SMM C/P 1988 DOY306   60 +/-   0 degrees

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

Top of Big, Bright Loop
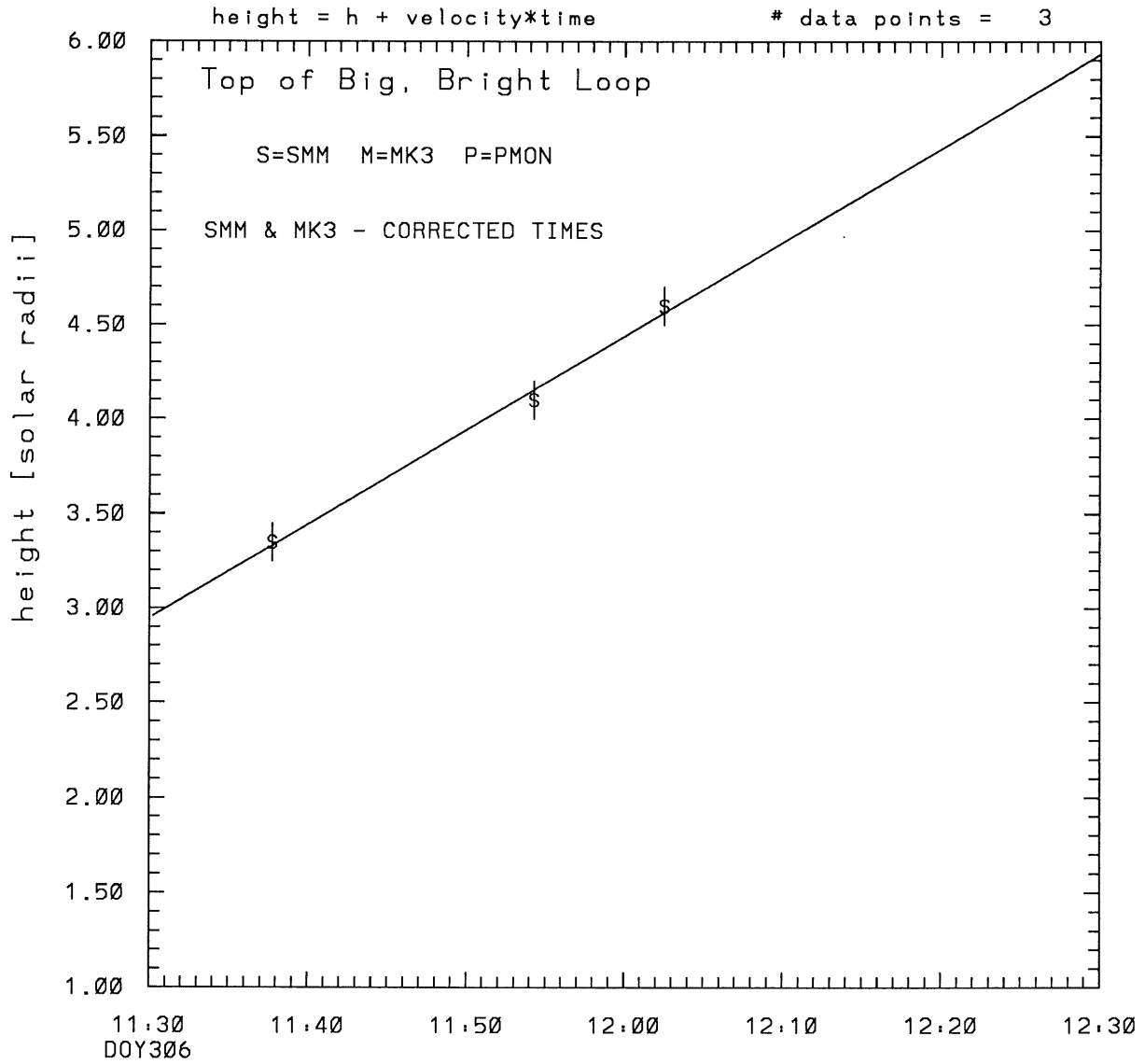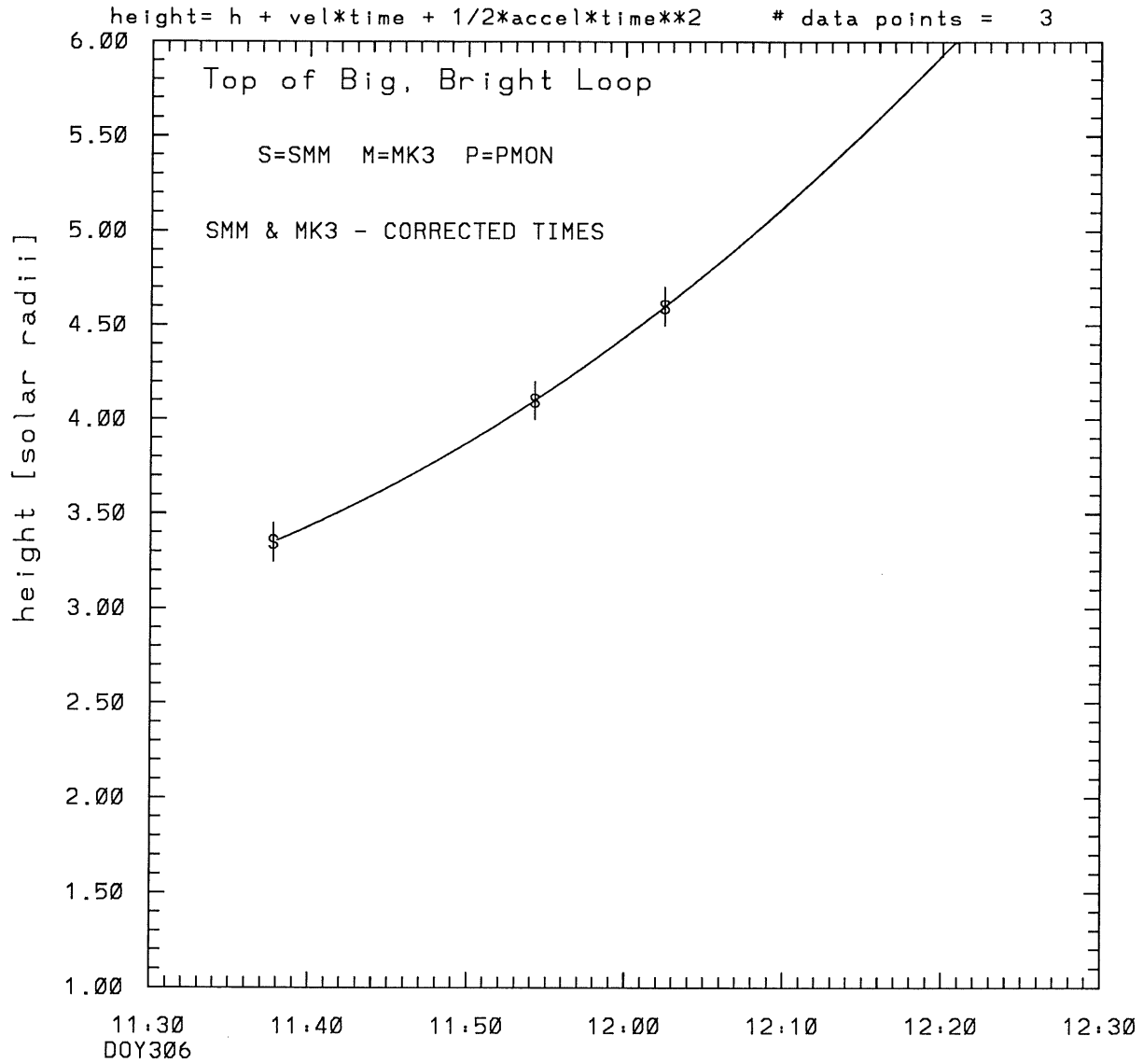
S=SMM   M=MK3   P=PMON

SMM & MK3 - CORRECTED TIMES

height [solar radii]

tstart=DOY306 10:51 +/-   1.2 [min.]
radial velocity=   577. +/-   31. [km/sec]

SMM C/P 1988 DOY306   60 +/-   0 degrees

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

Top of Big, Bright Loop

S=SMM   M=MK3   P=PMON

SMM & MK3 - CORRECTED TIMES

tstart=DOY306 11: 9   from derivative=0
Event begins at   2.83 Solar Radii
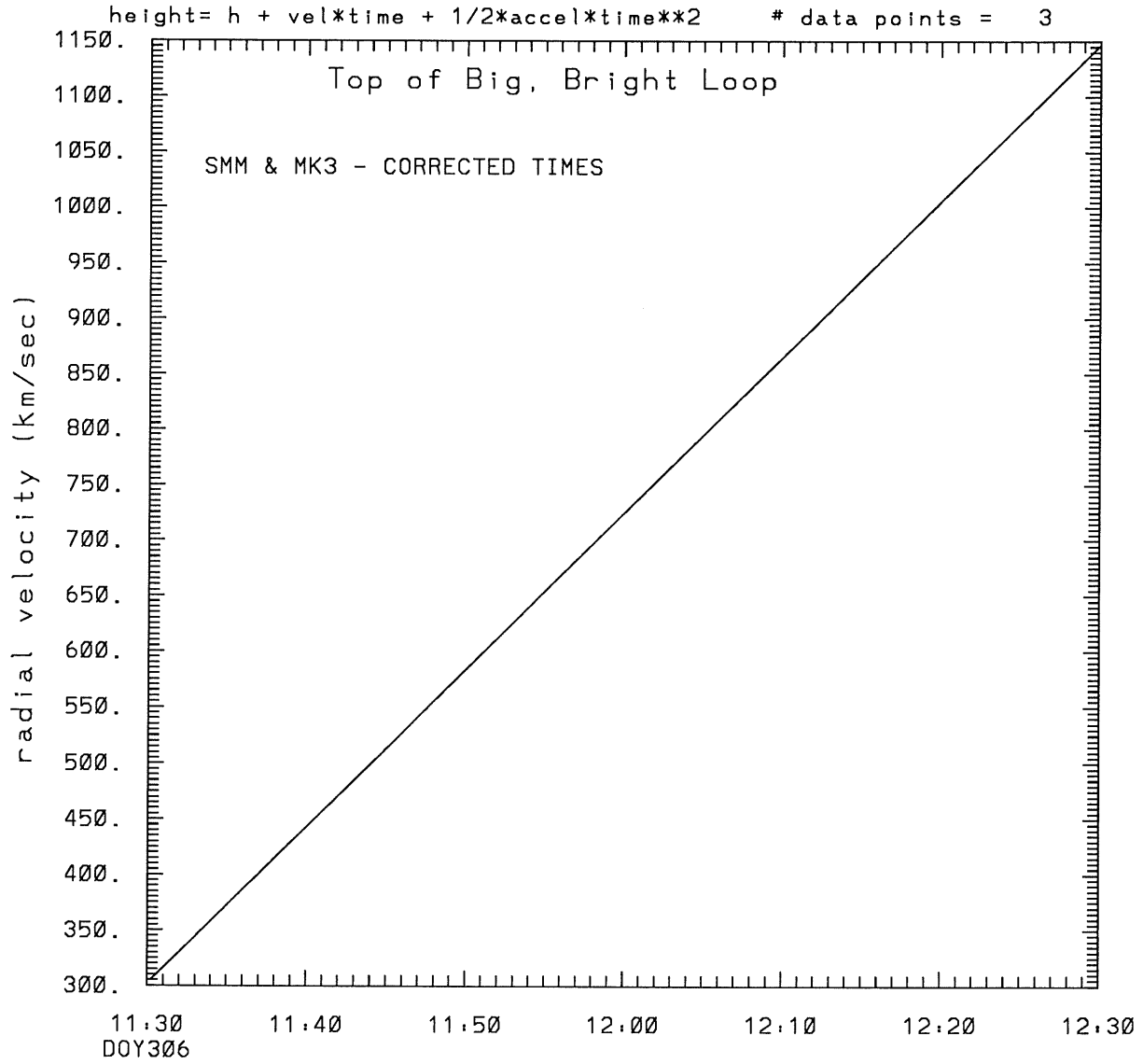radial acceleration= 0.2346 +/- 0.0000 [km/sec**2]

SMM C/P 1988 DOY306   60 +/- 0 degrees

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

Top of Big, Bright Loop

SMM & MK3 - CORRECTED TIMES

radial velocity (km/sec)

1150.
1100.
1050.
1000.
950.
900.
850.
800.
750.
700.
650.
600.
550.
500.
450.
400.
350.
300.

11:30   11:40   11:50   12:00   12:10   12:20   12:30
DOY306

tstart=DOY306 11: 9   from derivative=0
Event begins at   2.83 Solar Radii
radial acceleration=0.235E+00 km/sec**2

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


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


                      error in        error in
 year doy   time    radii  radius   angle  angle   datatype
 1988 306  11:37:45  3.35 +/- 0.10   60.0 +/-  1.0     SMM
 1988 306  11:54:15  4.10 +/- 0.10   60.0 +/-  1.0     SMM
 1988 306  12: 2:31  4.60 +/- 0.10   60.0 +/-  1.0     SMM


 ****************************************
  Structure being measured:
 Top of Big, Bright Loop
 ****************************************


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


 START TIME:


 Event began at t = 0 + -0.391E+02 +/-  0.124E+01 [minutes]
 In more convenient units:
 Event began at DOY 306 10:51 +/-  0.124E+01 [minutes]


 Origin defined at DOY306 11:30


 RADIAL INFORMATION:


 RADIAL VELOCITY =   577. +/-    31. km/sec


 The computed RADIAL coefficients and errors FROM NLLST2 are:


 c(1) =   0.295E+01 +/-   0.628E-01 [solar radii]
 c(2) =   0.498E-01 +/-   0.263E-02 [radii/min]
 c(2) =   0.577E+03 +/-   0.305E+02 [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)= 0.88744E-01 [radii] see Bevington pg. 114
          error in c(2)= 0.37220E-02 [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) = 60. +/-   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 11:37 =   0. km/sec
The TOTAL velocity at 11:37 = 577. km/sec

The TANGENTIAL velocity at 11:54 =   0. km/sec
The TOTAL velocity at 11:54 = 577. km/sec

The TANGENTIAL velocity at 12: 2 =   0. km/sec
The TOTAL velocity at 12: 2 = 577. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 0.63
Standard Deviation in start time measurement =   0.103E+02
Error in time =   0.13339E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.220E-02
Reduced Chi Squared = 0.975E-02
Chi Squared = 0.975E-02
The probability for exceeding chi square = 0.963E+00

The correlation coefficient =   0.997E+00
The probability that no LINEAR correlation exists between the variables =   0.4751E-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
1988 306  11:37:45  3.35 +/- 0.10   60.0 +/-  1.0     SMM
1988 306  11:54:15  4.10 +/- 0.10   60.0 +/-  1.0     SMM
1988 306  12: 2:31  4.60 +/- 0.10   60.0 +/-  1.0     SMM


*****************************************
 Structure being measured:
Top of Big, Bright Loop
*****************************************


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


START TIME:

 tstart=DOY306 11: 9 from derivative = 0
Event begins at   2.83 Solar Radii
 Origin defined at DOY306 11:30


RADIAL INFORMATION:

RADIAL ACCELERATION =  0.235E+00 +/-  0.188E-05 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

    c(1) =   0.311E+01 +/-   0.151E-05 [solar radii]
    c(2) =   0.260E-01 +/-   0.193E-06 [radii/min]
    c(2) =   0.302E+03 +/-   0.224E-02 [km/sec]
    c(3) =   0.607E-03 +/-   0.487E-08 [radii/min**2]
    c(3) =   0.235E+00 +/-   0.188E-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) =  60. +/-   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 11:37 =   0. km/sec
The TOTAL velocity at 11:37 = 411. km/sec

The TANGENTIAL velocity at 11:54 =   0. km/sec
The TOTAL velocity at 11:54 = 643. km/sec

The TANGENTIAL velocity at 12: 2 =   0. km/sec
The TOTAL velocity at 12: 2 = 760. 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!