

Sunspots Observation 2020 FEBRUARY

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Year: 2020  
 Month: February  
 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   | 1410 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 25 |        |   |     |            |
| 2   | 1550 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 40 | raIn   |   |     |            |
| 3   | 1940 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 20 | RAin   |   |     |            |
| 4   | 1530 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 80 | cirrus |   |     |            |
| 5   | 1700 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 30 |        |   |     |            |
| 6   |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | * 100 raIn |
| 7   | 1630 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 60 | RaIn   |   |     |            |
| 8   |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | ! 100 RAIN |
| 9   |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | ! 100 RAIn |
| 10  |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | ! 100 raIn |
| 11  |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | ! 100 rAIn |
| 12  | 1850 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 25 |        |   |     |            |
| 13  | 1710 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 30 |        |   |     |            |
| 14  |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | * 100      |
| 15  | 1630 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 50 |        |   |     |            |
| 16  | 1940 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 40 |        |   |     |            |
| 17  |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | * 100      |
| 18  |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | * 100 RAIn |
| 19  |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | * 100 raIn |
| 20  |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | ! 100 RAIn |
| 21  | 1800 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 60 | rAIN   |   |     |            |
| 22  | 1610 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 50 | Rain   |   |     |            |
| 23  | 1800 | 4 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 5  |        |   |     |            |
| 24  | 1730 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 25 |        |   |     |            |
| 25  | 1540 | 4 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | raiN   |   |     |            |
| 26  |      |   |   |   |   |    |    |    |    |    |    |    |    |        |   |     | ! 100 RAIn |
| 27  | 1850 | 4 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 5  | raIn   |   |     |            |
| 28  | 1630 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 5  |        |   |     |            |
| 29  | 1600 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 15 |        |   |     |            |

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Sunspots observation summary

Year: 2020  
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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 = 3.2 Cld = 57.4%

The Sun has been observed 18 days on 29 possible.  
 11 cloudy days 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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