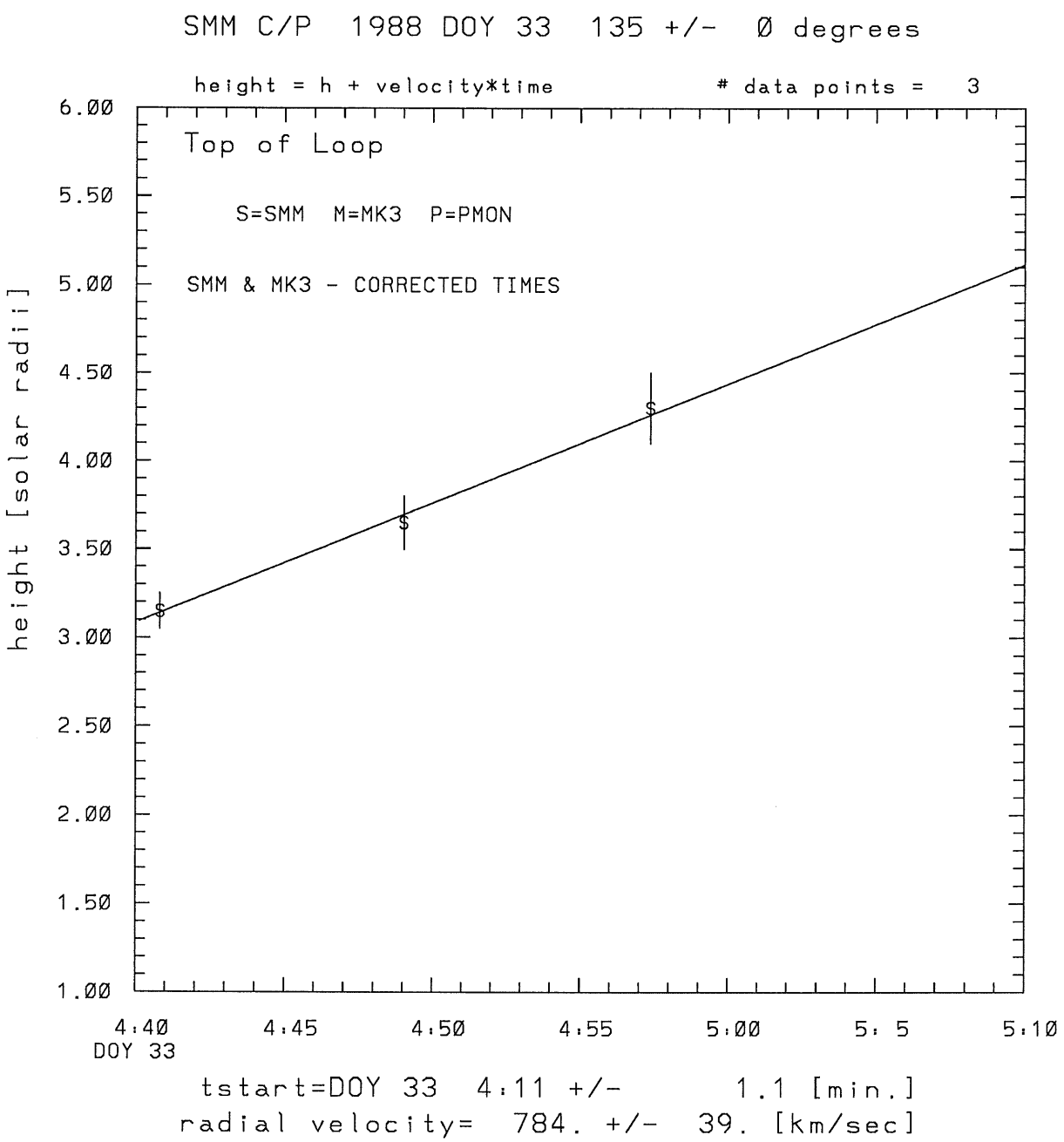
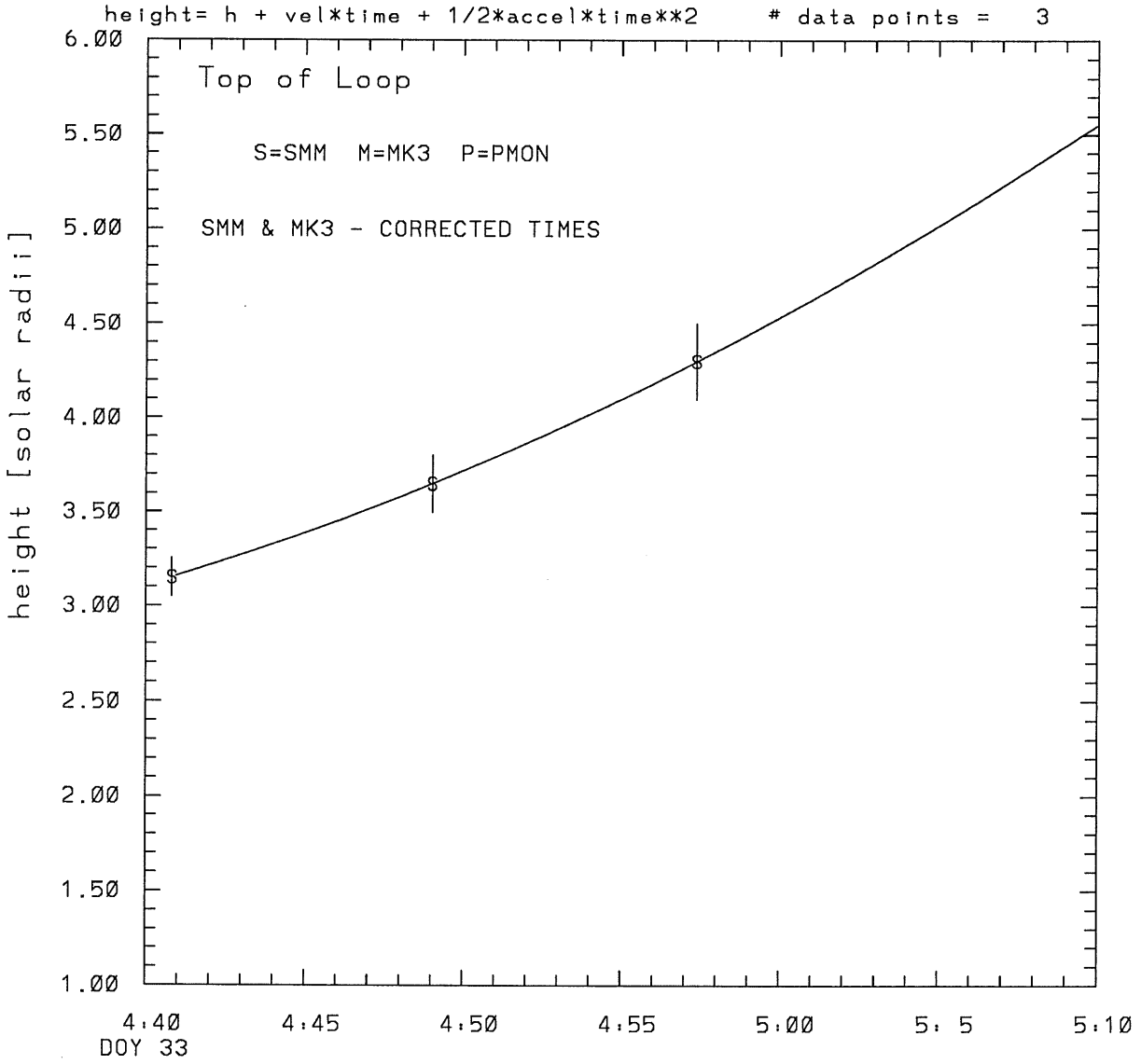
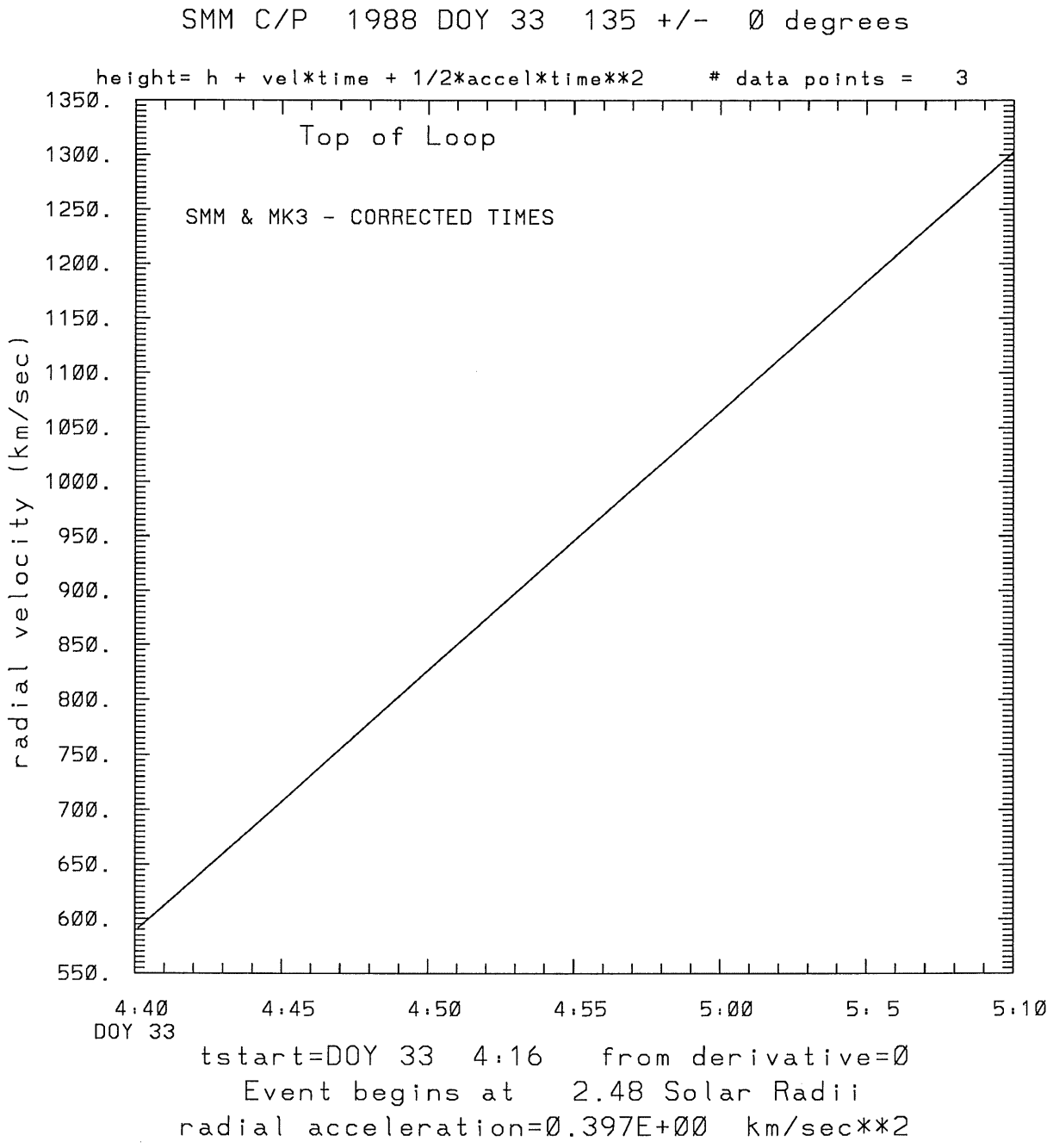

SMM C/P 1988 DOY 33 135 +/- Ø degrees
height = h + velocity*time
# data points = 3
Top of Loop
S=SMM M=MK3 P=PMON
SMM & MK3 - CORRECTED TIMES
height [solar radii]
6.ØØ
5.5Ø
5.ØØ
4.5Ø
4.ØØ
3.5Ø
3.ØØ
2.5Ø
2.ØØ
1.5Ø
1.ØØ
4:4Ø
DOY 33
4:45
4:5Ø
4:55
5:ØØ
5: 5
5:1Ø
tstart=DOY 33 4:11 +/- 1.1 [min.]
radial velocity= 784. +/- 39. [km/sec]



tstart=DOY 33 4:16 from derivative=Ø

Event begins at 2.48 Solar Radii

radial acceleration= Ø.3966 +/- Ø.ØØØØ [km/sec**2]


SMM C/P 1988 DOY 33 135 +/- Ø degrees
height= h + vel*time + 1/2*accel*time**2 # data points = 3
Top of Loop
SMM & MK3 - CORRECTED TIMES
radial velocity (km/sec)
1350.
1300.
1250.
1200.
1150.
1100.
1050.
1000.
950.
900.
850.
800.
750.
700.
650.
600.
550.
4:40
DOY 33
4:45
4:50
4:55
5:00
5: 5
5:10
tstart=DOY 33 4:16 from derivative=Ø
Event begins at 2.48 Solar Radii
radial acceleration=Ø.397E+ØØ km/sec**2

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

****
INPUT:
****

year	doy	time	radii	error in radius	angle	error in angle	datatype
1988	33	4:40:49	3.15	+/- 0.10	135.0	+/- 1.0	SMM
1988	33	4:49: 2	3.65	+/- 0.15	135.0	+/- 1.0	SMM
1988	33	4:57:23	4.30	+/- 0.20	135.0	+/- 1.0	SMM

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

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.308E+02 +/- 0.107E+01 [minutes]
In more convenient units:
Event began at DOY 33 4:11 +/- 0.107E+01 [minutes]

Origin defined at DOY 33 4:40

RADIAL INFORMATION:

RADIAL VELOCITY = 784. +/- 39. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.308E+01 +/- 0.274E-01 [solar radii]
c(2) = 0.676E-01 +/- 0.336E-02 [radii/min]
c(2) = 0.784E+03 +/- 0.390E+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)= 0.59304E-01 [radii] see Bevington pg. 114
error in c(2)= 0.52387E-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) = 135. +/- 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 4:40 = 0. km/sec
The TOTAL velocity at 4:40 = 784. km/sec

The TANGENTIAL velocity at 4:49 = 0. km/sec
The TOTAL velocity at 4:49 = 784. km/sec

The TANGENTIAL velocity at 4:57 = 0. km/sec
The TOTAL velocity at 4:57 = 784. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 0.58
Standard Deviation in start time measurement = 0.676E+01
Error in time = 0.90763E+00 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.126E-02
Reduced Chi Squared = 0.903E-02
Chi Squared = 0.903E-02
The probability for exceeding chi square = 0.972E+00

The correlation coefficient = 0.998E+00
The probability that no LINEAR correlation exists between the variables = 0.4488E-01
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
1988	33	4:40:49	3.15	+/- 0.10	135.0	+/- 1.0	SMM
1988	33	4:49: 2	3.65	+/- 0.15	135.0	+/- 1.0	SMM
1988	33	4:57:23	4.30	+/- 0.20	135.0	+/- 1.0	SMM

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

****
OUTPUT:
****

START TIME:

tstart=DOY 33 4:16 from derivative = 0
Event begins at 2.48 Solar Radii
Origin defined at DOY 33 4:40

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.397E+00 +/- 0.324E-04 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.311E+01 +/- 0.370E-05 [solar radii]
c(2) = 0.508E-01 +/- 0.143E-05 [radii/min]
c(2) = 0.589E+03 +/- 0.166E-01 [km/sec]
c(3) = 0.103E-02 +/- 0.839E-07 [radii/min**2]
c(3) = 0.397E+00 +/- 0.324E-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) = 135. +/- 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 4:40 = 0. km/sec
The TOTAL velocity at 4:40 = 608. km/sec

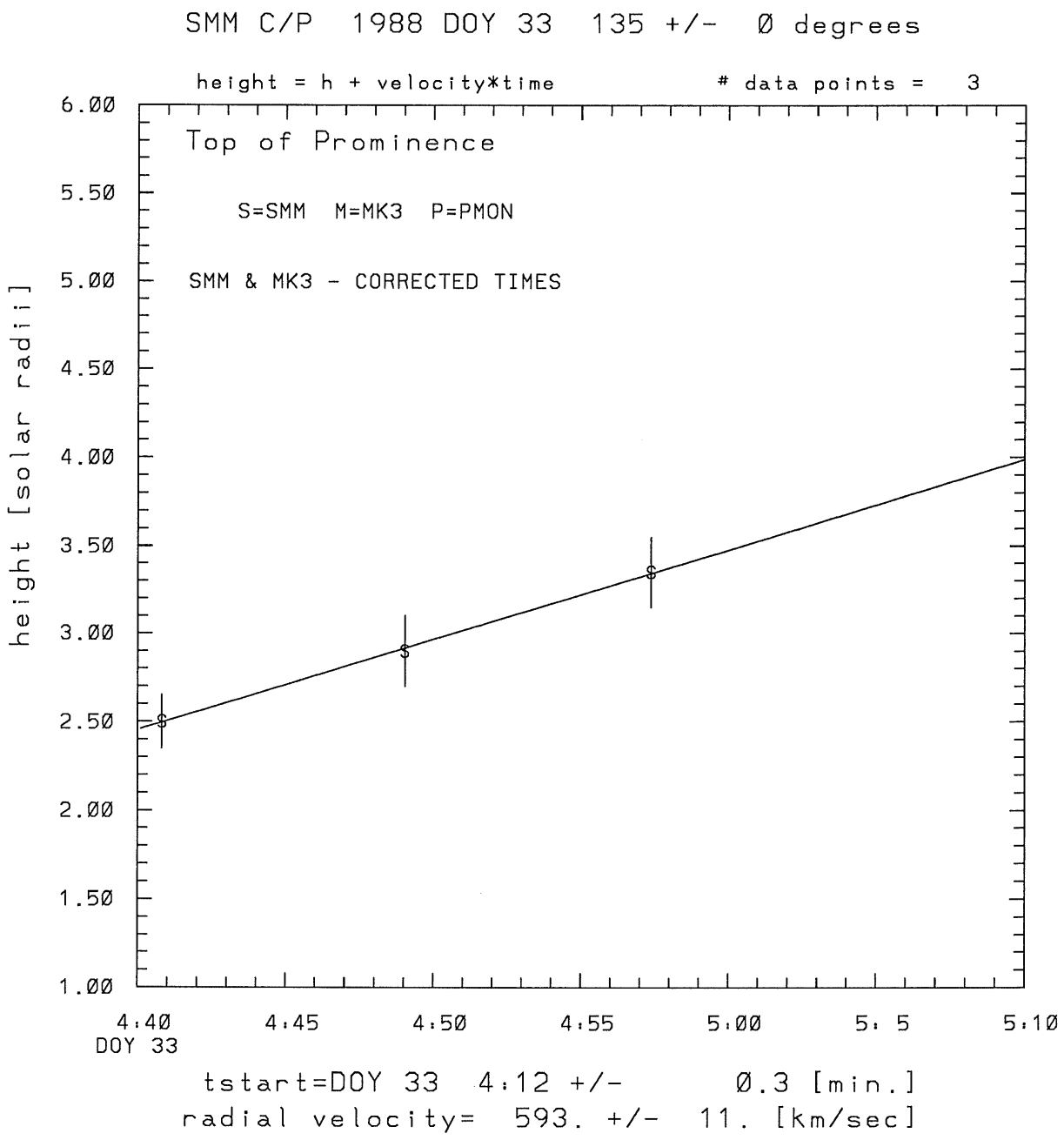
The TANGENTIAL velocity at 4:49 = 0. km/sec
The TOTAL velocity at 4:49 = 804. km/sec

The TANGENTIAL velocity at 4:57 = 0. km/sec
The TOTAL velocity at 4:57 = 1002. km/sec

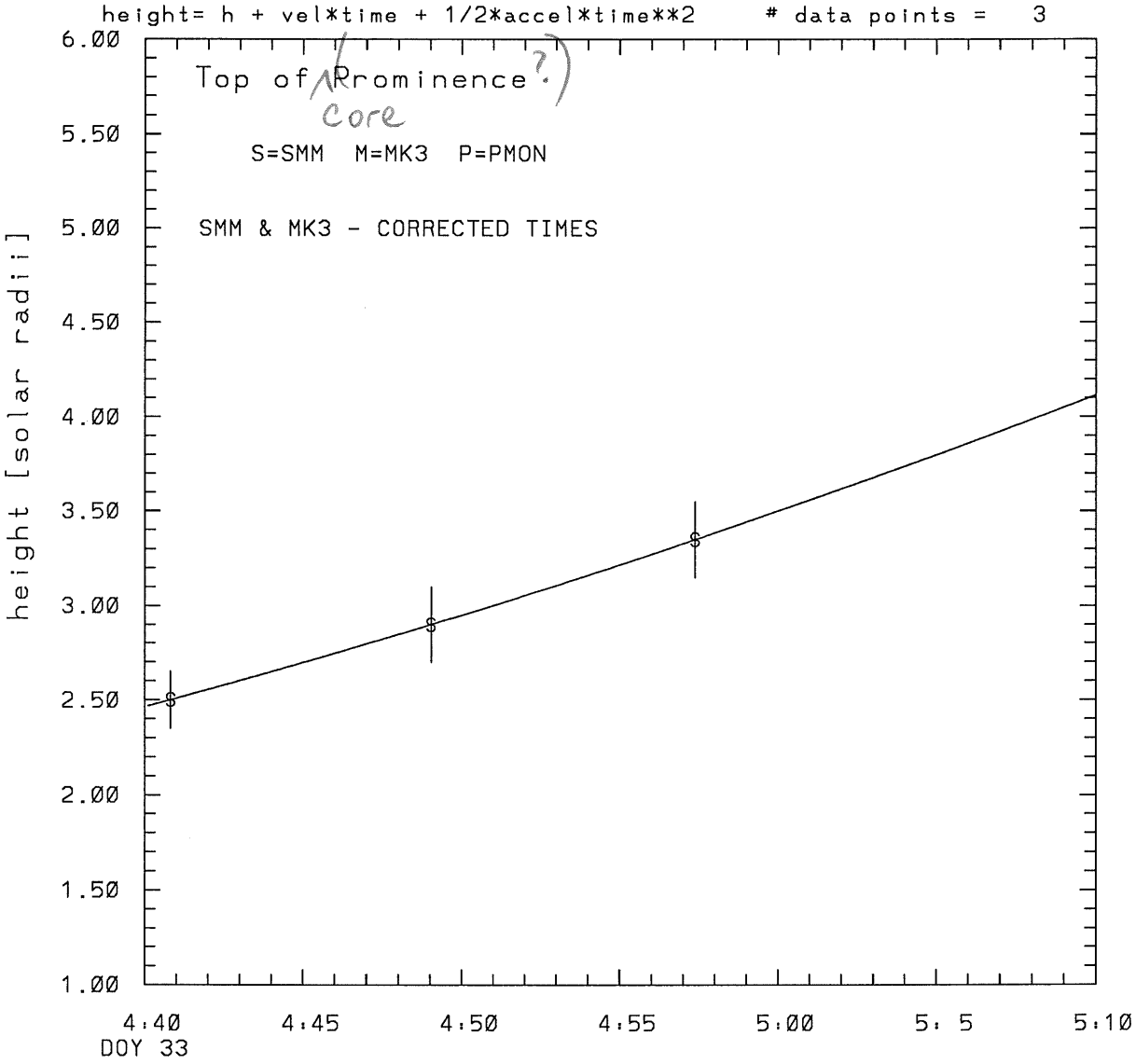
****
The following info is for estimating goodness of the fit
****

Number data points = number of coefficients. No error analysis is possible.

Correlation coefficient is not computable!

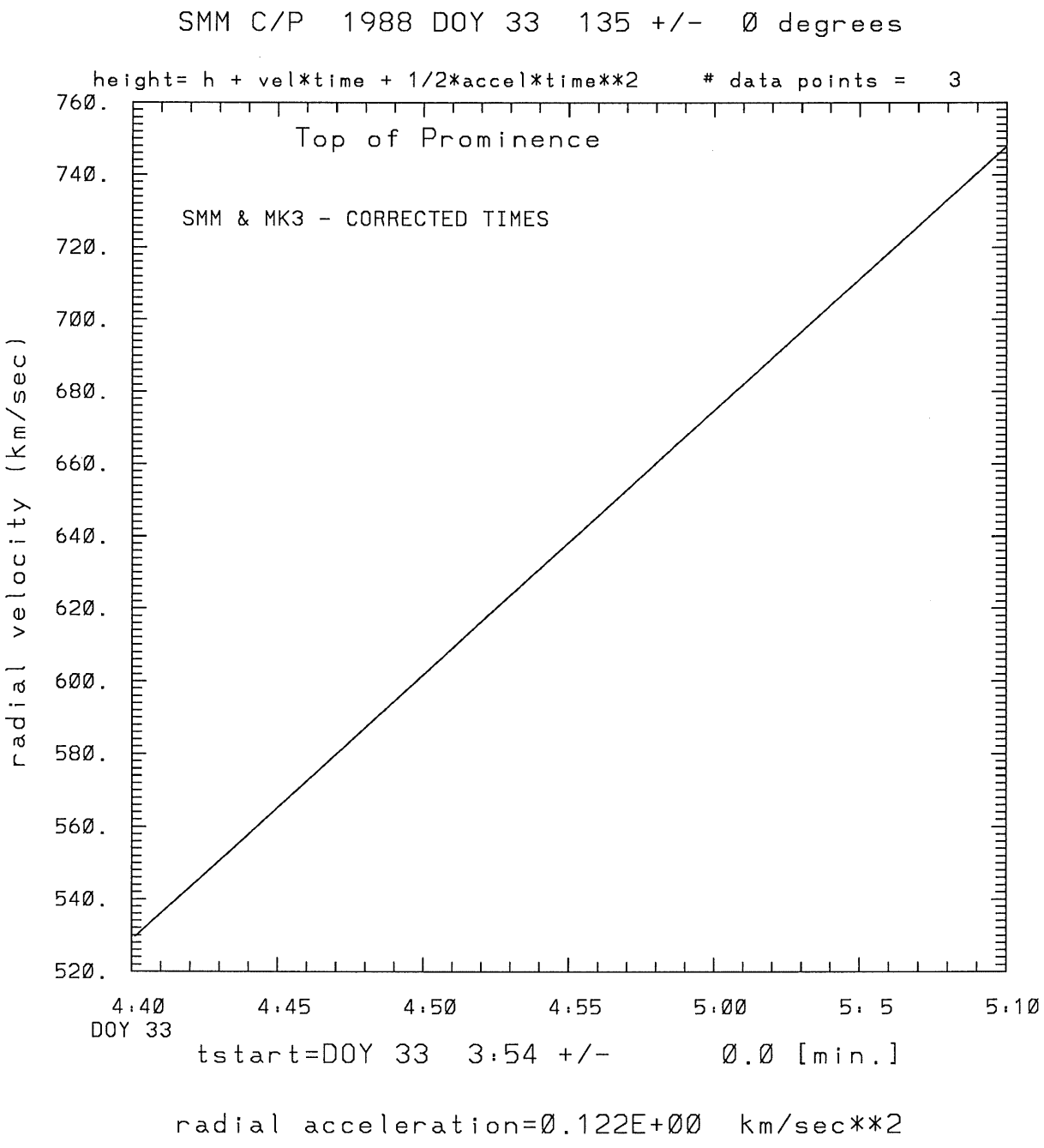

SMM C/P 1988 DOY 33 135 +/- Ø degrees
height = h + velocity*time
# data points = 3
Top of Prominence
S=SMM M=MK3 P=PMON
SMM & MK3 - CORRECTED TIMES
height [solar radii]
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
4:40
DOY 33
4:45
4:50
4:55
5:00
5: 5
5:10
tstart=DOY 33 4:12 +/- Ø.3 [min.]
radial velocity= 593. +/- 11. [km/sec]

SMM C/P 1988 DOY 33 135 +/- Ø degrees



tstart=DOY 33 3:54 +/- Ø.Ø [min.]

radial acceleration= Ø.1217 +/- Ø.ØØØ1 [km/sec**2]


SMM C/P 1988 DOY 33 135 +/- Ø degrees
height= h + vel*time + 1/2*accel*time**2 # data points = 3
Top of Prominence
SMM & MK3 - CORRECTED TIMES
radial velocity (km/sec)
760.
740.
720.
700.
680.
660.
640.
620.
600.
580.
560.
540.
520.
4:40
DOY 33
4:45
4:50
4:55
5:00
5: 5
5:10
tstart=DOY 33 3:54 +/- Ø.Ø [min.]
radial acceleration=Ø.122E+ØØ km/sec**2

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

****
INPUT:
****

year	doy	time	radii	error in radius	angle	error in angle	datatype
1988	33	4:40:49	2.50	+/- 0.15	135.0	+/- 1.0	SMM
1988	33	4:49: 2	2.90	+/- 0.20	135.0	+/- 1.0	SMM
1988	33	4:57:23	3.35	+/- 0.20	135.0	+/- 1.0	SMM

****
Structure being measured:
Top of Prominence
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.284E+02 +/- 0.300E+00 [minutes]
In more convenient units:
Event began at DOY 33 4:12 +/- 0.300E+00 [minutes]

Origin defined at DOY 33 4:40

RADIAL INFORMATION:

RADIAL VELOCITY = 593. +/- 11. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.245E+01 +/- 0.976E-02 [solar radii]
c(2) = 0.511E-01 +/- 0.967E-03 [radii/min]
c(2) = 0.593E+03 +/- 0.112E+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)= 0.17292E-01 [radii] see Bevington pg. 114
error in c(2)= 0.15275E-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) = 135. +/- 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 4:40 = 0. km/sec
The TOTAL velocity at 4:40 = 593. km/sec

The TANGENTIAL velocity at 4:49 = 0. km/sec
The TOTAL velocity at 4:49 = 593. km/sec

The TANGENTIAL velocity at 4:57 = 0. km/sec
The TOTAL velocity at 4:57 = 593. 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 = 0.676E+01
Error in time = 0.35011E+00 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.133E-03
Reduced Chi Squared = 0.680E-03
Chi Squared = 0.680E-03
The probability for exceeding chi square = 0.991E+00

The correlation coefficient = 0.100E+01
The probability that no LINEAR correlation exists between the variables = 0.1864E-01
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
1988	33	4:40:49	2.50	+/- 0.15	135.0	+/- 1.0	SMM
1988	33	4:49: 2	2.90	+/- 0.20	135.0	+/- 1.0	SMM
1988	33	4:57:23	3.35	+/- 0.20	135.0	+/- 1.0	SMM

****
Structure being measured:
Top of Prominence
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.480E+02 +/- 0.000E+00 [minutes]
In more convenient units:
Event began at DOY 33 3:54 +/- 0.000E+00 [minutes]

Origin defined at DOY 33 4:40

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.122E+00 +/- 0.727E-04 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.246E+01 +/- 0.976E-05 [solar radii]
c(2) = 0.456E-01 +/- 0.340E-05 [radii/min]
c(2) = 0.529E+03 +/- 0.395E-01 [km/sec]
c(3) = 0.315E-03 +/- 0.188E-06 [radii/min**2]
c(3) = 0.122E+00 +/- 0.727E-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) = 135. +/- 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 4:40 = 0. km/sec
The TOTAL velocity at 4:40 = 535. km/sec

The TANGENTIAL velocity at 4:49 = 0. km/sec
The TOTAL velocity at 4:49 = 595. km/sec

The TANGENTIAL velocity at 4:57 = 0. km/sec
The TOTAL velocity at 4:57 = 656. 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!