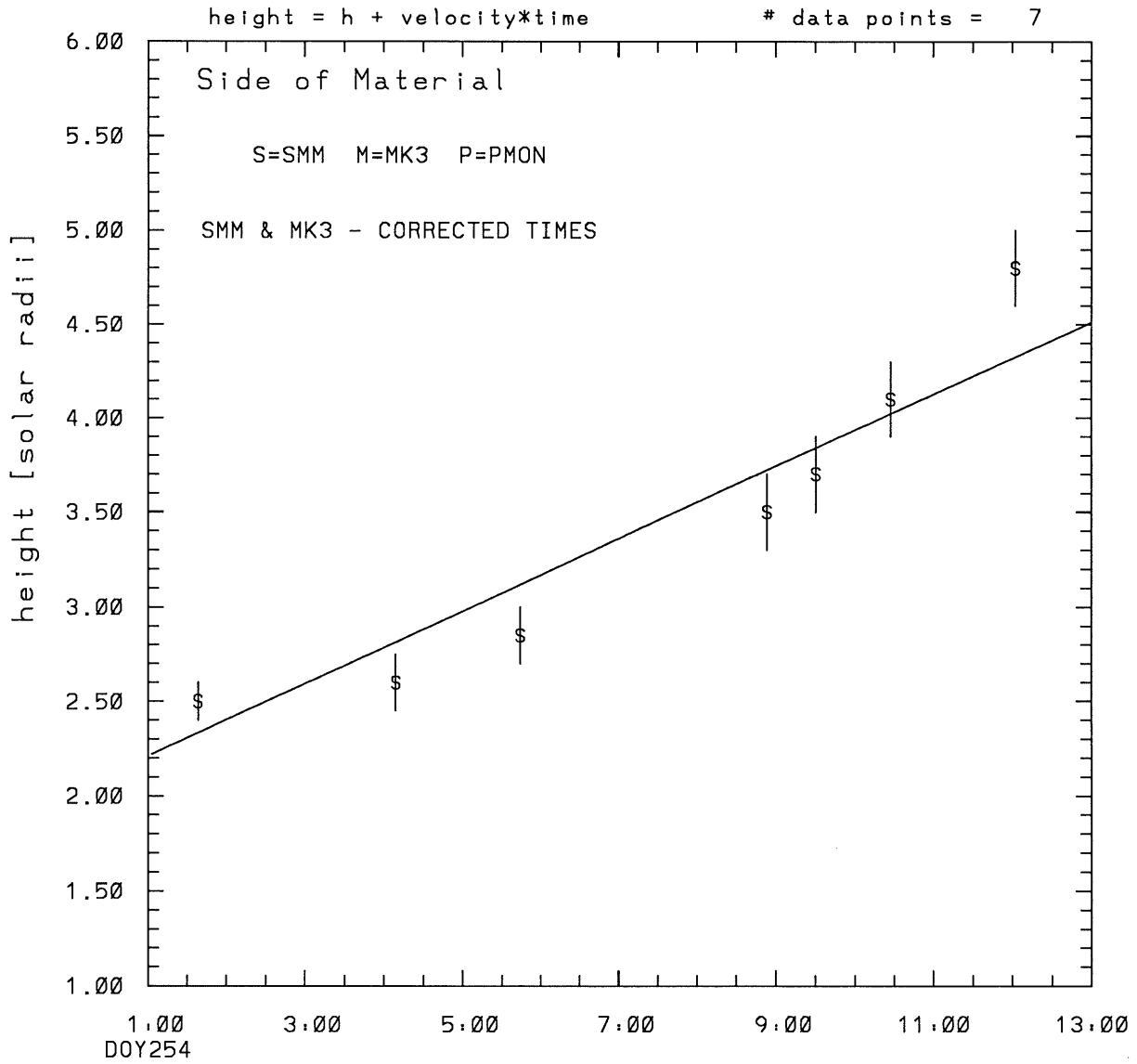
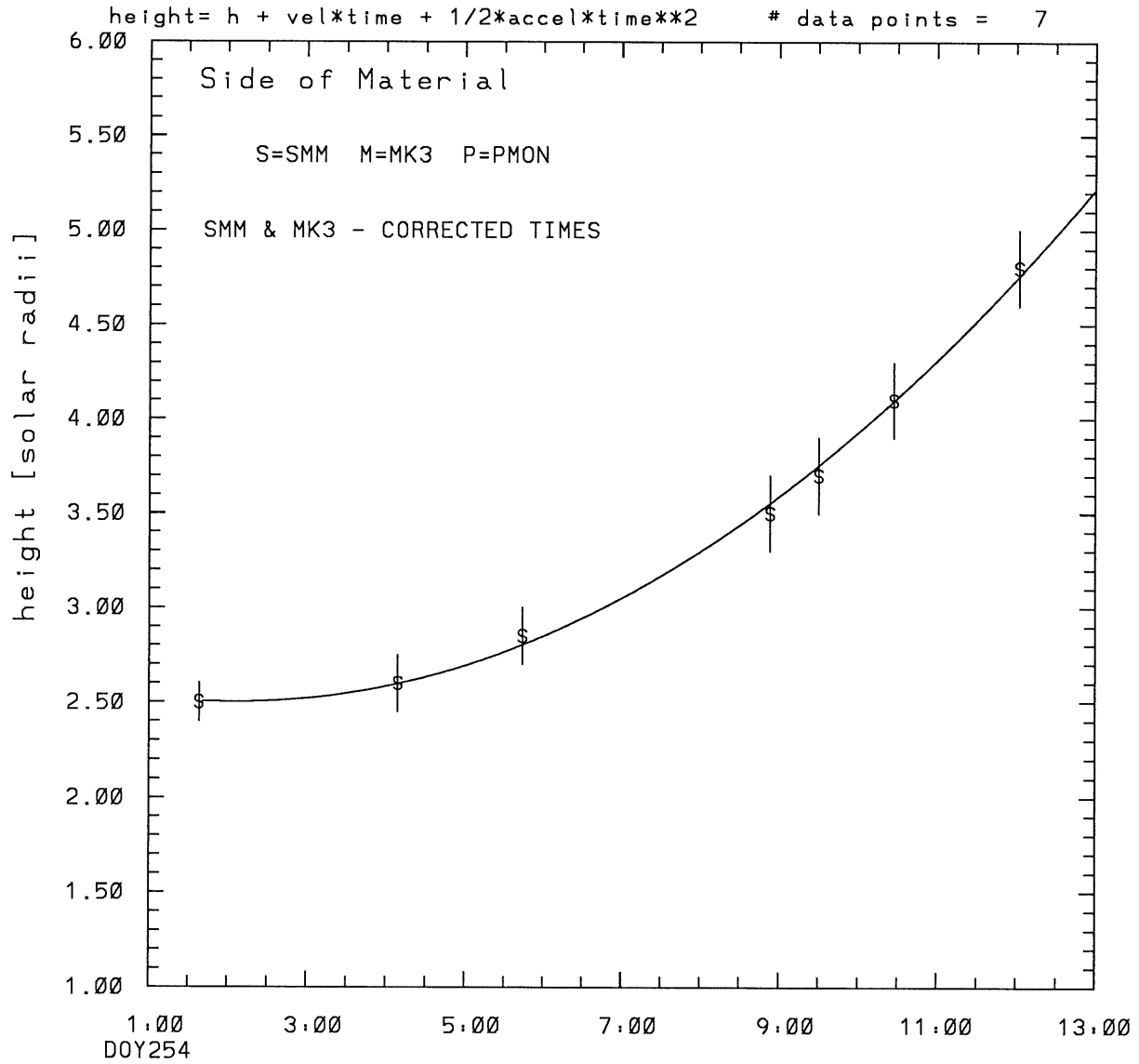


SMM C/P 1984 DOY254 65 +/- 0 degrees



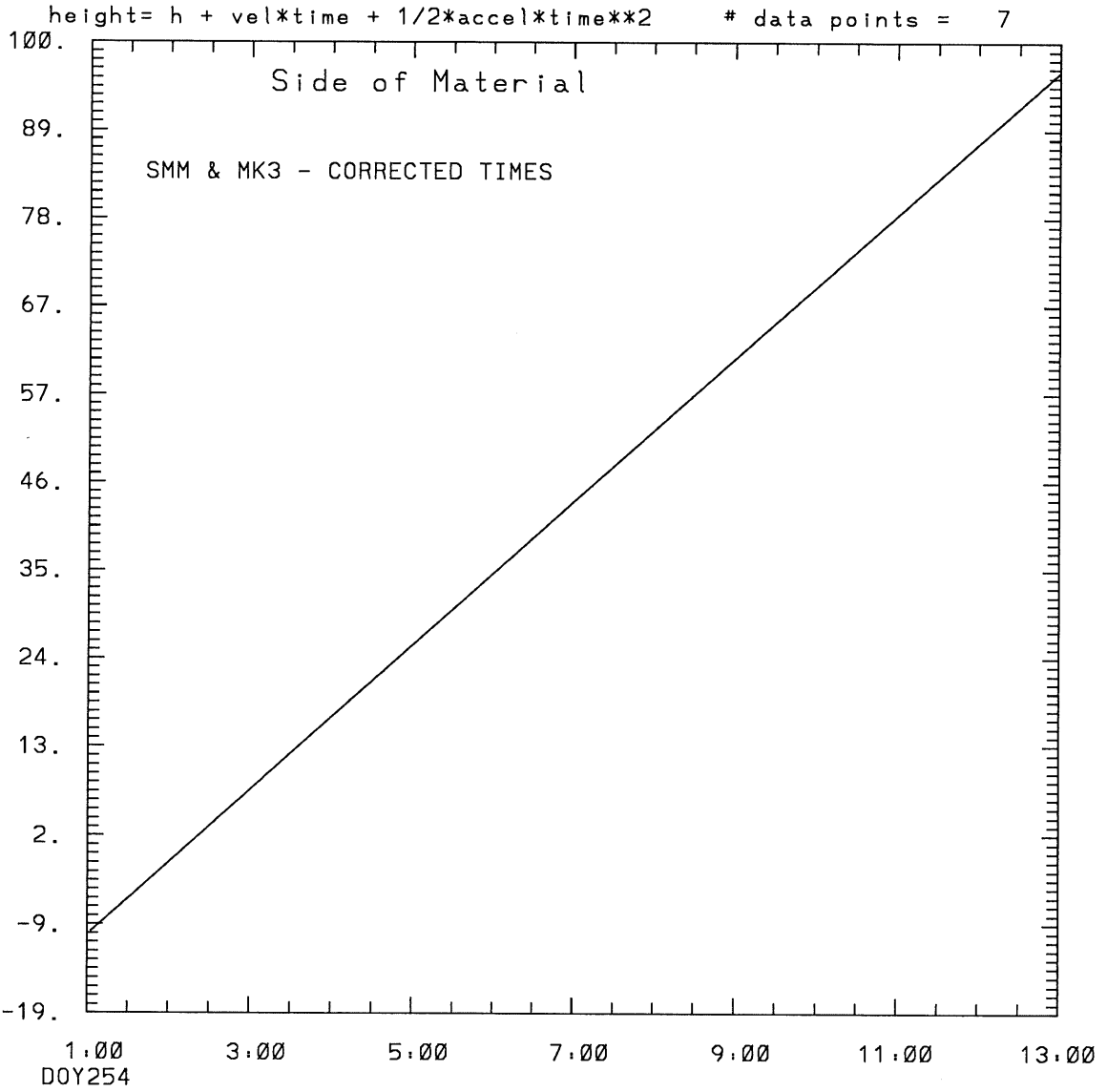
tstart=DOY253 18:41 +/- 20.0 [min.]
radial velocity= 37. +/- 5. [km/sec]

SMM C/P 1984 DOY254 65 +/- 0 degrees



tstart=DOY254 2: 6 from derivative=0
Event begins at 2.50 Solar Radii
radial acceleration = 0.0025 ± 0.0002 [km/sec**2]

SMM C/P 1984 DOY254 65 +/- 0 degrees



tstart=DOY254 2: 6 from derivative=0
Event begins at 2.50 Solar Radii
radial acceleration=0.246E-02 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in	angle	angle	error in	datatype
1984	254	1:38:14	2.50	+/- 0.10	65.0	+/- 0.5	SMM		
1984	254	4: 9:13	2.60	+/- 0.15	65.0	+/- 0.5	SMM		
1984	254	5:44:14	2.85	+/- 0.15	65.0	+/- 0.5	SMM		
1984	254	8:53:13	3.50	+/- 0.20	65.0	+/- 1.0	SMM		
1984	254	9:30:13	3.70	+/- 0.20	65.0	+/- 1.0	SMM		
1984	254	10:27:14	4.10	+/- 0.20	65.0	+/- 1.0	SMM		
1984	254	12: 2:14	4.80	+/- 0.20	65.0	+/- 1.0	SMM		

Structure being measured:
Side of Material

OUTPUT:

START TIME:

Event began at $t = 0 + -0.379E+03 +/- 0.200E+02$ [minutes]
In more convenient units:
Event began at DOY 253 18:41 +/- 0.200E+02 [minutes]

Origin defined at DOY254 1: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 37. +/- 5. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.221E+01 +/- 0.152E+00$ [solar radii]
 $c(2) = 0.319E-02 +/- 0.427E-03$ [radii/min]
 $c(2) = 0.370E+02 +/- 0.496E+01$ [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 $c(1) = 0.23984E+00$ [radii] see Bevington pg. 114
error in $c(2) = 0.54360E-03$ [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) = 65. +/- 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 1:38 = 0.000E+00 km/sec

The TOTAL velocity at 1:38 = 37. km/sec

The TANGENTIAL velocity at 4: 9 = 0.000E+00 km/sec

The TOTAL velocity at 4: 9 = 37. km/sec

The TANGENTIAL velocity at 5:44 = 0.000E+00 km/sec

The TOTAL velocity at 5:44 = 37. km/sec

The TANGENTIAL velocity at 8:53 = 0.000E+00 km/sec

The TOTAL velocity at 8:53 = 37. km/sec

The TANGENTIAL velocity at 9:30 = 0.000E+00 km/sec

The TOTAL velocity at 9:30 = 37. km/sec

The TANGENTIAL velocity at 10:27 = 0.000E+00 km/sec

The TOTAL velocity at 10:27 = 37. km/sec

The TANGENTIAL velocity at 12: 2 = 0.000E+00 km/sec

The TOTAL velocity at 12: 2 = 37. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.85

Standard Deviation in start time measurement = 0.208E+03

Error in time = 0.20927E+03 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.628E-01

Reduced Chi Squared = 0.449E+00

Chi Squared = 0.225E+01

The probability for exceeding chi square = 0.997E+00

The correlation coefficient = 0.953E+00

The probability that no LINEAR correlation exists between the variables = 0.9082E-03

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

This is a 2 order run

INPUT:

year	day	time	radii	radius	error in	angle	error in	datatype
1984	254	1:38:14	2.50	+/- 0.10	65.0	+/- 0.5	SMM	
1984	254	4: 9:13	2.60	+/- 0.15	65.0	+/- 0.5	SMM	
1984	254	5:44:14	2.85	+/- 0.15	65.0	+/- 0.5	SMM	
1984	254	8:53:13	3.50	+/- 0.20	65.0	+/- 1.0	SMM	
1984	254	9:30:13	3.70	+/- 0.20	65.0	+/- 1.0	SMM	
1984	254	10:27:14	4.10	+/- 0.20	65.0	+/- 1.0	SMM	
1984	254	12: 2:14	4.80	+/- 0.20	65.0	+/- 1.0	SMM	

Structure being measured:
Side of Material

OUTPUT:

START TIME:

tstart=DOY254 2: 6 from derivative = 0
Event begins at 2.50 Solar Radii
Origin defined at DOY254 1: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.246E-02 +/- 0.151E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.253E+01 +/- 0.300E-01 [solar radii]
c(2) = -0.844E-03 +/- 0.257E-03 [radii/min]
c(2) = -0.979E+01 +/- 0.298E+01 [km/sec]
c(3) = 0.636E-05 +/- 0.392E-06 [radii/min**2]
c(3) = 0.246E-02 +/- 0.151E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.56861E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.42632E-02 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.37923E-03 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.33103E-04 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.52720E-06 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.46738E-07 [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) = 65. +/- 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 1:38 = 0.000E+00 km/sec

The TOTAL velocity at 1:38 = -4. km/sec

The TANGENTIAL velocity at 4: 9 = 0.000E+00 km/sec

The TOTAL velocity at 4: 9 = 18. km/sec

The TANGENTIAL velocity at 5:44 = 0.000E+00 km/sec

The TOTAL velocity at 5:44 = 32. km/sec

The TANGENTIAL velocity at 8:53 = 0.000E+00 km/sec

The TOTAL velocity at 8:53 = 60. km/sec

The TANGENTIAL velocity at 9:30 = 0.000E+00 km/sec

The TOTAL velocity at 9:30 = 65. km/sec

The TANGENTIAL velocity at 10:27 = 0.000E+00 km/sec

The TOTAL velocity at 10:27 = 74. km/sec

The TANGENTIAL velocity at 12: 2 = 0.000E+00 km/sec

The TOTAL velocity at 12: 2 = 88. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.85

Standard Deviation in start time measurement = 0.208E+03

Value of reduced Chi Squared returned from nllst2 = 0.140E-02

Reduced Chi Squared = 0.112E-01

Chi Squared = 0.447E-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 = 0.1145E+01

The correlation between the data and the time**2 term = 0.1072E+01

The correlation between the data and the complete equation of motion = 0.9999E+00
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]