

### Character Figures for bright H $\alpha$ -Floculi.

The character figures are assigned on a scale of 0, 1, 2, 3, 4, 5. The numbers refer to the area and intensity, 0 representing absence or rarity, 5 extreme abundance and intensity of the floculi. As central zone a circular surface of a semidiameter of the sun's disc has been taken.

#### Whole Sun Disc

1928

Observatory	January																															Mean
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Arcetri/Firenze . . .																	1		1						2						2	2
Evershed/Ewhurst . . .										1	1	1	2		2	2	3	3	3	1	2	2		2	2	2	2	4		4	4	4
Kodaikanal . . .	2	3	3	2					1	1	1	2		2	2	3	3	3	1	2	2		2	2	2	2	4		4	4	4	
Meudon/Paris . . .					2																		2.5	3.5	3	3	3*	3		3	3	
Mount Wilson . . .	3		2	3	3	3	3	4	3	3	3	3	3			2		4*	2	4	4	4	4	2	2	3	3	4	3	3	3	
Mean . . .	2.5	3	2.5	2.5	2.5	3	3	4	2	2	2	2.5	3	2	2	2.5	2	3.5	1.5	3	3	4	2.2	2	2.6	2.7	3.3	3.5	3.3	3	2.8	2.7

#### February

Arcetri/Firenze . . .																																
Evershed/Ewhurst . . .		2				0													2	2		2										
Kodaikanal . . .	2			3	2		2	2	2	1	1		1	1	1	1	3	2	3	2	3	3	3	3	3	3	2	3	3			
Meudon/Paris . . .		2			2	2	2				1.5					2.5	2.5	2.5	3	3	3.5*	4*	4	3.5*	2.5*	2.5	3					
Mount Wilson . . .	3	2			2	2	2	3	2	2	2			2		3	3	3	4	4	4	4	4	4	2	2	3	3				
Mean . . .	2.5	2		2.5	2	1.3	2	2.5	2	1.5	1.5	2	1	1.5	1	1	2.8	2.5	2.5	2.5	3.3	3.1	3.7	4	3.2	2.5	2.2	3	3		2.3	

#### March

Arcetri/Firenze . . .																																
Evershed/Ewhurst . . .																3		3									1					
Kodaikanal . . .	2	1	1	0	1	1	2	3	2	3	3	3	2	2	4	4	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	
Meudon/Paris . . .		2.5	2	2	2	2		1.5			2	2.5			3	3	3								2.5	2			2.5*	2.5	2.5	
Mount Wilson . . .		3					2	3	3			3	4	3	4	3	5	4	4	3	4			3		2		4	3	4	2	
Mean . . .	2	2.2	1.5	1	1.5	1.5	2	2.5	2.5	3	2.5	3.8	3	2.5	3.7	3.2	3.7	3.3	3.5	3.2	3.5	3	3	3	2	1.9	2	3	2.5	3.2	2.2	

#### Central Zone

Observatory	January																															Mean
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Arcetri/Firenze . . .			2		2							2	2										2	2								
Evershed/Ewhurst . . .					0						0				0	0			0						2							
Kodaikanal . . .	2	3	3	2						1	1	3		2	1	1	1	1	0	0	2		2	3	1	2	2		3	3	3	
Meudon/Paris . . .					1.5														0				3		2.5	2.5	2	2	3	2	2.1	
Mount Wilson . . .	3		3	3	3	3	2	3	3	3	3	3	2		2		1	2	3	3	3	2	2	2	2	2	2	3	4	3	2.6	
Mean . . .	2.5	2.5	3	2.3	1.5	3	2	3	3	2	1.3	2.7	2	2	0.5	1.5	0.5	1	0.5	1.5	2.5	2.5	2.2	2.5	1.9	2.2	2	2.5	3.3	2.3	2.2	

#### February

Arcetri/Firenze . . .									2								1	2		3	3	2	1		2	2					2.0
Evershed/Ewhurst . . .		0	1			1												2	2	2	2							1	0		1.2
Kodaikanal . . .	0			0	1		2	2	2	2	1		0	1	0	0	1	0	2	3	3	2	2		2	3	2	0	0		1.3
Meudon/Paris . . .		0		0.5		2	2.5				0.5					1	2.5	2.5	3	3	3	2.5	2	3.5	2	2.5	1.5				2.0
Mount Wilson . . .	2	0			2	2	3	3	2	2	0	1		2		2	2	4	4	3	3	3	3	2	2	2	1	1	1		2.0
Mean . . .	1	0	1	0.2	1.5	1.7	2.5	2.5	2	2	0.5	1	0	1.5	0	0	1.3	1.4	2.1	3	3	2.6	2.4	2	2.8	2.2	1.7	0.6	0.5		1.5

#### March

Arcetri/Firenze . . .																																
Evershed/Ewhurst . . .																1		2								0						
Kodaikanal . . .	0	2	1	0	1	1	1	2	2	1	2	1	1	0	1	2	3	3	4	4	2	1	1	0	0	0	1	1	2		1	
Meudon/Paris . . .		2.5	2.5	2	1.5	1.5		2			1.5	2			0.5	2	3		4.5	3.5					0.5	1		3	3	2	2.1	
Mount Wilson . . .		3					2	3	3			3	3	2	3	3	5	4.5	5	4	3			2		2	3	4	4	2	3.2	
Mean . . .	0	2.5	1.8	1	1.2	1.2	1.5	2.3	2.5	1	1.8	2	2	1	1.5	2	3.7	3.2	4.4	3.4	2.5	1	1.5	0	0	0.6	1	2	3	2.7	2	

* Eruptions brillantes d'hydrogènes H $\alpha$	Jours	Heure	Eclat	Coordonnées	
				$\varphi$	L
	Janvier 28	9 h 34	1	+ 5 $^{\circ}$	+ 55 $^{\circ}$
	Février 22	10 h 17	1	+ 8 $^{\circ}$	+ 6 $^{\circ}$
	" 23	12 h 00	1	- 18 $^{\circ}$	- 33 $^{\circ}$
	" 25	8 h 38	3	- 10 $^{\circ}$	- 1 $^{\circ}$
	" 26	9 h 02	1	- 26 $^{\circ}$	+ 25 $^{\circ}$
	Mars 29	8 h 38	1	+ 19 $^{\circ}$	+ 21 $^{\circ}$

a = Very bright H $\alpha$  northeast group.

Character Figures for bright H $\alpha$ -Flocculi.

## Whole Sun Disc

1928

Observatory	April																															Mean			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Arcetri/Firenze . .																																			
Evershed/Ewhurst . .					1	1											1	1								1									
Kodaikanal . . . .	4	3	4	3	3	3	3	2	2	2	3	3	2	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2				
Meudon/Paris . . . .		2.5	2.5		2.5	3	3	2.5			4		4.5	4*		3.5*	2.5				2	2	1	1.5	1.5	1.5	2	2	2	2.5					
Mount Wilson . . . .	2			4	3	4	4	5	4	4	5	5	4	5	5	4	3	2	2			1	2	2	2	3		3	4	4					
Mean . . . . .	3	2.8	3.2	3.5	2.4	2.8	3.3	3.2	3	3.3	4	4.2	3.3	4	3.5	2.8	2	1.3	1.7	1.5	1	1.2	1.5	1.4	1.7	2	1.5	1.9	3	3				2.6	

## May

Observatory	May																															Mean			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Arcetri/Firenze . .																																			
Evershed/Ewhurst . .					2	2	2	2	2		1	1			0											0		1	1						2
Kodaikanal . . . .	2	2	3	3	3	3	4		3	3	3	3	2	2	2	1	0	1	1			1	1	1	1	2	2	3	3	4	5	5			
Meudon/Paris . . . .			3			3	3	3	3.5	2.5	3	2	2	1.5	1.5	1	1	1			1						2	3	3	3.5	4				
Mount Wilson . . . .		3	3	4	3					3	3	3	4	3		3	3	2	2	2	3	3	3	3											
Mean . . . . .	2	2.5	3	3.5	2.7	2.7	3	2.5	2.8	2.8	2.5	2.2	2.7	2.2	1.2	1.7	1.3	1.3	1.5	1.5	2	2	2	2	2	2	1	2	2.3	2.3	3.8	4.5	3.5		2.4

## June

Observatory	June																															Mean			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Arcetri/Firenze . .																																			
Evershed/Ewhurst . .		2	3			2					0	1	1			1	1				1				2	3	3		3	3				2	
Kodaikanal . . . .	5	5	4										1			3	2	2	2	3	3	3	3	3	3			5	4	4	4				
Meudon/Paris . . . .	4	4	4	4	4	3.5	3		2	2	2	1.5	1.5	2	2	2	2	2.5	3*	3	3	3	3	3	3.5	4		4	4	4	3.5				
Mount Wilson . . . .									2		2	2	2	1	2	3	3	3	3	3	3	3	3	4	3	4	3	4	5	4	4*	4			
Mean . . . . .	4.5	3.7	3.7	4	4	2.8	3		2	2	1	1.5	1.5	1.7	1.5	2	2	2.5	2.7	2.5	3	3.3	2.8	3.4	3.3	4	4.2	3.8	4	3.4				2.9	

## Central Zone

Observatory	April																															Mean			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Arcetri/Firenze . .															2						1														
Evershed/Ewhurst . .		0			1	1												2	1			0			2			1							
Kodaikanal . . . .	2	2	2	2	2	1	1	2	3	3	2	1	1	3	3	2	2	0	0	1	0	0	0	1	1	0	1	0	1	1					
Meudon/Paris . . . .		1.5	2		2	1.5	3	3		3.5	2.5	2		4	3			0.5	1	0.5	0.5	0	1	1.5	1	1	2								
Mount Wilson . . . .	2			3	3	3	4	4	4	4	3	3	3	4	5	3	3	0	0		1	1	1	2	3	2									
Mean . . . . .	2	1.2	2	2.5	2	1.6	2.7	3	3.5	3.5	2.5	2.2	2	3	4	2.7	2.3	0.5	0.2	1	0.4	0.2	0.3	1.5	1.5	1.2	1	1.8	2	2				1.9	

## May

Observatory	May																															Mean			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Arcetri/Firenze . .			2									2																							
Evershed/Ewhurst . .					1	2	3	3	3	1	1	0			0									0	0		1	1						2	
Kodaikanal . . . .	1	2	2	2	3	2	3		3	3	1	2	0	0	0	0	0	0	1	1			1	0	1	0	0	2	2	3	2	2	4		
Meudon/Paris . . . .			3			3	3.5	3	3	2.5	2	1.5	1	1	0	0	1	1			2						2	2.5	2.5	2.5	3				
Mount Wilson . . . .		4	4	4	3					3	2	3	2	2		2	3		1	1		3	3		2										
Mean . . . . .	1	3	2.8	3	2.3	2.3	3.2	3	3	2.4	1.5	1.7	1	1	0	0.7	1.3	1	1	2.5	2	1.5	1.5	0.7	0	2	1.8	1.9	2.5	2.5	3			1.8	

## June

Observatory	June																															Mean		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Arcetri/Firenze . .			3							0	0			1	2	1							2	3	2	3	3		4	3	2	4		
Evershed/Ewhurst . .		2	2			1					0	1	1		0	1	2					0		2	2	2		3	2	2				
Kodaikanal . . . .	5	5	5											1			2	2	2	3	2		0	2	3	3	3		2	4	4	4		
Meudon/Paris . . . .	3.5	3.5	4		3	3	1.5		0	1	2	2	1	1.5	2	2	2	2	2	1	0.5	2	3	3	3	3.5		3	4	5	3.5			
Mount Wilson . . . .										1		2	2	1	2	3	3	4	1		2	4	4	3	3	2	4	5	5	5*	3			
Mean . . . . .	4.2	3.5	3.5	3	3	2	1.5		0	0.7	1	1.7	1.2	1.4	1.2	2	2.2	2.8	1.3	0.6	2.5	3.2	2.6	2.8	2.6	4	3.4	3.6	4	3.3			2.4	

\* Eruptions brillantes d'hydrogènes H $\alpha$  Jours Heure Eclat Coordonnées

Jours	Heure	Eclat	Coordonnées $\varphi$	$L$
Avril 13	7 h 37	2	+16°	+52°
" 15	8 h 31	1	-16°	-31°
Juin 19	10 h 13	2	+13°	+29°

a = Very bright H $\alpha$  large north and south central group.

Character Figures for bright H $\alpha$ -Flocculi.

Whole Sun Disc

1928

Table for July observations of the whole sun disc. Includes columns for Observatory, days 1-31, and Mean. Observatories listed: Arcetri/Firenze, Evershed/Ewhurst, Kodaikanal, Meudon/Paris, Mount Wilson.

August

Table for August observations of the whole sun disc. Includes columns for Observatory, days 1-31, and Mean. Observatories listed: Arcetri/Firenze, Evershed/Ewhurst, Kodaikanal, Meudon/Paris, Mount Wilson.

September

Table for September observations of the whole sun disc. Includes columns for Observatory, days 1-31, and Mean. Observatories listed: Arcetri/Firenze, Evershed/Ewhurst, Kodaikanal, Meudon/Paris, Mount Wilson.

Central Zone

Table for July observations of the central zone. Includes columns for Observatory, days 1-31, and Mean. Observatories listed: Arcetri/Firenze, Evershed/Ewhurst, Kodaikanal, Meudon/Paris, Mount Wilson.

August

Table for August observations of the central zone. Includes columns for Observatory, days 1-31, and Mean. Observatories listed: Arcetri/Firenze, Evershed/Ewhurst, Kodaikanal, Meudon/Paris, Mount Wilson.

September

Table for September observations of the central zone. Includes columns for Observatory, days 1-31, and Mean. Observatories listed: Arcetri/Firenze, Evershed/Ewhurst, Kodaikanal, Meudon/Paris, Mount Wilson.

\* Eruption brillante d'hydrogene H $\alpha$  Jour Heure Eclat Coordonnées  $\phi$  L

a = Very bright eruption west of central meridian.

Character Figures for bright H $\alpha$ -Flocculi.

Whole Sun Disc  
1928

Observatory	October																															Mean	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Arcetri/Firenze . .																																	
Evershed/Ewhurst .	2		1	2		1				2	2		2	2	2							2	2	2	2						1	1	
Kodaikanal . . . .	4		2	1	2	1	1	1	1	2		3	3	2			1							4	4	2				1	1	1	
Meudon/Paris . . .	2.5	2.5	2	1.5				1.5	2	2	2	2.5	2.5*	2		2					2.5*	3	3.5*						1		1.5		
Mount Wilson . . .	2	2	2	2	3	3	2	3	3	3				3	3	3		2	3	4	3	4	4	4	3		3	2		2			
Mean . . . . .	2.6	2.2	1.8	1.6	2.5	1.7	1.5	2	2	2.2	2.2	2.8	2.3	2.3	2.3	2.5	1	2	3	4	2.8	3	3.2	3.3	3	2	3	2	1	1.5	1.2		

November

Arcetri/Firenze . .																	2	2									1					
Evershed/Ewhurst .					1	1											2	2									1		0			
Kodaikanal . . . .		1	1		1			1								1	2	1	2	1				1	0				0	0		
Meudon/Paris . . .				2	2	1.5				2			3							2	1.5							0.5				
Mount Wilson . . .	2			3	3	3	3	3	3	4	3	4			3	3	3	3			2	1.5	3			1			2			
Mean . . . . .	2	1	1	2.5	1.8	1.8	3	2	3	3	3	4	3		2	2.3	2	2.5	1.5	1.5	3		1	0.5	1	0.5	0	1				

December

Arcetri/Firenze . .																																
Evershed/Ewhurst .							3	3	2					2			1				1			0							2 <sup>a</sup>	
Kodaikanal . . . .	1	1		2	2	2	2	2	2	2	3	2	2	2	4	3	3	1	1	1	1	1	1	1						3	3	
Meudon/Paris . . .								3	3	3	3	3			3	3		2											2.5	2.5		
Mount Wilson . . .	2				3	3	3	3	3	3	3	3			4	4	3	2	2	2	2	2	2	2	2		2	2	4 <sup>b</sup>	2	2	
Mean . . . . .	1.5	1		2	2.5	2.7	2.8	2.5	2.5	3	2.5	2	2.3	3.7	3.5	2.3	1.7	1.5	1.5	1.3	1.5	1	1.5			2	2	2.8	2.5	2.5	2.2	

Central Zone

Observatory	October																															Mean
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Arcetri/Firenze . .								1	1	2		3			2	2	1															
Evershed/Ewhurst .	1		1	1		1					2		1	2	2							1	2	1	0					0		
Kodaikanal . . . .	2	2.5	1.5	0.5	0	1	0	1	1	1	1	3	4	2	2		1						3	1	0				1	1	1	
Meudon/Paris . . .	2.5	2.5	1.5	0.5			0.5	2	2	1.5	3	3	3	2		1					3	3.5	4						1.5	1		
Mount Wilson . . .	2	2	1	1	2	3	2	3.5	3	3	3			3	3	1		0	2	3	3	3	4	3	2		2	2	2	2		
Mean . . . . .	1.9	2.2	1.1	0.9	1	1.7	0.9	1.9	2	1.8	2.7	3	2.7	2.3	2.2	1.3	1	0	2	3	3	2.5	3.3	2.3	1	0	2	2	1.2	1.5		

November

Arcetri/Firenze . .										3		2	1	0	1											0	0		0	0	
Evershed/Ewhurst .				0	0	0			1							2	0	0		2					1	0	0		0	0	
Kodaikanal . . . .		0	1		2	2		1							2	2	0		2	0			1	0				0	0		
Meudon/Paris . . .				0.5	2	0.5				2.5		1									1	1					0				
Mount Wilson . . .	2			3	2.5	2	3	3	3	4	3	3			4	3.5	3	3		1	1		3		1				2		
Mean . . . . .	2	0	1	1.2	1.6	0.8	3	2	2	3.2	3	2.5	1	0	1	3	1.8	1	2.3	0.5	1	3		1	0.3	0	0	0	0	0.7	

December

Arcetri/Firenze . .			2		3	3																									
Evershed/Ewhurst .							2	1	1					1		0						1		0					1		
Kodaikanal . . . .	0	0		2	2	2	2	2		0	3	1	2	2	0	1	1	2	2	2	2	1	0	1	0				2	3	
Meudon/Paris . . .							2.5	3						1.5	1		2.5							1					1		3.5
Mount Wilson . . .	1				4	3	3	1	2		2				3	3	2	2	2	2	2	2	2	1	1		2	1	3 <sup>b</sup>	2	
Mean . . . . .	0.5	0	2		2.5	3	2.3	2.1	1	1	3	1.5	2	1.5	1.3	2	1	2.2	2	2	1.3	1	0.7	0.7			2	1	1.7	2	

\* Eruptions brillantes d'hydrogènes H $\alpha$

Jours	Heure	Eclat	Coordonnées	
			$\varphi$	L
Octobre 12	13 h 05	1	+10°	-10°
" 21	14 h 34	2	+18°	+1°
" 23	9 h 21	1	+15°	+13°

a = Some small very bright points about 23° east of the C. M. & north of the equator.  
b = Very bright H $\alpha$  north central groups.