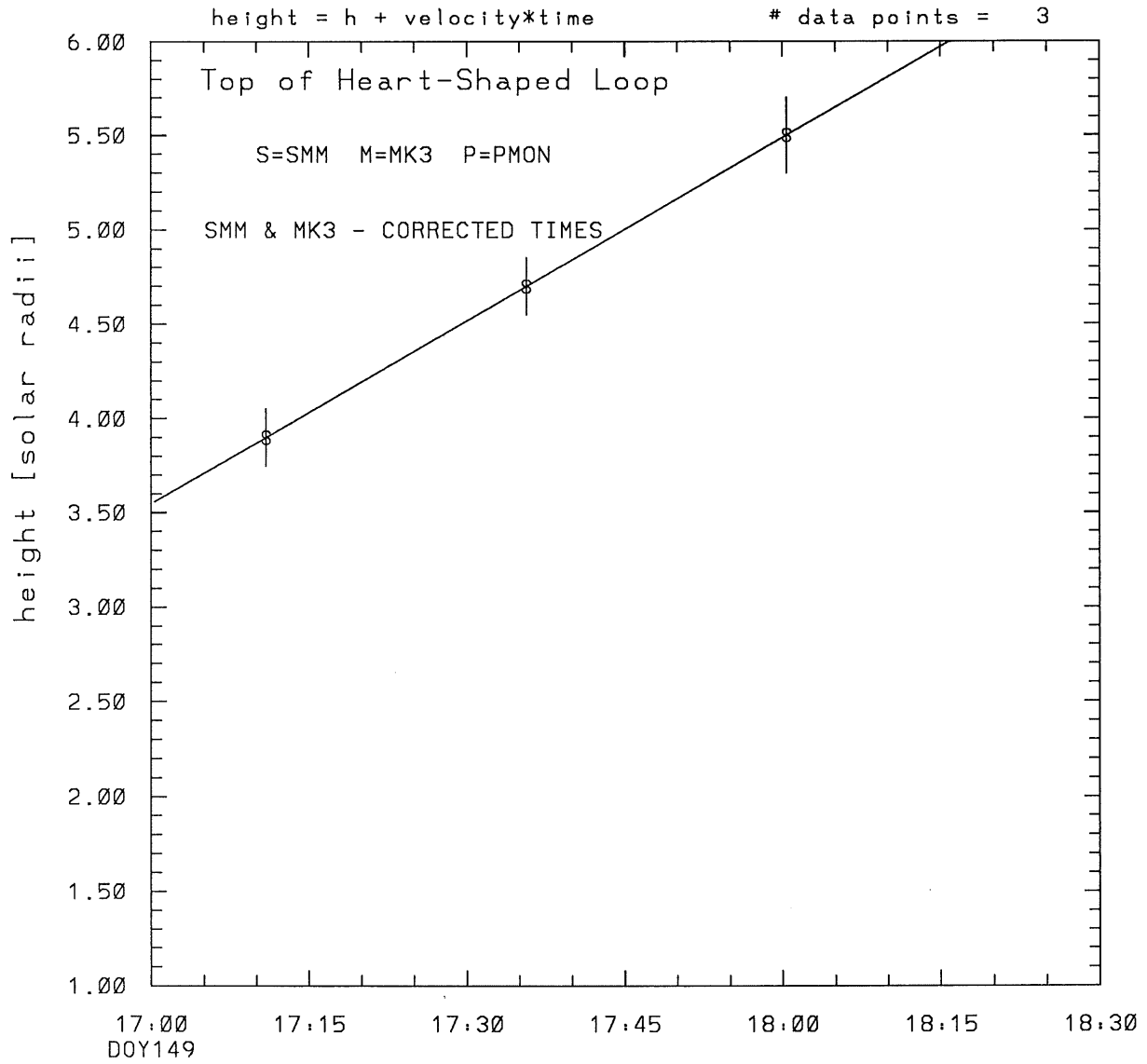
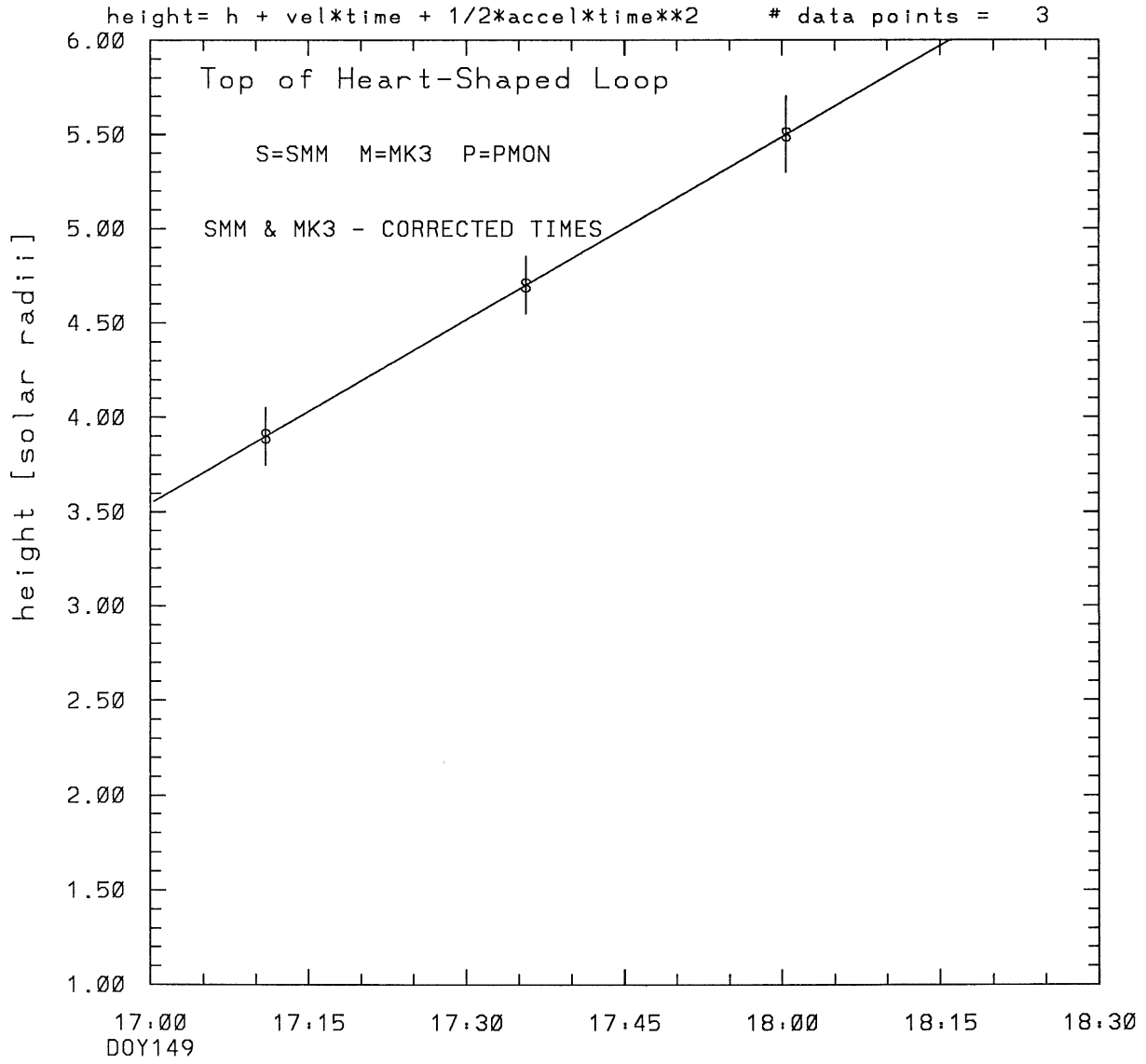


SMM C/P 1987 DOY149 275 +/- 0 degrees



tstart=DOY149 15:43 +/- 0.0 [min.]
radial velocity= 375. +/- 0. [km/sec]

SMM C/P 1987 DOY149 275 +/- 0 degrees

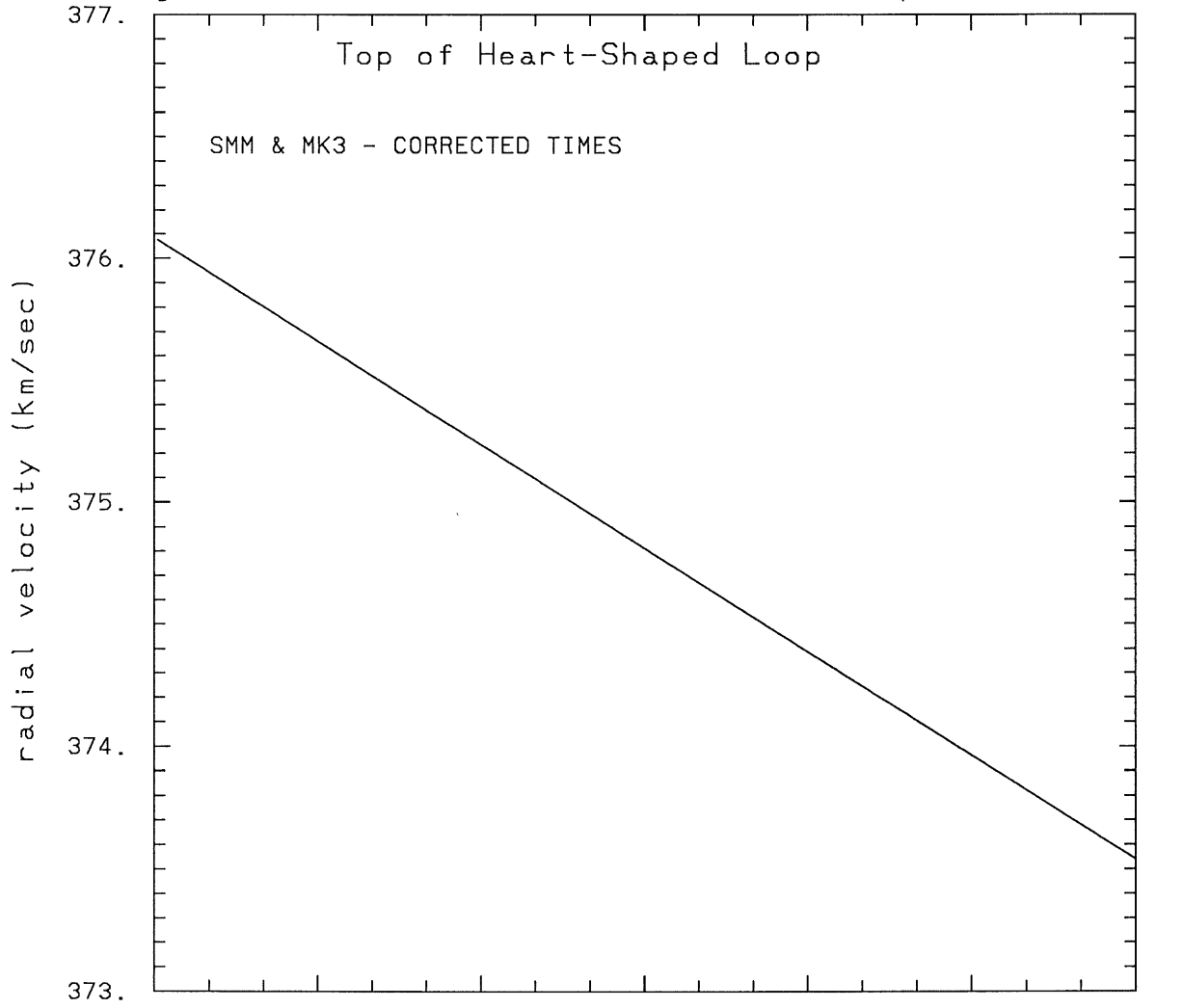


tstart=DOY149 15:42 +/- 0.0 [min.]

radial acceleration=-0.0005 +/- 0.0000 [km/sec**2]

SMM C/P 1987 DOY149 275 +/- 0 degrees

height= h + vel*time + 1/2*accel*time**2 # data points = 3



17:00
DOY149

tstart=DOY149 15:42 +/- 0.0 [min.]

radial acceleration=-.471E-03 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in	angle	error in	datatype
1987	149	17:10:56	3.90	+/- 0.15	275.0	+/- 1.0	SMM	
1987	149	17:35:39	4.70	+/- 0.15	275.0	+/- 1.0	SMM	
1987	149	18:02:25	5.50	+/- 0.20	275.0	+/- 1.0	SMM	

Structure being measured:

Top of Heart-Shaped Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.788E+02 \pm 0.242E-01$ [minutes]

In more convenient units:

Event began at DOY 149 15:43 $\pm 0.242E-01$ [minutes]

Origin defined at DOY149 17: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 375. \pm 0. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.355E+01 \pm 0.533E-03$ [solar radii]
 $c(2) = 0.323E-01 \pm 0.145E-04$ [radii/min]
 $c(2) = 0.375E+03 \pm 0.169E+00$ [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 $c(1) = 0.79786E-03$ [radii] see Bevington pg. 114

error in $c(2) = 0.19465E-04$ [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) = 275. +/- 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 17:10 = 0.000E+00 km/sec

The TOTAL velocity at 17:10 = 375. km/sec

The TANGENTIAL velocity at 17:35 = 0.000E+00 km/sec

The TOTAL velocity at 17:35 = 375. km/sec

The TANGENTIAL velocity at 18: 0 = 0.000E+00 km/sec

The TOTAL velocity at 18: 0 = 375. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.80

Standard Deviation in start time measurement = 0.202E+02

Error in time = 0.21065E-01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.226E-06

Reduced Chi Squared = 0.105E-05

Chi Squared = 0.105E-05

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.100E+01

The probability that no LINEAR correlation exists between the variables = 0.0000E+00

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
1987	149	17:10:56	3.90	+/- 0.15	275.0	+/- 1.0	SMM
1987	149	17:35:39	4.70	+/- 0.15	275.0	+/- 1.0	SMM
1987	149	18: 0:25	5.50	+/- 0.20	275.0	+/- 1.0	SMM

Structure being measured:

Top of Heart-Shaped Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.783E+02 +/- 0.000E+00 [minutes]

In more convenient units:

Event began at DOY 149 15:42 +/- 0.000E+00 [minutes]

Origin defined at DOY149 17: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.471E-03 +/- 0.396E-04 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.355E+01 +/- 0.102E-03 [solar radii]
c(2) = 0.324E-01 +/- 0.720E-05 [radii/min]
c(2) = 0.376E+03 +/- 0.835E-01 [km/sec]
c(3) = -0.122E-05 +/- 0.102E-06 [radii/min**2]
c(3) = -0.471E-03 +/- 0.396E-04 [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) = 275. +/- 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 17:10 = 0.000E+00 km/sec

The TOTAL velocity at 17:10 = 376. km/sec

The TANGENTIAL velocity at 17:35 = 0.000E+00 km/sec

The TOTAL velocity at 17:35 = 375. km/sec

The TANGENTIAL velocity at 18: 0 = 0.000E+00 km/sec

The TOTAL velocity at 18: 0 = 374. 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!