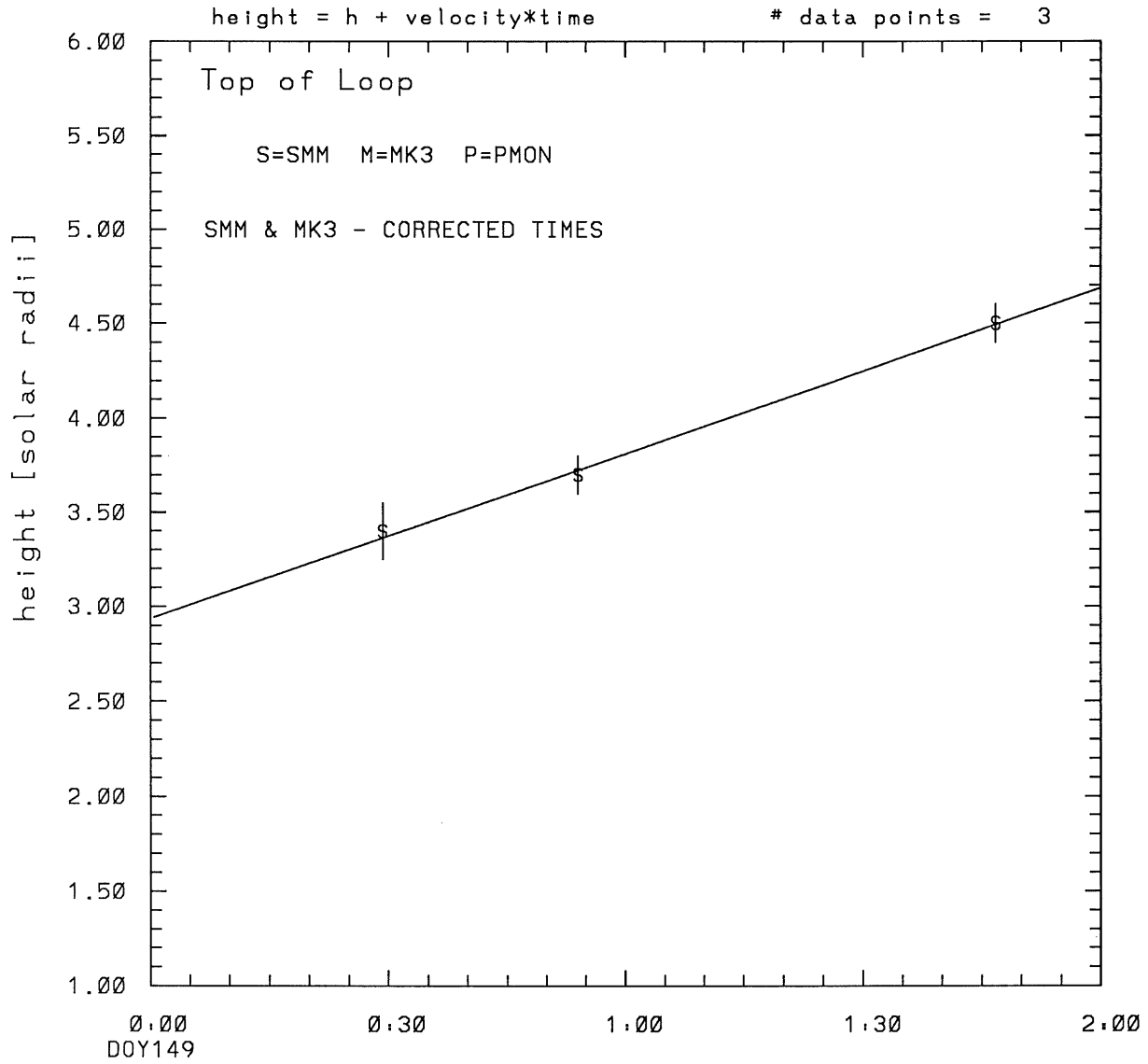
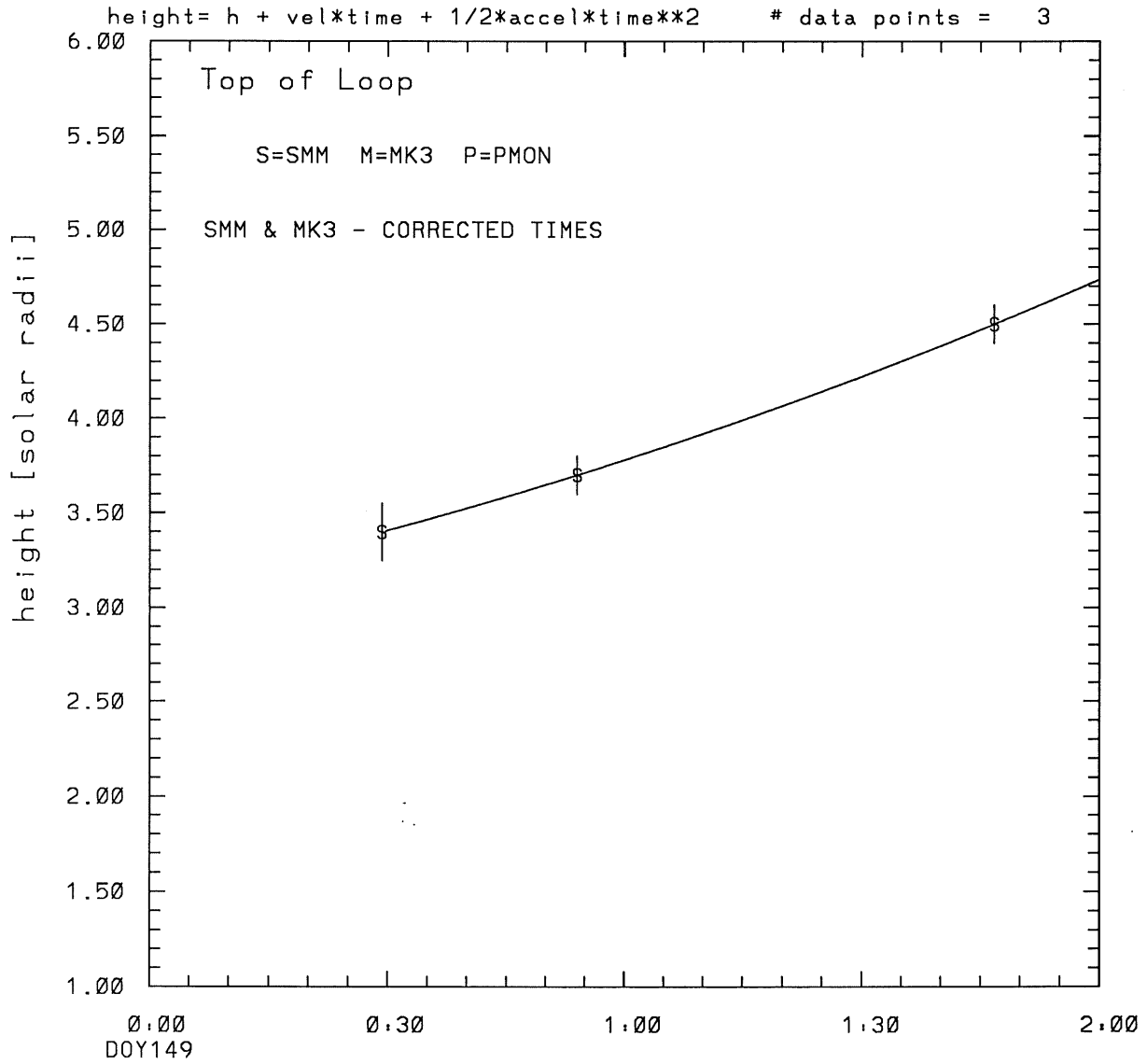


SMM C/P 1988 DOY149 285 +/- 0 degrees



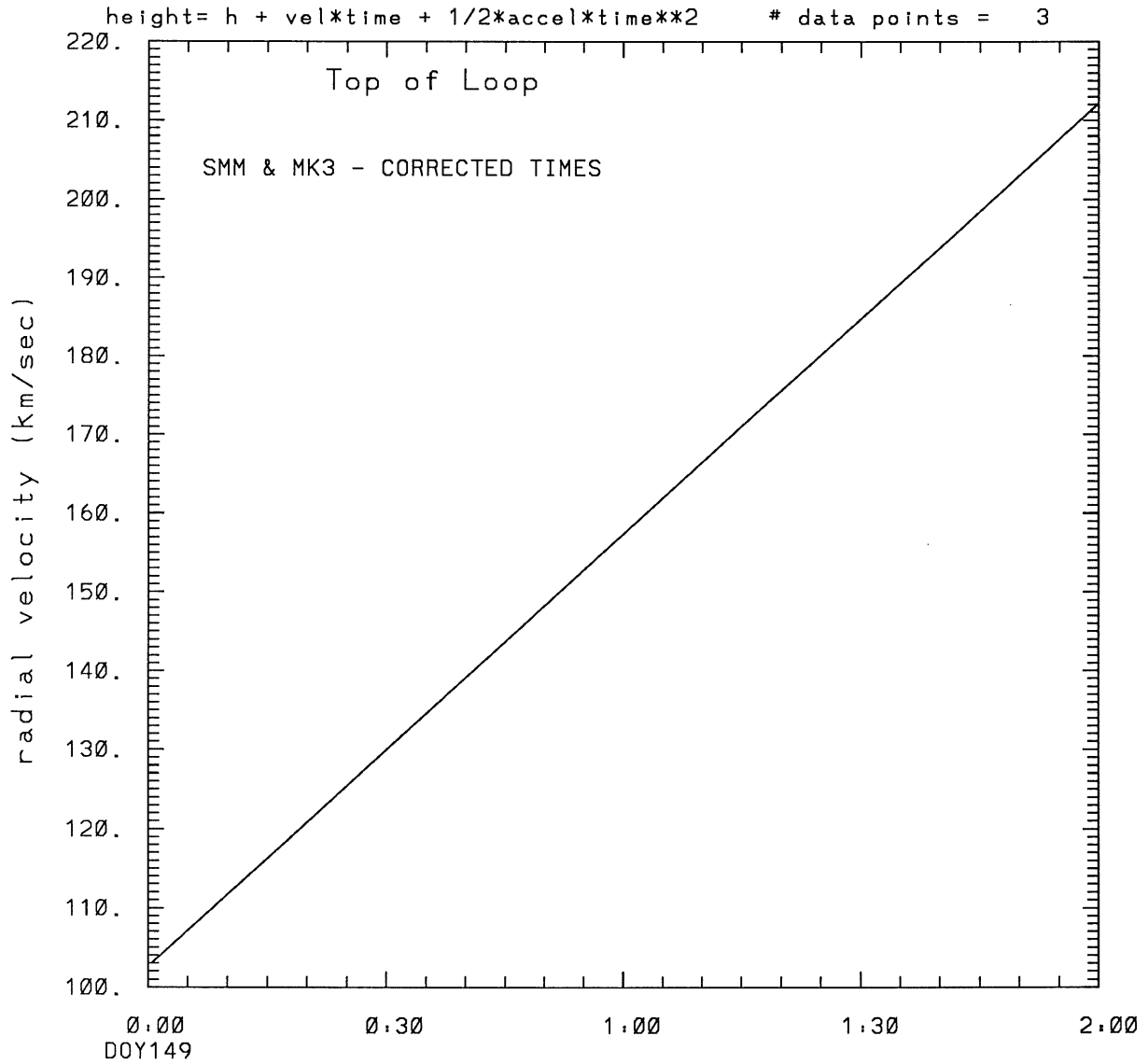
tstart=DOY148 21:49 +/- 3.6 [min.]
radial velocity= 169. +/- 6. [km/sec]

SMM C/P 1988 DOY149 285 +/- 0 degrees



tstart=DOY148 22: 8 from derivative=0
Event begins at 2.61 Solar Radii
radial acceleration= 0.0152 +/- 0.0000 [km/sec**2]

SMM C/P 1988 DOY149 285 +/- 0 degrees



tstart=DOY148 22: 8 from derivative=0
Event begins at 2.61 Solar Radii
radial acceleration=0.152E-01 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	angle	datatype
1988	149	0:29:17	3.40	+/- 0.15	285.0	+/- 1.0	SMM
1988	149	0:54: 2	3.70	+/- 0.10	285.0	+/- 1.0	SMM
1988	149	1:46:46	4.50	+/- 0.10	285.0	+/- 1.0	SMM

Structure being measured:
Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.133E+03 +/- 0.357E+01$ [minutes]
In more convenient units:
Event began at DOY 148 21:49 +/- 0.357E+01 [minutes]

Origin defined at DOY149 0: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 169. +/- 6. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.294E+01 +/- 0.398E-01$ [solar radii]
 $c(2) = 0.146E-01 +/- 0.513E-03$ [radii/min]
 $c(2) = 0.169E+03 +/- 0.595E+01$ [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 $c(1) = 0.56521E-01$ [radii] see Bevington pg. 114
error in $c(2) = 0.79467E-03$ [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) = 285. +/- 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 0:29 = 0. km/sec

The TOTAL velocity at 0:29 = 169. km/sec

The TANGENTIAL velocity at 0:54 = 0. km/sec

The TOTAL velocity at 0:54 = 169. km/sec

The TANGENTIAL velocity at 1:46 = 0. km/sec

The TOTAL velocity at 1:46 = 169. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.57

Standard Deviation in start time measurement = 0.323E+02

Error in time = 0.30523E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.755E-03

Reduced Chi Squared = 0.267E-02

Chi Squared = 0.267E-02

The probability for exceeding chi square = 0.978E+00

The correlation coefficient = 0.999E+00

The probability that no LINEAR correlation exists between the variables = 0.3248E-01

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

This is a 2 order run

INPUT:

year	day	time	radii	error in radius	error in angle	datatype
1988	149	0:29:17	3.40	+/- 0.15	285.0 +/- 1.0	SMM
1988	149	0:54: 2	3.70	+/- 0.10	285.0 +/- 1.0	SMM
1988	149	1:46:46	4.50	+/- 0.10	285.0 +/- 1.0	SMM

Structure being measured:
Top of Loop

OUTPUT:

START TIME:

tstart=DOY148 22: 8 from derivative = 0
Event begins at 2.61 Solar Radii
Origin defined at DOY149 0: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.152E-01 +/- 0.103E-05 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.311E+01 +/- 0.121E-04 [solar radii]
c(2) = 0.884E-02 +/- 0.390E-06 [radii/min]
c(2) = 0.103E+03 +/- 0.452E-02 [km/sec]
c(3) = 0.394E-04 +/- 0.266E-08 [radii/min**2]
c(3) = 0.152E-01 +/- 0.103E-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) = 285. +/- 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 0:29 = 0. km/sec

The TOTAL velocity at 0:29 = 129. km/sec

The TANGENTIAL velocity at 0:54 = 0. km/sec

The TOTAL velocity at 0:54 = 152. km/sec

The TANGENTIAL velocity at 1:46 = 0. km/sec

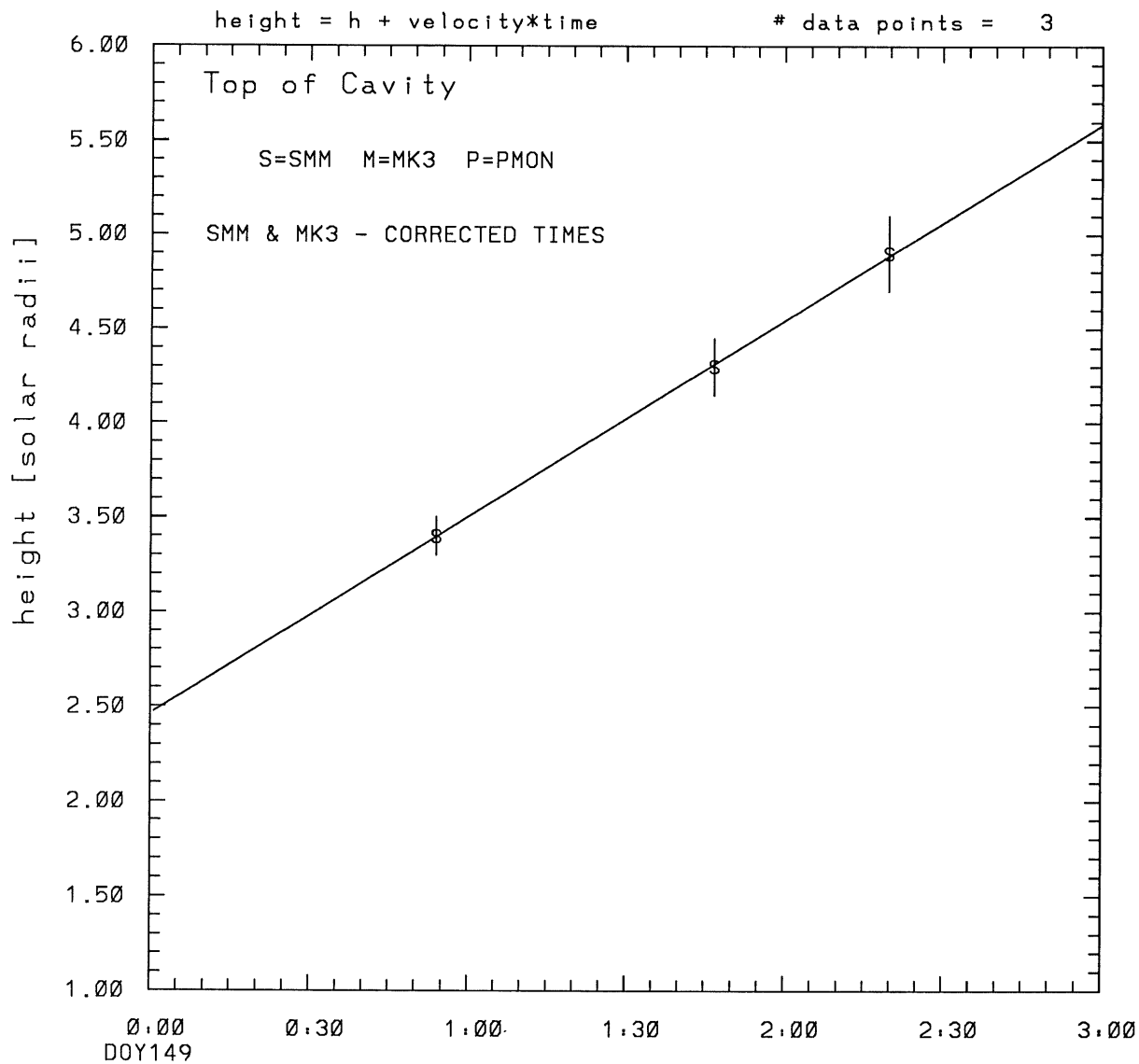
The TOTAL velocity at 1:46 = 200. km/sec

The following info is for estimating goodness of the fit

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

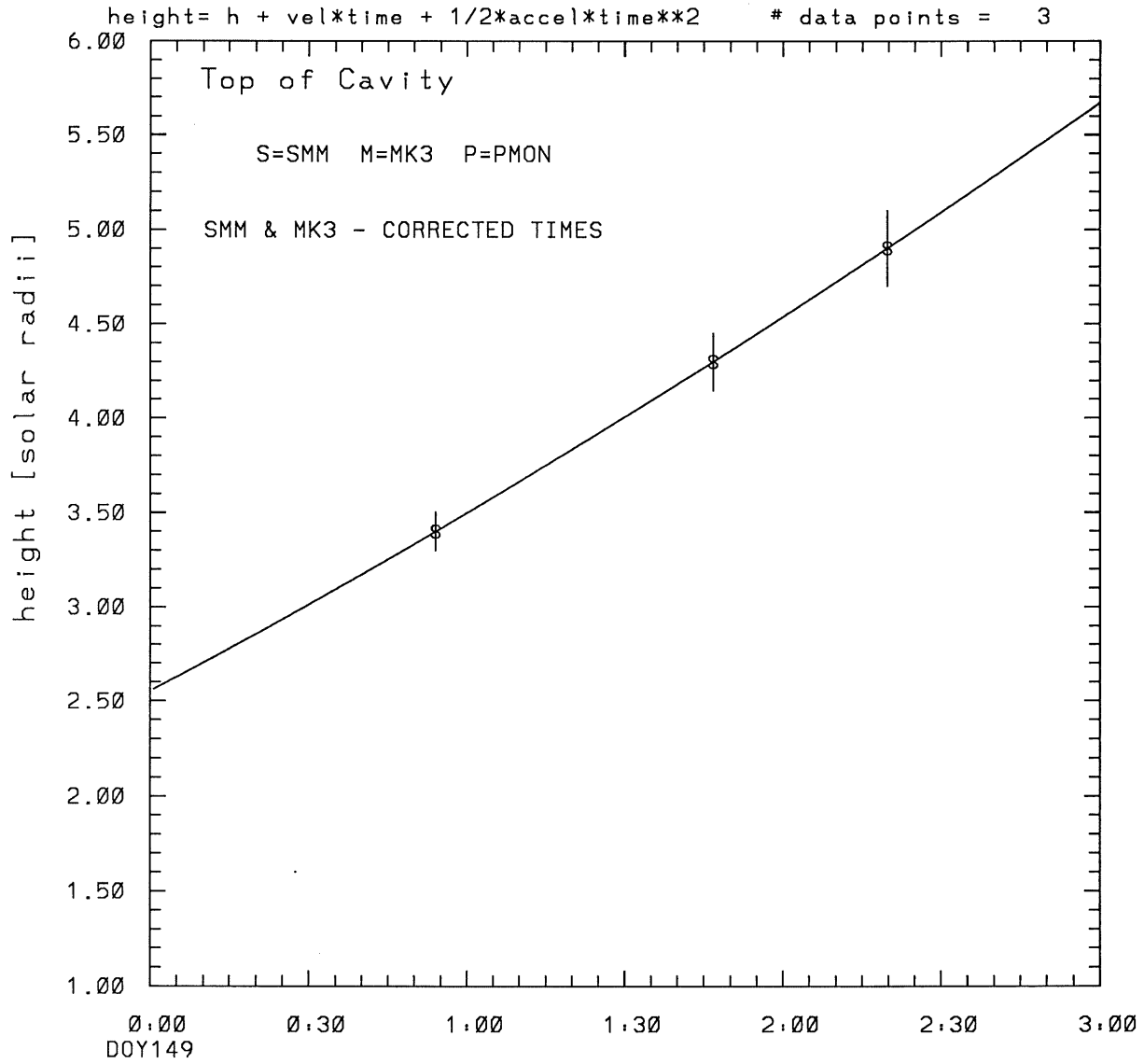
Correlation coefficient is not computable!

SMM C/P 1988 DOY149 285 +/- 0 degrees



tstart=DOY148 22:36 +/- 0.7 [min.]
radial velocity= 201. +/- 2. [km/sec]

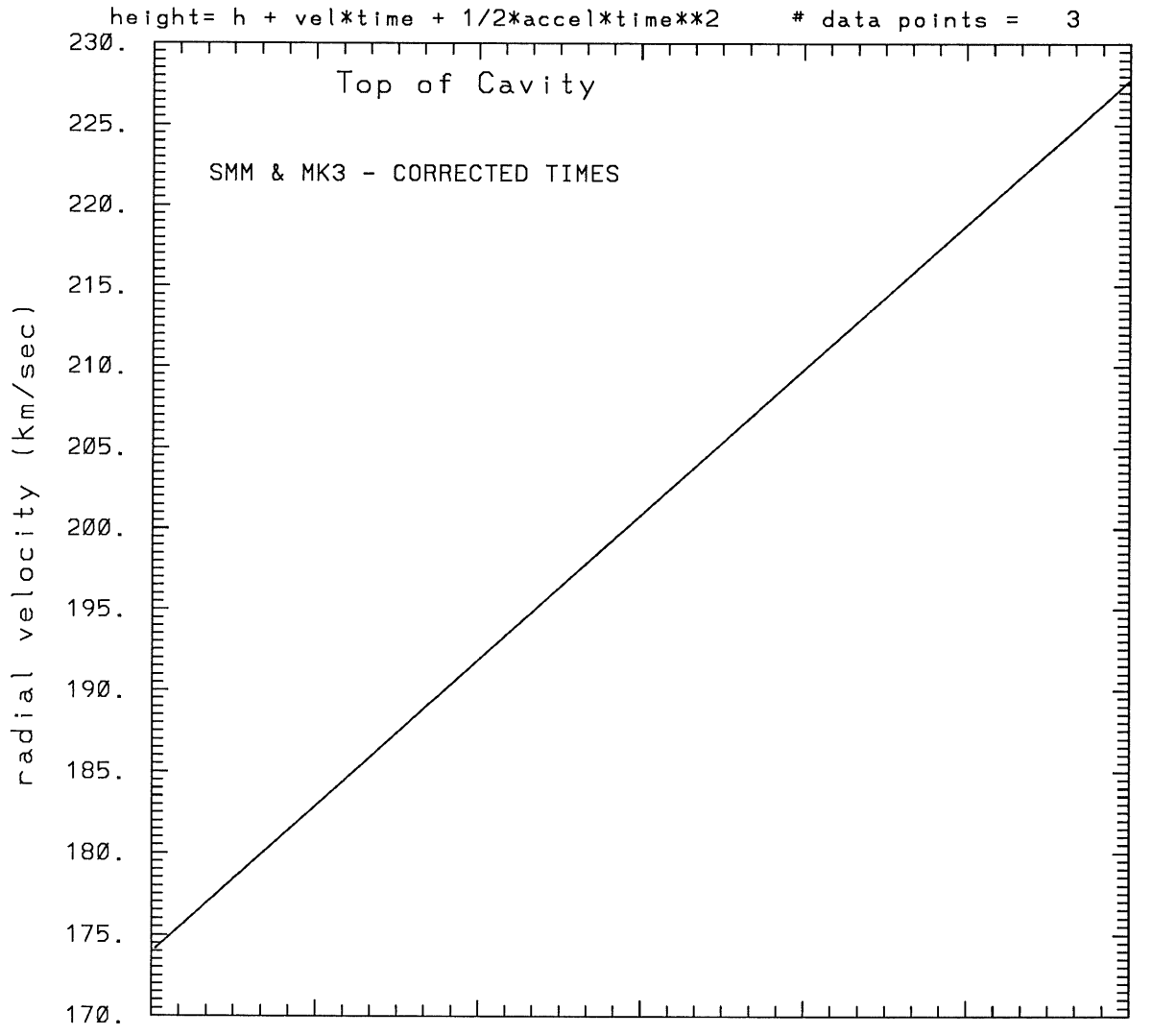
SMM C/P 1988 DOY149 285 +/- 0 degrees



tstart=DOY148 22: 7 +/- 0.0 [min.]

radial acceleration = 0.0050 +/- 0.0000 [km/sec**2]

SMM C/P 1988 DOY149 285 +/- 0 degrees



DOY149

tstart=DOY148 22: 7 +/- 0.0 [min.]

radial acceleration=0.499E-02 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	angle	error in angle	datatype
1988	149	0:54:2	3.40	+/- 0.10	285.0	+/- 1.0	SMM
1988	149	1:46:46	4.30	+/- 0.15	285.0	+/- 1.0	SMM
1988	149	2:19:47	4.90	+/- 0.20	285.0	+/- 1.0	SMM

Structure being measured:
Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.841E+02 +/- 0.737E+00$ [minutes]
In more convenient units:
Event began at DOY 148 22:36 +/- 0.737E+00 [minutes]

Origin defined at DOY149 0: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 201. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.246E+01 +/- 0.161E-01 [solar radii]
- c(2) = 0.174E-01 +/- 0.185E-03 [radii/min]
- c(2) = 0.201E+03 +/- 0.214E+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)= 0.33456E-01 [radii] see Bevington pg. 114
- error in c(2)= 0.31492E-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) = 285. +/- 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 0:54 = 0. km/sec

The TOTAL velocity at 0:54 = 201. km/sec

The TANGENTIAL velocity at 1:46 = 0. km/sec

The TOTAL velocity at 1:46 = 201. km/sec

The TANGENTIAL velocity at 2:19 = 0. km/sec

The TOTAL velocity at 2:19 = 201. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.75

Standard Deviation in start time measurement = 0.353E+02

Error in time = 0.11100E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.114E-03

Reduced Chi Squared = 0.937E-03

Chi Squared = 0.937E-03

The probability for exceeding chi square = 0.991E+00

The correlation coefficient = 0.100E+01

The probability that no LINEAR correlation exists between the variables = 0.1095E-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
1988	149	0:54: 2	3.40	+/- 0.10	285.0	+/- 1.0	SMM
1988	149	1:46:46	4.30	+/- 0.15	285.0	+/- 1.0	SMM
1988	149	2:19:47	4.90	+/- 0.20	285.0	+/- 1.0	SMM

Structure being measured:
Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.115E+03 +/- 0.000E+00$ [minutes]
In more convenient units:
Event began at DOY 148 22: 7 +/- 0.000E+00 [minutes]

Origin defined at DOY149 0: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $0.499E-02 +/- 0.000E+00$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.255E+01 +/- 0.000E+00$ [solar radii]
c(2) = $0.150E-01 +/- 0.000E+00$ [radii/min]
c(2) = $0.174E+03 +/- 0.000E+00$ [km/sec]
c(3) = $0.129E-04 +/- 0.000E+00$ [radii/min**2]
c(3) = $0.499E-02 +/- 0.000E+00$ [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) = 285. +/- 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]

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

THE TANGENTIAL AND TOTAL VELOCITIES AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 0:54 = 0. km/sec

The TOTAL velocity at 0:54 = 190. km/sec

The TANGENTIAL velocity at 1:46 = 0. km/sec

The TOTAL velocity at 1:46 = 206. km/sec

The TANGENTIAL velocity at 2:19 = 0. km/sec

The TOTAL velocity at 2:19 = 216. 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!