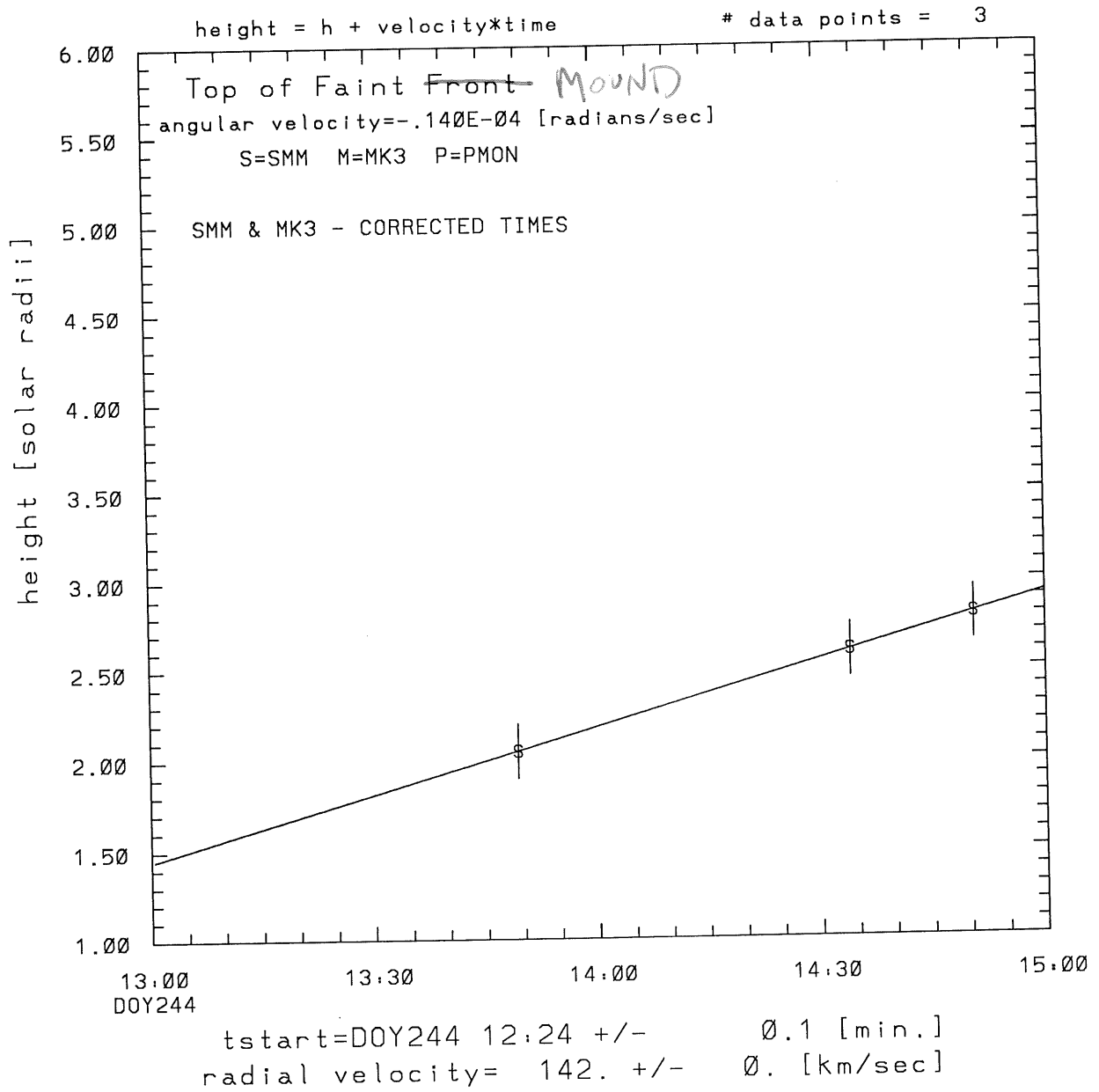
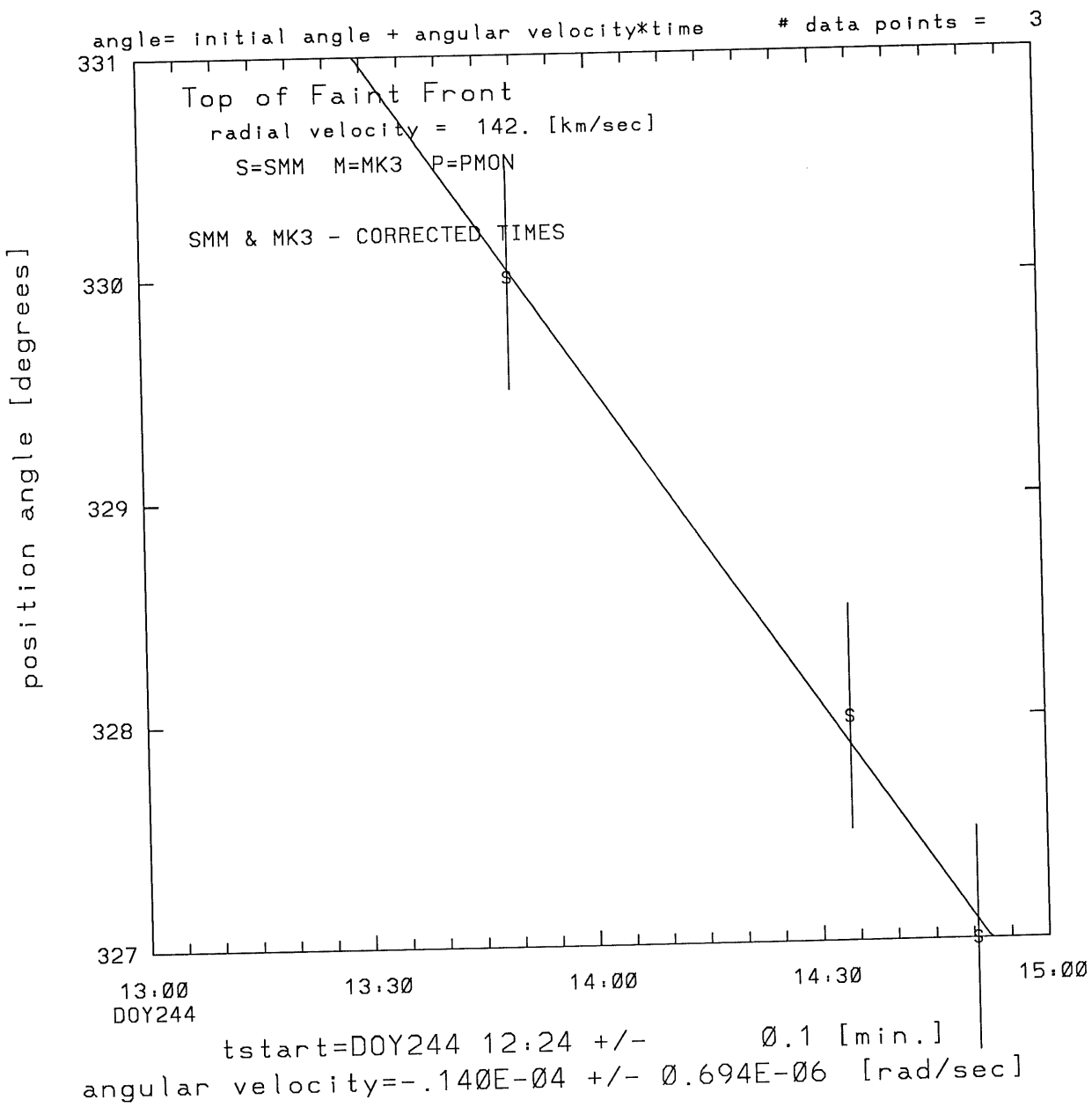


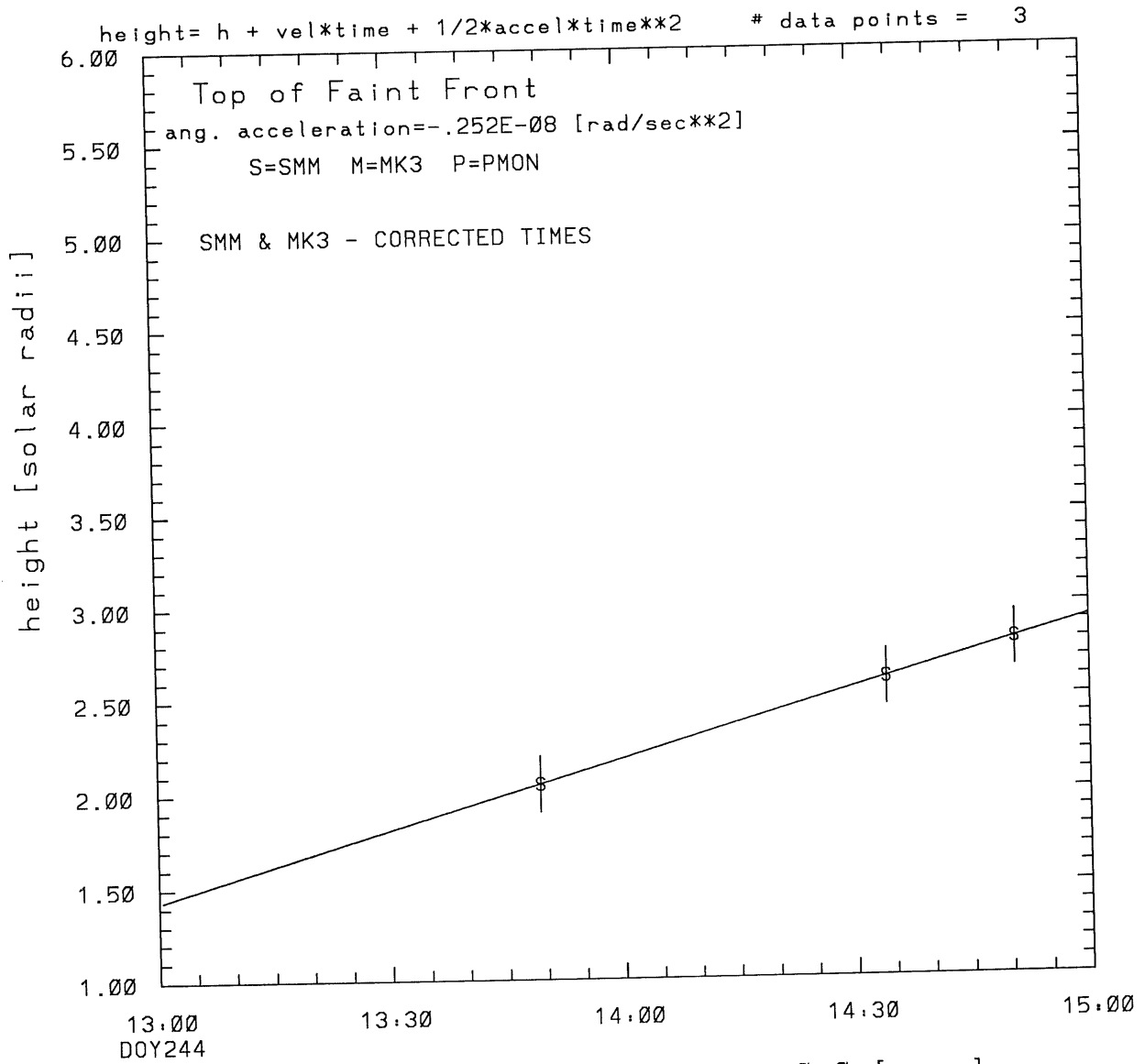
SMM C/P 1987 DOY244 328 +/- 2 degrees



SMM C/P 1987 DOY244 328 +/- 2 degrees



SMM C/P 1987 DOY244 328 +/- 2 degrees

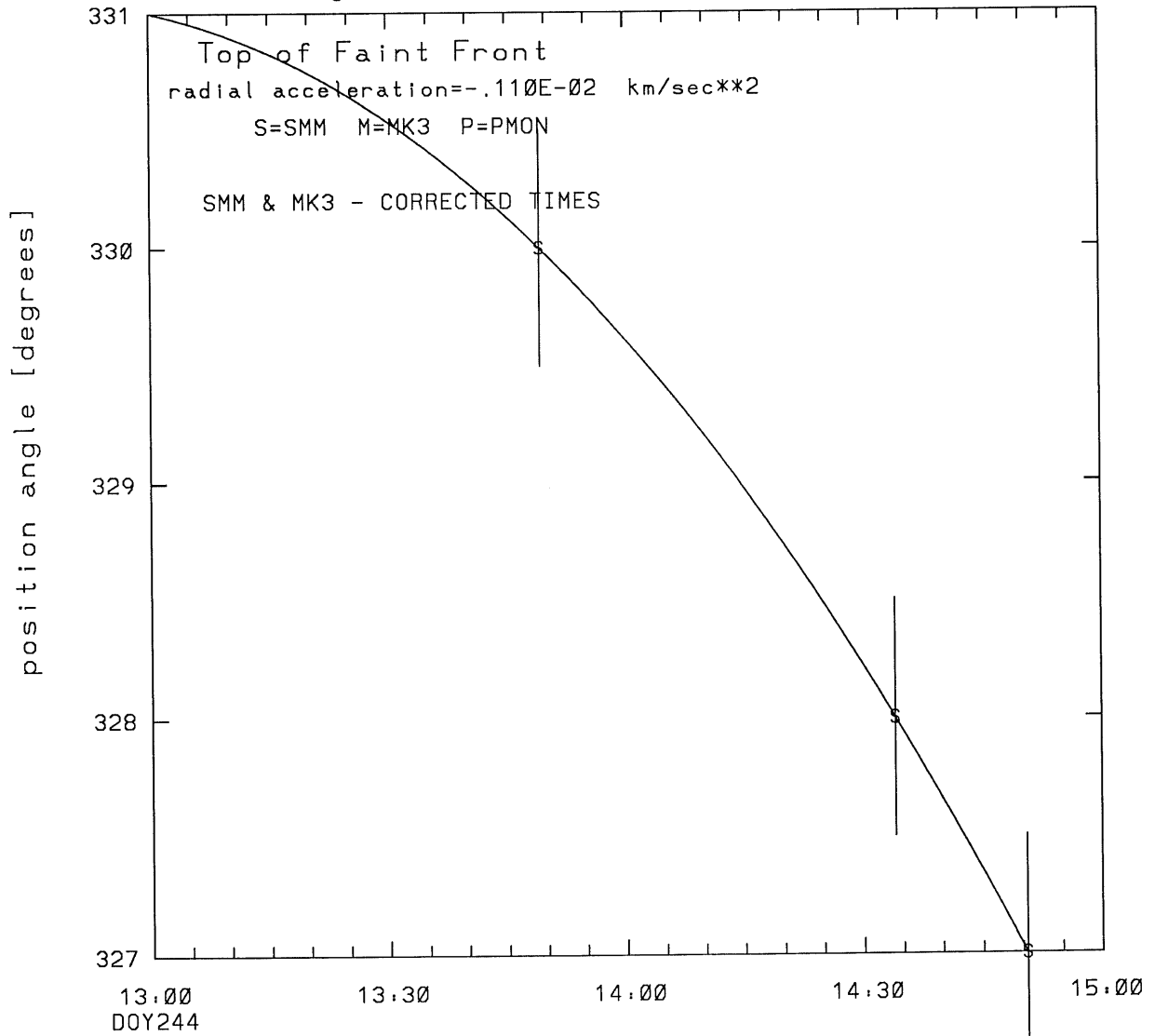


radial acceleration =  $-0.0011 +/- 0.0000$  [km/sec\*\*2]

SMM C/P 1987 DOY244 328 +/- 2 degrees

angle = initial angle + angular velocity\*time  
+ 1/2 angular acceleration\*time\*\*2

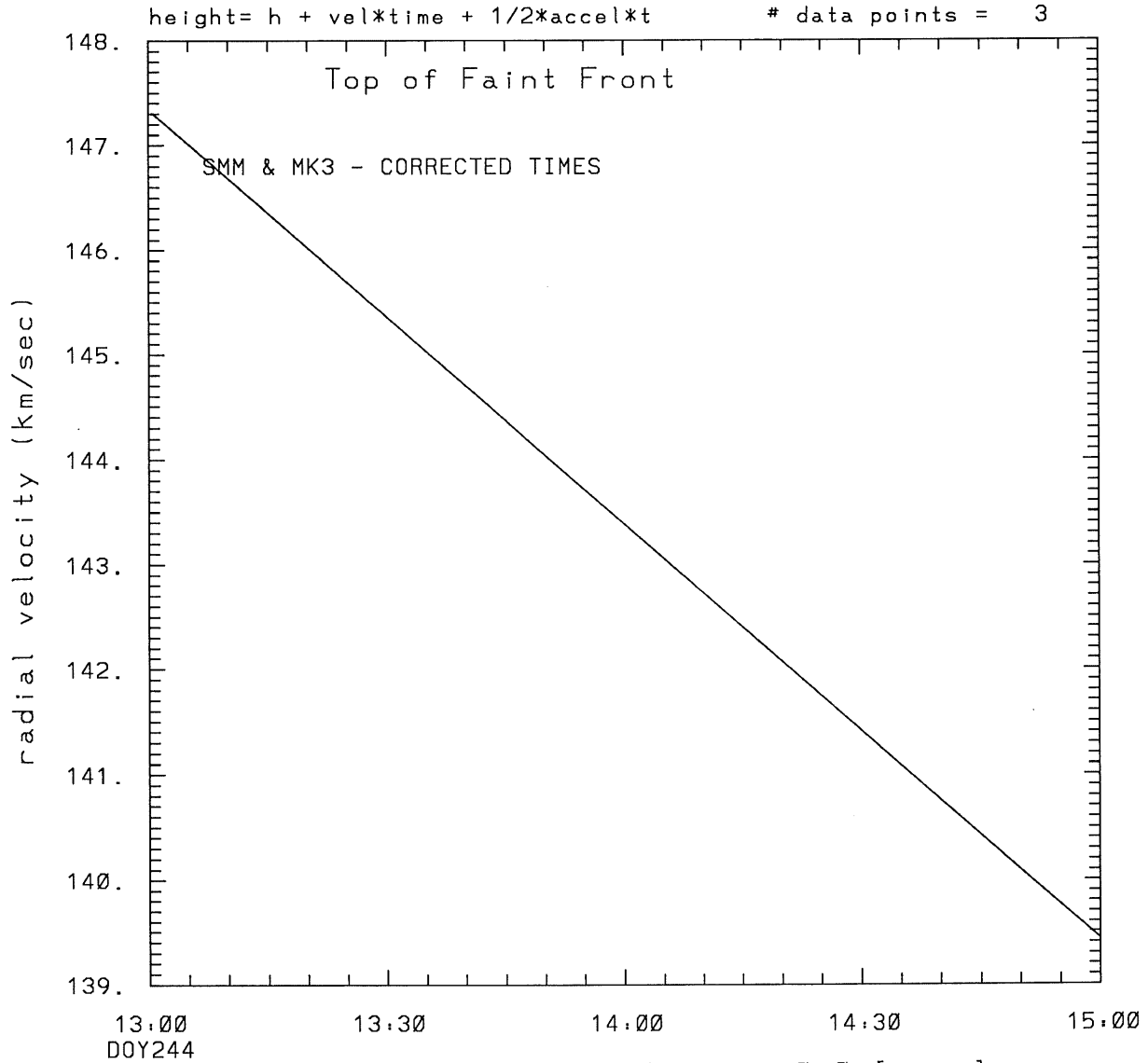
# data points = 3



tstart = DOY244 12:28 +/- 0.0 [min.]

angular acceleration =  $-0.252 \times 10^{-8}$  +/-  $0.102 \times 10^{-11}$  [rad/sec\*\*2]

SMM C/P 1987 DOY244 328 +/- 2 degrees



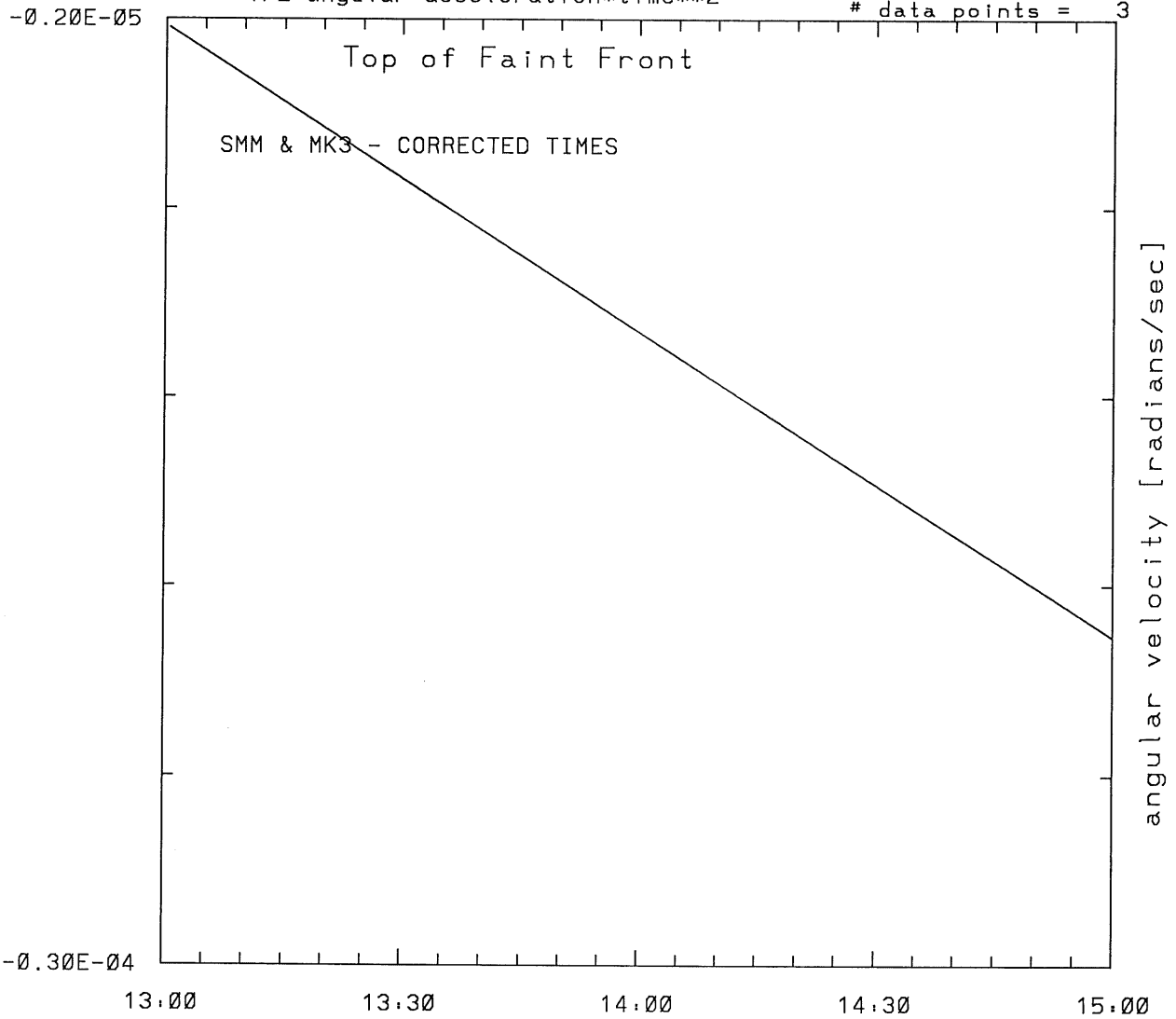
tstart=DOY244 12:28 +/- 0.0 [min.]

radial acceleration=-.110E-02 km/sec\*\*2

SMM C/P 1987 DOY244 328 +/- 2 degrees

$$\text{angle} = \text{initial angle} + \text{angular velocity} \times \text{time} + \frac{1}{2} \text{angular acceleration} \times \text{time}^2$$

# data points = 3



DOY244

tstart=DOY244 12:28 +/- 0.0 [min.]

angular acceleration=-.252E-08 +/-

0.102E-11 [rad/sec\*\*2]

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

\*\*\*\*\*  
INPUT:  
\*\*\*\*\*

year	day	time	radii	radius	error in angle	error in angle	datatype
1987	244	13:49:15	2.05 +/- 0.15	330.0 +/- 0.5			SMM
1987	244	14:33:59	2.60 +/- 0.15	328.0 +/- 0.5			SMM
1987	244	14:50:29	2.80 +/- 0.15	327.0 +/- 0.5			SMM

\*\*\*\*\*  
Structure being measured:  
Top of Mound  
\*\*\*\*\*

\*\*\*\*\*  
OUTPUT:  
\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.364E+02 +/- 0.507E-01 [minutes]  
In more convenient units:  
Event began at DOY 244 12:24 +/- 0.507E-01 [minutes]  
Origin defined at DOY244 13: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 142. +/- 0. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.145E+01 +/- 0.231E-02 [solar radii]  
c(2) = 0.123E-01 +/- 0.261E-04 [radii/min]  
c(2) = 0.142E+03 +/- 0.303E+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]

The computed ERRORS in coefficients [BEVINGTON] are:

error in c(1)= 0.32635E-02 [radii] see Bevington pg. 114  
error in c(2)= 0.36901E-04 [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = -0.1399E-04 +/- 0.6941E-06[radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 332. +/- 0. [degrees]  
a(2) = -0.481E-01 +/- 0.239E-02 [degrees/min]  
a(2) = -0.140E-04 +/- 0.694E-06 [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 RADIAL velocity at 13:49 = 142. km/sec

The RADIAL velocity at 14:33 = 142. km/sec

The RADIAL velocity at 14:50 = 142. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 0.39  
Standard Deviation in start time measurement = 0.259E+02  
Error in time = 0.13488E+00 using best fit method  
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.137E-05  
Reduced Chi Squared = 0.625E-05  
Chi Squared = 0.625E-05  
The probability for exceeding chi square = 0.999E+00

The correlation coefficient = 0.100E+01  
The probability that no LINEAR correlation exists between the variables = 0.22631  
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]



\*\*\*\*\*  
This is a 2 order run  
\*\*\*\*\*

\*\*\*\*\*  
INPUT:  
\*\*\*\*\*

year	day	time	radii	radius	error in angle	error in angle	datatype
1987	244	13:49:15	2.05 +/-	0.15	330.0 +/-	0.5	SMM
1987	244	14:33:59	2.60 +/-	0.15	328.0 +/-	0.5	SMM
1987	244	14:50:29	2.80 +/-	0.15	327.0 +/-	0.5	SMM

\*\*\*\*\*  
Structure being measured:  
Top of Mound  
\*\*\*\*\*

\*\*\*\*\*  
OUTPUT:  
\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.337E+02 +/- 0.000E+00 [minutes]  
In more convenient units:  
Event began at DOY 244 12:28 +/- 0.000E+00 [minutes]  
Origin defined at DOY244 13: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.110E-02 +/- 0.158E-06 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.143E+01 +/- 0.226E-05 [solar radii]  
c(2) = 0.127E-01 +/- 0.642E-07 [radii/min]  
c(2) = 0.147E+03 +/- 0.745E-03 [km/sec]  
c(3) = -0.284E-05 +/- 0.409E-09 [radii/min\*\*2]  
c(3) = -0.110E-02 +/- 0.158E-06 [km/sec\*\*2]

ANGULAR INFORMATION:

ANGULAR ACCELERATION= -0.2517E-08 +/- 0.1016E-11[radians/sec\*\*2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 331. +/- 0. [degrees]  
a(2) = -0.754E-02 +/- 0.164E-04 [degrees/min]  
a(2) = -0.219E-05 +/- 0.478E-08 [rad/sec]  
a(3) = -0.260E-03 +/- 0.105E-06 [degrees/min\*\*2]  
a(3) = -0.252E-08 +/- 0.102E-11 [rad/sec\*\*2]

The RADIAL velocity at 13:49 = 144. km/sec

The RADIAL velocity at 14:33 = 141. km/sec

The RADIAL velocity at 14:50 = 140. 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!