SMM C/P   1988 DOY236   95 +/-   0 degrees

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

Top of 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

9:00   9:10   9:20   9:30   9:40   9:50   10:00
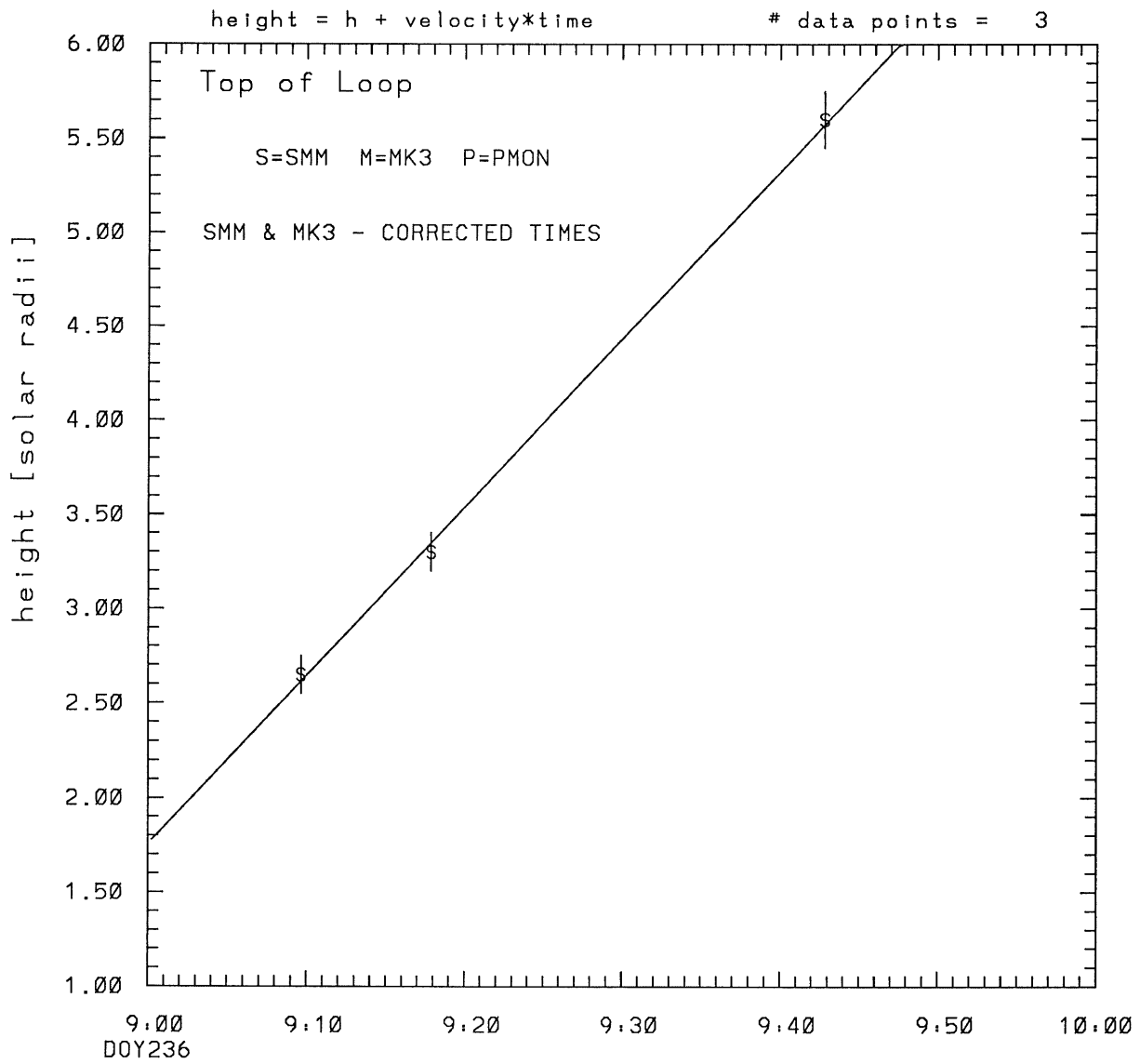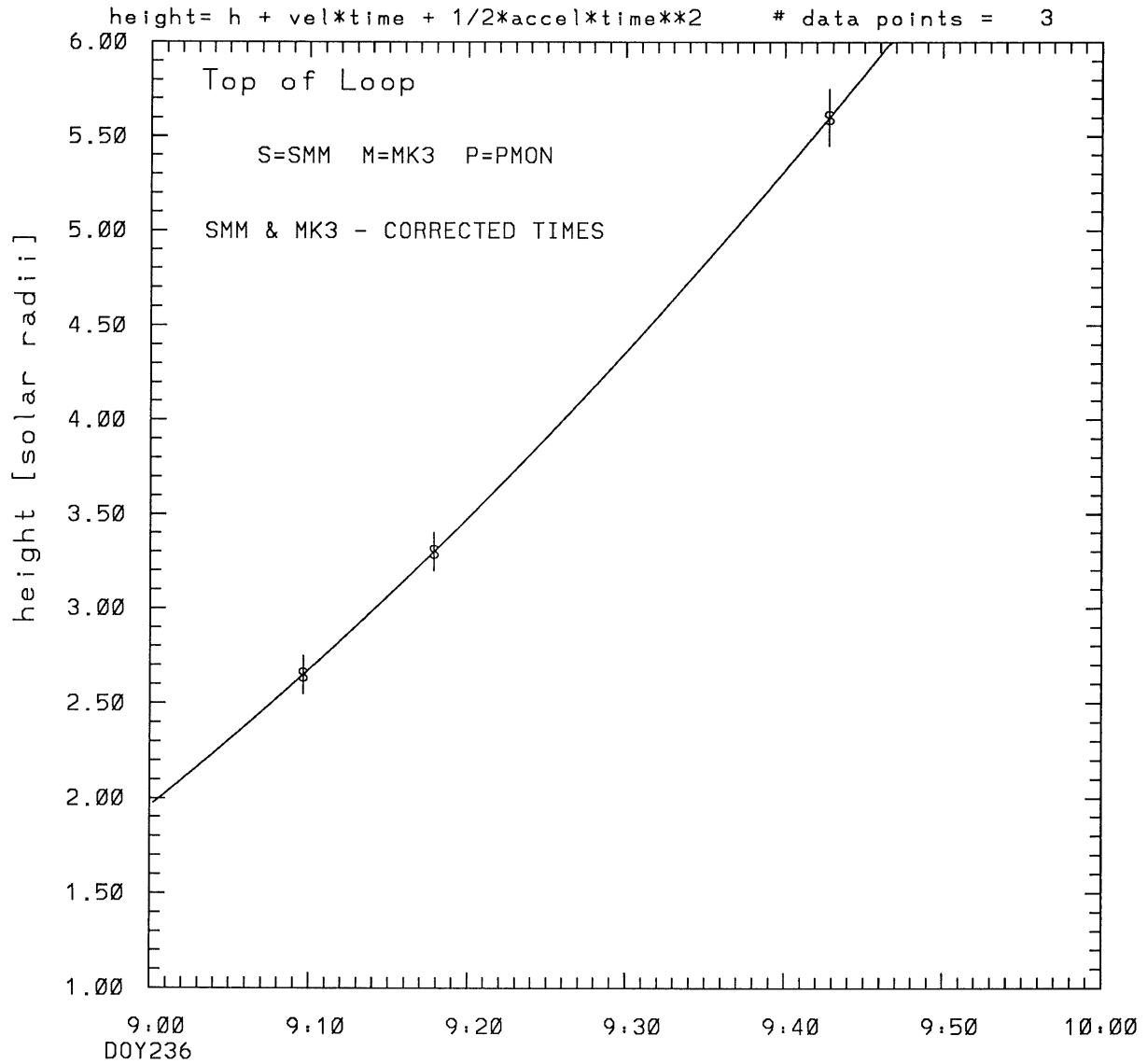DOY236

tstart=DOY236   8:52 +/-   0.2 [min.]
radial velocity= 1035. +/-   28. [km/sec]

SMM C/P 1988 DOY236   95 +/- Ø degrees

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

Top of 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

9:00   9:10   9:20   9:30   9:40   9:50   10:00
DOY236

tstart=DOY236 8:46 +/-   Ø.Ø [min.]

radial acceleration= Ø.155Ø +/- Ø.ØØØØ [km/sec**2]

SMM C/P 1988 DOY236   95 +/- 0 degrees

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

Top of Loop

SMM & MK3 - CORRECTED TIMES

radial velocity (km/sec)

1350.
1300.
1250.
1200.
1150.
1100.
1050.
1000.
950.
900.
850.
800.
750.

9:00   9:10   9:20   9:30   9:40   9:50   10:00
DOY236
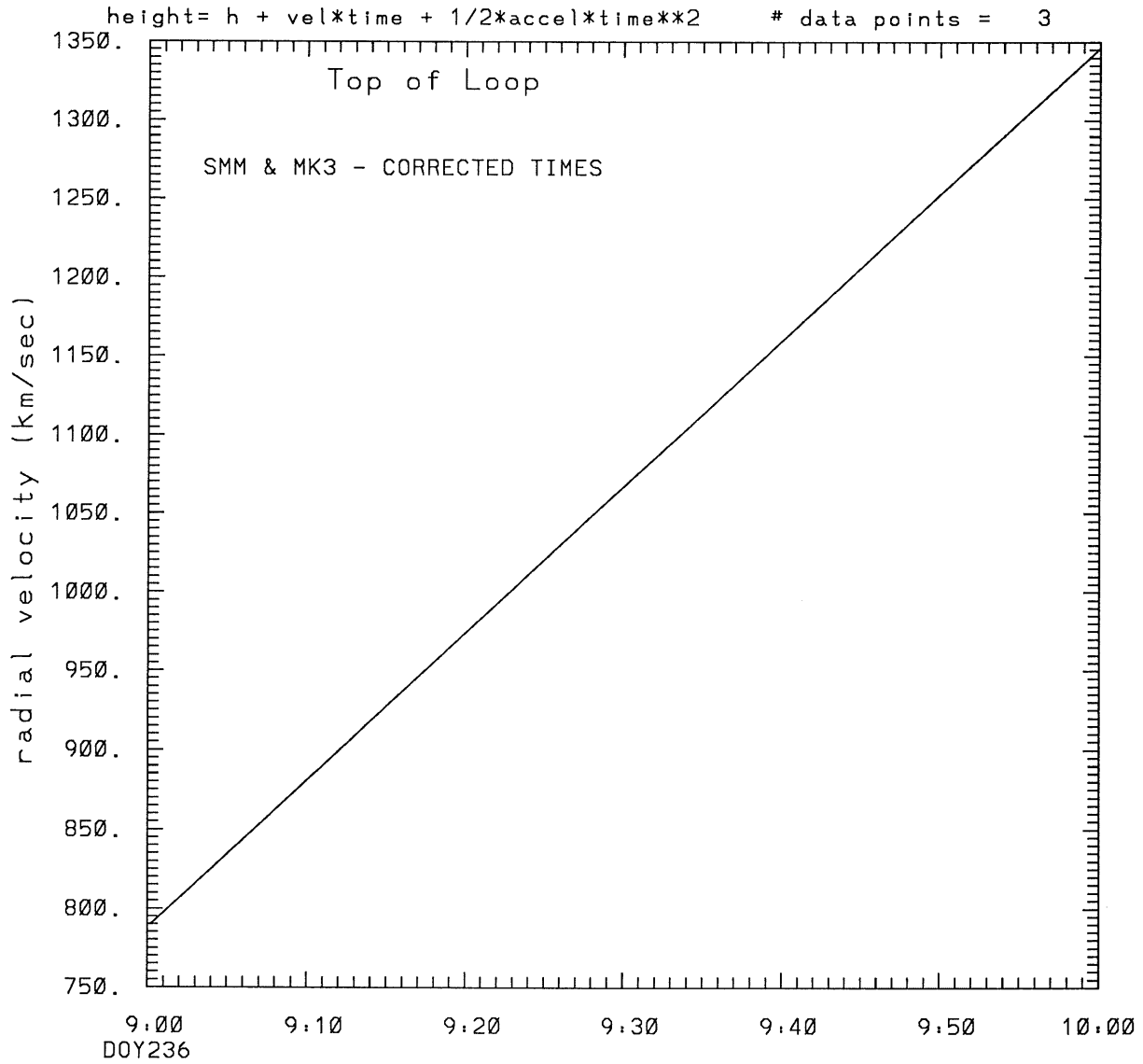
tstart=DOY236   8:46 +/-   0.0 [min.]

radial acceleration=0.155E+00 km/sec**2

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


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


                        error in        error in
year doy    time    radii  radius   angle   angle    datatype
1988 236  9: 9:38   2.65 +/- 0.10   95.0 +/-  0.5      SMM
1988 236  9:17:52   3.30 +/- 0.10   95.0 +/-  1.0      SMM
1988 236  9:42:48   5.60 +/- 0.15   95.0 +/-  1.0      SMM


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


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


START TIME:


Event began at t = 0 + -0.845E+01 +/-  0.237E+00 [minutes]
In more convenient units:
Event began at DOY 236  8:52 +/-  0.237E+00 [minutes]


Origin defined at DOY236  9: 0

RADIAL INFORMATION:

RADIAL VELOCITY =  1035. +/-    28. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:


c(1) =    0.175E+01 +/-    0.541E-01 [solar radii]
c(2) =    0.892E-01 +/-    0.242E-02 [radii/min]
c(2) =    0.104E+04 +/-    0.280E+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)= 0.74118E-01 [radii] see Bevington pg. 114
            error in c(2)= 0.27101E-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) =   95. +/-   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 9: 9 =   0. km/sec
The TOTAL velocity at 9: 9 = 1035. km/sec

The TANGENTIAL velocity at 9:17 =   0. km/sec
The TOTAL velocity at 9:17 = 1035. km/sec

The TANGENTIAL velocity at 9:42 =   0. km/sec
The TOTAL velocity at 9:42 = 1035. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 1.55
Standard Deviation in start time measurement =   0.141E+02
Error in time =   0.74182E+00 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.244E-02
Reduced Chi Squared = 0.817E-02
Chi Squared = 0.817E-02
The probability for exceeding chi square = 0.961E+00

The correlation coefficient =   0.100E+01
The probability that no LINEAR correlation exists between the variables =   0.1876E-01
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

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


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

		radii	error in radius	error in angle	datatype
year doy	time			angle	
1988 236	9: 9:38	2.65 +/- 0.10	95.0 +/- 0.5	SMM
1988 236	9:17:52	3.30 +/- 0.10	95.0 +/- 1.0	SMM
1988 236	9:42:48	5.60 +/- 0.15	95.0 +/- 1.0	SMM

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


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


START TIME:

 Event began at t = 0 + -0.155E+02 +/-  0.000E+00 [minutes]
 In more convenient units:
 Event began at DOY 236  8:46 +/-  0.000E+00 [minutes]

 Origin defined at DOY236  9: 0

RADIAL INFORMATION:

RADIAL ACCELERATION =  0.155E+00 +/-  0.191E-05 km/sec**2
```

The computed RADIAL coefficients and errors FROM NLLST2 are:

```
 c(1) =    0.196E+01 +/-    0.269E-05 [solar radii]
 c(2) =    0.679E-01 +/-    0.266E-06 [radii/min]
 c(2) =    0.788E+03 +/-    0.308E-02 [km/sec]
 c(3) =    0.401E-03 +/-    0.493E-08 [radii/min**2]
 c(3) =    0.155E+00 +/-    0.191E-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) =  95. +/-   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 9: 9 =   0. km/sec
The TOTAL velocity at 9: 9 = 877. km/sec

The TANGENTIAL velocity at 9:17 =   0. km/sec
The TOTAL velocity at 9:17 = 954. km/sec

The TANGENTIAL velocity at 9:42 =   0. km/sec
The TOTAL velocity at 9:42 = 1186. 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!