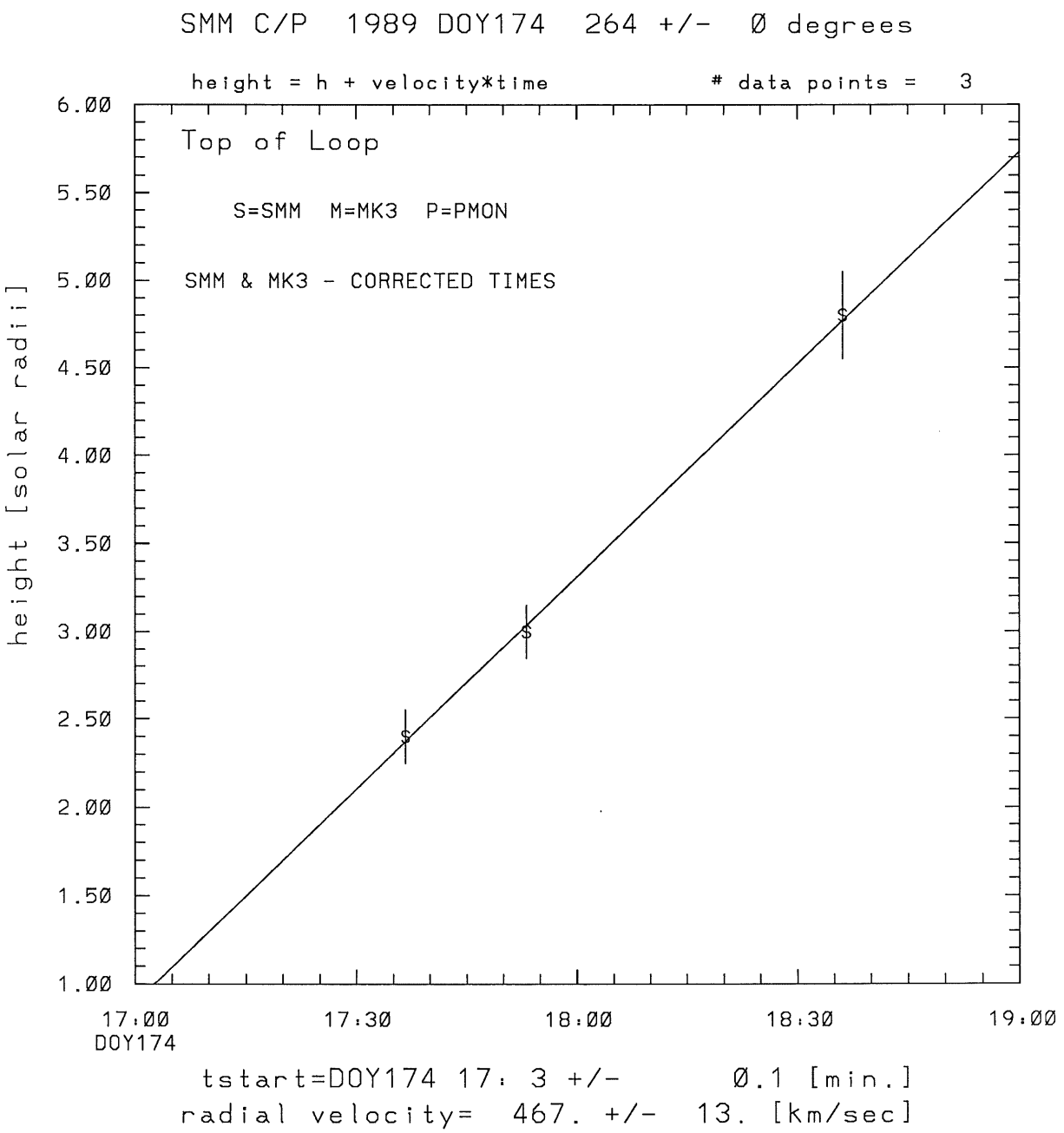
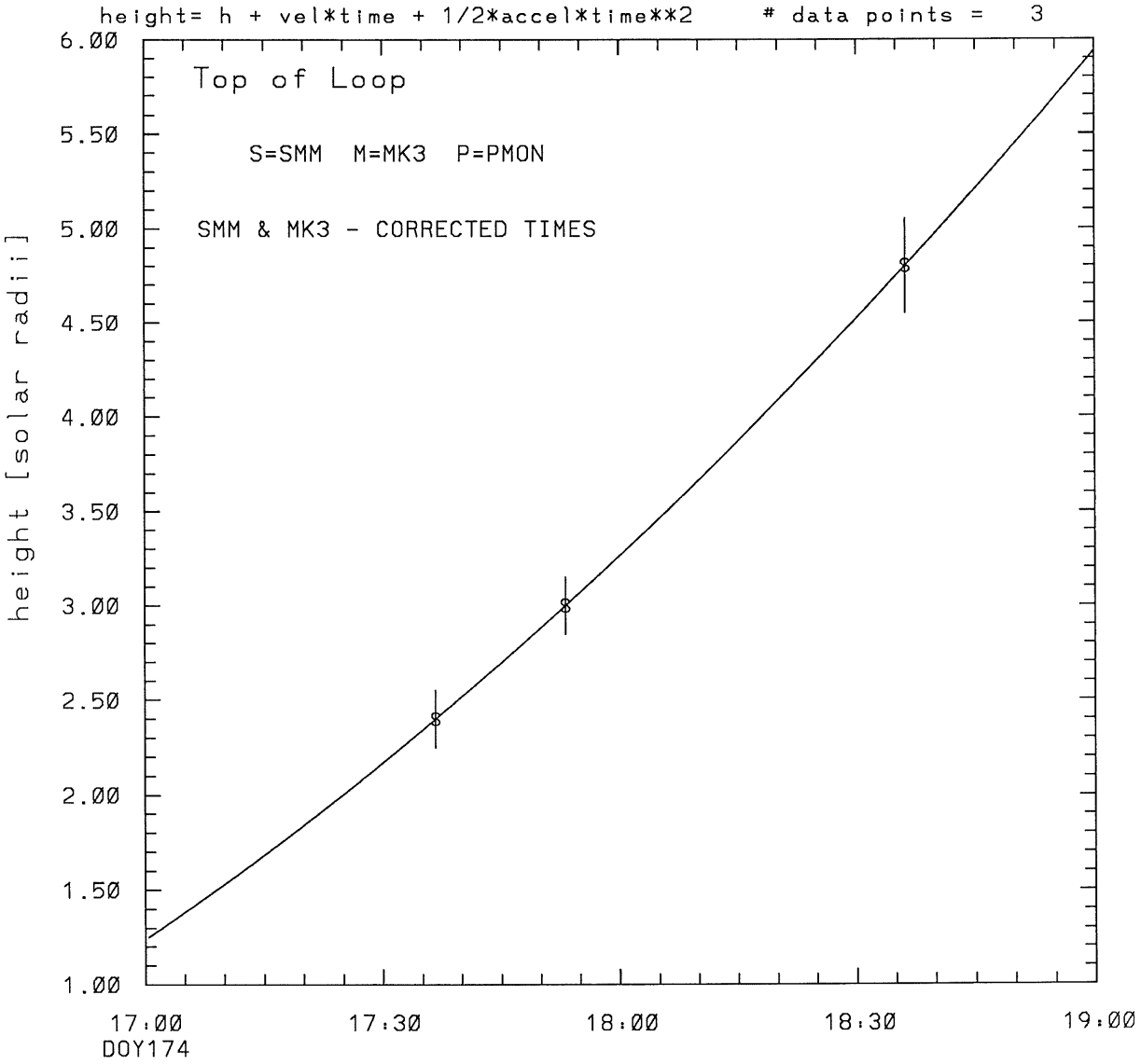

SMM C/P 1989 DOY174 264 +/- Ø degrees
height = h + velocity*time
# data points = 3
Top of Loop
S=SMM M=MK3 P=PMON
SMM & MK3 - CORRECTED TIMES
height [solar radii]
6.ØØ
5.5Ø
5.ØØ
4.5Ø
4.ØØ
3.5Ø
3.ØØ
2.5Ø
2.ØØ
1.5Ø
1.ØØ
17:ØØ
DOY174
17:3Ø
18:ØØ
18:3Ø
19:ØØ
tstart=DOY174 17: 3 +/- Ø.1 [min.]
radial velocity= 467. +/- 13. [km/sec]

SMM C/P 1989 DOY174 264 +/- Ø degrees

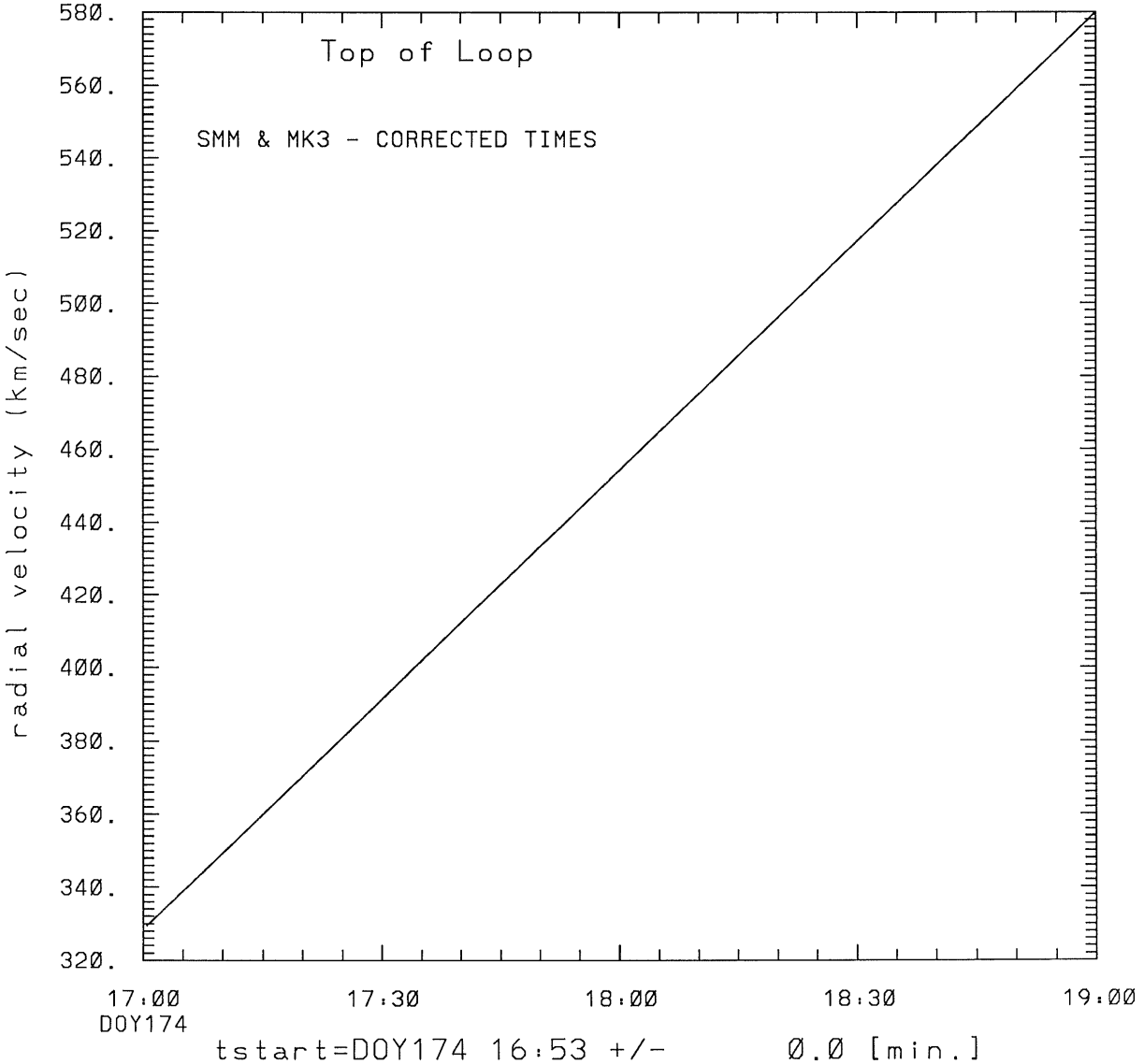


tstart=DOY174 16:53 +/- Ø.Ø [min.]

radial acceleration= Ø.Ø349 +/- Ø.ØØØØ [km/sec**2]

SMM C/P 1989 DOY174 264 +/- Ø degrees

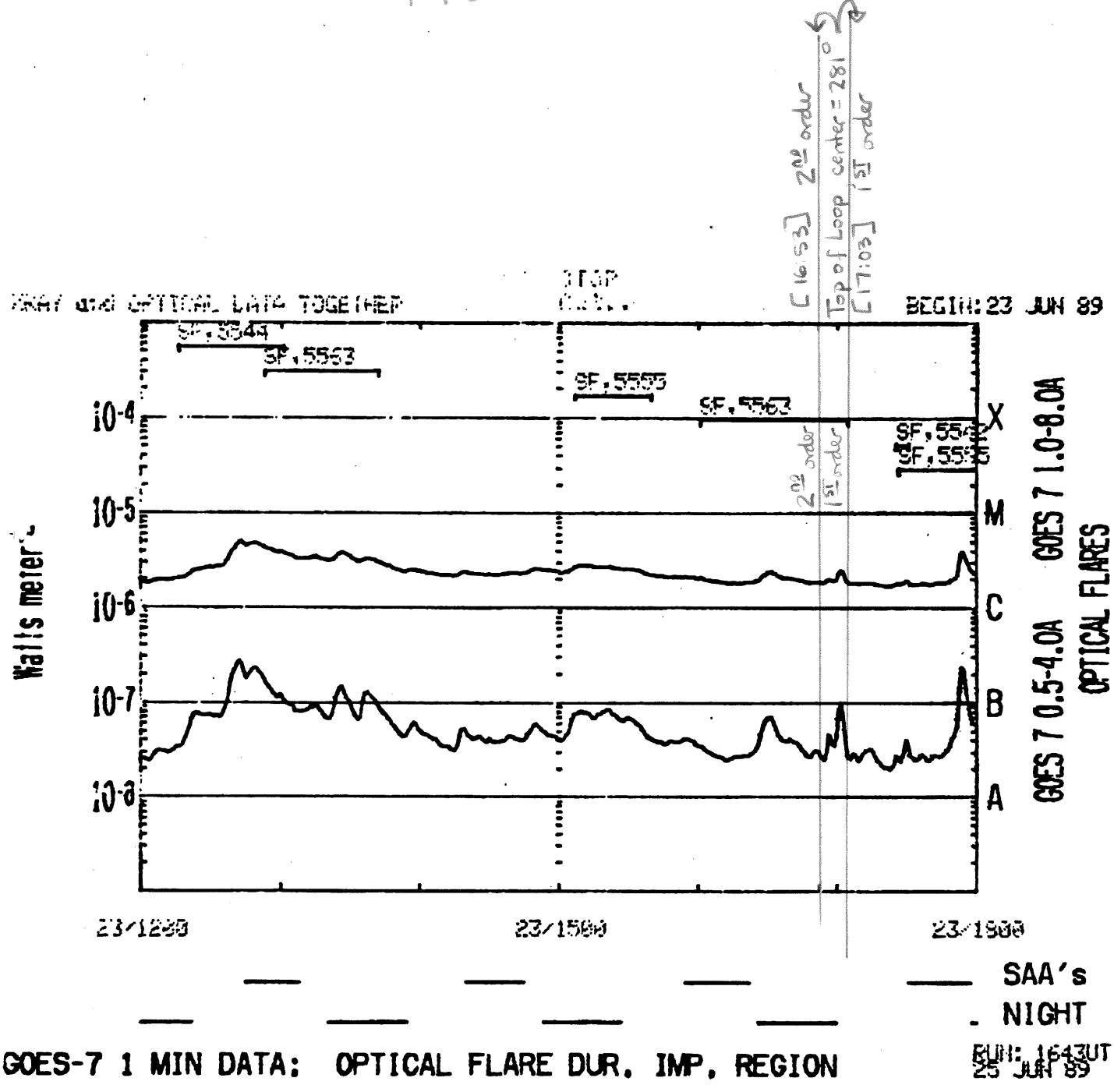
height= h + vel*time + 1/2*accel*time**2 # data points = 3



tstart=DOY174 16:53 +/- Ø.Ø [min.]

radial acceleration=Ø.349E-Ø1 km/sec**2

1989 DOY 174



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

RUN: 1643UT
25 JUN 89

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

****
INPUT:
****

year	doy	time	radii	error in radius	angle	error in angle	datatype
1989	174	17:36:43	2.40	+/- 0.15	264.0	+/- 0.5	SMM
1989	174	17:53:11	3.00	+/- 0.15	264.0	+/- 1.0	SMM
1989	174	18:36:14	4.80	+/- 0.25	264.0	+/- 1.0	SMM

****
Structure being measured:
Top of Loop
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + 0.264E+01 +/- 0.135E+00 [minutes]
In more convenient units:
Event began at DOY 174 17: 3 +/- 0.135E+00 [minutes]

Origin defined at DOY174 17: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 467. +/- 13. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.894E+00 +/- 0.633E-01 [solar radii]
c(2) = 0.403E-01 +/- 0.112E-02 [radii/min]
c(2) = 0.467E+03 +/- 0.130E+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)= 0.82568E-01 [radii] see Bevington pg. 114
error in c(2)= 0.12337E-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) = 264. +/- 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 17:36 = 0. km/sec
The TOTAL velocity at 17:36 = 467. km/sec

The TANGENTIAL velocity at 17:53 = 0. km/sec
The TOTAL velocity at 17:53 = 467. km/sec

The TANGENTIAL velocity at 18:36 = 0. km/sec
The TOTAL velocity at 18:36 = 467. km/sec

****
The following info is for estimating goodness of the fit
****

Fit is ok [ier=1]

Standard Deviation in the height = 1.25
Standard Deviation in start time measurement = 0.251E+02
Error in time = 0.13306E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.150E-02
Reduced Chi Squared = 0.584E-02
Chi Squared = 0.584E-02
The probability for exceeding chi square = 0.969E+00

The correlation coefficient = 0.100E+01
The probability that no LINEAR correlation exists between the variables = 0.1824E-01
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	174	17:36:43	2.40 +/-	0.15	264.0 +/-	0.5	SMM
1989	174	17:53:11	3.00 +/-	0.15	264.0 +/-	1.0	SMM
1989	174	18:36:14	4.80 +/-	0.25	264.0 +/-	1.0	SMM

****
Structure being measured:
Top of Loop
****

****
OUTPUT:
****

START TIME:

Event began at t = 0 + -0.866E+01 +/- 0.000E+00 [minutes]
In more convenient units:
Event began at DOY 174 16:53 +/- 0.000E+00 [minutes]

Origin defined at DOY174 17: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.349E-01 +/- 0.372E-06 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.124E+01 +/- 0.380E-05 [solar radii]
c(2) = 0.283E-01 +/- 0.129E-06 [radii/min]
c(2) = 0.328E+03 +/- 0.149E-02 [km/sec]
c(3) = 0.903E-04 +/- 0.963E-09 [radii/min**2]
c(3) = 0.349E-01 +/- 0.372E-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) = 264. +/- 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 17:36 = 0. km/sec
The TOTAL velocity at 17:36 = 405. km/sec

The TANGENTIAL velocity at 17:53 = 0. km/sec
The TOTAL velocity at 17:53 = 440. km/sec

The TANGENTIAL velocity at 18:36 = 0. km/sec
The TOTAL velocity at 18:36 = 530. 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!