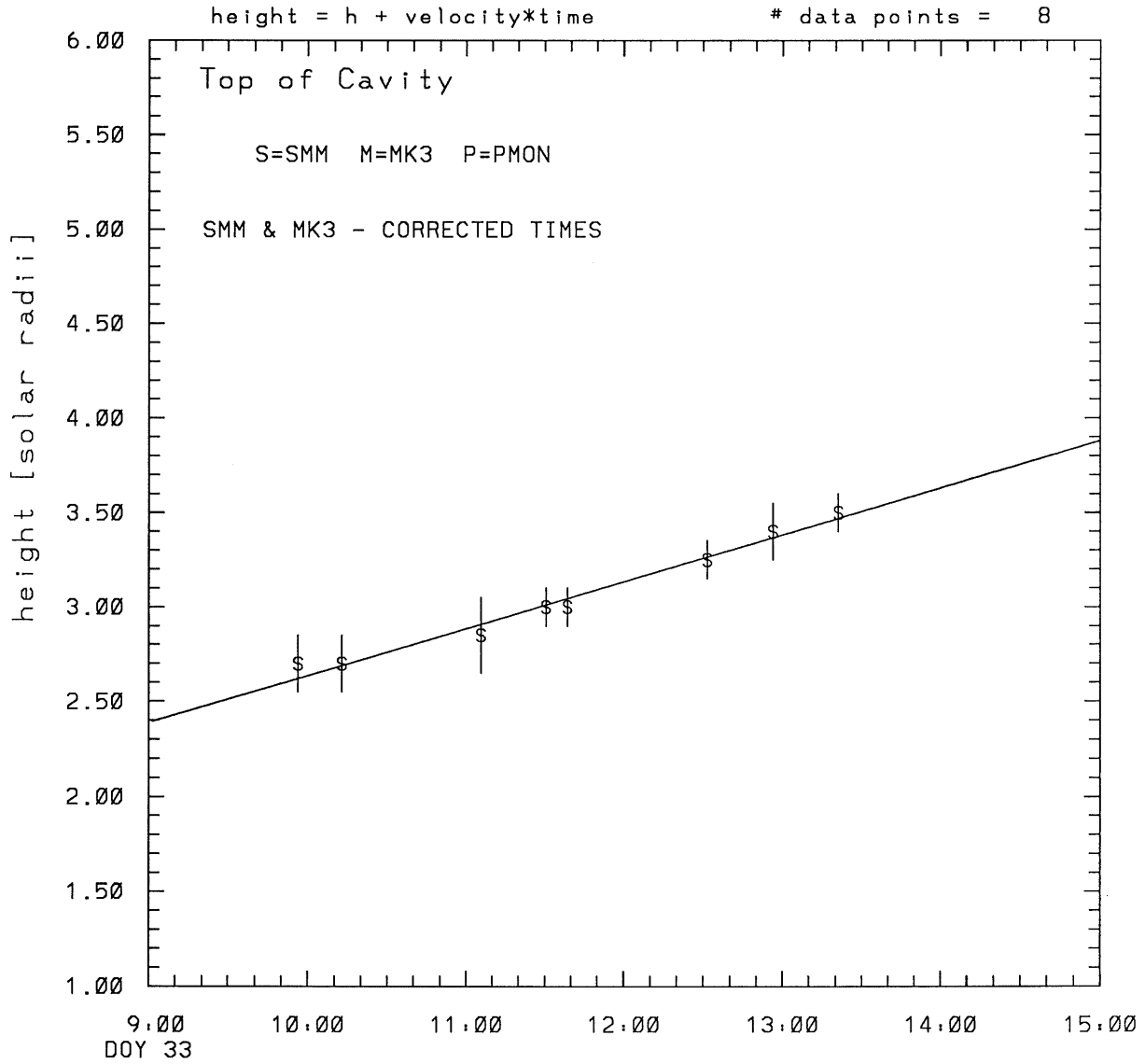
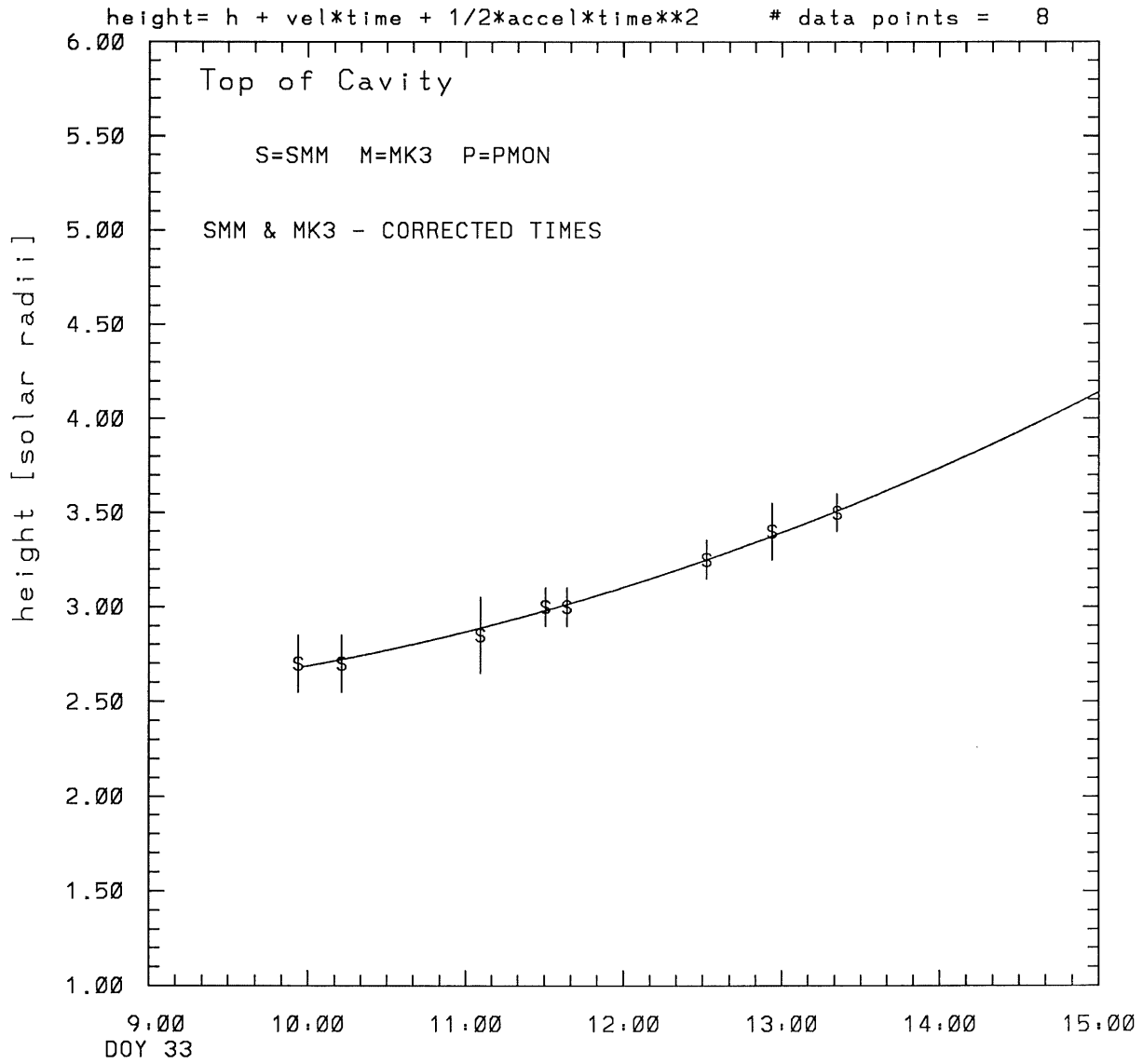


SMM C/P 1988 DOY 33 265 +/- 0 degrees



tstart=DOY 33 3:27 +/- 3.6 [min.]
radial velocity= 48. +/- 3. [km/sec]

SMM C/P 1988 DOY 33 265 +/- 0 degrees

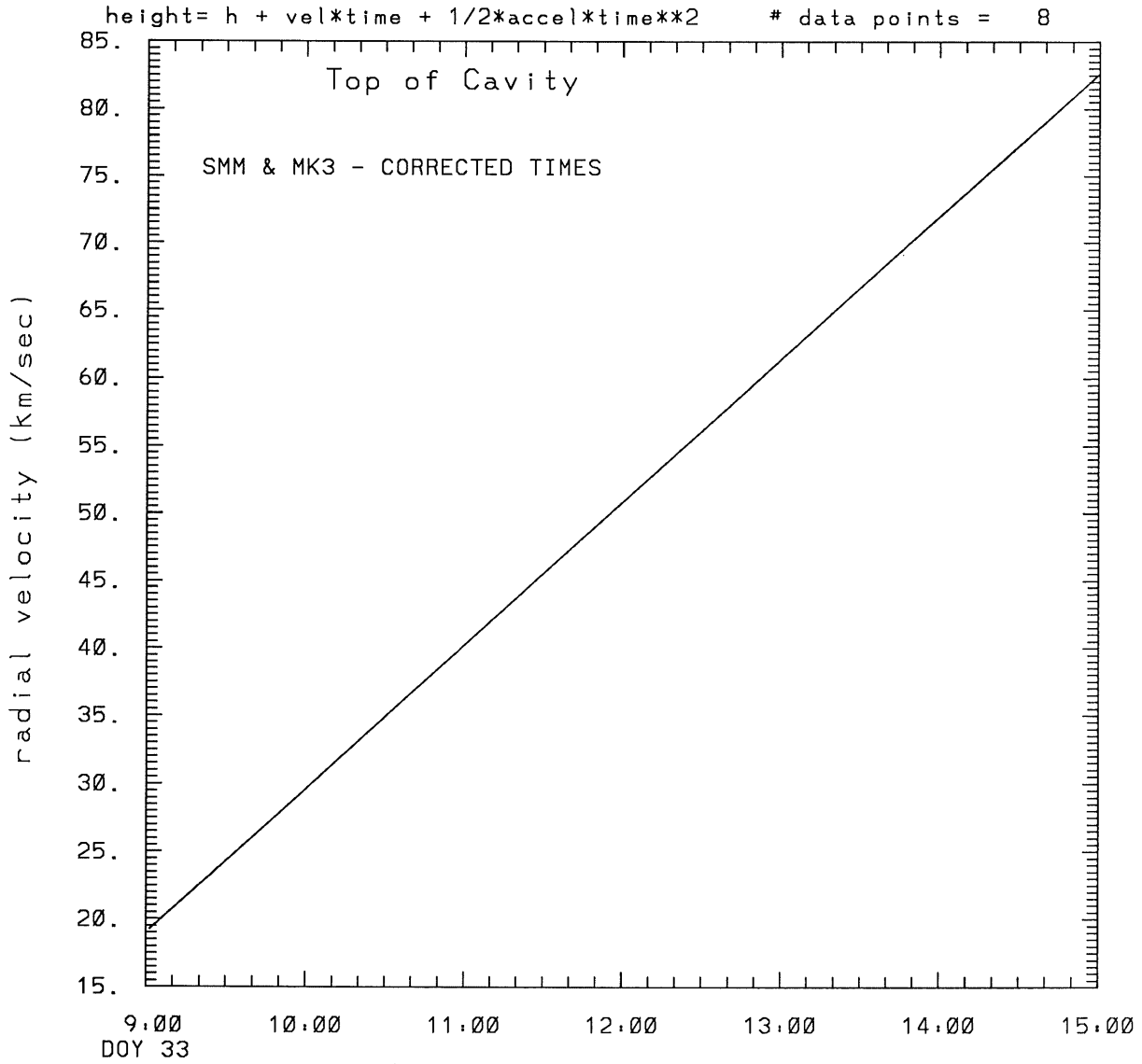


tstart=DOY 33 7:13 from derivative=0

Event begins at 2.47 Solar Radii

radial acceleration = 0.0029 ± 0.0007 [km/sec**2]

SMM C/P 1988 DOY 33 265 +/- 0 degrees



tstart=DOY 33 7:13 from derivative=0
Event begins at 2.47 Solar Radii
radial acceleration=0.294E-02 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	angle	error in angle	datatype
1988	33	9:56:21	2.70	+/- 0.15	265.0	+/- 1.0	SMM
1988	33	10:12:50	2.70	+/- 0.15	265.0	+/- 1.0	SMM
1988	33	11: 5:40	2.85	+/- 0.20	265.0	+/- 1.0	SMM
1988	33	11:30:26	3.00	+/- 0.10	265.0	+/- 1.0	SMM
1988	33	11:38:40	3.00	+/- 0.10	265.0	+/- 1.0	SMM
1988	33	12:31:36	3.25	+/- 0.10	265.0	+/- 1.0	SMM
1988	33	12:56:24	3.40	+/- 0.15	265.0	+/- 1.0	SMM
1988	33	13:21: 8	3.50	+/- 0.10	265.0	+/- 1.0	SMM

Structure being measured:
Top of Cavity

OUTPUT:

START TIME:

Event began at $t = 0 + -0.335E+03 +/- 0.362E+01$ [minutes]
In more convenient units:
Event began at DOY 33 3:27 +/- 0.362E+01 [minutes]

Origin defined at DOY 33 9: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 48. +/- 3. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.239E+01 +/- 0.401E-01 [solar radii]
c(2) = 0.415E-02 +/- 0.216E-03 [radii/min]
c(2) = 0.481E+02 +/- 0.250E+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)= 0.42987E-01 [radii] see Bevington pg. 114
error in c(2)= 0.24771E-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) = 265. +/- 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 9:56 = 0. km/sec

The TOTAL velocity at 9:56 = 48. km/sec

The TANGENTIAL velocity at 10:12 = 0. km/sec

The TOTAL velocity at 10:12 = 48. km/sec

The TANGENTIAL velocity at 11: 5 = 0. km/sec

The TOTAL velocity at 11: 5 = 48. km/sec

The TANGENTIAL velocity at 11:30 = 0. km/sec

The TOTAL velocity at 11:30 = 48. km/sec

The TANGENTIAL velocity at 11:38 = 0. km/sec

The TOTAL velocity at 11:38 = 48. km/sec

The TANGENTIAL velocity at 12:31 = 0. km/sec

The TOTAL velocity at 12:31 = 48. km/sec

The TANGENTIAL velocity at 12:56 = 0. km/sec

The TOTAL velocity at 12:56 = 48. km/sec

The TANGENTIAL velocity at 13:21 = 0. km/sec

The TOTAL velocity at 13:21 = 48. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.31

Standard Deviation in start time measurement = 0.692E+02

Error in time = 0.28651E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.152E-02

Reduced Chi Squared = 0.721E-02

Chi Squared = 0.433E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.989E+00

The probability that no LINEAR correlation exists between the variables = 0.2953E-05

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

This is a 2 order run

INPUT:

year	day	time	radii	error in radius	angle	error in angle	datatype
1988	33	9:56:21	2.70	+/- 0.15	265.0	+/- 1.0	SMM
1988	33	10:12:50	2.70	+/- 0.15	265.0	+/- 1.0	SMM
1988	33	11: 5:40	2.85	+/- 0.20	265.0	+/- 1.0	SMM
1988	33	11:30:26	3.00	+/- 0.10	265.0	+/- 1.0	SMM
1988	33	11:38:40	3.00	+/- 0.10	265.0	+/- 1.0	SMM
1988	33	12:31:36	3.25	+/- 0.10	265.0	+/- 1.0	SMM
1988	33	12:56:24	3.40	+/- 0.15	265.0	+/- 1.0	SMM
1988	33	13:21: 8	3.50	+/- 0.10	265.0	+/- 1.0	SMM

Structure being measured:
Top of Cavity

OUTPUT:

START TIME:

tstart=DOY 33 7:13 from derivative = 0
Event begins at 2.47 Solar Radii
Origin defined at DOY 33 9: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.294E-02 +/- 0.654E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.256E+01 +/- 0.440E-01 [solar radii]
- c(2) = 0.164E-02 +/- 0.569E-03 [radii/min]
- c(2) = 0.190E+02 +/- 0.660E+01 [km/sec]
- c(3) = 0.762E-05 +/- 0.169E-05 [radii/min**2]
- c(3) = 0.294E-02 +/- 0.654E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

- Approximate error in c(1) = 0.52436E-01 [radii] Bevington pg 154 (8-30)
- Exact error in c(1) = 0.13929E-01 [radii] Bevington pg 154 (8-28)
- Approximate error in c(2) = 0.74483E-03 [radii/min] Bevington pg 154 (8-30)
- Exact error in c(2) = 0.15537E-03 [radii/min] Bevington pg 154 (8-28)
- Approximate error in c(3) = 0.23187E-05 [radii/min**] Bevington pg 154 (8-30)

Exact error in c(3) = 0.45283E-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) = 265. +/- 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 9:56 = 0. km/sec

The TOTAL velocity at 9:56 = 29. km/sec

The TANGENTIAL velocity at 10:12 = 0. km/sec

The TOTAL velocity at 10:12 = 32. km/sec

The TANGENTIAL velocity at 11: 5 = 0. km/sec

The TOTAL velocity at 11: 5 = 41. km/sec

The TANGENTIAL velocity at 11:30 = 0. km/sec

The TOTAL velocity at 11:30 = 46. km/sec

The TANGENTIAL velocity at 11:38 = 0. km/sec

The TOTAL velocity at 11:38 = 47. km/sec

The TANGENTIAL velocity at 12:31 = 0. km/sec

The TOTAL velocity at 12:31 = 56. km/sec

The TANGENTIAL velocity at 12:56 = 0. km/sec

The TOTAL velocity at 12:56 = 61. km/sec

The TANGENTIAL velocity at 13:21 = 0. km/sec

The TOTAL velocity at 13:21 = 65. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.31

Standard Deviation in start time measurement = 0.692E+02

Value of reduced Chi Squared returned from nllst2 = 0.405E-03

Reduced Chi Squared = 0.265E-02

Chi Squared = 0.133E-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 = 0.9420E+00

The correlation between the data and the time**2 term = 0.9817E+00

0The correlation between the data and the complete equation of motion = 0.9945E+00

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