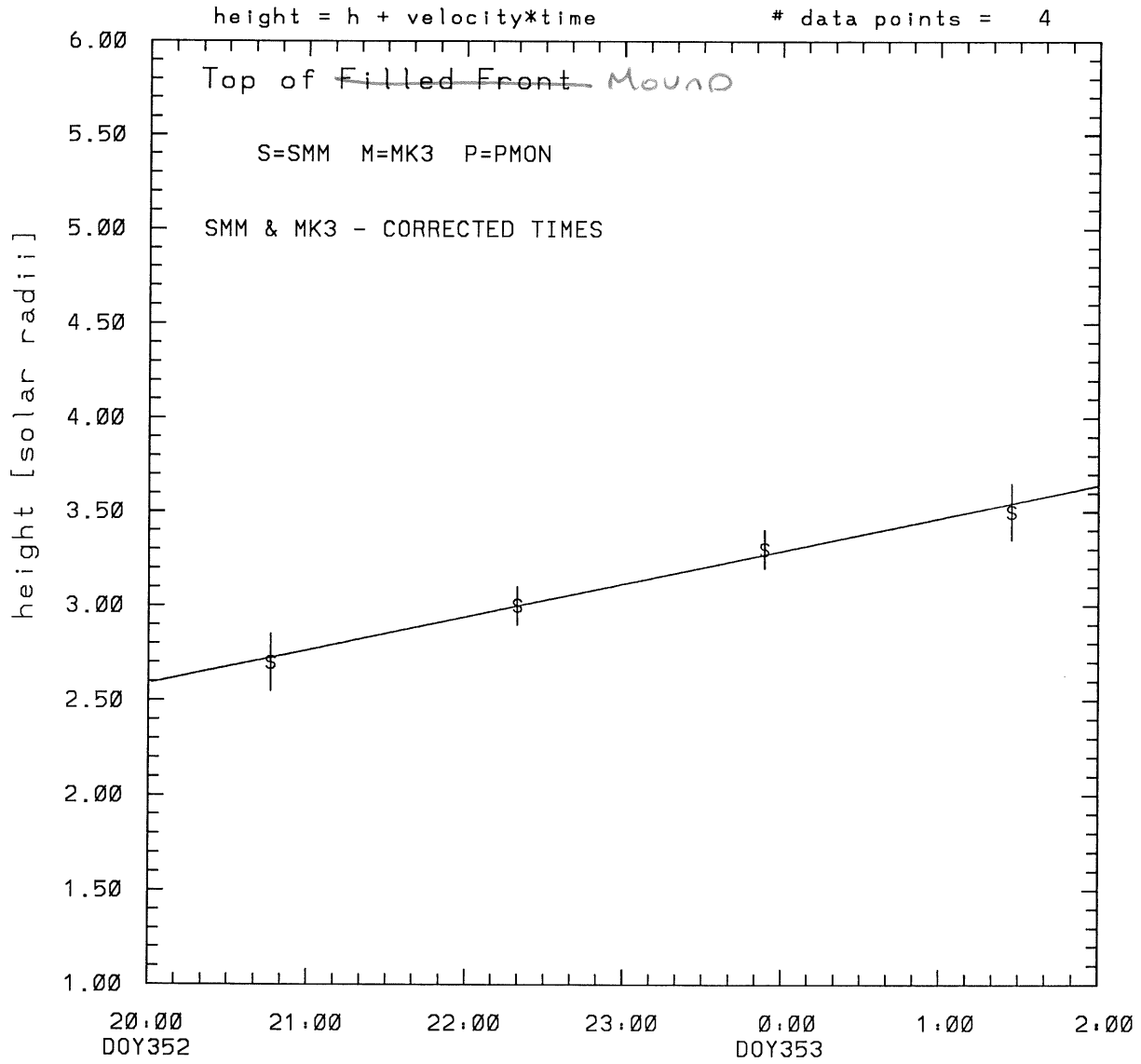
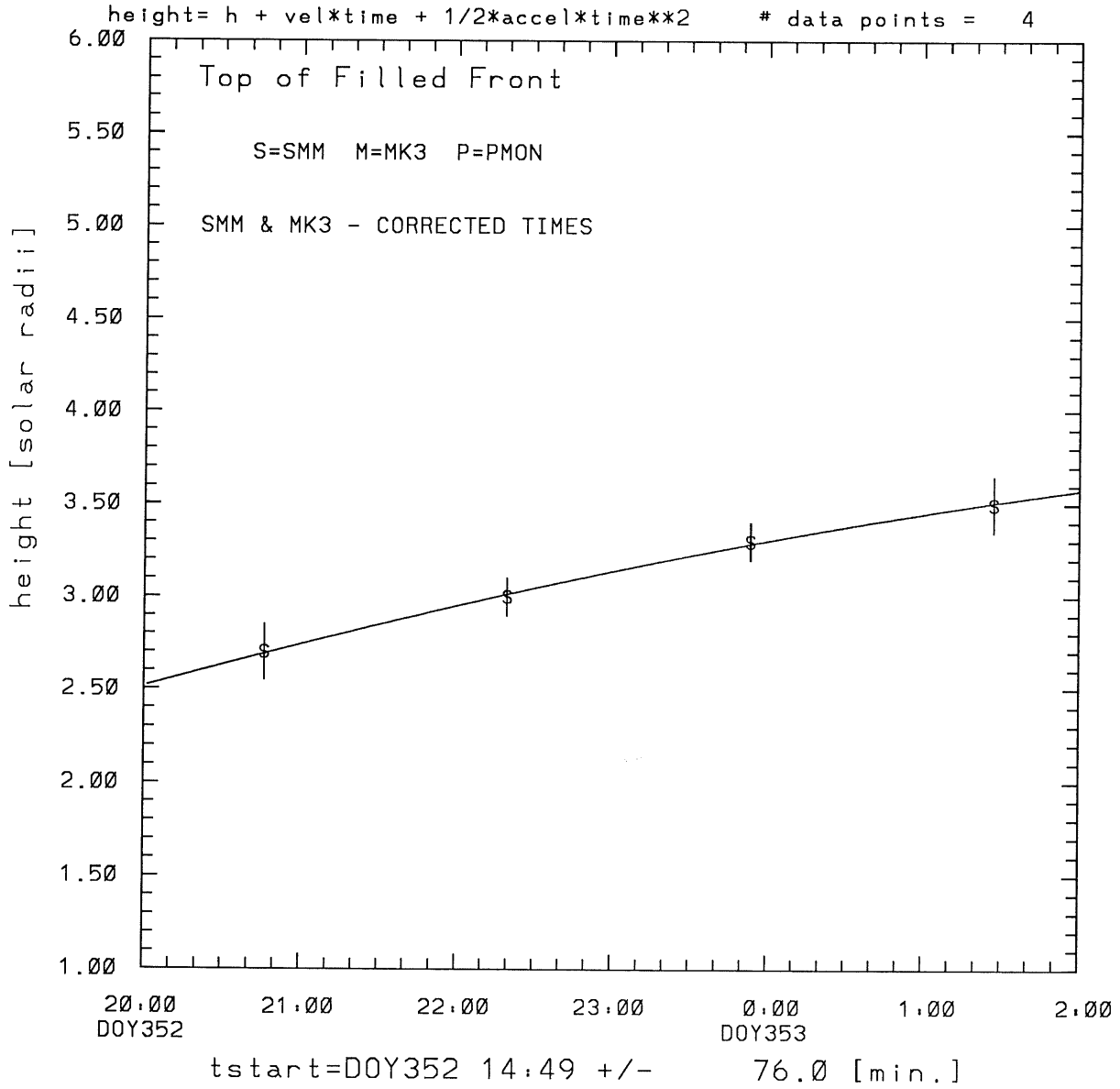


SMM C/P 1988 DOY352 5 +/- 0 degrees



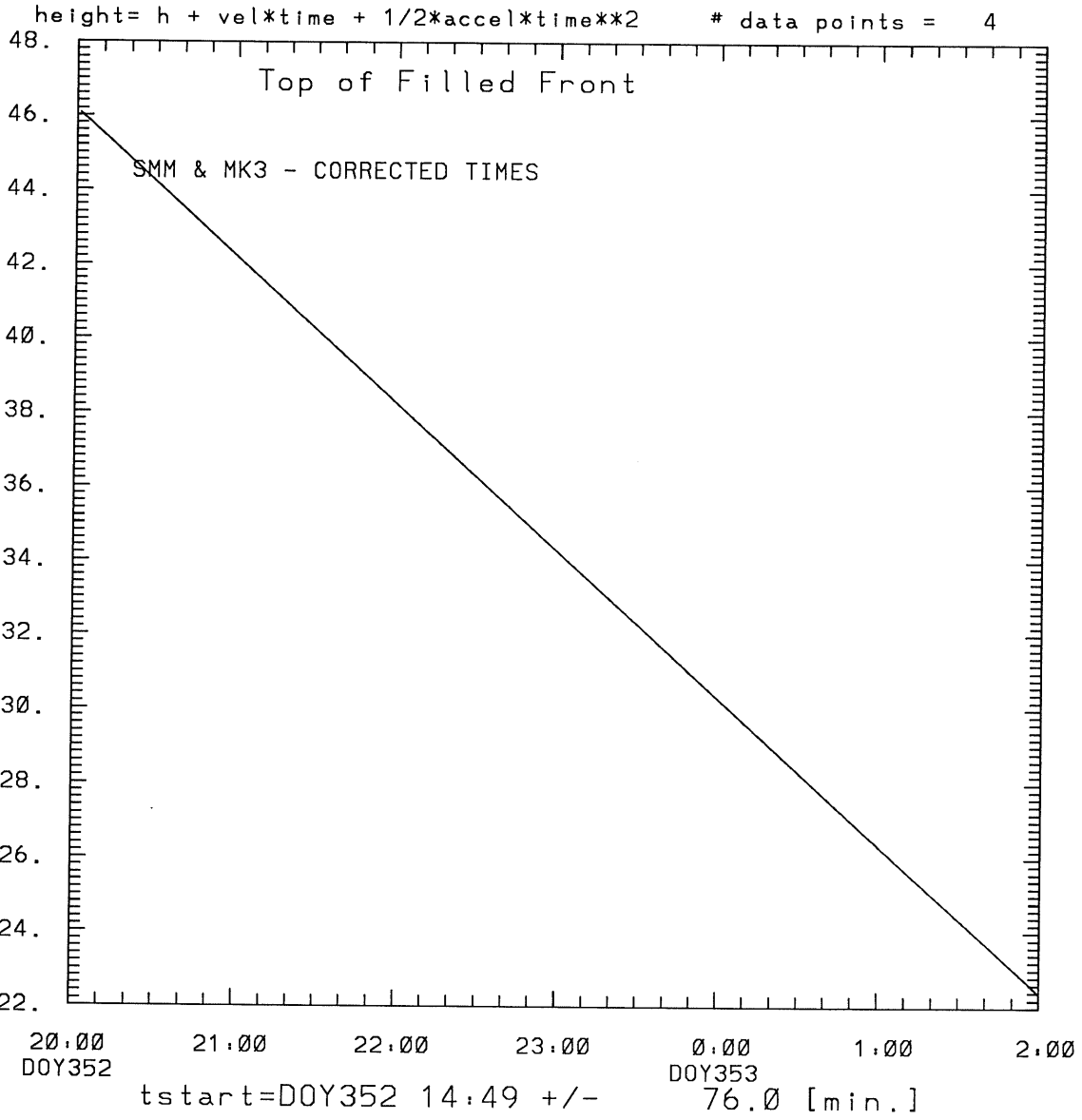
tstart=DOY352 10:55 +/- 20.5 [min.]
radial velocity= 34. +/- 2. [km/sec]

SMM C/P 1988 DOY352 5 +/- 0 degrees



radial acceleration = -0.0011 ± 0.0004 [km/sec**2]

SMM C/P 1988 DOY352 5 +/- 0 degrees



radial acceleration=-.110E-02 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	datatype
1988	352	20:46: 5	2.70	+/- 0.15	5.0 +/- 0.5	SMM
1988	352	22:19:49	3.00	+/- 0.10	5.0 +/- 1.0	SMM
1988	352	23:53:33	3.30	+/- 0.10	5.0 +/- 1.0	SMM
1988	353	1:27:17	3.50	+/- 0.15	5.0 +/- 1.0	SMM

Structure being measured:
Top of Filled Front *Mound*

OUTPUT:

START TIME:

Event began at $t = 0 + -0.545E+03 +/- 0.205E+02$ [minutes]
In more convenient units:
Event began at DOY 352 10:55 +/- 0.205E+02 [minutes]

Origin defined at DOY352 20: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 34. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.259E+01 +/- 0.357E-01$ [solar radii]
 $c(2) = 0.292E-02 +/- 0.173E-03$ [radii/min]
 $c(2) = 0.338E+02 +/- 0.201E+01$ [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 $c(1) = 0.42272E-01$ [radii] see Bevington pg. 114
error in $c(2) = 0.19745E-03$ [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) = 5. +/- 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 20:46 = 0. km/sec

The TOTAL velocity at 20:46 = 34. km/sec

The TANGENTIAL velocity at 22:19 = 0. km/sec

The TOTAL velocity at 22:19 = 34. km/sec

The TANGENTIAL velocity at 23:53 = 0. km/sec

The TOTAL velocity at 23:53 = 34. km/sec

The TANGENTIAL velocity at 1:27 = 0. km/sec

The TOTAL velocity at 1:27 = 34. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.35

Standard Deviation in start time measurement = 0.105E+03

Error in time = 0.20070E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.915E-03

Reduced Chi Squared = 0.553E-02

Chi Squared = 0.111E-01

The probability for exceeding chi square = 0.999E+00

The correlation coefficient = 0.996E+00

The probability that no LINEAR correlation exists between the variables = 0.4090E-02

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

This is a 2 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	angle	datatype
1988	352	20:46: 5	2.70	+/- 0.15	5.0	+/- 0.5	SMM
1988	352	22:19:49	3.00	+/- 0.10	5.0	+/- 1.0	SMM
1988	352	23:53:33	3.30	+/- 0.10	5.0	+/- 1.0	SMM
1988	353	1:27:17	3.50	+/- 0.15	5.0	+/- 1.0	SMM

Structure being measured:
Top of Filled Front

OUTPUT:

START TIME:

Event began at $t = 0 + -0.311E+03 \pm 0.760E+02$ [minutes]
In more convenient units:
Event began at DOY 352 14:49 $\pm 0.760E+02$ [minutes]

Origin defined at DOY352 20: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.110E-02 \pm 0.418E-03$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.251E+01 \pm 0.360E-01$ [solar radii]
 $c(2) = 0.398E-02 \pm 0.416E-03$ [radii/min]
 $c(2) = 0.462E+02 \pm 0.483E+01$ [km/sec]
 $c(3) = -0.285E-05 \pm 0.108E-05$ [radii/min**2]
 $c(3) = -0.110E-02 \pm 0.418E-03$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in $c(1) = 0.40058E-01$ [radii] Bevington pg 154 (8-30)
Exact error in $c(1) = 0.17920E-01$ [radii] Bevington pg 154 (8-28)
Approximate error in $c(2) = 0.51329E-03$ [radii/min] Bevington pg 154 (8-30)
Exact error in $c(2) = 0.25512E-03$ [radii/min] Bevington pg 154 (8-28)
Approximate error in $c(3) = 0.13414E-05$ [radii/min**] Bevington pg 154 (8-30)
Exact error in $c(3) = 0.67069E-06$ [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) = 5. +/- 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 20:46 = 0. km/sec

The TOTAL velocity at 20:46 = 43. km/sec

The TANGENTIAL velocity at 22:19 = 0. km/sec

The TOTAL velocity at 22:19 = 37. km/sec

The TANGENTIAL velocity at 23:53 = 0. km/sec

The TOTAL velocity at 23:53 = 31. km/sec

The TANGENTIAL velocity at 1:27 = 0. km/sec

The TOTAL velocity at 1:27 = 25. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.35

Standard Deviation in start time measurement = 0.105E+03

Value of reduced Chi Squared returned from nllst2 = 0.308E-03

Reduced Chi Squared = 0.139E-02

Chi Squared = 0.139E-02

The probability for exceeding chi square = 0.986E+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 = 0.8271E+00

The correlation between the data and the time**2 term = 0.7856E+00

The correlation between the data and the complete equation of motion = 0.9976E+00

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