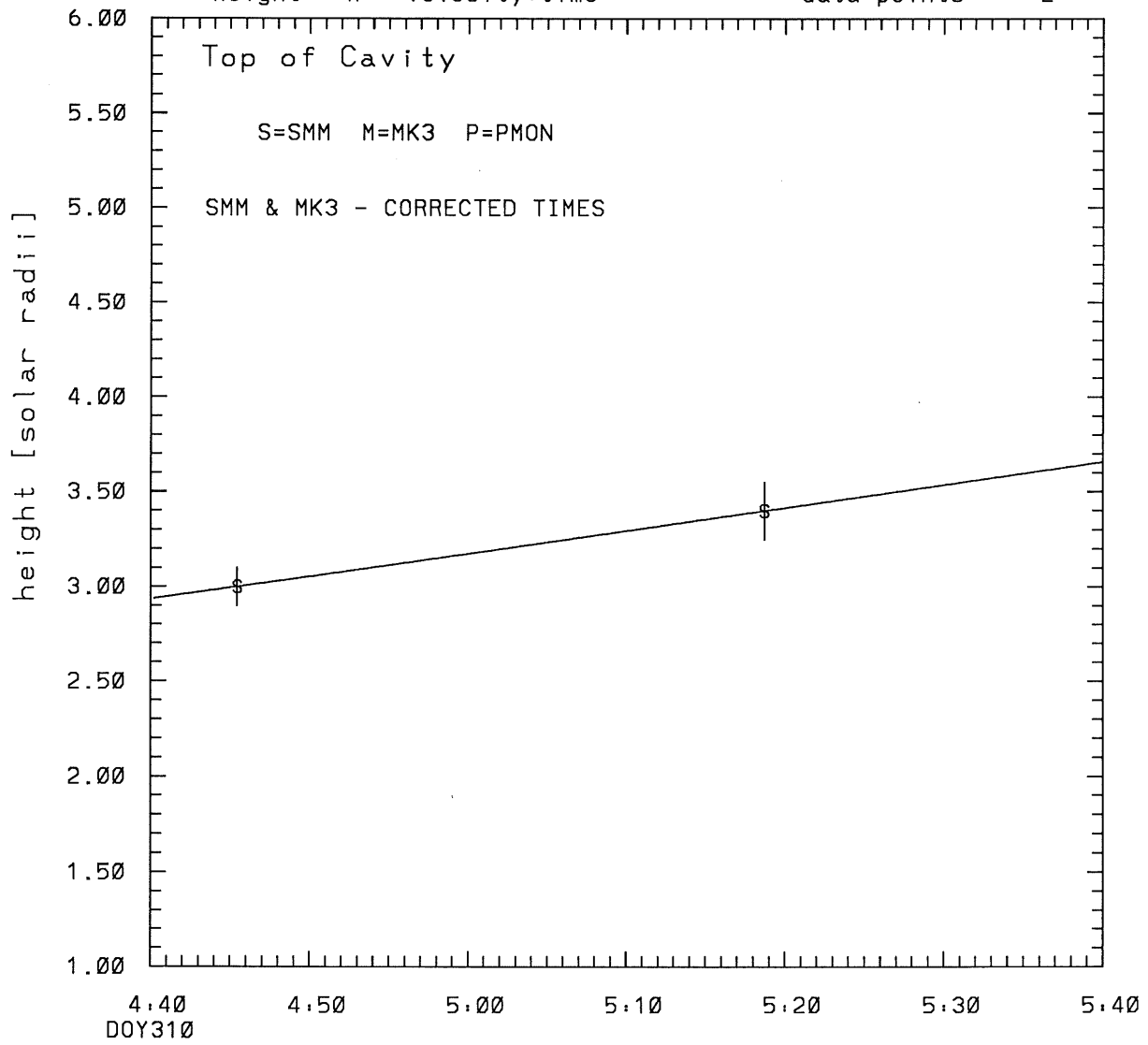


SMM C/P 1988 DOY310 63 +/- 0 degrees

height = h + velocity*time

data points = 2



tstart=DOY310 2: 1 +/- 0.0 [min.]
radial velocity= 139. +/- 0. [km/sec]

This is a 1 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1988	310	4:45:27	3.00	+/- 0.10	63.0	+/- 1.0	SMM
1988	310	5:18:43	3.40	+/- 0.15	63.0	+/- 1.0	SMM

Structure being measured:
Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.161E+03 +/- 0.000E+00$ [minutes]
In more convenient units:
Event began at DOY 310 2: 1 +/- 0.000E+00 [minutes]

Origin defined at DOY310 4:40

RADIAL INFORMATION:

RADIAL VELOCITY = 139. +/- 0. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.293E+01 +/- 0.141E-05$ [solar radii]
 $c(2) = 0.120E-01 +/- 0.640E-07$ [radii/min]
 $c(2) = 0.139E+03 +/- 0.743E-03$ [km/sec]
 $c(3) = 0.000E+00 +/- 0.000E+00$ [radii/min**2]
 $c(3) = 0.000E+00 +/- 0.000E+00$ [km/sec**2]

ANGULAR INFORMATION:

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

The computed ANGULAR coefficients and errors FROM NLLST2 are:

$a(1) = 63. +/- 0.$ [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 4:45 = 0. km/sec

The TOTAL velocity at 4:45 = 139. km/sec

The TANGENTIAL velocity at 5:18 = 0. km/sec

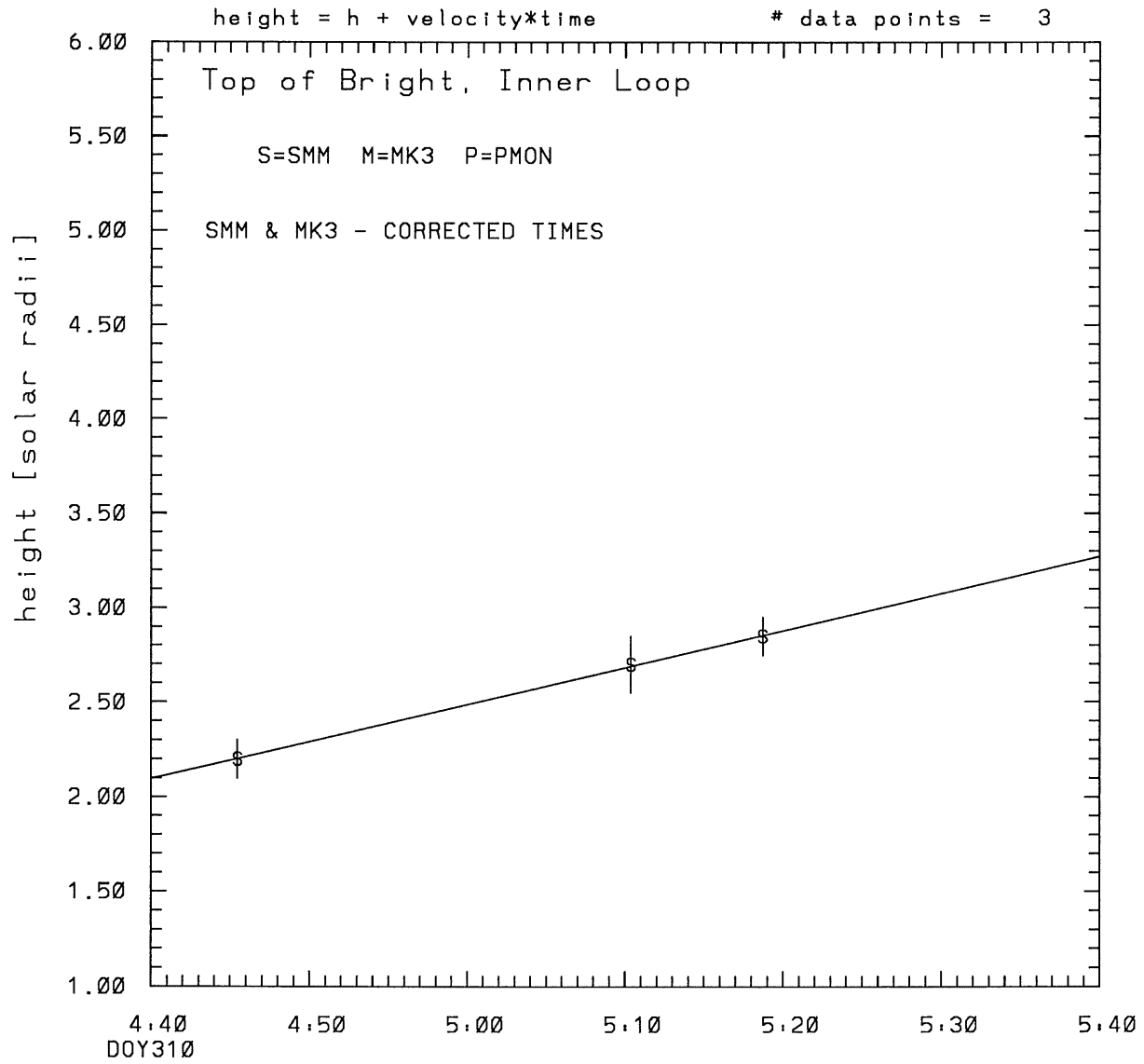
The TOTAL velocity at 5:18 = 139. km/sec

The following info is for estimating goodness of the fit

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

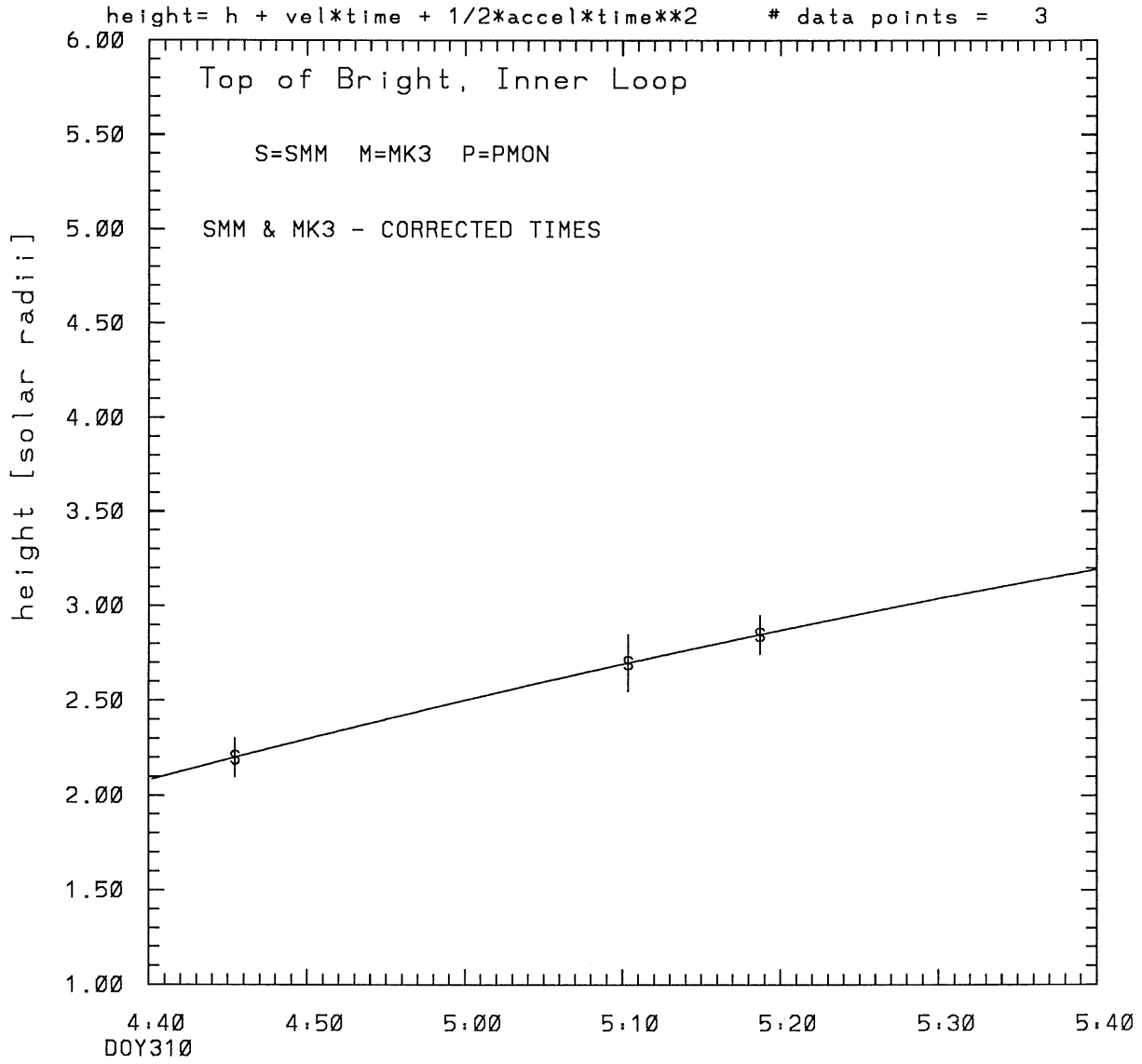
Correlation coefficient is not computable!

SMM C/P 1988 DOY310 61 +/- 0 degrees



tstart=DOY310 3.46 +/- 0.3 [min.]
radial velocity= 227. +/- 3. [km/sec]

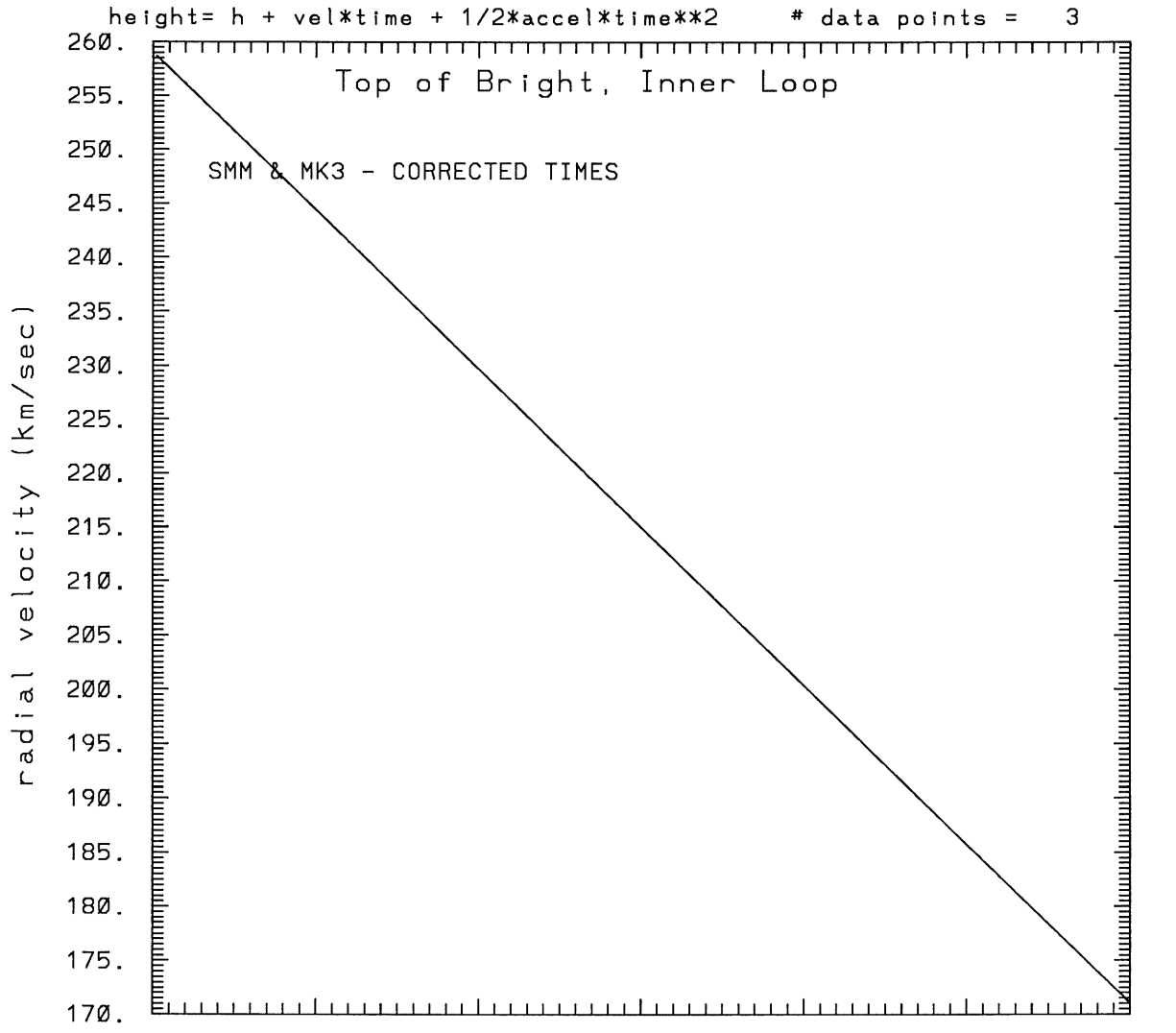
SMM C/P 1988 DOY310 61 +/- 0 degrees



tstart=DOY310 3:57 +/- 0.0 [min.]

radial acceleration = $-0.0244 +/- 0.0000$ [km/sec**2]

SMM C/P 1988 DOY310 61 +/- 0 degrees



DOY310

tstart=DOY310 3:57 +/- 0.0 [min.]

radial acceleration = $-.244E-01$ km/sec**2

This is a 1 order run

INPUT:

year	day	time	error in radii	error in radius	error in angle	error in angle	datatype
1988	310	4:45:27	2.20 +/- 0.10	2.20 +/- 0.10	61.0 +/- 0.5	61.0 +/- 0.5	SMM
1988	310	5:10:22	2.70 +/- 0.15	2.70 +/- 0.15	61.0 +/- 0.5	61.0 +/- 0.5	SMM
1988	310	5:18:43	2.85 +/- 0.10	2.85 +/- 0.10	61.0 +/- 0.5	61.0 +/- 0.5	SMM

Structure being measured:

Top of Bright, Inner Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.558E+02 +/- 0.304E+00$ [minutes]

In more convenient units:

Event began at DOY 310 3:46 +/- 0.304E+00 [minutes]

Origin defined at DOY310 4:40

RADIAL INFORMATION:

RADIAL VELOCITY = 227. +/- 3. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.209E+01 +/- 0.642E-02$ [solar radii]
 $c(2) = 0.196E-01 +/- 0.228E-03$ [radii/min]
 $c(2) = 0.227E+03 +/- 0.265E+01$ [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 $c(1) = 0.12743E-01$ [radii] see Bevington pg. 114

error in $c(2) = 0.44582E-03$ [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) = 61. +/- 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 4:45 = 0. km/sec

The TOTAL velocity at 4:45 = 227. km/sec

The TANGENTIAL velocity at 5:10 = 0. km/sec

The TOTAL velocity at 5:10 = 227. km/sec

The TANGENTIAL velocity at 5:18 = 0. km/sec

The TOTAL velocity at 5:18 = 227. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.34

Standard Deviation in start time measurement = 0.141E+02

Error in time = 0.55651E+00 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.369E-04

Reduced Chi Squared = 0.249E-03

Chi Squared = 0.249E-03

The probability for exceeding chi square = 0.995E+00

The correlation coefficient = 0.100E+01

The probability that no LINEAR correlation exists between the variables = 0.1360E-01

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

This is a 2 order run

INPUT:

year	day	time	error in radii	error in radius	error in angle	error in angle	datatype
1988	310	4:45:27	2.20 +/- 0.10		61.0 +/- 0.5		SMM
1988	310	5:10:22	2.70 +/- 0.15		61.0 +/- 0.5		SMM
1988	310	5:18:43	2.85 +/- 0.10		61.0 +/- 0.5		SMM

Structure being measured:
Top of Bright, Inner Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.431E+02 +/- 0.000E+00$ [minutes]
In more convenient units:
Event began at DOY 310 3:57 +/- 0.000E+00 [minutes]

Origin defined at DOY310 4:40

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.244E-01 +/- 0.446E-05$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.208E+01 +/- 0.306E-05$ [solar radii]
c(2) = $0.223E-01 +/- 0.500E-06$ [radii/min]
c(2) = $0.259E+03 +/- 0.580E-02$ [km/sec]
c(3) = $-0.632E-04 +/- 0.115E-07$ [radii/min**2]
c(3) = $-0.244E-01 +/- 0.446E-05$ [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) = $61. +/- 0.$ [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]

$$a(3) = 0.000E+00 \pm 0.000E+00 \text{ [rad/sec**2]}$$

THE TANGENTIAL AND TOTAL VELOCITIES AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 4:45 = 0. km/sec

The TOTAL velocity at 4:45 = 251. km/sec

The TANGENTIAL velocity at 5:10 = 0. km/sec

The TOTAL velocity at 5:10 = 215. km/sec

The TANGENTIAL velocity at 5:18 = 0. km/sec

The TOTAL velocity at 5:18 = 202. 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!