

Sunspots Observation 2019 OCTOBER

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Year: 2019  
 Month: October  
 OBSERVER: German Morales C.  
 Astronomia Sigma Octante

Instr.: SCT  
 Fl: 2000mm Aperture: 200mm Aperture stop used: 90mm  
 Method: Projection Image diameter: 140mm

Day UT Q g s R Ng Ns NR Sg Ss SR cR CV IS M Cld  
 Remarks

|        |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |
|--------|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|
| 1      | 1510 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40  |   |
| cirrus |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |
| 2      | 1850 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15  |   |
| 3      | 1730 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20  |   |
| 4      | 1610 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50  |   |
| 5      | 1540 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40  |   |
| 6      | 1630 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10  |   |
| 7      | 2010 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5   |   |
| 8      | 1600 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 9      | 1720 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 10     | 1710 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 11     | 1600 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 12     | 1620 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 13     | 1530 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 14     |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | * |
| rain   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |
| 15     | 1500 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |   |
| cirrus |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |
| 16     | 1845 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30  |   |
| 17     | 1730 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30  |   |
| 18     |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | X |
| issue  |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |
| 19     |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | X |
| issue  |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |
| 20     | 1520 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40  |   |
| 21     | 1710 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15  |   |
| 22     | 1620 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 23     | 1630 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 24     | 1710 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15  |   |
| 25     | 1620 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40  |   |
| 26     | 1530 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70  |   |
| 27     | 1510 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 28     | 1610 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5   |   |
| 29     | 1630 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |   |
| 30     | 1610 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10  |   |
| cirrus |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |
| 31     | 1430 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15  |   |

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Sunspots observation summary

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Monthly Mean R = 0.0  
 NR = 0.0 SR = 0.0 cR = 0.0  
 CV = 0.0 IS = 0.0  
 Q = 3.4 Cld = 19.0%

The Sun has been observed 28 days on 31 possible.  
 1 cloudy day impede observe the Sun

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Column Headings

UT: UTC at middle of observation  
 Q: Quality seeing  
 1 Bad, 2 Poor, 3 Fair, 4 Good, 5 Excelent

R: Wolf relative number for whole disc  
 g: Total Groups, s: Total Spots  
 NR: Wolf Relative number North hemisphere  
 Ng: North Groups, Ns: North Spots  
 SR: Wolf Relative number South hemisphere  
 Sg: South Groups, Ss: South Spots  
 cR: Wolf Relative number Central  
 CV: Classification Value after Malde for whole disc  
 IS: Inter Sol index for whole disc

M: ! Cloudy all day  
 \* Cloudy at observation hours  
 X Impossible to make any kind of observation  
 Cld: Percentage of cloudy sky

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