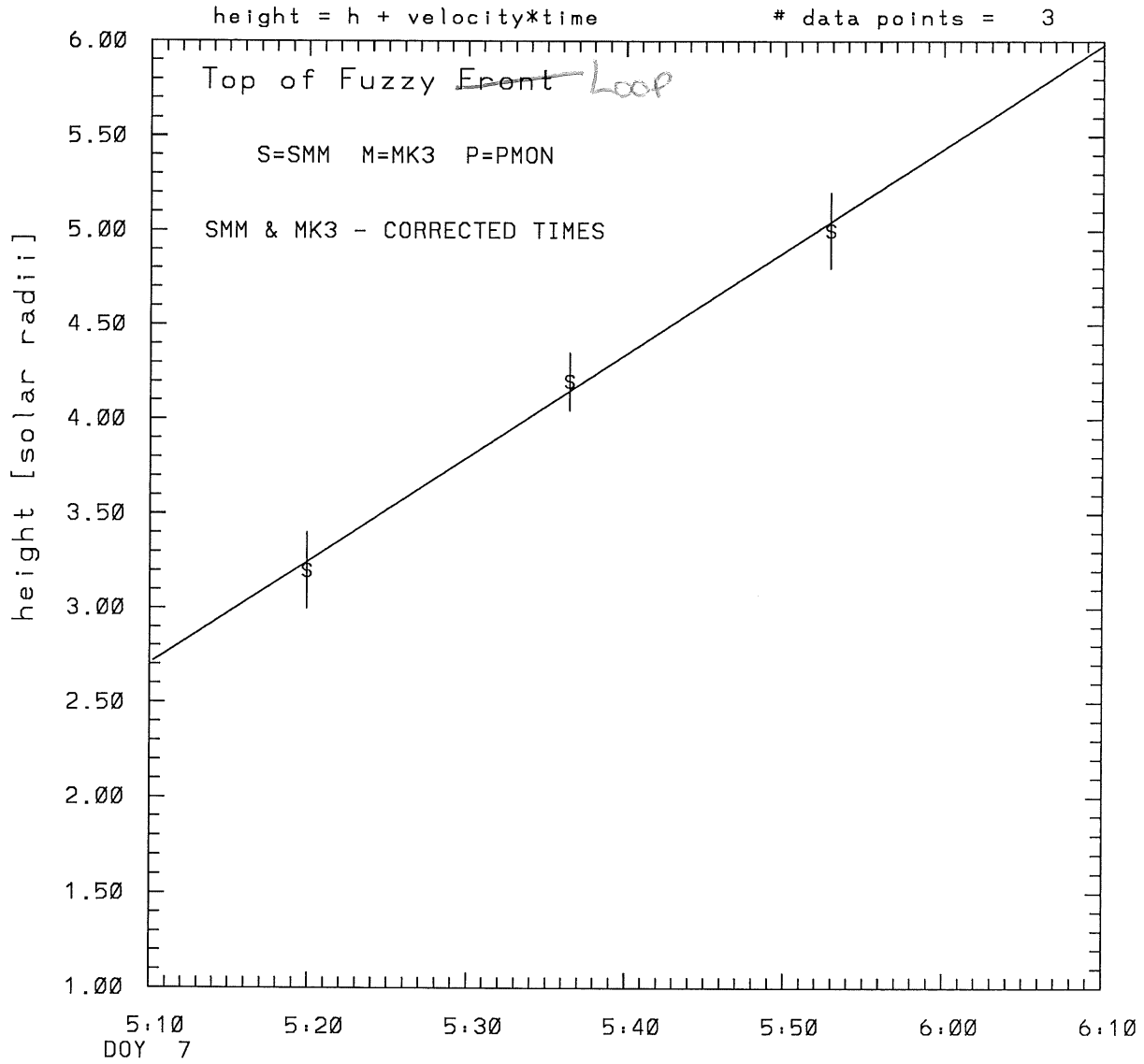
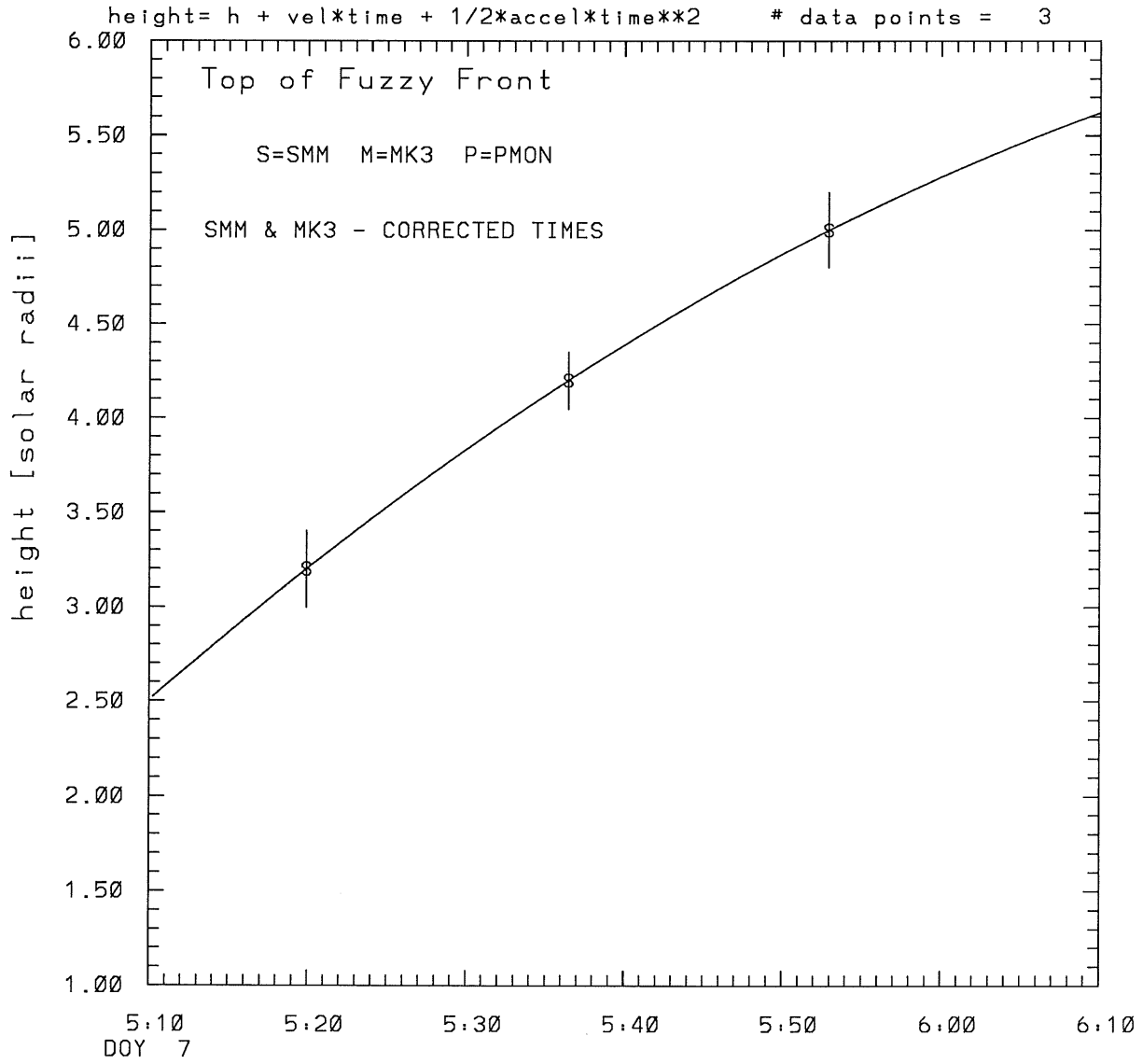


SMM C/P 1989 DOY 7 58 +/- 0 degrees



tstart=DOY 7 4:39 +/- 1.3 [min.]  
radial velocity= 633. +/- 34. [km/sec]

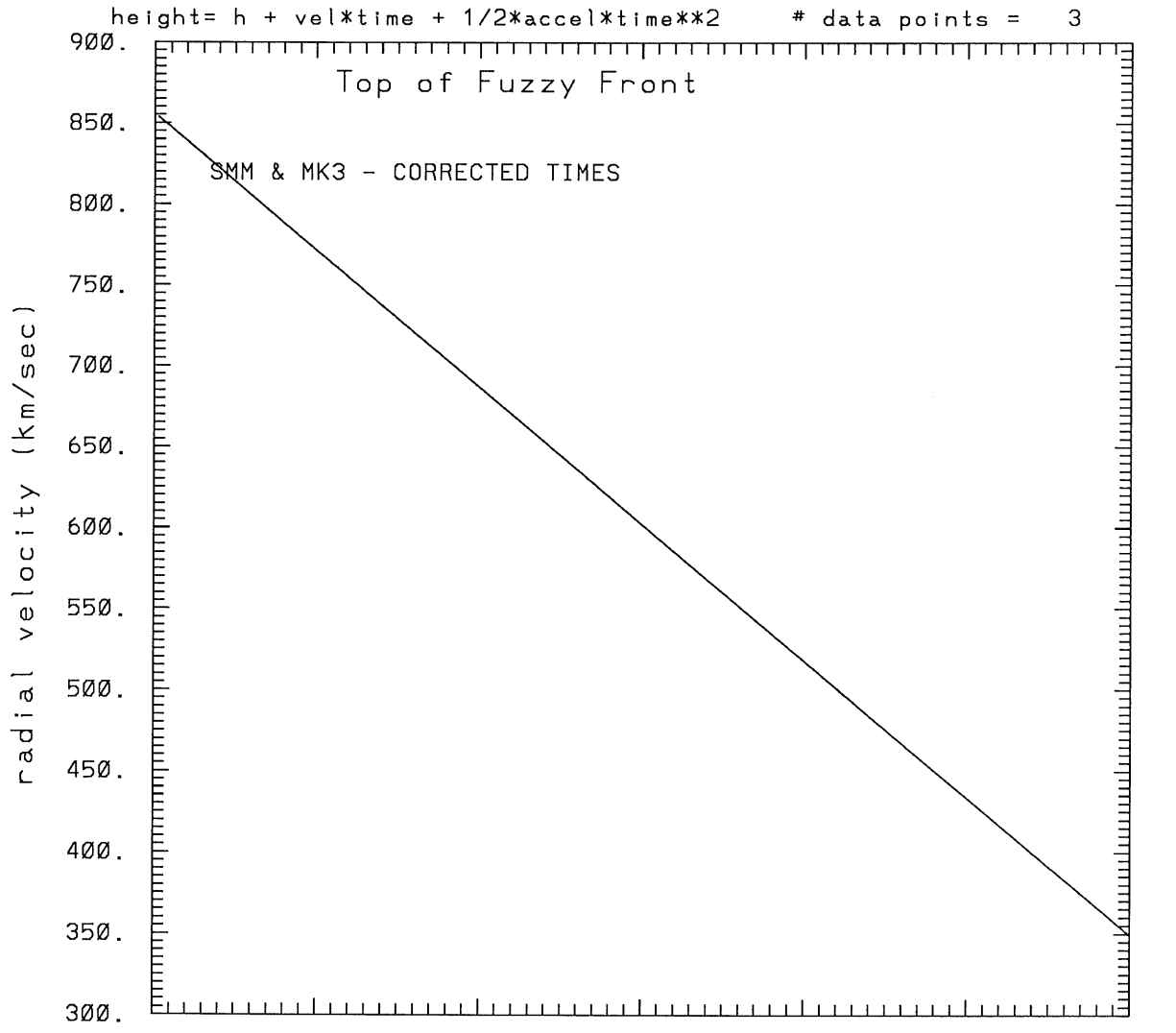
SMM C/P 1989 DOY 7 58 +/- 0 degrees



tstart=DOY 7 4.53 +/- 0.0 [min.]

radial acceleration=-0.1407 +/- 0.0000 [km/sec\*\*2]

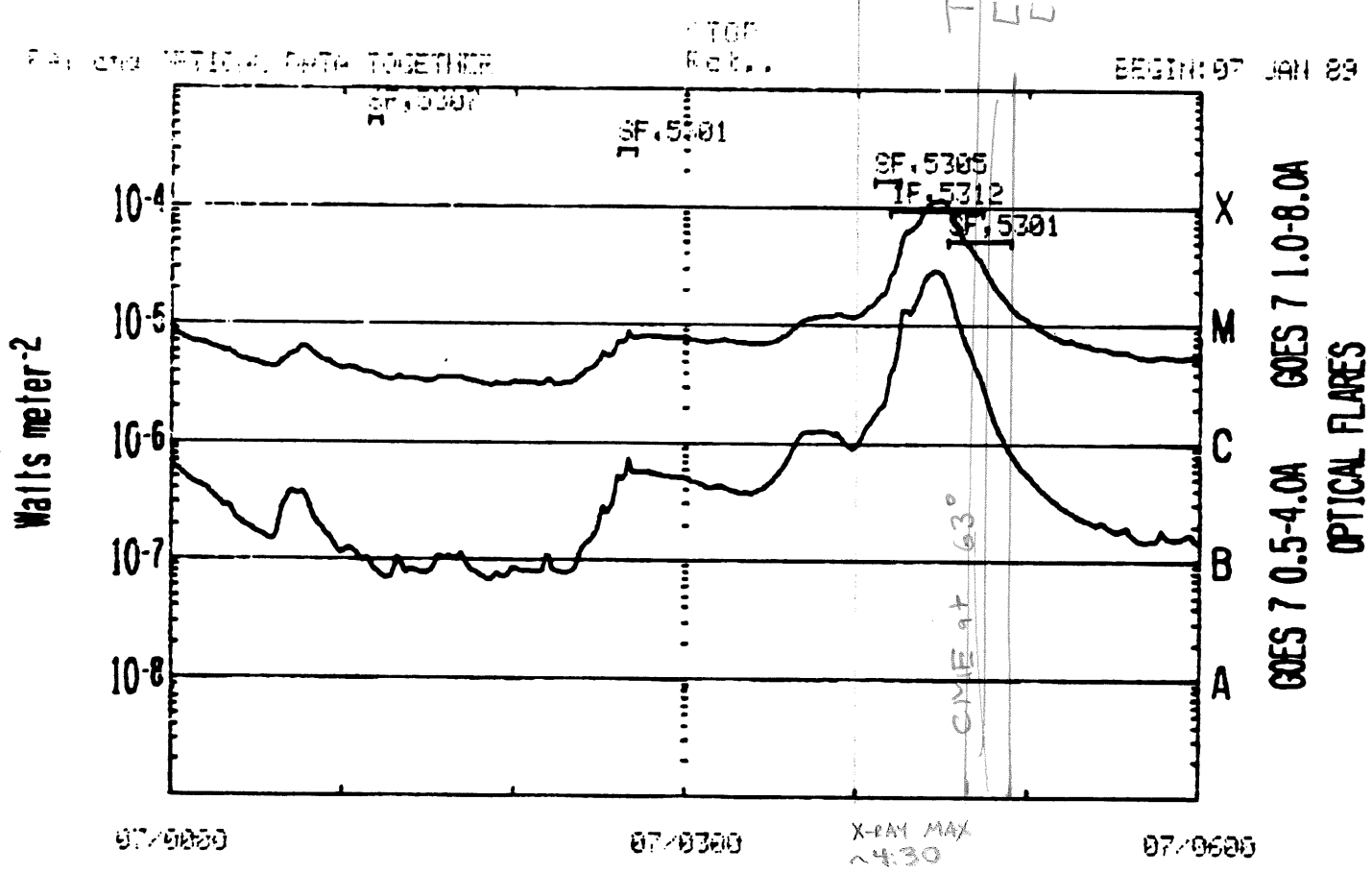
SMM C/P 1989 DOY 7 58 +/- 0 degrees



DOY 7

tstart=DOY 7 4.53 +/- 0.0 [min.]

radial acceleration =  $-.141E+00$  km/sec\*\*2



GOES-7 1 MIN DATA: OPTICAL FLARE DUR.: IMP. REGION

SAA's  
NIGHT  
RUN: 1734UT  
9 JAN 89

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

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

			error in	error in		
year	day	time	radii	radius	angle	
1989	7	5:19:55	3.20	+/- 0.20	58.0 +/- 0.5	SMM
1989	7	5:36:26	4.20	+/- 0.15	58.0 +/- 0.5	SMM
1989	7	5:52:55	5.00	+/- 0.20	58.0 +/- 0.5	SMM

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

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

START TIME:

Event began at  $t = 0 + -0.313E+02 +/- 0.134E+01$  [minutes]  
In more convenient units:  
Event began at DOY 7 4:39 +/- 0.134E+01 [minutes]

Origin defined at DOY 7 5:10

RADIAL INFORMATION:

RADIAL VELOCITY = 633. +/- 34. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- $c(1) = 0.271E+01 +/- 0.845E-01$  [solar radii]
- $c(2) = 0.545E-01 +/- 0.291E-02$  [radii/min]
- $c(2) = 0.633E+03 +/- 0.338E+02$  [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  $c(1) = 0.10710E+00$  [radii] see Bevington pg. 114
- error in  $c(2) = 0.36112E-02$  [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) = 58. +/- 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 5:19 = 0. km/sec

The TOTAL velocity at 5:19 = 633. km/sec

The TANGENTIAL velocity at 5:36 = 0. km/sec

The TOTAL velocity at 5:36 = 633. km/sec

The TANGENTIAL velocity at 5:52 = 0. km/sec

The TOTAL velocity at 5:52 = 633. km/sec

\*\*\*\*\*

The following info is for estimating goodness of the fit

\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.90

Standard Deviation in start time measurement = 0.135E+02

Error in time = 0.15448E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.367E-02

Reduced Chi Squared = 0.142E-01

Chi Squared = 0.142E-01

The probability for exceeding chi square = 0.952E+00

The correlation coefficient = 0.998E+00

The probability that no LINEAR correlation exists between the variables = 0.4040E-01

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

\*\*\*\*\*

This is a 2 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1989	7	5:19:55	3.20 +/- 0.20	3.20 +/- 0.20	58.0 +/- 0.5	58.0 +/- 0.5	SMM
1989	7	5:36:26	4.20 +/- 0.15	4.20 +/- 0.15	58.0 +/- 0.5	58.0 +/- 0.5	SMM
1989	7	5:52:55	5.00 +/- 0.20	5.00 +/- 0.20	58.0 +/- 0.5	58.0 +/- 0.5	SMM

\*\*\*\*\*

Structure being measured:

Top of Fuzzy Front

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.187E+02 +/- 0.000E+00 [minutes]

In more convenient units:

Event began at DOY 7 4:53 +/- 0.000E+00 [minutes]

Origin defined at DOY 7 5:10

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.141E+00 +/- 0.175E-05 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.250E+01 +/- 0.292E-05 [solar radii]  
c(2) = 0.738E-01 +/- 0.245E-06 [radii/min]  
c(2) = 0.856E+03 +/- 0.284E-02 [km/sec]  
c(3) = -0.364E-03 +/- 0.453E-08 [radii/min\*\*2]  
c(3) = -0.141E+00 +/- 0.175E-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) = 58. +/- 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]

$$a(3) = 0.000E+00 \pm 0.000E+00 \text{ [rad/sec**2]}$$

THE TANGENTIAL AND TOTAL VELOCITIES AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 5:19 = 0. km/sec

The TOTAL velocity at 5:19 = 772. km/sec

The TANGENTIAL velocity at 5:36 = 0. km/sec

The TOTAL velocity at 5:36 = 633. km/sec

The TANGENTIAL velocity at 5:52 = 0. km/sec

The TOTAL velocity at 5:52 = 493. 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!