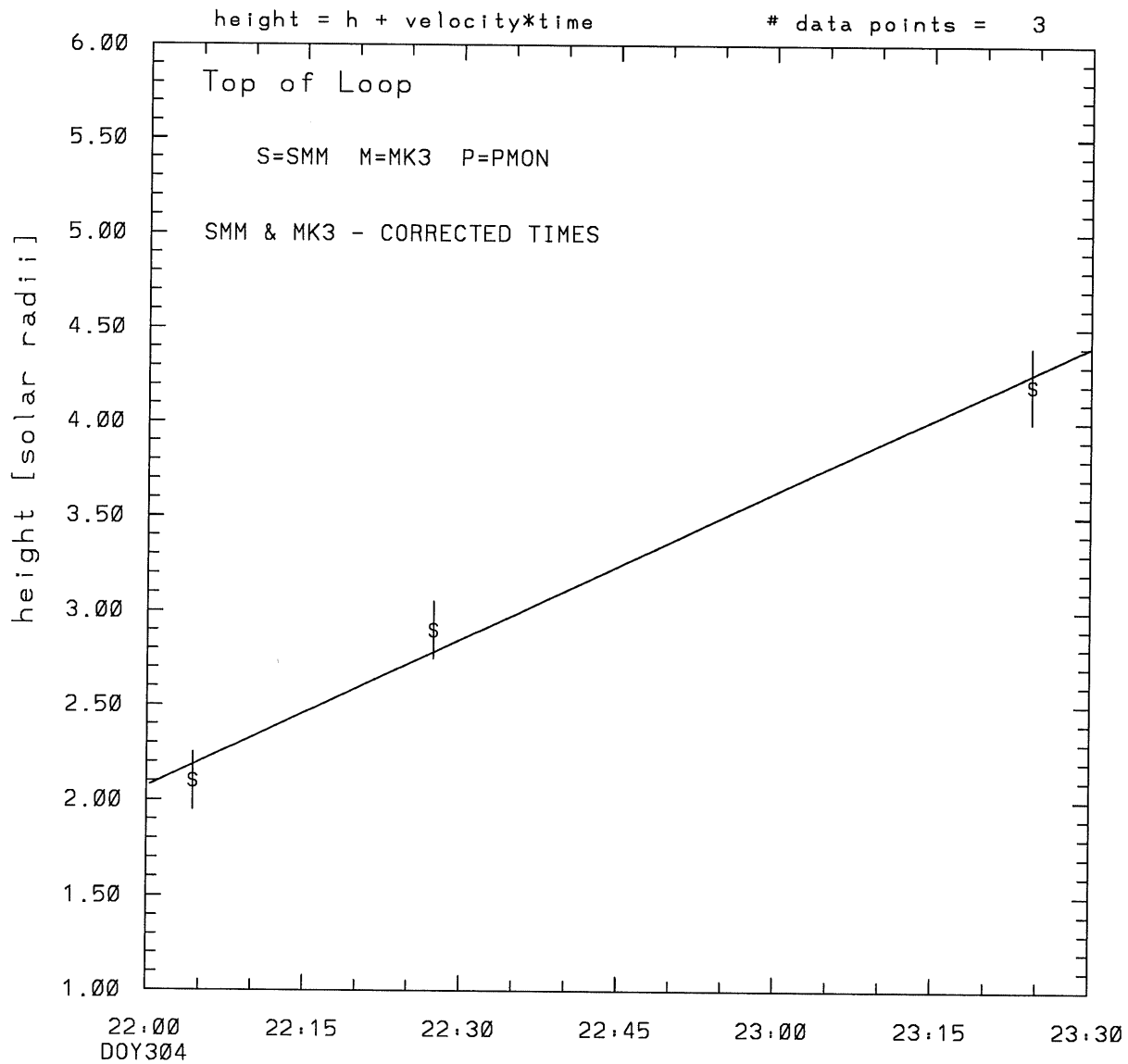
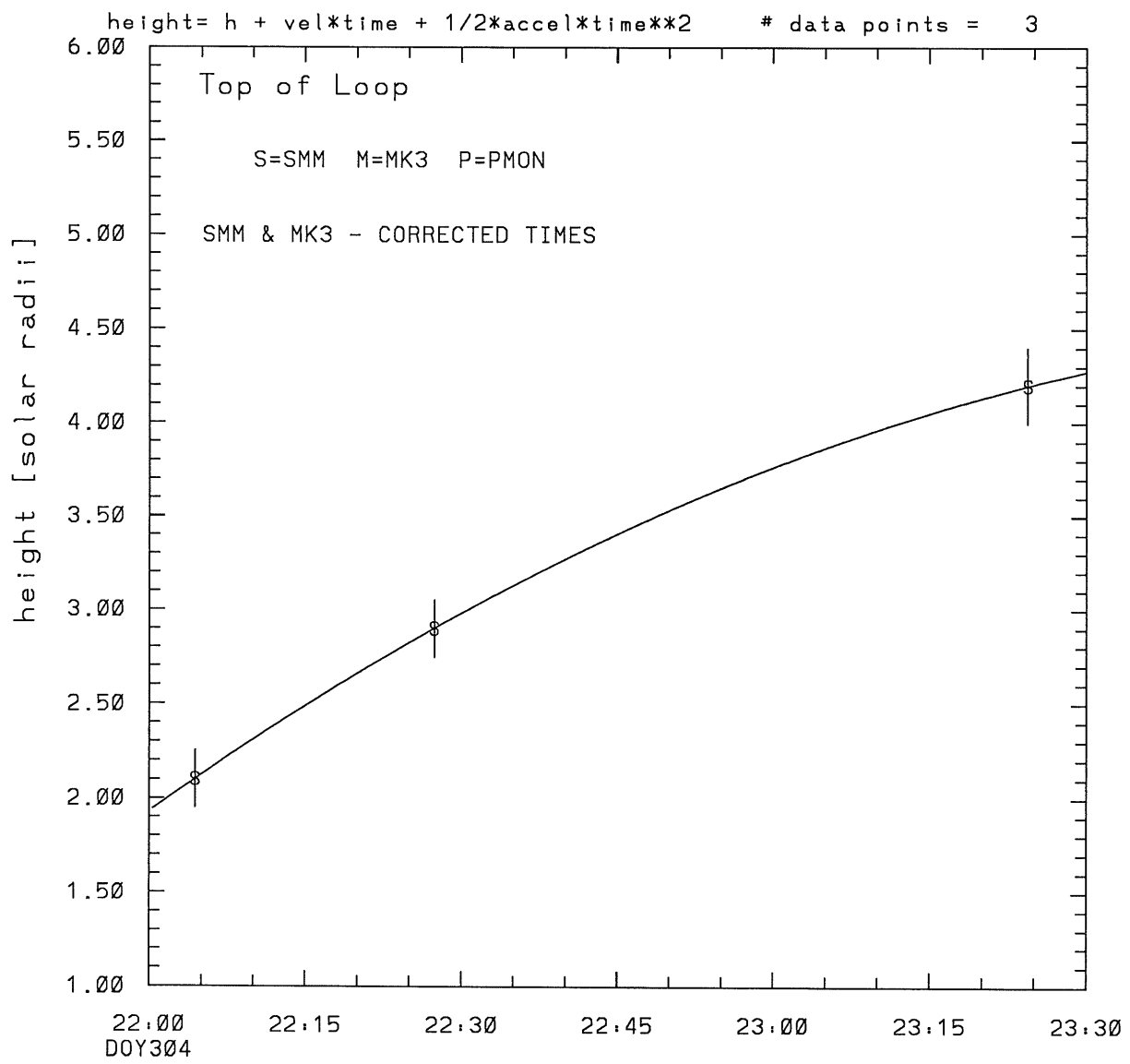


SMM C/P 1986 DOY304 100 +/- 0 degrees



tstart=DOY304 21:19 +/- 2.5 [min.]  
radial velocity= 301. +/- 26. [km/sec]

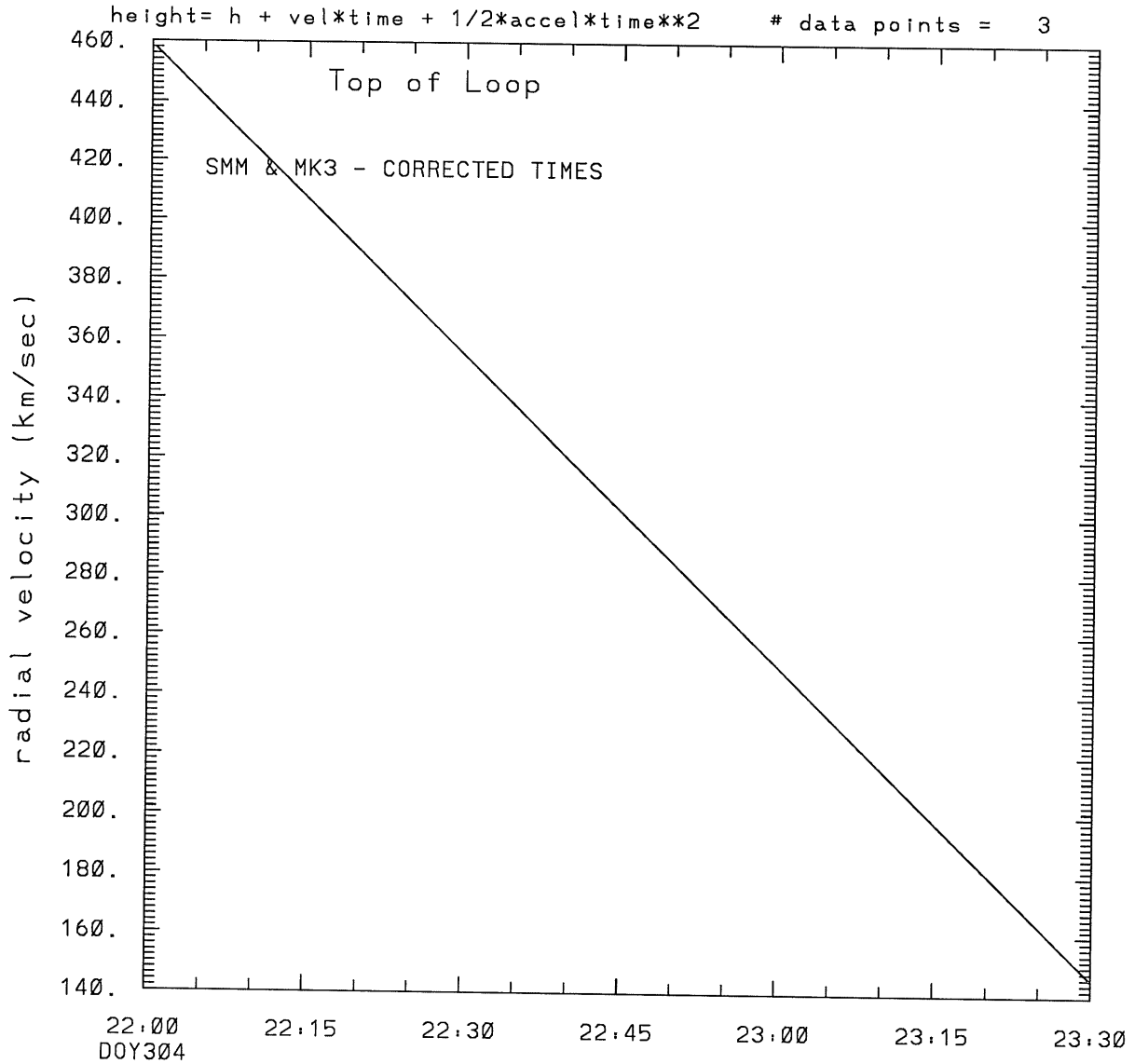
SMM C/P 1986 DOY304 100 +/- 0 degrees



tstart=DOY304 21:40 +/- 0.0 [min.]

radial acceleration = -0.0580 +/- 0.0000 [km/sec\*\*2]

SMM C/P 1986 DOY304 100 +/- 0 degrees



tstart=DOY304 21:40 +/- 0.0 [min.]

radial acceleration =  $-.580E-01$  km/sec\*\*2

\*\*\*\*\*

This is a 1 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	doy	time	radii	error in radius	error in angle	angle	datatype
1986	304	22: 4:24	2.10	+/- 0.15	100.0	+/- 0.5	SMM
1986	304	22:27:23	2.90	+/- 0.15	100.0	+/- 0.5	SMM
1986	304	23:24:23	4.20	+/- 0.20	100.0	+/- 1.0	SMM

\*\*\*\*\*

Structure being measured:

Top of Loop

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at  $t = 0 + -0.412E+02 +/- 0.254E+01$  [minutes]

In more convenient units:

Event began at DOY 304 21:19 +/- 0.254E+01 [minutes]

Origin defined at DOY304 22: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 301. +/- 26. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.207E+01 +/- 0.968E-01 [solar radii]  
c(2) = 0.260E-01 +/- 0.224E-02 [radii/min]  
c(2) = 0.301E+03 +/- 0.260E+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)= 0.13913E+00 [radii] see Bevington pg. 114

error in c(2)= 0.27129E-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) = 100. +/- 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: 4 = 0.000E+00 km/sec

The TOTAL velocity at 22: 4 = 301. km/sec

The TANGENTIAL velocity at 22:27 = 0.000E+00 km/sec

The TOTAL velocity at 22:27 = 301. km/sec

The TANGENTIAL velocity at 23:24 = 0.000E+00 km/sec

The TOTAL velocity at 23:24 = 301. km/sec

\*\*\*\*\*

The following info is for estimating goodness of the fit

\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 1.06

Standard Deviation in start time measurement = 0.336E+02

Error in time = 0.60870E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.137E-01

Reduced Chi Squared = 0.464E-01

Chi Squared = 0.464E-01

The probability for exceeding chi square = 0.907E+00

The correlation coefficient = 0.995E+00

The probability that no LINEAR correlation exists between the variables = 0.6631E-01

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

\*\*\*\*\*  
This is a 2 order run  
\*\*\*\*\*

\*\*\*\*\*  
INPUT:  
\*\*\*\*\*

year	doy	time	radii	error in radius	angle	error in angle	datatype
1986	304	22: 4:24	2.10	+/- 0.15	100.0	+/- 0.5	SMM
1986	304	22:27:23	2.90	+/- 0.15	100.0	+/- 0.5	SMM
1986	304	23:24:23	4.20	+/- 0.20	100.0	+/- 1.0	SMM

\*\*\*\*\*  
Structure being measured:  
Top of Loop  
\*\*\*\*\*

\*\*\*\*\*  
OUTPUT:  
\*\*\*\*\*

START TIME:

Event began at  $t = 0 + -0.217E+02 +/- 0.000E+00$  [minutes]

In more convenient units:

Event began at DOY 304 21:40 +/- 0.000E+00 [minutes]

Origin defined at DOY304 22: 0

RADIAL INFORMATION:

RADIAL ACCELERATION =  $-0.580E-01 +/- 0.205E-06$  km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) =  $0.193E+01 +/- 0.696E-06$  [solar radii]  
c(2) =  $0.396E-01 +/- 0.494E-07$  [radii/min]  
c(2) =  $0.459E+03 +/- 0.573E-03$  [km/sec]  
c(3) =  $-0.150E-03 +/- 0.530E-09$  [radii/min\*\*2]  
c(3) =  $-0.580E-01 +/- 0.205E-06$  [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) =  $100. +/- 0.$  [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 22: 4 = 0.000E+00 km/sec

The TOTAL velocity at 22: 4 = 444. km/sec

The TANGENTIAL velocity at 22:27 = 0.000E+00 km/sec

The TOTAL velocity at 22:27 = 364. km/sec

The TANGENTIAL velocity at 23:24 = 0.000E+00 km/sec

The TOTAL velocity at 23:24 = 165. km/sec

\*\*\*\*\*

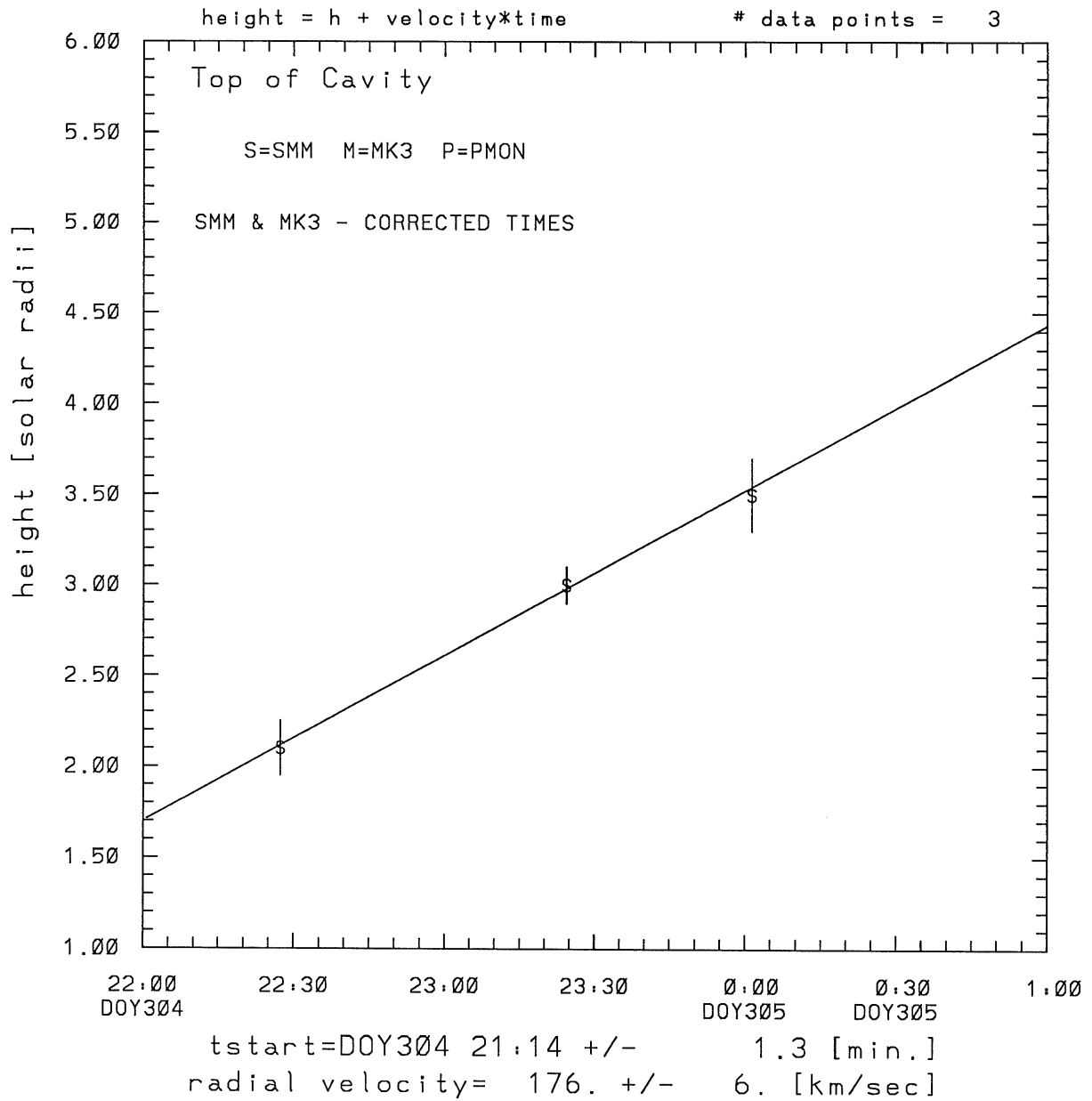
The following info is for estimating goodness of the fit

\*\*\*\*\*

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

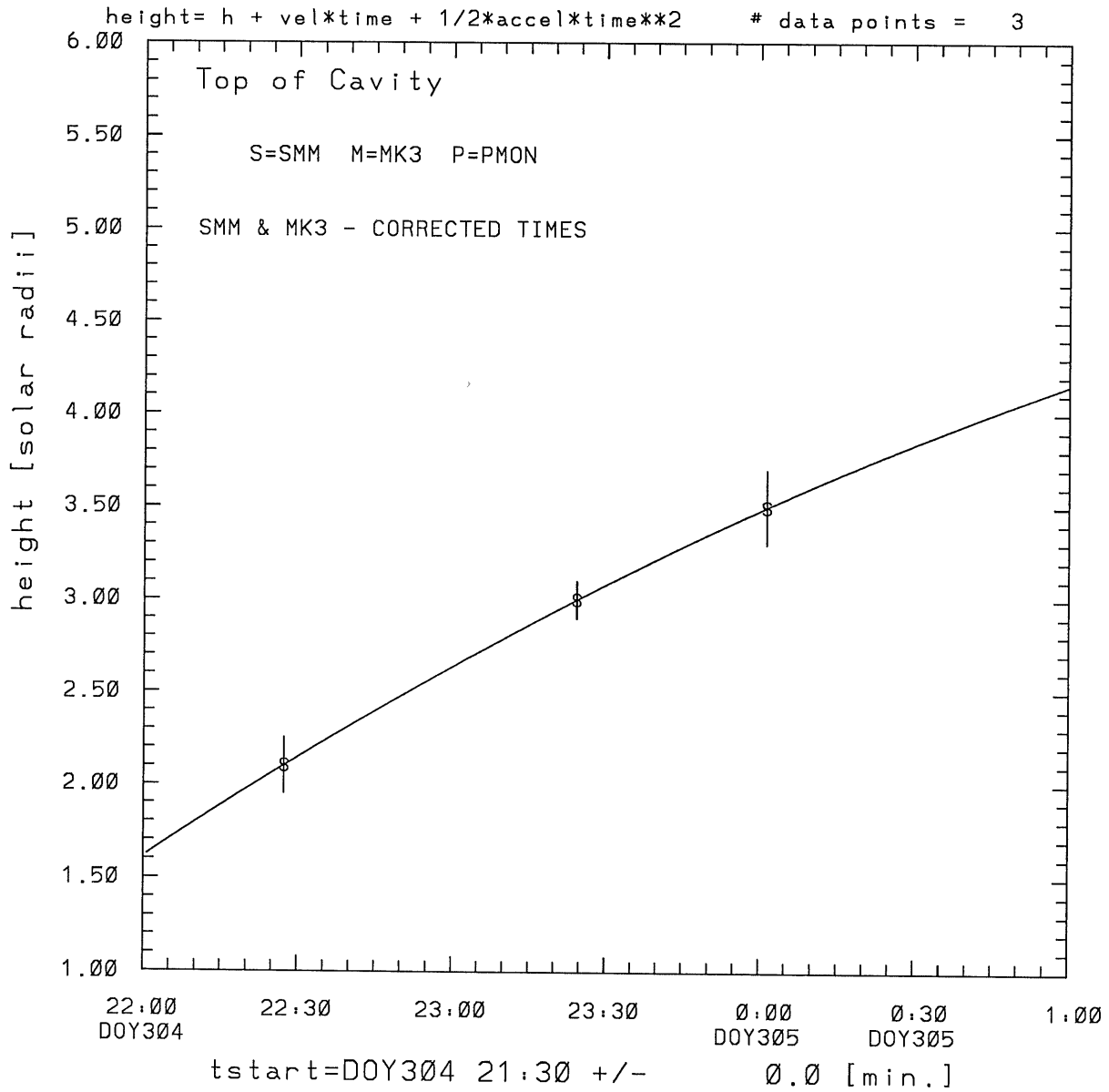
Correlation coefficient is not computable!

SMM C/P 1986 DOY304 85 +/- 0 degrees



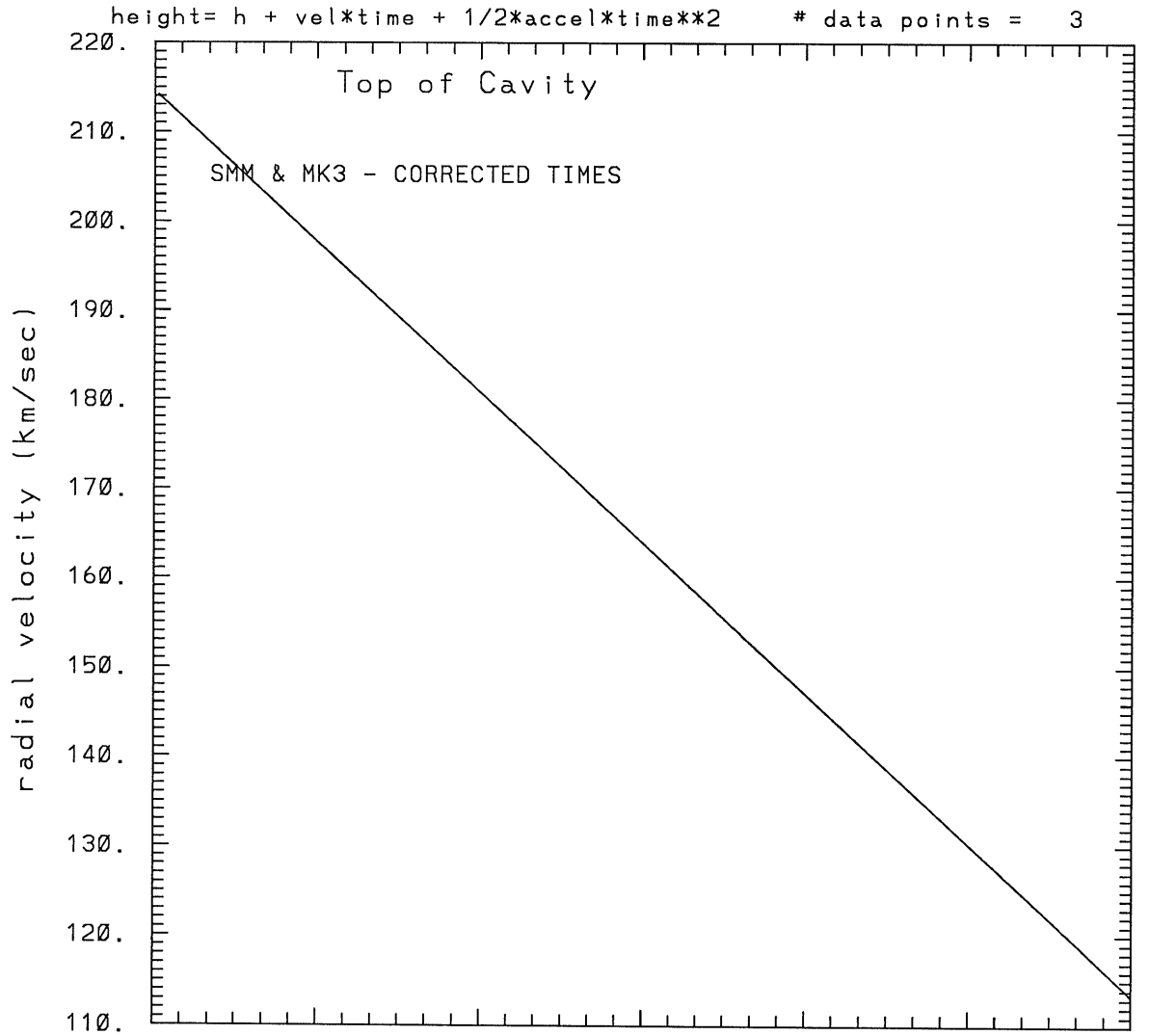


SMM C/P 1986 DOY304 85 +/- 0 degrees



radial acceleration =  $-0.0094 \pm 0.0000$  [km/sec\*\*2]

SMM C/P 1986 DOY304 85 +/- 0 degrees



22:00  
DOY304

22:30

23:00

23:30

0:00  
DOY305

0:30

1:00

tstart=DOY304 21:30 +/-

0.0 [min.]

radial acceleration =  $-.936E-02$  km/sec\*\*2

\*\*\*\*\*

This is a 1 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	day	time	radii	error in radius	angle	error in angle	datatype
1986	304	22:27:23	2.10	+/- 0.15	85.0	+/- 0.5	SMM
1986	304	23:24:23	3.00	+/- 0.10	85.0	+/- 1.0	SMM
1986	305	0: 1:23	3.50	+/- 0.20	85.0	+/- 1.0	SMM

\*\*\*\*\*

Structure being measured:

Top of Cavity

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.461E+02 +/- 0.126E+01 [minutes]

In more convenient units:

Event began at DOY 304 21:14 +/- 0.126E+01 [minutes]

Origin defined at DOY304 22: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 176. +/- 6. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.170E+01 +/- 0.431E-01 [solar radii]
- c(2) = 0.152E-01 +/- 0.532E-03 [radii/min]
- c(2) = 0.176E+03 +/- 0.617E+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)= 0.65006E-01 [radii] see Bevington pg. 114

error in c(2)= 0.74889E-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) = 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 22:27 = 0.000E+00 km/sec

The TOTAL velocity at 22:27 = 176. km/sec

The TANGENTIAL velocity at 23:24 = 0.000E+00 km/sec

The TOTAL velocity at 23:24 = 176. km/sec

The TANGENTIAL velocity at 0: 1 = 0.000E+00 km/sec

The TOTAL velocity at 0: 1 = 176. km/sec

\*\*\*\*\*

The following info is for estimating goodness of the fit

\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.71

Standard Deviation in start time measurement = 0.387E+02

Error in time = 0.33016E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.819E-03

Reduced Chi Squared = 0.670E-02

Chi Squared = 0.670E-02

The probability for exceeding chi square = 0.977E+00

The correlation coefficient = 0.999E+00

The probability that no LINEAR correlation exists between the variables = 0.2623E-01

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
1986	304	22:27:23	2.10	+/- 0.15	85.0	+/- 0.5	SMM
1986	304	23:24:23	3.00	+/- 0.10	85.0	+/- 1.0	SMM
1986	305	0: 1:23	3.50	+/- 0.20	85.0	+/- 1.0	SMM

\*\*\*\*\*

Structure being measured:

Top of Cavity

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at  $t = 0 + -0.318E+02 +/- 0.000E+00$  [minutes]

In more convenient units:

Event began at DOY 304 21:30 +/- 0.000E+00 [minutes]

Origin defined at DOY304 22: 0

RADIAL INFORMATION:

RADIAL ACCELERATION =  $-0.936E-02 +/- 0.367E-06$  km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) =  $0.161E+01 +/- 0.421E-05$  [solar radii]  
c(2) =  $0.185E-01 +/- 0.133E-06$  [radii/min]  
c(2) =  $0.215E+03 +/- 0.154E-02$  [km/sec]  
c(3) =  $-0.242E-04 +/- 0.949E-09$  [radii/min\*\*2]  
c(3) =  $-0.936E-02 +/- 0.367E-06$  [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]

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

THE TANGENTIAL AND TOTAL VELOCITIES AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 22:27 = 0.000E+00 km/sec

The TOTAL velocity at 22:27 = 199. km/sec

The TANGENTIAL velocity at 23:24 = 0.000E+00 km/sec

The TOTAL velocity at 23:24 = 167. km/sec

The TANGENTIAL velocity at 0: 1 = 0.000E+00 km/sec

The TOTAL velocity at 0: 1 = 146. 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!