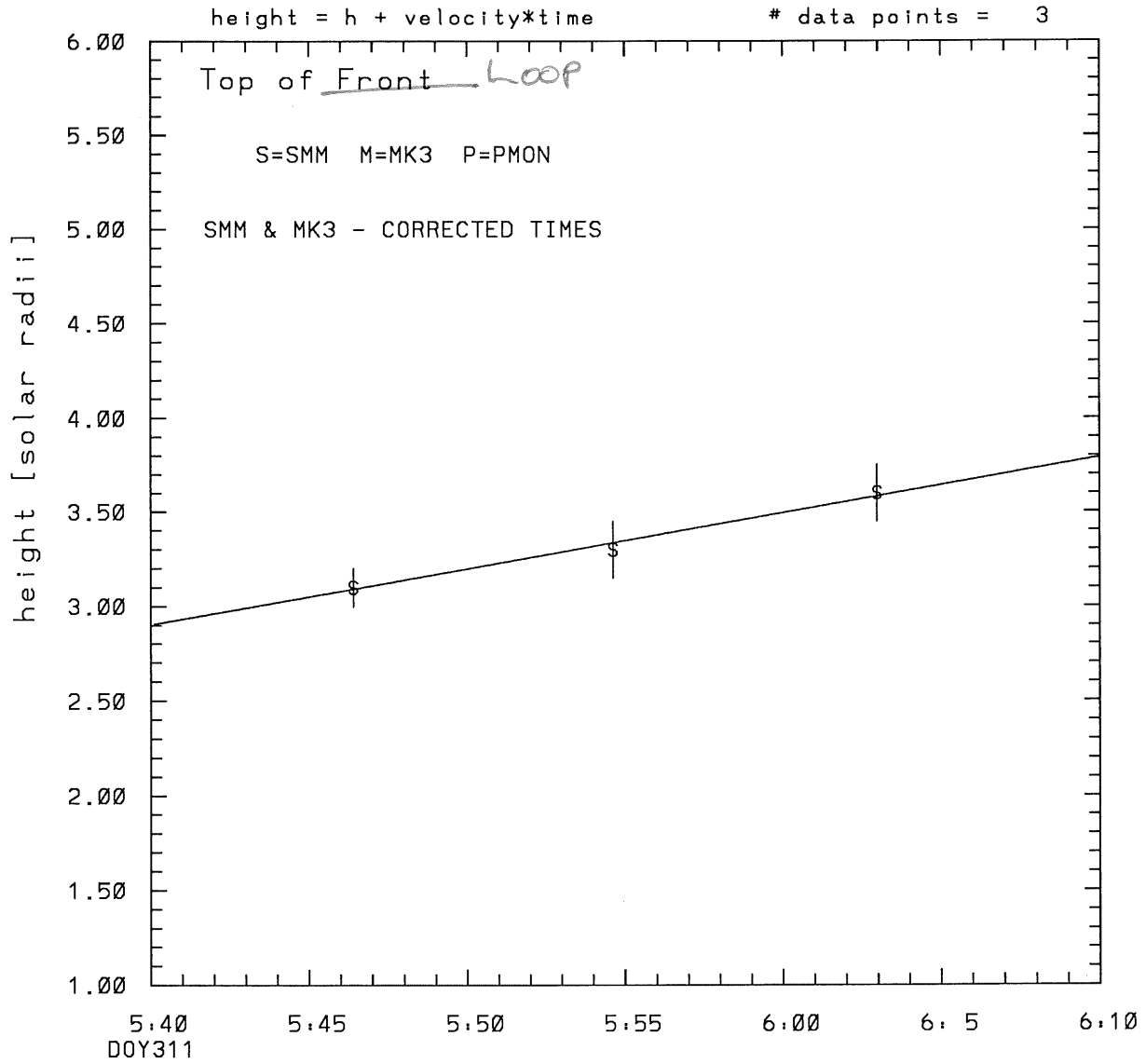
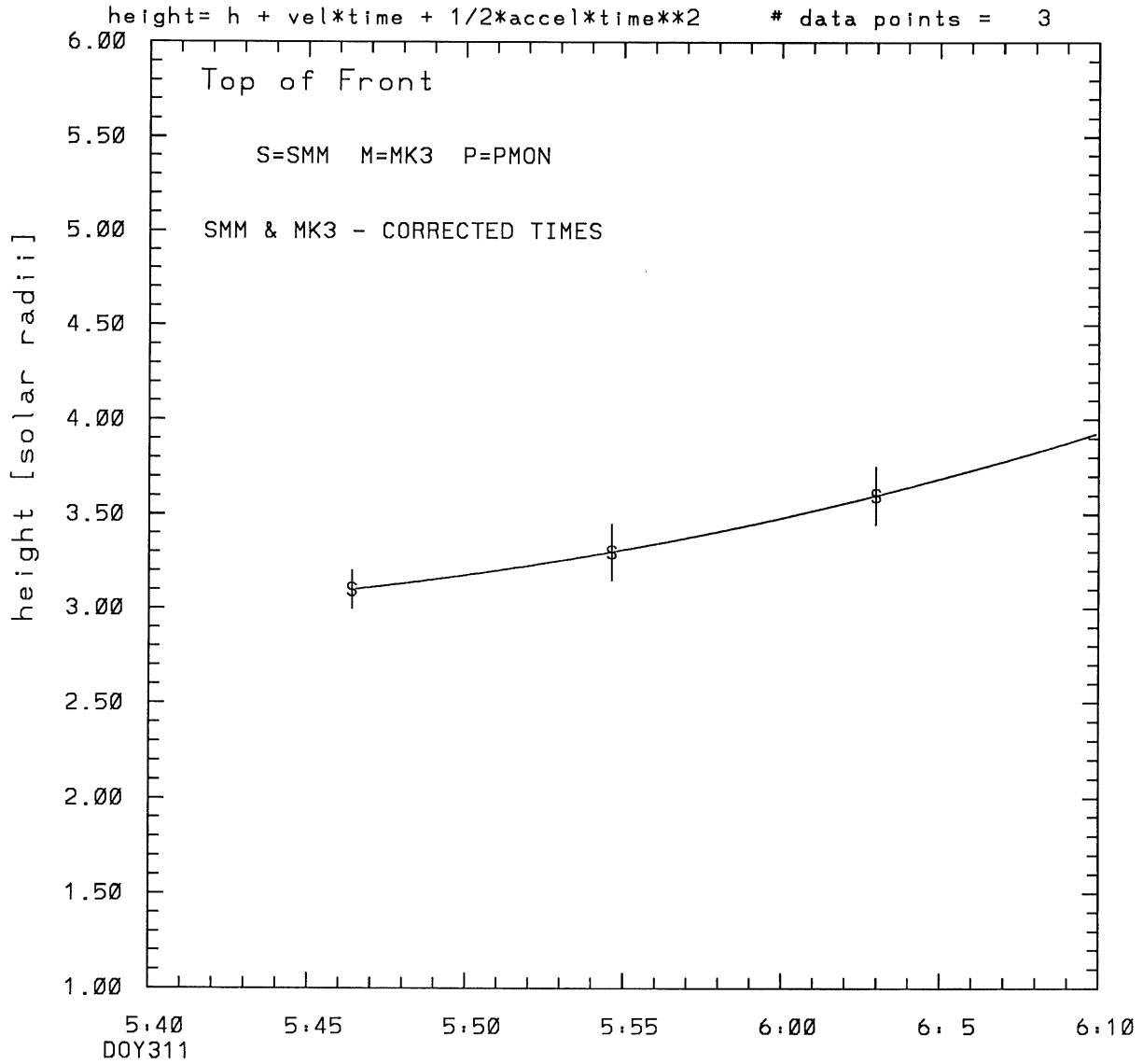


SMM C/P 1988 DOY311 97 +/- 0 degrees



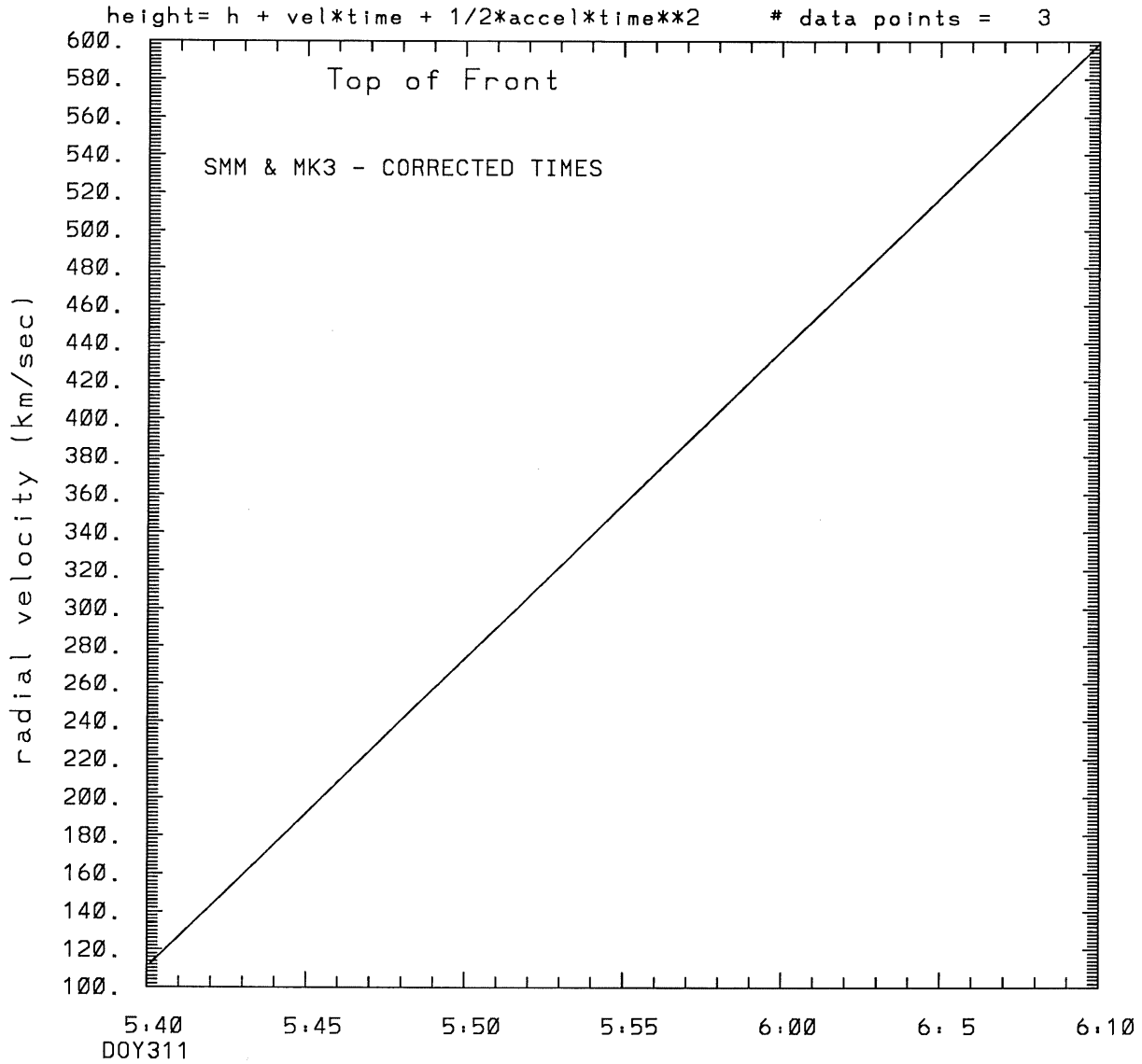
tstart=DOY311 4:36 +/- 2.5 [min.]  
radial velocity= 343. +/- 24. [km/sec]

SMM C/P 1988 DOY311 97 +/- 0 degrees



tstart=DOY311 5:34 from derivative=0  
Event begins at 2.98 Solar Radii  
radial acceleration = 0.2713 +/- 0.0000 [km/sec\*\*2]

SMM C/P 1988 DOY311 97 +/- 0 degrees



tstart=DOY311 5.34 from derivative=0  
Event begins at 2.98 Solar Radii  
radial acceleration=0.271E+00 km/sec\*\*2

\*\*\*\*\*

This is a 1 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	day	time	radii	error in radius	angle	error in angle	datatype
1988	311	5:46:24	3.10	+/- 0.10	97.0	+/- 1.0	SMM
1988	311	5:54:38	3.30	+/- 0.15	97.0	+/- 1.0	SMM
1988	311	6: 2:59	3.60	+/- 0.15	97.0	+/- 1.0	SMM

\*\*\*\*\*

Structure being measured:

Top of Front Loop

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at  $t = 0 + -0.644E+02 +/- 0.252E+01$  [minutes]

In more convenient units:

Event began at DOY 311 4:36 +/- 0.252E+01 [minutes]

Origin defined at DOY311 5:40

RADIAL INFORMATION:

RADIAL VELOCITY = 343. +/- 24. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.290E+01 +/- 0.291E-01$  [solar radii]  
 $c(2) = 0.296E-01 +/- 0.208E-02$  [radii/min]  
 $c(2) = 0.343E+03 +/- 0.241E+02$  [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  $c(1) = 0.55692E-01$  [radii] see Bevington pg. 114

error in  $c(2) = 0.34465E-02$  [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) = 97. +/- 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 5:46 = 0. km/sec

The TOTAL velocity at 5:46 = 343. km/sec

The TANGENTIAL velocity at 5:54 = 0. km/sec

The TOTAL velocity at 5:54 = 343. km/sec

The TANGENTIAL velocity at 6: 2 = 0. km/sec

The TOTAL velocity at 6: 2 = 343. km/sec

\*\*\*\*\*

The following info is for estimating goodness of the fit

\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.25

Standard Deviation in start time measurement = 0.677E+01

Error in time = 0.13669E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.604E-03

Reduced Chi Squared = 0.351E-02

Chi Squared = 0.351E-02

The probability for exceeding chi square = 0.980E+00

The correlation coefficient = 0.994E+00

The probability that no LINEAR correlation exists between the variables = 0.7058E-01

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

\*\*\*\*\*

This is a 2 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	day	time	error in radii	error in radius	error in angle	error in angle	datatype
1988	311	5:46:24	3.10 +/- 0.10	3.10 +/- 0.10	97.0 +/- 1.0	97.0 +/- 1.0	SMM
1988	311	5:54:38	3.30 +/- 0.15	3.30 +/- 0.15	97.0 +/- 1.0	97.0 +/- 1.0	SMM
1988	311	6: 2:59	3.60 +/- 0.15	3.60 +/- 0.15	97.0 +/- 1.0	97.0 +/- 1.0	SMM

\*\*\*\*\*

Structure being measured:

Top of Front

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

tstart=DOY311 5:34 from derivative = 0

Event begins at 2.98 Solar Radii

Origin defined at DOY311 5:40

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.271E+00 +/- 0.130E-04 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.301E+01 +/- 0.552E-05 [solar radii]  
c(2) = 0.953E-02 +/- 0.972E-06 [radii/min]  
c(2) = 0.111E+03 +/- 0.113E-01 [km/sec]  
c(3) = 0.702E-03 +/- 0.337E-07 [radii/min\*\*2]  
c(3) = 0.271E+00 +/- 0.130E-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) = 97. +/- 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 5:46 = 0. km/sec

The TOTAL velocity at 5:46 = 215. km/sec

The TANGENTIAL velocity at 5:54 = 0. km/sec

The TOTAL velocity at 5:54 = 349. km/sec

The TANGENTIAL velocity at 6: 2 = 0. km/sec

The TOTAL velocity at 6: 2 = 485. 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!