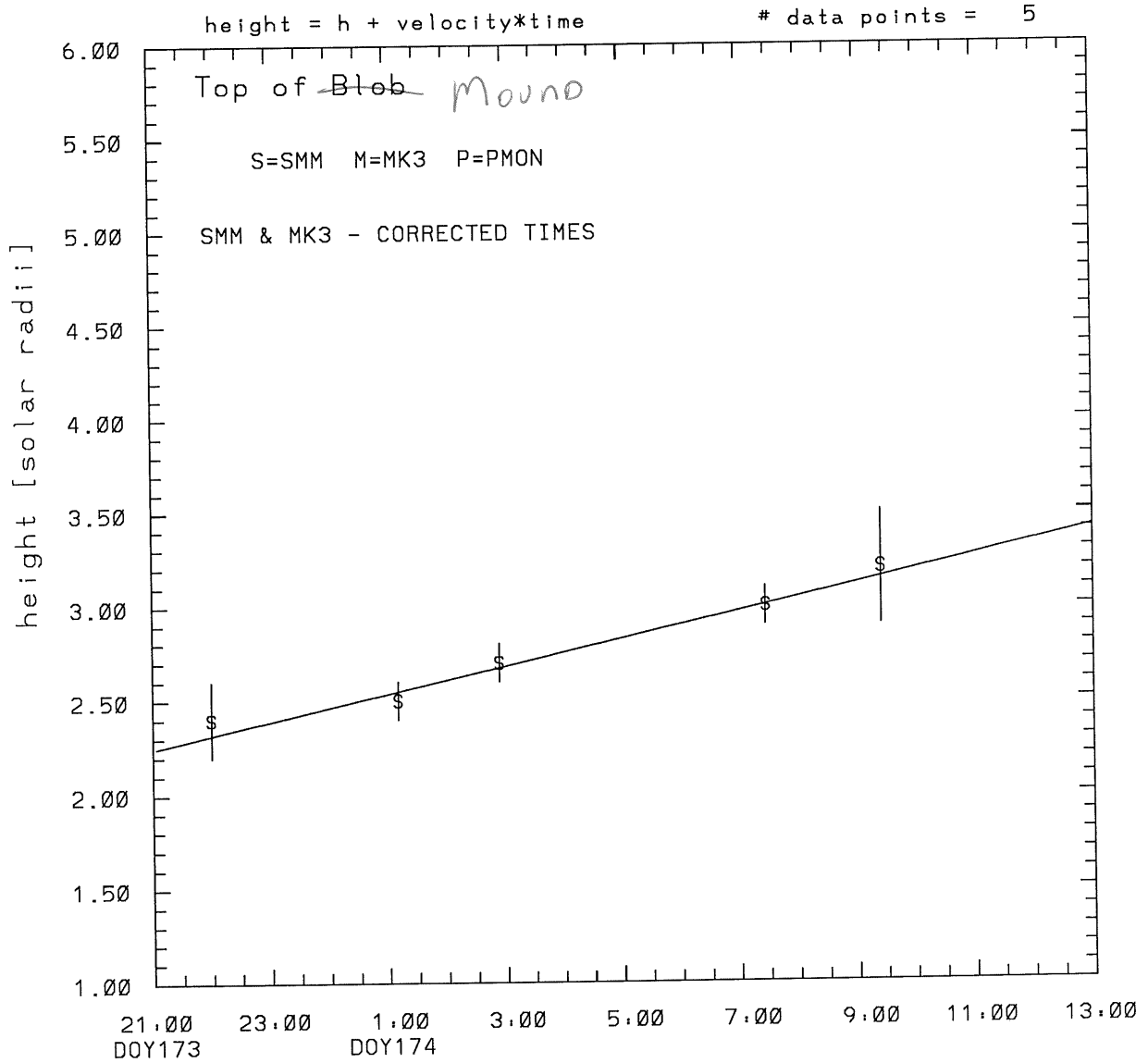
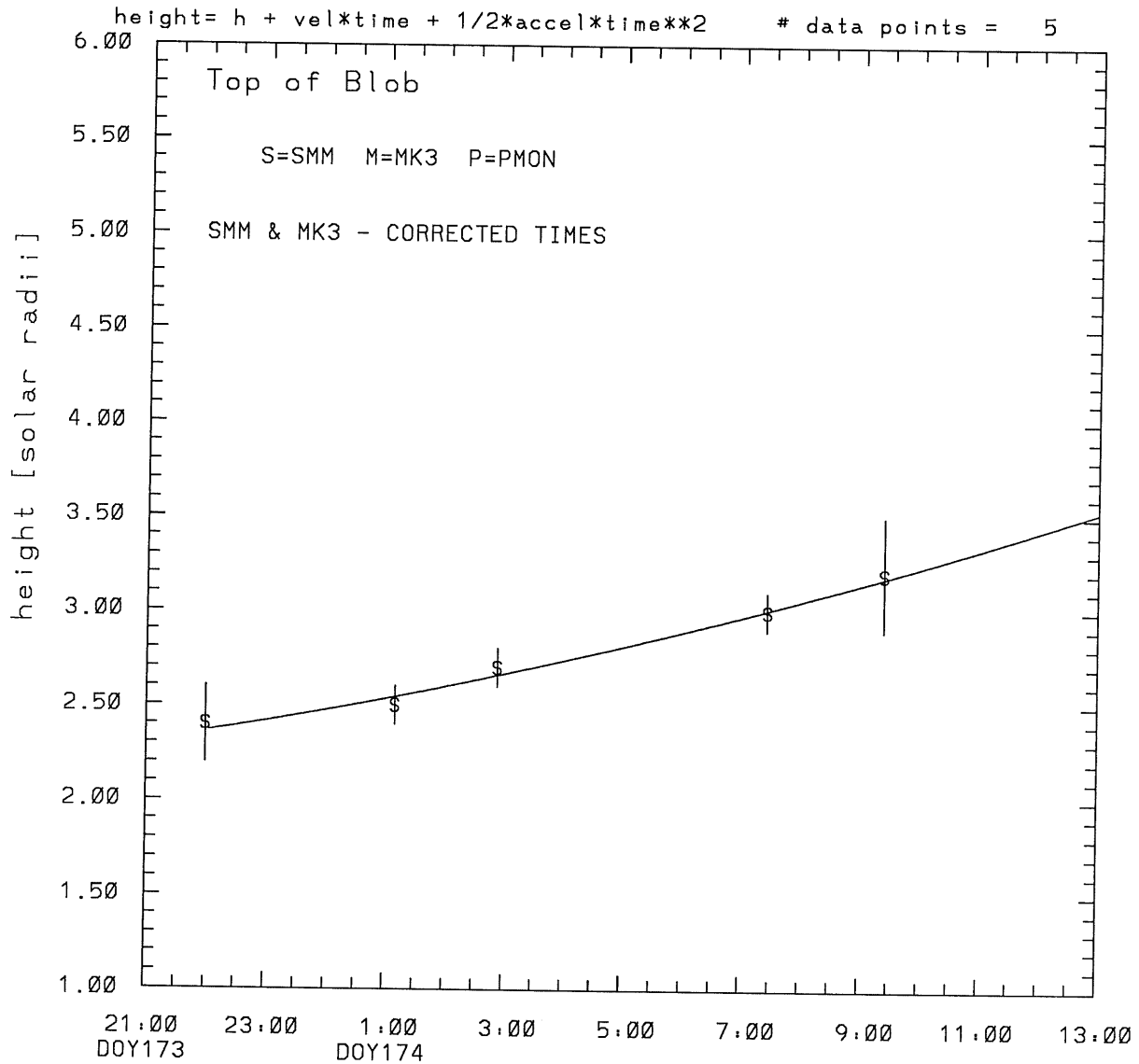


SMM C/P 1980 DOY173 250 +/- 0 degrees



tstart=DOY173 3:54 +/- 35.2 [min.]
radial velocity= 14. +/- 1. [km/sec]

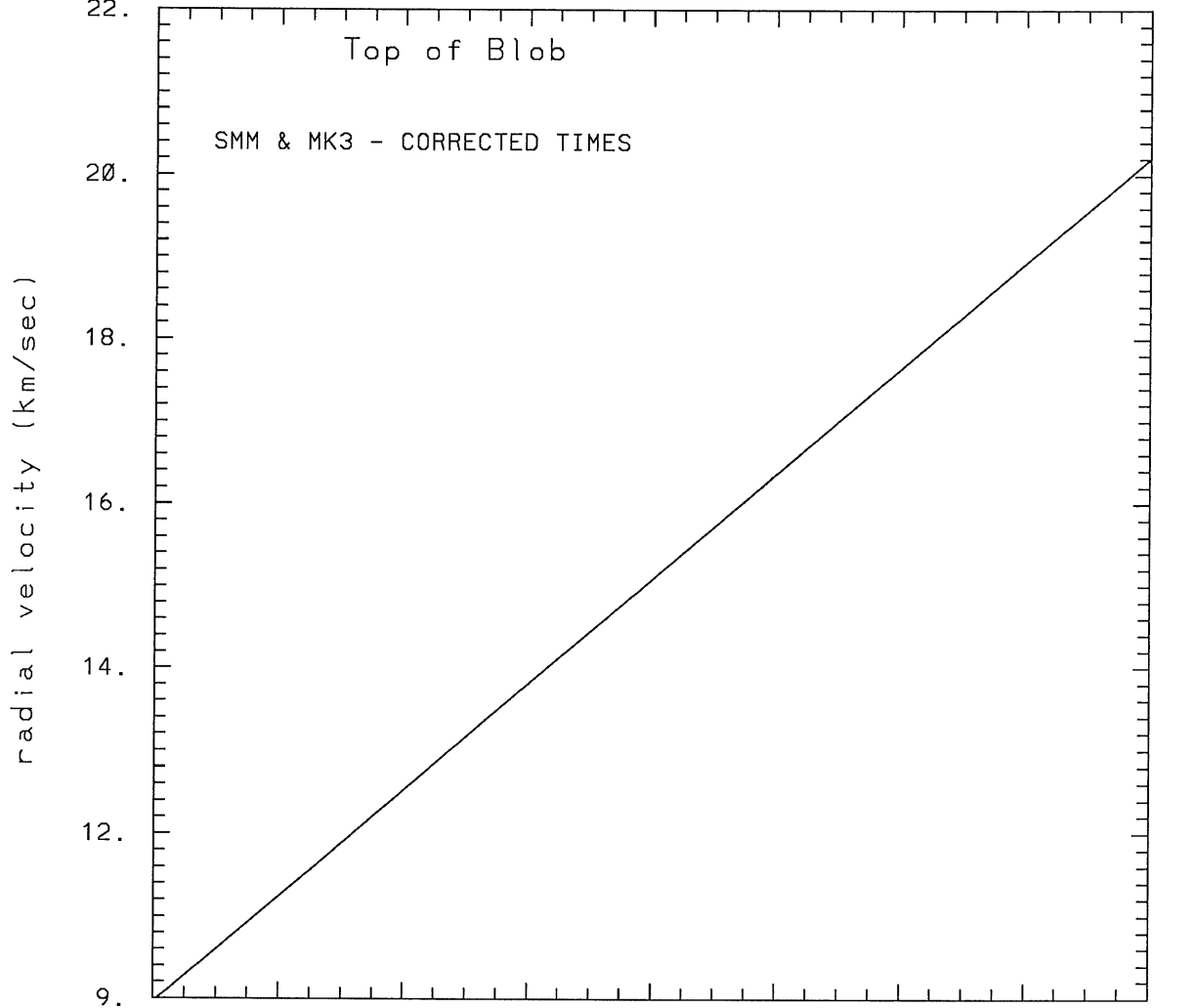
SMM C/P 1980 DOY173 250 +/- 0 degrees



tstart=DOY173 6:53 from derivative=0
Event begins at 1.97 Solar Radii
radial acceleration = 0.0002 +/- 0.0002 [km/sec**2]

SMM C/P 1980 DOY173 250 +/- 0 degrees

height= h + vel*time + 1/2*accel*time**2 # data points = 5



21:00 23:00 1:00 3:00 5:00 7:00 9:00 11:00 13:00
DOY173 DOY174

tstart=DOY173 6.53 from derivative=0
Event begins at 1.97 Solar Radii
radial acceleration=0.186E-03 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	radius	error in	angle	angle	error in	datatype
1980	173	21:59:24	2.40	+/- 0.20	250.0	+/- 0.5			SMM
1980	174	1: 9:50	2.50	+/- 0.10	250.0	+/- 0.5			SMM
1980	174	2:53:36	2.70	+/- 0.10	250.0	+/- 0.5			SMM
1980	174	7:26:27	3.00	+/- 0.10	250.0	+/- 0.5			SMM
1980	174	9:24:10	3.20	+/- 0.30	250.0	+/- 0.5			SMM

Structure being measured:

Top of Blob

OUTPUT:

START TIME:

Event began at $t = 0 + -0.103E+04 \pm 0.352E+02$ [minutes]

In more convenient units:

Event began at DOY 173 3:54 $\pm 0.352E+02$ [minutes]

Origin defined at DOY173 21: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 14. \pm 1. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.225E+01 \pm 0.451E-01 [solar radii]
c(2) = 0.121E-02 \pm 0.103E-03 [radii/min]
c(2) = 0.141E+02 \pm 0.120E+01 [km/sec]
c(3) = 0.000E+00 \pm 0.000E+00 [radii/min**2]
c(3) = 0.000E+00 \pm 0.000E+00 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

error in c(1)= 0.55574E-01 [radii] see Bevington pg. 114

error in c(2)= 0.11653E-03 [radii/min] see Bevington pg. 114

ANGULAR INFORMATION:

ANGULAR VELOCITY = 0.0000E+00 \pm 0.0000E+00[radians/sec]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 250. +/- 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 21:59 = 0.000E+00 km/sec

The TOTAL velocity at 21:59 = 14. km/sec

The TANGENTIAL velocity at 1: 9 = 0.000E+00 km/sec

The TOTAL velocity at 1: 9 = 14. km/sec

The TANGENTIAL velocity at 2:53 = 0.000E+00 km/sec

The TOTAL velocity at 2:53 = 14. km/sec

The TANGENTIAL velocity at 7:26 = 0.000E+00 km/sec

The TOTAL velocity at 7:26 = 14. km/sec

The TANGENTIAL velocity at 9:24 = 0.000E+00 km/sec

The TOTAL velocity at 9:24 = 14. 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 = 0.249E+03

Error in time = 0.92784E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.187E-02

Reduced Chi Squared = 0.919E-02

Chi Squared = 0.276E-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 = 0.1441E-02

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
1980	173	21:59:24	2.40	+/- 0.20	250.0	+/- 0.5	SMM	
1980	174	1: 9:50	2.50	+/- 0.10	250.0	+/- 0.5	SMM	
1980	174	2:53:36	2.70	+/- 0.10	250.0	+/- 0.5	SMM	
1980	174	7:26:27	3.00	+/- 0.10	250.0	+/- 0.5	SMM	
1980	174	9:24:10	3.20	+/- 0.30	250.0	+/- 0.5	SMM	

Structure being measured:

Top of Blob

OUTPUT:

START TIME:

tstart=DOY173 6:53 from derivative = 0

Event begins at 1.97 Solar Radii

Origin defined at DOY173 21: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.186E-03 +/- 0.233E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.231E+01 +/- 0.947E-01 [solar radii]
c(2) = 0.814E-03 +/- 0.511E-03 [radii/min]
c(2) = 0.944E+01 +/- 0.593E+01 [km/sec]
c(3) = 0.480E-06 +/- 0.603E-06 [radii/min**2]
c(3) = 0.186E-03 +/- 0.233E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.70239E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.32704E-01 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.42237E-03 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.15837E-03 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.49976E-06 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.18067E-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) = 250. +/- 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 21:59 = 0.000E+00 km/sec

The TOTAL velocity at 21:59 = 10. km/sec

The TANGENTIAL velocity at 1: 9 = 0.000E+00 km/sec

The TOTAL velocity at 1: 9 = 12. km/sec

The TANGENTIAL velocity at 2:53 = 0.000E+00 km/sec

The TOTAL velocity at 2:53 = 13. km/sec

The TANGENTIAL velocity at 7:26 = 0.000E+00 km/sec

The TOTAL velocity at 7:26 = 16. km/sec

The TANGENTIAL velocity at 9:24 = 0.000E+00 km/sec

The TOTAL velocity at 9:24 = 18. 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 = 0.249E+03

Value of reduced Chi Squared returned from nllst2 = 0.206E-02

Reduced Chi Squared = 0.623E-02

Chi Squared = 0.125E-01

The probability for exceeding chi square = 0.998E+00

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 = 0.7401E+00

The correlation between the data and the time**2 term = 0.7562E+00

The correlation between the data and the complete equation of motion = 0.9713E+00

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