         | 1.4 | 253 | 63.0        | 112  | 07   | 78.4       | 113  | 15   | 68.8        | 93   | 43   |
| 12†     | 2         | 1.7 | 370 | 79.0        | 120  | -13  | 67.4       | 191  | 04   | 54.0        | 72   | 22    | 12     | 2         | 1.3 | 208 | 65.2        | 104  | 13   | 74.9       | 100  | 34   | 67.2        | 93   | 42   |
| 13†     | 2         | 1.9 | 271 | 37.0        | 76   | -04  | 81.0       | 144  | 23   | 68.8        | 100  | 30    | 13     | 2         | 1.2 | 234 | 62.2        | 114  | 23   | 74.7       | 119  | 34   | 70.8        | 94   | 36   |
| 14†     | 2         | 1.7 | 221 | 49.2        | 75   | 10   | 75.0       | 122  | 40   | 71.1        | 109  | 35    | 14     | 1         | 0.9 | 185 | 64.3        | 99   | 24   | 80.5       | 116  | 42   | 70.2        | 84   | 48   |
| 15†     | 2         | 1.6 | 179 | 54.8        | 85   | 29   | 69.9       | 98   | 36   | 72.0        | 112  | 51    | 15     | 1         | 1.0 | 198 | 65.1        | 92   | 14   | 79.5       | 108  | 41   | 70.6        | 101  | 48   |
| 16†     | 2         | 1.5 | 219 | 64.0        | 113  | 24   | 75.6       | 112  | 36   | 64.8        | 94   | 40    | 16     | 1         | 1.0 | 214 | 68.5        | 120  | 27   | 78.7       | 126  | 32   | 64.0        | 78   | 51   |
| 17      | 1         | 1.0 | 122 | 63.3        | 77   | 46   | 77.2       | 106  | 48   | 68.3        | 87   | 54    | 17     | 1         | 0.8 | 162 | 65.6        | 88   | 21   | 77.2       | 101  | 37   | 66.2        | 81   | 50   |
| 18      | 1         | 1.1 | 164 | 64.3        | 85   | 38   | 66.2       | 126  | 34   | 69.0        | 83   | 58    | 18     | 1         | 0.6 | 168 | 68.7        | 105  | 42   | 78.9       | 109  | 35   | 74.5        | 92   | 61   |
| 19      | 1         | 0.9 | 118 | 66.5        | 90   | 46   | 68.0       | 88   | 47   | 66.2        | 84   | 51    | 19     | 2         | 1.3 | 255 | 74.3        | 116  | 05   | 77.0       | 129  | 34   | 72.0        | 98   | 49   |
| 20      | 1         | 0.8 | 131 | 69.4        | 95   | 47   | 67.8       | 104  | 51   | 67.6        | 86   | 56    | 20†    | 2         | 1.7 | 238 | 58.5        | 92   | 06   | 72.8       | 111  | 30   | 83.3        | 130  | 59   |
| 21      | 1         | 0.4 | 94  | 69.4        | 88   | 46   | 66.0       | 85   | 47   | 67.3        | 75   | 61    | 21     | 2         | 1.4 | 196 | 59.0        | 93   | 10   | 76.1       | 98   | 42   | 74.9        | 100  | 43   |
| 22*     | 0         | 0.3 | 93  | 74.9        | 87   | 57   | 66.8       | 90   | 40   | 62.9        | 69   | 56    | 22†    | 2         | 1.5 | 282 | 62.3        | 127  | 00   | 76.4       | 117  | 32   | 70.0        | 103  | 33   |
| 23      | 1         | 0.8 | 112 | 81.1        | 97   | 64   | 62.3       | 97   | 32   | 64.1        | 71   | 57    | 23     | 2         | 1.3 | 224 | 66.8        | 122  | 28   | 78.2       | 11   |      |             |      |      |

Aktivitätszahlen, Tagesmittel, höchste und niedrigste Stundenwerte der Komponenten.

Seddin

Begrenzung der Tage und Stunden nach Weltzeit.

1930

| Tag         | Aktivität |     |     | X - 18300 γ |     |      | Y + 1900 γ |     |    | Z - 43000 γ |      |               | Tag    | Aktivität |      |      | X - 18300 γ |     |      | Y + 1900 γ |     |    | Z - 43000 γ |      |    |    |
|-------------|-----------|-----|-----|-------------|-----|------|------------|-----|----|-------------|------|---------------|--------|-----------|------|------|-------------|-----|------|------------|-----|----|-------------|------|----|----|
|             | n         | v   | α   | T.          | M.  | Max. | Min.       | T.  | M. | Max.        | Min. | T.            |        | M.        | Max. | Min. | T.          | M.  | Max. | Min.       | T.  | M. | Max.        | Min. | T. | M. |
| <b>Mai</b>  |           |     |     |             |     |      |            |     |    |             |      | <b>Juli</b>   |        |           |      |      |             |     |      |            |     |    |             |      |    |    |
| I           | 1         | 0.5 | 150 | 78.6        | 103 | 46   | 71.1       | 104 | 34 | 73.1        | 80   | 57            | I      | 1         | 0.6  | 149  | 72.5        | 98  | 37   | 85.2       | 112 | 49 | 63.7        | 77   | 52 |    |
| 2*          | 0         | 0.1 | 144 | 88.9        | 112 | 59   | 71.6       | 104 | 36 | 70.8        | 78   | 55            | 2      | 1         | 0.9  | 167  | 74.2        | 114 | 39   | 84.5       | 114 | 47 | 64.9        | 77   | 52 |    |
| 3*          | 1         | 0.4 | 135 | 82.5        | 103 | 56   | 72.6       | 100 | 38 | 71.6        | 80   | 54            | 3      | 2         | 1.0  | 155  | 76.2        | 114 | 52   | 82.0       | 106 | 45 | 57.9        | 73   | 41 |    |
| 4           | 2         | 1.1 | 209 | 82.4        | 110 | 40   | 72.8       | 115 | 17 | 69.7        | 92   | 51            | 4      | 2         | 1.2  | 166  | 74.2        | 116 | 37   | 79.8       | 106 | 56 | 59.8        | 80   | 43 |    |
| 5†          | 2         | 1.8 | 393 | 45.5        | 121 | -56  | 88.5       | 137 | 22 | 72.7        | 117  | 16            | 5      | 2         | 1.1  | 148  | 76.5        | 106 | 48   | 82.8       | 109 | 55 | 60.7        | 76   | 40 |    |
| 6†          | 2         | 1.5 | 261 | 61.1        | 129 | 21   | 77.8       | 114 | 42 | 72.6        | 106  | 25            | 6      | 1         | 0.5  | 116  | 72.8        | 88  | 48   | 83.2       | 106 | 52 | 66.9        | 78   | 56 |    |
| 7           | 2         | 1.5 | 315 | 69.5        | 127 | 12   | 85.0       | 146 | 43 | 66.0        | 106  | 09            | 7      | 1         | 0.5  | 129  | 78.2        | 103 | 58   | 81.8       | 109 | 46 | 59.9        | 69   | 48 |    |
| 8           | 1         | 1.1 | 199 | 66.9        | 105 | 29   | 79.1       | 110 | 48 | 77.4        | 105  | 44            | 8*     | 1         | 0.2  | 90   | 76.8        | 93  | 61   | 85.3       | 104 | 66 | 62.7        | 72   | 52 |    |
| 9           | 1         | 1.2 | 212 | 64.9        | 109 | 28   | 84.9       | 120 | 48 | 81.0        | 111  | 52            | 9      | 2         | 1.2  | 215  | 85.6        | 145 | 43   | 72.8       | 107 | 23 | 57.0        | 65   | 36 |    |
| 10          | 1         | 0.8 | 155 | 69.1        | 95  | 47   | 82.5       | 121 | 52 | 73.3        | 92   | 54            | 10†    | 2         | 1.7  | 271  | 65.3        | 131 | -09  | 89.1       | 118 | 54 | 59.6        | 89   | 22 |    |
| 11          | 1         | 0.5 | 122 | 73.5        | 106 | 42   | 76.0       | 94  | 52 | 80.7        | 88   | 72            | 11†    | 2         | 1.6  | 251  | 62.5        | 104 | 18   | 97.9       | 144 | 63 | 56.4        | 86   | 02 |    |
| 12          | 1         | 1.1 | 242 | 65.0        | 126 | 16   | 86.4       | 132 | 48 | 71.4        | 96   | 48            | 12†    | 2         | 1.5  | 218  | 62.6        | 122 | 03   | 86.6       | 128 | 61 | 60.4        | 78   | 46 |    |
| 13          | 1         | 1.1 | 192 | 70.8        | 107 | 26   | 80.5       | 107 | 38 | 78.3        | 99   | 57            | 13†    | 2         | 1.4  | 196  | 62.1        | 107 | 14   | 87.9       | 109 | 55 | 69.9        | 103  | 54 |    |
| 14          | 1         | 0.4 | 131 | 72.9        | 93  | 56   | 77.1       | 108 | 47 | 76.9        | 96   | 63            | 14     | 1         | 0.7  | 151  | 63.9        | 94  | 32   | 85.8       | 108 | 51 | 56.0        | 71   | 39 |    |
| 15          | 1         | 0.7 | 157 | 71.2        | 108 | 32   | 78.8       | 101 | 48 | 81.8        | 96   | 68            | 15     | 1         | 0.8  | 106  | 67.9        | 87  | 44   | 89.5       | 108 | 66 | 58.9        | 72   | 51 |    |
| 16†         | 2         | 1.6 | 280 | 77.5        | 141 | 53   | 78.0       | 143 | 24 | 76.0        | 129  | 56            | 16     | 2         | 1.2  | 171  | 65.9        | 101 | 36   | 79.3       | 112 | 45 | 56.7        | 81   | 42 |    |
| 17†         | 2         | 1.7 | 258 | 53.9        | 104 | -26  | 80.0       | 106 | 37 | 77.8        | 110  | 51            | 17     | 2         | 1.0  | 135  | 64.8        | 89  | 35   | 95.8       | 119 | 80 | 53.8        | 73   | 31 |    |
| 18          | 2         | 1.2 | 216 | 71.5        | 147 | 39   | 80.8       | 110 | 46 | 77.3        | 104  | 60            | 18     | 1         | 0.5  | 108  | 71.6        | 92  | 49   | 84.4       | 101 | 66 | 51.5        | 63   | 33 |    |
| 19          | 1         | 1.1 | 163 | 75.5        | 105 | 37   | 78.2       | 103 | 53 | 74.7        | 95   | 50            | 19     | 1         | 0.5  | 131  | 67.1        | 88  | 28   | 91.1       | 113 | 65 | 52.5        | 62   | 39 |    |
| 20          | 1         | 1.0 | 135 | 67.7        | 90  | 24   | 77.8       | 94  | 52 | 78.4        | 91   | 64            | 20*    | 1         | 0.2  | 103  | 70.9        | 86  | 55   | 83.9       | 104 | 57 | 50.3        | 57   | 32 |    |
| 21          | 2         | 1.0 | 159 | 71.6        | 112 | 38   | 80.0       | 107 | 55 | 76.1        | 96   | 63            | 21*    | 1         | 0.3  | 75   | 72.8        | 83  | 53   | 87.8       | 106 | 78 | 53.2        | 59   | 42 |    |
| 22          | 2         | 1.1 | 194 | 66.3        | 98  | -01  | 75.5       | 110 | 42 | 78.9        | 92   | 65            | 22*    | 1         | 0.2  | 108  | 72.5        | 90  | 58   | 81.8       | 99  | 52 | 49.4        | 60   | 31 |    |
| 23          | 1         | 0.6 | 132 | 74.3        | 98  | 44   | 80.9       | 110 | 54 | 76.9        | 86   | 64            | 23*    | 1         | 0.3  | 115  | 69.2        | 85  | 47   | 86.7       | 114 | 58 | 49.6        | 57   | 36 |    |
| 24*         | 1         | 0.3 | 120 | 82.5        | 107 | 68   | 75.9       | 102 | 42 | 73.8        | 82   | 61            | 24     | 1         | 1.0  | 113  | 80.3        | 118 | 60   | 87.3       | 111 | 74 | 45.6        | 56   | 38 |    |
| 25          | 1         | 0.8 | 148 | 82.0        | 113 | 67   | 75.8       | 102 | 44 | 73.8        | 98   | 54            | 25†    | 2         | 1.6  | 303  | 75.4        | 144 | 19   | 95.8       | 159 | 39 | 38.0        | 71   | 13 |    |
| 26          | 1         | 0.6 | 116 | 73.4        | 90  | 50   | 79.3       | 109 | 55 | 76.7        | 84   | 62            | 26     | 2         | 1.3  | 173  | 59.9        | 107 | 20   | 86.4       | 111 | 65 | 45.0        | 66   | 26 |    |
| 27*         | 1         | 0.2 | 123 | 79.8        | 100 | 61   | 77.0       | 109 | 50 | 74.8        | 83   | 58            | 27     | 1         | 0.7  | 138  | 69.1        | 94  | 35   | 93.2       | 125 | 64 | 45.5        | 54   | 36 |    |
| 28*         | 1         | 0.3 | 138 | 80.4        | 92  | 57   | 77.5       | 113 | 41 | 80.6        | 98   | 67            | 28     | 1         | 0.7  | 160  | 70.9        | 108 | 43   | 88.4       | 118 | 45 | 43.1        | 56   | 34 |    |
| 29          | 1         | 0.4 | 141 | 80.5        | 104 | 43   | 77.2       | 104 | 56 | 76.3        | 92   | 60            | 29     | 2         | 1.0  | 203  | 67.9        | 103 | -02  | 88.0       | 120 | 55 | 44.0        | 64   | 31 |    |
| 30          | 1         | 1.2 | 201 | 85.2        | 124 | 55   | 80.9       | 133 | 43 | 73.0        | 96   | 54            | 30     | 1         | 0.9  | 135  | 67.5        | 92  | 31   | 89.0       | 111 | 63 | 44.0        | 58   | 32 |    |
| 31†         | 2         | 1.7 | 329 | 57.0        | 129 | -01  | 94.0       | 147 | 40 | 68.7        | 105  | 13            | 31     | 1         | 0.6  | 122  | 69.2        | 90  | 37   | 92.9       | 114 | 66 | 44.8        | 52   | 31 |    |
| Mittel      | 1.3       | 0.9 | 189 | 72.3        | 110 | 34   | 79.1       | 113 | 43 | 75.2        | 96   | 52            | Mittel | 1.4       | 0.9  | 156  | 70.5        | 103 | 36   | 86.6       | 114 | 57 | 54.2        | 70   | 37 |    |
| Max.        | 2         | 1.8 | 393 | 88.9        | 147 | 68   | 88.5       | 147 | 56 | 81.8        | 129  | 72            | Max.   | 2         | 1.7  | 303  | 85.6        | 145 | 61   | 97.9       | 159 | 80 | 69.9        | 103  | 56 |    |
| Min.        | 0         | 0.1 | 116 | 45.5        | 90  | -56  | 71.1       | 94  | 17 | 66.0        | 78   | 09            | Min.   | 0         | 0.2  | 75   | 59.9        | 83  | -09  | 72.8       | 99  | 23 | 38.0        | 52   | 02 |    |
| <b>Juni</b> |           |     |     |             |     |      |            |     |    |             |      | <b>August</b> |        |           |      |      |             |     |      |            |     |    |             |      |    |    |
| 1†          | 2         | 1.4 | 255 | 51.0        | 103 | -02  | 89.3       | 133 | 50 | 75.1        | 104  | 31            | 1      | 1         | 0.5  | 128  | 69.3        | 92  | 46   | 84.9       | 109 | 55 | 39.6        | 49   | 21 |    |
| 2†          | 2         | 1.4 | 253 | 61.8        | 137 | 14   | 86.3       | 118 | 49 | 74.1        | 105  | 44            | 2*     | 1         | 0.4  | 103  | 73.3        | 86  | 51   | 82.0       | 99  | 56 | 44.7        | 57   | 32 |    |
| 3           | 2         | 1.3 | 218 | 57.0        | 95  | -01  | 85.8       | 116 | 62 | 73.0        | 105  | 37            | 3*     | 1         | 0.3  | 129  | 73.6        | 98  | 46   | 84.9       | 110 | 56 | 39.2        | 47   | 24 |    |
| 4           | 2         | 1.2 | 192 | 57.5        | 103 | 06   | 89.0       | 114 | 59 | 83.1        | 100  | 60            | 4*     | 1         | 0.2  | 105  | 74.6        | 89  | 49   | 86.0       | 107 | 57 | 38.5        | 45   | 30 |    |
| 5           | 1         | 0.5 | 117 | 71.4        | 91  | 54   | 87.6       | 120 | 66 | 79.4        | 90   | 64            | 5      | 1         | 0.9  | 130  | 78.6        | 97  | 58   | 86.6       | 110 | 51 | 37.9        | 54   | 22 |    |
| 6           | 1         | 0.6 | 168 | 70.3        | 107 | 32   | 82.5       | 118 | 57 | 75.5        | 89   | 57            | 6†     | 2         | 1.7  | 289  | 61.3        | 98  | -09  | 81.8       | 127 | 33 | 45.9        | 104  | 16 |    |
| 7†          | 2         | 1.4 | 242 | 64.7        | 111 | 18   | 77.9       | 124 | 42 | 75.0        | 99   | 32            | 7†     | 2         | 1.7  | 244  | 52.2        | 115 | -12  | 93.0       | 123 | 70 | 44.4        | 74   | 10 |    |
| 8           | 2         | 1.0 | 212 | 68.4        | 113 | 24   | 82.4       | 129 | 45 | 72.0        | 86   | 47            | 8†     | 2         | 1.7  | 238  | 56.0        | 101 | -01  | 91.2       | 126 | 55 | 39.1        | 72   | 07 |    |
| 9           | 1         | 0.8 | 168 | 69.6        | 100 | 29   | 79.3       | 110 | 46 | 77.0        | 99   | 66            | 9†     | 2         | 1.5  | 185  | 45.8        | 85  | -10  | 92.0       | 119 | 72 | 48.2        | 67   | 24 |    |
| 10          | 1         | 0.3 | 145 | 68.9        | 92  | 31   | 85.2       | 115 | 62 | 77.7        | 91   | 60            | 10     | 2         | 1.2  | 163  | 53.4        | 94  | 13   | 92.0       | 118 | 69 | 51.7        | 72   | 39 |    |
| 11*         | 0         | 0.2 | 119 | 74.7        | 96  | 54   | 80.6       | 109 | 50 | 76.7        | 83   | 65            | 11     | 1         | 1.2  | 172  | 59.8        | 97  | 16   | 95.3       | 119 | 63 | 48.8        | 69   | 34 |    |
| 12†         | 2         | 1.5 | 290 | 85.4        | 149 | 40   | 81.5       | 123 | 19 | 72.5        | 122  | 45            | 12†    | 2         | 1.3  | 196  | 61.4        | 109 | 18   | 91.1       | 119 | 57 | 41.6        | 65   | 22 |    |
| 13          | 1         | 1.3 | 219 | 63.6        | 95  | -11  | 80.4       | 112 | 50 | 73.7        | 100  | 49            | 13     | 1         | 1.1  | 150  | 61.2        | 84  | 25   | 90.5       | 114 | 71 | 42.8        | 57   | 09 |    |
| 14          | 1         | 0.7 | 135 | 63.0        | 86  | 22   | 82.2       | 114 | 59 | 78.3        | 84   | 68            | 14     | 2         | 1.2  | 180  | 64.8        | 116 | 36   | 95.4       | 144 | 72 | 45.7        | 58   | 30 |    |
| 15*         | 0         | 0.3 | 153 | 76.7        | 105 | 40   | 79.5       | 117 | 48 | 81.1        | 86   | 67            | 15     | 1         | 1.1  | 170  | 59.0        | 90  | 17   | 85.7       | 100 | 64 | 48.1        | 84   | 23 |    |
| 16†         | 2         | 1.9 | 285 | 45.0        | 111 | -54  | 87.3       | 130 | 59 | 95.0        | 117  | 68            | 16     | 1         | 0.7  | 129  | 59.5        | 87  | 39   | 90.0       | 112 | 68 | 55.7        | 80   | 43 |    |
| 17          | 1         | 1.2 | 201 | 53.6        | 97  | -13  | 87.6       | 112 | 57 | 90.9        | 106  | 70            | 17*    | 1         | 0.4  | 121  | 67.5        | 85  | 40   | 91.3       | 116 | 63 | 50.8        | 64   | 41 |    |
| 18          | 1         | 1.1 | 193 | 66.8        | 132 | 26   | 89.2       | 114 | 68 | 89.5        | 114  | 73            | 18     | 1         | 0.5  | 106  | 71.0        | 94  | 52   | 93.1       | 112 | 68 | 44.2        | 53   | 33 |    |
| 19          | 1         | 0.8 | 139 | 63.7        | 89  | 26   | 81.9       | 109 | 57 | 88.2        | 100  | 76            | 19     | 2         | 1.0  | 177  | 59.9        | 80  | -11  | 84.8       | 109 | 49 | 47.8        | 61   | 35 |    |
| 20          | 1         | 0.7 | 163 | 67.6        | 106 | 27   | 82.0       | 109 | 51 | 81.9        | 96   | 70            | 20     | 1         | 0.5  | 135  | 71.2        | 110 | 50   | 92.1       | 121 | 65 | 44.5        | 54   | 35 |    |
| 21          | 1         | 0.8 | 171 | 74.1        | 103 | 37   | 82.9       | 116 | 50 | 84.5        | 107  | 68            | 21     | 1         | 1.1  | 143  | 75.4        | 101 | 55   | 80.5       | 119 | 52 | 45.4        | 64   | 34 |    |
| 22          | 1         | 0.3 | 93  | 72.5        | 94  | 50   | 82.2       | 100 | 61 | 84.6        | 89   | 79            | 22     | 2         | 1.2  | 204  | 64.0        | 104 | 16   | 86.2       | 125 | 53 | 37.8        | 55   | 11 |    |
| 23*         | 0         | 0.1 | 126 | 75.9        | 89  | 45   |            |     |    |             |      |               |        |           |      |      |             |     |      |            |     |    |             |      |    |    |

Aktivitätszahlen, Tagesmittel, höchste und niedrigste Stundenwerte der Komponenten.

Seddin

Begrenzung der Tage und Stunden nach Weltzeit.

1930

| Tag       | Aktivität |     |     | X - 18300 γ |      |      | Y + 1900 γ |      |      | Z - 43000 γ |      |          | Tag    | Aktivität |     |     | X - 18300 γ |      |      | Y + 1900 γ |      |      | Z - 43000 γ |      |      |
|-----------|-----------|-----|-----|-------------|------|------|------------|------|------|-------------|------|----------|--------|-----------|-----|-----|-------------|------|------|------------|------|------|-------------|------|------|
|           | n         | v   | α   | T.-M.       | Max. | Min. | T.-M.      | Max. | Min. | T.-M.       | Max. | Min.     |        | n         | v   | α   | T.-M.       | Max. | Min. | T.-M.      | Max. | Min. | T.-M.       | Max. | Min. |
| September |           |     |     |             |      |      |            |      |      |             |      | November |        |           |     |     |             |      |      |            |      |      |             |      |      |
| 1         | 2         | 1.3 | 212 | 53.0        | 88   | 05   | 90.4       | 126  | 60   | 57.5        | 95   | 32       | 1      | 1         | 0.7 | 114 | 48.2        | 64   | 17   | 109.6      | 130  | 96   | 94.1        | 111  | 78   |
| 2         | 1         | 1.0 | 169 | 63.0        | 90   | 12   | 87.9       | 114  | 54   | 50.3        | 60   | 29       | 2      | 1         | 0.8 | 124 | 59.6        | 81   | 20   | 103.9      | 122  | 89   | 92.2        | 113  | 83   |
| 3†        | 2         | 1.6 | 285 | 54.3        | 92   | 23   | 94.6       | 148  | 29   | 69.1        | 141  | 44       | 3      | 0         | 0.4 | 90  | 62.2        | 77   | 44   | 105.5      | 136  | 90   | 86.9        | 92   | 81   |
| 4         | 1         | 1.1 | 195 | 50.8        | 77   | -18  | 96.5       | 127  | 67   | 54.7        | 68   | 28       | 4†     | 1         | 1.2 | 167 | 59.1        | 98   | -01  | 99.5       | 118  | 75   | 89.4        | 102  | 77   |
| 5         | 2         | 1.1 | 189 | 63.2        | 108  | 31   | 98.9       | 122  | 64   | 62.1        | 96   | 42       | 5      | 1         | 0.5 | 88  | 60.2        | 83   | 47   | 108.1      | 132  | 93   | 87.4        | 95   | 82   |
| 6†        | 2         | 1.4 | 207 | 55.7        | 80   | -11  | 94.9       | 134  | 60   | 67.0        | 92   | 50       | 6      | 1         | 0.2 | 62  | 64.9        | 76   | 46   | 102.2      | 115  | 91   | 88.2        | 92   | 84   |
| 7         | 1         | 0.8 | 139 | 57.0        | 80   | 18   | 100.4      | 117  | 68   | 65.7        | 76   | 48       | 7      | 1         | 0.3 | 70  | 67.9        | 79   | 55   | 102.2      | 120  | 84   | 86.6        | 90   | 80   |
| 8         | 1         | 0.6 | 167 | 61.7        | 104  | 29   | 100.0      | 127  | 60   | 61.4        | 75   | 50       | 8      | 1         | 0.7 | 132 | 67.8        | 99   | 49   | 102.7      | 151  | 81   | 89.6        | 96   | 84   |
| 9         | 1         | 1.1 | 213 | 60.4        | 92   | 12   | 94.9       | 149  | 51   | 68.2        | 87   | 52       | 9      | 1         | 0.7 | 105 | 66.5        | 86   | 40   | 104.8      | 121  | 81   | 88.0        | 96   | 77   |
| 10        | 1         | 0.6 | 137 | 61.4        | 86   | 31   | 95.7       | 117  | 71   | 63.1        | 77   | 41       | 10     | 1         | 0.3 | 65  | 69.0        | 80   | 56   | 100.6      | 120  | 86   | 86.5        | 90   | 83   |
| 11        | 1         | 0.6 | 144 | 65.4        | 93   | 29   | 92.1       | 115  | 55   | 64.4        | 75   | 55       | 11     | 0         | 0.1 | 60  | 68.8        | 77   | 54   | 102.9      | 120  | 90   | 85.0        | 87   | 80   |
| 12        | 1         | 0.5 | 139 | 63.2        | 85   | 34   | 99.7       | 132  | 69   | 61.5        | 74   | 49       | 12*    | 0         | 0.0 | 54  | 69.1        | 81   | 56   | 102.5      | 110  | 80   | 86.5        | 90   | 82   |
| 13        | 0         | 0.3 | 118 | 67.3        | 82   | 38   | 98.1       | 124  | 65   | 57.4        | 64   | 49       | 13     | 0         | 0.5 | 53  | 75.9        | 89   | 63   | 100.1      | 110  | 88   | 86.9        | 90   | 85   |
| 14*       | 0         | 0.3 | 145 | 67.6        | 87   | 42   | 98.8       | 131  | 53   | 58.0        | 66   | 44       | 14†    | 2         | 1.5 | 284 | 63.0        | 91   | -09  | 106.4      | 184  | 68   | 94.4        | 144  | 76   |
| 15*       | 0         | 0.2 | 101 | 68.8        | 88   | 42   | 96.8       | 112  | 77   | 58.1        | 66   | 46       | 15     | 1         | 1.1 | 133 | 45.5        | 60   | 06   | 112.7      | 156  | 89   | 97.4        | 101  | 89   |
| 16*       | 1         | 0.2 | 119 | 69.3        | 83   | 39   | 95.2       | 121  | 67   | 58.4        | 66   | 45       | 16     | 1         | 0.4 | 69  | 59.3        | 68   | 48   | 106.5      | 130  | 93   | 95.0        | 100  | 88   |
| 17        | 1         | 0.6 | 143 | 71.5        | 86   | 39   | 87.2       | 115  | 49   | 58.0        | 72   | 42       | 17     | 1         | 0.4 | 69  | 58.3        | 75   | 43   | 106.5      | 117  | 89   | 96.2        | 102  | 93   |
| 18†       | 2         | 2.0 | 390 | 48.3        | 84   | -26  | 94.1       | 177  | -07  | 69.9        | 124  | 28       | 18     | 1         | 0.4 | 94  | 63.1        | 93   | 48   | 107.9      | 131  | 94   | 94.8        | 101  | 89   |
| 19        | 1         | 1.3 | 212 | 38.9        | 70   | -04  | 107.2      | 166  | 74   | 62.8        | 87   | 41       | 19*    | 0         | 0.0 | 55  | 65.2        | 73   | 52   | 104.8      | 115  | 89   | 93.1        | 96   | 88   |
| 20        | 1         | 0.4 | 102 | 56.9        | 77   | 40   | 98.4       | 118  | 70   | 64.5        | 70   | 53       | 20*    | 0         | 0.0 | 40  | 69.8        | 77   | 60   | 103.7      | 111  | 89   | 92.5        | 96   | 89   |
| 21        | 2         | 1.1 | 185 | 48.8        | 74   | -26  | 93.9       | 112  | 60   | 68.7        | 89   | 56       | 21*    | 0         | 0.0 | 58  | 71.8        | 82   | 60   | 101.6      | 112  | 88   | 91.8        | 96   | 84   |
| 22        | 1         | 0.4 | 91  | 60.7        | 72   | 39   | 98.9       | 118  | 75   | 63.2        | 68   | 53       | 22*    | 0         | 0.0 | 54  | 73.8        | 82   | 55   | 99.4       | 106  | 86   | 91.1        | 95   | 88   |
| 23        | 1         | 0.7 | 128 | 60.8        | 80   | 23   | 98.8       | 121  | 70   | 63.8        | 70   | 50       | 23†    | 1         | 0.8 | 168 | 65.5        | 89   | 31   | 107.9      | 168  | 84   | 93.6        | 110  | 84   |
| 24        | 1         | 0.8 | 154 | 61.3        | 86   | 17   | 97.6       | 118  | 58   | 61.0        | 72   | 47       | 24†    | 2         | 1.6 | 216 | 59.7        | 76   | 11   | 113.2      | 181  | 80   | 96.0        | 122  | 72   |
| 25        | 1         | 0.4 | 155 | 66.7        | 98   | 41   | 98.1       | 132  | 60   | 59.5        | 70   | 44       | 25†    | 2         | 1.8 | 359 | 31.8        | 102  | -16  | 122.8      | 192  | 46   | 100.8       | 145  | 50   |
| 26*       | 0         | 0.1 | 112 | 66.1        | 79   | 38   | 95.1       | 115  | 62   | 60.5        | 65   | 47       | 26†    | 1         | 1.2 | 126 | 46.5        | 63   | 30   | 115.5      | 145  | 101  | 99.9        | 112  | 63   |
| 27*       | 0         | 0.1 | 102 | 66.7        | 82   | 30   | 95.8       | 110  | 69   | 62.7        | 66   | 57       | 27     | 1         | 1.0 | 96  | 53.7        | 66   | 26   | 112.0      | 137  | 98   | 100.9       | 109  | 92   |
| 28        | 2         | 1.1 | 185 | 63.7        | 87   | 12   | 99.3       | 145  | 60   | 62.8        | 76   | 51       | 28     | 1         | 0.5 | 100 | 56.8        | 72   | 28   | 106.3      | 134  | 94   | 101.2       | 110  | 94   |
| 29†       | 2         | 1.7 | 271 | 43.3        | 90   | -20  | 96.9       | 154  | 61   | 65.2        | 101  | 42       | 29     | 1         | 0.6 | 94  | 59.1        | 73   | 44   | 110.5      | 147  | 96   | 100.6       | 108  | 94   |
| 30†       | 2         | 1.8 | 351 | 31.0        | 110  | -33  | 87.4       | 116  | -24  | 53.2        | 73   | 05       | 30     | 1         | 0.4 | 81  | 59.4        | 75   | 46   | 107.5      | 130  | 91   | 102.1       | 109  | 96   |
| Mittel    | 1.1       | 0.8 | 175 | 58.9        | 86   | 17   | 96.1       | 128  | 57   | 61.8        | 79   | 44       | Mittel | 0.8       | 0.6 | 110 | 61.1        | 80   | 37   | 106.3      | 133  | 87   | 93.0        | 103  | 83   |
| Max.      | 2         | 2.0 | 390 | 71.5        | 110  | 42   | 107.2      | 177  | 77   | 69.9        | 141  | 57       | Max.   | 2         | 1.8 | 359 | 75.9        | 102  | 63   | 122.8      | 192  | 101  | 102.1       | 145  | 96   |
| Min.      | 0         | 0.1 | 91  | 31.0        | 70   | -33  | 87.2       | 110  | -24  | 50.3        | 60   | 05       | Min.   | 1         | 0.0 | 46  | 31.8        | 60   | -16  | 99.4       | 106  | 46   | 85.0        | 87   | 50   |
| Oktober   |           |     |     |             |      |      |            |      |      |             |      | Dezember |        |           |     |     |             |      |      |            |      |      |             |      |      |
| 1         | 1         | 1.1 | 141 | 46.4        | 77   | 02   | 102.2      | 124  | 80   | 75.0        | 87   | 65       | 1      | 1         | 0.3 | 67  | 62.2        | 79   | 46   | 106.5      | 113  | 94   | 100.7       | 107  | 92   |
| 2         | 1         | 0.9 | 160 | 53.8        | 96   | 27   | 103.5      | 144  | 72   | 72.7        | 83   | 64       | 2      | 1         | 0.2 | 45  | 66.0        | 75   | 60   | 106.2      | 119  | 96   | 99.0        | 102  | 95   |
| 3†        | 2         | 1.5 | 220 | 48.1        | 76   | -02  | 105.3      | 144  | 65   | 77.6        | 123  | 60       | 3†     | 2         | 1.9 | 498 | 25.2        | 101  | -79  | 118.6      | 214  | 53   | 133.7       | 244  | 87   |
| 4         | 1         | 1.2 | 199 | 47.3        | 103  | -02  | 106.0      | 132  | 75   | 77.7        | 99   | 62       | 4†     | 2         | 1.5 | 272 | 25.2        | 48   | -01  | 111.4      | 204  | 40   | 103.4       | 130  | 71   |
| 5         | 1         | 1.0 | 169 | 44.5        | 67   | 08   | 101.5      | 137  | 94   | 77.5        | 102  | 65       | 5      | 0         | 0.3 | 50  | 55.5        | 62   | 41   | 113.9      | 124  | 105  | 108.3       | 112  | 102  |
| 6         | 1         | 0.9 | 187 | 54.8        | 90   | 14   | 104.1      | 155  | 66   | 73.9        | 86   | 64       | 6      | 1         | 0.2 | 69  | 61.2        | 79   | 50   | 111.4      | 130  | 101  | 106.1       | 111  | 100  |
| 7         | 1         | 0.7 | 140 | 60.5        | 90   | 43   | 107.1      | 138  | 74   | 71.4        | 87   | 58       | 7      | 1         | 0.5 | 67  | 65.8        | 77   | 49   | 108.5      | 124  | 98   | 104.2       | 110  | 97   |
| 8         | 1         | 0.9 | 178 | 42.5        | 72   | 03   | 95.9       | 131  | 62   | 79.9        | 104  | 64       | 8*     | 0         | 0.0 | 39  | 69.0        | 73   | 63   | 106.8      | 114  | 95   | 102.0       | 105  | 95   |
| 9         | 1         | 0.6 | 157 | 58.8        | 94   | 24   | 100.6      | 130  | 64   | 71.7        | 80   | 59       | 9      | 1         | 0.2 | 63  | 70.8        | 85   | 59   | 105.2      | 115  | 92   | 100.8       | 106  | 92   |
| 10        | 1         | 0.4 | 118 | 61.6        | 73   | 36   | 103.6      | 130  | 70   | 73.3        | 82   | 61       | 10     | 1         | 0.1 | 53  | 72.0        | 77   | 65   | 104.7      | 121  | 90   | 101.1       | 104  | 94   |
| 11*       | 0         | 0.2 | 111 | 58.2        | 77   | 29   | 98.6       | 115  | 68   | 76.7        | 85   | 69       | 11     | 0         | 0.1 | 38  | 72.8        | 80   | 68   | 105.1      | 112  | 96   | 100.3       | 104  | 94   |
| 12        | 1         | 0.2 | 97  | 64.4        | 81   | 40   | 99.1       | 118  | 73   | 76.2        | 81   | 70       | 12     | 1         | 0.8 | 112 | 74.2        | 84   | 56   | 104.7      | 149  | 83   | 101.2       | 111  | 93   |
| 13*       | 0         | 0.0 | 89  | 65.7        | 76   | 46   | 97.4       | 114  | 65   | 76.7        | 82   | 72       | 13†    | 2         | 1.1 | 161 | 66.4        | 98   | 35   | 109.3      | 156  | 82   | 103.8       | 118  | 94   |
| 14†       | 2         | 1.5 | 296 | 64.7        | 120  | -05  | 103.2      | 198  | 64   | 70.5        | 90   | 53       | 14     | 1         | 0.7 | 81  | 69.7        | 82   | 60   | 109.5      | 137  | 92   | 103.2       | 110  | 96   |
| 15        | 0         | 0.3 | 97  | 47.9        | 65   | 30   | 106.5      | 141  | 89   | 81.1        | 85   | 75       | 15     | 1         | 0.3 | 61  | 68.9        | 76   | 54   | 104.3      | 119  | 92   | 104.0       | 111  | 99   |
| 16*       | 0         | 0.2 | 81  | 56.8        | 66   | 29   | 105.2      | 123  | 89   | 78.5        | 82   | 72       | 16*    | 0         | 0.0 | 30  | 71.8        | 77   | 66   | 106.5      | 110  | 96   | 103.5       | 106  | 101  |
| 17†       | 2         | 1.7 | 417 | 21.2        | 81   | -62  | 116.1      | 219  | 48   | 106.0       | 177  | 74       | 17*    | 0         | 0.0 | 29  | 75.1        | 79   | 69   | 105.8      | 111  | 98   | 101.3       | 103  | 97   |
| 18        | 1         | 0.9 | 129 | 35.0        | 64   | 07   | 109.1      | 133  | 79   | 94.5        | 103  | 85       | 18*    | 0         | 0.0 | 32  | 77.5        | 83   | 71   | 104.5      | 110  | 95   | 101.3       | 103  | 98   |
| 19        | 1         | 0.9 | 110 | 52.3        | 71   | 22   | 107.4      | 138  | 86   | 85.3        | 90   | 81       | 19     | 1         | 0.8 | 72  | 77.6        | 89   | 62   | 103.5      | 124  | 88   | 99.9        | 104  | 95   |
| 20        | 2         | 1.2 | 201 | 51.9        | 73   | -29  | 108.4      | 142  | 80   | 81.8        | 100  | 63       | 20†    | 2         | 1.5 | 169 | 69.2        | 89   | 33   | 111.8      | 174  | 94   | 104.8       | 126  | 93   |
| 21        | 1         | 0.7 | 93  | 58.3        | 88   | 53   | 103.6      | 121  | 82   | 79.7        | 89   | 70       | 21†    | 2         | 1.4 | 183 | 48.0        | 79   | 05   | 119.0      | 170  | 85   | 112.1       | 126  | 102  |
| 22        | 1         | 0.4 | 92  | 61.0        | 71   | 47   | 103.0      | 134  | 82   | 81.6        | 89   | 73       | 22     | 1         | 1.0 | 120 | 55.8        | 74   | 35   | 113.8      | 158  | 99   | 109.7       | 121  | 99   |
| 23*       | 1         | 0.2 | 66  | 65.3        | 76   | 53   | 100.7      | 112  | 80   | 81.2        | 86   | 75       | 23     | 1         | 0.9 | 109 | 60.2        | 74   | 40   | 114.2      | 154  | 99   | 108.8       | 121  | 101  |
|           |           |     |     |             |      |      |            |      |      |             |      |          |        |           |     |     |             |      |      |            |      |      |             |      |      |

Tagesmittel der Elemente.

1930

Seddin

Begrenzung der Tage nach Weltzeit.

| Tag    | D    | I    | H  | F       | D    | I    | H  | F         | D    | I    | H  | F       | D    | I    | H  | F        | D    | I    | H  | F        | D    | I    | H  | F  | Tag    |   |   |   |  |
|--------|------|------|----|---------|------|------|----|-----------|------|------|----|---------|------|------|----|----------|------|------|----|----------|------|------|----|----|--------|---|---|---|--|
| Januar |      |      |    | Februar |      |      |    | März      |      |      |    | April   |      |      |    | Mai      |      |      |    | Juni     |      |      |    |    |        |   |   |   |  |
|        | '    | '    | Y  | Y       | '    | '    | Y  | Y         | '    | '    | Y  | Y       | '    | '    | Y  | Y        | '    | '    | Y  | Y        | '    | '    | Y  | Y  | '      | ' | Y | Y |  |
| 1      | 6.5  | 7.6  | 67 | 41      | 7.3  | 7.4  | 67 | 35        | 7.4  | 7.9  | 61 | 36      | 7.5  | 7.8  | 64 | 39       | 8.9  | 7.5  | 70 | 46       | 11.8 | 9.6  | 40 | Y  | I      |   |   |   |  |
| 2      | 6.2  | 7.3  | 71 | 42      | 7.5  | 7.3  | 68 | 35        | 8.2  | 8.2  | 56 | 35      | 8.0  | 7.4  | 70 | 43       | 9.3  | 6.8  | 80 | 48       | 11.4 | 8.7  | 52 | 40 | 2      |   |   |   |  |
| 3      | 6.2  | 8.0  | 62 | 44      | 7.4  | 7.5  | 65 | 35        | 7.4  | 7.9  | 61 | 35      | 8.0  | 7.4  | 70 | 41       | 9.4  | 7.3  | 73 | 47       | 11.3 | 9.0  | 47 | 37 | 3      |   |   |   |  |
| 4      | 6.7  | 9.1  | 49 | 44      | 6.9  | 7.3  | 68 | 36        | 8.3  | 7.6  | 65 | 36      | 8.4  | 7.4  | 69 | 41       | 9.4  | 7.2  | 73 | 45       | 11.9 | 9.4  | 46 | 46 | 4      |   |   |   |  |
| 5      | 8.2  | 10.0 | 36 | 39      | 6.3  | 7.2  | 69 | 37        | 7.5  | 7.2  | 69 | 36      | 8.3  | 6.8  | 77 | 41       | 11.5 | 9.8  | 35 | 33       | 12.0 | 8.3  | 60 | 48 | 5      |   |   |   |  |
| 6      | 7.3  | 8.9  | 52 | 44      | 7.0  | 7.0  | 73 | 37        | 7.7  | 6.9  | 74 | 38      | 9.3  | 7.7  | 66 | 43       | 9.9  | 8.7  | 51 | 39       | 11.1 | 8.2  | 60 | 45 | 6      |   |   |   |  |
| 7      | 7.9  | 8.7  | 53 | 44      | 6.4  | 6.8  | 75 | 37        | 7.4  | 6.7  | 75 | 36      | 10.8 | 8.1  | 58 | 37       | 11.4 | 7.9  | 60 | 36       | 10.0 | 8.6  | 55 | 42 | 7      |   |   |   |  |
| 8      | 6.1  | 8.1  | 60 | 41      | 6.8  | 7.5  | 66 | 37        | 7.4  | 6.7  | 76 | 36      | 11.8 | 9.3  | 41 | 31       | 10.2 | 8.4  | 57 | 45       | 10.8 | 8.3  | 58 | 41 | 8      |   |   |   |  |
| 9      | 6.3  | 7.7  | 67 | 44      | 6.8  | 6.7  | 76 | 36        | 7.7  | 6.4  | 80 | 37      | 10.1 | 8.8  | 50 | 39       | 11.3 | 8.7  | 55 | 47       | 10.3 | 8.2  | 60 | 46 | 9      |   |   |   |  |
| 10     | 6.7  | 7.3  | 71 | 43      | 6.4  | 6.8  | 74 | 34        | 7.1  | 6.5  | 79 | 35      | 8.3  | 9.3  | 43 | 35       | 10.8 | 8.2  | 59 | 42       | 11.3 | 8.4  | 59 | 47 | 10     |   |   |   |  |
| 11     | 6.4  | 6.9  | 75 | 43      | 6.7  | 6.1  | 82 | 33        | 7.7  | 6.7  | 75 | 36      | 9.9  | 8.5  | 53 | 36       | 9.8  | 8.0  | 65 | 51       | 10.8 | 7.9  | 65 | 48 | 11     |   |   |   |  |
| 12     | 6.1  | 6.9  | 76 | 44      | 8.2  | 6.9  | 71 | 30        | 12.1 | 9.2  | 41 | 29      | 9.5  | 8.2  | 56 | 36       | 11.5 | 8.5  | 55 | 38       | 10.9 | 7.1  | 75 | 47 | 12     |   |   |   |  |
| 13     | 5.7  | 6.6  | 79 | 41      | 10.1 | 10.3 | 27 | 25        | 9.5  | 8.9  | 46 | 32      | 9.4  | 8.6  | 53 | 38       | 10.7 | 8.3  | 61 | 48       | 10.4 | 8.5  | 54 | 41 | 13     |   |   |   |  |
| 14     | 6.3  | 6.8  | 77 | 43      | 9.2  | 9.5  | 40 | 32        | 10.0 | 8.9  | 47 | 34      | 10.4 | 8.4  | 54 | 37       | 9.9  | 8.0  | 63 | 48       | 10.7 | 8.8  | 53 | 45 | 14     |   |   |   |  |
| 15     | 6.8  | 7.0  | 74 | 43      | 8.4  | 9.1  | 46 | 36        | 9.2  | 8.7  | 50 | 34      | 10.4 | 8.5  | 55 | 38       | 10.3 | 8.4  | 61 | 51       | 10.4 | 7.9  | 67 | 52 | 15     |   |   |   |  |
| 16     | 6.5  | 7.3  | 71 | 44      | 9.7  | 8.3  | 55 | 33        | 8.2  | 8.3  | 55 | 33      | 10.2 | 8.1  | 58 | 34       | 10.2 | 7.8  | 67 | 48       | 11.3 | 10.5 | 35 | 53 | 16     |   |   |   |  |
| 17     | 5.3  | 7.9  | 65 | 46      | 9.7  | 8.5  | 53 | 35        | 8.7  | 8.3  | 56 | 36      | 9.8  | 8.2  | 56 | 35       | 10.2 | 9.4  | 44 | 41       | 11.7 | 9.8  | 43 | 53 | 17     |   |   |   |  |
| 18     | 6.6  | 7.9  | 63 | 42      | 7.8  | 8.3  | 56 | 37        | 9.4  | 7.7  | 63 | 39      | 10.2 | 8.3  | 59 | 44       | 10.7 | 8.1  | 62 | 47       | 12.1 | 8.9  | 56 | 57 | 18     |   |   |   |  |
| 19     | 6.7  | 7.6  | 67 | 42      | 8.2  | 8.1  | 57 | 35        | 8.4  | 8.3  | 55 | 32      | 9.9  | 7.9  | 64 | 43       | 10.2 | 7.8  | 66 | 47       | 10.8 | 9.0  | 54 | 54 | 19     |   |   |   |  |
| 20     | 6.9  | 7.6  | 67 | 41      | 8.2  | 8.0  | 60 | 37        | 8.8  | 7.9  | 61 | 37      | 8.9  | 9.2  | 49 | 47       | 10.0 | 8.5  | 58 | 47       | 10.8 | 8.6  | 58 | 50 | 20     |   |   |   |  |
| 21     | 7.0  | 7.9  | 62 | 40      | 7.8  | 7.9  | 61 | 38        | 8.4  | 8.1  | 60 | 41      | 9.6  | 8.9  | 50 | 40       | 10.5 | 8.1  | 62 | 46       | 11.1 | 8.2  | 64 | 54 | 21     |   |   |   |  |
| 22     | 7.4  | 7.7  | 65 | 41      | 8.2  | 7.4  | 66 | 36        | 8.8  | 7.8  | 61 | 33      | 9.6  | 8.5  | 53 | 37       | 9.7  | 8.5  | 57 | 47       | 10.9 | 8.4  | 62 | 54 | 22     |   |   |   |  |
| 23     | 6.5  | 7.6  | 68 | 44      | 7.4  | 7.1  | 73 | 40        | 8.0  | 7.3  | 71 | 42      | 10.0 | 8.3  | 57 | 41       | 10.7 | 8.0  | 64 | 48       | 11.7 | 7.9  | 66 | 50 | 23     |   |   |   |  |
| 24     | 6.9  | 7.4  | 70 | 41      | 7.5  | 7.2  | 71 | 41        | 7.2  | 8.7  | 51 | 39      | 9.2  | 8.6  | 54 | 42       | 10.0 | 7.3  | 73 | 49       | 11.2 | 7.8  | 67 | 47 | 24     |   |   |   |  |
| 25     | 6.4  | 7.0  | 74 | 41      | 9.3  | 8.3  | 56 | 37        | 8.0  | 7.6  | 67 | 40      | 9.8  | 8.4  | 57 | 43       | 10.0 | 7.3  | 73 | 49       | 10.1 | 7.2  | 74 | 48 | 25     |   |   |   |  |
| 26     | 6.4  | 6.6  | 78 | 39      | 8.4  | 7.8  | 60 | 33        | 7.5  | 7.6  | 65 | 39      | 9.3  | 8.1  | 59 | 38       | 10.3 | 8.0  | 63 | 48       | 10.7 | 7.5  | 71 | 51 | 26     |   |   |   |  |
| 27     | 6.7  | 6.5  | 79 | 38      | 7.6  | 7.2  | 69 | 36        | 8.7  | 8.3  | 58 | 41      | 10.0 | 8.2  | 59 | 43       | 10.0 | 7.6  | 70 | 48       | 11.2 | 6.8  | 77 | 44 | 27     |   |   |   |  |
| 28     | 6.3  | 6.5  | 79 | 37      | 7.5  | 7.8  | 62 | 38        | 8.3  | 8.0  | 61 | 38      | 9.3  | 7.5  | 70 | 46       | 10.2 | 7.7  | 70 | 53       | 11.8 | 7.1  | 71 | 37 | 28     |   |   |   |  |
| 29     | 6.5  | 7.0  | 72 | 37      |      |      |    |           | 8.2  | 8.0  | 60 | 38      | 8.7  | 7.2  | 74 | 47       | 10.0 | 7.6  | 70 | 49       | 10.9 | 7.6  | 64 | 34 | 29     |   |   |   |  |
| 30     | 7.2  | 7.5  | 66 | 38      |      |      |    |           | 8.7  | 8.0  | 62 | 41      | 8.9  | 7.8  | 67 | 48       | 10.9 | 7.1  | 75 | 48       | 10.9 | 7.7  | 63 | 38 | 30     |   |   |   |  |
| 31     | 7.1  | 7.2  | 69 | 36      |      |      |    |           | 8.8  | 7.8  | 63 | 41      |      |      |    |          | 12.8 | 9.0  | 46 | 33       |      |      |    |    | 31     |   |   |   |  |
| Mittel | 6.6  | 7.6  | 67 | 42      | 7.8  | 7.7  | 63 | 35        | 8.3  | 7.8  | 62 | 37      | 9.4  | 8.2  | 59 | 40       | 10.3 | 8.0  | 63 | 45       | 11.1 | 8.3  | 59 | 46 | Mittel |   |   |   |  |
| Max.   | 8.2  | 10.0 | 79 | 46      | 10.1 | 10.3 | 82 | 41        | 12.1 | 9.2  | 80 | 42      | 11.8 | 9.3  | 77 | 48       | 12.8 | 9.8  | 80 | 53       | 12.1 | 10.5 | 77 | 57 | Max.   |   |   |   |  |
| Min.   | 5.3  | 6.5  | 36 | 36      | 6.3  | 6.1  | 27 | 25        | 7.1  | 6.4  | 41 | 29      | 7.5  | 6.8  | 41 | 31       | 8.9  | 6.8  | 35 | 33       | 10.0 | 6.8  | 35 | 34 | Min.   |   |   |   |  |
| Juli   |      |      |    | August  |      |      |    | September |      |      |    | Oktober |      |      |    | November |      |      |    | Dezember |      |      |    |    |        |   |   |   |  |
|        | '    | '    | Y  | Y       | '    | '    | Y  | Y         | '    | '    | Y  | Y       | '    | '    | Y  | Y        | '    | '    | Y  | Y        | '    | '    | Y  | Y  | '      | ' | Y | Y |  |
| 1      | 11.4 | 7.7  | 63 | 36      | 11.3 | 7.3  | 59 | 12        | 12.0 | 9.0  | 42 | 21      | 14.1 | 10.0 | 34 | 34       | 15.7 | 10.4 | 35 | 52       | 15.3 | 9.6  | 50 | 64 | I      |   |   |   |  |
| 2      | 11.2 | 7.7  | 64 | 37      | 10.9 | 7.1  | 63 | 18        | 11.8 | 8.0  | 52 | 18      | 14.6 | 9.4  | 42 | 35       | 14.7 | 9.5  | 48 | 55       | 15.2 | 9.3  | 54 | 64 | 2      |   |   |   |  |
| 3      | 11.0 | 7.3  | 66 | 31      | 11.4 | 6.9  | 64 | 13        | 13.0 | 9.2  | 43 | 32      | 14.7 | 10.0 | 36 | 38       | 15.1 | 9.2  | 50 | 51       | 16.8 | 13.2 | 11 | 79 | 3      |   |   |   |  |
| 4      | 10.5 | 7.5  | 64 | 32      | 11.7 | 6.8  | 65 | 12        | 13.1 | 9.0  | 40 | 17      | 14.8 | 10.0 | 35 | 38       | 14.0 | 9.5  | 47 | 52       | 15.3 | 12.3 | 12 | 52 | 4      |   |   |   |  |
| 5      | 11.2 | 7.4  | 66 | 34      | 11.9 | 6.5  | 69 | 14        | 13.8 | 8.4  | 51 | 29      | 14.1 | 10.1 | 32 | 35       | 15.5 | 9.4  | 47 | 50       | 16.5 | 10.3 | 43 | 68 | 5      |   |   |   |  |
| 6      | 11.1 | 7.7  | 63 | 39      | 10.7 | 7.9  | 51 | 14        | 13.0 | 9.0  | 45 | 31      | 14.6 | 9.3  | 43 | 37       | 14.5 | 9.1  | 53 | 54       | 16.0 | 9.9  | 48 | 68 | 6      |   |   |   |  |
| 7      | 11.0 | 7.2  | 68 | 34      | 12.5 | 8.6  | 41 | 8         | 13.9 | 9.0  | 45 | 30      | 15.3 | 8.9  | 48 | 36       | 14.5 | 8.8  | 56 | 54       | 15.8 | 9.5  | 53 | 69 | 7      |   |   |   |  |
| 8      | 11.5 | 7.4  | 67 | 36      | 12.2 | 8.2  | 45 | 5         | 14.0 | 8.5  | 50 | 27      | 13.0 | 10.2 | 32 | 38       | 14.7 | 8.9  | 56 | 57       | 15.4 | 9.2  | 57 | 68 | 8      |   |   |   |  |
| 9      | 9.4  | 6.6  | 77 | 34      | 12.2 | 9.1  | 35 | 10        | 13.1 | 8.8  | 49 | 33      | 14.2 | 9.0  | 47 | 36       | 15.0 | 9.0  | 54 | 54       | 15.1 | 9.0  | 59 | 68 | 9      |   |   |   |  |
| 10     | 12.1 | 8.1  | 54 | 28      | 12.4 | 8.8  | 42 | 16        | 13.3 | 8.5  | 50 | 29      | 14.7 | 8.8  | 50 | 38       | 14.3 | 8.7  | 57 | 54       | 15.1 | 8.9  | 60 | 68 | 10     |   |   |   |  |
| 11     | 13.6 | 8.3  | 50 | 22      | 13.1 | 8.2  | 49 | 16        | 12.6 | 8.3  | 54 | 32      | 13.7 | 9.2  | 46 | 41       | 14.7 | 8.7  | 57 | 52       | 15.1 | 8.9  | 61 | 68 | 11     |   |   |   |  |
| 12     | 11.6 | 8.2  | 53 | 28      | 12.3 | 7.9  | 50 | 10        | 14.0 | 8.1  | 51 | 29      | 13.9 | 8.8  | 52 | 42       | 14.5 | 8.7  | 57 | 53       | 15.1 | 8.8  | 62 | 69 | 12     |   |   |   |  |
| 13     | 11.8 | 8.6  | 51 | 36      | 12.3 | 7.9  | 50 | 11        | 13.7 | 8.1  | 55 | 25      | 13.5 | 8.6  | 54 | 44       | 14.3 | 8.3  | 64 | 57       | 15.8 | 9.5  | 53 | 69 | 13     |   |   |   |  |
| 14     | 11.5 | 8.0  | 54 | 24      | 13.2 | 7.7  | 54 | 15        | 13.9 | 8.0  | 56 | 27      | 14.7 | 8.5  | 53 | 37       | 15.1 | 9.3  | 51 | 58       | 16.1 | 9.2  | 57 | 69 | 14     |   |   |   |  |
| 15     | 12.1 | 7.9  | 57 | 28      | 11.4 | 8.2  | 49 | 15        | 13.5 | 7.9  | 57 | 27      | 14.9 | 10.0 | 36 | 40       | 16.1 | 10.7 | 32 | 53       | 14.8 | 9.2  | 57 | 70 | 15     |   |   |   |  |
| 16     | 10.2 | 8.0  | 56 | 26      | 12.2 | 8.4  | 48 | 22        | 13.2 | 7.9  | 58 | 28      | 14.8 | 9.4  | 45 | 41       | 15.1 | 9.7  | 47 | 57       | 15.5 | 9.0  | 60 | 71 | 16     |   |   |   |  |
| 17     | 13.4 | 8.0  | 54 | 23      | 12.4 | 7.8  | 56 | 21        | 11.8 | 7.6  | 62 | 29      | 16.3 | 12.6 | 8  | 52       | 15.0 | 9.8  | 46 | 58       | 15.4 | 8.8  | 63 | 72 | 17     |   |   |   |  |
| 18     | 11.2 | 7.4  | 62 | 24      | 12.9 | 7.3  | 60 | 15        | 12.7 | 9.6  | 37 | 30      | 15.2 | 11.3 | 22 | 46       | 15.5 | 9.5  | 50 | 58       | 15.0 | 8.6  | 65 | 70 | 18     |   |   |   |  |
| 19     | 12.4 | 7.8  | 56 | 23      | 11.2 | 8.1  | 50 | 15        | 14.9 | 10.1 | 27 | 20      | 15.1 | 9.9  | 40 | 45       | 15.0 | 9.2  | 53 | 58       | 15.0 | 8.5  | 66 | 70 | 19     |   |   |   |  |
| 20     | 11.2 | 7.4  | 61 | 22      | 12.7 | 7.3  | 60 | 15        | 13.5 | 9.0  | 45 | 29      | 15.3 | 9.9  | 39 | 42       | 14.9 | 8.9  | 58 | 60       | 16.3 | 9.3  | 56 | 70 | 20     |   |   |   |  |
| 21     | 12.0 | 7.4  | 62 | 25      | 12.4 | 7.1  | 64 | 18        | 12.7 | 9.5  | 38 | 30      | 14.6 | 9.3  | 46 | 44       | 14.6 | 8.7  | 60 | 59       | 17.3 | 11.0 | 34 | 68 | 21     |   |   |   |  |
| 22     | 10.9 | 7.3  | 62 | 21      | 11.5 | 7.5  | 54 | 8         | 13.8 | 8.6  | 49 | 29      | 14.9 | 9.2  | 49 | 46       | 14.0 | 8.5  | 62 | 60       | 16.5 | 10.4 | 43 | 70 | 22     |   |   |   |  |
| 23     | 11.7 | 7.5  | 59 | 21      | 13.3 | 7.4  | 59 | 15        | 13.8 | 8.7  | 49 | 30      | 14.3 | 8.8  | 53 | 47       | 15.6 | 9.2  | 53 | 59       | 16.6 | 10.1 | 47 | 70 | 23     |   |   |   |  |
| 24     | 11.9 | 6.7  | 70 | 21      | 12.6 |      |    |           |      |      |    |         |      |      |    |          |      |      |    |          |      |      |    |    |        |   |   |   |  |

Täglicher Gang an allen, an ruhigen und an gestörten Tagen, dargestellt durch Stundenmittel.

Seddin

Weltzeit.

1930

Table with columns 0h to 24h and T.M. for Nordkomponente (ΔX). Rows include S.S., Äqu., N.S., W., S., and J. with multiple data points per hour.

Table with columns 0h to 24h and T.M. for Ostkomponente (ΔY). Rows include S.S., Äqu., N.S., W., S., and J. with multiple data points per hour.

Table with columns 0h to 24h and T.M. for Vertikalkomponente (ΔZ). Rows include S.S., Äqu., N.S., W., S., and J. with multiple data points per hour.

Von den drei Zeilen jeder Gruppe gilt die erste für alle Tage, die zweite für die auf S. 17 bis 19 durch (\*) bezeichneten ruhigen, die dritte für die dort durch (†) bezeichneten gestörten Tage.

Monatsmittel des täglichen Ganges, dargestellt durch Stundenmittel.

Seddin

Weltzeit.

1930

0h 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h 12h 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h 24h T.-M.

IX

Nordkomponente

Table with 24 columns (hours) and 25 rows (stations: J, F, M, A, M, J, J, A, S, O, N, D, S.S., Äqu., N.S., W, S, J). Values range from -12.6 to 18.9.

0h 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h 12h 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h 24h T.-M.

AY

Ostkomponente

Table with 24 columns (hours) and 25 rows (stations: J, F, M, A, M, J, J, A, S, O, N, D, S.S., Äqu., N.S., W, S, J). Values range from -17.9 to 15.9.

0h 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h 12h 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h 24h T.-M.

AZ

Vertikalkomponente

Table with 24 columns (hours) and 25 rows (stations: J, F, M, A, M, J, J, A, S, O, N, D, S.S., Äqu., N.S., W, S, J). Values range from -11.0 to 14.6.

Täglicher Gang an ruhigen Tagen, dargestellt durch Stundenmittel.

Seddin

Weltzeit.

1930

|                          | 0h   | 1h   | 2h   | 3h  | 4h   | 5h   | 6h   | 7h    | 8h    | 9h    | 10h   | 11h   | 12h   | 13h   | 14h  | 15h  | 16h  | 17h  | 18h  | 19h  | 20h  | 21h  | 22h  | 23h  | 24h   | T.M.    |  |
|--------------------------|------|------|------|-----|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|-------|---------|--|
| <b>ΔX Nordkomponente</b> |      |      |      |     |      |      |      |       |       |       |       |       |       |       |      |      |      |      |      |      |      |      |      |      |       |         |  |
| J.                       | 1.0  | 1.8  | 2.7  | 3.1 | 4.6  | 7.6  | 8.2  | 4.0   | -1.1  | -8.0  | -11.2 | -11.0 | -8.1  | -5.0  | -3.0 | -3.5 | -1.9 | 1.4  | 3.8  | 5.2  | 5.1  | 4.3  | 0.0  | 0.0  | 0.0   | 18384.5 |  |
| F.                       | 5.8  | 5.0  | 6.5  | 9.7 | 11.0 | 11.4 | 11.3 | 7.2   | -1.6  | -14.1 | -22.5 | -21.6 | -13.2 | -8.1  | -5.7 | -5.2 | -3.4 | -1.3 | 5.2  | 2.0  | 2.7  | 4.7  | 5.8  | 0.8  | 379.2 |         |  |
| M.                       | 5.1  | 4.7  | 5.0  | 5.2 | 6.9  | 8.9  | 7.9  | 5.8   | -2.6  | -11.9 | -16.9 | -17.0 | -15.4 | -9.3  | -4.5 | -2.2 | -1.4 | 2.3  | 4.9  | 5.9  | 5.6  | 4.2  | 4.9  | 5.1  | 383.6 |         |  |
| A.                       | 5.6  | 4.8  | 6.2  | 7.9 | 10.9 | 7.8  | 4.0  | -2.4  | -16.5 | -30.3 | -29.9 | -25.2 | -11.2 | -3.9  | 0.5  | 0.1  | 3.2  | 11.4 | 11.2 | 11.9 | 7.9  | 8.0  | 10.4 | 8.2  | 377.8 |         |  |
| M.                       | 7.8  | 8.3  | 4.1  | 5.8 | 6.4  | 3.9  | -1.4 | -8.2  | -16.1 | -18.9 | -18.0 | -16.6 | -12.0 | -7.6  | -3.5 | -1.1 | 5.8  | 6.8  | 9.5  | 14.8 | 8.2  | 5.9  | 6.7  | 10.0 | 382.8 |         |  |
| J.                       | 8.3  | 7.4  | 8.1  | 8.4 | 9.5  | 5.4  | -1.5 | -10.2 | -18.3 | -22.6 | -25.5 | -19.6 | -10.6 | -5.3  | -1.2 | -1.9 | 1.0  | 8.1  | 8.2  | 12.5 | 11.0 | 10.1 | 10.8 | 8.5  | 377.6 |         |  |
| A.                       | 5.6  | 5.7  | 5.6  | 5.7 | 5.0  | 2.7  | -5.3 | -8.6  | -9.9  | -9.2  | -8.7  | -10.4 | -14.6 | -8.7  | -5.0 | -4.7 | 3.6  | 5.7  | 4.9  | 12.2 | 9.9  | 5.0  | 6.9  | 7.2  | 372.4 |         |  |
| J.                       | 9.8  | 7.6  | 5.7  | 5.1 | 1.3  | 1.4  | -1.0 | -5.2  | -10.7 | -16.3 | -24.3 | -22.0 | -18.8 | -10.3 | -2.5 | 2.1  | 10.8 | 10.0 | 10.8 | 10.5 | 7.1  | 7.7  | 9.8  | 10.0 | 371.5 |         |  |
| S.                       | 11.3 | 7.1  | 10.6 | 9.6 | 11.2 | 7.9  | 3.5  | -5.7  | -18.0 | -27.4 | -29.2 | -22.3 | -15.9 | -8.8  | -5.0 | 1.4  | 4.1  | 6.7  | 7.9  | 10.8 | 11.6 | 9.8  | 9.1  | 9.7  | 367.7 |         |  |
| O.                       | 4.6  | 5.5  | 5.8  | 5.8 | 7.1  | 9.7  | 7.4  | 1.7   | -7.7  | -14.8 | -15.5 | -14.1 | -9.9  | -4.9  | -3.2 | -1.9 | 0.3  | -1.2 | 0.5  | 2.5  | 5.0  | 6.6  | 5.5  | 5.8  | 363.0 |         |  |
| N.                       | 0.6  | 0.5  | 2.4  | 3.3 | 4.6  | 5.8  | 4.0  | 0.3   | -7.0  | -11.3 | -13.0 | -9.9  | -5.1  | -1.2  | -1.1 | 0.8  | 3.7  | 3.6  | 3.5  | 5.2  | 4.1  | 5.2  | 1.9  | 1.0  | 369.9 |         |  |
| D.                       | -2.3 | -3.6 | -1.9 | 0.0 | 1.3  | 1.4  | 0.3  | 0.0   | -0.4  | -0.9  | -0.8  | -1.3  | -0.5  | 0.6   | 1.1  | 2.0  | 2.4  | 1.9  | 0.4  | 2.1  | 1.4  | 0.3  | -2.0 | -2.5 | 373.8 |         |  |
| S.S.                     | 1.3  | 0.9  | 2.4  | 4.0 | 5.4  | 6.4  | 6.0  | 3.0   | -2.5  | -8.6  | -11.0 | -11.2 | -6.7  | -3.4  | -2.2 | -1.5 | 0.2  | 1.4  | 3.2  | 3.8  | 3.3  | 3.6  | 1.4  | 1.3  | 376.8 |         |  |
| Äqu.                     | 6.6  | 5.5  | 6.9  | 7.1 | 9.0  | 8.6  | 5.7  | -0.2  | -11.2 | -21.1 | -22.9 | -19.6 | -13.1 | -6.7  | -3.0 | -0.6 | 1.6  | 4.8  | 6.1  | 7.8  | 7.5  | 7.2  | 7.5  | 7.2  | 373.0 |         |  |
| N.S.                     | 7.9  | 7.2  | 5.9  | 6.2 | 5.7  | 3.4  | -2.3 | -8.0  | -13.8 | -16.8 | -19.1 | -17.2 | -14.0 | -8.0  | -3.0 | -1.4 | 5.3  | 7.6  | 8.4  | 12.5 | 9.0  | 7.2  | 8.6  | 9.1  | 376.1 |         |  |
| W.                       | 2.5  | 2.3  | 3.4  | 4.5 | 5.9  | 7.4  | 6.5  | 3.2   | -3.4  | -10.2 | -13.3 | -12.6 | -8.7  | -4.6  | -2.7 | -1.7 | 0.0  | 1.1  | 3.0  | 3.9  | 4.0  | 4.2  | 2.7  | 2.7  | 375.7 |         |  |
| S.                       | 8.1  | 6.8  | 6.7  | 7.1 | 7.5  | 4.8  | -0.3 | -6.7  | -14.9 | -20.8 | -22.6 | -19.4 | -13.8 | -7.4  | -2.8 | -0.7 | 4.8  | 8.1  | 8.8  | 12.1 | 9.3  | 7.8  | 9.0  | 9.0  | 375.0 |         |  |
| J.                       | 5.3  | 4.6  | 5.1  | 5.8 | 6.7  | 6.1  | 3.1  | -1.8  | -9.2  | -15.5 | -18.0 | -16.0 | -11.3 | -6.0  | -2.8 | -1.2 | 2.4  | 4.6  | 5.9  | 8.0  | 6.6  | 6.0  | 5.8  | 5.9  | 375.3 |         |  |

|                         | 0h   | 1h   | 2h  | 3h   | 4h   | 5h   | 6h   | 7h   | 8h   | 9h   | 10h   | 11h   | 12h   | 13h   | 14h   | 15h   | 16h   | 17h  | 18h  | 19h  | 20h  | 21h  | 22h | 23h  | 24h     | T.M. |  |
|-------------------------|------|------|-----|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-----|------|---------|------|--|
| <b>ΔY Ostkomponente</b> |      |      |     |      |      |      |      |      |      |      |       |       |       |       |       |       |       |      |      |      |      |      |     |      |         |      |  |
| J.                      | 1.8  | -0.1 | 1.0 | 0.4  | -0.3 | 2.4  | 4.3  | 8.8  | 11.1 | 6.3  | -0.6  | -10.1 | -13.1 | -9.6  | -6.9  | -5.7  | -5.4  | -2.7 | -0.4 | 2.1  | 3.6  | 4.6  | 4.1 | 3.4  | -1843.2 |      |  |
| F.                      | 6.7  | 4.1  | 2.9 | 1.6  | 2.2  | 3.8  | 6.0  | 12.3 | 15.1 | 7.7  | -5.2  | -16.0 | -22.4 | -22.4 | -18.5 | -9.1  | -0.5  | -1.8 | 1.4  | 1.2  | 3.4  | 6.5  | 9.5 | 10.5 | 839.6   |      |  |
| M.                      | 3.5  | 4.7  | 5.6 | 4.4  | 4.3  | 5.3  | 9.6  | 17.3 | 19.9 | 8.6  | -7.2  | -19.3 | -22.7 | -19.4 | -11.2 | -2.7  | -0.9  | -2.0 | -1.5 | -1.1 | -0.6 | 1.0  | 1.9 | 3.1  | 837.9   |      |  |
| A.                      | 2.9  | 3.9  | 2.8 | 6.4  | 6.2  | 12.3 | 22.3 | 27.7 | 23.0 | 7.2  | -12.6 | -24.9 | -30.5 | -27.2 | -14.8 | -5.6  | -0.9  | 1.9  | -2.5 | 1.4  | -2.2 | -0.8 | 2.5 | 1.7  | 829.5   |      |  |
| M.                      | 2.4  | 3.1  | 8.7 | 14.6 | 20.4 | 24.1 | 27.8 | 27.8 | 20.9 | 6.5  | -11.8 | -23.4 | -30.6 | -31.8 | -25.3 | -17.3 | -11.6 | -7.2 | -2.7 | 2.2  | 0.2  | 1.1  | 1.5 | 0.8  | 825.1   |      |  |
| J.                      | 2.3  | 3.4  | 5.7 | 11.9 | 17.0 | 23.4 | 24.9 | 26.2 | 20.0 | 3.5  | -11.2 | -24.0 | -28.2 | -25.2 | -18.7 | -10.8 | -5.8  | -5.1 | -3.2 | -3.6 | -3.5 | -2.7 | 0.8 | 2.3  | 818.7   |      |  |
| J.                      | 4.4  | 2.7  | 7.8 | 11.7 | 17.2 | 18.5 | 13.6 | 7.7  | 5.7  | -0.2 | -7.3  | -18.6 | -18.6 | -15.7 | -10.8 | -5.7  | -6.7  | -6.8 | -3.3 | -0.4 | 0.7  | 0.6  | 2.9 | 3.8  | 814.9   |      |  |
| A.                      | 7.5  | 8.3  | 7.1 | 10.5 | 13.9 | 16.3 | 17.5 | 16.1 | 11.2 | 2.6  | -8.6  | -19.6 | -26.2 | -26.8 | -23.6 | -15.0 | -9.3  | -4.5 | 3.5  | 1.7  | 1.5  | 6.3  | 3.5 | 6.1  | 812.3   |      |  |
| S.                      | 10.3 | 9.2  | 7.8 | 7.0  | 7.3  | 8.7  | 13.2 | 17.0 | 13.0 | -0.1 | -14.5 | -25.6 | -30.4 | -26.1 | -14.7 | -4.8  | 2.6   | 2.0  | -0.7 | 0.3  | 4.6  | 4.4  | 5.0 | 5.3  | 803.7   |      |  |
| O.                      | 5.0  | 4.3  | 3.9 | 2.1  | 0.2  | 1.8  | 6.3  | 12.3 | 13.1 | 3.6  | -10.6 | -20.9 | -22.3 | -17.2 | -11.0 | -3.9  | -3.3  | -0.9 | 4.2  | 4.8  | 7.9  | 7.9  | 8.1 | 5.2  | 799.9   |      |  |
| N.                      | 2.4  | 2.4  | 1.6 | 1.5  | 2.3  | 3.9  | 5.5  | 7.3  | 5.9  | -1.6 | -10.2 | -14.0 | -13.2 | -8.2  | -4.6  | -3.1  | -2.9  | -0.7 | 0.9  | 3.1  | 4.3  | 5.4  | 6.8 | 4.8  | 797.6   |      |  |
| D.                      | 3.5  | 3.1  | 2.5 | 1.1  | 1.7  | 3.9  | 3.7  | 2.7  | 1.7  | -3.1 | -6.9  | -8.5  | -8.3  | -5.9  | -4.5  | -3.3  | -1.7  | -0.7 | 0.7  | 2.9  | 3.7  | 3.9  | 4.7 | 3.7  | 793.9   |      |  |
| S.S.                    | 3.6  | 2.4  | 2.0 | 1.2  | 1.5  | 3.5  | 4.9  | 7.8  | 8.4  | 2.3  | -5.7  | -12.2 | -14.2 | -11.5 | -8.6  | -5.3  | -2.6  | -1.5 | 0.6  | 2.3  | 3.8  | 5.1  | 6.3 | 5.6  | 818.6   |      |  |
| Äqu.                    | 5.4  | 5.5  | 5.0 | 5.0  | 4.5  | 7.1  | 12.8 | 18.6 | 17.2 | 4.8  | -11.2 | -22.7 | -26.5 | -22.5 | -12.9 | -4.2  | -0.6  | 0.2  | -0.1 | 1.4  | 2.4  | 3.1  | 4.4 | 3.8  | 817.8   |      |  |
| N.S.                    | 4.2  | 4.4  | 7.3 | 12.2 | 17.1 | 20.6 | 21.0 | 19.4 | 14.4 | 3.1  | -10.5 | -21.4 | -25.9 | -24.9 | -19.6 | -12.2 | -8.4  | -5.9 | -1.4 | 0.0  | -0.3 | 1.3  | 2.2 | 3.2  | 817.8   |      |  |
| W.                      | 3.8  | 3.1  | 2.9 | 1.8  | 1.7  | 3.5  | 5.9  | 10.1 | 11.1 | 3.6  | -6.8  | -14.8 | -17.0 | -13.8 | -9.4  | -4.6  | -2.4  | -1.5 | 0.9  | 2.2  | 3.7  | 4.9  | 5.8 | 5.1  | 818.7   |      |  |
| S.                      | 5.0  | 5.1  | 6.6 | 10.4 | 13.7 | 17.2 | 19.9 | 20.4 | 15.6 | 3.2  | -11.5 | -22.7 | -27.4 | -25.5 | -18.0 | -9.9  | -5.3  | -3.3 | -1.5 | 0.3  | 0.2  | 1.5  | 2.7 | 3.3  | 817.4   |      |  |
| J.                      | 4.4  | 4.1  | 4.8 | 6.1  | 7.7  | 10.4 | 12.9 | 15.3 | 13.4 | 3.4  | -9.1  | -18.7 | -22.2 | -19.6 | -13.7 | -7.2  | -3.9  | -2.4 | -0.3 | 1.2  | 2.0  | 3.2  | 4.3 | 4.2  | 818.0   |      |  |

|                              | 0h   | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 7h   | 8h   | 9h   | 10h   | 11h   | 12h   | 13h  | 14h | 15h | 16h | 17h | 18h | 19h | 20h | 21h  | 22h  | 23h  | 24h     | T.M. |  |
|------------------------------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|---------|------|--|
| <b>ΔZ Vertikalkomponente</b> |      |      |      |      |      |      |      |      |      |      |       |       |       |      |     |     |     |     |     |     |     |      |      |      |         |      |  |
| J.                           | 0.7  | 0.3  | -0.2 | -0.7 | -1.3 | -1.6 | -1.3 | -1.5 | -2.4 | -2.2 | -2.7  | -4.2  | -2.0  | 2.1  | 2.0 | 2.0 | 1.9 | 2.3 | 2.0 | 2.1 | 1.7 | 1.4  | 1.7  | 1.1  | 43064.2 |      |  |
| F.                           | -0.2 | -0.6 | -1.7 | -2.3 | -2.7 | -2.8 | -2.0 | -0.2 | -0.7 | -3.5 | -4.1  | -3.8  | -2.8  | 0.3  | 2.1 | 2.1 | 3.2 | 3.8 | 3.2 | 4.1 | 3.7 | 2.7  | 2.0  | 0.2  | 060.8   |      |  |
| M.                           | 1.0  | 0.6  | 0.6  | 0.8  | 0.6  | 0.8  | 2.8  | 2.4  | -0.6 | -6.6 | -9.2  | -7.0  | -4.6  | -2.8 | 1.4 | 3.4 | 2.0 | 1.8 | 2.2 | 2.2 | 2.0 | 2.4  | 2.2  | 1.8  | 059.2   |      |  |
| A.                           | 0.7  | 1.3  | 0.6  | -0.4 | -1.9 | 0.9  | 2.3  | 0.2  | -4.0 | -8.9 | -13.1 | -13.6 | -9.6  | -2.1 | 4.1 | 7.2 | 6.0 | 6.3 | 6.5 | 5.1 | 4.4 | 3.4  | 2.3  | 1.9  | 069.2   |      |  |
| M.                           | 1.0  | 0.4  | 1.2  | 2.8  | 2.7  | 2.1  | 1.7  | 0.1  | -5.4 | -9.0 | -13.6 | -13.6 | -11.2 | -6.2 | 0.4 | 6.8 | 7.5 | 9.7 | 6.5 | 4.7 | 4.4 | 3.6  | 2.6  | 1.2  | 075.3   |      |  |
| J.                           | 1.2  | 0.9  | 1.5  | 1.9  | 0.8  | 0.6  | 2.6  | 1.6  | -2.1 | -6.5 | -11.1 | -14.1 | -11.5 | -3.5 | 1.9 | 4.9 | 5.2 | 6.0 | 5.8 | 4.6 | 3.7 | 3.1  | 1.9  | 1.8  | 076.8   |      |  |
| J.                           | 0.5  | 1.0  | 0.8  | 1.7  | 1.8  | -0.6 | -0.5 | -4.1 | -6.2 | -9.1 | -13.5 | -10.4 | -6.4  | -0.3 | 4.7 | 5.8 | 4.9 | 5.7 | 5.4 | 5.2 | 4.9 | 4.6  | 3.6  | 1.5  | 053.0   |      |  |
| A.                           | -3.6 | -2.9 | -1.6 | 0.0  | 2.3  | 1.2  | 1.7  | 0.5  | -3.4 | -7.7 | -10.1 | -9.8  | -7.2  | -2.5 | 3.3 | 4.6 | 5.7 | 7.9 | 7.8 | 7.1 | 5.4 | 3.2  | 1.1  | -2.0 | 044.2   |      |  |
| S.                           | -2.3 | -1.8 | -2.9 | -2.6 | -0.9 | 1.6  | 3.7  | 3.4  | 1.0  | -3.3 | -8.8  | -8.3  | -4.7  | -0.2 | 3.3 | 3.6 | 4.8 | 4.3 | 3.8 | 2.5 | 2.0 | 1.3  | 0.4  | -0.7 | 059.5   |      |  |
| O.                           | -0.1 | -0.7 | -1.3 | -1.7 | -1.7 | -1.5 | 0.9  | 1.7  | -1.6 | -5.2 | -8.8  | -3.8  | -3.4  | -1.8 | 2.6 | 3.6 | 3.7 | 4.5 | 4.5 | 3.9 | 2.3 | 1.3  | 0.9  | -0.1 | 078.7   |      |  |
| N.                           | -0.4 | -0.4 | -0.6 | -0.6 | -1.0 | -1.2 | -1.2 | -0.4 | -2.0 | -4.2 | -3.2  | 0.2   | 2.6   | 3.6  | 3.0 | 2.4 | 1.8 | 1.6 | 1.2 | 0.4 | 0.4 | -0.6 | -0.6 | -0.8 | 091.0   |      |  |
| D.                           | 0.9  | 1.0  | -0.2 | -0.5 | -1.0 | -1.2 | -1.7 | -3.1 | -4.4 | -3.7 | -2.7  | -2.0  | 0.6   | 0.9  | 1.3 | 1.8 | 1.7 | 1.5 | 2.2 | 1.6 | 1.9 | 1.8  | 1.6  | 1.5  | 102.6   |      |  |
| S.S.                         | 0.2  | 0.1  | -0.7 | -1.0 | -1.5 | -1.7 | -1.6 | -1.3 | -2.4 | -3.4 | -3.2  | -2.4  | -0.4  | 1.7  | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.0 | 1.9 | 1.3  | 1.2  | 0.5  | 079.6   |      |  |
| Äqu.                         | -0.2 | -0.2 | -0.8 | -1.0 | -1.0 | 0.4  | 2.4  | 1.9  | -1.3 | -6.0 | -9.2  | -8.2  | -5.6  | -1.7 | 2.8 | 4.4 | 4.1 | 4.2 | 4.2 | 3.4 | 2.7 | 2.1  | 1.4  | 0.7  | 066.6   |      |  |
| N.S.                         | -0.2 | -0.2 | 0.5  | 1.6  | 1.9  | 0.8  | 1.4  | -0.5 | -4.3 | -8.1 | -12.1 | -12.0 | -9.1  | -3.1 | 2.6 | 5.5 | 5.8 | 7.3 | 6.4 | 5.4 | 4.6 | 3.6  | 2.3  | 0.6  | 062.3   |      |  |
| W.                           | 0.3  | 0.0  | -0.6 | -0.8 | -1.2 | -1.2 | -0.4 | -0.2 | -2.0 |      |       |       |       |      |     |     |     |     |     |     |     |      |      |      |         |      |  |

Monatsmittel des täglichen Ganges, dargestellt durch stündliche Werte.

Seddin

Mittlere Ortszeit.

1930

|                              | 1 <sup>h</sup> | 2 <sup>h</sup> | 3 <sup>h</sup> | 4 <sup>h</sup> | 5 <sup>h</sup> | 6 <sup>h</sup> | 7 <sup>h</sup> | 8 <sup>h</sup> | 9 <sup>h</sup> | 10 <sup>h</sup> | 11 <sup>h</sup> | Mtg.         | 13 <sup>h</sup> | 14 <sup>h</sup> | 15 <sup>h</sup> | 16 <sup>h</sup> | 17 <sup>h</sup> | 18 <sup>h</sup> | 19 <sup>h</sup> | 20 <sup>h</sup> | 21 <sup>h</sup> | 22 <sup>h</sup> | 23 <sup>h</sup> | Mn.  |  |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|--|
| <b>AX Nordkomponente</b>     |                |                |                |                |                |                |                |                |                |                 |                 |              |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |      |  |
| J.                           | 4.3            | 4.8            | 5.5            | 6.6            | 8.0            | <b>10.9</b>    | 10.7           | 7.6            | 0.3            | -6.0            | -11.5           | <b>-13.1</b> | -11.9           | -9.3            | -7.5            | -7.5            | -6.3            | -2.6            | -1.9            | 1.2             | 4.3             | 5.5             | 4.9             | 5.0  |  |
| F.                           | 5.9            | 8.0            | 4.9            | 6.2            | 8.1            | 9.5            | 10.4           | 9.0            | 1.0            | -10.0           | -16.3           | <b>-19.9</b> | -18.8           | -14.0           | -12.1           | -7.9            | -6.4            | -4.4            | 5.3             | 6.2             | 8.7             | 9.0             | <b>11.5</b>     | 7.3  |  |
| M.                           | 9.5            | 7.9            | 8.4            | 10.0           | 9.4            | 8.3            | 7.8            | 0.6            | -10.2          | -19.1           | -23.7           | <b>-25.5</b> | -24.8           | -16.9           | -7.8            | -2.7            | -2.5            | 4.9             | 8.9             | 12.5            | 11.3            | <b>12.8</b>     | 11.1            | 9.5  |  |
| A.                           | 9.1            | 8.8            | 6.9            | 7.0            | 9.2            | 5.8            | 0.2            | -10.7          | -20.3          | -29.3           | <b>-30.9</b>    | -28.6        | -20.7           | -13.2           | -6.6            | -1.8            | 5.6             | 13.5            | 12.7            | 18.9            | <b>19.7</b>     | 14.3            | 16.3            | 13.5 |  |
| M.                           | 14.9           | 8.4            | 5.6            | 4.6            | -1.9           | -3.5           | -11.2          | -14.6          | -23.6          | -29.4           | -28.9           | -22.6        | -17.0           | -12.2           | -4.1            | 1.6             | 11.8            | 18.8            | 20.4            | <b>21.4</b>     | 15.2            | 15.7            | 15.6            | 15.3 |  |
| J.                           | 13.2           | 9.7            | 10.2           | 7.9            | 4.6            | 1.4            | -6.0           | -16.6          | -27.8          | -29.6           | -29.5           | -26.9        | -22.8           | -12.6           | -3.6            | -0.6            | 6.9             | 13.5            | 20.4            | <b>23.9</b>     | 18.6            | 16.2            | 15.6            | 14.7 |  |
| J.                           | 8.2            | 11.9           | 7.1            | 3.9            | 5.9            | 1.5            | -6.5           | -12.3          | -18.8          | -22.8           | <b>-26.0</b>    | -25.6        | -20.1           | -13.8           | -4.7            | 2.6             | 8.0             | 11.9            | 17.6            | <b>19.1</b>     | 16.4            | 13.9            | 11.9            | 11.4 |  |
| A.                           | 13.3           | 9.2            | 5.6            | 7.6            | 5.8            | -0.1           | -5.4           | -14.8          | -23.8          | -25.2           | <b>-27.0</b>    | -23.1        | -17.2           | -11.7           | -2.6            | -1.4            | 5.9             | 12.3            | 15.8            | 15.1            | <b>20.4</b>     | 14.1            | 14.8            | 12.5 |  |
| S.                           | 11.8           | 12.5           | 12.0           | 12.6           | 9.5            | 6.5            | 1.2            | -7.3           | -18.7          | -28.8           | <b>-32.7</b>    | -26.2        | -20.6           | -13.6           | -8.8            | -1.7            | 0.4             | 5.3             | 8.9             | 14.0            | 16.7            | 14.9            | <b>17.2</b>     | 14.9 |  |
| O.                           | 9.1            | 6.9            | 8.7            | 9.7            | 9.7            | <b>12.3</b>    | 9.1            | 2.1            | -7.0           | -18.1           | -21.7           | <b>-23.8</b> | -18.2           | -14.4           | -7.6            | -4.2            | -3.1            | 0.0             | 7.0             | 8.5             | 9.0             | 7.3             | 9.4             | 8.9  |  |
| N.                           | 5.1            | 3.9            | 3.4            | 6.0            | 6.3            | <b>8.1</b>     | 7.7            | 5.3            | -1.9           | -8.5            | -13.3           | <b>-14.7</b> | -12.0           | -6.9            | -4.8            | -3.7            | -1.4            | 0.5             | -0.3            | 1.7             | 2.9             | 5.8             | 5.7             | 4.9  |  |
| D.                           | 0.7            | 1.2            | 2.1            | 4.6            | 6.8            | <b>7.1</b>     | 6.6            | 6.2            | 4.4            | 0.9             | 0.3             | -1.6         | -3.7            | -4.4            | -5.6            | -7.1            | <b>-7.5</b>     | -6.4            | -2.7            | -2.1            | -3.5            | 0.5             | 3.7             | 0.3  |  |
| S.S.                         | 4.0            | 4.5            | 4.0            | 5.8            | 7.3            | <b>8.9</b>     | 8.8            | 7.0            | 1.0            | -5.9            | -10.2           | <b>-12.6</b> | -11.6           | -8.6            | -7.5            | -6.6            | -5.4            | -3.2            | 0.1             | 1.8             | 3.1             | 5.2             | 6.4             | 4.4  |  |
| Aqu.                         | 9.9            | 9.0            | 9.0            | 9.8            | 9.4            | 8.2            | 4.6            | -3.8           | -14.0          | -23.8           | <b>-27.2</b>    | -26.0        | -21.1           | -14.5           | -7.7            | -2.6            | 0.1             | 5.9             | 9.4             | 13.5            | <b>14.2</b>     | 12.3            | 13.5            | 11.7 |  |
| N.S.                         | 12.4           | 9.8            | 7.1            | 6.0            | 3.6            | -0.2           | -7.3           | -14.6          | -23.5          | -26.8           | <b>-27.8</b>    | -24.6        | -19.3           | -12.6           | -3.8            | 0.6             | 8.2             | 14.1            | 18.6            | <b>19.9</b>     | 17.6            | 15.0            | 14.5            | 13.5 |  |
| W.                           | 5.8            | 5.4            | 5.5            | 7.2            | 8.0            | <b>9.4</b>     | 8.7            | 5.1            | -2.2           | -10.1           | -14.4           | <b>-16.6</b> | -14.9           | -11.9           | -7.6            | -5.5            | -4.5            | -1.3            | 2.7             | 4.7             | 5.4             | 6.8             | 7.7             | 6.0  |  |
| S.                           | 11.8           | 10.1           | 7.9            | 7.3            | 5.5            | 1.9            | -4.6           | -12.7          | -22.2          | -27.5           | <b>-29.2</b>    | -25.5        | -19.7           | -12.8           | -5.1            | -0.2            | 6.4             | 12.6            | 16.0            | <b>18.7</b>     | 17.8            | 14.8            | 15.2            | 13.7 |  |
| J.                           | 8.8            | 7.8            | 6.7            | 7.2            | 6.8            | 5.6            | 2.0            | -3.8           | -12.2          | -18.8           | <b>-21.8</b>    | -21.0        | -17.3           | -11.9           | -6.3            | -2.9            | 1.0             | 5.6             | 9.3             | <b>11.7</b>     | 11.6            | 10.8            | 11.5            | 9.8  |  |
| <b>AY Ostkomponente</b>      |                |                |                |                |                |                |                |                |                |                 |                 |              |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |      |  |
| J.                           | 7.4            | 4.7            | 3.8            | 0.5            | -2.1           | -1.3           | 0.4            | 2.3            | 3.7            | 0.7             | -5.1            | -12.2        | <b>-17.8</b>    | -15.5           | -9.4            | -8.1            | -7.7            | -4.8            | 0.9             | 8.1             | 12.6            | <b>16.3</b>     | 12.1            | 9.9  |  |
| F.                           | 10.0           | 9.5            | 5.2            | -0.1           | -0.1           | 2.1            | -0.3           | 4.9            | 7.0            | 2.9             | -5.2            | -14.6        | <b>-21.2</b>    | -25.1           | -20.1           | -10.2           | -3.7            | -0.7            | 4.6             | 9.8             | 9.8             | <b>13.2</b>     | 13.1            | 7.3  |  |
| M.                           | 2.3            | 1.1            | -0.5           | 3.9            | 3.7            | 4.7            | 6.8            | <b>15.1</b>    | 14.8           | 7.5             | -6.6            | -20.7        | -29.0           | <b>-29.2</b>    | -22.8           | -9.1            | -3.1            | 7.7             | 7.3             | 6.2             | 10.9            | 10.8            | 9.9             | 7.3  |  |
| A.                           | 13.6           | 5.4            | 5.3            | 5.3            | 7.1            | 11.0           | 15.5           | <b>17.9</b>    | 16.8           | 6.3             | -10.3           | -28.7        | <b>-35.8</b>    | -34.8           | -25.3           | -15.4           | -5.5            | 2.1             | 6.8             | 10.5            | 10.2            | 8.0             | 8.6             | 5.9  |  |
| M.                           | 9.1            | 8.1            | 9.3            | 9.9            | 13.2           | 16.9           | <b>22.1</b>    | 22.1           | 18.3           | 6.8             | -7.3            | -21.5        | <b>-31.3</b>    | -31.8           | -27.5           | -22.0           | -14.4           | -8.6            | -0.2            | 4.1             | 4.2             | 8.0             | 7.7             | 5.6  |  |
| J.                           | 3.7            | 5.7            | 6.8            | 9.9            | 13.2           | 18.8           | <b>22.8</b>    | 23.6           | 19.8           | 12.6            | -0.5            | -16.9        | <b>-25.5</b>    | -27.3           | -25.2           | -19.2           | -12.8           | -10.8           | -6.1            | -0.4            | 0.4             | 1.0             | 3.3             | 3.9  |  |
| J.                           | 5.7            | 12.9           | 11.3           | 10.6           | 15.2           | 17.7           | <b>19.9</b>    | 17.3           | 13.3           | 6.3             | -5.9            | -17.3        | <b>-23.8</b>    | -25.5           | -21.2           | -14.9           | -12.1           | -8.3            | -8.1            | -3.4            | 1.5             | 2.9             | 2.3             | 2.6  |  |
| A.                           | 4.8            | 5.5            | 5.2            | 8.9            | 9.5            | 10.6           | 14.2           | <b>16.6</b>    | 12.8           | 3.1             | -7.5            | -19.7        | <b>-27.3</b>    | -27.2           | -23.6           | -14.2           | -6.8            | -1.0            | 0.9             | 3.3             | 9.6             | 7.9             | 6.5             | 7.4  |  |
| S.                           | 7.4            | 5.6            | 3.8            | 5.5            | 3.1            | 6.2            | 12.0           | <b>16.7</b>    | 13.5           | 2.7             | -9.0            | -25.5        | <b>-30.9</b>    | -32.2           | -22.3           | -11.5           | -1.9            | 4.8             | 8.9             | 8.4             | 9.8             | 7.5             | 9.4             | 8.6  |  |
| O.                           | 3.1            | 1.5            | 0.7            | -1.3           | -5.3           | -5.4           | -1.6           | 4.5            | 6.8            | 2.5             | -9.8            | -20.6        | <b>-25.1</b>    | -24.3           | -15.5           | -1.9            | 1.1             | 8.7             | 12.2            | 13.7            | 14.1            | <b>17.9</b>     | 14.8            | 9.7  |  |
| N.                           | 5.6            | 4.2            | 2.2            | -0.8           | -3.7           | -4.4           | -1.4           | 1.9            | 3.9            | -0.5            | -8.0            | -13.1        | <b>-14.5</b>    | -12.1           | -10.1           | -2.2            | 2.0             | 1.8             | 2.9             | 5.8             | 10.8            | <b>13.1</b>     | 9.3             | 7.9  |  |
| D.                           | 6.4            | 5.9            | 3.1            | -0.9           | -3.5           | -3.7           | -3.5           | -4.9           | -2.7           | -4.7            | -7.4            | -10.6        | <b>-11.3</b>    | -10.4           | -9.3            | -5.2            | 1.0             | 5.3             | 7.3             | 8.2             | 8.1             | <b>12.0</b>     | 11.9            | 9.4  |  |
| S.S.                         | 7.4            | 6.1            | 3.6            | -0.3           | -2.4           | -1.8           | -1.2           | 1.0            | 3.0            | -0.4            | -6.4            | -12.6        | <b>-16.2</b>    | -15.8           | -12.2           | -6.4            | -2.1            | 0.4             | 3.9             | 8.0             | 10.3            | <b>12.8</b>     | 11.6            | 10.1 |  |
| Aqu.                         | 6.6            | 3.4            | 2.3            | 3.4            | 2.2            | 4.1            | 8.2            | <b>13.6</b>    | 13.0           | 4.8             | -8.9            | -23.9        | <b>-30.2</b>    | -30.1           | -21.5           | -9.5            | -2.4            | 5.8             | 8.8             | 9.7             | 11.2            | 11.0            | 10.7            | 7.9  |  |
| N.S.                         | 5.8            | 8.0            | 8.2            | 9.8            | 12.8           | 16.0           | <b>19.8</b>    | 19.9           | 16.0           | 7.2             | -5.3            | -18.8        | <b>-27.0</b>    | -28.0           | -24.4           | -17.6           | -11.5           | -7.2            | -3.3            | 0.9             | 3.9             | 5.0             | 4.9             | 4.9  |  |
| W.                           | 5.8            | 4.5            | 2.4            | 0.2            | -1.8           | -1.3           | 0.1            | 4.0            | 5.6            | 1.4             | -7.0            | -15.3        | <b>-19.8</b>    | -19.4           | -14.5           | -6.1            | -1.7            | 3.0             | 5.9             | 8.6             | 11.0            | <b>13.3</b>     | 11.9            | 9.6  |  |
| S.                           | 7.4            | 7.2            | 7.0            | 8.4            | 10.2           | 13.5           | <b>17.8</b>    | 19.0           | 15.8           | 6.3             | -6.8            | -21.6        | <b>-29.1</b>    | -29.8           | -24.2           | -16.2           | -8.9            | -3.6            | 0.4             | 3.8             | 6.0             | 5.9             | 6.3             | 5.7  |  |
| J.                           | 6.6            | 5.8            | 4.7            | 4.3            | 4.2            | 6.1            | 8.9            | <b>11.5</b>    | 10.7           | 3.8             | -6.9            | -18.4        | <b>-24.5</b>    | -24.6           | -19.4           | -11.2           | -5.3            | -0.3            | 3.2             | 6.2             | 8.5             | 9.6             | 9.1             | 7.6  |  |
| <b>AZ Vertikalkomponente</b> |                |                |                |                |                |                |                |                |                |                 |                 |              |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |      |  |
| J.                           | -1.2           | -2.5           | -3.7           | -4.0           | -4.8           | -5.1           | -3.8           | -4.3           | -4.2           | -4.0            | -4.1            | -4.6         | -1.7            | 2.7             | 4.9             | 5.2             | 6.2             | 6.4             | <b>7.4</b>      | 6.2             | 4.7             | 3.3             | 1.5             | -0.4 |  |
| F.                           | -5.1           | -6.0           | <b>-7.0</b>    | -6.4           | -6.3           | -5.5           | -4.5           | -3.2           | -2.3           | -3.8            | -4.5            | -3.7         | -1.5            | 2.7             | 8.2             | 9.9             | 10.0            | <b>10.1</b>     | 8.5             | 7.2             | 4.7             | 2.9             | -0.6            | -3.1 |  |
| M.                           | -4.6           | -6.8           | -7.8           | -7.8           | -7.6           | -6.0           | -3.0           | -2.3           | -3.7           | -6.3            | -8.4            | -7.1         | -2.5            | 2.0             | 8.8             | <b>14.1</b>     | 13.7            | 11.4            | 9.7             | 7.1             | 5.3             | 2.7             | 0.9             | -1.5 |  |
| A.                           | -9.1           | -9.2           | -9.1           | -9.6           | -8.3           | -3.4           | -0.6           | -0.2           | -3.6           | -8.1            | <b>-12.4</b>    | -12.3        | -7.8            | 0.3             | 7.8             | 14.6            | 16.4            | <b>18.6</b>     | 18.4            | 12.4            | 7.4             | 4.4             | 0.2             | -6.6 |  |
| M.                           | -6.0           | -9.1           | -8.9           | -7.5           | -7.2           | -6.2           | -4.2           | -3.8           | -5.1           | -7.1            | -10.3           | <b>-12.2</b> | -8.3            | -1.1            | 5.7             | 10.3            | 14.6            | <b>17.6</b>     | 18.9            | 15.5            | 11.4            | 5.9             | 1.0             | -4.2 |  |
| J.                           | -7.2           | -8.7           | -9.2           | -8.9           | -7.5           | -5.4           | -1.8           | -0.9           | -3.5           | -6.6            | <b>-10.0</b>    | -9.1         | -5.8            | 0.5             | 6.9             | 11.7            | 13.9            | <b>16.3</b>     | 15.2            | 13.1            | 8.7             | 4.6             | -0.1            | -5.3 |  |
| J.                           | -3.4           | -6.2           | -4.6           | -5.3           | -6.4           | -5.1           | -3.0           | -2.6           | -4.0           | -7.1            | <b>-9.7</b>     | -9.4         | -7.2            | -1.4            | 5.1             | 9.1             | 11.1            | <b>12.6</b>     | 11.4            | 10.5            | 8.2             | 4.5             | 2.4             | -0.4 |  |
| A.                           | -5.9           | -7.5           | -8.3           | -7.8           | -5.6           | -4.3           | -2.9           | -1.1           | -1.8           | -5.2            | -9.5            | -9.7         | -5.6            | 0.2             | 8.0             | 13.1            | 13.9            | <b>14.1</b>     | 12.1            | 10.3            | 4.8             | 2.1             | -1.4            | -2.8 |  |
| S.                           | -4.3           | -7.4           | -8.3           | -8.2           | -6.6           | -4.9           | -2.5           | -1.1           | -2.2           | -5.8            | -9.0            | -7.7         | -3.2            | 4.1             | 10.0            | 13.4            | <b>14.4</b>     | 13.3            | 10.8            | 6.5             | 3.6             | 1.1             | -2.7            | -4.2 |  |
| O.                           | -6.0           | -6.3           | -6.2           | -6.0           | -5.9           | -5.2           | -2.6           | -1.2           | -3.2           | -6.2            | <b>-6.9</b>     | -4.1         | -0.3            | 4.7             | 10.5            | <b>11.1</b>     | 13.8            | 12.0            | 8.1             | 5.0             | 1.9             | -2.0            | -3.8            | -4.6 |  |
| N.                           | -3.5           | <b>-8.4</b>    | -4.8           | -4.7           | -4.5           | -5.2           | -3.8           | -2.0           | -2.3           | -4.2            | -3.3            | -1.0         | 2.4             | 4.7             | 5.5             | <b>6.1</b>      | 6.1             | 5.4             | 5.6             | 5.3             | 4.4             | 1.9             | -0.1            | -1.5 |  |
| D.                           | -1.4           | -2.2           | -2.9           | -3.7           | -4.0           | -4.3           | -4.2           | -5.2           | <b>-6.8</b>    | -6.2            | -5.5            | -4.8         | -2.0            | 0.5             | 3.4             | 6.8             | 7.3             | <b>8.5</b>      | 8.5             | 7.2             | 6.0             | 3.6             | 1.4             | 0.3  |  |
| S.S.                         | -2.8           | -4.0           | -4.6           | -4.7           | -4.9           | <b>-5.0</b>    | -4.1           | -3.7           | -3.9           | -4.6            | -4.4            | -3.5         | -0.7            | 2.6             | 5.5             | 7.0             | 7.4             | <b>7.6</b>      | 7.5             | 6.5             | 5.0             | 2.9             | 0.6             | -1.2 |  |
| Aqu.                         | -6.0           | -7.4           | -7.8           | -7.9           | -7.1           | -4.9           | -2.2           | -1.2           | -3.2           | -6.6            | <b>-9.2</b>     | -7.8         | -3.4            | 2.8             | 9.3             | 14.0            | <b>14.6</b>     | 13.8            | 11.8            | 7.8             | 4.6             | 1.6             | -1.4            | -4.2 |  |
| N.S.                         | -5.6           | -7.9           | -7.8           | -7.4           | -6.7           | -5.2           | -3.0           | -2.1           | -3.6           | -6.5            | -9.9            | <b>-10.1</b> | -6.6            | -0.4            | 6.4             | 11.0            | 13.4            | <b>15.2</b>     | 14.4            | 12.4            | 8.3             | 4.3             | 0.5             | -3.2 |  |
| W.                           | -3.6           | -4.9           | -5.4           | -5.4           | <b>-5.5</b>    | -5.2           | -3.6           | -3.0           | -3.8           | -5.1            | -5.4            | -4.2         | -0.9            | 2.9             | 6.9             | 9.2             | <b>9.5</b>      | 9.0             | 8.0             | 6.3             | 4.5             | 2.1             | -0.1            | -1.8 |  |
| S.                           | -6.0           | -8.0           | -8.1           | -7.9           | -6.9           | -4.9           | -2.5           | -1.6           | -3.4           | -6.6            | <b>-10.2</b>    | -10.1        | -6.3            | 0.4             | 7.2             | 12.0            | 14.0            | <b>15.4</b>     | 14.5            | 11.4            | 7.4             | 3               |                 |      |  |

Täglicher Gang an ruhigen Tagen, dargestellt durch stündliche Werte.

Seddin

Mittlere Ortszeit.

1930

|                          | 1 <sup>h</sup> | 2 <sup>h</sup> | 3 <sup>h</sup> | 4 <sup>h</sup> | 5 <sup>h</sup> | 6 <sup>h</sup> | 7 <sup>h</sup> | 8 <sup>h</sup> | 9 <sup>h</sup> | 10 <sup>h</sup> | 11 <sup>h</sup> | Mtg.  | 13 <sup>h</sup> | 14 <sup>h</sup> | 15 <sup>h</sup> | 16 <sup>h</sup> | 17 <sup>h</sup> | 18 <sup>h</sup> | 19 <sup>h</sup> | 20 <sup>h</sup> | 21 <sup>h</sup> | 22 <sup>h</sup> | 23 <sup>h</sup> | Mn.  |  |
|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|--|
| <b>ΔX Nordkomponente</b> |                |                |                |                |                |                |                |                |                |                 |                 |       |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |      |  |
| J.                       | 0.7            | 1.4            | 2.4            | 2.8            | 3.8            | 6.9            | 8.7            | 6.6            | 1.3            | -6.1            | -10.5           | -12.4 | -9.4            | -5.9            | -3.3            | -3.5            | -2.8            | 0.3             | 3.1             | 4.9             | 5.2             | 5.2             | 0.9             | -0.2 |  |
| F.                       | 6.1            | 5.0            | 5.7            | 8.9            | 10.6           | 11.3           | 12.0           | 9.5            | 2.3            | -10.2           | -21.0           | -23.2 | -15.7           | -9.5            | -6.3            | -5.6            | -4.2            | -2.8            | 4.3             | 3.1             | 2.4             | 4.1             | 5.4             | 6.8  |  |
| M.                       | 5.1            | 4.7            | 4.8            | 4.8            | 6.2            | 8.6            | 8.4            | 7.5            | 0.6            | -9.3            | -16.0           | -17.4 | -16.8           | -11.4           | -6.0            | -2.9            | -2.3            | 1.1             | 4.1             | 5.6             | 5.8             | 4.3             | 4.7             | 5.0  |  |
| A.                       | 6.2            | 4.8            | 5.6            | 7.1            | 10.8           | 9.0            | 5.9            | 1.3            | -11.4          | -27.6           | -30.8           | -28.4 | -15.2           | -6.1            | -0.3            | -0.3            | 1.2             | 9.8             | 11.1            | 12.5            | 8.7             | 7.6             | 10.3            | 9.0  |  |
| M.                       | 8.1            | 8.9            | 4.6            | 5.4            | 6.7            | 5.3            | 0.8            | -5.5           | -14.0          | -18.5           | -18.4           | -17.7 | -13.6           | -9.2            | -4.7            | -2.8            | 4.2             | 6.2             | 8.1             | 14.8            | 9.9             | 6.3             | 5.9             | 9.7  |  |
| J.                       | 8.5            | 7.5            | 8.0            | 8.1            | 10.0           | 7.4            | 1.3            | -7.1           | -16.0          | -21.2           | -23.9           | -22.3 | -13.3           | -7.1            | -1.9            | -2.3            | -0.8            | 6.7             | 7.5             | 11.8            | 11.5            | 10.2            | 11.1            | 9.0  |  |
| J.                       | 5.8            | 5.6            | 5.5            | 5.6            | 6.0            | 4.5            | -3.2           | -7.8           | -9.8           | -9.5            | -8.6            | -9.5  | -14.9           | -10.6           | -5.8            | -6.3            | 1.4             | 5.3             | 3.8             | 11.0            | 11.1            | 5.6             | 6.4             | 7.3  |  |
| A.                       | 10.4           | 8.3            | 6.2            | 5.8            | 2.1            | 1.8            | 0.2            | -3.5           | -8.7           | -13.9           | -23.1           | -23.0 | -20.8           | -13.3           | -4.9            | -0.2            | 9.2             | 10.1            | 10.6            | 11.2            | 7.7             | 7.2             | 9.3             | 10.5 |  |
| S.                       | 11.7           | 7.3            | 10.1           | 9.5            | 11.5           | 9.3            | 5.9            | -1.9           | -13.9          | -25.2           | -30.0           | -24.8 | -18.4           | -10.8           | -6.9            | -0.3            | 3.2             | 6.0             | 7.2             | 10.1            | 11.7            | 10.3            | 9.1             | 9.3  |  |
| O.                       | 4.6            | 5.3            | 5.7            | 5.6            | 6.4            | 9.6            | 8.9            | 4.4            | -4.6           | -13.3           | -18.6           | -15.1 | -11.5           | -6.2            | -3.7            | -2.6            | 0.1             | -1.2            | -0.1            | 1.7             | 4.2             | 6.5             | 5.7             | 5.9  |  |
| N.                       | 0.7            | 0.2            | 1.8            | 2.9            | 4.2            | 5.4            | 5.0            | 1.7            | -5.0           | -10.1           | -13.2           | -11.3 | -6.7            | -2.0            | -1.4            | -0.1            | 3.1             | 3.6             | 3.2             | 5.1             | 4.1             | 5.6             | 2.8             | 1.3  |  |
| D.                       | -2.1           | -3.6           | -2.5           | -0.6           | 1.0            | 1.6            | 0.5            | 0.2            | -0.2           | -0.8            | -0.7            | -1.3  | -0.9            | 0.3             | 0.8             | 1.7             | 2.4             | 2.2             | 0.4             | 1.9             | 1.7             | 0.9             | -1.4            | -2.4 |  |
| S.S.                     | 1.4            | 0.8            | 1.8            | 3.5            | 4.9            | 6.3            | 6.6            | 4.5            | -0.4           | -6.8            | -11.4           | -12.0 | -8.2            | -4.3            | -2.6            | -1.9            | -0.4            | 0.8             | 2.8             | 3.8             | 3.4             | 4.0             | 1.9             | 1.4  |  |
| Äqu.                     | 6.9            | 5.5            | 6.6            | 6.8            | 8.7            | 9.1            | 7.3            | 2.8            | -7.3           | -18.8           | -23.1           | -21.4 | -15.5           | -8.6            | -4.2            | -1.5            | 0.6             | 3.9             | 5.6             | 7.5             | 7.6             | 7.2             | 7.4             | 7.3  |  |
| N.S.                     | 8.2            | 7.6            | 6.1            | 6.2            | 6.2            | 4.8            | -0.2           | -6.0           | -12.1          | -15.8           | -19.0           | -18.1 | -15.6           | -10.0           | -4.3            | -2.9            | 3.5             | 7.1             | 7.5             | 12.2            | 10.0            | 7.3             | 8.2             | 9.1  |  |
| W.                       | 2.5            | 2.2            | 3.0            | 4.1            | 5.4            | 7.2            | 7.2            | 5.0            | -0.9           | -8.3            | -12.8           | -13.4 | -10.2           | -5.8            | -3.3            | -2.2            | -0.6            | 0.5             | 2.5             | 3.7             | 3.9             | 4.4             | 3.0             | 2.7  |  |
| S.                       | 8.4            | 7.1            | 6.7            | 6.9            | 7.8            | 6.2            | 1.8            | -4.1           | -12.3          | -19.3           | -22.8           | -21.0 | -16.0           | -9.5            | -4.1            | -2.4            | 3.1             | 7.4             | 8.0             | 11.9            | 10.1            | 7.9             | 8.7             | 9.1  |  |
| J.                       | 5.5            | 4.6            | 4.8            | 5.5            | 6.6            | 6.7            | 4.5            | 0.4            | -6.6           | -13.8           | -17.8           | -17.2 | -13.1           | -7.6            | -3.7            | -2.1            | 1.2             | 3.9             | 5.3             | 7.8             | 7.0             | 6.2             | 5.8             | 5.9  |  |

|                         | 1 <sup>h</sup> | 2 <sup>h</sup> | 3 <sup>h</sup> | 4 <sup>h</sup> | 5 <sup>h</sup> | 6 <sup>h</sup> | 7 <sup>h</sup> | 8 <sup>h</sup> | 9 <sup>h</sup> | 10 <sup>h</sup> | 11 <sup>h</sup> | Mtg.  | 13 <sup>h</sup> | 14 <sup>h</sup> | 15 <sup>h</sup> | 16 <sup>h</sup> | 17 <sup>h</sup> | 18 <sup>h</sup> | 19 <sup>h</sup> | 20 <sup>h</sup> | 21 <sup>h</sup> | 22 <sup>h</sup> | 23 <sup>h</sup> | Mn.  |  |
|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|--|
| <b>ΔY Ostkomponente</b> |                |                |                |                |                |                |                |                |                |                 |                 |       |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |      |  |
| J.                      | 2.4            | 0.1            | 0.9            | 0.6            | -0.6           | 1.6            | 3.1            | 7.5            | 11.4           | 8.5             | 2.4             | -7.7  | -13.1           | -10.7           | -7.6            | -5.9            | -5.9            | -3.6            | -1.3            | 1.4             | 3.1             | 4.5             | 4.3             | 3.8  |  |
| F.                      | 7.9            | 4.8            | 3.3            | 1.8            | 1.8            | 3.1            | 4.6            | 10.5           | 15.7           | 11.4            | -0.8            | -12.7 | -21.1           | -23.0           | -20.9           | -12.4           | -2.0            | -2.0            | 0.8             | 0.8             | 2.5             | 5.4             | 8.7             | 10.9 |  |
| M.                      | 3.2            | 4.3            | 5.6            | 4.6            | 4.1            | 4.4            | 7.4            | 15.4           | 21.3           | 13.5            | -2.0            | -16.3 | -22.6           | -21.5           | -14.2           | -4.7            | -1.1            | -1.9            | -1.7            | -1.3            | -1.0            | 0.5             | 1.5             | 2.8  |  |
| A.                      | 2.5            | 3.9            | 2.4            | 5.7            | 5.2            | 9.4            | 19.4           | 27.4           | 26.5           | 13.7            | -6.6            | -21.5 | -30.0           | -30.0           | -18.8           | -8.2            | -2.3            | 2.0             | -2.2            | 1.2             | -1.7            | -1.7            | 1.9             | 1.7  |  |
| M.                      | 2.0            | 2.1            | 6.0            | 12.4           | 18.6           | 22.8           | 27.1           | 29.0           | 24.7           | 12.4            | -6.2            | -19.9 | -29.0           | -32.7           | -27.9           | -19.9           | -13.4           | -8.9            | -4.4            | 1.5             | 0.4             | 0.8             | 1.5             | 0.6  |  |
| J.                      | 2.1            | 2.8            | 4.2            | 9.9            | 14.9           | 21.9           | 24.4           | 26.9           | 24.0           | 9.2             | -6.2            | -20.7 | -27.9           | -26.9           | -21.3           | -13.2           | -6.9            | -5.5            | -3.5            | -3.5            | -3.6            | -3.5            | -0.1            | 2.0  |  |
| J.                      | 4.6            | 2.2            | 6.2            | 10.0           | 15.9           | 19.0           | 15.6           | 9.2            | 7.1            | 2.7             | -6.9            | -16.9 | -19.1           | -17.1           | -12.6           | -6.5            | -0.5            | -7.4            | -4.5            | -1.2            | 0.5             | 0.2             | 2.2             | 3.5  |  |
| A.                      | 7.1            | 8.3            | 6.7            | 9.1            | 12.8           | 15.6           | 17.5           | 17.2           | 13.6           | 6.2             | -4.6            | -16.3 | -24.8           | -27.2           | -25.5           | -17.7           | -11.2           | -6.8            | 2.2             | 2.1             | 0.7             | 5.8             | 3.7             | 5.4  |  |
| S.                      | 9.5            | 9.6            | 8.2            | 7.2            | 7.0            | 7.6            | 11.7           | 16.9           | 16.0           | 4.9             | -9.8            | -22.6 | -30.1           | -28.9           | -18.6           | -8.0            | 1.2             | 2.5             | -0.4            | -0.6            | 3.7             | 4.3             | 4.9             | 4.4  |  |
| O.                      | 5.1            | 4.5            | 4.3            | 2.8            | 0.3            | 0.7            | 4.4            | 11.0           | 14.5           | 7.9             | -6.1            | -18.6 | -22.8           | -19.2           | -13.4           | -5.4            | -3.8            | -2.2            | 3.1             | 4.2             | 7.3             | 7.9             | 8.6             | 5.8  |  |
| N.                      | 2.9            | 2.5            | 1.8            | 1.4            | 1.8            | 3.3            | 4.9            | 7.1            | 7.4            | 1.3             | -7.9            | -13.3 | -14.2           | -9.8            | -5.5            | -3.4            | -3.3            | -1.4            | 0.2             | 2.5             | 3.9             | 5.0             | 6.8             | 5.6  |  |
| D.                      | 3.6            | 3.3            | 2.8            | 1.3            | 1.2            | 3.5            | 3.9            | 3.1            | 2.7            | -1.5            | -5.8            | -8.2  | -8.7            | -6.6            | -5.0            | -3.8            | -2.2            | -1.1            | 0.0             | 2.4             | 3.5             | 3.8             | 4.7             | 3.9  |  |
| S.S.                    | 4.2            | 2.7            | 2.2            | 1.3            | 1.0            | 2.9            | 4.1            | 7.0            | 9.3            | 4.9             | -3.0            | -10.5 | -14.3           | -12.5           | -9.8            | -6.4            | -3.4            | -2.0            | -0.1            | 1.8             | 3.2             | 4.7             | 6.1             | 6.0  |  |
| Äqu.                    | 5.1            | 5.6            | 5.1            | 5.1            | 4.2            | 5.5            | 10.7           | 17.7           | 19.6           | 10.6            | -6.1            | -19.8 | -26.4           | -24.9           | -16.2           | -6.6            | -1.5            | 0.1             | -0.3            | 0.9             | 2.1             | 2.8             | 4.2             | 3.7  |  |
| N.S.                    | 4.0            | 3.8            | 5.9            | 10.4           | 15.6           | 19.8           | 21.2           | 20.6           | 17.4           | 7.6             | -6.0            | -18.4 | -25.2           | -26.0           | -21.8           | -14.3           | -9.5            | -7.2            | -2.6            | -0.3            | -0.5            | 0.8             | 1.8             | 2.9  |  |
| W.                      | 4.2            | 3.2            | 3.1            | 2.1            | 1.4            | 2.8            | 4.7            | 9.1            | 12.2           | 6.8             | -3.4            | -12.8 | -17.1           | -15.1           | -11.1           | -5.9            | -3.0            | -2.0            | 0.2             | 1.7             | 3.2             | 4.5             | 5.8             | 5.5  |  |
| S.                      | 4.6            | 4.8            | 5.7            | 9.0            | 12.4           | 16.0           | 19.3           | 21.1           | 18.6           | 8.2             | -6.7            | -19.6 | -26.8           | -27.1           | -20.8           | -12.2           | -6.5            | -4.0            | -2.1            | -0.1            | 0.0             | 1.0             | 2.4             | 2.9  |  |
| J.                      | 4.4            | 4.0            | 4.4            | 5.6            | 6.9            | 9.4            | 12.0           | 15.1           | 15.4           | 7.5             | -5.0            | -16.2 | -22.0           | -21.1           | -15.9           | -9.1            | -4.8            | -3.0            | -1.0            | 0.8             | 1.6             | 2.8             | 4.1             | 4.2  |  |

|                              | 1 <sup>h</sup> | 2 <sup>h</sup> | 3 <sup>h</sup> | 4 <sup>h</sup> | 5 <sup>h</sup> | 6 <sup>h</sup> | 7 <sup>h</sup> | 8 <sup>h</sup> | 9 <sup>h</sup> | 10 <sup>h</sup> | 11 <sup>h</sup> | Mtg.  | 13 <sup>h</sup> | 14 <sup>h</sup> | 15 <sup>h</sup> | 16 <sup>h</sup> | 17 <sup>h</sup> | 18 <sup>h</sup> | 19 <sup>h</sup> | 20 <sup>h</sup> | 21 <sup>h</sup> | 22 <sup>h</sup> | 23 <sup>h</sup> | Mn.  |     |  |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|-----|--|
| <b>ΔZ Vertikalkomponente</b> |                |                |                |                |                |                |                |                |                |                 |                 |       |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |      |     |  |
| J.                           | 0.8            | 0.4            | -0.1           | -0.6           | -1.3           | -1.6           | -1.5           | -1.4           | -2.3           | -2.2            | -2.5            | -4.4  | -3.2            | 1.2             | 1.9             | 1.9             | 1.7             | 2.1             | 2.0             | 2.1             | 1.7             | 1.4             | 1.6             | 1.2  |     |  |
| F.                           | 0.0            | -0.3           | -1.4           | -2.1           | -2.6           | -2.9           | -2.5           | -0.5           | -0.1           | -2.8            | -4.0            | -4.1  | -3.5            | -0.6            | 1.7             | 1.9             | 2.9             | 3.8             | 3.1             | 4.0             | 4.0             | 3.0             | 2.4             | 0.7  |     |  |
| M.                           | 1.3            | 0.7            | 0.6            | 0.8            | 0.6            | 0.5            | 2.5            | 3.0            | 1.0            | -5.0            | -9.1            | -7.8  | -5.4            | -3.9            | 0.3             | 3.2             | 2.3             | 1.7             | 2.1             | 2.2             | 1.9             | 2.3             | 2.3             | 2.0  |     |  |
| A.                           | 0.8            | 1.3            | 0.9            | 0.0            | -2.1           | 0.1            | 2.4            | 1.3            | -2.4           | -7.2            | -12.2           | -14.2 | -11.6           | -4.6            | 2.4             | 6.8             | 6.2             | 6.3             | 6.7             | 5.5             | 4.7             | 3.8             | 2.6             | 2.2  |     |  |
| M.                           | 1.1            | 0.4            | 0.7            | 2.5            | 2.8            | 2.2            | 2.1            | 1.3            | -3.7           | -7.5            | -12.7           | -14.0 | -12.5           | -8.3            | -2.0            | 5.4             | 7.0             | 9.8             | 7.4             | 5.1             | 4.6             | 4.0             | 3.0             | 1.5  |     |  |
| J.                           | 1.3            | 0.9            | 1.3            | 2.0            | 1.0            | 0.3            | 2.4            | 2.4            | -0.7           | -4.8            | -9.7            | -13.9 | -13.3           | -6.0            | 0.3             | 4.3             | 5.0             | 5.8             | 6.0             | 5.0             | 4.0             | 3.4             | 2.1             | 1.9  |     |  |
| J.                           | 0.6            | 0.9            | 0.6            | 1.5            | 2.2            | -0.1           | 0.1            | -3.0           | -5.3           | -7.8            | -13.1           | -11.7 | -8.2            | -2.3            | 3.5             | 5.8             | 5.0             | 5.5             | 5.5             | 5.5             | 5.2             | 5.0             | 4.9             | 4.2  | 2.1 |  |
| A.                           | -3.4           | -3.2           | -2.2           | -0.7           | 2.0            | 1.3            | 1.8            | 1.3            | -1.9           | -6.2            | -9.6            | -10.3 | -8.5            | -4.4            | 1.9             | 4.1             | 5.1             | 7.5             | 7.9             | 7.5             | 6.1             | 4.0             | 2.0             | -1.1 |     |  |
| S.                           | -2.1           | -1.7           | -2.7           | -3.0           | -1.6           | 0.7            | 3.3            | 3.9            | 2.2            | -1.5            | -7.8            | -9.0  | -6.2            | -1.7            | 2.6             | 3.3             | 4.7             | 4.5             | 4.1             | 2.9             | 2.2             | 1.6             | 0.8             | -0.2 |     |  |
| O.                           | -0.1           | -0.6           | -1.2           | -1.7           | -1.8           | -2.0           | 0.2            | 2.0            | -0.4           | -4.5            | -6.1            | -4.4  | -3.9            | -2.9            | 1.4             | 3.3             | 3.5             | 4.2             | 4.5             | 4.2             | 2.7             | 1.5             | 1.1             | 0.0  |     |  |
| N.                           | -0.5           | -0.4           | -0.6           | -0.5           | -0.9           | -1.2           | -1.3           | -0.3           | -1.3           | -4.0            | -4.0            | -0.9  | 1.9             | 3.5             | 3.2             | 2.6             | 1.9             | 1.7             | 1.4             | 0.6             | 0.6             | -0.4            | -0.6            | -0.9 |     |  |
| D.                           | 1.0            | 1.2            | 0.0            | -0.3           | -0.9           | -1.1           | -1.4           | -2.6           | -4.2           | -4.0            | -3.0            | -2.5  | 0.1             | 0.7             | 1.1             | 1.7             | 1.7             | 1.4             | 2.2             | 1.7             | 1.8             | 1.8             | 1.6             | 1.6  |     |  |
| S.S.                         | 0.3            | 0.2            | -0.5           | -0.9           | -1.4           | -1.7           | -1.7           | -1.2           | -2.0           | -3.2            | -3.4            | -3.0  | -1.2            | 1.2             | 2.0             | 2.0             | 2.0             | 2.2             | 2.2             | 2.1             | 2.0             | 1.4             | 1.2             | 0.6  |     |  |
| Äqu.                         | 0.0            | -0.1           | -0.6           | -1.0           | -1.2           | -0.2           | 2.1            | 2.6            | 0.1            | -4.6            | -8.8            | -8.8  | -6.8            | -3.3            | 1.7             | 4.2             | 4.2             | 4.2             | 4.4             | 3.7             | 2.9             | 2.3             | 1.7             | 1.0  |     |  |
| N.S.                         | -0.1           | -0.2           | 0.1            | 1.3            | 2.0            | 0.9            | 1.6            | 0.5            | -2.9           | -6.6            | -11.3           | -12.5 | -10.6           | -5.2            | 0.9             | 4.9             | 5.5             | 7.5             | 6.7             | 5.7             | 4.9             | 4.1             | 2.8             | 1.1  |     |  |
| W.                           | 0.4            | 0.2            | -0.4           | -0.7           | -1.2           | -1.4           | -0.7           | 0.0            | -1.2           | -3.8            | -4.8</          |       |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |      |     |  |

Monatsmittel des täglichen Ganges, dargestellt durch stündliche Werte.

Seddin

Mittlere Ortszeit.

1930

Table with columns 1h to 23h and Mn. for ΔH (Horizontalintensität). Rows include J, F, M, A, M, J, J, A, S, O, N, D, S.S., Äqu., N.S., W., S., J.

Table with columns 1h to 23h and Mn. for ΔD (Deklination). Rows include J, F, M, A, M, J, J, A, S, O, N, D, S.S., Äqu., N.S., W., S., J.

Table with columns 1h to 23h and Mn. for ΔI (Inklination). Rows include J, F, M, A, M, J, J, A, S, O, N, D, S.S., Äqu., N.S., W., S., J.

Der Wert unter Mn. gilt sowohl für 0h wie für 24h.

Monatsmittel des täglichen Ganges, dargestellt durch trigonometrische Reihen.

Seddin Alle Tage. Epoche: Mitternacht nach mittlerer Ortszeit. Ruhige Tage. 1930

| Monat                     | a <sub>1</sub> | b <sub>1</sub> | a <sub>2</sub> | b <sub>2</sub> | a <sub>3</sub> | b <sub>3</sub> | a <sub>4</sub> | b <sub>4</sub> | a <sub>1</sub> | b <sub>1</sub> | a <sub>2</sub> | b <sub>2</sub> | a <sub>3</sub> | b <sub>3</sub> | a <sub>4</sub> | b <sub>4</sub> |
|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>ΔX Nordkomponente</b>  |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| Januar . . . . .          | 7.43           | 5.39           | -3.77          | -1.88          | 1.77           | -1.98          | -0.56          | 0.84           | 4.87           | 2.02           | -4.56          | -2.18          | 1.28           | -1.58          | -1.37          | 1.47           |
| Februar . . . . .         | 11.60          | 4.56           | -4.88          | -3.91          | 2.41           | -1.69          | -1.12          | 1.28           | 9.66           | 5.11           | -6.62          | -1.16          | 3.53           | -2.05          | -1.32          | 1.93           |
| März . . . . .            | 16.08          | 0.58           | -7.64          | -1.18          | 1.94           | -1.85          | -0.76          | 0.73           | 8.71           | 2.82           | -5.81          | -1.93          | 2.70           | -0.77          | -1.07          | 1.28           |
| April . . . . .           | 19.53          | -5.68          | -8.12          | 0.83           | 0.74           | -3.22          | 0.68           | 1.06           | 14.13          | -2.28          | -0.15          | 1.78           | 2.85           | -4.21          | -0.25          | 3.04           |
| Mai . . . . .             | 18.92          | -10.87         | -5.64          | 2.00           | 0.50           | 0.02           | 1.59           | 1.51           | 12.44          | -2.53          | -5.37          | 1.08           | 0.08           | -1.21          | 0.74           | 1.70           |
| Juni . . . . .            | 21.03          | -8.75          | -7.10          | 2.14           | -0.81          | -1.71          | 0.61           | 1.28           | 14.44          | -2.22          | -5.88          | 2.21           | 0.42           | -3.67          | -0.13          | 1.43           |
| Juli . . . . .            | 17.52          | -7.20          | -6.98          | 1.08           | 0.19           | -0.45          | -0.21          | 0.48           | 9.95           | -1.16          | -2.87          | -0.50          | -1.63          | 0.07           | 0.68           | -0.79          |
| August . . . . .          | 18.29          | -7.38          | -5.50          | 1.97           | -0.35          | -2.04          | 0.71           | 0.69           | 13.53          | -3.04          | -6.42          | 0.32           | 3.01           | 1.38           | -0.22          | 0.48           |
| September . . . . .       | 20.23          | -2.26          | -6.48          | 1.93           | 1.00           | -3.54          | -0.35          | 1.11           | 15.92          | -0.76          | -8.05          | 2.00           | 2.02           | -3.18          | -0.06          | 1.66           |
| Oktober . . . . .         | 13.78          | 2.54           | -6.89          | -0.46          | 1.93           | -2.45          | -0.33          | 1.52           | 8.27           | 2.49           | -4.48          | 0.43           | 2.58           | -2.77          | -0.32          | 1.02           |
| November . . . . .        | 7.36           | 2.88           | -4.10          | -0.64          | 2.51           | -1.76          | -0.32          | 0.54           | 5.20           | -0.72          | -4.54          | 0.15           | 1.22           | -2.29          | -0.22          | 0.87           |
| Dezember . . . . .        | 1.41           | 5.67           | -0.47          | -1.68          | 0.05           | -1.03          | 0.35           | -0.02          | -0.53          | -0.98          | -1.57          | -0.52          | 0.02           | -0.68          | -0.01          | -0.41          |
| November-Febr. . . . .    | 6.95           | 4.62           | -3.30          | -2.03          | 1.68           | -1.62          | -0.41          | 0.66           | 4.80           | 1.36           | -4.32          | -0.93          | 1.51           | -1.65          | -0.74          | 0.96           |
| Mrz.Apr.Sept.Okt. . . . . | 17.40          | -1.20          | -7.28          | 0.28           | 1.40           | -2.76          | -0.19          | 1.10           | 11.76          | 0.57           | -6.87          | -0.57          | 2.54           | -2.73          | -0.42          | 1.75           |
| Mai-August . . . . .      | 18.94          | -8.55          | -6.30          | 1.80           | -0.12          | -1.04          | 0.68           | 0.99           | 12.59          | -2.24          | -5.14          | 0.78           | 0.47           | -0.86          | 0.27           | 0.70           |
| Oktober-März . . . . .    | 9.61           | 3.60           | -4.62          | -1.62          | 1.77           | -1.79          | -0.46          | 0.82           | 6.03           | 1.79           | -4.60          | -0.87          | 1.89           | -1.69          | -0.72          | 1.03           |
| April-September . . . . . | 19.25          | -7.02          | -6.64          | 1.66           | 0.21           | -1.82          | 0.50           | 1.02           | 13.40          | -2.00          | -6.29          | 1.15           | 1.12           | -1.80          | 0.13           | 1.25           |
| Jahr . . . . .            | 14.43          | -1.71          | -5.63          | 0.02           | 0.99           | -1.81          | 0.02           | 0.92           | 9.72           | -0.10          | -5.44          | 0.14           | 1.51           | -1.75          | -0.30          | 1.14           |

| Monat                     | a <sub>1</sub> | b <sub>1</sub> | a <sub>2</sub> | b <sub>2</sub> | a <sub>3</sub> | b <sub>3</sub> | a <sub>4</sub> | b <sub>4</sub> | a <sub>1</sub> | b <sub>1</sub> | a <sub>2</sub> | b <sub>2</sub> | a <sub>3</sub> | b <sub>3</sub> | a <sub>4</sub> | b <sub>4</sub> |
|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>ΔY Ostkomponente</b>   |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| Januar . . . . .          | 9.85           | 1.52           | 0.83           | -6.32          | 1.48           | 0.52           | -2.47          | -1.16          | 2.90           | 4.02           | -0.17          | -5.58          | 1.89           | 2.02           | -1.75          | -1.34          |
| Februar . . . . .         | 11.78          | 3.27           | -0.81          | -7.62          | 1.82           | 4.23           | -0.34          | -1.04          | 7.47           | 6.78           | -1.08          | -8.21          | 3.22           | 5.30           | -0.09          | -2.08          |
| März . . . . .            | 10.02          | 4.83           | -5.96          | -11.14         | 3.30           | 4.55           | -0.91          | -2.02          | 4.33           | 8.15           | -4.11          | -6.58          | 4.32           | 5.05           | -2.81          | -2.40          |
| April . . . . .           | 13.42          | 8.94           | -7.83          | -11.58         | 4.16           | 5.20           | -1.52          | -0.36          | 5.33           | 11.32          | -8.05          | -9.98          | 6.62           | 6.10           | -2.41          | -1.11          |
| Mai . . . . .             | 11.72          | 14.86          | -6.08          | -10.86         | 2.68           | 2.68           | -1.24          | 0.06           | 7.32           | 17.97          | -8.75          | -11.42         | 2.96           | 2.32           | -1.17          | -0.76          |
| Juni . . . . .            | 6.82           | 16.14          | -5.28          | -9.82          | 2.68           | 2.54           | -0.90          | -0.79          | 5.48           | 15.56          | -8.93          | -8.55          | 5.11           | 2.86           | -0.67          | -0.79          |
| Juli . . . . .            | 8.62           | 14.76          | -5.19          | -5.90          | 2.30           | 1.92           | -1.38          | -0.68          | 6.58           | 10.28          | -5.93          | -3.25          | 2.28           | -0.53          | -0.18          | -1.54          |
| August . . . . .          | 10.66          | 9.42           | -5.87          | -8.98          | 2.47           | 2.57           | -0.96          | -1.20          | 9.39           | 12.71          | -5.25          | -8.45          | 1.56           | 2.85           | 0.16           | -0.12          |
| September . . . . .       | 12.21          | 6.17           | -7.08          | -10.19         | 4.02           | 5.08           | -1.04          | -0.72          | 9.99           | 8.68           | -6.67          | -6.58          | 5.16           | 5.55           | -1.92          | -1.74          |
| Oktober . . . . .         | 11.71          | -2.38          | -3.61          | -9.39          | 3.00           | 3.97           | -2.11          | -2.46          | 7.91           | 4.50           | -2.81          | -7.37          | 3.04           | 3.66           | -3.28          | -1.58          |
| November . . . . .        | 8.22           | -1.01          | -0.75          | -4.68          | 2.46           | 1.81           | -1.93          | -1.22          | 5.54           | 2.88           | -2.31          | -3.77          | 3.18           | 0.52           | -1.77          | -0.40          |
| Dezember . . . . .        | 9.25           | -2.88          | -0.12          | -3.14          | 0.66           | 1.61           | 0.13           | -0.39          | 4.62           | 2.02           | -1.38          | -2.07          | 1.50           | 0.09           | -0.71          | 0.24           |
| November-Febr. . . . .    | 9.78           | 0.30           | -0.21          | -5.44          | 1.60           | 2.04           | -1.15          | -0.95          | 5.13           | 3.92           | -1.24          | -4.91          | 2.45           | 1.98           | -1.08          | -0.90          |
| Mrz.Apr.Sept.Okt. . . . . | 11.84          | 4.39           | -6.12          | -10.58         | 3.62           | 4.70           | -1.40          | -1.54          | 6.89           | 8.16           | -5.41          | -7.63          | 4.94           | 5.24           | -2.60          | -1.71          |
| Mai-August . . . . .      | 9.46           | 13.80          | -5.60          | -8.89          | 2.53           | 2.43           | -1.12          | -0.65          | 7.19           | 14.13          | -7.22          | -7.92          | 2.98           | 1.88           | -0.46          | -0.78          |
| Oktober-März . . . . .    | 10.14          | 0.61           | -1.74          | -7.05          | 2.12           | 2.78           | -1.27          | -1.48          | 5.46           | 4.72           | -1.98          | -5.60          | 2.06           | 2.87           | -1.74          | -1.26          |
| April-September . . . . . | 10.58          | 11.72          | -6.22          | -9.56          | 3.05           | 3.33           | -1.17          | -0.62          | 7.35           | 12.75          | -7.26          | -8.04          | 3.95           | 3.19           | -1.03          | -1.00          |
| Jahr . . . . .            | 10.36          | 6.16           | -3.98          | -8.30          | 2.59           | 3.06           | -1.22          | -1.05          | 6.40           | 8.74           | -4.62          | -6.82          | 3.45           | 3.03           | -1.38          | -1.13          |

| Monat                        | a <sub>1</sub> | b <sub>1</sub> | a <sub>2</sub> | b <sub>2</sub> | a <sub>3</sub> | b <sub>3</sub> | a <sub>4</sub> | b <sub>4</sub> | a <sub>1</sub> | b <sub>1</sub> | a <sub>2</sub> | b <sub>2</sub> | a <sub>3</sub> | b <sub>3</sub> | a <sub>4</sub> | b <sub>4</sub> |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>ΔZ Vertikalkomponente</b> |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| Januar . . . . .             | 1.08           | -5.83          | -1.44          | -0.02          | 0.58           | -0.10          | -0.57          | 0.25           | 1.48           | -1.78          | -0.66          | 0.35           | 0.71           | -0.93          | -0.54          | 0.03           |
| Februar . . . . .            | -0.88          | -7.68          | -2.83          | -0.39          | 1.23           | -0.01          | -0.79          | -0.23          | 1.70           | -2.78          | -0.96          | -0.74          | 0.88           | 0.17           | -0.83          | 0.08           |
| März . . . . .               | -0.08          | -8.94          | -3.96          | -0.05          | 2.88           | -0.21          | -0.68          | -0.12          | 3.02           | -0.57          | -2.63          | -0.25          | 2.21           | -0.35          | -0.90          | 0.37           |
| April . . . . .              | 0.65           | -10.86         | -8.04          | -1.92          | 2.79           | 0.12           | -0.83          | 0.52           | 4.92           | -3.12          | -4.81          | -0.18          | 3.10           | 0.19           | -1.52          | 0.28           |
| Mai . . . . .                | 2.32           | -11.21         | -6.69          | -2.61          | 1.16           | 0.52           | -0.88          | 0.15           | 5.83           | -2.38          | -6.04          | -0.46          | 2.23           | 0.50           | -0.21          | -0.57          |
| Juni . . . . .               | 0.57           | -10.16         | -6.25          | -2.18          | 1.86           | 0.05           | -0.87          | 0.52           | 4.88           | -1.63          | -4.82          | -0.77          | 2.54           | 0.75           | -1.42          | -0.32          |
| Juli . . . . .               | 2.53           | -8.18          | -4.60          | -1.25          | 1.83           | 0.20           | -0.85          | -0.02          | 5.06           | -3.38          | -3.92          | 0.96           | 1.77           | -1.12          | -1.03          | -0.28          |
| August . . . . .             | 0.10           | -8.80          | -5.78          | -0.92          | 2.66           | 0.48           | -0.83          | 0.00           | 3.28           | -3.28          | -5.22          | -1.44          | 1.23           | -0.78          | -0.75          | -0.12          |
| September . . . . .          | -1.12          | -8.73          | -5.02          | 0.25           | 2.96           | 0.15           | -0.78          | 0.46           | 1.25           | -1.80          | -3.51          | -1.32          | 2.72           | -0.09          | -1.05          | 0.43           |
| Oktober . . . . .            | -2.19          | -7.88          | -4.39          | 1.53           | 2.18           | 0.16           | -0.65          | 0.31           | 1.76           | -2.38          | -2.27          | -0.63          | 1.28           | 0.23           | -0.55          | 0.58           |
| November . . . . .           | -0.95          | -5.68          | -1.12          | -0.06          | 0.38           | 0.82           | -0.54          | 0.41           | -0.12          | -1.75          | -0.66          | 1.23           | 0.37           | -0.73          | -0.39          | 0.78           |
| Dezember . . . . .           | 2.03           | -6.44          | -2.21          | 0.23           | 0.24           | -0.05          | -0.03          | 0.12           | 1.66           | -1.90          | -0.27          | 0.86           | 0.12           | -0.51          | 0.11           | 0.31           |
| November-Febr. . . . .       | 0.32           | -6.41          | -1.90          | -0.06          | 0.61           | -0.24          | -0.48          | 0.14           | 1.18           | -2.05          | -0.64          | 0.42           | 0.52           | -0.28          | -0.41          | 0.30           |
| Mrz.Apr.Sept.Okt. . . . .    | -0.68          | -9.10          | -5.35          | -0.05          | 2.70           | 0.06           | -0.74          | 0.29           | 2.74           | -1.97          | -3.30          | -0.60          | 2.33           | 0.00           | -1.00          | 0.42           |
| Mai-August . . . . .         | 1.38           | -9.59          | -5.83          | -1.74          | 1.88           | 0.31           | -0.86          | 0.16           | 4.76           | -2.67          | -5.00          | -0.43          | 1.94           | -0.16          | -0.85          | -0.32          |
| Oktober-März . . . . .       | -0.16          | -7.08          | -2.66          | 0.21           | 1.25           | -0.17          | -0.54          | 0.13           | 1.58           | -1.86          | -1.24          | 0.14           | 0.93           | -0.20          | -0.52          | 0.36           |
| April-September . . . . .    | 0.84           | -9.66          | -6.06          | -1.44          | 2.21           | 0.25           | -0.84          | 0.27           | 4.20           | -2.60          | -4.72          | -0.54          | 2.26           | -0.09          | -1.00          | -0.10          |
| Jahr . . . . .               | 0.34           | -8.37          | -4.36          | -0.62          | 1.73           | 0.04           | -0.69          | 0.20           | 2.89           | -2.23          | -2.98          | -0.20          | 1.60           | -0.15          | -0.76          | 0.13           |

Mondentägiger Gang der Nordkomponente.

Seddin

0<sup>s</sup> untere Kulmination des mittleren Mondes.

1930

| $\mu$                      | $\pi$ | $\rho$ | 0 <sup>s</sup> | 1 <sup>s</sup> | 2 <sup>s</sup> | 3 <sup>s</sup> | 4 <sup>s</sup> | 5 <sup>s</sup> | 6 <sup>s</sup> | 7 <sup>s</sup> | 8 <sup>s</sup> | 9 <sup>s</sup> | 10 <sup>s</sup> | 11 <sup>s</sup> | 12 <sup>s</sup> | 13 <sup>s</sup> | 14 <sup>s</sup> | 15 <sup>s</sup> | 16 <sup>s</sup> | 17 <sup>s</sup> | 18 <sup>s</sup> | 19 <sup>s</sup> | 20 <sup>s</sup> | 21 <sup>s</sup> | 22 <sup>s</sup> | 23 <sup>s</sup> | 24 <sup>s</sup> |    |
|----------------------------|-------|--------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----|
| <b>Januar — Februar</b>    |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |    |
| 0                          | 13    | 18     | 6              | 14             | 40             | 33             | 23             | 57             | 28             | 10             | 13             | 12             | -9              | -42             | -55             | -38             | -47             | -42             | -34             | -27             | -43             | -6              | 18              | 5               | 58              | 35              | 6               |    |
| 3                          | 10    | 15     | 15             | 1              | 44             | 11             | 11             | -7             | -24            | -7             | -25            | -47            | -17             | -5              | 20              | 18              | 17              | 3               | -2              | 25              | 22              | 15              | 6               | 14              | -1              | -9              | 15              |    |
| 6                          | 7     | 12     | -32            | 5              | 20             | -23            | 16             | -20            | -3             | -21            | 19             | -9             | -14             | -19             | -38             | -11             | -5              | -6              | -2              | 3               | 3               | 10              | 43              | 48              | 37              | -6              | -32             |    |
| 9                          | 4     | 9      | -28            | -28            | 32             | 62             | 1              | 4              | -7             | -26            | 35             | 7              | 48              | -11             | -1              | 2               | -19             | -16             | -19             | 8               | -4              | 10              | 7               | 19              | 21              | -14             | -28             |    |
| 12                         | 1     | 6      | 56             | 60             | 38             | 20             | 31             | 20             | 6              | 4              | -29            | -63            | -79             | -61             | -41             | -37             | -32             | -29             | -26             | 5               | 47              | 30              | 13              | 9               | 22              | 39              | 56              |    |
| 15                         | 22    | 3      | 14             | 4              | 1              | 17             | 35             | 33             | 10             | 19             | 23             | 10             | 6               | -10             | -32             | -44             | -18             | 1               | -27             | -30             | 6               | -3              | 17              | 13              | 2               | 10              | 14              |    |
| 18                         | 19    | 0      | -26            | -26            | -48            | -59            | -44            | -18            | 15             | 9              | 8              | 9              | 6               | 21              | 34              | 33              | 10              | 84              | 34              | 29              | 4               | -28             | -9              | -8              | -1              | -30             | -26             |    |
| 21                         | 16    | 21     | 35             | 27             | 48             | 61             | 30             | 12             | 13             | 20             | -6             | -56            | -95             | -88             | -40             | -49             | -7              | -52             | -41             | 0               | 21              | 36              | 41              | 12              | 43              | 30              | 35              |    |
| M                          |       |        | 5              | 7              | 3              | 15             | 13             | 10             | 5              | 1              | 5              | -17            | -19             | -27             | -19             | -16             | -13             | -7              | -15             | -2              | 7               | 6               | 13              | 11              | 23              | 7               | 5               |    |
| <b>März — April</b>        |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |    |
| 0                          | 16    | 22     | -38            | -27            | -10            | -7             | 8              | 23             | 19             | -3             | 6              | 21             | -4              | -57             | -52             | -33             | -33             | -26             | -8              | 24              | 4               | -1              | 44              | 83              | 74              | -11             | -38             |    |
| 3                          | 13    | 19     | 20             | -13            | 15             | 40             | 29             | 31             | 17             | 28             | 18             | -29            | 12              | -66             | -93             | -11             | 10              | 5               | -40             | -91             | -82             | -8              | 47              | 26              | 6               | 63              | 20              |    |
| 6                          | 10    | 16     | -30            | 35             | -48            | 13             | 17             | 15             | -18            | -31            | -12            | 19             | 59              | 68              | 84              | 57              | 37              | 1               | -23             | 6               | -48             | -70             | -58             | -15             | -8              | -43             | -30             |    |
| 9                          | 7     | 13     | 14             | -30            | -22            | 45             | -17            | 18             | 79             | 79             | 19             | 18             | 19              | -36             | -5              | -54             | -32             | -12             | -24             | -6              | 5               | -13             | -8              | -18             | -29             | -1              | 14              |    |
| 12                         | 4     | 10     | 45             | 98             | 106            | 73             | 39             | 86             | 39             | 71             | 41             | -70            | -54             | 30              | 31              | 40              | 44              | 15              | -48             | -105            | -132            | -139            | -83             | -41             | -55             | -26             | 45              |    |
| 15                         | 1     | 7      | -15            | 23             | 17             | 44             | 61             | 47             | 34             | 35             | 10             | 19             | 28              | -17             | -97             | -55             | -41             | -22             | 15              | 16              | -25             | 9               | 7               | -33             | -21             | -41             | -15             |    |
| 18                         | 22    | 4      | 39             | 76             | 117            | 129            | 112            | 83             | 59             | 46             | 31             | -10            | -48             | -87             | -90             | -106            | -110            | -89             | -90             | -41             | -24             | -19             | 3               | 4               | -2              | 17              | 39              |    |
| 21                         | 19    | 7      | -12            | -3             | 3              | 6              | 38             | 33             | -7             | -31            | -25            | -36            | -35             | 2               | 12              | 28              | -13             | -12             | -19             | 6               | 63              | 40              | 13              | 14              | -28             | -34             | -12             |    |
| M                          |       |        | 3              | 20             | 22             | 43             | 36             | 42             | 28             | 24             | 11             | -1             | -3              | -20             | -26             | -17             | -17             | -18             | -30             | -24             | -30             | -25             | 4               | 2               | -8              | 10              | 3               |    |
| <b>Mai — Juni</b>          |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |    |
| 0                          | 20    | 3      | -39            | -30            | 18             | 53             | 63             | 80             | 69             | 61             | 62             | 63             | 73              | 62              | 54              | 23              | -1              | -40             | -64             | -82             | -90             | -88             | -62             | -58             | -88             | -48             | -39             |    |
| 3                          | 17    | 0      | -29            | -54            | -38            | -45            | -27            | -33            | -5             | 9              | 14             | 44             | 77              | 70              | 23              | 33              | 37              | 11              | 6               | 13              | 23              | 28              | -50             | -58             | -39             | -21             | -29             |    |
| 6                          | 14    | 21     | 103            | 28             | 5              | 0              | 24             | -9             | -15            | -34            | -45            | -40            | -39             | -61             | -33             | -14             | 13              | 0               | -62             | -46             | -6              | 1               | 29              | 42              | 58              | 148             | 103             |    |
| 9                          | 11    | 18     | -17            | -57            | -10            | -12            | 5              | 29             | 25             | 75             | 59             | 45             | -8              | -35             | -29             | 66              | 74              | 42              | -37             | -130            | -90             | -46             | -23             | 9               | 38              | 22              | -17             |    |
| 12                         | 8     | 15     | 28             | 13             | -28            | -29            | 16             | -53            | -69            | -61            | -43            | -39            | 87              | -22             | 26              | 14              | -4              | 0               | 7               | 21              | -5              | 55              | 57              | 29              | 17              | 24              | 28              |    |
| 15                         | 5     | 12     | -3             | 13             | 33             | 45             | 8              | -5             | 52             | 40             | 16             | 24             | 22              | -3              | 31              | -27             | 78              | 4               | 25              | 37              | -40             | -51             | -73             | -77             | -93             | -63             | 3               |    |
| 18                         | 2     | 9      | -47            | -100           | -41            | -10            | -13            | -80            | -106           | -72            | -50            | -7             | 44              | 39              | 18              | 54              | 73              | 39              | 55              | 25              | 42              | 52              | 68              | 41              | -20             | 1               | -47             |    |
| 21                         | 23    | 6      | 17             | -36            | -58            | 6              | 48             | 32             | -10            | -16            | -11            | -36            | -16             | 20              | -24             | -36             | -11             | 81              | 80              | 21              | 30              | -14             | -46             | -20             | -4              | 9               | 17              |    |
| M                          |       |        | 2              | -28            | -15            | 1              | 6              | -5             | 7              | 0              | 0              | 7              | 30              | 9               | 8               | 14              | 32              | 17              | 1               | -18             | -17             | -8              | -12             | -12             | -16             | 7               | 2               |    |
| <b>Juli — August</b>       |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |    |
| 0                          | 23    | 7      | 24             | 71             | 53             | -20            | -48            | 19             | -14            | -72            | -72            | -10            | 11              | 7               | 6               | 1               | -11             | -26             | -18             | -25             | -17             | -23             | 13              | 76              | 57              | 11              | 24              |    |
| 3                          | 20    | 4      | -60            | -71            | -42            | -1             | -20            | -7             | -5             | 7              | 31             | 50             | 56              | 74              | 52              | 59              | 75              | 53              | 19              | 15              | -30             | -63             | -57             | -60             | -57             | -26             | -60             |    |
| 6                          | 17    | 1      | -89            | -86            | -49            | -62            | -26            | -5             | 5              | 0              | 31             | 26             | 43              | 32              | -6              | 9               | 3               | 67              | 85              | 67              | 44              | 20              | 8               | 7               | -28             | -67             | -89             |    |
| 9                          | 14    | 22     | 52             | 40             | 37             | 57             | 42             | 24             | -30            | -46            | -46            | -50            | -3              | -22             | -5              | 1               | -7              | -13             | 0               | -18             | -33             | -62             | -19             | 14              | 41              | 41              | 52              |    |
| 12                         | 11    | 19     | -127           | -122           | -88            | 17             | 73             | 133            | 122            | 161            | 185            | 184            | 80              | 130             | 98              | -8              | 16              | 17              | 36              | -70             | -132            | -121            | -104            | -151            | -176            | -146            | -127            |    |
| 15                         | 8     | 16     | 69             | 82             | 66             | 51             | 65             | 47             | 9              | 12             | -35            | -34            | -46             | -90             | -71             | -40             | -32             | -49             | -31             | -54             | -44             | -26             | 5               | 41              | 71              | 70              | 69              |    |
| 18                         | 5     | 13     | 54             | 81             | 53             | 25             | 14             | -3             | 0              | 15             | -40            | -45            | -17             | 4               | 31              | 14              | 50              | -36             | 29              | -8              | -30             | -24             | -14             | 30              | -13             | -34             | 54              |    |
| 21                         | 2     | 10     | -2             | 2              | 22             | 21             | -8             | -11            | -19            | -13            | -43            | -42            | -10             | 25              | 42              | 23              | 7               | -12             | -7              | -6              | 3               | 20              | -8              | 0               | -20             | -3              | -2              |    |
| M                          |       |        | -10            | 0              | 6              | 11             | 12             | 25             | 8              | 1              | 1              | 10             | 14              | 20              | 18              | 5               | 0               | 0               | 14              | -12             | -31             | -35             | -22             | -7              | -11             | -10             | -10             |    |
| <b>September — Oktober</b> |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |    |
| 0                          | 3     | 11     | -12            | -1             | 3              | -31            | -39            | -18            | -2             | 13             | -21            | -58            | 12              | 108             | 127             | 95              | 41              | -6              | -41             | -30             | -17             | -33             | -27             | -7              | -26             | -36             | -12             |    |
| 3                          | 0     | 8      | 37             | 57             | 64             | 43             | 15             | -31            | -59            | -31            | -16            | -4             | 20              | 69              | 50              | 23              | -5              | -35             | -79             | -79             | -53             | -26             | -22             | -8              | 36              | 25              | 37              |    |
| 6                          | 21    | 5      | -20            | -57            | -97            | -134           | -126           | -83            | -44            | -17            | -11            | -5             | -7              | 23              | 51              | 96              | 116             | 125             | 102             | 49              | -8              | -21             | 12              | 33              | 27              | 4               | -20             |    |
| 9                          | 18    | 2      | -11            | -3             | 2              | -7             | -18            | -20            | 7              | 25             | -1             | -5             | -9              | 0               | 30              | -4              | 2               | 16              | 6               | -14             | -34             | -14             | 6               | 10              | 14              | 12              | -11             |    |
| 12                         | 15    | 23     | -17            | 5              | 32             | 41             | 1              | -13            | -8             | 34             | 36             | 24             | 29              | 25              | 7               | 4               | 9               | 27              | 50              | 31              | -24             | -68             | -77             | -36             | -59             | -56             | -17             |    |
| 15                         | 12    | 20     | -80            | -106           | -121           | -77            | 3              | -3             | -10            | 16             | 45             | 39             | 52              | 91              | 41              | 48              | 29              | 36              | 24              | 31              | 13              | 39              | -10             | -20             | -33             | -37             | -80             |    |
| 18                         | 9     | 17     | -3             | -31            | -44            | -2             | -23            | -07            | -105           | -100           | -54            | -13            | 8               | 41              | 63              | 36              | 68              | 67              | 16              | -22             | -5              | 15              | 24              | 66              | 39              | 15              | -3              |    |
| 21                         | 6     | 14     | -43            | -49            | -31            | -18            | -5             | 9              | 35             | 63             | 84             | 102            | 84              | 37              | 18              | 19              | -27             | -42             | -54             | -81             | -35             | -24             | 22              | -19             | -24             | -26             | -43             |    |
| M                          |       |        | -19            | -23            | -24            | -23            | -24            | -28            | -23            | 0              | 8              | 10             | 24              | 49              | 48              | 39              | 29              | 24              | 3               | -14             | -20             | -16             | 9               | 2               | -3              | -12             | -19             |    |
| <b>November — Dezember</b> |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |    |
| 0                          | 6     | 15     | -32            | -5             | 1              | 10             | 11             | 15             | 17             | -6             | -20            | -47            | -30             | 15              | 33              | -34             | 9               | 12              | -6              | -17             | 6               | 9               | -12             | -6              | 4               | -6              | -32             |    |
| 3                          | 3     | 12     | 13             | -24            | -1             | -24            | -63            | -53            | -34            | -28            | -30            | -36            | -37             | -23             | -3              | -8              | -6              | -4              | 20              | 34              | 40              | 55              | 51              | 54              | 41              | 24              | 40              | 13 |
| 6                          | 0     | 9      | -71            | -67            | -116           | -80            | -19            | -86            | -90            | 5              | 30             | 42             | 16              | 15              | 18              | 22              | 26              | 35              | 56              | 66              | 62              | 46              | 51              | 47              | 12              | -23             | -71             |    |
| 9                          | 21    | 6      | -2             | 7              | 18             | 27             | 33             | 51             | 14             | -3             | 14             | 15             | 1               | -12             | -25             | -21             | -35             | -32             | -26             | -4              | -10             | -22             | -4              | 16              | 4               | -11             | -2              |    |
| 12                         | 18    | 3      | -47            | -52            | -49            | -20            | 21             | 27             | 36             | 26             | 35             | 41             | 11              | 27              | 52              | 1               | -6              | -22             | -9              | 3               | 0               | -5              | -12             | -1              | -18             | -44             | -47             |    |
| 15                         | 15    | 0      | -25            | -33            | -30            | -35            | -23            | -7             | -14            | -18            | -7             | -2             | 20              | 43              | 14              | 13              | 48              | 35              | 3               | 4               | -4              | 3               | 17              | 4               | 9               | 3               | -25             |    |
| 18                         | 12    | 21     | -14            | -15            | -6             | 9              | -1             | -6             | -1             | 3              | -2             | 1              | 2               | 23              | 31              | 6               | -12             | -13             | -4              | 4               | 14              | 21              | -14             | -18             | -2              | -4              | -14             |    |
| 21                         | 9     | 18     | 52             | 32             | 17             | 41             | 56             | 37             | 45             | 55             | 6              | -51            | -46             | -35             | -75             | -68             | -73             | -68             | -52             | -27             | 18              | 17              | 2               | 29              | 39              | 50              | 52              |    |
| M                          |       |        | -16            | -20            | -21            | -9             | 2              | -3             | -3             | 4              | 3              | -5             | -8              | 7               | 5               | -2              | -6              | -4              | 0               | 9               | 18              | 15              | 10              | 14              | 9               | 0               | -16             |    |

$\mu$ : Stundenwinkel des mittleren Mondes im mittleren Mittag für den Greenwich Meridian.  
Einheit: 0.1  $\gamma$ .

Mondentägiger Gang der Ostkomponente.

Seddin

o<sup>s</sup> untere Kulmination des mittleren Mondes.

1930

| $\mu$                      | $\pi$ | $\rho$ | 0 <sup>s</sup> | 1 <sup>s</sup> | 2 <sup>s</sup> | 3 <sup>s</sup> | 4 <sup>s</sup> | 5 <sup>s</sup> | 6 <sup>s</sup> | 7 <sup>s</sup> | 8 <sup>s</sup> | 9 <sup>s</sup> | 10 <sup>s</sup> | 11 <sup>s</sup> | 12 <sup>s</sup> | 13 <sup>s</sup> | 14 <sup>s</sup> | 15 <sup>s</sup> | 16 <sup>s</sup> | 17 <sup>s</sup> | 18 <sup>s</sup> | 19 <sup>s</sup> | 20 <sup>s</sup> | 21 <sup>s</sup> | 22 <sup>s</sup> | 23 <sup>s</sup> | 24 <sup>s</sup> |
|----------------------------|-------|--------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Januar - Februar</b>    |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                          | 13    | 18     | -42            | -22            | -40            | -33            | -57            | -30            | -2             | -21            | 9              | 17             | -21             | -28             | -33             | -26             | 10              | 30              | 95              | 109             | 52              | 38              | 43              | 11              | -1              | -38             | -42             |
| 3                          | 10    | 15     | -9             | 12             | -18            | -7             | 31             | 43             | 18             | 9              | 2              | 5              | -6              | -18             | -18             | 1               | 0               | -12             | -20             | -17             | -9              | -1              | 6               | -1              | 25              | -23             | -9              |
| 6                          | 7     | 12     | -108           | -70            | -26            | 17             | 43             | 60             | 67             | 26             | 69             | 72             | 53              | 35              | 10              | -2              | 1               | 9               | 16              | 5               | -6              | -13             | -21             | -61             | -68             | -103            | -108            |
| 9                          | 4     | 9      | -33            | -82            | -119           | 16             | 16             | 3              | -5             | 1              | 28             | 46             | 119             | 116             | 84              | 34              | 43              | 46              | 20              | -28             | -63             | -51             | -33             | -26             | -59             | -67             | -33             |
| 12                         | 1     | 6      | 57             | 80             | 55             | -6             | -52            | -81            | -63            | -65            | -29            | -25            | -30             | 22              | -11             | -16             | -1              | 2               | 7               | -12             | -15             | 20              | 37              | 46              | 35              | 35              | 57              |
| 15                         | 22    | 3      | 66             | 56             | 34             | 16             | 17             | 5              | 4              | 23             | -6             | -38            | -42             | -36             | -51             | -44             | -36             | -11             | -28             | -45             | -33             | 5               | 19              | 25              | 45              | 56              | 66              |
| 18                         | 19    | 0      | -31            | -23            | -19            | -12            | -11            | 4              | -4             | -2             | 38             | 61             | 44              | 90              | 96              | 37              | 19              | -28             | -20             | -9              | -31             | -45             | -78             | -37             | 4               | -10             | -31             |
| 21                         | 16    | 21     | -70            | -57            | -39            | -39            | -35            | -44            | -50            | -30            | -16            | 10             | 26              | 19              | 13              | 40              | 99              | 45              | 59              | 89              | 91              | 39              | 5               | -15             | -66             | -63             | -70             |
| M                          |       |        | -21            | -13            | -22            | -6             | -6             | -5             | -4             | -7             | 12             | 18             | 18              | 25              | 11              | 3               | 10              | 10              | 16              | 12              | -2              | -1              | -4              | -7              | -11             | -26             | -21             |
| <b>März - April</b>        |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                          | 16    | 22     | -23            | -116           | -63            | -54            | -32            | -16            | 20             | 27             | 50             | 70             | 42              | 36              | 54              | 12              | 20              | 4               | 3               | 4               | -29             | 8               | 26              | -48             | -7              | 23              | -23             |
| 3                          | 13    | 19     | 79             | 6              | -28            | -90            | 14             | -35            | -48            | -50            | -29            | -10            | 9               | -18             | -47             | -36             | 13              | 12              | 2               | 14              | 7               | 39              | 49              | 59              | 37              | 58              | 79              |
| 6                          | 10    | 16     | 43             | 70             | 15             | -17            | -56            | -85            | 64             | 89             | 33             | 1              | 22              | 20              | 10              | 5               | -12             | -12             | -6              | -19             | -33             | -29             | -13             | -27             | -55             | 5               | 43              |
| 9                          | 7     | 13     | -55            | -71            | -35            | 32             | -7             | 12             | 43             | 47             | 87             | 29             | 58              | 64              | 33              | 19              | -22             | -10             | 4               | -10             | -27             | -20             | -29             | -34             | -50             | -42             | -55             |
| 12                         | 4     | 10     | -58            | -19            | -9             | 11             | 20             | 95             | 44             | 54             | 71             | 51             | 9               | -40             | -17             | -81             | -67             | 48              | 78              | 78              | 32              | -33             | -74             | -80             | -52             | -63             | -58             |
| 15                         | 1     | 7      | -39            | -39            | -41            | -27            | 3              | -18            | -10            | 42             | -9             | -26            | -33             | -25             | 6               | 24              | 27              | 63              | 69              | 92              | 17              | -18             | 13              | -19             | -30             | -33             | -39             |
| 18                         | 22    | 4      | -23            | 0              | 51             | 80             | 72             | 59             | 50             | 40             | 24             | 34             | -7              | -92             | -91             | -82             | -81             | -38             | 7               | 12              | 21              | -24             | 26              | 20              | -15             | -31             | -23             |
| 21                         | 19    | 1      | -16            | -2             | -10            | 0              | 26             | 48             | 54             | 47             | 45             | 36             | 38              | 22              | 38              | -29             | -17             | -29             | -44             | -70             | -75             | -28             | 10              | -49             | -6              | -46             | -16             |
| M                          |       |        | -12            | -21            | -15            | -8             | 5              | 8              | 27             | 37             | 34             | 23             | 17              | -5              | -2              | -15             | -17             | 5               | 14              | 12              | -11             | -14             | 1               | -22             | -22             | -16             | -12             |
| <b>Mai - Juni</b>          |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                          | 20    | 3      | -44            | -66            | -52            | -8             | 24             | 32             | 49             | 40             | 11             | -22            | -23             | -13             | 6               | 19              | 22              | 35              | 36              | 39              | 22              | -18             | -33             | -15             | -7              | -35             | -44             |
| 3                          | 17    | 0      | -33            | -44            | -42            | -56            | -58            | -67            | -24            | -7             | 27             | 11             | 18              | 17              | -23             | -40             | -25             | -8              | 14              | 42              | 50              | 80              | 82              | 51              | 33              | 5               | 33              |
| 6                          | 14    | 21     | 44             | 44             | 33             | 12             | 16             | -26            | -104           | -57            | -86            | -68            | -86             | -56             | -34             | -20             | 1               | 11              | 32              | 47              | 47              | 58              | 80              | 41              | 23              | 47              | 44              |
| 9                          | 11    | 18     | 33             | 6              | -28            | -30            | -24            | -21            | -16            | -67            | -61            | 28             | -2              | -23             | 17              | 64              | 53              | 8               | -14             | 1               | -3              | -2              | 13              | 16              | 15              | 32              | 33              |
| 12                         | 8     | 15     | -36            | -47            | -45            | -43            | -13            | 0              | -8             | 10             | 31             | 9              | -11             | -24             | 76              | 40              | 37              | 67              | 93              | 49              | 6               | -23             | -24             | -40             | -53             | -49             | -36             |
| 15                         | 5     | 12     | -39            | -19            | -13            | -19            | -23            | -18            | -14            | -31            | -45            | 9              | 26              | 39              | 46              | -24             | 12              | 83              | 92              | 79              | 9               | -10             | -10             | -21             | -45             | -70             | -39             |
| 18                         | 2     | 9      | 17             | 33             | 29             | 42             | 24             | -4             | -16            | -17            | -44            | -40            | -26             | -32             | -27             | -10             | -26             | 11              | 29              | 98              | 77              | 1               | -13             | -32             | -43             | -39             | 17              |
| 21                         | 23    | 6      | 82             | 12             | -68            | -77            | -13            | 49             | 72             | 84             | 58             | 11             | -22             | -51             | -65             | -102            | -97             | -65             | -57             | -22             | -9              | 52              | 81              | 29              | 25              | 104             | 82              |
| M                          |       |        | 3              | -10            | -23            | -22            | -8             | -7             | -8             | -6             | -14            | -8             | -16             | -18             | 0               | -9              | -3              | 18              | 28              | 42              | 26              | 17              | 22              | 4               | -6              | -1              | 3               |
| <b>Juli - August</b>       |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                          | 23    | 7      | 7              | -76            | 59             | 89             | -28            | 1              | 13             | 29             | 27             | 10             | -34             | -48             | -41             | -35             | 7               | 41              | 50              | 35              | 27              | -27             | -40             | -30             | -1              | -44             | 7               |
| 3                          | 20    | 4      | 30             | 3              | -5             | -34            | 23             | -18            | -14            | 39             | 66             | 39             | -21             | -43             | -39             | -48             | -44             | 0               | 32              | 36              | 4               | -2              | -27             | -21             | 9               | 31              | 30              |
| 6                          | 17    | 1      | 25             | 11             | -26            | -22            | 6              | 20             | 43             | 1              | -17            | -38            | -12             | -8              | -57             | -89             | -69             | -38             | 4               | 38              | 59              | 59              | 39              | 36              | 27              | 11              | 25              |
| 9                          | 14    | 22     | 19             | 78             | 86             | 73             | 86             | 87             | 14             | 7              | 4              | -69            | -46             | -65             | -78             | -53             | -71             | -36             | -32             | -15             | -10             | 4               | -8              | -4              | 25              | 7               | 19              |
| 12                         | 11    | 19     | 82             | 73             | 66             | 39             | -25            | -19            | -92            | -90            | -16            | 64             | 3               | 10              | 37              | 27              | -38             | -18             | -54             | -96             | -118            | -16             | -1              | 32              | 55              | 85              | 82              |
| 15                         | 8     | 16     | -5             | -10            | -10            | -21            | -37            | -32            | -14            | -13            | -8             | 14             | 29              | -21             | -52             | -2              | -35             | 16              | 45              | 37              | -2              | 22              | 44              | 40              | 11              | 14              | 5               |
| 18                         | 5     | 13     | 45             | 51             | 39             | 8              | 11             | 21             | -2             | -43            | -63            | -75            | -86             | -71             | -19             | -7              | -31             | -12             | -10             | 42              | 23              | 32              | 3               | 41              | 72              | 40              | 45              |
| 21                         | 2     | 10     | 20             | 12             | 24             | 77             | 67             | 48             | 43             | 18             | -33            | -70            | -73             | -62             | -52             | -29             | -6              | -6              | -10             | 17              | 7               | -6              | 11              | -22             | -6              | 36              | 20              |
| M                          |       |        | 28             | 18             | 29             | 26             | 13             | 14             | -1             | -6             | -5             | -18            | -30             | -38             | -38             | -30             | -36             | -7              | 3               | 12              | -1              | 8               | 3               | 9               | -24             | 22              | 28              |
| <b>September - Oktober</b> |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                          | 3     | 11     | -26            | -24            | 52             | 82             | 44             | 33             | 36             | 27             | 8              | 0              | -2              | 14              | 34              | 42              | 9               | -37             | -20             | -34             | -33             | -50             | -51             | -56             | -28             | -13             | -26             |
| 3                          | 0     | 8      | 24             | 11             | 13             | 54             | 110            | 66             | 9              | 37             | 17             | 20             | 19              | 8               | -1              | 3               | -22             | -61             | -100            | -106            | -52             | -44             | -13             | 11              | -34             | 33              | 24              |
| 6                          | 21    | 5      | -139           | -114           | 18             | 58             | 23             | 24             | 25             | 75             | 50             | 33             | 19              | 1               | -27             | -26             | 10              | 36              | 38              | 39              | 23              | 17              | -8              | -52             | -49             | -82             | -139            |
| 9                          | 18    | 2      | -6             | -9             | -30            | -51            | -6             | -30            | -39            | -30            | -3             | 44             | 2               | -28             | -8              | 24              | 38              | 56              | 56              | 37              | 21              | 8               | -9              | -24             | -14             | -9              | -6              |
| 12                         | 15    | 23     | -51            | -27            | 46             | 53             | 45             | 104            | 39             | 82             | 70             | 0              | -23             | -33             | -16             | -17             | -39             | -43             | -21             | 8               | -7              | -9              | -16             | -41             | -50             | -50             | -51             |
| 15                         | 12    | 20     | 1              | -22            | -50            | -26            | -23            | 20             | 80             | 92             | 91             | 69             | 62              | -3              | -2              | 15              | -21             | -78             | -91             | -25             | -59             | -72             | -27             | 20              | 27              | 23              | 1               |
| 18                         | 9     | 17     | -113           | -108           | -97            | -41            | 16             | 69             | 89             | 107            | 72             | 69             | 52              | 66              | 73              | 49              | 1               | 45              | 35              | -13             | -37             | -55             | -103            | -25             | -47             | -90             | -113            |
| 21                         | 6     | 14     | 14             | 17             | 19             | 23             | 26             | 25             | 21             | 5              | 7              | 15             | -1              | -22             | -55             | -70             | -101            | 28              | 14              | -37             | -32             | 0               | 45              | 34              | -1              | 27              | 14              |
| M                          |       |        | -37            | -34            | -4             | 19             | 29             | 39             | 32             | 49             | 39             | 31             | 16              | 0               | 0               | 2               | -16             | -7              | -11             | -16             | -22             | -26             | -23             | -17             | -24             | -20             | -37             |
| <b>November - Dezember</b> |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                          | 6     | 15     | 17             | -3             | -10            | -8             | 2              | 19             | 14             | -5             | -3             | -15            | -37             | -30             | -7              | 10              | 24              | 7               | -18             | 31              | 76              | 35              | -43             | -59             | -11             | 19              | 17              |
| 3                          | 3     | 12     | -36            | -31            | -10            | -5             | 5              | 3              | 42             | 35             | 46             | 55             | 49              | 28              | 10              | 8               | 8               | 9               | 11              | 1               | -12             | -40             | -47             | -53             | -44             | -28             | -36             |
| 6                          | 0     | 9      | -109           | -55            | 3              | 114            | 145            | 64             | 29             | -34            | -3             | 0              | 26              | 19              | 11              | 15              | 15              | 16              | 7               | 15              | -28             | -16             | -13             | -47             | -62             | -76             | -109            |
| 9                          | 21    | 6      | -33            | -75            | -49            | -50            | -49            | 6              | -12            | -22            | 7              | 14             | 12              | 20              | 27              | 38              | 39              | 35              | 31              | 43              | 38              | 27              | 12              | -8              | -28             | -21             | -33             |
| 12                         | 18    | 3      | 8              | -2             | -16            | -13            | -2             | -21            | 0              | -11            | -23            | -14            | -12             | -4              | 7               | 105             | 95              | 50              | 5               | -39             | -45             | -40             | -34             | -12             | -2              | 7               | 8               |
| 15                         | 15    | 0      | 31             | 16             | 10             | 12             | 25             | 31             | 29             | -4             | 6              | -7             | -26             | -41             | -64             | -52             | -34             | -5              | 0               | -23             | -12             | 7               | 21              | 17              | 28              | 38              | 31              |
| 18                         | 12    | 21     | -20            | -35            | -33            | -13            | 22             | 38             | 42             | 26             | 18             | -57            | 53              | 48              | 47              | 57              | 7               | -30             | -9              | -24             | -32             | -33             | -58             | -34             | -43             | -37             | -26             |
| 21                         | 9     | 18     | -64            | -72            | -76            | -61            | -41            | -51            | -48            | -39            | -30            | -23            | -24             | -25             | 10              | 148             | 108             | 98              | 96              | 120             | 100             | -5              | -19             | -23             | -50             | -25             | -64             |
| M                          |       |        | -26            | -32            | -23            | -3             | 13             | 11             | 12             | -7             | 2              | 8              | 5               | 2               | 5               | 41              | 33              | 22              | 15              | 13              | 11              | -8              | -23             | -27             | -26             | -15             | -26             |

( $\mu + \pi$ ): Stundenwinkel des Perigäums im mittleren Mittag für den Greenwich Meridian.  
Einheit: 0.1°.

Mondentägiger Gang der Vertikalkomponente.

Seddin

0<sup>s</sup> untere Kulmination des mittleren Mondes.

1930

| $\mu$                    | $\pi$ | $\rho$ | 0 <sup>s</sup> | 1 <sup>s</sup> | 2 <sup>s</sup> | 3 <sup>s</sup> | 4 <sup>s</sup> | 5 <sup>s</sup> | 6 <sup>s</sup> | 7 <sup>s</sup> | 8 <sup>s</sup> | 9 <sup>s</sup> | 10 <sup>s</sup> | 11 <sup>s</sup> | 12 <sup>s</sup> | 13 <sup>s</sup> | 14 <sup>s</sup> | 15 <sup>s</sup> | 16 <sup>s</sup> | 17 <sup>s</sup> | 18 <sup>s</sup> | 19 <sup>s</sup> | 20 <sup>s</sup> | 21 <sup>s</sup> | 22 <sup>s</sup> | 23 <sup>s</sup> | 24 <sup>s</sup> |
|--------------------------|-------|--------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Januar—Februar</b>    |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                        | 13    | 18     | -9             | -26            | -23            | -11            | -15            | -23            | -5             | 1              | -7             | -9             | -6              | 0               | 3               | 11              | 31              | 43              | 36              | 28              | 23              | 4               | -8              | -8              | -19             | -22             | -9              |
| 3                        | 10    | 15     | -7             | -10            | -6             | 14             | 16             | 17             | 16             | 14             | 26             | 23             | 14              | 14              | 4               | 2               | 1               | 6               | 13              | 17              | -18             | -10             | -16             | -20             | -15             | -8              | -7              |
| 6                        | 7     | 12     | 10             | 14             | 17             | 29             | 19             | 35             | 33             | 14             | 9              | 6              | 2               | -4              | -3              | -5              | 6               | 9               | 10              | 25              | -28             | -32             | -46             | -40             | -18             | 0               | 10              |
| 9                        | 4     | 9      | 47             | 43             | 46             | 42             | 57             | 40             | 27             | 24             | -4             | -16            | -10             | -17             | -33             | -45             | -46             | -40             | 32              | 26              | -16             | -19             | -24             | -14             | -7              | 24              | 47              |
| 12                       | 1     | 6      | 7              | -5             | -35            | -48            | -47            | -42            | -37            | -28            | -8             | 11             | 27              | 32              | 39              | 36              | 28              | 37              | 31              | 20              | -2              | -7              | -12             | -9              | 1               | 8               | 7               |
| 15                       | 22    | 3      | 17             | 6              | 3              | -1             | -12            | -19            | -24            | -30            | -35            | -41            | -38             | -24             | -10             | 4               | 8               | 12              | 20              | 24              | 19              | 23              | 25              | 21              | 20              | 24              | 17              |
| 18                       | 19    | 0      | 13             | 14             | 17             | 17             | 23             | 32             | 31             | 21             | 8              | 4              | 1               | -13             | -17             | -14             | -10             | 32              | 26              | 25              | -8              | -15             | -16             | -17             | -2              | 15              | 13              |
| 21                       | 16    | 21     | -16            | -12            | -16            | -13            | -10            | -18            | -15            | 2              | 4              | 9              | 37              | 51              | 34              | 32              | 31              | 37              | 15              | -3              | -9              | -22             | -21             | -29             | -35             | -21             | -16             |
| M                        |       |        | 8              | 3              | 0              | 4              | 4              | 3              | 3              | 2              | -1             | -2             | 3               | 5               | 2               | 3               | 6               | 8               | 3               | -3              | -5              | -11             | -15             | -14             | -9              | 2               | 8               |
| <b>März—April</b>        |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                        | 16    | 22     | 28             | 44             | 35             | 33             | 27             | 20             | 15             | 9              | -6             | -21            | -24             | -32             | -34             | -15             | -4              | -1              | 9               | -17             | -13             | -5              | -2              | -15             | -33             | 9               | 28              |
| 3                        | 13    | 19     | -13            | 11             | 29             | 28             | 14             | 22             | 24             | 22             | 16             | 3              | -8              | -15             | -12             | -11             | -7              | 14              | 18              | 9               | -14             | -17             | 5               | 0               | -5              | -29             | -13             |
| 6                        | 10    | 16     | 59             | 50             | 51             | 27             | 14             | -45            | -10            | -14            | 4              | -2             | -28             | -33             | -35             | -29             | -22             | 7               | 1               | 3               | 4               | 4               | -4              | -12             | 9               | 33              | 59              |
| 9                        | 7     | 13     | 8              | 23             | 25             | 19             | 27             | 18             | -2             | -5             | 16             | -11            | -35             | -34             | -26             | -7              | -16             | 16              | 7               | 2               | 1               | 3               | 6               | 8               | 4               | -4              | 8               |
| 12                       | 4     | 10     | 36             | 58             | 91             | 110            | 98             | 69             | 54             | 17             | 5              | 17             | 16              | -29             | -70             | -80             | -132            | -132            | 83              | 44              | -19             | -14             | -9              | 2               | 11              | 25              | 36              |
| 15                       | 1     | 7      | 6              | 10             | 23             | 37             | 35             | 13             | 0              | 0              | -4             | -28            | -33             | -12             | 17              | 18              | 5               | -25             | 31              | 5               | 5               | -23             | -18             | -7              | -5              | 7               | 6               |
| 18                       | 22    | 4      | 37             | 35             | 24             | 4              | -13            | -23            | -40            | -62            | -66            | -59            | -62             | -56             | -41             | -21             | -6              | 1               | 3               | -13             | 23              | 75              | 78              | 79              | 65              | 47              | 37              |
| 21                       | 19    | 1      | 19             | 26             | 28             | 21             | 19             | 21             | 26             | 23             | 13             | 6              | -6              | -19             | -32             | -46             | -53             | -48             | 27              | -22             | -32             | -21             | 24              | 35              | 26              | 24              | 19              |
| M                        |       |        | 22             | 32             | 38             | 35             | 28             | 12             | 8              | -1             | -3             | -12            | -22             | -29             | -29             | -24             | -29             | -30             | -22             | -13             | -6              | 0               | 10              | 11              | 9               | 14              | 22              |
| <b>Mai—Juni</b>          |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                        | 20    | 3      | 37             | 83             | 71             | 53             | 52             | 26             | 13             | 7              | 4              | -2             | -4              | -9              | -18             | -33             | -42             | -39             | -51             | -51             | -52             | -51             | -34             | -18             | 17              | 43              | 37              |
| 3                        | 17    | 0      | -14            | 21             | 54             | 68             | 68             | 70             | 60             | 52             | 42             | 13             | -6              | -8              | -2              | -11             | -11             | -11             | -28             | -42             | -58             | -48             | -53             | -68             | -54             | -34             | -14             |
| 6                        | 14    | 21     | 13             | 27             | 14             | 7              | 24             | 31             | 26             | 7              | -10            | -29            | -29             | -19             | -14             | -5              | 0               | 8               | 2               | 2               | -2              | -1              | -5              | -10             | -6              | -9              | 13              |
| 9                        | 11    | 18     | -38            | -44            | -46            | -42            | -43            | -28            | -2             | 10             | 32             | 51             | -12             | 33              | 34              | 19              | 29              | 31              | 39              | 36              | 23              | 16              | -2              | -27             | -42             | -37             | -38             |
| 12                       | 8     | 15     | -34            | -14            | 4              | 7              | 13             | 27             | 25             | 21             | 26             | 29             | -21             | -13             | -26             | 18              | -1              | 11              | 31              | 27              | 7               | -20             | -21             | -27             | -36             | -37             | -34             |
| 15                       | 5     | 12     | -11            | 4              | 10             | 25             | 54             | 74             | 77             | 78             | 58             | 47             | 37              | 31              | 4               | 8               | -57             | -46             | -112            | -111            | -69             | -66             | -17             | -1              | 1               | -16             | -11             |
| 18                       | 2     | 9      | -43            | -29            | -27            | -20            | -16            | 14             | 62             | 81             | 67             | 63             | 67              | 77              | 83              | 65              | 20              | 6               | -35             | -71             | -73             | -50             | -47             | -17             | -57             | -83             | -43             |
| 21                       | 23    | 6      | -10            | 0              | -5             | -6             | 13             | 34             | 45             | 46             | 32             | 7              | -15             | -19             | -3              | -9              | -4              | 4               | 1               | 5               | -10             | -25             | -19             | -35             | -2              | -5              | -10             |
| M                        |       |        | -12            | 6              | 9              | 12             | 21             | 31             | 38             | 38             | 31             | 22             | 2               | 9               | 7               | 6               | -8              | -8              | -20             | -26             | -29             | -31             | -25             | -29             | -22             | -22             | -12             |
| <b>Juli—August</b>       |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                        | 23    | 7      | -38            | -64            | -53            | -31            | -44            | -40            | 0              | 3              | -5             | -10            | 7               | 18              | 21              | 33              | 57              | 59              | 33              | 19              | 16              | 5               | 3               | -4              | 2               | 12              | -38             |
| 3                        | 20    | 4      | 14             | 30             | 29             | 16             | -38            | 49             | 40             | 38             | 30             | 12             | -4              | -21             | -8              | -10             | -16             | -19             | -23             | -27             | -25             | -39             | -53             | -43             | -15             | 1               | 14              |
| 6                        | 17    | 1      | 22             | 18             | 8              | 3              | -2             | 4              | 11             | -7             | -23            | -12            | -4              | 10              | 10              | 2               | 4               | 6               | 2               | 17              | -28             | -26             | -13             | 5               | 21              | 23              | 22              |
| 9                        | 14    | 22     | 26             | 60             | 60             | 29             | 9              | -32            | -29            | -30            | -19            | -15            | -19             | -19             | -22             | -9              | -14             | -10             | 6               | 5               | 9               | 1               | -8              | -2              | 20              | 18              | 26              |
| 12                       | 11    | 19     | 58             | 50             | 31             | 15             | 14             | 17             | 9              | 4              | -4             | -9             | 7               | -26             | -36             | 10              | -30             | -34             | -34             | -24             | -30             | -18             | 5               | -4              | -1              | 28              | 58              |
| 15                       | 8     | 16     | -2             | -7             | -16            | -22            | -37            | -44            | -46            | -42            | -31            | -12            | -5              | 8               | 19              | 11              | 14              | 31              | 21              | 48              | 49              | 35              | 15              | 4               | 2               | -3              | -2              |
| 18                       | 5     | 13     | -1             | 3              | 8              | 0              | -7             | -2             | -7             | -9             | -5             | -21            | -38             | -28             | -7              | 1               | 17              | 13              | 0               | -2              | 23              | 23              | 9               | -8              | 10              | 17              | -1              |
| 21                       | 2     | 10     | 14             | 8              | 8              | 15             | 18             | 9              | 9              | 17             | 11             | -3             | -12             | -18             | -14             | -10             | -8              | -11             | -20             | 2               | -9              | -18             | -7              | 9               | -3              | 14              | 14              |
| M                        |       |        | 12             | 12             | 9              | 3              | -1             | -6             | -2             | -3             | -6             | -9             | -8              | -10             | -5              | 4               | 3               | 4               | 4               | 0               | 1               | -5              | -6              | -5              | 4               | 14              | 12              |
| <b>September—Oktober</b> |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                        | 3     | 11     | 33             | 20             | 14             | 31             | 36             | 25             | 10             | 3              | -2             | -4             | -13             | -18             | -24             | -37             | -44             | -50             | -40             | -27             | -14             | 1               | 10              | 22              | 32              | 46              | 33              |
| 3                        | 0     | 8      | 6              | -6             | -36            | -40            | -13            | -3             | -2             | 2              | -2             | -5             | -9              | -20             | -18             | -11             | -12             | 7               | 16              | 23              | 39              | 40              | 49              | 32              | -11             | -3              | 6               |
| 6                        | 21    | 5      | -35            | -4             | 18             | 29             | 32             | 44             | 46             | 20             | 26             | 20             | 19              | 15              | 9               | 9               | 13              | 11              | 4               | -7              | -16             | -34             | -51             | -62             | -62             | -51             | -35             |
| 9                        | 18    | 2      | -22            | -35            | -40            | -27            | -7             | 2              | 5              | -5             | -3             | 0              | 18              | 24              | 5               | 14              | 16              | 22              | 28              | 37              | 33              | 17              | -6              | -28             | -33             | -25             | -22             |
| 12                       | 15    | 23     | 24             | 41             | 62             | 56             | 46             | 36             | 20             | -5             | -18            | -24            | -44             | -48             | -22             | -27             | -25             | -25             | -32             | -19             | -5              | 0               | 2               | -6              | -2              | 13              | 24              |
| 15                       | 12    | 20     | -14            | -17            | 2              | 24             | 34             | 48             | 84             | 87             | 63             | 38             | 11              | -30             | -40             | -26             | -14             | -9              | -50             | -53             | -37             | -50             | -28             | -12             | -6              | -11             | -14             |
| 18                       | 9     | 17     | -46            | -45            | -25            | -3             | 30             | 54             | 70             | 65             | 49             | 39             | 38              | 16              | 3               | 4               | -11             | -34             | -25             | -4              | -7              | -12             | -34             | -43             | -36             | -42             | -46             |
| 21                       | 6     | 14     | 50             | 44             | 38             | 28             | 19             | 8              | 3              | -9             | -26            | -43            | -52             | -62             | -75             | -75             | -48             | -16             | 9               | 28              | 34              | 40              | 21              | 1               | 45              | 50              | 50              |
| M                        |       |        | 0              | 0              | 4              | 12             | 22             | 27             | 30             | 20             | 11             | 3              | -4              | -15             | -20             | -19             | -15             | -14             | -11             | -3              | 2               | 0               | -5              | -12             | -9              | -3              | 0               |
| <b>November—Dezember</b> |       |        |                |                |                |                |                |                |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| 0                        | 6     | 15     | 10             | 8              | 11             | 12             | 13             | 10             | 5              | -1             | -6             | -5             | -4              | 1               | 5               | 2               | 0               | -6              | -4              | 6               | 4               | -9              | -13             | -13             | -14             | -10             | 10              |
| 3                        | 3     | 12     | -10            | 6              | 7              | 21             | 35             | 27             | 19             | 17             | 10             | 9              | 7               | 7               | 8               | 10              | 12              | 10              | -1              | 13              | -21             | -28             | -36             | -34             | -29             | -26             | -10             |
| 6                        | 0     | 9      | 27             | 51             | 70             | 54             | 35             | 44             | 29             | 1              | 2              | -12            | -12             | -9              | -7              | -12             | -14             | -18             | -25             | -33             | -34             | -33             | -34             | -35             | -30             | -9              | 27              |
| 9                        | 21    | 6      | -15            | -14            | -14            | -19            | -19            | -14            | -4             | 3              | 1              | 3              | 15              | 18              | 21              | 22              | 25              | 27              | 22              | 11              | 5               | -6              | -15             | -18             | -14             | -13             | -15             |
| 12                       | 18    | 3      | 16             | 27             | 34             | 21             | 8              | 2              | -3             | -4             | -3             | -1             | 8               | 9               | 11              | 8               | 4               | -1              | -11             | -22             | -23             | -23             | -24             | -23             | -11             | 6               | 16              |
| 15                       | 15    | 0      | 10             | 8              | 7              | 5              | 8              | 10             | 15             | 9              | -3             | -11            | -21             | -26             | -15             | -4              | 6               | 2               | -5              | -4              | 0               | 0               | 2               | 7               | 11              | 14              | 10              |
| 18                       | 12    | 21     | 15             | 12             | 15             | 24             | 32             | 28             | 14             | 1              | 0              | 3              | 7               | -4              | -14             | -9              | -10             | -6              | -4              | -5              | -7              | -43             | -40             | -13             | 0               | 8               | 15              |
| 21                       | 9     | 18     | -25            | -26            | -26            | -30            | -16            | -2             | 1              | -4             | -5             | 3              | 12              | 17              | 36              | 53              | 60              | 52              | 42              | 23              | -2              | -28             | -40             | -63             | -22             | -20             | -25             |
| M                        |       |        | 4              | 9              | 13             | 11             | 12             | 13             | 10             | 3              | 0              | -1             | 2               | 2               | 6               | 9               | 9               | 7               | 2               | -5              | -10             | -21             | -25             | -24             | -14             | -6              | 4               |

( $\mu + g$ ): Stundenwinkel des aufsteigenden Knotens im mittleren Mittag für den Greenwich Meridian.  
Einheit: 0,1  $\gamma$ .

Mondentägiger Gang im Jahresmittel.

0<sup>s</sup> untere Kulmination des mittleren Mondes.

Seddin

1930

Table with 25 columns (Phase μ, 0<sup>s</sup> to 24<sup>s</sup>) and 3 main sections: Nordkomponente, Ostkomponente, and Vertikalkomponente. Each section contains 11 rows of data for different moon phases and a 'Mittel' row.

Einfluß des Mondes auf den sonnentägigen Gang im Jahresmittel.

Seddin

Weltzeit.

1930

Table with 25 columns (Phase μ, 0<sup>h</sup> to 24<sup>h</sup>) and 3 main sections: Nordkomponente, Ostkomponente, and Vertikalkomponente. Each section contains 11 rows of data for different moon phases and a 'Mittel' row.

Für nähere Erläuterungen vergl. Erg. 1922, S. 7 und 23ff.

Aktivitätszahlen S.

Seddin

X = 18300 γ, Y = 1900 γ, Z = 43000 γ.

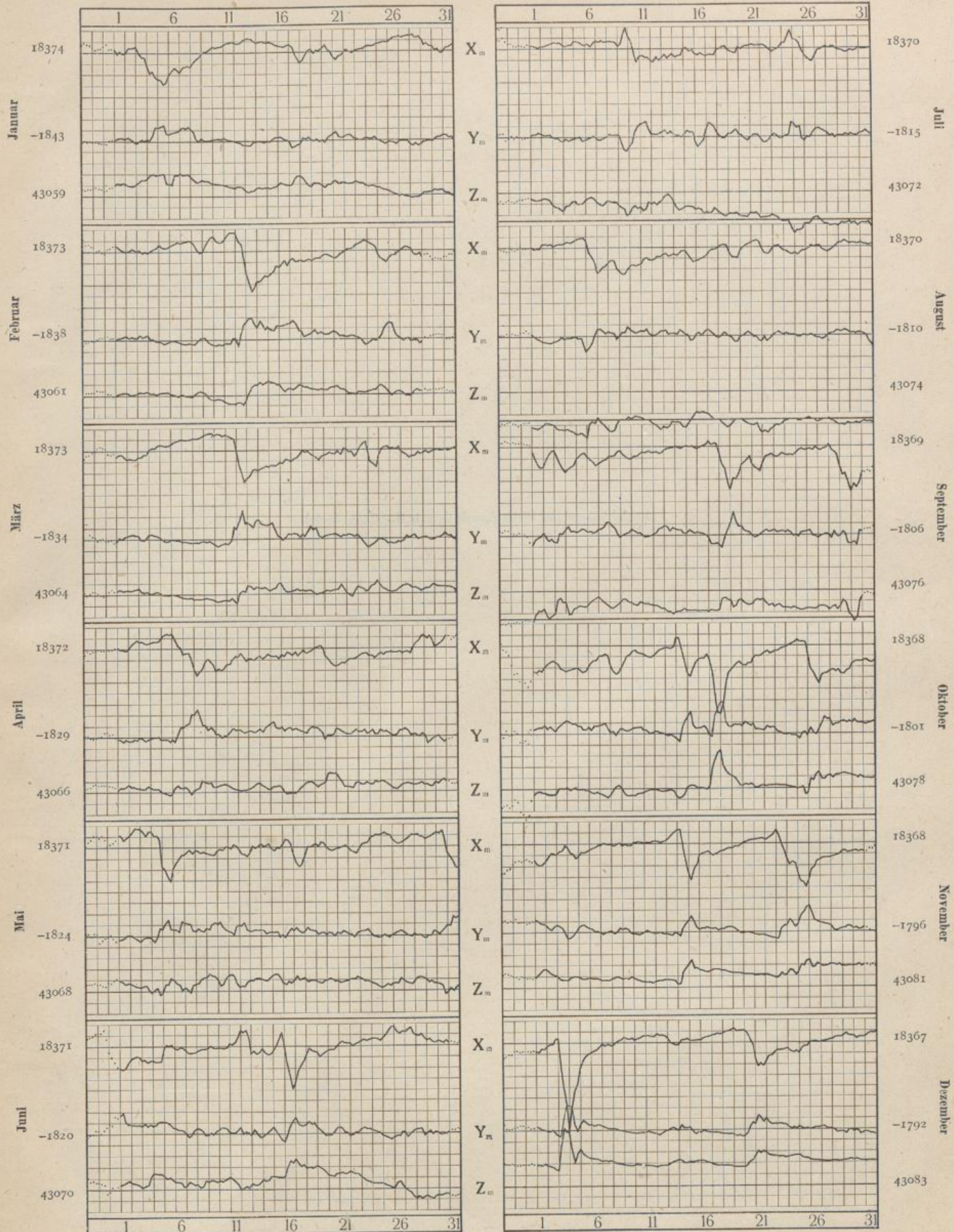
1930

| Tag    | XR <sub>x</sub> | YR <sub>y</sub> | ZR <sub>z</sub> | S     | XR <sub>x</sub> | YR <sub>y</sub> | ZR <sub>z</sub> | S     | XR <sub>x</sub> | YR <sub>y</sub> | ZR <sub>z</sub> | S     | XR <sub>x</sub> | YR <sub>y</sub> | ZR <sub>z</sub> | S     | XR <sub>x</sub> | YR <sub>y</sub> | ZR <sub>z</sub> | S     | XR <sub>x</sub> | YR <sub>y</sub> | ZR <sub>z</sub> | S     |
|--------|-----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-------|-----------------|-----------------|-----------------|-------|
|        | Januar          |                 |                 |       | Februar         |                 |                 |       | März            |                 |                 |       | April           |                 |                 |       | Mai             |                 |                 |       | Juni            |                 |                 |       |
| 1      | 95              | 12              | 112             | 219   | 93              | 14              | 108             | 215   | 145             | 15              | 198             | 358   | 99              | 13              | 159             | 271   | 104             | 13              | 99              | 216   | 192             | 15              | 314             | 521   |
| 2      | 27              | 7               | 64              | 98    | 106             | 12              | 82              | 200   | 139             | 13              | 181             | 333   | 95              | 12              | 86              | 193   | 97              | 13              | 99              | 209   | 225             | 13              | 262             | 500   |
| 3      | 108             | 11              | 129             | 248   | 115             | 14              | 95              | 224   | 128             | 7               | 82              | 217   | 110             | 14              | 99              | 223   | 86              | 12              | 112             | 210   | 176             | 10              | 292             | 478   |
| 4      | 174             | 16              | 202             | 392   | 108             | 7               | 43              | 158   | 68              | 9               | 90              | 167   | 82              | 12              | 103             | 197   | 128             | 19              | 176             | 323   | 178             | 10              | 172             | 360   |
| 5      | 132             | 18              | 232             | 382   | 70              | 7               | 56              | 133   | 60              | 8               | 60              | 128   | 49              | 11              | 95              | 155   | 324             | 22              | 434             | 780   | 68              | 10              | 112             | 190   |
| 6      | 134             | 20              | 232             | 386   | 59              | 7               | 43              | 109   | 60              | 9               | 52              | 121   | 68              | 18              | 322             | 408   | 198             | 14              | 348             | 560   | 137             | 12              | 138             | 287   |
| 7      | 97              | 16              | 159             | 272   | 77              | 7               | 30              | 114   | 51              | 9               | 52              | 112   | 170             | 21              | 284             | 475   | 210             | 20              | 417             | 647   | 170             | 16              | 288             | 474   |
| 8      | 82              | 8               | 73              | 163   | 88              | 9               | 69              | 166   | 46              | 8               | 60              | 114   | 220             | 19              | 353             | 592   | 139             | 12              | 262             | 413   | 163             | 16              | 168             | 347   |
| 9      | 38              | 5               | 43              | 86    | 62              | 8               | 56              | 126   | 38              | 6               | 47              | 91    | 141             | 15              | 219             | 375   | 148             | 14              | 254             | 416   | 130             | 12              | 142             | 284   |
| 10     | 44              | 5               | 43              | 92    | 88              | 8               | 39              | 135   | 53              | 10              | 77              | 140   | 196             | 15              | 284             | 495   | 88              | 13              | 163             | 264   | 112             | 10              | 133             | 255   |
| 11     | 26              | 4               | 22              | 52    | 40              | 6               | 39              | 94    | 86              | 13              | 155             | 254   | 192             | 19              | 215             | 426   | 117             | 8               | 69              | 194   | 77              | 11              | 77              | 165   |
| 12     | 46              | 5               | 52              | 103   | 243             | 36              | 215             | 494   | 273             | 27              | 331             | 631   | 167             | 13              | 219             | 399   | 201             | 16              | 206             | 423   | 199             | 20              | 331             | 550   |
| 13     | 92              | 4               | 64              | 160   | 146             | 23              | 301             | 470   | 124             | 17              | 292             | 433   | 167             | 16              | 249             | 432   | 148             | 13              | 181             | 342   | 194             | 12              | 219             | 425   |
| 14     | 64              | 5               | 43              | 112   | 119             | 16              | 318             | 453   | 150             | 19              | 297             | 466   | 137             | 14              | 155             | 306   | 68              | 12              | 142             | 222   | 117             | 10              | 69              | 196   |
| 15     | 40              | 10              | 52              | 102   | 102             | 12              | 262             | 376   | 123             | 16              | 340             | 479   | 143             | 13              | 228             | 384   | 139             | 10              | 120             | 269   | 119             | 13              | 82              | 214   |
| 16     | 42              | 5               | 39              | 86    | 163             | 14              | 232             | 409   | 159             | 12              | 129             | 300   | 170             | 18              | 116             | 304   | 161             | 23              | 314             | 498   | 302             | 13              | 211             | 526   |
| 17     | 75              | 16              | 168             | 259   | 57              | 11              | 142             | 210   | 119             | 11              | 146             | 276   | 123             | 12              | 133             | 268   | 238             | 13              | 254             | 505   | 201             | 10              | 155             | 366   |
| 18     | 73              | 8               | 69              | 150   | 86              | 17              | 108             | 211   | 170             | 15              | 155             | 340   | 115             | 14              | 133             | 262   | 198             | 12              | 189             | 309   | 194             | 9               | 176             | 379   |
| 19     | 86              | 12              | 95              | 193   | 81              | 8               | 142             | 231   | 97              | 13              | 120             | 230   | 203             | 18              | 211             | 432   | 124             | 10              | 194             | 328   | 115             | 10              | 103             | 228   |
| 20     | 59              | 16              | 142             | 217   | 88              | 10              | 129             | 227   | 99              | 9               | 129             | 237   | 157             | 15              | 305             | 477   | 121             | 8               | 116             | 245   | 145             | 11              | 112             | 268   |
| 21     | 117             | 10              | 60              | 196   | 77              | 7               | 60              | 144   | 93              | 12              | 142             | 247   | 152             | 11              | 245             | 408   | 135             | 10              | 142             | 287   | 121             | 13              | 168             | 302   |
| 22     | 77              | 7               | 56              | 140   | 55              | 10              | 56              | 121   | 143             | 14              | 245             | 402   | 232             | 16              | 301             | 549   | 181             | 13              | 116             | 310   | 81              | 7               | 43              | 131   |
| 23     | 55              | 7               | 30              | 92    | 60              | 12              | 60              | 132   | 88              | 13              | 77              | 178   | 172             | 16              | 202             | 390   | 99              | 11              | 95              | 205   | 81              | 10              | 120             | 211   |
| 24     | 37              | 5               | 60              | 102   | 79              | 14              | 90              | 183   | 236             | 13              | 168             | 417   | 192             | 14              | 181             | 387   | 71              | 11              | 90              | 172   | 75              | 11              | 99              | 185   |
| 25     | 24              | 8               | 30              | 62    | 145             | 18              | 142             | 305   | 86              | 10              | 112             | 208   | 108             | 9               | 155             | 272   | 84              | 11              | 189             | 284   | 71              | 9               | 77              | 157   |
| 26     | 31              | 6               | 56              | 93    | 60              | 10              | 168             | 238   | 113             | 13              | 103             | 229   | 130             | 12              | 129             | 271   | 73              | 10              | 95              | 178   | 73              | 9               | 120             | 222   |
| 27     | 44              | 5               | 34              | 83    | 73              | 9               | 64              | 146   | 137             | 14              | 95              | 246   | 146             | 11              | 120             | 277   | 71              | 11              | 108             | 190   | 150             | 17              | 176             | 343   |
| 28     | 62              | 7               | 73              | 142   | 139             | 12              | 138             | 289   | 198             | 14              | 133             | 345   | 93              | 9               | 108             | 210   | 64              | 14              | 133             | 211   | 181             | 17              | 228             | 426   |
| 29     | 106             | 7               | 60              | 173   |                 |                 |                 |       | 148             | 12              | 185             | 345   | 139             | 20              | 215             | 374   | 112             | 9               | 138             | 259   | 141             | 11              | 189             | 341   |
| 30     | 123             | 12              | 90              | 225   |                 |                 |                 |       | 123             | 12              | 73              | 208   | 145             | 14              | 172             | 331   | 126             | 17              | 181             | 324   | 112             | 11              | 129             | 252   |
| 31     | 97              | 6               | 30              | 133   |                 |                 |                 |       | 113             | 13              | 52              | 178   |                 |                 |                 |       | 238             | 20              | 396             | 654   |                 |                 |                 |       |
| Mittel | 74.4            | 9.1             | 84.6            | 168.2 | 96.0            | 12.1            | 117.4           | 225.5 | 118.2           | 12.5            | 141.2           | 271.9 | 143.8           | 14.5            | 193.2           | 350.9 | 138.4           | 13.4            | 188.1           | 339.9 | 144.0           | 11.9            | 163.5           | 319.4 |
|        | Juli            |                 |                 |       | August          |                 |                 |       | September       |                 |                 |       | Oktober         |                 |                 |       | November        |                 |                 |       | Dezember        |                 |                 |       |
| 1      | 112             | 12              | 108             | 232   | 84              | 10              | 120             | 214   | 152             | 13              | 271             | 436   | 137             | 8               | 95              | 240   | 86              | 6               | 142             | 234   | 60              | 4               | 64              | 128   |
| 2      | 137             | 13              | 108             | 258   | 64              | 8               | 108             | 180   | 143             | 11              | 133             | 287   | 126             | 14              | 82              | 222   | 112             | 6               | 129             | 247   | 27              | 4               | 30              | 61    |
| 3      | 113             | 12              | 138             | 263   | 95              | 10              | 99              | 204   | 126             | 23              | 417             | 566   | 143             | 15              | 271             | 429   | 60              | 9               | 47              | 116   | 329             | 31              | 675             | 1035  |
| 4      | 145             | 10              | 159             | 314   | 73              | 10              | 64              | 147   | 174             | 11              | 172             | 357   | 192             | 11              | 159             | 362   | 181             | 8               | 108             | 297   | 90              | 31              | 254             | 375   |
| 5      | 106             | 10              | 155             | 271   | 71              | 11              | 138             | 220   | 141             | 11              | 232             | 384   | 108             | 14              | 159             | 281   | 66              | 7               | 56              | 129   | 38              | 4               | 43              | 85    |
| 6      | 73              | 10              | 95              | 178   | 196             | 18              | 378             | 592   | 167             | 14              | 181             | 362   | 139             | 17              | 95              | 251   | 55              | 5               | 34              | 94    | 53              | 6               | 47              | 106   |
| 7      | 82              | 12              | 90              | 184   | 232             | 10              | 275             | 517   | 113             | 9               | 120             | 242   | 86              | 12              | 125             | 223   | 44              | 7               | 43              | 94    | 51              | 5               | 56              | 112   |
| 8      | 59              | 7               | 86              | 152   | 187             | 13              | 280             | 480   | 137             | 13              | 108             | 258   | 126             | 13              | 172             | 311   | 92              | 13              | 52              | 157   | 18              | 4               | 43              | 65    |
| 9      | 187             | 16              | 125             | 328   | 174             | 9               | 185             | 368   | 146             | 19              | 150             | 315   | 128             | 13              | 90              | 231   | 84              | 8               | 82              | 174   | 48              | 4               | 60              | 112   |
| 10     | 256             | 12              | 288             | 556   | 148             | 9               | 142             | 299   | 101             | 9               | 155             | 265   | 68              | 11              | 90              | 169   | 44              | 6               | 30              | 80    | 22              | 6               | 43              | 71    |
| 11     | 157             | 15              | 361             | 533   | 148             | 11              | 150             | 309   | 117             | 11              | 86              | 214   | 88              | 9               | 69              | 166   | 42              | 6               | 30              | 78    | 22              | 3               | 43              | 68    |
| 12     | 218             | 13              | 138             | 369   | 167             | 12              | 185             | 364   | 93              | 12              | 108             | 213   | 75              | 9               | 47              | 131   | 46              | 4               | 34              | 84    | 51              | 13              | 77              | 141   |
| 13     | 170             | 10              | 211             | 391   | 108             | 8               | 206             | 322   | 81              | 11              | 64              | 156   | 55              | 9               | 43              | 107   | 48              | 4               | 22              | 74    | 115             | 14              | 103             | 232   |
| 14     | 113             | 11              | 138             | 262   | 146             | 14              | 120             | 280   | 82              | 15              | 95              | 192   | 229             | 25              | 159             | 413   | 183             | 22              | 292             | 497   | 40              | 9               | 60              | 109   |
| 15     | 79              | 8               | 90              | 177   | 134             | 7               | 262             | 403   | 84              | 7               | 86              | 172   | 64              | 10              | 43              | 117   | 99              | 13              | 52              | 164   | 40              | 5               | 52              | 97    |
| 16     | 119             | 13              | 168             | 300   | 88              | 8               | 159             | 255   | 81              | 10              | 90              | 181   | 68              | 6               | 43              | 117   | 37              | 7               | 52              | 96    | 20              | 3               | 22              | 45    |
| 17     | 99              | 7               | 181             | 287   | 82              | 10              | 99              | 191   | 86              | 13              | 129             | 228   | 262             | 32              | 443             | 737   | 59              | 5               | 39              | 103   | 18              | 2               | 26              | 46    |
| 18     | 79              | 7               | 129             | 215   | 77              | 8               | 86              | 171   | 201             | 35              | 413             | 649   | 104             | 10              | 77              | 191   | 82              | 7               | 52              | 141   | 22              | 3               | 22              | 47    |
| 19     | 110             | 9               | 99              | 218   | 167             | 11              | 112             | 290   | 135             | 17              | 198             | 350   | 90              | 10              | 39              | 139   | 38              | 5               | 34              | 77    | 49              | 7               | 39              | 95    |
| 20     | 57              | 9               | 108             | 174   | 110             | 11              | 82              | 203   | 68              | 9               | 73              | 150   | 187             | 12              | 159             | 358   | 31              | 4               | 30              | 65    | 102             | 15              | 142             | 259   |
| 21     | 53              | 3               | 73              | 133   | 84              | 13              | 129             | 226   | 183             | 10              | 142             | 335   | 64              | 7               | 82              | 153   | 40              | 5               | 52              | 97    | 135             | 16              | 103             | 254   |
| 22     | 59              | 9               | 125             | 193   | 161             | 14              | 189             | 364   | 60              | 8               | 64              | 182   | 44              | 10              | 69              | 123   | 49              | 4               | 30              | 83    | 71              | 11              | 95              | 177   |
| 23     | 70              | 11</            |                 |       |                 |                 |                 |       |                 |                 |                 |       |                 |                 |                 |       |                 |                 |                 |       |                 |                 |                 |       |

Tagesmittel der Komponenten  
in Abweichungen vom Normalwert.

Seddin

1930



Die lotrechten Linien bezeichnen den Augenblick  $0^h$  nach Weltzeit.

Die absoluten Werte am Rande gelten für die Mitte des Monats. — Einheit der Zahlen:  $\gamma$ ; Einheit der Ordinaten:  $10 \gamma$ .

Buchdruckerei des Waisenhauses G. m. b. H., Halle (Saale).

