SOLAR RADIATION AND SUNSPOT DATA FOR JUNE 1942

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1942

[Communicated by Capt. J. F. Hellweg, U. S. N. (Ret.), Superintendent, U. S. Naval Observatory.] All measurements and spot counts were made at the Naval Observatory from plates taken at the observatories indicated. Difference in longitude is measured from the central meridian, positive toward the west. Latitude is positive toward the north. Areas are corrected for foreshortening and expressed in millionths of Sun's hemisphere. For each day, under longitude, latitude, area of spot or group, and spot count, are included assumed longitude of center of the disk, assumed latitude of center of the disk, total area of spots and groups, and total spot count.

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1942	*h m*		°	°	°	°				
June 1	10 45			No spots					G	Mt. Wilson.
June 2	10 39	7444	−53	345	+12	55	48	6	G	Do.
				(38)	(−1)	------	48	6		
June 3	14 42	7444	−36	346	+12	38	36	3	G	U. S. Naval.
				(22)	(−1)	------	36	3		
June 4	10 32	7444	−24	347	+12	27	24	1	G	Do.
				(11)	(0)	------	24	1		
June 5	10 45	7444	−15	343	+13	20	12	1	G	Mt. Wilson.
				(358)	(0)	------	12	1		
June 6	10 48	7445	−1	344	+12	12	145	10	G	U. S. Naval.
		(*)	+25	10	+11	28	12	2		
				(345)	(0)	------	157	12		
June 7	11 22	7446	−47	284	+5	48	12	2	F	Do.
		7445	+13	344	+12	18	145	8		
		(*)	+22	353	−6	23	6	3		
				(331)	(0)	------	163	13		
June 8	13 20	7445	+27	344	+12	30	133	6	F	Do.
				(317)	(0)	------	133	6		
June 9	8 25	7445	+40	346	+13	42	97	2	G	Mt. Wilson.
				(306)	(0)	------	97	2		
June 10	10 45	(*)	0	292	+21	21	6	1	G	Do.
		7445	+53	345	+13	54	24	1		
				(292)	(0)	------	30	2		
June 11	9 6	7445	+67	346	+13	68	12	1	G	Do.
				(279)	(+1)		12	1		
June 12	10 34			No spots					G	U. S. Naval.
June 13	11 52			No spots					G	Do.
June 14	11 6	(*)	−17	222	+10	20	12	2	G	Do.
		7447	0	239	+11	11	48	4		
				(239)	(+1)		60	6		
June 15	10 47	7447	+13	238	+11	17	36	3	G	Do.
				(225)	(+1)		36	3		
June 16	12 48	7448	−79	132	+6	79	194	1	F	Do.
				(211)	(+1)		194	1		
June 17	10 46	7448	−67	132	+6	67	291	9	G	Do.
		(*)	+25	224	−10	27	6	1		
				(199)	(+1)		297	10		
June 18	10 39	7448	−53	133	+6	53	194	7	G	Do.
		7450	−33	153	−10	35	6	1		
				(186)	(+1)		200	8		
June 19	12 31	7448	−42	130	+7	43	97	9	G	Do.
		7448	−35	137	+6	36	97	1		
		7450	−19	153	−10	23	73	7		
				(172)	(+2)		267	17		
June 20	10 30	7448	−29	130	+7	30	73	10	VG	Do.
		7448	−22	137	+6	23	97	1		
		7450	−6	153	−10	13	73	8		
				(159)	(+2)		243	19		
June 21	11 8	7448	−16	130	+7	17	48	5	G	Do.
		7448	−8	138	+6	10	73	1		
		7450	+9	155	−11	17	48	3		
		7451	+42	188	−3	42	6	1		
				(146)	(+2)		175	10		

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Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1942	*h m*		°	°	°	°				
June 22	10 48	7448	−2	131	+7	8	48	4	G	U. S. Naval
		7448	+5	138	+6	6	73	1		
				(133)	(+2)		121	5		
June 23	10 59	7448	+13	132	+7	14	73	6	G	Do.
		7448	+20	139	+6	21	73	1		
				(119)	(+2)		146	7		
June 24	10 32	7448	+26	132	+6	27	48	5	G	Do.
		7448	+33	139	+5	33	73	6		
		7452	+43	149	−10	45	6	2		
				(106)	(+2)		127	13		
June 25	10 34	(*)	−32	61	−13	35	12	3	F	Do.
		7448	+47	140	+6	47	97	8		
		7452	+59	152	−11	60	48	3		
				(93)	(+2)		157	14		
June 26	10 44	7453	+49	129	+4	49	24	2	G	Do.
		7448	+60	140	+5	60	48	2		
		7452	+70	150	−11	71	24	3		
				(80)	(+2)		96	7		
June 27	8 39	7453	+63	131	+5	63	73	4	F	Mt. Wilson.
		7453	+67	135	+4	67	48	5		
		7448	+77	145	+4	77	48	1		
				(68)	(+2)		169	10		
June 28	9 31	7453	+76	130	+5	76	97	6	P	Do.
				(54)	(+3)		97	6		
June 29	11 1			No spots					G	U. S. Naval.
June 30	10 38			No spots					G	Do.

Mean daily area for 30 days=103

(*) Not numbered.
VG=very good; G=good; F=fair; P=poor.

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR MAY 1942

[Based on observations at Zurich, except at Locarno on May 15. Data furnished through the courtesy of Prof. W. Brunner, Eidgen. Sternwarte, Zurich, Switzerland]

May 1942	Relative numbers	May 1942	Relative numbers	May 1942	Relative numbers
1	51	11		21	14
2	38	12	31	22	*a* 11
3	30	13	*a* 40	23	9
4	31	14	54	24	8
5	*a* 27	15	**a* 32	25	8
6	25	16	*ad* 52	26	15
7	*d* 25	17	46	27	7
8	20	18	35	28	15
9	*d* 25	19	34	29	0
10	*d* 29	20	26	30	0
				31	7

Mean, 30 days=24.8

*=Observation at Locarno.
a=Passage of an average-sized group through the central meridian.
d=Entrance of a large or average-sized center of activity on the east limb.

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