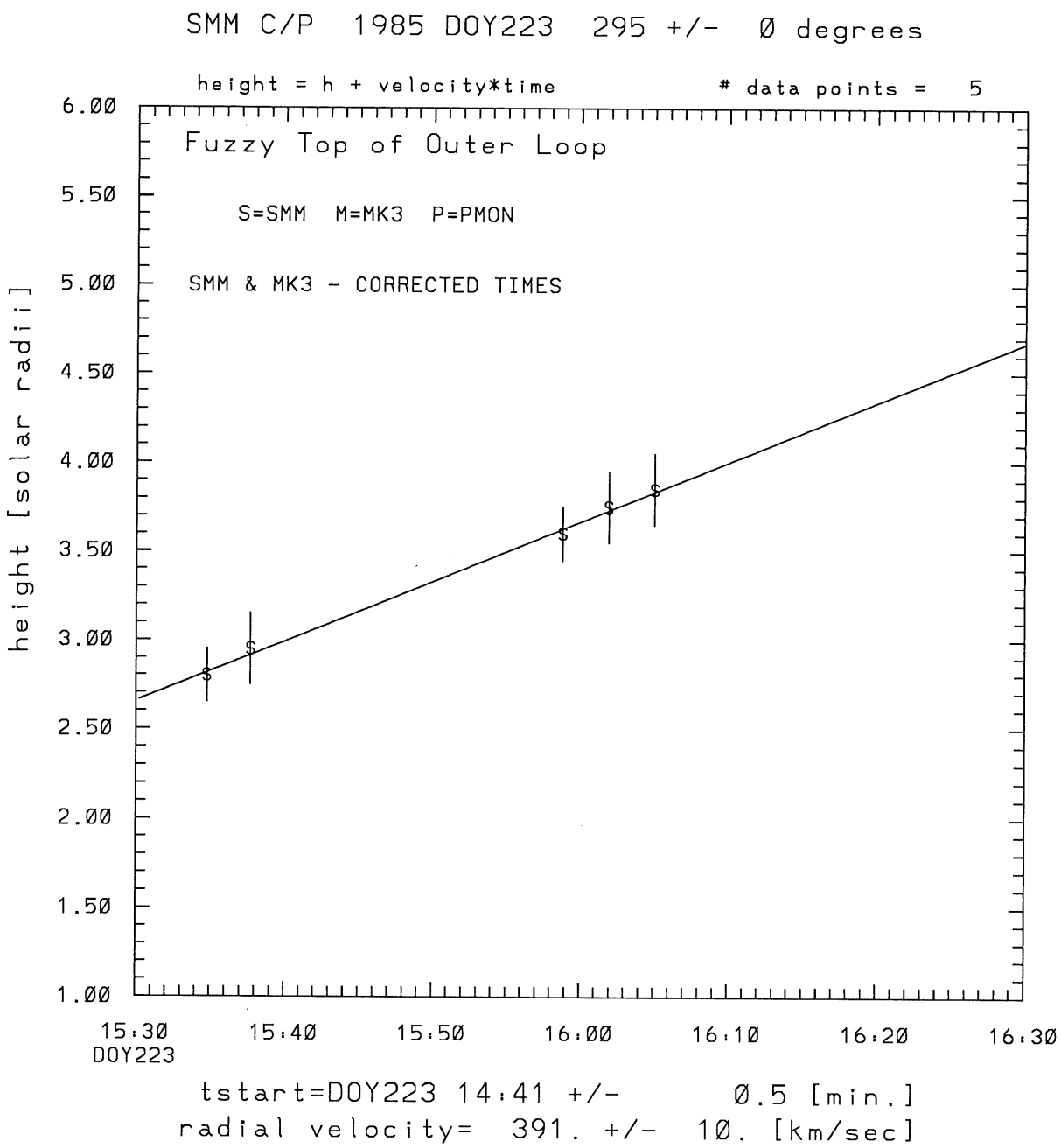
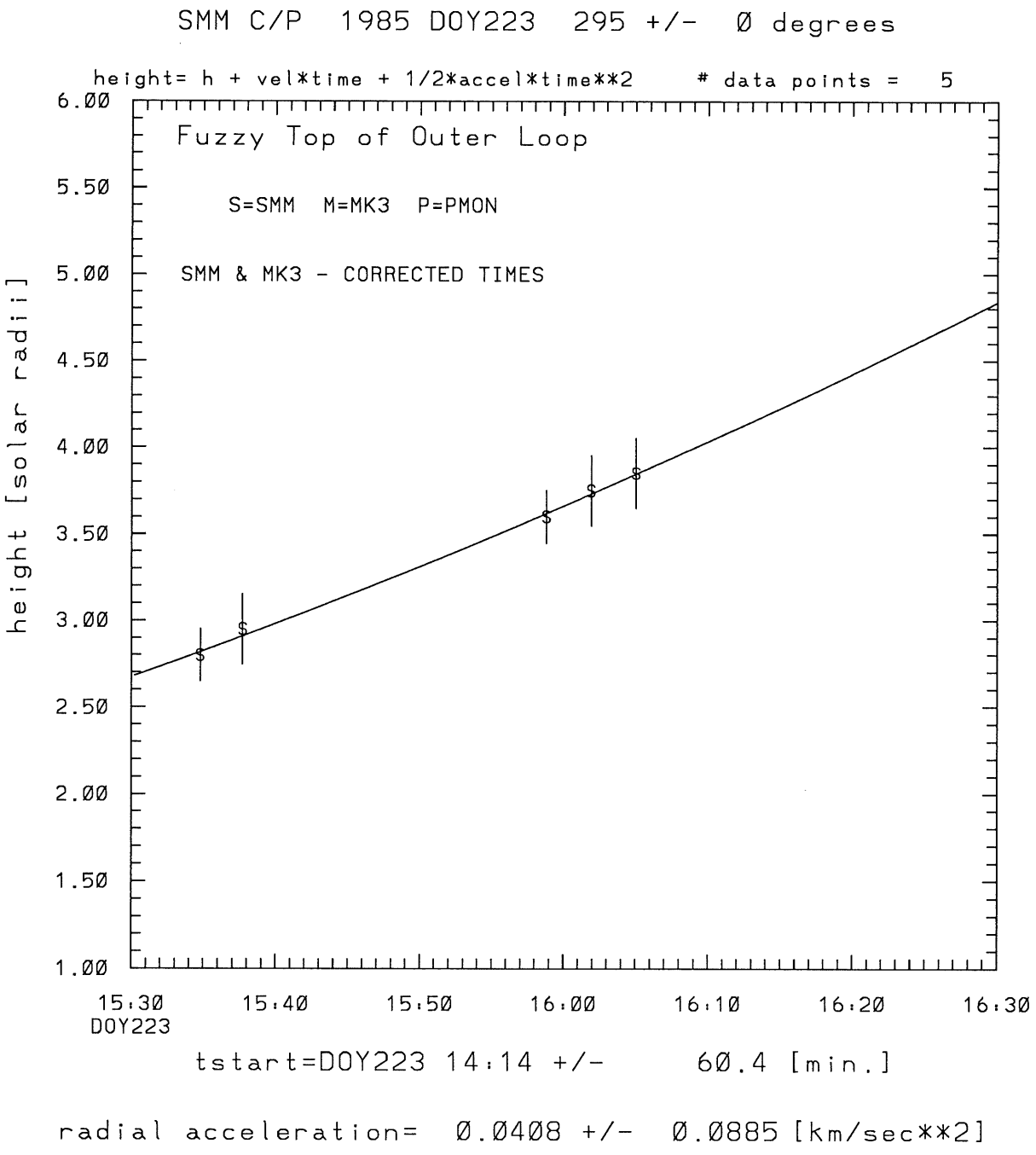
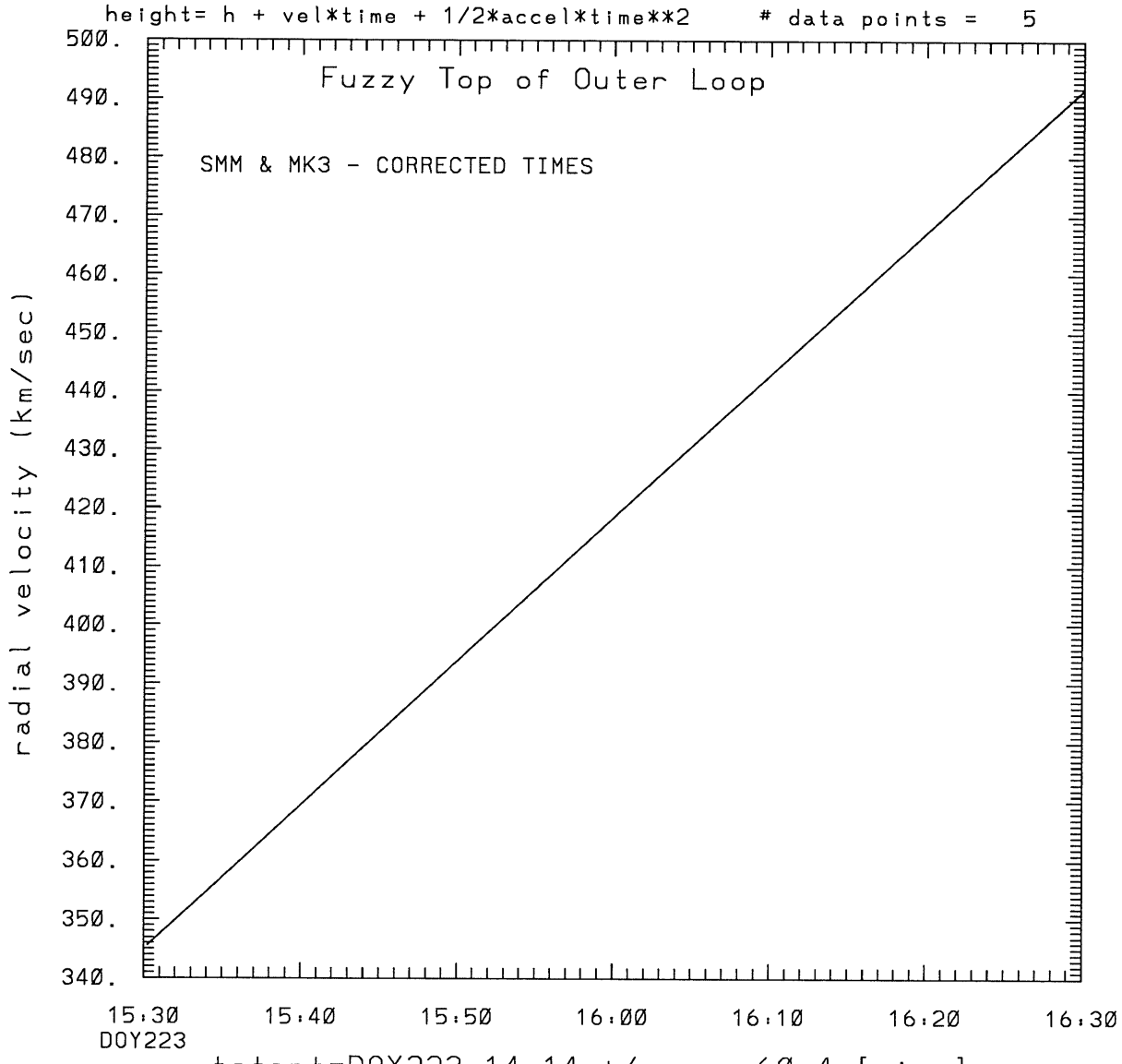

SMM C/P 1985 DOY223 295 +/- Ø degrees
height = h + velocity*time
# data points = 5
Fuzzy Top of Outer Loop
S=SMM M=MK3 P=PMON
SMM & MK3 - CORRECTED TIMES
height [solar radii]
6.ØØ
5.5Ø
5.ØØ
4.5Ø
4.ØØ
3.5Ø
3.ØØ
2.5Ø
2.ØØ
1.5Ø
1.ØØ
15:3Ø
DOY223
15:4Ø
15:5Ø
16:ØØ
16:1Ø
16:2Ø
16:3Ø
tstart=DOY223 14:41 +/- Ø.5 [min.]
radial velocity= 391. +/- 1Ø. [km/sec]


SMM C/P 1985 DOY223 295 +/- Ø degrees
height= h + vel*time + 1/2*accel*time**2 # data points = 5
Fuzzy Top of Outer Loop
S=SMM M=MK3 P=PMON
SMM & MK3 - CORRECTED TIMES
height [solar radii]
6.ØØ
5.5Ø
5.ØØ
4.5Ø
4.ØØ
3.5Ø
3.ØØ
2.5Ø
2.ØØ
1.5Ø
1.ØØ
15:3Ø
DOY223
15:4Ø
15:5Ø
16:ØØ
16:1Ø
16:2Ø
16:3Ø
tstart=DOY223 14:14 +/- 6Ø.4 [min.]
radial acceleration= Ø.Ø4Ø8 +/- Ø.Ø885 [km/sec**2]

SMM C/P 1985 DOY223 295 +/- Ø degrees



tstart=DOY223 14:14 +/- 60.4 [min.]

radial acceleration=Ø.4Ø8E-Ø1 km/sec**2

****
This is a 1 order run
****

****
INPUT:
****

year	doy	time	radii	error in radius	angle	error in angle	datatype
1985	223	15:34:46	2.80	+/- 0.15	295.0	+/- 0.5	SMM
1985	223	15:37:42	2.95	+/- 0.20	295.0	+/- 0.5	SMM
1985	223	15:58:49	3.60	+/- 0.15	295.0	+/- 1.0	SMM
1985	223	16: 1:55	3.75	+/- 0.20	295.0	+/- 1.0	SMM
1985	223	16: 5: 2	3.85	+/- 0.20	295.0	+/- 1.0	SMM

****
Structure being measured:
Fuzzy Top of Outer Loop
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.490E+02 +/- 0.541E+00 [minutes]
In more convenient units:
Event began at DOY 223 14:41 +/- 0.541E+00 [minutes]

Origin defined at DOY223 15:30

RADIAL INFORMATION:

RADIAL VELOCITY = 391. +/- 10. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.265E+01 +/- 0.218E-01 [solar radii]
c(2) = 0.337E-01 +/- 0.903E-03 [radii/min]
c(2) = 0.391E+03 +/- 0.105E+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)= 0.26962E-01 [radii] see Bevington pg. 114
error in c(2)= 0.10728E-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) = 295. +/- 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 15:34 = 0.000E+00 km/sec
The TOTAL velocity at 15:34 = 391. km/sec

The TANGENTIAL velocity at 15:37 = 0.000E+00 km/sec
The TOTAL velocity at 15:37 = 391. km/sec

The TANGENTIAL velocity at 15:58 = 0.000E+00 km/sec
The TOTAL velocity at 15:58 = 391. km/sec

The TANGENTIAL velocity at 16: 1 = 0.000E+00 km/sec
The TOTAL velocity at 16: 1 = 391. km/sec

The TANGENTIAL velocity at 16: 5 = 0.000E+00 km/sec
The TOTAL velocity at 16: 5 = 391. km/sec

****
The following info is for estimating goodness of the fit
****

Fit is ok [ier=1]

Standard Deviation in the height = 0.48
Standard Deviation in start time measurement = 0.128E+02
Error in time = 0.15734E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.665E-03
Reduced Chi Squared = 0.251E-02
Chi Squared = 0.752E-02
The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.999E+00
The probability that no LINEAR correlation exists between the variables = 0.6371E-04
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
1985 223	15:34:46	2.80	+/- 0.15	295.0	+/- 0.5	SMM
1985 223	15:37:42	2.95	+/- 0.20	295.0	+/- 0.5	SMM
1985 223	15:58:49	3.60	+/- 0.15	295.0	+/- 1.0	SMM
1985 223	16: 1:55	3.75	+/- 0.20	295.0	+/- 1.0	SMM
1985 223	16: 5: 2	3.85	+/- 0.20	295.0	+/- 1.0	SMM

****
Structure being measured:
Fuzzy Top of Outer Loop
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.777E+02 +/- 0.604E+02 [minutes]
In more convenient units:
Event began at DOY 223 14:14 +/- 0.604E+02 [minutes]

Origin defined at DOY223 15:30

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.408E-01 +/- 0.885E-01 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.267E+01 +/- 0.501E-01 [solar radii]
c(2) = 0.297E-01 +/- 0.871E-02 [radii/min]
c(2) = 0.345E+03 +/- 0.101E+03 [km/sec]
c(3) = 0.105E-03 +/- 0.229E-03 [radii/min**2]
c(3) = 0.408E-01 +/- 0.885E-01 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.70118E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.21846E-01 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.11653E-01 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.33335E-02 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.29854E-03 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.81172E-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) = 295. +/- 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 15:34 = 0.000E+00 km/sec
The TOTAL velocity at 15:34 = 357. km/sec

The TANGENTIAL velocity at 15:37 = 0.000E+00 km/sec
The TOTAL velocity at 15:37 = 364. km/sec

The TANGENTIAL velocity at 15:58 = 0.000E+00 km/sec
The TOTAL velocity at 15:58 = 415. km/sec

The TANGENTIAL velocity at 16: 1 = 0.000E+00 km/sec
The TOTAL velocity at 16: 1 = 423. km/sec

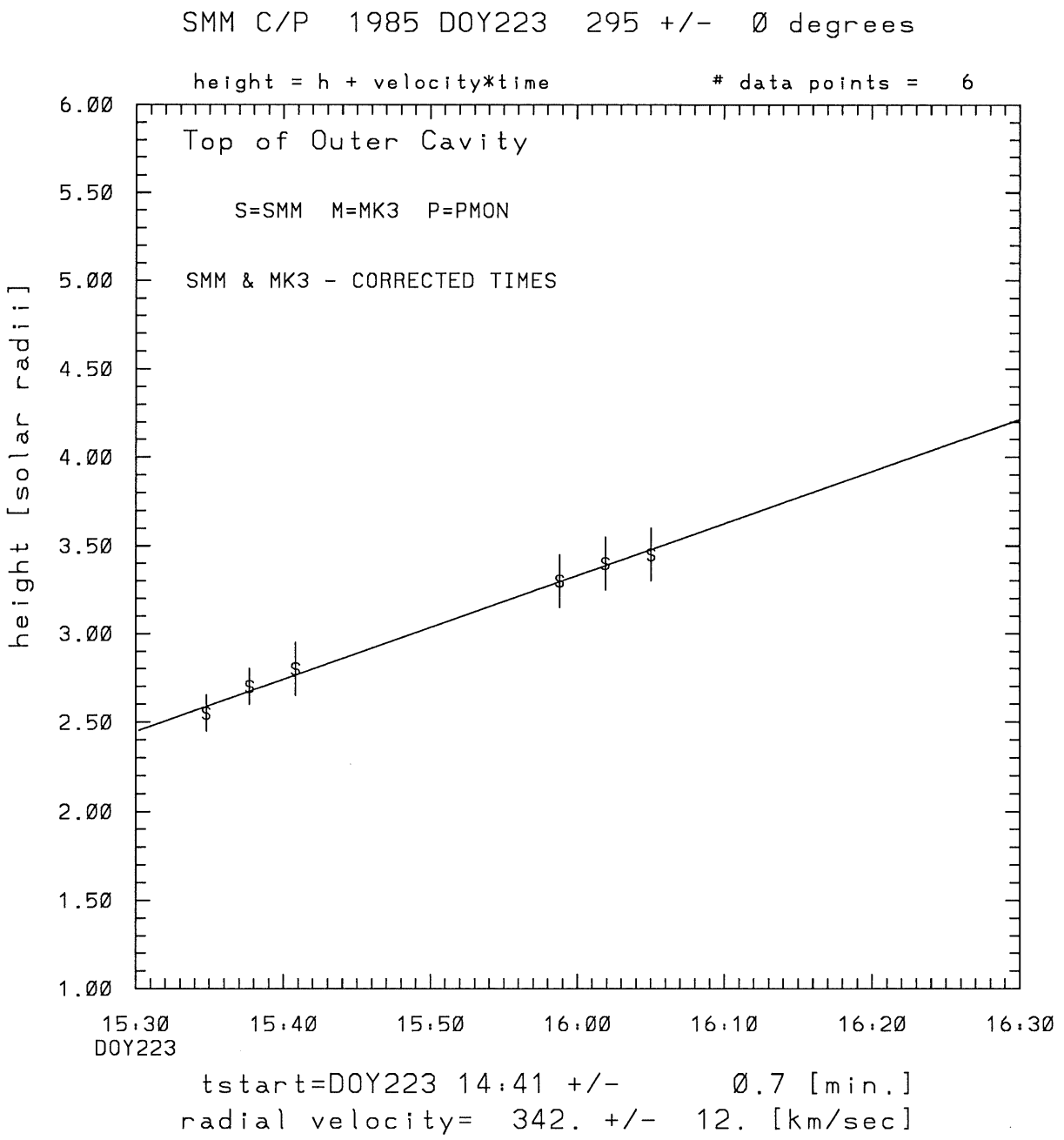
The TANGENTIAL velocity at 16: 5 = 0.000E+00 km/sec
The TOTAL velocity at 16: 5 = 431. km/sec

****
The following info is for estimating goodness of the fit
****

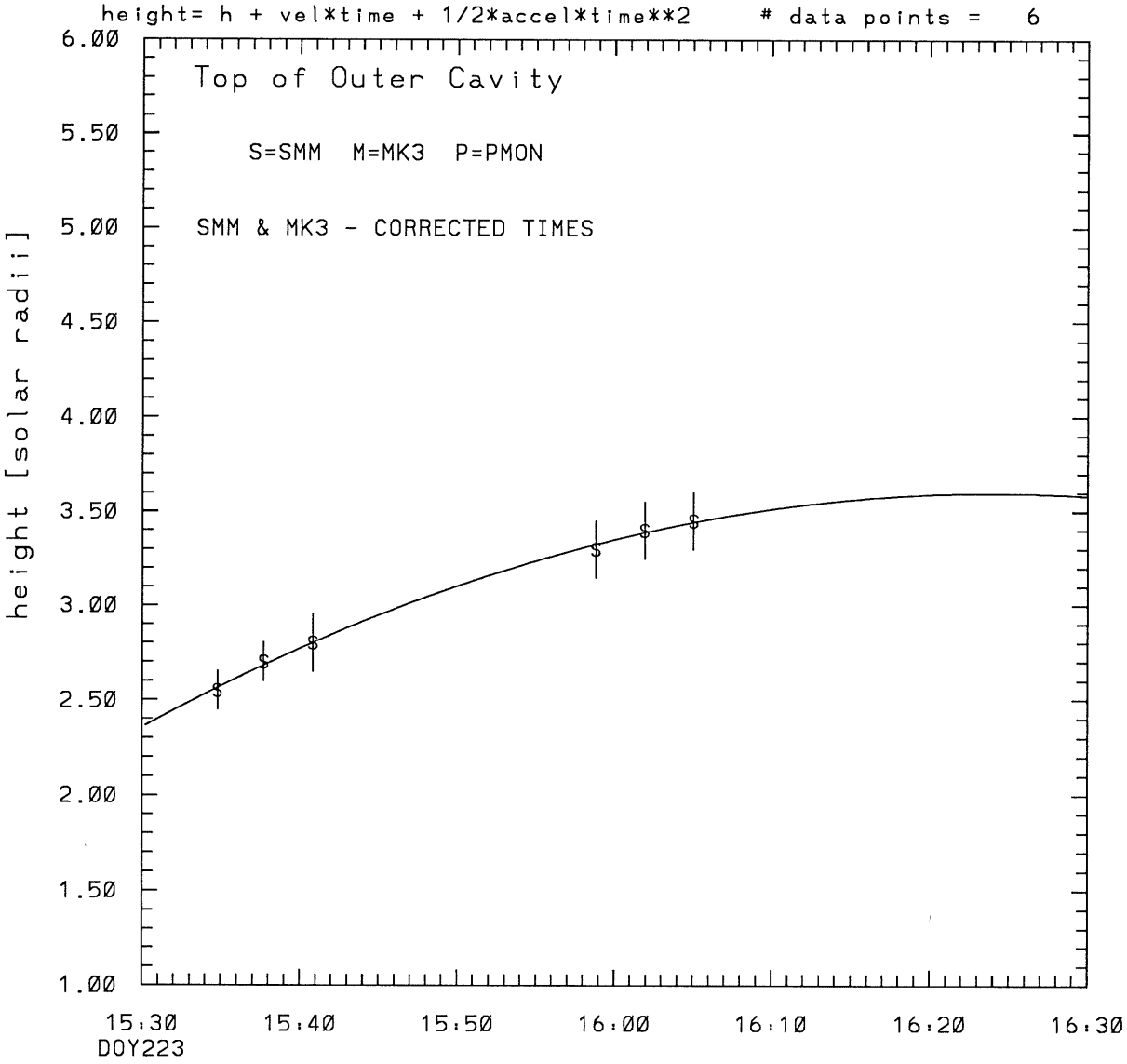
Fit is ok [ier=1]

Standard Deviation in the height = 0.48
Standard Deviation in start time measurement = 0.128E+02
Value of reduced Chi Squared returned from nllst2 = 0.828E-03
Reduced Chi Squared = 0.316E-02
Chi Squared = 0.631E-02
The probability for exceeding chi square = 0.999E+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 = 0.1002E+01
The correlation between the data and the time**2 term = 0.9727E+00
The correlation between the data and the complete equation of motion = 0.9960E+00
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

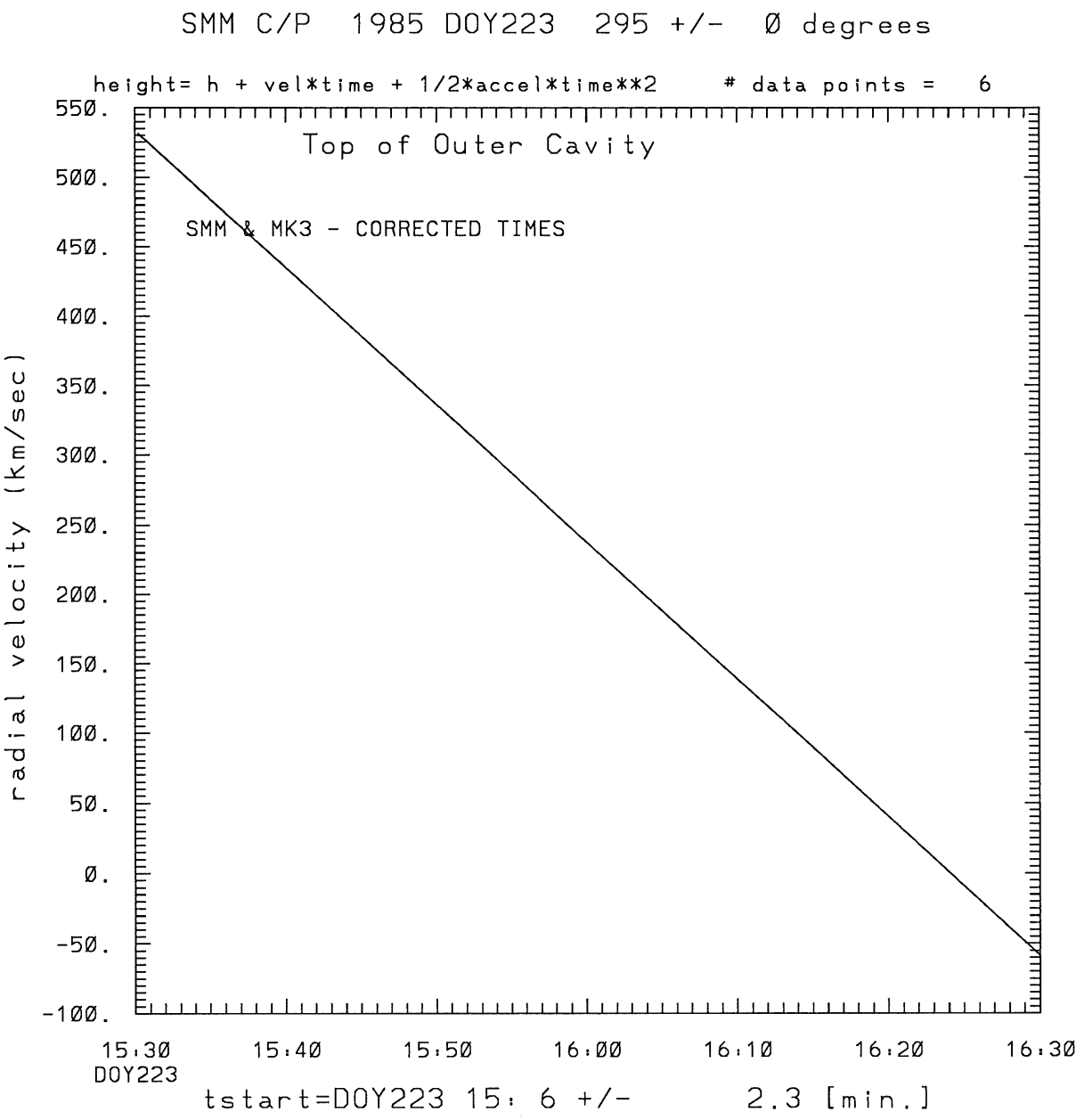

SMM C/P 1985 DOY223 295 +/- Ø degrees
height = h + velocity*time
# data points = 6
Top of Outer Cavity
S=SMM M=MK3 P=PMON
SMM & MK3 - CORRECTED TIMES
height [solar radii]
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
15:30
DOY223
15:40
15:50
16:00
16:10
16:20
16:30
tstart=DOY223 14:41 +/- Ø.7 [min.]
radial velocity= 342. +/- 12. [km/sec]

SMM C/P 1985 DOY223 295 +/- Ø degrees



tstart=DOY223 15: 6 +/- 2.3 [min.]

radial acceleration= -Ø.1644 +/- Ø.Ø513 [km/sec**2]


SMM C/P 1985 DOY223 295 +/- Ø degrees
height= h + vel*time + 1/2*accel*time**2 # data points = 6
Top of Outer Cavity
SMM & MK3 - CORRECTED TIMES
radial velocity (km/sec)
550.
500.
450.
400.
350.
300.
250.
200.
150.
100.
50.
Ø.
-50.
-100.
15:30
DOY223
15:40
15:50
16:00
16:10
16:20
16:30
tstart=DOY223 15: 6 +/- 2.3 [min.]
radial acceleration=-.164E+ØØ km/sec**2

****
This is a 1 order run
****

****
INPUT:
****

year doy	time	radii	error in radius	angle	error in angle	datatype
1985 223	15:34:46	2.55	+/- 0.10	295.0	+/- 0.5	SMM
1985 223	15:37:42	2.70	+/- 0.10	295.0	+/- 0.5	SMM
1985 223	15:40:49	2.80	+/- 0.15	295.0	+/- 0.5	SMM
1985 223	15:58:49	3.30	+/- 0.15	295.0	+/- 1.0	SMM
1985 223	16: 1:55	3.40	+/- 0.15	295.0	+/- 1.0	SMM
1985 223	16: 5: 2	3.45	+/- 0.15	295.0	+/- 1.0	SMM

****
Structure being measured:
Top of Outer Cavity
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.491E+02 +/- 0.745E+00 [minutes]
In more convenient units:
Event began at DOY 223 14:41 +/- 0.745E+00 [minutes]

Origin defined at DOY223 15:30

RADIAL INFORMATION:

RADIAL VELOCITY = 342. +/- 12. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.245E+01 +/- 0.210E-01 [solar radii]
c(2) = 0.294E-01 +/- 0.105E-02 [radii/min]
c(2) = 0.342E+03 +/- 0.122E+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)= 0.25319E-01 [radii] see Bevington pg. 114
error in c(2)= 0.10837E-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) = 295. +/- 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 15:34 = 0.000E+00 km/sec
The TOTAL velocity at 15:34 = 342. km/sec

The TANGENTIAL velocity at 15:37 = 0.000E+00 km/sec
The TOTAL velocity at 15:37 = 342. km/sec

The TANGENTIAL velocity at 15:40 = 0.000E+00 km/sec
The TOTAL velocity at 15:40 = 342. km/sec

The TANGENTIAL velocity at 15:58 = 0.000E+00 km/sec
The TOTAL velocity at 15:58 = 342. km/sec

The TANGENTIAL velocity at 16: 1 = 0.000E+00 km/sec
The TOTAL velocity at 16: 1 = 342. km/sec

The TANGENTIAL velocity at 16: 5 = 0.000E+00 km/sec
The TOTAL velocity at 16: 5 = 342. 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 = 0.123E+02
Error in time = 0.22245E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.973E-03
Reduced Chi Squared = 0.305E-02
Chi Squared = 0.122E-01
The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.997E+00
The probability that no LINEAR correlation exists between the variables = 0.1072E-04
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
1985 223	15:34:46	2.55	+/- 0.10	295.0	+/- 0.5	SMM
1985 223	15:37:42	2.70	+/- 0.10	295.0	+/- 0.5	SMM
1985 223	15:40:49	2.80	+/- 0.15	295.0	+/- 0.5	SMM
1985 223	15:58:49	3.30	+/- 0.15	295.0	+/- 1.0	SMM
1985 223	16: 1:55	3.40	+/- 0.15	295.0	+/- 1.0	SMM
1985 223	16: 5: 2	3.45	+/- 0.15	295.0	+/- 1.0	SMM

****
Structure being measured:
Top of Outer Cavity
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.241E+02 +/- 0.231E+01 [minutes]
In more convenient units:
Event began at DOY 223 15: 6 +/- 0.231E+01 [minutes]

Origin defined at DOY223 15:30

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.164E+00 +/- 0.513E-01 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.235E+01 +/- 0.316E-01 [solar radii]
c(2) = 0.460E-01 +/- 0.520E-02 [radii/min]
c(2) = 0.534E+03 +/- 0.603E+02 [km/sec]
c(3) = -0.425E-03 +/- 0.133E-03 [radii/min**2]
c(3) = -0.164E+00 +/- 0.513E-01 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.38109E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.13742E-01 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.56898E-02 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.16822E-02 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.14215E-03 [radii/min**] Bevington pg 154 (8-30)

Exact error in c(3) = 0.37677E-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) = 295. +/- 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 15:34 = 0.000E+00 km/sec
The TOTAL velocity at 15:34 = 486. km/sec

The TANGENTIAL velocity at 15:37 = 0.000E+00 km/sec
The TOTAL velocity at 15:37 = 458. km/sec

The TANGENTIAL velocity at 15:40 = 0.000E+00 km/sec
The TOTAL velocity at 15:40 = 427. km/sec

The TANGENTIAL velocity at 15:58 = 0.000E+00 km/sec
The TOTAL velocity at 15:58 = 249. km/sec

The TANGENTIAL velocity at 16: 1 = 0.000E+00 km/sec
The TOTAL velocity at 16: 1 = 219. km/sec

The TANGENTIAL velocity at 16: 5 = 0.000E+00 km/sec
The TOTAL velocity at 16: 5 = 188. km/sec

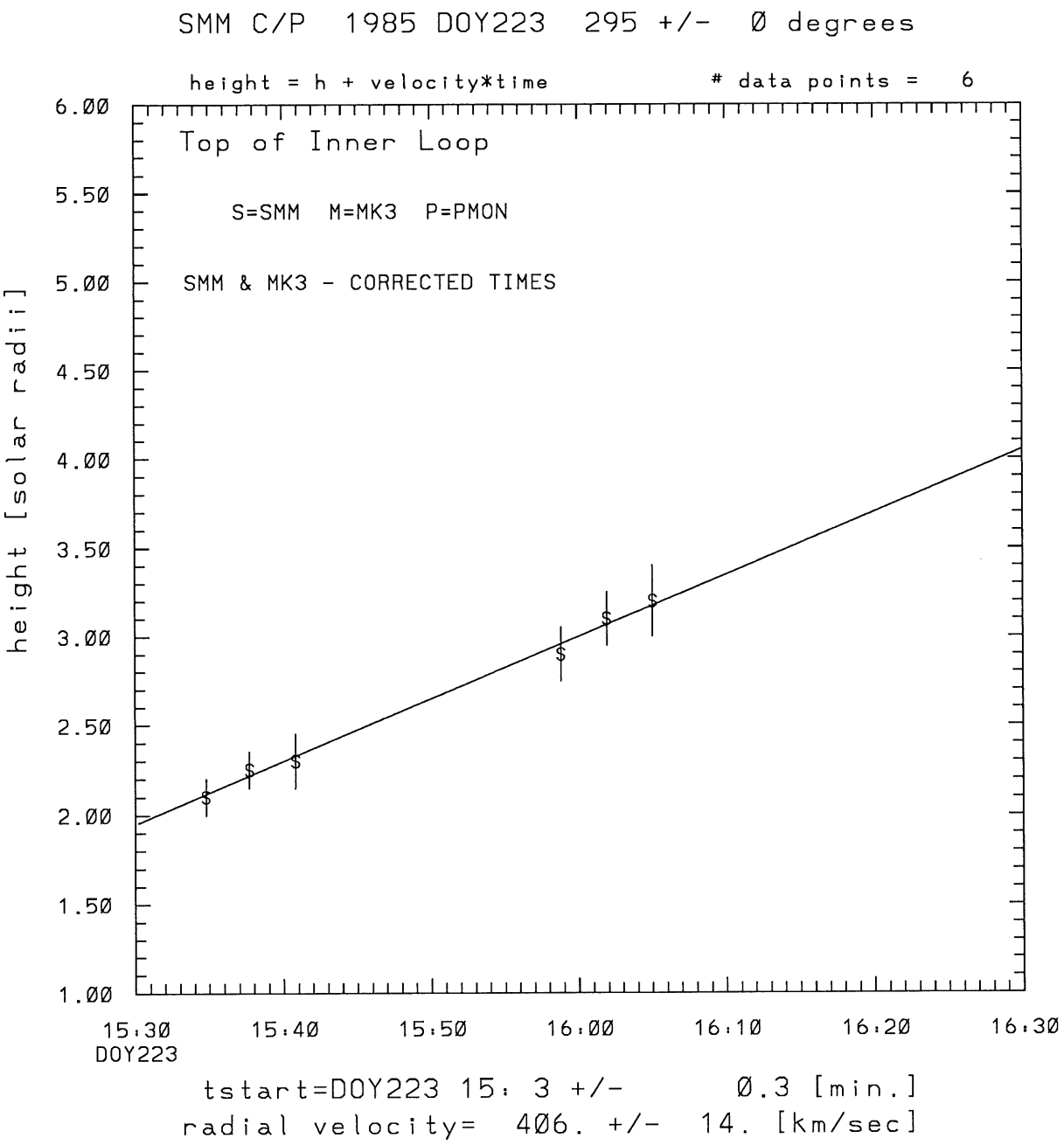
****
The following info is for estimating goodness of the fit
****

Fit is ok [ier=1]

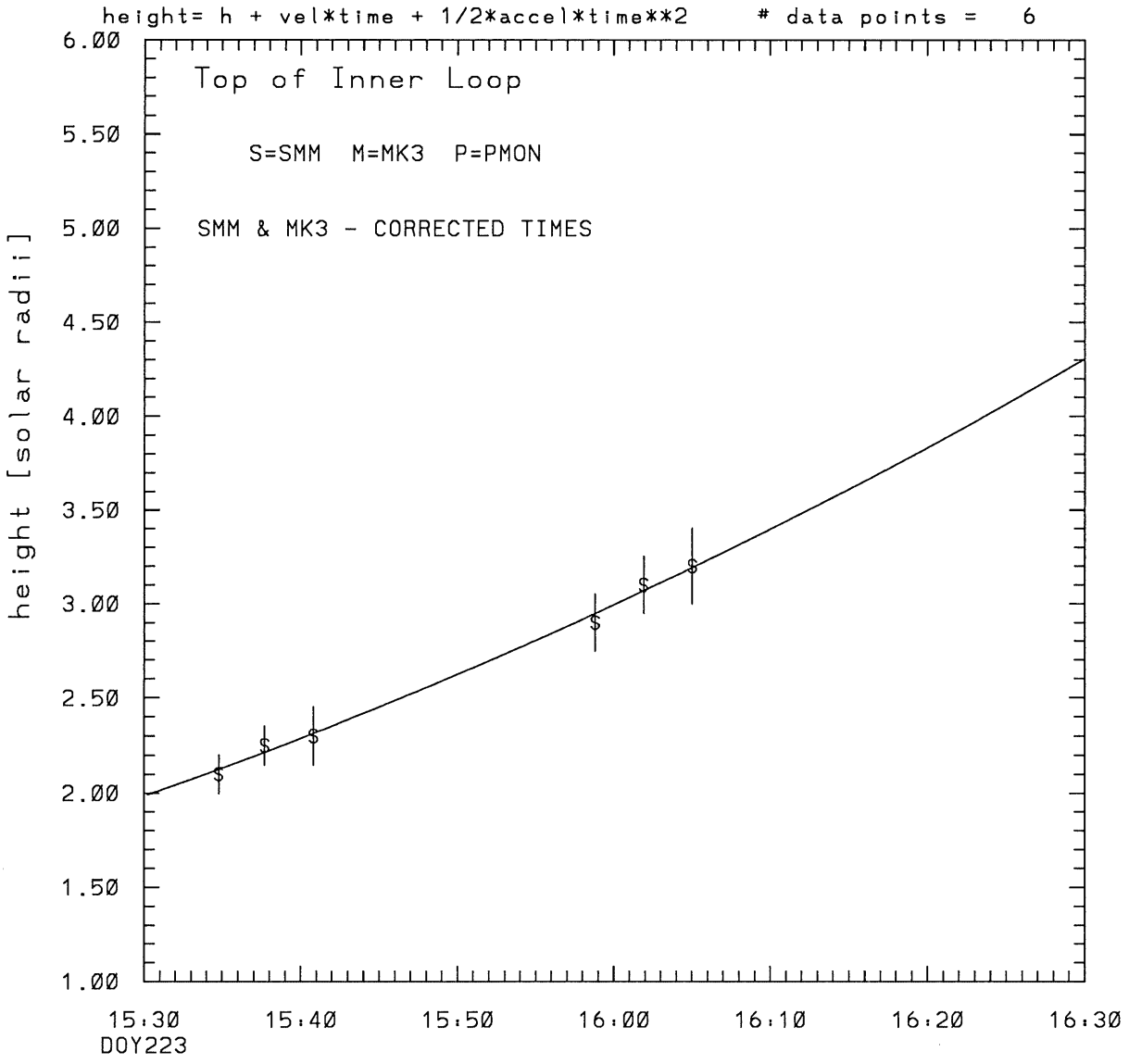
Standard Deviation in the height = 0.39
Standard Deviation in start time measurement = 0.123E+02
Value of reduced Chi Squared returned from nllst2 = 0.341E-03
Reduced Chi Squared = 0.148E-02
Chi Squared = 0.443E-02
The probability for exceeding chi square = 0.100E+01

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 = 0.1030E+01
The correlation between the data and the time**2 term = 0.9898E+00
The correlation between the data and the complete equation of motion = 0.9991E+00

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

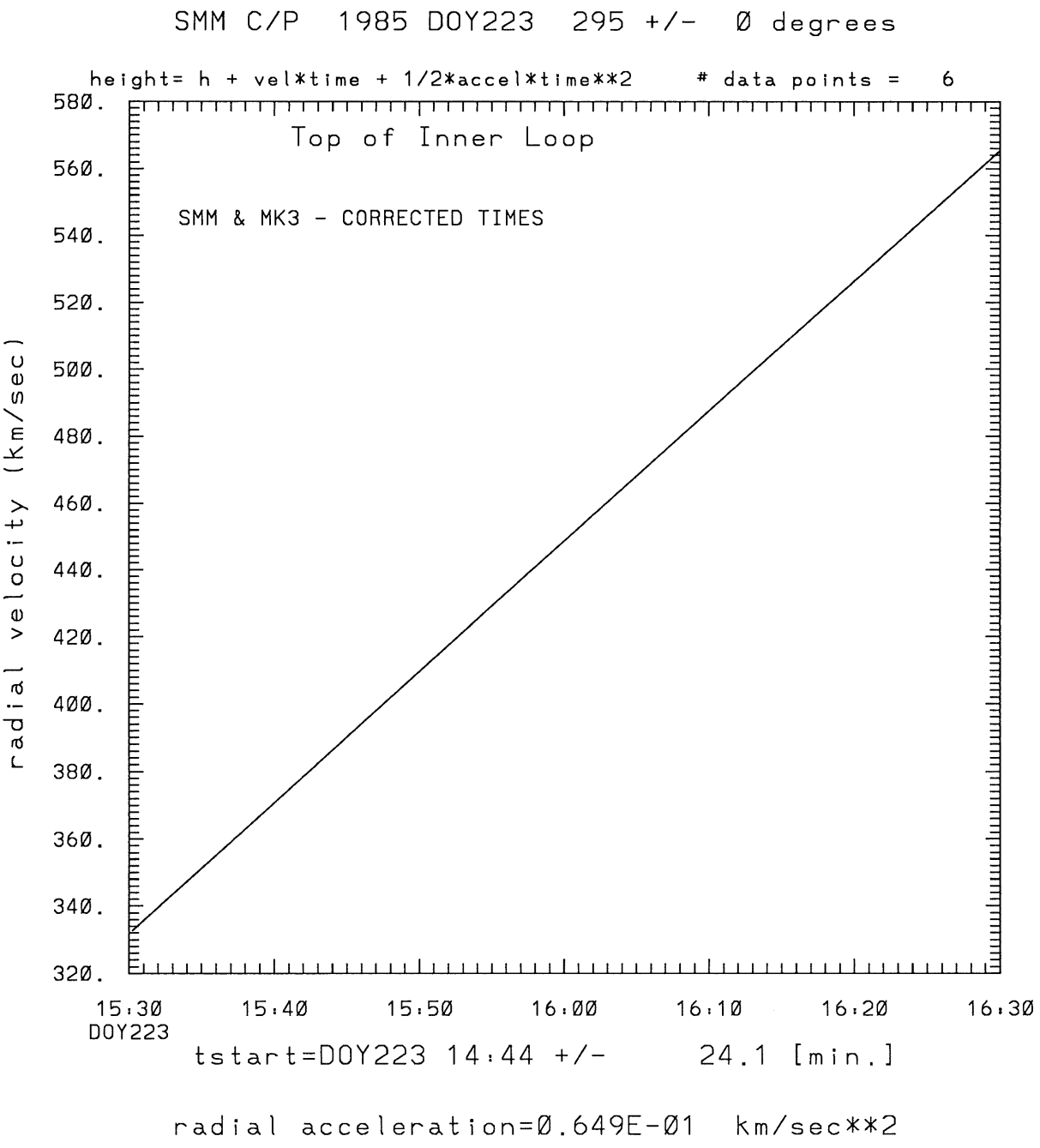

SMM C/P 1985 DOY223 295 +/- Ø degrees
height = h + velocity*time
# data points = 6
Top of Inner Loop
S=SMM M=MK3 P=PMON
SMM & MK3 - CORRECTED TIMES
height [solar radii]
6.ØØ
5.5Ø
5.ØØ
4.5Ø
4.ØØ
3.5Ø
3.ØØ
2.5Ø
2.ØØ
1.5Ø
1.ØØ
15:3Ø
DOY223
15:4Ø
15:5Ø
16:ØØ
16:1Ø
16:2Ø
16:3Ø
tstart=DOY223 15: 3 +/- Ø.3 [min.]
radial velocity= 4Ø6. +/- 14. [km/sec]

SMM C/P 1985 DOY223 295 +/- Ø degrees



tstart=DOY223 14:44 +/- 24.1 [min.]

radial acceleration= Ø.Ø649 +/- Ø.11ØØ [km/sec**2]


SMM C/P 1985 DOY223 295 +/- Ø degrees
height= h + vel*time + 1/2*accel*time**2 # data points = 6
Top of Inner Loop
SMM & MK3 - CORRECTED TIMES
radial velocity (km/sec)
580.
560.
540.
520.
500.
480.
460.
440.
420.
400.
380.
360.
340.
320.
15:30
DOY223
15:40
15:50
16:00
16:10
16:20
16:30
tstart=DOY223 14:44 +/- 24.1 [min.]
radial acceleration=Ø.649E-Ø1 km/sec**2

This is a 1 order run
****

****
INPUT:
****

year doy	time	radii	error in radius	angle	error in angle	datatype
1985 223	15:34:46	2.10	+/- 0.10	295.0	+/- 0.5	SMM
1985 223	15:37:42	2.25	+/- 0.10	295.0	+/- 0.5	SMM
1985 223	15:40:49	2.30	+/- 0.15	295.0	+/- 0.5	SMM
1985 223	15:58:49	2.90	+/- 0.15	295.0	+/- 1.0	SMM
1985 223	16: 1:55	3.10	+/- 0.15	295.0	+/- 1.0	SMM
1985 223	16: 5: 2	3.20	+/- 0.20	295.0	+/- 1.0	SMM

****
Structure being measured:
Top of Inner Loop
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.271E+02 +/- 0.336E+00 [minutes]
In more convenient units:
Event began at DOY 223 15: 3 +/- 0.336E+00 [minutes]

Origin defined at DOY223 15:30

RADIAL INFORMATION:

RADIAL VELOCITY = 406. +/- 14. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.195E+01 +/- 0.234E-01 [solar radii]
c(2) = 0.350E-01 +/- 0.125E-02 [radii/min]
c(2) = 0.406E+03 +/- 0.145E+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)= 0.32503E-01 [radii] see Bevington pg. 114
error in c(2)= 0.13911E-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) = 295. +/- 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 15:34 = 0.000E+00 km/sec
The TOTAL velocity at 15:34 = 406. km/sec

The TANGENTIAL velocity at 15:37 = 0.000E+00 km/sec
The TOTAL velocity at 15:37 = 406. km/sec

The TANGENTIAL velocity at 15:40 = 0.000E+00 km/sec
The TOTAL velocity at 15:40 = 406. km/sec

The TANGENTIAL velocity at 15:58 = 0.000E+00 km/sec
The TOTAL velocity at 15:58 = 406. km/sec

The TANGENTIAL velocity at 16: 1 = 0.000E+00 km/sec
The TOTAL velocity at 16: 1 = 406. km/sec

The TANGENTIAL velocity at 16: 5 = 0.000E+00 km/sec
The TOTAL velocity at 16: 5 = 406. km/sec

****
The following info is for estimating goodness of the fit
****

Fit is ok [ier=1]

Standard Deviation in the height = 0.48
Standard Deviation in start time measurement = 0.123E+02
Error in time = 0.24010E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.125E-02
Reduced Chi Squared = 0.679E-02
Chi Squared = 0.272E-01
The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.997E+00
The probability that no LINEAR correlation exists between the variables = 0.1355E-04
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
1985	223	15:34:46	2.10	+/- 0.10	295.0	+/- 0.5	SMM
1985	223	15:37:42	2.25	+/- 0.10	295.0	+/- 0.5	SMM
1985	223	15:40:49	2.30	+/- 0.15	295.0	+/- 0.5	SMM
1985	223	15:58:49	2.90	+/- 0.15	295.0	+/- 1.0	SMM
1985	223	16: 1:55	3.10	+/- 0.15	295.0	+/- 1.0	SMM
1985	223	16: 5: 2	3.20	+/- 0.20	295.0	+/- 1.0	SMM

****
Structure being measured:
Top of Inner Loop
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.478E+02 +/- 0.241E+02 [minutes]
In more convenient units:
Event began at DOY 223 14:44 +/- 0.241E+02 [minutes]

Origin defined at DOY223 15:30

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.649E-01 +/- 0.110E+00 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.198E+01 +/- 0.657E-01 [solar radii]
c(2) = 0.286E-01 +/- 0.110E-01 [radii/min]
c(2) = 0.332E+03 +/- 0.127E+03 [km/sec]
c(3) = 0.168E-03 +/- 0.285E-03 [radii/min**2]
c(3) = 0.649E-01 +/- 0.110E+00 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.76689E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.26705E-01 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.11450E-01 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.35839E-02 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.28605E-03 [radii/min**] Bevington pg 154 (8-30)

Exact error in c(3) = 0.81987E-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) = 295. +/- 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 15:34 = 0.000E+00 km/sec
The TOTAL velocity at 15:34 = 350. km/sec

The TANGENTIAL velocity at 15:37 = 0.000E+00 km/sec
The TOTAL velocity at 15:37 = 362. km/sec

The TANGENTIAL velocity at 15:40 = 0.000E+00 km/sec
The TOTAL velocity at 15:40 = 374. km/sec

The TANGENTIAL velocity at 15:58 = 0.000E+00 km/sec
The TOTAL velocity at 15:58 = 444. km/sec

The TANGENTIAL velocity at 16: 1 = 0.000E+00 km/sec
The TOTAL velocity at 16: 1 = 456. km/sec

The TANGENTIAL velocity at 16: 5 = 0.000E+00 km/sec
The TOTAL velocity at 16: 5 = 468. km/sec

****
The following info is for estimating goodness of the fit
****

Fit is ok [ier=1]

Standard Deviation in the height = 0.48
Standard Deviation in start time measurement = 0.123E+02
Value of reduced Chi Squared returned from nllst2 = 0.143E-02
Reduced Chi Squared = 0.609E-02
Chi Squared = 0.183E-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 = 0.1019E+01
The correlation between the data and the time**2 term = 0.9760E+00
The correlation between the data and the complete equation of motion = 0.9967E+00

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