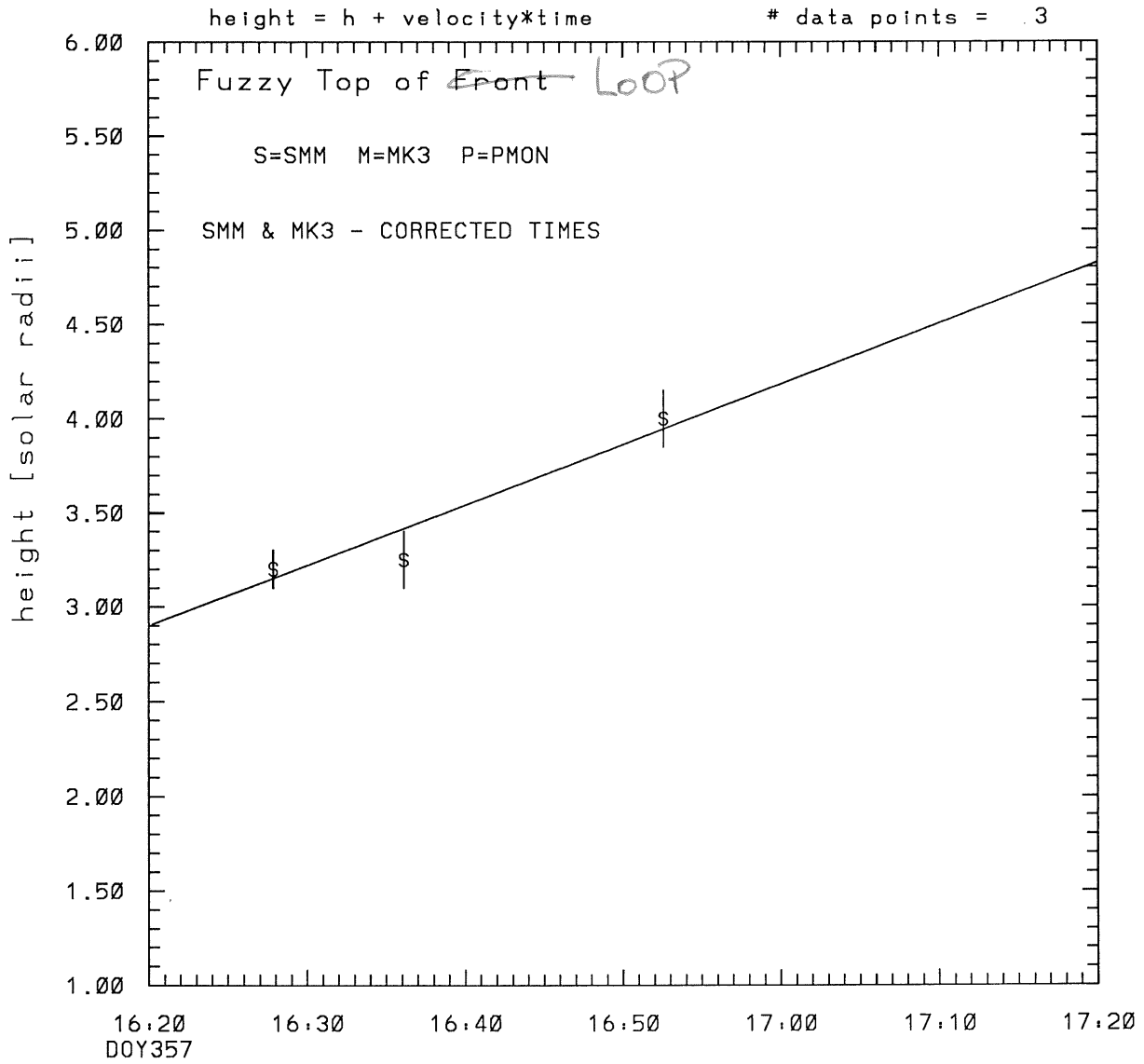
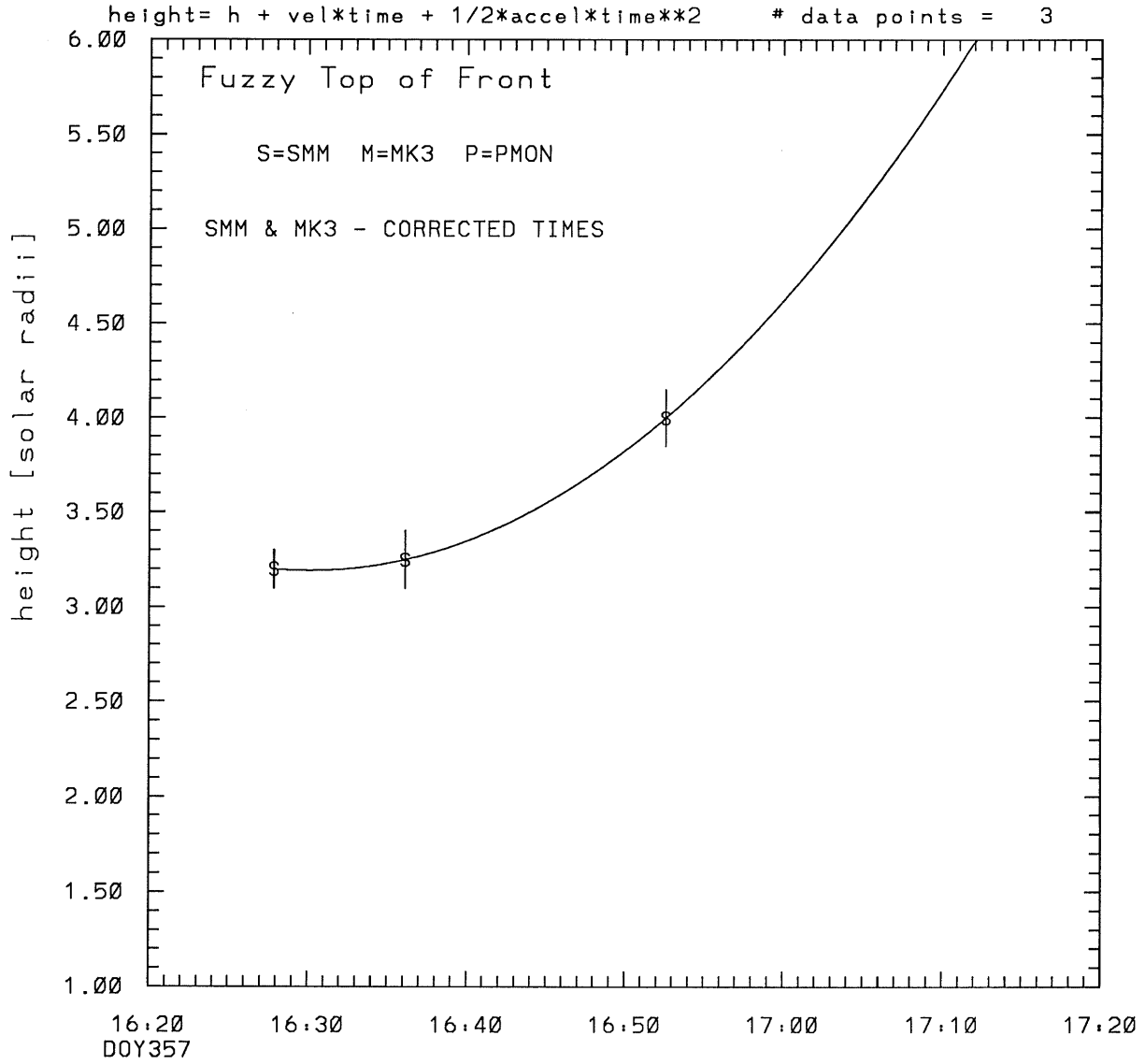


SMM C/P 1988 DOY357 230 +/- 0 degrees



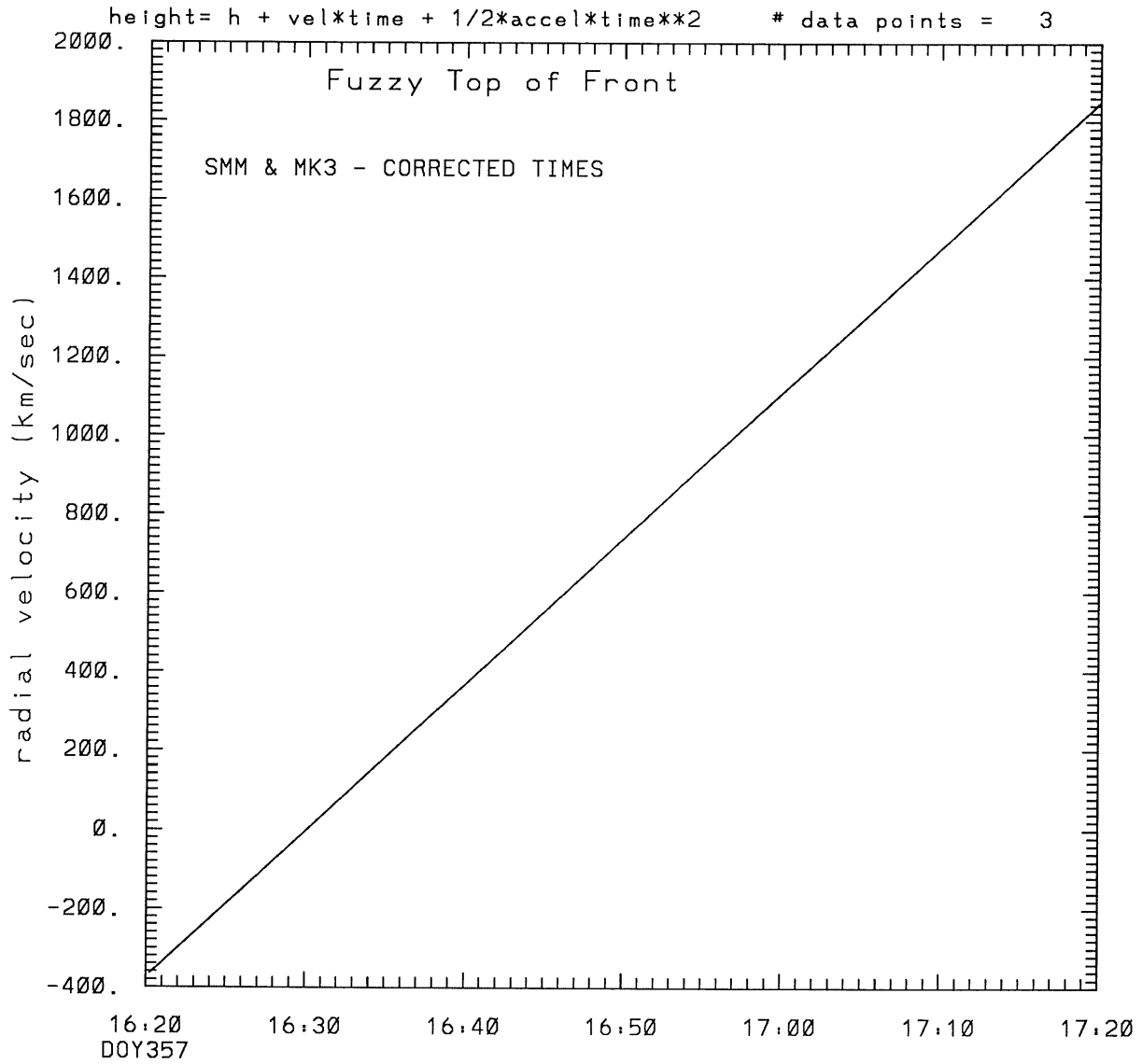
tstart=DOY357 15:21 +/- 5.7 [min.]
radial velocity= 372. +/- 76. [km/sec]

SMM C/P 1988 DOY357 230 +/- 0 degrees



tstart=DOY357 16:30 from derivative=0
Event begins at 3.19 Solar Radii
radial acceleration = 0.6175 +/- 0.0000 [km/sec**2]

SMM C/P 1988 DOY357 230 +/- 0 degrees



tstart=DOY357 16:30 from derivative=0
Event begins at 3.19 Solar Radii
radial acceleration=0.617E+00 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in	angle	error in	datatype
1988	357	16:27:51	3.20	+/- 0.10	230.0	+/- 0.5	SMM	
1988	357	16:36: 7	3.25	+/- 0.15	230.0	+/- 1.0	SMM	
1988	357	16:52:35	4.00	+/- 0.15	230.0	+/- 1.0	SMM	

Structure being measured:

Fuzzy Top of Front- Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.592E+02 +/- 0.569E+01$ [minutes]

In more convenient units:

Event began at DOY 357 15:21 +/- 0.569E+01 [minutes]

Origin defined at DOY357 16:20

RADIAL INFORMATION:

RADIAL VELOCITY = 372. +/- 76. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.290E+01 +/- 0.121E+00 [solar radii]
c(2) = 0.321E-01 +/- 0.653E-02 [radii/min]
c(2) = 0.372E+03 +/- 0.757E+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)= 0.21934E+00 [radii] see Bevington pg. 114

error in c(2)= 0.10216E-01 [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 16:27 = 0. km/sec

The TOTAL velocity at 16:27 = 372. km/sec

The TANGENTIAL velocity at 16:36 = 0. km/sec

The TOTAL velocity at 16:36 = 372. km/sec

The TANGENTIAL velocity at 16:52 = 0. km/sec

The TOTAL velocity at 16:52 = 372. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.45

Standard Deviation in start time measurement = 0.103E+02

Error in time = 0.56690E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.127E-01

Reduced Chi Squared = 0.668E-01

Chi Squared = 0.668E-01

The probability for exceeding chi square = 0.910E+00

The correlation coefficient = 0.961E+00

The probability that no LINEAR correlation exists between the variables = 0.1774E+00

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

This is a 2 order run

INPUT:

year	doy	time	radii	radius	error in	angle	error in	angle	datatype
1988	357	16:27:51	3.20	+/- 0.10	230.0	+/- 0.5			SMM
1988	357	16:36: 7	3.25	+/- 0.15	230.0	+/- 1.0			SMM
1988	357	16:52:35	4.00	+/- 0.15	230.0	+/- 1.0			SMM

Structure being measured:

Fuzzy Top of Front

OUTPUT:

START TIME:

tstart=DOY357 16:30 from derivative = 0

Event begins at 3.19 Solar Radii

Origin defined at DOY357 16:20

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.617E+00 +/- 0.101E-04 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.335E+01 +/- 0.796E-05 [solar radii]
c(2) = -0.322E-01 +/- 0.106E-05 [radii/min]
c(2) = -0.374E+03 +/- 0.123E-01 [km/sec]
c(3) = 0.160E-02 +/- 0.261E-07 [radii/min**2]
c(3) = 0.617E+00 +/- 0.101E-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) = 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 16:27 = 0. km/sec

The TOTAL velocity at 16:27 = -83. km/sec

The TANGENTIAL velocity at 16:36 = 0. km/sec

The TOTAL velocity at 16:36 = 223. km/sec

The TANGENTIAL velocity at 16:52 = 0. km/sec

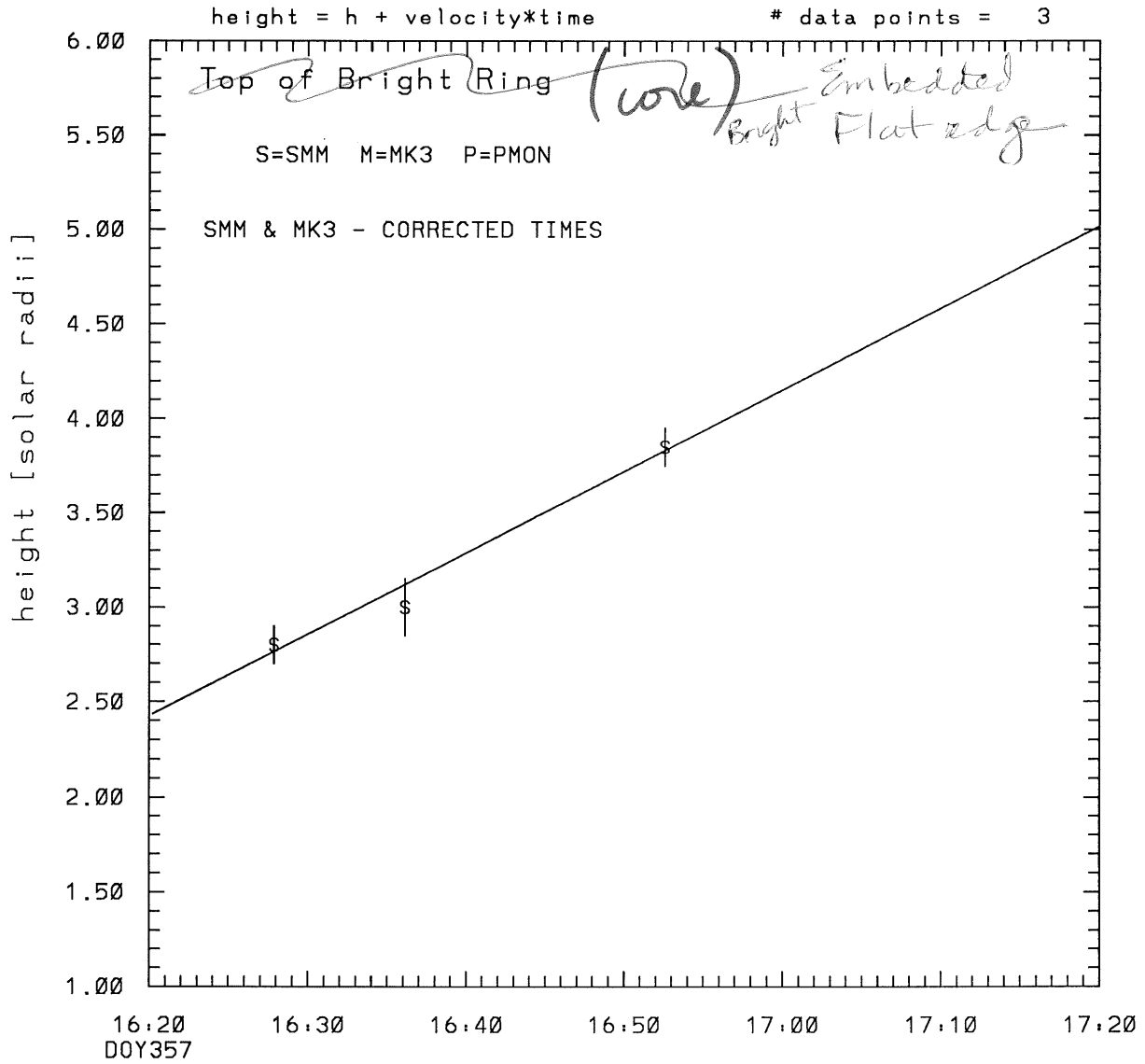
The TOTAL velocity at 16:52 = 833. km/sec

The following info is for estimating goodness of the fit

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

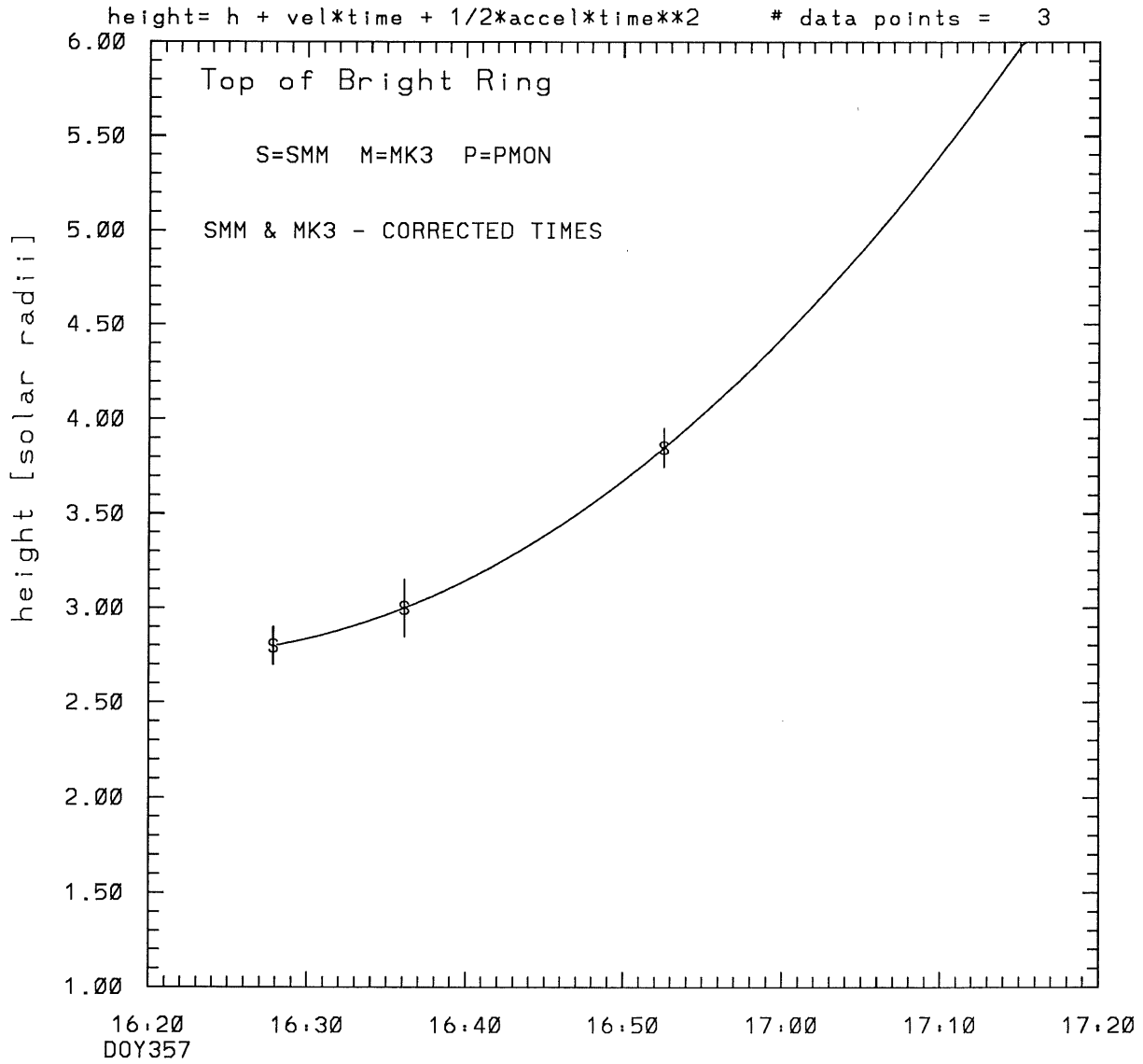
Correlation coefficient is not computable!

SMM C/P 1988 DOY357 230 +/- 0 degrees



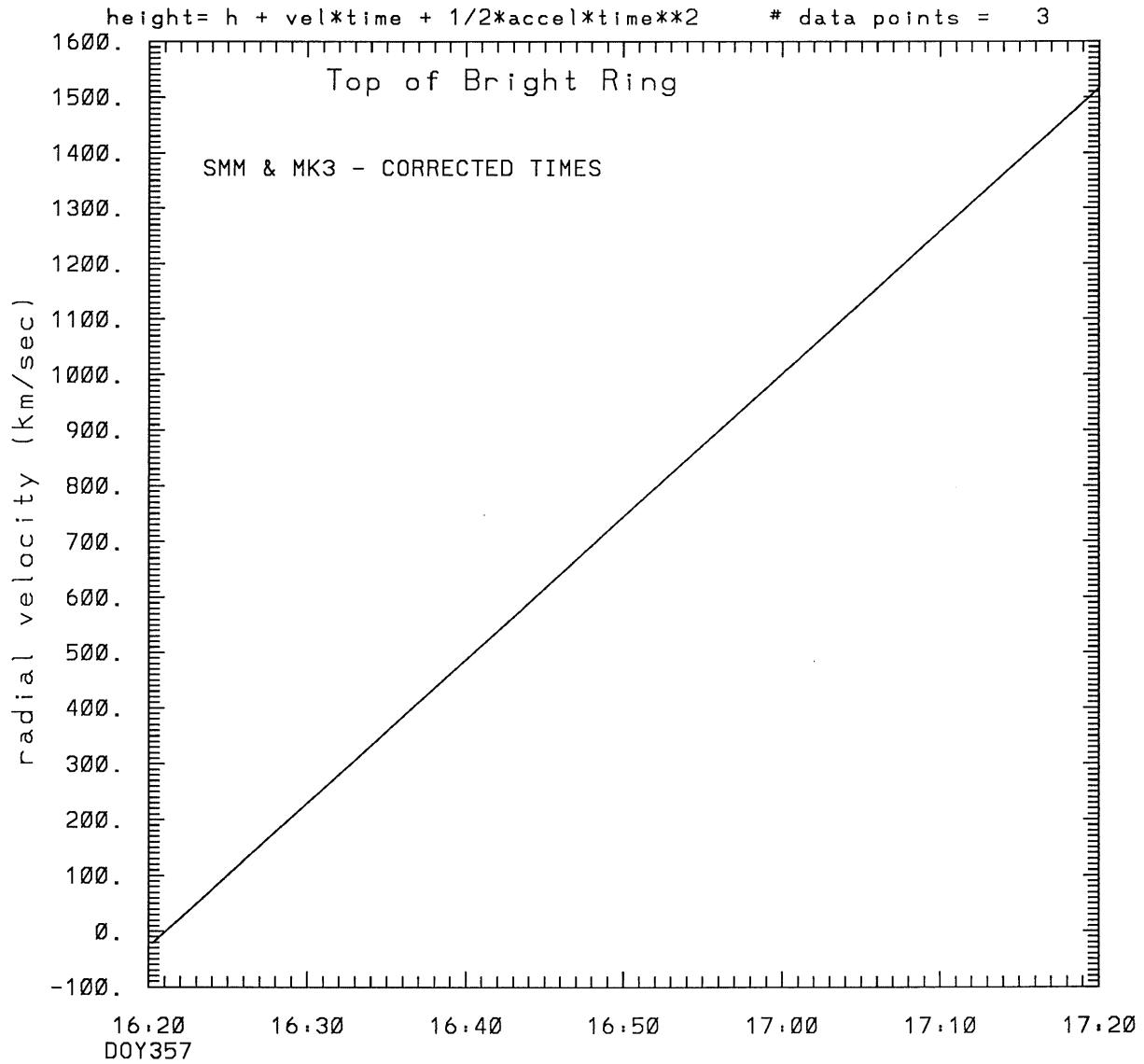
tstart=DOY357 15:47 +/- 1.4 [min.]
radial velocity= 501. +/- 42. [km/sec]

SMM C/P 1988 DOY357 230 +/- 0 degrees



tstart=DOY357 16:21 from derivative=0
Event begins at 2.75 Solar Radii
radial acceleration = 0.4288 +/- 0.0000 [km/sec**2]

SMM C/P 1988 DOY357 230 +/- 0 degrees



tstart=DOY357 16:21 from derivative=0
Event begins at 2.75 Solar Radii
radial acceleration=0.429E+00 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1988	357	16:27:51	2.80	+/- 0.10	230.0	+/- 0.5	SMM
1988	357	16:36: 7	3.00	+/- 0.15	230.0	+/- 1.0	SMM
1988	357	16:52:35	3.85	+/- 0.10	230.0	+/- 1.0	SMM

Structure being measured:
Top of Bright Ring

OUTPUT:

START TIME:

Event began at $t = 0 + -0.330E+02 +/- 0.138E+01$ [minutes]

In more convenient units:

Event began at DOY 357 15:47 +/- 0.138E+01 [minutes]

Origin defined at DOY357 16:20

RADIAL INFORMATION:

RADIAL VELOCITY = 501. +/- 42. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.243E+01 +/- 0.812E-01 [solar radii]
c(2) = 0.432E-01 +/- 0.361E-02 [radii/min]
c(2) = 0.501E+03 +/- 0.419E+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)= 0.15379E+00 [radii] see Bevington pg. 114

error in c(2)= 0.71627E-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 16:27 = 0. km/sec

The TOTAL velocity at 16:27 = 501. km/sec

The TANGENTIAL velocity at 16:36 = 0. km/sec

The TOTAL velocity at 16:36 = 501. km/sec

The TANGENTIAL velocity at 16:52 = 0. km/sec

The TOTAL velocity at 16:52 = 501. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.56

Standard Deviation in start time measurement = 0.103E+02

Error in time = 0.29541E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.498E-02

Reduced Chi Squared = 0.316E-01

Chi Squared = 0.316E-01

The probability for exceeding chi square = 0.944E+00

The correlation coefficient = 0.988E+00

The probability that no LINEAR correlation exists between the variables = 0.9813E-01

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

This is a 2 order run

INPUT:

			error in	error in	
year	doy	time	radii radius	angle angle	datatype
1988	357	16:27:51	2.80 +/- 0.10	230.0 +/- 0.5	SMM
1988	357	16:36: 7	3.00 +/- 0.15	230.0 +/- 1.0	SMM
1988	357	16:52:35	3.85 +/- 0.10	230.0 +/- 1.0	SMM

Structure being measured:

Top of Bright Ring

OUTPUT:

START TIME:

tstart=DOY357 16:21 from derivative = 0

Event begins at 2.75 Solar Radii

Origin defined at DOY357 16:20

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.429E+00 +/- 0.102E-05 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.275E+01 +/- 0.823E-06 [solar radii]
c(2) = -0.238E-02 +/- 0.109E-06 [radii/min]
c(2) = -0.276E+02 +/- 0.127E-02 [km/sec]
c(3) = 0.111E-02 +/- 0.265E-08 [radii/min**2]
c(3) = 0.429E+00 +/- 0.102E-05 [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) = 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 16:27 = 0. km/sec

The TOTAL velocity at 16:27 = 174. km/sec

The TANGENTIAL velocity at 16:36 = 0. km/sec

The TOTAL velocity at 16:36 = 387. km/sec

The TANGENTIAL velocity at 16:52 = 0. km/sec

The TOTAL velocity at 16:52 = 811. 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!