SMM C/P 1989 DOY219 285 +/- Ø degrees

height = h + velocity*time   # data points =   3

Top of Mound

S=SMM M=MK3 P=PMON

SMM & MK3 - CORRECTED TIMES

height [solar radii]
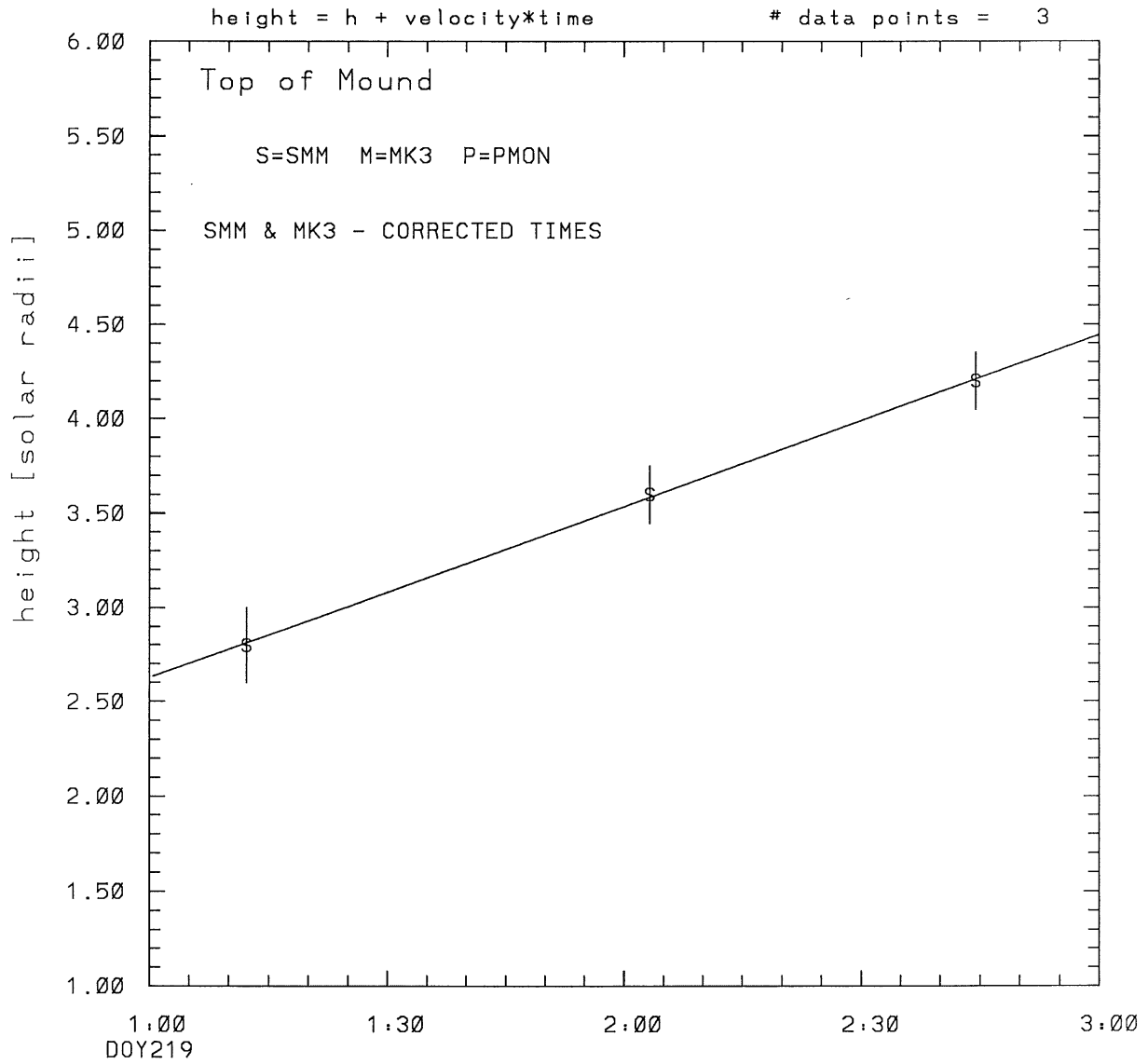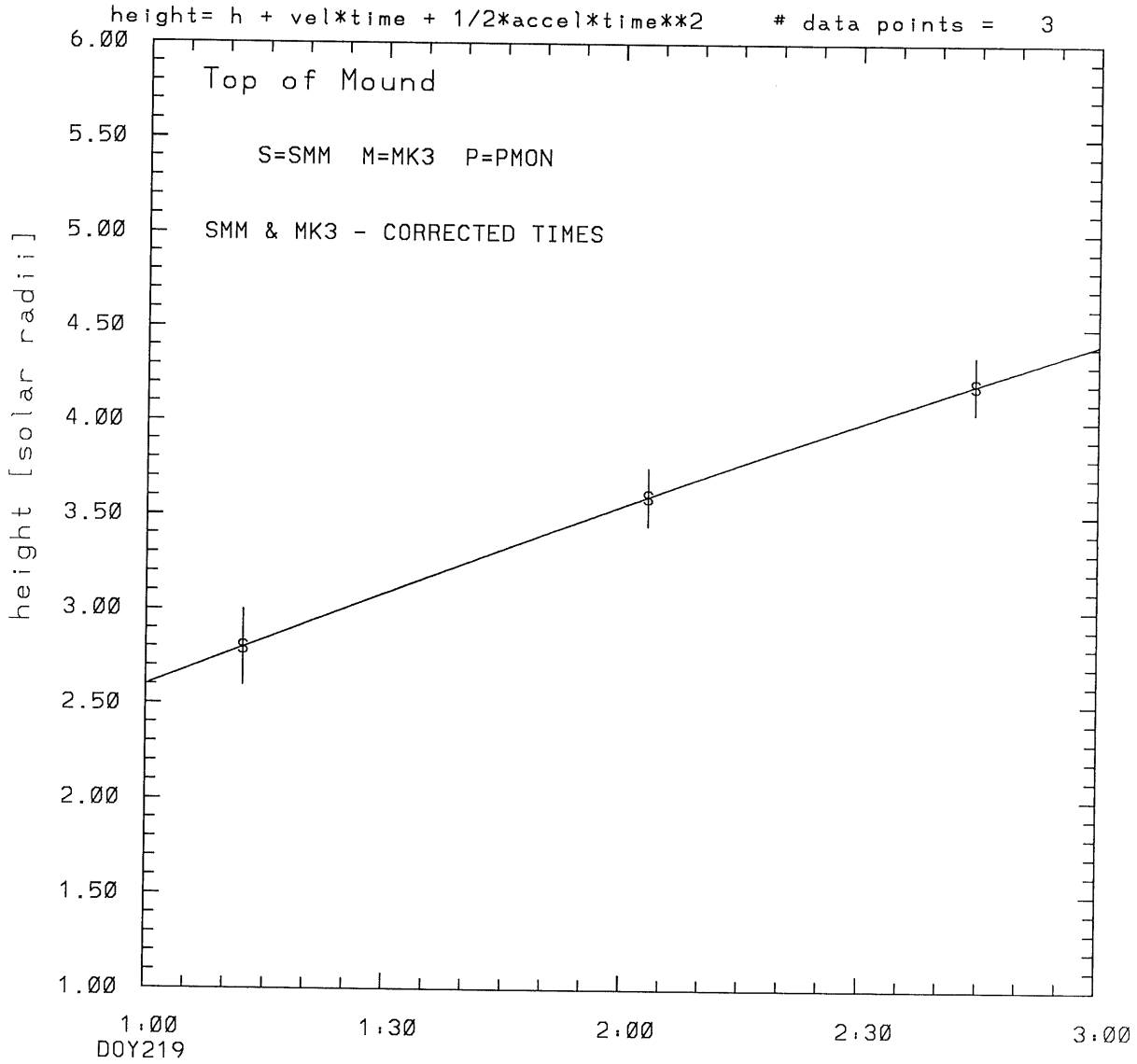
tstart=DOY218 23:14 +/-   1.3 [min.]
radial velocity= 176. +/-   3. [km/sec]

SMM C/P   1989 DOY219   285 +/-   0 degrees

height= h + vel*time + 1/2*accel*time**2   # data points =   3

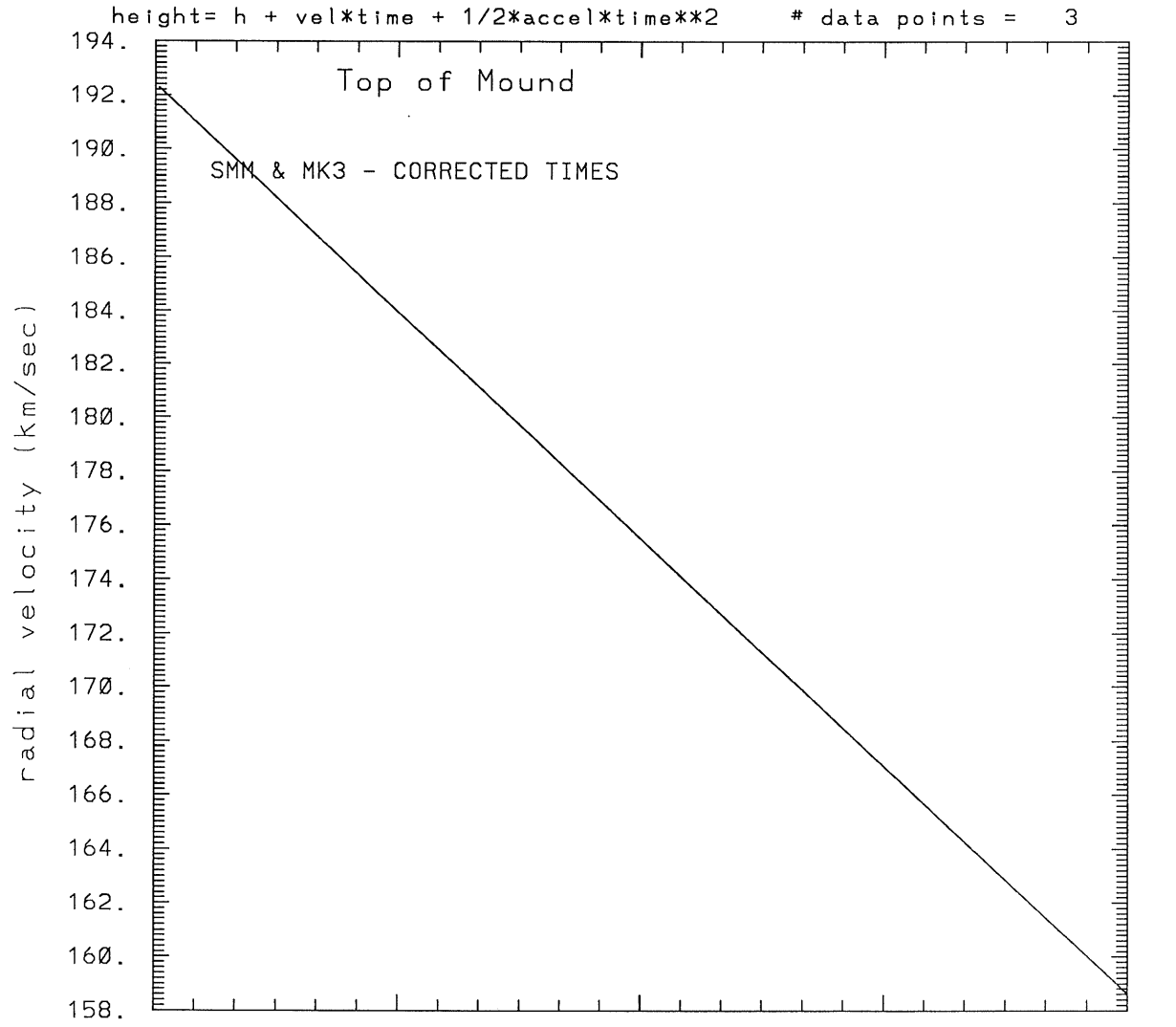Top of Mound

S=SMM   M=MK3   P=PMON

SMM & MK3 - CORRECTED TIMES

height [solar radii]

tstart=DOY218 23:30 +/-   0.0 [min.]

radial acceleration=-0.0047 +/- 0.0000 [km/sec**2]

SMM C/P 1989 DOY219 285 +/- 0 degrees

height= h + vel*time + 1/2*accel*time**2   # data points = 3

Top of Mound

SMM & MK3 - CORRECTED TIMES

radial velocity (km/sec)

194.
192.
190.
188.
186.
184.
182.
180.
178.
176.
174.
172.
170.
168.
166.
164.
162.
160.
158.

1:00
DOY219
1:30
2:00
2:30
3:00

tstart=DOY218 23:30 +/-   0.0 [min.]

radial acceleration=-.469E-02 km/sec**2
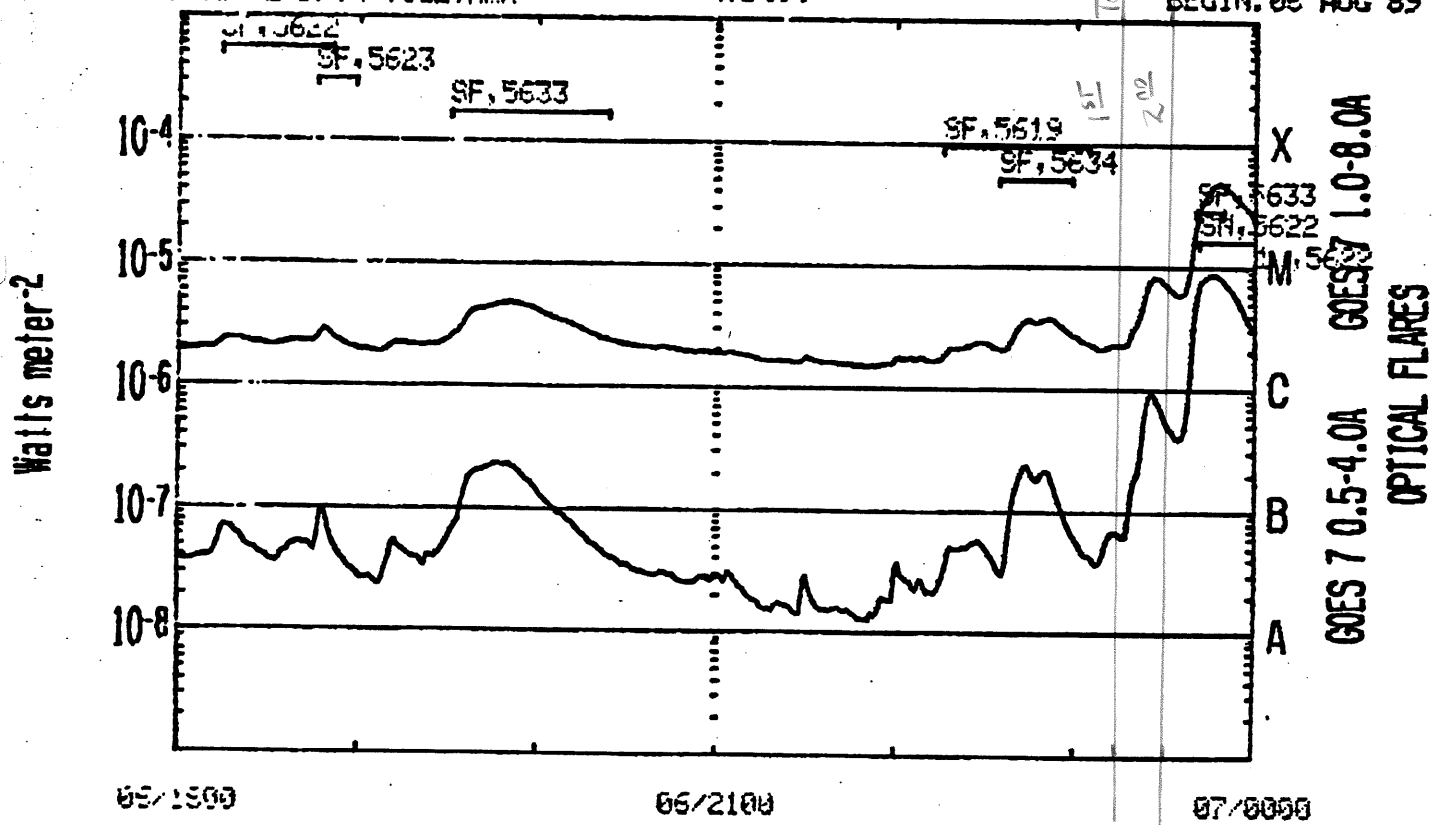
GOES-7 1 MIN DATA: OPTICAL FLARE DUR. IMP. REGION

```
********************
 This is a 1 order run
********************


 ******
 INPUT:
 ******


                       error in        error in
 year doy    time    radii  radius    angle  angle   datatype
 1989 219   1:12:13   2.80 +/- 0.20   285.0 +/-  0.5     SMM
 1989 219   2: 3:16   3.60 +/- 0.15   285.0 +/-  1.0     SMM
 1989 219   2:44:30   4.20 +/- 0.15   285.0 +/-  1.0     SMM


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


 ********
 OUTPUT:
 ********


 START TIME:


 Event began at t = 0 + -0.108E+03 +/-  0.126E+01 [minutes]
 In more convenient units:
 Event began at DOY 218 23:14 +/-  0.126E+01 [minutes]


 Origin defined at DOY219  1: 0

 RADIAL INFORMATION:

 RADIAL VELOCITY =    176. +/-     3. km/sec

 The computed RADIAL coefficients and errors FROM NLLST2 are:


 c(1) =    0.263E+01 +/-    0.192E-01 [solar radii]
 c(2) =    0.151E-01 +/-    0.251E-03 [radii/min]
 c(2) =    0.176E+03 +/-    0.292E+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)= 0.23199E-01 [radii] see Bevington pg. 114
              error in c(2)= 0.32730E-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) = 285. +/- 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 1:12 =   0. km/sec
The TOTAL velocity at 1:12 = 176. km/sec

The TANGENTIAL velocity at 2: 3 =   0. km/sec
The TOTAL velocity at 2: 3 = 176. km/sec

The TANGENTIAL velocity at 2:44 =   0. km/sec
The TOTAL velocity at 2:44 = 176. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 0.70
Standard Deviation in start time measurement =   0.377E+02
Error in time =   0.14142E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.230E-03
Reduced Chi Squared = 0.839E-03
Chi Squared = 0.839E-03
The probability for exceeding chi square = 0.988E+00

The correlation coefficient =   0.100E+01
The probability that no LINEAR correlation exists between the variables =   0.1330E-01
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

```
********************
 This is a 2 order run
********************


*******
 INPUT:
*******
```

			error in		error in	
year doy	time	radii	radius	angle	angle	datatype
1989 219	1:12:13	2.80 +/- 0.20		285.0 +/- 0.5		SMM
1989 219	2: 3:16	3.60 +/- 0.15		285.0 +/- 1.0		SMM
1989 219	2:44:30	4.20 +/- 0.15		285.0 +/- 1.0		SMM

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


********
 OUTPUT:
********


START TIME:


Event began at t = 0 + -0.904E+02 +/- 0.000E+00 [minutes]
In more convenient units:
Event began at DOY 218 23:30 +/- 0.000E+00 [minutes]


Origin defined at DOY219 1: 0


RADIAL INFORMATION:


RADIAL ACCELERATION = -0.469E-02 +/- 0.000E+00 km/sec**2


The computed RADIAL coefficients and errors FROM NLLST2 are:


c(1) =     0.260E+01 +/-   0.000E+00 [solar radii]
c(2) =     0.166E-01 +/-   0.000E+00 [radii/min]
c(2) =     0.192E+03 +/-   0.000E+00 [km/sec]
c(3) =    -0.121E-04 +/-   0.000E+00 [radii/min**2]
c(3) =    -0.469E-02 +/-   0.000E+00 [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) = 285. +/-   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 1:12 =   0. km/sec
The TOTAL velocity at 1:12 = 189. km/sec

The TANGENTIAL velocity at 2: 3 =   0. km/sec
The TOTAL velocity at 2: 3 = 175. km/sec

The TANGENTIAL velocity at 2:44 =   0. km/sec
The TOTAL velocity at 2:44 = 163. 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!