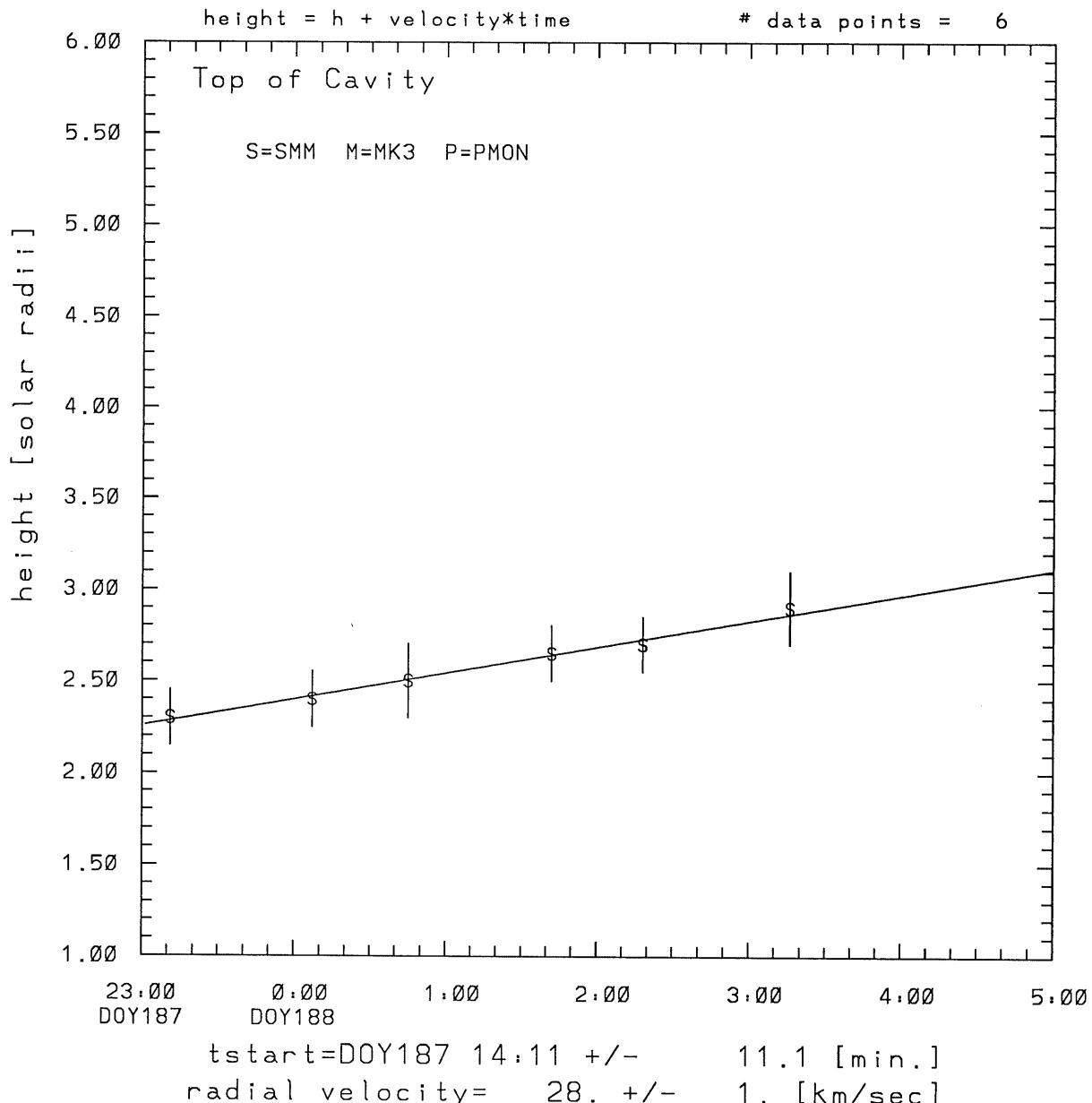
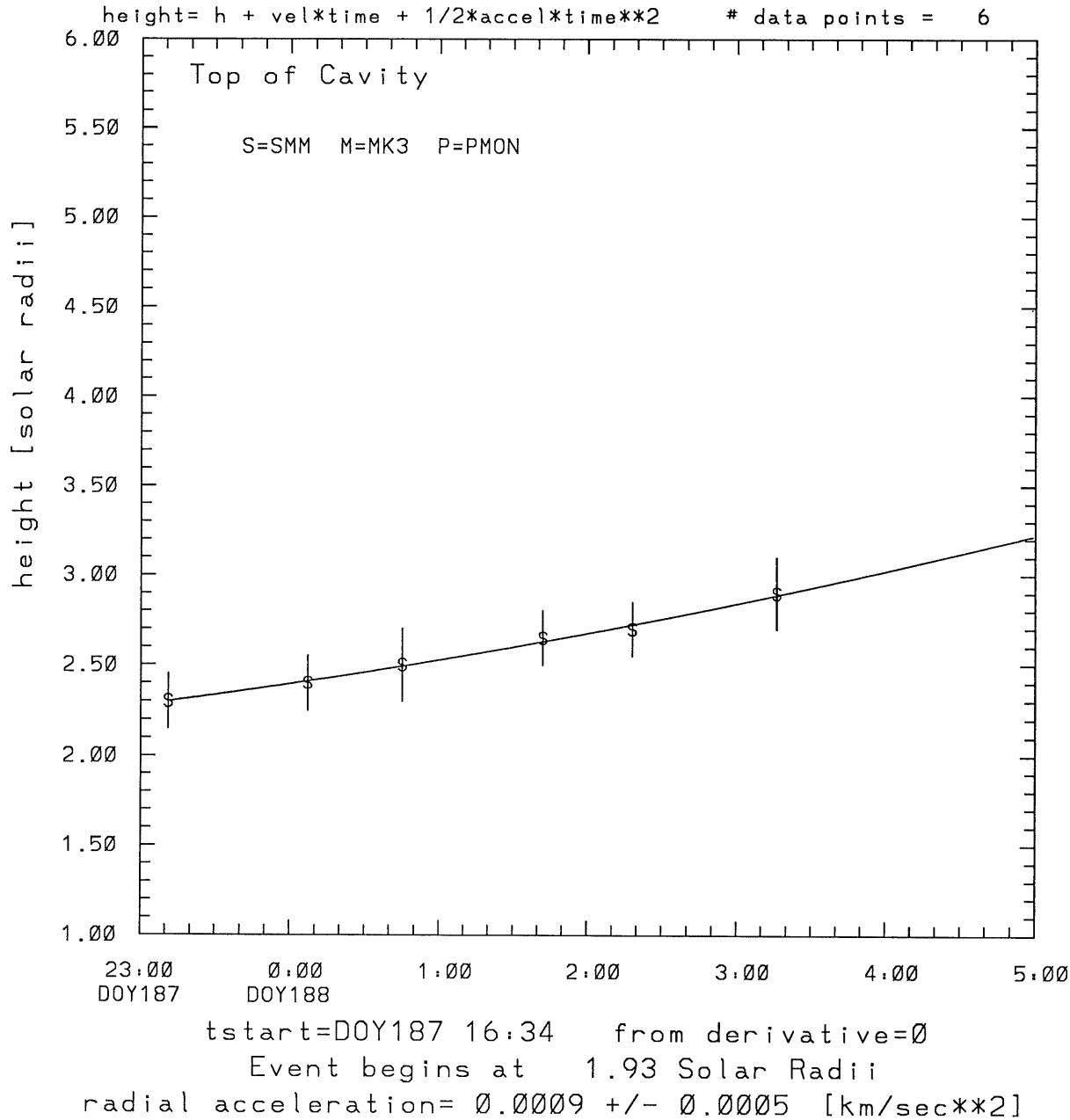




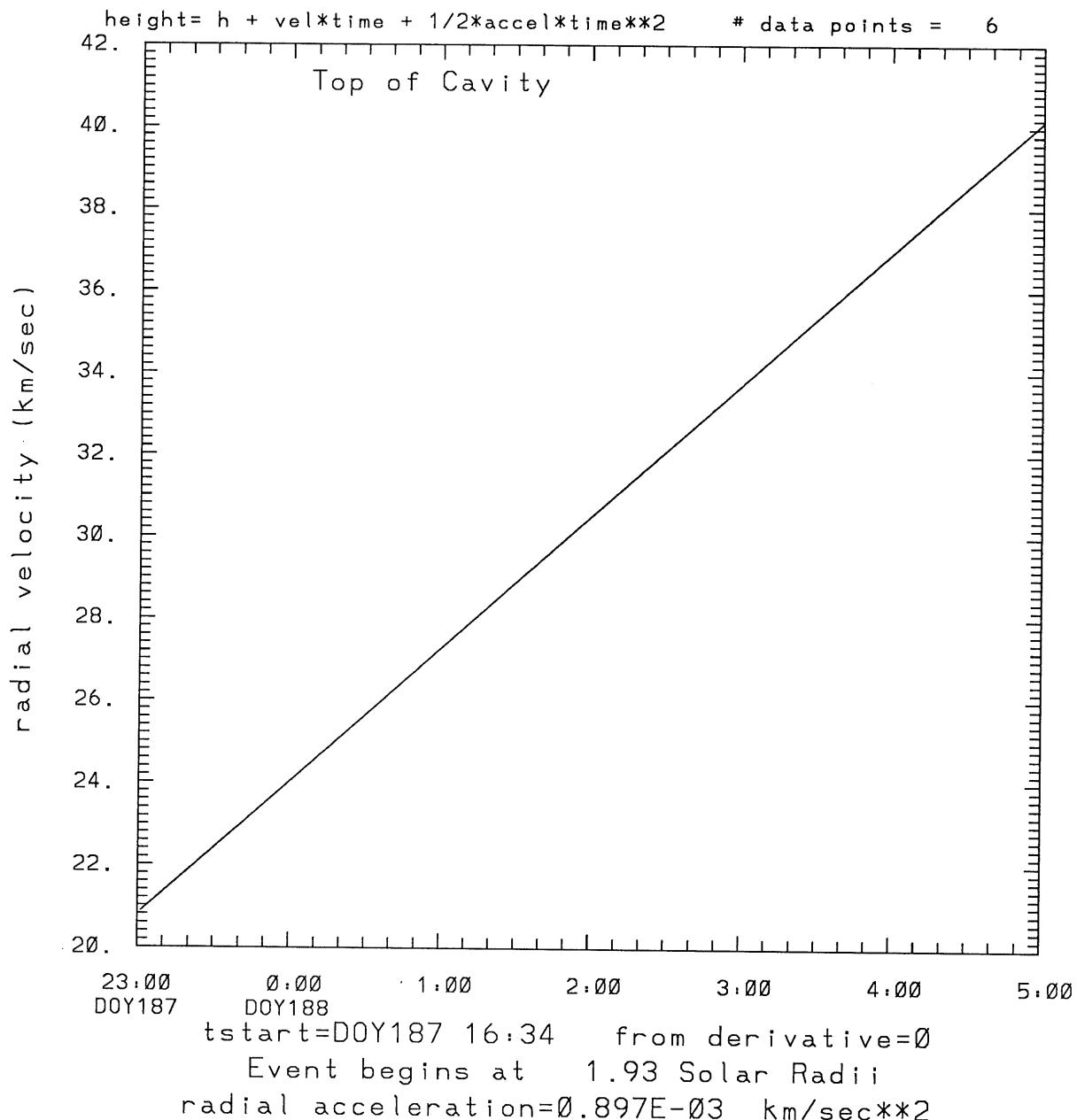
SMM C/P 1984 DOY187 5θ +/- θ degrees



SMM C/P 1984 DOY187 50 +/- 0 degrees



SMM C/P 1984 DOY187 50 +/- 0 degrees



This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in radii	error in radius	angle	angle	datatype
1984	187	23:11: 7	2.30	+/- 0.15	50.0	+/- 0.5	50.0	+/- 0.5	SMM
1984	188	0: 7: 8	2.40	+/- 0.15	50.0	+/- 0.5	50.0	+/- 0.5	SMM
1984	188	0:45: 8	2.50	+/- 0.20	50.0	+/- 0.5	50.0	+/- 0.5	SMM
1984	188	1:42: 7	2.65	+/- 0.15	50.0	+/- 0.5	50.0	+/- 0.5	SMM
1984	188	2:18: 7	2.70	+/- 0.15	50.0	+/- 0.5	50.0	+/- 0.5	SMM
1984	188	3:16: 7	2.90	+/- 0.20	50.0	+/- 0.5	50.0	+/- 0.5	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

Event began at t = 0 + -0.529E+03 +/- 0.111E+02 [minutes]

In more convenient units:

Event began at DOY 187 14:11 +/- 0.111E+02 [minutes]

Origin defined at DOY187 23: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 28. +/- 1. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.226E+01 +/- 0.167E-01 [solar radii]
c(2) = 0.237E-02 +/- 0.112E-03 [radii/min]
c(2) = 0.275E+02 +/- 0.130E+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)= 0.20021E-01 [radii] see Bevington pg. 114

error in c(2)= 0.12799E-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) = 50. +/- 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 23:11 = 0.000E+00 km/sec

The TOTAL velocity at 23:11 = 28. km/sec

The TANGENTIAL velocity at 0:7 = 0.000E+00 km/sec

The TOTAL velocity at 0:7 = 28. km/sec

The TANGENTIAL velocity at 0:45 = 0.000E+00 km/sec

The TOTAL velocity at 0:45 = 28. km/sec

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

The TOTAL velocity at 1:42 = 28. km/sec

The TANGENTIAL velocity at 2:18 = 0.000E+00 km/sec

The TOTAL velocity at 2:18 = 28. km/sec

The TANGENTIAL velocity at 3:16 = 0.000E+00 km/sec

The TOTAL velocity at 3:16 = 28. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.22

Standard Deviation in start time measurement = 0.819E+02

Error in time = 0.21620E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.484E-03

Reduced Chi Squared = 0.309E-02

Chi Squared = 0.124E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.995E+00

The probability that no LINEAR correlation exists between the variables = 0.4152E-04

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

This is a 2 order run

INPUT:

year	doy	time	radii	radius	error in angle	error in angle	datatype
1984	187	23:11: 7	2.30	+/- 0.15	50.0	+/- 0.5	SMM
1984	188	0: 7: 8	2.40	+/- 0.15	50.0	+/- 0.5	SMM
1984	188	0:45: 8	2.50	+/- 0.20	50.0	+/- 0.5	SMM
1984	188	1:42: 7	2.65	+/- 0.15	50.0	+/- 0.5	SMM
1984	188	2:18: 7	2.70	+/- 0.15	50.0	+/- 0.5	SMM
1984	188	3:16: 7	2.90	+/- 0.20	50.0	+/- 0.5	SMM

Structure being measured:

Top of Cavity

OUTPUT:

START TIME:

tstart=DOY187 16:34 from derivative = 0

Event begins at 1.93 Solar Radii

Origin defined at DOY187 23: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.897E-03 +/- 0.518E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.228E+01 +/- 0.188E-01 [solar radii]
c(2) = 0.179E-02 +/- 0.349E-03 [radii/min]
c(2) = 0.208E+02 +/- 0.405E+01 [km/sec]
c(3) = 0.232E-05 +/- 0.134E-05 [radii/min**2]
c(3) = 0.897E-03 +/- 0.518E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.22200E-01 [radii] Bevington pg 154 (8-30)

Exact error in c(1) = 0.14630E-02 [radii] Bevington pg 154 (8-28)

Approximate error in c(2) = 0.38376E-03 [radii/min] Bevington pg 154 (8-30)

Exact error in c(2) = 0.72623E-04 [radii/min] Bevington pg 154 (8-28)

Approximate error in c(3) = 0.13857E-05 [radii/min**] Bevington pg 154 (8-30)

Exact error in c(3) = 0.30898E-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) = 50. +/- 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 23:11 = 0.000E+00 km/sec

The TOTAL velocity at 23:11 = 21. km/sec

The TANGENTIAL velocity at 0: 7 = 0.000E+00 km/sec

The TOTAL velocity at 0: 7 = 24. km/sec

The TANGENTIAL velocity at 0:45 = 0.000E+00 km/sec

The TOTAL velocity at 0:45 = 26. km/sec

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

The TOTAL velocity at 1:42 = 30. km/sec

The TANGENTIAL velocity at 2:18 = 0.000E+00 km/sec

The TOTAL velocity at 2:18 = 31. km/sec

The TANGENTIAL velocity at 3:16 = 0.000E+00 km/sec

The TOTAL velocity at 3:16 = 35. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.22

Standard Deviation in start time measurement = 0.819E+02

Value of reduced Chi Squared returned from nllst2 = 0.346E-03

Reduced Chi Squared = 0.188E-02

Chi Squared = 0.563E-02

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 = 0.9787E+00

The correlation between the data and the t^{**2} term = 0.9052E+00

The correlation between the data and the complete equation of motion = 0.9930E+00

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