JUPITER, 1964-65

Rotation Periods based on transits by E. J. R.

★ Corrected for phase exaggeration.

Note: 1° should be added to all longitudes

** Reverses of photographs

9h+ (1) 1/5

No	Mark	Limiting Dates		Limiting Longitudes		λ8	Transits	30d Drift	Period	
✓ 1 ok	Wc	Dec 21	Jan 19	61°	40°	---	4	- 21°.7	55:11	
✓ 2 ok	Wc	Dec 4	Jan 17	101	62	---	5	- 26.6	55:04	
✓ 3 ok	Dc	Dec 21	Jan 22	95	65	---	4	- 28.1	55:02	
✓ 4 ok ✓	Wc	Dec 28	Feb 15	141	101	---	8	- 24.5	55:07	
✓ 5,6,7 N N	Dc	Dec 21	Mar 23	193	117	---	10	- 24.8	55:07	
✓ STB	Wc Wc System	Dec. 21 Dec. 22	Jan. 18 Jan. 20	346 321	323 303		40	- 23.9	55:06	
✓ ok 11 B	Wp	Jun ~~19~~ 20	Mar. 24 Apr 15	~~149~~	~~324~~	~~80~~ ~~55~~	~~47~~ ~~26~~	~~- 18.91~~	~~55:15.0~~	
✓ ok 2 3	Wc	Jun ~~17~~ 20	Mar. 24 Apr 15	~~177~~ ~~168~~	~~329~~	~~88~~ ~~64~~	~~49~~	~~- 18.81~~	~~55:14.9~~	(17)
✓ ok 3 C	Wf	Jun ~~17~~ 20	Mar. 24 Apr 15	~~186~~ ~~169~~	~~334~~	~~97~~ ~~73~~	~~44~~ ~~24~~	~~- 18.90~~	~~55:14.8~~	
✓ ok 4 D	Wp	Jun ~~19~~ 20	Mar 23	~~354~~ ~~270~~	~~183~~	~~204~~ ~~183~~	~~38~~ ~~20~~	~~- 17.67~~	~~55:16.5~~	
✓ ok 5 4	Wc	Jun ~~19~~ 20	Mar 23	~~312~~ ~~279~~	~~132~~ ~~114~~	~~212~~ ~~192~~	~~44~~ ~~39~~	~~- 17.84~~	~~55:16.2~~	length (17°)
✓ ok 6 E	Wf	Jun ~~17~~ 20	Mar 23	~~321~~ ~~284~~	~~134~~ ~~122~~	~~221~~ ~~201~~	~~48~~ ~~36~~	~~- 18.06~~	~~55:15.9~~	
✓ ok ~~7~~ 5	Df	Jul 28	Nov 28 ✓	338	233	246	5	-- 25.6	55.06	
✓ ok 8 F	Wp	Jun ~~8~~ 19	Apr. 16 Mar 19	49 ~~44~~	222 ~~225~~	315 ~~304~~	51 ~~37~~	~~- 18.89~~	~~55:14.8~~	
✓ ok 9 1	Wc	Jun ~~6~~ 19	Apr. 16 Mar 19	58 ~~52~~	230 ~~234~~	324 ~~313~~	47 ~~43~~	~~- 18.78~~	~~55:14.9~~	length (15)
✓ ok 10 A	Wf	Jun ~~8~~ 19	Apr. 16 Mar 19	67 ~~61~~	240 ~~244~~	333 ~~327~~	43 ~~46~~	~~- 18.67~~	~~55:15.1~~	
~~9~~ 11 ok	Dc	Oct 13	Nov 21 ✓	0	335	340	8	- 19.2	55:14	
✓ South STB	N just S to Z, System II						~~424~~	~~- 17.48~~	55:15	Refers to Nos. 9, 11
(8) ~~11~~ ok	Df	Nov 17	Mar 29	57	335	---	16	- 18.6	55:15	
✓ (1) ~~12~~ ok	Wp	Jul 15	Aug 6	216	203	---	6	- 17.7	55:16	
✓ (2) ~~10~~ ok	Wc	Jul 15	Sep 3	229	198	---	6	- 18.6	55:15	
✓ (3) ~~14~~ ok	Wf	Jul 15	Aug 18	241	220	---	8	- 18.5	55:15	
~~(4)~~ (5) ok	Dp	Oct. 8 Jan 3	Nov. 15 Mar 23	~~85~~ 165	~~58~~ 111	---	~~6~~ 5	~~- 20.8~~ - 20.5	55:13	
(6) ok	Wc	Sep 22	Jan 16	311	231	274	~~6~~	- 20.7	55:12	
(7) ok	Wc	Oct 9	Jan 25	318	244	295	8	- 20.6	55:12	
✓ Middle STB	System II					(61)	~~59~~	~~- 17.3~~	55:14	
✓ OK	RSp	May 31	Apr 20	2	11	8 ✓	~~93~~	+ 0.83 ✓	55:41.8 ✓	
✓ OK	RSc	May 31	Apr. 20	15	22	20 ✓	~~87~~ 93	+ 0.65 ✓	55:41.5 ✓	length (24°)
✓ OK	RSf	May 31	Apr 20	28	34	32 ✓	~~70~~ 82	+ 0.56 ✓	55:41.4 ✓	
✓ Red Spot	System II						(258) ~~222~~	+ 0.68 ✓	55:41.6 ✓	
1 OK	Dc ✓	Nov 14	Jan 29 ✓	74	107 ✓	---	15	+ 13.08	55:68	
2 OK	Dc ✓	Dec 17	Jan 22 ✓	121	133 ✓	---	5	+ 10.00	55 54	
3 OK	Dp ✓	Aug 11	Oct 27 ✓	232	219 ✓	---	8	- 5.1	55:34 ✓	Near source of SEB Dist.
4 OK	Dp ✓	Aug. 6	Oct 3 ✓	242	242 ✓	---	6	0.0	55 41 ✓	"
SEBs,	System II			(mean of 1 and 2:			(34)	~~+ 11.52~~	55:66	
1 OK	Dc ✓	Aug 25.49	Sep 4.45 ✓	252.0	285.4 ✓	---	3 **	+ 100°.60	57:~~69~~ 57.9	±0°.9
2 OK	Dc ✓	Oct 3.39	Oct 8.39 ✓	259.4	276~~8~~ ✓	---	3 **	+ 92.40 ✓	57 ~~48~~ 45	±8°.3
✓ SEBs,	System II. (Retrograding Branch of SEB Disturbance)						(6)	~~+ 96.50~~	57:53.7	

The UTILITY Line Form No. 1138A

JUPITER, 1964-65

ALL OK

(2)

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9h+

No.	Mark	Limiting Dates		Limiting Longitudes		λ^{δ}	Transits	30^{d} Drift	Period	
1	Dc	Jun 14	Aug 30	233	313	--	10	-109.1	53:12	
2	Wc	Jun 21	Aug 17	218	59	---	4	- 30.8	53.50	
3	Wc	Jun 19	Aug 5	233	116	---	10	- 74.7	53 54	
4	Dc	Jul 24	Aug 19	152	99	---	7	- 61.2	54:17	
5	Dp	Jun 19	Jul 22	241	162	---	8	-- 71.8	54 03	
6	Dc	Jun 19	Aug 5	245	138	---	10	- 68.3	54.07	
7	Wc	Jul 15	Aug 15	199	125	----	4	- 71.6	54.03	65
8	Dc	Jul 15	Aug 15	209	135	--	8	- 71.6	54.03	mean 1-8 -74.1 34 9.53.54 Jun 2-8 -71°.43 9.54.03
9	Wc	Jul 6	Jul 27	251	209	---	4	-60.0	54.19	
10	Dc	Aug 17	Sep 22	50	341	---	5	-60.7	54:17	
11	Dc	Aug 19	Oct 15	67	323	---	11	-54.7	54.26	
12	Dc	Jul 24	Sep 19	133	30	---	8	-54.2	54.27	
* 13	Wc	Aug. 15	Oct 13	95	0	---	~~13~~	-48.3	54 35	
14	Dc	Aug 29	Sep 21	75	40	---	6	-33.7	54.54	
15	Wc	Aug 29	Oct 6	80	36	---	5	-34.7	54.53	
16	Dc	Aug 19	Oct 6	99	45	---	6	-33.8	54.54	
17	Wc	Aug 29	Oct 16	102	40	---	4	-33.7	54.48	
* 18	Dc	Jul 30	Nov 7	236	94	---	~~19~~	-33.7	54.48	
19	Wc	Sep 20	Nov 7	147	102	---	9	-40.6	54.45	
20	Dc	Sep 18	Nov 3	175	106	---	10	-40.6	54.45	
21	Wc	Jul 27	Oct 21	240	141	---	~~14~~ 17	-34.5	54.53	
* 22	Wc	Oct 29	Dec 6	134	101	121	~~8~~	-26.1	55:05	
23	Dc	Aug 6	Nov 8	233	130	---	12	-32.9	54.56	
24	Wc	Sep 18	Nov 8	191	138	---	6	-31.2	54.58	
25	Dc	Nov 8	Dec 5	144	112	136	9	-35.6	54.52	
26	Wc	Aug 13	Oct 10	235	131	--	8	-27.9	55:02	
27	Dc	Aug 13	Oct 27	240	167	---	10	-29.2	55:01	
28	Dc	Oct 29	Dec 4	167	142	157	9	-20.8	55:12	
29	Wc	Sep 30	Nov 20	211	157	165	9	-31.8	54:57	177
30	Wc	Sep 30	Nov 25	227	157	173	3	-37.5	54:49	mean 10-30 -33.46 9.54.49
* 31	Wc	Nov 6	Dec 6	5	2	4	~~14~~	- 3.0	55:37	
* 32	Df	Sep 17	Oct 16	92	83	---	~~7~~	- 9.3	55:28	
33	Wc	Dec 21	Feb 5	37	99	---	8	-13.0	55:23	
34	Wc	Nov 13	Dec 7	143	135	143	8	-10.0	55.27	
35	Wc	Dec 22	Feb 20	132	114	---	8	-10.0	55:27	
36	Dc	Nov 6	Jan 5	197	161	192	12	-18.0	55:16	
37	Df	Nov 11	Dec 15	202	182	202	5	-17.6	55:17	65
38	Wc	Dec 21	Jan 10	182	163	---	8	-30.0	55:00	mean 31-38 -13.86 9.55.22
							(258) ~~278~~	~~-48.52~~	(54:34)	

S. edge SEB$_n$, SEBZ, System II

(mean (1 through 30) ✓

d

*The UTILITY Line Form No. 1138A

JUPITER, 1964-65

Mean without 6a, 7a, 21a, 22a = $-0°.5/30^d$ = 9:50:29

[Mean of 6a, 7a, 21a, 22a (Abnormally slow)] = $+11°.3/30^d$ = 9:50:45

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9h+

NO	MARK	LIMITING DATES		LIMITING LONGITUDES		λ^o	TRANSITS	30^d DRIFT	PERIOD
OK 1	Dc	DEC 30	FEB 21	9	9	---	13	0°0	50:30
OK 2	Wc	DEC 28	FEB 14	22	17	---	7	- 3.1	50:26
3a	Dc	NOV 21	JAN 29	45	26	---	8	- 8.3	50:19
OK 3b	Dc	JAN 29	APR 3	26	34	---	5	+ 3.8	50:35
* OK 4	Wc	DEC 28	MAR 7	47	43	---	7	- 1.7	50:28
OK 5	Dc	DEC 21	FEB 26	56	65	---	5	+ 4.0	50:35
* (6a) OK	Wc	JUN 15	SEP 17	357	44	---	16	(+15.0)	50:50
* 6b OK	Wc	SEP 17	APR 15	44	90	60	22	+ 6.4	50:39
* (7a) OK	Dc	JUN 15	OCT 25	10	67	---	16	(+13.0)	50:48
* 7b OK	Dc	OCT 25	APR 22	67	105	70	21	+ 6.4	50:39
OK 8	Dc	JUN 27	JUL 22	39	41	---	5	+ 2.4	50:33
OK 9	Wc	JUN 27	JUL 20	50	52	---	6	+ 2.6	50:34
OK 10	Dc	JUN 18	JUL 27	85	69	---	4	- 12.3	50:13
OK 11	Wc	JUN 18	SEP 29	110	86	---	9	- 7.0	50:21
OK 12	Dc	JUN 25	SEP 29	116	95	---	5	- 6.6	50:21
OK 13	Wc	JUN 25	SEP 6	121	110	---	7	- 4.5	50:24
OK 14	Dc	JUN 25	OCT 13	129	126	---	12	- 0.8	50:29
OK 15	Dc	JUL 2	SEP 29	136	139	---	10	+ 1.0	50:31
OK 16	Wc	JUN 30	OCT 9	148	150	---	7	+ 0.6	50:31
OK 17	Dc	JUN 14	SEP 18	179	162	---	6	- 5.3	50:23
OK 18	Dc	DEC 22	FEB 6	157	164	---	8	+ 4.6	50:36
OK 19	Wc	OCT 16	MAR 3	211	208	216	12	- 0.7	50:29
OK 20	Dc	OCT 16	MAR 3	222	218	224	17	- 0.9	50:29
* (21a) OK	Wc	JUN 14	NOV 13	195	240	(240)	28	+ 8.9	50:42
* 21b OK	Wc	NOV 13	MAR 15	240	248	240	15	+ 2.0	50:33
* (22a) OK	Dc	JUN 21	NOV 13	212	251	(251)	20	+ 8.1	50:41
* 22b OK	Dc	NOV 13	MAR 31	251	261	251	17	+ 2.2	50:33
OK 23	Wc	AUG 6	OCT 23	242	250	---	6	+ 3.1	50:34
OK 24	Dc	JUL 21	OCT 23	269	257	---	8	- 3.8	50:25
OK 25	Wc	JUN 26	OCT 30	282	272	---	13	- 2.4	50:27
OK 26	Dc	JUN 17	JAN 10	294	275	287	21	- 2.8	50:26
OK 27	Wc	JUL 26	NOV 18	305	296	296	13	- 2.3	50:27
OK 28	Dc	JUL 3	FEB 4	324	291	305	26	- 4.6	50:24
29 OK	Wc	JUN 8	AUG 18	328	345	---	5	+ 7.2	50:40
30 OK	Dc	JUN 15	AUG 11	340	349	---	3	+ 4.7	50:36
* OK 31	Dc	SEP 17	DEC 11	335	312	316	15	- 8.1	50:19
OK 32	Dc	FEB 18	APR 12	350	354	---	9	+ 2.3	50:33
OK 33	Dc	JUL 17	AUG 18	0	4	--- (432)	5	+ 3.8	50:35
N. EQUATORIAL CURRENT,		SYSTEM I				mean		+ 0.7	(50:31)

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JUPITER, 1964-65

† Measures of Photographs in Green Light

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9h+

No.	MARK	LIMITING DATES		LIMITING	LONGITUDES	$\lambda^{\circ\circ}$	TRANSITS	30d DRIFT	PERIOD	
OK 1	Wp	JUL 26	AUG 27	89	68	---	4	-18.5	55:15	
OK 2	Wc	JUN 18	MAR 3	106	2	47	~~42~~	-12.1	55:24	
OK 3	Wf	JUL 26	SEP 17	99	78	---	~~12~~	-11.9	55:24	
OK 4	Wc	JUN 23	FEB 19	137	93	75	~~13~~	-12.9	55:23	
OK 5	Wc	JUL 3	AUG 3	219	207	---	3	-11.6	55:25	
OK 6	Wc	AUG 6	SEP 18	250	223	---	4	-18.8	55:15	
OK 7	Wc	AUG 13	OCT 7	262	230	---	4	-17.5	55:17	
OK 8	Dp	JUN 25	AUG 19	59	27	---	6	-17.5	55:17	
K MIDDLE OF NEB,		SYSTEM II					~~88~~	~~-15.1~~	55:20	
OK 1	Wc	JUL 26	JAN 12	58	8	30	~~16~~	-8.8	55 24	
OK 2	Dc	JUN 18	JUL 14	90	80	---	~~6~~	-11.5	55:25	
OK 3	Wc	JUL 24	MAR 3	111	16	61	~~18~~	-12.3	55:23	
OK 4	Wc	DEC 6	JAN 17	79	58	---	4	-15.0	55:20	
OK 5	Dc	DEC 4	JAN 17	113	94	---	5	-13.0	55:23	
OK 6	Wc	JUN 21	JAN 17	185	100	127	16	-12.1	55:24	
OK 7	Dp	JUN 21	JAN 17	195	106	133	~~14~~	-12.7	55:23	
8 OK	Wc	JUL 27	FEB 13	241	169	203	~~31~~	-10.7	55:26	
OK 9	Dc	JUL 20	JAN 22	254	187	211	~~11~~	-10.8	55:26	
OK 10	Wc	JUL 6	SEP 6	275	251	---	4	-11.6	55:25	
OK 11 ✓	Wc	JUL 14	MAR 7	1	291	327	~~41~~	-8.9	55:29	
OK 12 ✓	Dc	JUN 27	MAR 7	13	300	335	~~25~~	-8.7	55.27	
OK 13 ✓	Wc	JUN 27	MAR 29	25	300	344	44	-9.3	55:28	
OK 14 Heath ✓	Dc	JUN 27	OCT 26	32	355	---	9	-9.2	55:28	
✓ N edge NEB,		SYSTEM II					~~244~~	~~-11.1~~	55:26	
OK 1	Dp	NOV 7	FEB 15	328	149	322	~~9~~	-54.8	49:17	
OK 2	Dc	NOV 13	DEC 11	346	295	346	6	-54.6	49:17	
OK 3	Dp	FEB 6	MAR 30	198	100	---	8	-56.5	49:14	
* NTBs,	S edge	NTBs,	SYSTEM I				~~23~~	~~-54.9~~	49:17	
OK 1	Dp	NOV 7	DEC 11	49	33	39	7	-1.8	55:38	
OK 2	Dc	NOV 7	DEC 11	53	60	52	6	-2.6	55:36	
OK 3	Dp	DEC 28	MAR 15	60	73	---	12	+4.9	55:47	
OK 4	Dc	JAN 14	MAR 27	77	86	---	12	+3.8	55:46	
OK 5	Df	JAN 3	MAR 18	93	95	---	13	+0.8	55:42	
6 OK	Wc	JUL 14	OCT 16	77	84	---	8	+2.2	55:44	
7 OK	Wf	JUN 29	NOV 8	135	129	---	10	-1.4	55:39	
OK 8	Dc	JUN 29	AUG 3	164	156	---	4	-6.9	55:31	
OK 9	Df	SEP 12	DEC 22	197	197	199	8	0.0	55:41	
OK 10	Wc	AUG 3	DEC 30	208	208	208	10	0.0	55:41	
✓ NNTB	SYSTEM II						(90)	~~-0.1~~	(55:40.5)	

The UTILITY Line Form No. 1138A

JUPITER, 1964-65

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9^h_1

No	MARK	LIMITING	DATES	LIMITING	LONGITUDES	λ^{o}	TRANSITS	30^d DRIFT	PERIOD	
OK 1	Dc	SEP 29	Nov 7	34	8	---	9	-20°.0	55:13	
OK 2	Dp	JUL 27	SEP 18	224	205	---	4	-10.8	55:26	
OK 3	Dc	JUL 20	SEP 18	240	223	---	8	- 8.5	55:29	
OK 4	Dp	JUN 27	Nov 2	32	337	---	7	-12.9	58:23	
OK 5 Heath	Dc	JUN 27	Nov 29	46	339	346	20	-13.0	55:23	
OK 6	Df	JUL 7	OCT 14	57	11	---	7	-13.9	55:22	
√ NNNTB, SYSTEM II							(55)	~~-13.2~~	(55:23)	

OK

SEB DISTURBANCE OF 1964-65

Initial Outbreak: λ_{II} 250°, JUN. 10, 1964 (EXTRAPOLATED)

1ST OBSERVATION: JUN. 14, 1964 (Reese) 232° (II)

STRZ OVAL	PERIOD DURING 1964-65 APPARITION		PERIOD BETWEEN 1963-1964 OPPOSITIONS	
OMIT BC	$9^h\ 55^m$	$14^s.9$	$9^h\ 55^m$	$13^s.7$
DE	$9^h\ 55^m$	$16^s.2$	$9^h\ 55^m$	$14^s.0$
FA	$9^h\ 55^m$	$14^s.9$	$9^h\ 55^m$	$16^s.2$
mean	$9^h\ 55^m$	$15^s.3$	$9^h\ 55^m$	$14^s.6$