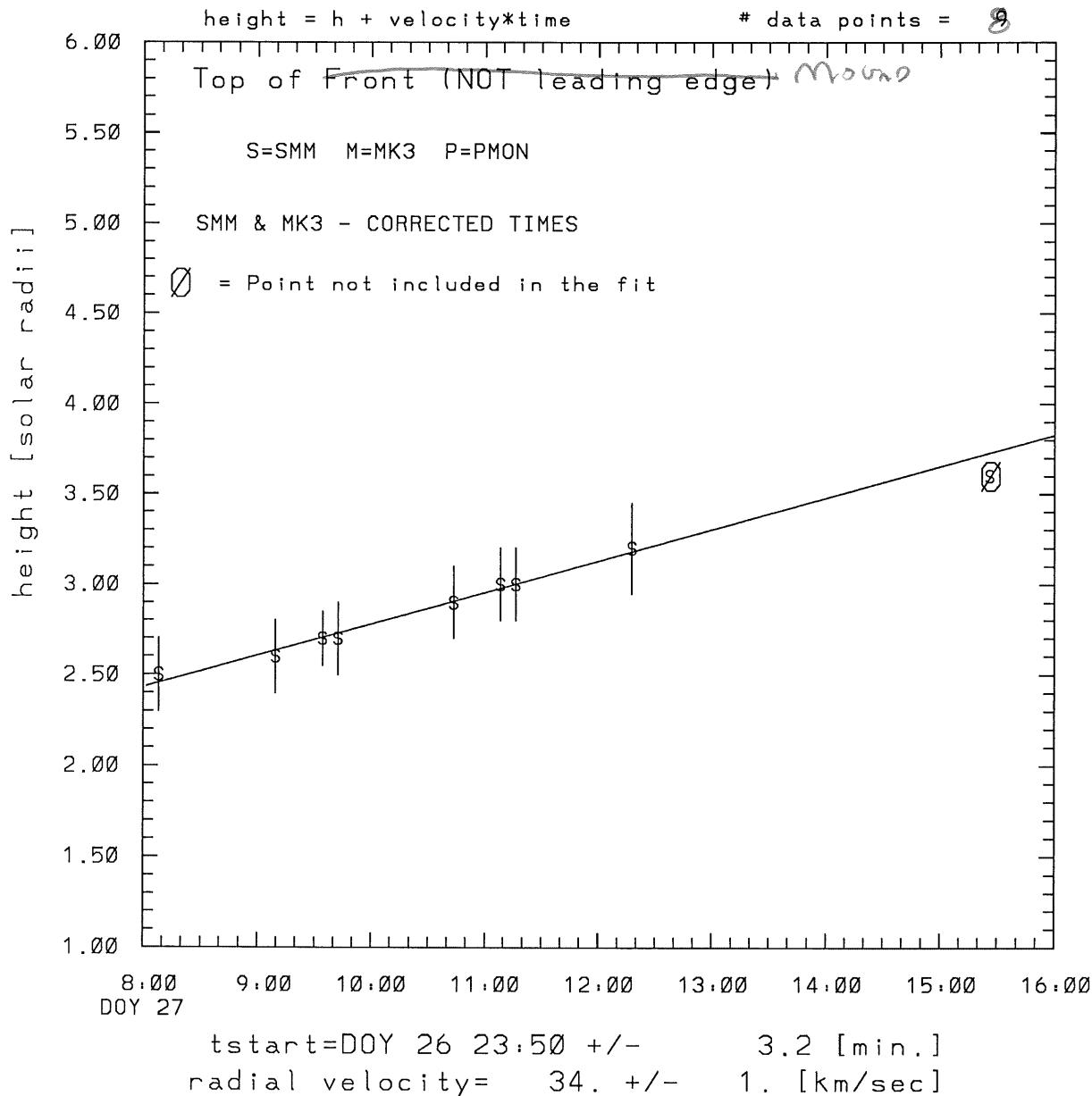
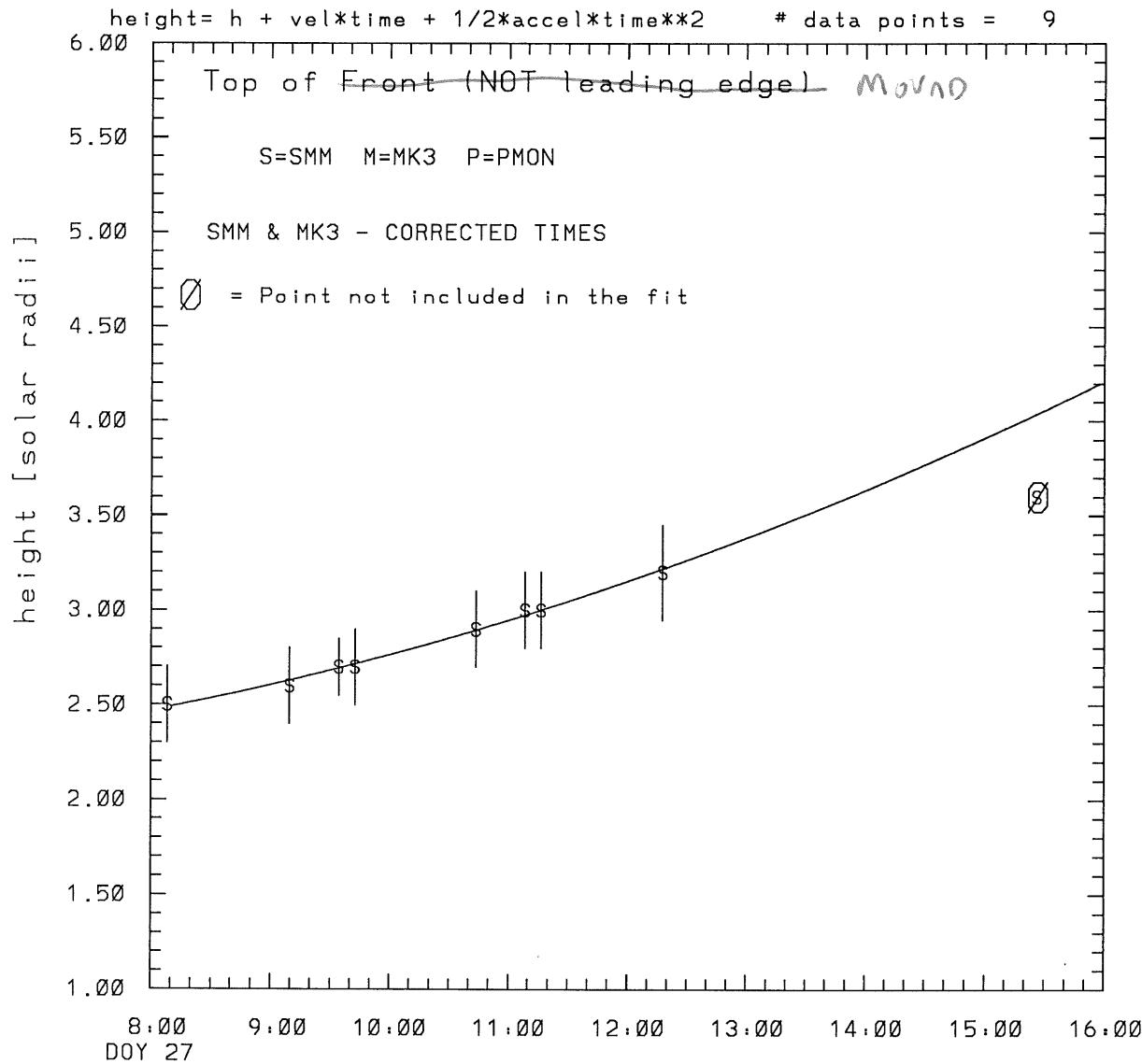


SMM C/P 1988 DOY 27 120 +/- 0 degrees

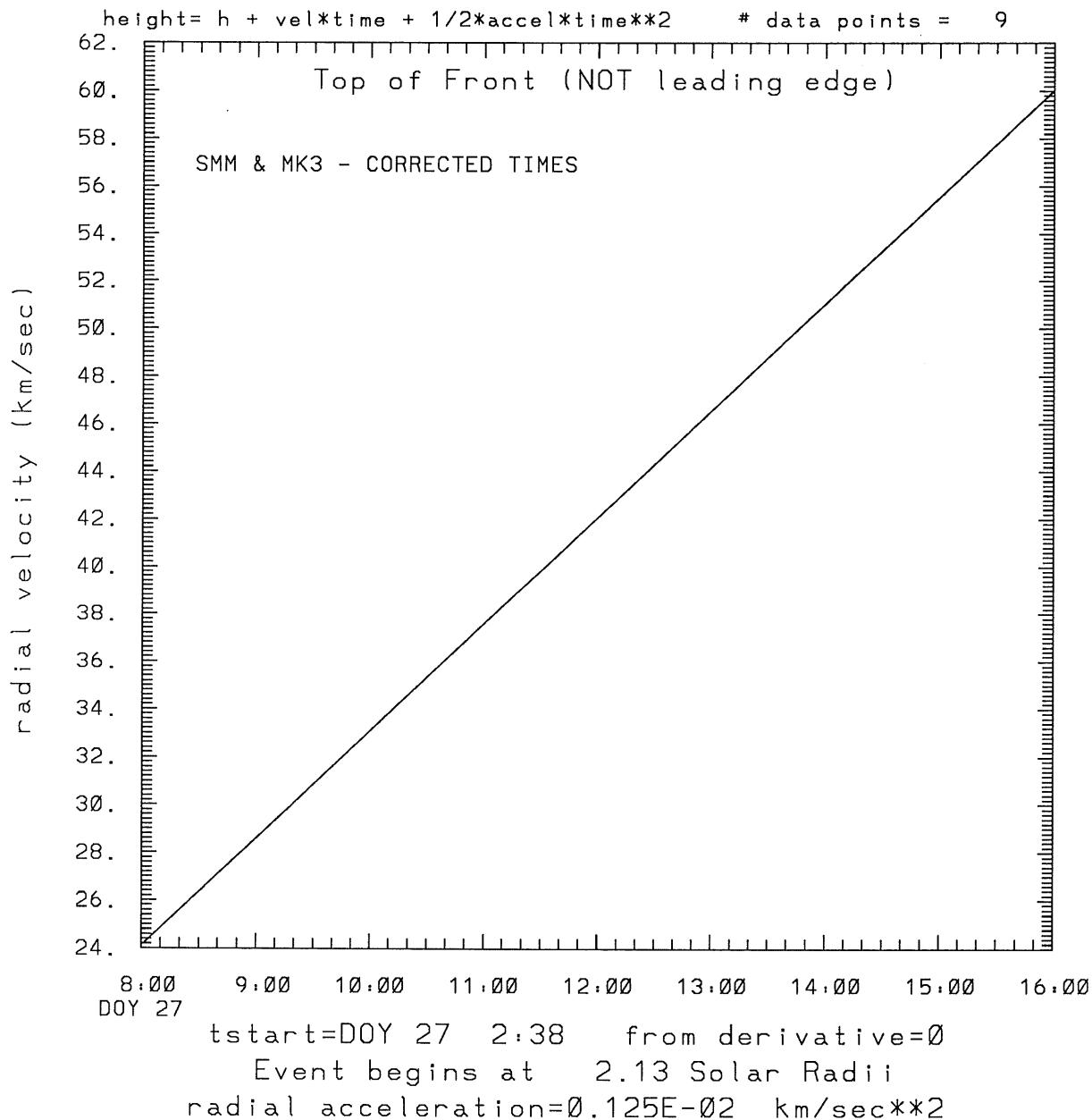


SMM C/P 1988 DOY 27 120 +/- 0 degrees



tstart=DOY 27 2:38 from derivative=0
Event begins at 2.13 Solar Radii
radial acceleration= 0.0012 +/- 0.0004 [km/sec**2]

SMM C/P 1988 DOY 27 120 +/- 0 degrees



This is a 1 order run

INPUT:

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1988	27	8: 8:15	2.50	+/- 0.20	120.0	+/- 0.5	SMM
1988	27	9: 9:23	2.60	+/- 0.20	120.0	+/- 0.5	SMM
1988	27	9:34:11	2.70	+/- 0.15	120.0	+/- 0.5	SMM
1988	27	9:42:25	2.70	+/- 0.20	120.0	+/- 0.5	SMM
1988	27	10:43:33	2.90	+/- 0.20	120.0	+/- 0.5	SMM
1988	27	11: 8:21	3.00	+/- 0.20	120.0	+/- 0.5	SMM
1988	27	11:16:36	3.00	+/- 0.20	120.0	+/- 0.5	SMM
1988	27	12:17:44	3.20	+/- 0.25	120.0	+/- 0.5	SMM
1988	27	15:26:11	3.60	-----	120.00	+/- -----	SMM THIS POINT WASN'T USED IN THE FIT.

Structure being measured:

Top of Front (NOT leading edge) *Mound*

OUTPUT:

START TIME:

Event began at t = 0 + -0.492E+03 +/- 0.324E+01 [minutes]

In more convenient units:

Event began at DOY 26 23:50 +/- 0.324E+01 [minutes]

Origin defined at DOY 27 8: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 34. +/- 1. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.243E+01 +/- 0.173E-01 [solar radii]
c(2) = 0.291E-02 +/- 0.120E-03 [radii/min]
c(2) = 0.337E+02 +/- 0.139E+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)= 0.31757E-01 [radii] see Bevington pg. 114

error in c(2)= 0.15243E-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) = 120. +/- 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 8: 8 = 0. km/sec

The TOTAL velocity at 8: 8 = 34. km/sec

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

The TOTAL velocity at 9: 9 = 34. km/sec

The TANGENTIAL velocity at 9:34 = 0. km/sec

The TOTAL velocity at 9:34 = 34. km/sec

The TANGENTIAL velocity at 9:42 = 0. km/sec

The TOTAL velocity at 9:42 = 34. km/sec

The TANGENTIAL velocity at 10:43 = 0. km/sec

The TOTAL velocity at 10:43 = 34. km/sec

The TANGENTIAL velocity at 11: 8 = 0. km/sec

The TOTAL velocity at 11: 8 = 34. km/sec

The TANGENTIAL velocity at 11:16 = 0. km/sec

The TOTAL velocity at 11:16 = 34. km/sec

The TANGENTIAL velocity at 12:17 = 0. km/sec

The TOTAL velocity at 12:17 = 34. km/sec

The TANGENTIAL velocity at 15:26 = 0. km/sec

The TOTAL velocity at 15:26 = 34. 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 = 0.121E+03

Error in time = 0.50304E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.631E-03

Reduced Chi Squared = 0.232E-01

Chi Squared = 0.163E+00

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.994E+00

The probability that no LINEAR correlation exists between the variables = 0.4355E-07

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

This is a 2 order run

INPUT:

year	doy	time	radii	radius	error in radii	angle	error in angle	datatype
1988	27	8: 8:15	2.50	+/- 0.20	120.0	+/- 0.5	SMM	
1988	27	9: 9:23	2.60	+/- 0.20	120.0	+/- 0.5	SMM	
1988	27	9:34:11	2.70	+/- 0.15	120.0	+/- 0.5	SMM	
1988	27	9:42:25	2.70	+/- 0.20	120.0	+/- 0.5	SMM	
1988	27	10:43:33	2.90	+/- 0.20	120.0	+/- 0.5	SMM	
1988	27	11: 8:21	3.00	+/- 0.20	120.0	+/- 0.5	SMM	
1988	27	11:16:36	3.00	+/- 0.20	120.0	+/- 0.5	SMM	
1988	27	12:17:44	3.20	+/- 0.25	120.0	+/- 0.5	SMM	
1988	27	15:26:11	3.60	-----	120.00	+/- -----	SMM THIS POINT WASN'T USED IN THE FIT.	

Structure being measured:

Top of Front (NOT leading edge) Mountain

OUTPUT:

START TIME:

tstart=DOY 27 2:38 from derivative = 0

Event begins at 2.13 Solar Radii

Origin defined at DOY 27 8: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.125E-02 +/- 0.445E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.247E+01 +/- 0.185E-01 [solar radii]
c(2) = 0.208E-02 +/- 0.309E-03 [radii/min]
c(2) = 0.241E+02 +/- 0.358E+01 [km/sec]
c(3) = 0.322E-05 +/- 0.115E-05 [radii/min**2]
c(3) = 0.125E-02 +/- 0.445E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.15526E+00 [radii] Bevington pg 154 (8-30)

Exact error in c(1) = 0.58013E-02 [radii] Bevington pg 154 (8-28)

Approximate error in c(2) = 0.16172E-02 [radii/min] Bevington pg 154 (8-30)

Exact error in c(2) = 0.88028E-04 [radii/min] Bevington pg 154 (8-28)

Approximate error in c(3) = 0.33451E-05 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.32176E-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) = 120. +/- 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 8: 8 = 0. km/sec

The TOTAL velocity at 8: 8 = 25. km/sec

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

The TOTAL velocity at 9: 9 = 29. km/sec

The TANGENTIAL velocity at 9:34 = 0. km/sec

The TOTAL velocity at 9:34 = 31. km/sec

The TANGENTIAL velocity at 9:42 = 0. km/sec

The TOTAL velocity at 9:42 = 32. km/sec

The TANGENTIAL velocity at 10:43 = 0. km/sec

The TOTAL velocity at 10:43 = 36. km/sec

The TANGENTIAL velocity at 11: 8 = 0. km/sec

The TOTAL velocity at 11: 8 = 38. km/sec

The TANGENTIAL velocity at 11:16 = 0. km/sec

The TOTAL velocity at 11:16 = 39. km/sec

The TANGENTIAL velocity at 12:17 = 0. km/sec

The TOTAL velocity at 12:17 = 43. km/sec

The TANGENTIAL velocity at 15:26 = 0. km/sec

The TOTAL velocity at 15:26 = 57. 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 = 0.121E+03

(

Value of reduced Chi Squared returned from nllst2 = 0.339E-03

Reduced Chi Squared = 0.289E+00

Chi Squared = 0.174E+01

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 = 0.6749E+00

The correlation between the data and the $time^{**2}$ term = 0.4615E+00

The correlation between the data and the complete equation of motion = 0.1099E+01

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