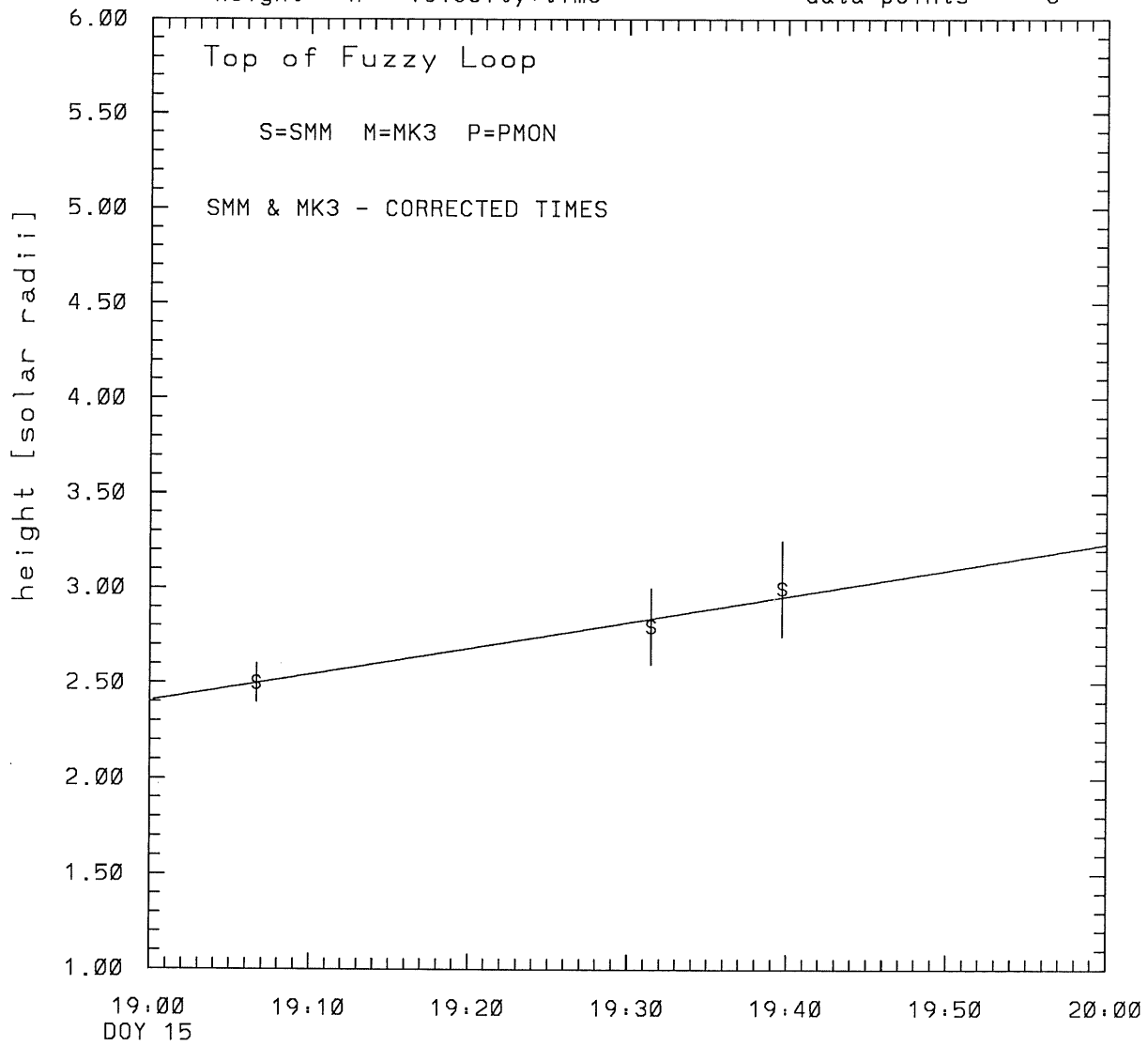


SMM C/P 1989 DOY 15 114 +/- 0 degrees

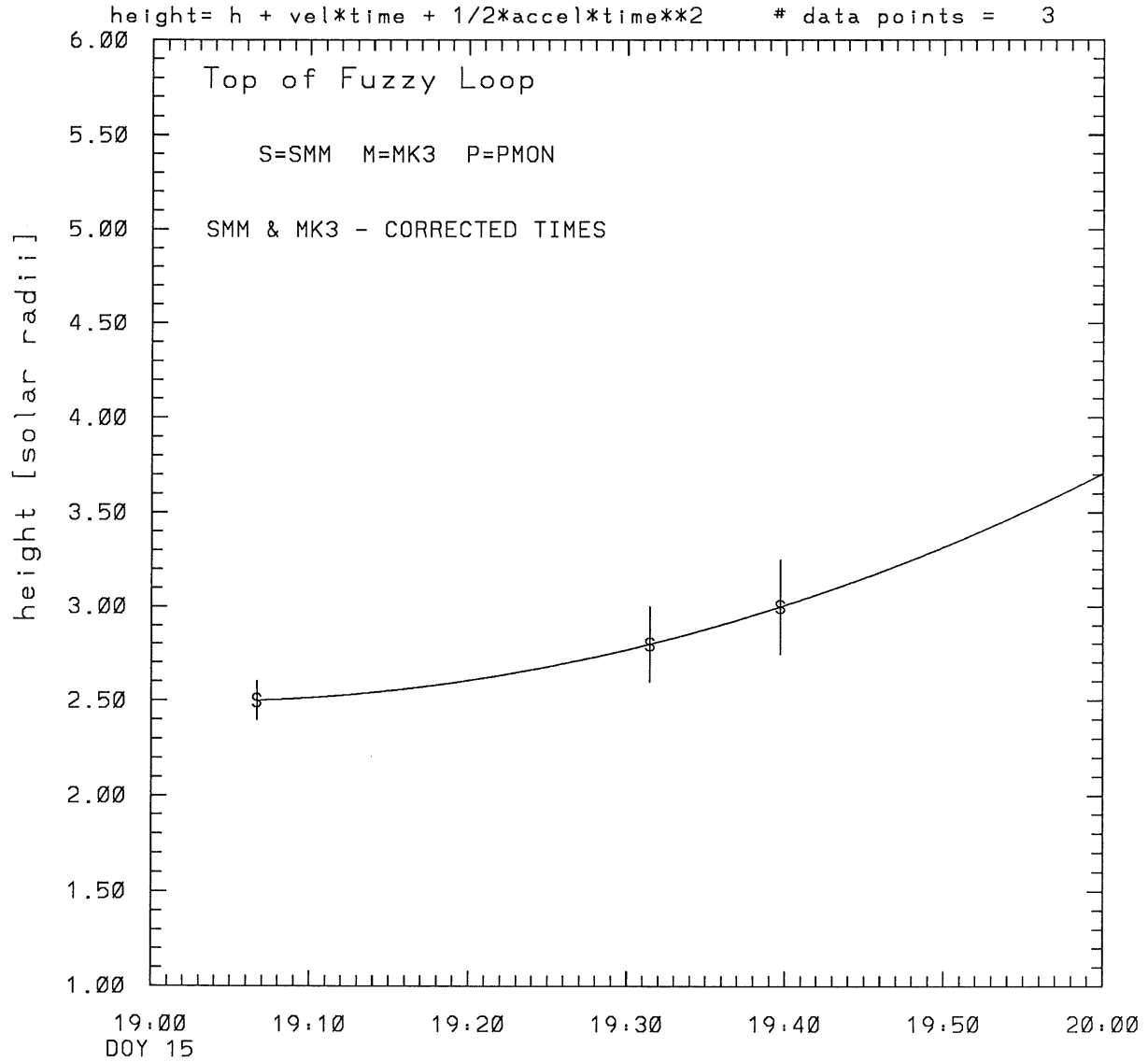
height = h + velocity*time

data points = 3



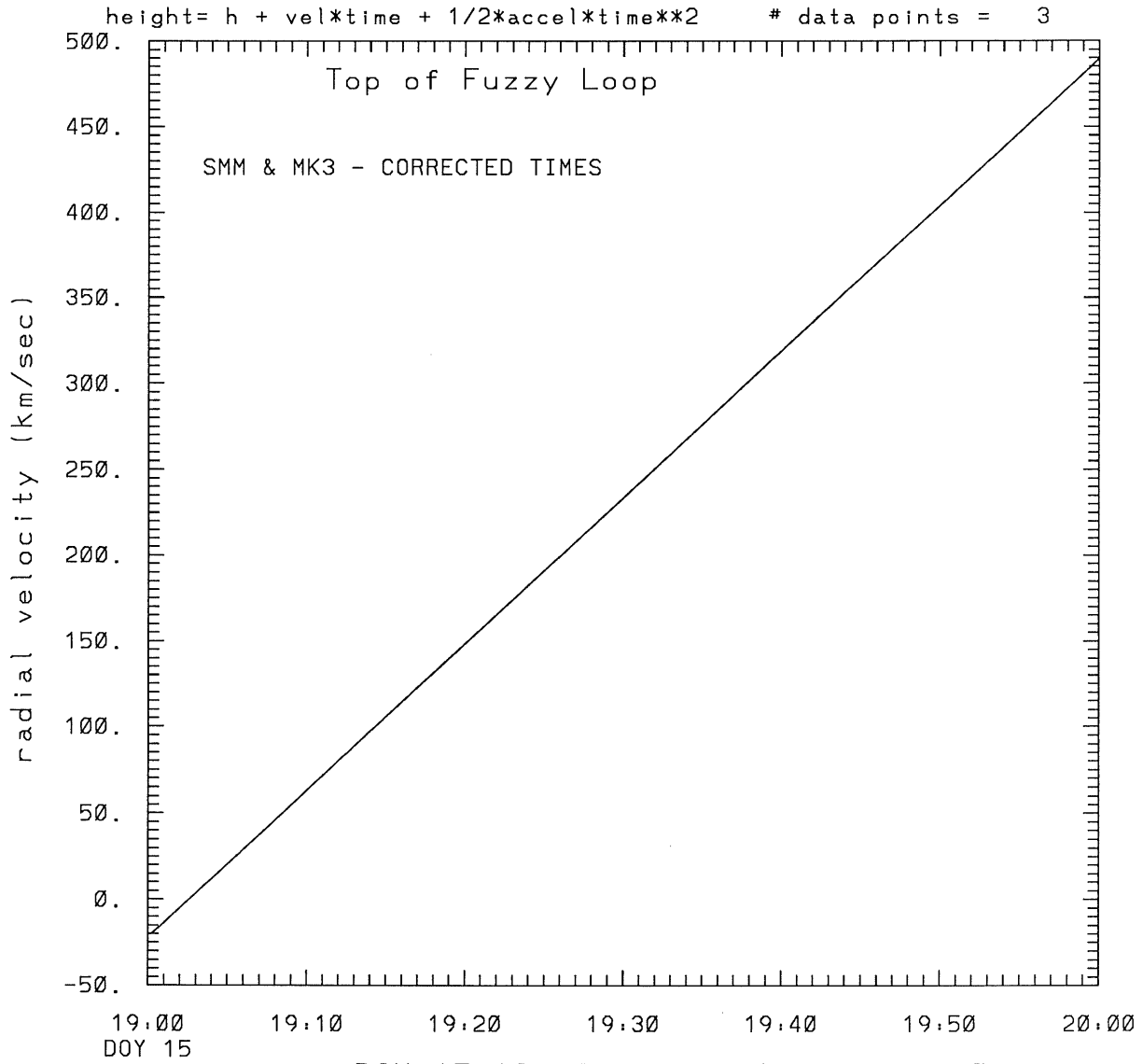
tstart=DOY 15 17:20 +/- 7.8 [min.]
radial velocity= 160. +/- 15. [km/sec]

SMM C/P 1989 DOY 15 114 +/- 0 degrees



tstart=DOY 15 19: 2 from derivative=0
Event begins at 2.49 Solar Radii
radial acceleration= 0.1421 +/- 0.0000 [km/sec**2]

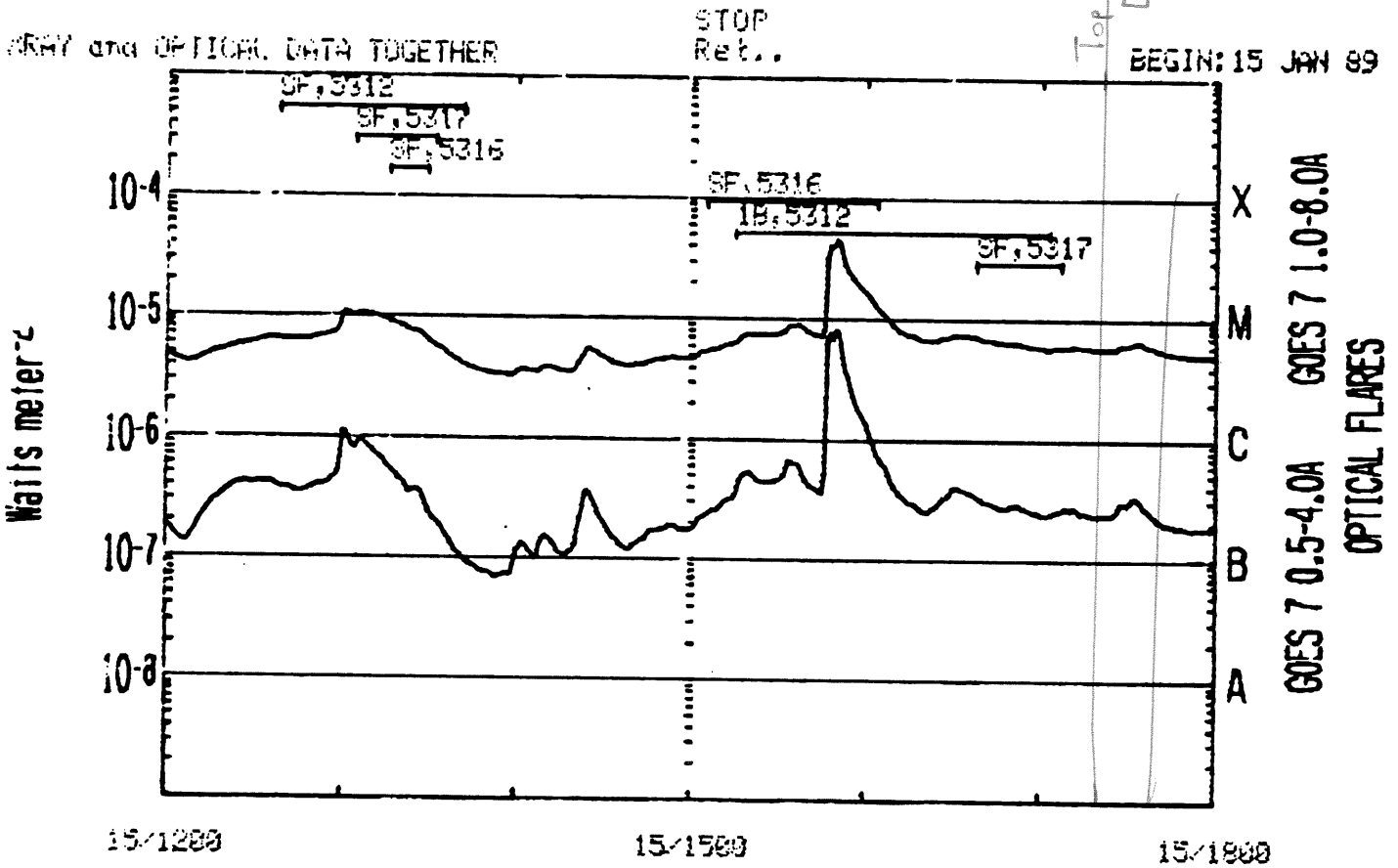
SMM C/P 1989 DOY 15 114 +/- 0 degrees



tstart=DOY 15 19: 2 from derivative=0
Event begins at 2.49 Solar Radii
radial acceleration=0.142E+00 km/sec**2

1989 Day 15

Top of Fuzzy Loop center = 105°
[17:20] / 15 mddr



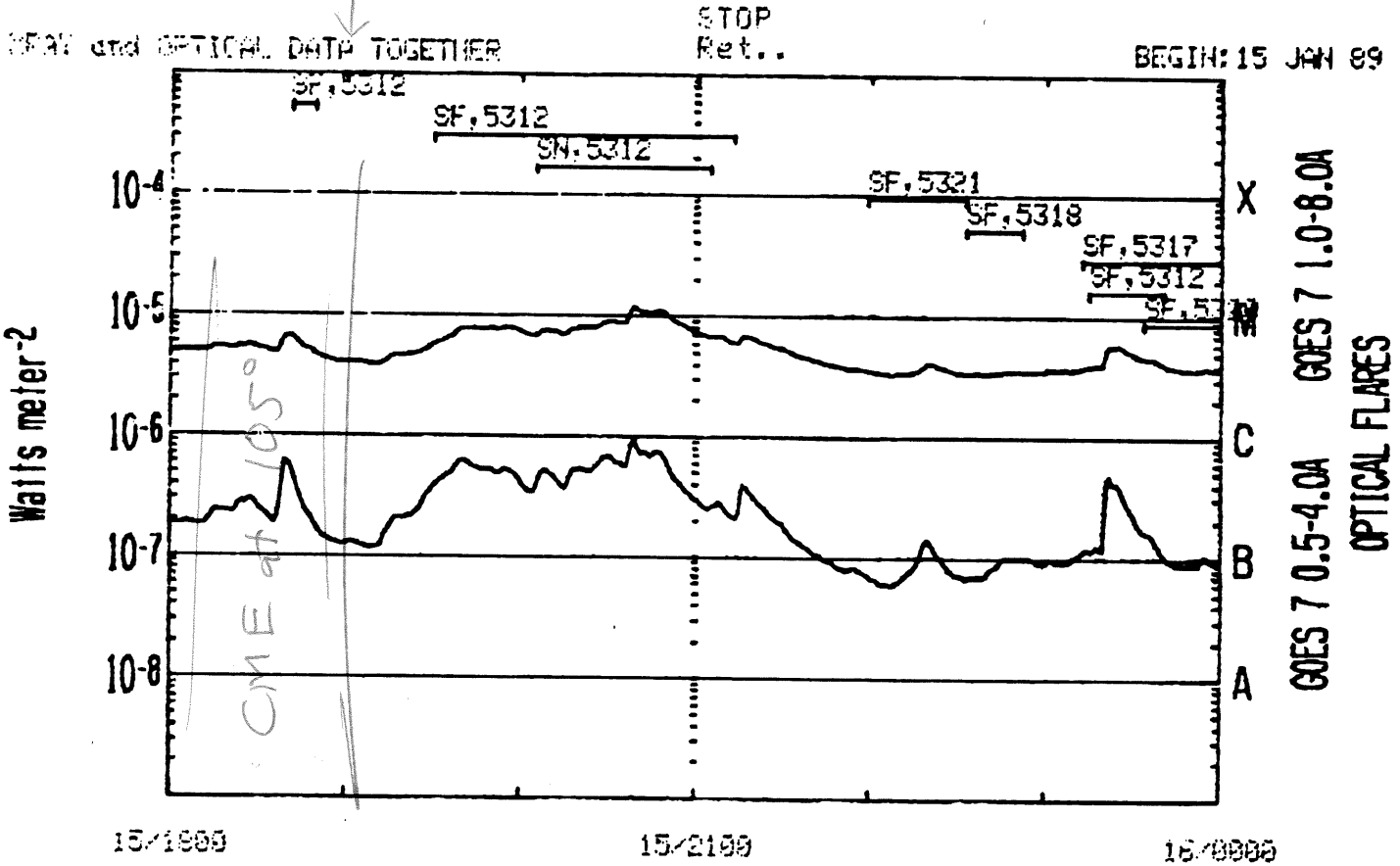
GOES-7 1 MIN DATA; OPTICAL FLARE DUR, IMP, REGION

SAA's NIGHT
RUN: 1756UT
28 JAN 89

2nd order next page

1989 Day 15

[19:02] 2nd order



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

SAA's NIGHT

RUN: 1758UT
28 JAN 89

This is a 1 order run

INPUT:

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1989	15	19: 6:39	2.50 +/- 0.10		114.0 +/- 0.5		SMM
1989	15	19:31:27	2.80 +/- 0.20		114.0 +/- 0.5		SMM
1989	15	19:39:42	3.00 +/- 0.25		114.0 +/- 0.5		SMM

Structure being measured:

Top of Fuzzy Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.102E+03 +/- 0.784E+01$ [minutes]

In more convenient units:

Event began at DOY 15 17:20 +/- 0.784E+01 [minutes]

Origin defined at DOY 15 19: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 160. +/- 15. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.241E+01 +/- 0.247E-01$ [solar radii]
 $c(2) = 0.138E-01 +/- 0.126E-02$ [radii/min]
 $c(2) = 0.160E+03 +/- 0.146E+02$ [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 $c(1) = 0.74172E-01$ [radii] see Bevington pg. 114

error in $c(2) = 0.25149E-02$ [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) = 114. +/- 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 19: 6 = 0. km/sec

The TOTAL velocity at 19: 6 = 160. km/sec

The TANGENTIAL velocity at 19:31 = 0. km/sec

The TOTAL velocity at 19:31 = 160. km/sec

The TANGENTIAL velocity at 19:39 = 0. km/sec

The TOTAL velocity at 19:39 = 160. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.25

Standard Deviation in start time measurement = 0.140E+02

Error in time = 0.44346E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.793E-03

Reduced Chi Squared = 0.964E-02

Chi Squared = 0.964E-02

The probability for exceeding chi square = 0.978E+00

The correlation coefficient = 0.986E+00

The probability that no LINEAR correlation exists between the variables = 0.1060E+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
1989	15	19: 6:39	2.50	+/- 0.10	114.0	+/- 0.5	SMM
1989	15	19:31:27	2.80	+/- 0.20	114.0	+/- 0.5	SMM
1989	15	19:39:42	3.00	+/- 0.25	114.0	+/- 0.5	SMM

Structure being measured:

Top of Fuzzy Loop

OUTPUT:

START TIME:

tstart=DOY 15 19: 2 from derivative = 0

Event begins at 2.49 Solar Radii

Origin defined at DOY 15 19: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.142E+00 +/- 0.401E-05 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.250E+01 +/- 0.274E-05 [solar radii]
c(2) = -0.190E-02 +/- 0.446E-06 [radii/min]
c(2) = -0.221E+02 +/- 0.518E-02 [km/sec]
c(3) = 0.367E-03 +/- 0.104E-07 [radii/min**2]
c(3) = 0.142E+00 +/- 0.401E-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) = 114. +/- 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 19: 6 = 0. km/sec

The TOTAL velocity at 19: 6 = 35. km/sec

The TANGENTIAL velocity at 19:31 = 0. km/sec

The TOTAL velocity at 19:31 = 246. km/sec

The TANGENTIAL velocity at 19:39 = 0. km/sec

The TOTAL velocity at 19:39 = 316. 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!