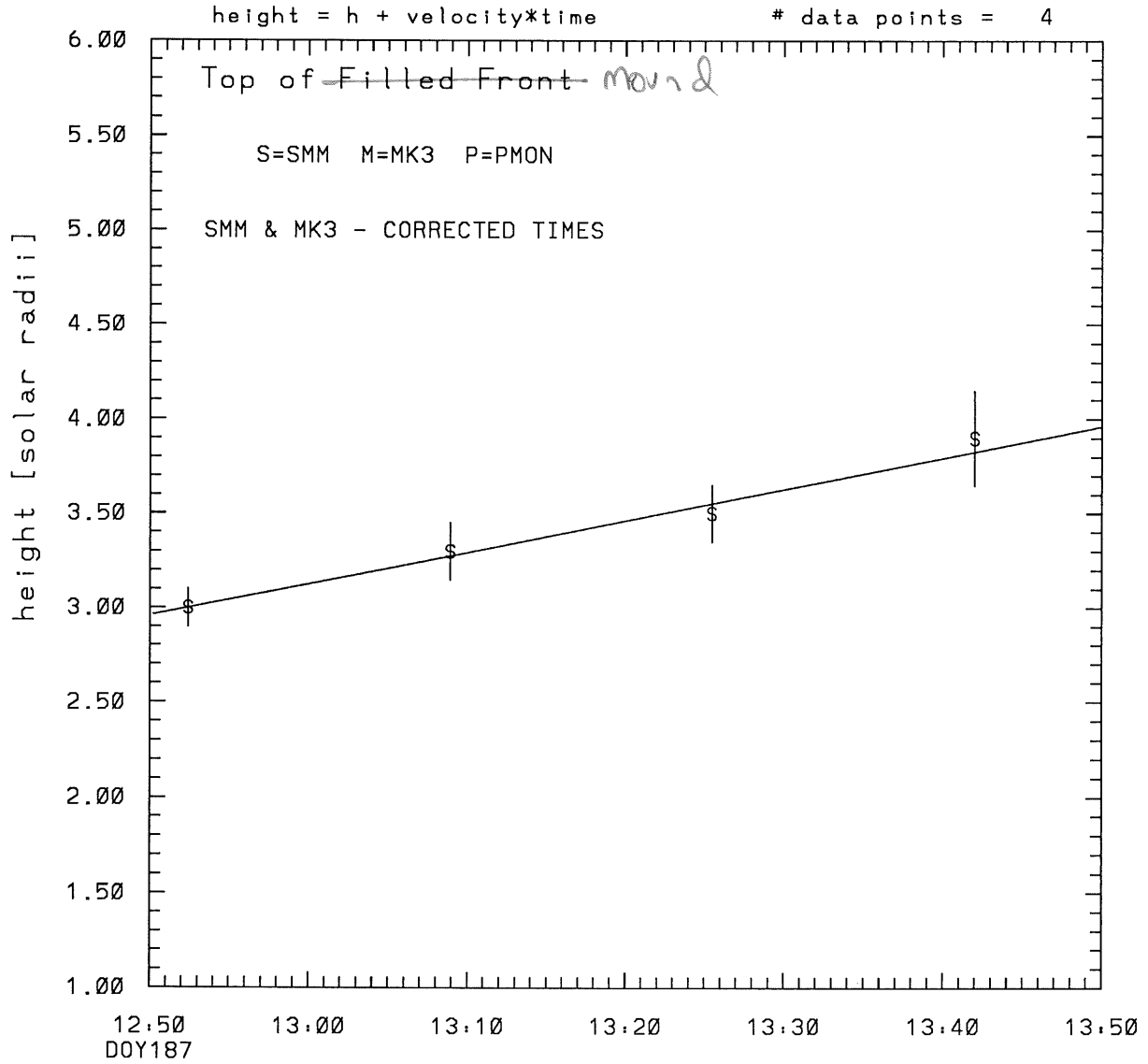
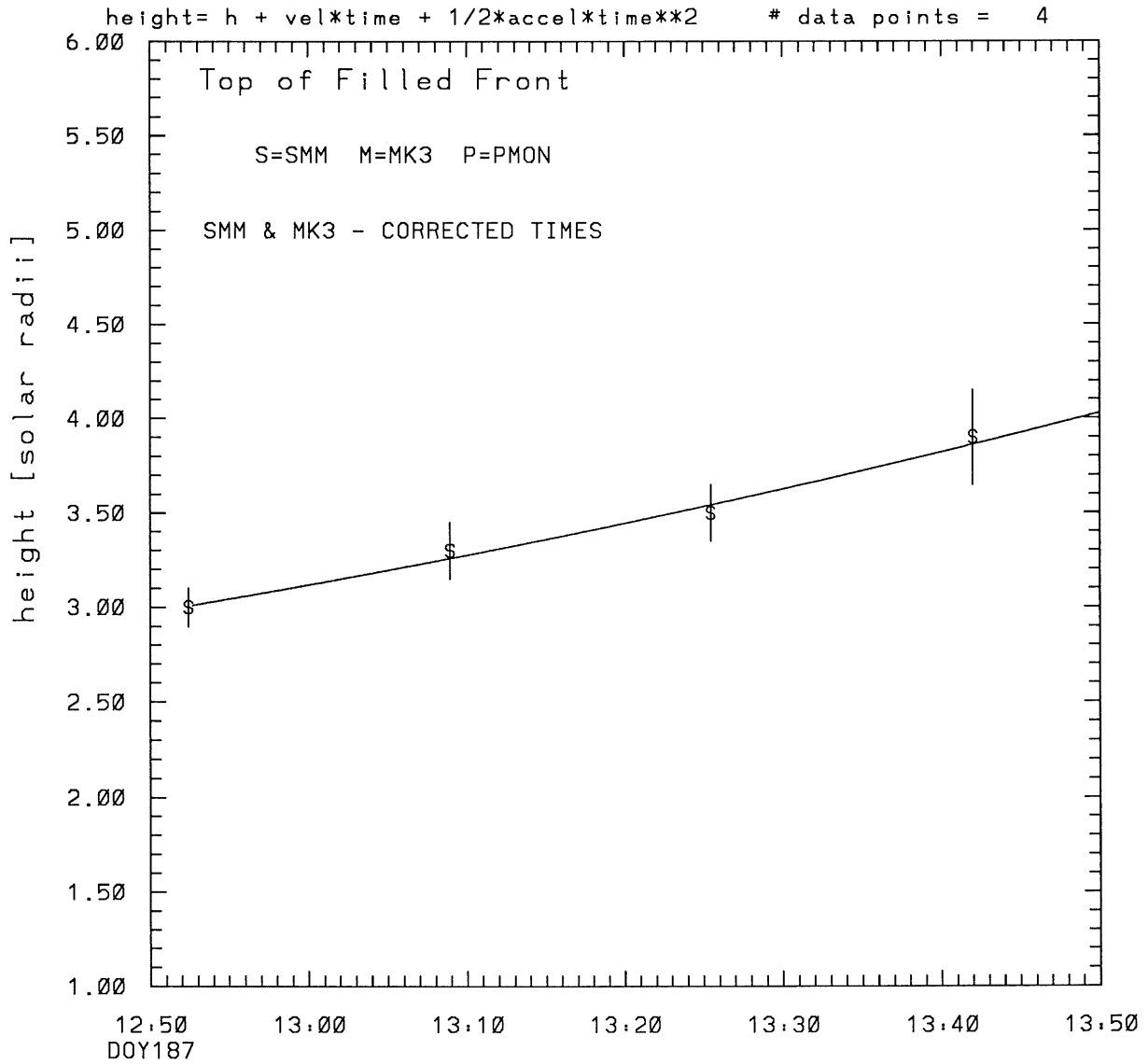


SMM C/P 1988 DOY187 265 +/- 0 degrees



tstart=DOY187 10:53 +/- 4.3 [min.]
radial velocity= 194. +/- 14. [km/sec]

SMM C/P 1988 DOY187 265 +/- 0 degrees

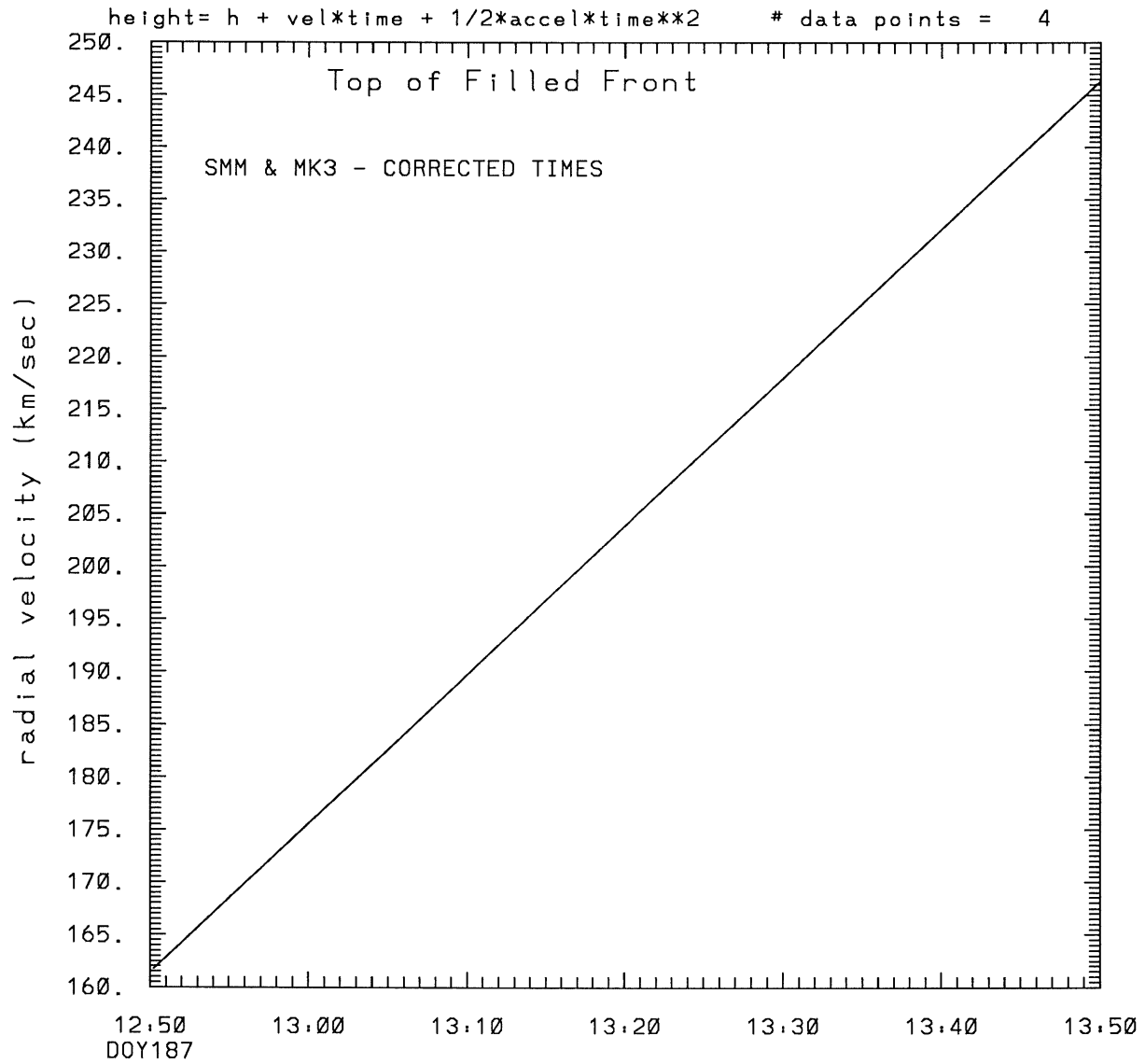


tstart=DOY187 10:56 from derivative=0

Event begins at 2.18 Solar Radii

radial acceleration = 0.0236 ± 0.0365 [km/sec**2]

SMM C/P 1988 DOY187 265 +/- 0 degrees



tstart=DOY187 10:56 from derivative=0
Event begins at 2.18 Solar Radii
radial acceleration=0.236E-01 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in angle	error in angle	datatype
1988	187	12:52:25	3.00	+/- 0.10	265.0	+/- 1.0	SMM
1988	187	13: 8:55	3.30	+/- 0.15	265.0	+/- 1.0	SMM
1988	187	13:25:28	3.50	+/- 0.15	265.0	+/- 1.0	SMM
1988	187	13:41:59	3.90	+/- 0.25	265.0	+/- 1.0	SMM

Structure being measured:

Top of ~~Filled Front~~ *mound*

OUTPUT:

START TIME:

Event began at t = 0 + -0.117E+03 +/- 0.433E+01 [minutes]

In more convenient units:

Event began at DOY 187 10:53 +/- 0.433E+01 [minutes]

Origin defined at DOY187 12:50

RADIAL INFORMATION:

RADIAL VELOCITY = 194. +/- 14. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.296E+01 +/- 0.277E-01 [solar radii]
 c(2) = 0.167E-01 +/- 0.117E-02 [radii/min]
 c(2) = 0.194E+03 +/- 0.135E+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)= 0.58171E-01 [radii] see Bevington pg. 114

error in c(2)= 0.17693E-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) = 265. +/- 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 12:52 = 0. km/sec

The TOTAL velocity at 12:52 = 194. km/sec

The TANGENTIAL velocity at 13: 8 = 0. km/sec

The TOTAL velocity at 13: 8 = 194. km/sec

The TANGENTIAL velocity at 13:25 = 0. km/sec

The TOTAL velocity at 13:25 = 194. km/sec

The TANGENTIAL velocity at 13:41 = 0. km/sec

The TOTAL velocity at 13:41 = 194. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.38

Standard Deviation in start time measurement = 0.185E+02

Error in time = 0.55370E+01 using best fit method

See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.150E-02

Reduced Chi Squared = 0.152E-01

Chi Squared = 0.303E-01

The probability for exceeding chi square = 0.999E+00

The correlation coefficient = 0.992E+00

The probability that no LINEAR correlation exists between the variables = 0.8250E-02

SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

This is a 2 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1988	187	12:52:25	3.00	+/- 0.10	265.0	+/- 1.0	SMM
1988	187	13: 8:55	3.30	+/- 0.15	265.0	+/- 1.0	SMM
1988	187	13:25:28	3.50	+/- 0.15	265.0	+/- 1.0	SMM
1988	187	13:41:59	3.90	+/- 0.25	265.0	+/- 1.0	SMM

Structure being measured:
Top of Filled Front

OUTPUT:

START TIME:

tstart=DOY187 10:56 from derivative = 0
Event begins at 2.18 Solar Radii
Origin defined at DOY187 12:50

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.236E-01 +/- 0.365E-01 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.297E+01 +/- 0.369E-01 [solar radii]
c(2) = 0.139E-01 +/- 0.450E-02 [radii/min]
c(2) = 0.161E+03 +/- 0.522E+02 [km/sec]
c(3) = 0.610E-04 +/- 0.944E-04 [radii/min**2]
c(3) = 0.236E-01 +/- 0.365E-01 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.83225E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.10442E-01 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.74682E-02 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.32445E-02 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.13248E-03 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.65812E-04 [radii/min**] Bevington pg 154 (8-28)

ANGULAR INFORMATION:

ANGULAR ACCELERATION= 0.0000E+00 +/- 0.0000E+00[radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 265. +/- 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 12:52 = 0. km/sec

The TOTAL velocity at 12:52 = 165. km/sec

The TANGENTIAL velocity at 13: 8 = 0. km/sec

The TOTAL velocity at 13: 8 = 188. km/sec

The TANGENTIAL velocity at 13:25 = 0. km/sec

The TOTAL velocity at 13:25 = 212. km/sec

The TANGENTIAL velocity at 13:41 = 0. km/sec

The TOTAL velocity at 13:41 = 235. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.38

Standard Deviation in start time measurement = 0.185E+02

Value of reduced Chi Squared returned from nllst2 = 0.186E-02

Reduced Chi Squared = 0.153E-01

Chi Squared = 0.153E-01

The probability for exceeding chi square = 0.966E+00

For a second order fit 3 correlation coefficients are given:

(Using equation of motion: $r = a + bt + at^{**2}$)

The correlation between the data and the term linear in time = 0.1046E+01

The correlation between the data and the time**2 term = 0.8833E+00

The correlation between the data and the complete equation of motion = 0.9780E+00

SEE BEVINGTON "Data Reduction and Error Analysis" [1969]