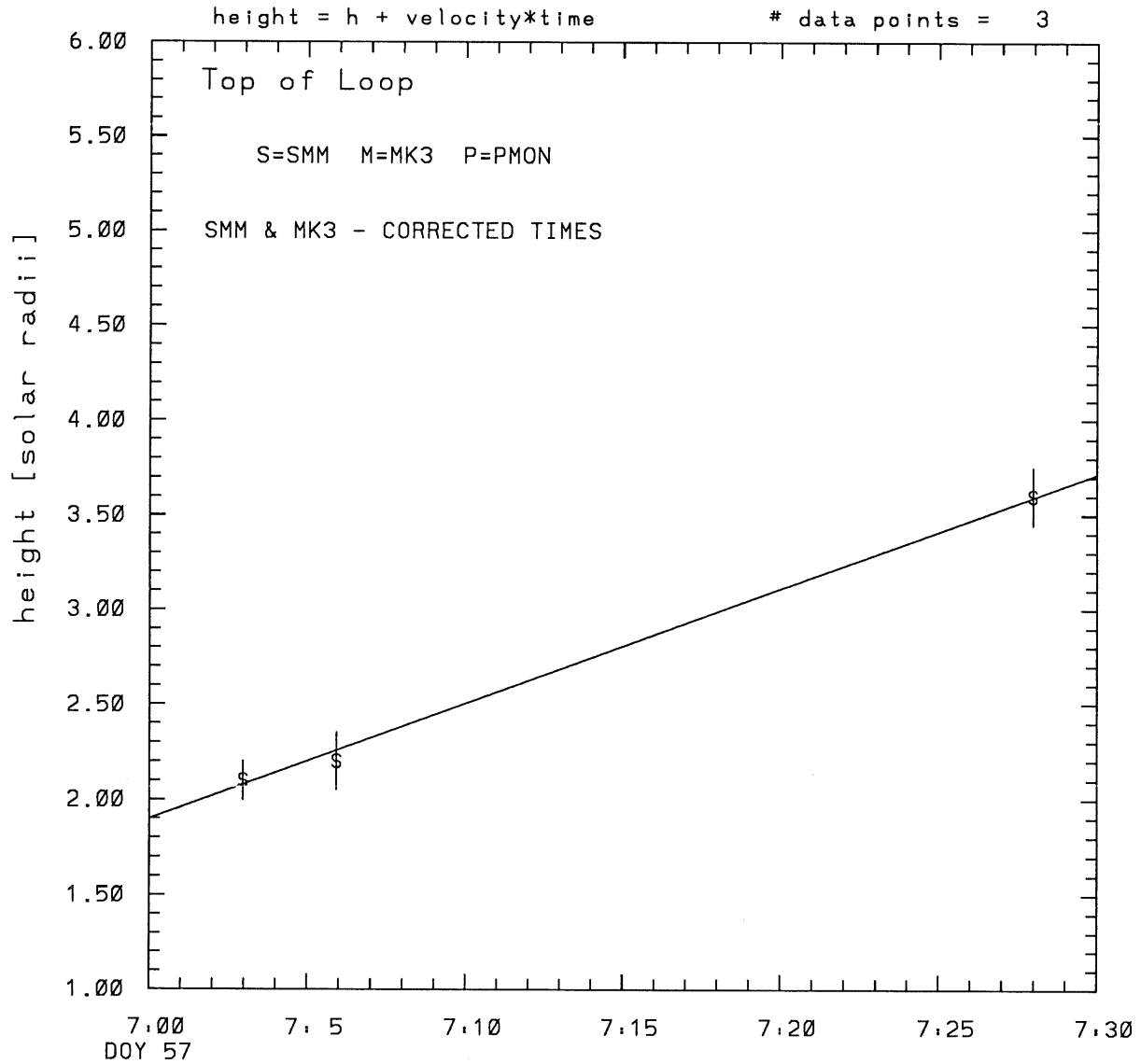
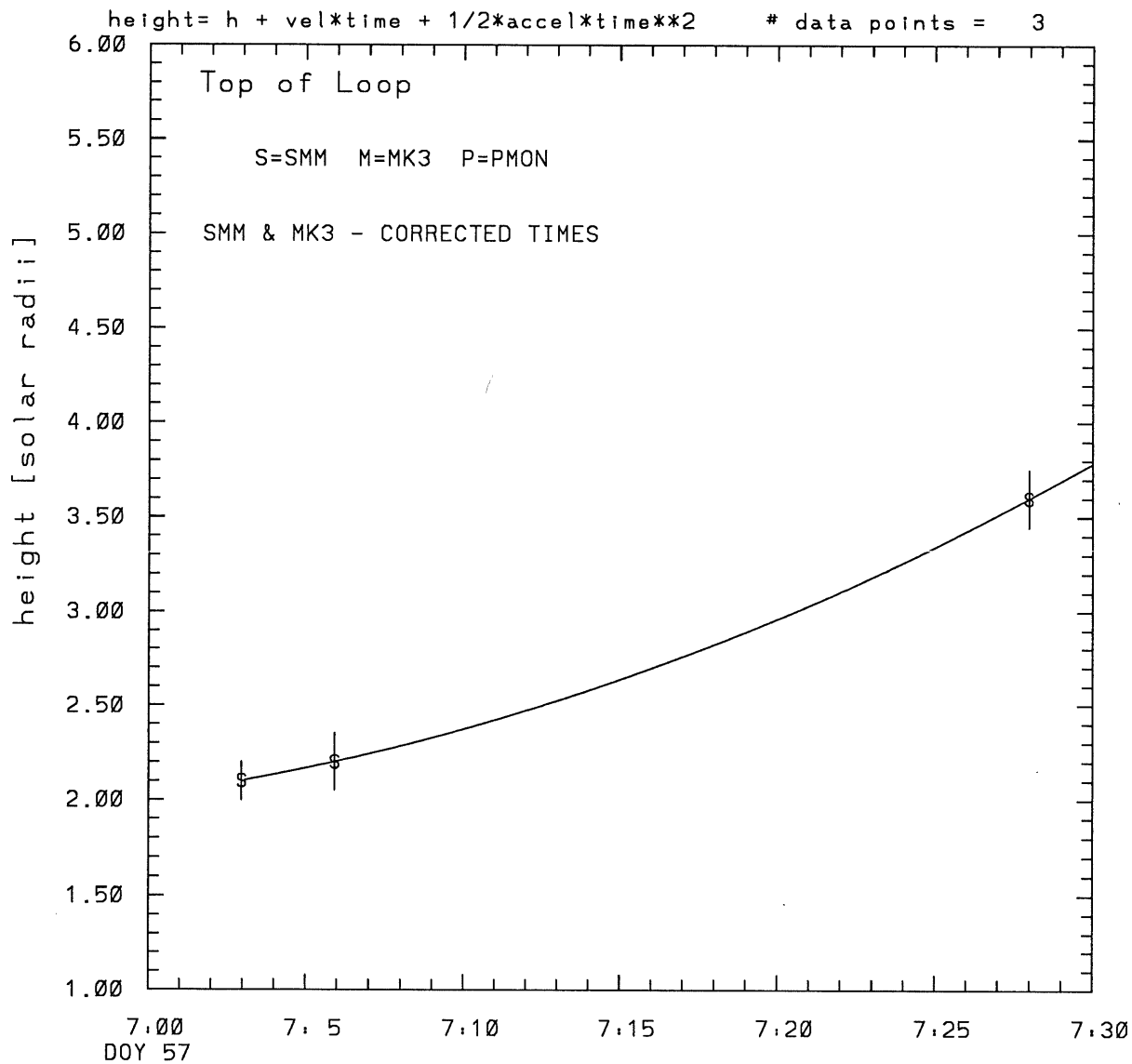


SMM C/P 1986 DOY 57 115 +/- 0 degrees



tstart=DOY 57 6:47 +/- 0.3 [min.]
radial velocity= 703. +/- 25. [km/sec]

SMM C/P 1986 DOY 57 115 +/- 0 degrees

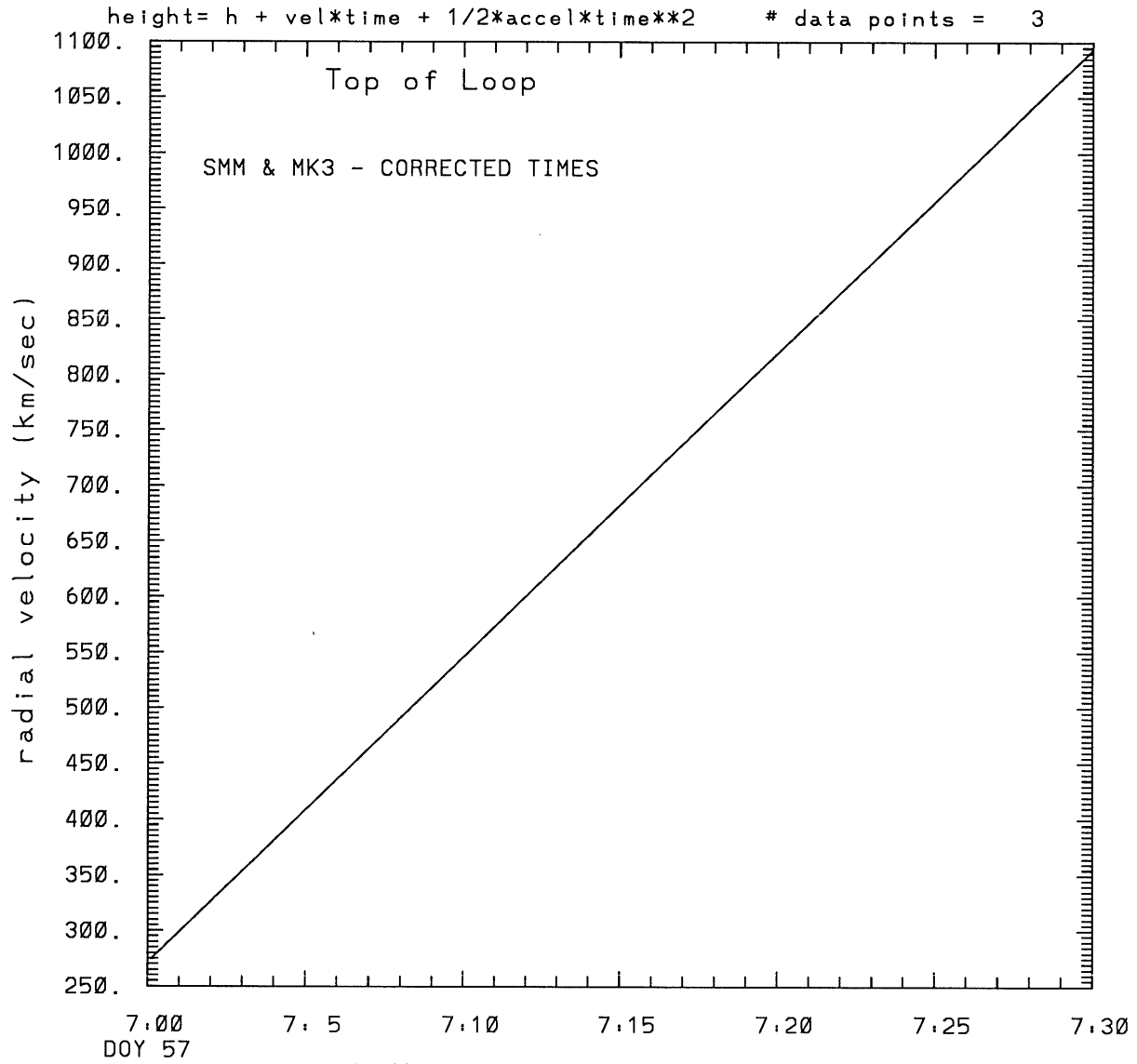


tstart=DOY 57 6:51 from derivative=0

Event begins at 1.90 Solar Radii

radial acceleration = 0.4567 +/- 0.0000 [km/sec**2]

SMM C/P 1986 DOY 57 115 +/- 0 degrees



tstart=DOY 57 6:51 from derivative=0
Event begins at 1.90 Solar Radii
radial acceleration=0.457E+00 km/sec**2

This is a 1 order run

INPUT:

year	day	time	error in		error in		datatype
			radii	radius	angle	angle	
1986	57	7: 2:58	2.10	+/- 0.10	115.0	+/- 0.5	SMM
1986	57	7: 5:55	2.20	+/- 0.15	115.0	+/- 0.5	SMM
1986	57	7:27:59	3.60	+/- 0.15	115.0	+/- 0.5	SMM

Structure being measured:

Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.148E+02 \pm 0.283E+00$ [minutes]

In more convenient units:

Event began at DOY 57 6:47 $\pm 0.283E+00$ [minutes]

Origin defined at DOY 57 7: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 703. \pm 25. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.190E+01 \pm 0.308E-01 [solar radii]
c(2) = 0.606E-01 \pm 0.220E-02 [radii/min]
c(2) = 0.703E+03 \pm 0.255E+02 [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)= 0.52463E-01 [radii] see Bevington pg. 114

error in c(2)= 0.31600E-02 [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) = 115. +/- 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 7: 2 = 0.000E+00 km/sec

The TOTAL velocity at 7: 2 = 703. km/sec

The TANGENTIAL velocity at 7: 5 = 0.000E+00 km/sec

The TOTAL velocity at 7: 5 = 703. km/sec

The TANGENTIAL velocity at 7:27 = 0.000E+00 km/sec

The TOTAL velocity at 7:27 = 703. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.84

Standard Deviation in start time measurement = 0.112E+02

Error in time = 0.10086E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.153E-02

Reduced Chi Squared = 0.702E-02

Chi Squared = 0.702E-02

The probability for exceeding chi square = 0.969E+00

The correlation coefficient = 0.999E+00

The probability that no LINEAR correlation exists between the variables = 0.3084E-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	57	7: 2:58	2.10	+/- 0.10	115.0	+/- 0.5	SMM
1986	57	7: 5:55	2.20	+/- 0.15	115.0	+/- 0.5	SMM
1986	57	7:27:59	3.60	+/- 0.15	115.0	+/- 0.5	SMM

Structure being measured:

Top of Loop

OUTPUT:

START TIME:

tstart=DOY 57 6:51 from derivative = 0

Event begins at 1.90 Solar Radii

Origin defined at DOY 57 7: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.457E+00 +/- 0.983E-05 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.202E+01 +/- 0.279E-05 [solar radii]
c(2) = 0.234E-01 +/- 0.803E-06 [radii/min]
c(2) = 0.272E+03 +/- 0.931E-02 [km/sec]
c(3) = 0.118E-02 +/- 0.254E-07 [radii/min**2]
c(3) = 0.457E+00 +/- 0.983E-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) = 115. +/- 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 7: 2 = 0.000E+00 km/sec

The TOTAL velocity at 7: 2 = 353. km/sec

The TANGENTIAL velocity at 7: 5 = 0.000E+00 km/sec

The TOTAL velocity at 7: 5 = 434. km/sec

The TANGENTIAL velocity at 7:27 = 0.000E+00 km/sec

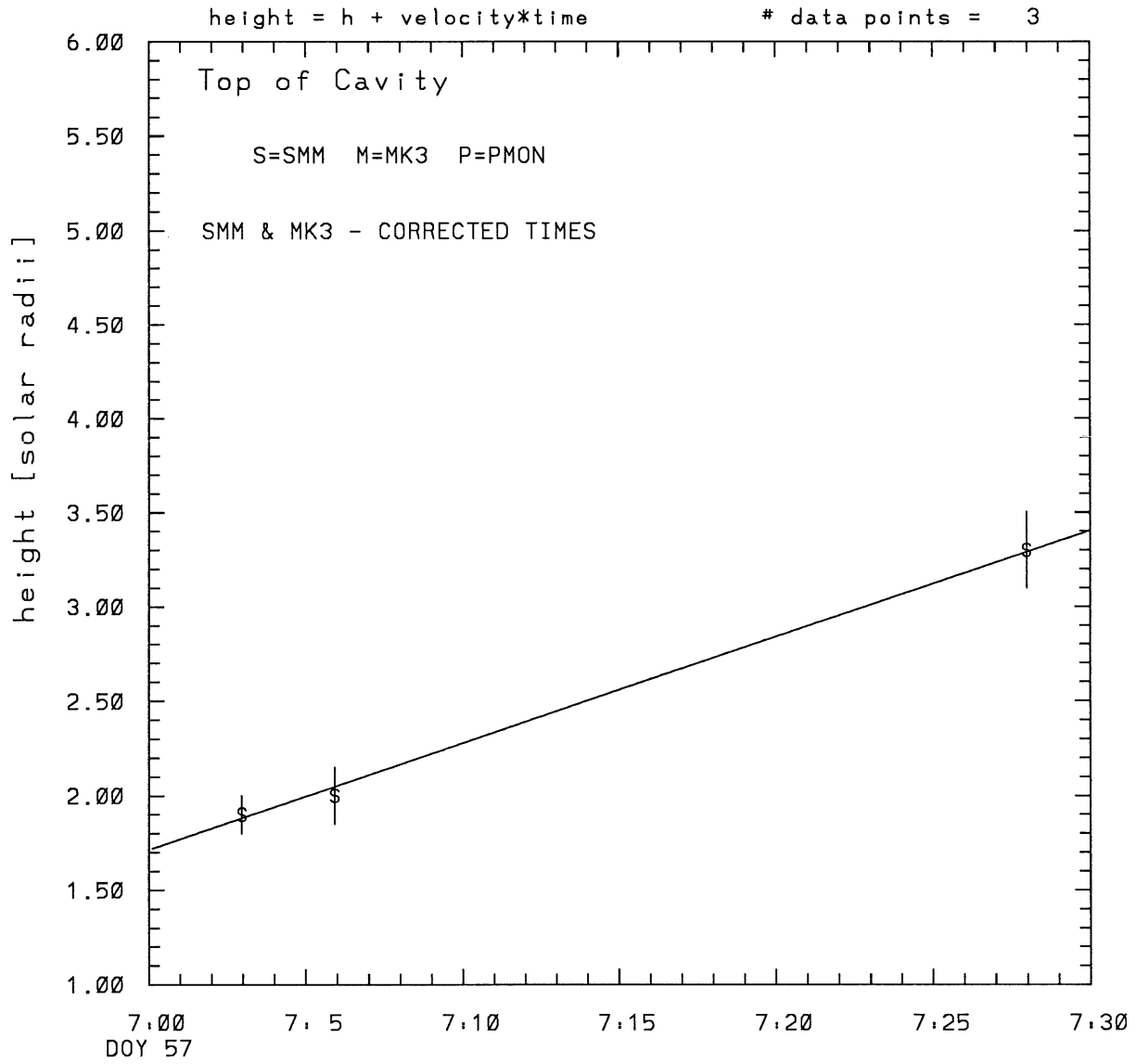
The TOTAL velocity at 7:27 = 1038. km/sec

The following info is for estimating goodness of the fit

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

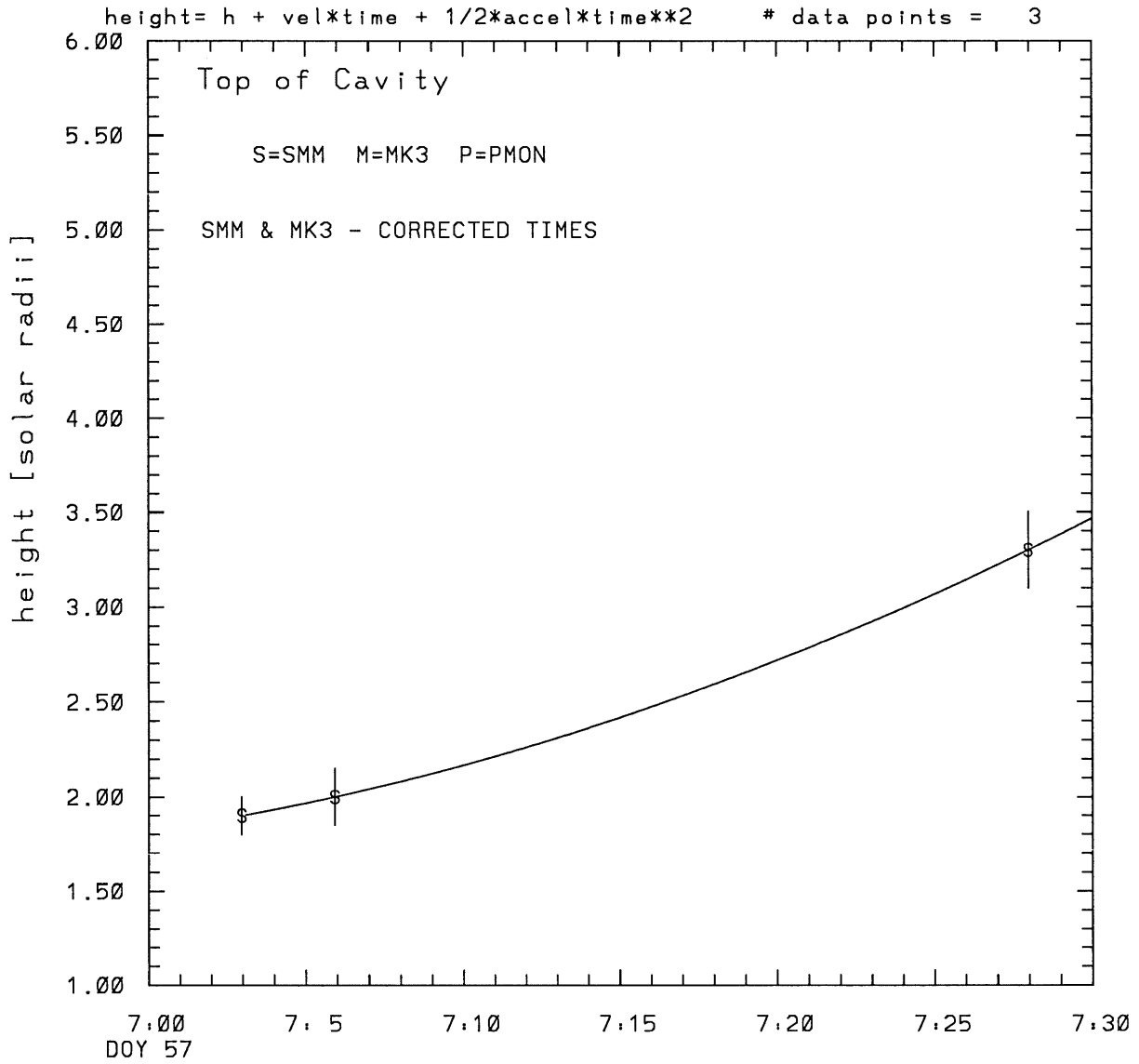
Correlation coefficient is not computable!

SMM C/P 1986 DOY 57 115 +/- 0 degrees



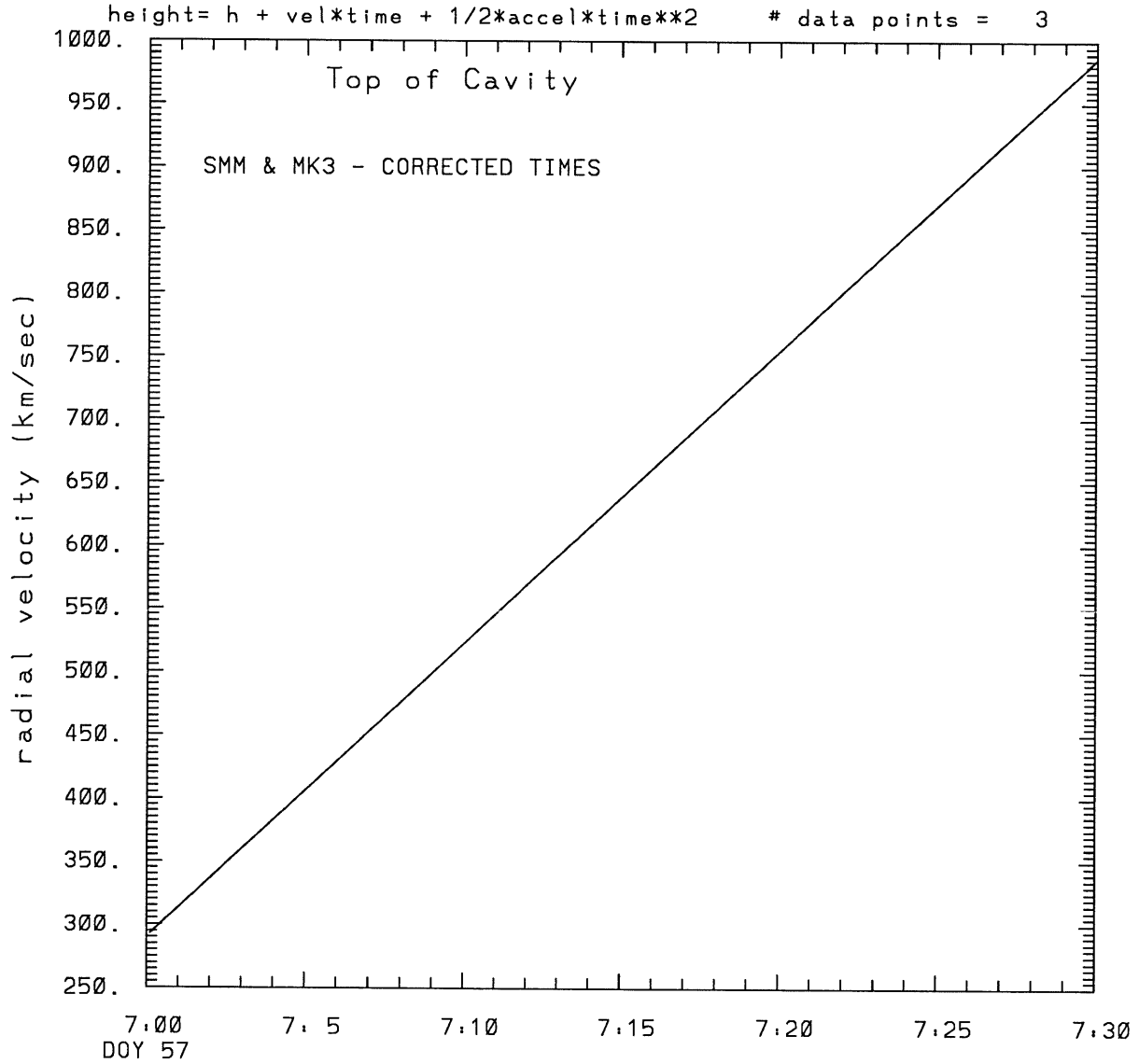
tstart=DOY 57 6:49 +/- 0.2 [min.]
radial velocity= 653. +/- 27. [km/sec]

SMM C/P 1986 DOY 57 115 +/- 0 degrees



tstart=DOY 57 6.48 from derivative=0
Event begins at 1.66 Solar Radii
radial acceleration = 0.3866 +/- 0.0000 [km/sec**2]

SMM C/P 1986 DOY 57 115 +/- 0 degrees



tstart=DOY 57 6:48 from derivative=0

Event begins at 1.66 Solar Radii

radial acceleration= $0.387E+00$ km/sec**2

This is a 1 order run

INPUT:

			error in	error in	
year	day	time	radii radius	angle angle	datatype
1986	57	7: 2:58	1.90 +/- 0.10	115.0 +/- 0.5	SMM
1986	57	7: 5:55	2.00 +/- 0.15	115.0 +/- 0.5	SMM
1986	57	7:27:59	3.30 +/- 0.20	115.0 +/- 1.0	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.127E+02 \pm 0.234E+00$ [minutes]

In more convenient units:

Event began at DOY 57 6:49 $\pm 0.234E+00$ [minutes]

Origin defined at DOY 57 7: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 653. \pm 27. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.171E+01 \pm 0.266E-01 [solar radii]
c(2) = 0.563E-01 \pm 0.233E-02 [radii/min]
c(2) = 0.653E+03 \pm 0.270E+02 [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)= 0.44629E-01 [radii] see Bevington pg. 114

error in c(2)= 0.26882E-02 [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) = 115. +/- 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 7: 2 = 0.000E+00 km/sec

The TOTAL velocity at 7: 2 = 653. km/sec

The TANGENTIAL velocity at 7: 5 = 0.000E+00 km/sec

The TOTAL velocity at 7: 5 = 653. km/sec

The TANGENTIAL velocity at 7:27 = 0.000E+00 km/sec

The TOTAL velocity at 7:27 = 653. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.78

Standard Deviation in start time measurement = 0.112E+02

Error in time = 0.92302E+00 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.122E-02

Reduced Chi Squared = 0.516E-02

Chi Squared = 0.516E-02

The probability for exceeding chi square = 0.972E+00

The correlation coefficient = 0.999E+00

The probability that no LINEAR correlation exists between the variables = 0.2804E-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	57	7: 2:58	1.90	+/- 0.10	115.0	+/- 0.5	SMM
1986	57	7: 5:55	2.00	+/- 0.15	115.0	+/- 0.5	SMM
1986	57	7:27:59	3.30	+/- 0.20	115.0	+/- 1.0	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

tstart=DOY 57 6:48 from derivative = 0

Event begins at 1.66 Solar Radii

Origin defined at DOY 57 7: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.387E+00 +/- 0.187E-05 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.182E+01 +/- 0.528E-06 [solar radii]
c(2) = 0.250E-01 +/- 0.152E-06 [radii/min]
c(2) = 0.290E+03 +/- 0.176E-02 [km/sec]
c(3) = 0.100E-02 +/- 0.483E-08 [radii/min**2]
c(3) = 0.387E+00 +/- 0.187E-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) = 115. +/- 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 7: 2 = 0.000E+00 km/sec

The TOTAL velocity at 7: 2 = 359. km/sec

The TANGENTIAL velocity at 7: 5 = 0.000E+00 km/sec

The TOTAL velocity at 7: 5 = 427. km/sec

The TANGENTIAL velocity at 7:27 = 0.000E+00 km/sec

The TOTAL velocity at 7:27 = 939. 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!