



The British Astronomical Association

A company limited by guarantee Registered Charity No. 210769
Ossington Chambers, 6/8 Castle Gate, Newark. NG24 1AX
Telephone: 01636 705624 Fax No.: 020 7439 4629
Email: office@britastro.org Website: www.britastro.org



BAA Solar Section Newsletter

Sunspot data 2026 June

Day	g	R
1	8	100
2	7	100
3	8	124
4	7	121
5	8	118
6	8	132
7	8	123
8	8	121
9	8	117
10	6	88
11	5	78
12	5	64
13	3	46
14	4	55
15	4	60
16	4	56
17	3	49
18	3	43
19	4	57
20	4	58
21	4	55
22	4	64
23	5	69
24	5	79
25	4	76
26	5	92
27	5	106
28	5	119
29	5	110
30	5	116

Monthly Means

MDFg:	5.32	(39 observers)
MDFNg	2.85	(33 observers)
MDFSg	2.59	(33 observers)
Mean R:	84.49	(42 observers)

**Lyn Smith, 1 Montboy Steading, Careston,
Brechin, Angus DD9 6RX, Scotland, UK.**
Telephone : 01356 630218 or mob: 07725 347711
Email: solar@britastro.org

Images for the web should be sent to
Peter Meadows: peter@petermeadows.com and
copied to me. All digital images must be in "JPEG"
format with the same orientation as naked eye
orientation. Include initials, date and time in the
file name. Keep each image file to less than 1Mb.

On-line Reporting:

<https://britastro.org/solarwl>
<https://britastro.org/solarha>

Observers:

R S Armas, Cuba	A Johnston, Denbighshire
C Bailey, Suffolk	S L Karl, Aberdeen
R Battaiola, Milan, Italy	M Kinder, Cheshire
M Boschat, Canada	L Macdonald, Berkshire
C F Bowron, South Yorks	R Mackenzie, Kent
A Bowyer, Epsom Downs	P Meadows, Essex
S Brown, Leicestershire	H Meyerdierks, Germany
M Buck, Bristol	C C Moraes, Brazil
D Buczynski, Tarbatness	L Morrone, Italy
L Cambon, France	M Nicholls, Sheffield
G Clarke, Australia	R Samworth, Leicestershire
E Colombo, Italy	J D Shanklin, Cambridge
J Cook, Wolverhampton	D Smith, Essex
P Curtin, USA	L Smith, Angus
S Dawes, London	T Tanti, Malta
A Devey, Spain	P Taylor, Coventry
R Dryden, Oxon	D Teske, Mississippi, USA
F Dubois, Belgium	C B Thielke, Denmark
T Emmett, Cambs	SOS PTMA, Poland
E Fabrigat, France	TOS, Poland
M Giuntoli, Italy	S Ove Thimm, Denmark
D Glover, Essex	P Urbanski, Poland
S Green, Lancs	G Vargas, Bolivia
K Hall, Warrington	D Vidican, Romania
B Halls, W Sussex	S Viney, Cheshire
K Hay, Canada	J Weightman
R Heard, Suffolk	A M Wood, Australia
R Hill, Arizona, USA	

The Sun in White Light – June

Both hemispheres reduced slightly in activity during the month leading to a general downward trend in the Relative Sunspot number (R) and also the Quality number (Q). However, activity for June was broadly in line with the average seen for 2026.

Thirty-one sunspot groups were allocated a Boulder number during the month with two impressive groups appearing towards the end of the month. It is often the case that the largest sunspot groups are seen during the declining phase of a sunspot Cycle.

AR14455 N14°/087° survived on the disk from previous month, now located midway across the NE quadrant. The group was type Dao with an area of 670 millionths and comprised of a large leading penumbral sunspot and a close smaller penumbral follower. By the 3rd, many more pores and small penumbral sunspots had appeared in the leading position, while the follower had reduced considerably, giving an area of 470 millionths. By the following day, there were fewer sunspots and a slightly reduced area of 440 millionths. The accompanying sunspots continued to reduce as they main sunspot progressed toward the NW limb, being close to the limb by the 8th.

AR14458 S04°/075° formed on the disk on the 2nd as a small Dsi group in an oval configuration. The group developed slightly over the next few days, but once into the SW quadrant on the 5th, the follower rapidly grew in size becoming the dominant sunspot within the group. Thereafter, sunspots began to reduce through the central portion of the group with only a small penumbral leader and larger follower remaining as the group approached the limb on the 8th.

AR14459 N14°/031° formed on the disk in the region of the NE limb on the 2nd as a small Cso type group. The following day there was development in the follower section with two small penumbral sunspots forming in close proximity, aligned north/south. The group was of similar appearance on the 3rd when it was assessed as type Dac with a total area of 230 millionths. As the group progressed towards the central meridian (CM), the two penumbral followers became less associated with the southerly sunspot being more westward than its companion. The leading sunspots within the group also declined with the group being type Cso on the 9th with an area of just 80 millionths before reducing to type Axx on the 10th.

AR14464 S12°/336° formed on the disk near the SE limb on the 6th as a small Dao type group. Development took place overnight particularly within the leader which became an asymmetrical penumbral sunspot. As the group progressed to the CM, the leader became more symmetrical in shape with a cluster of smaller sunspots strung out eastwards of the leader. These smaller sunspots varied in character and number as the group progressed across the SW quadrant. When the group was near the limb on the 16th, only the leader remained visible.

AR14465 N09°/292° rotated over the NE limb on the 8th. By the 9th the group was fully on the disk comprising of three penumbral sunspots, type Dsc with an area of 470 millionths. The group was of similar appearance on the 10th but by the 12th had started to decay. When seen on the 14th the group had reduced to a single Hax type sunspot with an area of 270 millionths and was near to the CM. However, the following day, a small accompanying penumbral sunspot formed, changing the group's classification to type Dac with an area of 280 millionths. It remained of similar type for a day or two before reducing. By the 19th the group was described as a pair of closely related penumbral sunspots with two pores accompanying them, embedded in a region of faculae, near to the NW limb.

AR14475 S09°/126° rotated over the SE limb on the 20th type Hsx. Initially it followed closely behind a smaller collection of sunspots designated AR14473 but as they rotated onto the disk, a separate Boulder number was assigned for the larger follower sunspot. By the 24th the umbra within the main sunspot had a bright light bridge across it and several pores accompanied the main sunspot. The following day, the umbra had split into three with small sunspots and rudimentary penumbra lying to the south and east of the main sunspot. The following day the main sunspot showed shape changes and the group was in the process of decay. Over the next few days with the group in the SW quadrant, the group rapidly faded but surprisingly underwent renewed growth on the 30th with the group concluding the month as type Dai.

AR14478 S05°/076° rotated into view on the 24th as a slender, elongated Hkx sunspot on the SE limb. Later that day, the leader was followed by another large penumbral sunspot. By the following day, several followers had appeared with the group already type Fkc with an estimated area of 1450 millionths. The leading sunspot had a partially bridged umbra on the 26th but it was now clear that the largest sunspot within this bipolar group was the irregular follower. The shapes of both leader and follower had changed by the 27th with several small sunspots developing between them. These had almost disappeared by the 29th but the group had increased in area to 1780 millionths. At this point, both the leader and follower were irregular, contained many umbrae and were of similar size. By the 30th, the follower had split into several penumbral sunspots while further changes could be seen within the leader. The group was by now near to the CM and was estimated to have a total area of 1640 millionths.

The group was described as “impressive” and was visible to the protected naked eye and as two visible sunspots on the 29th and 30th.

AR14479 N16°/094° was first reported as an Axx sunspot surrounded by extensive faculae in the NE quadrant on the 25th. The following day it was described as an evolving group and by the 27th it had developed into a Dao type group with an area of 160 millionths. Of note, the leader showed quite a large tilt with the follower at a higher latitude to the leaders. Rapid development took place so that by the 29th the group was of type Dki with an area of 630 millionths before becoming type Ekc with an area of 950 millionths on the 30th. The group was just west of the CM and comprised of an irregular leader and followers with several penumbral sunspots between them. This sunspot was also described as impressive and was visible to the protected naked eye as one sunspot on the 30th. Together with AR14478, the pair made a spectacular sight.

22 observers reported a Quality number of **Q = 17.20** for June.

The Sun in H-alpha Prominences

16 observers reported a prominence MDF of **6.65** for June.

The first prominence reported to the Section was on the 9th when a prominence hearth extended around the NE limb for about 70,000 km, rose to a height estimated to be 50,000 km.

An arch type prominence was seen on the W limb on the 13th at a height of 50,000 km and extended around the limb for about 110,000 km. The following day, a moderately high irregularly shaped prominence was observed on the SW limb with most of the prominence detached from the limb.

An inclined pillar prominence which was described as “very active” was on the NW limb on the 17th. It reached a height of 100,000 km during the observation.

A large hedgerow type prominence was reported on the NE limb on the 19th and an active prominence that underwent rapid change for 90 minutes on the E limb. The active prominence had an arch like appearance during its mid to latter stages.

On the 20th a broken arch prominence was on the NW limb and a flame type prominence was seen on the NE limb. The latter was much reduced the following day due to it rotating from the limb into the NE quadrant.

A broken pyramid prominence was on the NW limb on the 24th which was still present the following day but in the form of a single inclined pillar.

Filaments & Plage

16 observers reported a filament MDF of **8.97** and 15 observers reported a plage MDF of **5.13** for June.

A long filament, roughly north/south aligned was in the SW quadrant on the 9th and 10th. The filament was estimated to be around 260,000 km in length, possibly a little shorter on the 10th. This feature gave rise to the arch prominence reported above on the 13th.

A feather-shaped filament was reported in the NE quadrant on the 13th which was still present the following day.

Several filaments were seen associated with AR14471 on the 19th which was located in the northern hemisphere near to the CM.

A long east/west aligned filament was seen at quite high latitude in the southern hemisphere on the 20th and 21st. On the 21st a fila-prom was seen extending from the NE limb, the filament element being dark and forked. This filament was observed again on the 24th in the NE quadrant, again quite dark and serrated in appearance. The feature was estimated to be around 250,000 km in length on the 24th and 25th and it persisted to the end of the month crossing into the NW quadrant on the 27th.

Semi-circular plage was seen in the following area of AR14475 on the 24th which was quite pronounced. Plage was still apparent within the group the following day but not so significant.

On the 29th, a bright region of plage was seen in the following position of AR14479, extending considerably in latitude (no associated flare observed).

Polar Faculae

Brian Halls reported a high latitude polar faculae MDF of **0.71** for June.

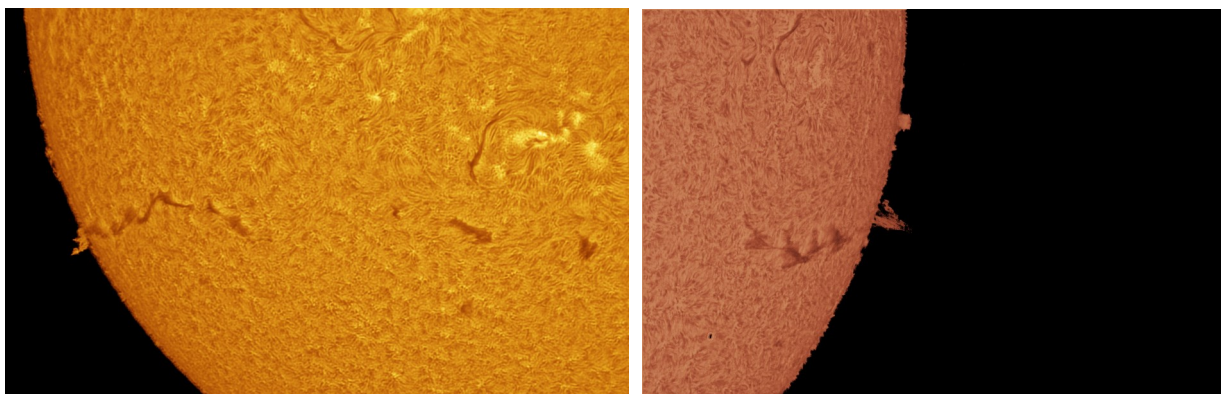
Flares

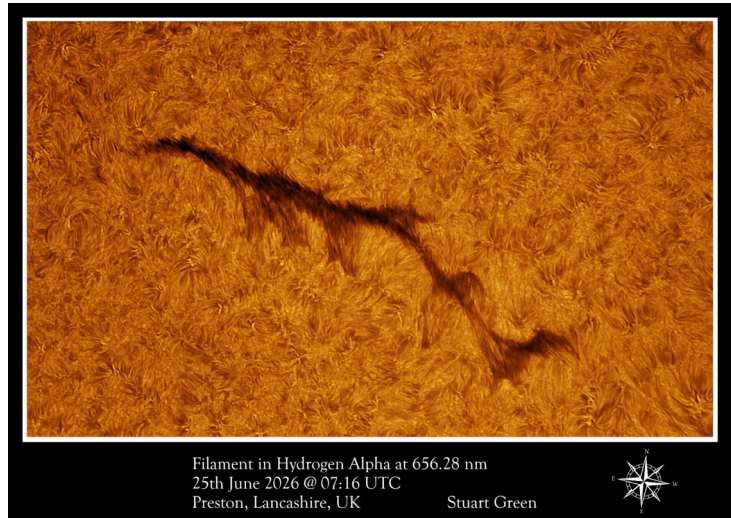
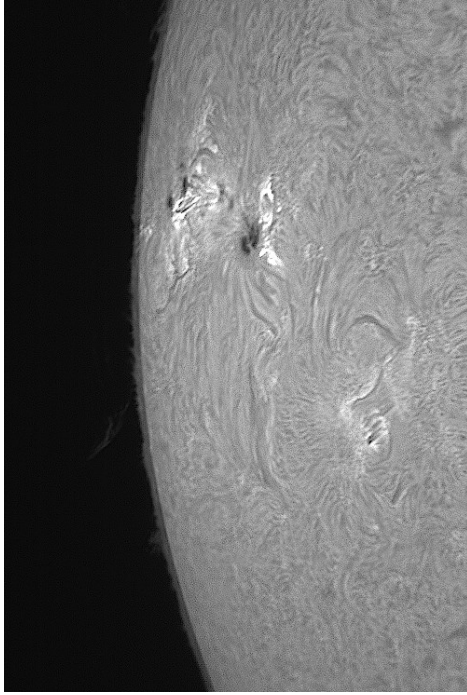
Numerous B and C class flares were reported during the month associated with active areas AR14455/56/65/75/78/79. Andy Devey reported an M7 class flare in association with AR14475 on the 30th at 1252 UT.



Above: A montage by Rik Hill showing sunspot groups across the solar disk on the 4th imaged at 2143 UT.

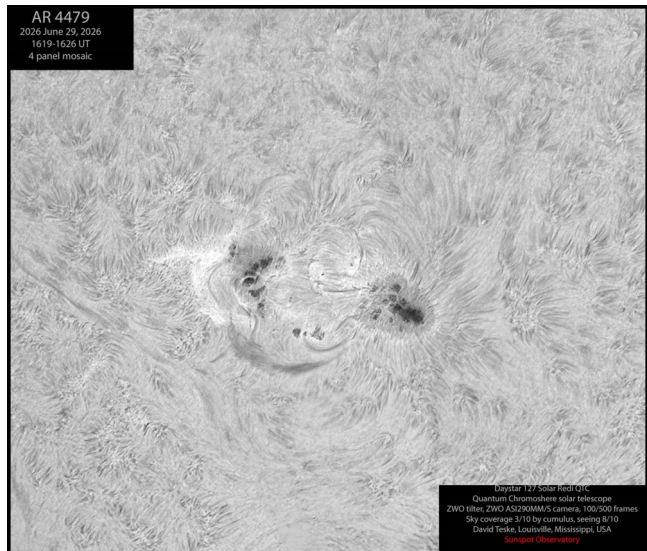
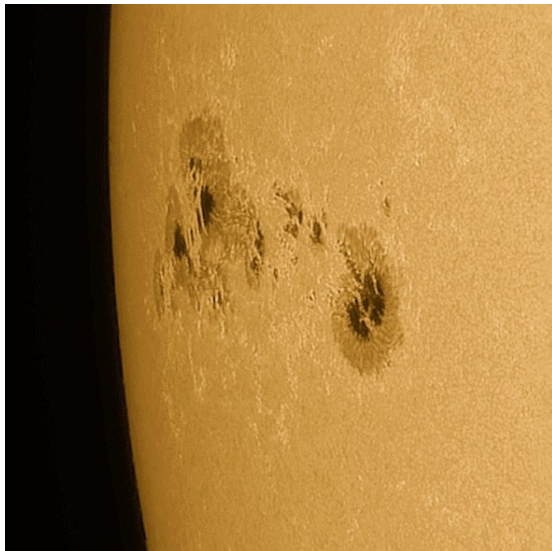
Below: A long filament near the SE limb (left) imaged by Dave Smith on the 17th and the same feature (right) imaged by Chris Bailey on the 26th with the filament approaching the SW limb.





Left: C2 flare associated with AR14478 imaged by Brian Halls on the 25th at 0830 UT

Above: The dark multi-arch filament in the NE quadrant imaged by Stuart Green on the 25th at 0716 UT

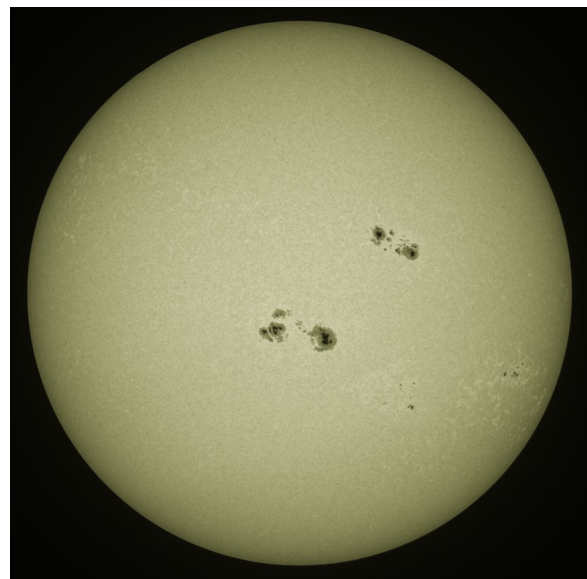
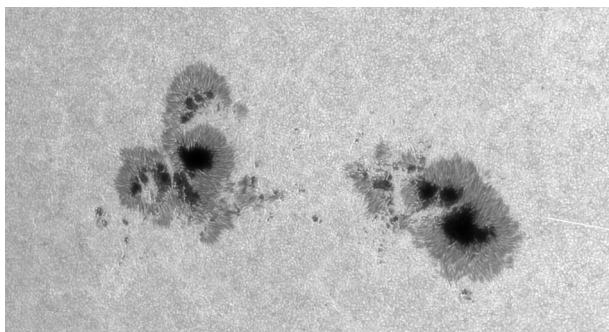


Above: AR14478 close to the SE limb on the 25th at 0851UT Carl Bowron, Sky-Watcher ED120

Above Right: AR14479 in H-alpha imaged by David Teske on the 29th, 1619—21 UT

Below: G-band image of AR14478 by Stuart Green imaged on the 28th at 1347 UT

Below Right: Full disk white light image of AR14478/79 by Dave Smith on the 30th at 1542 UT



Section News

As you are aware, I am standing down as Section director from 31st July 2026 and so this will be my final newsletter. I would like to thank John Cook and Peter Meadows for their assistance and friendship over the years and to wish Peter all the very best for his directorship commencing on the 1st of August.

I would also like to thank Martyn Kinder for hosting our bi-monthly Zoom meetings and not least you, the Section members for your support and for all the newsletter contributions, reports, images, ideas and suggestions that you've contributed to make this Section the success that it is.

It is perhaps, a fitting time to remember those that also contributed so much to the Section since my appointment in 2006, that are no longer with us. Sadly, we have lost many notable and dedicated observers over the years.

David Beesley, Graham Boots, Leonard Dougherty, Francis Dunn, Henry Hatfield, Alan Heath, Michael Hendrie, Mike Houchen, Jorgen Kartin, Barry Keenan, Ron Livesey, Ken Medway, German Morales, Zbigniew Pacult, Peter Paice, Ernest Richardson, Norman Rogers, Gerd-Lutz Schott, Eric Strach, Val White and Charles Willson.

This newsletter will be the last distributed via the current distribution list. To ensure you continue to receive the monthly newsletter, please ensure you are signed up to the new distribution list on the Section's web pages

https://britastro.org/section_information/_join-the-solar-section-newsletter-email-list

Please continue to send your reports and images by email to solar@britastro.org as this will be picked up by Peter from 1st August.

The next Section meeting will be held on the Zoom Platform from 7.30 pm (1830 hrs UT) on Friday 27th July 2026. Please come along and join in the conversation or just listen in with your camera turned off. Details below:

Lyn Smith is inviting you to a scheduled Zoom meeting.

Topic: Solar Section Zoom meeting

Time: Jul 24, 2026 19:30 London

Join Zoom Meeting

<https://us02web.zoom.us/j/83101002012?pwd=gktlXtRaOai1RALaC8wNmVx9UkjOJ3.1>

Meeting chat link

<https://us02web.zoom.us/jc/83101002012>

Meeting ID: 831 0100 2012

Passcode: 350356

One tap mobile

+441314601196,,83101002012#,,,,*350356# United Kingdom

+442034815237,,83101002012#,,,,*350356# United Kingdom

Magnetometer Report

June 2026

Date	Duration (UT)		Activity	Solid state magnetometer Uncalibrated John Cook
5/6	1200	1430	Disturbed	
11	0500	1000	Disturbed	
11/12	2000	1700	Disturbed	
12/13	2215	0800	Disturbed	
24	0145	0930	Disturbed	
24/25	2345	1800	Disturbed	
26	0000	0900	Disturbed	