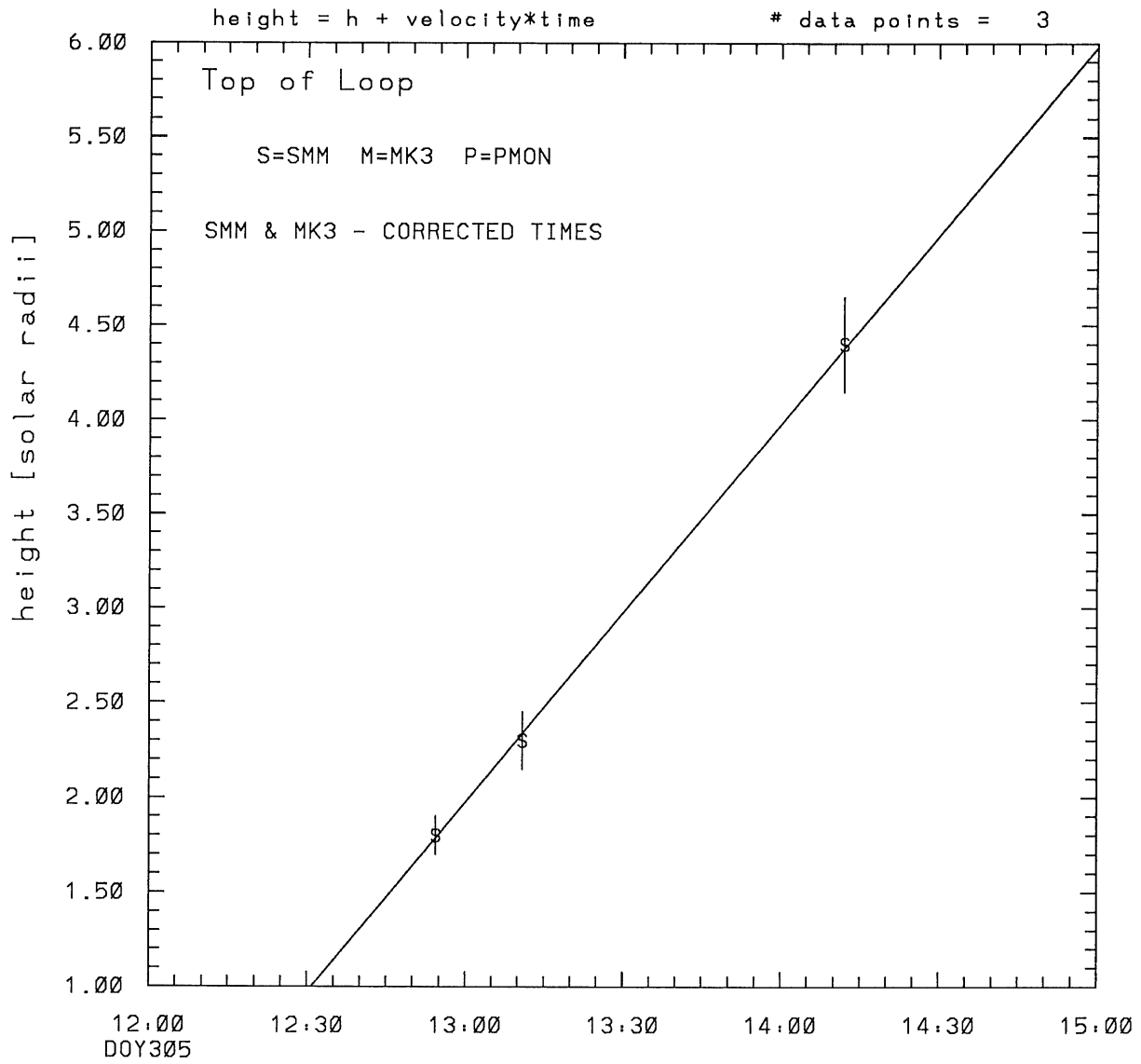
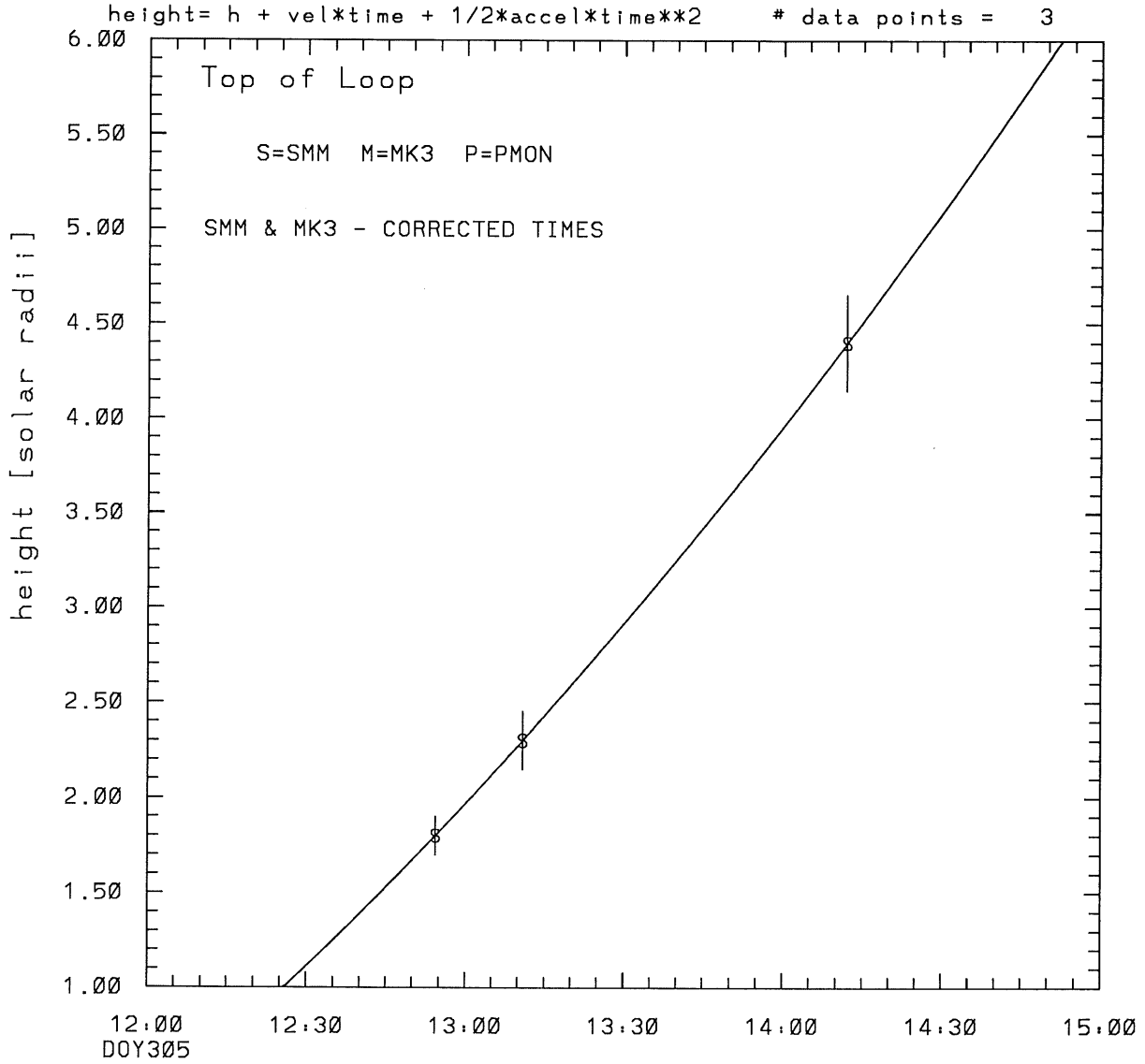


SMM C/P 1987 DOY305 125 +/- 0 degrees



tstart=DOY305 12:31 +/- 29.2 [min.]
radial velocity= 387. +/- 8. [km/sec]

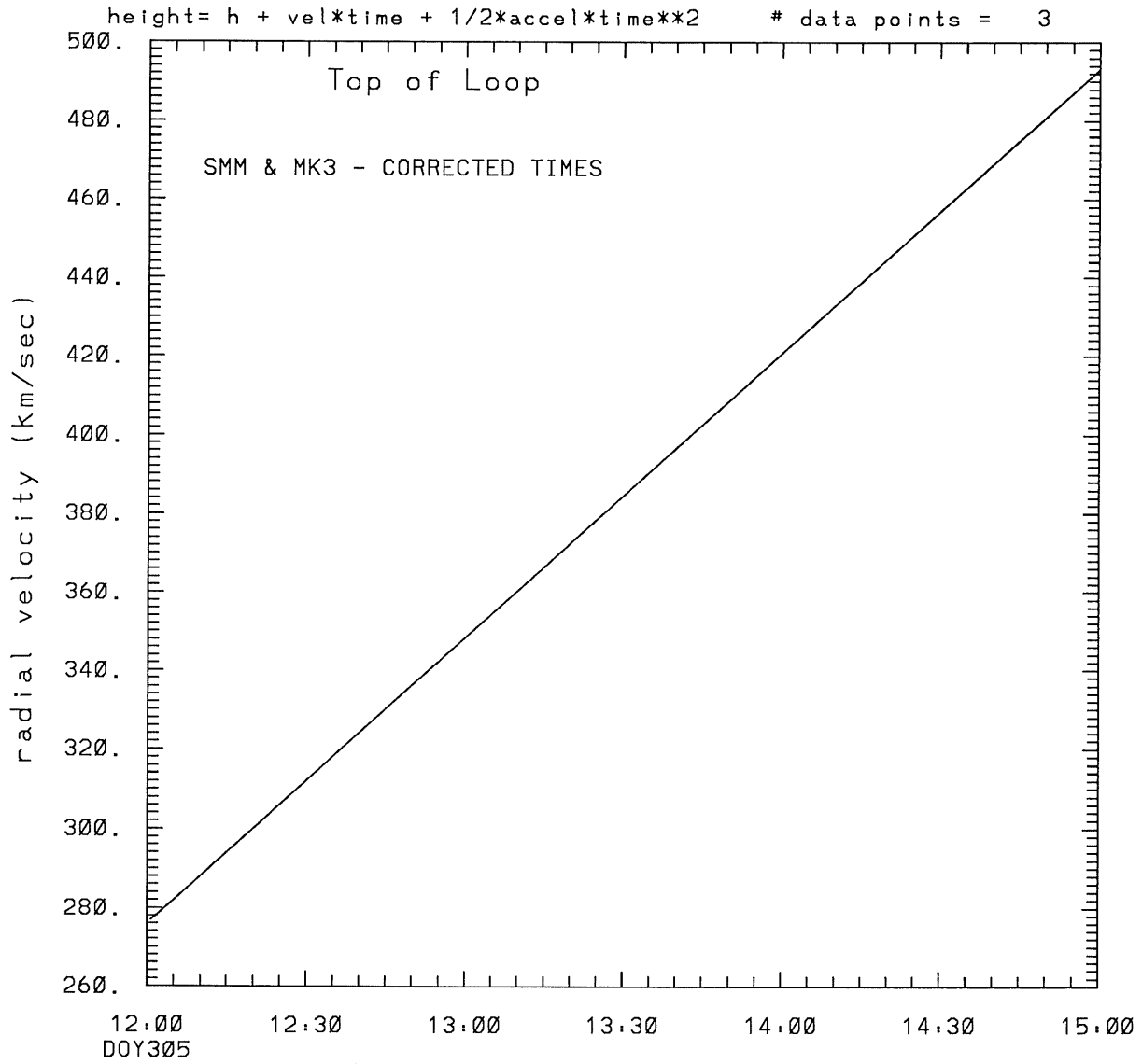
SMM C/P 1987 DOY305 125 +/- 0 degrees



tstart=DOY305 12:26 +/- 0.0 [min.]

radial acceleration = 0.0201 +/- 0.0000 [km/sec**2]

SMM C/P 1987 DOY305 125 +/- 0 degrees



tstart=DOY305 12:26 +/- 0.0 [min.]

radial acceleration=0.201E-01 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in angle	error in angle	datatype
1987	305	12:54:24	1.80	+/- 0.10	125.0	+/- 0.5	SMM
1987	305	13:10:54	2.30	+/- 0.15	125.0	+/- 0.5	SMM
1987	305	14:12: 3	4.40	+/- 0.25	125.0	+/- 1.0	SMM

Structure being measured:

Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + 0.308E+02 \pm 0.292E+02$ [minutes]

In more convenient units:

Event began at DOY 305 12:31 $\pm 0.292E+02$ [minutes]

Origin defined at DOY305 12: 0

RADIAL INFORMATION:

RADIAL VELOCITY = $387. \pm 8.$ km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = -0.283E-01 \pm 0.508E-01$ [solar radii]
 $c(2) = 0.334E-01 \pm 0.720E-03$ [radii/min]
 $c(2) = 0.387E+03 \pm 0.835E+01$ [km/sec]
 $c(3) = 0.000E+00 \pm 0.000E+00$ [radii/min**2]
 $c(3) = 0.000E+00 \pm 0.000E+00$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

error in $c(1) = 0.72285E-01$ [radii] see Bevington pg. 114

error in $c(2) = 0.78522E-03$ [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = $0.0000E+00 \pm 0.0000E+00$ [radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 125. +/- 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 12:54 = 0.000E+00 km/sec

The TOTAL velocity at 12:54 = 387. km/sec

The TANGENTIAL velocity at 13:10 = 0.000E+00 km/sec

The TOTAL velocity at 13:10 = 387. km/sec

The TANGENTIAL velocity at 14:12 = 0.000E+00 km/sec

The TOTAL velocity at 14:12 = 387. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 1.38

Standard Deviation in start time measurement = 0.334E+02

Error in time = 0.13614E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.817E-03

Reduced Chi Squared = 0.444E-02

Chi Squared = 0.444E-02

The probability for exceeding chi square = 0.977E+00

The correlation coefficient = 0.100E+01

The probability that no LINEAR correlation exists between the variables = 0.1327E-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
1987	305	12:54:24	1.80	+/- 0.10	125.0	+/- 0.5	SMM
1987	305	13:10:54	2.30	+/- 0.15	125.0	+/- 0.5	SMM
1987	305	14:12: 3	4.40	+/- 0.25	125.0	+/- 1.0	SMM

Structure being measured:

Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + 0.258E+02 \pm 0.000E+00$ [minutes]

In more convenient units:

Event began at DOY 305 12:26 $\pm 0.000E+00$ [minutes]

Origin defined at DOY305 12: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $0.201E-01 \pm 0.265E-06$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.352E+00 \pm 0.511E-05$ [solar radii]
c(2) = $0.238E-01 \pm 0.127E-06$ [radii/min]
c(2) = $0.276E+03 \pm 0.147E-02$ [km/sec]
c(3) = $0.520E-04 \pm 0.686E-09$ [radii/min**2]
c(3) = $0.201E-01 \pm 0.265E-06$ [km/sec**2]

ANGULAR INFORMATION:

ANGULAR ACCELERATION= $0.0000E+00 \pm 0.0000E+00$ [radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 125. $\pm 0.$ [degrees]
a(2) = $0.000E+00 \pm 0.000E+00$ [degrees/min]
a(2) = $0.000E+00 \pm 0.000E+00$ [rad/sec]
a(3) = $0.000E+00 \pm 0.000E+00$ [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 12:54 = 0.000E+00 km/sec

The TOTAL velocity at 12:54 = 342. km/sec

The TANGENTIAL velocity at 13:10 = 0.000E+00 km/sec

The TOTAL velocity at 13:10 = 361. km/sec

The TANGENTIAL velocity at 14:12 = 0.000E+00 km/sec

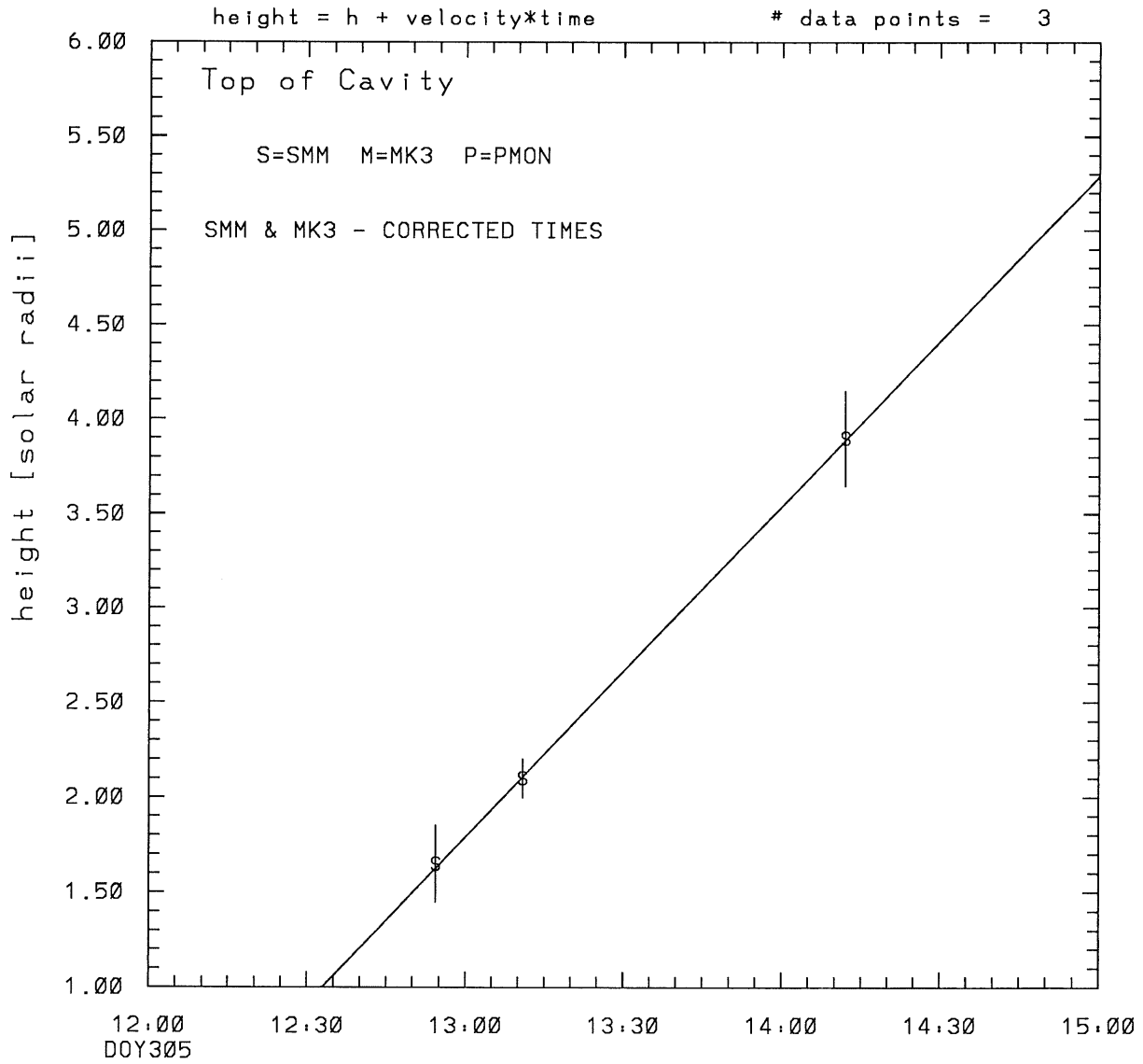
The TOTAL velocity at 14:12 = 435. km/sec

The following info is for estimating goodness of the fit

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

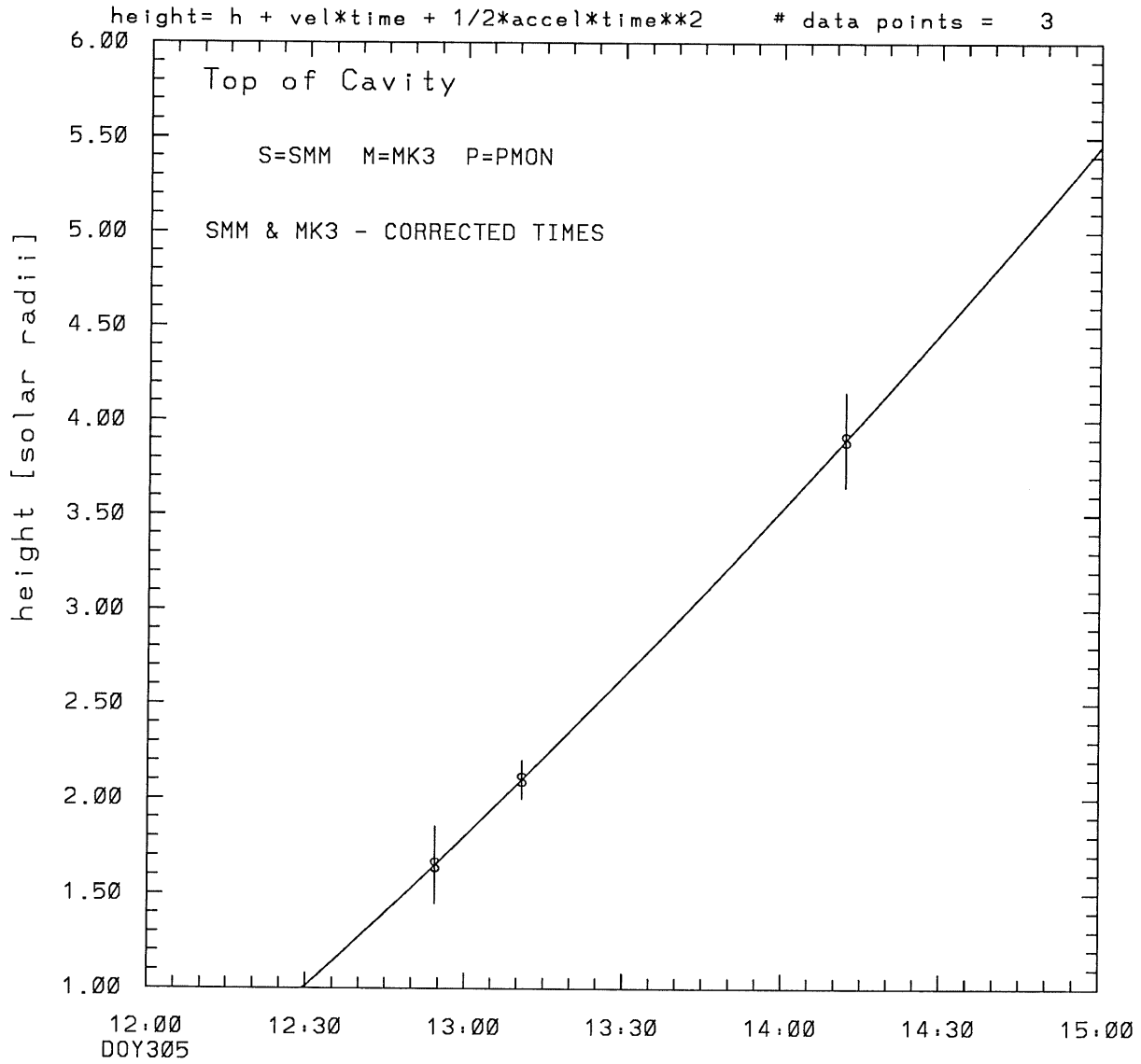
Correlation coefficient is not computable!

SMM C/P 1987 DOY305 125 +/- 0 degrees



tstart=DOY305 12:33 +/- 14.9 [min.]
radial velocity= 338. +/- 5. [km/sec]

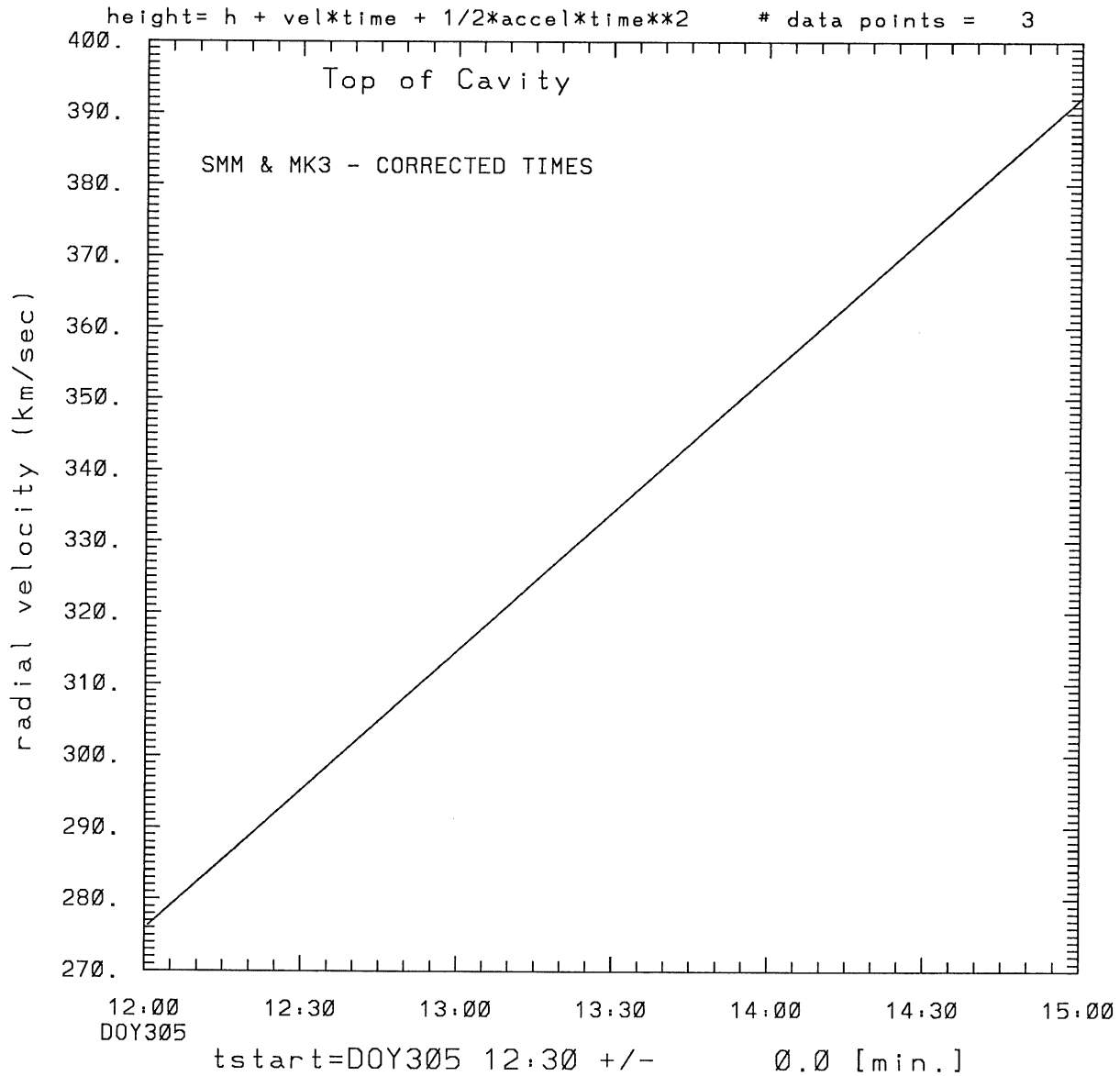
SMM C/P 1987 DOY305 125 +/- 0 degrees



tstart=DOY305 12.30 +/- 0.0 [min.]

radial acceleration = 0.0108 +/- 0.0000 [km/sec**2]

SMM C/P 1987 DOY305 125 +/- 0 degrees



radial acceleration = $0.108E-01$ km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1987	305	12:54:24	1.65	+/- 0.20	125.0	+/- 0.5	SMM
1987	305	13:10:54	2.10	+/- 0.10	125.0	+/- 0.5	SMM
1987	305	14:12: 3	3.90	+/- 0.25	125.0	+/- 1.0	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + 0.329E+02 \pm 0.149E+02$ [minutes]

In more convenient units:

Event began at DOY 305 12:33 $\pm 0.149E+02$ [minutes]

Origin defined at DOY305 12: 0

RADIAL INFORMATION:

RADIAL VELOCITY = $338. \pm 5$ km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.406E-01 \pm 0.315E-01$ [solar radii]
c(2) = $0.292E-01 \pm 0.404E-03$ [radii/min]
c(2) = $0.338E+03 \pm 0.468E+01$ [km/sec]
c(3) = $0.000E+00 \pm 0.000E+00$ [radii/min**2]
c(3) = $0.000E+00 \pm 0.000E+00$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

error in c(1)= $0.42334E-01$ [radii] see Bevington pg. 114

error in c(2)= $0.45986E-03$ [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = $0.0000E+00 \pm 0.0000E+00$ [radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 125. +/- 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 12:54 = 0.000E+00 km/sec

The TOTAL velocity at 12:54 = 338. km/sec

The TANGENTIAL velocity at 13:10 = 0.000E+00 km/sec

The TOTAL velocity at 13:10 = 338. km/sec

The TANGENTIAL velocity at 14:12 = 0.000E+00 km/sec

The TOTAL velocity at 14:12 = 338. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 1.19

Standard Deviation in start time measurement = 0.334E+02

Error in time = 0.91264E+00 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.223E-03

Reduced Chi Squared = 0.960E-03

Chi Squared = 0.960E-03

The probability for exceeding chi square = 0.988E+00

The correlation coefficient = 0.100E+01

The probability that no LINEAR correlation exists between the variables = 0.8233E-02

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
1987	305	12:54:24	1.65	+/- 0.20	125.0	+/- 0.5	SMM
1987	305	13:10:54	2.10	+/- 0.10	125.0	+/- 0.5	SMM
1987	305	14:12: 3	3.90	+/- 0.25	125.0	+/- 1.0	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + 0.295E+02 +/- 0.000E+00$ [minutes]

In more convenient units:

Event began at DOY 305 12:30 +/- 0.000E+00 [minutes]

Origin defined at DOY305 12: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $0.108E-01 +/- 0.122E-06$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.274E+00 +/- 0.268E-05$ [solar radii]
c(2) = $0.238E-01 +/- 0.609E-07$ [radii/min]
c(2) = $0.276E+03 +/- 0.707E-03$ [km/sec]
c(3) = $0.279E-04 +/- 0.314E-09$ [radii/min**2]
c(3) = $0.108E-01 +/- 0.122E-06$ [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) = $125. +/- 0.$ [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]

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

THE TANGENTIAL AND TOTAL VELOCITIES AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 12:54 = 0.000E+00 km/sec

The TOTAL velocity at 12:54 = 311. km/sec

The TANGENTIAL velocity at 13:10 = 0.000E+00 km/sec

The TOTAL velocity at 13:10 = 322. km/sec

The TANGENTIAL velocity at 14:12 = 0.000E+00 km/sec

The TOTAL velocity at 14:12 = 361. 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!