



BULLETIN FOR CHARACTER FIGURES OF SOLAR PHENOMENA

Published by the

Eidgen. Sternwarte in Zürich

Co-operating Observatories: Arcetri-Firenze, Cambridge (England), Catania, Coimbra, del Ebro, Ewhurst (Mr. Evershed), Greenwich and Capetown, Kodaikanal, Lyons, Kiew, Meudon-Paris, Mount Wilson, Roma/Campidoglio, South Hadley, Stonyhurst, Tokyo, Zürich.

Character Figures for Calcium-Floculi.

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

Whole Sun Disc

Table for Whole Sun Disc in January. Columns: Observatory, January (days 1-31), Mean. Rows: Cambridge/Kodaikl., Coimbra del Ebro, Meudon, Mount Wilson, Tokyo, Mean.

February

Table for Whole Sun Disc in February. Columns: Observatory, February (days 1-28), Mean. Rows: Cambridge/Kodaikl., Coimbra del Ebro, Meudon, Mount Wilson, Tokyo, Mean.

March

Table for Whole Sun Disc in March. Columns: Observatory, March (days 1-31), Mean. Rows: Cambridge/Kodaikl., Coimbra del Ebro, Meudon, Mount Wilson, Tokyo, Mean.

Central Zone

Table for Central Zone in January. Columns: Observatory, January (days 1-31), Mean. Rows: Cambridge/Kodaikl., Coimbra del Ebro, Meudon, Mount Wilson, Tokyo, Mean.

February

Table for Central Zone in February. Columns: Observatory, February (days 1-28), Mean. Rows: Cambridge/Kodaikl., Coimbra del Ebro, Meudon, Mount Wilson, Tokyo, Mean.

March

Table for Central Zone in March. Columns: Observatory, March (days 1-31), Mean. Rows: Cambridge/Kodaikl., Coimbra del Ebro, Meudon, Mount Wilson, Tokyo, Mean.

* Days of special activity. a) Very bright K2 south central group.



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Character Figures for Calcium-Flocculi.

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

Whole Sun Disc

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	
Cambridge/Kodaikl.	K2-3	1.5	2	2	2	2	2	2.5	3	3	3	3	3	3	3	3	3	3	3	3	3	2.5	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2	2.3
del Ebro	K2			1.7	1.7				1.7		1.5	1.7		1.7	1.7	2	2	2.2		1.7	1.7	1.7		1	0.7	1	1	0.7	1.2		1.4		
Meudon	K3	1				1			2	2	1.5	2	2	2.5	2	2	2	2	2	2	2	2	1.5	1.5	1.5	0.5	1	0.5	0.5	1	1	1	1.5
Mount Wilson	K2	2	2	2	1			1.5	1.5	1.5 ^a	1.5		1.5	2	2	2	2	2	2	2	2	1	1							1	1	1	1.6
Tokyo	K2-3		2		2			2	3	3	3	3					3				3		2			1					1	2.3	
Mean		1.5	2	1.9	1.7	1.5	2	2.3	2.2	2.4	2.1	2.2	2.2	2.2	2.2	2.2	2.5	2.2	2.4	2.7	1.9	1.7	1.8	1.5	1	1	1	1	1	1.2	1.2	1.8	

May

Cambridge/Kodaikl.	K2-3	1.5	1.5	1	1.5	1.5	1.5	2	2	2	2	2	2	2	2	2	2.5	2.5	2.5	2.5	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1	1	1.8
del Ebro	K2				0.5	0.5					1.7	1.5	1.5	2.2		1.7				1.7	1.7	1.7		1.7	1.2	1.2		1.2	1.5		1.0	1.4		
Meudon	K3	1			0.5	0.5	0.5	1				1.5	2	2	2	2				2			1.5	1.5	1.5	1.5	1.5	1	1	1	1.5	1.4		
Mount Wilson	K2	1	1	1	1	0.5	0.5	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1 ^b	1	1	1		1	1	1	1	1	1.0	
Tokyo	K2-3		2		2	2	1	1	1	1					3		2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1.8	
Mean		1.2	1.5	1	1.1	1	0.9	1.2	1.3	1.6	1.5	1.6	2	2	2	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.3	1.2	1	1.1	1.5	

June

Cambridge/Kodaikl.	K2-3	1	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2	2	1.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	1.5		
del Ebro	K2	1	1	1.5	2			2	2	2.2	2	1.7	1.5	1.5	1.2	0.7	0.7	1	1	1	1	1	0.5	0.5	0.2	0.2	0.7		0.7	1	2.2	1.2	
Meudon	K3			2	2	2	2			2		2	1.5	1	0.5	1	0	0.5	0.5	0.5	0	0	0	0	0	0	0	0.5	0.5	1	2	0.9	
Mount Wilson	K2	1	1	1	2					2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	
Tokyo	K2-3		2	3	3	3				3				2									1						1	1	2	2.1	
Mean		1	1.2	1.6	2.3	2.5	2.5	2.2	2.2	2.4	2.1	1.9	1.4	1.4	1.2	0.9	0.6	0.9	0.9	0.9	0.9	0.8	0.5	0.7	0.6	0.4	0.4	0.6	0.8	0.8	1	1.7	1.3

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	
Cambridge/Kodaikl.	K2-3	1	1.5	1.5	1.5	0.5	0.5	1*	1*	2*	2*	2*	1.5		1	1	2*	2*	2*	1.5*	1*	1	0.5	0.5	1*	1*	1	0	0.5	0.5	1	1.2	
del Ebro	K2			1.2	1				1.7		1.2	1.5			1	1.7	1.5	1.5	2.5			1.2	0.5	0.2		0.2	1	0.5	0.5	0.2	1	1.1	
Meudon	K3	1			0.5				2	2.5	2.5	2.5	2	1	1	1.5			2			1	0.5	0.5	1	1	0.5	0	0.5	1	1	1.2	
Mount Wilson	K2	2	2	2	1			1	2	2 ^a	2		1	1	1	2	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.5	
Tokyo	K2-3		3		3			1	2	2	2	3					2					1									1	1.8	
Mean		1.3	2.2	1.6	1.6	0.5	0.8	1.3	1.7	2.1	2.1	2	1.5	1	1	1.6	2.1	1.9	2.2	1.2	1.1	0.9	0.6	0.5	0.7	0.6	0.4	0.4	0.6	0.8	0.8	1	1.3

May

Cambridge/Kodaikl.	K2-3	0.5	0.5	0.5	0.5	0.5	1	1.5	1	0.5	0.5	0.5	1.5*	1.5*		1	0.5	0	0	1.5*	1.5*	1.5*	1.5*	1	1	1*	1*	1	0	0	0	0.8
del Ebro	K2				0.5	0.5				1	0.5	1.2	2.5			1.7						2.2	2.2	1.5		1.2	1.2	1.5		0.2	0.2	1.1
Meudon	K3	1			0.5	1	1	1			0.5	1	2	2.5	2.5	1.5				0.5			1.5	0.5	1	1	1	1	1	0	0	1.0
Mount Wilson	K2	1	1	1	1	1	1	1	1	1	1	2	3	3	2	1	0	0	1	1	1	2 ^b	2	1	1	1	1	1	0	0	0	1.1
Tokyo	K2-3		2		1	1	2	1	1					4		1	0			1	2	2			1	1	2	1	1	0	0	1.2
Mean		0.8	1.2	0.8	0.7	0.8	1.2	1.1	1	0.8	0.6	1.2	2.2	2.3	2.8	1.3	0.5	0	0.5	1.2	1.9	1.9	1.4	0.9	1	1.3	1.1	1	0	0	0	1.0

June

Cambridge/Kodaikl.	K2-3	0.5	0.5	0.5	1.5*	1.5*	1.5*	2*	1.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0	0	0	0.5	0.5	0.7	
del Ebro	K2	0.2	0.2	1.5	2			1.7	2	2.2	1.7	0.5	0.2	0.5	0.5	0.2	0.2	1	1	1	1	1	0.7	0.2	0	0	0		0.7	1	1	0.8	
Meudon	K3			1	2	2	2		1.5		1	1	0	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0	0	0	0	0	0.5	1	1	0.6	
Mount Wilson	K2	1	1	2	2					3	3	2	0	0	1	1			1	1	1	1	1	1	1	0	0	0	1	1	1	1.1	
Tokyo	K2-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	
Mean		0.6	0.6	1	2.1	2.2	2.2	1.8	1.7	2.3	1.7	1.1	0.2	0.4	0.5	0.5	0.2	0.5	0.8	0.8	0.8	0.8	0.8	0.7	0.4	0	0	0	0.5	0.6	0.9	1.1	0.9

a Small areas very bright K2 developed in large north central group between 16 h 22 m and 16 h 31 m G. C. T.
b Small area very bright K2 south central group.
* Days of special activity.



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Whole Sun Disc

Table with columns for Observatory, July (1-31), and Mean. Rows include Cambridge/Kodaikl., del Ebro, Kyoto/Kwasan, Meudon, Mount Wilson, and Tokyo.

August

Table with columns for Observatory, August (1-31), and Mean. Rows include Cambridge/Kodaikl., del Ebro, Kyoto/Kwasan, Meudon, Mount Wilson, and Tokyo.

September

Table with columns for Observatory, September (1-31), and Mean. Rows include Cambridge/Kodaikl., del Ebro, Kyoto/Kwasan, Meudon, Mount Wilson, and Tokyo.

Central Zone

Table with columns for Observatory, July (1-31), and Mean. Rows include Cambridge/Kodaikl., del Ebro, Kyoto/Kwasan, Meudon, Mount Wilson, and Tokyo.

August

Table with columns for Observatory, August (1-31), and Mean. Rows include Cambridge/Kodaikl., del Ebro, Kyoto/Kwasan, Meudon, Mount Wilson, and Tokyo.

September

Table with columns for Observatory, September (1-31), and Mean. Rows include Cambridge/Kodaikl., del Ebro, Kyoto/Kwasan, Meudon, Mount Wilson, and Tokyo.

* Days of special activity.

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Whole Sun Disc

Table for Whole Sun Disc, October. Columns: Observatory, Character Figure (K2-3), and days 1-31. Rows include Cambridge/Kodaikl., del Ebro, Kwasan, Meudon, Mount Wilson, Tokyo, and Mean.

November

Table for Whole Sun Disc, November. Columns: Observatory, Character Figure (K2-3), and days 1-31. Rows include Cambridge/Kodaikl., del Ebro, Kwasan, Meudon, Mount Wilson, Tokyo, and Mean.

December

Table for Whole Sun Disc, December. Columns: Observatory, Character Figure (K2-3), and days 1-31. Rows include Cambridge/Kodaikl., del Ebro, Kwasan, Meudon, Mount Wilson, Tokyo, and Mean.

Central Zone

Table for Central Zone, October. Columns: Observatory, Character Figure (K2-3), and days 1-31. Rows include Cambridge/Kodaikl., del Ebro, Kwasan, Meudon, Mount Wilson, Tokyo, and Mean.

November

Table for Central Zone, November. Columns: Observatory, Character Figure (K2-3), and days 1-31. Rows include Cambridge/Kodaikl., del Ebro, Kwasan, Meudon, Mount Wilson, Tokyo, and Mean.

December

Table for Central Zone, December. Columns: Observatory, Character Figure (K2-3), and days 1-31. Rows include Cambridge/Kodaikl., del Ebro, Kwasan, Meudon, Mount Wilson, Tokyo, and Mean.

* Special activity in the central zone.