

## Sunspot Activity.

|                  | Number of observations | Reduction-factor on Wolf's unit |              | Number of comparisons |
|------------------|------------------------|---------------------------------|--------------|-----------------------|
|                  |                        | whole disc                      | central zone |                       |
| Batavia          | 48                     | 1.56                            | 1.44         | 44                    |
| Catania          | 66                     | 0.67                            | 0.77         | 59                    |
| Greenwich/Cape   | 68                     | 0.70                            | 0.84         | 61                    |
| Kiew             | 34                     | 1.22                            | 1.35         | 34                    |
| Lyons            | 52                     | 0.94                            | 0.99         | 47                    |
| Roma/Campidoglio | 36                     | 0.86                            | 0.93         | 31                    |
| South Hadley     | 66                     | 1.05                            | 1.06         | 59                    |
| Stonyhurst       | 55                     | 1.05                            | 1.31         | 50                    |
| Tokyo            | 72                     | 0.79                            | 0.86         | 63                    |
| Wellington       | 17                     | 0.61                            | 0.42         | 14                    |
| Zürich/Arosa     | 82                     | 0.60                            | 0.60         | —                     |

Relative-numbers for the whole sun disc  
1934

|      | Jan.             | Feb.              | March            |
|------|------------------|-------------------|------------------|
| 1    | 0                | 11                | 0                |
| 2    | 0                | 9 <sup>a</sup>    | 0                |
| 3    | 0                | 9                 | 0                |
| 4    | 0                | 0                 | 6                |
| 5    | 0                | E 10 <sup>c</sup> | 0                |
| 6    | 0                | 11                | E 7 <sup>c</sup> |
| 7    | 0                | E 19 <sup>c</sup> | 9                |
| 8    | 0                | 8                 | 19               |
| 9    | 0                | 14                | 22 <sup>a</sup>  |
| 10   | 0                | 8                 | 12               |
| 11   | 0                | 9                 | 15               |
| 12   | M 8 <sup>c</sup> | 9                 | 7                |
| 13   | 11               | 16                | 0                |
| 14   | 12               | 17                | 0                |
| 15   | 13               | 10                | 0                |
| 16   | 16               | 11                | 0                |
| 17   | 11               | 11                | 0                |
| 18   | 4                | 11                | 7                |
| 19   | 0                | 8                 | 0                |
| 20   | 0                | 0                 | 0                |
| 21   | 0                | 0                 | 0                |
| 22   | 0                | 0                 | 0                |
| 23   | 0                | 0                 | 0                |
| 24   | 0                | 10                | 0                |
| 25   | 0                | 7                 | 7                |
| 26   | 0                | 0                 | 7                |
| 27   | 0                | 0                 | 0                |
| 28   | 0                | 0                 | 0                |
| 29   | E 8 <sup>c</sup> | 0                 | 7                |
| 30   | 11               | 0                 | 7                |
| 31   | 12               | 0                 | 0                |
| Mean | 3.4              | 7.8               | 4.3              |

Relative-numbers for the central circle zone  
1934

|      | Jan. | Feb. | March |
|------|------|------|-------|
| 1    | 0    | 0    | 0     |
| 2    | 0    | 0    | 0     |
| 3    | 0    | 0    | 0     |
| 4    | 0    | 0    | 0     |
| 5    | 0    | 0    | 0     |
| 6    | 0    | 0    | 0     |
| 7    | 0    | 8    | 9     |
| 8    | 0    | 0    | 12    |
| 9    | 0    | 0    | 15    |
| 10   | 0    | 0    | 12    |
| 11   | 0    | 0    | 15    |
| 12   | 8    | 0    | 7     |
| 13   | 11   | 16   | 0     |
| 14   | 10   | 9    | 0     |
| 15   | 0    | 10   | 0     |
| 16   | 0    | 11   | 0     |
| 17   | 0    | 9    | 0     |
| 18   | 0    | 0    | 0     |
| 19   | 0    | 0    | 0     |
| 20   | 0    | 0    | 0     |
| 21   | 0    | 0    | 0     |
| 22   | 0    | 0    | 0     |
| 23   | 0    | 0    | 0     |
| 24   | 0    | 10   | 0     |
| 25   | 0    | 0    | 7     |
| 26   | 0    | 0    | 7     |
| 27   | 0    | 0    | 0     |
| 28   | 0    | 0    | 0     |
| 29   | 0    | 0    | 7     |
| 30   | 0    | 0    | 7     |
| 31   | 0    | 0    | 0     |
| Mean | 0.9  | 2.6  | 3.2   |

## Intensity of the ultra-violet Radiation.

(Mount Wilson)

The figures give the ratio ultra-violet  
( $\lambda = 0.32 \mu$ ) to green ( $\lambda = 0.50 \mu$ )  
(Ratio for June 1924 = 1)

1934

|      | Jan. | Feb. | March |
|------|------|------|-------|
| 1    |      | 1.03 | 1.07  |
| 2    | 1.34 |      | 1.02  |
| 3    | 1.38 |      | 1.01  |
| 4    | 1.23 |      |       |
| 5    | 1.00 |      | 0.93  |
| 6    | 1.03 | 0.97 |       |
| 7    | 1.28 | 1.08 |       |
| 8    | 1.11 | 1.08 |       |
| 9    | 1.04 |      | 0.93  |
| 10   | 1.11 | 1.16 |       |
| 11   | 1.07 | 1.12 |       |
| 12   | 1.08 | 1.13 |       |
| 13   | 1.11 |      | 0.98  |
| 14   | 1.06 | 0.94 | 0.94  |
| 15   | 1.02 |      |       |
| 16   | 1.04 | 1.09 |       |
| 17   | 1.14 | 1.12 |       |
| 18   | 1.22 | 1.06 | 1.17  |
| 19   | 1.14 |      | 1.17  |
| 20   |      |      | 1.04  |
| 21   | 1.11 |      |       |
| 22   | 1.17 |      |       |
| 23   | 1.11 |      |       |
| 24   | 1.14 |      |       |
| 25   |      |      |       |
| 26   | 1.00 |      |       |
| 27   | 1.01 |      |       |
| 28   | 1.07 | 1.20 |       |
| 29   | 1.00 |      |       |
| 30   | 0.99 |      |       |
| 31   | 1.03 |      | 0.99  |
| Mean | 1.11 | 1.08 | 1.02  |

- a = Passage of an average sized group through the central meridian.  
 b = Passage of a large group or spot through the central meridian.  
 c = New formation of a centre of activity. E: on the eastern part of the sun's disc, W: on the western part, M: in the central circle zone.  
 d = Entrance of a large or average sized centre of activity on the east limb.

## Sunspot Activity.

|                  | Number of observations | Reduction-factor on Wolf's unit |              | Number of comparisons |
|------------------|------------------------|---------------------------------|--------------|-----------------------|
|                  |                        | whole disc                      | central zone |                       |
| Batavia          | —                      | —                               | —            | —                     |
| Catania          | 76                     | 0.76                            | 0.72         | 74                    |
| Greenwich/Cape   | 76                     | 0.97                            | 1.09         | 75                    |
| Kiew             | 55                     | 0.94                            | 0.79         | 53                    |
| Lyons            | 77                     | 0.89                            | 0.82         | 75                    |
| Roma/Campidoglio | 48                     | 0.91                            | 0.88         | 47                    |
| South Hadley     | 76                     | 0.87                            | 0.67         | 73                    |
| Stonyhurst       | 71                     | 0.96                            | 0.88         | 68                    |
| Tokyo            | 52                     | 0.66                            | 0.71         | 49                    |
| Wellington       | 36                     | 0.84                            | 0.64         | 36                    |
| Zürich/Arosa     | 88                     | 0.60                            | 0.60         | —                     |

Relative-numbers for the whole sun disc  
1934

|      | April | May    | June |
|------|-------|--------|------|
| 1    | 0     | 7      | 0    |
| 2    | 11    | 0      | 0    |
| 3    | 12    | 0      | 0    |
| 4    | 9     | M 14 c | 0    |
| 5    | 8     | 17     | 0    |
| 6    | 0     | 21 a   | 0    |
| 7    | 0     | 26     | 0    |
| 8    | 0     | 34     | 0    |
| 9    | 0     | 23     | 7    |
| 10   | 0     | 19     | 0    |
| 11   | 0     | 10     | 0    |
| 12   | 0     | 7      | 0    |
| 13   | 0     | 15 d   | 0    |
| 14   | 7 d   | 21     | 0 d  |
| 15   | 21    | 26     | 11   |
| 16   | 33    | 25     | 27   |
| 17   | 32    | 35 d   | 31   |
| 18   | 29    | 41     | 26   |
| 19   | 22    | 46     | 25   |
| 20   | 21    | 37 a   | 14 b |
| 21   | 22    | 29     | 16   |
| 22   | 18 b  | 34     | 10   |
| 23   | 16    | 33 a   | 10   |
| 24   | 19    | 23     | 8    |
| 25   | 11    | 19     | 8    |
| 26   | 10    | 17     | 8    |
| 27   | 16    | 9      | 0    |
| 28   | 14    | 16     | 0    |
| 29   | 7     | 8      | 0    |
| 30   | 0     | 0      | 0    |
| 31   |       | 0      |      |
| Mean | 11.3  | 19.7   | 6.7  |

Relative-numbers for the central circle zone  
1934

|      | April | May | June |
|------|-------|-----|------|
| 1    | 0     | 0   | 0    |
| 2    | 0     | 0   | 0    |
| 3    | 0     | 0   | 0    |
| 4    | 0     | 10  | 0    |
| 5    | 0     | 17  | 0    |
| 6    | 0     | 21  | 0    |
| 7    | 0     | 19  | 0    |
| 8    | 0     | 0   | 0    |
| 9    | 0     | 8   | 0    |
| 10   | 0     | 7   | 0    |
| 11   | 0     | 0   | 0    |
| 12   | 0     | 0   | 0    |
| 13   | 0     | 0   | 0    |
| 14   | 0     | 0   | 0    |
| 15   | 0     | 0   | 0    |
| 16   | 0     | 0   | 0    |
| 17   | 0     | 0   | 0    |
| 18   | 0     | 12  | 10   |
| 19   | 0     | 30  | 17   |
| 20   | 11    | 18  | 14   |
| 21   | 22    | 0   | 16   |
| 22   | 18    | 10  | 10   |
| 23   | 11    | 18  | 0    |
| 24   | 0     | 0   | 0    |
| 25   | 0     | 0   | 0    |
| 26   | 0     | 0   | 0    |
| 27   | 0     | 0   | 0    |
| 28   | 0     | 0   | 0    |
| 29   | 0     | 0   | 0    |
| 30   | 0     | 0   | 0    |
| 31   |       | 0   |      |
| Mean | 2.1   | 5.5 | 2.2  |

## Intensity of the ultra-violet Radiation.

(Mount Wilson)

The figures give the ratio ultra-violet  
( $\lambda = 0.32 \mu$ ) to green ( $\lambda = 0.50 \mu$ )  
(Ratio for June 1924 = 1)

1934

|      | April | May  | June |
|------|-------|------|------|
| 1    | 0.97  |      | 1.11 |
| 2    |       | 1.07 | 1.00 |
| 3    | 1.22  | 1.03 | 1.07 |
| 4    | 1.08  | 1.06 |      |
| 5    | 1.10  | 1.03 |      |
| 6    | 1.12  | 1.19 |      |
| 7    | 1.02  | 1.00 | 1.09 |
| 8    | 0.98  | 0.98 | 1.04 |
| 9    | 0.99  |      | 1.03 |
| 10   | 0.98  |      | 1.02 |
| 11   | 1.00  | 0.96 | 1.04 |
| 12   | 0.88  | 1.03 | 1.14 |
| 13   | 0.93  | 1.00 | 1.10 |
| 14   |       | 1.01 | 1.11 |
| 15   |       | 1.08 | 0.99 |
| 16   | 1.05  |      | 1.03 |
| 17   | 1.02  |      | 1.04 |
| 18   | 1.01  |      | 1.11 |
| 19   | 0.99  |      | 1.05 |
| 20   | 1.02  |      | 1.11 |
| 21   | 1.00  |      | 1.11 |
| 22   | 1.12  |      | 1.10 |
| 23   | 1.07  | 1.17 | 0.99 |
| 24   | 1.11  |      | 1.16 |
| 25   | 1.06  |      | 1.22 |
| 26   | 0.99  |      | 1.13 |
| 27   | 0.98  |      | 1.00 |
| 28   | 1.04  | 1.20 | 1.01 |
| 29   | 1.03  | 1.20 | 0.94 |
| 30   |       | 1.14 |      |
| 31   |       | 1.20 |      |
| Mean | 1.03  | 1.08 | 1.07 |

- a = Passage of an average sized group through the central meridian.  
b = Passage of a large group or spot through the central meridian.  
c = New formation of a centre of activity. E: on the eastern part of the sun's disc, W: on the western part, M: in the central circle zone.  
d = Entrance of a large or average sized centre of activity on the east limb.

Zurich, September 24, 1934.

W. Brunner

## Sunspot Activity.

|                  | Number of observations | Reduction-factor on Wolf's unit |              | Number of comparisons |
|------------------|------------------------|---------------------------------|--------------|-----------------------|
|                  |                        | whole disc                      | central zone |                       |
| Batavia          | 73                     | —                               | —            | 71                    |
| Catania          | 87                     | 0.78                            | 0.70         | 83                    |
| Greenwich/Cape   | 85                     | 0.75                            | 0.74         | 81                    |
| Kiew             | 78                     | 1.32                            | 0.81         | 74                    |
| Lyons            | 81                     | 1.10                            | 0.93         | 78                    |
| Roma/Campidoglio | 56                     | 1.11                            | 0.86         | 56                    |
| South Hadley     | 24                     | 0.91                            | 0.85         | 24                    |
| Stonyhurst       | 75                     | 0.96                            | 0.77         | 71                    |
| Tokyo            | 35                     | 0.71                            | 0.46         | 33                    |
| Wellington       | —                      | —                               | —            | —                     |
| Zürich/Arosa     | 88                     | 0.60                            | 0.60         | —                     |

Relative-numbers for the whole sun disc  
1934

|      | July            | Aug.               | Sept.             |
|------|-----------------|--------------------|-------------------|
| 1    | 0               | 0                  | 0                 |
| 2    | 0               | 0                  | 0                 |
| 3    | 0               | 0                  | 7                 |
| 4    | 0               | 0                  | 0                 |
| 5    | 0               | 0                  | 0                 |
| 6    | 8 <sup>d</sup>  | 8 <sup>d</sup>     | 0                 |
| 7    | 8               | 9                  | 0                 |
| 8    | 11              | 9                  | 0                 |
| 9    | 11              | 10                 | 0                 |
| 10   | 18              | 11                 | 7                 |
| 11   | 24 <sup>d</sup> | 12                 | 0                 |
| 12   | 24 <sup>b</sup> | M 21 <sup>ac</sup> | 7                 |
| 13   | 25              | 22                 | 7                 |
| 14   | 24              | 24                 | 8                 |
| 15   | 20              | 24                 | W 16 <sup>c</sup> |
| 16   | 23              | 27                 | 9                 |
| 17   | 17              | 17                 | 8                 |
| 18   | 18              | 22                 | 0                 |
| 19   | 17              | 13                 | 0                 |
| 20   | 9               | 0                  | 0                 |
| 21   | 8               | 0                  | 0                 |
| 22   | 0               | 0                  | 0                 |
| 23   | 0               | 7                  | 7                 |
| 24   | 8               | 8                  | 0                 |
| 25   | 8               | 0                  | 0                 |
| 26   | 0               | 0                  | 0                 |
| 27   | 0               | 7                  | 0                 |
| 28   | 6               | 0                  | 9                 |
| 29   | 0               | 0                  | 14                |
| 30   | 0               | 7                  | 21                |
| 31   | 0               | 0                  |                   |
| Mean | 9.3             | 8.3                | 4.0               |

Relative-numbers for the central circle zone  
1934

|      | July | Aug. | Sept. |
|------|------|------|-------|
| 1    | 0    | 0    | 0     |
| 2    | 0    | 0    | 0     |
| 3    | 0    | 0    | 0     |
| 4    | 0    | 0    | 0     |
| 5    | 0    | 0    | 0     |
| 6    | 0    | 0    | 0     |
| 7    | 0    | 0    | 0     |
| 8    | 0    | 0    | 0     |
| 9    | 0    | 0    | 0     |
| 10   | 0    | 0    | 7     |
| 11   | 10   | 0    | 0     |
| 12   | 10   | 0    | 0     |
| 13   | 6    | 10   | 0     |
| 14   | 10   | 11   | 0     |
| 15   | 8    | 12   | 0     |
| 16   | 8    | 11   | 0     |
| 17   | 8    | 0    | 0     |
| 18   | 8    | 0    | 0     |
| 19   | 9    | 0    | 0     |
| 20   | 0    | 0    | 0     |
| 21   | 0    | 0    | 0     |
| 22   | 0    | 0    | 0     |
| 23   | 0    | 0    | 0     |
| 24   | 0    | 0    | 0     |
| 25   | 0    | 0    | 0     |
| 26   | 0    | 0    | 0     |
| 27   | 0    | 7    | 0     |
| 28   | 0    | 0    | 9     |
| 29   | 0    | 0    | 8     |
| 30   | 0    | 0    | 7     |
| 31   | 0    | 0    |       |
| Mean | 2.5  | 1.6  | 1.0   |

## Intensity of the ultra-violet Radiation.

(Mount Wilson)

The figures give the ratio ultra-violet  
( $\lambda = 0.32 \mu$ ) to green ( $\lambda = 0.50 \mu$ )  
(Ratio for June 1924 = 1)

1934

|      | July | Aug. | Sept. |
|------|------|------|-------|
| 1    |      | 1.10 |       |
| 2    | 0.99 |      | 0.93  |
| 3    | 0.99 | 1.01 | 0.88  |
| 4    | 1.04 |      | 1.01  |
| 5    | 1.00 | 1.09 | 0.91  |
| 6    | 1.05 | 1.14 | 0.96  |
| 7    | 0.99 | 0.97 | 1.09  |
| 8    | 1.00 | 0.93 | 1.00  |
| 9    | 1.00 | 0.91 | 0.98  |
| 10   | 0.99 | 0.94 | 0.97  |
| 11   | 0.96 | 0.88 | 0.98  |
| 12   | 0.93 | 0.91 | 1.04  |
| 13   | 0.96 | 0.96 | 0.96  |
| 14   | 0.96 |      | 0.96  |
| 15   | 0.99 | 0.96 | 1.00  |
| 16   | 0.94 | 0.90 | 0.98  |
| 17   | 1.03 |      |       |
| 18   |      |      | 1.09  |
| 19   | 1.05 |      | 0.88  |
| 20   | 1.17 | 0.88 | 1.04  |
| 21   | 1.14 | 1.03 | 1.03  |
| 22   |      | 1.07 |       |
| 23   |      | 0.96 |       |
| 24   | 1.03 | 0.93 |       |
| 25   | 0.96 | 1.03 |       |
| 26   |      | 0.99 |       |
| 27   |      | 0.94 | 1.00  |
| 28   | 0.99 | 0.91 | 0.99  |
| 29   | 0.94 | 0.96 | 0.93  |
| 30   | 0.93 |      | 0.98  |
| 31   | 0.96 |      |       |
| Mean | 1.00 | 0.97 | 0.98  |

- a Passage of an average sized group through the central meridian.  
 b Passage of a large group or spot through the central meridian.  
 c = New formation of a centre of activity. E: on the eastern part of the sun's disc, W: on the western part, M: in the central circle zone.  
 d Entrance of a large or average sized centre of activity on the east limb.

Zurich, December 21, 1934.

W. Brunner

## ÉRUPTIONS CHROMOSPHÉRIQUES

observées au spectrohélioscope.

Aucun phénomène chromosphérique pouvant être considéré comme une éruption n'a été signalé pendant le troisième trimestre 1934.

Meudon, 21 décembre 1934.

L. d'Azambuja

## Sunspot Activity.

|                  | Number of observations | Reduction-factor on Wolf's unit |              | Number of comparisons |
|------------------|------------------------|---------------------------------|--------------|-----------------------|
|                  |                        | whole disc                      | central zone |                       |
| Batavia          |                        |                                 |              |                       |
| Catania          | 56                     | 0.62                            | 0.86         | 51                    |
| Greenwich        | 54                     | 0.68                            | 0.69         | 49                    |
| Kiew             | 37                     | 0.71                            | 1.03         | 35                    |
| Lyons            | 40                     | 0.82                            | 0.81         | 38                    |
| Roma/Campidoglio | 30                     | 0.71                            | 0.96         | 28                    |
| South Hadley     | 60                     | 0.90                            | 1.07         | 56                    |
| Stonyhurst       | 44                     | 0.82                            | 1.04         | 38                    |
| Tokyo            | 52                     | 0.64                            | 0.84         | 49                    |
| Wellington       | 25                     | 0.83                            | 0.84         | 21                    |
| Zürich/Arosa     | 84                     | 0.60                            | 0.60         | —                     |

Relative-numbers for the whole sun disc  
1934

|      | Oct. | Nov.   | Dec.    |
|------|------|--------|---------|
| 1    | 15   | 13     | 27      |
| 2    | 0    | 14     | 20      |
| 3    | 0    | 16     | 12      |
| 4    | 8    | 14     | 14      |
| 5    | 0    | 12     | W 14 c  |
| 6    | 0    | 14     | 10      |
| 7    | 0    | 10     | 13      |
| 8    | 0    | 8      | 11      |
| 9    | 0    | 10     | 0       |
| 10   | 0    | 7      | 0       |
| 11   | 7    | 7      | 0       |
| 12   | 8    | 7      | 0       |
| 13   | 8    | 0      | 0       |
| 14   | 8    | 0      | 0       |
| 15   | 9    | 0      | 0       |
| 16   | 9    | 0      | 0       |
| 17   | 8    | 0      | 0       |
| 18   | 8    | 7      | 0       |
| 19   | 14   | 0      | 0       |
| 20   | 0    | 0      | E 14 c  |
| 21   | 0    | 0      | 24      |
| 22   | 7    | 0      | 21      |
| 23   | 8    | 0      | 27      |
| 24   | 0    | 0      | 25 a    |
| 25   | 7    | 7      | E 47 cc |
| 26   | 7    | M 11 c | 37      |
| 27   | 7    | 14     | 29      |
| 28   | 7    | 23     | 35 a    |
| 29   | 9    | W 35 c | 31      |
| 30   | 16   | 31     | 36 a    |
| 31   | 8    |        | 31      |
| Mean | 5.7  | 8.7    | 15.4    |

Relative-numbers for the central circle zone  
1934

|      | Oct. | Nov. | Dec. |
|------|------|------|------|
| 1    | 0    | 0    | 0    |
| 2    | 0    | 0    | 0    |
| 3    | 0    | 0    | 0    |
| 4    | 8    | 0    | 0    |
| 5    | 0    | 9    | 0    |
| 6    | 0    | 3    | 0    |
| 7    | 0    | 10   | 0    |
| 8    | 0    | 8    | 0    |
| 9    | 0    | 0    | 0    |
| 10   | 0    | 0    | 0    |
| 11   | 0    | 0    | 0    |
| 12   | 0    | 0    | 0    |
| 13   | 0    | 0    | 0    |
| 14   | 0    | 0    | 0    |
| 15   | 0    | 0    | 0    |
| 16   | 0    | 0    | 0    |
| 17   | 7    | 0    | 0    |
| 18   | 8    | 7    | 0    |
| 19   | 7    | 0    | 0    |
| 20   | 0    | 0    | 0    |
| 21   | 0    | 0    | 0    |
| 22   | 0    | 0    | 10   |
| 23   | 8    | 0    | 18   |
| 24   | 0    | 0    | 17   |
| 25   | 0    | 0    | 10   |
| 26   | 0    | 0    | 8    |
| 27   | 0    | 7    | 8    |
| 28   | 0    | 13   | 15   |
| 29   | 10   | 11   | 21   |
| 30   | 16   | 0    | 15   |
| 31   | 8    |      | 14   |
| Mean | 2.3  | 2.3  | 4.4  |

## Intensity of the ultra-violet Radiation.

(Mount Wilson)

The figures give the ratio ultra-violet  
( $\lambda = 0.32 \mu$ ) to green ( $\lambda = 0.50 \mu$ )  
(Ratio for June 1924 = 1)

1934

|      | Oct. | Nov. | Dec. |
|------|------|------|------|
| 1    | 1.00 |      | 1.17 |
| 2    | 0.99 |      | 1.06 |
| 3    |      | 0.97 | 1.01 |
| 4    | 1.07 |      |      |
| 5    | 0.96 | 1.00 |      |
| 6    |      | 1.03 | 1.16 |
| 7    | 1.11 |      |      |
| 8    | 0.96 | 0.99 |      |
| 9    | 0.93 |      |      |
| 10   | 1.08 | 0.96 |      |
| 11   | 1.01 | 0.91 |      |
| 12   | 1.02 | 0.98 |      |
| 13   | 1.03 | 0.96 |      |
| 14   | 1.09 |      |      |
| 15   |      | 1.02 |      |
| 16   |      |      | 1.17 |
| 17   |      |      | 1.23 |
| 18   |      |      |      |
| 19   |      |      | 1.26 |
| 20   | 1.07 | 1.19 | 1.13 |
| 21   | 1.08 |      | 1.10 |
| 22   | 1.07 |      |      |
| 23   | 1.14 | 1.11 | 1.01 |
| 24   | 1.05 | 1.20 | 1.01 |
| 25   |      | 1.08 | 1.01 |
| 26   | 0.96 |      | 1.07 |
| 27   | 1.09 |      |      |
| 28   | 1.02 | 1.17 |      |
| 29   |      |      |      |
| 30   | 1.01 | 1.14 | 0.97 |
| 31   |      |      | 1.01 |
| Mean | 1.03 | 1.05 | 1.09 |

- a Passage of an average sized group through the central meridian.  
 b Passage of a large group or spot through the central meridian.  
 c = New formation of a centre of activity. E: on the eastern part of the sun's disc, W: on the western part, M: in the central circle zone.  
 d Entrance of a large or average sized centre of activity on the east limb.  
 Zurich, March 4, 1935.

W. Brunner

ÉRUPTIONS CHROMOSPHÉRIQUES BRILLANTES  
observées au spectrohélioscope.

| Observatoire        | Date    | Heures d'observation | Coordonnées approximatives |                  | Inten-<br>sité | Remarques  |
|---------------------|---------|----------------------|----------------------------|------------------|----------------|--|
|                     | 1934    | T. C. G.             | $\varphi$                  | Dist. mér. cent. |                |  |
| Cambridge (England) | déc. 7  | 13 h 6 m             | 24° S.                     | 70° W.           | 1              | Very brilliant small patches. Also shown on spectroheliogram in K 2.3.2. on recently formed group. |
| Cambridge (England) | déc. 31 | 13 h 48 m            | 24° S.                     | 10° W.           | 1              | Brilliant patches. Possibly return of group of Dec. 7.   |

Meudon, 4 mars 1935.

L. d'Azambuja