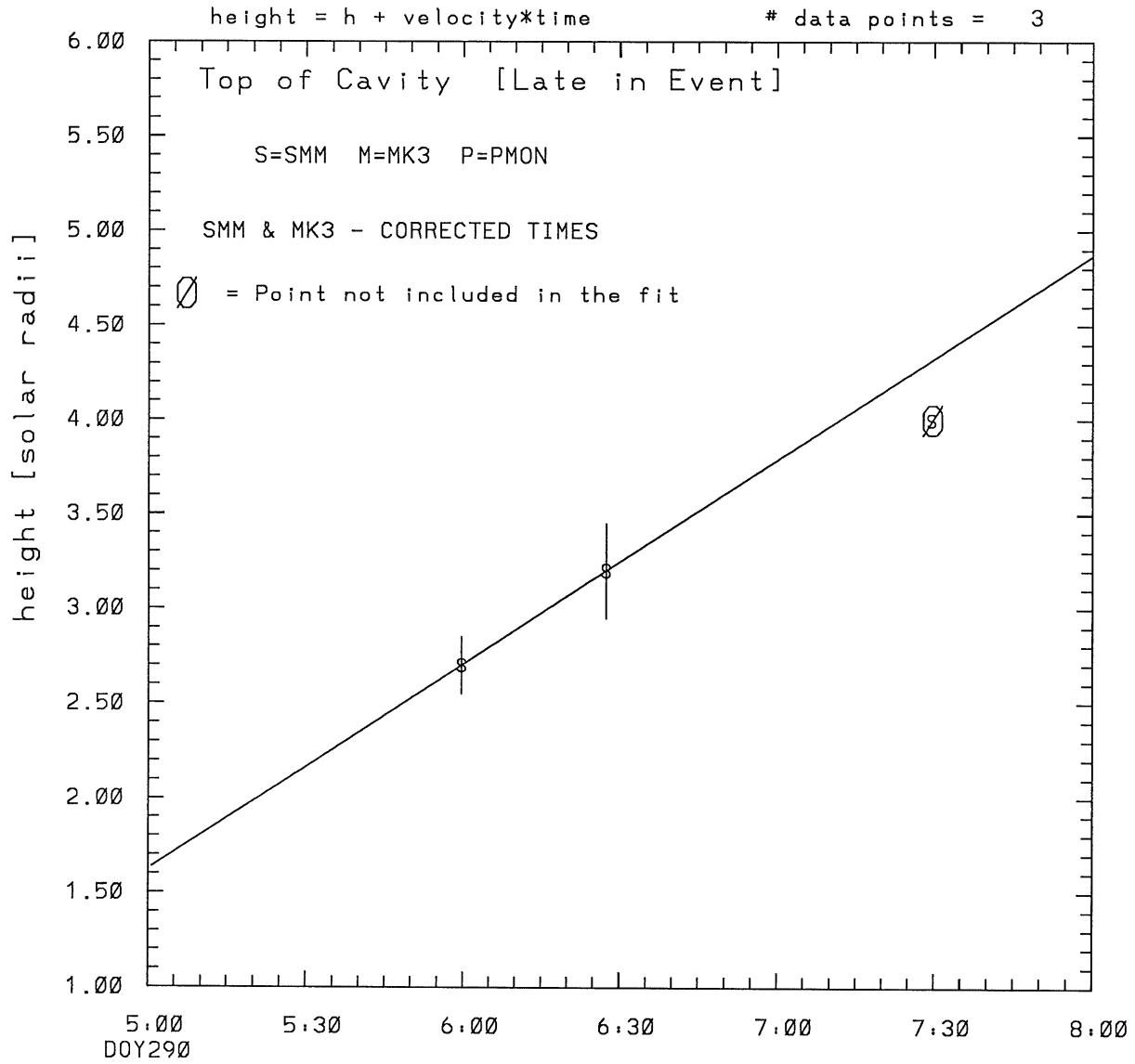


SMM C/P 1986 DOY290 90 +/- 0 degrees



tstart=DOY290 4.27 +/- 0.0 [min.]
radial velocity= 209. +/- 0. [km/sec]

This is a 1 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1986	290	5:59:41	2.70	+/- 0.15	90.0	+/- 0.5	SMM
1986	290	6:27:26	3.20	+/- 0.25	90.0	+/- 1.0	SMM
1986	290	7:29:28	4.00	----	90.00	+/- ----	SMM THIS POINT WASN'T USED IN THE FIT.

Structure being measured:
Top of Cavity [Late in Event]

OUTPUT:

START TIME:

Event began at $t = 0 + -0.347E+02 +/- 0.304E-04$ [minutes]

In more convenient units:

Event began at DOY 290 4:27 +/- 0.304E-04 [minutes]

Origin defined at DOY290 5: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 209. +/- 0. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.162E+01 +/- 0.108E-05$ [solar radii]
 $c(2) = 0.180E-01 +/- 0.159E-07$ [radii/min]
 $c(2) = 0.209E+03 +/- 0.184E-03$ [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 $c(1) = 0.51680E+00$ [radii] see Bevington pg. 114

error in $c(2) = 0.48872E-02$ [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) = 90. +/- 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 5:59 = 0.000E+00 km/sec

The TOTAL velocity at 5:59 = 209. km/sec

The TANGENTIAL velocity at 6:27 = 0.000E+00 km/sec

The TOTAL velocity at 6:27 = 209. km/sec

The TANGENTIAL velocity at 7:29 = 0.000E+00 km/sec

The TOTAL velocity at 7:29 = 209. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.66

Standard Deviation in start time measurement = 0.375E+02

Error in time = 0.17633E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.114E-12

Reduced Chi Squared = 0.303E+00

Chi Squared = 0.303E+00

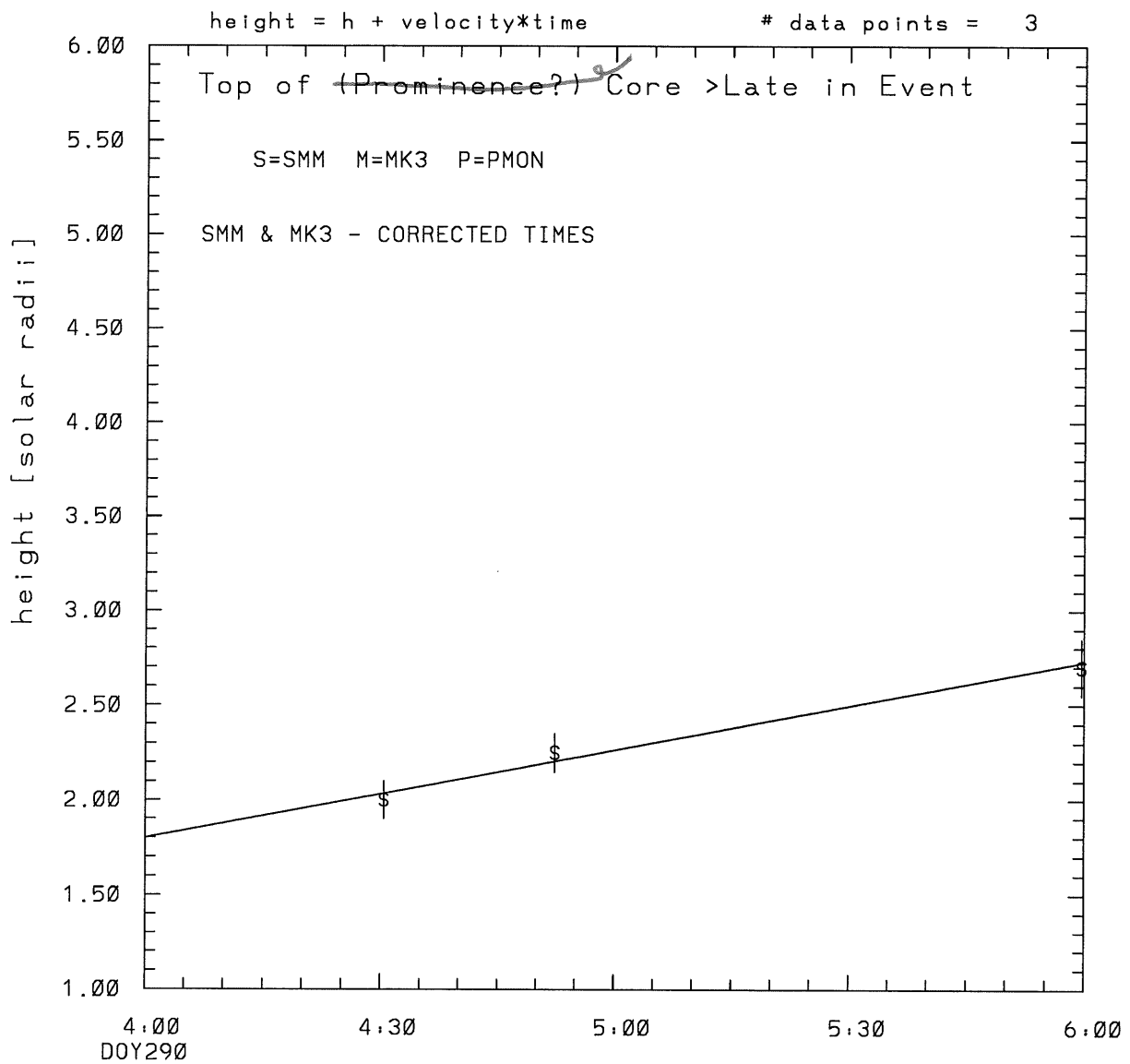
The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.996E+00

The probability that no LINEAR correlation exists between the variables = 0.5381E-01

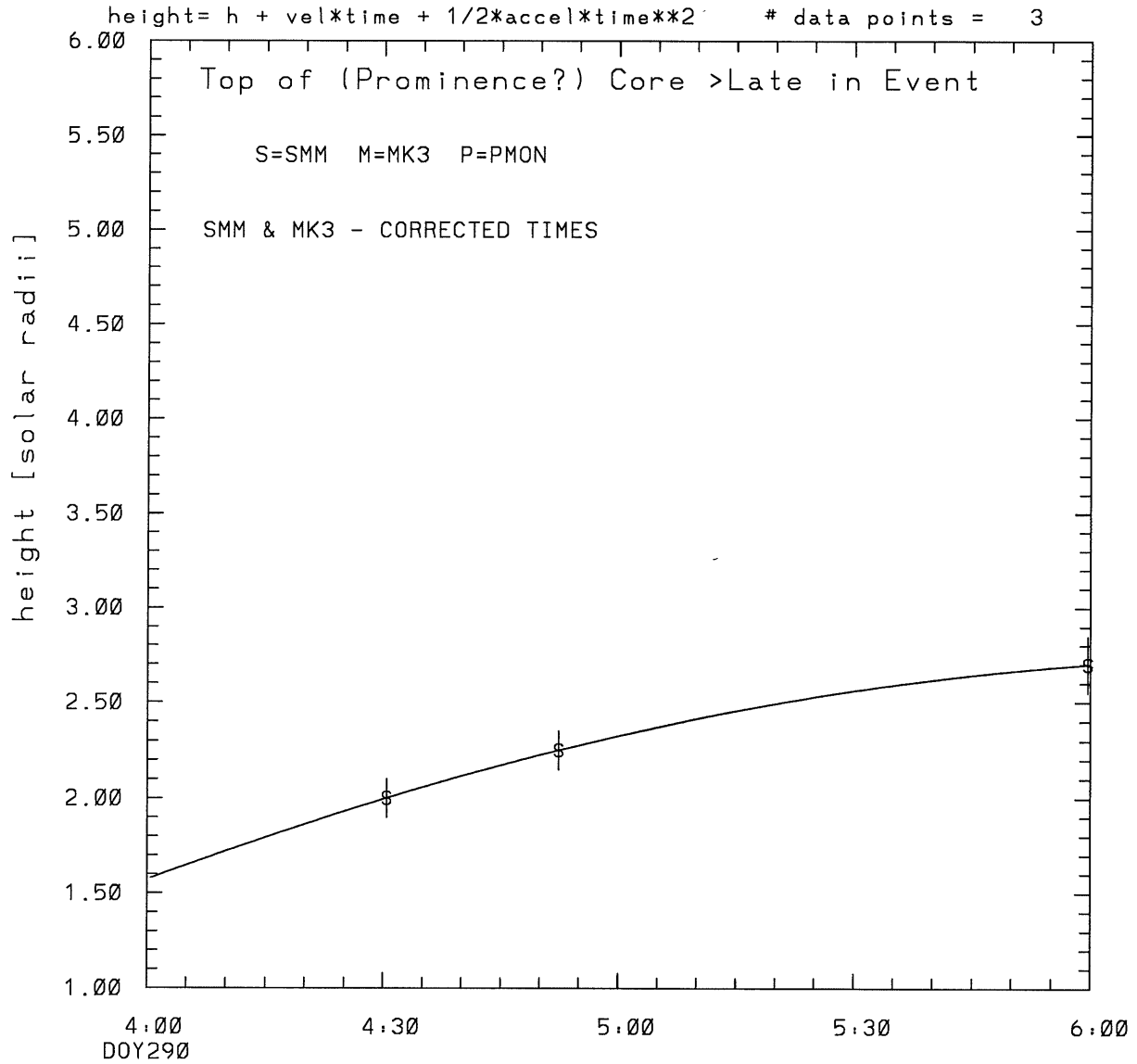
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

SMM C/P 1986 DOY290 90 +/- 0 degrees



tstart=DOY290 2:17 +/- 6.5 [min.]
radial velocity= 90. +/- 10. [km/sec]

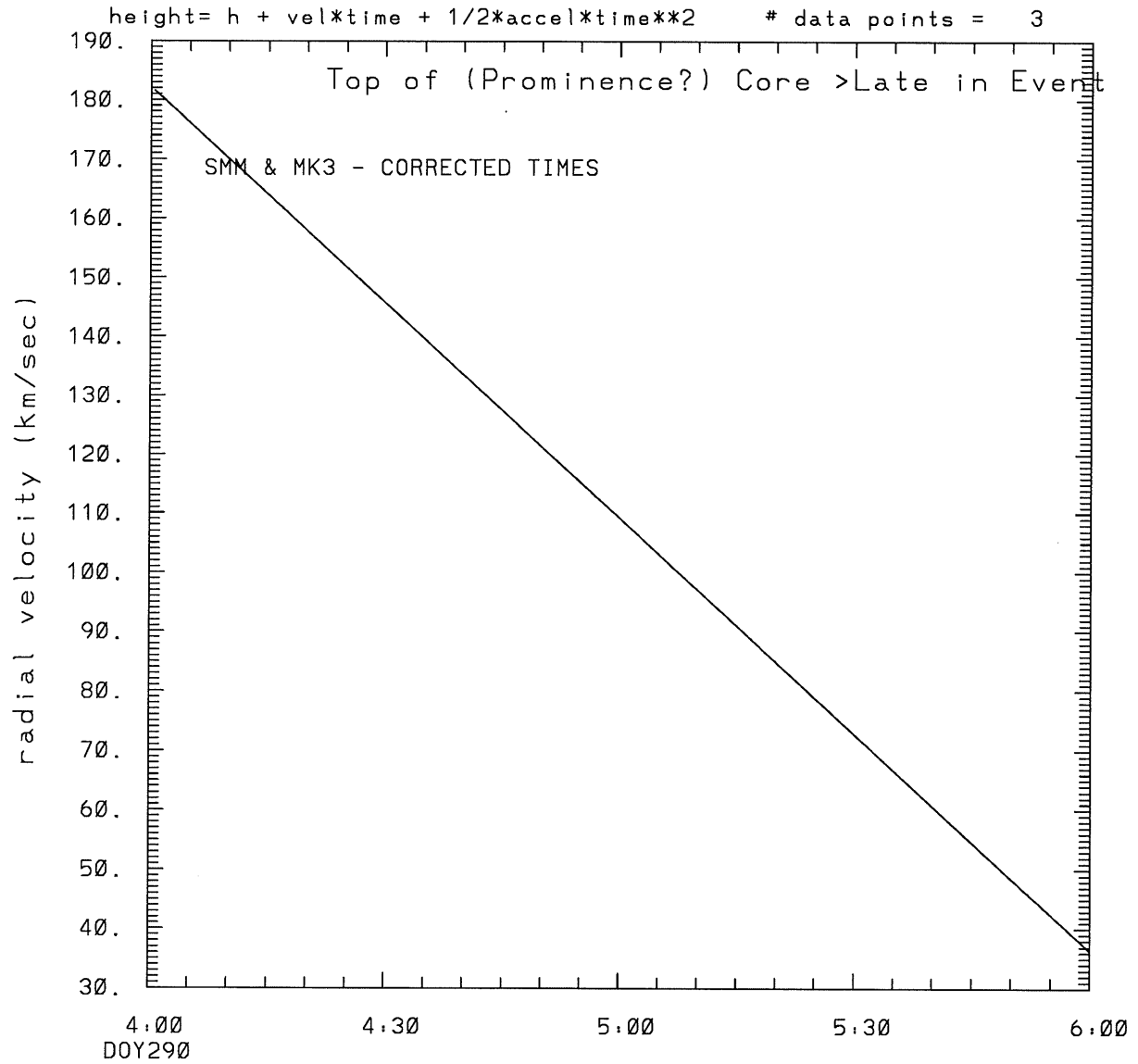
SMM C/P 1986 DOY290 90 +/- 0 degrees



tstart=DOY290 3:29 +/- 0.0 [min.]

radial acceleration = -0.0202 +/- 0.0000 [km/sec**2]

SMM C/P 1986 DOY290 90 +/- 0 degrees



tstart=DOY290 3:29 +/- 0.0 [min.]

radial acceleration = $-.202E-01$ km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1986	290	4:30:26	2.00	+/- 0.10	90.0	+/- 0.5	SMM
1986	290	4:52:26	2.25	+/- 0.10	90.0	+/- 0.5	SMM
1986	290	5:59:41	2.70	+/- 0.15	90.0	+/- 0.5	SMM

Structure being measured:
Top of (Prominence?) Core >Late in Event

OUTPUT:

START TIME:

Event began at $t = 0 + -0.103E+03 +/- 0.646E+01$ [minutes]

In more convenient units:

Event began at DOY 290 2:17 +/- 0.646E+01 [minutes]

Origin defined at DOY290 4: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 90. +/- 10. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.180E+01 +/- 0.541E-01$ [solar radii]
 $c(2) = 0.774E-02 +/- 0.844E-03$ [radii/min]
 $c(2) = 0.898E+02 +/- 0.979E+01$ [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 $c(1) = 0.73300E-01$ [radii] see Bevington pg. 114

error in $c(2) = 0.94631E-03$ [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) = 90. +/- 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 4:30 = 0.000E+00 km/sec

The TOTAL velocity at 4:30 = 90. km/sec

The TANGENTIAL velocity at 4:52 = 0.000E+00 km/sec

The TOTAL velocity at 4:52 = 90. km/sec

The TANGENTIAL velocity at 5:59 = 0.000E+00 km/sec

The TOTAL velocity at 5:59 = 90. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.35

Standard Deviation in start time measurement = 0.380E+02

Error in time = 0.80377E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.216E-02

Reduced Chi Squared = 0.721E-02

Chi Squared = 0.721E-02

The probability for exceeding chi square = 0.963E+00

The correlation coefficient = 0.993E+00

The probability that no LINEAR correlation exists between the variables = 0.7722E-01

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

This is a 2 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1986	290	4:30:26	2.00	+/- 0.10	90.0	+/- 0.5	SMM
1986	290	4:52:26	2.25	+/- 0.10	90.0	+/- 0.5	SMM
1986	290	5:59:41	2.70	+/- 0.15	90.0	+/- 0.5	SMM

Structure being measured:

Top of (Prominence?) Core >Late in Event

OUTPUT:

START TIME:

Event began at $t = 0 + -0.328E+02 +/- 0.000E+00$ [minutes]

In more convenient units:

Event began at DOY 290 3:29 +/- 0.000E+00 [minutes]

Origin defined at DOY290 4: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.202E-01 +/- 0.417E-06$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.157E+01 +/- 0.495E-05$ [solar radii]
c(2) = $0.157E-01 +/- 0.166E-06$ [radii/min]
c(2) = $0.182E+03 +/- 0.192E-02$ [km/sec]
c(3) = $-0.523E-04 +/- 0.108E-08$ [radii/min**2]
c(3) = $-0.202E-01 +/- 0.417E-06$ [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) = $90. +/- 0.$ [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 4:30 = 0.000E+00 km/sec

The TOTAL velocity at 4:30 = 145. km/sec

The TANGENTIAL velocity at 4:52 = 0.000E+00 km/sec

The TOTAL velocity at 4:52 = 118. km/sec

The TANGENTIAL velocity at 5:59 = 0.000E+00 km/sec

The TOTAL velocity at 5:59 = 37. 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!