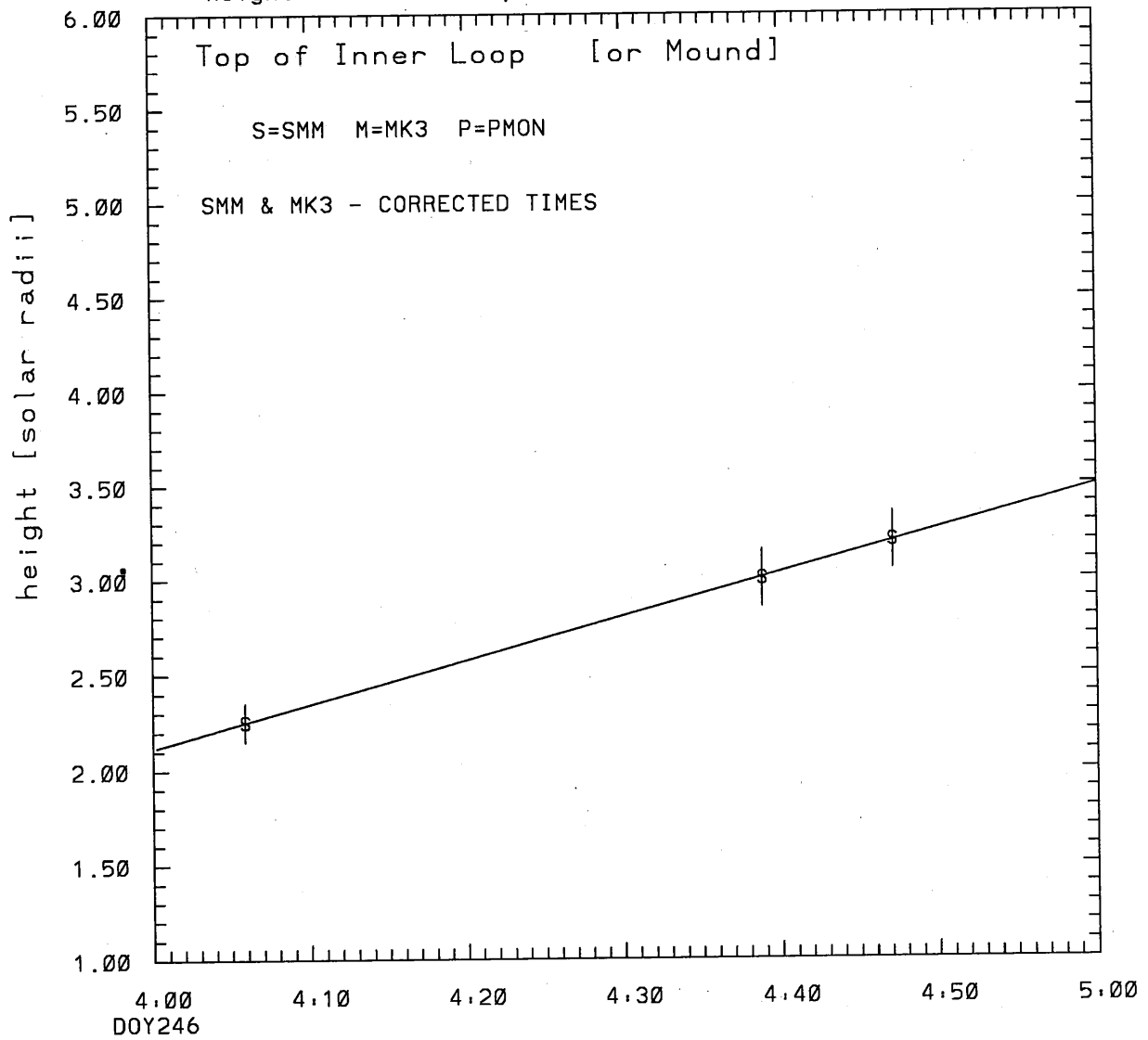


SMM C/P 1989 DOY246 72 +/- 0 degrees

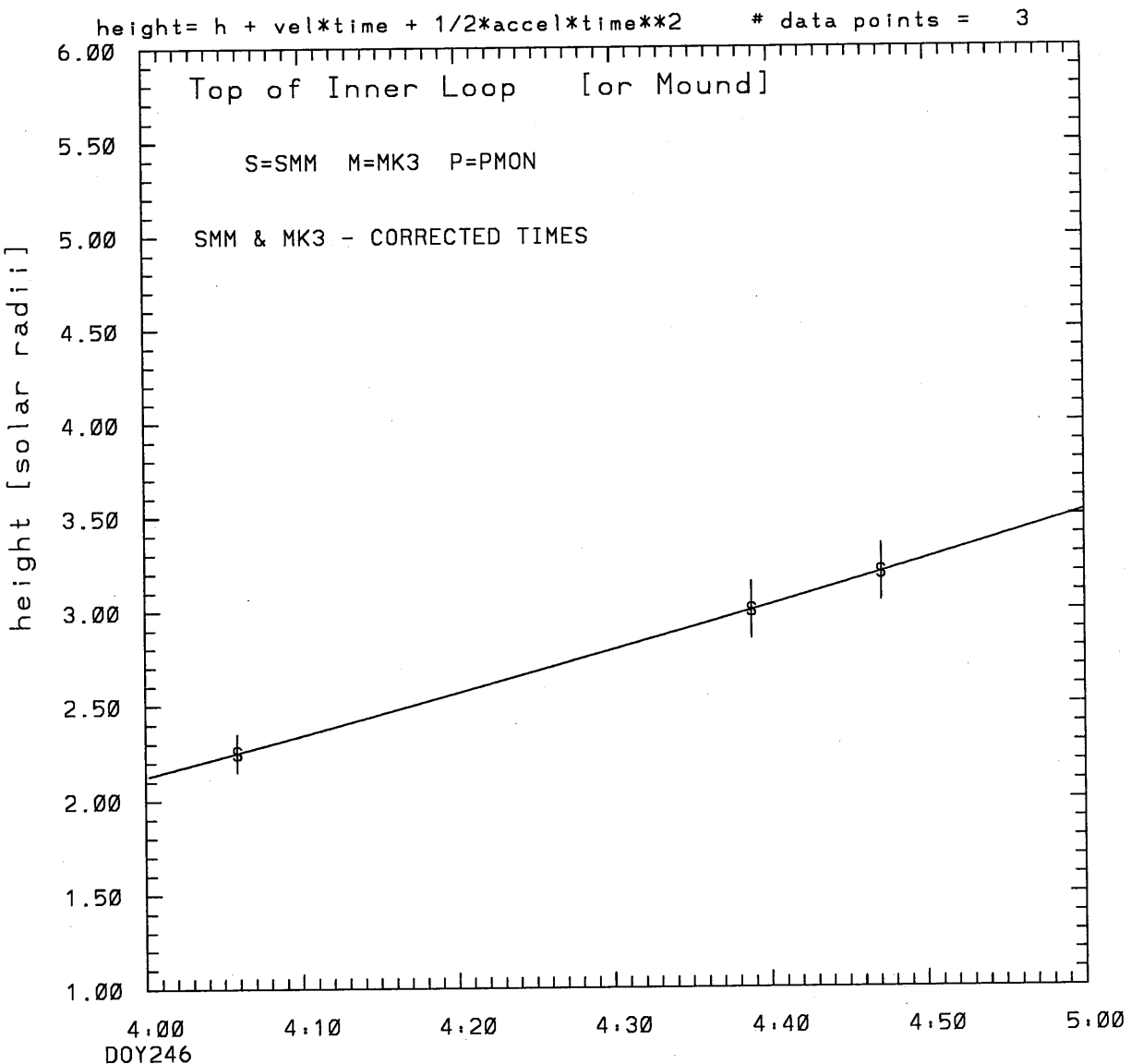
height = h + velocity*time

data points = 3



tstart=DOY246 3.13 +/- 0.2 [min.]
radial velocity= 266. +/- 2. [km/sec]

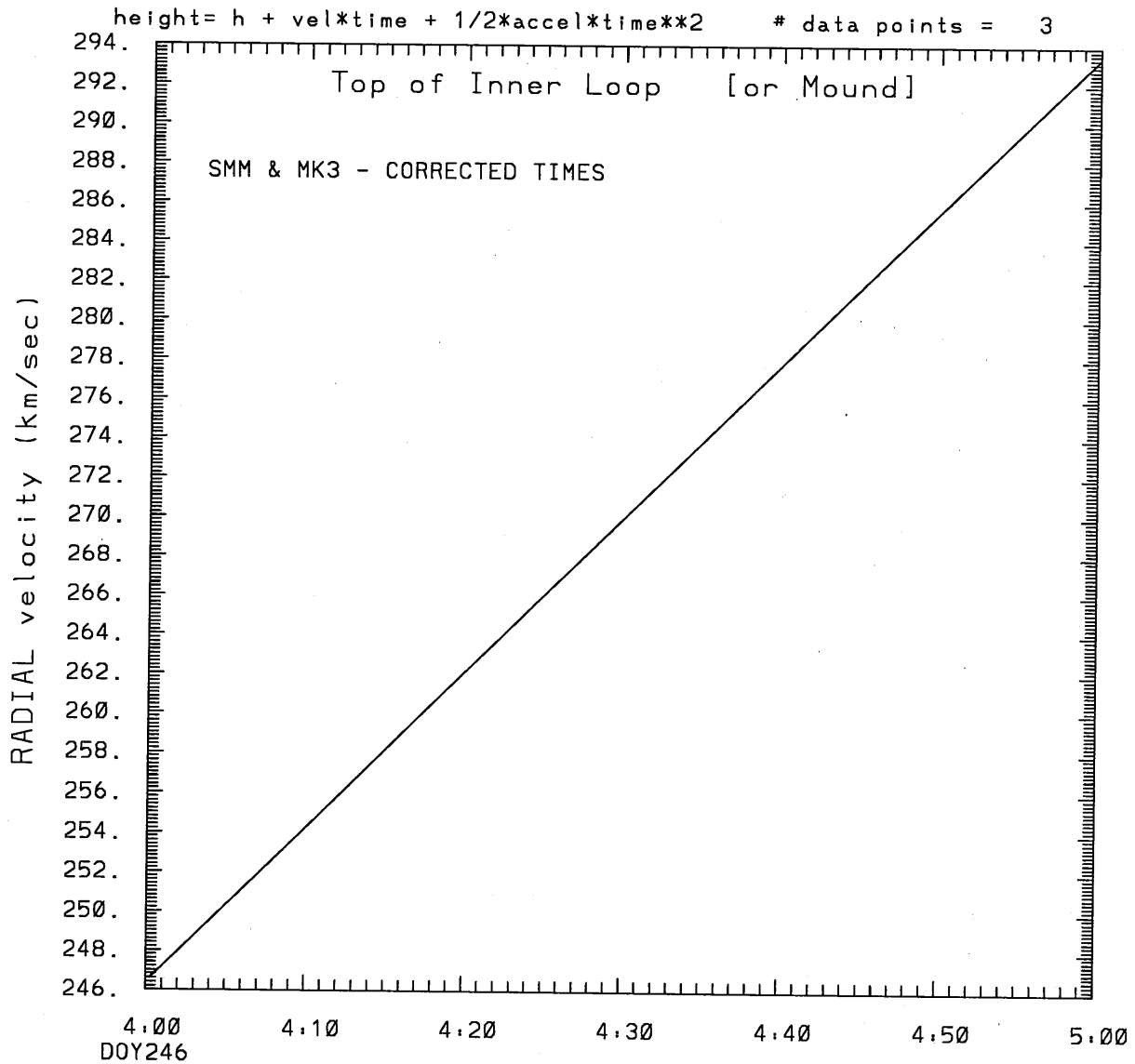
SMM C/P 1989 DOY246 72 +/- 0 degrees



tstart=DOY246 3.2 +/- 0.0 [min.]

radial acceleration = 0.0131 +/- 0.0000 [km/sec**2]

SMM C/P 1989 DOY246 72 +/- 0 degrees



tstart=DOY246 3: 2 +/- 0.0 [min.]

radial acceleration=0.131E-01 km/sec**2

1989 Day 246

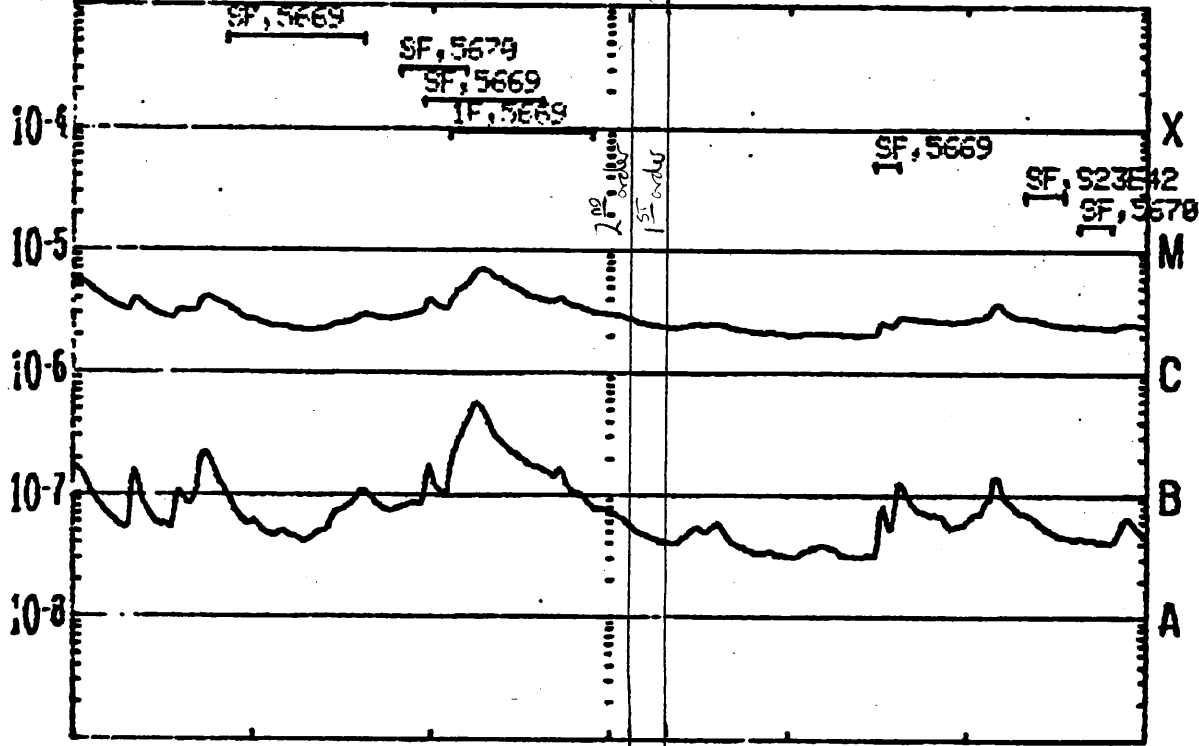
DATA OPTICAL DATA TOGETHER

STOP
Ret.

Top of Inner Loop
Center = 76°
[3:16] 1st order
[3:05] 2nd order

BEGIN: 03 SEP 89

Watts meter²



GOES 7 0.5-4.0A GOES 7 1.0-8.0A
OPTICAL FLARES

03/0000

03/0300

03/0600

=====

SAA's
NIGHT

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

RUN: 2826UT
5 SEP 89

This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in angle	error in angle	datatype
1989	246	4: 5:51	2.25 +/-	0.10	72.0 +/-	0.5	SMM
1989	246	4:38:49	3.00 +/-	0.15	72.0 +/-	1.0	SMM
1989	246	4:47: 6	3.20 +/-	0.15	72.0 +/-	1.0	SMM

Structure being measured:
Top of Inner Loop [or Mound]

OUTPUT:

START TIME:

Event began at t = 0 + -0.486E+02 +/- 0.196E+00 [minutes]
In more convenient units:
Event began at DOY 246 3:13 +/- 0.196E+00 [minutes]

Origin defined at DOY246 4: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 266. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.212E+01 +/- 0.393E-02 [solar radii]
c(2) = 0.229E-01 +/- 0.131E-03 [radii/min]
c(2) = 0.266E+03 +/- 0.152E+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)= 0.82034E-02 [radii] see Bevington pg. 114
error in c(2)= 0.23174E-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) = 72. +/- 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, RADIAL AND TOTAL SPEEDS AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 4: 5 = 0. km /sec

The RADIAL velocity at 4: 5 = 266. km/sec

The TOTAL velocity at 4: 5 = 266. km/sec

The TANGENTIAL velocity at 4:38 = 0. km /sec

The RADIAL velocity at 4:38 = 266. km/sec

The TOTAL velocity at 4:38 = 266. km/sec

The TANGENTIAL velocity at 4:47 = 0. km /sec

The RADIAL velocity at 4:47 = 266. km/sec

The TOTAL velocity at 4:47 = 266. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.50

Standard Deviation in start time measurement = 0.178E+02

Error in time = 0.31182E+00 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.182E-04

Reduced Chi Squared = 0.122E-03

Chi Squared = 0.122E-03

The probability for exceeding chi square = 0.997E+00

The correlation coefficient = 0.100E+01

The probability that no LINEAR correlation exists between the variables = 0.64051

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	246	4: 5:51	2.25 +/-	0.10	72.0 +/-	0.5	SMM
1989	246	4:38:49	3.00 +/-	0.15	72.0 +/-	1.0	SMM
1989	246	4:47: 6	3.20 +/-	0.15	72.0 +/-	1.0	SMM

Structure being measured:
Top of Inner Loop [or Mound]

OUTPUT:

START TIME:

Event began at $t = 0 + -0.584E+02 +/- 0.000E+00$ [minutes]
In more convenient units:
Event began at DOY 246 3: 2 +/- 0.000E+00 [minutes]

Origin defined at DOY246 4: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $0.131E-01 +/- 0.243E-05$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.212E+01 +/- 0.200E-05$ [solar radii]
c(2) = $0.212E-01 +/- 0.316E-06$ [radii/min]
c(2) = $0.246E+03 +/- 0.367E-02$ [km/sec]
c(3) = $0.338E-04 +/- 0.627E-08$ [radii/min**2]
c(3) = $0.131E-01 +/- 0.243E-05$ [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) = 72. +/- 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, RADIAL AND TOTAL SPEEDS AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 4: 5 = 0. km /sec
The RADIAL velocity at 4: 5 = 251. km/sec

The TOTAL velocity at 4: 5 = 251. km/sec

The TANGENTIAL velocity at 4:38 = 0. km /sec
The RADIAL velocity at 4:38 = 277. km/sec

The TOTAL velocity at 4:38 = 277. km/sec

The TANGENTIAL velocity at 4:47 = 0. km /sec
The RADIAL velocity at 4:47 = 283. km/sec

The TOTAL velocity at 4:47 = 283. 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!