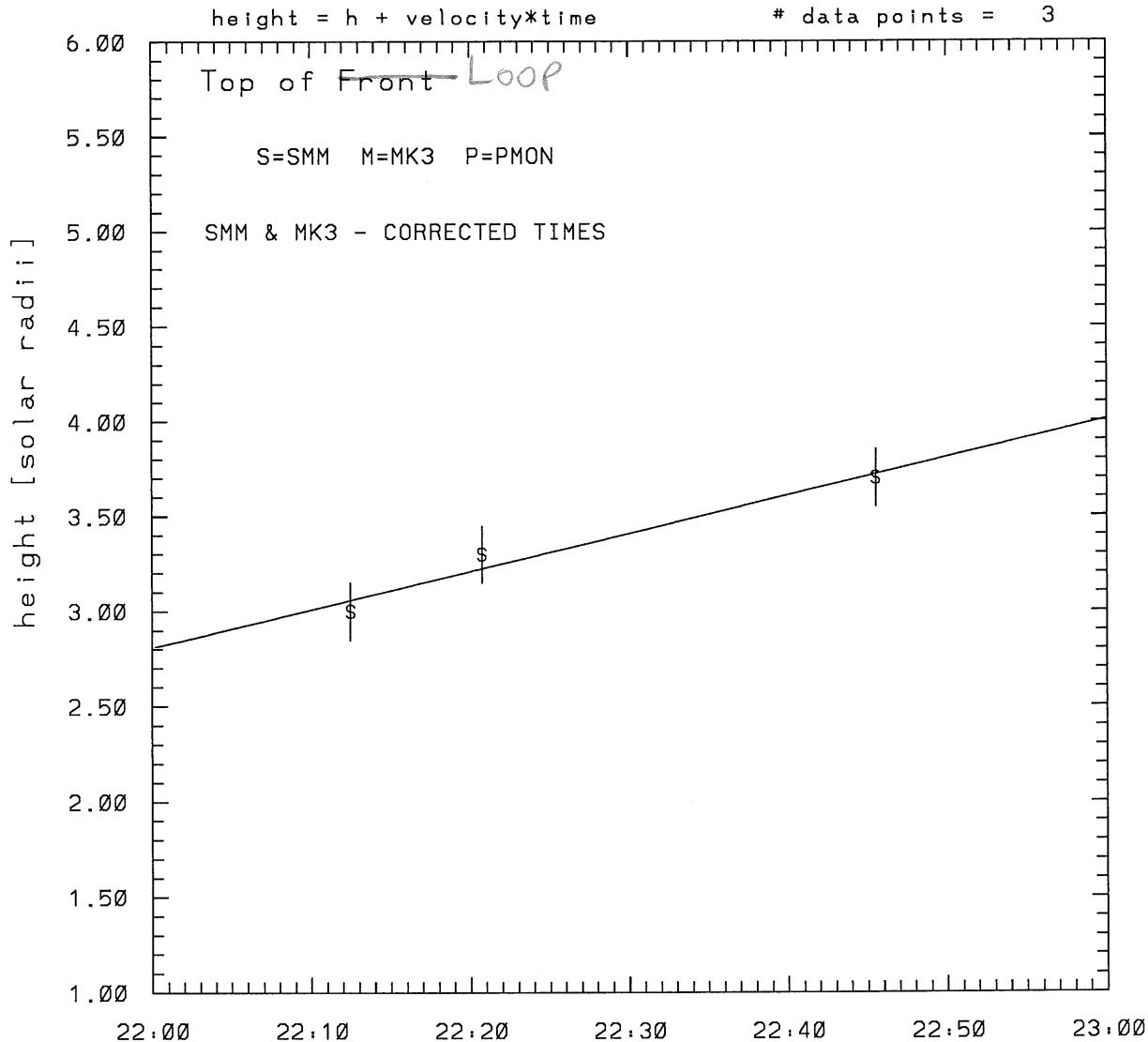
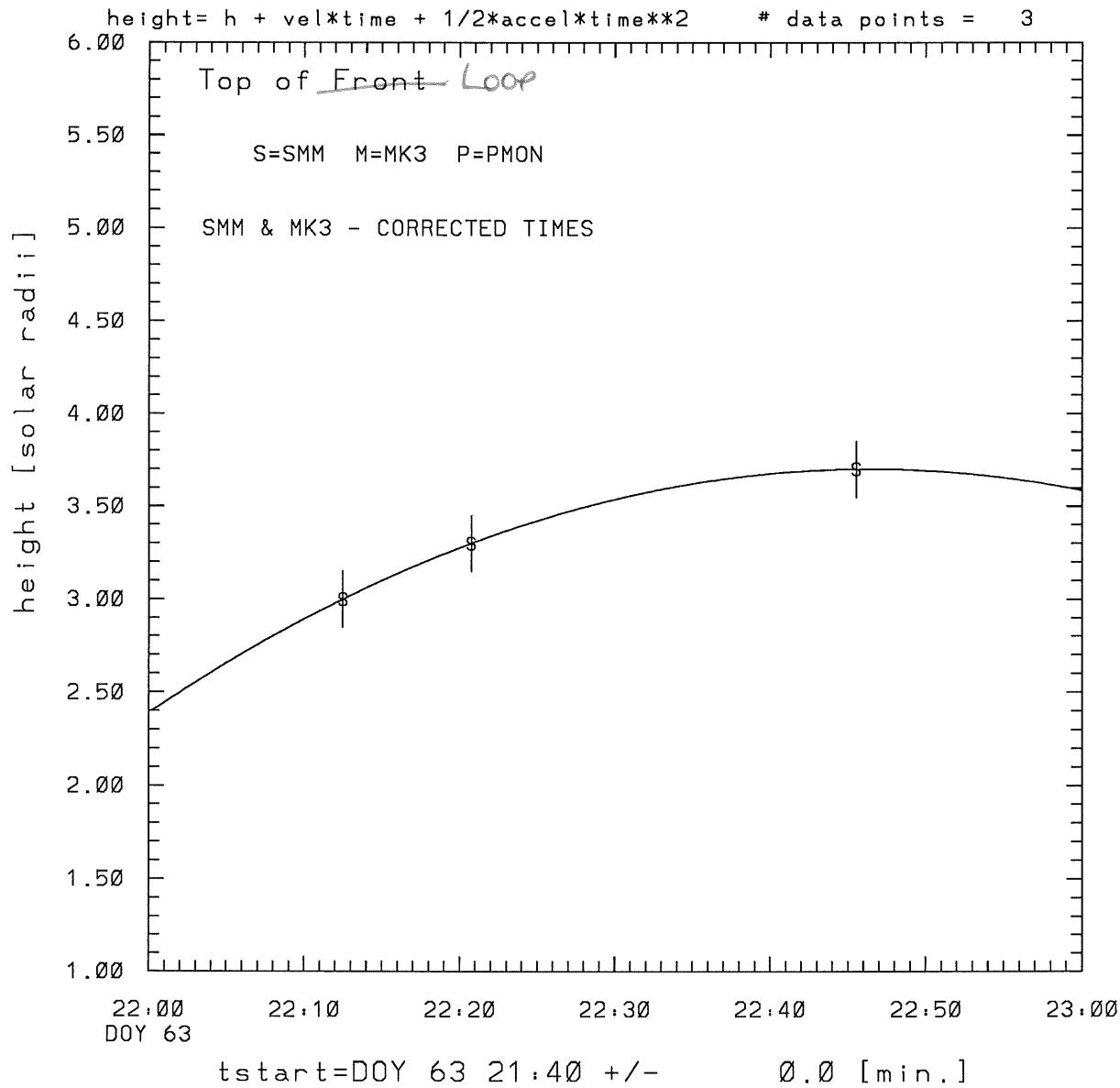


SMM C/P 1988 DOY 63 85 +/- 0 degrees

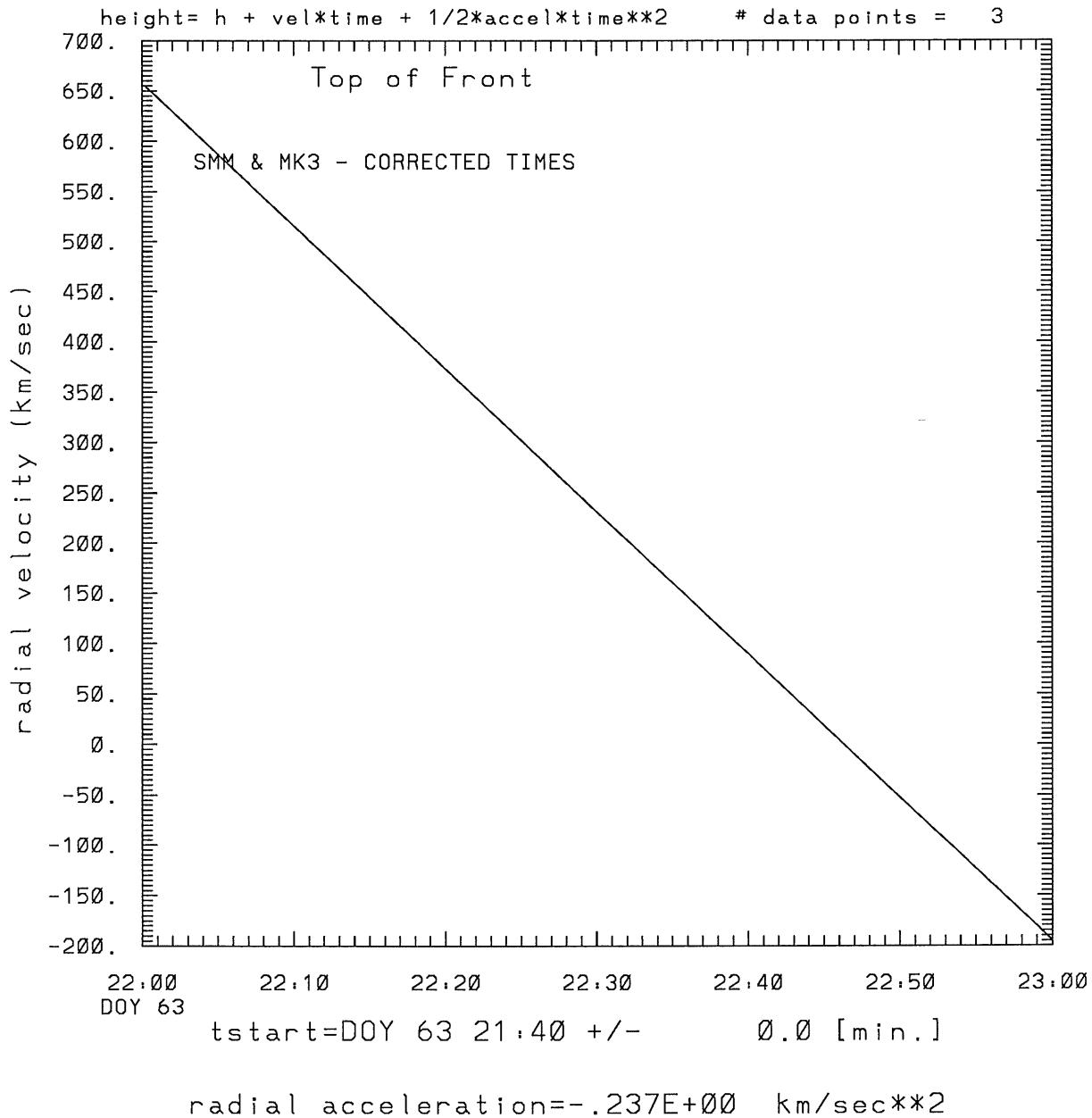


tstart=DOY 63 20:30 +/- 7.8 [min.]
radial velocity= 232. +/- 33. [km/sec]

SMM C/P 1988 DOY 63 85 +/- 0 degrees



SMM C/P 1988 DOY 63 85 +/- 0 degrees



This is a 1 order run

INPUT:

| year | doy | time | radii | radius | angle | error in angle | datatype |
|------|-----|----------|-------|----------|-------|----------------|----------|
| 1988 | 63 | 22:12:29 | 3.00 | +/- 0.15 | 85.0 | +/- 1.0 | SMM |
| 1988 | 63 | 22:20:44 | 3.30 | +/- 0.15 | 85.0 | +/- 1.0 | SMM |
| 1988 | 63 | 22:45:32 | 3.70 | +/- 0.15 | 85.0 | +/- 1.0 | SMM |

Structure being measured:

Top of Front Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.903E+02 +/- 0.778E+01 [minutes]

In more convenient units:

Event began at DOY 63 20:30 +/- 0.778E+01 [minutes]

Origin defined at DOY 63 22: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 232. +/- 33. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.281E+01 +/- 0.850E-01 [solar radii]

c(2) = 0.200E-01 +/- 0.286E-02 [radii/min]

c(2) = 0.232E+03 +/- 0.331E+02 [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)= 0.12024E+00 [radii] see Bevington pg. 114

error in c(2)= 0.40389E-02 [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) = 85. +/- 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 22:12 = 0. km/sec
The TOTAL velocity at 22:12 = 232. km/sec

The TANGENTIAL velocity at 22:20 = 0. km/sec
The TOTAL velocity at 22:20 = 232. km/sec

The TANGENTIAL velocity at 22:45 = 0. km/sec
The TOTAL velocity at 22:45 = 232. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.35
Standard Deviation in start time measurement = 0.140E+02
Error in time = 0.49097E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.483E-02
Reduced Chi Squared = 0.163E-01
Chi Squared = 0.163E-01
The probability for exceeding chi square = 0.945E+00

The correlation coefficient = 0.980E+00
The probability that no LINEAR correlation exists between the variables = 0.1268E+00
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

This is a 2 order run

INPUT:

| year | doy | time | radii | radius | angle | angle | datatype |
|------|-----|----------|-------|----------|-------|---------|----------|
| 1988 | 63 | 22:12:29 | 3.00 | +/- 0.15 | 85.0 | +/- 1.0 | SMM |
| 1988 | 63 | 22:20:44 | 3.30 | +/- 0.15 | 85.0 | +/- 1.0 | SMM |
| 1988 | 63 | 22:45:32 | 3.70 | +/- 0.15 | 85.0 | +/- 1.0 | SMM |

Structure being measured:

Top of Front Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.201E+02 +/- 0.000E+00 [minutes]

In more convenient units:

Event began at DOY 63 21:40 +/- 0.000E+00 [minutes]

Origin defined at DOY 63 22: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.237E+00 +/- 0.812E-06 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.239E+01 +/- 0.150E-05 [solar radii]
c(2) = 0.567E-01 +/- 0.127E-06 [radii/min]
c(2) = 0.658E+03 +/- 0.147E-02 [km/sec]
c(3) = -0.612E-03 +/- 0.210E-08 [radii/min**2]
c(3) = -0.237E+00 +/- 0.812E-06 [km/sec**2]

ANGULAR INFORMATION:

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

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 85. +/- 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 22:12 = 0. km/sec

The TOTAL velocity at 22:12 = 480. km/sec

The TANGENTIAL velocity at 22:20 = 0. km/sec

The TOTAL velocity at 22:20 = 363. km/sec

The TANGENTIAL velocity at 22:45 = 0. km/sec

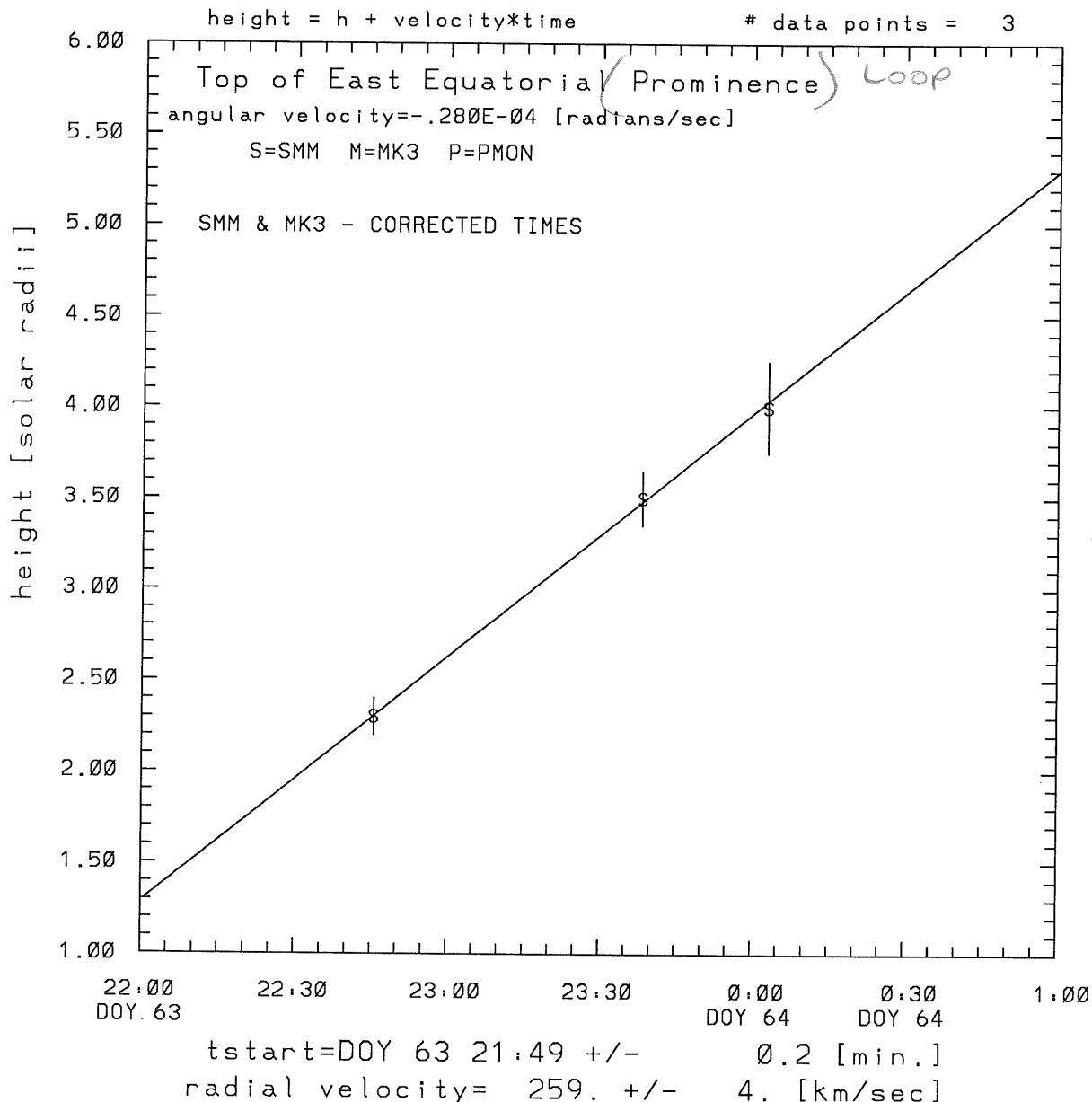
The TOTAL velocity at 22:45 = 11. km/sec

The following info is for estimating goodness of the fit

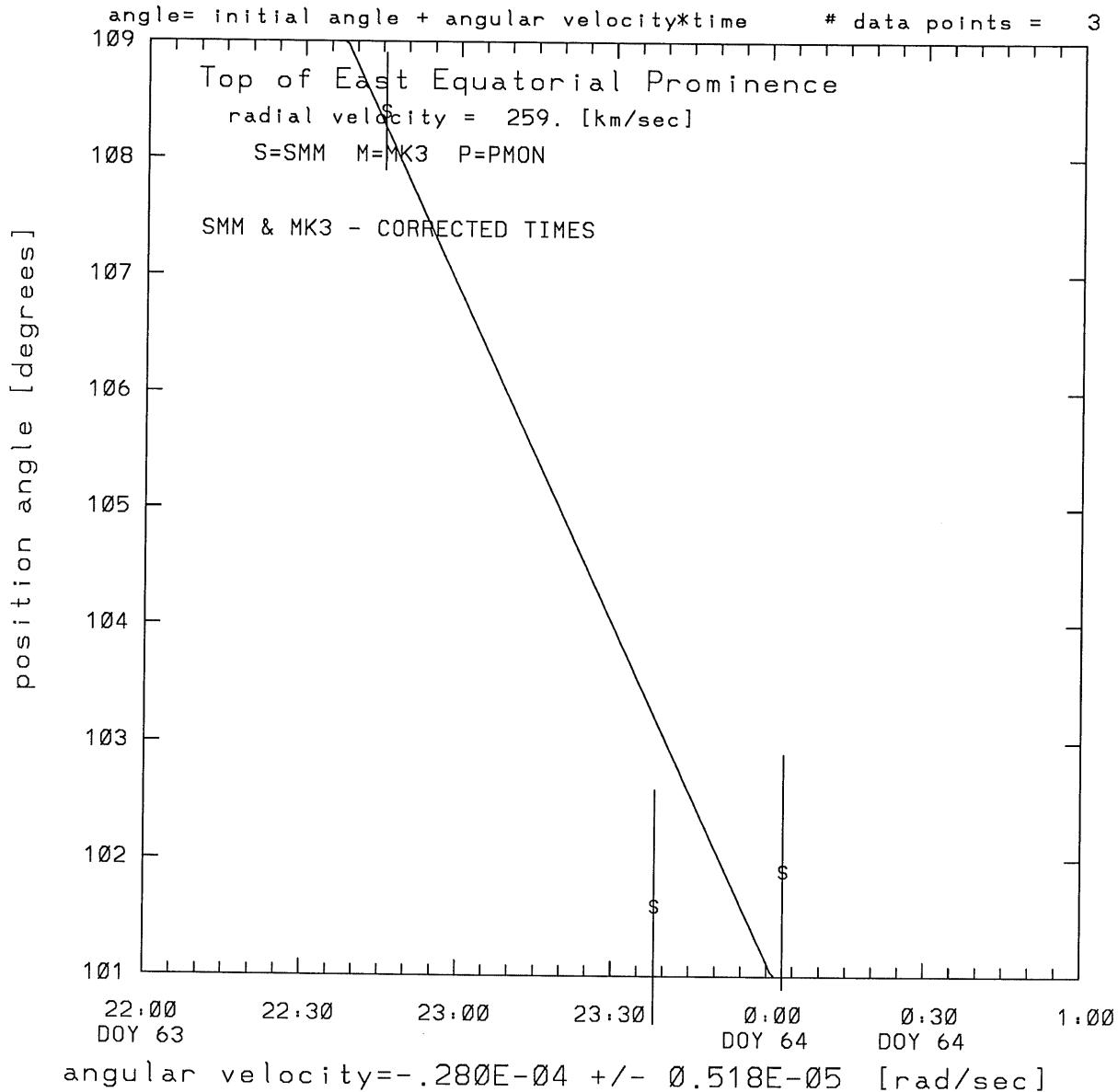
Number data points = number of coefficients. No error analysis is possible.

Correlation coefficient is not computable!

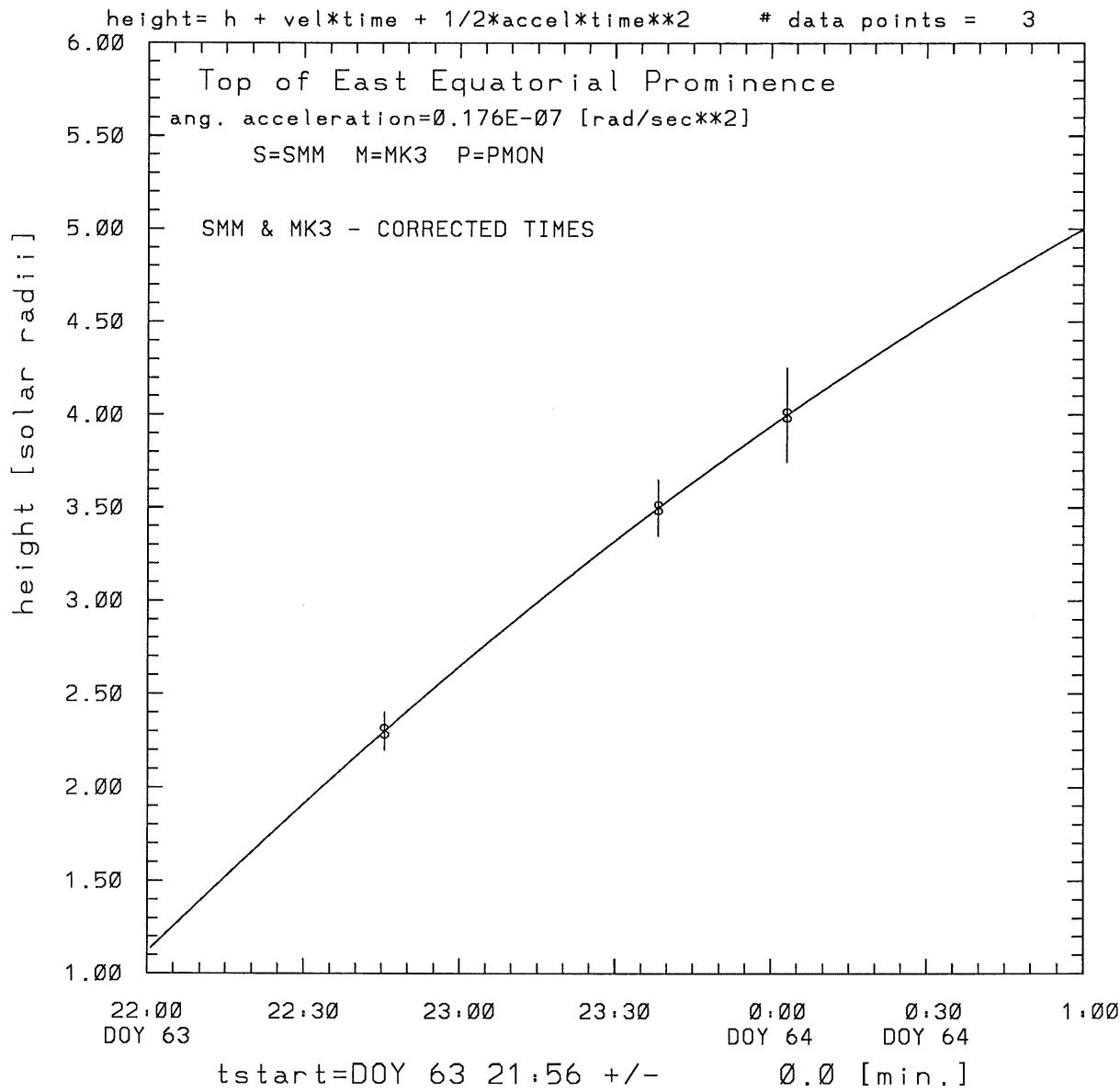
SMM C/P 1988 DOY 63 103 +/- 5 degrees

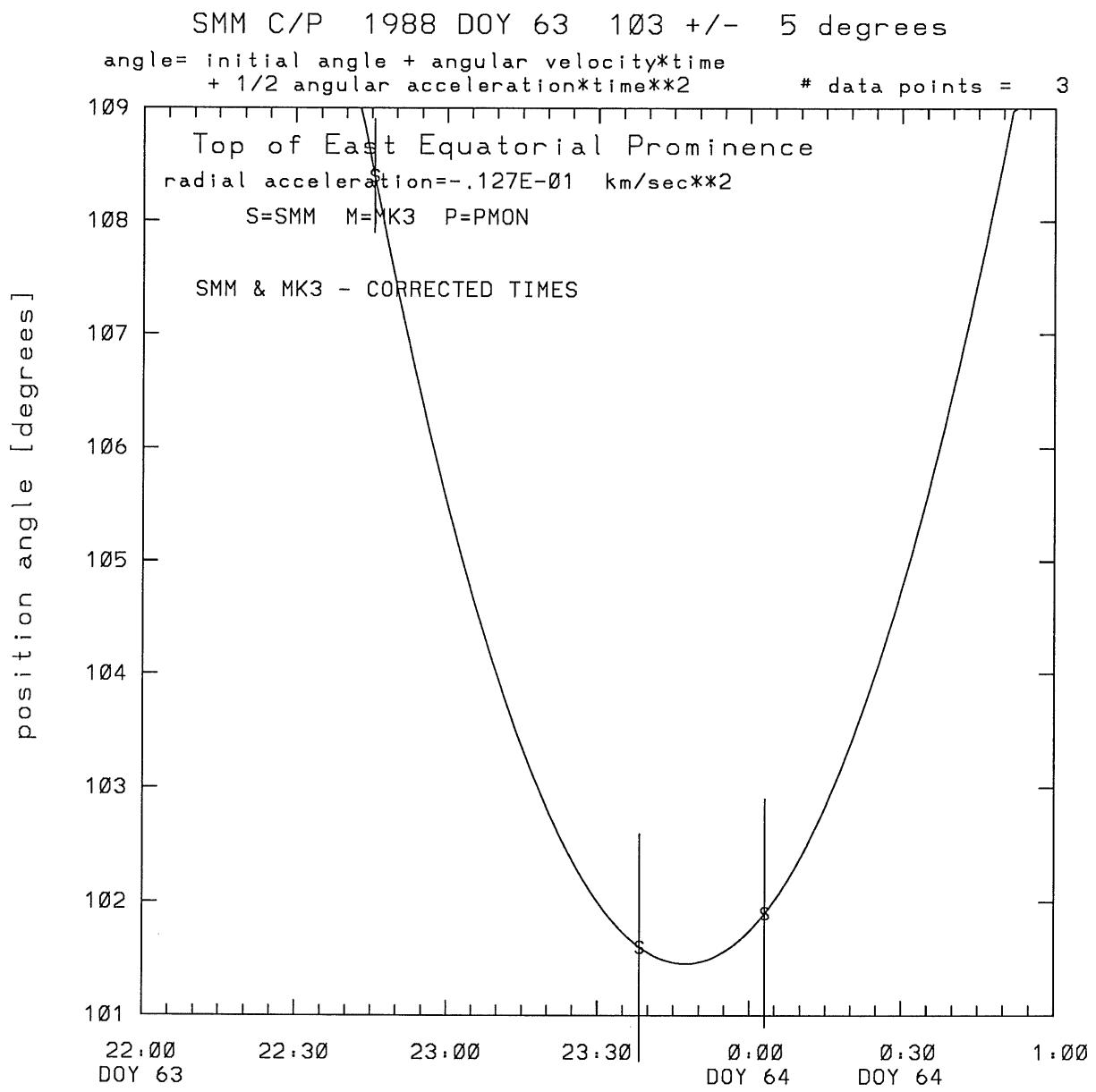


SMM C/P 1988 DOY 63 103 +/- 5 degrees



SMM C/P 1988 DOY 63 103 +/- 5 degrees

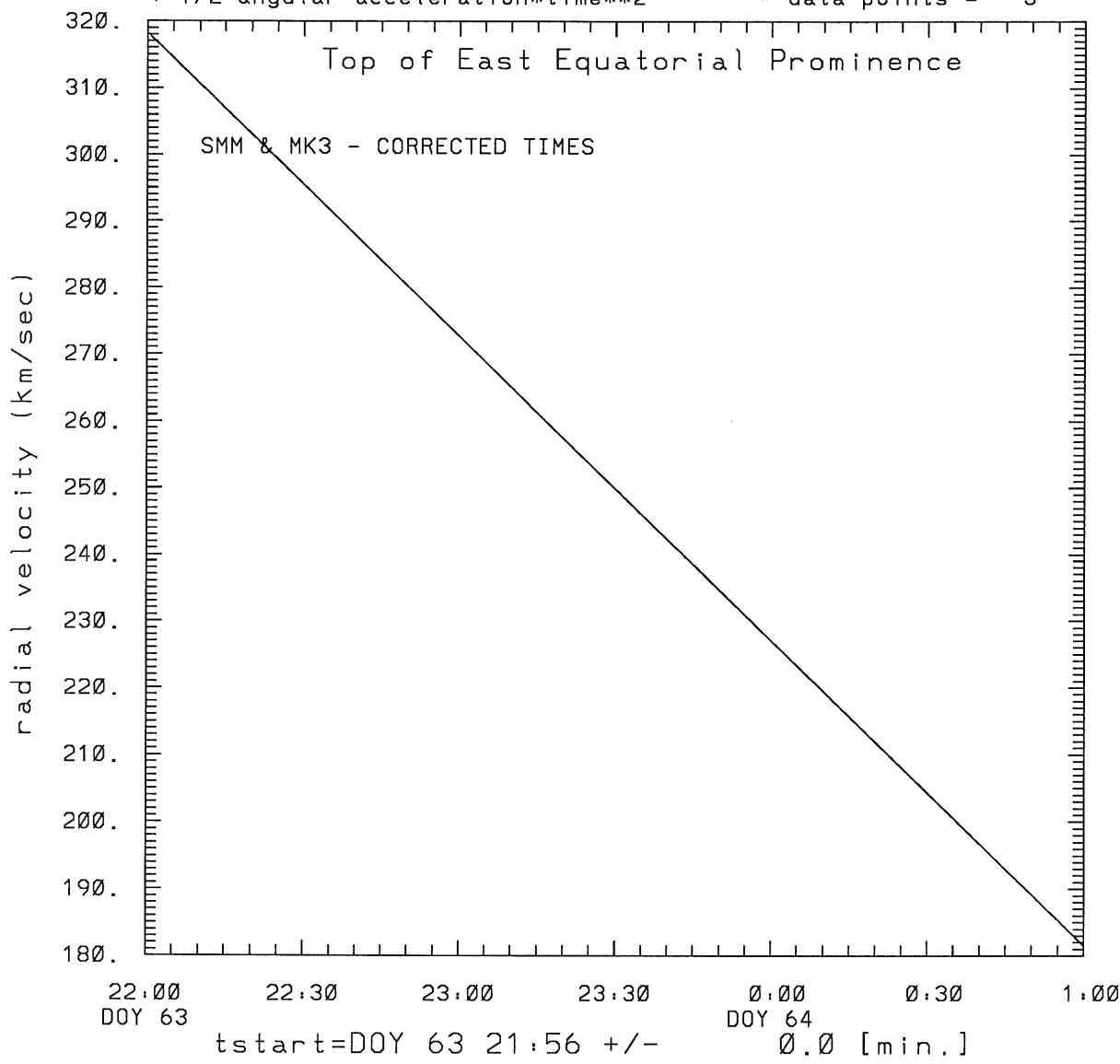




angular acceleration=0.176E-07 +/- 0.276E-12 [rad/sec**2]

SMM C/P 1988 DOY 63 103 +/- 5 degrees

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

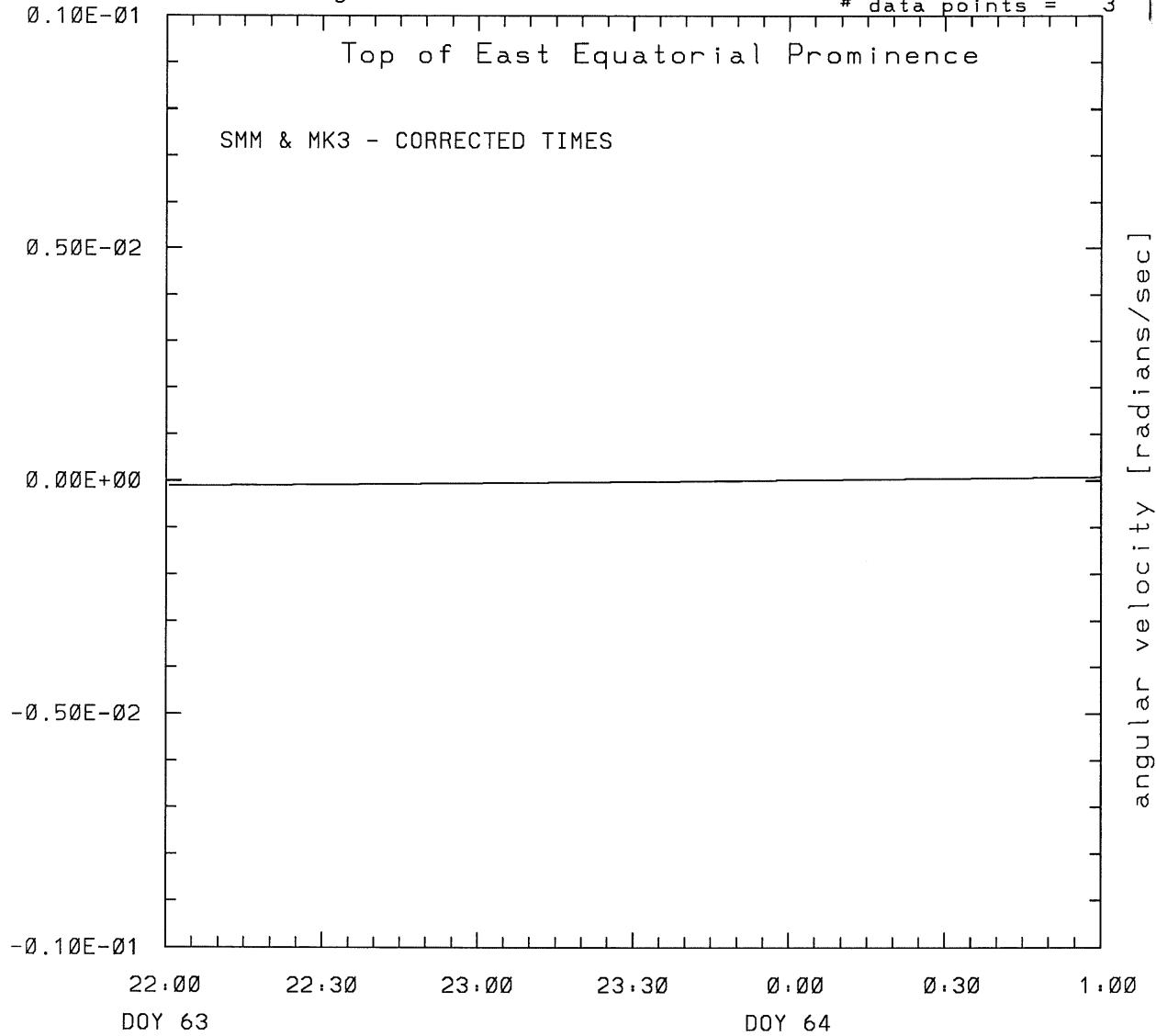


radial acceleration=-.127E-01 km/sec**2

SMM C/P 1988 DOY 63 103 +/- 5 degrees

angle = initial angle + angular velocity*time +
1/2 angular acceleration*time**2

data points = 3



angular acceleration = 0.176E-07 +/-
0.276E-12 [rad/sec**2]

This is a 1 order run

INPUT:

| year | doy | time | radii | radius | error in angle | error in angle | datatype |
|------|-----|----------|-------|----------|----------------|----------------|----------|
| 1988 | 63 | 22:45:32 | 2.30 | +/- 0.10 | 108.4 | +/- 0.5 | SMM |
| 1988 | 63 | 23:38:20 | 3.50 | +/- 0.15 | 101.6 | +/- 1.0 | SMM |
| 1988 | 64 | 0: 3: 6 | 4.00 | +/- 0.25 | 101.9 | +/- 1.0 | SMM |

Structure being measured:
Top of East Equatorial Prominence Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.128E+02 +/- 0.207E+00 [minutes]
In more convenient units:
Event began at DOY 63 21:49 +/- 0.207E+00 [minutes]

Origin defined at DOY 63 22: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 259. +/- 4. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.129E+01 +/- 0.261E-01 [solar radii]
c(2) = 0.223E-01 +/- 0.353E-03 [radii/min]
c(2) = 0.259E+03 +/- 0.410E+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)= 0.66480E-01 [radii] see Bevington pg. 114
error in c(2)= 0.70211E-03 [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = -0.2797E-04 +/- 0.5182E-05[radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 113. +/- 1. [degrees]
a(2) = -0.962E-01 +/- 0.178E-01 [degrees/min]
a(2) = -0.280E-04 +/- 0.518E-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 22:45 = 259. km/sec

The RADIAL velocity at 23:38 = 259. km/sec

The RADIAL velocity at 0: 3 = 259. km/sec

* ****
The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.87
Standard Deviation in start time measurement = 0.323E+02
Error in time = 0.17617E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.326E-03
Reduced Chi Squared = 0.429E-02
Chi Squared = 0.429E-02
The probability for exceeding chi square = 0.986E+00

The correlation coefficient = 0.100E+01
The probability that no LINEAR correlation exists between the variables = 0.17651
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

This is a 2 order run

INPUT:

| year | doY | time | radii | radius | angle | angle | datatype |
|------|-----|----------|-------|----------|-------|---------|----------|
| 1988 | 63 | 22:45:32 | 2.30 | +/- 0.10 | 108.4 | +/- 0.5 | SMM |
| 1988 | 63 | 23:38:20 | 3.50 | +/- 0.15 | 101.6 | +/- 1.0 | SMM |
| 1988 | 64 | 0: 3: 6 | 4.00 | +/- 0.25 | 101.9 | +/- 1.0 | SMM |

Structure being measured:
Top of East Equatorial Prominence

OUTPUT:

START TIME:

Event began at $t = 0 + -0.430E+01 +/- 0.000E+00$ [minutes]
In more convenient units:
Event began at DOY 63 21:56 +/- 0.000E+00 [minutes]

Origin defined at DOY 63 22: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.127E-01 +/- 0.167E-06$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.112E+01 +/- 0.226E-05 [solar radii]
c(2) = 0.274E-01 +/- 0.677E-07 [radii/min]
c(2) = 0.318E+03 +/- 0.785E-03 [km/sec]
c(3) = -0.327E-04 +/- 0.432E-09 [radii/min**2]
c(3) = -0.127E-01 +/- 0.167E-06 [km/sec**2]

ANGULAR INFORMATION:

ANGULAR ACCELERATION= $0.1761E-07 +/- 0.2761E-12$ [radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 122. +/- 0. [degrees]
a(2) = -0.390E+00 +/- 0.462E-05 [degrees/min]
a(2) = -0.113E-03 +/- 0.135E-08 [rad/sec]
a(3) = 0.182E-02 +/- 0.285E-07 [degrees/min**2]
a(3) = 0.176E-07 +/- 0.276E-12 [rad/sec**2]

The RADIAL velocity at 22:45 = 284. km/sec

The RADIAL velocity at 23:38 = 244. km/sec

The RADIAL velocity at 0: 3 = 225. 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!

(

(

(