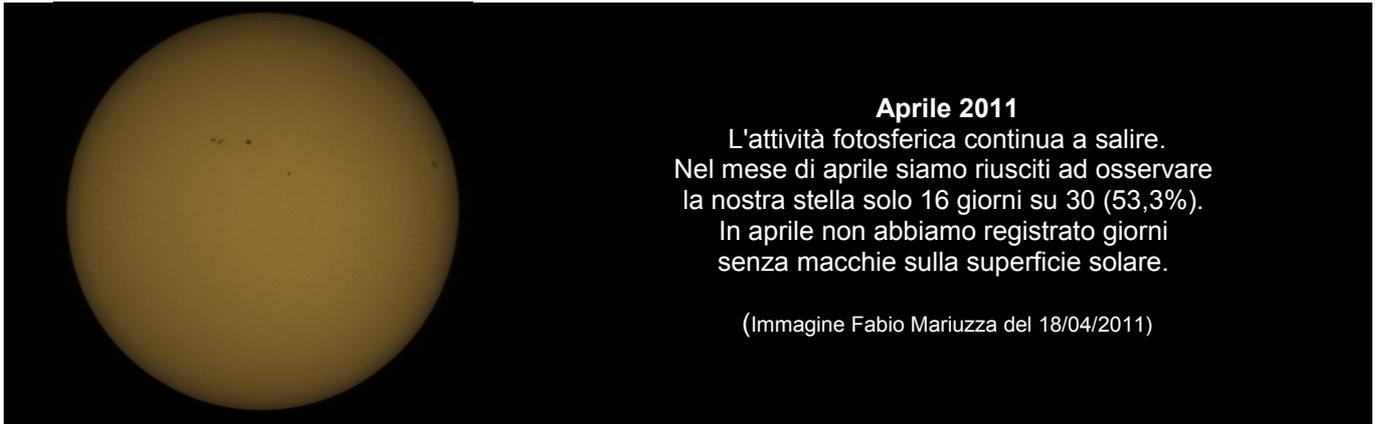


## **RAPPORTO ATTIVITA' SOLARE**

**APRILE 2011**



Il mese di aprile è stato un mese nel quale il numero di Wolf è continuato a salire rispetto ai mesi precedenti, un piccolo salto. I grafico di Wolf che segue mostra un sali e scendi continuo, ma la tendenza è chiaramente in salita. Il valore medio raggiunto è di 60,19.

Nel mese sono stati presenti 28 gruppi (8 in più rispetto a marzo) e questi gruppi sono stati registrati con i numeri NOAA 11176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203.

In nessun giorno, in questo mese, il sole è stato privo di macchie, anche se sappiamo perfettamente che non siamo riusciti ad osservarlo tutti i giorni.

Le nostre osservazioni registrano un'attività fotosferica e cromosferica medio-bassa.

Per comprendere meglio quale sia stata l'attività del Sole, guardate le fotografie più sotto.

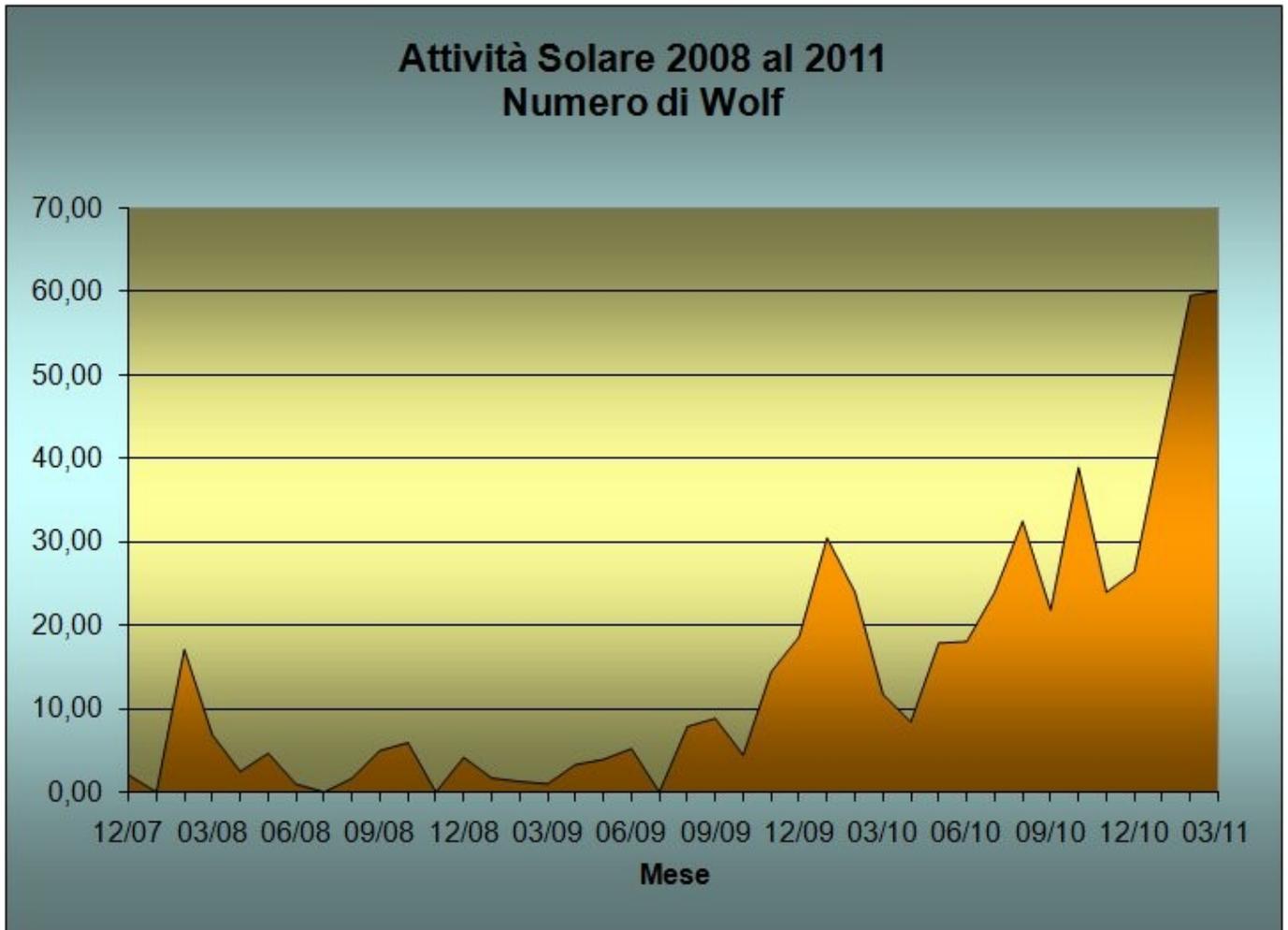
## **TABELLA DI OSSERVAZIONE MENSILE IN LUCE VISIBILE**

Numero	Data	Ora Locale	Ora TU	Rotazione Carrington	Diametro apparente	Giorno Giuliano	Angolo P	Angolo Bo	Angolo Lo	Altezza sul orizz.	Seeing da 1 a 5	GR Gruppi totali	SPOT Macchie totali	R
														Nro wolf
	01/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
685	02/04/11	09:05	07:05	2108	32,02	2455653,8	-26,18	-6,50	132,61	22°52'	5/5	3	22	52
686	03/04/11	09:15	07:15	2108	32,02	2455654,8	-26,22	-6,45	119,32	24°51'	5/5	3	30	60
	04/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
687	07/04/11	17:35	15:35	2108	31,97	2455659,1	-26,28	-6,18	61,96	21°20'	5/5	3	19	49
688	08/04/11	17:35	15:35	2108	31,97	2455660,1	-26,27	-6,11	48,76	21°33'	3/5	4	18	58
689	09/04/11	08:50	06:50	2108	31,95	2455660,8	-26,26	-6,07	40,37	22°39'	4/5	4	25	65
690	10/04/11	08:45	06:45	2108	31,95	2455661,8	-26,24	-6,00	27,22	22°07'	4/5	3	22	52
	11/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	13/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	14/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	15/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
691	16/04/11	09:15	07:15	2109	31,88	2455667,8	-25,98	-5,55	307,74	29°01'	5/5	4	47	87
692	17/04/11	08:45	06:45	2109	31,88	2455668,8	-25,91	-5,47	294,81	24°15'	5/5	3	43	73
693	18/04/11	17:30	15:30	2109	31,87	2455670,1	-25,81	-5,36	276,79	24°36'	4/5	3	34	64
	19/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
694	20/04/11	17:30	15:30	2109	31,85	2455672,2	-25,62	-5,19	250,37	25°01'	5/5	3	21	51
695	21/04/11	17:40	15:40	2109	31,85	2455673,2	-25,52	-5,10	237,07	23°31'	5/5	3	28	58
696	22/04/11	08:20	06:20	2109	31,83	2455673,8	-25,46	-5,05	229,00	21°21'	5/5	3	36	66
697	23/04/11	10:55	08:55	2109	31,83	2455675,0	-25,32	-4,94	213,27	56°25'	3/5	3	30	60
698	24/04/11	08:45	06:45	2109	31,82	2455675,8	-25,22	-4,87	202,35	26°13'	3/5	3	22	52
699	25/04/11	10:01	08:01	2109	31,82	2455676,8	-25,08	-4,77	188,45	39°07'	3/5	3	20	50
	26/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	27/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	28/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
	29/04/11	-	-	-	-	-	-	-	-	-	-	-	-	-
700	30/04/11	09:50	07:50	2109	31,77	2455681,8	-24,33	-4,29	122,48	38°40'	4/5	4	26	66
<b>Media</b>												<b>3,3</b>	<b>27,7</b>	<b>60,19</b>

## **TABELLA DEL NUMERO DI WOLF DELLE NOSTRE OSSERVAZIONI**

<b>Mese</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Gennaio	-	2,08	4,17	18,64	26,50
Febbraio	-	0,00	1,70	30,54	43,00
Marzo	-	17,14	1,28	24,00	59,63
Aprile	-	6,90	1,00	11,76	60,19
Maggio	-	2,48	3,30	8,43	
Giugno	-	4,67	3,92	17,90	
Luglio	-	0,96	5,22	18,10	
Agosto	-	0,00	0,00	24,00	
Settembre	-	1,65	7,88	32,54	
Ottobre	-	5,00	8,85	21,86	
Novembre	-	5,93	4,44	39,00	
Dicembre	12,00	0,00	14,46	24,00	

**GRAFICO DEL NUMERO DI WOLF DELLE NOSTRE OSSERVAZIONI**



**OSSERVAZIONE MENSILE IN LUCE H-alfa (6563Å)**

Nel mese di aprile il numero delle protuberanze al lembo è salito al valore di 77,7. Questo ci fa capire che l'attività solare è in salita e sicuramente aumenterà ancora.

In questo mese l'attività cromosferica ha evidenziato diverse regioni attive, le quali hanno prodotto alcuni flare e diverse protuberanze.

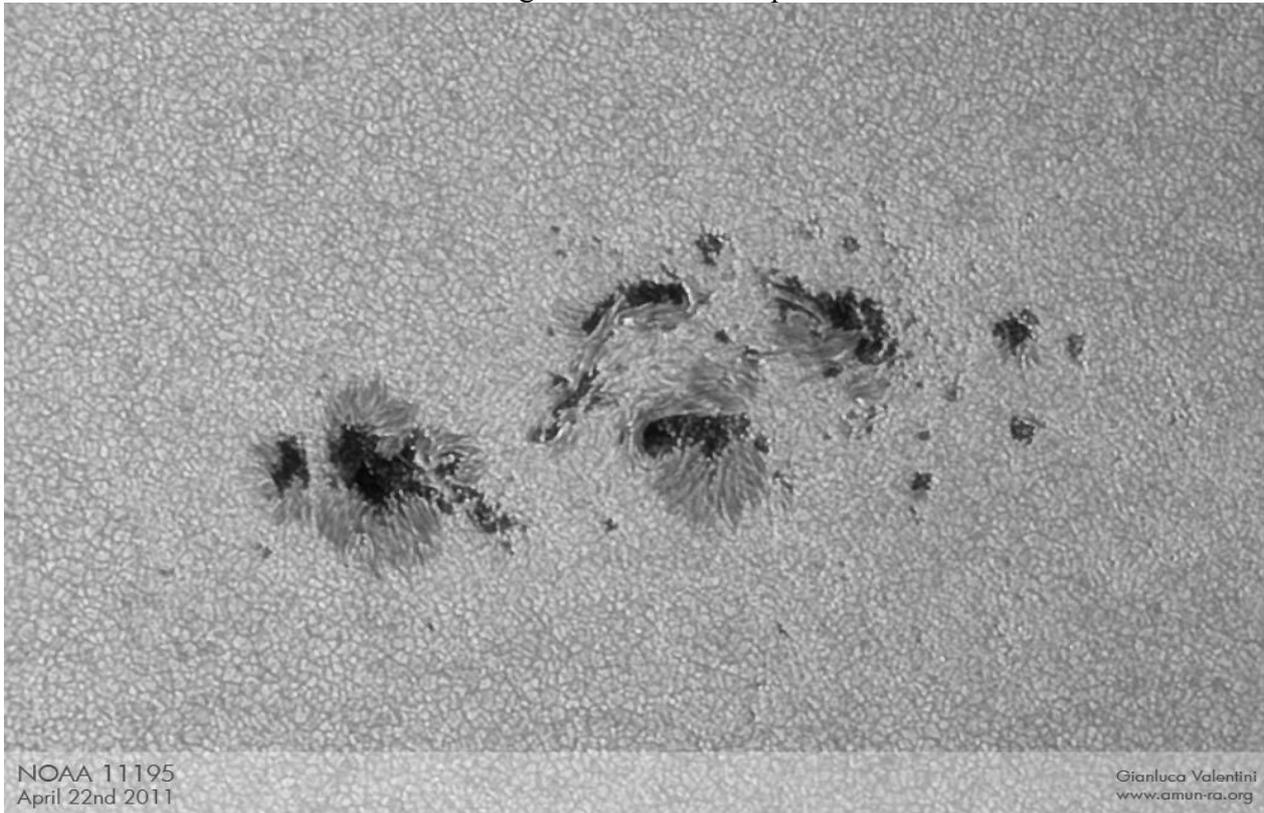
### TABELLA DI OSSERVAZIONE MENSILE IN H-alfa

giorno	HHMM TU	Seeing Q	Trasp. Atm W	OSSERV. EMISFERICA				OSSERV. GLOBALE		RIEPILOGO FINALE			
				nord		sud		H	e	H tot	Rp N	Rp S	Rp tot
				H	e	H	e						
1													
2	710	5	1	4	4	4	8			8	44	48	92
3	720	5	1	4	5	5	13			9	45	63	108
4													
5													
6													
7	1540	5	1	3	6	3	4			6	36	34	70
8	1545	3	3	3	5	3	5			6	35	35	70
9	655	4	2	2	4	2	4			4	24	24	48
10	650	4	2	4	6	3	4			7	46	34	80
11													
12													
13													
14													
15													
16	720	5	1	3	5	4	6			7	35	46	81
17	700	5	1	3	4	6	8			9	34	68	102
18	1540	4	2	5	8	3	7			8	58	37	95
19													
20	1535	4	2	5	7	1	2			6	57	12	69
21	1545	5	1	3	4	1	2			4	34	12	46
22	625	5	1	4	7	2	5			6	47	25	72
23	845	3	3	5	8	3	4			8	58	34	92
24	650	3	3	3	4	4	10			7	34	50	84
25	805	3	3	3	6	4	8			7	36	48	84
26													
27													
28													
29													
30	755	4	2	2	7	2	3			4	27	23	50
<i>medie &gt;&gt;&gt;&gt;</i>				4	6	3	6	#DIV/0!	#DIV/0!	6.6	40.6	37.1	77.7

### TABELLA DELLE PROTUBERANZE AL LEMBO

MESE	2009	2010	2011
Gennaio		46,9	64,2
Febbraio		43,5	62,0
Marzo		40,6	59,1
Aprile	43,2	47,9	77,7
Maggio	36,7	49,6	
Giugno	40,0	52,4	
Luglio	39,6	58,0	
Agosto	39,3	70,2	
Settembre	36,8	81,2	
Ottobre	48,7	64,3	
Novembre	38,9	75,0	
Dicembre	38,9	68,1	

Alcune fotografie del mese di aprile 2011



NOAA 11195  
April 22nd 2011

Gianluca Valentini  
[www.amun-ra.org](http://www.amun-ra.org)

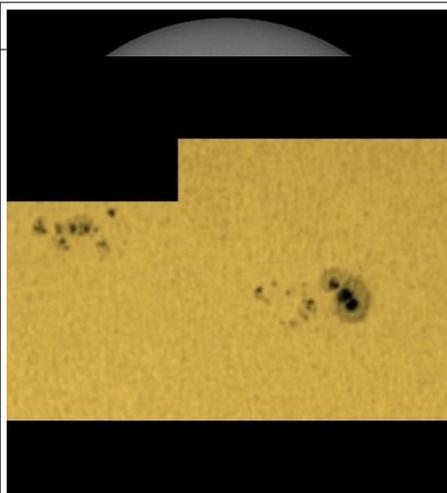


NOA 1184 Ripresa il 06.04.2011 alle ore 11:45 T.U. da Premariacco (UD) - Seeing 6/10 con presenza di velature.

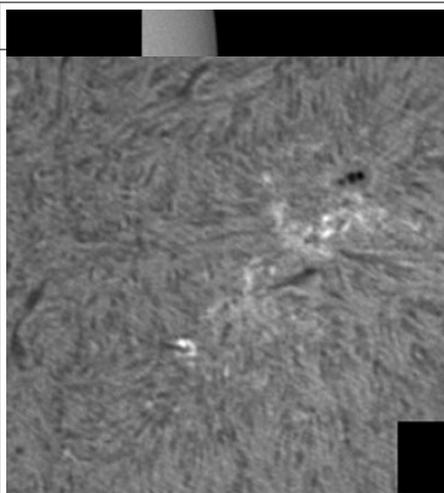
Ottica: Astro-Physics 130 EDFS a f.12 tramite l'interposizione di una barlow 2x AP, con filtro H-Alpha Solarscope da 70 mm. Camera di ripresa Point Grey Chameleon - Somma di 800 frames scelti sul totale di 1800. Somma ed elaborazioni effettuate con il Software AviStack e programmi di fotoritocco. Montatura Astro-Physics 1200 QMD. Seeing medio 6/10 con presenza di velature.

<http://www.astrofoterissinotto.org>

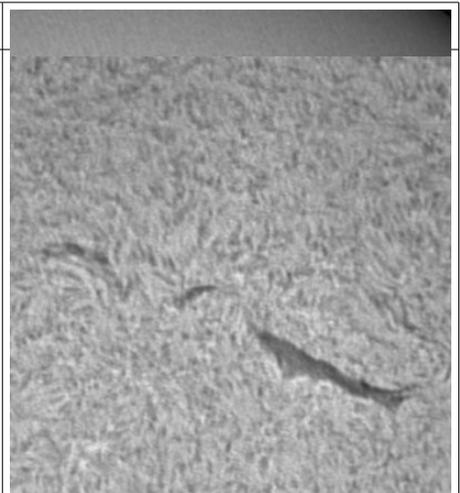
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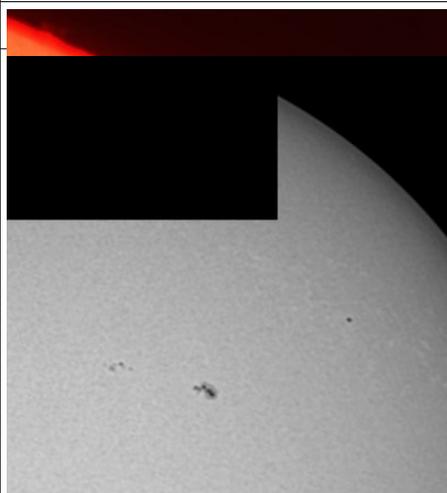
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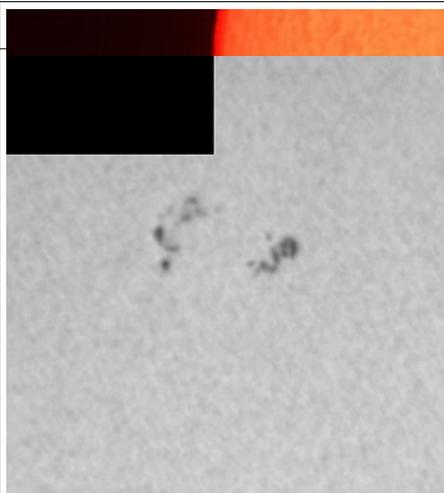
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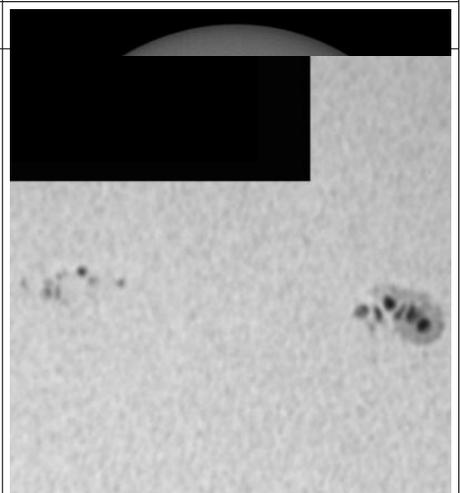
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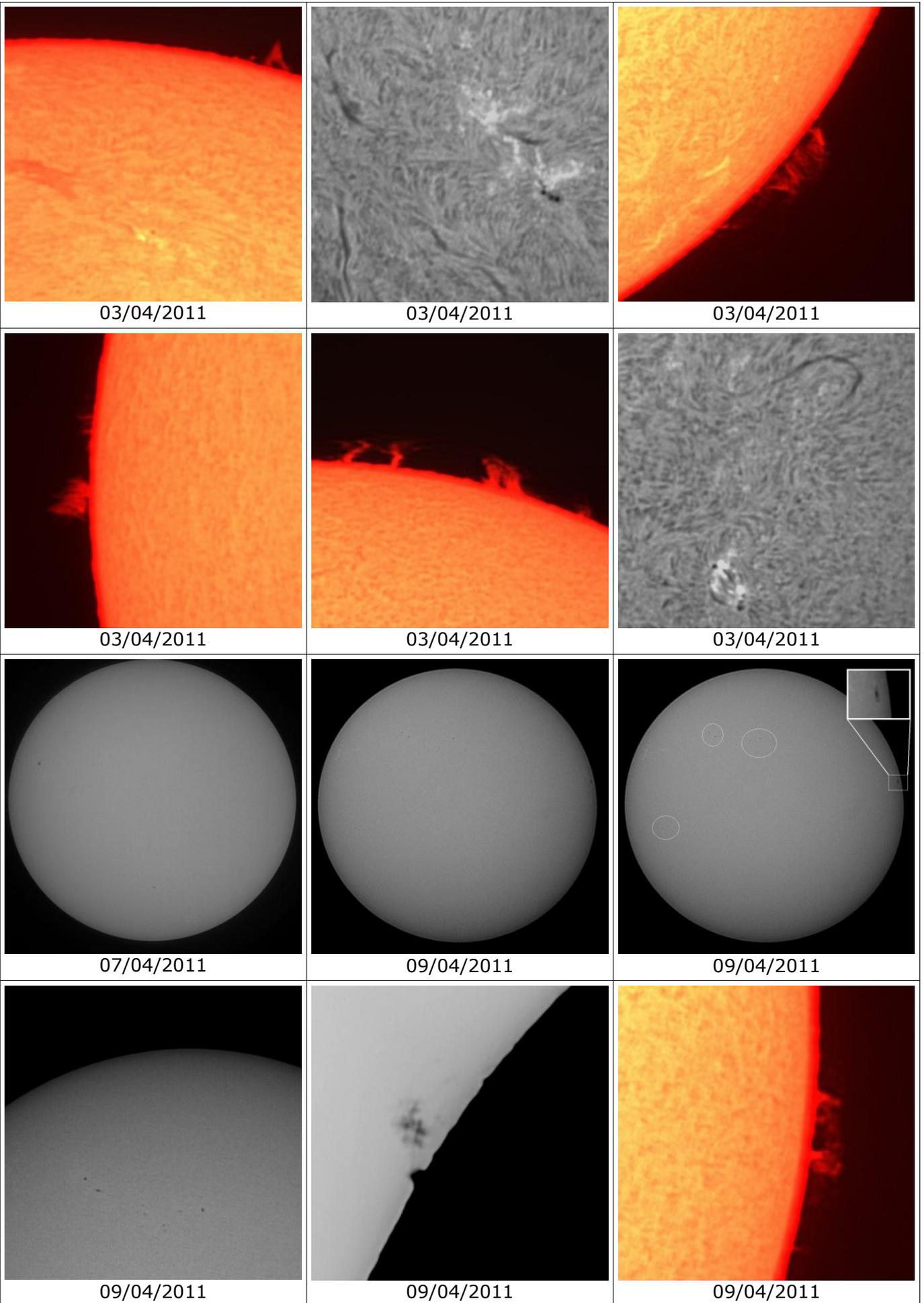
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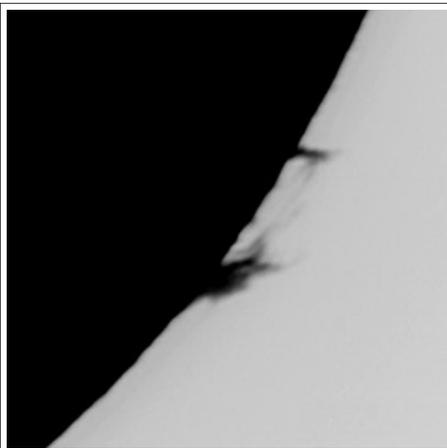


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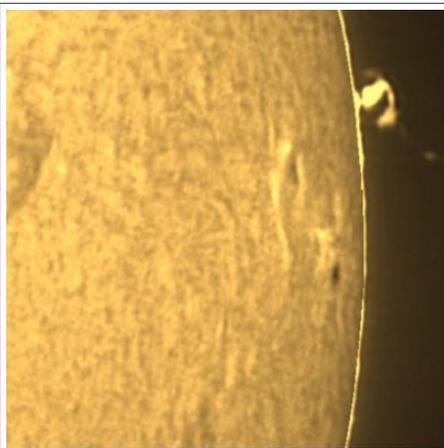


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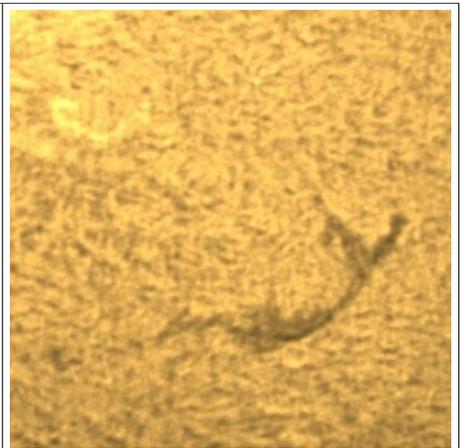




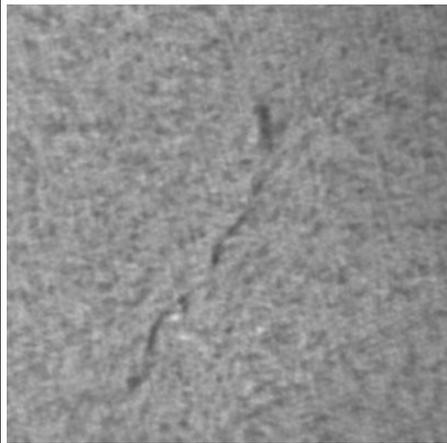
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09/04/2011



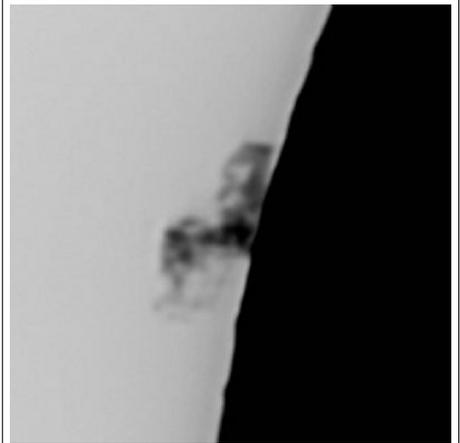
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09/04/2011



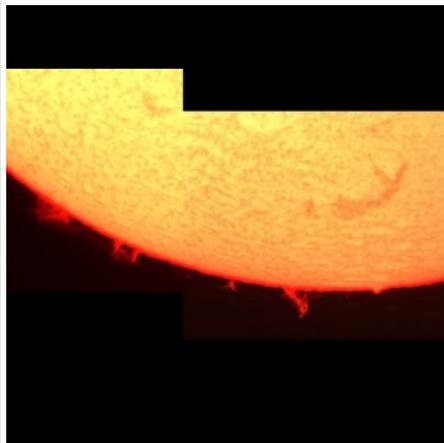
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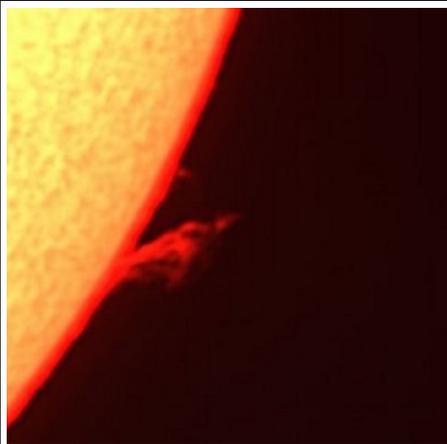
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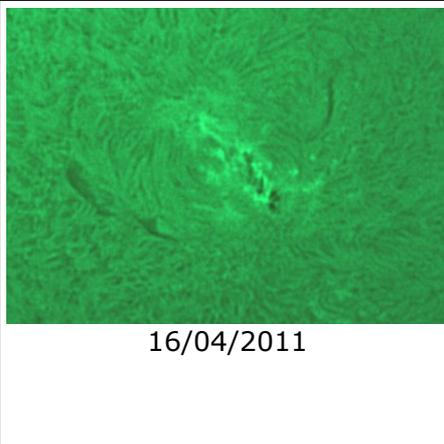
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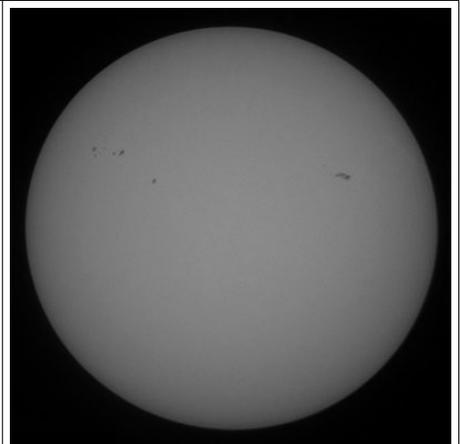
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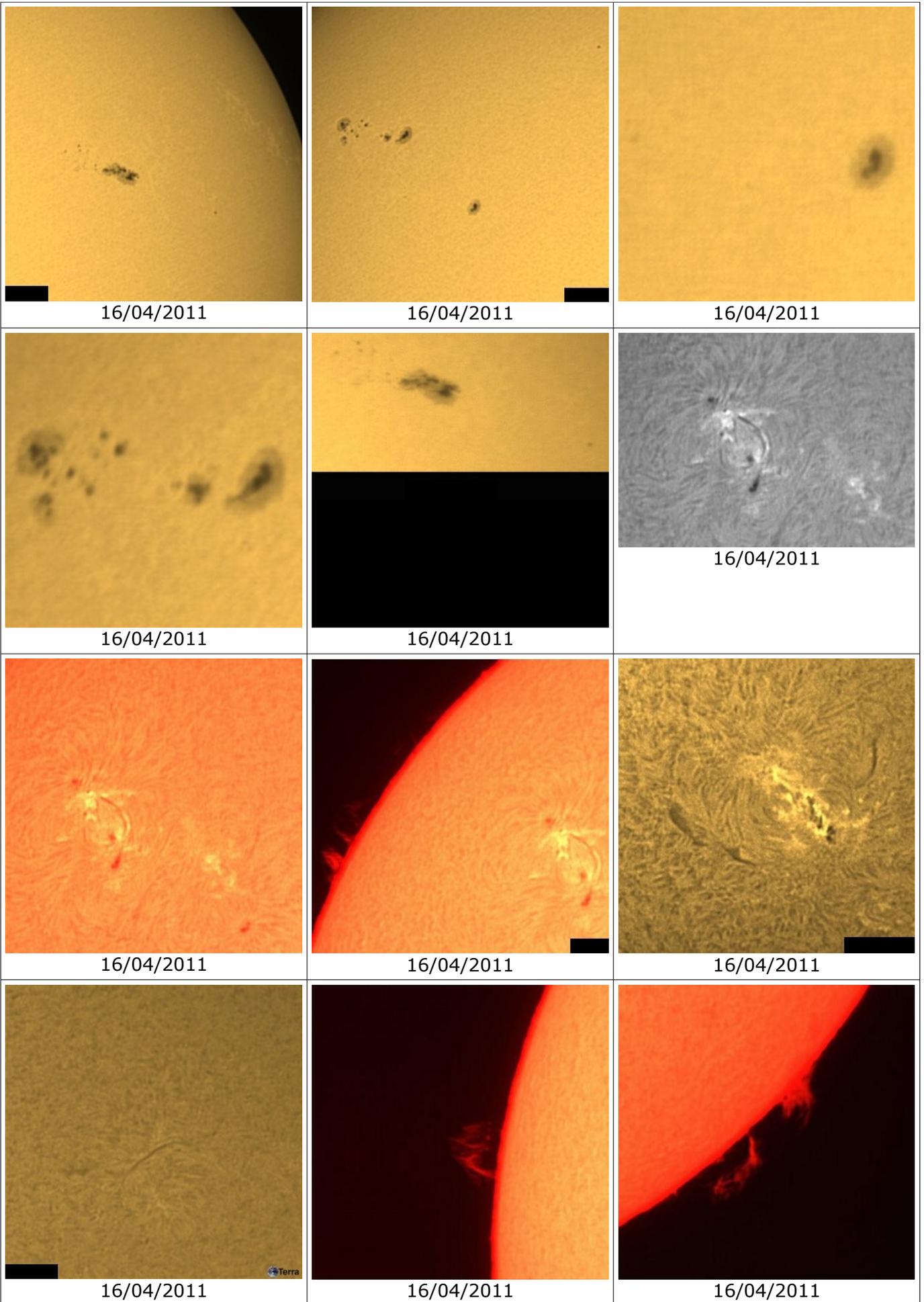
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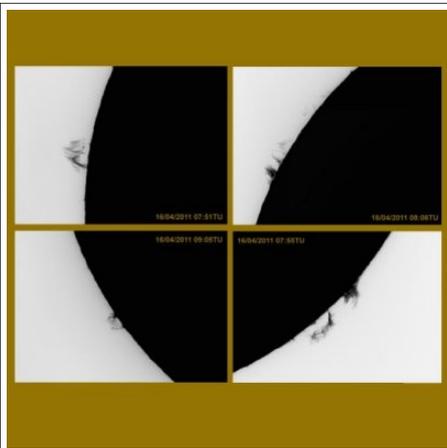


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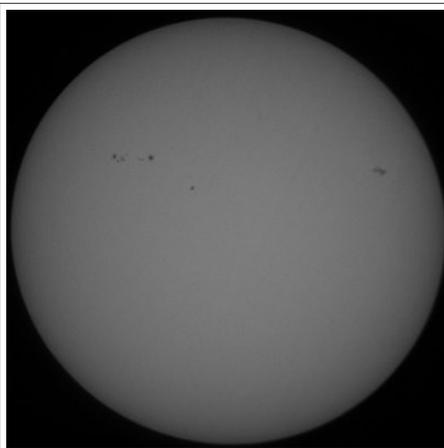


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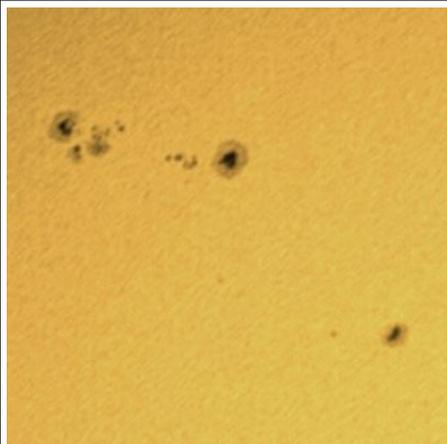
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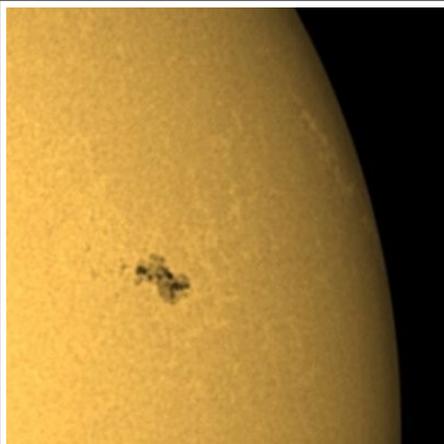
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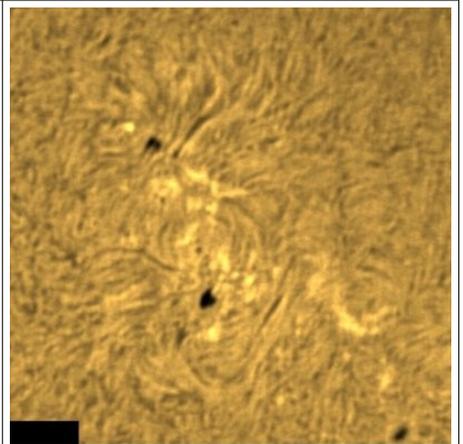
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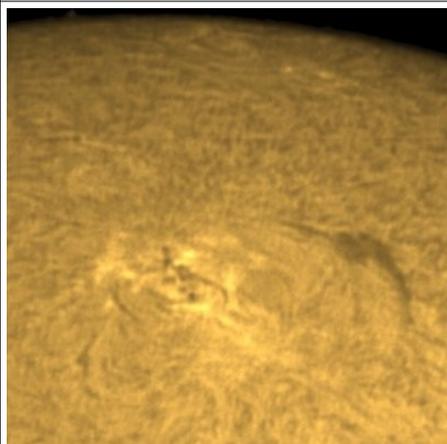
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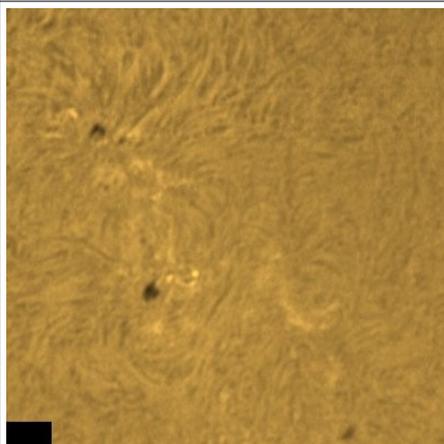
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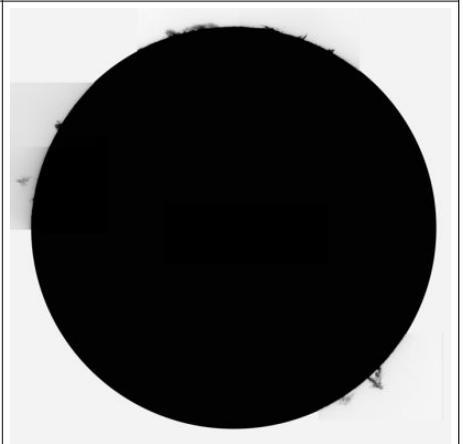
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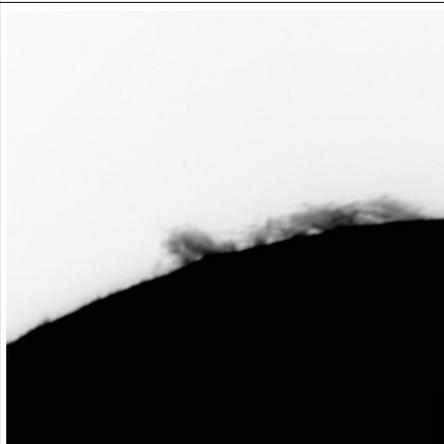
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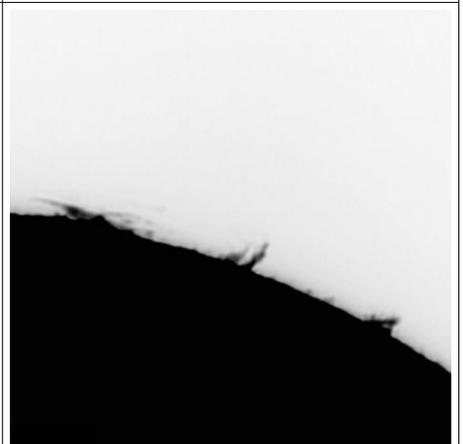
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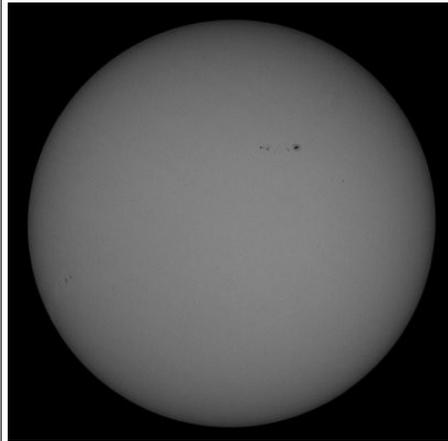
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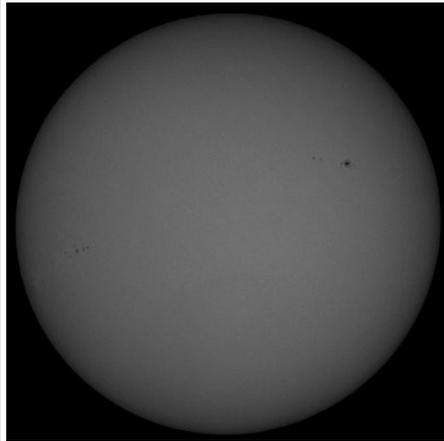
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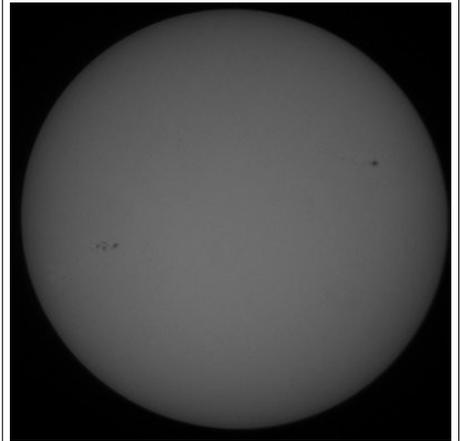
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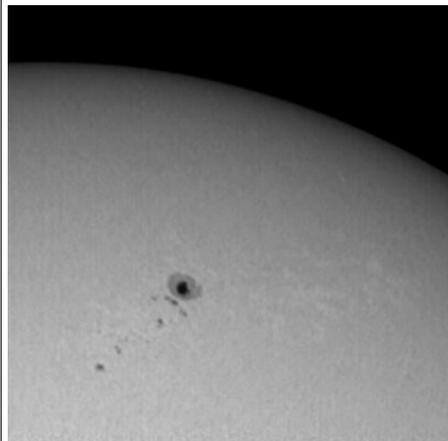
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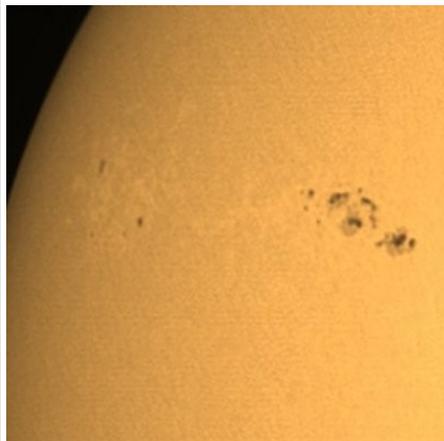
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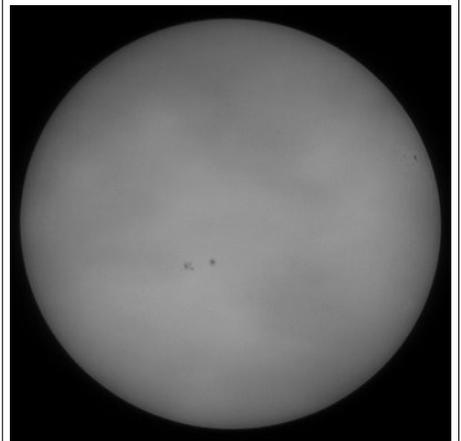
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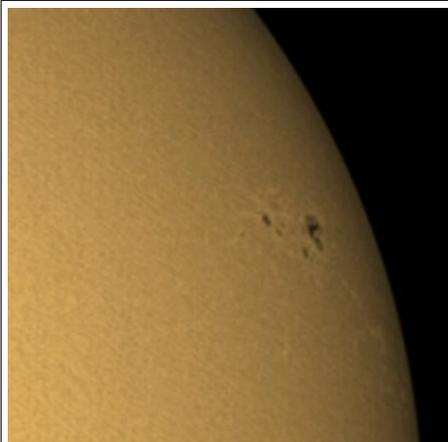
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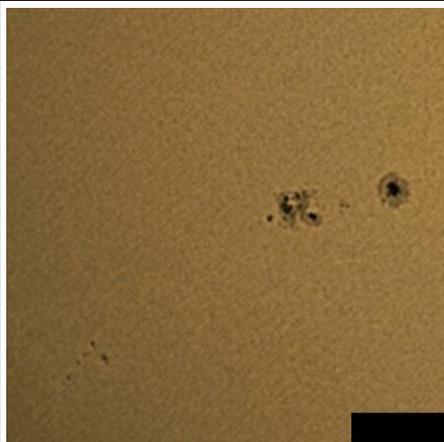
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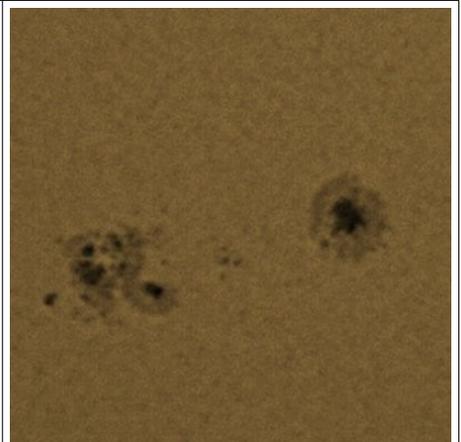
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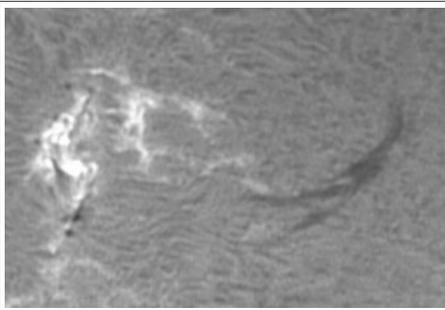
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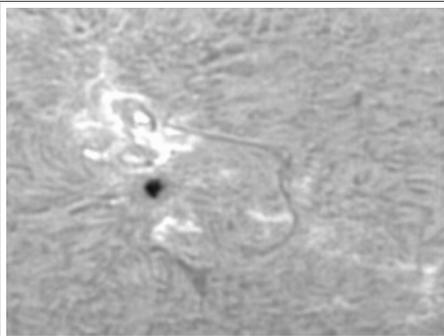
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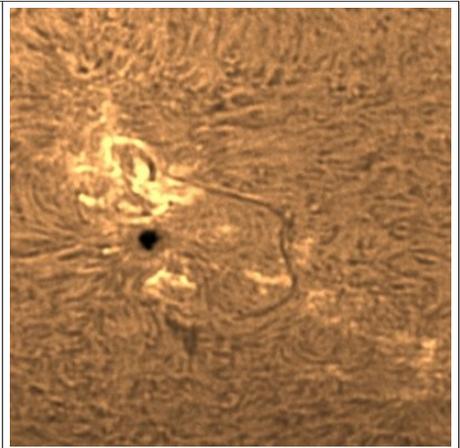
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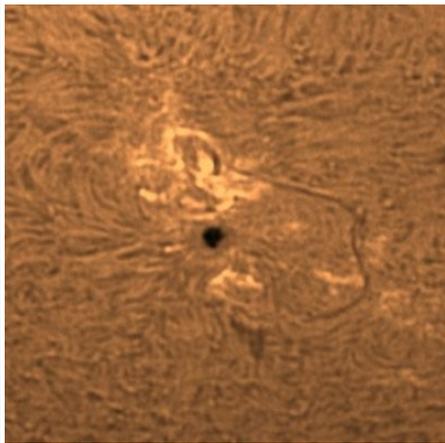
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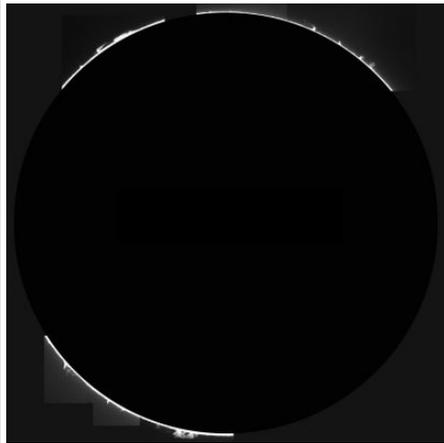
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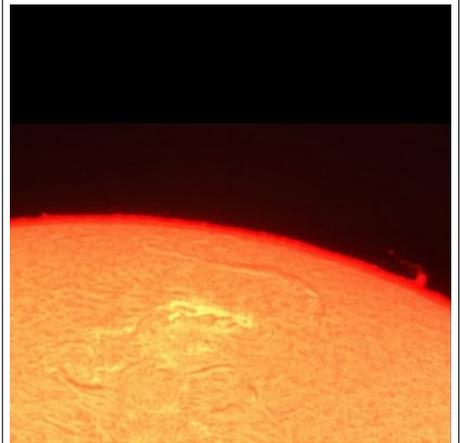
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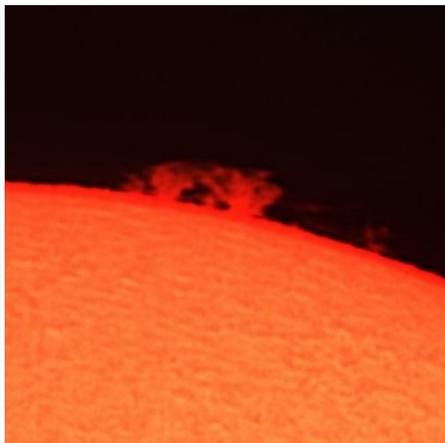
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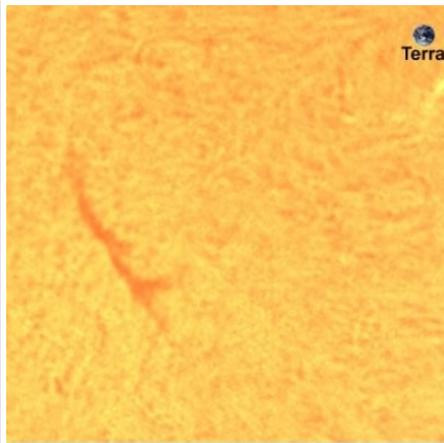
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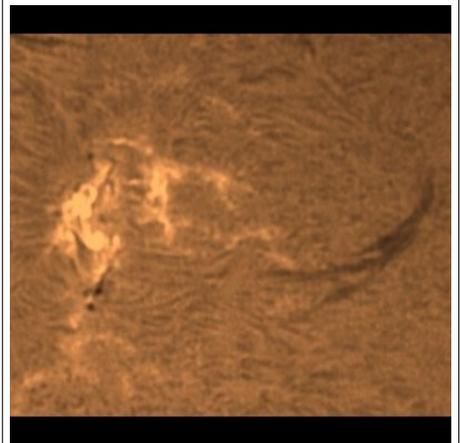
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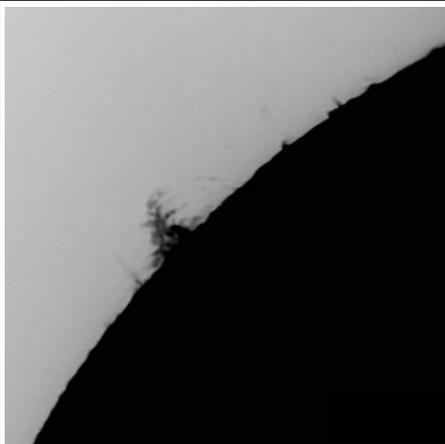
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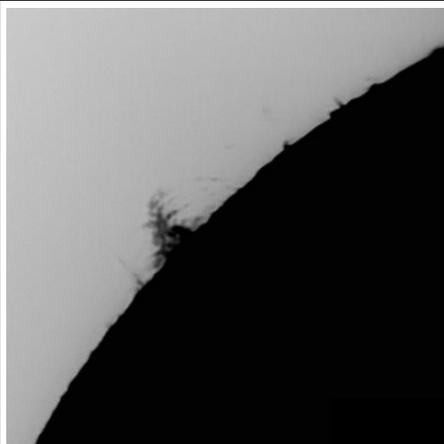
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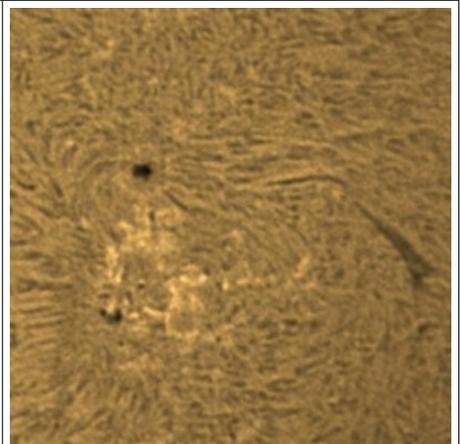
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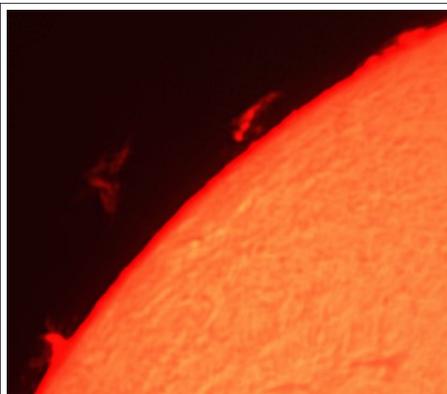
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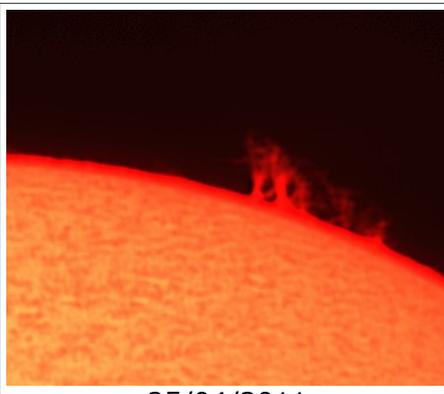
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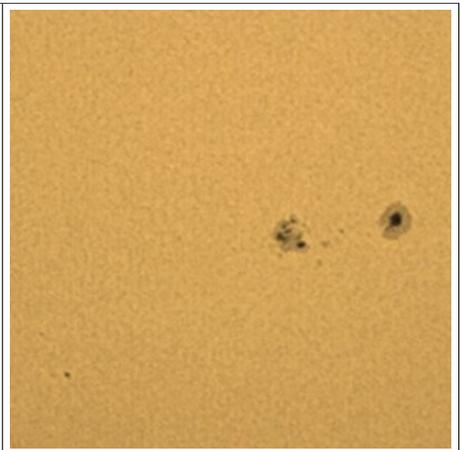
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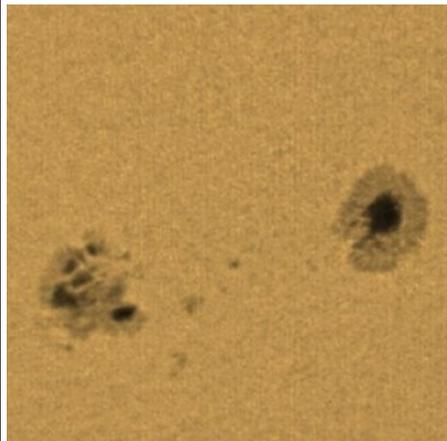
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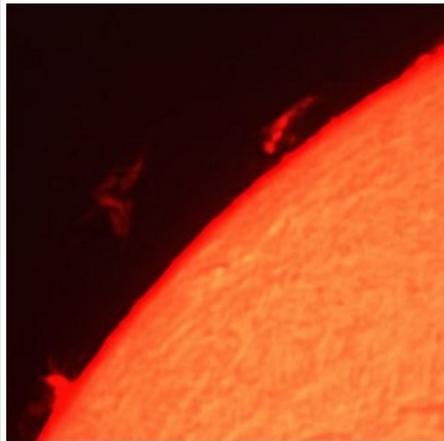
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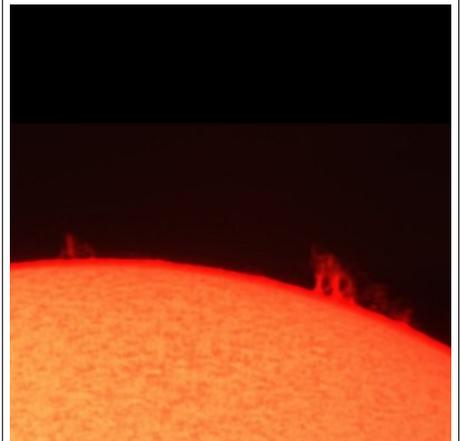
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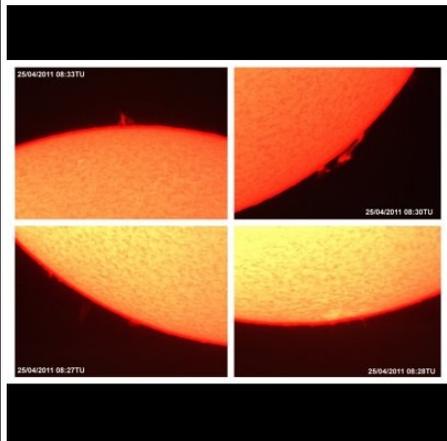
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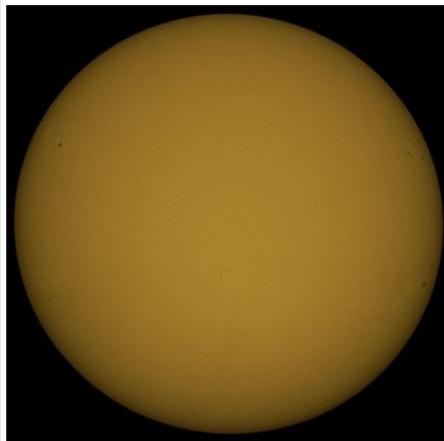
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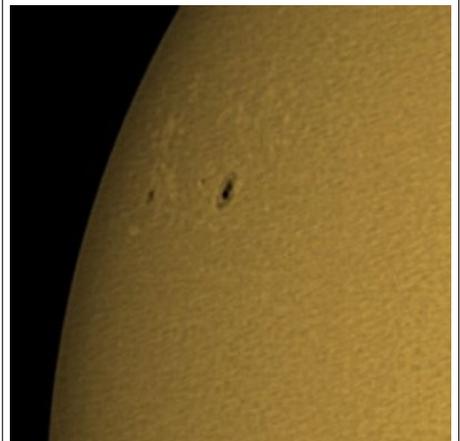
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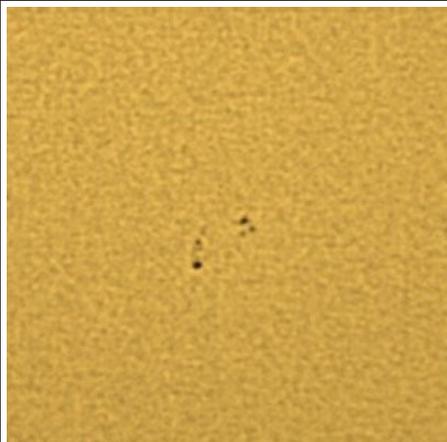
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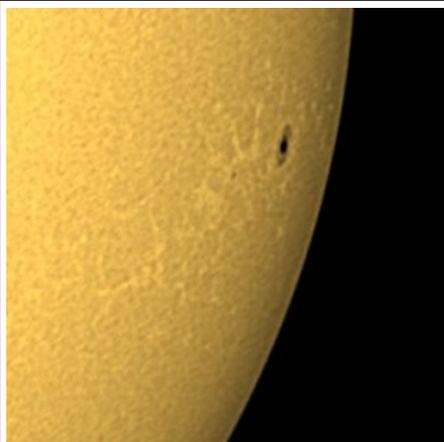
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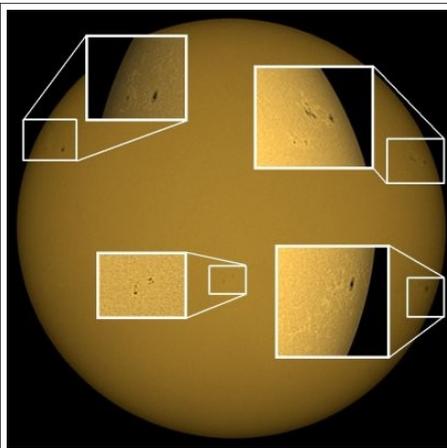
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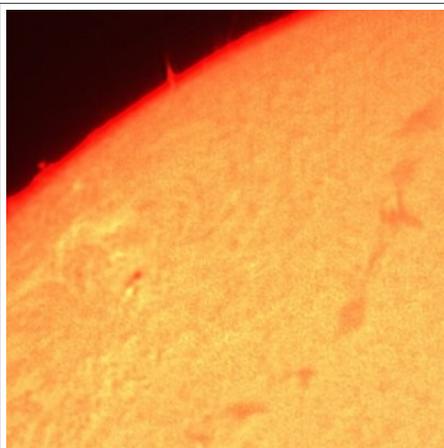
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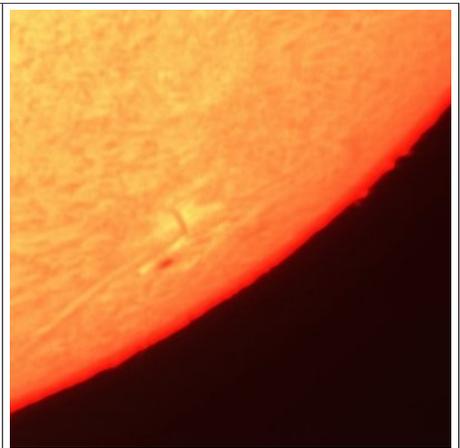
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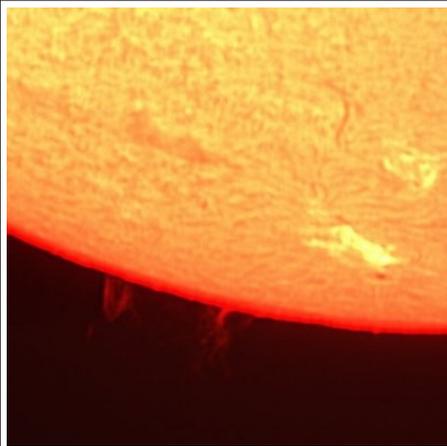
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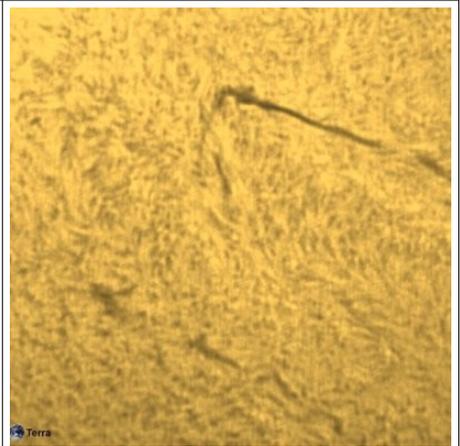
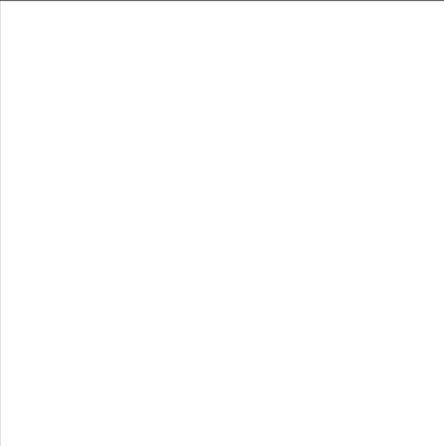
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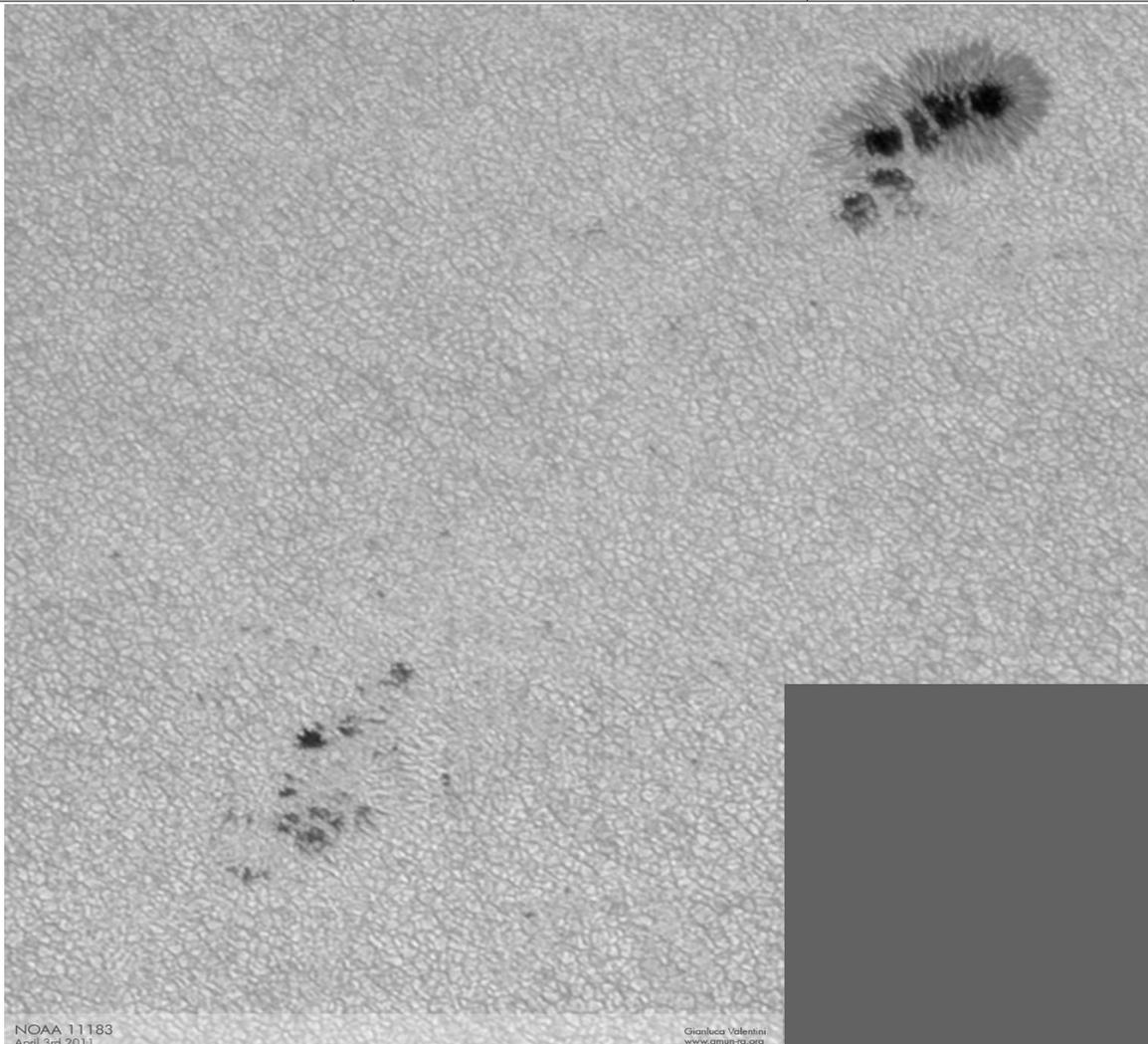
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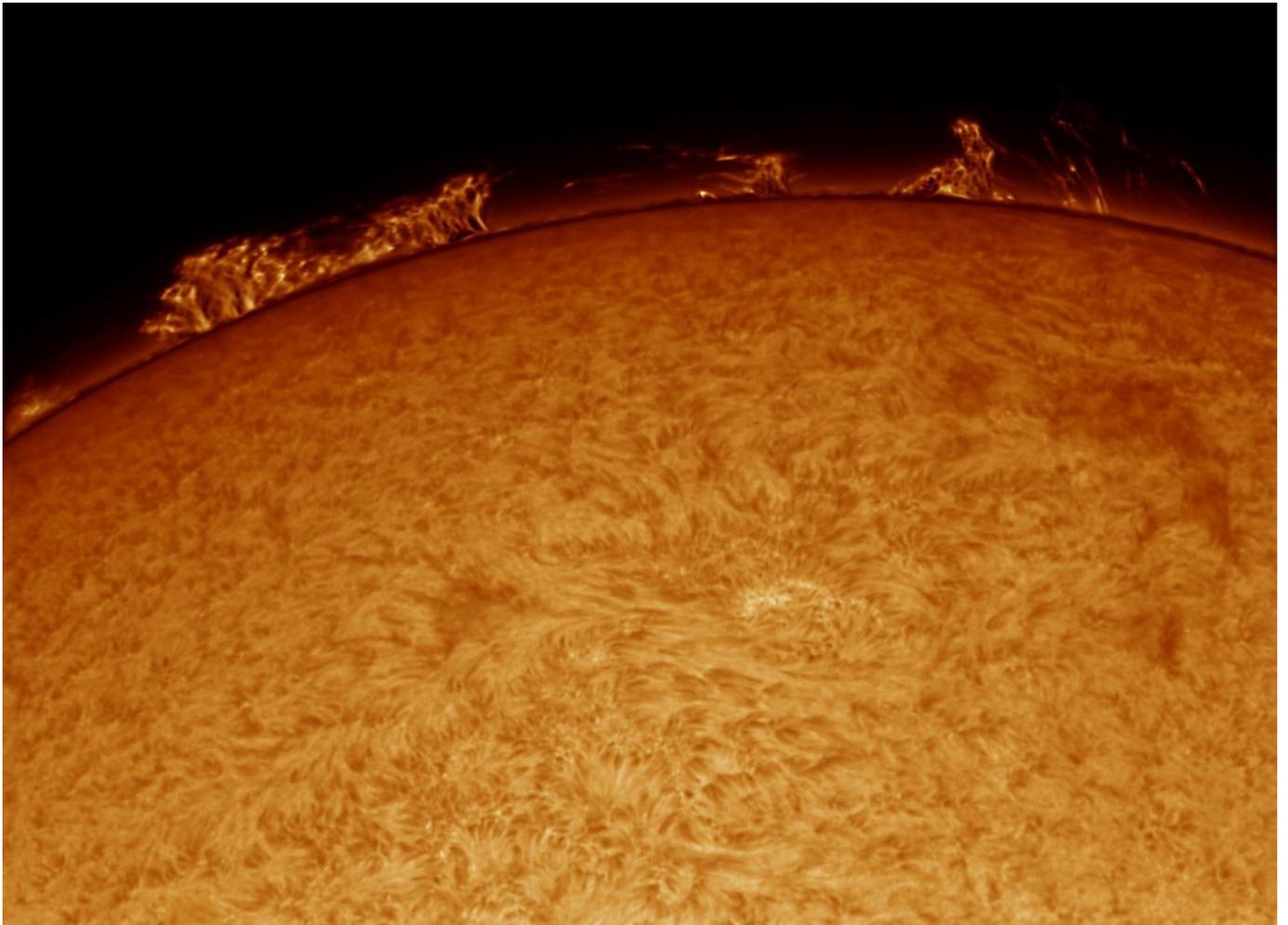


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NOAA 11183  
April 3rd 2011

Gianluca Valentini  
www.aman-ra.org



Gruppo di protuberanze solari riprese il 10.04.2011 alle ore 13:20 T.U. da Premariacco (UD) - Seeing 5/10

Ottica: Astro-Physics 130 EDFS f.6 portato a f.12 tramite l'interposizione di una barlow 2x AP. Filtro solare H-Alpha Solarscope da 70 mm. - Camera di ripresa Point Grey Chameleon. Somma di 450 frames sul totale di 1800 per le protuberanze e somma di 500 frames sul totale di 2000 per la fotosfera. Somma ed elaborazioni effettuate con il Software Avistack e programmi di fotoritocco. Montatura Astro-Physics 1200 QMD. Seeing mediocre 5/10 per la presenza di folate di vento.

<http://www.astrofoterissinotto>

<http://www.castfvg.it>

Un grazie speciale a Enrico e Luca

### **Fabio Mariuzza**

Circolo ASTrofilii Talmassons (CAST) [www.castfvg.it](http://www.castfvg.it)  
Maggiori informazione: [www.friulinelweb.it/sole.htm](http://www.friulinelweb.it/sole.htm)