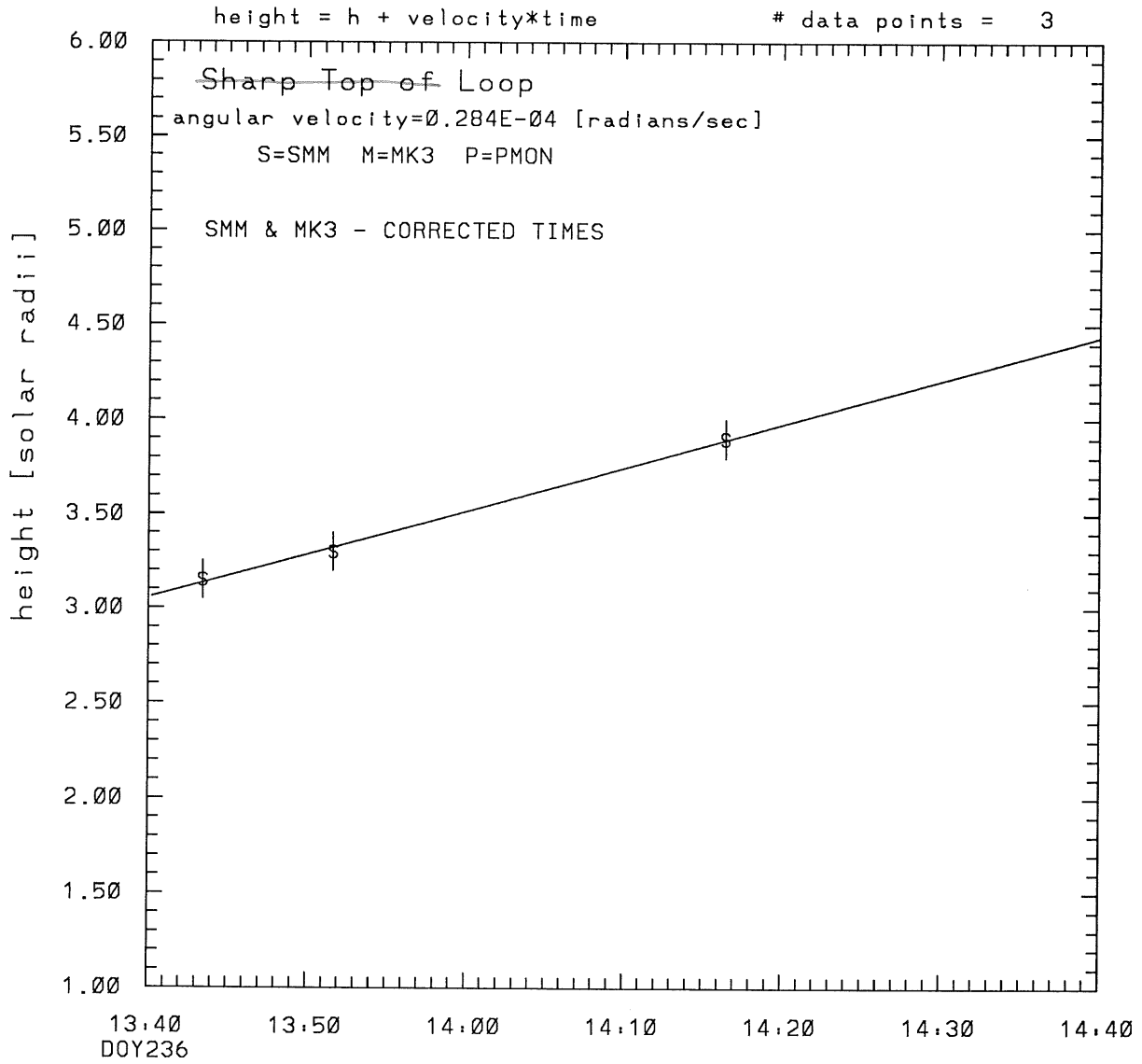


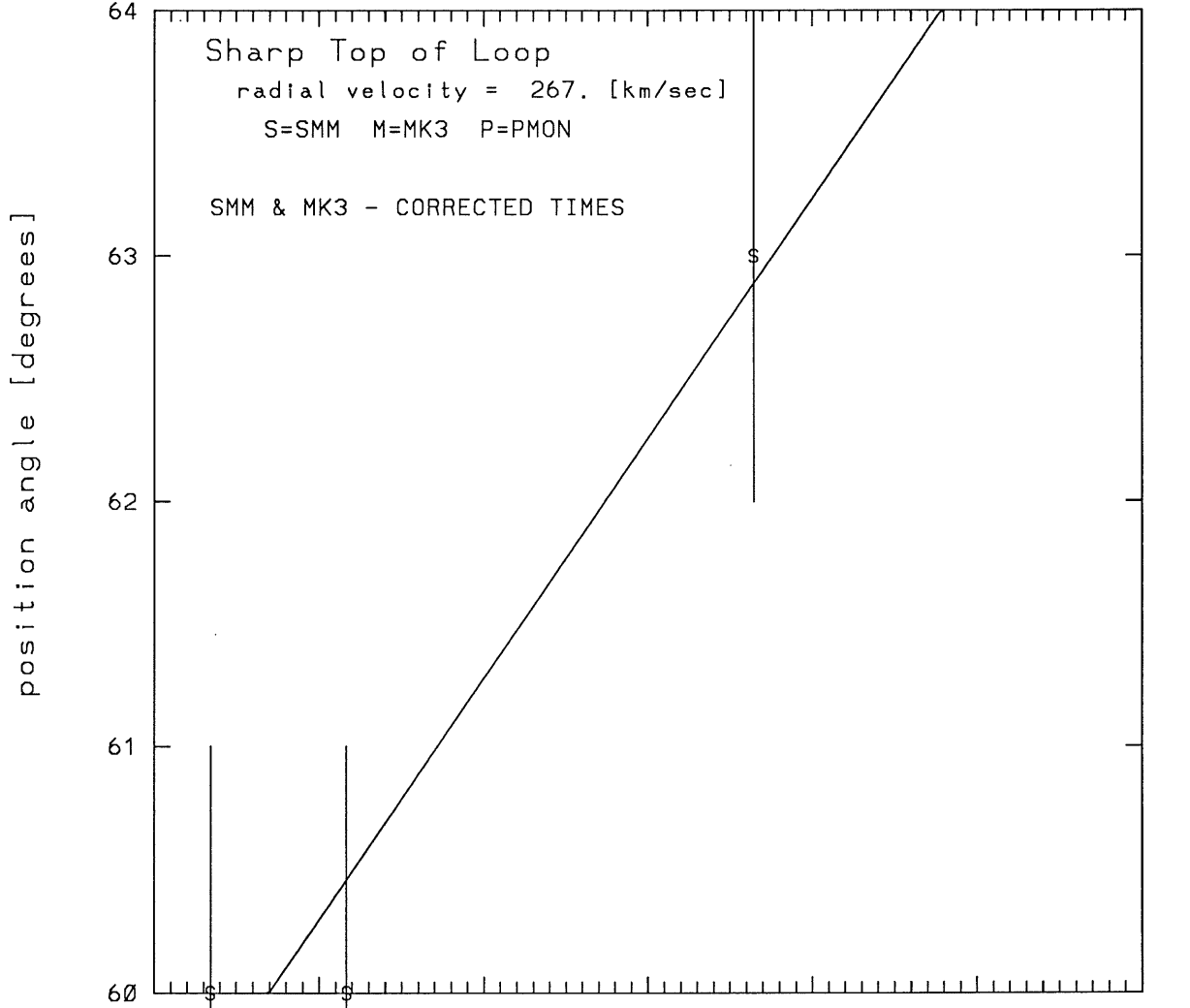
SMM C/P 1988 DOY236 61 +/- 2 degrees



tstart=DOY236 12:11 +/- 1.9 [min.]
radial velocity= 267. +/- 10. [km/sec]

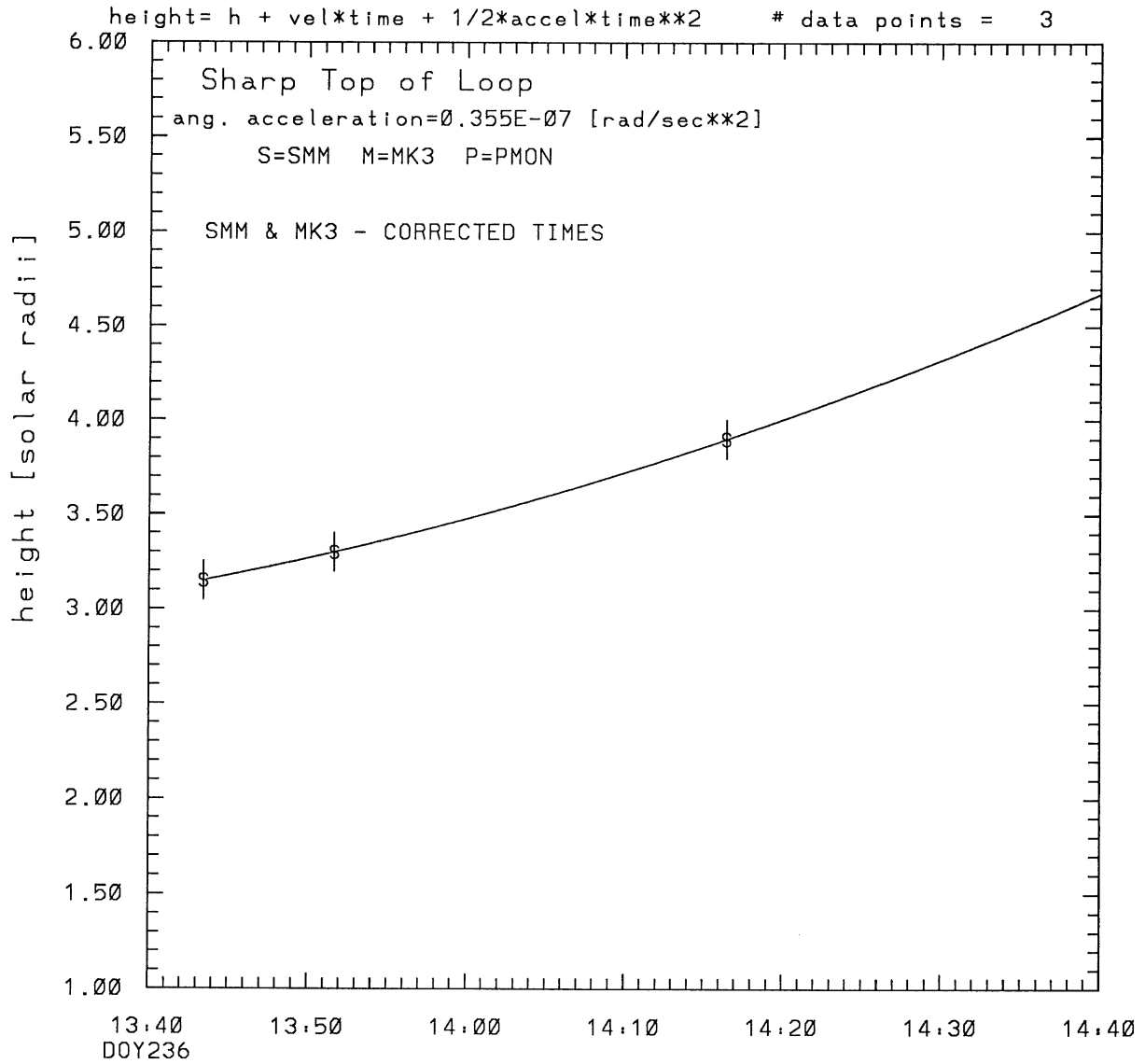
SMM C/P 1988 DOY236 61 +/- 2 degrees

angle = initial angle + angular velocity * time # data points = 3



angular velocity = $0.284E-04 \pm 0.496E-05$ [rad/sec]

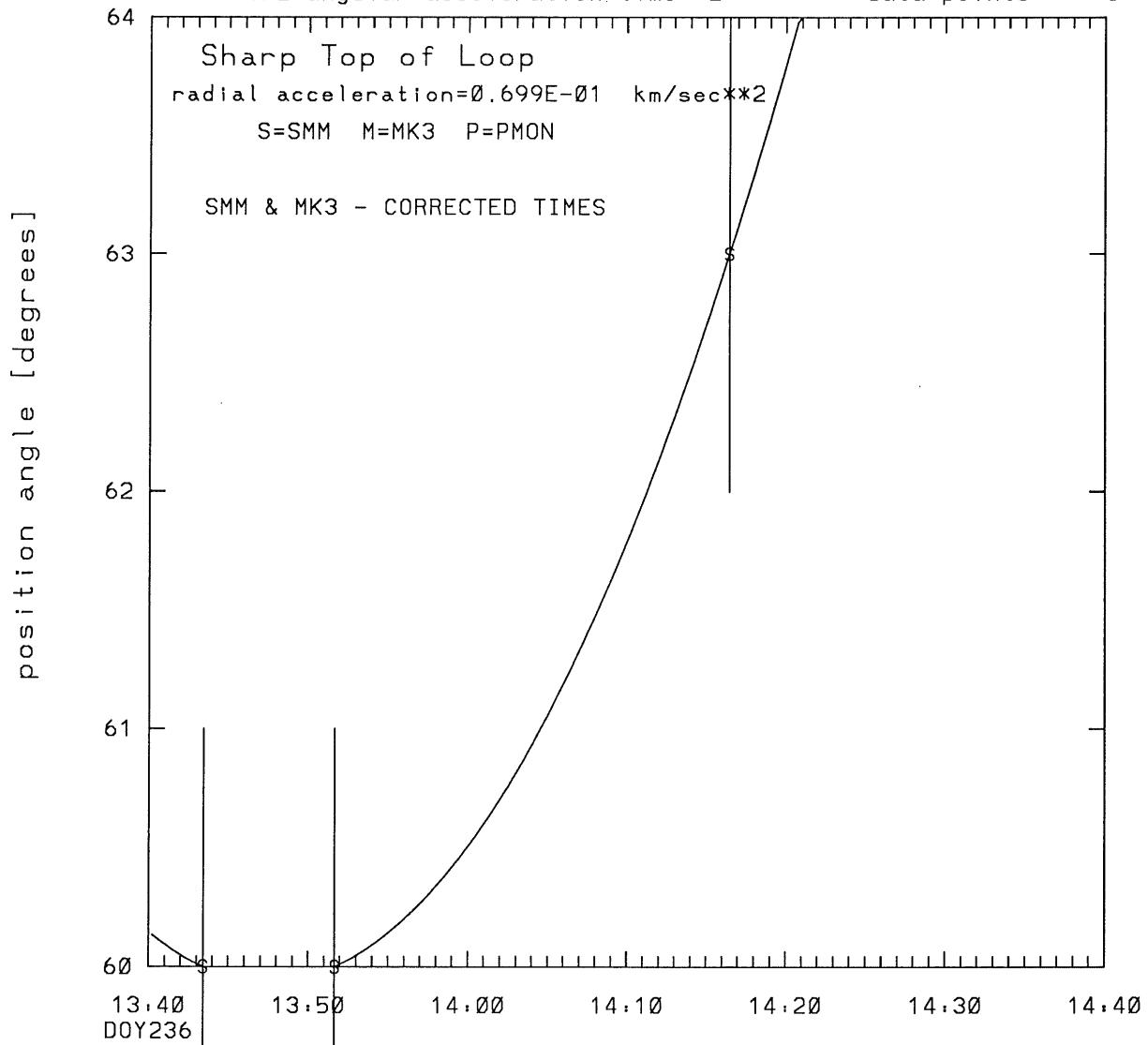
SMM C/P 1988 DOY236 61 +/- 2 degrees



tstart=DOY236 12:58 from derivative=0
Event begins at 2.76 Solar Radii
radial acceleration = $0.0699 +/- 0.0000$ [km/sec**2]

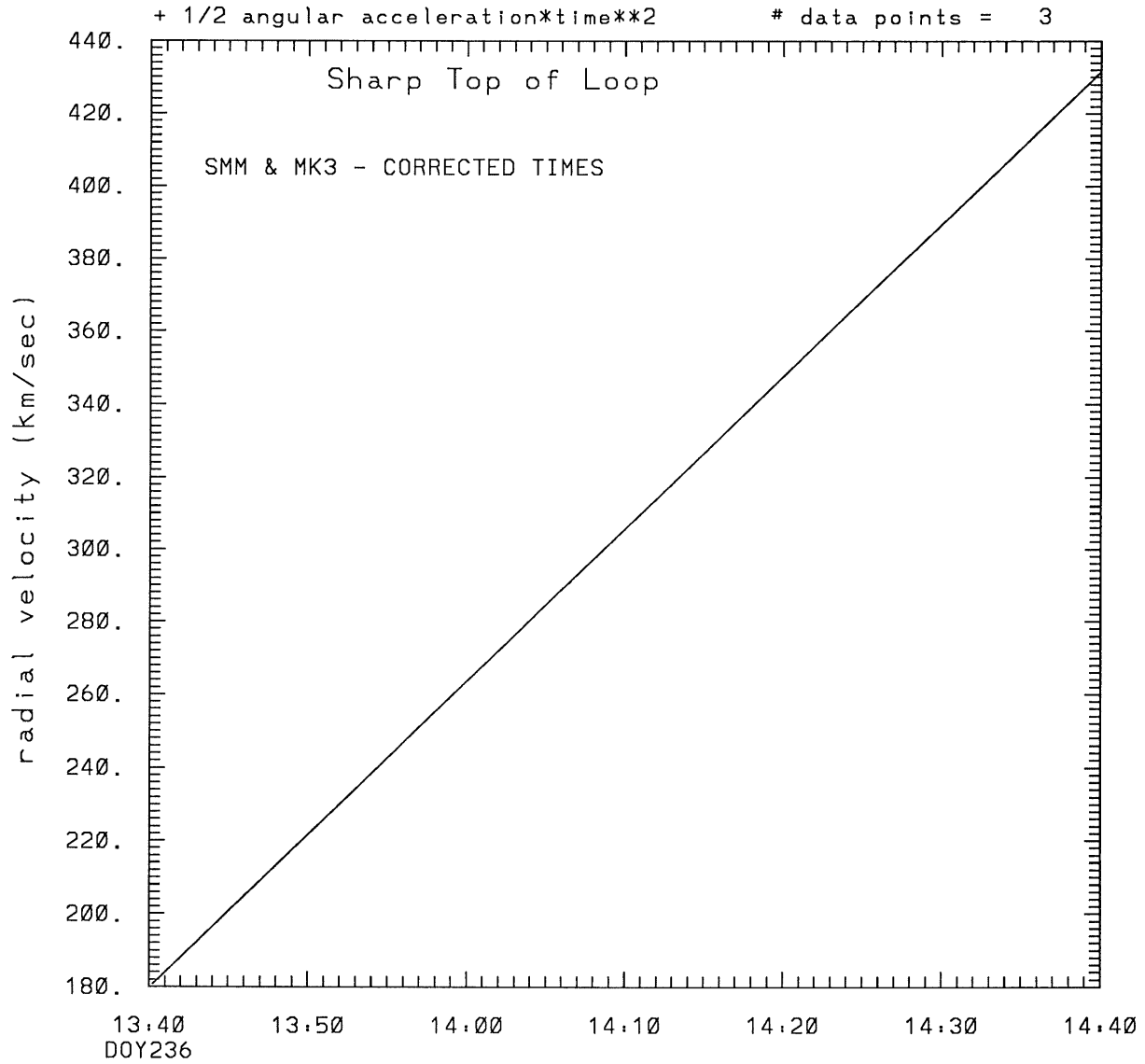
SMM C/P 1988 DOY236 61 +/- 2 degrees

angle = initial angle + angular velocity*time
+ 1/2 angular acceleration*time**2 # data points = 3



Event begins at 2.76 Solar Radii
angular acceleration=0.355E-07 +/-0.231E-12 [rad/sec**2]

SMM C/P 1988 DOY236 61 +/- 2 degrees

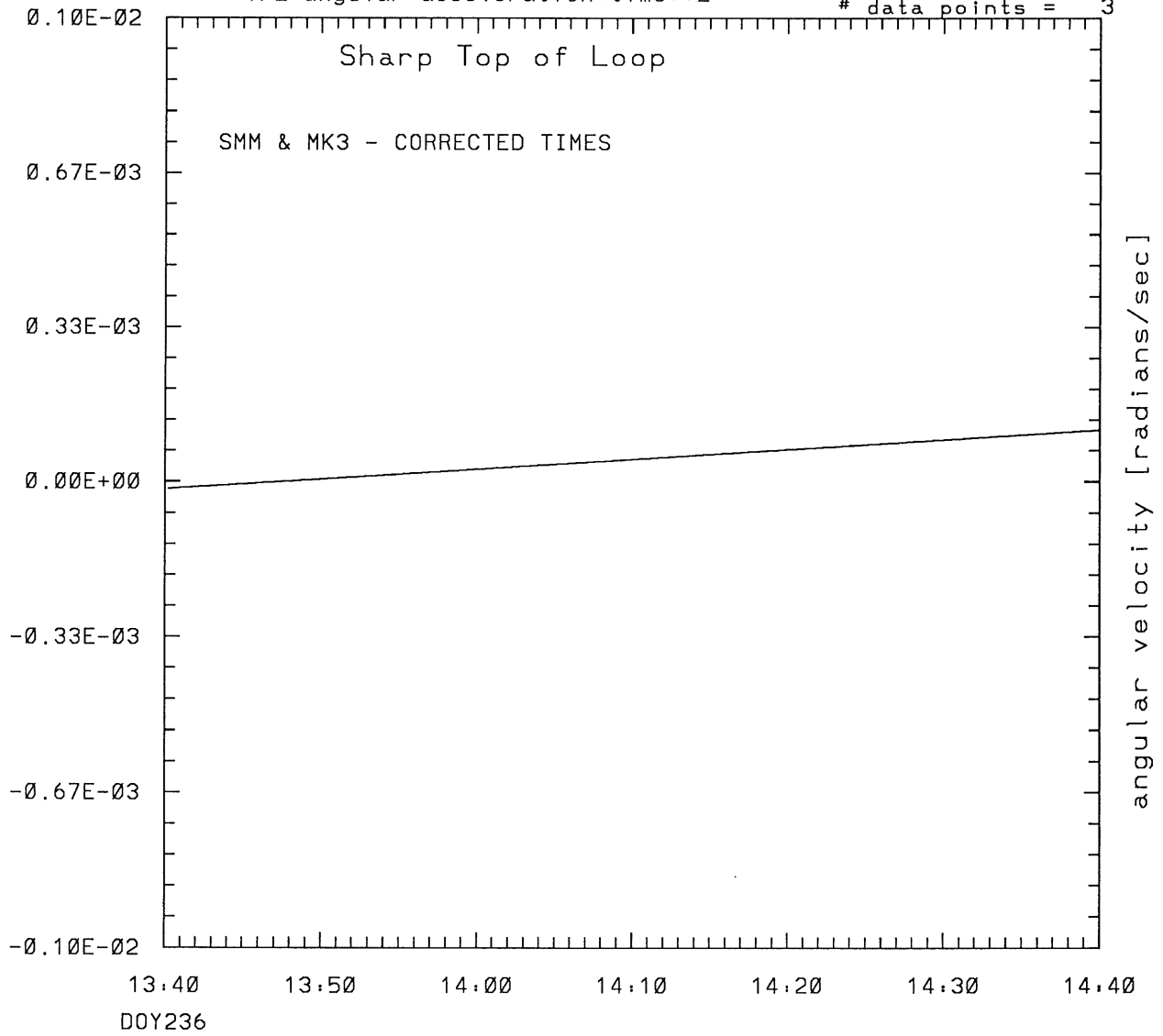


tstart=DOY236 12:58 from derivative=0
Event begins at 2.76 Solar Radii
radial acceleration=0.699E-01 km/sec**2

SMM C/P 1988 DOY236 61 +/- 2 degrees

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

data points = 3



angular acceleration = $0.355E-07$ +/- $0.231E-12$ [rad/sec**2]

This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in angle	error in angle	datatype
1988	236	13:43:25	3.15 +/- 0.10	60.0 +/- 1.0		SMM	
1988	236	13:51:39	3.30 +/- 0.10	60.0 +/- 1.0		SMM	
1988	236	14:16:27	3.90 +/- 0.10	63.0 +/- 1.0		SMM	

Structure being measured:
Sharp Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.891E+02 +/- 0.194E+01$ [minutes]
In more convenient units:
Event began at DOY 236 12:11 +/- 0.194E+01 [minutes]
Origin defined at DOY236 13:40

RADIAL INFORMATION:

RADIAL VELOCITY = 267. +/- 10. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.305E+01 +/- 0.187E-01 [solar radii]
c(2) = 0.230E-01 +/- 0.842E-03 [radii/min]
c(2) = 0.267E+03 +/- 0.977E+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) = 0.26421E-01 [radii] see Bevington pg. 114
error in c(2) = 0.11911E-02 [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = 0.2845E-04 +/- 0.4960E-05 [radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 59. +/- 0. [degrees]
a(2) = 0.978E-01 +/- 0.171E-01 [degrees/min]
a(2) = 0.284E-04 +/- 0.496E-05 [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 13:43 = 267. km/sec

The RADIAL velocity at 13:51 = 267. km/sec

The RADIAL velocity at 14:16 = 267. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.40
Standard Deviation in start time measurement = 0.140E+02
Error in time = 0.12567E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.420E-03
Reduced Chi Squared = 0.142E-02
Chi Squared = 0.142E-02
The probability for exceeding chi square = 0.984E+00

The correlation coefficient = 0.999E+00
The probability that no LINEAR correlation exists between the variables = 0.32811
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
1988	236	13:43:25	3.15 +/- 0.10	60.0 +/- 1.0	1.0	SMM	
1988	236	13:51:39	3.30 +/- 0.10	60.0 +/- 1.0	1.0	SMM	
1988	236	14:16:27	3.90 +/- 0.10	63.0 +/- 1.0	1.0	SMM	

Structure being measured:
Sharp Top of Loop

OUTPUT:

START TIME:

tstart=DOY236 12:58 from derivative = 0
Event begins at 2.76 Solar Radii
Origin defined at DOY236 13:40

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.699E-01 +/- 0.576E-06 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.309E+01 +/- 0.400E-06 [solar radii]
c(2) = 0.155E-01 +/- 0.630E-07 [radii/min]
c(2) = 0.180E+03 +/- 0.730E-03 [km/sec]
c(3) = 0.181E-03 +/- 0.149E-08 [radii/min**2]
c(3) = 0.699E-01 +/- 0.576E-06 [km/sec**2]

ANGULAR INFORMATION:

ANGULAR ACCELERATION= 0.3551E-07 +/- 0.2310E-12[radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 60. +/- 0. [degrees]
a(2) = -0.552E-01 +/- 0.101E-05 [degrees/min]
a(2) = -0.160E-04 +/- 0.293E-09 [rad/sec]
a(3) = 0.366E-02 +/- 0.238E-07 [degrees/min**2]
a(3) = 0.355E-07 +/- 0.231E-12 [rad/sec**2]

The RADIAL velocity at 13:43 = 194. km/sec

The RADIAL velocity at 13:51 = 229. km/sec

The RADIAL velocity at 14:16 = 333. 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!