SMM C/P   1988 DOY215   277 +/-   0 degrees

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

Top of Northern Fuzzy Front   Material

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

19:10   19:20   19:30   19:40   19:50   20:00   20:10
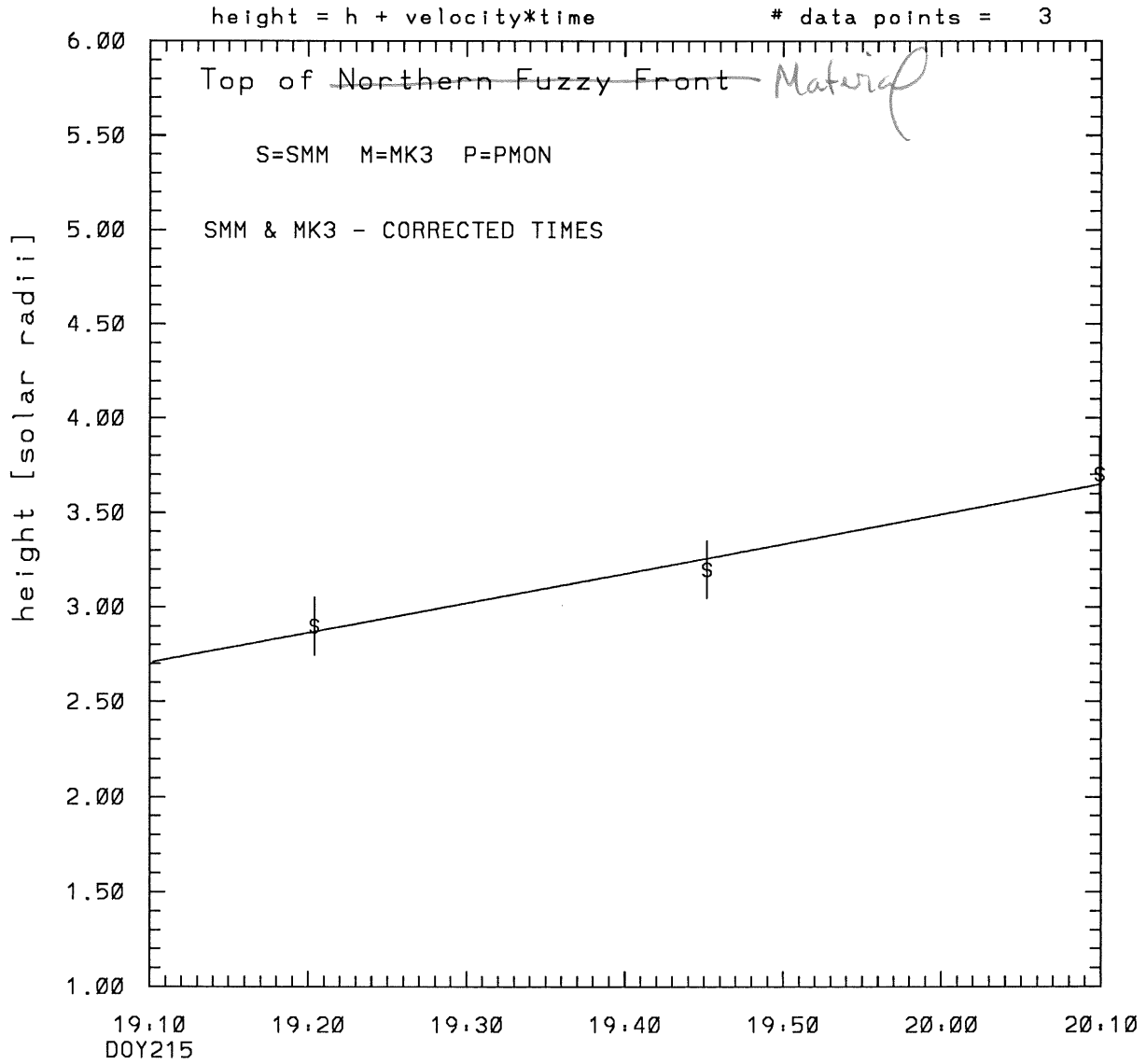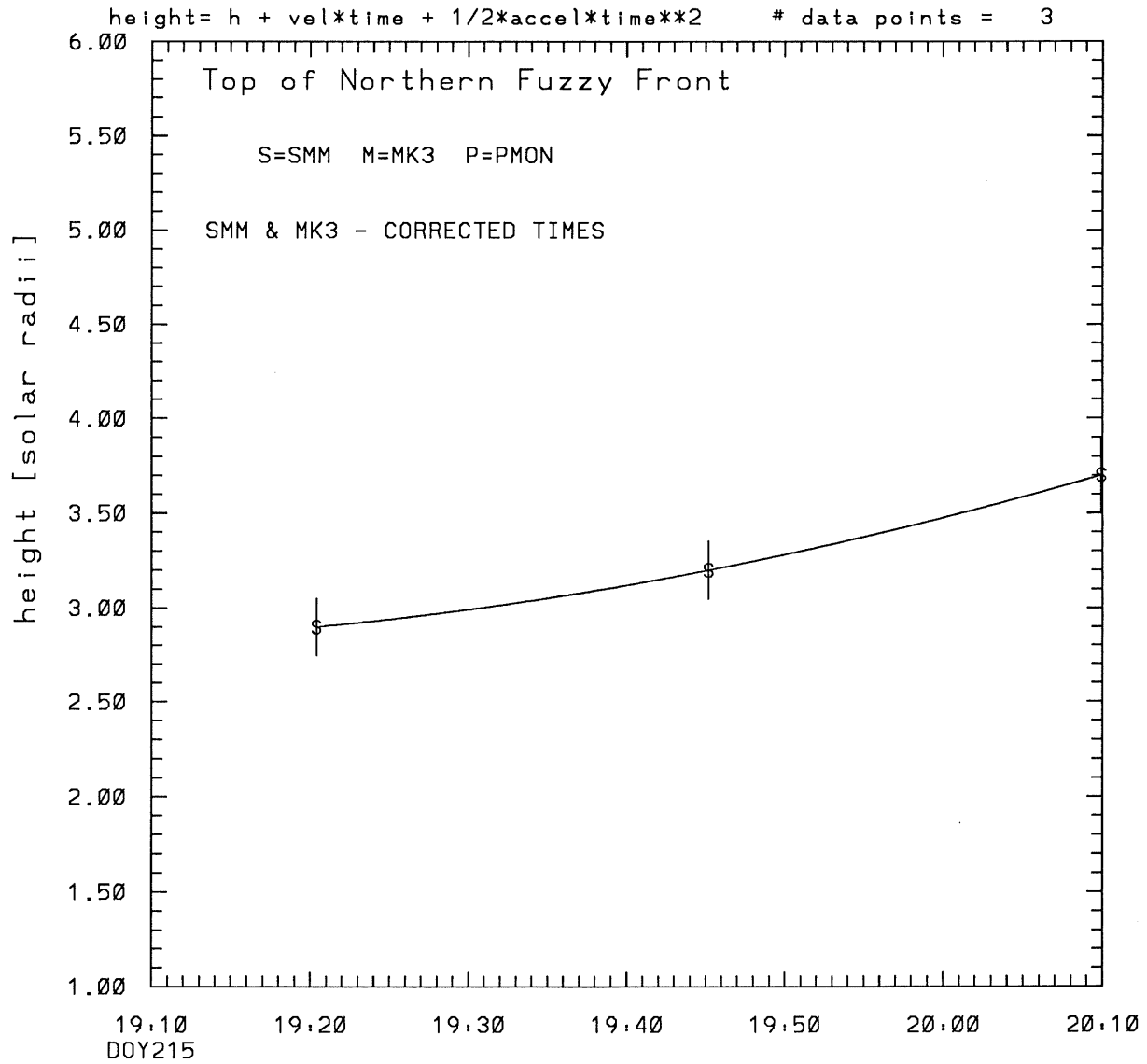DOY215

tstart=DOY215 17:23 +/-   8.4 [min.]
radial velocity=   182. +/-   21. [km/sec]

SMM C/P 1988 DOY215 277 +/- Ø degrees

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

Top of Northern Fuzzy Front

S=SMM M=MK3 P=PMON

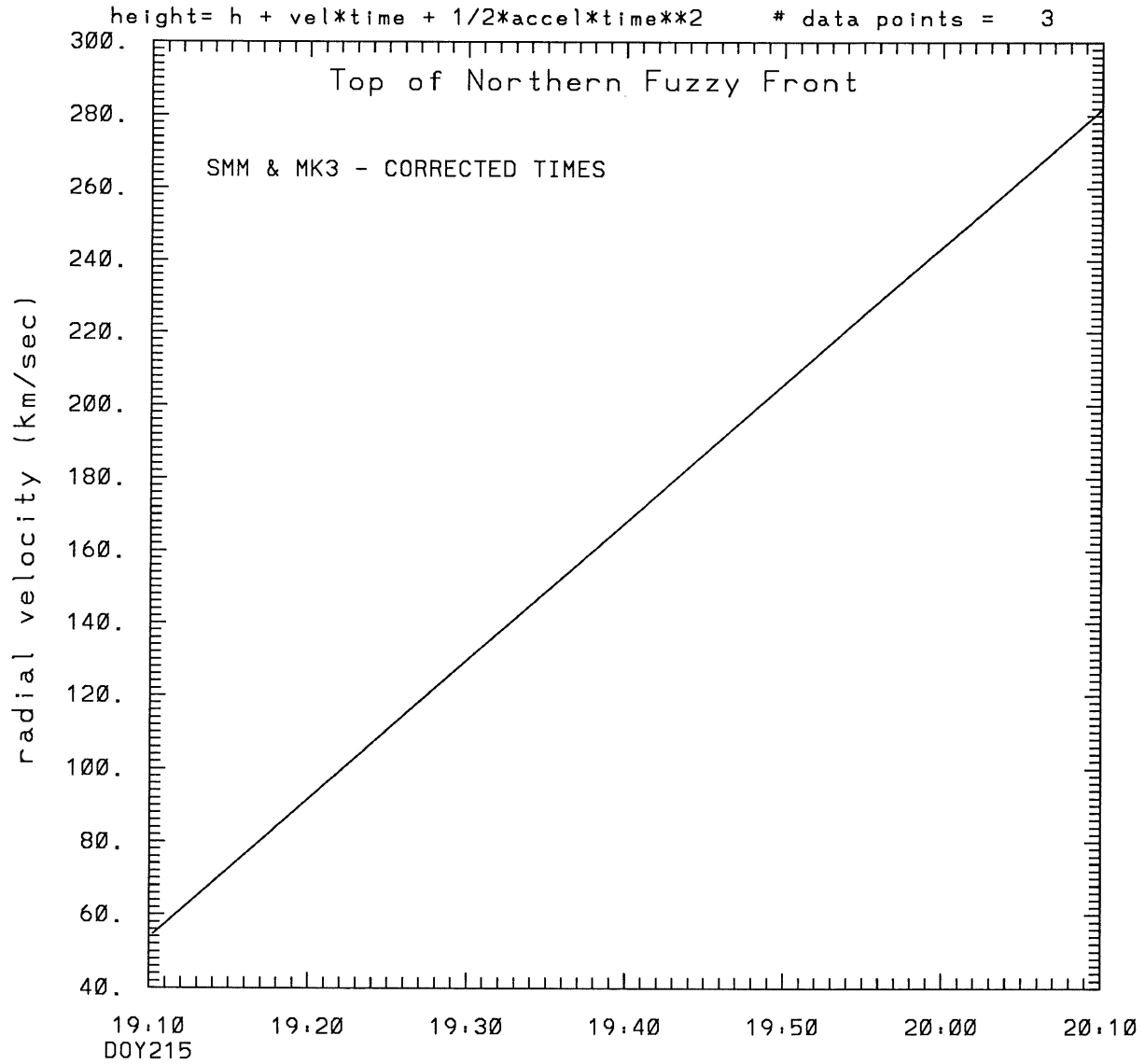SMM & MK3 - CORRECTED TIMES

height [solar radii]

tstart=DOY215 18:56   from derivative=Ø
Event begins at   2.8Ø Solar Radii
radial acceleration= Ø.Ø634 +/- Ø.ØØØØ [km/sec**2]

SMM C/P 1988 DOY215 277 +/- Ø degrees

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

Top of Northern Fuzzy Front

SMM & MK3 - CORRECTED TIMES

radial velocity (km/sec)

300.
280.
260.
240.
220.
200.
180.
160.
140.
120.
100.
80.
60.
40.

19:10   19:20   19:30   19:40   19:50   20:00   20:10
DOY215

tstart=DOY215 18:56   from derivative=Ø
Event begins at   2.8Ø Solar Radii
radial acceleration=Ø.634E-Ø1 km/sec**2

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


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

| | | error in | error in | |
year doy	time	radii radius	angle angle	datatype
1988 215	19:20:23	2.90 +/- 0.15	277.0 +/- 0.5	SMM
1988 215	19:45:11	3.20 +/- 0.15	277.0 +/- 1.0	SMM
1988 215	20: 9:55	3.70 +/- 0.20	277.0 +/- 1.0	SMM

```
*******************************************
 Structure being measured:
 Top of Northern Fuzzy Front         Mcloud ?,
 *******************************************
```

```
********
 OUTPUT:
********
```

START TIME:

Event began at t = 0 + -0.109E+03 +/- 0.838E+01 [minutes]
In more convenient units:
Event began at DOY 215 17:23 +/- 0.838E+01 [minutes]

Origin defined at DOY215 19:10

RADIAL INFORMATION:

RADIAL VELOCITY =   182. +/-   21. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

```
c(1) =   0.271E+01 +/-   0.655E-01 [solar radii]
c(2) =   0.157E-01 +/-   0.181E-02 [radii/min]
c(2) =   0.182E+03 +/-   0.210E+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)= 0.98149E-01 [radii] see Bevington pg. 114
        error in c(2)= 0.24198E-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) = 277. +/- 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 19:20 =   0. km/sec
The TOTAL velocity at 19:20 = 182. km/sec

The TANGENTIAL velocity at 19:45 =   0. km/sec
The TOTAL velocity at 19:45 = 182. km/sec

The TANGENTIAL velocity at 20: 9 =   0. km/sec
The TOTAL velocity at 20: 9 = 182. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 0.40
Standard Deviation in start time measurement =   0.202E+02
Error in time =   0.54042E+01 using best fit method
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.349E-02
Reduced Chi Squared = 0.163E-01
Chi Squared = 0.163E-01
The probability for exceeding chi square = 0.953E+00

The correlation coefficient =   0.990E+00
The probability that no LINEAR correlation exists between the variables =   0.9178E-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 215  19:20:23   2.90 +/- 0.15    277.0 +/-  0.5      SMM
1988 215  19:45:11   3.20 +/- 0.15    277.0 +/-  1.0      SMM
1988 215  20: 9:55   3.70 +/- 0.20    277.0 +/-  1.0      SMM


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


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


START TIME:

 tstart=DOY215 18:56 from derivative = 0
Event begins at   2.80 Solar Radii
 Origin defined at DOY215 19:10


RADIAL INFORMATION:

RADIAL ACCELERATION =  0.634E-01 +/-  0.181E-06 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

   c(1) =    0.283E+01 +/-   0.448E-06 [solar radii]
   c(2) =    0.463E-02 +/-   0.324E-07 [radii/min]
   c(2) =    0.537E+02 +/-   0.376E-03 [km/sec]
   c(3) =    0.164E-03 +/-   0.468E-09 [radii/min**2]
   c(3) =    0.634E-01 +/-   0.181E-06 [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) = 277. +/-   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 19:20 =   0. km/sec
The TOTAL velocity at 19:20 =   93. km/sec

The TANGENTIAL velocity at 19:45 =   0. km/sec
The TOTAL velocity at 19:45 = 187. km/sec

The TANGENTIAL velocity at 20: 9 =   0. km/sec
The TOTAL velocity at 20: 9 = 282. 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!