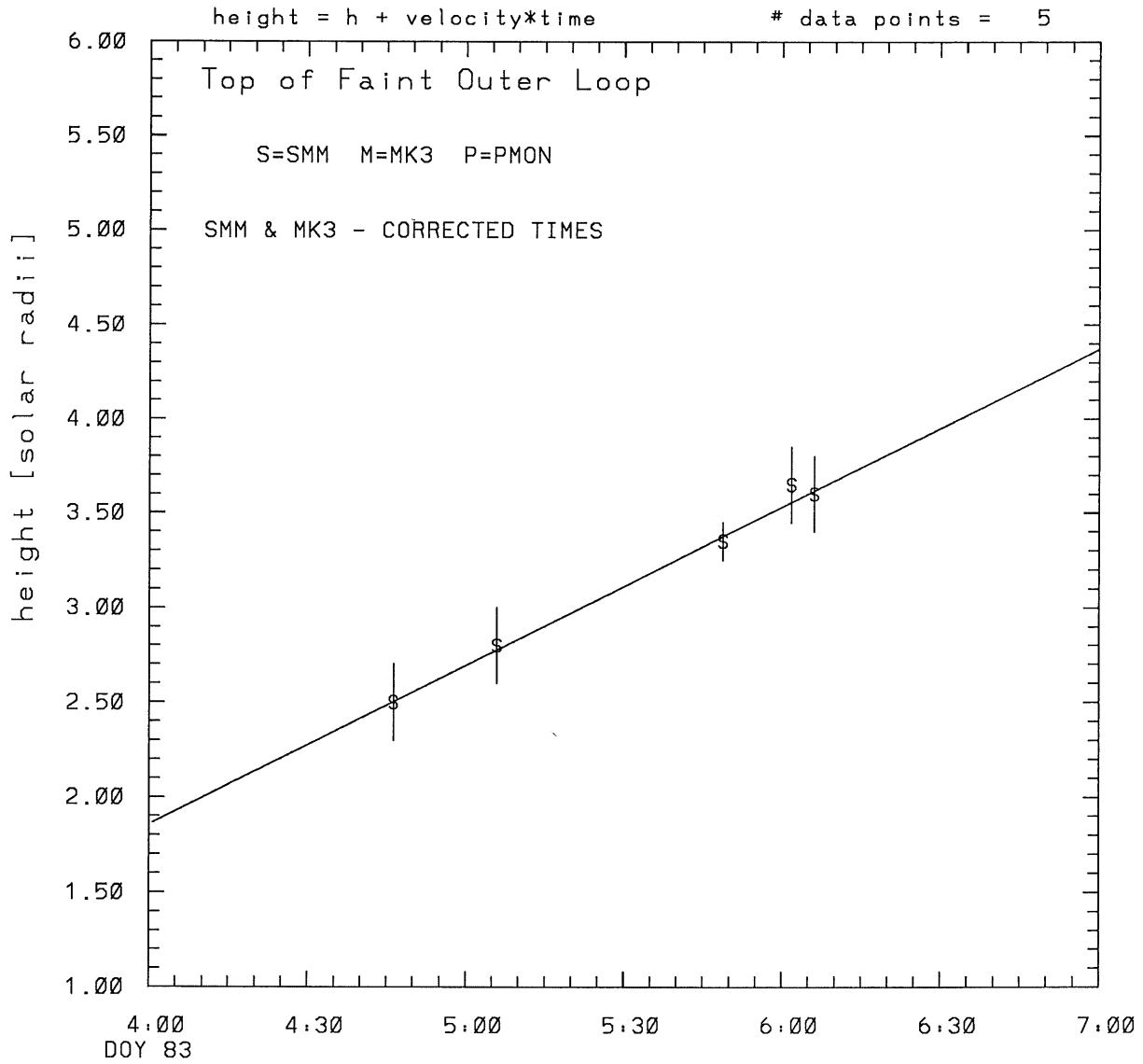
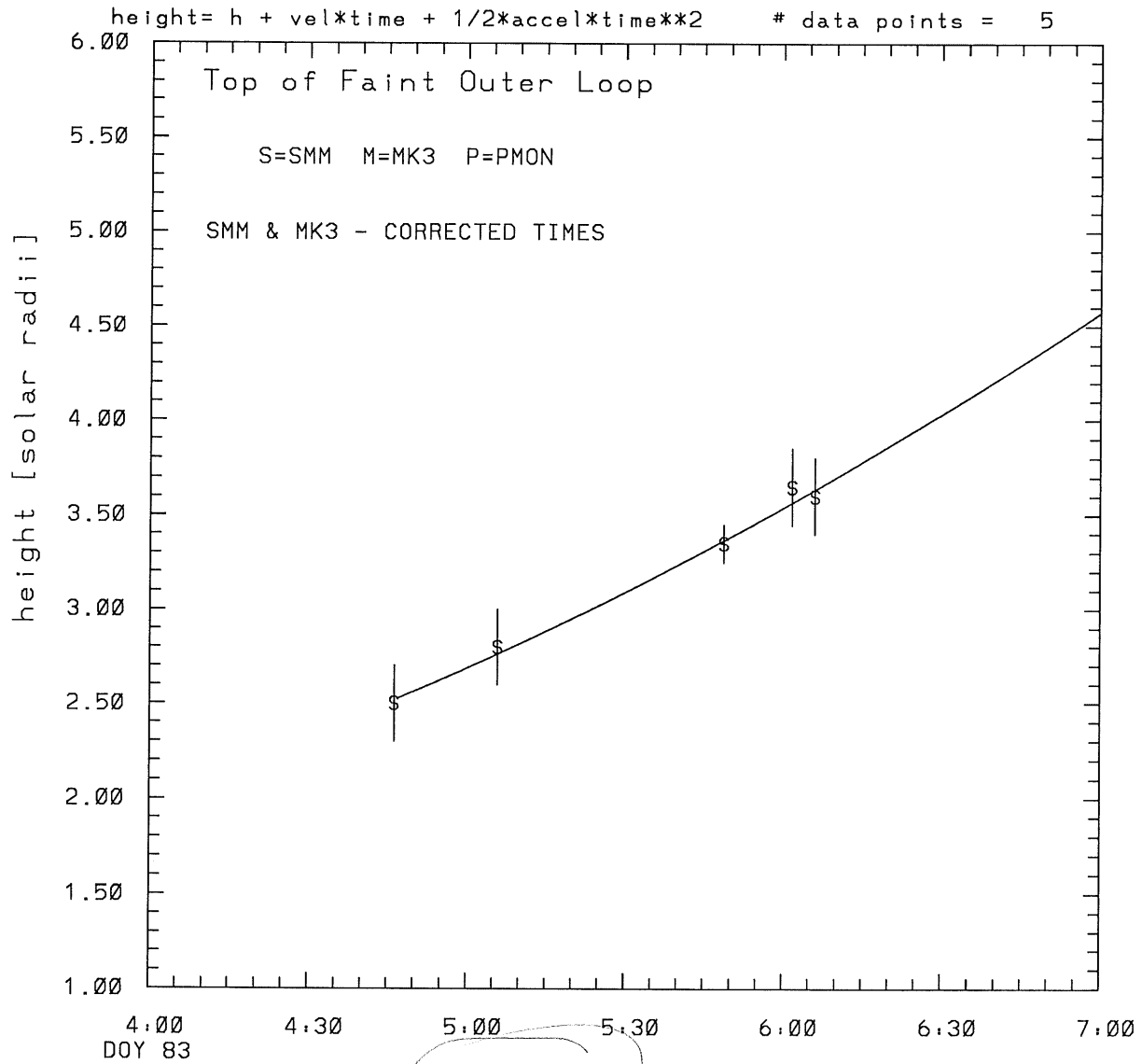


SMM C/P 1980 DOY 83 235 +/- 0 degrees



tstart=DOY 83 2:59 +/- 0.5 [min.]
radial velocity= 162. +/- 9. [km/sec]

SMM C/P 1980 DOY 83 235 +/- 0 degrees



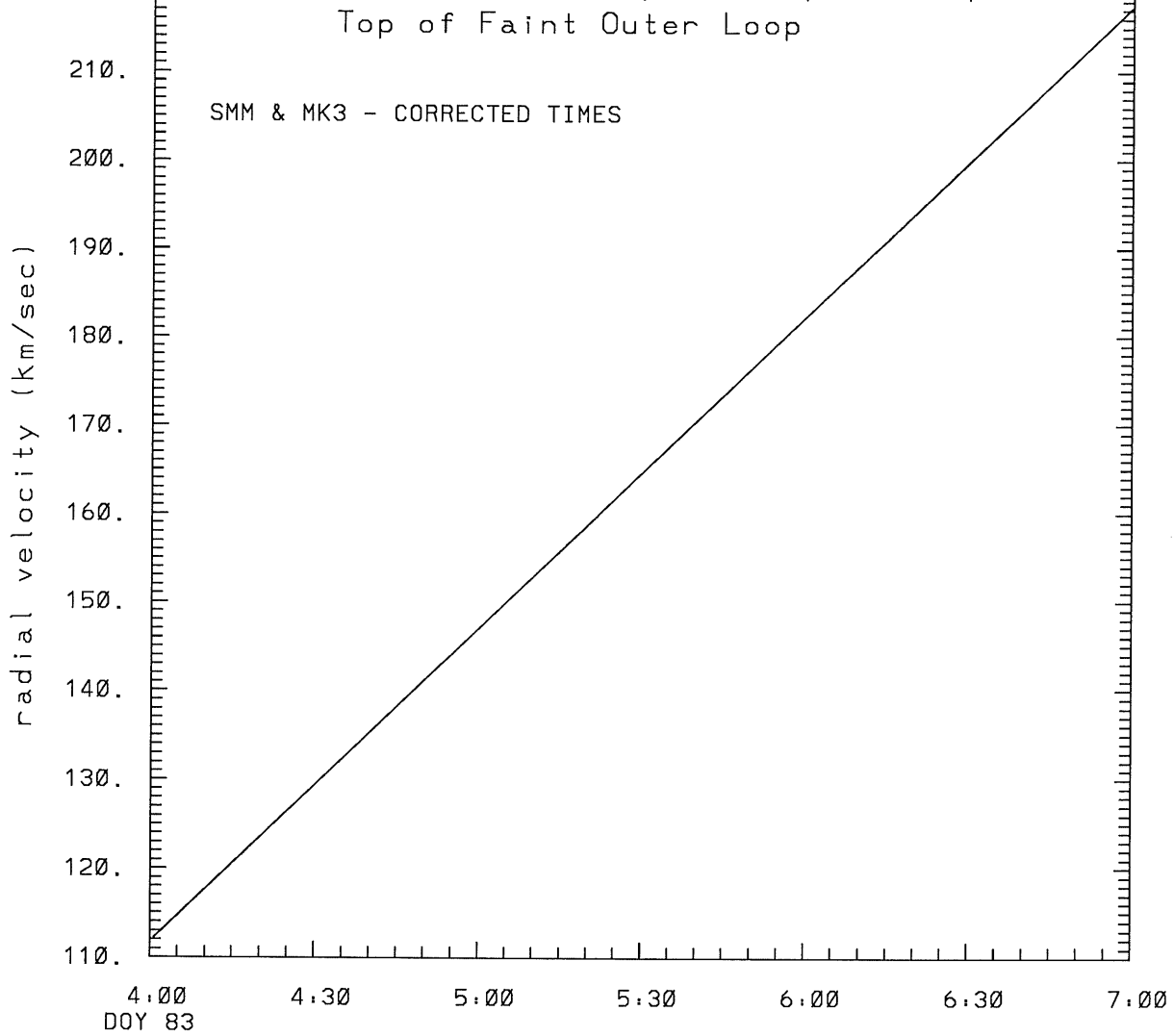
tstart=DOY 82 24.50 from derivative=0

Event begins at 1.10 Solar Radii

radial acceleration = 0.0098 ± 0.0169 [km/sec**2]

SMM C/P 1980 DOY 83 235 +/- 0 degrees

height = $h + vel*time + 1/2*accel*time**2$ # data points = 5



tstart=DOY 82 24:50 from derivative=0

Event begins at 1.10 Solar Radii

radial acceleration=0.979E-02 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in	angle	angle	datatype
1980	83	4:46:17	2.50	+/- 0.20	235.0	+/- 0.5	SMM	
1980	83	5: 5:54	2.80	+/- 0.20	235.0	+/- 0.5	SMM	
1980	83	5:48:50	3.35	+/- 0.10	235.0	+/- 1.0	SMM	
1980	83	6: 1:47	3.65	+/- 0.20	235.0	+/- 1.0	SMM	
1980	83	6: 6: 9	3.60	+/- 0.20	235.0	+/- 1.0	SMM	

Structure being measured:

Top of Faint Outer Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.613E+02 +/- 0.495E+00$ [minutes]

In more convenient units:

Event began at DOY 83 2:59 +/- 0.495E+00 [minutes]

Origin defined at DOY 83 4: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 162. +/- 9. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.186E+01 +/- 0.766E-01 [solar radii]
c(2) = 0.140E-01 +/- 0.745E-03 [radii/min]
c(2) = 0.162E+03 +/- 0.864E+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)= 0.81661E-01 [radii] see Bevington pg. 114

error in c(2)= 0.82427E-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) = 235. +/- 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 4:46 = 0.000E+00 km/sec

The TOTAL velocity at 4:46 = 162. km/sec

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

The TOTAL velocity at 5: 5 = 162. km/sec

The TANGENTIAL velocity at 5:48 = 0.000E+00 km/sec

The TOTAL velocity at 5:48 = 162. km/sec

The TANGENTIAL velocity at 6: 1 = 0.000E+00 km/sec

The TOTAL velocity at 6: 1 = 162. km/sec

The TANGENTIAL velocity at 6: 6 = 0.000E+00 km/sec

The TOTAL velocity at 6: 6 = 162. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.51

Standard Deviation in start time measurement = 0.319E+02

Error in time = 0.72979E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.191E-02

Reduced Chi Squared = 0.133E-01

Chi Squared = 0.400E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.996E+00

The probability that no LINEAR correlation exists between the variables = 0.3464E-03

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	83	4:46:17	2.50	+/- 0.20	235.0	+/- 0.5	SMM
1980	83	5: 5:54	2.80	+/- 0.20	235.0	+/- 0.5	SMM
1980	83	5:48:50	3.35	+/- 0.10	235.0	+/- 1.0	SMM
1980	83	6: 1:47	3.65	+/- 0.20	235.0	+/- 1.0	SMM
1980	83	6: 6: 9	3.60	+/- 0.20	235.0	+/- 1.0	SMM

Structure being measured:

Top of Faint Outer Loop

OUTPUT:

START TIME:

tstart=DOY 82 24:50 from derivative = 0

Event begins at 1.10 Solar Radii

Origin defined at DOY 83 4: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.979E-02 +/- 0.169E-01 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.202E+01 +/- 0.293E+00 [solar radii]
c(2) = 0.963E-02 +/- 0.753E-02 [radii/min]
c(2) = 0.112E+03 +/- 0.873E+02 [km/sec]
c(3) = 0.253E-04 +/- 0.438E-04 [radii/min**2]
c(3) = 0.979E-02 +/- 0.169E-01 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.41579E+00 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.10018E+00 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.10858E-01 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.28545E-02 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.62171E-04 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.17515E-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) = 235. +/- 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 4:46 = 0.000E+00 km/sec

The TOTAL velocity at 4:46 = 139. km/sec

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

The TOTAL velocity at 5: 5 = 150. km/sec

The TANGENTIAL velocity at 5:48 = 0.000E+00 km/sec

The TOTAL velocity at 5:48 = 176. km/sec

The TANGENTIAL velocity at 6: 1 = 0.000E+00 km/sec

The TOTAL velocity at 6: 1 = 183. km/sec

The TANGENTIAL velocity at 6: 6 = 0.000E+00 km/sec

The TOTAL velocity at 6: 6 = 186. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.51

Standard Deviation in start time measurement = 0.319E+02

Value of reduced Chi Squared returned from nllst2 = 0.230E-02

Reduced Chi Squared = 0.191E-01

Chi Squared = 0.382E-01

The probability for exceeding chi square = 0.998E+00

For a second order fit 3 correlation coefficients are given:

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

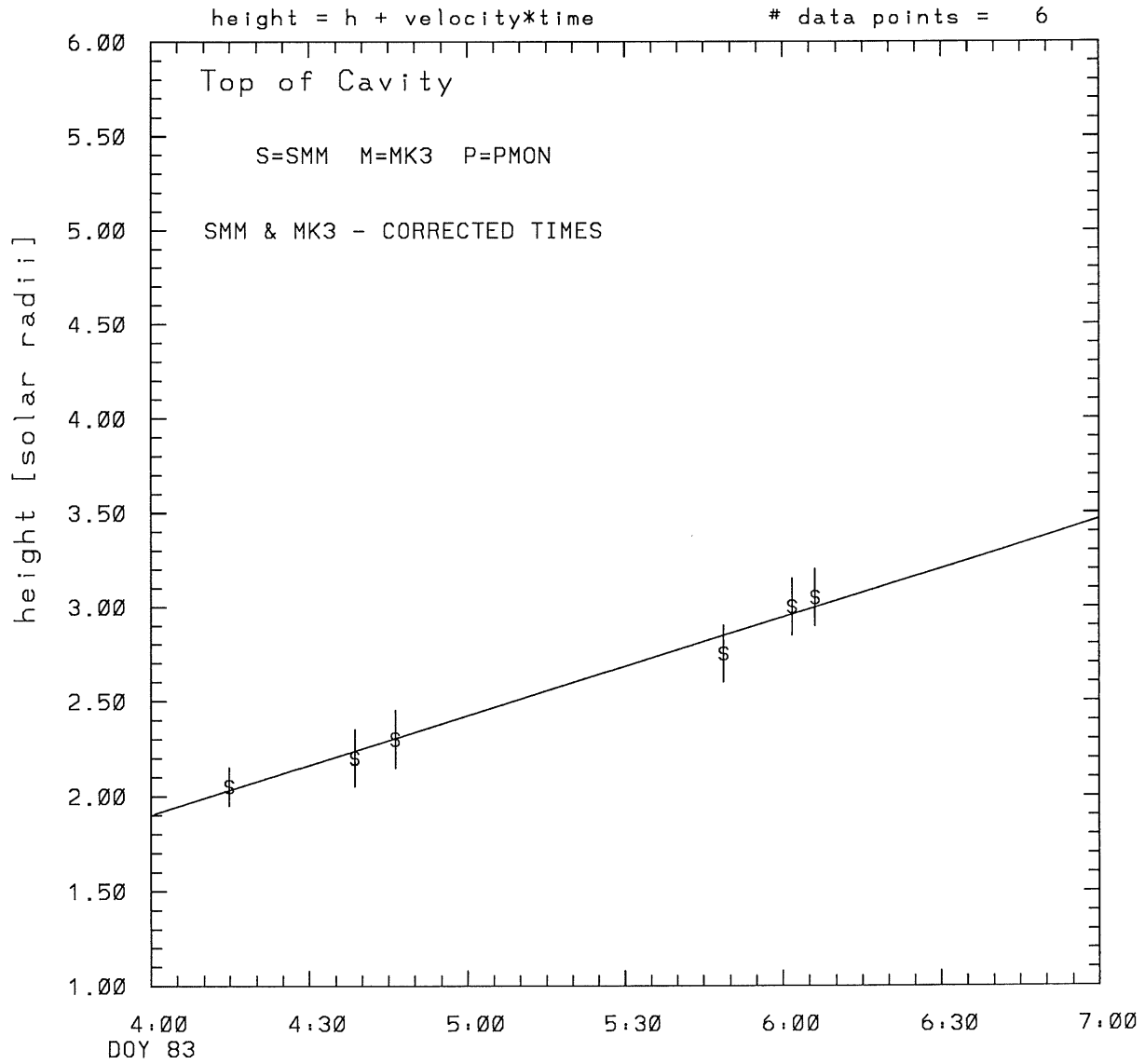
The correlation between the data and the term linear in time = 0.8364E+00

The correlation between the data and the time**2 term = 0.8151E+00

The correlation between the data and the complete equation of motion = 0.9946E+00

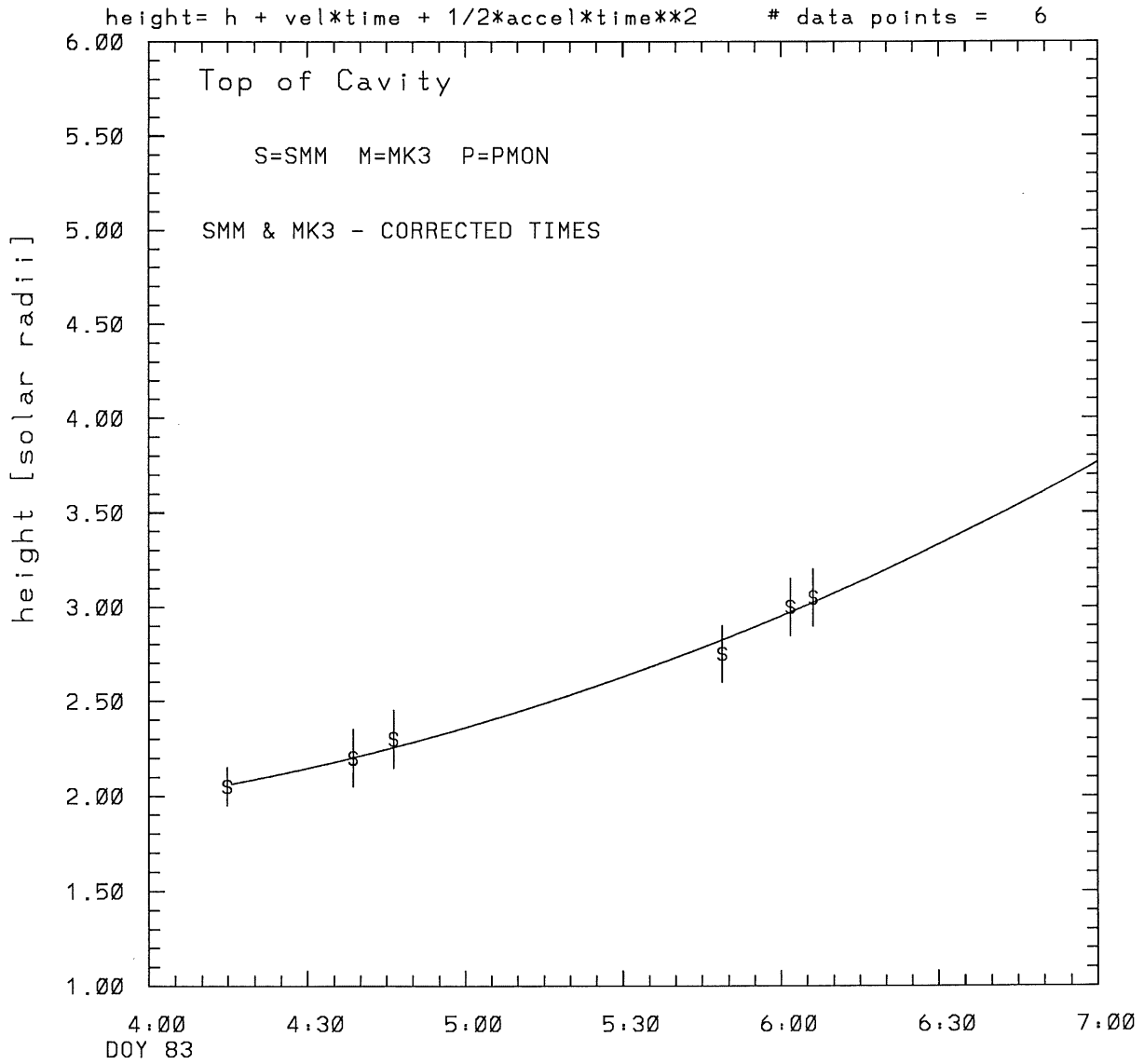
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

SMM C/P 1980 DOY 83 235 +/- 0 degrees



tstart=DOY 83 2:18 +/- 2.1 [min.]
radial velocity= 101. +/- 5. [km/sec]

SMM C/P 1980 DOY 83 235 +/- 0 degrees

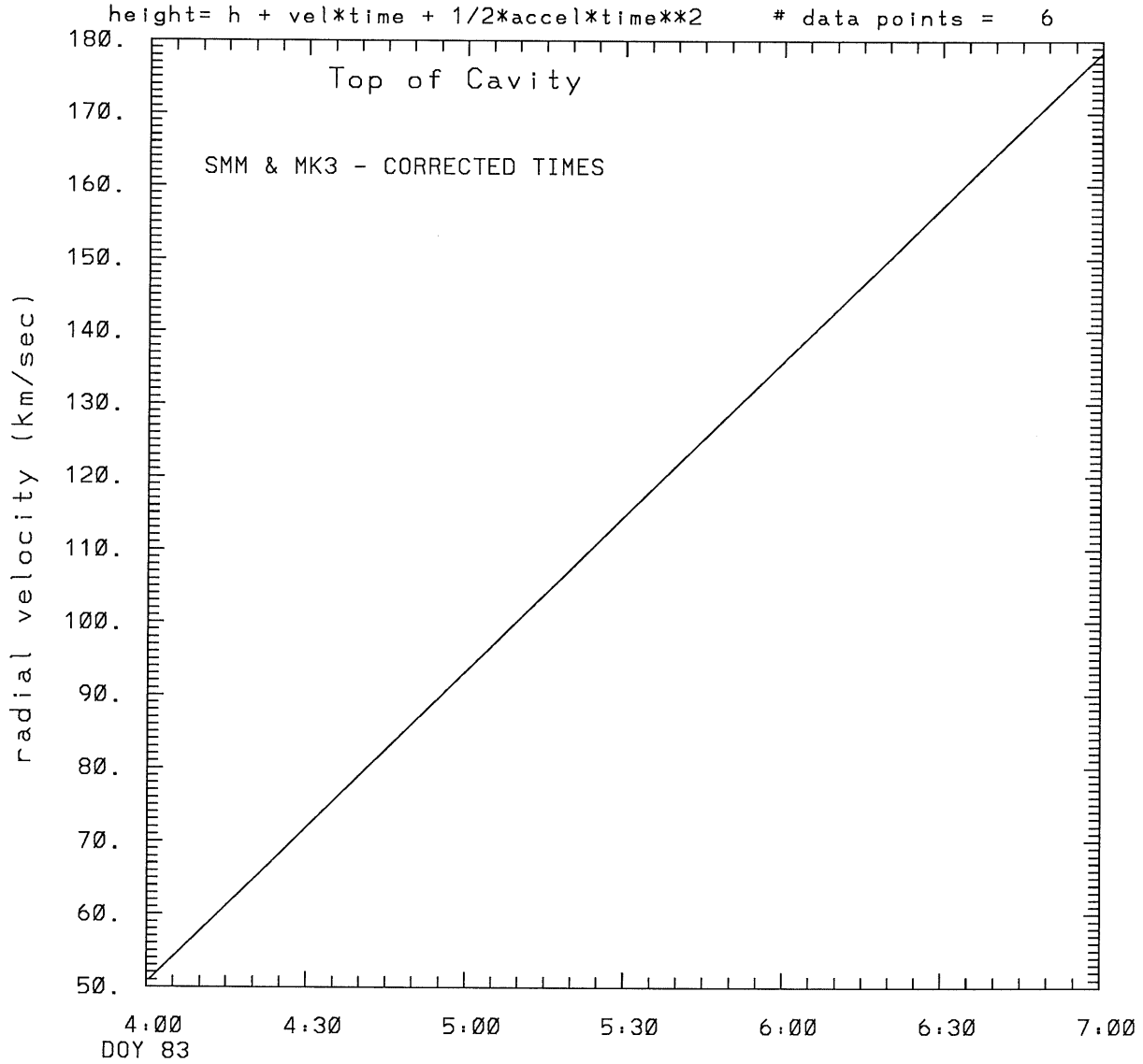


tstart=DOY 83 2.49 from derivative=0

Event begins at 1.83 Solar Radii

radial acceleration = 0.0118 ± 0.0068 [km/sec**2]

SMM C/P 1980 DOY 83 235 +/- 0 degrees



tstart=DOY 83 2.49 from derivative=0
Event begins at 1.83 Solar Radii
radial acceleration= $0.118E-01$ km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in	angle	error in	datatype
1980	83	4:14:49	2.05	+/- 0.10	235.0	+/- 0.5	SMM	
1980	83	4:38:36	2.20	+/- 0.15	235.0	+/- 0.5	SMM	
1980	83	4:46:17	2.30	+/- 0.15	235.0	+/- 0.5	SMM	
1980	83	5:48:50	2.75	+/- 0.15	235.0	+/- 0.5	SMM	
1980	83	6: 1:47	3.00	+/- 0.15	235.0	+/- 1.0	SMM	
1980	83	6: 6: 9	3.05	+/- 0.15	235.0	+/- 1.0	SMM	

Structure being measured:
Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.104E+03 +/- 0.206E+01$ [minutes]
In more convenient units:
Event began at DOY 83 2:18 +/- 0.206E+01 [minutes]

Origin defined at DOY 83 4: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 101. +/- 5. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.190E+01 +/- 0.364E-01 [solar radii]
- c(2) = 0.869E-02 +/- 0.454E-03 [radii/min]
- c(2) = 0.101E+03 +/- 0.526E+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)= 0.50702E-01 [radii] see Bevington pg. 114
error in c(2)= 0.57630E-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) = 235. +/- 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 4:14 = 0.000E+00 km/sec

The TOTAL velocity at 4:14 = 101. km/sec

The TANGENTIAL velocity at 4:38 = 0.000E+00 km/sec

The TOTAL velocity at 4:38 = 101. km/sec

The TANGENTIAL velocity at 4:46 = 0.000E+00 km/sec

The TOTAL velocity at 4:46 = 101. km/sec

The TANGENTIAL velocity at 5:48 = 0.000E+00 km/sec

The TOTAL velocity at 5:48 = 101. km/sec

The TANGENTIAL velocity at 6: 1 = 0.000E+00 km/sec

The TOTAL velocity at 6: 1 = 101. km/sec

The TANGENTIAL velocity at 6: 6 = 0.000E+00 km/sec

The TOTAL velocity at 6: 6 = 101. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.43

Standard Deviation in start time measurement = 0.442E+02

Error in time = 0.14352E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.266E-02

Reduced Chi Squared = 0.164E-01

Chi Squared = 0.654E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.992E+00

The probability that no LINEAR correlation exists between the variables = 0.1022E-03

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

This is a 2 order run

INPUT:

			error in		error in		
year	day	time	radii	radius	angle	angle	datatype
1980	83	4:14:49	2.05 +/-	0.10	235.0 +/-	0.5	SMM
1980	83	4:38:36	2.20 +/-	0.15	235.0 +/-	0.5	SMM
1980	83	4:46:17	2.30 +/-	0.15	235.0 +/-	0.5	SMM
1980	83	5:48:50	2.75 +/-	0.15	235.0 +/-	0.5	SMM
1980	83	6: 1:47	3.00 +/-	0.15	235.0 +/-	1.0	SMM
1980	83	6: 6: 9	3.05 +/-	0.15	235.0 +/-	1.0	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

tstart=DOY 83 2:49 from derivative = 0

Event begins at 1.83 Solar Radii

Origin defined at DOY 83 4: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.118E-01 +/- 0.684E-02 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.199E+01 +/- 0.586E-01 [solar radii]
c(2) = 0.436E-02 +/- 0.253E-02 [radii/min]
c(2) = 0.506E+02 +/- 0.293E+02 [km/sec]
c(3) = 0.306E-04 +/- 0.177E-04 [radii/min**2]
c(3) = 0.118E-01 +/- 0.684E-02 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.93069E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.96385E-02 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.34882E-02 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.33713E-03 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.23373E-04 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.23404E-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) = 235. +/- 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 4:14 = 0.000E+00 km/sec
The TOTAL velocity at 4:14 = 61. km/sec

The TANGENTIAL velocity at 4:38 = 0.000E+00 km/sec
The TOTAL velocity at 4:38 = 78. km/sec

The TANGENTIAL velocity at 4:46 = 0.000E+00 km/sec
The TOTAL velocity at 4:46 = 83. km/sec

The TANGENTIAL velocity at 5:48 = 0.000E+00 km/sec
The TOTAL velocity at 5:48 = 128. km/sec

The TANGENTIAL velocity at 6: 1 = 0.000E+00 km/sec
The TOTAL velocity at 6: 1 = 137. km/sec

The TANGENTIAL velocity at 6: 6 = 0.000E+00 km/sec
The TOTAL velocity at 6: 6 = 140. km/sec

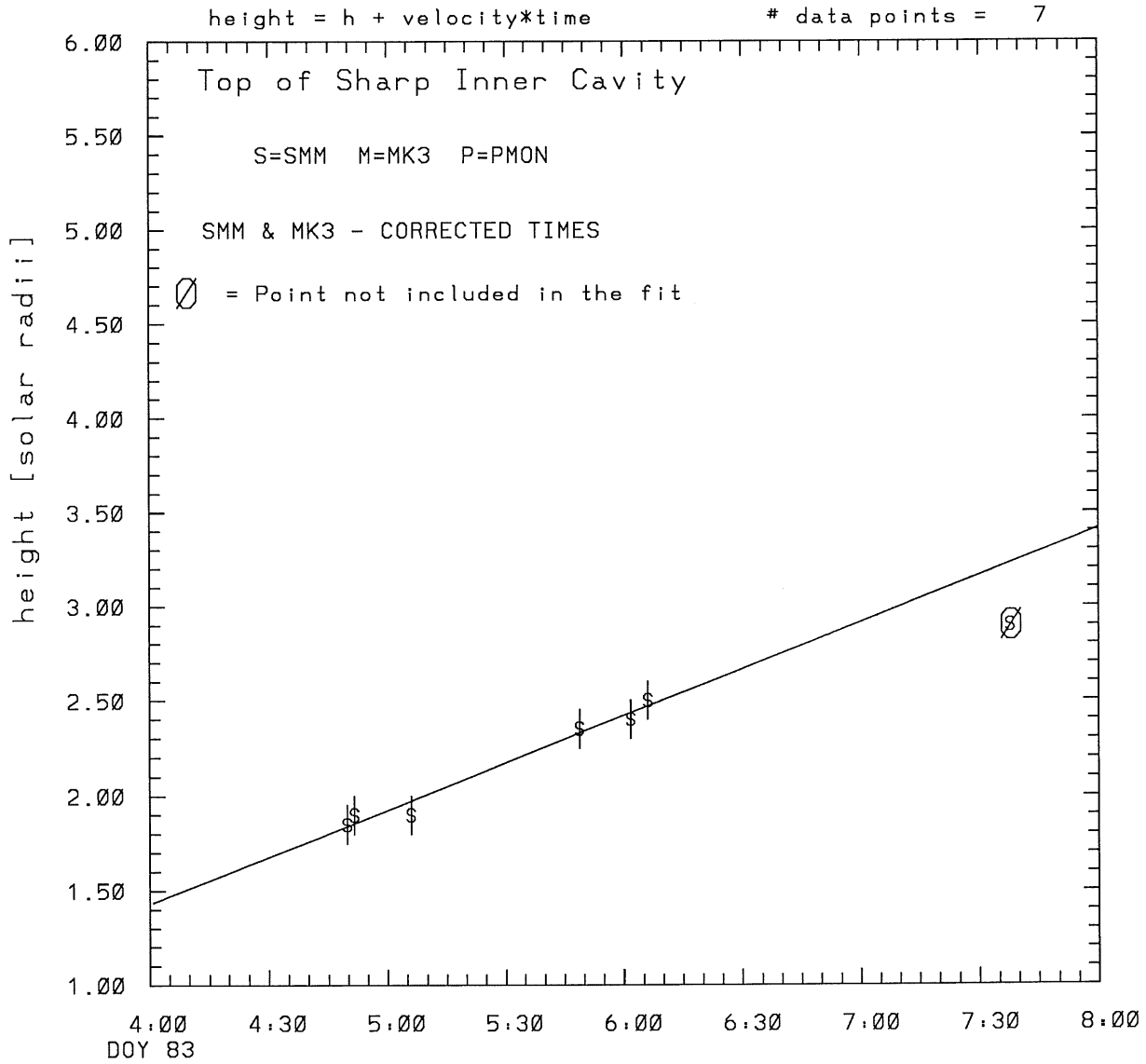
The following info is for estimating goodness of the fit

Fit is ok [ier=1]

- Standard Deviation in the height = 0.43
- Standard Deviation in start time measurement = 0.442E+02
- Value of reduced Chi Squared returned from nllst2 = 0.190E-02
- Reduced Chi Squared = 0.120E-01
- Chi Squared = 0.360E-01
- The probability for exceeding chi square = 0.100E+01

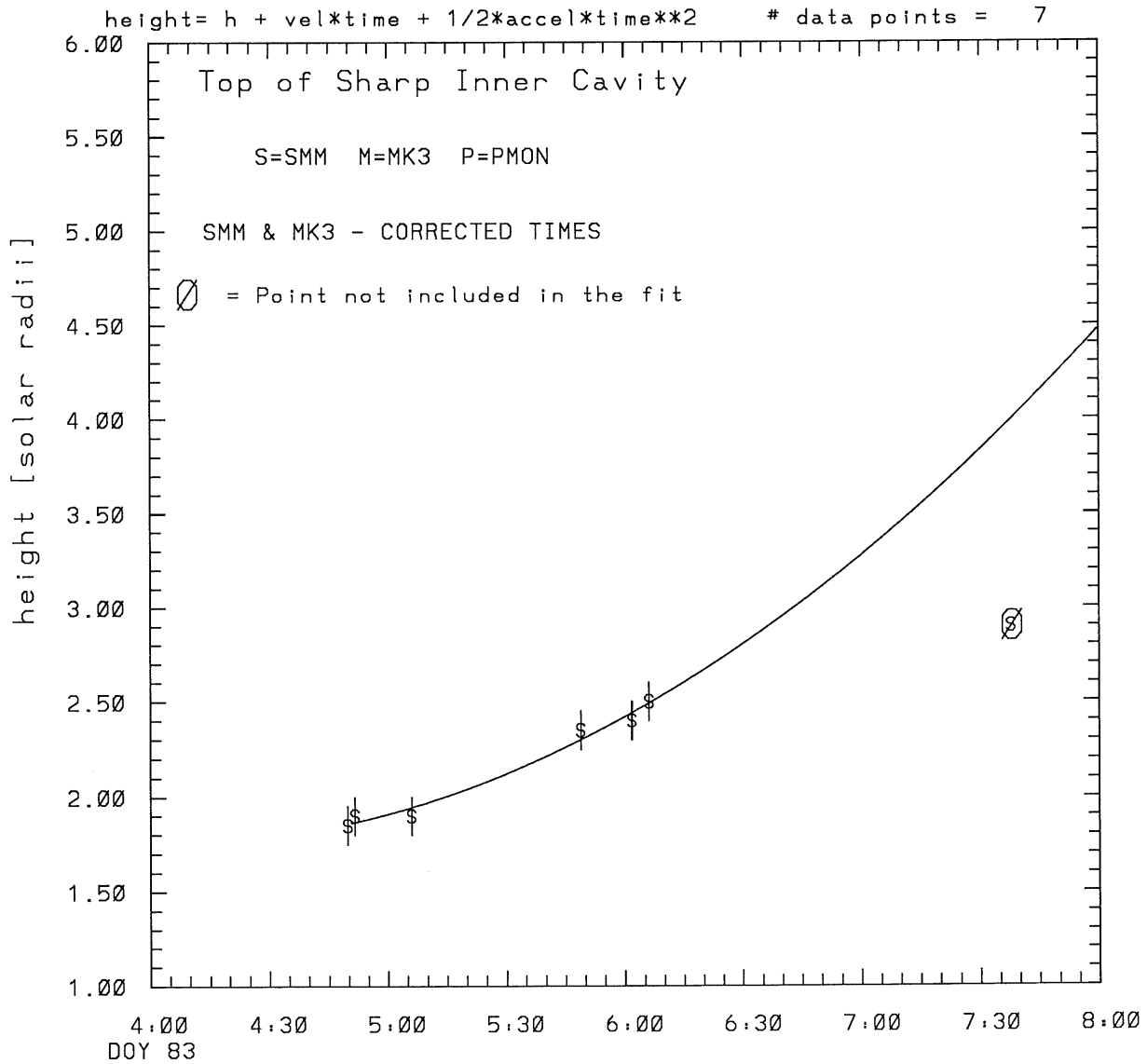
For a second order fit 3 correlation coefficients are given:
(Using equation of motion: $r = a + bt + at^{**2}$)
The correlation between the data and the term linear in time = 0.1070E+01
The correlation between the data and the time**2 term = 0.1019E+01
The correlation between the data and the complete equation of motion = 0.9917E+00
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

SMM C/P 1980 DOY 83 230 +/- 0 degrees



tstart=DOY 83 3.8 +/- 0.9 [min.]
radial velocity= 96. +/- 6. [km/sec]

SMM C/P 1980 DOY 83 230 +/- 0 degrees

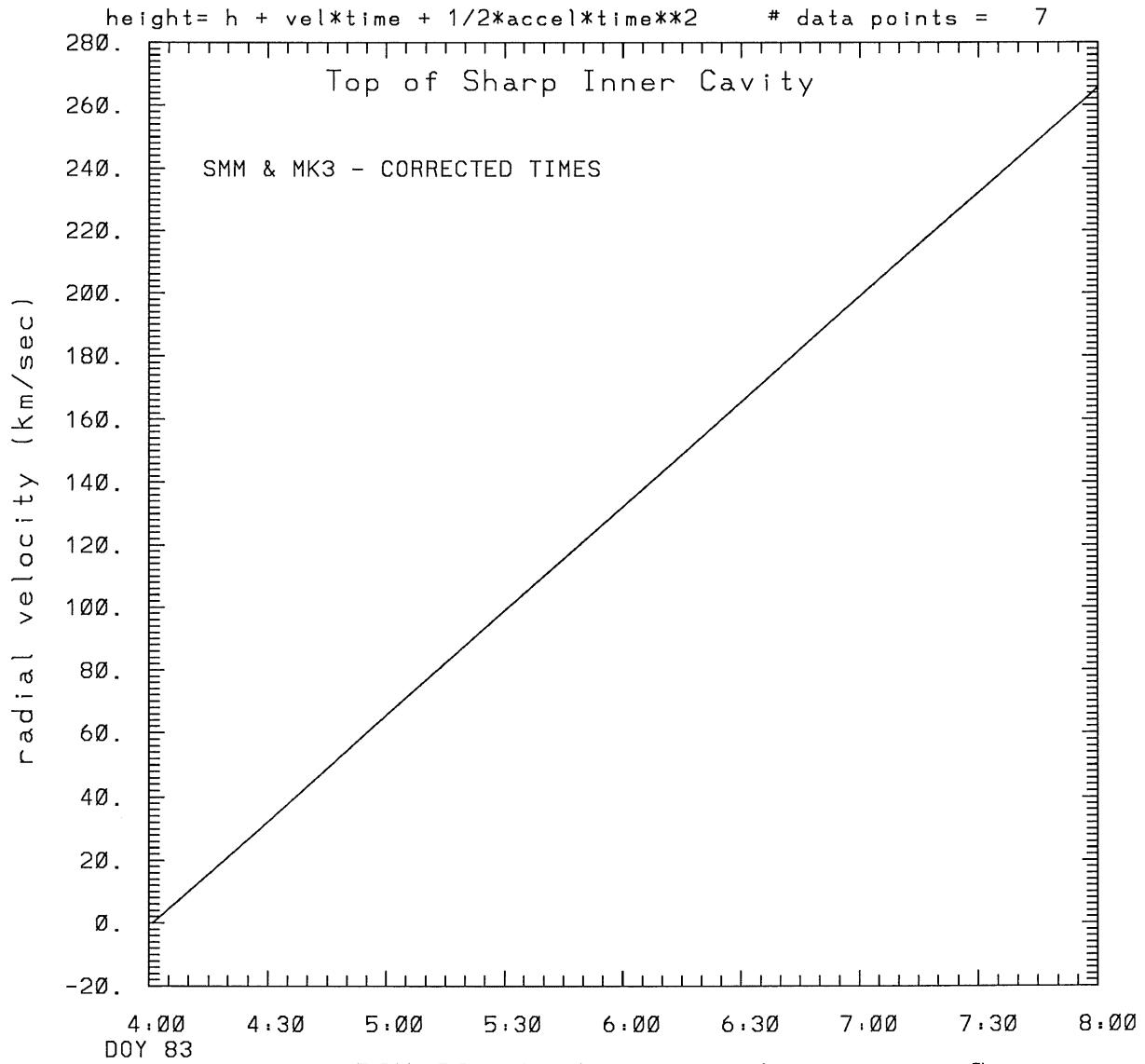


tstart=DOY 83 4: 1 from derivative=0

Event begins at 1.74 Solar Radii

radial acceleration = 0.0185 ± 0.0143 [km/sec**2]

SMM C/P 1980 DOY 83 230 +/- 0 degrees



tstart=DOY 83 4: 1 from derivative=0
Event begins at 1.74 Solar Radii
radial acceleration=0.185E-01 km/sec**2

This is a 1 order run

INPUT:

			error in	error in			
year	day	time	radii	radius	angle	angle	datatype
1980	83	4:49:41	1.85	+/- 0.10	230.0	+/- 0.5	SMM
1980	83	4:51:32	1.90	+/- 0.10	230.0	+/- 0.5	SMM
1980	83	5: 5:54	1.90	+/- 0.10	230.0	+/- 0.5	SMM
1980	83	5:48:50	2.35	+/- 0.10	230.0	+/- 0.5	SMM
1980	83	6: 1:47	2.40	+/- 0.10	230.0	+/- 0.5	SMM
1980	83	6: 6: 9	2.50	+/- 0.10	230.0	+/- 0.5	SMM
1980	83	7:37:44	2.90	-----	230.00	+/- ----	SMM THIS POINT WASN'T USED IN THE FIT.

Structure being measured:

Top of Sharp Inner Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.521E+02 +/- 0.855E+00$ [minutes]

In more convenient units:

Event began at DOY 83 3: 8 +/- 0.855E+00 [minutes]

Origin defined at DOY 83 4: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 96. +/- 6. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.143E+01 +/- 0.481E-01$ [solar radii]

$c(2) = 0.825E-02 +/- 0.516E-03$ [radii/min]

$c(2) = 0.957E+02 +/- 0.599E+01$ [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 $c(1) = 0.12585E+00$ [radii] see Bevington pg. 114

error in $c(2) = 0.10558E-02$ [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) = 230. +/- 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 4:49 = 0.000E+00 km/sec
The TOTAL velocity at 4:49 = 96. km/sec

The TANGENTIAL velocity at 4:51 = 0.000E+00 km/sec
The TOTAL velocity at 4:51 = 96. km/sec

The TANGENTIAL velocity at 5: 5 = 0.000E+00 km/sec
The TOTAL velocity at 5: 5 = 96. km/sec

The TANGENTIAL velocity at 5:48 = 0.000E+00 km/sec
The TOTAL velocity at 5:48 = 96. km/sec

The TANGENTIAL velocity at 6: 1 = 0.000E+00 km/sec
The TOTAL velocity at 6: 1 = 96. km/sec

The TANGENTIAL velocity at 6: 6 = 0.000E+00 km/sec
The TOTAL velocity at 6: 6 = 96. km/sec

The TANGENTIAL velocity at 7:37 = 0.000E+00 km/sec
The TOTAL velocity at 7:37 = 96. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.39
Standard Deviation in start time measurement = 0.546E+02
Error in time = 0.41357E+02 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.196E-02
Reduced Chi Squared = 0.156E+00
Chi Squared = 0.778E+00
The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.979E+00
The probability that no LINEAR correlation exists between the variables = 0.1161E-03
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

This is a 2 order run

INPUT:

			error in	error in			
year	day	time	radii	radius	angle	angle	datatype
1980	83	4:49:41	1.85 +/- 0.10	230.0 +/- 0.5			SMM
1980	83	4:51:32	1.90 +/- 0.10	230.0 +/- 0.5			SMM
1980	83	5: 5:54	1.90 +/- 0.10	230.0 +/- 0.5			SMM
1980	83	5:48:50	2.35 +/- 0.10	230.0 +/- 0.5			SMM
1980	83	6: 1:47	2.40 +/- 0.10	230.0 +/- 0.5			SMM
1980	83	6: 6: 9	2.50 +/- 0.10	230.0 +/- 0.5			SMM
1980	83	7:37:44	2.90 -----	230.00 +/- ----			SMM THIS POINT WASN'T USED IN THE FIT.

Structure being measured:

Top of Sharp Inner Cavity

OUTPUT:

START TIME:

tstart=DOY 83 4: 1 from derivative = 0

Event begins at 1.74 Solar Radii

Origin defined at DOY 83 4: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.185E-01 +/- 0.143E-01 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.175E+01 +/- 0.247E+00 [solar radii]
c(2) = -0.126E-03 +/- 0.646E-02 [radii/min]
c(2) = -0.146E+01 +/- 0.749E+02 [km/sec]
c(3) = 0.479E-04 +/- 0.369E-04 [radii/min**2]
c(3) = 0.185E-01 +/- 0.143E-01 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.99937E+00 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.94360E-01 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.17790E-01 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.26305E-02 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.66849E-04 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.14959E-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) = 230. +/- 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 4:49 = 0.000E+00 km/sec

The TOTAL velocity at 4:49 = 54. km/sec

The TANGENTIAL velocity at 4:51 = 0.000E+00 km/sec

The TOTAL velocity at 4:51 = 56. km/sec

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

The TOTAL velocity at 5: 5 = 72. km/sec

The TANGENTIAL velocity at 5:48 = 0.000E+00 km/sec

The TOTAL velocity at 5:48 = 120. km/sec

The TANGENTIAL velocity at 6: 1 = 0.000E+00 km/sec

The TOTAL velocity at 6: 1 = 134. km/sec

The TANGENTIAL velocity at 6: 6 = 0.000E+00 km/sec

The TOTAL velocity at 6: 6 = 139. km/sec

The TANGENTIAL velocity at 7:37 = 0.000E+00 km/sec

The TOTAL velocity at 7:37 = 241. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.39

Standard Deviation in start time measurement = 0.546E+02

Value of reduced Chi Squared returned from nllst2 = 0.176E-02

Reduced Chi Squared = 0.209E+01

Chi Squared = 0.835E+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 = 0.6712E+00

The correlation between the data and the time**2 term = 0.5004E+00

The correlation between the data and the complete equation of motion = $0.1182E+01$
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]