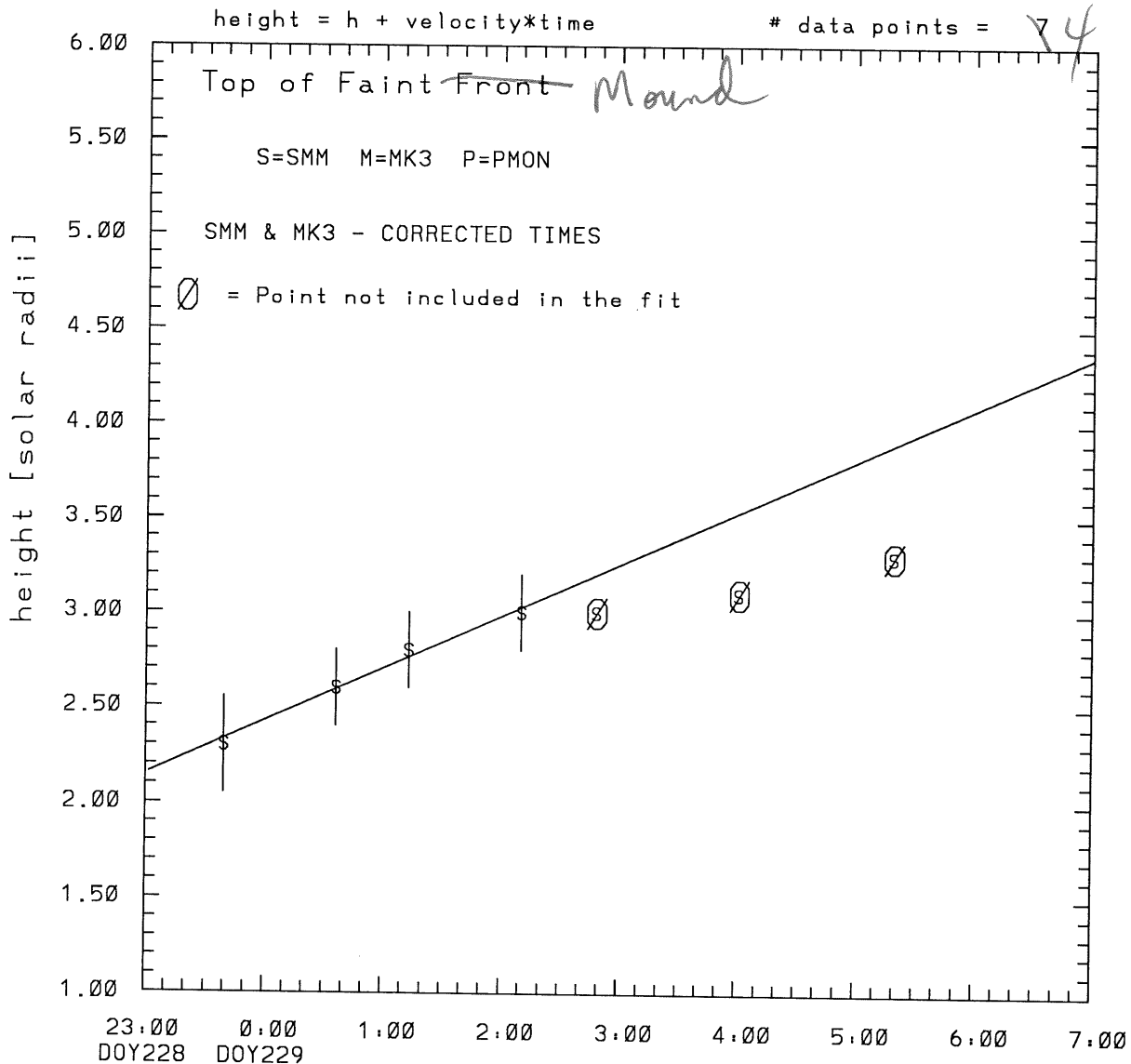


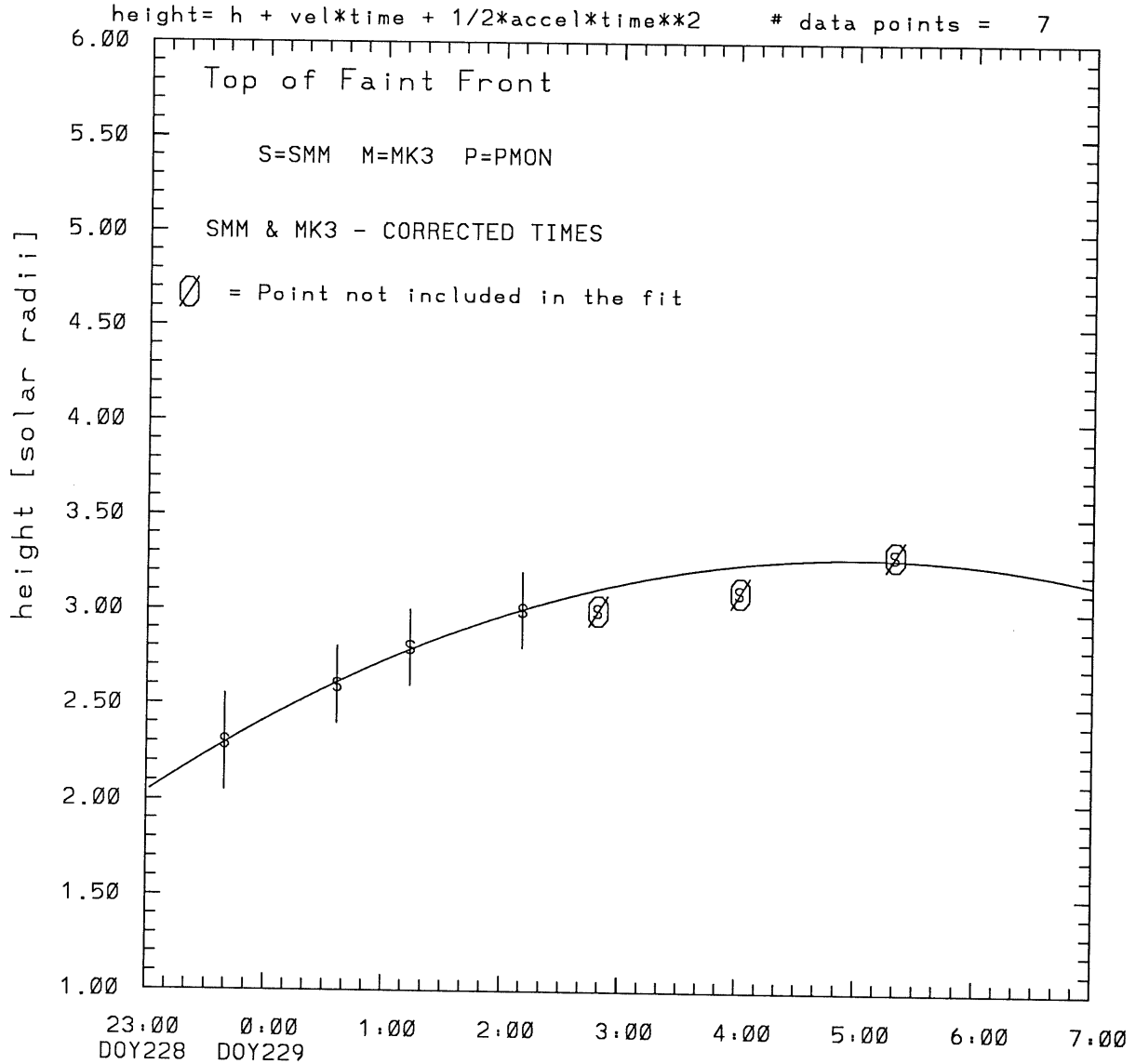
SMM C/P 1985 DOY228 295 +/- 0 degrees



23:00 DOY228 0:00 DOY229 1:00 2:00 3:00 4:00 5:00 6:00 7:00

tstart=DOY228 18:53 +/- 5.8 [min.]
radial velocity= 54. +/- 2. [km/sec]

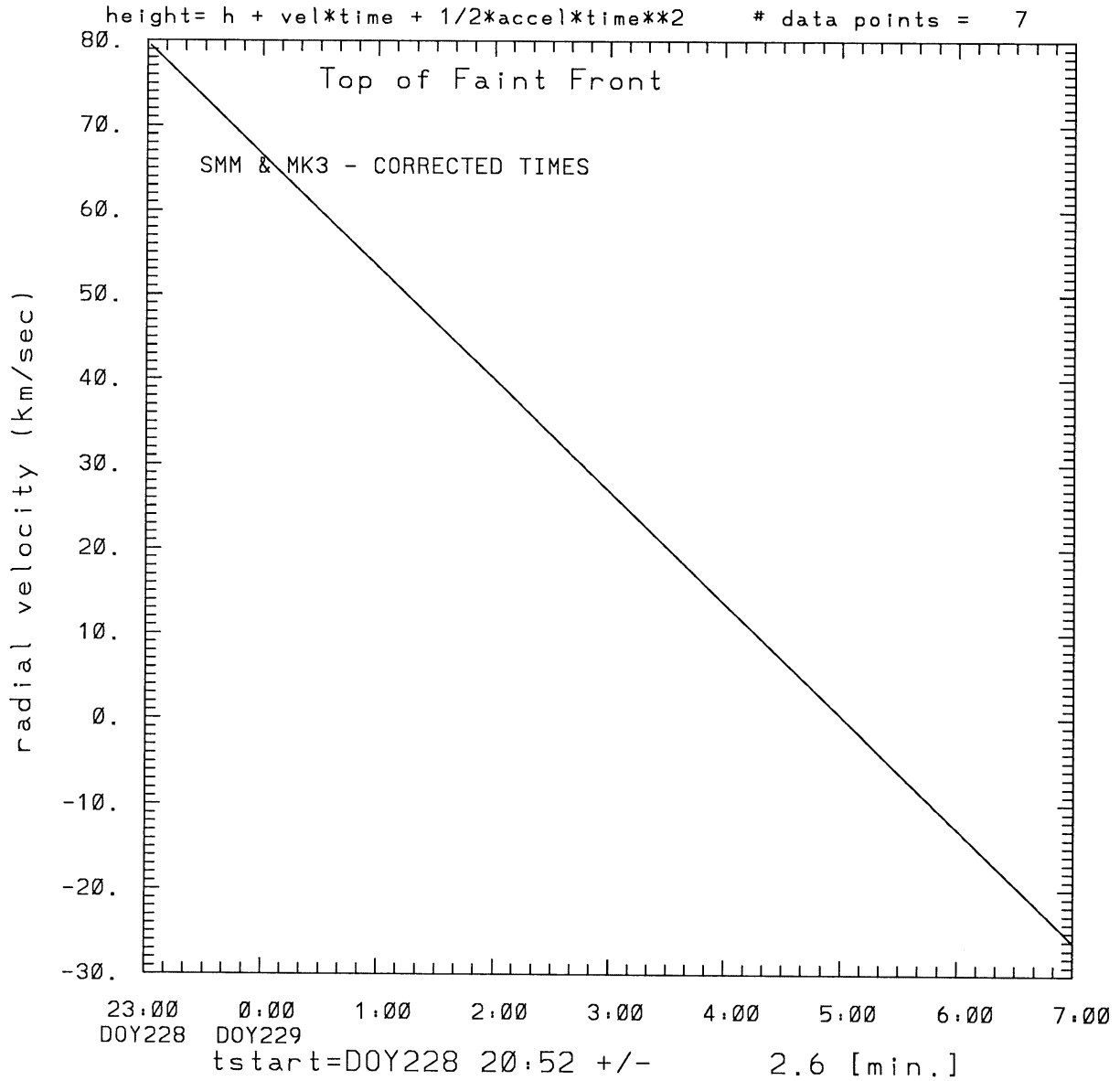
SMM C/P 1985 DOY228 295 +/- 0 degrees



tstart=DOY228 20:52 +/- 2.6 [min.]

radial acceleration = -0.0037 ± 0.0007 [km/sec**2]

SMM C/P 1985 DOY228 295 +/- 0 degrees



This is a 1 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1985	228	23:39:32	2.30	+/- 0.25	295.0	+/- 0.5	SMM
1985	229	0:36:31	2.60	+/- 0.20	295.0	+/- 0.5	SMM
1985	229	1:13:31	2.80	+/- 0.20	295.0	+/- 0.5	SMM
1985	229	2:10:30	3.00	+/- 0.20	295.0	+/- 1.0	SMM
1985	229	2:48:32	3.00	----	295.00	+/- ----	SMM THIS POINT WASN'T USED IN THE FIT.
1985	229	4: 1: 0	3.10	----	295.00	+/- ----	SMM THIS POINT WASN'T USED IN THE FIT.
1985	229	5:19:31	3.30	----	295.00	+/- ----	SMM THIS POINT WASN'T USED IN THE FIT.

Structure being measured:

Top of Faint Front

OUTPUT:

START TIME:

Event began at t = 0 + -0.249E+03 +/- 0.579E+01 [minutes]

In more convenient units:

Event began at DOY 228 18:53 +/- 0.579E+01 [minutes]

Origin defined at DOY228 23: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 54. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.215E+01 +/- 0.282E-01 [solar radii]
 c(2) = 0.461E-02 +/- 0.212E-03 [radii/min]
 c(2) = 0.535E+02 +/- 0.246E+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)= 0.26589E+00 [radii] see Bevington pg. 114

error in c(2)= 0.11860E-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) = 295. +/- 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 23:39 = 0.000E+00 km/sec

The TOTAL velocity at 23:39 = 54. km/sec

The TANGENTIAL velocity at 0:36 = 0.000E+00 km/sec

The TOTAL velocity at 0:36 = 54. km/sec

The TANGENTIAL velocity at 1:13 = 0.000E+00 km/sec

The TOTAL velocity at 1:13 = 54. km/sec

The TANGENTIAL velocity at 2:10 = 0.000E+00 km/sec

The TOTAL velocity at 2:10 = 54. km/sec

The TANGENTIAL velocity at 2:48 = 0.000E+00 km/sec

The TOTAL velocity at 2:48 = 54. km/sec

The TANGENTIAL velocity at 4: 1 = 0.000E+00 km/sec

The TOTAL velocity at 4: 1 = 54. km/sec

The TANGENTIAL velocity at 5:19 = 0.000E+00 km/sec

The TOTAL velocity at 5:19 = 54. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.34

Standard Deviation in start time measurement = 0.110E+03

Error in time = 0.16664E+03 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.850E-03

Reduced Chi Squared = 0.771E+00

Chi Squared = 0.385E+01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.953E+00

The probability that no LINEAR correlation exists between the variables = 0.8781E-03

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

This is a 2 order run

INPUT:

year	day	time	radii	radius	error in radius	angle	error in angle	datatype
1985	228	23:39:32	2.30	+/- 0.25	295.0	+/- 0.5	SMM	
1985	229	0:36:31	2.60	+/- 0.20	295.0	+/- 0.5	SMM	
1985	229	1:13:31	2.80	+/- 0.20	295.0	+/- 0.5	SMM	
1985	229	2:10:30	3.00	+/- 0.20	295.0	+/- 1.0	SMM	
1985	229	2:48:32	3.00	----	295.00	+/- ----	SMM THIS POINT WASN'T USED IN THE FIT.	
1985	229	4: 1: 0	3.10	----	295.00	+/- ----	SMM THIS POINT WASN'T USED IN THE FIT.	
1985	229	5:19:31	3.30	----	295.00	+/- ----	SMM THIS POINT WASN'T USED IN THE FIT.	

Structure being measured:

Top of Faint Front

OUTPUT:

START TIME:

Event began at t = 0 + -0.128E+03 +/- 0.257E+01 [minutes]

In more convenient units:

Event began at DOY 228 20:52 +/- 0.257E+01 [minutes]

Origin defined at DOY228 23: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.368E-02 +/- 0.668E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.204E+01 +/- 0.230E-01 [solar radii]
 c(2) = 0.688E-02 +/- 0.420E-03 [radii/min]
 c(2) = 0.798E+02 +/- 0.488E+01 [km/sec]
 c(3) = -0.951E-05 +/- 0.173E-05 [radii/min**2]
 c(3) = -0.368E-02 +/- 0.668E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.12366E+00 [radii] Bevington pg 154 (8-30)

Exact error in c(1) = 0.38366E-02 [radii] Bevington pg 154 (8-28)

Approximate error in c(2) = 0.13581E-02 [radii/min] Bevington pg 154 (8-30)

Exact error in c(2) = 0.51897E-04 [radii/min] Bevington pg 154 (8-28)

Approximate error in $c(3) = 0.31409E-05$ [radii/min**] Bevington pg 154 (8-30)
Exact error in $c(3) = 0.17559E-06$ [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:

$a(1) = 295.$ +/- $0.$ [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 23:39 = $0.000E+00$ km/sec

The TOTAL velocity at 23:39 = 71. km/sec

The TANGENTIAL velocity at 0:36 = $0.000E+00$ km/sec

The TOTAL velocity at 0:36 = 59. km/sec

The TANGENTIAL velocity at 1:13 = $0.000E+00$ km/sec

The TOTAL velocity at 1:13 = 50. km/sec

~~The TANGENTIAL velocity at 2:10 = $0.000E+00$ km/sec~~

~~The TOTAL velocity at 2:10 = 38. km/sec~~

The TANGENTIAL velocity at 2:48 = $0.000E+00$ km/sec

The TOTAL velocity at 2:48 = 29. km/sec

The TANGENTIAL velocity at 4: 1 = $0.000E+00$ km/sec

The TOTAL velocity at 4: 1 = 13. km/sec

The TANGENTIAL velocity at 5:19 = $0.000E+00$ km/sec

The TOTAL velocity at 5:19 = -4. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.34

Standard Deviation in start time measurement = $0.110E+03$

Value of reduced Chi Squared returned from nllst2 = $0.144E-03$

Reduced Chi Squared = $0.495E-01$

Chi Squared = $0.198E+00$

The probability for exceeding chi square = $0.100E+01$

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 = 0.7607E+00

The correlation between the data and the time**2 term = 0.5904E+00

The correlation between the data and the complete equation of motion = 0.1063E+01

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