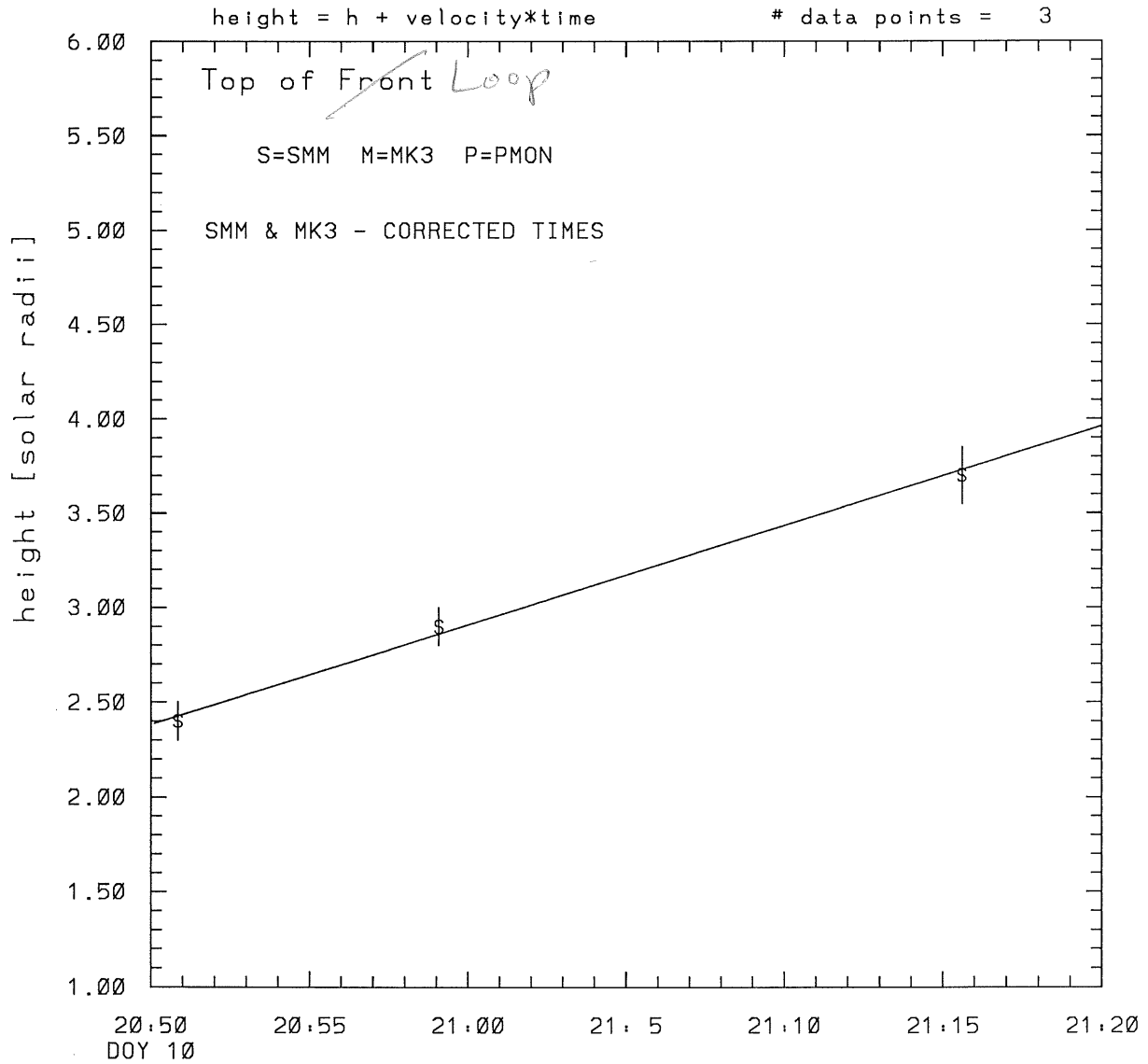
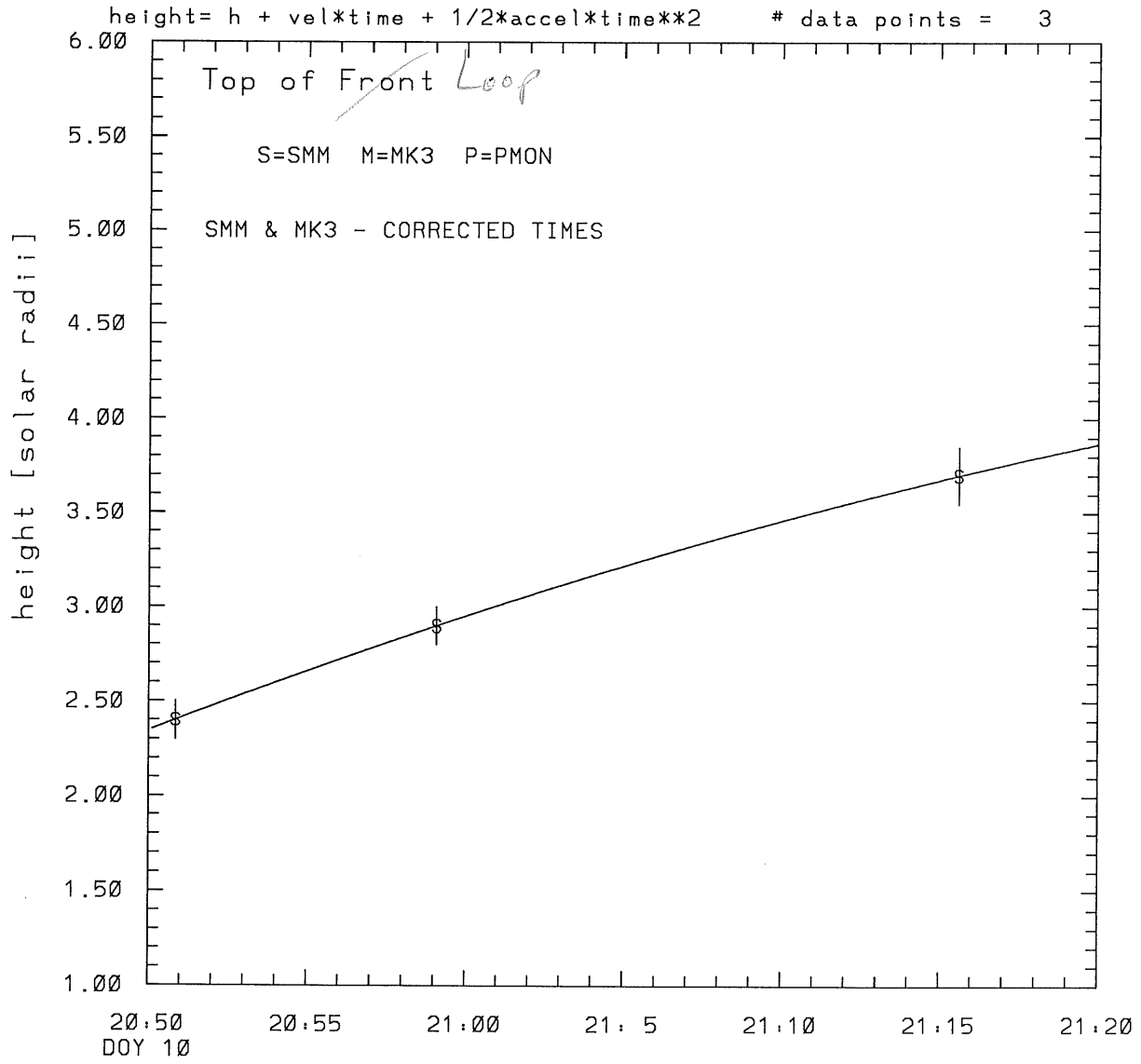


SMM C/P 1989 DOY 10 140 +/- 0 degrees



tstart=DOY 10 20:24 +/- 0.8 [min.]
radial velocity= 611. +/- 31. [km/sec]

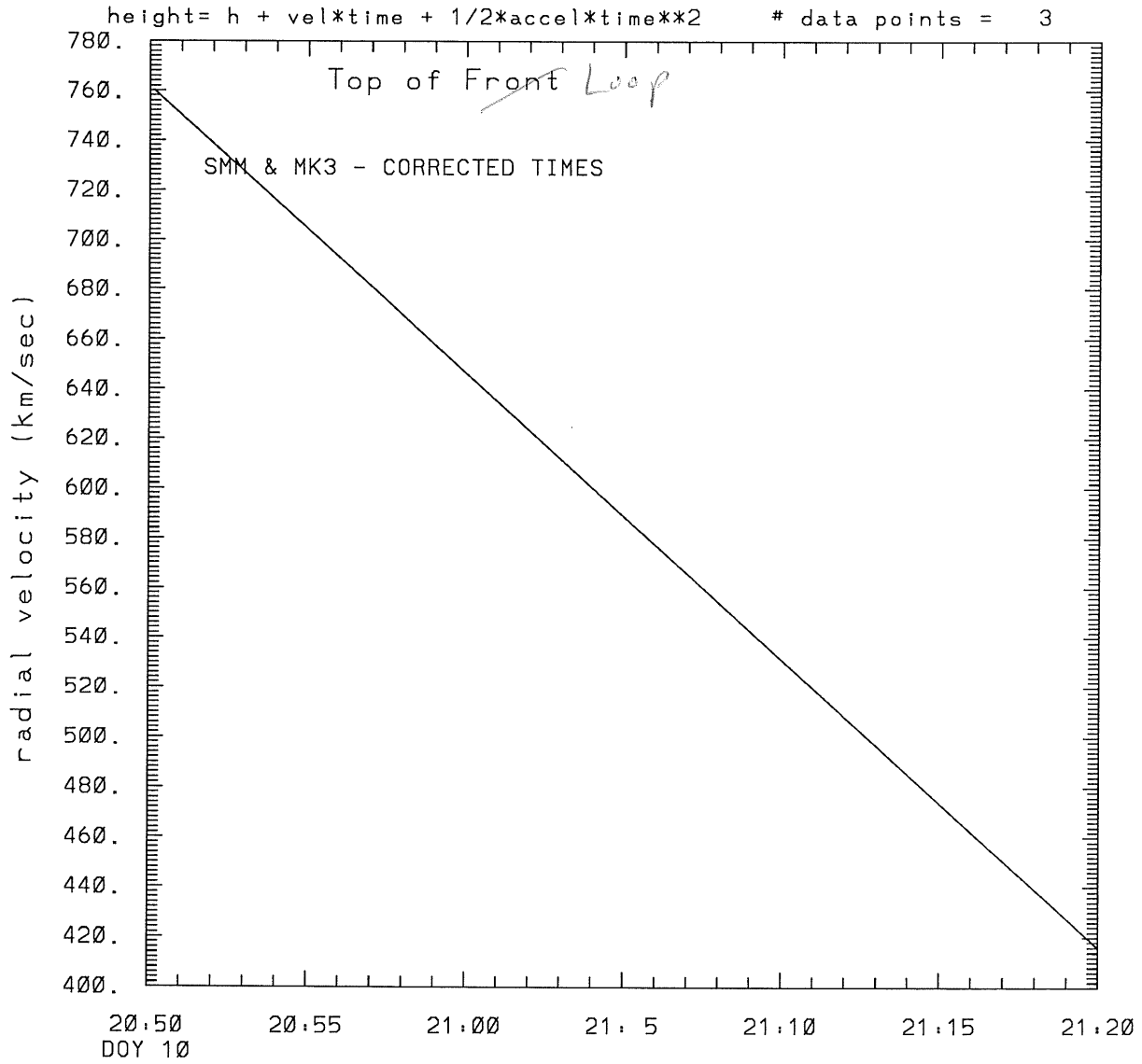
SMM C/P 1989 DOY 10 140 +/- 0 degrees



tstart=DOY 10 20:32 +/- 0.0 [min.]

radial acceleration=-0.1920 +/- 0.0000 [km/sec**2]

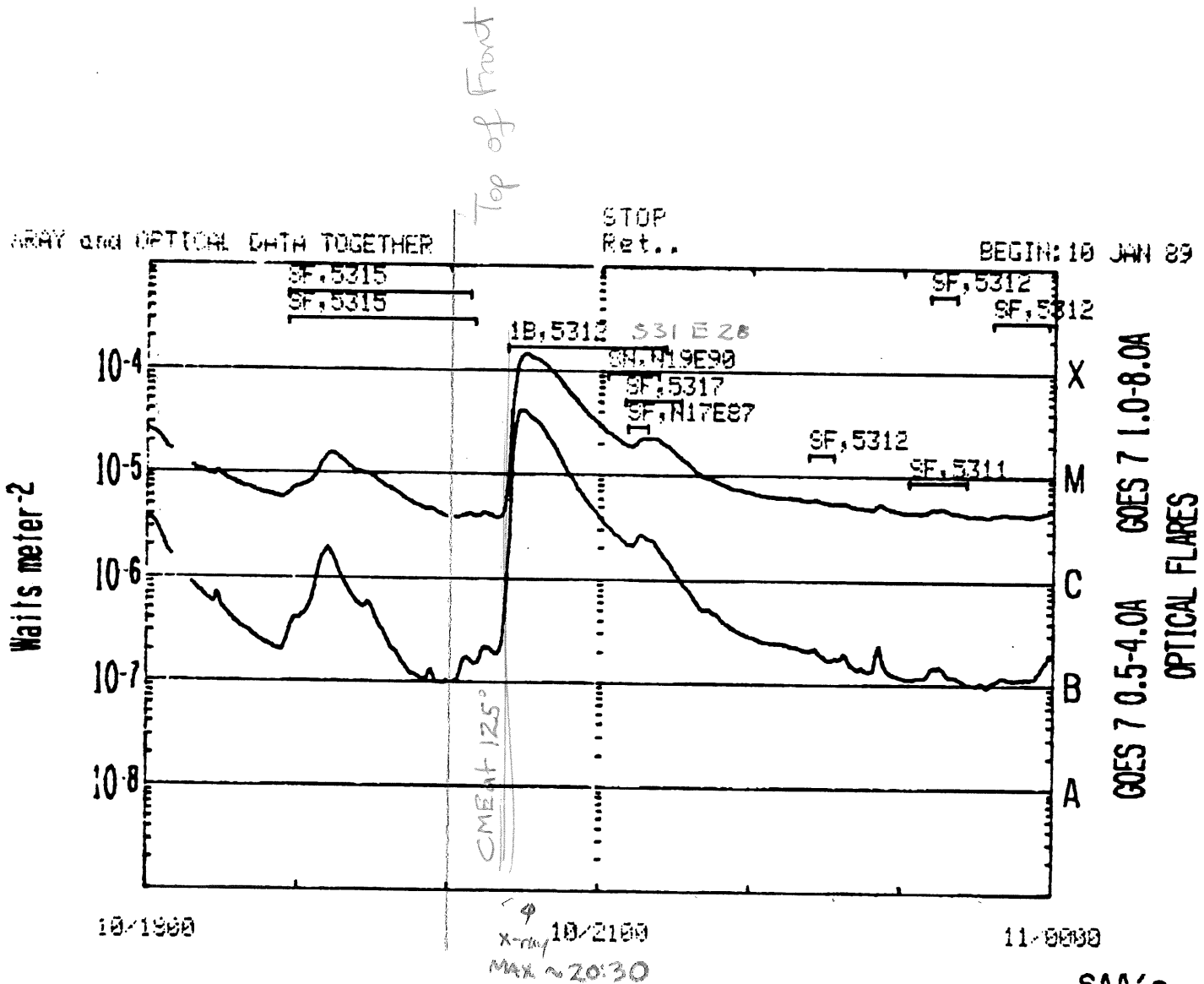
SMM C/P 1989 DOY 10 140 +/- 0 degrees



tstart=DOY 10 20:32 +/- 0.0 [min.]

radial acceleration = $-.192E+00$ km/sec**2

1989 Day 10



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

SAA's NIGHT

FIN: 1944UT
15 JAN 89

This is a 1 order run

INPUT:

year	day	time	radii	error in radius	error in angle	datatype
1989	10	20:50:51	2.40	+/- 0.10	140.0 +/- 0.5	SMM
1989	10	20:59: 5	2.90	+/- 0.10	140.0 +/- 0.5	SMM
1989	10	21:15:36	3.70	+/- 0.15	140.0 +/- 0.5	SMM

Structure being measured:
Top of Front *Loop*

OUTPUT:

START TIME:

Event began at $t = 0 + -0.262E+02 +/- 0.848E+00$ [minutes]

In more convenient units:

Event began at DOY 10 20:24 +/- 0.848E+00 [minutes]

Origin defined at DOY 10 20:50

RADIAL INFORMATION:

RADIAL VELOCITY = 611. +/- 31. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.238E+01 +/- 0.331E-01 [solar radii]
c(2) = 0.527E-01 +/- 0.267E-02 [radii/min]
c(2) = 0.611E+03 +/- 0.310E+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)= 0.49696E-01 [radii] see Bevington pg. 114

error in c(2)= 0.31672E-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) = 140. +/- 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 20:50 = 0. km/sec

The TOTAL velocity at 20:50 = 611. km/sec

The TANGENTIAL velocity at 20:59 = 0. km/sec

The TOTAL velocity at 20:59 = 611. km/sec

The TANGENTIAL velocity at 21:15 = 0. km/sec

The TOTAL velocity at 21:15 = 611. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.66

Standard Deviation in start time measurement = 0.103E+02

Error in time = 0.10721E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.165E-02

Reduced Chi Squared = 0.656E-02

Chi Squared = 0.656E-02

The probability for exceeding chi square = 0.968E+00

The correlation coefficient = 0.998E+00

The probability that no LINEAR correlation exists between the variables = 0.3720E-01

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

This is a 2 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1989	10	20:50:51	2.40	+/- 0.10	140.0	+/- 0.5	SMM
1989	10	20:59: 5	2.90	+/- 0.10	140.0	+/- 0.5	SMM
1989	10	21:15:36	3.70	+/- 0.15	140.0	+/- 0.5	SMM

Structure being measured:
Top of Front *Loop*

OUTPUT:

START TIME:

Event began at $t = 0 + -0.180E+02 +/- 0.000E+00$ [minutes]
In more convenient units:
Event began at DOY 10 20:32 +/- 0.000E+00 [minutes]

Origin defined at DOY 10 20:50

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.192E+00 +/- 0.113E-05$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = $0.234E+01 +/- 0.351E-06$ [solar radii]
- c(2) = $0.657E-01 +/- 0.794E-07$ [radii/min]
- c(2) = $0.762E+03 +/- 0.922E-03$ [km/sec]
- c(3) = $-0.497E-03 +/- 0.291E-08$ [radii/min**2]
- c(3) = $-0.192E+00 +/- 0.113E-05$ [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) = 140. +/- 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 20:50 = 0. km/sec

The TOTAL velocity at 20:50 = 752. km/sec

The TANGENTIAL velocity at 20:59 = 0. km/sec

The TOTAL velocity at 20:59 = 657. km/sec

The TANGENTIAL velocity at 21:15 = 0. km/sec

The TOTAL velocity at 21:15 = 467. 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!