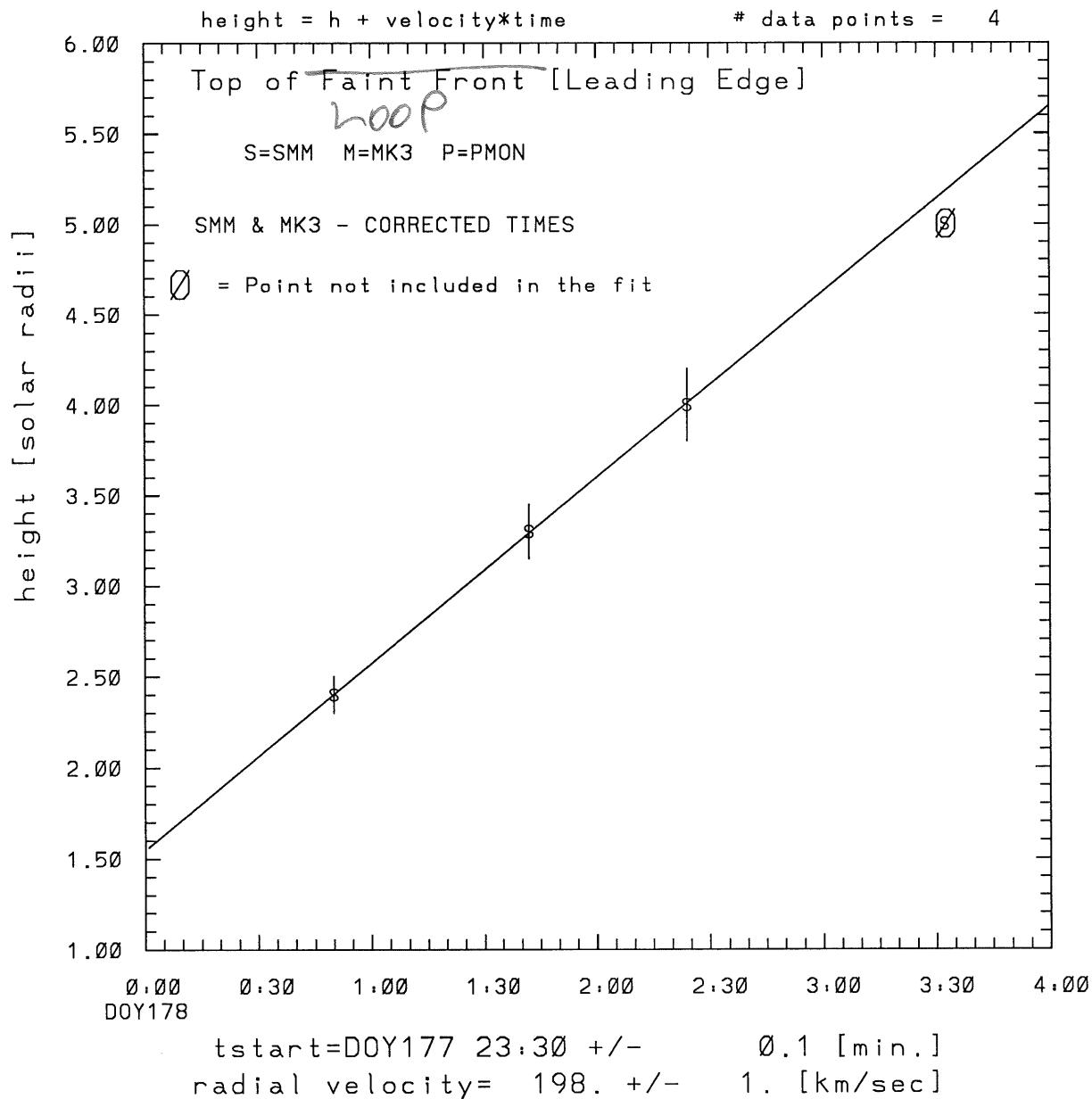
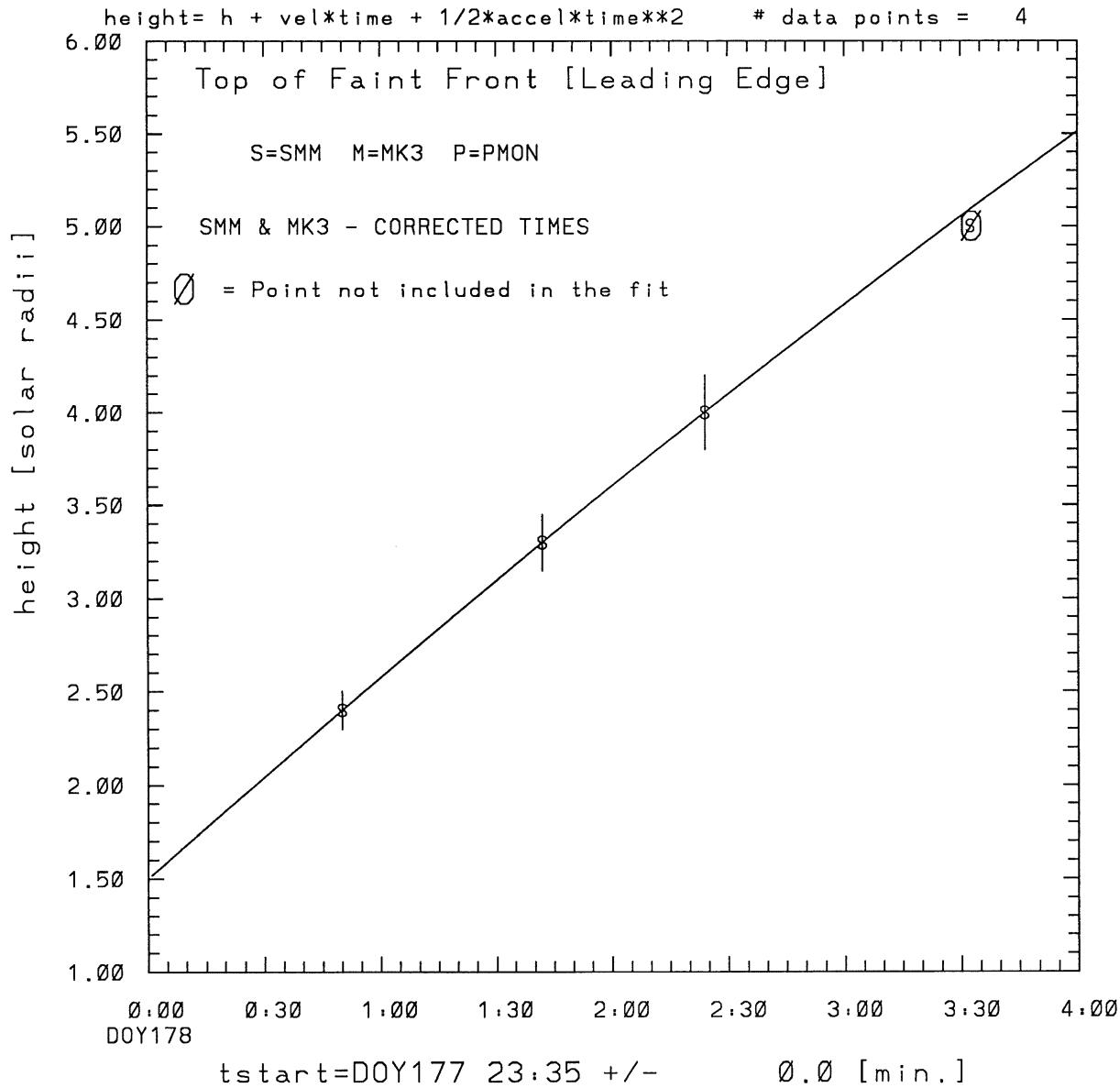


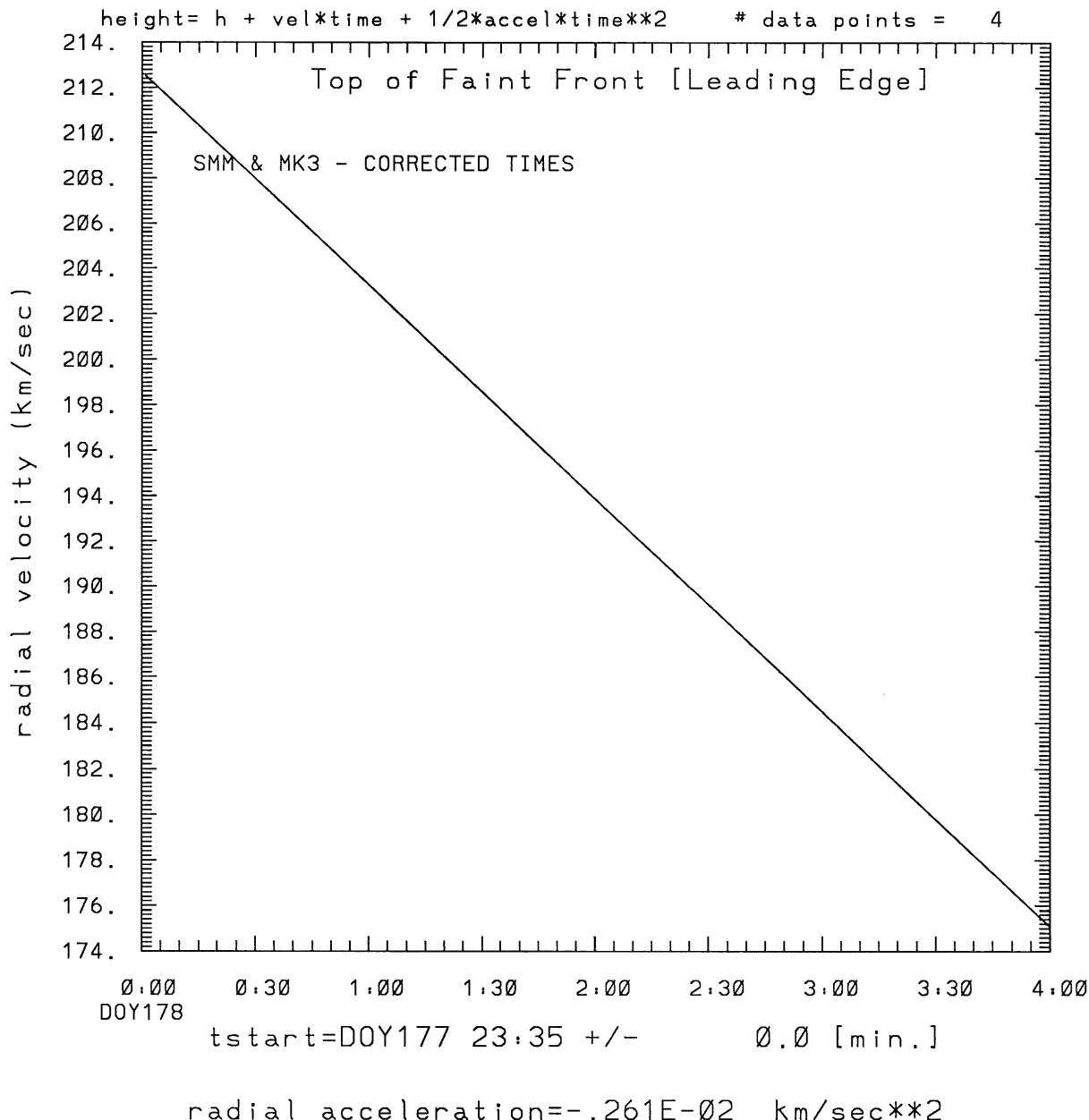
SMM C/P 1986 DOY178 273 +/- 0 degrees



SMM C/P 1986 DOY178 273 +/- 0 degrees



SMM C/P 1986 DOY178 273 +/- 0 degrees



This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in angle	error in angle	datatype
1986	178	0:50: 1	2.40	+/- 0.10	273.0	+/- 0.5	SMM
1986	178	1:42: 1	3.30	+/- 0.15	273.0	+/- 0.5	SMM
1986	178	2:24: 0	4.00	+/- 0.20	273.0	+/- 1.0	SMM
1986	178	3:32:29	5.00	-----	273.00	+/- -----	SMM THIS POINT WASN'T USED IN THE FIT.

Structure being measured:

Top of Faint Front [Leading Edge]

OUTPUT:

START TIME:

Event began at t = 0 + -0.320E+02 +/- 0.135E+00 [minutes]

In more convenient units:

Event began at DOY 177 23:30 +/- 0.135E+00 [minutes]

Origin defined at DOY178 0: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 198. +/- 1. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.155E+01 +/- 0.820E-02 [solar radii]

c(2) = 0.171E-01 +/- 0.962E-04 [radii/min]

c(2) = 0.198E+03 +/- 0.112E+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)= 0.15050E+00 [radii] see Bevington pg. 114

error in c(2)= 0.10723E-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) = 273. +/- 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 0:50 = 0.000E+00 km/sec

The TOTAL velocity at 0:50 = 198. km/sec

The TANGENTIAL velocity at 1:42 = 0.000E+00 km/sec

The TOTAL velocity at 1:42 = 198. km/sec

The TANGENTIAL velocity at 2:24 = 0.000E+00 km/sec

The TOTAL velocity at 2:24 = 198. km/sec

The TANGENTIAL velocity at 3:32 = 0.000E+00 km/sec

The TOTAL velocity at 3:32 = 198. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 1.10

Standard Deviation in start time measurement = 0.595E+02

Error in time = 0.10548E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.465E-04

Reduced Chi Squared = 0.649E-01

Chi Squared = 0.130E+00

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.999E+00

The probability that no LINEAR correlation exists between the variables = 0.9788E-03

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
1986	178	0:50: 1	2.40	+/- 0.10	273.0	+/- 0.5	SMM	
1986	178	1:42: 1	3.30	+/- 0.15	273.0	+/- 0.5	SMM	
1986	178	2:24: 0	4.00	+/- 0.20	273.0	+/- 1.0	SMM	
1986	178	3:32:29	5.00	-----	273.00	+/- -----	SMM THIS POINT WASN'T USED IN THE FIT.	

Structure being measured:

Top of Faint Front [Leading Edge]

OUTPUT:

START TIME:

Event began at t = 0 + -0.270E+02 +/- 0.102E-02 [minutes]

In more convenient units:

Event began at DOY 177 23:35 +/- 0.102E-02 [minutes]

Origin defined at DOY178 0: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = -0.261E-02 +/- 0.129E-06 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.150E+01 +/- 0.241E-05 [solar radii]

c(2) = 0.183E-01 +/- 0.616E-07 [radii/min]

c(2) = 0.213E+03 +/- 0.714E-03 [km/sec]

c(3) = -0.675E-05 +/- 0.334E-09 [radii/min**2]

c(3) = -0.261E-02 +/- 0.129E-06 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.23411E+00 [radii] Bevington pg 154 (8-30)

Exact error in c(1) = 0.18353E-05 [radii] Bevington pg 154 (8-28)

Approximate error in c(2) = 0.40156E-02 [radii/min] Bevington pg 154 (8-30)

Exact error in c(2) = 0.47721E-07 [radii/min] Bevington pg 154 (8-28)

Approximate error in c(3) = 0.14876E-04 [radii/min**] Bevington pg 154 (8-30)

Exact error in c(3) = 0.25434E-09 [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) = 273. +/- 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 0:50 = 0.000E+00 km/sec

The TOTAL velocity at 0:50 = 205. km/sec

The TANGENTIAL velocity at 1:42 = 0.000E+00 km/sec

The TOTAL velocity at 1:42 = 197. km/sec

The TANGENTIAL velocity at 2:24 = 0.000E+00 km/sec

The TOTAL velocity at 2:24 = 190. km/sec

The TANGENTIAL velocity at 3:32 = 0.000E+00 km/sec

The TOTAL velocity at 3:32 = 179. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 1.10

Standard Deviation in start time measurement = 0.595E+02

Value of reduced Chi Squared returned from nllst2 = 0.341E-12

Reduced Chi Squared = 0.330E-01

Chi Squared = 0.330E-01

The probability for exceeding chi square = 0.100E+01

For a second order fit 3 correlation coefficients are given:

(Using equation of motion: $r = a + bt + ct^2$)

The correlation between the data and the term linear in time = 0.1025E+01

The correlation between the data and the time 2 term = 0.8610E+00

The correlation between the data and the complete equation of motion = 0.1018E+01

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