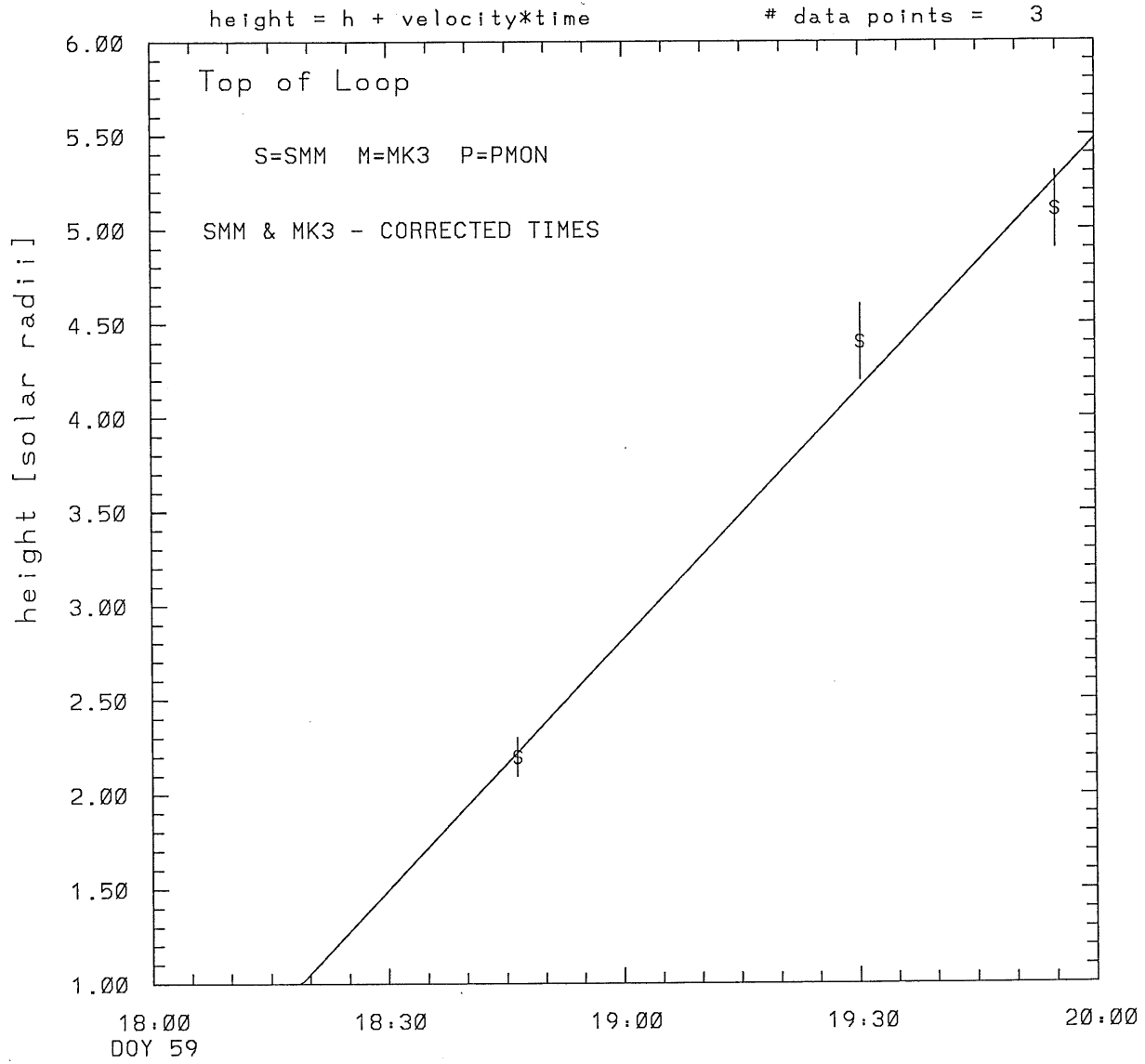
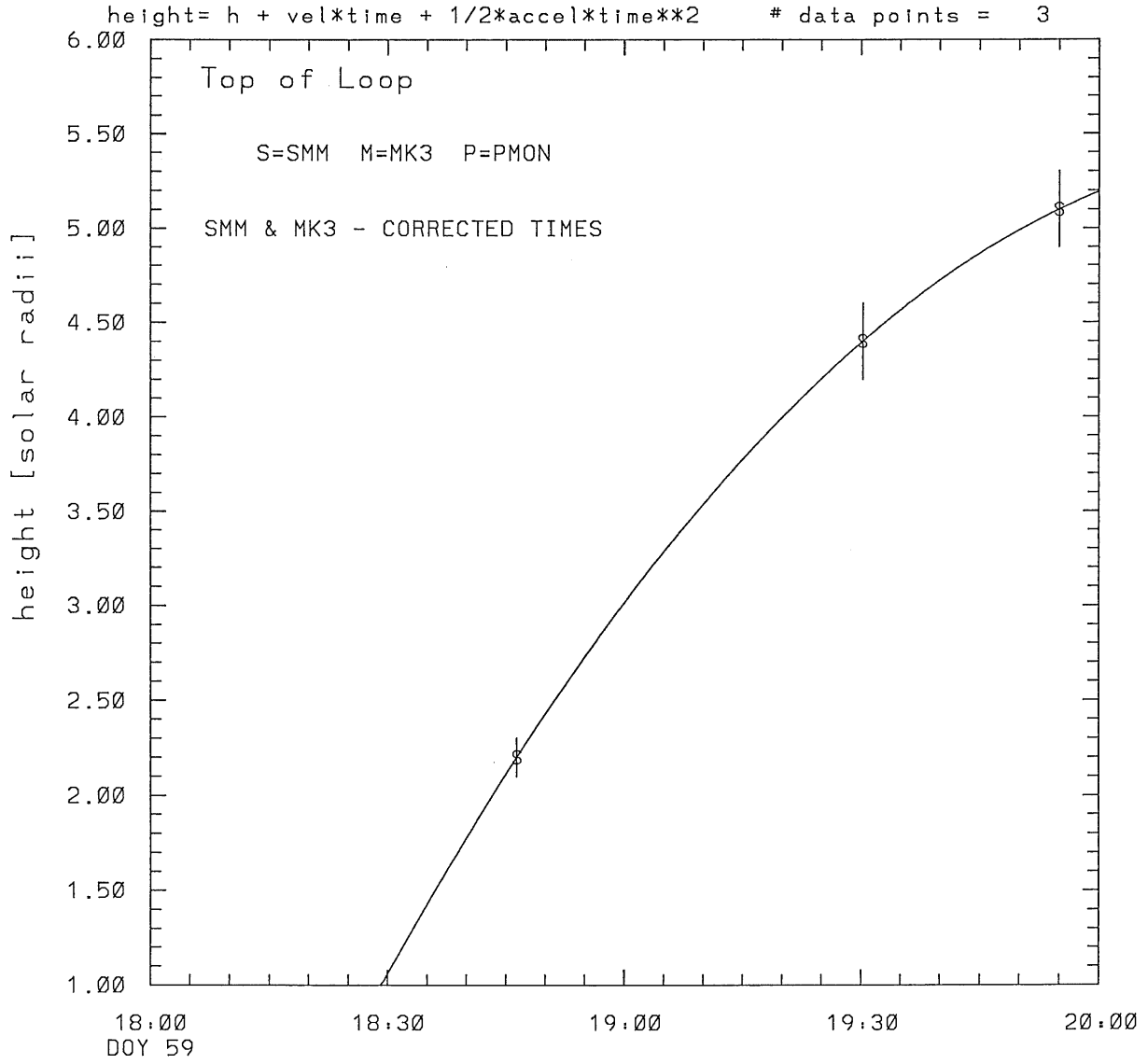


SMM C/P 1989 DOY 59 295 +/- 0 degrees



tstart=DOY 59 18:19 +/- 11.5 [min.]
radial velocity= 513. +/- 35. [km/sec]

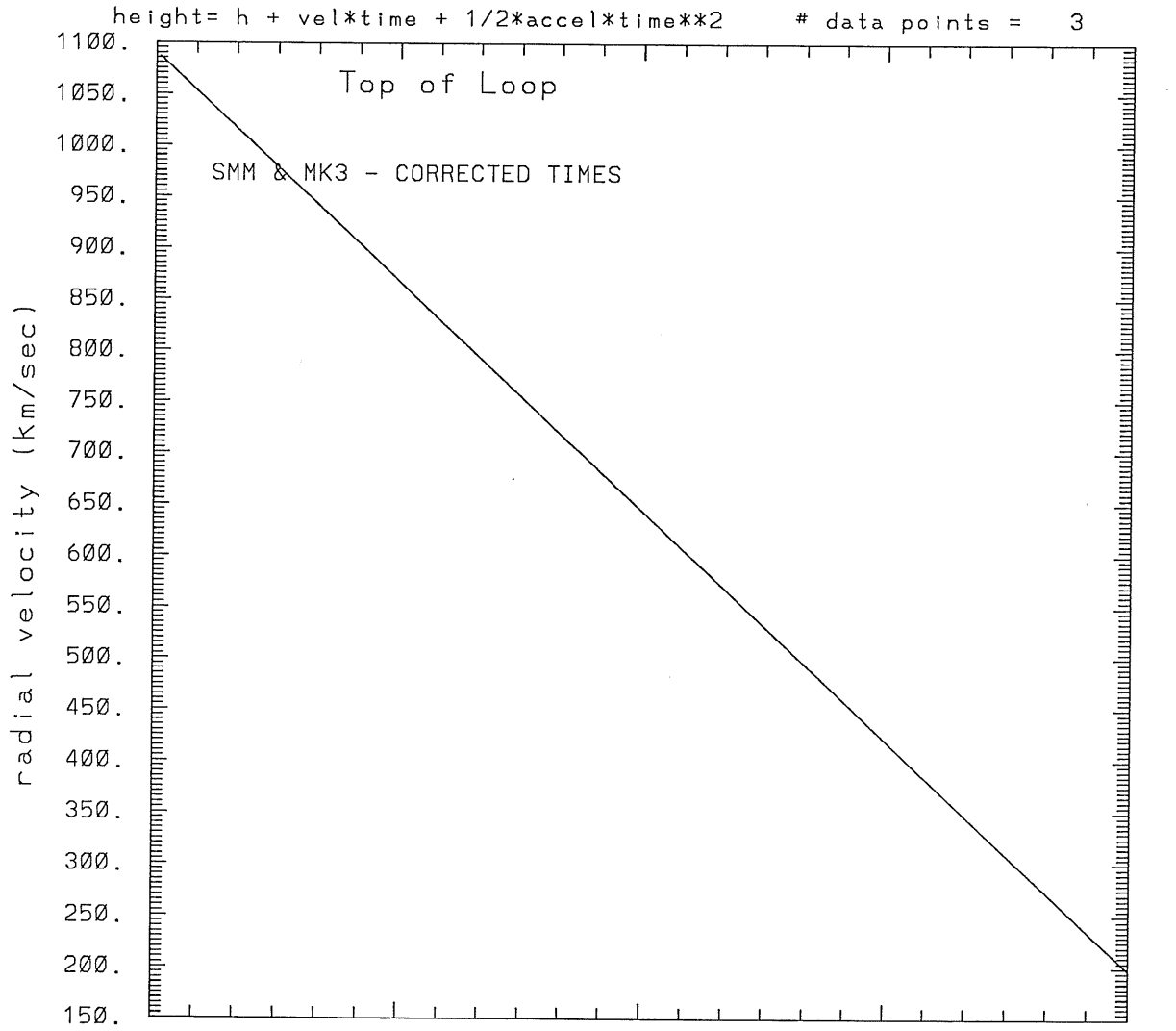
SMM C/P 1989 DOY 59 295 +/- 0 degrees



tstart=DOY 59 18:29 +/- 0.0 [min.]

radial acceleration=-0.1239 +/- 0.0000 [km/sec**2]

SMM C/P 1989 DOY 59 295 +/- 0 degrees



18:00
DOY 59

18:30

19:00

19:30

20:00

tstart=DOY 59 18:29 +/- 0.0 [min.]

radial acceleration=-.124E+00 km/sec**2

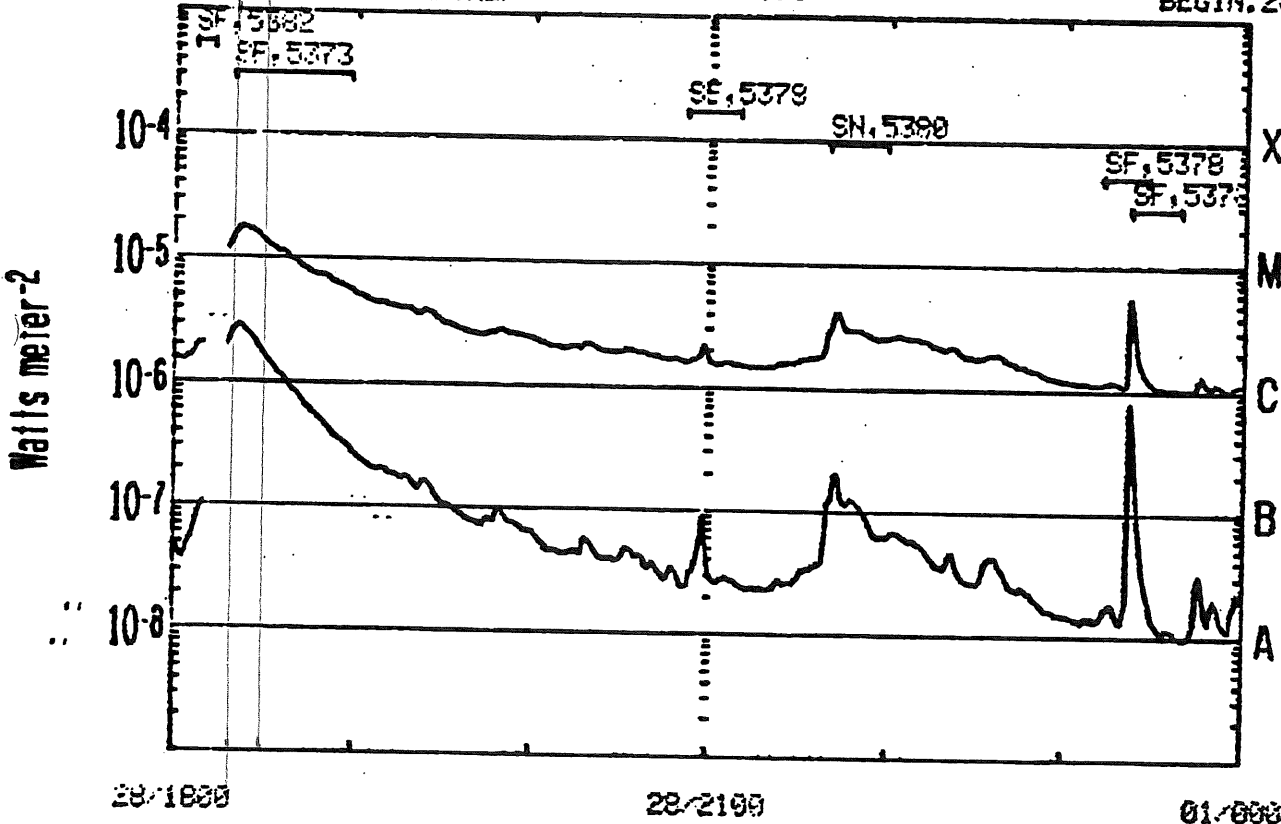
1989 Day 059

Top of Loop, center pos=293° [18:19] [18:20]
200 order [18:29]

SAA/ and OPTICAL DATA TOGETHER

STOP
Ret..

BEGIN: 28 FEB 89



Goes 7 0.5-4.0A
Goes 7 1.0-8.0A
OPTICAL FLARES

28/1800

28/2100

01/0000

SAA's
NIGHT

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

RUN: 2150UT
3 MAR 89

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	angle	error in angle	datatype
1989	59	18:46:25	2.20	+/- 0.10	295.0	+/- 0.5	SMM
1989	59	19:30:14	4.40	+/- 0.20	295.0	+/- 0.5	SMM
1989	59	19:55: 2	5.10	+/- 0.20	295.0	+/- 0.5	SMM

Structure being measured:

Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + 0.188E+02 \pm 0.115E+02$ [minutes]

In more convenient units:

Event began at DOY 59 18:19 $\pm 0.115E+02$ [minutes]

Origin defined at DOY 59 18: 0

RADIAL INFORMATION:

RADIAL VELOCITY = $513. \pm 35.$ km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.170E+00 \pm 0.216E+00$ [solar radii]
 $c(2) = 0.442E-01 \pm 0.305E-02$ [radii/min]
 $c(2) = 0.513E+03 \pm 0.354E+02$ [km/sec]
 $c(3) = 0.000E+00 \pm 0.000E+00$ [radii/min**2]
 $c(3) = 0.000E+00 \pm 0.000E+00$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

error in $c(1) = 0.51835E+00$ [radii] see Bevington pg. 114

error in $c(2) = 0.58530E-02$ [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = $0.0000E+00 \pm 0.0000E+00$ [radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 295. +/- 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 18:46 = 0. km/sec

The TOTAL velocity at 18:46 = 513. km/sec

The TANGENTIAL velocity at 19:30 = 0. km/sec

The TOTAL velocity at 19:30 = 513. km/sec

The TANGENTIAL velocity at 19:55 = 0. km/sec

The TOTAL velocity at 19:55 = 513. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 1.51

Standard Deviation in start time measurement = 0.284E+02

Error in time = 0.65075E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.210E-01

Reduced Chi Squared = 0.189E+00

Chi Squared = 0.189E+00

The probability for exceeding chi square = 0.885E+00

The correlation coefficient = 0.991E+00

The probability that no LINEAR correlation exists between the variables = 0.8374E-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	59	18:46:25	2.20	+/- 0.10	295.0	+/- 0.5	SMM
1989	59	19:30:14	4.40	+/- 0.20	295.0	+/- 0.5	SMM
1989	59	19:55: 2	5.10	+/- 0.20	295.0	+/- 0.5	SMM

Structure being measured:
Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + 0.292E+02 \pm 0.000E+00$ [minutes]

In more convenient units:

Event began at DOY 59 18:29 $\pm 0.000E+00$ [minutes]

Origin defined at DOY 59 18: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.124E+00 \pm 0.204E-06$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $-0.147E+01 \pm 0.275E-05$ [solar radii]
c(2) = $0.940E-01 \pm 0.822E-07$ [radii/min]
c(2) = $0.109E+04 \pm 0.953E-03$ [km/sec]
c(3) = $-0.320E-03 \pm 0.527E-09$ [radii/min**2]
c(3) = $-0.124E+00 \pm 0.204E-06$ [km/sec**2]

ANGULAR INFORMATION:

ANGULAR ACCELERATION= $0.0000E+00 \pm 0.0000E+00$ [radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 295. $\pm 0.$ [degrees]
a(2) = $0.000E+00 \pm 0.000E+00$ [degrees/min]
a(2) = $0.000E+00 \pm 0.000E+00$ [rad/sec]
a(3) = $0.000E+00 \pm 0.000E+00$ [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 18:46 = 0. km/sec

The TOTAL velocity at 18:46 = 745. km/sec

The TANGENTIAL velocity at 19:30 = 0. km/sec

The TOTAL velocity at 19:30 = 420. km/sec

The TANGENTIAL velocity at 19:55 = 0. km/sec

The TOTAL velocity at 19:55 = 235. 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!