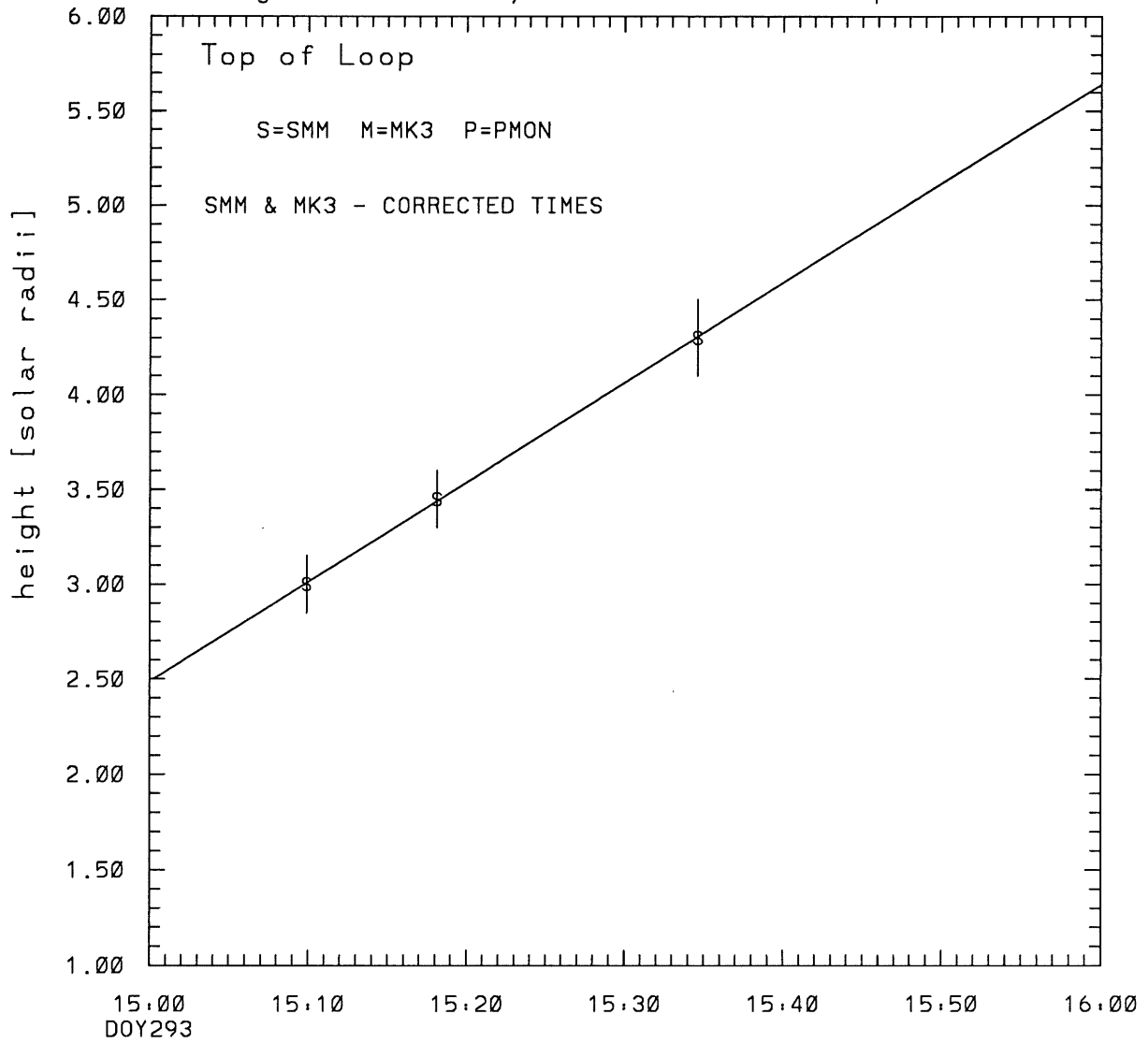


SMM C/P 1989 DOY293 234 +/- 0 degrees

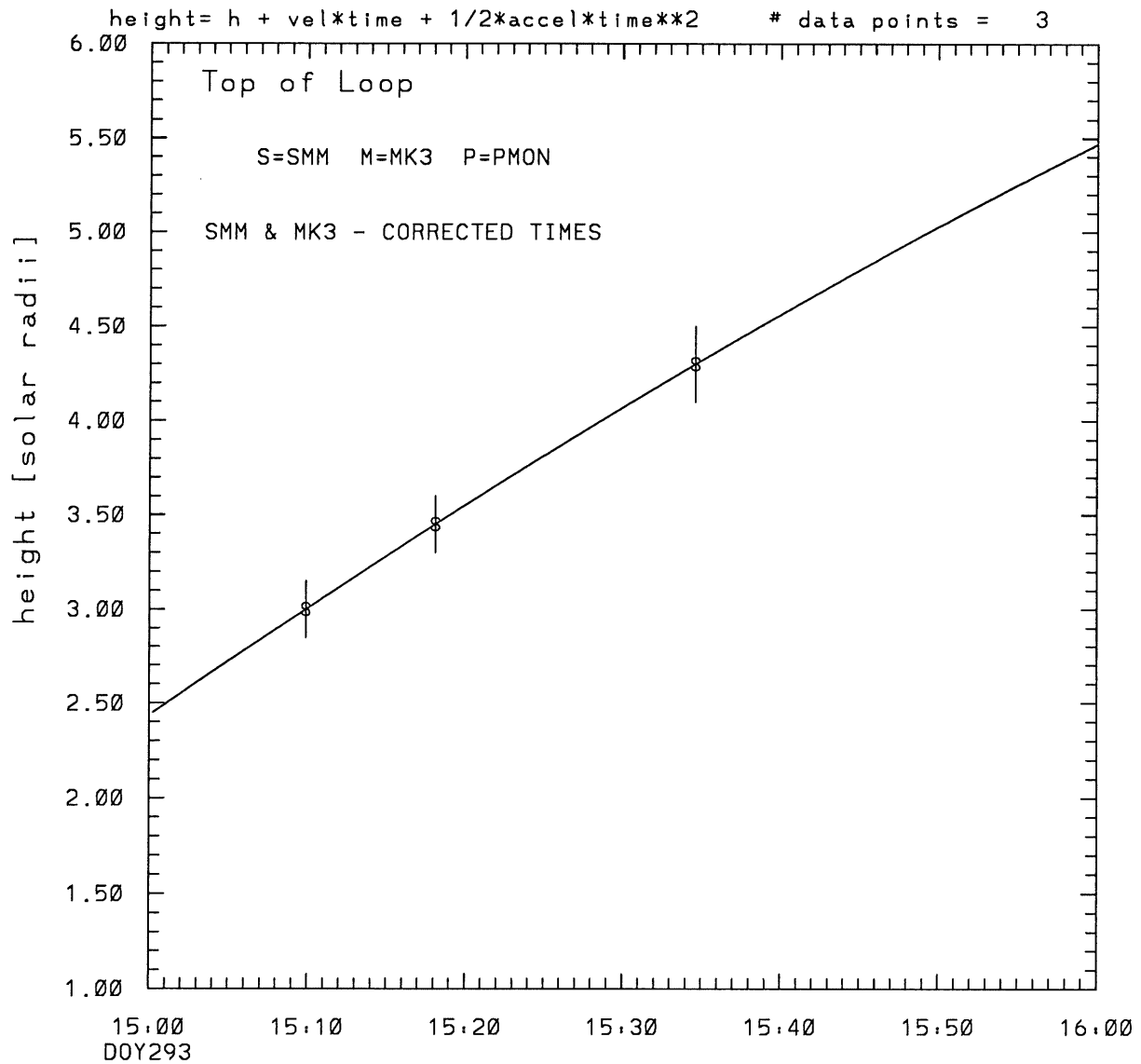
height = h + velocity*time

data points = 3



tstart=DOY293 14:32 +/- 0.2 [min.]
radial velocity= 610. +/- 8. [km/sec]

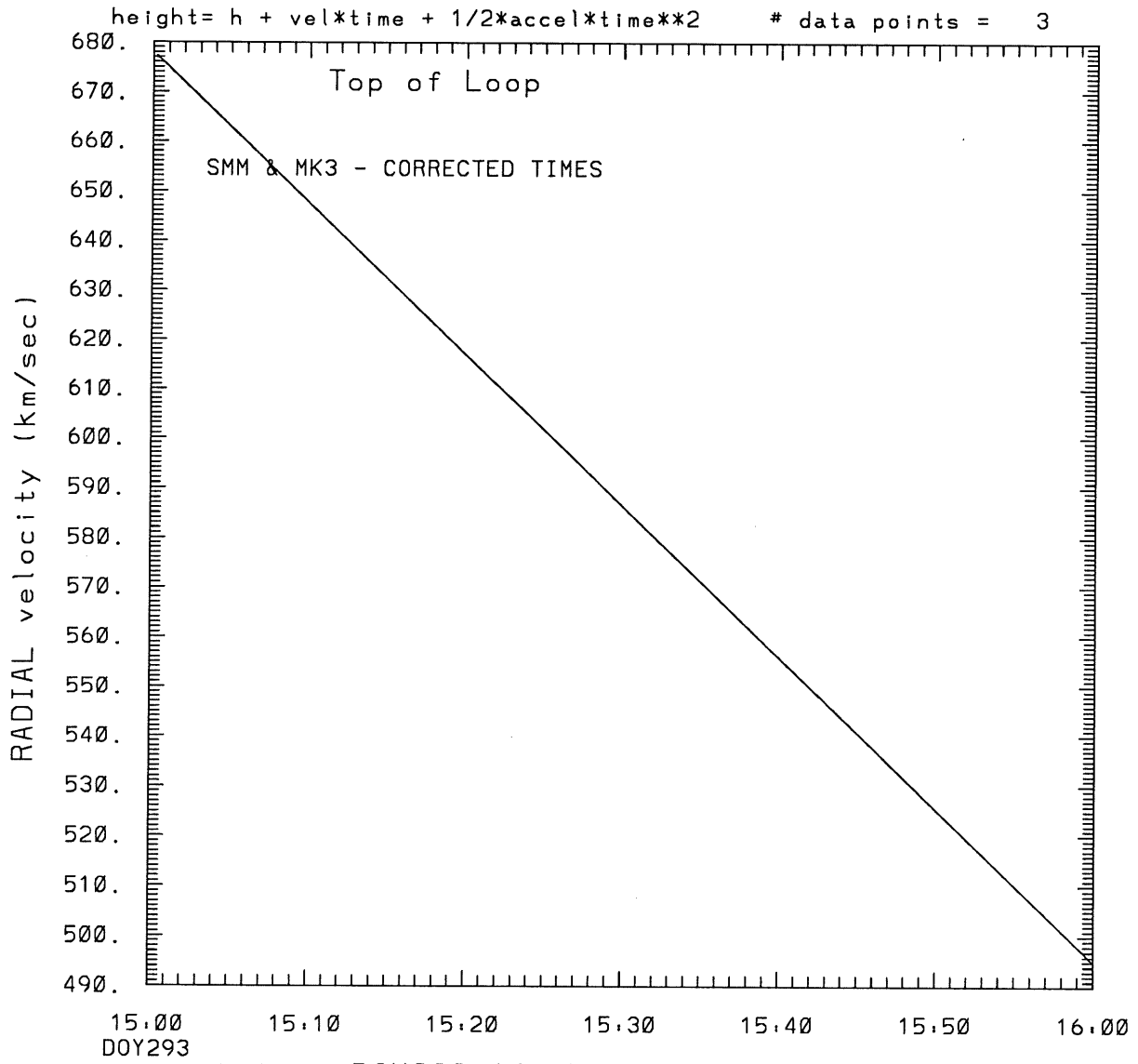
SMM C/P 1989 DOY293 234 +/- 0 degrees



tstart=DOY293 14:37 +/- 0.0 [min.]

radial acceleration = -0.0509 +/- 0.0000 [km/sec**2]

SMM C/P 1989 DOY293 234 +/- 0 degrees



DOY293

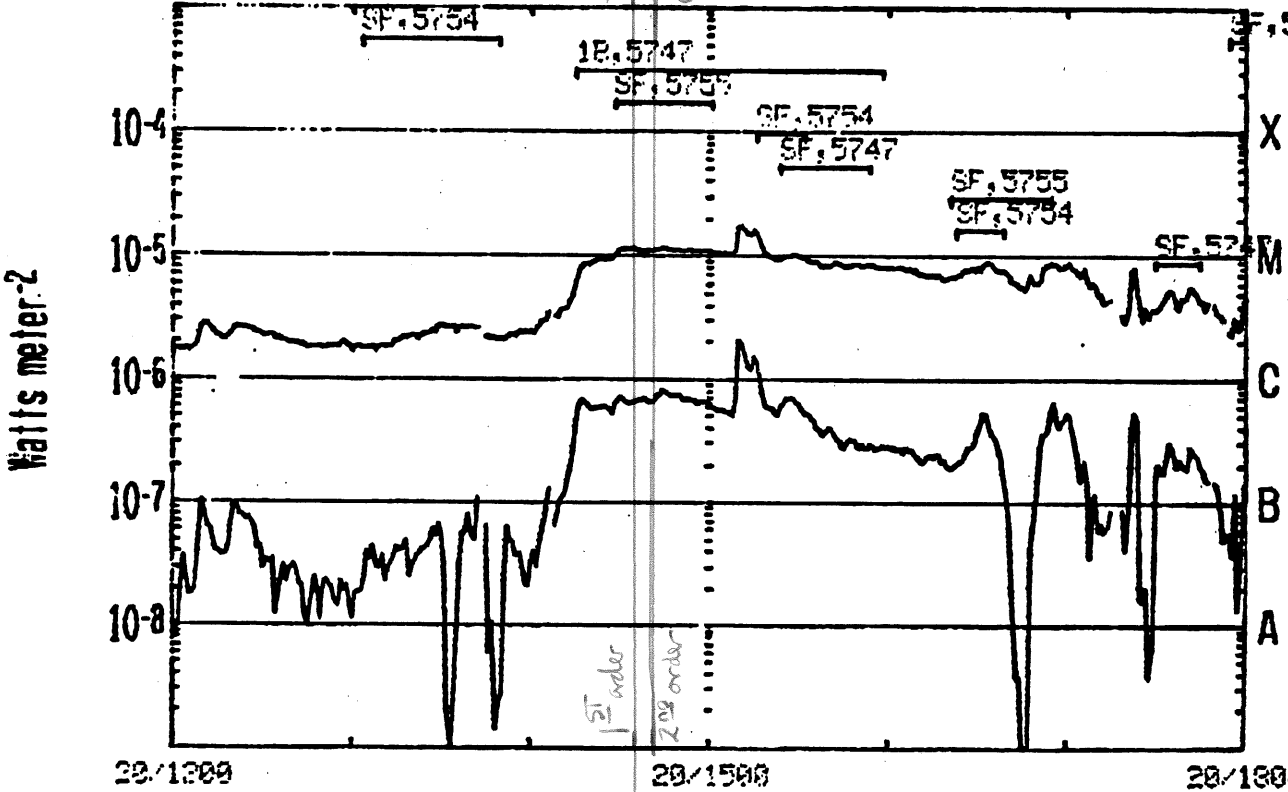
tstart=DOY293 14:37 +/- 0.0 [min.]

radial acceleration=-.509E-01 km/sec**2

1989 D01 293

SAA and OPTICAL DATA TOGETHER

BEGIN: 20 OCT 89



GOES 6 0.5-4.0A GOES 6 1.0-8.0A
OPTICAL FLARES

SAA's
NIGHT

GOES-6 1 MIN DATA; OPTICAL FLARE DUR, IMP, REGION

END: 1800UT
25 OCT 89

This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in angle	error in angle	datatype
1989	293	15: 9:54	3.00 +/-	0.15	234.0 +/-	1.0	SMM
1989	293	15:18: 7	3.45 +/-	0.15	234.0 +/-	1.0	SMM
1989	293	15:34:37	4.30 +/-	0.20	234.0 +/-	1.0	SMM

Structure being measured:
Top of Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.283E+02 +/- 0.236E+00 [minutes]
In more convenient units:
Event began at DOY 293 14:32 +/- 0.236E+00 [minutes]

Origin defined at DOY293 15: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 610. +/- 8. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.249E+01 +/- 0.137E-01 [solar radii]
c(2) = 0.526E-01 +/- 0.663E-03 [radii/min]
c(2) = 0.610E+03 +/- 0.769E+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)= 0.19022E-01 [radii] see Bevington pg. 114
error in c(2)= 0.81743E-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) = 234. +/- 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 RADIAL velocity at 15: 9 = 610. km/sec

The RADIAL velocity at 15:18 = 610. km/sec

The RADIAL velocity at 15:34 = 610. 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 = 0.103E+02
Error in time = 0.27684E+00 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.113E-03
Reduced Chi Squared = 0.412E-03
Chi Squared = 0.412E-03
The probability for exceeding chi square = 0.992E+00

The correlation coefficient = 0.100E+01
The probability that no LINEAR correlation exists between the variables = 0.9776
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
1989	293	15: 9:54	3.00 +/-	0.15	234.0 +/-	1.0	SMM
1989	293	15:18: 7	3.45 +/-	0.15	234.0 +/-	1.0	SMM
1989	293	15:34:37	4.30 +/-	0.20	234.0 +/-	1.0	SMM

Structure being measured:
Top of Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.233E+02 +/- 0.000E+00 [minutes]
In more convenient units:
Event began at DOY 293 14:37 +/- 0.000E+00 [minutes]

Origin defined at DOY293 15: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.509E-01 +/- 0.403E-05 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.243E+01 +/- 0.444E-05 [solar radii]
c(2) = 0.585E-01 +/- 0.472E-06 [radii/min]
c(2) = 0.678E+03 +/- 0.548E-02 [km/sec]
c(3) = -0.132E-03 +/- 0.104E-07 [radii/min**2]
c(3) = -0.509E-01 +/- 0.403E-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) = 234. +/- 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 RADIAL velocity at 15: 9 = 648. km/sec

The RADIAL velocity at 15:18 = 623. km/sec

The RADIAL velocity at 15:34 = 572. 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!