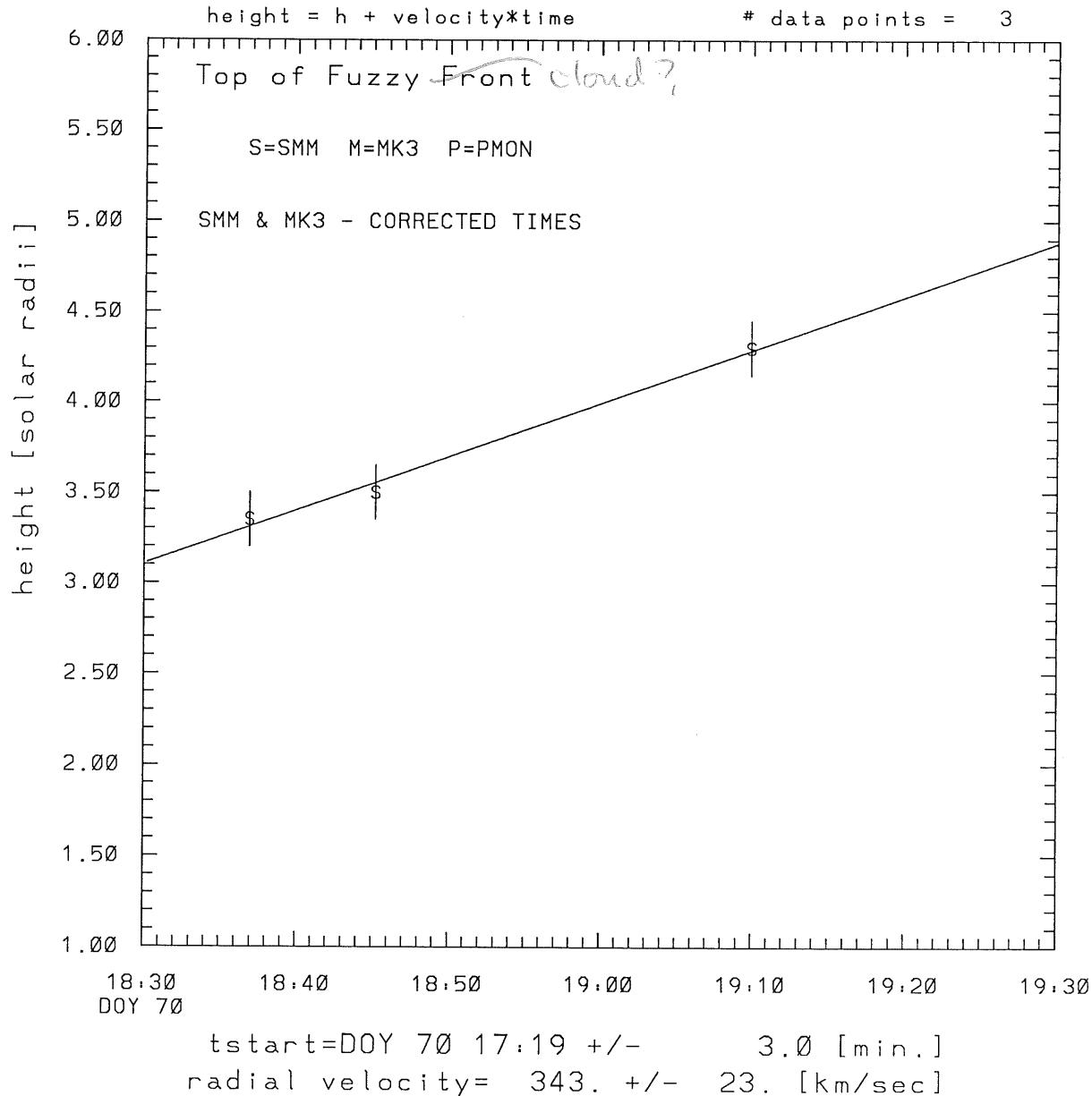
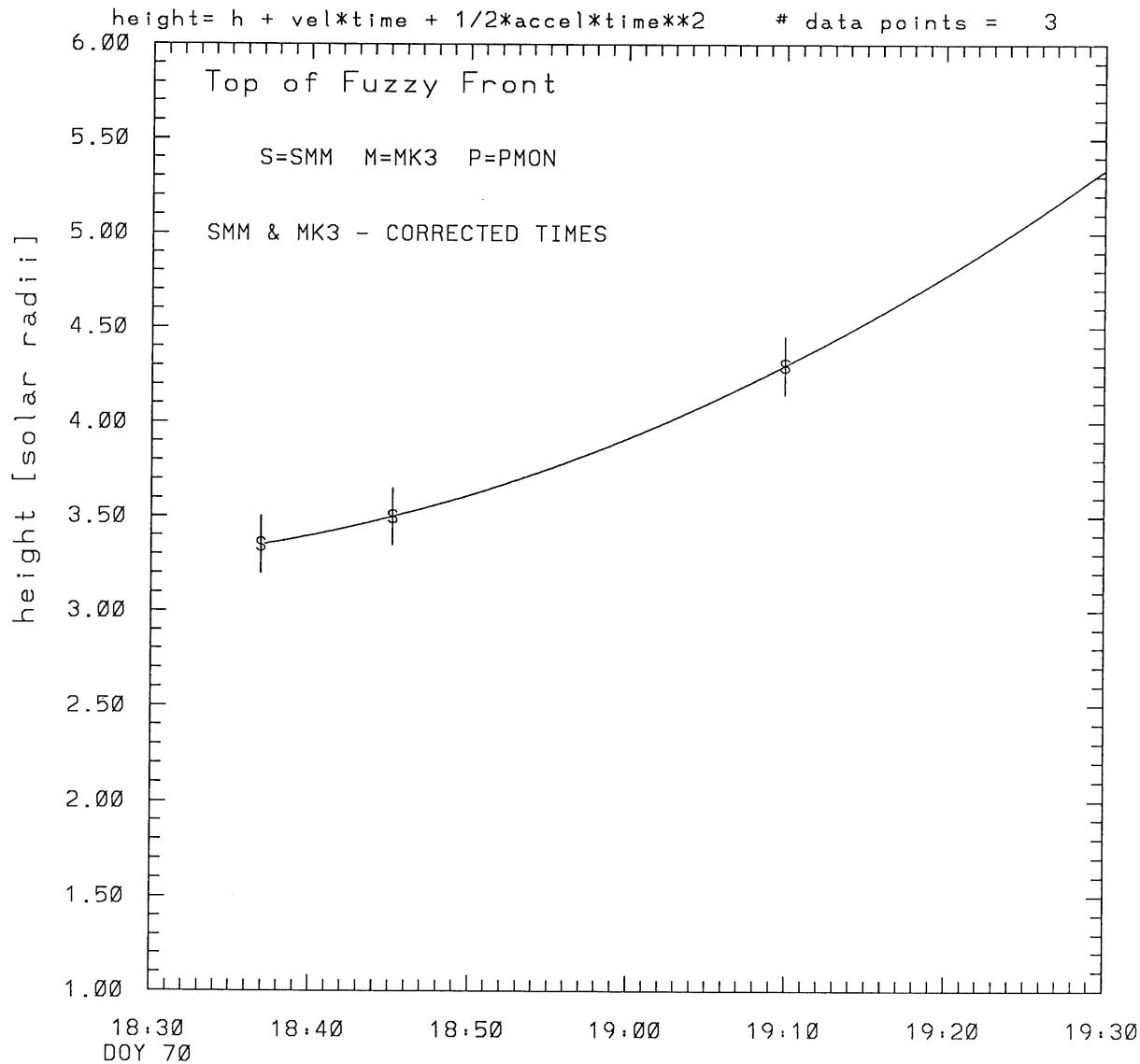


SMM C/P 1989 DOY 70 340 +/- 0 degrees



SMM C/P 1989 DOY 70 340 +/- 0 degrees

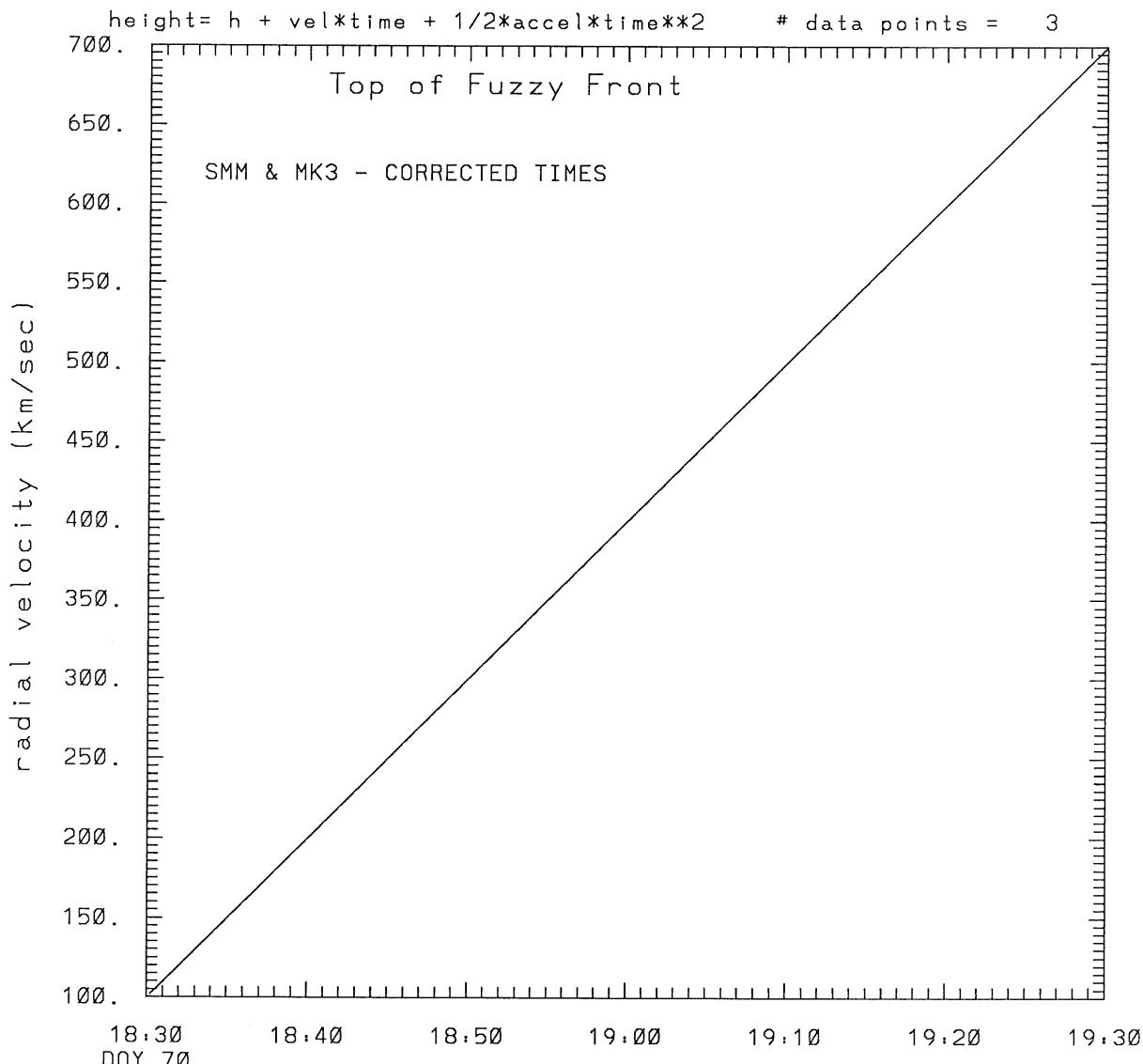


tstart=DOY 70 18:21 from derivative=0

Event begins at 3.23 Solar Radii

radial acceleration= 0.1667 +/- 0.0000 [km/sec\*\*2]

SMM C/P 1989 DOY 70 340 +/- 0 degrees



tstart=DOY 70 18:21 from derivative=0  
Event begins at 3.23 Solar Radii  
radial acceleration=0.167E+00 km/sec\*\*2

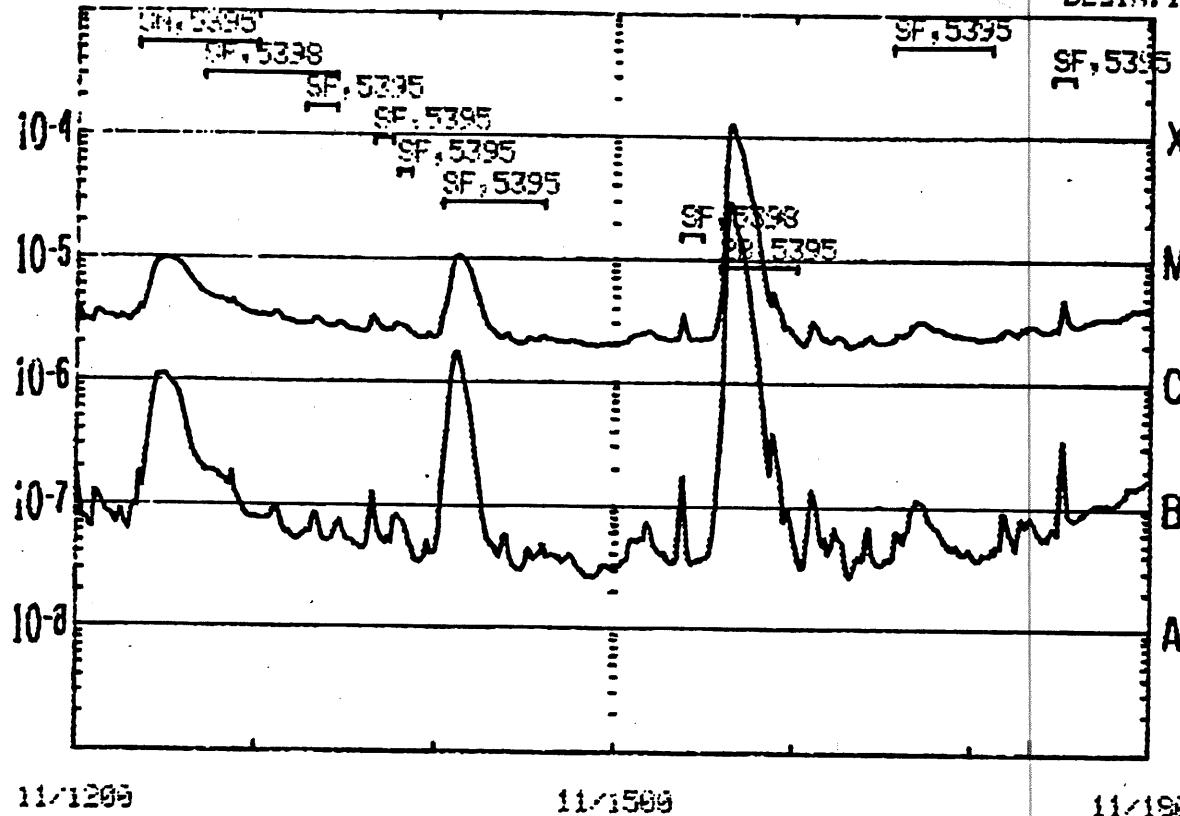
1989 Day 070

SOFT AND OPTICAL DATA TOGETHER

STOP

BEGIN: 11 MAR 89

Watts meter<sup>-2</sup>



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

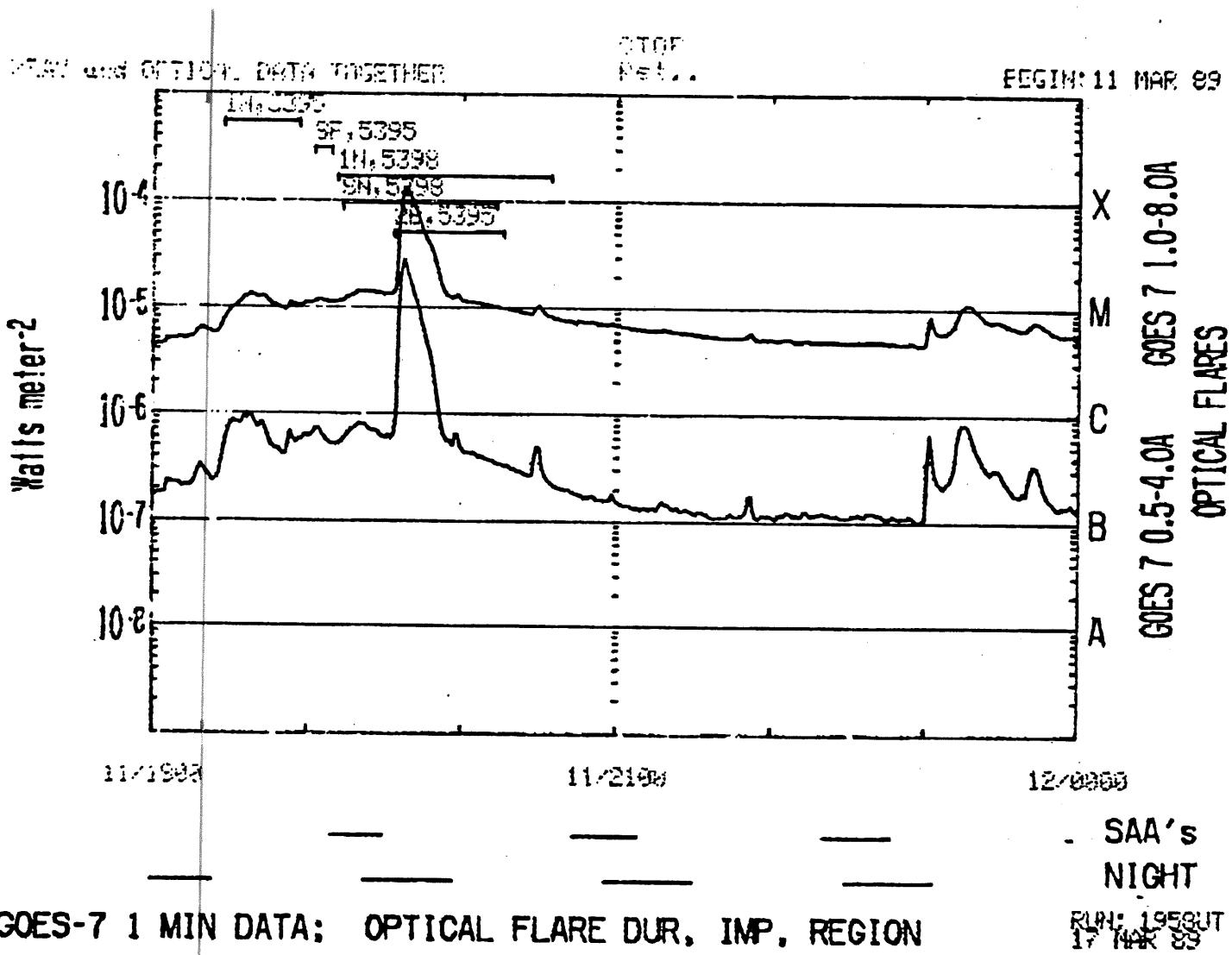
SAA'S  
NIGHT

RUN: 1953UT  
17 MAR 89

Top of Fuzzy Front  
[17:19], center = 320°  
1ST order

2nd order next page

1989 Day 070



Top of Flare Front  
202 orders [18:21]

\*\*\*\*\*

This is a 1 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	doy	time	radii	radius	error in angle	error in angle	datatype
1989	70	18:36:55	3.35	+/- 0.15	340.0	+/- 0.5	SMM
1989	70	18:45:12	3.50	+/- 0.15	340.0	+/- 0.5	SMM
1989	70	19: 9:56	4.30	+/- 0.15	340.0	+/- 0.5	SMM

\*\*\*\*\*

Structure being measured:

Top of Fuzzy Front cloud?

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.711E+02 +/- 0.297E+01 [minutes]

In more convenient units:

Event began at DOY 70 17:19 +/- 0.297E+01 [minutes]

Origin defined at DOY 70 18:30

RADIAL INFORMATION:

RADIAL VELOCITY = 343. +/- 23. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.310E+01 +/- 0.504E-01 [solar radii]

c(2) = 0.296E-01 +/- 0.202E-02 [radii/min]

c(2) = 0.343E+03 +/- 0.234E+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)= 0.71308E-01 [radii] see Bevington pg. 114

error in c(2)= 0.28534E-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) = 340. +/- 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 18:36 = 0. km/sec

The TOTAL velocity at 18:36 = 343. km/sec

The TANGENTIAL velocity at 18:45 = 0. km/sec

The TOTAL velocity at 18:45 = 343. km/sec

The TANGENTIAL velocity at 19: 9 = 0. km/sec

The TOTAL velocity at 19: 9 = 343. km/sec

\*\*\*\*\*

The following info is for estimating goodness of the fit

\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.51

Standard Deviation in start time measurement = 0.140E+02

Error in time = 0.23423E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.240E-02

Reduced Chi Squared = 0.814E-02

Chi Squared = 0.814E-02

The probability for exceeding chi square = 0.961E+00

The correlation coefficient = 0.995E+00

The probability that no LINEAR correlation exists between the variables = 0.6120E-01

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

\*\*\*\*\*

This is a 2 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1989	70	18:36:55	3.35	+/- 0.15	340.0	+/- 0.5	SMM
1989	70	18:45:12	3.50	+/- 0.15	340.0	+/- 0.5	SMM
1989	70	19: 9:56	4.30	+/- 0.15	340.0	+/- 0.5	SMM

\*\*\*\*\*

Structure being measured:

Top of Fuzzy Front

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

tstart=DOY 70 18:21 from derivative = 0

Event begins at 3.23 Solar Radii

Origin defined at DOY 70 18:30

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.167E+00 +/- 0.243E-05 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.327E+01 +/- 0.263E-05 [solar radii]  
c(2) = 0.857E-02 +/- 0.310E-06 [radii/min]  
c(2) = 0.994E+02 +/- 0.359E-02 [km/sec]  
c(3) = 0.431E-03 +/- 0.629E-08 [radii/min\*\*2]  
c(3) = 0.167E+00 +/- 0.243E-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) = 340. +/- 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 18:36 = 0. km/sec

The TOTAL velocity at 18:36 = 169. km/sec

The TANGENTIAL velocity at 18:45 = 0. km/sec

The TOTAL velocity at 18:45 = 251. km/sec

The TANGENTIAL velocity at 19: 9 = 0. km/sec

The TOTAL velocity at 19: 9 = 499. 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!