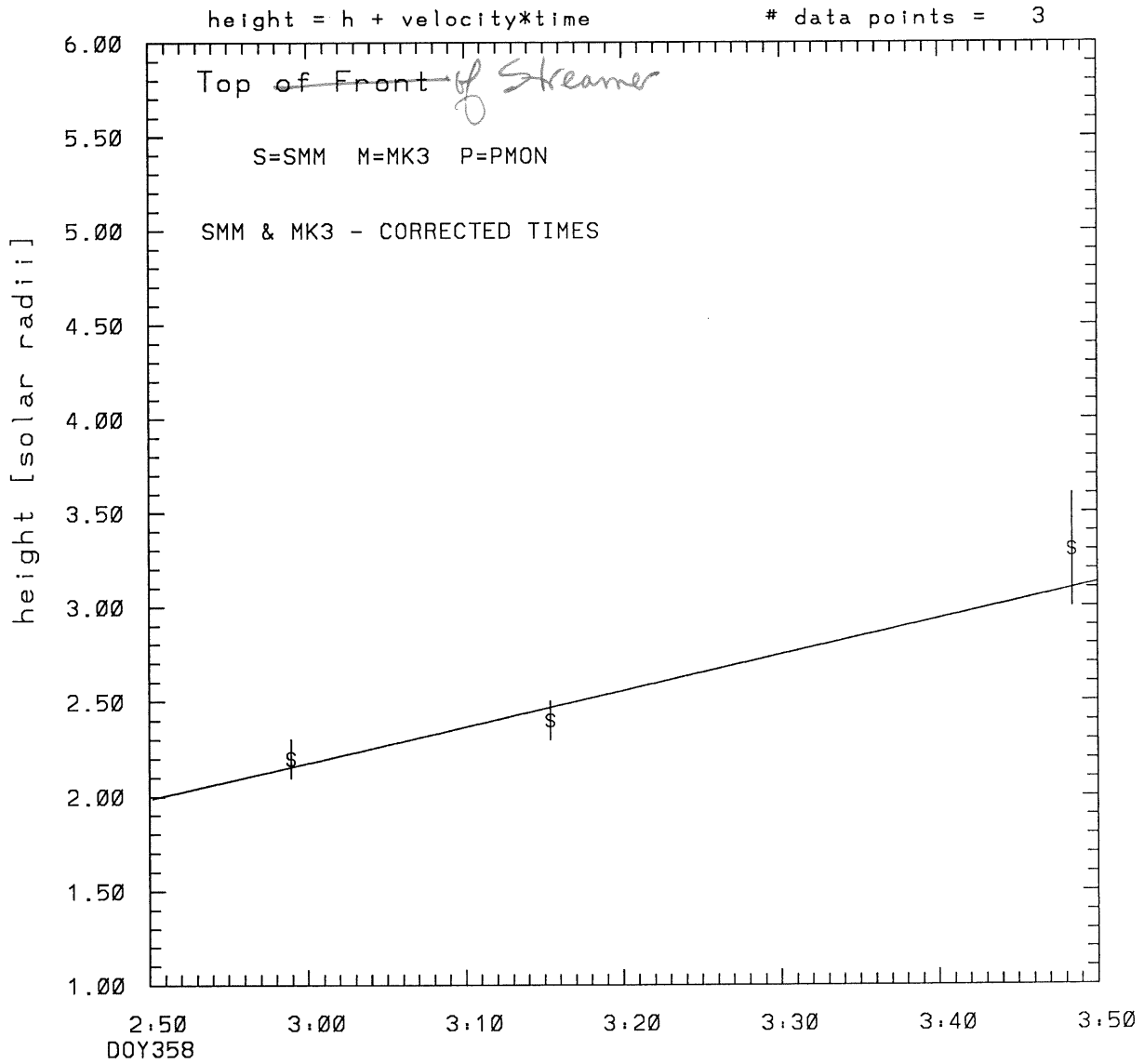
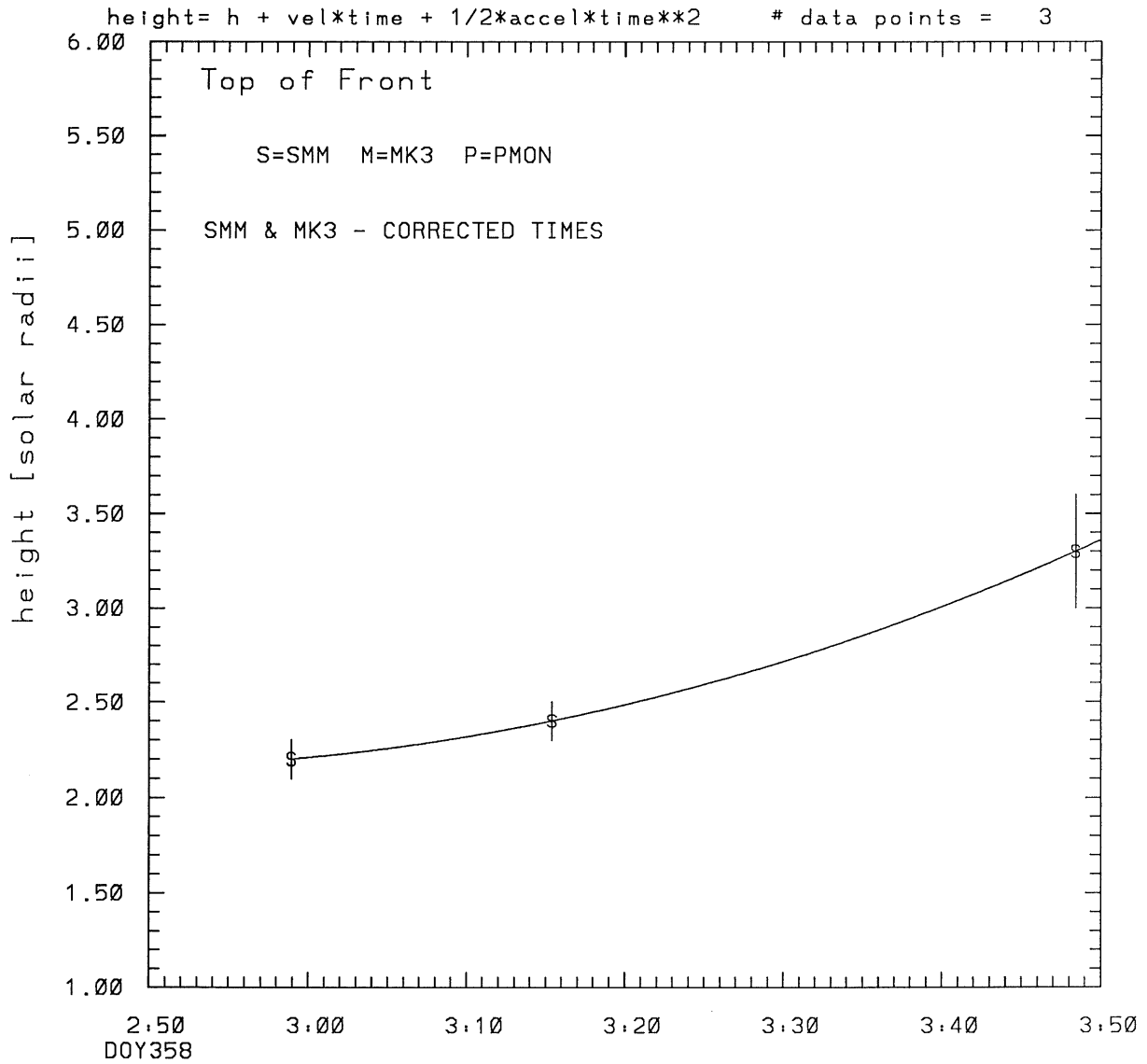


SMM C/P 1988 DOY358 313 +/- 0 degrees



tstart=DOY358 2: 0 +/- 9.4 [min.]  
radial velocity= 221. +/- 49. [km/sec]

SMM C/P 1988 DOY358 313 +/- 0 degrees

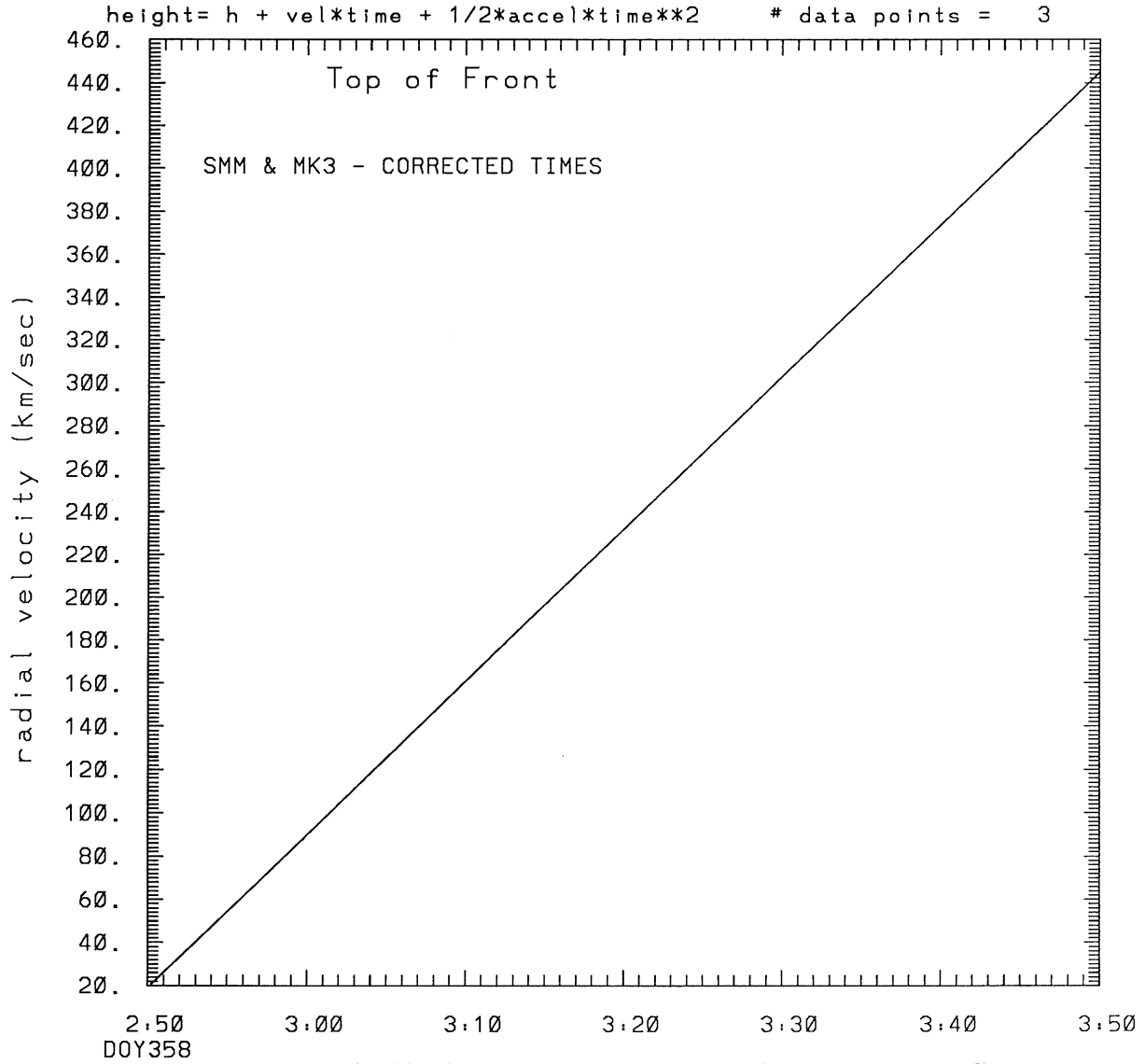


tstart=DOY358 2:48 from derivative=0

Event begins at 2.16 Solar Radii

radial acceleration =  $0.1183 \pm 0.0000$  [km/sec\*\*2]

SMM C/P 1988 DOY358 313 +/- 0 degrees



tstart=DOY358 2:48 from derivative=0  
Event begins at 2.16 Solar Radii  
radial acceleration=0.118E+00 km/sec\*\*2

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

\*\*\*\*\*  
INPUT:  
\*\*\*\*\*

year	day	time	radii	error in radius	angle	error in angle	datatype
1988	358	2:58:55	2.20	+/- 0.10	313.0	+/- 0.5	SMM
1988	358	3:15:24	2.40	+/- 0.10	313.0	+/- 0.5	SMM
1988	358	3:48:24	3.30	+/- 0.30	313.0	+/- 1.0	SMM

\*\*\*\*\*  
Structure being measured:  
Top of ~~Front~~ *Stream*  
\*\*\*\*\*

\*\*\*\*\*  
OUTPUT:  
\*\*\*\*\*

START TIME:

Event began at  $t = 0 + -0.518E+02 +/- 0.942E+01$  [minutes]

In more convenient units:

Event began at DOY 358 2:00 +/- 0.942E+01 [minutes]

Event began at DOY 358 2: 0 +/- 0.942E+01 [minutes]

Origin defined at DOY358 2:50

RADIAL INFORMATION:

RADIAL VELOCITY = 221. +/- 49. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.198E+01 +/- 0.970E-01 [solar radii]
- c(2) = 0.190E-01 +/- 0.424E-02 [radii/min]
- c(2) = 0.221E+03 +/- 0.492E+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)= 0.22921E+00 [radii] see Bevington pg. 114

error in c(2)= 0.61737E-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) = 313. +/- 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 2:58 = 0.000E+00 km/sec

The TOTAL velocity at 2:58 = 221. km/sec

The TANGENTIAL velocity at 3:15 = 0.000E+00 km/sec

The TOTAL velocity at 3:15 = 221. km/sec

The TANGENTIAL velocity at 3:48 = 0.000E+00 km/sec

The TOTAL velocity at 3:48 = 221. km/sec

\*\*\*\*\*

The following info is for estimating goodness of the fit

\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.59

Standard Deviation in start time measurement = 0.206E+02

Error in time = 0.11566E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.805E-02

Reduced Chi Squared = 0.136E+00

Chi Squared = 0.136E+00

The probability for exceeding chi square = 0.928E+00

The correlation coefficient = 0.987E+00

The probability that no LINEAR correlation exists between the variables = 0.1029E+00

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	358	2:58:55	2.20	+/- 0.10	313.0	+/- 0.5	SMM
1988	358	3:15:24	2.40	+/- 0.10	313.0	+/- 0.5	SMM
1988	358	3:48:24	3.30	+/- 0.30	313.0	+/- 1.0	SMM

\*\*\*\*\*  
Structure being measured:  
Top of Front  
\*\*\*\*\*

\*\*\*\*\*  
OUTPUT:  
\*\*\*\*\*

START TIME:

tstart=DOY358 2:48 from derivative = 0  
Event begins at 2.16 Solar Radii  
Origin defined at DOY358 2:50

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.118E+00 +/- 0.111E-06 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.216E+01 +/- 0.210E-06 [solar radii]  
c(2) = 0.163E-02 +/- 0.173E-07 [radii/min]  
c(2) = 0.190E+02 +/- 0.200E-03 [km/sec]  
c(3) = 0.306E-03 +/- 0.287E-09 [radii/min\*\*2]  
c(3) = 0.118E+00 +/- 0.111E-06 [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) = 313. +/- 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 2:58 = 0.000E+00 km/sec

The TOTAL velocity at 2:58 = 82. km/sec

The TANGENTIAL velocity at 3:15 = 0.000E+00 km/sec

The TOTAL velocity at 3:15 = 199. km/sec

The TANGENTIAL velocity at 3:48 = 0.000E+00 km/sec

The TOTAL velocity at 3:48 = 433. 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!