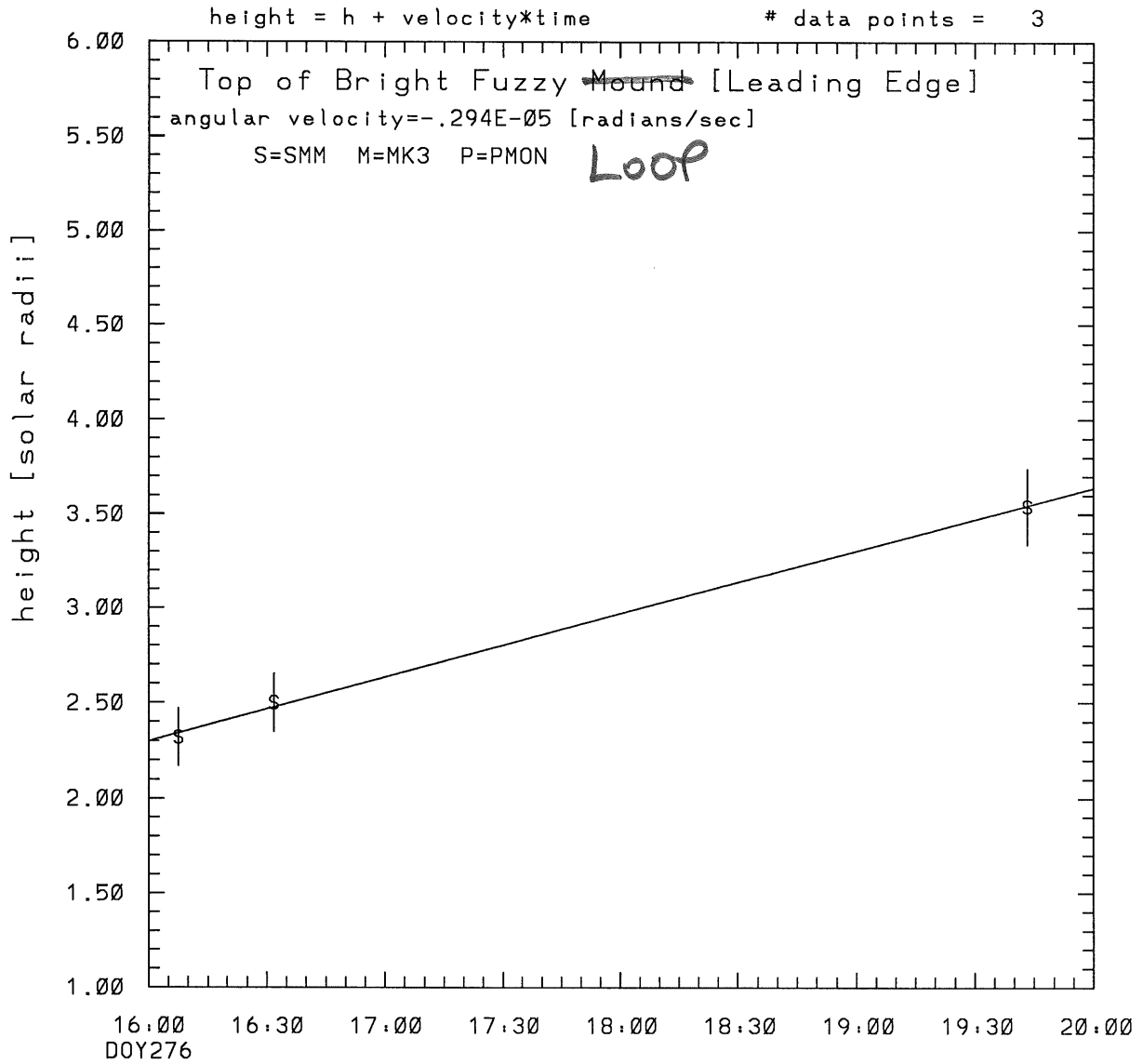


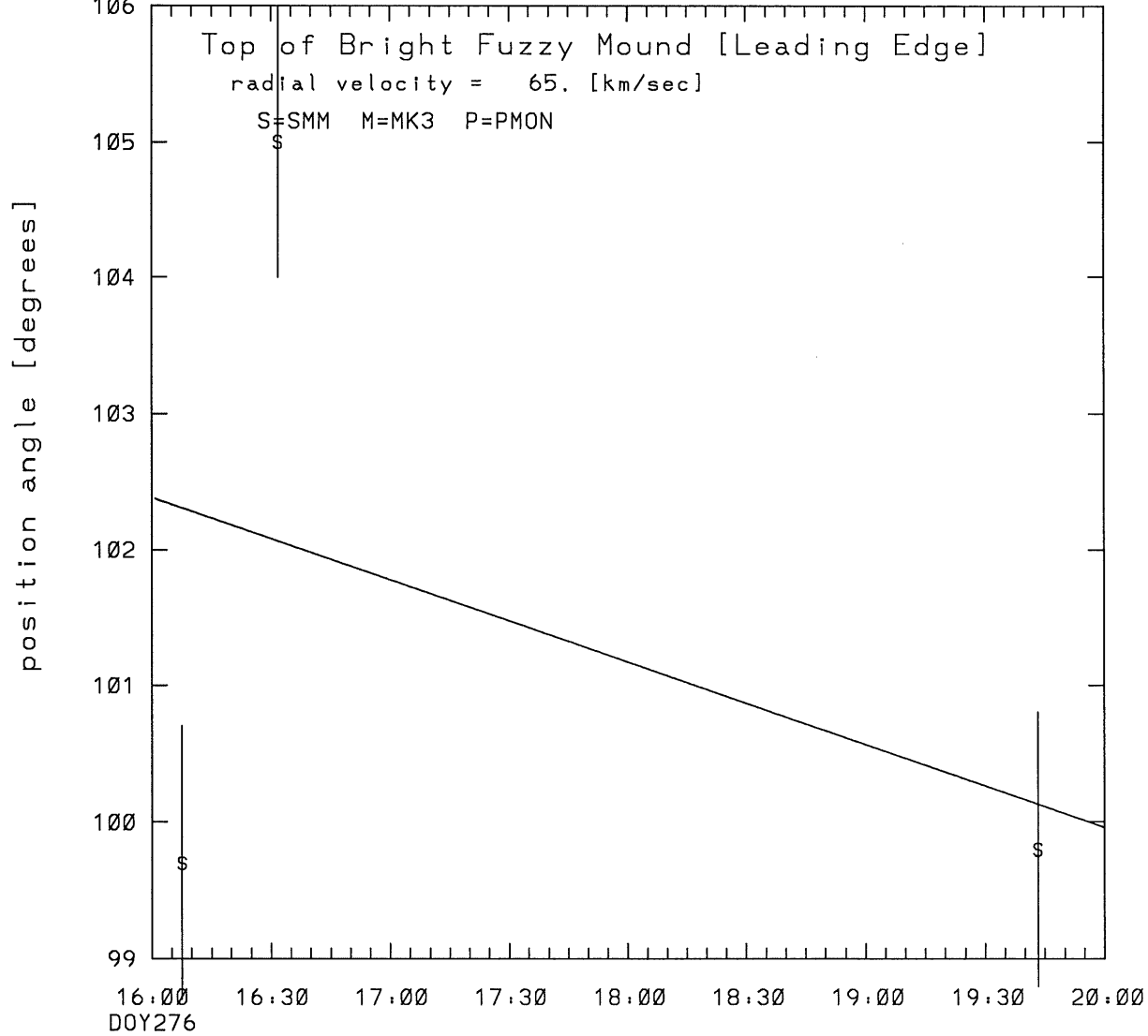
SMM C/P 1984 DOY276 101 +/- 4 degrees



tstart=DOY276 12: 9 +/- 3.8 [min.]
radial velocity= 65. +/- 2. [km/sec]

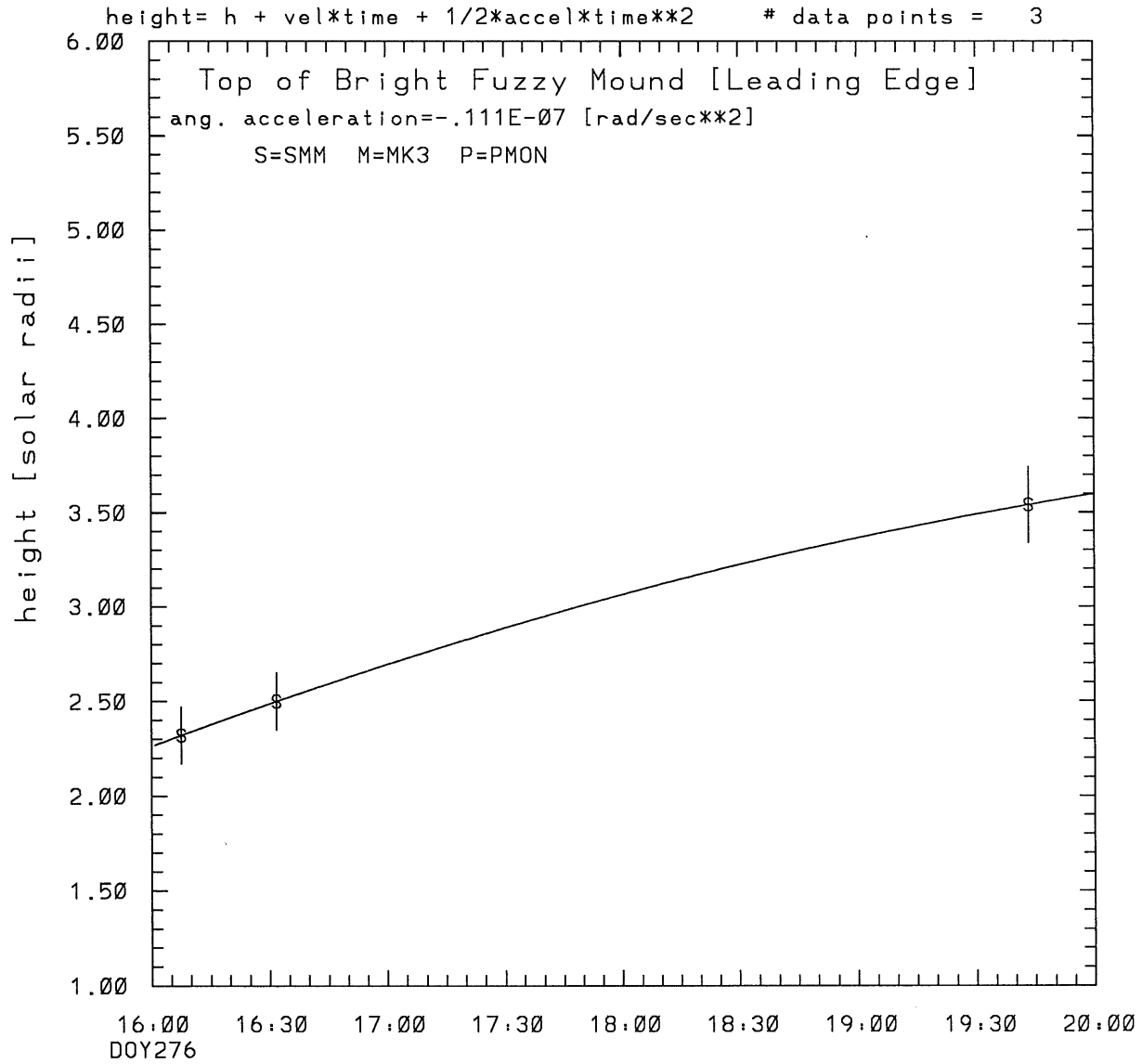
SMM C/P 1984 DOY276 101 +/- 4 degrees

angle= initial angle + angular velocity*time # data points = 3



tstart=DOY276 12: 9 +/- 3.8 [min.]
angular velocity=-.294E-05 +/- 0.485E-05 [rad/sec]

SMM C/P 1984 DOY276 101 +/- 4 degrees

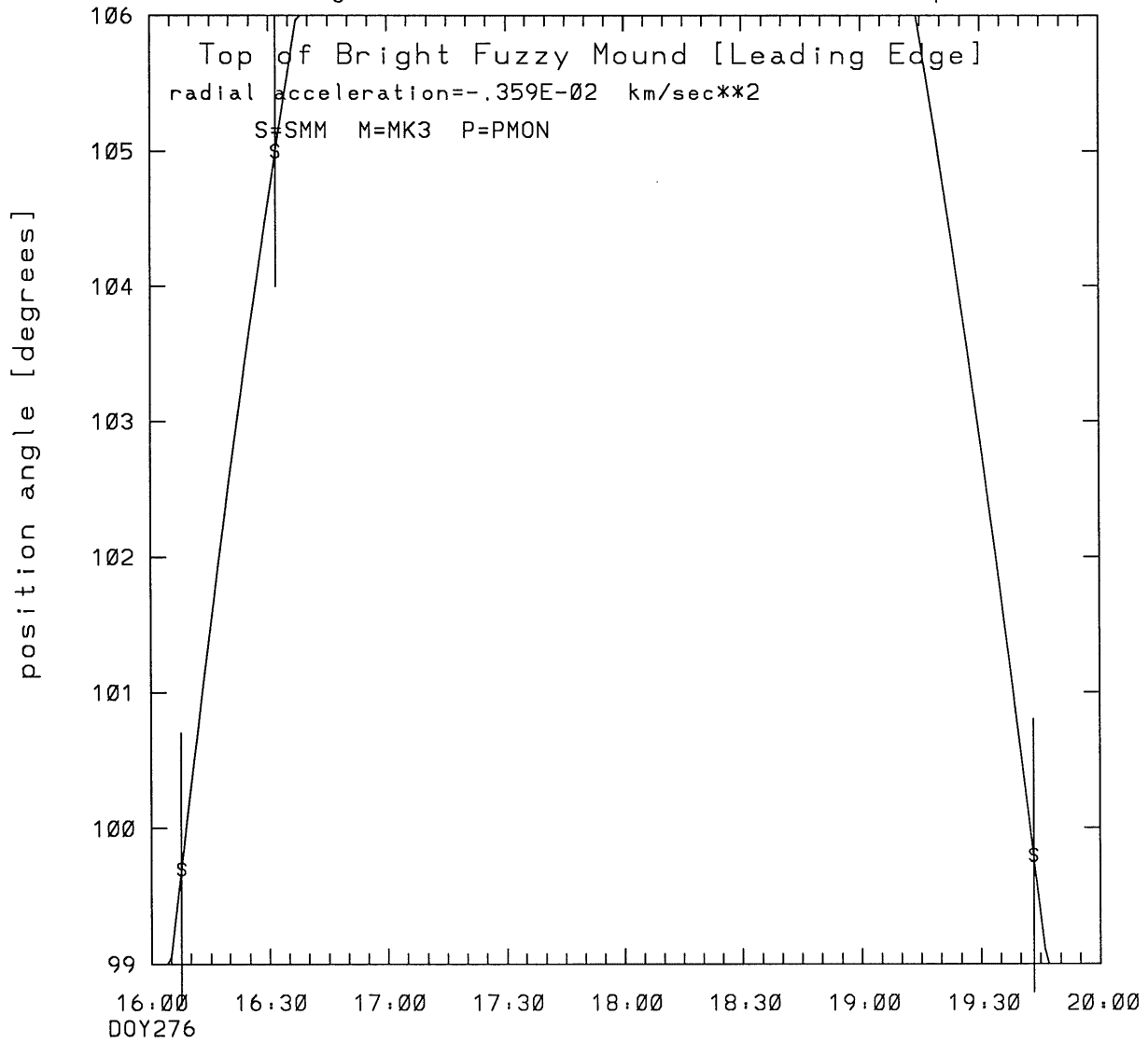


tstart=DOY276 13:43 +/- 0.0 [min.]

radial acceleration = $-0.0036 +/- 0.0000$ [km/sec**2]

SMM C/P 1984 DOY276 101 +/- 4 degrees

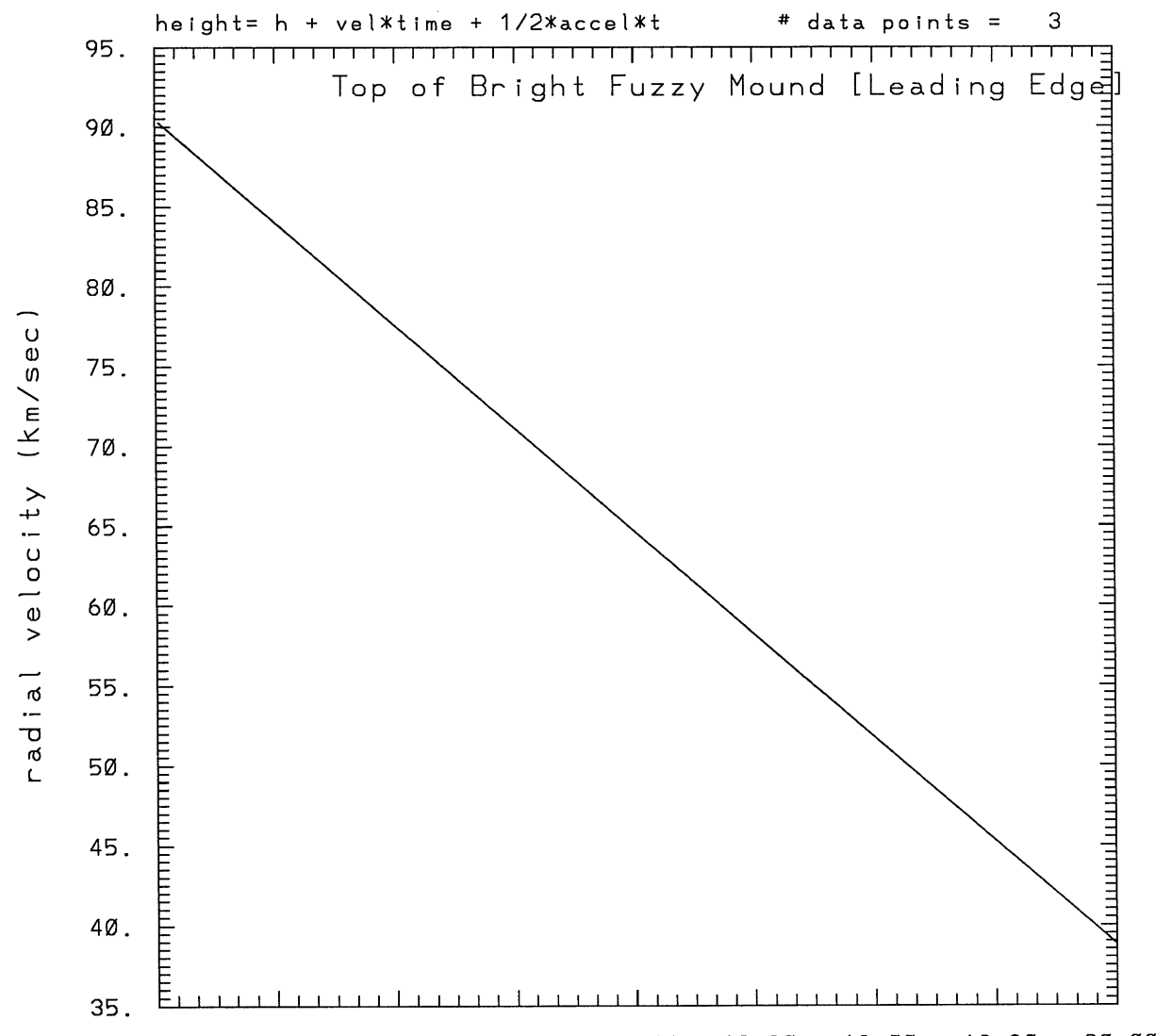
angle= initial angle + angular velocity*time
+ 1/2 angular acceleration*time**2 # data points = 3



tstart=DOY276 13.43 +/- 0.0 [min.]

angular acceleration=-.111E-07 +/- 0.303E-13 [rad/sec**2]

SMM C/P 1984 DOY276 101 +/- 4 degrees



DOY276

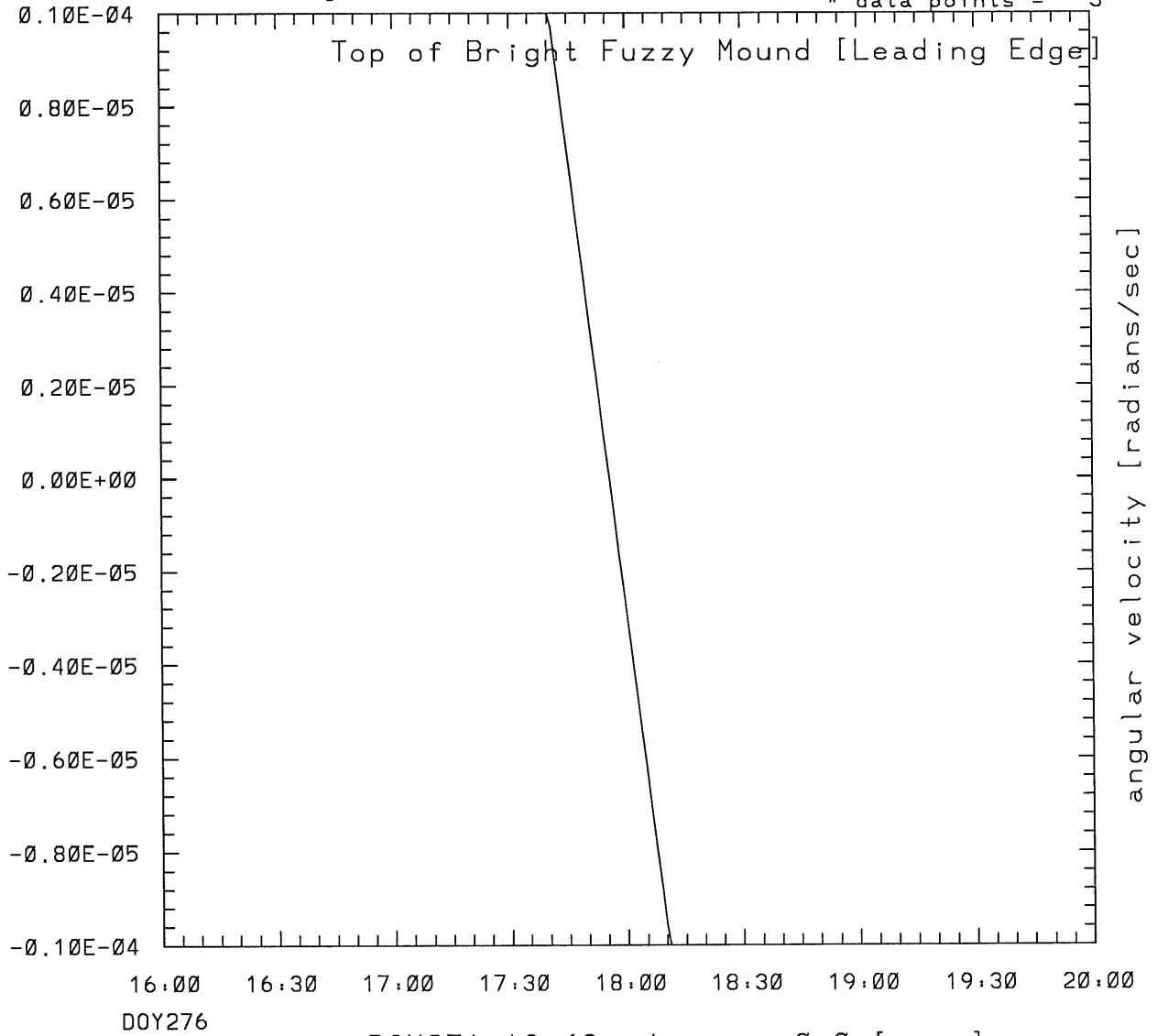
tstart=DOY276 13:43 +/- 0.0 [min.]

radial acceleration=-.359E-02 km/sec**2

SMM C/P 1984 DOY276 101 +/- 4 degrees

$$\text{angle} = \text{initial angle} + \text{angular velocity} * \text{time} + \frac{1}{2} \text{angular acceleration} * \text{time} ** 2$$

data points = 3



DOY276
tstart=DOY276 13.43 +/- 0.0 [min.]
angular acceleration=-.111E-07 +/-
0.303E-13 [rad/sec**2]

This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in angle	error in angle	datatype
1984	276	16: 7:35	2.32 +/-	0.15	99.7 +/-	0.5	SMM
1984	276	16:31:48	2.50 +/-	0.15	105.0 +/-	0.5	SMM
1984	276	19:43:15	3.54 +/-	0.20	99.8 +/-	1.0	SMM

Structure being measured:
Top of Bright Fuzzy Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.233E+03 +/- 0.377E+01$ [minutes]
In more convenient units:
Event began at DOY 276 12: 9 +/- 0.377E+01 [minutes]

Origin defined at DOY276 16: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 65. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.230E+01 +/- 0.177E-01 [solar radii]
c(2) = 0.558E-02 +/- 0.166E-03 [radii/min]
c(2) = 0.647E+02 +/- 0.193E+01 [km/sec]
c(3) = 0.000E+00 +/- 0.000E+00 [radii/min**2]
c(3) = 0.000E+00 +/- 0.000E+00 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

error in c(1)= 0.25041E-01 [radii] see Bevington pg. 114
error in c(2)= 0.19223E-03 [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = -0.1567E-05 +/- 0.8231E-05 [radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 102. +/- 2. [degrees]
a(2) = -0.539E-02 +/- 0.283E-01 [degrees/min]
a(2) = -0.157E-05 +/- 0.823E-05 [rad/sec]
a(3) = 0.000E+00 +/- 0.000E+00 [degrees/min**2]
a(3) = 0.000E+00 +/- 0.000E+00 [rad/sec**2]

The RADIAL velocity at 16: 7 = 65. km/sec

The RADIAL velocity at 16:31 = 65. km/sec

The RADIAL velocity at 19:43 = 65. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.66
Standard Deviation in start time measurement = 0.965E+02
Error in time = 0.57548E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.598E-03
Reduced Chi Squared = 0.164E-02
Chi Squared = 0.164E-02
The probability for exceeding chi square = 0.980E+00

The correlation coefficient = 0.999E+00
The probability that no LINEAR correlation exists between the variables = 0.21921
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

This is a 2 order run

INPUT:

year	doy	time	radii	radius	angle	error in angle	error in angle	datatype
1984	276	16: 7:35	2.32 +/-	0.15	99.7 +/-	0.5		SMM
1984	276	16:31:48	2.50 +/-	0.15	105.0 +/-	0.5		SMM
1984	276	19:43:15	3.54 +/-	0.20	99.8 +/-	1.0		SMM

Structure being measured:
Top of Bright Fuzzy Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.139E+03 +/- 0.000E+00 [minutes]
In more convenient units:
Event began at DOY 276 13:43 +/- 0.000E+00 [minutes]

Origin defined at DOY276 16: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.359E-02 +/- 0.124E-06 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.226E+01 +/- 0.155E-05 [solar radii]
c(2) = 0.780E-02 +/- 0.768E-07 [radii/min]
c(2) = 0.905E+02 +/- 0.891E-03 [km/sec]
c(3) = -0.928E-05 +/- 0.320E-09 [radii/min**2]
c(3) = -0.359E-02 +/- 0.124E-06 [km/sec**2]

ANGULAR INFORMATION:

ANGULAR ACCELERATION= -0.1106E-07 +/- 0.4589E-13[radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 98. +/- 0. [degrees]
a(2) = 0.264E+00 +/- 0.113E-05 [degrees/min]
a(2) = 0.767E-04 +/- 0.328E-09 [rad/sec]
a(3) = -0.114E-02 +/- 0.473E-08 [degrees/min**2]
a(3) = -0.111E-07 +/- 0.459E-13 [rad/sec**2]

The RADIAL velocity at 16: 7 = 89. km/sec

The RADIAL velocity at 16:31 = 84. km/sec

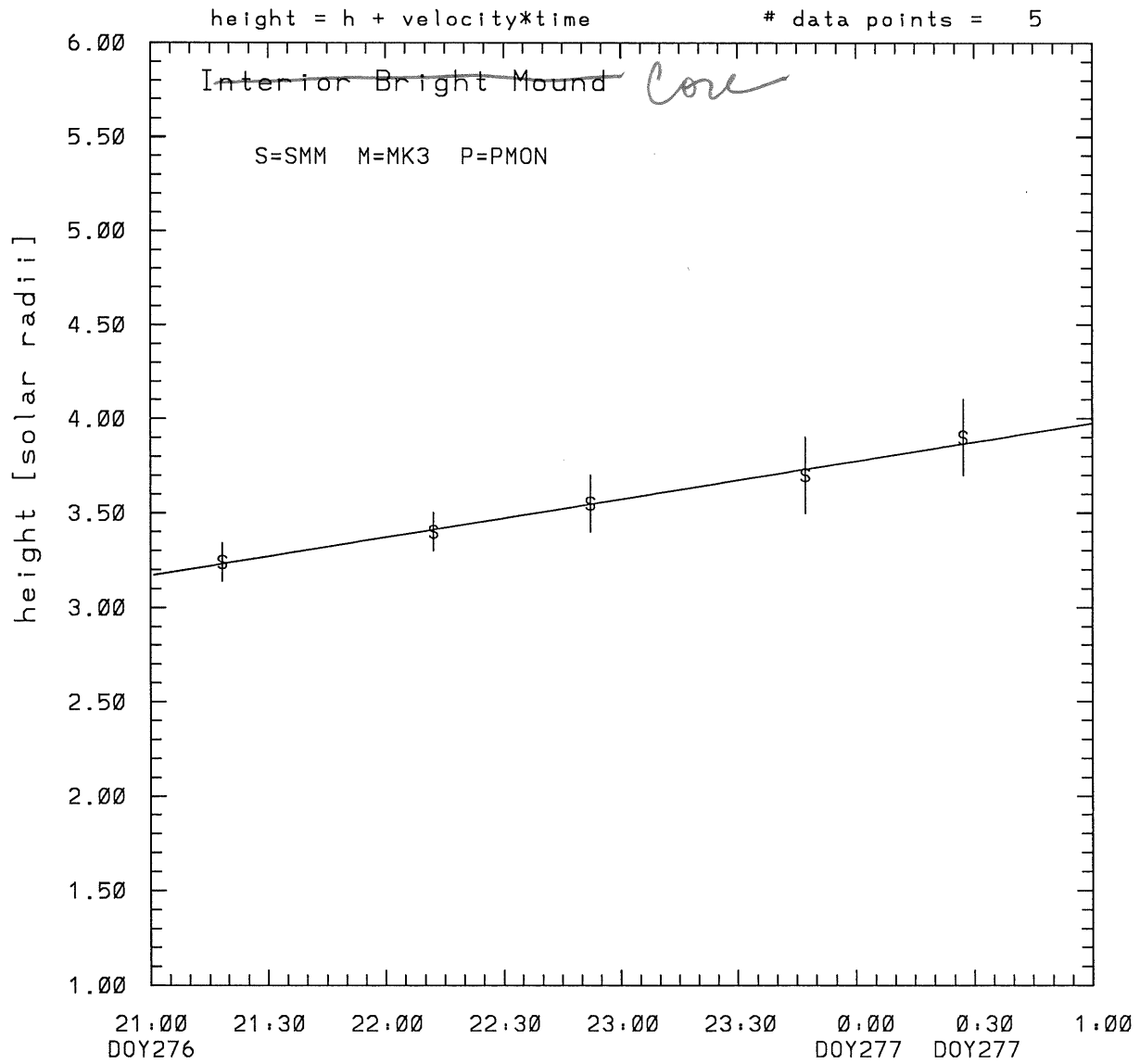
The RADIAL velocity at 19:43 = 42. km/sec

The following info is for estimating goodness of the fit

Number data points = number of coefficients. No error analysis is possible.

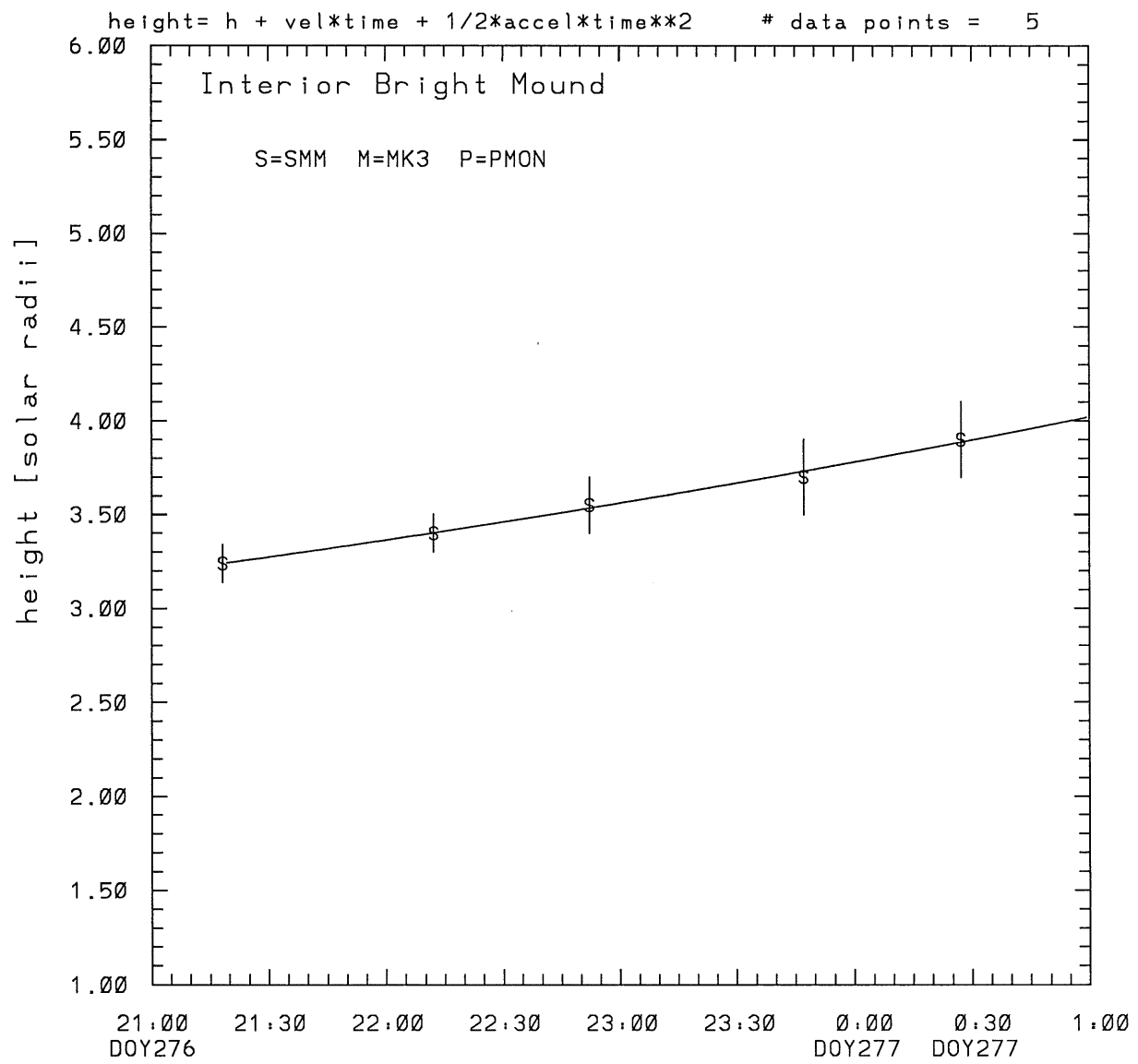
Correlation coefficient is not computable!

SMM C/P 1984 DOY276 105 +/- 0 degrees



tstart=DOY276 10:14 +/- 10.8 [min.]
radial velocity= 39. +/- 2. [km/sec]

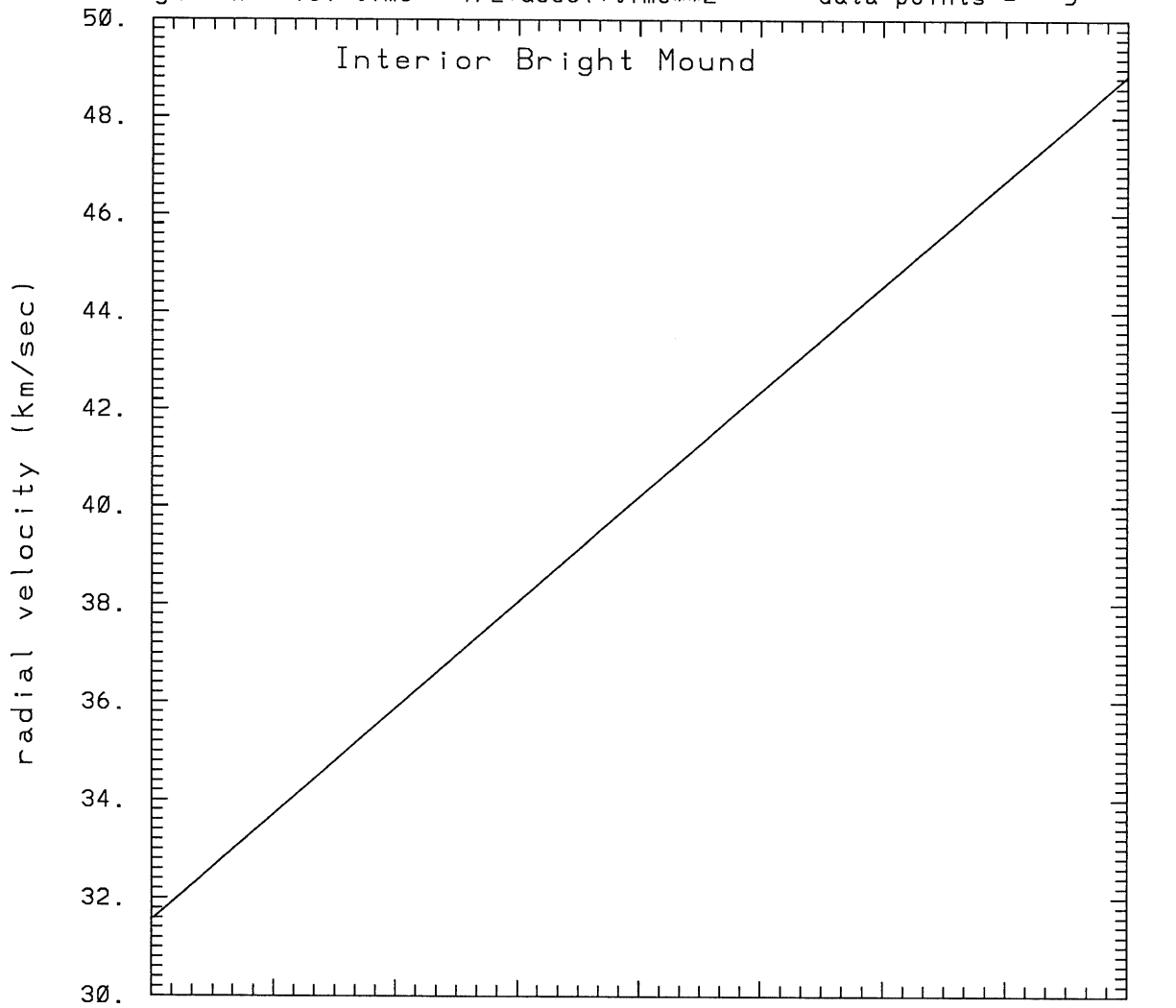
SMM C/P 1984 DOY276 105 +/- 0 degrees



tstart=DOY276 13:43 from derivative=0
Event begins at 2.59 Solar Radii
radial acceleration = 0.0012 +/- 0.0007 [km/sec**2]

SMM C/P 1984 DOY276 105 +/- 0 degrees

height= $h + vel*time + 1/2*accel*time**2$ # data points = 5



21.00
DOY276

21.30

22.00

22.30

23.00

23.30

0.00
DOY277

0.30

1.00

tstart=DOY276 13:43 from derivative=0
Event begins at 2.59 Solar Radii
radial acceleration=0.120E-02 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	angle	datatype
1984	276	21:18:16	3.24	+/- 0.10	105.0	+/- 1.0	SMM
1984	276	22:12:15	3.40	+/- 0.10	105.0	+/- 1.0	SMM
1984	276	22:52:15	3.55	+/- 0.15	105.0	+/- 1.0	SMM
1984	276	23:47:16	3.70	+/- 0.20	105.0	+/- 1.0	SMM
1984	277	0:27:15	3.90	+/- 0.20	105.0	+/- 1.0	SMM

Structure being measured:
Interior Bright Mound

OUTPUT:

START TIME:

Event began at $t = 0 + -0.646E+03 \pm 0.108E+02$ [minutes]
In more convenient units:
Event began at DOY 276 10:14 $\pm 0.108E+02$ [minutes]

Origin defined at DOY276 21: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 39. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.317E+01 +/- 0.136E-01 [solar radii]
- c(2) = 0.336E-02 +/- 0.138E-03 [radii/min]
- c(2) = 0.390E+02 +/- 0.160E+01 [km/sec]
- c(3) = 0.000E+00 +/- 0.000E+00 [radii/min**2]
- c(3) = 0.000E+00 +/- 0.000E+00 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

- error in c(1)= 0.25268E-01 [radii] see Bevington pg. 114
- error in c(2)= 0.18930E-03 [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = 0.0000E+00 +/- 0.0000E+00[radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 105. +/- 0. [degrees]
a(2) = 0.000E+00 +/- 0.000E+00 [degrees/min]
a(2) = 0.000E+00 +/- 0.000E+00 [rad/sec]
a(3) = 0.000E+00 +/- 0.000E+00 [degrees/min**2]
a(3) = 0.000E+00 +/- 0.000E+00 [rad/sec**2]

THE TANGENTIAL AND TOTAL VELOCITIES AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 21:18 = 0.000E+00 km/sec

The TOTAL velocity at 21:18 = 39. km/sec

The TANGENTIAL velocity at 22:12 = 0.000E+00 km/sec

The TOTAL velocity at 22:12 = 39. km/sec

The TANGENTIAL velocity at 22:52 = 0.000E+00 km/sec

The TOTAL velocity at 22:52 = 39. km/sec

The TANGENTIAL velocity at 23:47 = 0.000E+00 km/sec

The TOTAL velocity at 23:47 = 39. km/sec

The TANGENTIAL velocity at 0:27 = 0.000E+00 km/sec

The TOTAL velocity at 0:27 = 39. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.26

Standard Deviation in start time measurement = 0.670E+02

Error in time = 0.14625E+02 using best fit method

See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.330E-03

Reduced Chi Squared = 0.343E-02

Chi Squared = 0.103E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.996E+00

The probability that no LINEAR correlation exists between the variables = 0.3550E-03

SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

This is a 2 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	angle	datatype
1984	276	21:18:16	3.24	+/- 0.10	105.0	+/- 1.0	SMM
1984	276	22:12:15	3.40	+/- 0.10	105.0	+/- 1.0	SMM
1984	276	22:52:15	3.55	+/- 0.15	105.0	+/- 1.0	SMM
1984	276	23:47:16	3.70	+/- 0.20	105.0	+/- 1.0	SMM
1984	277	0:27:15	3.90	+/- 0.20	105.0	+/- 1.0	SMM

Structure being measured:
Interior Bright Mound

OUTPUT:

START TIME:

tstart=DOY276 13:43 from derivative = 0
Event begins at 2.59 Solar Radii
Origin defined at DOY276 21: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.120E-02 +/- 0.733E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.319E+01 +/- 0.168E-01 [solar radii]
c(2) = 0.272E-02 +/- 0.406E-03 [radii/min]
c(2) = 0.315E+02 +/- 0.471E+01 [km/sec]
c(3) = 0.311E-05 +/- 0.190E-05 [radii/min**2]
c(3) = 0.120E-02 +/- 0.733E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.35850E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.10049E-02 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.74652E-03 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.59853E-04 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.31925E-05 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.42355E-06 [radii/min**] Bevington pg 154 (8-28)

ANGULAR INFORMATION:

ANGULAR ACCELERATION= 0.0000E+00 +/- 0.0000E+00[radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 105. +/- 0. [degrees]
a(2) = 0.000E+00 +/- 0.000E+00 [degrees/min]
a(2) = 0.000E+00 +/- 0.000E+00 [rad/sec]
a(3) = 0.000E+00 +/- 0.000E+00 [degrees/min**2]
a(3) = 0.000E+00 +/- 0.000E+00 [rad/sec**2]

THE TANGENTIAL AND TOTAL VELOCITIES AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 21:18 = 0.000E+00 km/sec

The TOTAL velocity at 21:18 = 33. km/sec

The TANGENTIAL velocity at 22:12 = 0.000E+00 km/sec

The TOTAL velocity at 22:12 = 37. km/sec

The TANGENTIAL velocity at 22:52 = 0.000E+00 km/sec

The TOTAL velocity at 22:52 = 40. km/sec

The TANGENTIAL velocity at 23:47 = 0.000E+00 km/sec

The TOTAL velocity at 23:47 = 44. km/sec

The TANGENTIAL velocity at 0:27 = 0.000E+00 km/sec

The TOTAL velocity at 0:27 = 46. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.26

Standard Deviation in start time measurement = 0.670E+02

Value of reduced Chi Squared returned from nllst2 = 0.232E-03

Reduced Chi Squared = 0.281E-02

Chi Squared = 0.561E-02

The probability for exceeding chi square = 0.100E+01

For a second order fit 3 correlation coefficients are given:

(Using equation of motion: $r = a + bt + at^{**2}$)

The correlation between the data and the term linear in time = 0.1030E+01

The correlation between the data and the time**2 term = 0.9363E+00

The correlation between the data and the complete equation of motion = 0.9996E+00

SEE BEVINGTON "Data Reduction and Error Analysis" [1969]