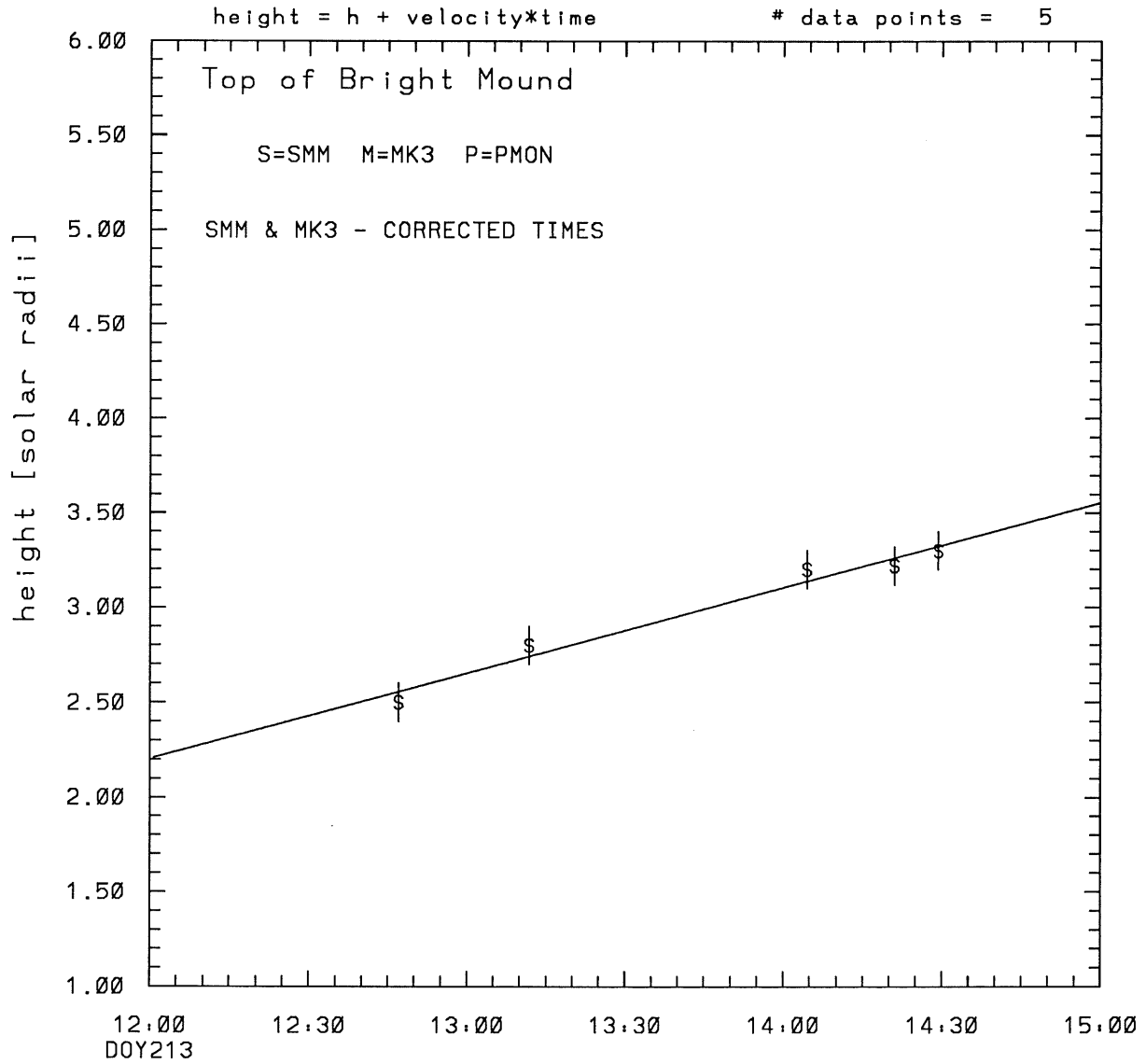
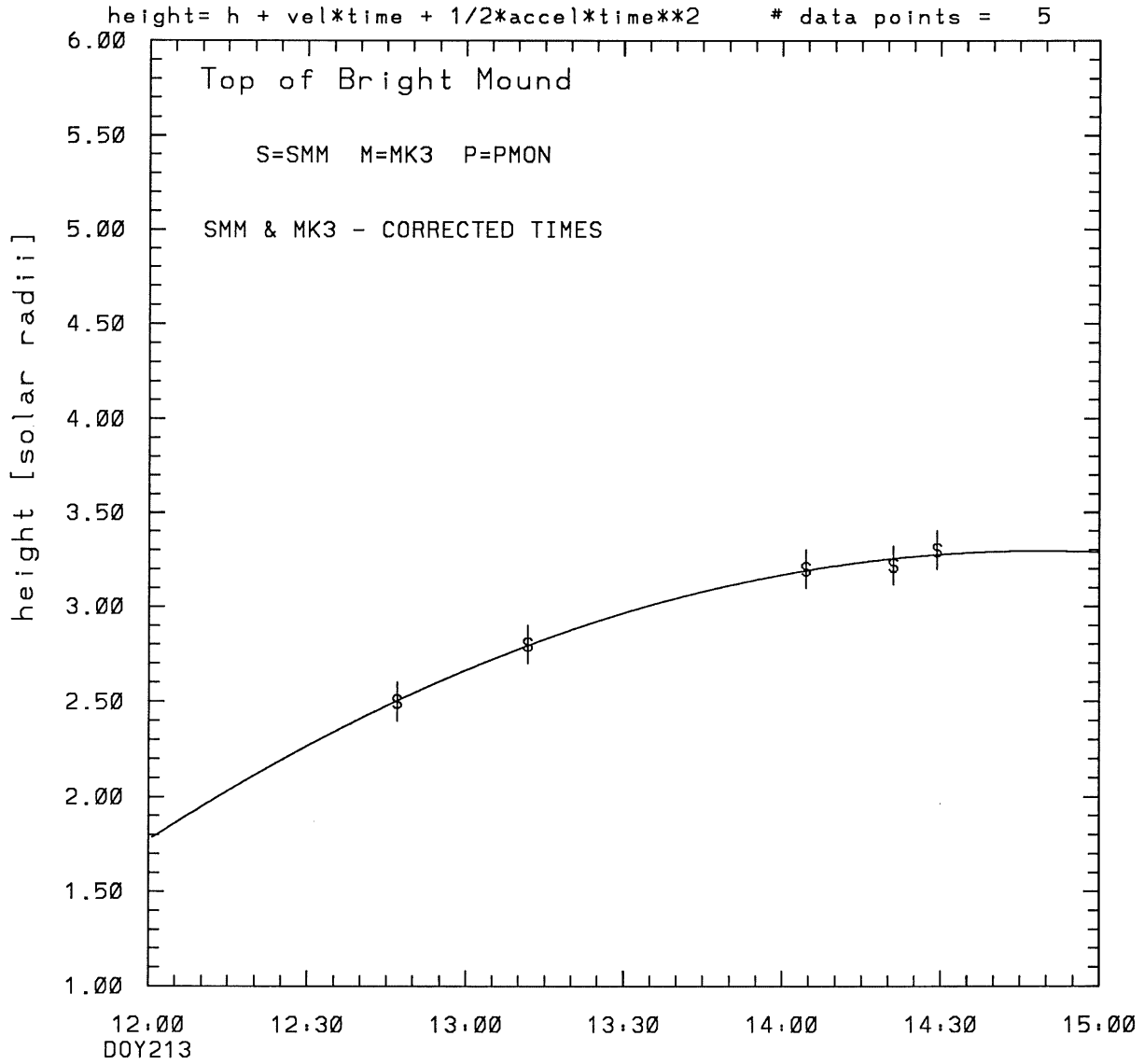


SMM C/P 1988 DOY213 80 +/- 0 degrees



tstart=DOY213 9.20 +/- 6.8 [min.]
radial velocity= 87. +/- 7. [km/sec]

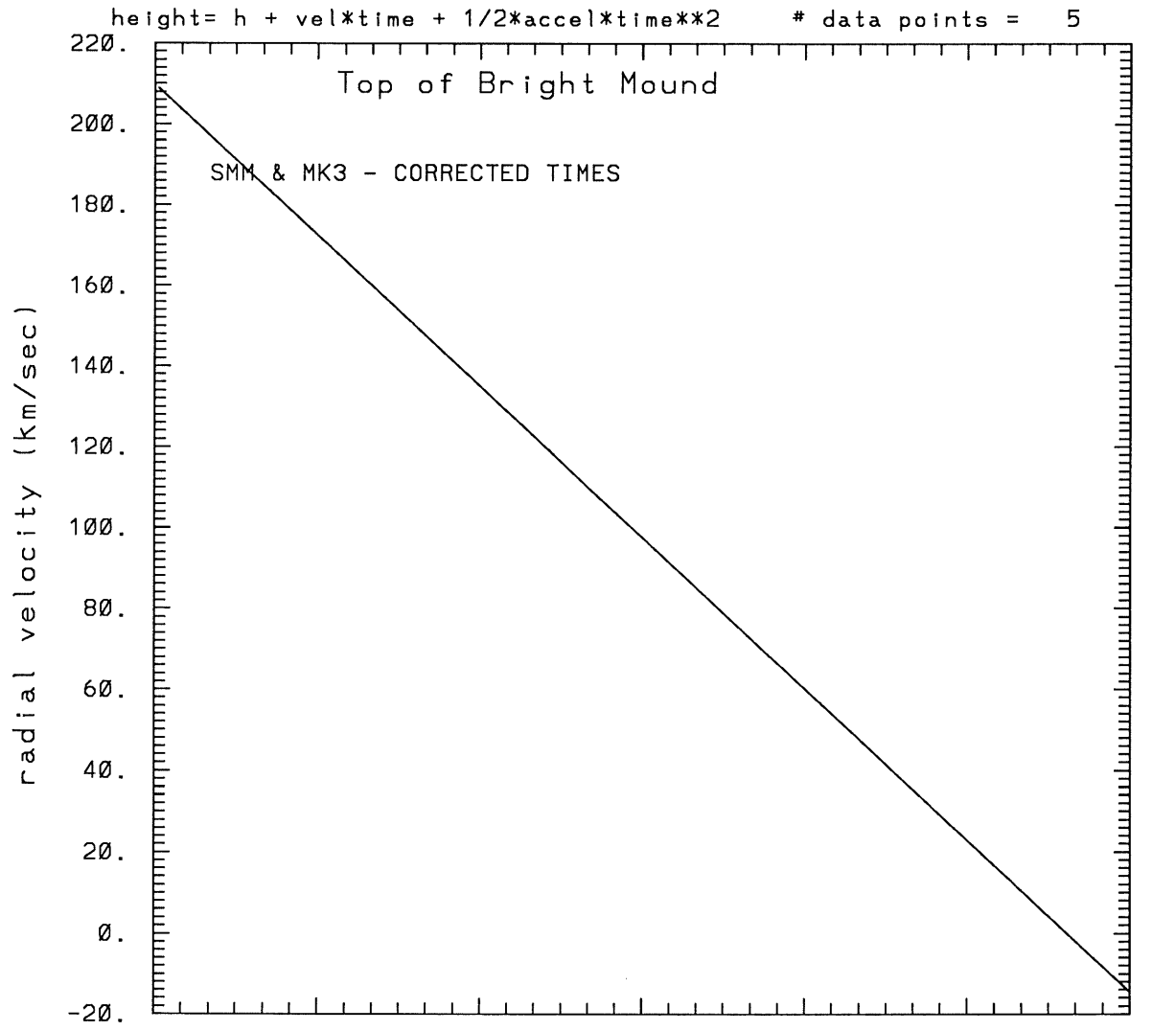
SMM C/P 1988 DOY213 80 +/- 0 degrees



tstart=DOY213 11:22 +/- 2.5 [min.]

radial acceleration = -0.0208 ± 0.0051 [km/sec**2]

SMM C/P 1988 DOY213 80 +/- 0 degrees



DOY213

tstart=DOY213 11:22 +/- 2.5 [min.]

radial acceleration=-.208E-01 km/sec**2

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	angle	error in angle	datatype
1988	213	12:46:58	2.50	+/- 0.10	80.0	+/- 0.5	SMM
1988	213	13:11:46	2.80	+/- 0.10	80.0	+/- 0.5	SMM
1988	213	14: 4:32	3.20	+/- 0.10	80.0	+/- 1.0	SMM
1988	213	14:21: 3	3.22	+/- 0.10	80.0	+/- 1.0	SMM
1988	213	14:29:18	3.30	+/- 0.10	80.0	+/- 1.0	SMM

Structure being measured:

Top of Bright Mound

OUTPUT:

START TIME:

Event began at $t = 0 + -0.160E+03 +/- 0.681E+01$ [minutes]

In more convenient units:

Event began at DOY 213 9:20 +/- 0.681E+01 [minutes]

Origin defined at DOY213 12: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 87. +/- 7. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

$c(1) = 0.220E+01 +/- 0.713E-01$ [solar radii]
 $c(2) = 0.750E-02 +/- 0.625E-03$ [radii/min]
 $c(2) = 0.870E+02 +/- 0.725E+01$ [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 $c(1) = 0.82323E-01$ [radii] see Bevington pg. 114

error in $c(2) = 0.72174E-03$ [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) = 80. +/- 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 12:46 = 0. km/sec

The TOTAL velocity at 12:46 = 87. km/sec

The TANGENTIAL velocity at 13:11 = 0. km/sec

The TOTAL velocity at 13:11 = 87. km/sec

The TANGENTIAL velocity at 14: 4 = 0. km/sec

The TOTAL velocity at 14: 4 = 87. km/sec

The TANGENTIAL velocity at 14:21 = 0. km/sec

The TOTAL velocity at 14:21 = 87. km/sec

The TANGENTIAL velocity at 14:29 = 0. km/sec

The TOTAL velocity at 14:29 = 87. 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 = 0.403E+02

Error in time = 0.15002E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.316E-02

Reduced Chi Squared = 0.104E-01

Chi Squared = 0.312E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.986E+00

The probability that no LINEAR correlation exists between the variables = 0.1902E-02

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

This is a 2 order run

INPUT:

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1988	213	12:46:58	2.50 +/- 0.10	2.50 +/- 0.10	80.0 +/- 0.5	80.0 +/- 0.5	SMM
1988	213	13:11:46	2.80 +/- 0.10	2.80 +/- 0.10	80.0 +/- 0.5	80.0 +/- 0.5	SMM
1988	213	14: 4:32	3.20 +/- 0.10	3.20 +/- 0.10	80.0 +/- 1.0	80.0 +/- 1.0	SMM
1988	213	14:21: 3	3.22 +/- 0.10	3.22 +/- 0.10	80.0 +/- 1.0	80.0 +/- 1.0	SMM
1988	213	14:29:18	3.30 +/- 0.10	3.30 +/- 0.10	80.0 +/- 1.0	80.0 +/- 1.0	SMM

Structure being measured:

Top of Bright Mound

OUTPUT:

START TIME:

Event began at $t = 0 + -0.384E+02 +/- 0.254E+01$ [minutes]

In more convenient units:

Event began at DOY 213 11:22 +/- 0.254E+01 [minutes]

Origin defined at DOY213 12: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.208E-01 +/- 0.510E-02$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.177E+01 +/- 0.111E+00$ [solar radii]
c(2) = $0.181E-01 +/- 0.261E-02$ [radii/min]
c(2) = $0.210E+03 +/- 0.303E+02$ [km/sec]
c(3) = $-0.537E-04 +/- 0.132E-04$ [radii/min**2]
c(3) = $-0.208E-01 +/- 0.510E-02$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = $0.13538E+00$ [radii] Bevington pg 154 (8-30)
Exact error in c(1) = $0.20039E-01$ [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = $0.32007E-02$ [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = $0.54354E-03$ [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = $0.16148E-04$ [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = $0.31038E-05$ [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) = 80. +/- 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 12:46 = 0. km/sec

The TOTAL velocity at 12:46 = 151. km/sec

The TANGENTIAL velocity at 13:11 = 0. km/sec

The TOTAL velocity at 13:11 = 120. km/sec

The TANGENTIAL velocity at 14: 4 = 0. km/sec

The TOTAL velocity at 14: 4 = 55. km/sec

The TANGENTIAL velocity at 14:21 = 0. km/sec

The TOTAL velocity at 14:21 = 34. km/sec

The TANGENTIAL velocity at 14:29 = 0. km/sec

The TOTAL velocity at 14:29 = 24. 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 = 0.403E+02

Value of reduced Chi Squared returned from nllst2 = 0.646E-03

Reduced Chi Squared = 0.409E-02

Chi Squared = 0.818E-02

The probability for exceeding chi square = 0.999E+00

For a second order fit 3 correlation coefficients are given:

(Using equation of motion: $r = a + bt + at**2$)

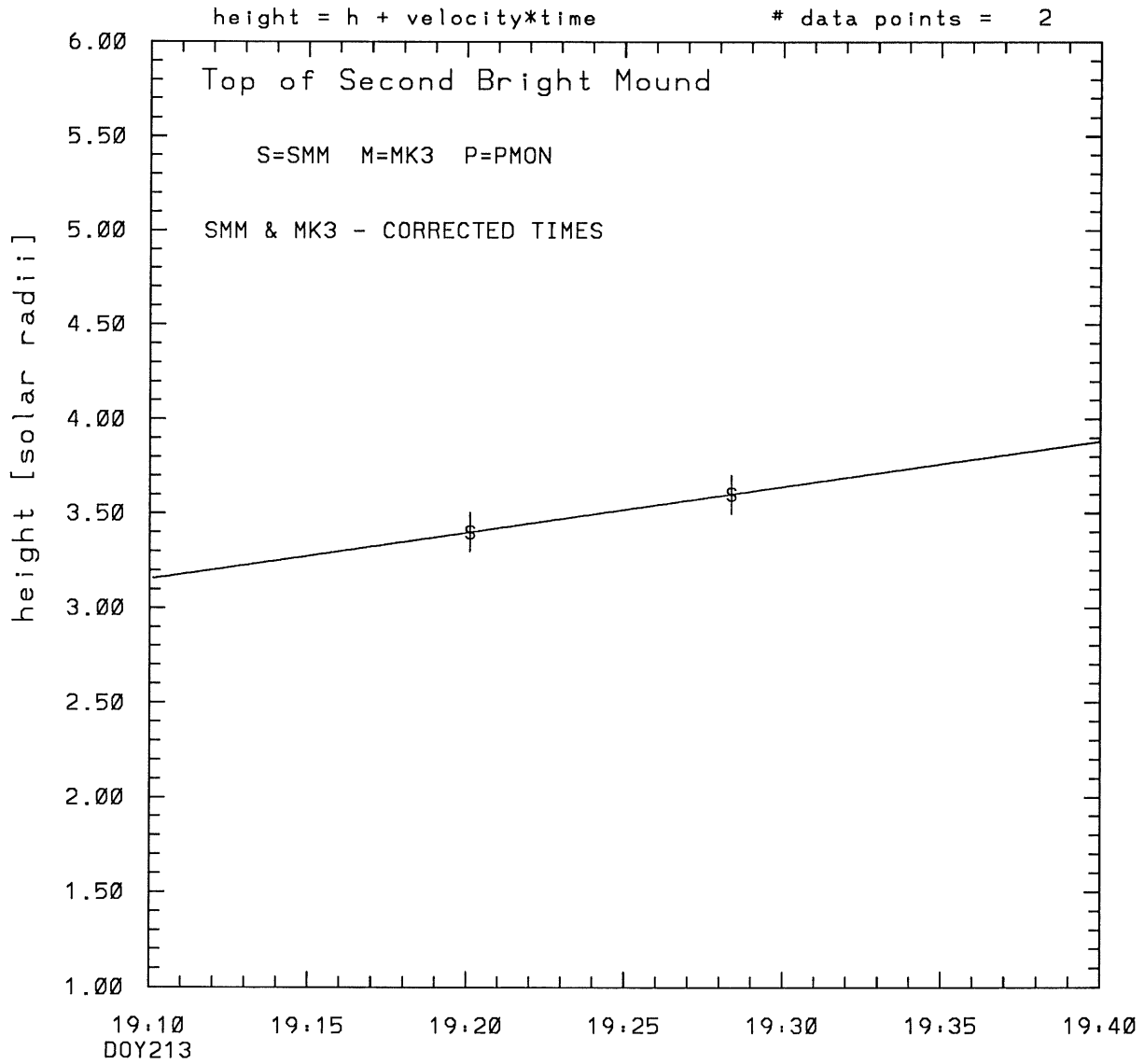
The correlation between the data and the term linear in time = 0.9864E+00

The correlation between the data and the time**2 term = 0.9643E+00

The correlation between the data and the complete equation of motion = 0.9959E+00

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

SMM C/P 1988 DOY213 80 +/- 0 degrees



tstart=DOY213 17:41 +/- 0.0 [min.]
radial velocity= 281. +/- 0. [km/sec]

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	datatype
1988	213	19:20: 7	3.40	+/- 0.10	80.0 +/- 1.0	SMM
1988	213	19:28:23	3.60	+/- 0.10	80.0 +/- 1.0	SMM

Structure being measured:
Top of Second Bright Mound

OUTPUT:

START TIME:

Event began at $t = 0 + -0.891E+02 +/- 0.000E+00$ [minutes]
In more convenient units:
Event began at DOY 213 17:41 +/- 0.000E+00 [minutes]

Origin defined at DOY213 19:10

RADIAL INFORMATION:

RADIAL VELOCITY = 281. +/- 0. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.316E+01 +/- 0.000E+00 [solar radii]
c(2) = 0.242E-01 +/- 0.000E+00 [radii/min]
c(2) = 0.281E+03 +/- 0.000E+00 [km/sec]
c(3) = 0.000E+00 +/- 0.000E+00 [radii/min**2]
c(3) = 0.000E+00 +/- 0.000E+00 [km/sec**2]

ANGULAR INFORMATION:

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

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 80. +/- 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 19:20 = 0. km/sec

The TOTAL velocity at 19:20 = 281. km/sec

The TANGENTIAL velocity at 19:28 = 0. km/sec

The TOTAL velocity at 19:28 = 281. km/sec

The following info is for estimating goodness of the fit

Number data points = number of coefficients. No error analysis is possible.

Correlation coefficient is not computable!