

The following linear drift lines closely approximate the observed drift motion in System II longitude of the center of the Red Spot in 1964-65.

<u>LIMITING DATES</u>	<u>LIMITING LONGITUDES</u>	<u>DRIFT/30^d</u>	<u>PERIOD</u>
MAY 31, 1964 - JUL. 21, 1964 *	16°5' - 19°8'	+1°.94	9 ^h 55 ^m 43 ^s .3
JUL. 21, 1964 - JAN. 9, 1965 *	19.8 - 21.1	+0°.23	9 ^h 55 ^m 40 ^s .9
JAN. 9, 1965 - APR. 20, 1965 *	21.1 - 23.6	+0°.74	9 ^h 55 ^m 41 ^s .6
weighted mean		+0°.66	9 ^h 55 ^m 41 ^s .5

* CORRECTED FOR PULSE EXAGGERATION AND ^{SYSTEMATIC} VISUAL TRANSIT ERROR.

Mean Rotation Period of the Red Spot from opposition 1963 to opposition 1964.

OMIT OCT 8, 1963 - NOV 13, 1964	16°7' - 21°2'	+0°.34	9 ^h 55 ^m 41 ^s .1
* correction of +1°.2 applied for systematic visual transit error			

OK 1964-65 ✓

2304 ← total transits
 1789 ← transits used
 77.6% used

77.6
 2304 / 1789

142 objects
 13 currents

OK 1965-66

1327 total transits

8-INCH REFL.
 12-INCH REFL.
 16-INCH REFL.

supplemented by 14 measured positions from photographs of 3 objects in 2 currents.

OMIT

Center Red Spot

Average elevation of Sun's beam from Bellini's horizon = ±0°.65
 P.E. (single obs) = ±0°.55

$$\frac{\sum \nu}{n} = \frac{50^{\circ}5}{78}$$

77
 79

Convention Paper Abstract

"Jupiter's North Equatorial Current in 1963 - 66"

By Phillip W. Budine

During the 1963 - 66 apparitions of Jupiter, an outstanding highlight of these apparitions was the existence of two distinct currents in the northern part of the Equatorial Zone: one current being normal; the other, abnormally slow. These two distinct currents were in evidence simultaneously during the apparitions.

In 1963 was the first time that an abnormally slow current was observed in these latitudes.

This paper gives the results and analysis of the abnormally slow current of the North Equatorial Current from 1963 - 66. The paper is illustrated with drift tables, charts and graphs of the features of the "slow" North Equatorial Current. The various features are compared with those of earlier apparitions. The mean period for 1963 - 66 of the abnormally slow portion of the N. Equatorial Current was between 9:50:47 - 9:50:50 in System I. All of the data used in the tables and charts was derived from the transit observations of members of the A.L.P.O. made during the 1963 - 66 apparitions of Jupiter.

1964-65 + 1965-66

Joan Farrell (Only 1965-66)
~~W. J. ...~~

Chuck Pollak (Only 1965-66)

Alan Heath (Both)

E. J. Reese (Both)

Paul Mackal (Both)

Phil Budine (Both)

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OBSER.

SOUTHWESTERN ASTRONOMICAL CONFERENCE '68
AUGUST 21-24

Things To Do For The Non-Astronomer

1. Luncheon at La Posta and tour of historical Old Mesilla, Thursday, 12 o'clock noon. Arranged by Fiesta Travel. Nominal Charge.
2. Melodrama, Las Cruces Community Theater. Ballroom, El Patio, Old Mesilla. Friday. Curtain time approximately 8:00 P.M.
3. Style Show. Hatch Farm Bureau presents Maid of Cotton and Jack and Jill, plus entertainment. Milton Student Center Ballroom. Saturday. 10:00 A.M.
4. Swimming N.M.S.U. Natatorium, 5:00 P.M.-10:00 P.M., Wed., Thurs., and Fri. Free. Get tickets at registration desk.
5. Bowling. South basement Milton Student Center. Regular fee.
6. Golf course. Regular fee. All day from dawn to dusk. Call Herb Wimberly - 646-3219.
7. Tennis. Courts open every day. No charge.
8. Bus service to Las Cruces via Old Mesilla and Loretto Shopping Center. Bus departs Milton Student Center every 30 minutes, on the hour and half hour, from 7:30 A.M. to 7:30 P.M. Bus schedules available at Garcia Hall desk. Fare 20¢.
9. Astronomers and non-astronomers alike will enjoy a visit to the Sacramento Peak Observatory more than 9,000 feet high among the pine trees and about 100 miles by road from Las Cruces. Their open house is at 2:00 P.M. on Saturday. Travel is by private automobile.

1963-64

- (Reese) (#16a) - Wc - Jun. 2 - Aug. 18 - $81^{\circ} - 114^{\circ} - 17 - +12.9 - 9:50:48$
- (Mackal) (#16a) - Wc - July 1 - Oct. 6 - $80 - 120 - 3 - +12.4 - 9:50:47$
- (#17) - Dc - June 2 - ~~Aug. 18~~ ^{Sept. 26} - $95^{\circ} - 124^{\circ} - 13 - +14.4 - 9:50:49$
- (#30) Wc - May 29 - Mar. 11 - $180 - 305 - (240) - 67 - +13.1 - 9:50:48$
- (#31) Dc - May 29 - Mar. 11 - $191 - 317 - (251^{\circ}) - 50 - +13.2 - 9:50:48$

AVE. = ~~9:51:04~~ ~~9:50:27~~ 9:50:48

other: 9:50:27

"63-64" 1964-65

- (#30) (#6a) - Wc - Jun. 15 - Sept. 17 - $357 - 44$ (~~12~~) ⁽¹²⁾ - $+15.0 - 9:50:50$
- (#31) (#6b) - Wc - Sept. 17 - Apr. 15 - $44 - 90 - (60) - 18 - +6.4 - 9:50:39$
- (#31) (#7a) - Dc - Jun. 15 - Oct. 25 - $10 - 67$ (~~14~~) ⁽¹⁴⁾ - $+13.0 - 9:50:48$
- (#7b) - Dc - Oct. 25 - Apr. 22 - $67 - 105 - (70) - 19 - +6.4 - 9:50:39$
- (#21a) - Wc - Jun. 14 - Nov. 13 - $195 - 240 - (240) - 24 - +8.9 - 9:50:42$
- (#21b) - Wc - Nov. 13 - Mar. 15 - $240^{\circ} - 248 - (240) - 10 - +2.0 - 9:50:33$
- (#22a) - Dc - Jun. 21 - Nov. 13 - $212 - 251$ (¹⁹) - $(+8.1) - 9:50:41$
- (#22b) - Dc - Nov. 13 - Mar. 31 - $251 - 261 - (251) - 16 - +2.2 - 9:50:33$

AVE. = $+11.3 / 30d = 9:50:45$

other: $-0.5 = 9:50:29$

1965-66

- (#30) #5 - Wc - Aug. 11 - May 4 - $115 - 242 - () - +14.1 - 9:50:49$
- (#31) #6 - Dc - Aug. 11 - Apr. 23 - $132 - 261 - () - +16.1 - 9:50:51$

Mean 9:50:50

weather 9:50:30