POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR OCTOBER 1947

By LUCY T. DAY

NOTE: Publication of "Positions, Areas, and Counts of Sunspots" in the MONTHLY WEATHER REVIEW will be *discontinued* with the December 1947 issue. The data will be issued thereafter through publications of the U. S. Naval Observatory, at various times depending on the sunspot activity. Current data will be distributed monthly to a limited number of persons on request addressed to Superintendent, U. S. Naval Observatory, Washington 25, D. C.

[Equatorial Division, U. S. Naval Observatory]

[Communicated by the 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 towards the north. Areas are corrected for foreshortening and expressed in millionths of Sun's hemisphere. For each day under Mount Wilson group number, longitude, latitude, area of spot or group, and spot count, are included respectively: number of groups, 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
1947	*h m*		°	°	°	°				
Oct. 1	10 21	8861	−86	171	−18	86	194	1	G	U. S. Naval.
		8859	−74	183	+21	74	48	1		
		8859	−69	188	+21	69	412	2		
		8859	−66	191	+22	66	24	1		
		8858	−47	210	+24	48	145	18		
		8858	−42	215	+25	44	48	4		
		8855	−46	211	−17	51	121	2		
		8855	−37	220	−13	42	97	16		
		8855	−33	224	−14	40	170	8		
		8852	−15	242	−11	24	242	10		
		8852	−11	246	−9	20	194	2		
		8860	−7	250	−19	28	12	2		
		8851	−4	253	−15	23	73	12		
		8848	+15	272	−33	43	6	1		
		8843	+22	279	+18	24	158	9		
		8841	+31	288	+15	32	73	1		
		8841	+31	288	+13	32	24	15		
		8856	+36	293	+10	36	36	1		
		8839	+41	298	−14	46	48	2		
		8839	+43	300	−10	46	12	2		
		8846	+43	300	+18	44	436	14		
		8834	+70	327	−20	74	36	1		
		8833	+88	345	+16	88	388	1		
		(15)		(257)	(+7)		2,997	126		
2	10 34	8861	−73	171	−18	76	194	1	G	Do.
		8864	−72	172	−12	75	48	1		
		8863	−68	176	+16	68	24	4		
		8859	−61	183	+20	61	485	16		
		8859	−54	190	+20	54	436	3		
		8859	−52	192	+22	53	12	1		
		8858	−35	209	+25	38	461	22		
		8858	−27	217	+24	31	61	3		
		8855	−32	212	−16	40	97	2		
		8855	−25	219	−12	31	61	9		
		8855	−19	225	−13	28	339	11		
		8852	−2	242	−11	18	218	8		
		8852	0	244	−13	20	24	6		
		8852	+2	246	−9	17	145	2		
		8860	+7	251	−19	28	12	3		
		8851	+10	254	−15	24	24	10		
		8857	+19	263	−2	22	61	7		
		8862	+34	278	+9	34	61	6		
		8843	+37	281	+19	39	73	9		
		8841	+45	289	+15	45	61	1		
		8856	+49	293	+11	49	6	1		
		8839	+56	300	−10	58	61	4		
		8846	+57	301	+18	57	533	10		
		(16)		(244)	(+7)		3,497	140		
3	10 20	8868	−80	151	+15	80	48	6	G	Do.
		8869	−77	154	+12	77	12	1		
		8861	−60	171	−19	65	194	1		
		8864	−60	171	−12	63	61	4		
		8863	−55	176	+16	55	145	8		
		8859	−50	181	+20	50	48	4		
		8859	−46	185	+19	47	533	19		
		8859	−40	191	+19	41	436	11		
		8867	−34	197	+12	34	12	2		
		8858	−21	210	+25	27	533	20		
		8855	−19	212	−17	31	48	5		
		8855	−9	222	−14	24	339	23		
		8865	+2	233	−23	30	36	5		
		8852	+12	243	−11	22	194	5		
		8852	+14	245	−9	22	218	7		
		8851	+23	254	−17	33	73	7		
		8857	+32	263	−4	34	121	8		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR OCTOBER 1947—Continued

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
1947	*h m*		°	°	°	°				
Oct. 3	10 20	8857	+36	267	−3	38	73	4	G	U. S. Naval.
		8862	+46	277	+8	46	97	11		
		8843	+49	280	+18	49	16	5		
		8841	+59	290	+14	59	48	3		
		8856	+62	293	+8	62	24	4		
		8846	+67	298	+17	67	145	8		
		8846	+71	302	+18	71	291	3		
		8839	+69	300	−12	71	48	1		
		8839	+70	301	−10	71	61	3		
		(19)		(293)	(+7)		3,854	178		
4	10 12	8868	−65	152	+14	65	24	4	F	Do.
		8869	−61	156	+11	61	6	1		
		8864	−48	169	−12	51	73	5		
		8861	−47	170	−18	52	194	1		
		8863	−46	171	+17	47	6	1		
		8863	−41	176	+16	41	97	1		
		8859	−35	182	+19	36	339	15		
		8859	−31	186	+18	33	436	6		
		8859	−27	190	+19	30	485	5		
		8867	−23	194	+11	23	12	2		
		8866	−14	203	+18	18	145	13		
		8858	−10	207	+25	21	267	9		
		8858	−3	214	+24	18	170	7		
		8855	−6	211	−15	23	121	5		
		8855	0	217	−14	21	145	3		
		8855	+6	223	−14	22	388	14		
		8865	+15	232	−24	34	73	6		
		8852	+24	241	−11	30	145	3		
		8852	+27	244	−8	31	121	4		
		8851	+36	253	−17	43	48	4		
		8857	+42	259	−4	43	194	8		
		8857	+48	265	−3	49	170	7		
		8862	+60	277	+9	60	170	3		
		8843	+63	280	+18	63	16	2		
		8841	+73	290	+15	73	12	1		
		8856	+78	295	+9	78	48	1		
		8846	+83	300	+16	83	97	1		
		8846	+86	303	+17	86	194	1		
		(19)		(217)	(+7)		4,196	133		
5	11 5	8868	−51	153	+14	51	12	3	F	Do.
		8864	−34	170	−12	39	73	13		
		8861	−33	171	−18	41	194	1		
		8863	−27	177	+17	29	61	1		
		8859	−18	186	+18	21	1,406	25		
		8870	−21	183	+11	22	12	3		
		8866	−3	201	+17	11	73	5		
		8866	+3	207	+17	11	36	2		
		8858	+5	209	+24	18	242	8		
		8858	+11	215	+22	18	73	6		
		8855	+8	212	−16	25	12	6		
		8855	+19	223	−14	28	242	9		
		8865	+29	233	−25	43	24	2		
		8852	+39	243	−12	44	145	1		
		8852	+41	245	−10	44	73	2		
		8851	+52	256	−18	57	12	3		
		8857	+60	264	−4	62	436	7		
		8862	+74	278	+9	74	145	2		
		(14)		(204)	(+7)		3,271	99		
6	10 22	8868	−37	154	+14	37	6	1	F	Do.
		8861	−20	171	−19	32	194	1		
		8864	−20	171	−11	26	73	7		
		8871	−17	174	+9	18	24	1		
		8863	−15	176	+17	19	61	2		
		8859	−4	187	+18	14	1,261	20		
		8866	+9	200	+17	14	48	3		
		8866	+17	208	+17	21	24	3		
		8858	+17	208	+24	24	242	8		
		8858	+25	216	+22	28	61	6		
		8855	+23	214	−16	32	24	2		
		8855	+32	223	−15	38	194	7		
		8865	+43	234	−25	53	12	3		
		8852	+51	242	−12	55	145	1		
		8852	+54	245	−10	56	61	2		
		8872	+53	244	−14	57	6	1		
		8857	+68	259	−5	70	242	1		
		8857	+78	269	−4	79	194	1		
		8862	+85	276	+10	85	97	2		
		(14)		(191)	(+6)		2,969	72		
7	10 17	8875	−78	100	+17	78	16	1	G	Do.
		8861	−7	171	−18	26	194	1		
		8864	−6	172	−11	18	12	5		
		8871	−3	175	+9	4	24	2		
		8863	−2	176	+17	12	61	1		
		8859	+3	181	+19	14	436	20		
		8859	+8	186	+18	15	97	10		
		8859	+13	191	+18	18	824	14		
		8859	+10	188	+21	17	12	4		
		8866	+21	199	+17	24	24	6		
		8866	+31	209	+17	33	12	2		
		8858	+27	205	+27	34	6	3		
		8858	+30	208	+26	35	242	6		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR OCTOBER 1947—Continued

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
1947	*h m*		°	°	°	°				
Oct. 7	10 17	8858	+39	217	+22	41	24	5	G	U. S. Naval.
		8855	+46	224	−14	51	145	10		
		8852	+65	243	−13	68	242	9		
		8852	+69	247	−9	71	12	1		
		8857	+82	260	−4	82	242	1		
		(11)		(178)	(+6)		2,625	101		
8	10 24	8876	−83	82	+20	83	194	1	F	Do.
		8877	−80	85	+9	80	24	1		
		8875	−64	101	+17	64	12	1		
		8874	−63	102	−16	66	24	3		
		8873	−26	139	−15	34	24	4		
		8861	+6	171	−18	25	194	1		
		8864	+7	172	−12	19	24	6		
		8871	+11	176	+8	11	12	2		
		8863	+11	176	+16	15	73	9		
		8859	+18	183	+18	22	436	19		
		8859	+26	191	+21	30	6	1		
		8859	+27	192	+17	29	824	6		
		8858	+43	208	+24	46	121	11		
		8866	+44	209	+16	45	6	1		
		8855	+60	225	−44	63	145	6		
		8852	+78	243	−13	80	242	5		
		(14)		(165)	(+6)		2,361	77		
9	9 51	8879	−76	76	+9	76	267	5	VG	Mt. Wilson.
		8876	−70	82	+19	70	291	1		
		8877	−66	86	+9	66	24	1		
		8875	−51	101	+16	52	12	2		
		8874	−49	103	−16	56	24	1		
		8873	−12	140	−15	24	48	8		
		8873	−7	145	−15	22	61	1		
		8861	+19	171	−18	31	194	1		
		8864	+19	171	−12	26	73	19		
		8863	+24	176	+17	26	48	1		
		8859	+30	182	+19	33	339	22		
		8859	+32	184	+19	35	145	20		
		8859	+40	192	+20	42	727	5		
		8878	+44	196	+11	44	36	6		
		8858	+54	206	+26	56	12	2		
		(*)	+72	224	+32	73	12	1		
		8855	+74	226	−14	76	121	1		
		(14)		(152)	(+6)		2,434	97		
10	14 2	8879	−62	74	+10	62	267	5	F	U. S. Naval.
		8876	−55	81	+20	56	242	1		
		8877	−48	88	+9	48	12	1		
		8874	−34	102	−17	41	12	1		
		8873	+4	140	−15	22	194	6		
		8873	+8	144	−15	23	291	3		
		8861	+33	169	−18	41	194	1		
		8864	+33	169	−12	38	61	4		
		8863	+40	176	+17	41	48	2		
		8859	+45	181	+19	47	145	6		
		8859	+54	190	+17	55	970	7		
		8878	+61	197	+10	61	73	2		
		(10)		(136)	(+6)		2,509	39		
11	12 35	8879	−49	75	+10	49	194	6	F	Do.
		8876	−42	82	+20	44	242	1		
		8877	−35	89	+9	35	12	1		
		8874	−14	110	−21	31	12	2		
		8873	+16	140	−15	26	242	2		
		8873	+21	145	−15	29	242	1		
		8861	+46	170	−18	52	194	1		
		8864	+46	170	−12	49	48	1		
		8863	+52	176	+17	53	24	1		
		8859	+59	183	+19	60	48	6		
		8859	+63	187	+17	63	242	7		
		8859	+69	193	+17	69	630	1		
		8878	+75	199	+10	75	48	1		
		(10)		(124)	(+6)		2,178	31		
12	12 33	8879	−35	76	+10	35	194	7	VG	Mt. Wilson.
		8876	−28	83	+20	31	242	1		
		8874	+1	112	−20	26	24	6		
		8873	+29	140	−15	36	218	1		
		8873	+31	142	−15	37	36	5		
		8873	+34	145	−15	40	206	1		
		8861	+59	170	−18	64	145	1		
		8864	+59	170	−11	62	61	5		
		8863	+65	176	+18	66	24	1		
		8859	+73	184	+22	73	12	1		
		8859	+76	187	+18	76	145	5		
		8859	+82	193	+17	82	703	3		
		(8)		(111)	(+6)		2,010	37		
13	9 35	8879	−22	77	+11	23	194	6	F	U. S. Naval.
		8876	−16	83	+20	21	242	1		
		8880	−2	97	+17	12	73	7		
		8873	+40	139	−16	46	194	1		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR OCTOBER 1947—Continued

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
1947	*h m*		°	°	°	°				
Oct. 13	9 35	8873	+46	145	−15	51	194	1	F	U. S. Naval.
		8861	+70	169	−18	75	145	1		
		8864	+70	169	−12	73	48	1		
		(6)		(99)	(+6)		1,090	18		
14	10 19	8881	−80	6	−23	82	145	3	F	Do.
		8881	−69	17	−22	74	242	7		
		8879	−8	78	+11	10	170	10		
		8876	−3	83	+20	14	242	1		
		8880	+12	98	+17	16	97	12		
		8874	+27	113	−19	37	16	2		
		8873	+54	140	−16	59	242	4		
		8873	+59	145	−15	63	145	1		
		8861	+86	172	−19	88	145	1		
		(7)		(86)	(+6)		1,444	41		
15	10 29	8884	−87	345	+19	87	291	1	G	Do.
		8881	−63	9	−24	69	145	10		
		8881	−62	10	−26	68	97	1		
		8881	−57	15	−22	64	194	2		
		(*)	−2	70	+14	8	6	2		
		8879	+6	78	+12	8	170	7		
		8883	+7	79	+4	7	12	3		
		8876	+10	82	+20	16	206	1		
		8880	+26	98	+17	28	97	17		
		8882	+27	99	−24	41	12	6		
		8874	+34	106	−16	40	16	7		
		8873	+67	139	−17	71	145	6		
		8873	+73	145	−16	78	194	3		
		(10)		(72)	(+6)		1,585	66		
16	15 12	8884	−71	345	+19	71	339	1	G	Do.
		8888	−67	349	−11	70	97	6		
		8887	−48	8	−7	51	97	7		
		8881	−48	8	−24	56	170	12		
		8881	−43	13	−22	51	388	11		
		8886	+1	57	+12	6	24	6		
		8879	+21	77	+12	22	145	4		
		8876	+26	82	+20	29	218	1		
		8885	+37	93	+7	37	12	1		
		8880	+41	97	+17	42	36	4		
		8880	+47	103	+16	48	73	3		
		8874	+47	103	−16	52	48	3		
		(10)		(56)	(+6)		1,647	59		
17	12 42	8884	−59	346	+19	60	339	1	G	Do.
		8888	−54	351	−11	56	73	5		
		8881	−38	7	−27	51	218	14		
		8881	−35	10	−24	46	145	6		
		8881	−30	15	−23	42	194	1		
		8887	−36	9	−7	39	61	6		
		8886	+12	57	+14	14	12	1		
		8879	+33	78	+12	33	109	3		
		8876	+38	83	+20	40	218	1		
		8885	+48	93	+7	48	6	1		
		8880	+55	100	+17	56	48	2		
		8880	+60	105	+15	60	109	4		
		8874	+60	105	−17	64	145	6		
		(10)		(45)	(+6)		1,677	51		
18	13 44	8890	−72	319	−29	76	194	1	G	Do.
		8884	−46	345	+18	47	364	1		
		8888	−40	351	−13	44	48	4		
		8881	−25	6	−27	41	291	21		
		8881	−17	14	−23	34	558	19		
		8887	−23	8	−8	26	24	2		
		8886	+25	56	+13	26	12	3		
		8879	+47	78	+12	47	97	3		
		8876	+50	81	+19	51	218	1		
		8882	+66	97	−25	71	24	1		
		8882	+70	101	−23	75	12	1		
		8880	+70	101	+16	70	48	3		
		8880	+75	106	+14	75	97	1		
		8874	+70	101	−18	74	48	1		
		8874	+80	111	−17	82	145	5		
		8889	+77	108	+29	77	16	2		
		(12)		(31)	(+6)		2,196	69		
19	13 3	8890	−72	306	−30	77	48	2	F	Do.
		8890	−59	319	−30	68	218	1		
		8893	−44	334	+12	44	97	3		
		8893	−40	338	+10	40	145	3		
		8884	−32	346	+18	34	339	1		
		8892	−31	347	−4	33	6	1		
		8888	−27	351	−13	33	48	4		
		8881	−13	5	−29	37	97	7		
		8881	−10	8	−27	35	97	11		
		8881	−4	14	−25	31	485	7		
		8887	−11	7	−9	19	24	4		
		8891	+27	45	+15	28	12	2		
		8879	+60	78	+11	60	97	2		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR OCTOBER 1947—Continued

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
1947	*h m*		°	°	°	°				
Oct. 19	13 3	8876	+62	80	+19	62	145	1	F	U. S. Naval.
		(10)		(18)	(+6)		1,858	49		
20	9 26	8896	−85	282	−12	85	145	4	G	Do.
		8896	−80	287	−12	80	291	2		
		8895	−78	289	+20	78	48	2		
		8890	−60	307	−31	66	48	1		
		8890	−47	320	−30	56	194	1		
		8893	−32	335	+12	32	218	19		
		8893	−28	339	+10	29	242	4		
		8894	−30	337	−10	34	6	1		
		8884	−20	347	+18	24	339	1		
		8892	−20	347	−4	23	16	4		
		8888	−15	352	−13	23	24	3		
		8881	+1	8	−28	33	121	10		
		8881	+7	14	−25	31	436	11		
		8887	+3	10	−8	14	24	8		
		8879	+71	78	+9	71	73	2		
		8876	+73	80	+19	74	194	1		
		(12)		(7)	(+5)		2,419	74		
21	9 26	8897	−88	266	−3	88	194	1	G	Do.
		8896	−71	283	−15	73	776	12		
		8896	−65	289	−12	66	388	8		
		8895	−64	290	+22	65	242	7		
		8890	−48	306	−30	57	48	3		
		8890	−34	320	−30	47	145	2		
		8893	−20	334	+12	21	170	17		
		8893	−14	340	+10	15	194	8		
		8884	−7	347	+18	15	339	1		
		8881	+12	6	−29	36	48	6		
		8881	+20	14	−25	35	412	12		
		(7)		(354)	(+5)		2,956	77		
22	9 25	8897	−72	268	−3	72	145	1	F	Do.
		8896	−58	282	−15	60	582	17		
		8896	−52	288	−12	54	339	8		
		8895	−50	290	+22	52	145	5		
		8890	−38	302	−30	51	24	2		
		8890	−22	318	−30	41	194	2		
		(*)	−11	329	−25	32	6	1		
		8893	−7	333	+12	10	170	18		
		8893	0	340	+9	4	218	4		
		8884	+6	346	+18	15	291	1		
		8888	+10	350	−13	20	12	3		
		8881	+24	4	−29	41	24	3		
		8881	+32	12	−25	42	388	11		
		(9)		(340)	(+5)		2,538	76		
23	9 27	8902	−85	242	+19	85	48	1	VG	Do.
		8901	−80	247	−10	80	194	1		
		8897	−59	268	−3	60	267	3		
		8900	−49	278	+16	50	16	10		
		8896	−50	277	−15	53	170	1		
		8896	−48	279	−17	52	73	1		
		8896	−45	282	−14	49	388	23		
		8896	−37	290	−13	42	242	10		
		8895	−37	290	+22	40	145	20		
		8890	−24	303	−30	42	24	2		
		8890	−13	314	−29	36	12	5		
		8890	−10	317	−30	36	170	1		
		8899	−10	317	+21	19	97	3		
		8898	−10	317	+13	13	24	6		
		8893	+6	333	+12	8	145	20		
		8893	+14	341	+9	15	218	7		
		8884	+19	346	+18	24	267	1		
		8881	+40	7	−26	50	73	4		
		8881	+45	12	−25	52	388	9		
		(*)	+73	40	+6	73	24	2		
		(13)		(327)	(+5)		2,985	130		
24	10 41	8903	−77	236	−18	78	194	1	F	Do.
		8902	−75	238	+19	76	97	2		
		8902	−70	243	+21	71	48	1		
		8901	−73	240	−11	74	24	1		
		8901	−66	247	−9	67	194	1		
		8897	−51	262	−1	52	24	2		
		8897	−46	267	−2	47	242	4		
		8900	−35	278	+16	36	6	1		
		8896	−33	280	−15	38	339	10		
		8896	−23	290	−14	29	291	6		
		8895	−23	290	+21	27	97	10		
		8890	−9	304	−30	36	12	1		
		8890	−4	309	−30	35	12	1		
		8890	+2	315	−30	35	170	6		
		8899	+3	316	+21	15	339	5		
		8898	+4	317	+12	7	218	12		
		8893	+20	333	+11	21	145	9		
		8893	+28	341	+9	29	291	11		
		8884	+32	345	+17	34	291	1		
		8881	+59	12	−26	63	388	8		
		(13)		(313)	(+5)		33,422	93		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR OCTOBER 1947—Continued

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
1947	*h m*		°	°	°	°				
Oct. 25	10 0	8907	−75	226	−14	77	194	1	F	U. S. Naval.
		8903	−64	237	−18	68	194	1		
		8901	−60	241	−11	62	36	1		
		8901	−53	248	−10	55	242	1		
		8902	−59	242	+21	60	145	10		
		8897	−39	262	−2	40	48	4		
		8897	−32	269	−2	33	242	2		
		8900	−23	278	+18	26	16	3		
		8896	−23	278	−15	30	194	1		
		8896	−15	286	−13	24	145	19		
		8896	−8	293	−14	22	170	1		
		8895	−8	293	+20	17	61	7		
		8890	+13	314	−29	36	145	9		
		8899	+16	317	+21	23	388	5		
		8898	+17	318	+11	18	388	10		
		8893	+34	335	+11	35	73	14		
		8893	+41	342	+9	41	291	4		
		8905	+40	341	−14	44	24	4		
		8884	+45	346	+17	46	291	1		
		8904	+72	13	+17	73	12	1		
		8881	+73	14	−25	76	242	6		
		(16)		(301)	(+5)		3,541	105		
26	9 39	8907	−62	226	−14	65	170	1	VG	Mt. Wilson.
		8903	−51	237	−18	55	194	1		
		8901	−46	242	−12	48	24	13		
		8901	−40	248	−10	43	242	3		
		8902	−46	242	+22	48	97	25		
		8897	−28	260	−2	29	24	3		
		8897	−19	269	−2	21	218	3		
		8896	−11	277	−15	22	170	6		
		8896	−2	286	−13	18	97	32		
		8896	+6	294	−14	20	158	3		
		8895	+5	293	+20	16	48	14		
		8890	+27	315	−29	43	121	15		
		8899	+27	315	+21	31	194	6		
		8899	+32	320	+21	35	206	8		
		8898	+29	317	+12	30	145	16		
		8898	+34	322	+12	35	267	2		
		8893	+48	336	+12	49	48	17		
		8893	+55	343	+10	55	242	5		
		8905	+53	341	−14	56	73	11		
		8884	+58	346	+17	59	242	1		
		(13)		(288)	(+5)		2,980	185		
27	11 45	8908	−83	190	+19	83	194	2	F	U. S. Naval.
		8907	−48	225	−14	52	170	1		
		8903	−37	236	−18	44	170	1		
		8902	−36	237	+22	38	24	3		
		8901	−26	247	−10	30	242	1		
		8897	−5	268	−1	6	12	1		
		8897	−4	269	−3	8	218	4		
		8896	+4	277	−15	20	109	1		
		8896	+7	280	−14	21	24	4		
		8896	+15	288	−15	24	121	7		
		8896	+19	292	−13	25	24	6		
		8896	+22	295	−13	28	109	1		
		8895	+20	293	+19	24	48	6		
		8899	+39	312	+21	41	194	1		
		8899	+46	319	+21	48	206	1		
		8890	+40	313	−29	52	48	2		
		8898	+42	315	+13	42	109	6		
		8898	+48	321	+13	49	291	1		
		8905	+67	340	−13	69	48	2		
		8893	+71	344	+10	71	170	4		
		8884	+72	345	+17	72	242	1		
		(14)		(273)	(+5)		2,773	56		
28	12 16	8909	−80	180	−9	80	388	1	F	Do.
		8908	−69	191	+19	69	194	2		
		8907	−34	226	−14	39	121	1		
		8903	−23	237	−18	32	97	1		
		8901	−18	242	−14	26	24	2		
		8901	−12	248	−11	21	206	1		
		(*)	−7	253	−3	11	24	3		
		8897	+3	263	−4	9	16	4		
		8897	+9	269	−2	11	6	1		
		8897	+10	270	−2	12	242	1		
		(*)	+13	273	+24	23	6	1		
		8896	+17	277	−15	26	73	1		
		8896	+29	289	−15	36	48	3		
		8896	+35	295	−15	40	73	4		
		8895	+33	293	+19	35	24	4		
		8899	+53	313	+20	55	145	1		
		8899	+59	319	+20	60	194	1		
		8890	+54	314	−29	61	24	6		
		8898	+55	315	+12	55	73	9		
		8898	+62	322	+12	62	242	1		
		8884	+72	332	+17	72	24	1		
		8884	+86	346	+17	86	242	1		
		8905	+80	340	−16	81	73	4		
		8893	+85	345	+9	85	145	4		
		(61)		(260)	(+5)		2,704	58		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR OCTOBER 1947—Continued

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
1947	*h m*		°	°	°	°				
Oct. 29	10 34	8909	−68	180	−9	69	436	1	F	U. S. Naval.
		8908	−57	191	+19	58	242	2		
		8907	−22	226	−15	29	109	3		
		8903	−11	237	−18	25	97	1		
		8901	0	248	−11	16	194	1		
		8910	+1	249	+20	15	24	6		
		8897	+22	270	−2	23	206	2		
		8896	+29	277	−16	36	73	1		
		8896	+41	289	−17	46	24	6		
		8896	+47	295	−16	52	145	10		
		(*)	+31	279	−11	35	12	3		
		8899	+65	313	+20	66	97	1		
		8899	+71	319	+19	71	194	1		
		8898	+74	322	+12	74	206	1		
		(11)		(248)	(+5)		2,059	39		
30	10 27	8909	−55	179	−8	57	291	1	F	Do.
		8908	−43	191	+19	45	145	2		
		(*)	−14	220	+10	15	12	1		
		8907	−9	225	−16	22	73	1		
		8903	+2	236	−19	25	97	1		
		8901	+13	247	−11	21	194	1		
		8910	+15	249	+19	22	48	1		
		8897	+35	269	−2	36	145	2		
		8896	+42	276	−18	48	73	1		
		8896	+45	279	−12	48	6	1		
		8896	+60	294	−13	62	170	4		
		8899	+81	315	+18	81	194	2		
		8898	+87	321	+12	87	194	1		
		(11)		(234)	(+5)		1,642	19		
31	10 56	(*)	−75	146	+27	77	12	1	VG	Mt. Wilson.
		8909	−47	174	−9	50	48	21		
		8909	−40	181	−9	43	436	7		
		8908	−29	192	+19	32	218	10		
		(*)	−22	199	+11	23	12	12		
		(*)	0	221	+13	9	6	2		
		8907	+5	226	−16	21	85	1		
		(*)	+7	228	+10	10	12	6		
		8903	+16	237	−18	28	73	1		
		8901	+26	247	−10	30	194	1		
		8910	+28	249	+19	31	73	21		
1947	*h m*		°	°	°	°				
Oct. 31	10 56	8897	+49	270	−3	50	194	9	VG	Mt. Wilson.
		8896	+55	276	−17	59	61	1		
		8896	+74	295	−16	76	194	2		
		(12)		(221)	(+4)		1,618	95		

Mean daily area for 31 days=2,517.
Mean 10 g+s for 31 days=201.6.
*Not numbered.
VG=very good; G=good; F=fair; P=poor.

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR OCTOBER 1947

[Dependent on observations at Zurich Observatory and its stations at Locarno and Arosa.]

October 1947	Relative numbers	October 1947	Relative numbers	October 1947	Relative numbers
1	235	11	132	21	149
2	242	12	125	22	170
3	273	13	93	23	191
4	304	14	111	24	228
5	262	15	129	25	237
6	275	16	112	26	239
7	227	17	121	27	204
8	235	18	136	28	182
9	222	19	147	29	129
10	160	20	129	30	120
				31	111

Mean, 31 days.6=181

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