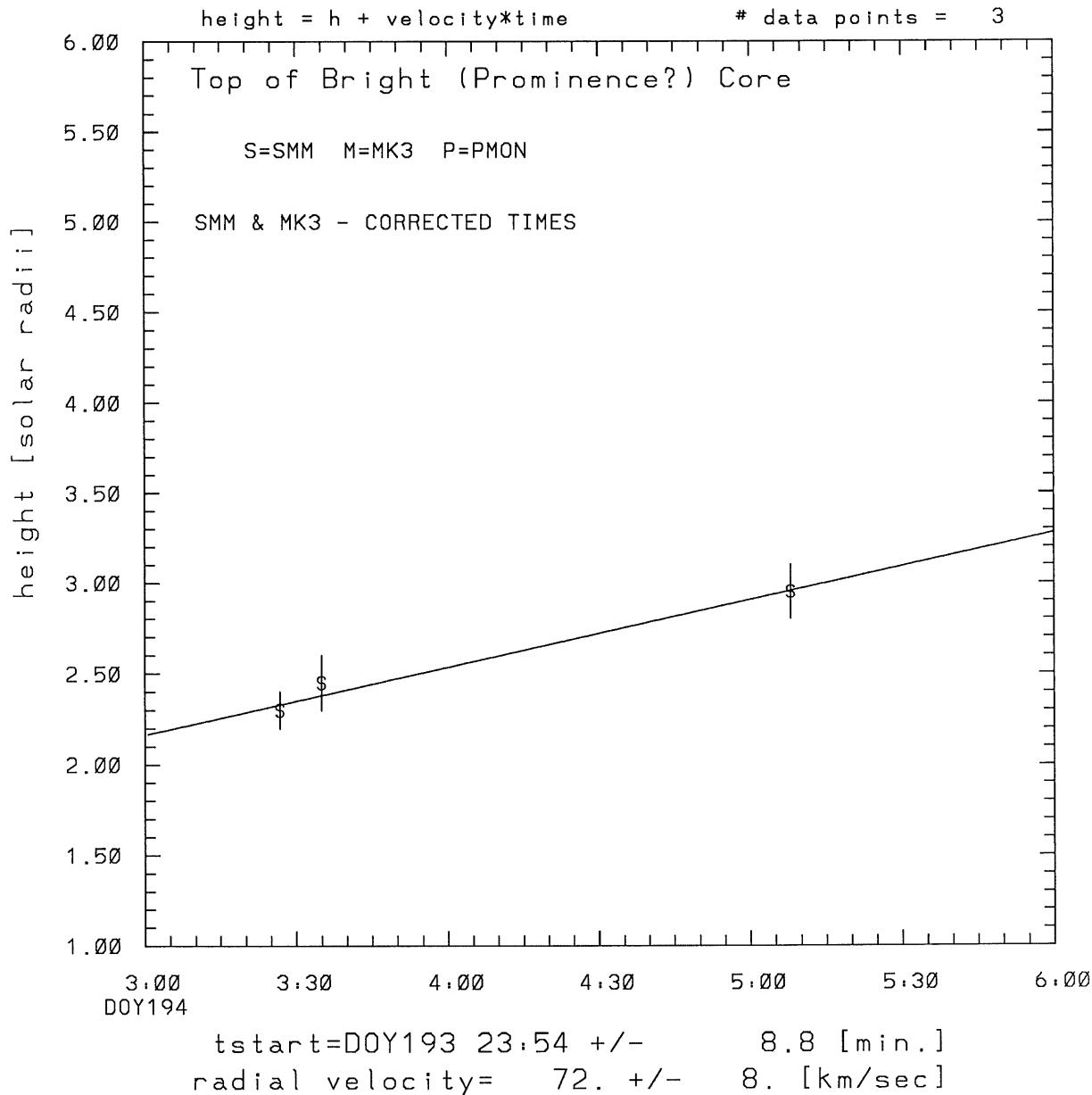
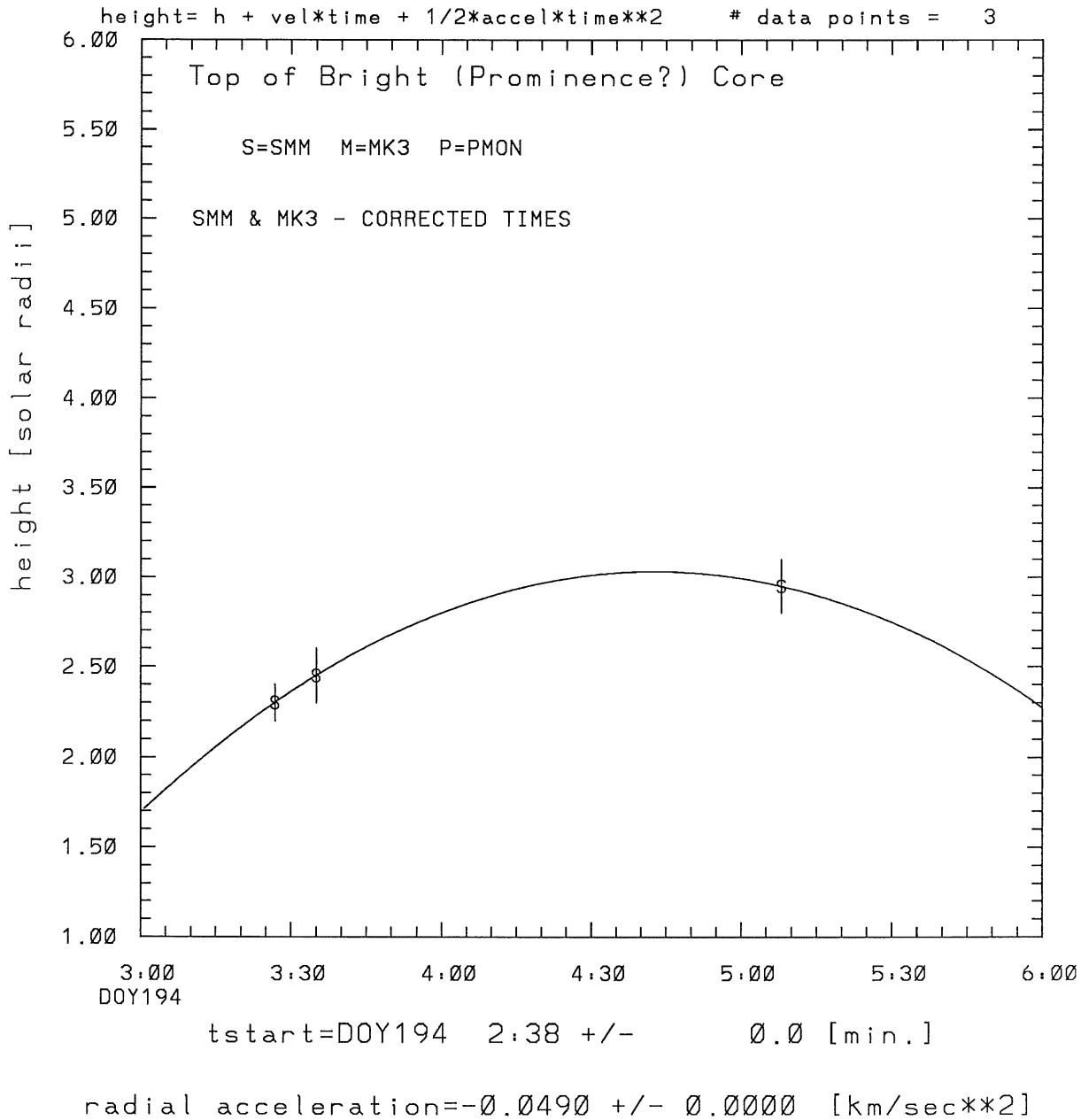


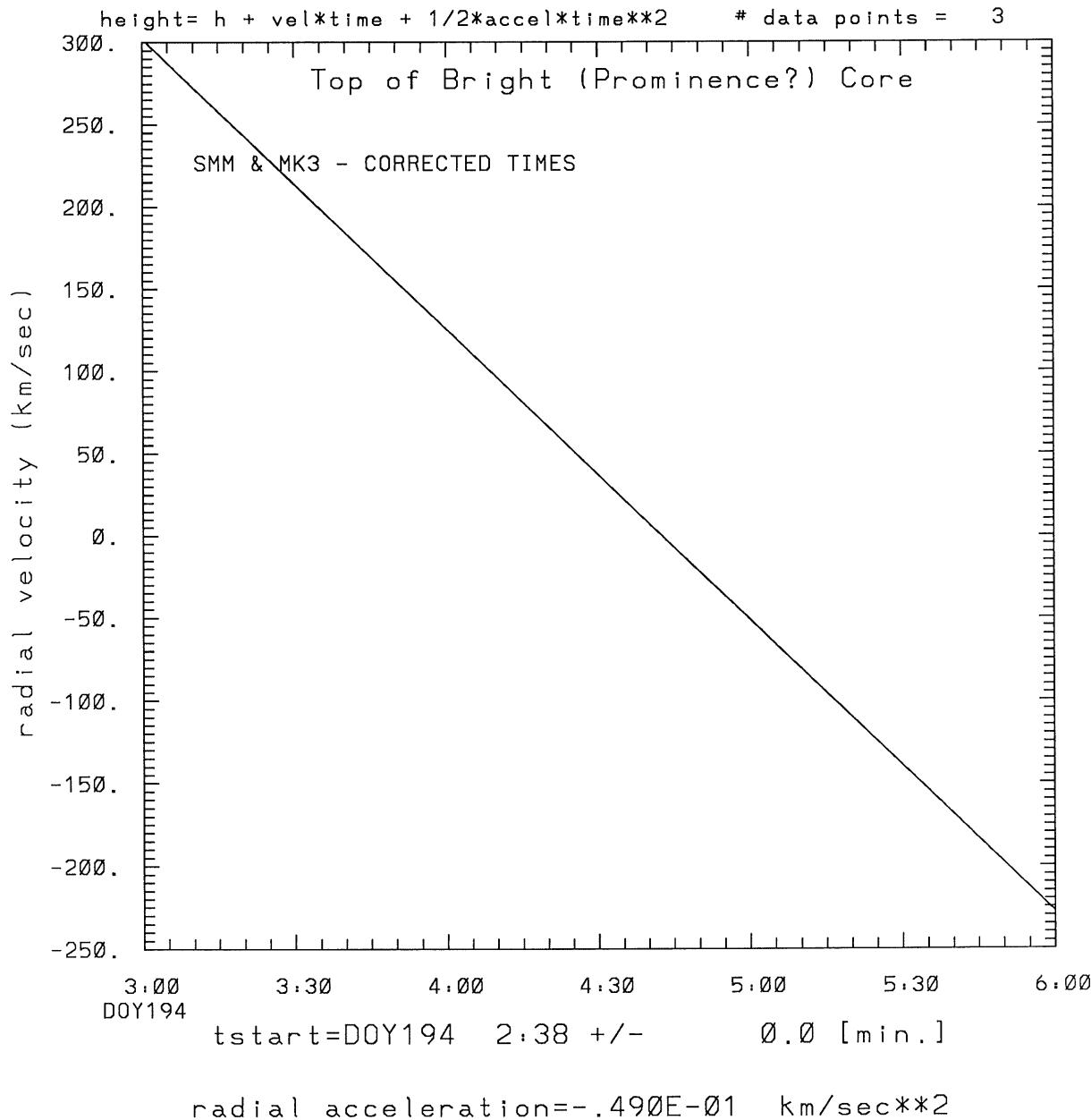
SMM C/P 1989 DOY194 154 +/- 0 degrees



SMM C/P 1989 DOY194 154 +/- 0 degrees

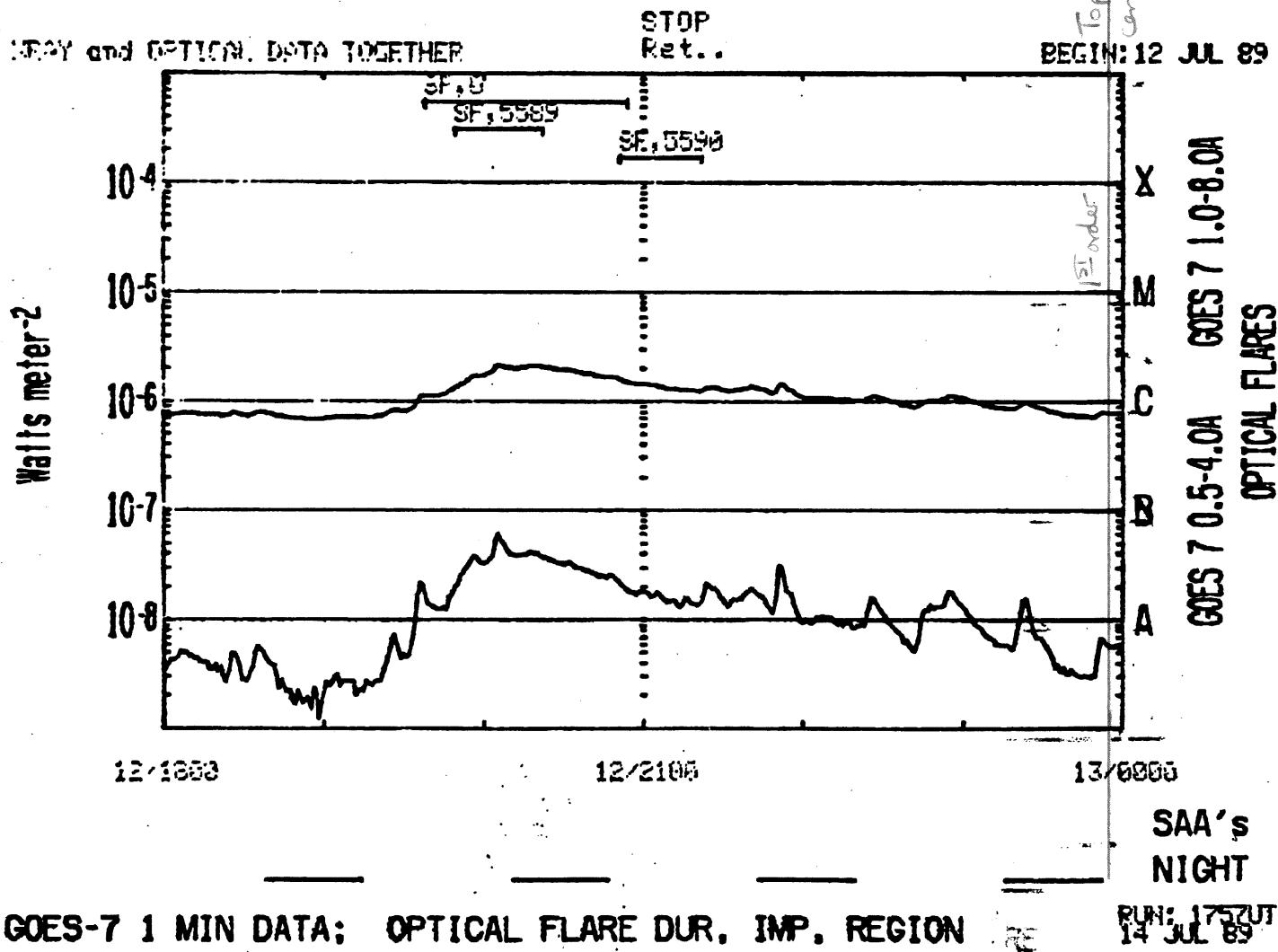


SMM C/P 1989 DOY194 154 +/- 0 degrees



(989 Day 193)

Top of Bright Pommere (?) Core  
center = 160°, [123:54] 1st order



See next page  
for 2<sup>nd</sup> order

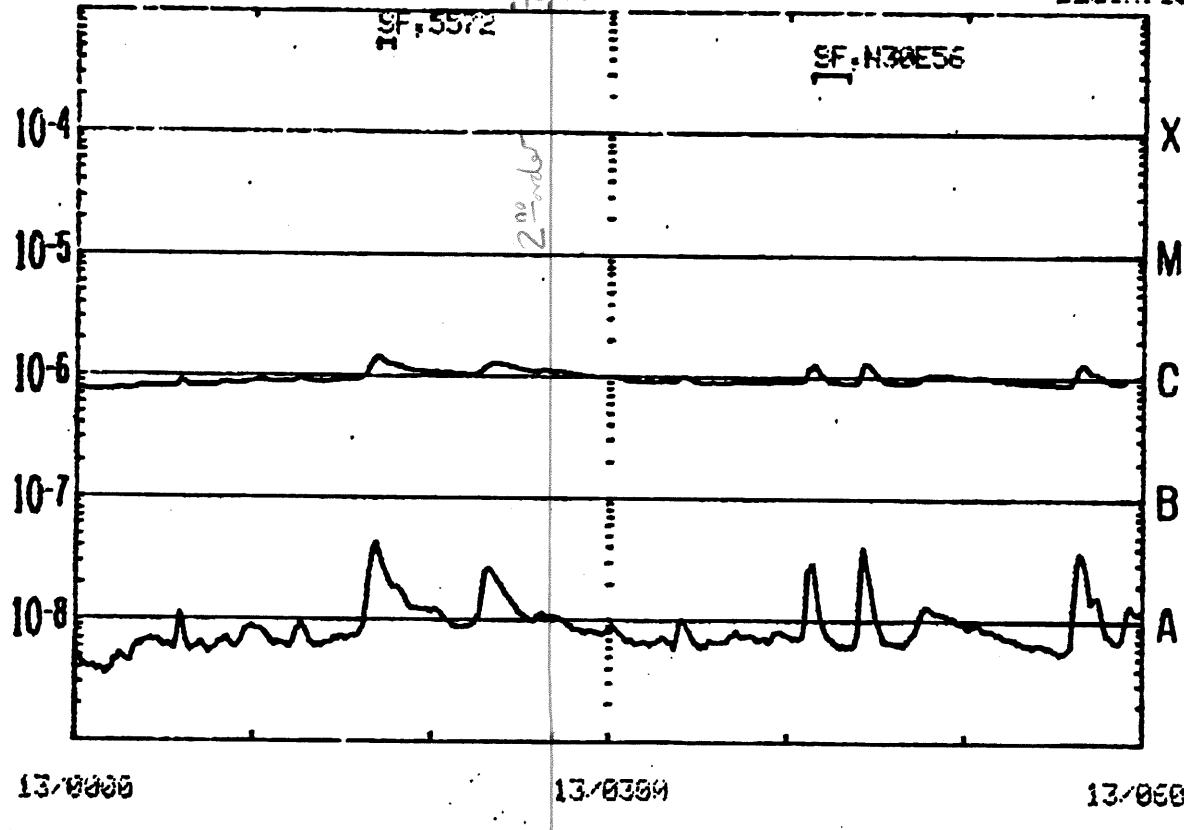
1989 Doy 194

SOHO and OPTICAL DATA TOGETHER

Top of Bright Prominence Core  
2<sup>nd</sup> order [2:38]  
STOP Ret..

BEGIN: 13 JUL 89

Watts meter/L



GOES 7 0.5-4.0A GOES 7 1.0-8.0A

OPTICAL FLARES

SAA's  
NIGHT

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

RUN: 1759UT  
14 JUL 89

\*\*\*\*\*

This is a 1 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	doy	time	radii	radius	error in angle	error in angle	datatype
1989	194	3:26:44	2.30	+/- 0.10	154.0	+/- 0.5	SMM
1989	194	3:34:58	2.45	+/- 0.15	154.0	+/- 0.5	SMM
1989	194	5: 8: 1	2.95	+/- 0.15	154.0	+/- 0.5	SMM

\*\*\*\*\*

Structure being measured:

Top of Bright (Prominence?) Core

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.188E+03 +/- 0.875E+01 [minutes]

In more convenient units:

Event began at DOY 193 23:54 +/- 0.875E+01 [minutes]

Origin defined at DOY194 3: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 72. +/- 8. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.216E+01 +/- 0.454E-01 [solar radii]  
c(2) = 0.619E-02 +/- 0.675E-03 [radii/min]  
c(2) = 0.718E+02 +/- 0.783E+01 [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)= 0.74836E-01 [radii] see Bevington pg. 114  
error in c(2)= 0.95751E-03 [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) = 154. +/- 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 3:26 = 0. km/sec

The TOTAL velocity at 3:26 = 72. km/sec

The TANGENTIAL velocity at 3:34 = 0. km/sec

The TOTAL velocity at 3:34 = 72. km/sec

The TANGENTIAL velocity at 5: 8 = 0. km/sec

The TOTAL velocity at 5: 8 = 72. km/sec

\*\*\*\*\*

The following info is for estimating goodness of the fit

\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.34

Standard Deviation in start time measurement = 0.459E+02

Error in time = 0.12304E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.241E-02

Reduced Chi Squared = 0.108E-01

Chi Squared = 0.108E-01

The probability for exceeding chi square = 0.961E+00

The correlation coefficient = 0.989E+00

The probability that no LINEAR correlation exists between the variables = 0.9481E-01

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

\*\*\*\*\*

This is a 2 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	doy	time	radii	radius	error in	error in	angle	angle	datatype
1989	194	3:26:44	2.30	+/- 0.10	154.0	+/- 0.5			SMM
1989	194	3:34:58	2.45	+/- 0.15	154.0	+/- 0.5			SMM
1989	194	5: 8: 1	2.95	+/- 0.15	154.0	+/- 0.5			SMM

\*\*\*\*\*

Structure being measured:

Top of Bright (Prominence?) Core

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.239E+02 +/- 0.000E+00 [minutes]

In more convenient units:

Event began at DOY 194 2:38 +/- 0.000E+00 [minutes]

Origin defined at DOY194 3: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.490E-01 +/- 0.168E-06 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.169E+01 +/- 0.162E-05 [solar radii]  
c(2) = 0.260E-01 +/- 0.682E-07 [radii/min]  
c(2) = 0.302E+03 +/- 0.791E-03 [km/sec]  
c(3) = -0.127E-03 +/- 0.435E-09 [radii/min\*\*2]  
c(3) = -0.490E-01 +/- 0.168E-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) = 154. +/- 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 3:26 = 0. km/sec

The TOTAL velocity at 3:26 = 223. km/sec

The TANGENTIAL velocity at 3:34 = 0. km/sec

The TOTAL velocity at 3:34 = 199. km/sec

The TANGENTIAL velocity at 5: 8 = 0. km/sec

The TOTAL velocity at 5: 8 = -75. 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!