

7724

20 12.0 +15 03 A2E

192425

28097

0576 0504

PKS

4.95 + 09 + 01 J

028	188	1023	2920	et al
037	180	1016	2601	J G (circled)
<u>032</u>	184	1019	2410	(5)

190
380
1013
1393
1457

048 = a ✓ 1.78

010 = r

But 51

+052 + 058

-23.0

6523 7338
-7824 -6794

179

+1.60 ✓
3.35 ✓

1.366

-8.184

-0.060

-9.500

0.817

8.193

27.351

-0.546

0.389

-23.000

42.563

3.400

0.050

0.052

3.000

15.000*

12.000*

20.000*

77.24.000*

20.850	8001.000*
44.200	
16.500	20.000*
-1.000	51.500*
5.800	44.000*
145	12.000*
-19.500	0.012*
	-0.002*
	5.500*
0.642	125.893
0.762	-19.500
-0.090	
32.365	0.029
6.428	-0.089
0.056	5.426
0.070	
0.996	0.002
2.815	0.996
-19.014	
	-19.115
-0.765	
0.644	-0.050
-0.002	-0.003
-45.944	
-6.598	-6.175

2561

20 311 448 01

BV11

195586

d

SB 5.35

6.58 -11 -57 407 21

-16.9

-029 097 395 2.672

0000 + 008

082 901

164

6.35

try you's

565

-205

8.4

7815

939.5 115

6.49

~~019 092 1.153 2.759
 095 1.149
 260
 1349~~

(10)
 20.4

7861.000*
 20.000*
 31.100*
 43.000*
 1.000*
 0.004*
 0.005*
 8.400*
 478.630
 -16.900
 0.030
 -0.145
 16.806
 0.004
 0.989
 -14.597
 -0.001
 0.034
 -1.072

8342 20 35.1
 21 44.1 + 69 65 long 405

207136
 Gap / Sind long, Air 0
 (-1.5)

-3277 9448 -5676 ~ 2524

15 + 02477 mod = 880 -4 155 1005 2.882

12 + 0002 - Pe = -8.9 -023 1026

-6012.526 -022724

844 81.4 134 805 2175

282
 500 -0019 0025 1.3 44.4

-6014 -6000 -24 -12.5

8.220 -004 1.54 44.7 5.6
 + 34 -12

8354 -146
 -004 -021
 242
 1.45

11- 10.00- 6-
 886.8-
 65.671-
 0.220
 0.737
 -0.639

17 10.37 6A
 4.445
 44.257
 0.926
 -0.364
 -0.101

14 13.20 12
 11.863
 -86.501
 0.307
 0.569
 0.763

15 18.10 13
 -1.500
 5.600
 -24.000
 -17.500
 69.900
 21.750

R.A. : 23.650
DEC. : -14.850
R.A. : 0.000
DEC. : 0.000
TANCE : 0.000
DULUS : 10
VEL. : 0.000

I1 (U) : 0.875
I2 (U) : 0.464
I3 (U) : -0.137
DU : 0.000
U : 0.000

q1 (V) : -0.403
q2 (V) : 0.856
q3 (V) : 0.323
dV : 0.000
V : 0.000

q1 (W) : -0.267
q2 (W) : 0.228
q3 (W) : -0.936
dW : 0.000
W : 0.000

8675 2245.5 -51 35 +20

215789

31813



9406
7397 - 8911

FRS

-250 2093
217.8 2100

349 + 08 + 08 C

841 168 1.154
2850 10 65

(65)

173
-72
3.5
0

175
350
1144
1496
1571

074 = 3
116 = 2
10346

8569
2504

1825
0050
272

R.A. : 22.750
DEC. : -51.600
M. R.A. : 173.000
M. DEC. : -72.000
DISTANCE : 3.500
MODULUS : 50
D. VEL. : 0.000

q1 (U) : 0.848
q2 (U) : 0.130
q3 (U) : -0.514
DU : 387.483
U : 19.420

q1 (V) : -0.268
q2 (V) : 0.942
q3 (V) : -0.204
DV : -457.886
V : -22.949

q1 (W) : -0.457
q2 (W) : -0.311
q3 (W) : -0.833
DW : -126.928
W : -6.361

20 5.1
21 10.6

20 15 6.0

8" 0.8

10.25
10.26
2.839

5.20

9407 Mg SD

(10.5)

22 0.9 444 24

856

209515 -15 W3

-13 444

1008

2.800

6-4.5

9963

+25 -0.252

-11 136

1029

2.834

6

9578

-00187
-014
+017-0.31

-010 144

1026

2.842

6

9376

-6014-0.308 GLT

220

1.304

992

15=0.318/2.815

-60183 -0.677 S.4

225

1.304

9971

2=0.062

-0156
-017
0.30

-235

270

9978

2=0.062



-31

270

9978

2=0.062

10.30
13

M.A. Williams
P270.8

276
1299

10964

22.000

44.400

-23.500

-31.000

5.600

123.02

131.52

110

~~11.200~~

10.8

+1.0

0.789

0.610

0.068

-152.482

-20.042

19

-0.144

0.076

0.987

0.281

-1.147

1979

11

10.3

-0.597

0.789

-0.148

-68.369

-8.042

10

-9.2

10

		TIME
8407.000*	8407.000*	
22.000*	22.000*	
0.900*	0.900*	
44.000*	44.000*	
24.000*	24.000*	
-0.017*	-0.017*	
-0.030*	-0.030*	
5.350*	5.900*	
117.490	151.356	5.25 110
-1.200	-4.500	
-0.150	-0.150	
0.070	0.070	
-17.730	-23.047	17
0.001	0.001	
0.986	0.986	
-1.074	-4.297	h
-0.064	-0.064	
-0.149	-0.149	
-7.396	-9.088	7

Comments:

199309

1400

70

55.2

499

01

Bas

P 3849

2417

48641

6

443

+ 3 46

144

431419

$P = 1068 d$

131670

1510

14

45.5

-19

44

-24.4

L. 4102

P = 2948 d

175717
10.389

19

1450

67.0

+10

10

-16.4

B₂

P22866

58318

1500 7

2012 77 46

Bar

+71714

+372.8

$P = (672.7) d$

8.3

222603

450 109 195 497

2 Dec 32917

23 25.5 +01 30

1-12-48

8984

14851

4.52+0.19 +0.07 A77

-135-746 C

W14851

23 70 130

222

-132-153 W

-122 -244 P
-133 -148

304110)

-0088 -153
-0084 2.46 2.11 2.20 2.23

F.54

24 27

-00774 -154 W3

SD -088-1464

-00770 -1513

-1302
-1284 1513
5297-7500
1984
14038

108516

-1314

2034

0632 49.5

10.30

-1396-1569

1006 10.50

0616

2013-0206 115 +12.4 0701 0.77

7:596 0 / -133 +48 +12.4 0 0 -201

012 0 -133 0 -055 -630 +12.4 +12.4 -1.1 3.4

034

+0.7 +94 -21

35

10.5 -22.1 23.4 03 +10.5 -19.1 -20.0

$(-25.5 + 12.5) 6$

05

215 204 484 2824

+11.3 -13.7 -14

$(230) (865)$

+11.4 -11.6 -11.7

201

$\frac{913}{058}$

115 244

$(14.7 + 1.9 - 13.5)$

07

$(-12.6 + 2.6 - 13)$

107

065

no

$(-14 + 2 - 14)$

→

97247

8' 54.3

753 30

-19.2

Ba

80.55

№ 988

2

40.4

+81

14

+26.3

31.03.90

5^u

P = 2018 d

5.26 +1.30 1.16

5.20 +0.400

30443

4

4600

+34

54

163.2

CN

+34911

~~163.2~~
2554d

31487

4511005

4511

451

47

~~47~~

1066.9d

492.9173

10 57.2 +11 87

-59.7 g

p=328.3

10.44 +1.32

223617

(1403)

23 Yld #1 yr

BA + 29.0

H1478

P 13014

-6⁰ 1483

6 SL.7 -7 02

-9 -2 -7

0 +3

-9 +1

-013 0

-011 +021

2349

-5232

9122

8522

}

123508
by his way of

+0082-038 C+Y

14.1

+0391

44.1

47

-34

+039-034

16.0

41.4

55.0

R.A.	:	14.100
DEC.	:	-44.100
PM. R.A.	:	47.000
PM. DEC.	:	-34.000
DISTANCE	:	10.000
MODULUS	:	1000
RAD. VEL.	:	16.800
q1 (U)	:	-0.709
q2 (U)	:	-0.010
q3 (U)	:	-0.705
DU	:	-111.865
U	:	-123.708
q1 (V)	:	0.641
q2 (V)	:	0.406
q3 (V)	:	-0.651
DV	:	37.173
V	:	26.238
q1 (M)	:	-0.293
q2 (M)	:	0.914
q3 (M)	:	0.282
MP	:	-194.092
M	:	-189.360

4903109

14

25

~30 + 13

8) 53

~~22 58.4~~

+80 49

+34

120' 49.54

9^{am} 3''

1905 1904
1904 1904

5.0511 52.15

1.95 1803/

8.4241 50.6

1905

148144

16 273

24 11

-290255)

-00170 -00188 -0198

-0143 -0043 -014

-026
-012

996-444-732 936353

NYB2 | 14 252 25 H

-25th 1118

+00131 +00120

+02278 +0313

F016

+023

148579

27.1

16 26.9 -25 02

-0025 = 2.0

-038 = 46

86.64 96.1

134
775

25.124

35.50

31.080

-0017 -031

-0005 -036

56.709

44

753

713

766

-0009 -033

-0027 -052

21.52 92.4

2.14

1933

8683

-3897

1.48

4961

-8209

20.48

2.246

1.53

20.93

20.47

20.00

2.114

-0209

-012 -026

0286

5009

-0.7

0064 1012

6.05

39.75

1.27

1967

2089

255

2012

20

2092

200009

300000

56.712

7

516

10

701

14M594

16.272

-27 48

-27 119.7

-17M96

-00104

-00955

-0127 -013

+00003

~~+00003~~

+00950

~~+00095~~

-00106

-00119

-0140

$\left[\begin{array}{c} -14 \\ +3 \end{array} \right]$

+00003

+00003

+00003

8464 A052044

16765 2

1515 790

3235

9.2.24.5

+0143 = 2.7 -130 ± 2.2

+0146

-120

DI = L + 7.88

8m = 3.64

40.088

1958.6

-0.54

26.41

1841.4

-735

39.353

+0148 - 126

+0143 - 126

+7.62
18.79

0.220 - 118

39.953

+2164

24.62

548 7909

2922
0603

+4
95-7

+215 - 124

+34
24.28

5351 1776

39.915

+13

931

24.68

85

38.1
46.7

40.33

2794

+11
24.57

320

2608

24.42

944
+591

5.63

21.300
-0.900
213.800
-129.300
1.700
22
7.300

0.636
0.493
0.594
355.814
12.415

11.9

-0.660
0.746
0.088
-1138.161
-24.215

-22.6

0.400
0.448
-0.800
139.119
-3.196

-3.4