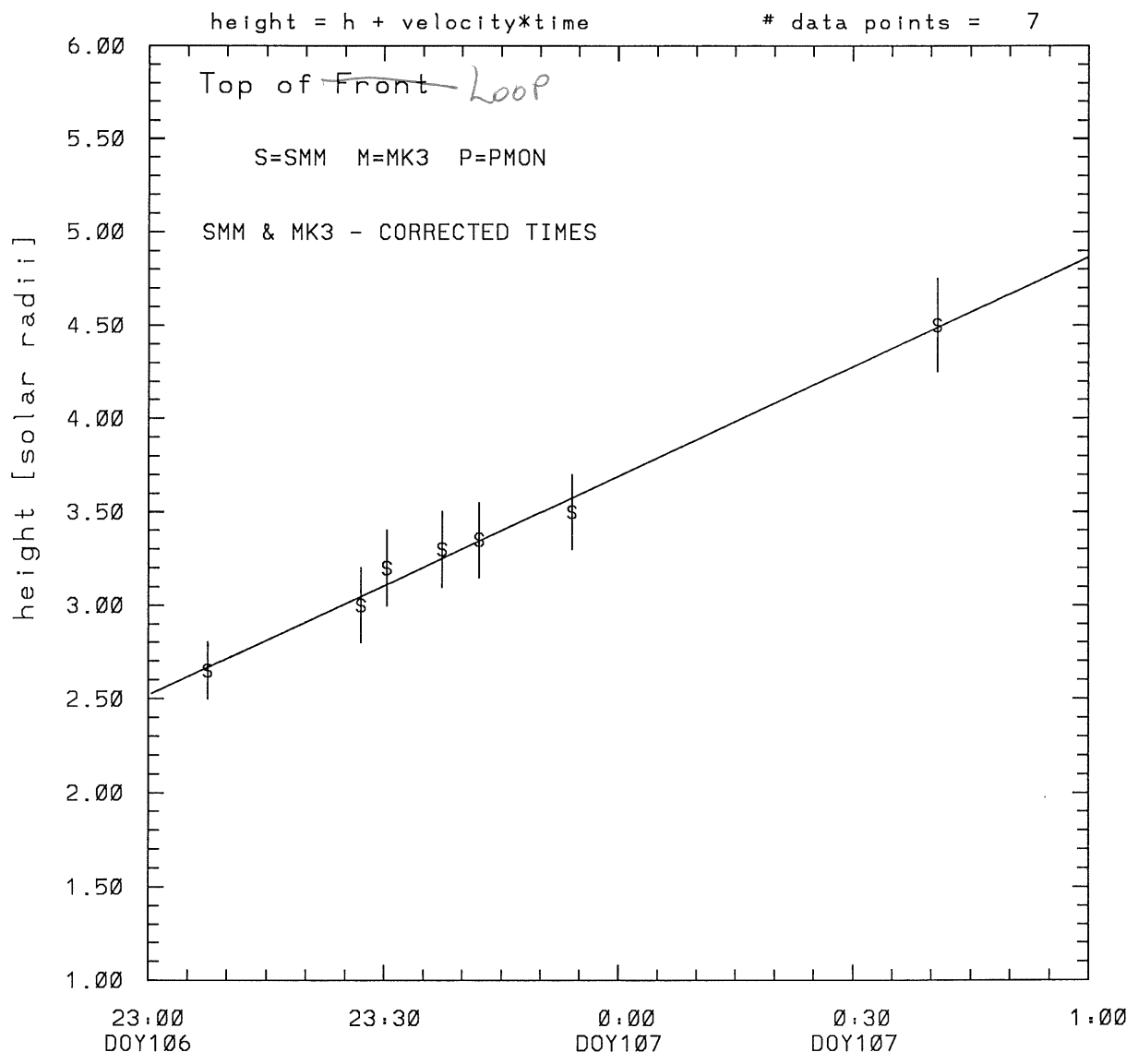
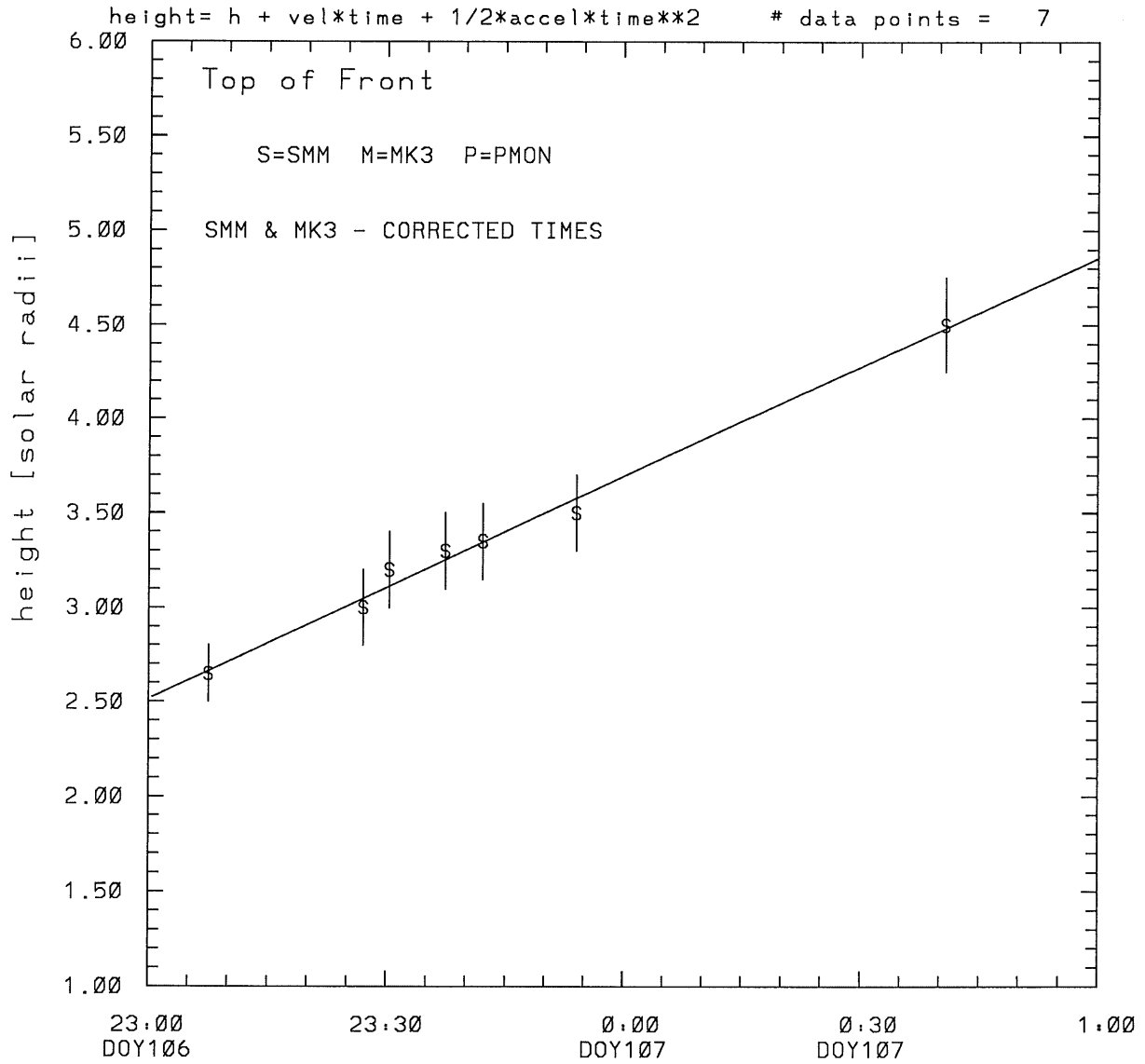


SMM C/P 1980 DOY106 50 +/- 0 degrees



tstart=DOY106 21:44 +/- 0.4 [min.]
radial velocity= 227. +/- 10. [km/sec]

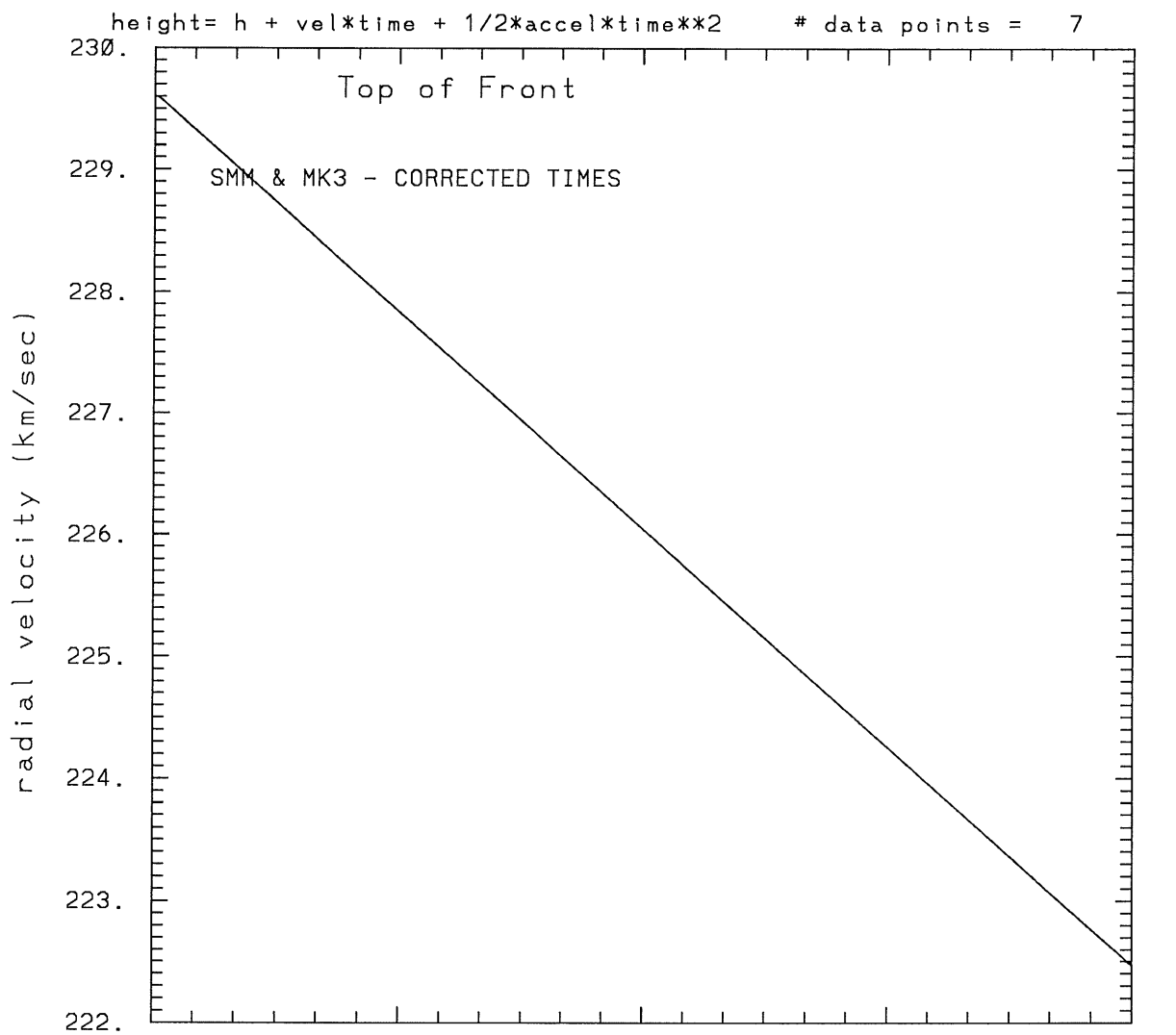
SMM C/P 1980 DOY106 50 +/- 0 degrees



tstart=DOY106 21:46 +/- 81.6 [min.]

radial acceleration = -0.0010 ± 0.0100 [km/sec**2]

SMM C/P 1980 DOY106 50 +/- 0 degrees



23:00
DOY106

23:30

0:00
DOY107

0:30

1:00

tstart=DOY106 21:46 +/- 81.6 [min.]

radial acceleration=-.994E-03 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1980	106	23: 7:30	2.65 +/- 0.15		50.0 +/- 0.5		SMM
1980	106	23:27: 3	3.00 +/- 0.20		50.0 +/- 1.0		SMM
1980	106	23:30:20	3.20 +/- 0.20		50.0 +/- 1.0		SMM
1980	106	23:37:27	3.30 +/- 0.20		50.0 +/- 1.0		SMM
1980	106	23:42:12	3.35 +/- 0.20		50.0 +/- 1.0		SMM
1980	106	23:54: 4	3.50 +/- 0.20		50.0 +/- 1.0		SMM
1980	107	0:40:45	4.50 +/- 0.25		50.0 +/- 1.0		SMM

Structure being measured:

Top of Front

OUTPUT:

START TIME:

Event began at $t = 0 + -0.778E+02 +/- 0.385E+00$ [minutes]

In more convenient units:

Event began at DOY 106 21:44 +/- 0.385E+00 [minutes]

Origin defined at DOY106 23: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 227. +/- 10. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.252E+01 +/- 0.362E-01 [solar radii]
c(2) = 0.195E-01 +/- 0.824E-03 [radii/min]
c(2) = 0.227E+03 +/- 0.955E+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)= 0.43003E-01 [radii] see Bevington pg. 114

error in c(2)= 0.84884E-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) = 50. +/- 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 23: 7 = 0.000E+00 km/sec

The TOTAL velocity at 23: 7 = 227. km/sec

The TANGENTIAL velocity at 23:27 = 0.000E+00 km/sec

The TOTAL velocity at 23:27 = 227. km/sec

The TANGENTIAL velocity at 23:30 = 0.000E+00 km/sec

The TOTAL velocity at 23:30 = 227. km/sec

The TANGENTIAL velocity at 23:37 = 0.000E+00 km/sec

The TOTAL velocity at 23:37 = 227. km/sec

The TANGENTIAL velocity at 23:42 = 0.000E+00 km/sec

The TOTAL velocity at 23:42 = 227. km/sec

The TANGENTIAL velocity at 23:54 = 0.000E+00 km/sec

The TOTAL velocity at 23:54 = 227. km/sec

The TANGENTIAL velocity at 0:40 = 0.000E+00 km/sec

The TOTAL velocity at 0:40 = 227. 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 = 0.272E+02

Error in time = 0.69824E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.295E-02

Reduced Chi Squared = 0.146E-01

Chi Squared = 0.732E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.995E+00

The probability that no LINEAR correlation exists between the variables = 0.2888E-05

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

This is a 2 order run

INPUT:

year	day	time	radii	radius	error in	angle	error in	datatype
1980	106	23: 7:30	2.65	+/- 0.15	50.0	+/- 0.5	SMM	
1980	106	23:27: 3	3.00	+/- 0.20	50.0	+/- 1.0	SMM	
1980	106	23:30:20	3.20	+/- 0.20	50.0	+/- 1.0	SMM	
1980	106	23:37:27	3.30	+/- 0.20	50.0	+/- 1.0	SMM	
1980	106	23:42:12	3.35	+/- 0.20	50.0	+/- 1.0	SMM	
1980	106	23:54: 4	3.50	+/- 0.20	50.0	+/- 1.0	SMM	
1980	107	0:40:45	4.50	+/- 0.25	50.0	+/- 1.0	SMM	

Structure being measured:
Top of Front

OUTPUT:

START TIME:

Event began at $t = 0 + -0.758E+02 +/- 0.816E+02$ [minutes]
In more convenient units:
Event began at DOY 106 21:46 +/- 0.816E+02 [minutes]

Origin defined at DOY106 23: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.994E-03 +/- 0.997E-02$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.251E+01 +/- 0.601E-01$ [solar radii]
 $c(2) = 0.198E-01 +/- 0.277E-02$ [radii/min]
 $c(2) = 0.230E+03 +/- 0.322E+02$ [km/sec]
 $c(3) = -0.257E-05 +/- 0.258E-04$ [radii/min**2]
 $c(3) = -0.994E-03 +/- 0.997E-02$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in $c(1) = 0.85434E-01$ [radii] Bevington pg 154 (8-30)
Exact error in $c(1) = 0.86778E-02$ [radii] Bevington pg 154 (8-28)
Approximate error in $c(2) = 0.36143E-02$ [radii/min] Bevington pg 154 (8-30)
Exact error in $c(2) = 0.32194E-03$ [radii/min] Bevington pg 154 (8-28)

Approximate error in $c(3) = 0.30609E-04$ [radii/min**] Bevington pg 154 (8-30)

Exact error in $c(3) = 0.27673E-05$ [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:

$a(1) = 50.$ +/- $0.$ [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 23: 7 = $0.000E+00$ km/sec

The TOTAL velocity at 23: 7 = 229. km/sec

The TANGENTIAL velocity at 23:27 = $0.000E+00$ km/sec

The TOTAL velocity at 23:27 = 228. km/sec

The TANGENTIAL velocity at 23:30 = $0.000E+00$ km/sec

The TOTAL velocity at 23:30 = 228. km/sec

The TANGENTIAL velocity at 23:37 = $0.000E+00$ km/sec

The TOTAL velocity at 23:37 = 227. km/sec

The TANGENTIAL velocity at 23:42 = $0.000E+00$ km/sec

The TOTAL velocity at 23:42 = 227. km/sec

The TANGENTIAL velocity at 23:54 = $0.000E+00$ km/sec

The TOTAL velocity at 23:54 = 226. km/sec

The TANGENTIAL velocity at 0:40 = $0.000E+00$ km/sec

The TOTAL velocity at 0:40 = 224. 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 = $0.272E+02$

Value of reduced Chi Squared returned from nllst2 = $0.353E-02$

Reduced Chi Squared = $0.187E-01$

Chi Squared = $0.748E-01$

The probability for exceeding chi square = $0.100E+01$

For a second order fit 3 correlation coefficients are given:

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

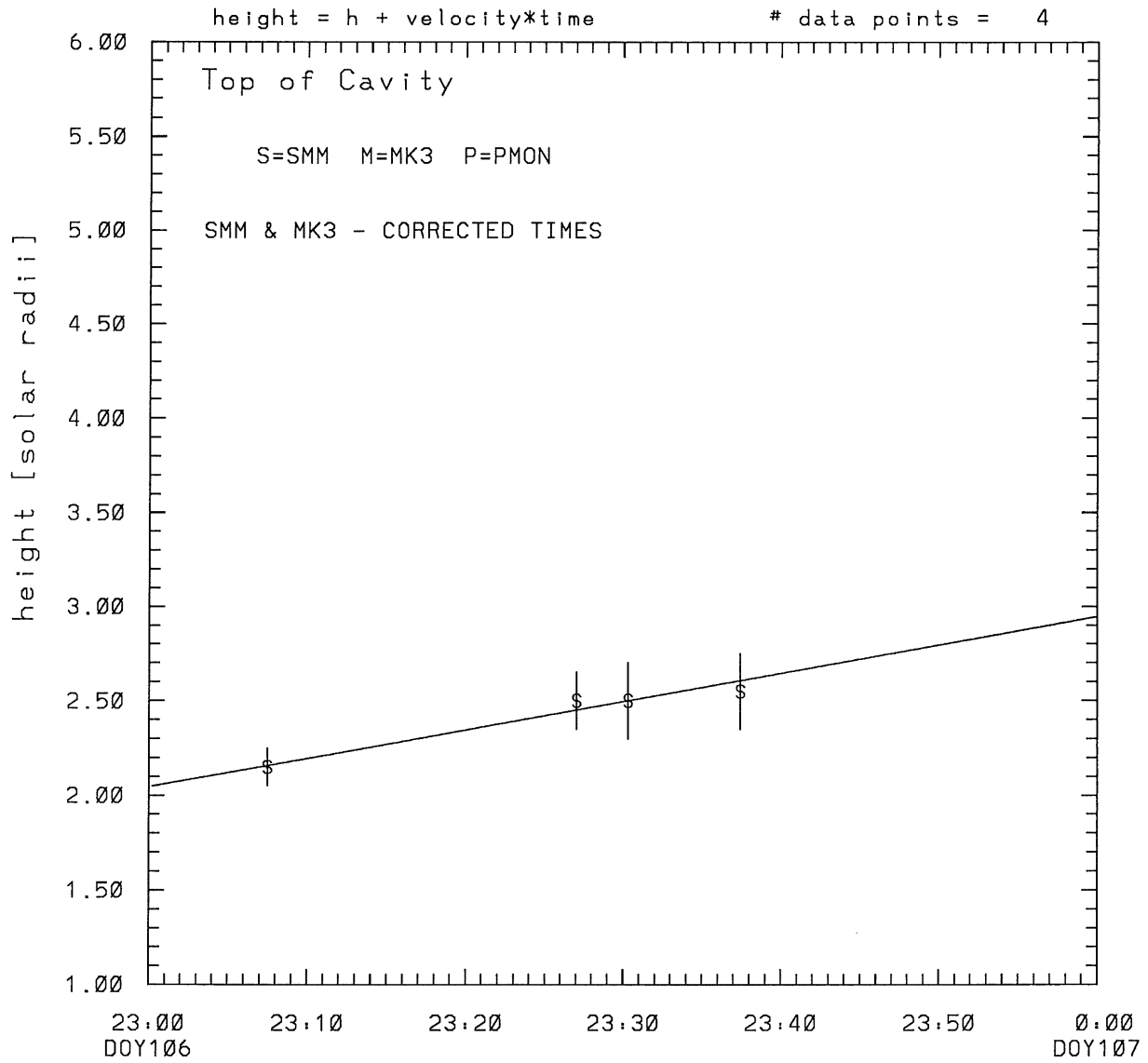
The correlation between the data and the term linear in time = 0.9436E+00

The correlation between the data and the time**2 term = 0.8088E+00

The correlation between the data and the complete equation of motion = 0.9890E+00

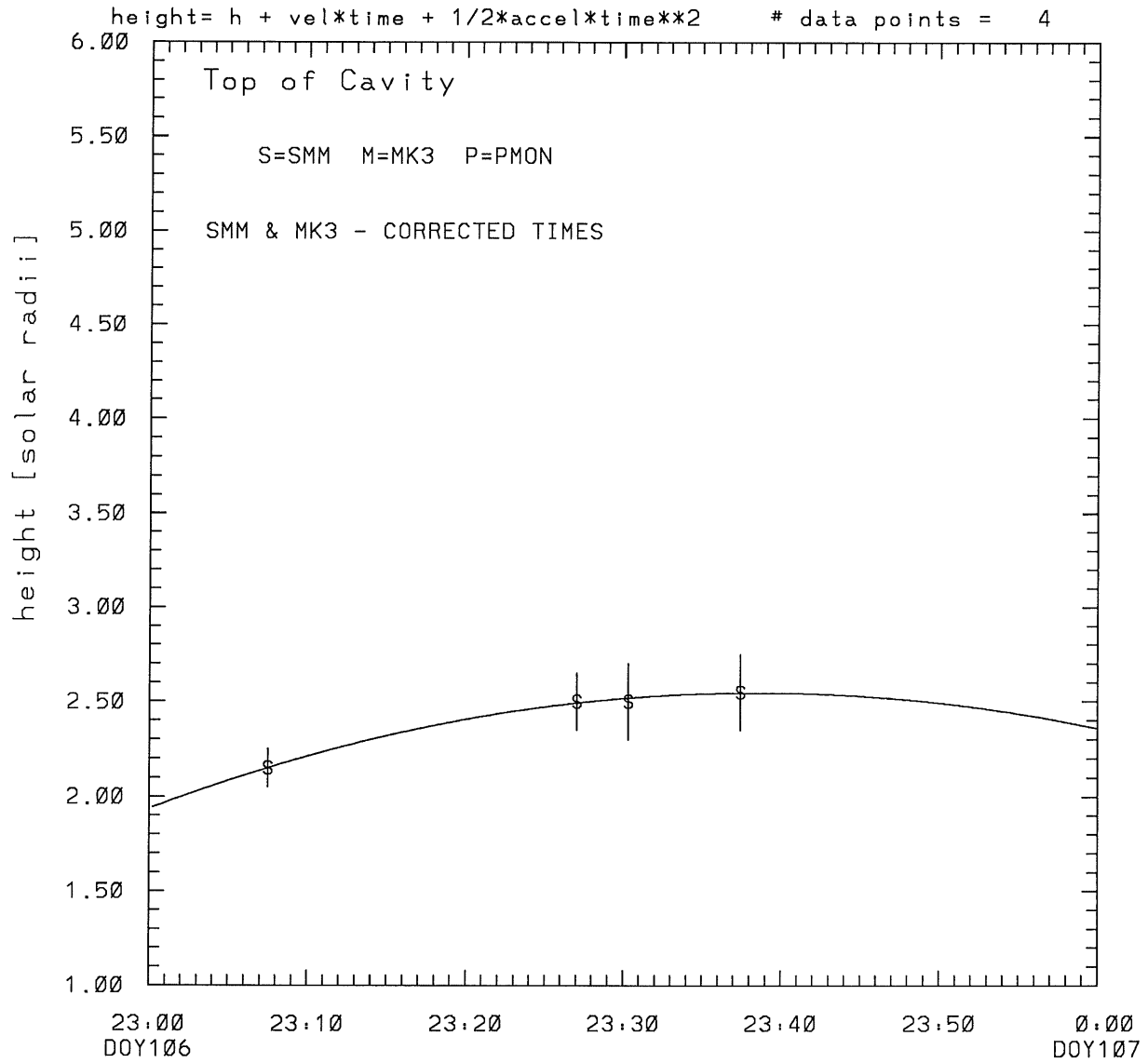
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

SMM C/P 1980 DOY106 50 +/- 0 degrees



tstart=DOY106 21:52 +/- 1.1 [min.]
radial velocity= 174. +/- 18. [km/sec]

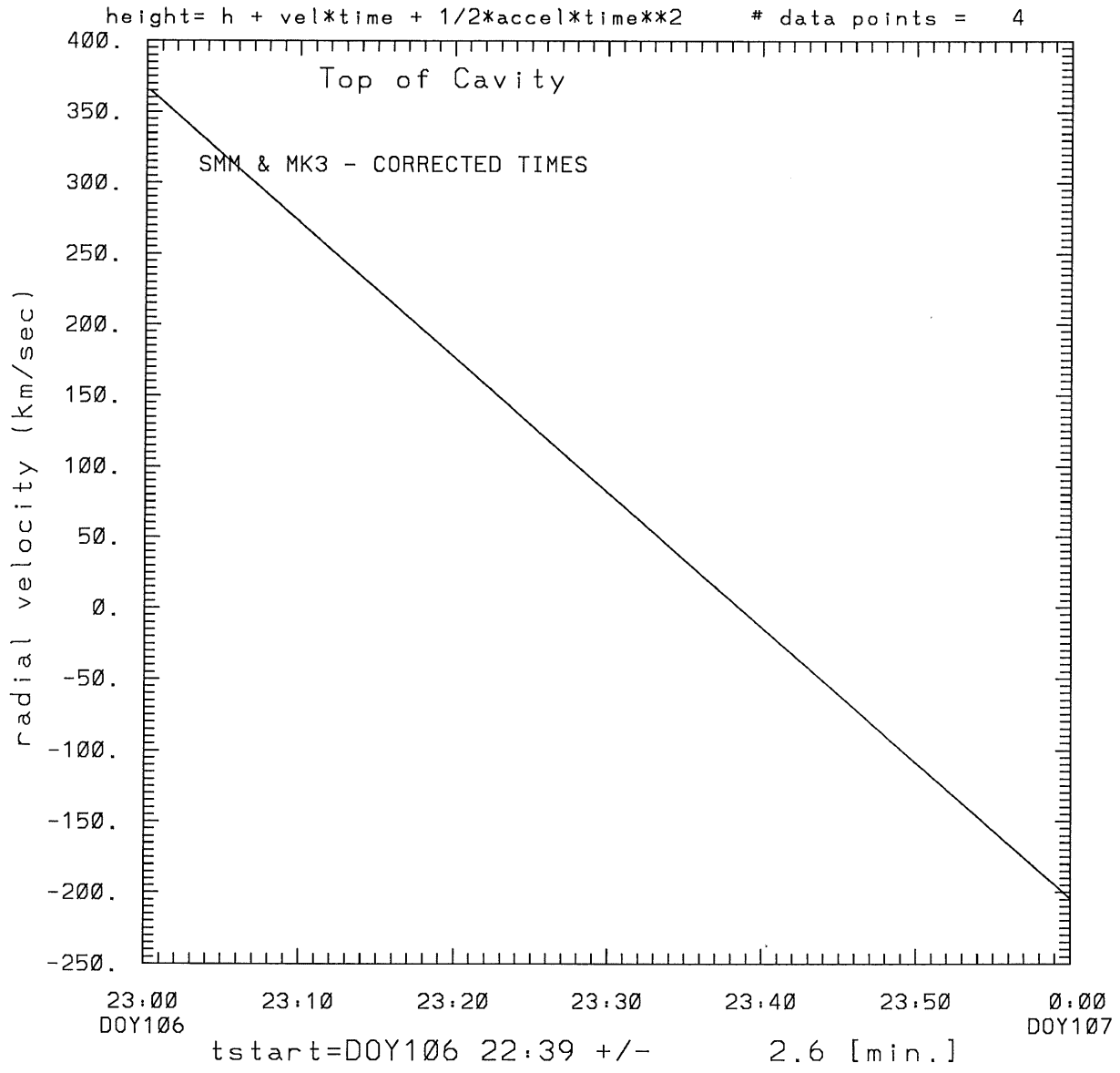
SMM C/P 1980 DOY106 50 +/- 0 degrees



tstart=DOY106 22:39 +/- 2.6 [min.]

radial acceleration = $-0.1587 +/- 0.0287$ [km/sec**2]

SMM C/P 1980 DOY106 50 +/- 0 degrees



radial acceleration=-.159E+00 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	datatype
1980	106	23: 7:30	2.15	+/- 0.10	50.0 +/- 0.5	SMM
1980	106	23:27: 3	2.50	+/- 0.15	50.0 +/- 0.5	SMM
1980	106	23:30:20	2.50	+/- 0.20	50.0 +/- 0.5	SMM
1980	106	23:37:27	2.55	+/- 0.20	50.0 +/- 0.5	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.697E+02 +/- 0.111E+01$ [minutes]

In more convenient units:

Event began at DOY 106 21:52 +/- 0.111E+01 [minutes]

Origin defined at DOY106 23: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 174. +/- 18. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.205E+01 +/- 0.339E-01 [solar radii]
c(2) = 0.150E-01 +/- 0.152E-02 [radii/min]
c(2) = 0.174E+03 +/- 0.177E+02 [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)= 0.67131E-01 [radii] see Bevington pg. 114

error in c(2)= 0.24073E-02 [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) = 50. +/- 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 23: 7 = 0.000E+00 km/sec

The TOTAL velocity at 23: 7 = 174. km/sec

The TANGENTIAL velocity at 23:27 = 0.000E+00 km/sec

The TOTAL velocity at 23:27 = 174. km/sec

The TANGENTIAL velocity at 23:30 = 0.000E+00 km/sec

The TOTAL velocity at 23:30 = 174. km/sec

The TANGENTIAL velocity at 23:37 = 0.000E+00 km/sec

The TOTAL velocity at 23:37 = 174. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.18

Standard Deviation in start time measurement = 0.111E+02

Error in time = 0.50361E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.133E-02

Reduced Chi Squared = 0.892E-02

Chi Squared = 0.178E-01

The probability for exceeding chi square = 0.999E+00

The correlation coefficient = 0.974E+00

The probability that no LINEAR correlation exists between the variables = 0.2573E-01

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

This is a 2 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	angle	datatype
1980	106	23: 7:30	2.15	+/- 0.10	50.0	+/- 0.5	SMM
1980	106	23:27: 3	2.50	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:30:20	2.50	+/- 0.20	50.0	+/- 0.5	SMM
1980	106	23:37:27	2.55	+/- 0.20	50.0	+/- 0.5	SMM

Structure being measured:
Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.228E+02 +/- 0.262E+01$ [minutes]
In more convenient units:
Event began at DOY 106 22:39 +/- 0.262E+01 [minutes]

Origin defined at DOY106 23: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.159E+00 +/- 0.287E-01$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = $0.194E+01 +/- 0.223E-01$ [solar radii]
- c(2) = $0.317E-01 +/- 0.305E-02$ [radii/min]
- c(2) = $0.367E+03 +/- 0.354E+02$ [km/sec]
- c(3) = $-0.411E-03 +/- 0.743E-04$ [radii/min**2]
- c(3) = $-0.159E+00 +/- 0.287E-01$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

- Approximate error in c(1) = $0.44721E-01$ [radii] Bevington pg 154 (8-30)
- Exact error in c(1) = $0.11159E-01$ [radii] Bevington pg 154 (8-28)
- Approximate error in c(2) = $0.50130E-02$ [radii/min] Bevington pg 154 (8-30)
- Exact error in c(2) = $0.17936E-02$ [radii/min] Bevington pg 154 (8-28)
- Approximate error in c(3) = $0.11516E-03$ [radii/min**] Bevington pg 154 (8-30)
- Exact error in c(3) = $0.40973E-04$ [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) = 50. +/- 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 23: 7 = 0.000E+00 km/sec

The TOTAL velocity at 23: 7 = 296. km/sec

The TANGENTIAL velocity at 23:27 = 0.000E+00 km/sec

The TOTAL velocity at 23:27 = 110. km/sec

The TANGENTIAL velocity at 23:30 = 0.000E+00 km/sec

The TOTAL velocity at 23:30 = 78. km/sec

The TANGENTIAL velocity at 23:37 = 0.000E+00 km/sec

The TOTAL velocity at 23:37 = 11. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.18
Standard Deviation in start time measurement = 0.111E+02
Value of reduced Chi Squared returned from nllst2 = 0.123E-03
Reduced Chi Squared = 0.122E-02
Chi Squared = 0.122E-02
The probability for exceeding chi square = 0.991E+00

For a second order fit 3 correlation coefficients are given:

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

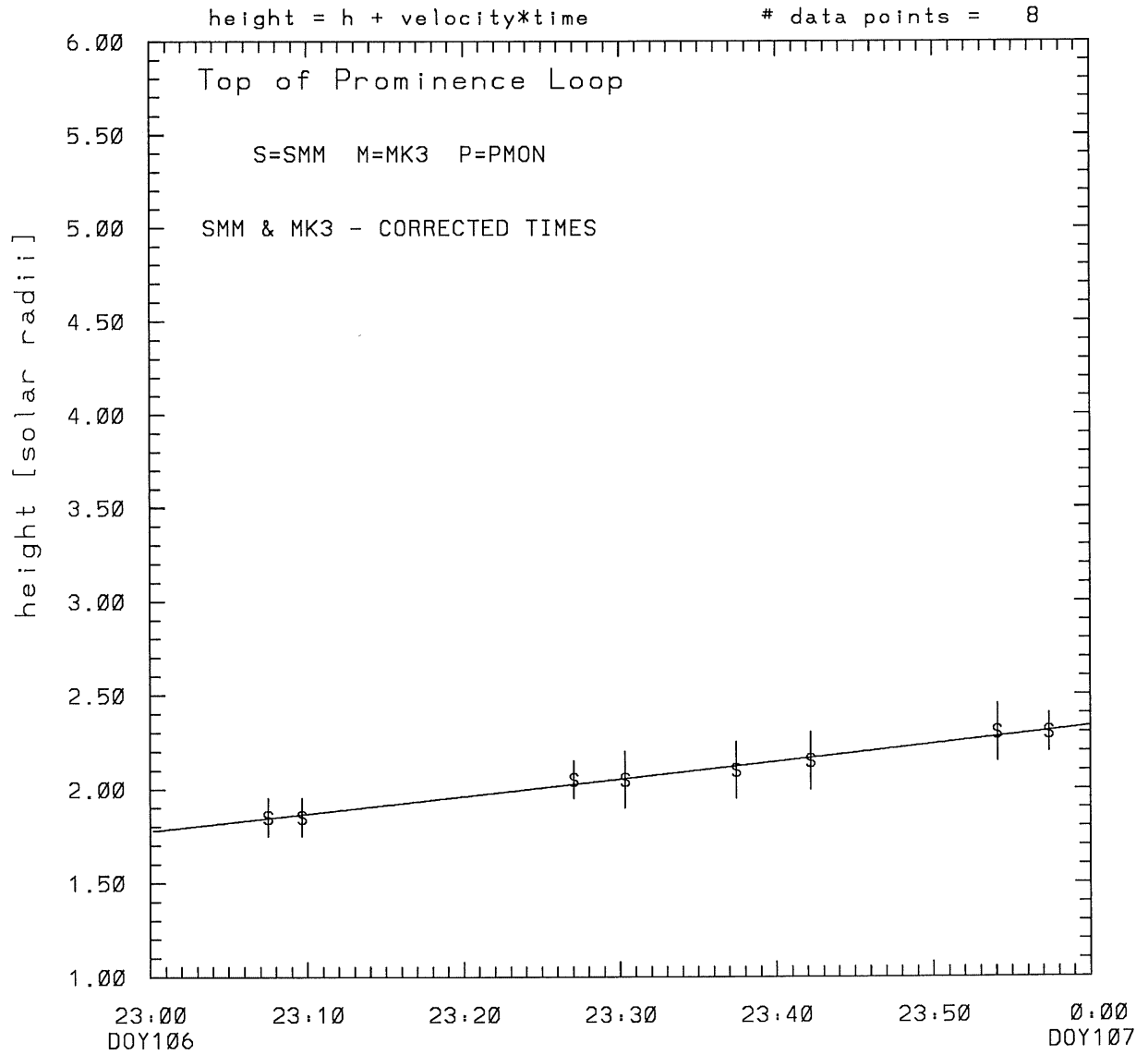
The correlation between the data and the term linear in time = 0.1226E+01

The correlation between the data and the time**2 term = 0.1126E+01

The correlation between the data and the complete equation of motion = 0.1002E+01

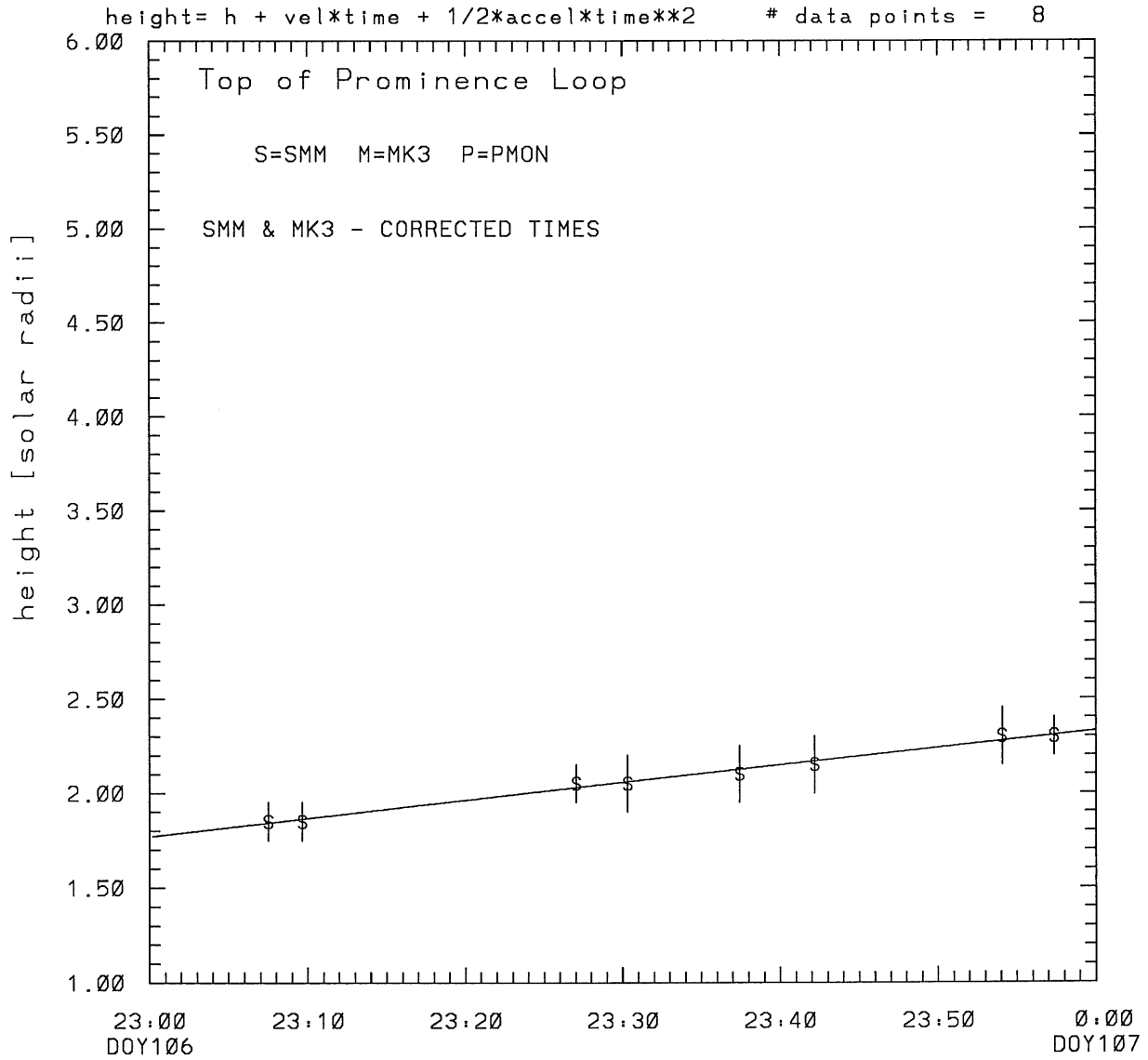
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

SMM C/P 1980 DOY106 50 +/- 0 degrees



tstart=DOY106 21:38 +/- 0.6 [min.]
radial velocity= 108. +/- 4. [km/sec]

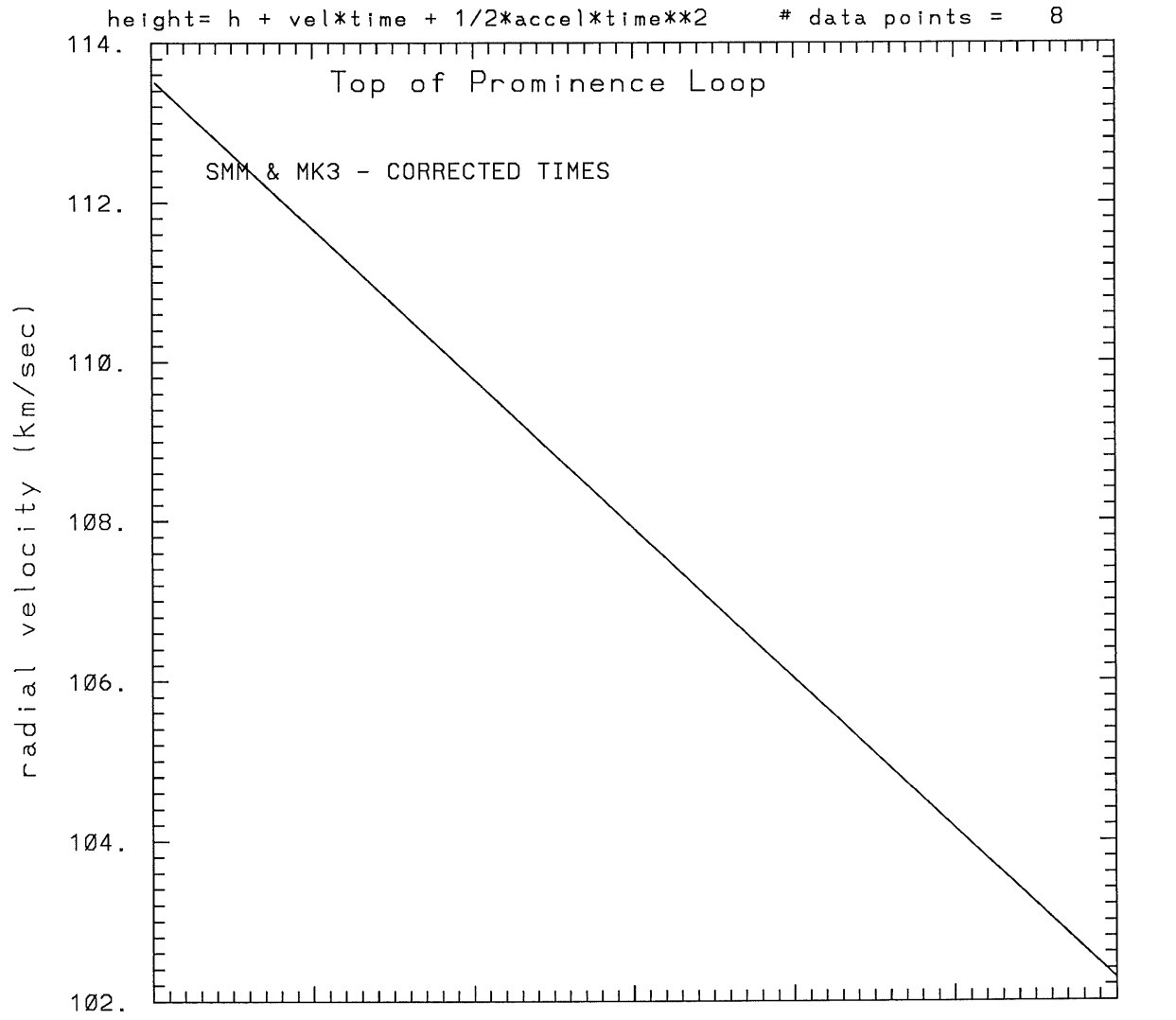
SMM C/P 1980 DOY106 50 +/- 0 degrees



tstart=DOY106 21.46 +/- 57.0 [min.]

radial acceleration = -0.0031 ± 0.0094 [km/sec**2]

SMM C/P 1980 DOY106 50 +/- 0 degrees



23:00 DOY106 23:10 23:20 23:30 23:40 23:50 0:00 DOY107

tstart=DOY106 21:46 +/- 57.0 [min.]

radial acceleration=-.313E-02 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	angle	error in angle	datatype
1980	106	23: 7:30	1.85	+/- 0.10	50.0	+/- 0.5	SMM
1980	106	23: 9:39	1.85	+/- 0.10	50.0	+/- 0.5	SMM
1980	106	23:27: 3	2.05	+/- 0.10	50.0	+/- 0.5	SMM
1980	106	23:30:20	2.05	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:37:27	2.10	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:42:12	2.15	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:54: 4	2.30	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:57:22	2.30	+/- 0.10	50.0	+/- 0.5	SMM

Structure being measured:
Top of Prominence Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.836E+02 +/- 0.624E+00$ [minutes]
In more convenient units:
Event began at DOY 106 21:38 +/- 0.624E+00 [minutes]

Origin defined at DOY106 23: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 108. +/- 4. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.177E+01 +/- 0.115E-01 [solar radii]
- c(2) = 0.927E-02 +/- 0.323E-03 [radii/min]
- c(2) = 0.108E+03 +/- 0.374E+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)= 0.14778E-01 [radii] see Bevington pg. 114
- error in c(2)= 0.39497E-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) = 50. +/- 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 23: 7 = 0.000E+00 km/sec

The TOTAL velocity at 23: 7 = 108. km/sec

The TANGENTIAL velocity at 23: 9 = 0.000E+00 km/sec

The TOTAL velocity at 23: 9 = 108. km/sec

The TANGENTIAL velocity at 23:27 = 0.000E+00 km/sec

The TOTAL velocity at 23:27 = 108. km/sec

The TANGENTIAL velocity at 23:30 = 0.000E+00 km/sec

The TOTAL velocity at 23:30 = 108. km/sec

The TANGENTIAL velocity at 23:37 = 0.000E+00 km/sec

The TOTAL velocity at 23:37 = 108. km/sec

The TANGENTIAL velocity at 23:42 = 0.000E+00 km/sec

The TOTAL velocity at 23:42 = 108. km/sec

The TANGENTIAL velocity at 23:54 = 0.000E+00 km/sec

The TOTAL velocity at 23:54 = 108. km/sec

The TANGENTIAL velocity at 23:57 = 0.000E+00 km/sec

The TOTAL velocity at 23:57 = 108. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.17

Standard Deviation in start time measurement = 0.172E+02

Error in time = 0.50894E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.292E-03

Reduced Chi Squared = 0.178E-02

Chi Squared = 0.107E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = $0.995E+00$

The probability that no LINEAR correlation exists between the variables = $0.2952E-06$

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
1980	106	23: 7:30	1.85	+/- 0.10	50.0	+/- 0.5	SMM
1980	106	23: 9:39	1.85	+/- 0.10	50.0	+/- 0.5	SMM
1980	106	23:27: 3	2.05	+/- 0.10	50.0	+/- 0.5	SMM
1980	106	23:30:20	2.05	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:37:27	2.10	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:42:12	2.15	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:54: 4	2.30	+/- 0.15	50.0	+/- 0.5	SMM
1980	106	23:57:22	2.30	+/- 0.10	50.0	+/- 0.5	SMM

Structure being measured:
Top of Prominence Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.741E+02 +/- 0.570E+02$ [minutes]
In more convenient units:
Event began at DOY 106 21:46 +/- 0.570E+02 [minutes]

Origin defined at DOY106 23: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.313E-02 +/- 0.937E-02$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.177E+01 +/- 0.202E-01$ [solar radii]
 $c(2) = 0.979E-02 +/- 0.158E-02$ [radii/min]
 $c(2) = 0.114E+03 +/- 0.183E+02$ [km/sec]
 $c(3) = -0.809E-05 +/- 0.242E-04$ [radii/min**2]
 $c(3) = -0.313E-02 +/- 0.937E-02$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in $c(1) = 0.26687E-01$ [radii] Bevington pg 154 (8-30)
Exact error in $c(1) = 0.52261E-02$ [radii] Bevington pg 154 (8-28)
Approximate error in $c(2) = 0.19064E-02$ [radii/min] Bevington pg 154 (8-30)

Exact error in c(2) = 0.42580E-03 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.29073E-04 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.62150E-05 [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) = 50. +/- 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 23: 7 = 0.000E+00 km/sec
The TOTAL velocity at 23: 7 = 112. km/sec

The TANGENTIAL velocity at 23: 9 = 0.000E+00 km/sec
The TOTAL velocity at 23: 9 = 112. km/sec

The TANGENTIAL velocity at 23:27 = 0.000E+00 km/sec
The TOTAL velocity at 23:27 = 108. km/sec

The TANGENTIAL velocity at 23:30 = 0.000E+00 km/sec
The TOTAL velocity at 23:30 = 108. km/sec

The TANGENTIAL velocity at 23:37 = 0.000E+00 km/sec
The TOTAL velocity at 23:37 = 107. km/sec

The TANGENTIAL velocity at 23:42 = 0.000E+00 km/sec
The TOTAL velocity at 23:42 = 106. km/sec

The TANGENTIAL velocity at 23:54 = 0.000E+00 km/sec
The TOTAL velocity at 23:54 = 103. km/sec

The TANGENTIAL velocity at 23:57 = 0.000E+00 km/sec
The TOTAL velocity at 23:57 = 103. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.17
Standard Deviation in start time measurement = 0.172E+02
Value of reduced Chi Squared returned from nllst2 = 0.334E-03
Reduced Chi Squared = 0.233E-02

Chi Squared = 0.117E-01

The probability for exceeding chi square = 0.100E+01

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 = 0.1095E+01

The correlation between the data and the time**2 term = 0.1053E+01

The correlation between the data and the complete equation of motion = 0.9935E+00

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