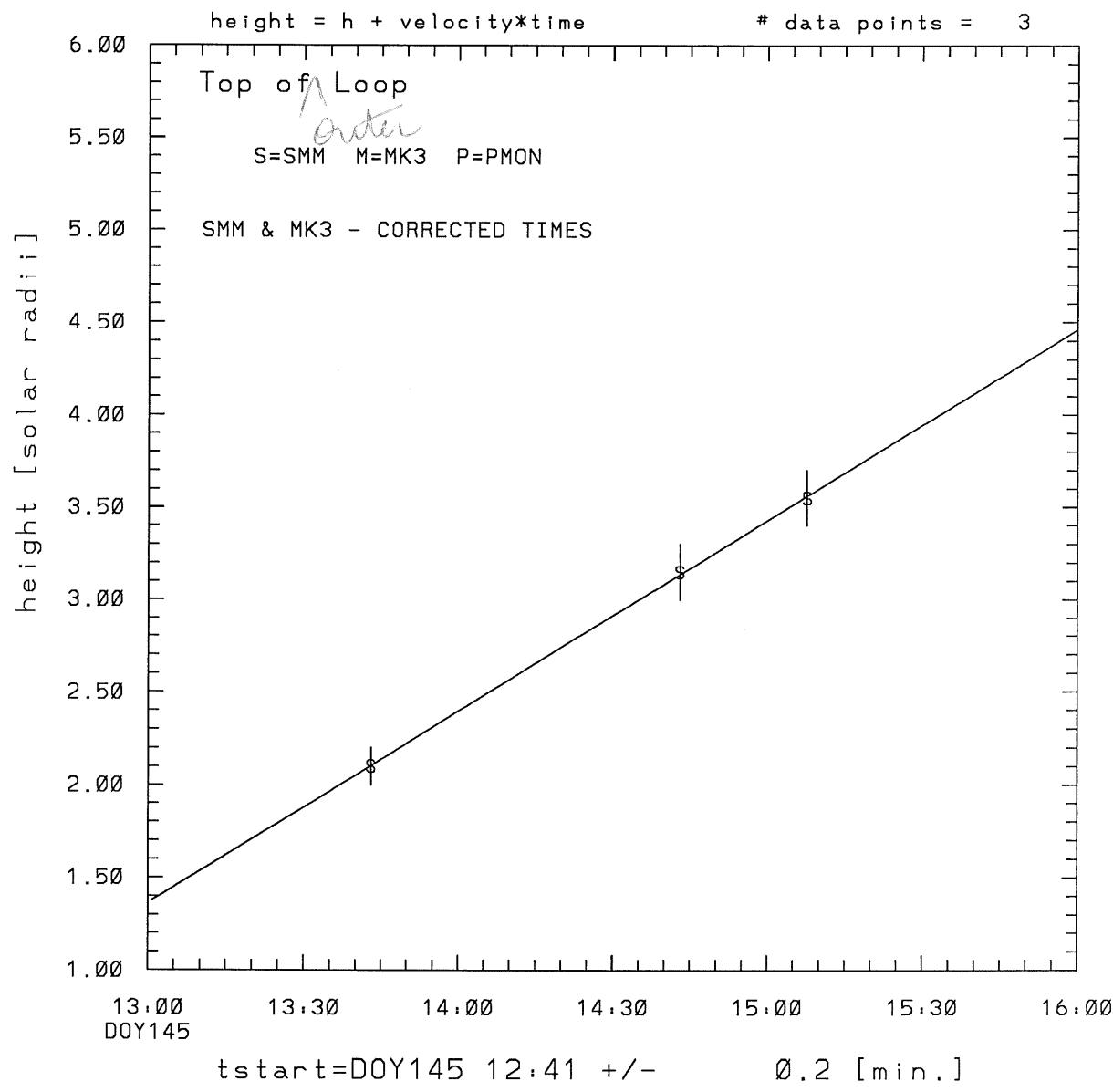
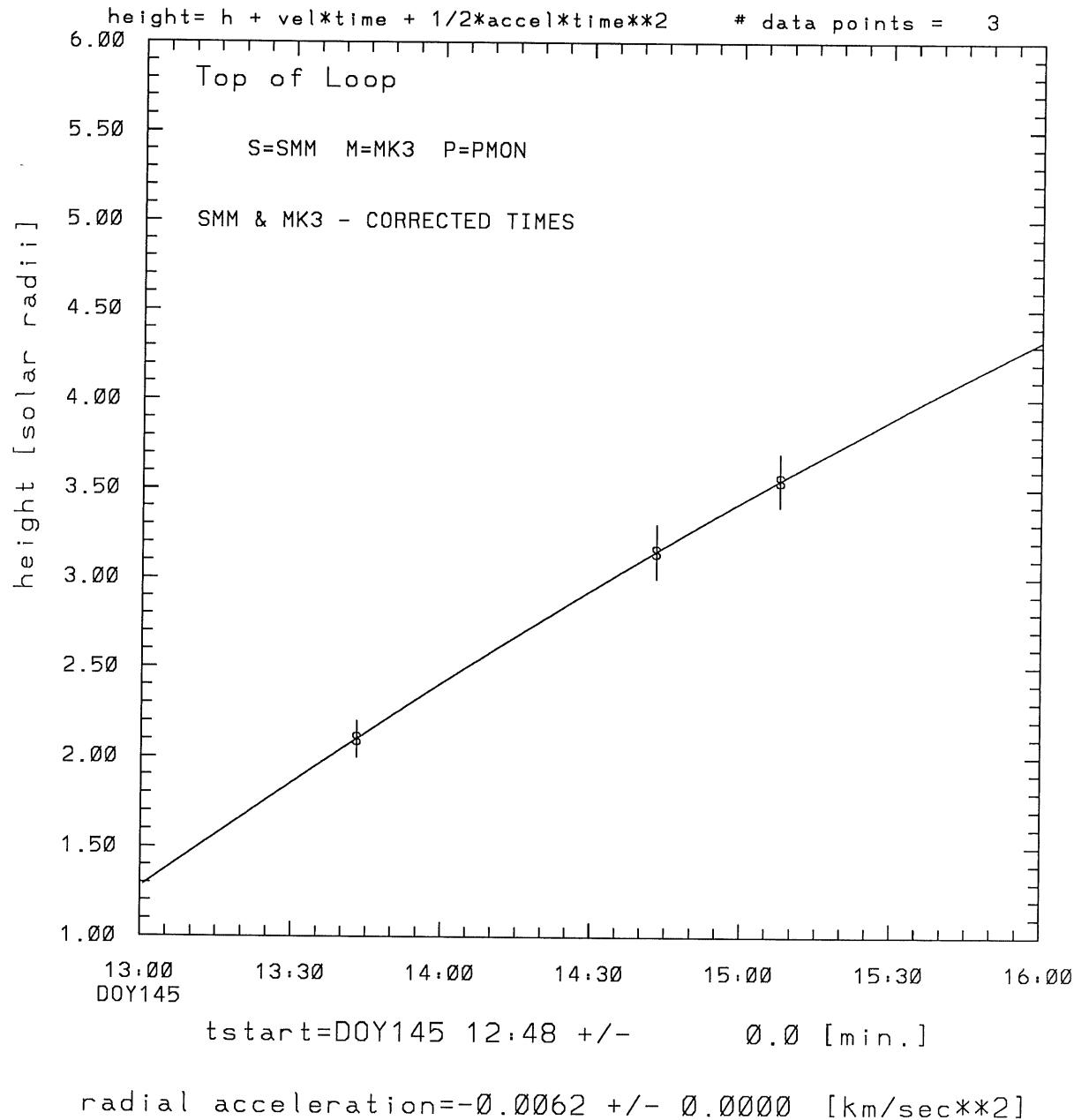


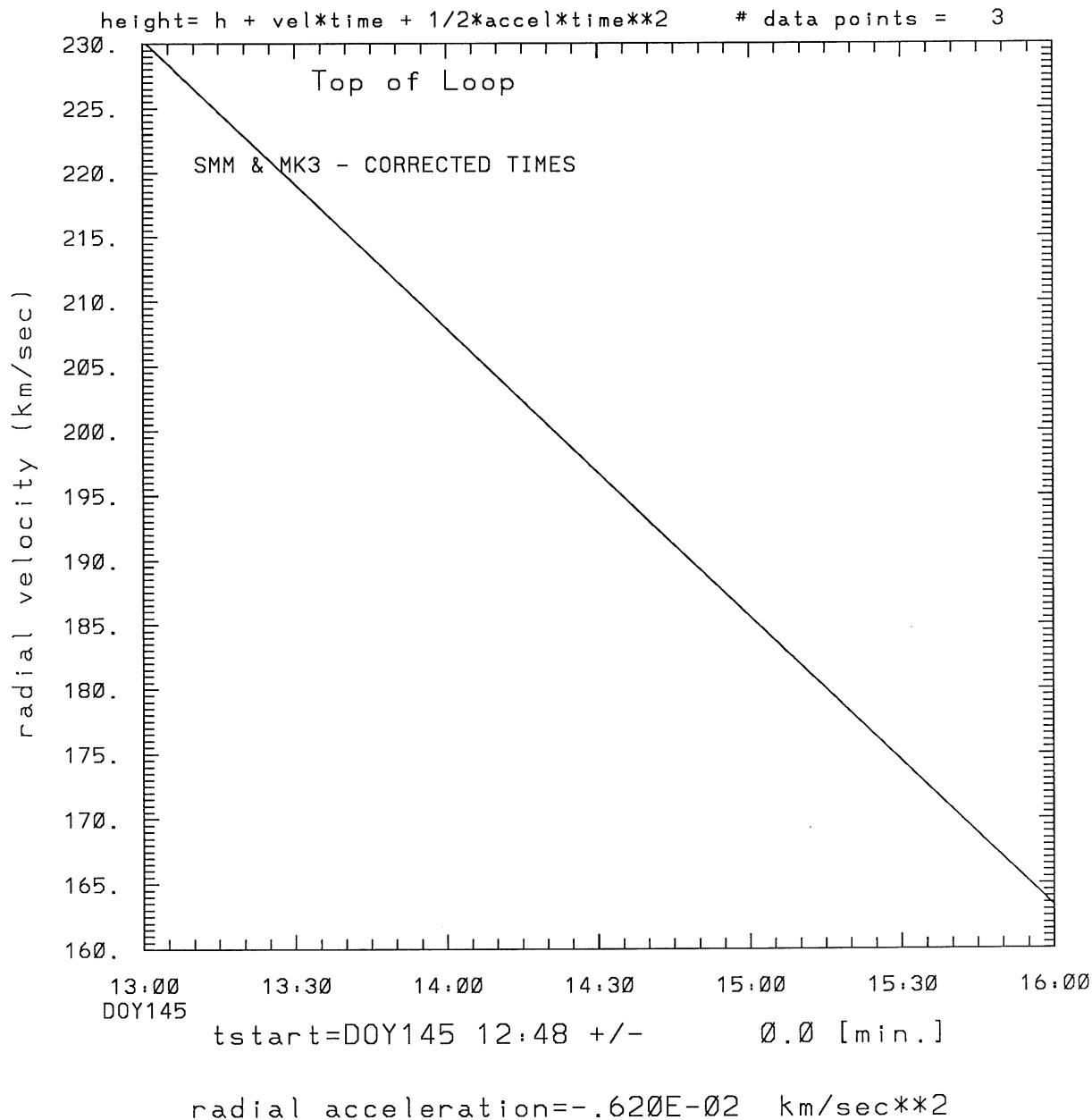
SMM C/P 1989 DOY145 70 +/- 0 degrees



SMM C/P 1989 DOY145 70 +/- 0 degrees



SMM C/P 1989 DOY145 70 +/- 0 degrees



✓ Top of Inner Gravity in Core, center=64°

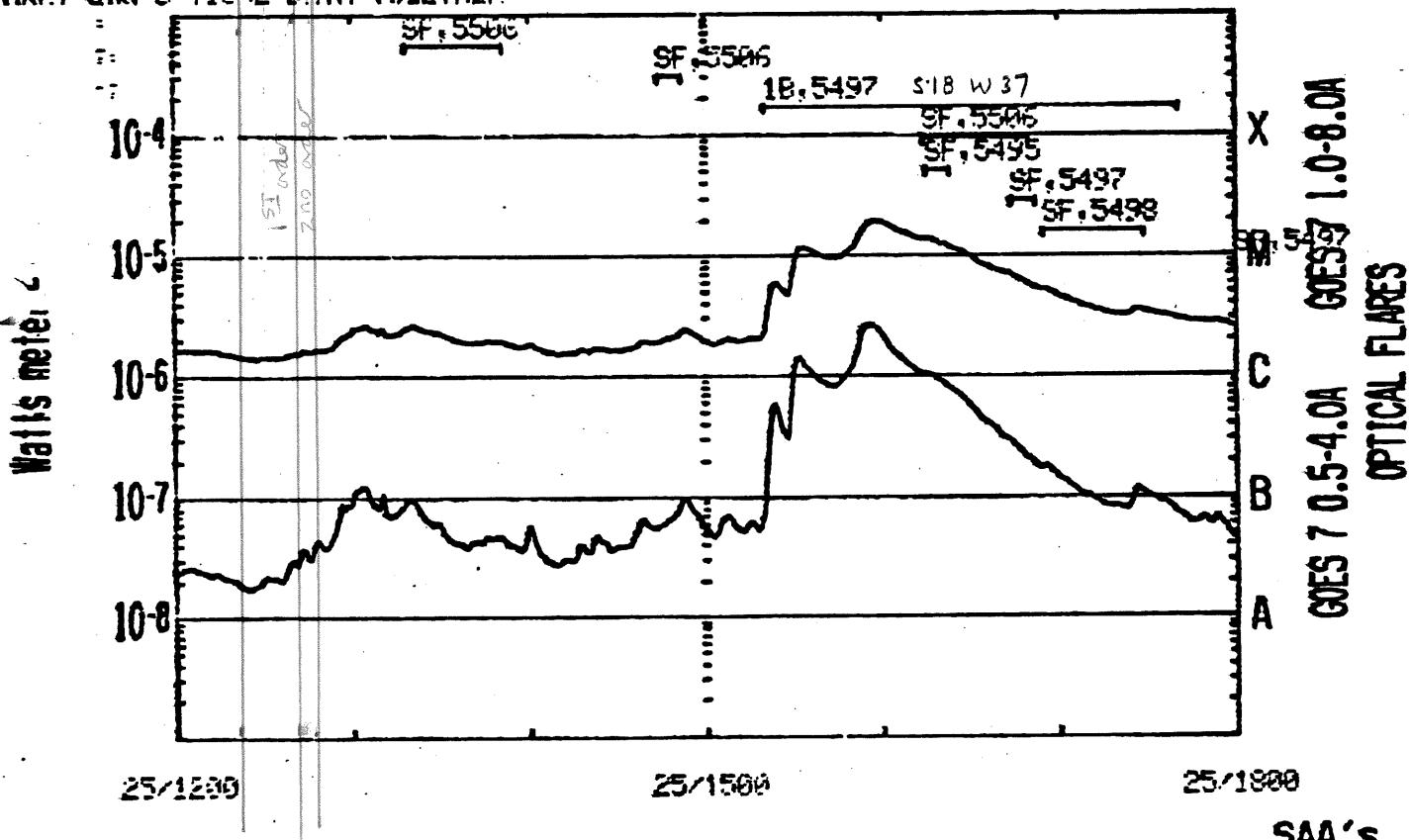
Top of [12.41], 1st order
[12.48], 2nd order

1989 Day 145

KEY AND OPTIONAL DATA TOGETHER

STOP
Ret..

BEGIN: 25 MAY 89



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

SUN: 1914UT
26 MAY 89

SAA'S
NIGHT

This is a 1 order run

INPUT:

year	doy	time	radii	radius	angle	error in angle	datatype
1989	145	13:43: 1	2.10	+/- 0.10	70.0	+/- 0.5	SMM
1989	145	14:42:59	3.15	+/- 0.15	70.0	+/- 0.5	SMM
1989	145	15: 7:45	3.55	+/- 0.15	70.0	+/- 0.5	SMM

Structure being measured:

Top of Loop

outer

OUTPUT:

START TIME:

Event began at t = 0 + -0.210E+02 +/- 0.170E+00 [minutes]

In more convenient units:

Event began at DOY 145 12:41 +/- 0.170E+00 [minutes]

Origin defined at DOY145 13: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 200. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.136E+01 +/- 0.152E-01 [solar radii]

c(2) = 0.172E-01 +/- 0.178E-03 [radii/min]

c(2) = 0.200E+03 +/- 0.206E+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)= 0.30313E-01 [radii] see Bevington pg. 114

error in c(2)= 0.30951E-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) = 70. +/- 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 13:43 = 0. km/sec

The TOTAL velocity at 13:43 = 200. km/sec

The TANGENTIAL velocity at 14:42 = 0. km/sec

The TOTAL velocity at 14:42 = 200. km/sec

The TANGENTIAL velocity at 15: 7 = 0. km/sec

The TOTAL velocity at 15: 7 = 200. km/sec

The following info is for estimating goodness of the fit

Fit is ok [jer=1]

Standard Deviation in the height = 0.75

Standard Deviation in start time measurement = 0.356E+02

Error in time = 0.11076E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.130E-03

Reduced Chi Squared = 0.843E-03

Chi Squared = 0.843E-03

The probability for exceeding chi square = 0.991E+00

The correlation coefficient = 0.100E+01

The probability that no LINEAR correlation exists between the variables = 0.1142E-01

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

This is a 2 order run

INPUT:

year	doy	time	radii	radius	error in angle	error in angle	datatype
1989	145	13:43: 1	2.10	+/- 0.10	70.0	+/- 0.5	SMM
1989	145	14:42:59	3.15	+/- 0.15	70.0	+/- 0.5	SMM
1989	145	15: 7:45	3.55	+/- 0.15	70.0	+/- 0.5	SMM

Structure being measured:

Top of Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.137E+02 +/- 0.000E+00 [minutes]

In more convenient units:

Event began at DOY 145 12:48 +/- 0.000E+00 [minutes]

Origin defined at DOY145 13: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.620E-02 +/- 0.916E-07 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.128E+01 +/- 0.130E-05 [solar radii]
c(2) = 0.199E-01 +/- 0.391E-07 [radii/min]
c(2) = 0.230E+03 +/- 0.453E-03 [km/sec]
c(3) = -0.160E-04 +/- 0.237E-09 [radii/min**2]
c(3) = -0.620E-02 +/- 0.916E-07 [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) = 70. +/- 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 13:43 = 0. km/sec

The TOTAL velocity at 13:43 = 214. km/sec

The TANGENTIAL velocity at 14:42 = 0. km/sec

The TOTAL velocity at 14:42 = 192. km/sec

The TANGENTIAL velocity at 15: 7 = 0. km/sec

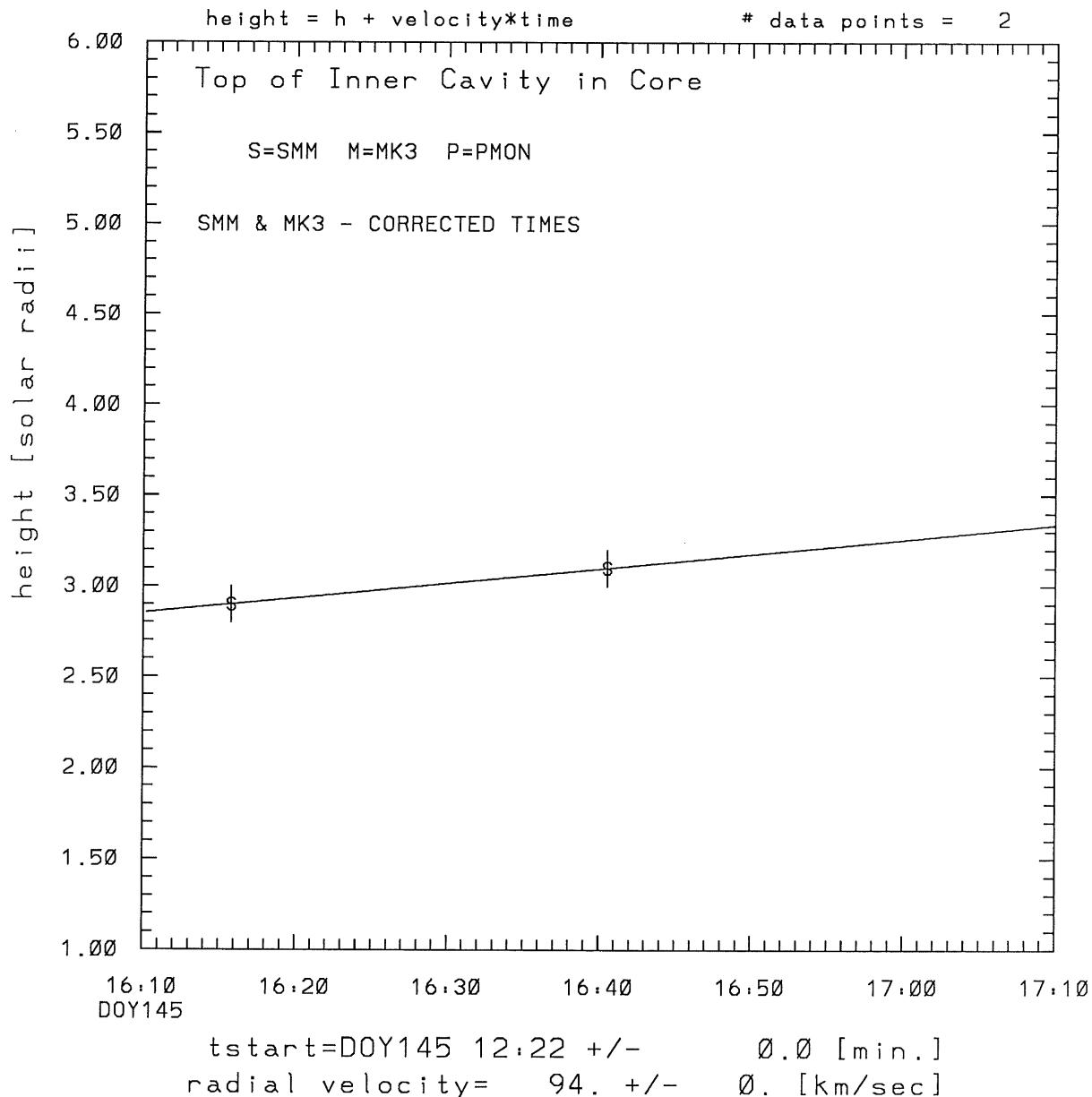
The TOTAL velocity at 15: 7 = 183. km/sec

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!

SMM C/P 1989 DOY145 86 +/- 0 degrees



This is a 1 order run

INPUT:

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1989	145	16:15:47	2.90	+/- 0.10	86.0	+/- 0.5	SMM
1989	145	16:40:33	3.10	+/- 0.10	86.0	+/- 0.5	SMM

Structure being measured:

Top of Inner Cavity in Core

OUTPUT:

START TIME:

Event began at t = 0 + -0.230E+03 +/- 0.000E+00 [minutes]

In more convenient units:

Event began at DOY 145 12:22 +/- 0.000E+00 [minutes]

Origin defined at DOY145 16:10

RADIAL INFORMATION:

RADIAL VELOCITY = 94. +/- 0. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.285E+01 +/- 0.000E+00 [solar radii]

c(2) = 0.808E-02 +/- 0.000E+00 [radii/min]

c(2) = 0.937E+02 +/- 0.000E+00 [km/sec]

c(3) = 0.000E+00 +/- 0.000E+00 [radii/min**2]

c(3) = 0.000E+00 +/- 0.000E+00 [km/sec**2]

ANGULAR INFORMATION:

ANGULAR VELOCITY = 0.0000E+00 +/- 0.0000E+00[radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 86. +/- 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 16:15 = 0. km/sec

The TOTAL velocity at 16:15 = 94. km/sec

The TANGENTIAL velocity at 16:40 = 0. km/sec

The TOTAL velocity at 16:40 = 94. 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!