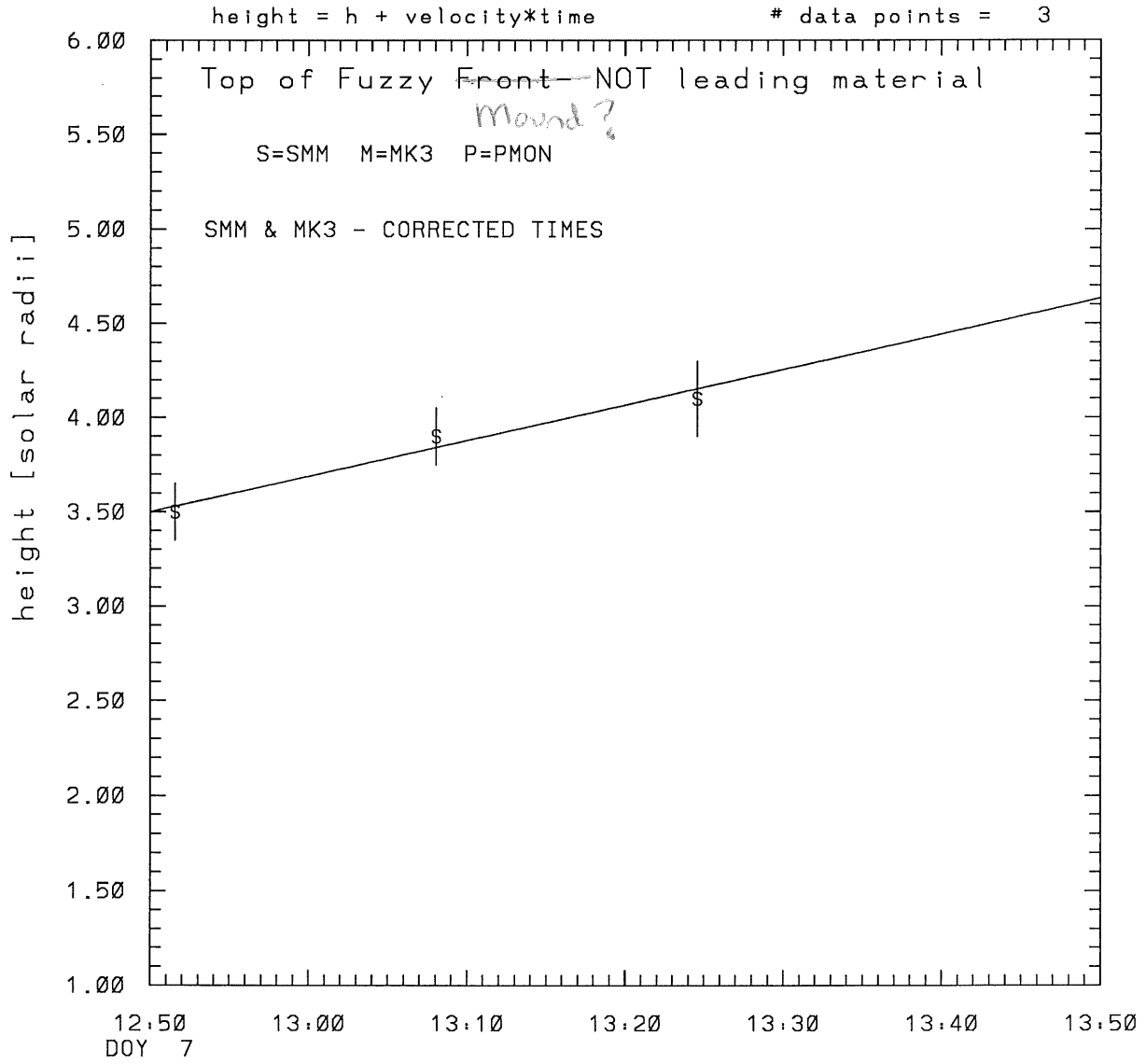
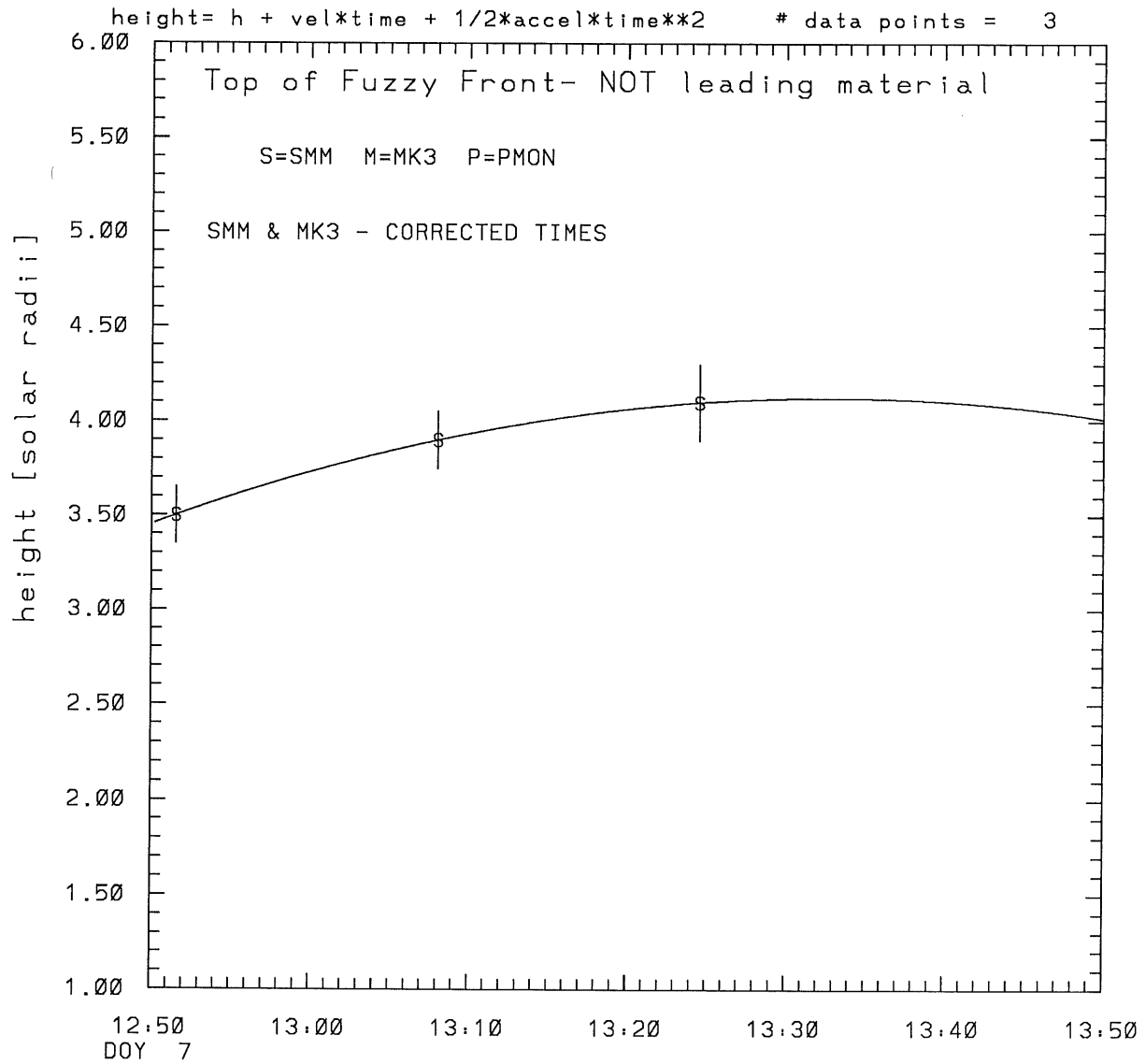


SMM C/P 1989 DOY 7 110 +/- 0 degrees



tstart=DOY 7 10:39 +/- 12.5 [min.]
radial velocity= 219. +/- 31. [km/sec]

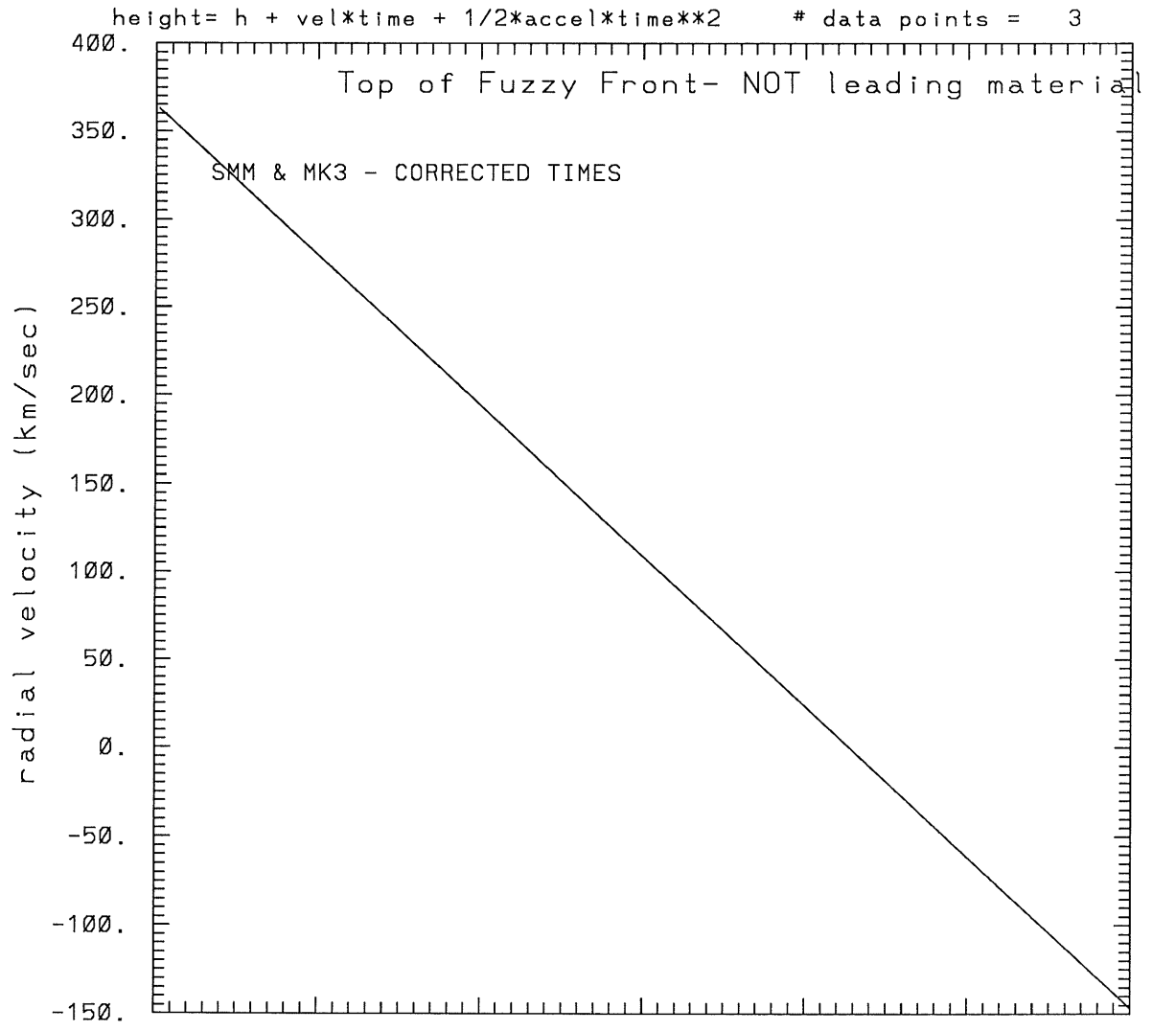
SMM C/P 1989 DOY 7 110 +/- 0 degrees



tstart=DOY 7 12: 1 +/- 0.0 [min.]

radial acceleration=-0.1421 +/- 0.0000 [km/sec**2]

SMM C/P 1989 DOY 7 110 +/- 0 degrees



DOY 7

tstart=DOY 7 12: 1 +/- 0.0 [min.]

radial acceleration = $-.142E+00$ km/sec**2

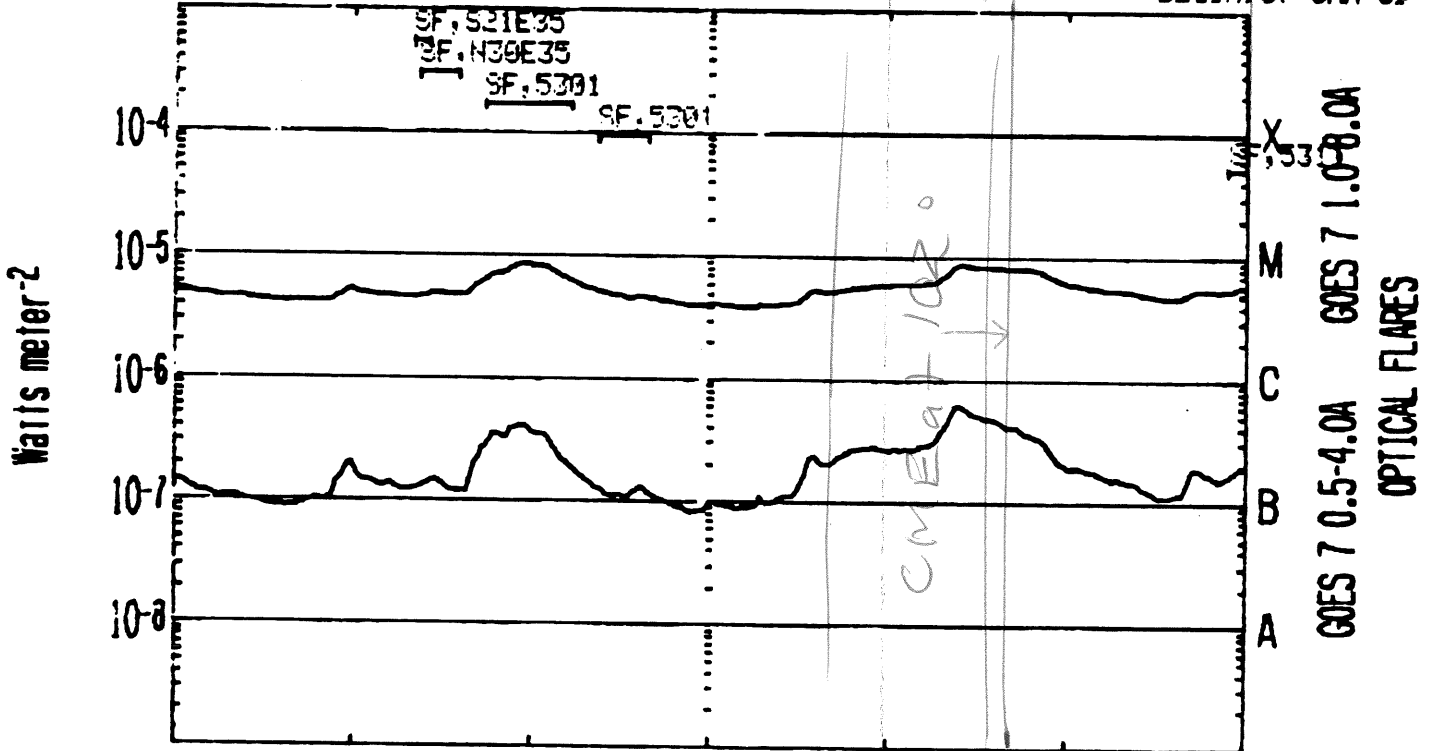
1989 Day 007

X-RAY and OPTICAL DATA TOGETHER

STOP
Ret..

Top of Fuzzy Front NOT leading
Material center = 102°
[10:35] 1st order
[12:01] 2nd order

BEGIN: 07 JAN 89



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

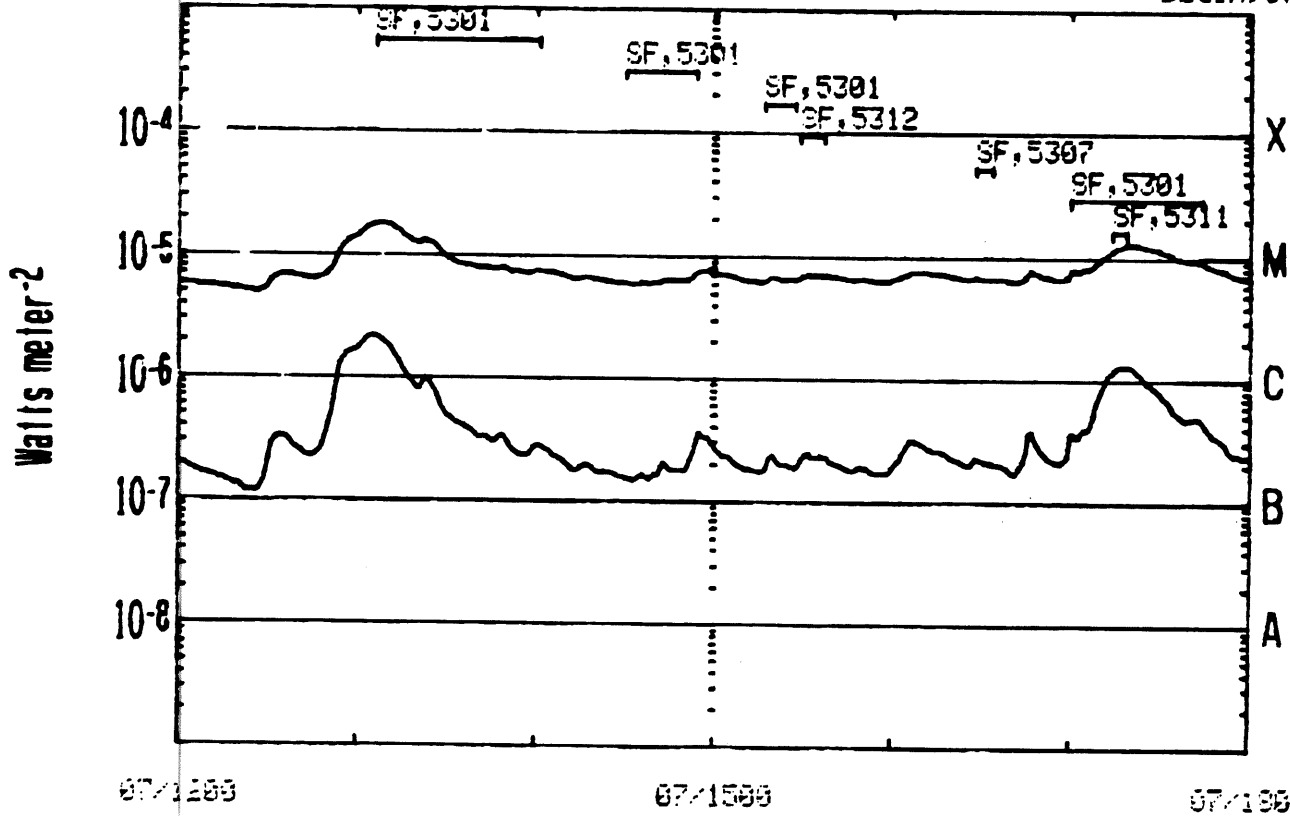
SAA's
NIGHT
RUN: 1736UT
9 JAN 89

Top of Fuzzy Front
[12:01] 2 no order

RAY and OPTICAL DATA TOGETHER

STOP
Ret..

BEGIN: 07 JAN 89



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

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

SAA's
NIGHT
RUN: 1730UT
9 JAN 89

This is a 1 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1989	7	12:51:33	3.50	+/- 0.15	110.0	+/- 0.5	SMM
1989	7	13: 8: 3	3.90	+/- 0.15	110.0	+/- 0.5	SMM
1989	7	13:24:34	4.10	+/- 0.20	110.0	+/- 0.5	SMM

Structure being measured:

Top of Fuzzy Front- NOT leading material

OUTPUT:

START TIME:

Event began at $t = 0 + -0.133E+03 +/- 0.125E+02$ [minutes]

In more convenient units:

Event began at DOY 7 10:39 +/- 0.125E+02 [minutes]

Origin defined at DOY 7 12:50

RADIAL INFORMATION:

RADIAL VELOCITY = 219. +/- 31. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.350E+01 +/- 0.534E-01 [solar radii]
c(2) = 0.189E-01 +/- 0.270E-02 [radii/min]
c(2) = 0.219E+03 +/- 0.313E+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)= 0.81476E-01 [radii] see Bevington pg. 114

error in c(2)= 0.36160E-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) = 110. +/- 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 12:51 = 0. km/sec

The TOTAL velocity at 12:51 = 219. km/sec

The TANGENTIAL velocity at 13: 8 = 0. km/sec

The TOTAL velocity at 13: 8 = 219. km/sec

The TANGENTIAL velocity at 13:24 = 0. km/sec

The TOTAL velocity at 13:24 = 219. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.31

Standard Deviation in start time measurement = 0.135E+02

Error in time = 0.44744E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.347E-02

Reduced Chi Squared = 0.161E-01

Chi Squared = 0.161E-01

The probability for exceeding chi square = 0.953E+00

The correlation coefficient = 0.982E+00

The probability that no LINEAR correlation exists between the variables = 0.1212E+00

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

This is a 2 order run

INPUT:

			error in	error in	
year	doy	time	radii radius	angle angle	datatype
1989	7	12:51:33	3.50 +/- 0.15	110.0 +/- 0.5	SMM
1989	7	13: 8: 3	3.90 +/- 0.15	110.0 +/- 0.5	SMM
1989	7	13:24:34	4.10 +/- 0.20	110.0 +/- 0.5	SMM

Structure being measured:

Top of Fuzzy Front- NOT leading material

OUTPUT:

START TIME:

Event began at $t = 0 + -0.494E+02 +/- 0.000E+00$ [minutes]

In more convenient units:

Event began at DOY 7 12: 1 +/- 0.000E+00 [minutes]

Origin defined at DOY 7 12:50

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.142E+00 +/- 0.181E-04$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.345E+01 +/- 0.114E-04$ [solar radii]
c(2) = $0.314E-01 +/- 0.168E-05$ [radii/min]
c(2) = $0.365E+03 +/- 0.194E-01$ [km/sec]
c(3) = $-0.367E-03 +/- 0.468E-07$ [radii/min**2]
c(3) = $-0.142E+00 +/- 0.181E-04$ [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) = $110. +/- 0.$ [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 12:51 = 0. km/sec

The TOTAL velocity at 12:51 = 352. km/sec

The TANGENTIAL velocity at 13: 8 = 0. km/sec

The TOTAL velocity at 13: 8 = 211. km/sec

The TANGENTIAL velocity at 13:24 = 0. km/sec

The TOTAL velocity at 13:24 = 70. 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!