SMM C/P   1988 DOY282   235 +/-   0 degrees

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

Top of Front Fuzzy Loop

S=SMM   M=MK3   P=PMON

SMM & MK3 - CORRECTED TIMES
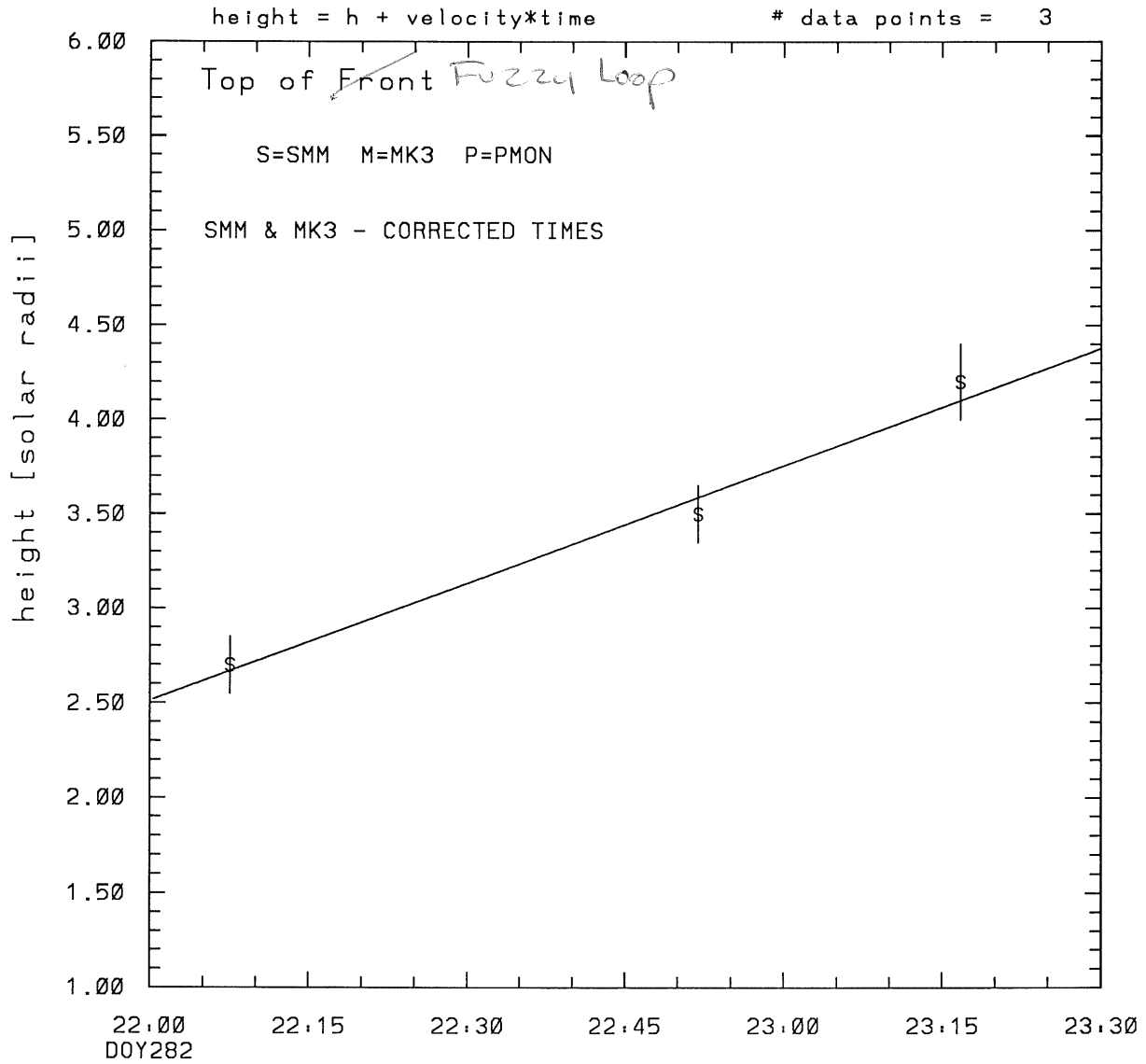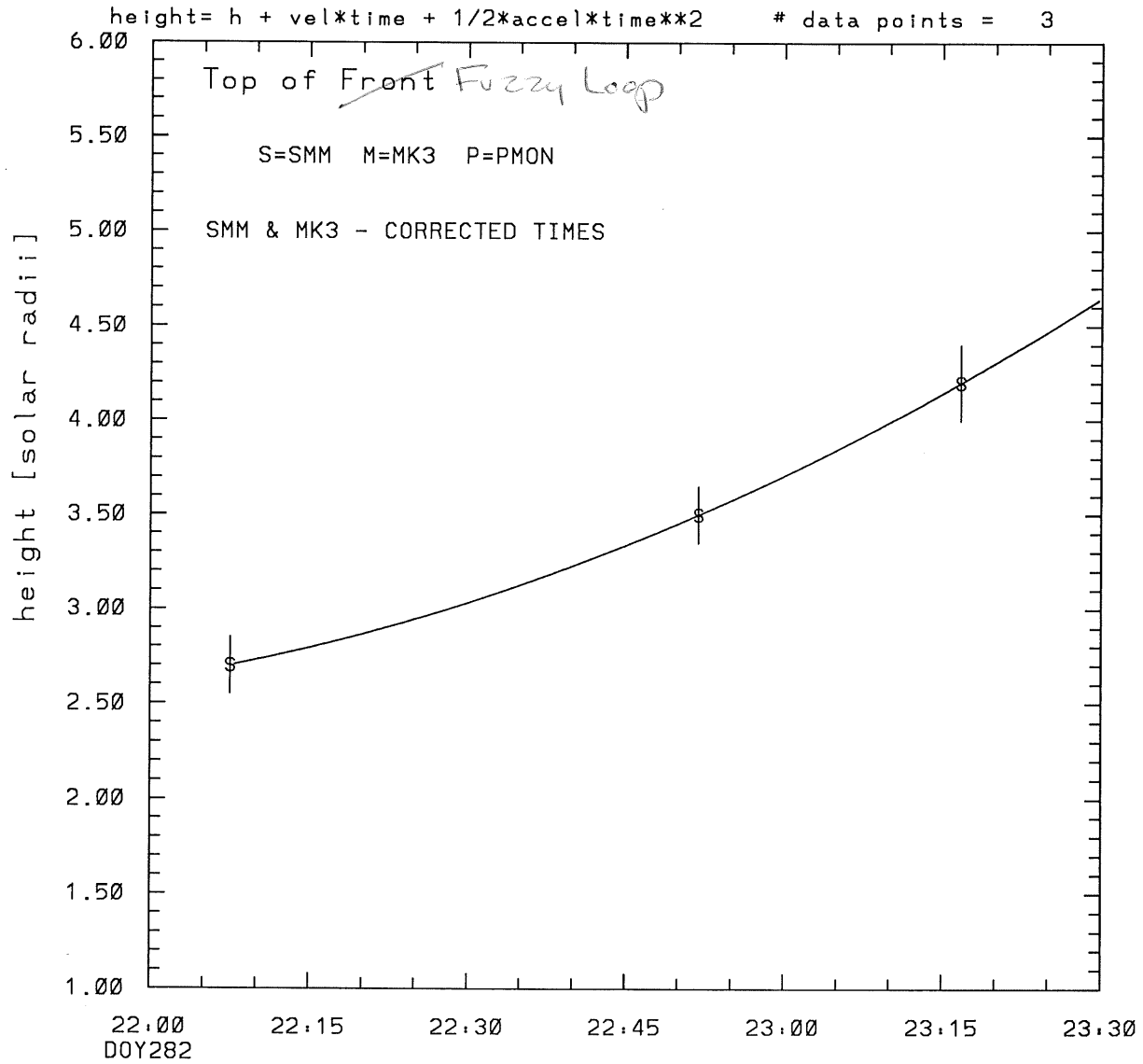

tstart=DOY282 20:47 +/-   4.6 [min.]
radial velocity=   240. +/-   22. [km/sec]

SMM C/P 1988 DOY282 235 +/- 0 degrees

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

Top of Front Fuzzy Loop

S=SMM M=MK3 P=PMON

SMM & MK3 - CORRECTED TIMES

height [solar radii]

6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00

22:00   22:15   22:30   22:45   23:00   23:15   23:30
DOY282

tstart=DOY282 21:29   from derivative=0
Event begins at   2.48 Solar Radii
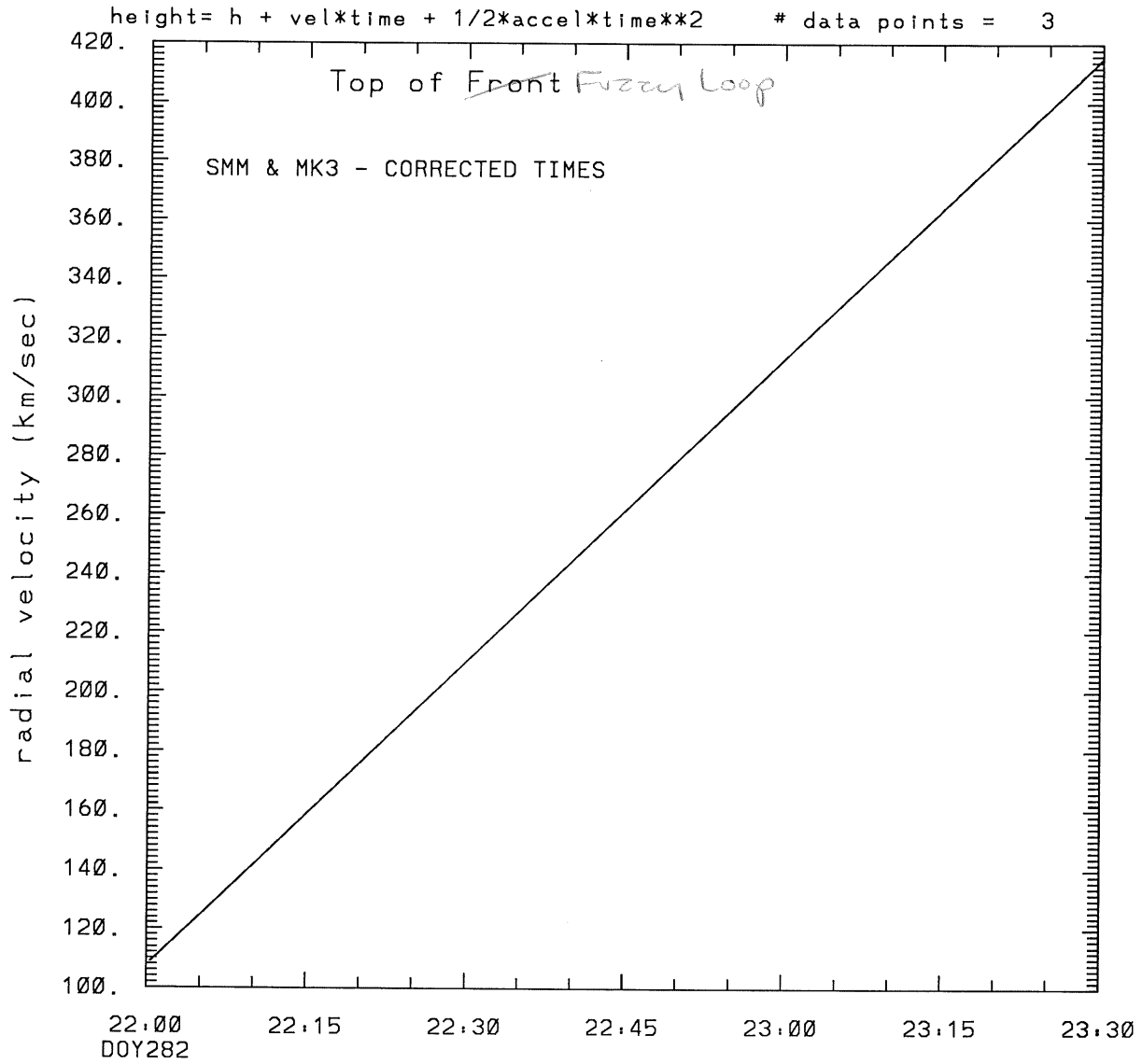radial acceleration= 0.0570 +/- 0.0000 [km/sec**2]

SMM C/P 1988 DOY282 235 +/- 0 degrees

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

Top of Front Fuzzy Loop

SMM & MK3 - CORRECTED TIMES

radial velocity (km/sec)

420.
400.
380.
360.
340.
320.
300.
280.
260.
240.
220.
200.
180.
160.
140.
120.
100.

22:00   22:15   22:30   22:45   23:00   23:15   23:30
DOY282

tstart=DOY282 21:29   from derivative=0
Event begins at   2.48 Solar Radii
radial acceleration=0.570E-01 km/sec**2

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


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

| | | error in | | error in | | |
year doy	time	radii	radius	angle	angle	datatype
1988 282	22: 7:35	2.70 +/- 0.15		235.0 +/- 0.5		SMM
1988 282	22:51:56	3.50 +/- 0.15		235.0 +/- 1.0		SMM
1988 282	23:16:44	4.20 +/- 0.20		235.0 +/- 1.0		SMM

```
*****************************************
 Structure being measured:
Top of Front⌐ Fuzzy Loop
*****************************************


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


START TIME:


Event began at t = 0 + -0.730E+02 +/-  0.463E+01 [minutes]
In more convenient units:
Event began at DOY 282 20:47 +/-  0.463E+01 [minutes]


Origin defined at DOY282 22: 0

RADIAL INFORMATION:


RADIAL VELOCITY =   240. +/-    22. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:


c(1) =    0.251E+01 +/-    0.925E-01 [solar radii]
c(2) =    0.207E-01 +/-    0.190E-02 [radii/min]
c(2) =    0.240E+03 +/-    0.221E+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)= 0.14709E+00 [radii] see Bevington pg. 114
          error in c(2)= 0.27405E-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) = 235. +/-   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 22: 7 =   0. km/sec
The TOTAL velocity at 22: 7 = 240. km/sec

The TANGENTIAL velocity at 22:51 =   0. km/sec
The TOTAL velocity at 22:51 = 240. km/sec

The TANGENTIAL velocity at 23:16 =   0. km/sec
The TOTAL velocity at 23:16 = 240. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 0.75
Standard Deviation in start time measurement =   0.286E+02
Error in time =   0.65568E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.826E-02
Reduced Chi Squared = 0.458E-01
Chi Squared = 0.458E-01
The probability for exceeding chi square = 0.928E+00

The correlation coefficient =   0.992E+00
The probability that no LINEAR correlation exists between the variables =   0.7853E-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 282  22: 7:35   2.70 +/- 0.15   235.0 +/-  0.5      SMM
 1988 282  22:51:56   3.50 +/- 0.15   235.0 +/-  1.0      SMM
 1988 282  23:16:44   4.20 +/- 0.20   235.0 +/-  1.0      SMM


 ******************************************
 Structure being measured:
 Top of Front   Fuzzy Loop
 ******************************************


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


START TIME:


 tstart=DOY282 21:29 from derivative = 0
 Event begins at   2.48 Solar Radii
 Origin defined at DOY282 22: 0


RADIAL INFORMATION:


RADIAL ACCELERATION =  0.570E-01 +/-  0.000E+00 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:


   c(1) =   0.262E+01 +/-   0.000E+00 [solar radii]
   c(2) =   0.927E-02 +/-   0.000E+00 [radii/min]
   c(2) =   0.108E+03 +/-   0.000E+00 [km/sec]
   c(3) =   0.147E-03 +/-   0.000E+00 [radii/min**2]
   c(3) =   0.570E-01 +/-   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) = 235. +/-   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 22: 7 =   0. km/sec
The TOTAL velocity at 22: 7 = 133. km/sec

The TANGENTIAL velocity at 22:51 =   0. km/sec
The TOTAL velocity at 22:51 = 285. km/sec

The TANGENTIAL velocity at 23:16 =   0. km/sec
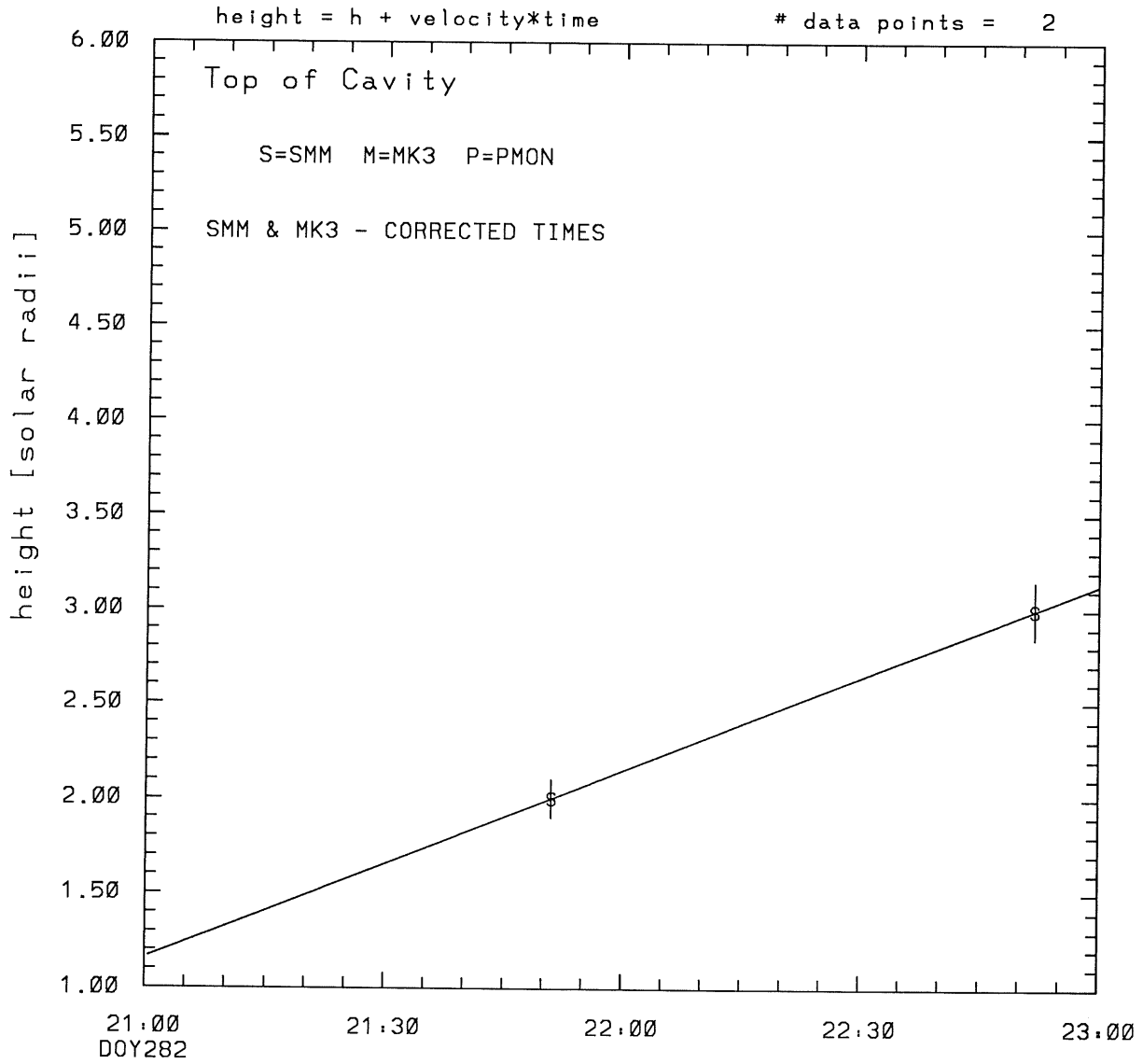The TOTAL velocity at 23:16 = 370. km/sec

****
 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!

SMM C/P   1988 DOY282   235 +/-   0 degrees

height = h + velocity*time   # data points =   2

Top of Cavity

    S=SMM   M=MK3   P=PMON

SMM & MK3 - CORRECTED TIMES

height [solar radii]

6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00

21:00   21:30   22:00   22:30   23:00
DOY282

tstart=DOY282 20:52 +/-   0.0 [min.]
radial velocity= 191. +/-   0. [km/sec]

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


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


                       error in       error in
 year doy   time   radii  radius   angle  angle   datatype
 1988 282  21:51: 7  2.00 +/- 0.10   235.0 +/- 0.5      SMM
 1988 282  22:51:56  3.00 +/- 0.15   235.0 +/- 1.0      SMM


*****************************************
 Structure being measured:
 Top of Cavity
*****************************************


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


START TIME:

Event began at t = 0 + -0.970E+01 +/-  0.000E+00 [minutes]
In more convenient units:
Event began at DOY 282 20:52 +/-  0.000E+00 [minutes]


Origin defined at DOY282 21: 0

RADIAL INFORMATION:

RADIAL VELOCITY =   191. +/-     0. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

 c(1) =   0.116E+01 +/-    0.000E+00 [solar radii]
 c(2) =   0.164E-01 +/-    0.000E+00 [radii/min]
 c(2) =   0.191E+03 +/-    0.000E+00 [km/sec]
 c(3) =   0.000E+00 +/-    0.000E+00 [radii/min**2]
 c(3) =   0.000E+00 +/-    0.000E+00 [km/sec**2]

ANGULAR INFORMATION:

ANGULAR VELOCITY = 0.0000E+00 +/-  0.0000E+00[radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

 a(1) = 235. +/-   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 21:51 =   0. km/sec
The TOTAL velocity at 21:51 = 191. km/sec

The TANGENTIAL velocity at 22:51 =   0. km/sec
The TOTAL velocity at 22:51 = 191. 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!