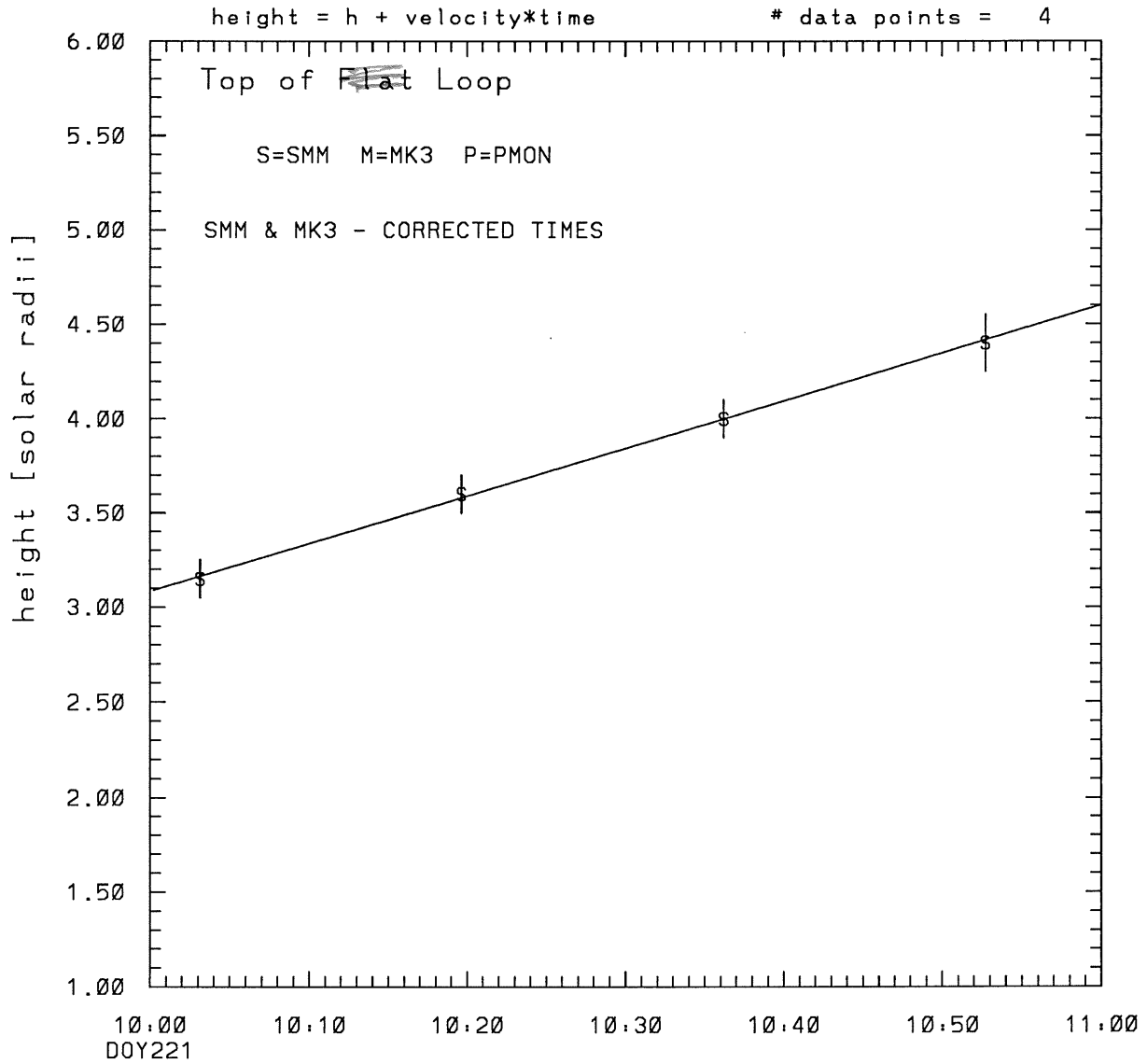
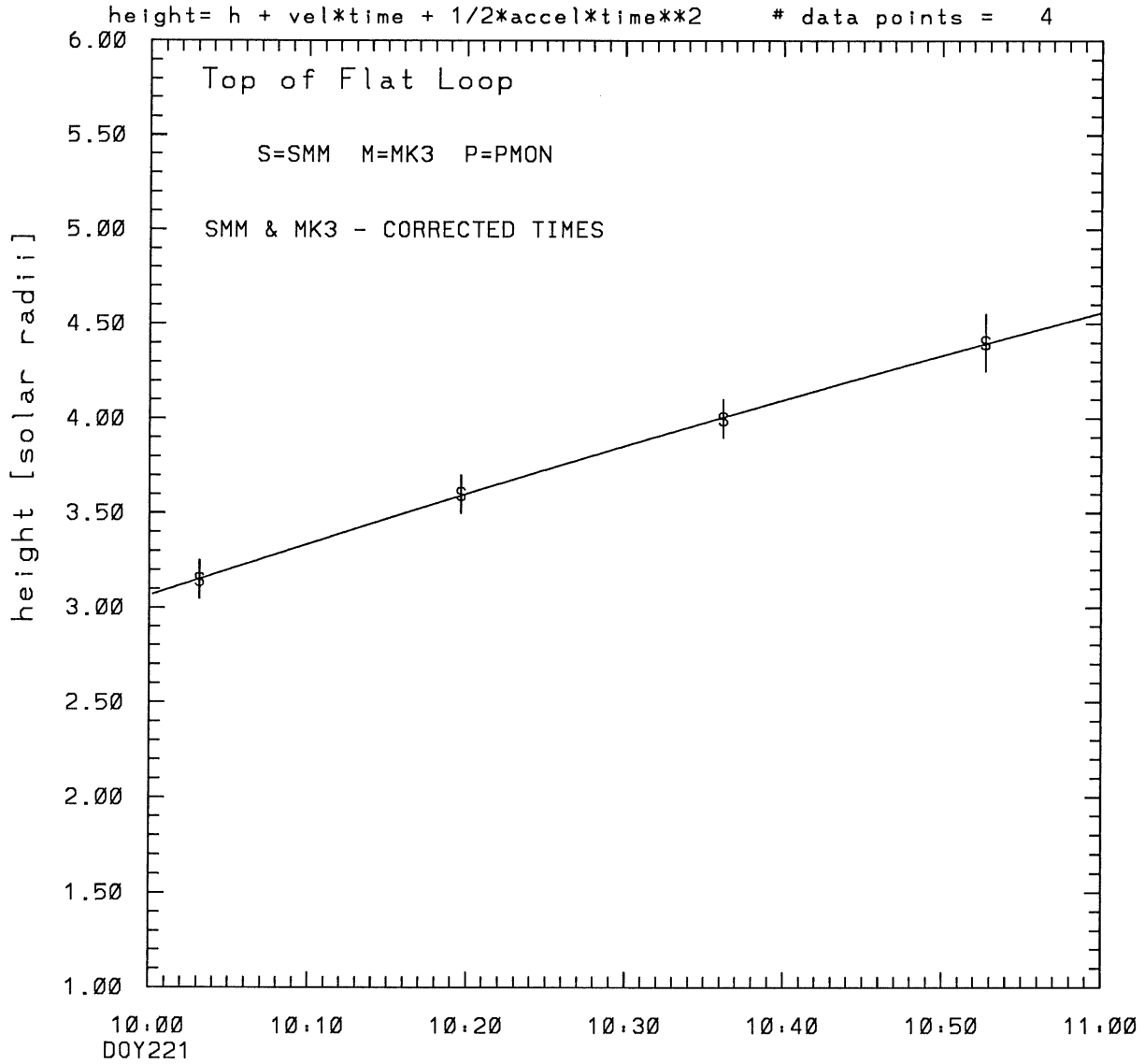


SMM C/P 1988 DOY221 270 +/- 0 degrees



tstart=DOY221 8:38 +/- 0.9 [min.]
radial velocity= 293. +/- 6. [km/sec]

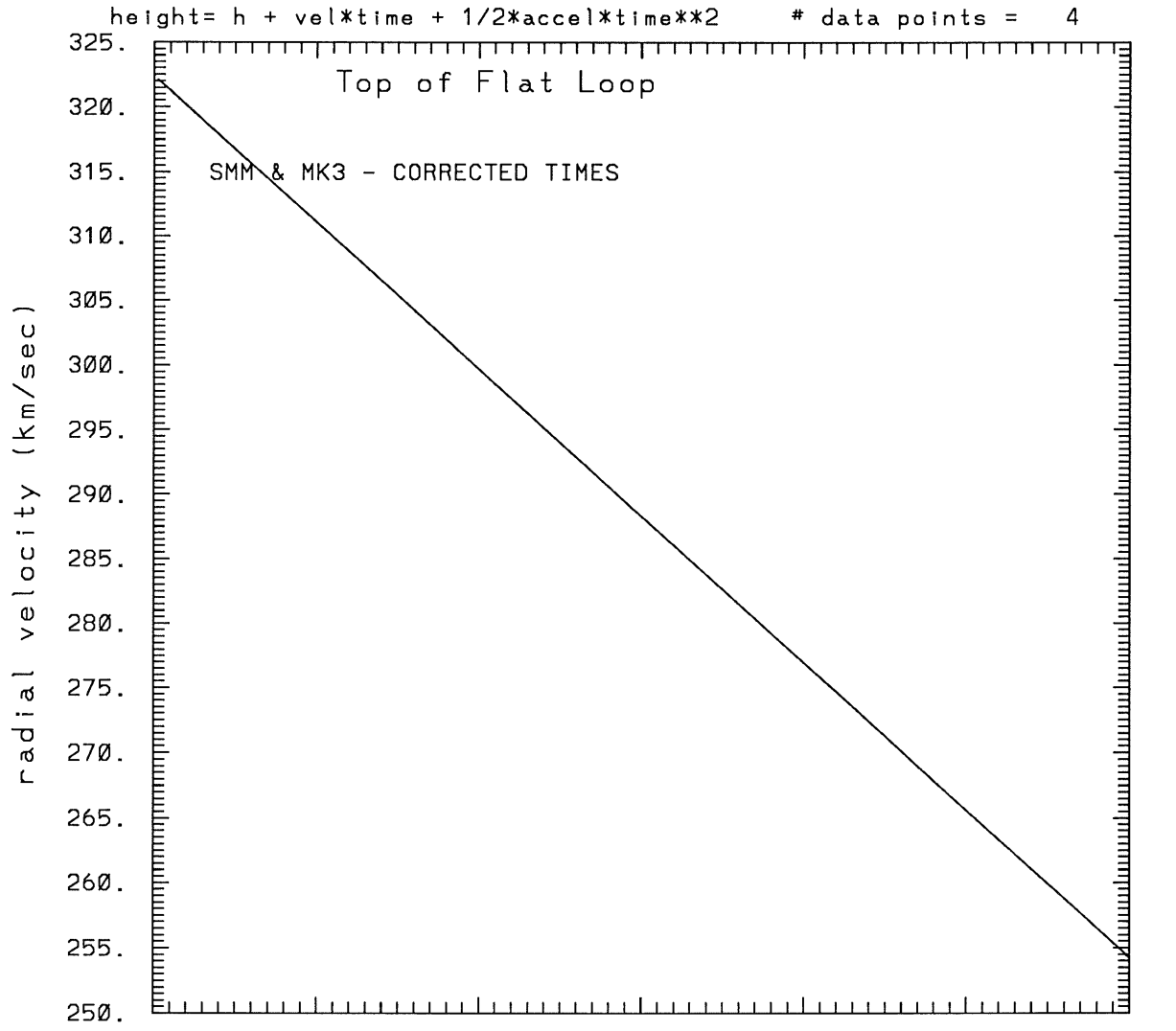
SMM C/P 1988 DOY221 270 +/- 0 degrees



tstart=DOY221 8:55 +/- 15.0 [min.]

radial acceleration = $-0.0189 +/- 0.0064$ [km/sec**2]

SMM C/P 1988 DOY221 270 +/- 0 degrees



DOY221

tstart=DOY221 8:55 +/- 15.0 [min.]

radial acceleration = $-.189E-01$ km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	angle	error in angle	datatype
1988	221	10: 3: 9	3.15	+/- 0.10	270.0	+/- 1.0	SMM
1988	221	10:19:39	3.60	+/- 0.10	270.0	+/- 1.0	SMM
1988	221	10:36:12	4.00	+/- 0.10	270.0	+/- 1.0	SMM
1988	221	10:52:43	4.40	+/- 0.15	270.0	+/- 1.0	SMM

Structure being measured:

Top of Flat Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.824E+02 +/- 0.862E+00$ [minutes]

In more convenient units:

Event began at DOY 221 8:38 +/- 0.862E+00 [minutes]

Origin defined at DOY221 10: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 293. +/- 6. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.308E+01 +/- 0.141E-01 [solar radii]
c(2) = 0.253E-01 +/- 0.484E-03 [radii/min]
c(2) = 0.293E+03 +/- 0.561E+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)= 0.18450E-01 [radii] see Bevington pg. 114

error in c(2)= 0.55096E-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) = 270. +/- 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 10: 3 = 0. km/sec

The TOTAL velocity at 10: 3 = 293. km/sec

The TANGENTIAL velocity at 10:19 = 0. km/sec

The TOTAL velocity at 10:19 = 293. km/sec

The TANGENTIAL velocity at 10:36 = 0. km/sec

The TOTAL velocity at 10:36 = 293. km/sec

The TANGENTIAL velocity at 10:52 = 0. km/sec

The TOTAL velocity at 10:52 = 293. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.54

Standard Deviation in start time measurement = 0.185E+02

Error in time = 0.11390E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.263E-03

Reduced Chi Squared = 0.101E-02

Chi Squared = 0.201E-02

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 = 0.4487E-03

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	angle	datatype
1988	221	10: 3: 9	3.15	+/- 0.10	270.0 +/- 1.0		SMM
1988	221	10:19:39	3.60	+/- 0.10	270.0 +/- 1.0		SMM
1988	221	10:36:12	4.00	+/- 0.10	270.0 +/- 1.0		SMM
1988	221	10:52:43	4.40	+/- 0.15	270.0 +/- 1.0		SMM

Structure being measured:
Top of Flat Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.665E+02 +/- 0.150E+02$ [minutes]
In more convenient units:
Event began at DOY 221 8:55 +/- 0.150E+02 [minutes]

Origin defined at DOY221 10: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.189E-01 +/- 0.644E-02$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.307E+01 +/- 0.977E-02$ [solar radii]
 $c(2) = 0.278E-01 +/- 0.894E-03$ [radii/min]
 $c(2) = 0.322E+03 +/- 0.104E+02$ [km/sec]
 $c(3) = -0.490E-04 +/- 0.167E-04$ [radii/min**2]
 $c(3) = -0.189E-01 +/- 0.644E-02$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in $c(1) = 0.14579E-01$ [radii] Bevington pg 154 (8-30)
Exact error in $c(1) = 0.34236E-02$ [radii] Bevington pg 154 (8-28)
Approximate error in $c(2) = 0.12740E-02$ [radii/min] Bevington pg 154 (8-30)
Exact error in $c(2) = 0.58626E-03$ [radii/min] Bevington pg 154 (8-28)
Approximate error in $c(3) = 0.22046E-04$ [radii/min**] Bevington pg 154 (8-30)
Exact error in $c(3) = 0.11002E-04$ [radii/min**] Bevington pg 154 (8-28)

ANGULAR INFORMATION:

ANGULAR ACCELERATION= 0.0000E+00 +/- 0.0000E+00[radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 270. +/- 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 10: 3 = 0. km/sec

The TOTAL velocity at 10: 3 = 319. km/sec

The TANGENTIAL velocity at 10:19 = 0. km/sec

The TOTAL velocity at 10:19 = 300. km/sec

The TANGENTIAL velocity at 10:36 = 0. km/sec

The TOTAL velocity at 10:36 = 281. km/sec

The TANGENTIAL velocity at 10:52 = 0. km/sec

The TOTAL velocity at 10:52 = 263. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.54

Standard Deviation in start time measurement = 0.185E+02

Value of reduced Chi Squared returned from nllst2 = 0.743E-04

Reduced Chi Squared = 0.398E-03

Chi Squared = 0.398E-03

The probability for exceeding chi square = 0.993E+00

For a second order fit 3 correlation coefficients are given:

(Using equation of motion: $r = a + bt + at^{**2}$)

The correlation between the data and the term linear in time = 0.9328E+00

The correlation between the data and the time**2 term = 0.8352E+00

The correlation between the data and the complete equation of motion = 0.9994E+00

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