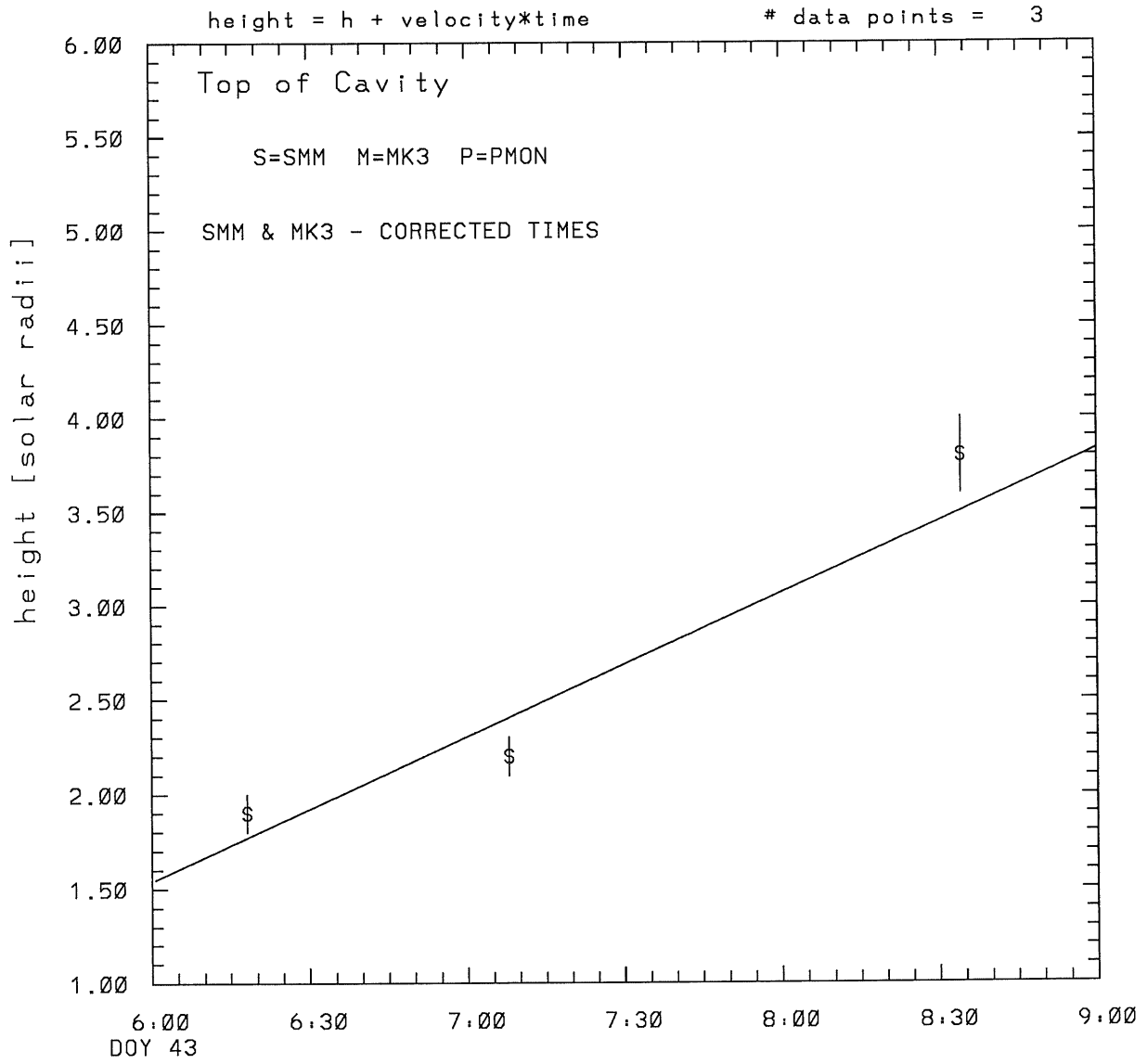
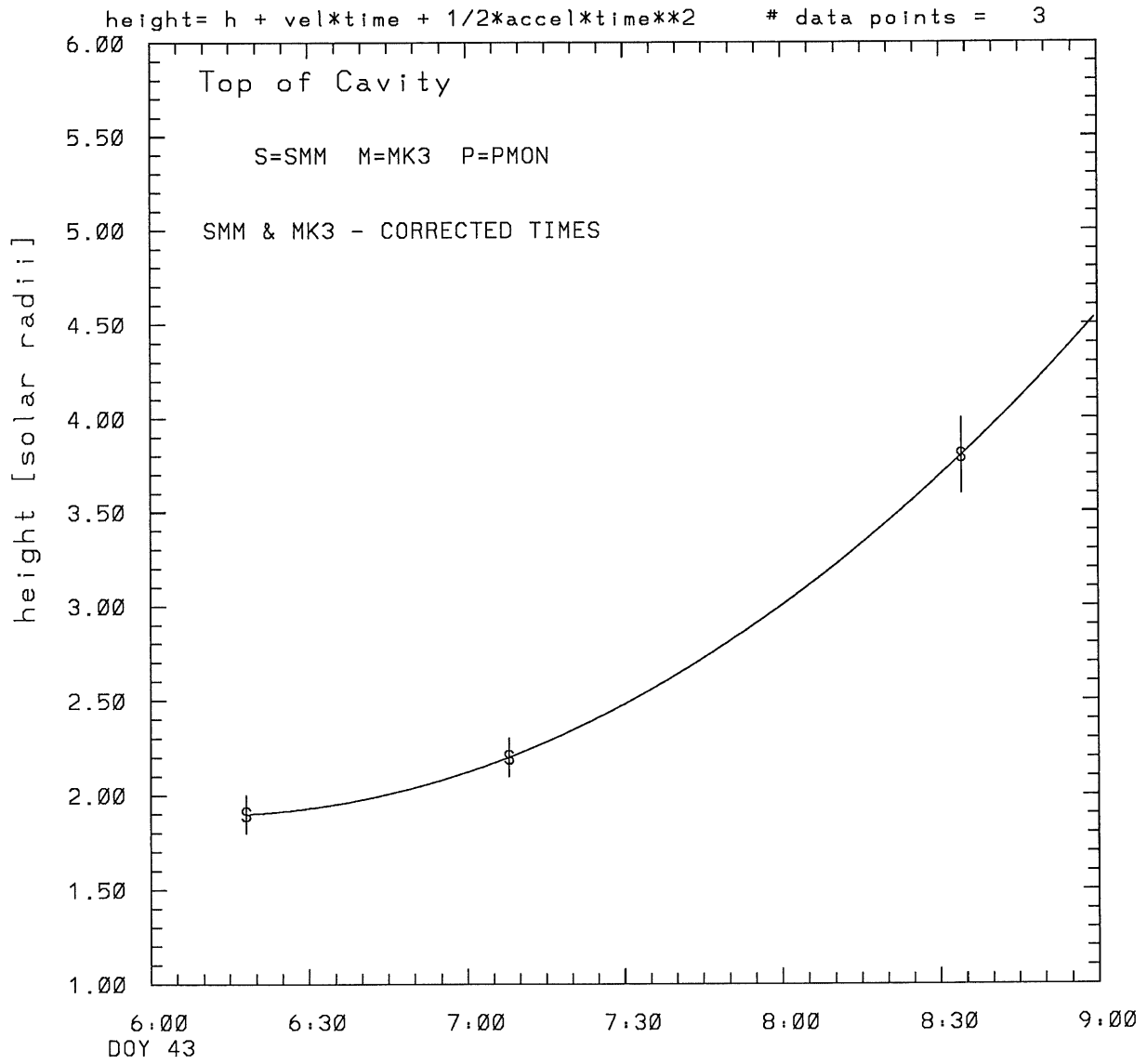


SMM C/P 1988 DOY 43 138 +/- 0 degrees



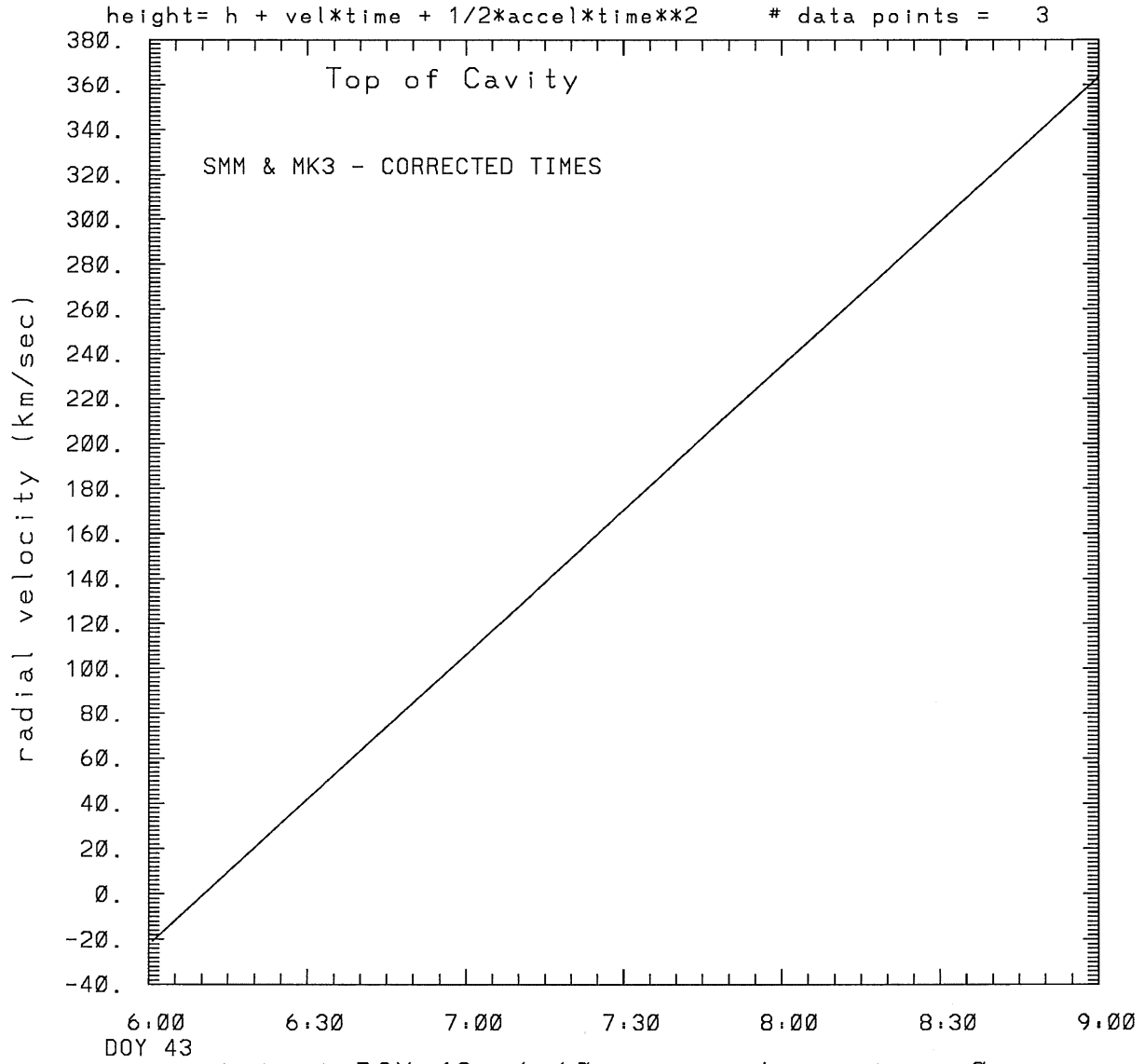
tstart=DOY 43 5:18 +/- 8.7 [min.]
radial velocity= 148. +/- 37. [km/sec]

SMM C/P 1988 DOY 43 138 +/- 0 degrees



tstart=DOY 43 6:10 from derivative=0
Event begins at 1.89 Solar Radii
radial acceleration = 0.0357 +/- 0.0000 [km/sec**2]

SMM C/P 1988 DOY 43 138 +/- 0 degrees



tstart=DOY 43 6:10 from derivative=0
Event begins at 1.89 Solar Radii
radial acceleration=0.357E-01 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in	angle	error in	datatype
1988	43	6:18: 6	1.90	+/- 0.10	138.0	+/- 0.5	SMM	
1988	43	7: 7:57	2.20	+/- 0.10	138.0	+/- 0.5	SMM	
1988	43	8:34: 5	3.80	+/- 0.20	138.0	+/- 1.0	SMM	

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.425E+02 +/- 0.873E+01$ [minutes]

In more convenient units:

Event began at DOY 43 5:18 +/- 0.873E+01 [minutes]

Origin defined at DOY 43 6: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 148. +/- 37. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.154E+01 +/- 0.222E+00$ [solar radii]
 $c(2) = 0.127E-01 +/- 0.319E-02$ [radii/min]
 $c(2) = 0.148E+03 +/- 0.370E+02$ [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 $c(1) = 0.38740E+00$ [radii] see Bevington pg. 114

error in $c(2) = 0.39617E-02$ [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) = 138. +/- 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 6:18 = 0. km/sec
The TOTAL velocity at 6:18 = 148. km/sec

The TANGENTIAL velocity at 7: 7 = 0. km/sec
The TOTAL velocity at 7: 7 = 148. km/sec

The TANGENTIAL velocity at 8:34 = 0. km/sec
The TOTAL velocity at 8:34 = 148. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 1.02
Standard Deviation in start time measurement = 0.562E+02
Error in time = 0.30302E+02 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.541E-01
Reduced Chi Squared = 0.370E+00
Chi Squared = 0.370E+00
The probability for exceeding chi square = 0.816E+00

The correlation coefficient = 0.975E+00
The probability that no LINEAR correlation exists between the variables = 0.1422E+00
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

This is a 2 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1988	43	6:18: 6	1.90	+/- 0.10	138.0	+/- 0.5	SMM
1988	43	7: 7:57	2.20	+/- 0.10	138.0	+/- 0.5	SMM
1988	43	8:34: 5	3.80	+/- 0.20	138.0	+/- 1.0	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

tstart=DOY 43 6:10 from derivative = 0

Event begins at 1.89 Solar Radii

Origin defined at DOY 43 6: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.357E-01 +/- 0.259E-07 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.190E+01 +/- 0.349E-06 [solar radii]
c(2) = -0.193E-02 +/- 0.111E-07 [radii/min]
c(2) = -0.224E+02 +/- 0.129E-03 [km/sec]
c(3) = 0.923E-04 +/- 0.670E-10 [radii/min**2]
c(3) = 0.357E-01 +/- 0.259E-07 [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) = 138. +/- 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 6:18 = 0. km/sec

The TOTAL velocity at 6:18 = 16. km/sec

The TANGENTIAL velocity at 7: 7 = 0. km/sec

The TOTAL velocity at 7: 7 = 123. km/sec

The TANGENTIAL velocity at 8:34 = 0. km/sec

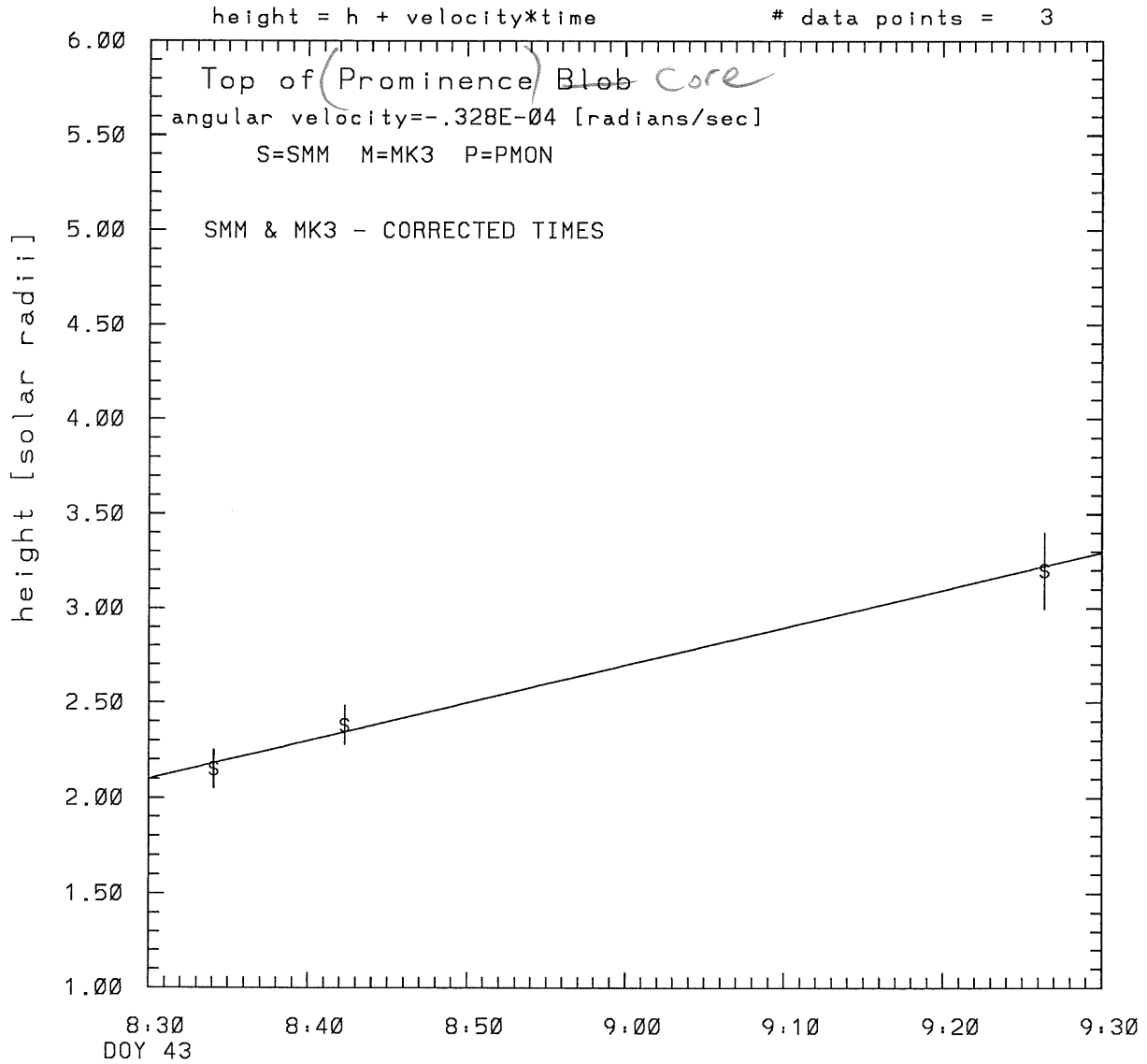
The TOTAL velocity at 8:34 = 308. km/sec

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!

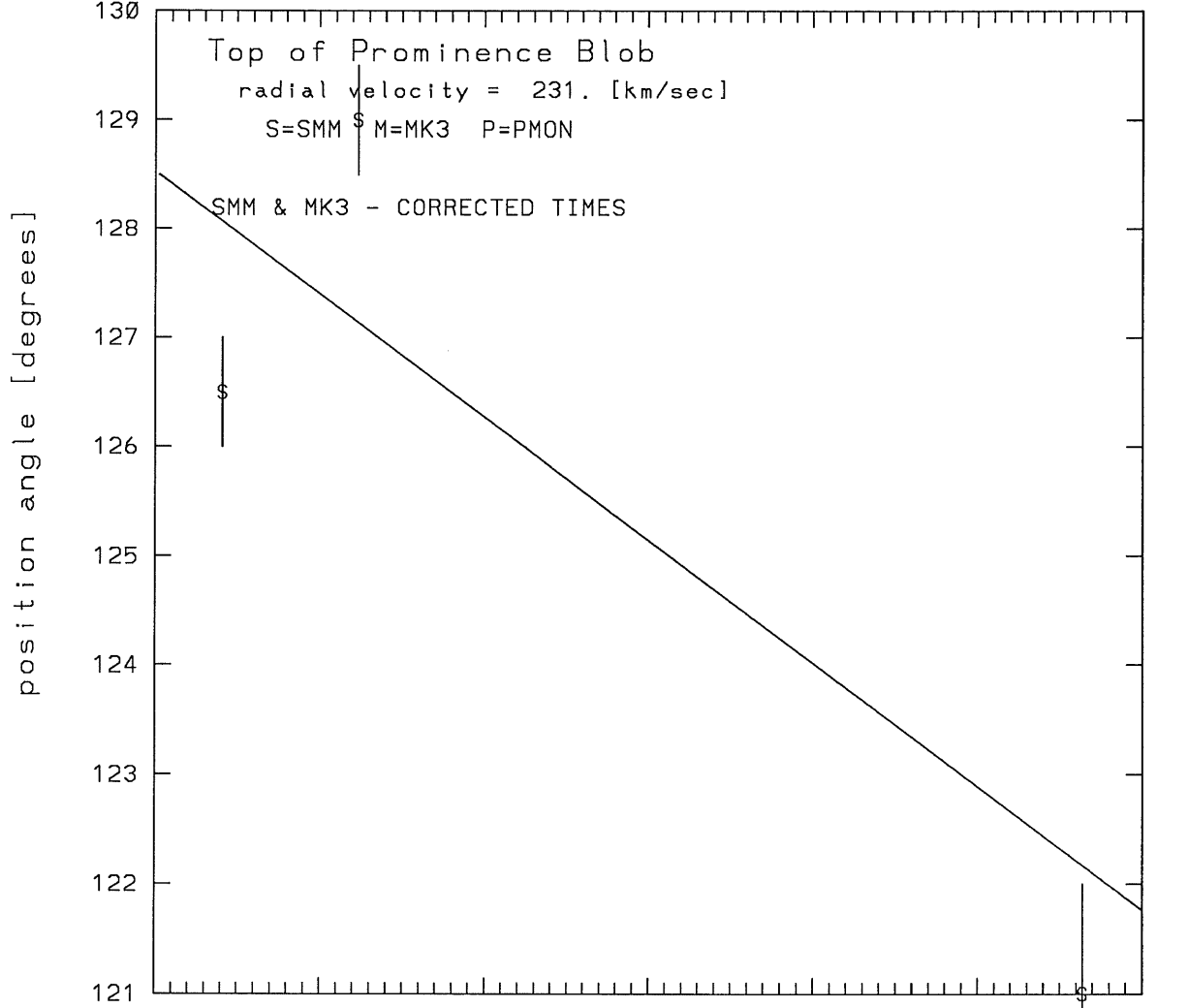
SMM C/P 1988 DOY 43 125 +/- 4 degrees



tstart=DOY 43 7:35 +/- 2.0 [min.]
radial velocity= 231. +/- 17. [km/sec]

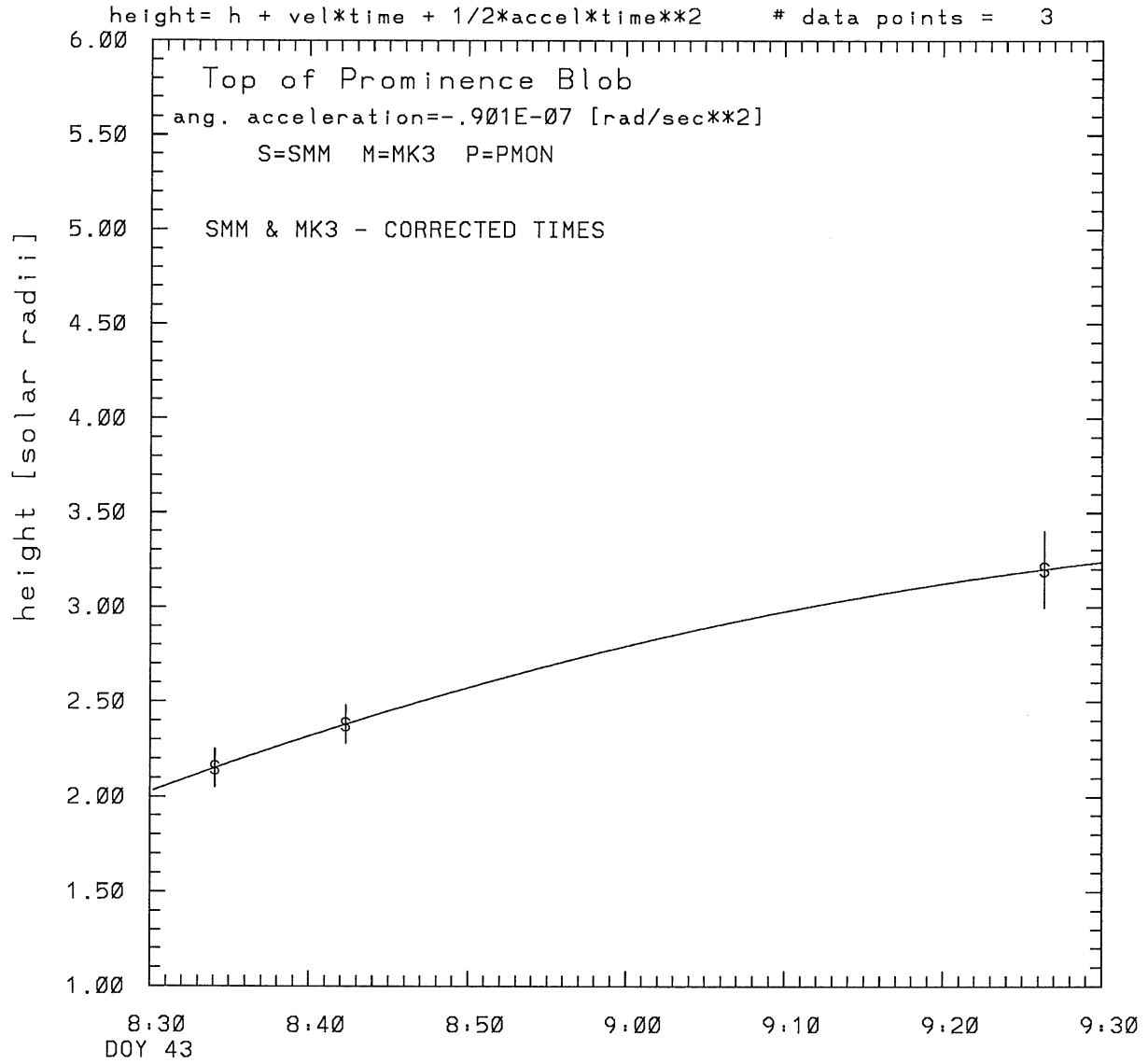
SMM C/P 1988 DOY 43 125 +/- 4 degrees

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



angular velocity = $-.328E-04 \pm 0.219E-04$ [rad/sec]

SMM C/P 1988 DOY 43 125 +/- 4 degrees

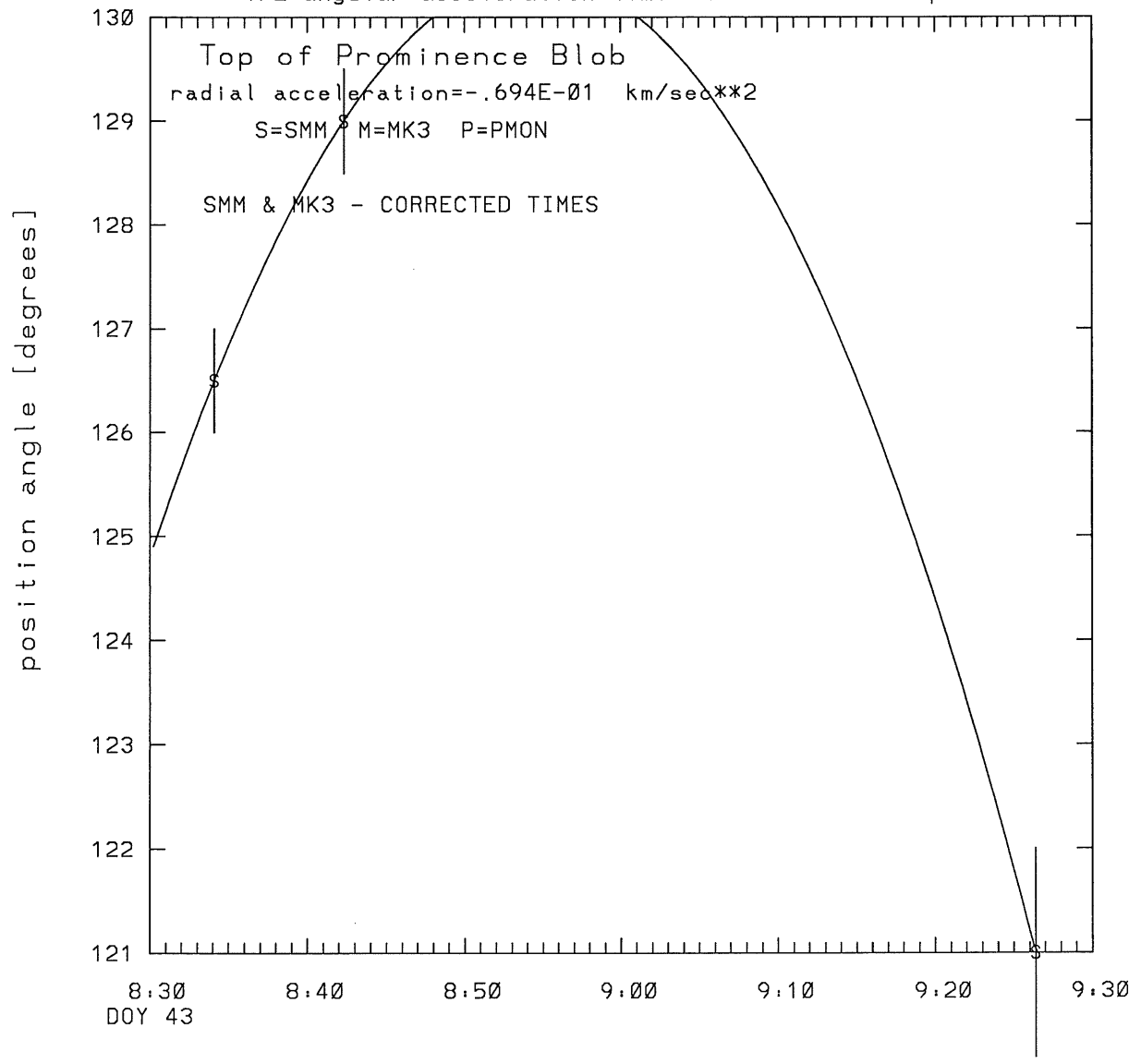


tstart=DOY 43 8: 2 +/- 0.0 [min.]

radial acceleration = $-0.0694 +/- 0.0000$ [km/sec**2]

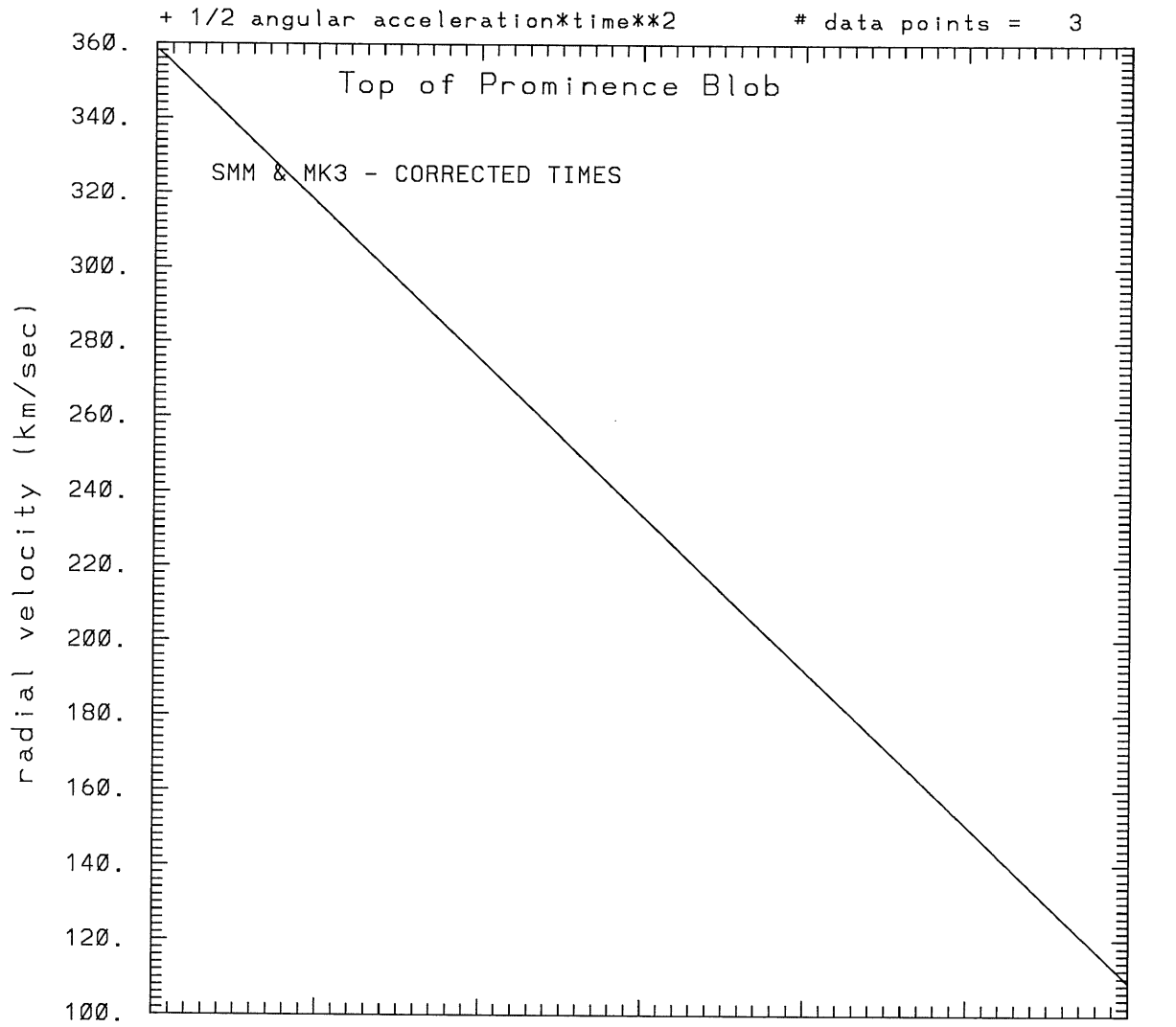
SMM C/P 1988 DOY 43 125 +/- 4 degrees

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



angular acceleration = $-.901E-07 \pm 0.476E-12$ [rad/sec**2]

SMM C/P 1988 DOY 43 125 +/- 4 degrees



8:30
DOY 43

8:40

8:50

9:00

9:10

9:20

9:30

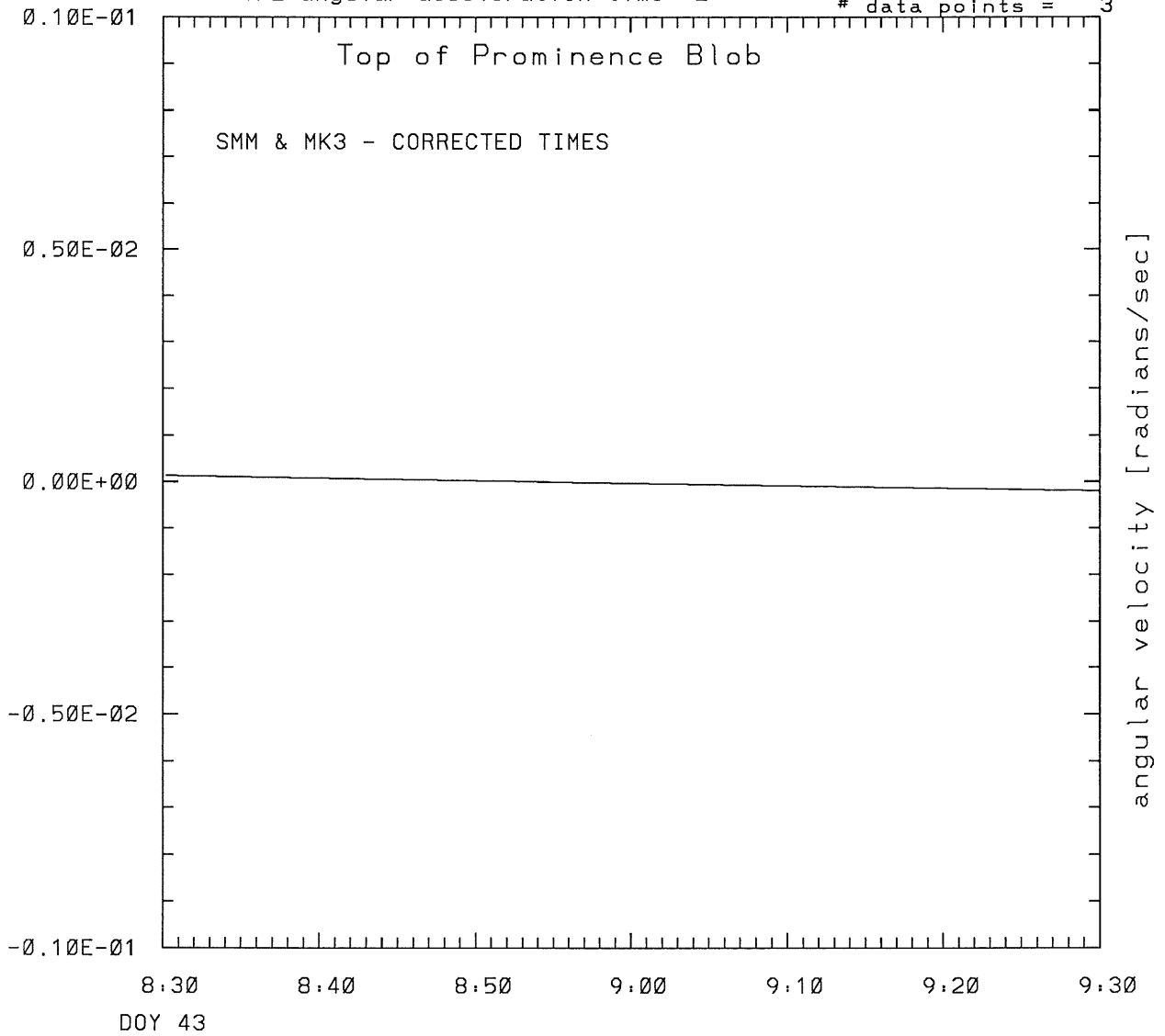
tstart=DOY 43 8: 2 +/- 0.0 [min.]

radial acceleration=-.694E-01 km/sec**2

SMM C/P 1988 DOY 43 125 +/- 4 degrees

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

data points = 3



angular acceleration = $-.901E-07$ +/- $0.476E-12$ [rad/sec**2]

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in angle	error in angle	datatype
1988	43	8:34: 5	2.15 +/- 0.10	126.5 +/- 0.5			SMM
1988	43	8:42:18	2.38 +/- 0.10	129.0 +/- 0.5			SMM
1988	43	9:26:23	3.20 +/- 0.20	121.0 +/- 1.0			SMM

Structure being measured:
Top of Prominence Blob

OUTPUT:

START TIME:

Event began at t = 0 + -0.551E+02 +/- 0.195E+01 [minutes]
In more convenient units:
Event began at DOY 43 7:35 +/- 0.195E+01 [minutes]

Origin defined at DOY 43 8:30

RADIAL INFORMATION:

RADIAL VELOCITY = 231. +/- 17. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.210E+01 +/- 0.302E-01 [solar radii]
c(2) = 0.199E-01 +/- 0.146E-02 [radii/min]
c(2) = 0.231E+03 +/- 0.169E+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)= 0.43804E-01 [radii] see Bevington pg. 114
error in c(2)= 0.13114E-02 [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = -0.3281E-04 +/- 0.2194E-04[radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 129. +/- 2. [degrees]
a(2) = -0.113E+00 +/- 0.754E-01 [degrees/min]
a(2) = -0.328E-04 +/- 0.219E-04 [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 8:34 = 231. km/sec

The RADIAL velocity at 8:42 = 231. km/sec

The RADIAL velocity at 9:26 = 231. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.55
Standard Deviation in start time measurement = 0.230E+02
Error in time = 0.26173E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.156E-02
Reduced Chi Squared = 0.503E-02
Chi Squared = 0.503E-02
The probability for exceeding chi square = 0.969E+00

The correlation coefficient = 0.998E+00
The probability that no LINEAR correlation exists between the variables = 0.4029]
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

This is a 2 order run

INPUT:

year	day	time	radii	radius	error in angle	error in angle	datatype
1988	43	8:34: 5	2.15 +/-	0.10	126.5 +/-	0.5	SMM
1988	43	8:42:18	2.38 +/-	0.10	129.0 +/-	0.5	SMM
1988	43	9:26:23	3.20 +/-	0.20	121.0 +/-	1.0	SMM

Structure being measured:
Top of Prominence Blob

OUTPUT:

START TIME:

Event began at t = 0 + -0.285E+02 +/- 0.000E+00 [minutes]
In more convenient units:
Event began at DOY 43 8: 2 +/- 0.000E+00 [minutes]

Origin defined at DOY 43 8:30

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.694E-01 +/- 0.331E-06 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.203E+01 +/- 0.401E-06 [solar radii]
c(2) = 0.309E-01 +/- 0.535E-07 [radii/min]
c(2) = 0.359E+03 +/- 0.620E-03 [km/sec]
c(3) = -0.180E-03 +/- 0.857E-09 [radii/min**2]
c(3) = -0.694E-01 +/- 0.331E-06 [km/sec**2]

ANGULAR INFORMATION:

ANGULAR ACCELERATION= -0.9005E-07 +/- 0.4758E-12[radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 125. +/- 0. [degrees]
a(2) = 0.456E+00 +/- 0.306E-05 [degrees/min]
a(2) = 0.133E-03 +/- 0.890E-09 [rad/sec]
a(3) = -0.929E-02 +/- 0.491E-07 [degrees/min**2]
a(3) = -0.901E-07 +/- 0.476E-12 [rad/sec**2]

The RADIAL velocity at 8:34 = 342. km/sec

The RADIAL velocity at 8:42 = 308. km/sec

The RADIAL velocity at 9:26 = 124. 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!