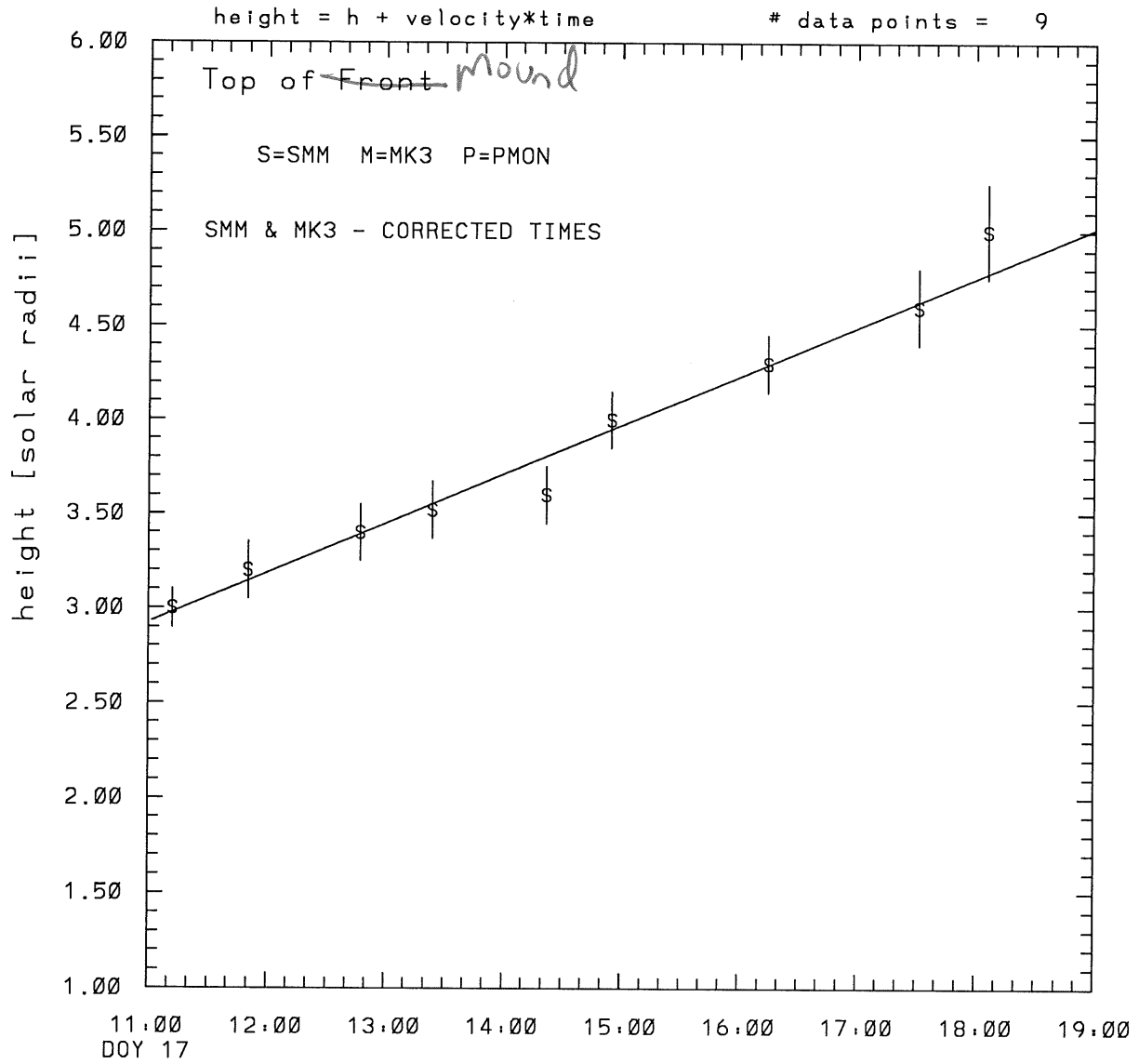
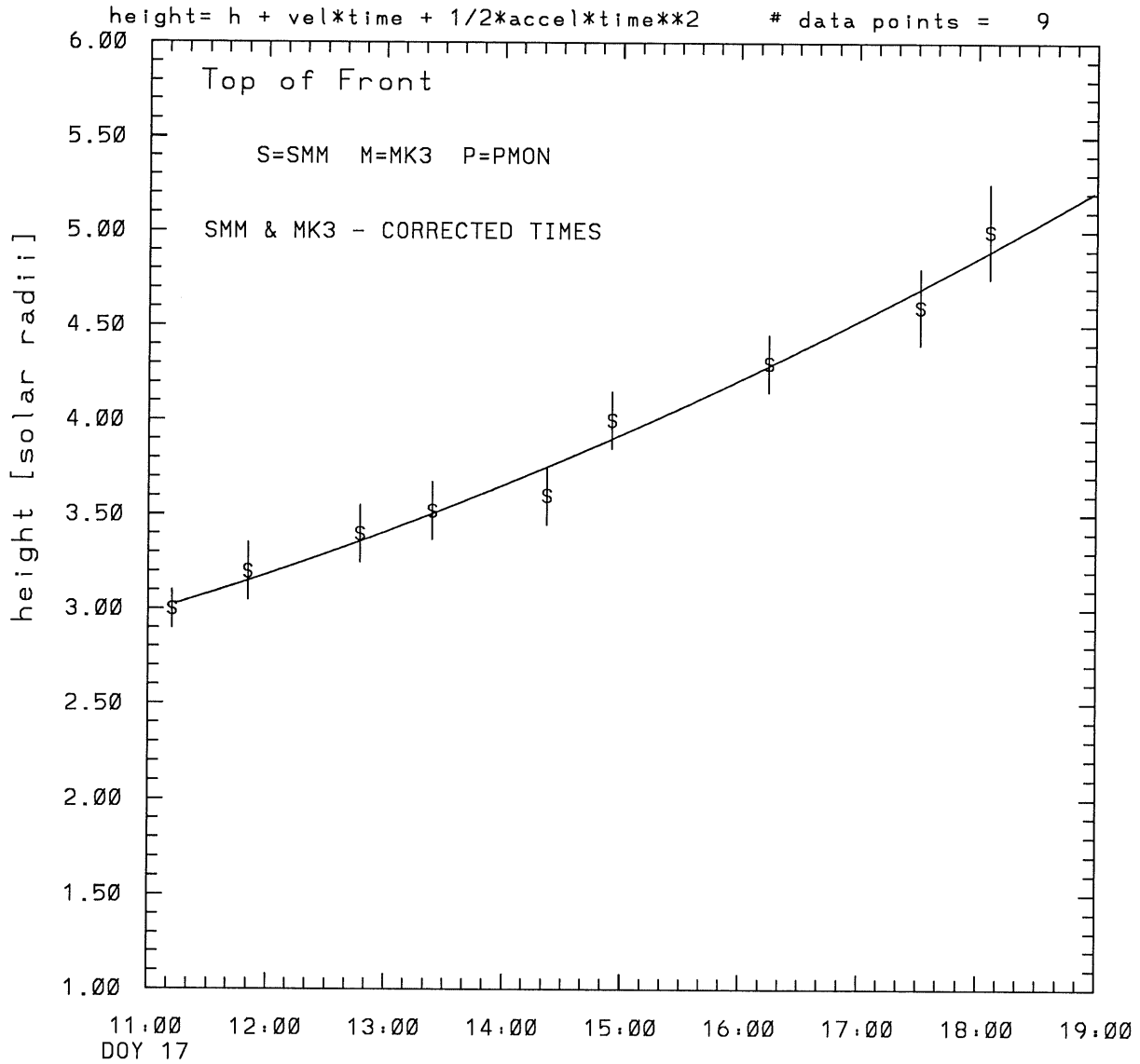


SMM C/P 1985 DOY 17 278 +/- 0 degrees



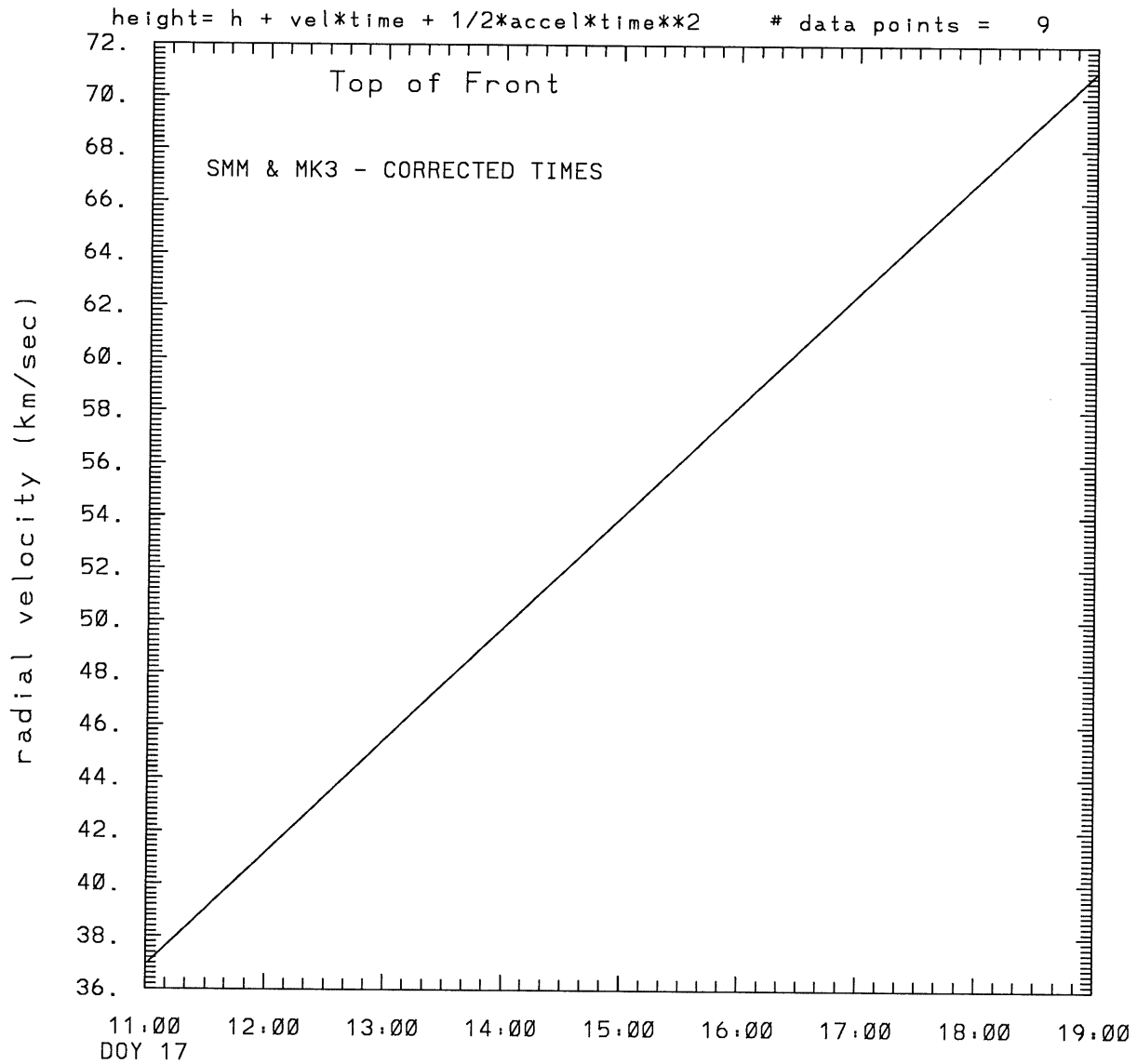
tstart=DOY 17 3:38 +/- 1.7 [min.]
radial velocity= 50. +/- 3. [km/sec]

SMM C/P 1985 DOY 17 278 +/- 0 degrees



tstart=DOY 17 2:21 from derivative=0
Event begins at 2.16 Solar Radii
radial acceleration = 0.0012 +/- 0.0007 [km/sec**2]

SMM C/P 1985 DOY 17 278 +/- 0 degrees



tstart=DOY 17 2:21 from derivative=0
Event begins at 2.16 Solar Radii
radial acceleration=0.118E-02 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in angle	error in angle	datatype
1985	17	11:12:12	3.00	+/- 0.10	278.0	+/- 1.0	SMM
1985	17	11:50:12	3.20	+/- 0.15	278.0	+/- 1.0	SMM
1985	17	12:47:12	3.40	+/- 0.15	278.0	+/- 1.0	SMM
1985	17	13:24:12	3.52	+/- 0.15	278.0	+/- 1.0	SMM
1985	17	14:22:12	3.60	+/- 0.15	278.0	+/- 1.0	SMM
1985	17	14:55: 9	4.00	+/- 0.15	278.0	+/- 1.0	SMM
1985	17	16:14:41	4.30	+/- 0.15	278.0	+/- 1.0	SMM
1985	17	17:31:12	4.60	+/- 0.20	278.0	+/- 1.0	SMM
1985	17	18: 6:12	5.00	+/- 0.25	278.0	+/- 1.0	SMM

Structure being measured:

Top of ~~Front~~ mound

OUTPUT:

START TIME:

Event began at t = 0 + -0.442E+03 +/- 0.174E+01 [minutes]

In more convenient units:

Event began at DOY 17 3:38 +/- 0.174E+01 [minutes]

Origin defined at DOY 17 11: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 50. +/- 3. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.292E+01 +/- 0.484E-01 [solar radii]
- c(2) = 0.435E-02 +/- 0.237E-03 [radii/min]
- c(2) = 0.505E+02 +/- 0.275E+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)= 0.71988E-01 [radii] see Bevington pg. 114
- error in c(2)= 0.28735E-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) = 278. +/- 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 11:12 = 0.000E+00 km/sec

The TOTAL velocity at 11:12 = 50. km/sec

The TANGENTIAL velocity at 11:50 = 0.000E+00 km/sec

The TOTAL velocity at 11:50 = 50. km/sec

The TANGENTIAL velocity at 12:47 = 0.000E+00 km/sec

The TOTAL velocity at 12:47 = 50. km/sec

The TANGENTIAL velocity at 13:24 = 0.000E+00 km/sec

The TOTAL velocity at 13:24 = 50. km/sec

The TANGENTIAL velocity at 14:22 = 0.000E+00 km/sec

The TOTAL velocity at 14:22 = 50. km/sec

The TANGENTIAL velocity at 14:55 = 0.000E+00 km/sec

The TOTAL velocity at 14:55 = 50. km/sec

The TANGENTIAL velocity at 16:14 = 0.000E+00 km/sec

The TOTAL velocity at 16:14 = 50. km/sec

The TANGENTIAL velocity at 17:31 = 0.000E+00 km/sec

The TOTAL velocity at 17:31 = 50. km/sec

The TANGENTIAL velocity at 18: 6 = 0.000E+00 km/sec

The TOTAL velocity at 18: 6 = 50. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.67

Standard Deviation in start time measurement = 0.138E+03

Error in time = 0.72173E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.834E-02

Reduced Chi Squared = 0.971E-01

Chi Squared = 0.679E+00

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.987E+00

The probability that no LINEAR correlation exists between the variables = 0.7303E-06

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

This is a 2 order run

INPUT:

year	doy	time	radii	radius	error in	angle	angle	datatype
1985	17	11:12:12	3.00	+/- 0.10	278.0	+/- 1.0	SMM	
1985	17	11:50:12	3.20	+/- 0.15	278.0	+/- 1.0	SMM	
1985	17	12:47:12	3.40	+/- 0.15	278.0	+/- 1.0	SMM	
1985	17	13:24:12	3.52	+/- 0.15	278.0	+/- 1.0	SMM	
1985	17	14:22:12	3.60	+/- 0.15	278.0	+/- 1.0	SMM	
1985	17	14:55: 9	4.00	+/- 0.15	278.0	+/- 1.0	SMM	
1985	17	16:14:41	4.30	+/- 0.15	278.0	+/- 1.0	SMM	
1985	17	17:31:12	4.60	+/- 0.20	278.0	+/- 1.0	SMM	
1985	17	18: 6:12	5.00	+/- 0.25	278.0	+/- 1.0	SMM	

Structure being measured:
Top of Front

OUTPUT:

START TIME:

tstart=DOY 17 2:21 from derivative = 0
Event begins at 2.16 Solar Radii
Origin defined at DOY 17 11: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.118E-02 +/- 0.685E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.298E+01 +/- 0.548E-01 [solar radii]
c(2) = 0.318E-02 +/- 0.709E-03 [radii/min]
c(2) = 0.369E+02 +/- 0.823E+01 [km/sec]
c(3) = 0.306E-05 +/- 0.177E-05 [radii/min**2]
c(3) = 0.118E-02 +/- 0.685E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.85510E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.96718E-02 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.93193E-03 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.12411E-03 [radii/min] Bevington pg 154 (8-28)

Approximate error in c(3) = 0.20278E-05 [radii/min**] Bevington pg 154 (8-30)

Exact error in c(3) = 0.32253E-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) = 278. +/- 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 11:12 = 0.000E+00 km/sec

The TOTAL velocity at 11:12 = 38. km/sec

The TANGENTIAL velocity at 11:50 = 0.000E+00 km/sec

The TOTAL velocity at 11:50 = 40. km/sec

The TANGENTIAL velocity at 12:47 = 0.000E+00 km/sec

The TOTAL velocity at 12:47 = 45. km/sec

The TANGENTIAL velocity at 13:24 = 0.000E+00 km/sec

The TOTAL velocity at 13:24 = 47. km/sec

The TANGENTIAL velocity at 14:22 = 0.000E+00 km/sec

The TOTAL velocity at 14:22 = 51. km/sec

The TANGENTIAL velocity at 14:55 = 0.000E+00 km/sec

The TOTAL velocity at 14:55 = 54. km/sec

The TANGENTIAL velocity at 16:14 = 0.000E+00 km/sec

The TOTAL velocity at 16:14 = 59. km/sec

The TANGENTIAL velocity at 17:31 = 0.000E+00 km/sec

The TOTAL velocity at 17:31 = 65. km/sec

The TANGENTIAL velocity at 18: 6 = 0.000E+00 km/sec

The TOTAL velocity at 18: 6 = 67. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.67

Standard Deviation in start time measurement = 0.138E+03

Value of reduced Chi Squared returned from nllst2 = 0.668E-02

Reduced Chi Squared = 0.599E-01

Chi Squared = 0.359E+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 = 0.9917E+00

The correlation between the data and the time**2 term = 0.8543E+00

The correlation between the data and the complete equation of motion = 0.9825E+00

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