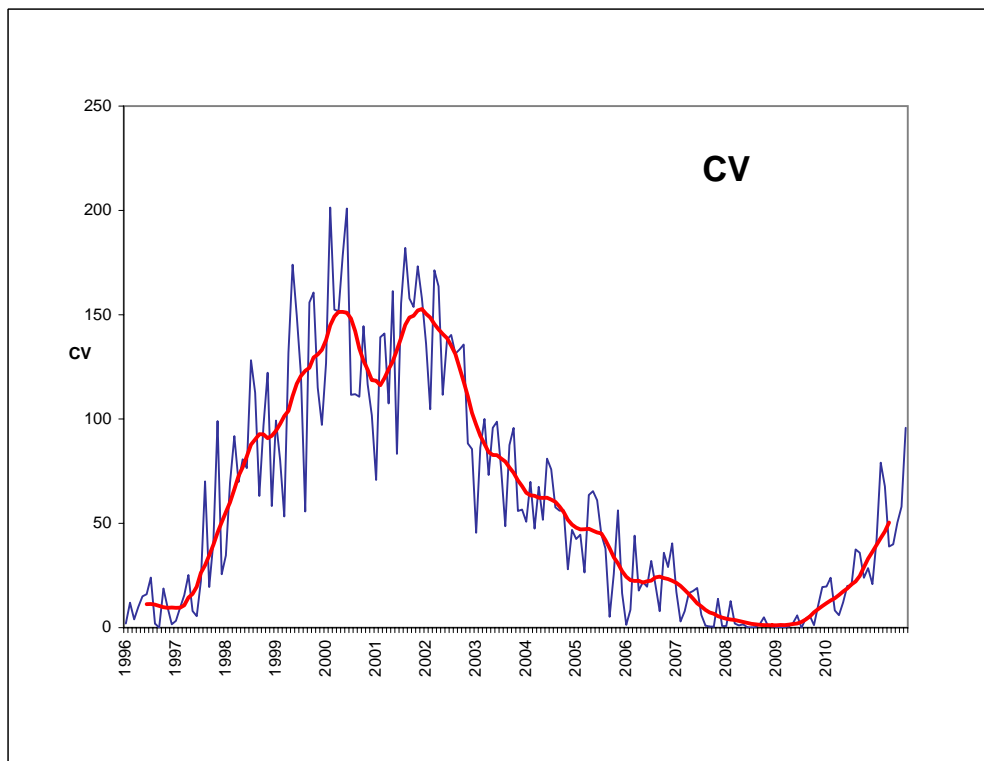
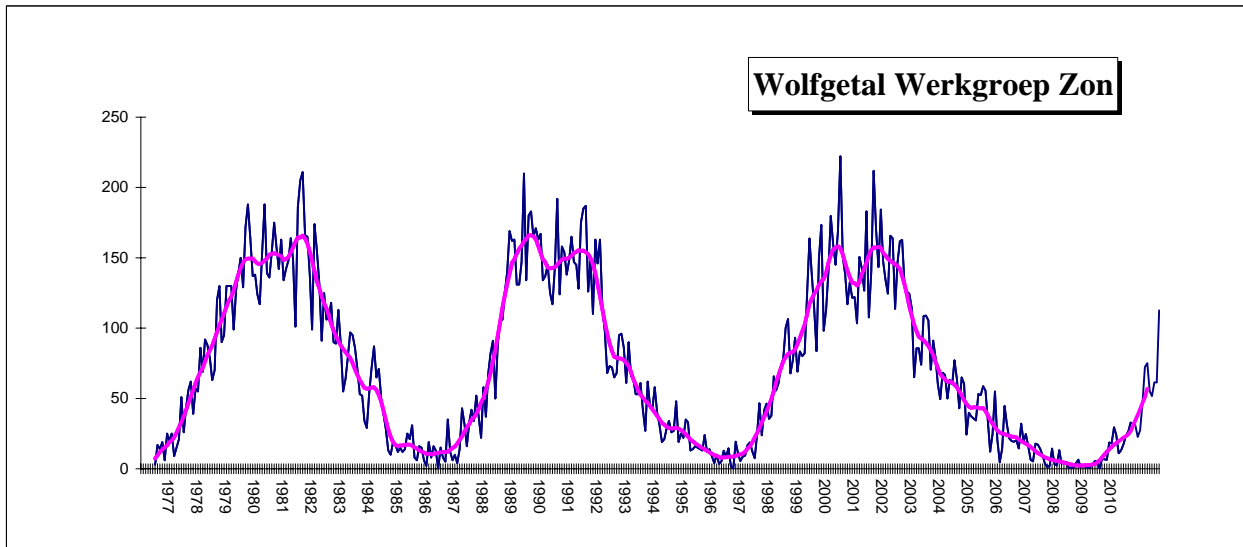


# NIEUWSBRIEF V.V.S. WERKGROEP ZON

|   |               |             |                |
|---|---------------|-------------|----------------|
| Waarnemingsresultaten en nieuws voor zonnewaarnemers  | Jaargang : 16 | Nummer: 187 | September 2011 |
| Franky Dubois Poelkappellestraat 57 Langemark 8920  |               |             |                |
| Web site: <a href="http://www.bso.vvs.be/">http://www.bso.vvs.be/</a> e-mail <a href="mailto:astrosun@skynet.be">astrosun@skynet.be</a> |               |             |                |

Op 1 januari stopt de werkgroep met het verwerken van de Rp waarden , dit wil niet zeggen dat je geen waarnemingen van Rp meer kan toesturen. Alle waarnemingen die ontvangen worden gaan rechtstreeks in de database van de werkgroep.



## Gemiddelden werkgroep zon September 2011

|                  |               |               |       |     |       |
|------------------|---------------|---------------|-------|-----|-------|
| Groepen : N      | 5,17          | Wolfgetal : N | 86,6  | RE' | 923,2 |
| S                | 1,80          | S             | 25,9  | CV  | 95,8  |
| N+S              | 6,97          | N+S           | 112,6 | SN  | 117,2 |
| 390 waarnemingen | 26 waarnemers |               |       | IS  | 61,6  |



# Sunspotnumbers VVS Belgium

Month: **September 2011**

| Day | GROUPS      |             |             | WOLFNUMBER  |             |              |              |             |              |             |            |
|-----|-------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|--------------|-------------|------------|
|     | N           | S           | N+S         | N           | S           | N+S          | RE'          | CV          | SN           | IS          | OBS        |
| 1   | 5           | 2           | 7           | 83,7        | 38          | <b>121,9</b> | 850          | 90          | 139,5        | 68          | 20         |
| 2   | 6           | 1           | 7           | 104,6       | 24          | <b>128,5</b> | 1005         | 88,5        | 132,3        | 71          | 17         |
| 3   | 7           | 1           | 8           | 110,4       | 26          | <b>136,2</b> | 973          | 78,5        | 141,5        | 73,7        | 23         |
| 4   | 4           | 2           | 6           | 76,4        | 30          | <b>105,9</b> | 765          | 86,3        | 135          | 47          | 9          |
| 5   | 4           | 2           | 6           | 75,1        | 27          | <b>102,3</b> | 927          | 74          | 125,8        | 62,7        | 19         |
| 6   | 3           | 2           | 5           | 46,8        | 31,2        | <b>78,0</b>  | 774          | 53,5        | 109          | 50          | 6          |
| 7   | 3           | 2           | 5           | 44,8        | 25,5        | <b>70,3</b>  | 600          | 68          | 53           | 37          | 7          |
| 8   | 2           | 1           | 3           | 51,0        | 14,0        | <b>65,0</b>  | 506          |             |              |             | 1          |
| 9   | 3           | 2           | 5           | 48,4        | 27,6        | <b>76,0</b>  | 469          | 63          | 69           |             | 2          |
| 10  | 3           | 2           | 5           | 43,2        | 28,6        | <b>71,8</b>  | 481          | 83,2        | 77,3         | 31          | 14         |
| 11  | 4           | 2           | 6           | 50,8        | 32,7        | <b>83,5</b>  | 450          | 89,7        | 82           | 38          | 8          |
| 12  | 5           | 4           | 9           | 70,5        | 49,2        | <b>119,7</b> | 493          | 92          | 102          | 51          | 10         |
| 13  | 5           | 4           | 9           | 78,5        | 55,8        | <b>134,3</b> | 758          | 112         | 124,5        | 79          | 15         |
| 14  | 6           | 4           | 10          | 80,9        | 71,2        | <b>152,1</b> | 787          | 119,3       | 134          | 76          | 17         |
| 15  | 7           | 4           | 11          | 120,3       | 51,7        | <b>172,0</b> | 1079         | 111,2       | 151          | 92,5        | 14         |
| 16  | 7           | 4           | 11          | 108,9       | 52,3        | <b>161,2</b> | 1401         | 153,4       | 224,5        | 115,5       | 12         |
| 17  | 8           | 4           | 12          | 112,0       | 54,6        | <b>166,6</b> | 1091         | 117,0       | 123,5        | 67          | 7          |
| 18  | 6           | 1           | 7           | 111,5       | 22,9        | <b>134,4</b> | 966          | 96,6        | 142          | 78          | 15         |
| 19  | 6           | 2           | 8           | 105,1       | 25,2        | <b>130,3</b> | 1083         | 113         | 128          | 64          | 12         |
| 20  | 5           | 1           | 6           | 104,0       | 21,2        | <b>125,2</b> | 1218         | 98          | 127          |             | 8          |
| 21  | 4           | 1           | 5           | 98,8        | 13,8        | <b>112,6</b> | 1040         | 76,5        | 103,5        | 47          | 3          |
| 22  | 4           | 2           | 6           | 88,8        | 21,0        | <b>109,8</b> | 860          | 102         | 97           | 48          | 7          |
| 23  | 4           | 0           | 4           | 82,1        | 0,0         | <b>82,1</b>  | 935          | 126,7       | 106          | 48          | 9          |
| 24  | 5           | 1           | 6           | 91,5        | 9,4         | <b>100,9</b> | 1062         | 126,3       | 101,8        | 50          | 21         |
| 25  | 6           | 1           | 7           | 98,7        | 16          | <b>114,8</b> | 1172         | 111,3       | 118,5        | 81,5        | 18         |
| 26  | 5           | 1           | 6           | 91,8        | 5           | <b>96,5</b>  | 1119         | 88          | 138          | 66          | 20         |
| 27  | 6           | 0           | 6           | 103,8       | 0           | <b>103,8</b> | 1201         | 92,6        | 91,8         | 54          | 15         |
| 28  | 7           | 0           | 7           | 102,6       | 0,0         | <b>102,6</b> | 1071         | 86,7        | 106,7        | 59          | 20         |
| 29  | 8           | 0           | 8           | 112,2       | 0,0         | <b>112,2</b> | 1300         | 95,8        | 120          | 63,5        | 19         |
| 30  | 7           | 1           | 8           | 101,4       | 5           | <b>106,0</b> | 1261         | 86,3        | 95,5         | 45,5        | 22         |
|     | <b>5,17</b> | <b>1,80</b> | <b>6,97</b> | <b>86,6</b> | <b>25,9</b> | <b>112,6</b> | <b>923,2</b> | <b>95,8</b> | <b>117,2</b> | <b>61,6</b> | <b>390</b> |

Monthly mean: **112,6** Covering: **30/30** Spotless days: **0**  
 Observations: **390** Number of observers: **26**

## V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS

Poekapellestraat 39  
 B8920 Langemark  
 Belgium  
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### Observers:

E.De Ceuninck ; J.Janssens ; Publ obs Mira ; J.Bourgeois ; R.Dezeure ; F.Feys  
 H. De Backer; F.Dubois ; B.Taillieu ; J.Carels ; K. Dewaele  
 L.Meeus ; O.Steen ; KSB ; L.Claeys ; B.Thooris ; J.Bonse  
 J.Claes ; R.Verboven ; F. Van Loo ; A.T.Son ; H.Coeckelberghs  
 G.Gubbels ; J Bavais ; D.Van Hessche; E.Neven ; R.De Laet



# Prominence number Rp

## Belgian solar observers

Month: **September 2011**

| Day | Q           | Wedel       |  | H          | e           | Rp           | el. Obs   | Stdev       | OBS        |
|-----|-------------|-------------|--|------------|-------------|--------------|-----------|-------------|------------|
| 1   | 4           | 2,1         |  | 7,6        | 13,8        | <b>89,8</b>  |           | 26,1        | 8          |
| 2   | 3,4         | 2,1         |  | 7,3        | 15,3        | <b>88,3</b>  |           | 27,2        | 7          |
| 3   | 3,8         | 1,5         |  | 11         | 17          | <b>127</b>   | 2         | 24          | 8          |
| 4   | 3,3         | 1,5         |  | 8,5        | 13          | <b>98</b>    | 1         | 22,6        | 3          |
| 5   | 3,8         | 2           |  | 8,3        | 17,5        | <b>100,5</b> | 1         | 11,5        | 7          |
| 6   | 3,5         | 1           |  | 7          | 12          | <b>82</b>    |           |             | 1          |
| 7   | 3,3         | 2,5         |  | 9          | 12,5        | <b>102,5</b> |           | 19,1        | 2          |
| 8   | 4           | 1           |  | 6          | 8           | <b>68</b>    |           |             | 1          |
| 9   |             |             |  |            |             |              |           |             |            |
| 10  | 3,9         | 2           |  | 8,3        | 15          | <b>98</b>    |           | 17,4        | 4          |
| 11  | 4           | 1,5         |  | 7,5        | 13,5        | <b>88,5</b>  | 1         | 16,3        | 3          |
| 12  | 3,5         | 1,8         |  | 9          | 19,7        | <b>109,7</b> |           | 19,6        | 3          |
| 13  | 3,6         | 1,8         |  | 7,3        | 17,5        | <b>90,5</b>  | 1         | 14,2        | 5          |
| 14  | 3,8         | 1,7         |  | 7          | 10          | <b>80</b>    | 1         | 17,7        | 6          |
| 15  | 4,5         | 1,5         |  | 4,8        | 7,6         | <b>55,6</b>  | 1         | 20,6        | 6          |
| 16  | 3,3         | 2,5         |  | 4,5        | 7,5         | <b>52,5</b>  |           | 10,6        | 2          |
| 17  | 4,3         | 1,5         |  | 8,5        | 12,5        | <b>97,5</b>  |           | 10,6        | 2          |
| 18  | 4           | 1,6         |  | 7,3        | 12,3        | <b>85,3</b>  | 1         | 5,9         | 5          |
| 19  | 3,6         | 1,9         |  | 9,8        | 14,8        | <b>112,8</b> |           | 15,5        | 4          |
| 20  | 3,8         | 2           |  | 8          | 13,7        | <b>93,7</b>  | 1         | 25          | 4          |
| 21  | 4           | 1,5         |  | 7,5        | 12,5        | <b>87,5</b>  |           | 9,2         | 2          |
| 22  | 3,7         | 2,3         |  | 7          | 17,3        | <b>87,3</b>  |           | 5,5         | 3          |
| 23  | 4           | 2           |  | 9,5        | 16          | <b>111</b>   |           | 11,3        | 2          |
| 24  | 3,8         | 1,6         |  | 8,4        | 14,9        | <b>98,9</b>  | 1         | 6,5         | 8          |
| 25  | 3,6         | 1,6         |  | 9,1        | 15,9        | <b>106,9</b> | 1         | 24,3        | 8          |
| 26  | 4           | 1,7         |  | 8,4        | 12,2        | <b>96,2</b>  | 1         | 9,9         | 6          |
| 27  | 4,1         | 1,5         |  | 6,5        | 13,3        | <b>78,3</b>  | 1         | 22,2        | 5          |
| 28  | 3,8         | 1,8         |  | 9,6        | 18          | <b>114</b>   | 1         | 15,3        | 6          |
| 29  | 3,6         | 2           |  | 8,4        | 15          | <b>99</b>    | 1         | 18,8        | 6          |
| 30  | 4           | 2           |  | 8,4        | 11,8        | <b>95,8</b>  | 1         | 21,8        | 6          |
|     | <b>3,79</b> | <b>1,78</b> |  | <b>7,9</b> | <b>13,8</b> | <b>92,9</b>  | <b>17</b> | <b>16,6</b> | <b>133</b> |

Monthly mean: **92,9** Covering: **29/30**  
 Observations: **133** Number of observers: **9**

**V.V.S. BELGIUM SOLAR SECTION FRANKY DUBOIS**

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 e-mail : astrosun@skynet.be

**Observers:**

**Steen ; Dubois ; De Ceuninck ; Coeckelberghs ; Janssens ; Feys  
 Hamsch ; Claes ; G.Gubbels ; T.Spaninks ; R.Blondeel;R.Verboven**

**Q : Seeing scale SIDC**

**W : transparency scale of Wedel , see <http://members.chello.be/j.janssens/>**

**H : number of prominence groups at the limb**

**e : total of individual prominences at the limb**

**Rp :  $H*10+e$**

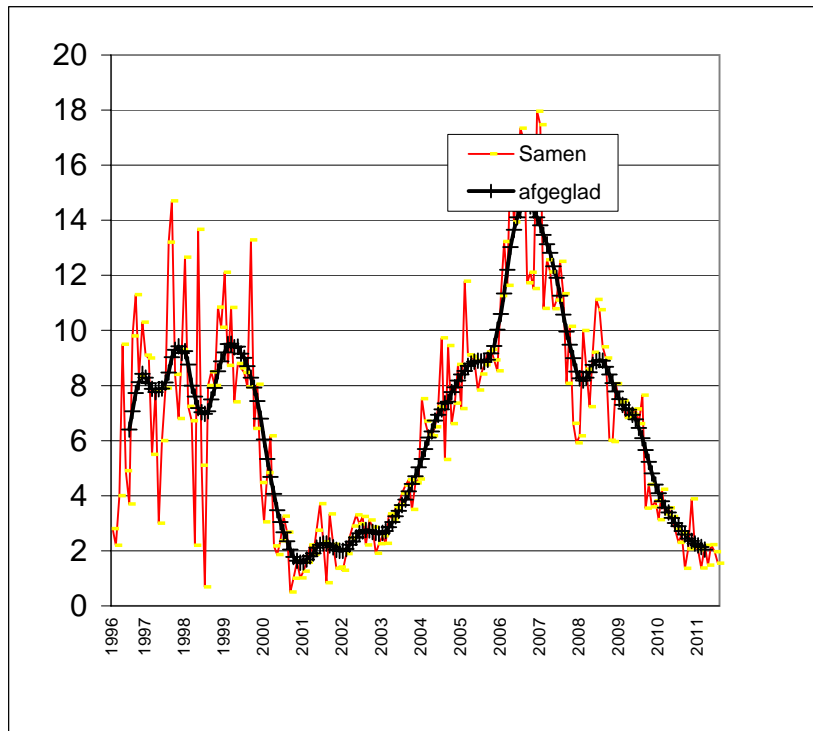
**More info at : <http://members.chello.be/j.janssens/>**

# Belgian Solar Observers

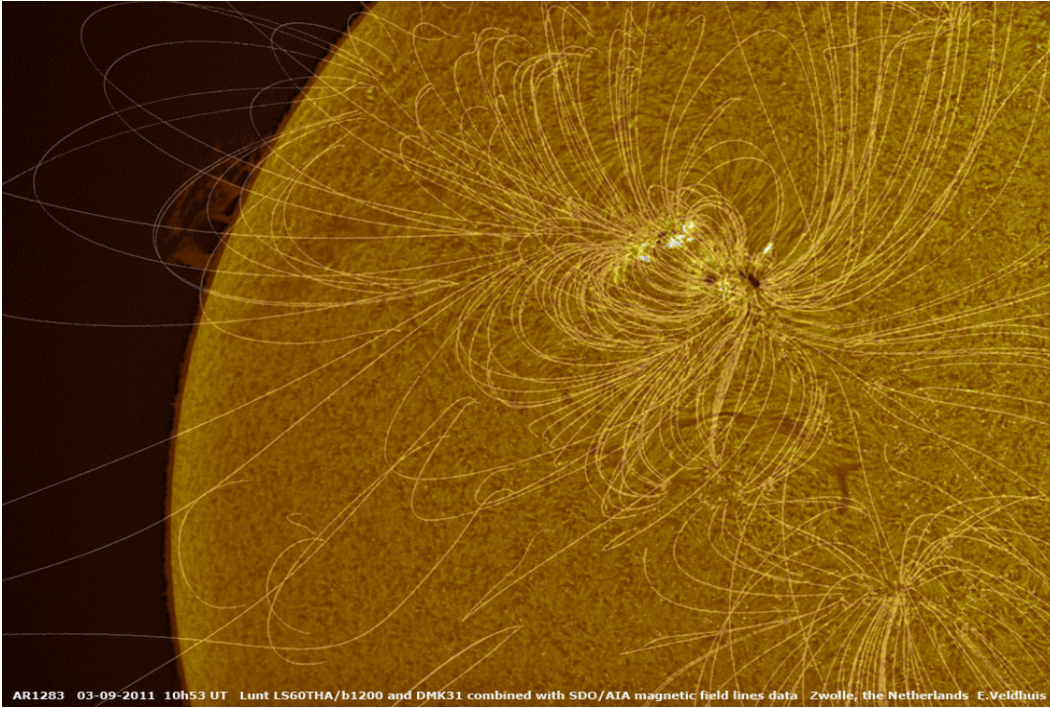
## Polar Faculae

Month: September 2011

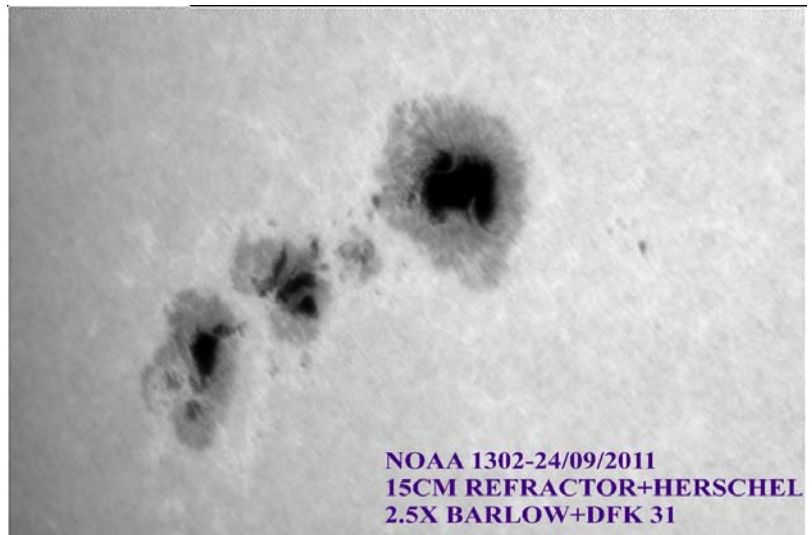
| Date | Dubois<br>125mm F20 |       |   | Steen<br>102mm F15 |       |   | T.Spaninks<br>127mm F15 |       |   | G.Gubbels<br>114mm F7,8 |       |     | J.Carels |       |   | Janssen<br>200mmF10 |       |   |
|------|---------------------|-------|---|--------------------|-------|---|-------------------------|-------|---|-------------------------|-------|-----|----------|-------|---|---------------------|-------|---|
|      | North               | South | Q | North              | South | Q | North                   | South | Q | North                   | South | Q   | North    | South | Q | North               | South | Q |
|      | 1                   | 1     | 0 | 3                  | 0     | 0 |                         | 0     | 0 | 4                       | 3     | 2   | 4        |       |   |                     |       |   |
| 2    | 0                   | 1     | 4 | 0                  | 1     |   | 0                       | 0     | 3 |                         |       |     |          |       |   |                     |       |   |
| 3    | 1                   | 0     | 4 | 0                  | 0     |   | 0                       | 0     | 4 | 3                       | 2     | 4   |          |       |   | 0                   | 0     | 4 |
| 4    | 0                   | 0     | 4 |                    |       |   |                         |       |   | 3                       | 1     | 2.5 |          |       |   |                     |       |   |
| 5    | 0                   | 0     | 3 | 0                  | 0     |   | 0                       | 0     | 3 | 4                       | 3     | 3.5 |          |       |   |                     |       |   |
| 6    |                     |       |   |                    |       |   |                         |       |   | 3                       | 2     | 3.5 |          |       |   |                     |       |   |
| 7    | 1                   | 0     | 3 |                    |       |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 8    |                     |       |   |                    |       |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 9    |                     |       |   |                    |       |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 10   |                     |       |   | 2                  | 0     |   |                         |       |   |                         |       |     |          |       |   | 1                   | 0     | 4 |
| 11   |                     |       |   |                    |       |   |                         |       |   | 3                       | 2     | 3   |          |       |   |                     |       |   |
| 12   |                     |       |   |                    |       |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 13   | 0                   | 0     | 3 | 2                  | 0     |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 14   | 0                   | 0     | 3 | 1                  | 0     |   | 0                       | 0     | 4 |                         |       |     |          |       |   |                     |       |   |
| 15   | 1                   | 1     | 4 | 1                  | 1     |   |                         |       |   | 3                       | 2     | 4   |          |       |   |                     |       |   |
| 16   |                     |       |   | 0                  | 1     |   |                         |       |   | 4                       | 2     | 4   |          |       |   |                     |       |   |
| 17   |                     |       |   | 0                  | 0     |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 18   | 3                   | 1     | 4 | 0                  | 0     |   |                         |       |   | 2                       | 1     | 3.5 |          |       |   | 0                   | 0     | 4 |
| 19   |                     |       |   | 0                  | 0     |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 20   |                     |       |   |                    |       |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 21   |                     |       |   | 0                  | 0     |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
| 22   |                     |       |   | 1                  | 2     |   | 0                       | 0     | 4 |                         |       |     |          |       |   |                     |       |   |
| 23   |                     |       |   | 0                  | 0     |   | 0                       | 0     | 4 |                         |       |     |          |       |   |                     |       |   |
| 24   |                     |       |   | 0                  | 0     |   |                         |       |   | 3                       | 1     | 3   |          |       |   | 0                   | 0     | 4 |
| 25   |                     |       |   |                    |       |   | 0                       | 0     | 4 | 4                       | 2     | 4.5 |          |       |   | 2                   | 0     | 4 |
| 26   |                     |       |   | 2                  | 1     |   |                         |       |   | 3                       | 2     | 3.5 |          |       |   |                     |       |   |
| 27   |                     |       |   | 1                  | 1     |   | 0                       | 0     | 4 | 5                       | 2     | 3.5 |          |       |   |                     |       |   |
| 28   |                     |       |   | 2                  | 0     |   | 0                       | 0     | 4 | 2                       | 1     | 4   |          |       |   |                     |       |   |
| 29   |                     |       |   | 1                  | 1     |   | 0                       | 0     | 4 | 3                       | 2     | 5   |          |       |   |                     |       |   |
| 30   | 2                   | 2     | 4 | 0                  | 0     |   | 0                       | 0     | 4 | 1                       | 0     | 3   |          |       |   |                     |       |   |
| 31   |                     |       |   |                    |       |   |                         |       |   |                         |       |     |          |       |   |                     |       |   |
|      | 0,82                | 0,45  |   | 0,62               | 0,38  |   | 0,0                     | 0,0   |   | 3,1                     | 1,7   |     | #####    | ##### |   | 0,60                | 0,00  |   |



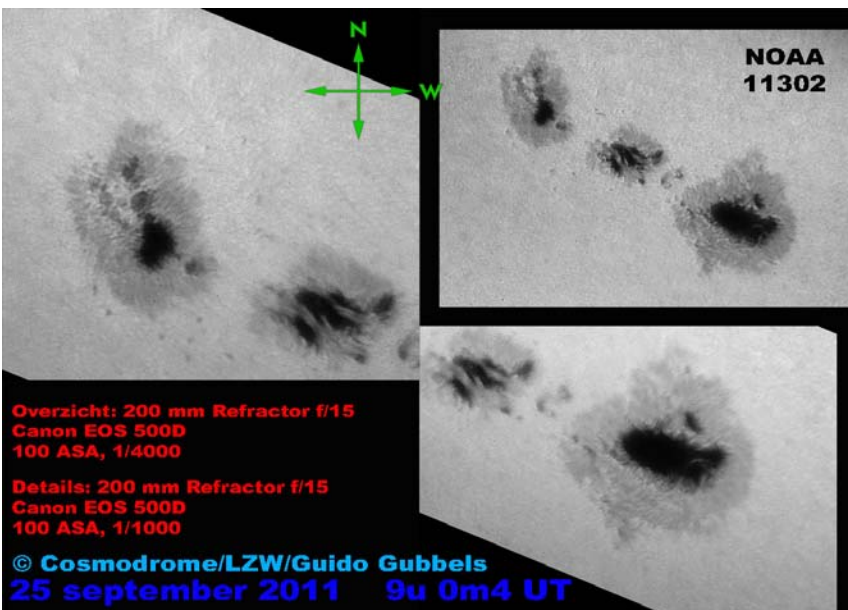
# Pictures of members



AR1283 03-09-2011 10h53 UT Lunt LS60THA/b1200 and DMK31 combined with SDO/AIA magnetic field lines data Zwolle, the Netherlands E.Veldhuis



NOAA 1302-24/09/2011  
15CM REFRACTOR+HERSCHEL  
2.5X BARLOW+DFK 31



Overzicht: 200 mm Refractor f/15  
Canon EOS 500D  
100 ASA, 1/4000

Details: 200 mm Refractor f/15  
Canon EOS 500D  
100 ASA, 1/1000

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25 september 2011 9u 0m4 UT