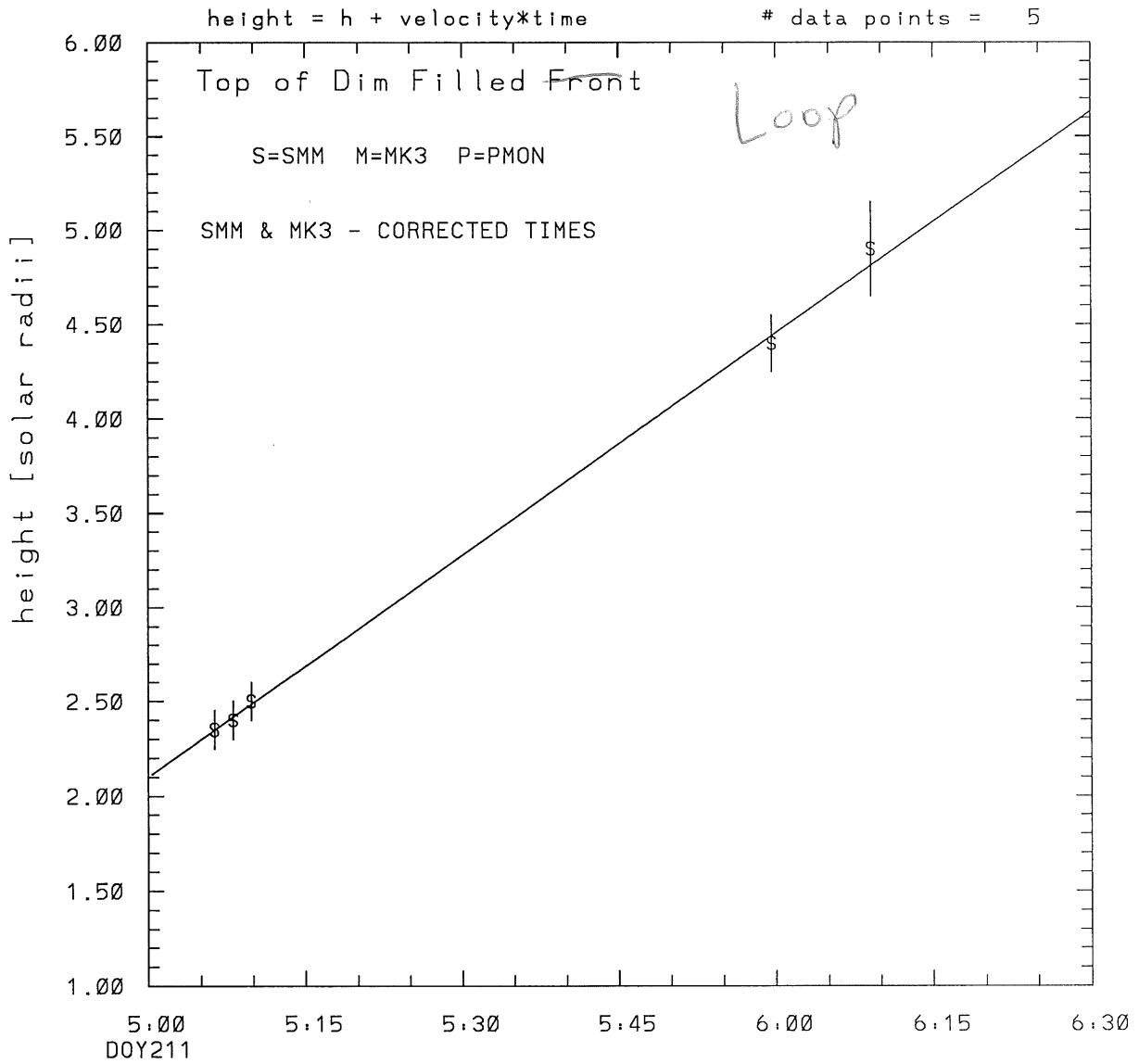
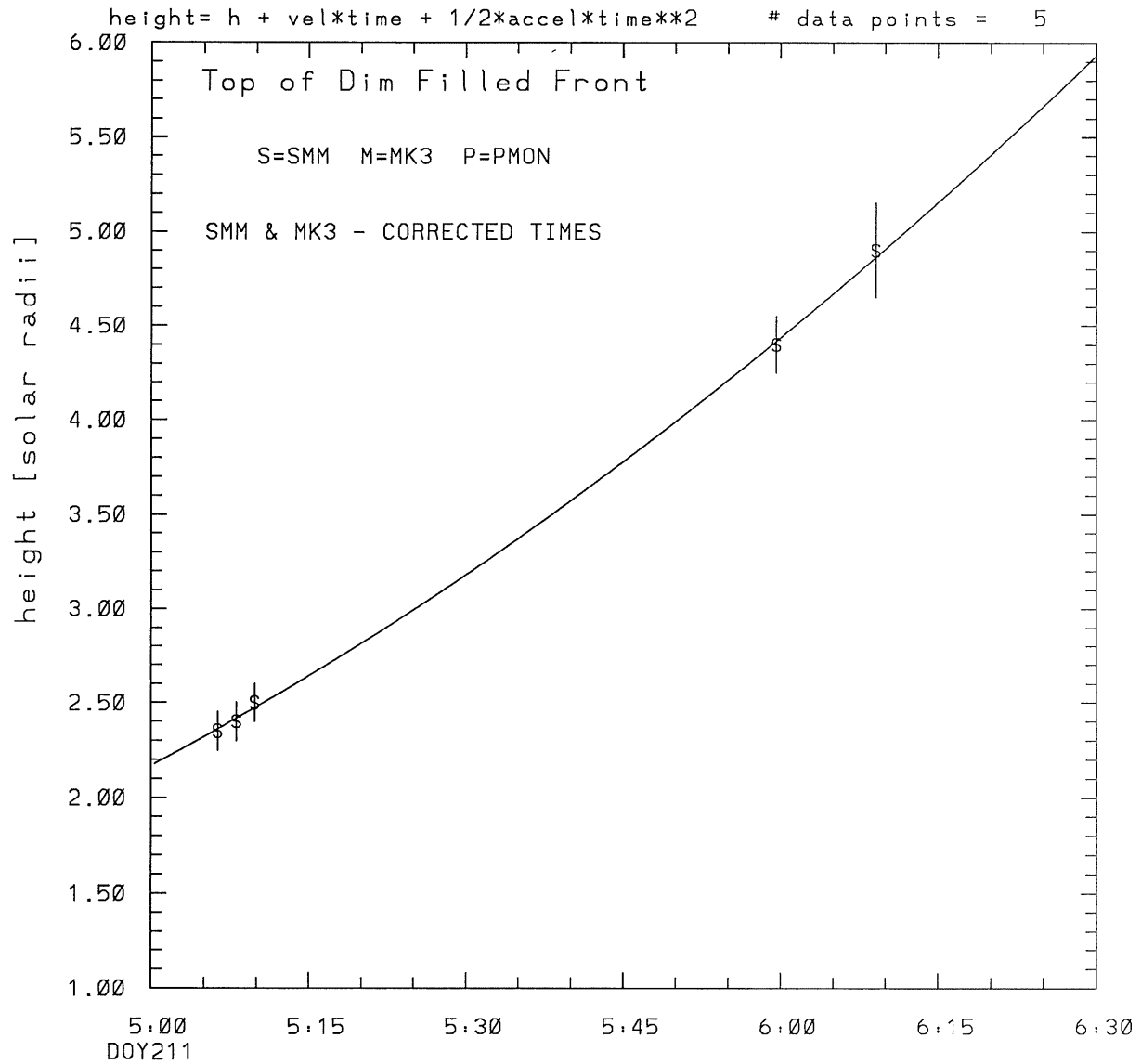


SMM C/P 1980 DOY211 275 +/- 0 degrees



tstart=DOY211 4:32 +/- 0.3 [min.]
radial velocity= 455. +/- 8. [km/sec]

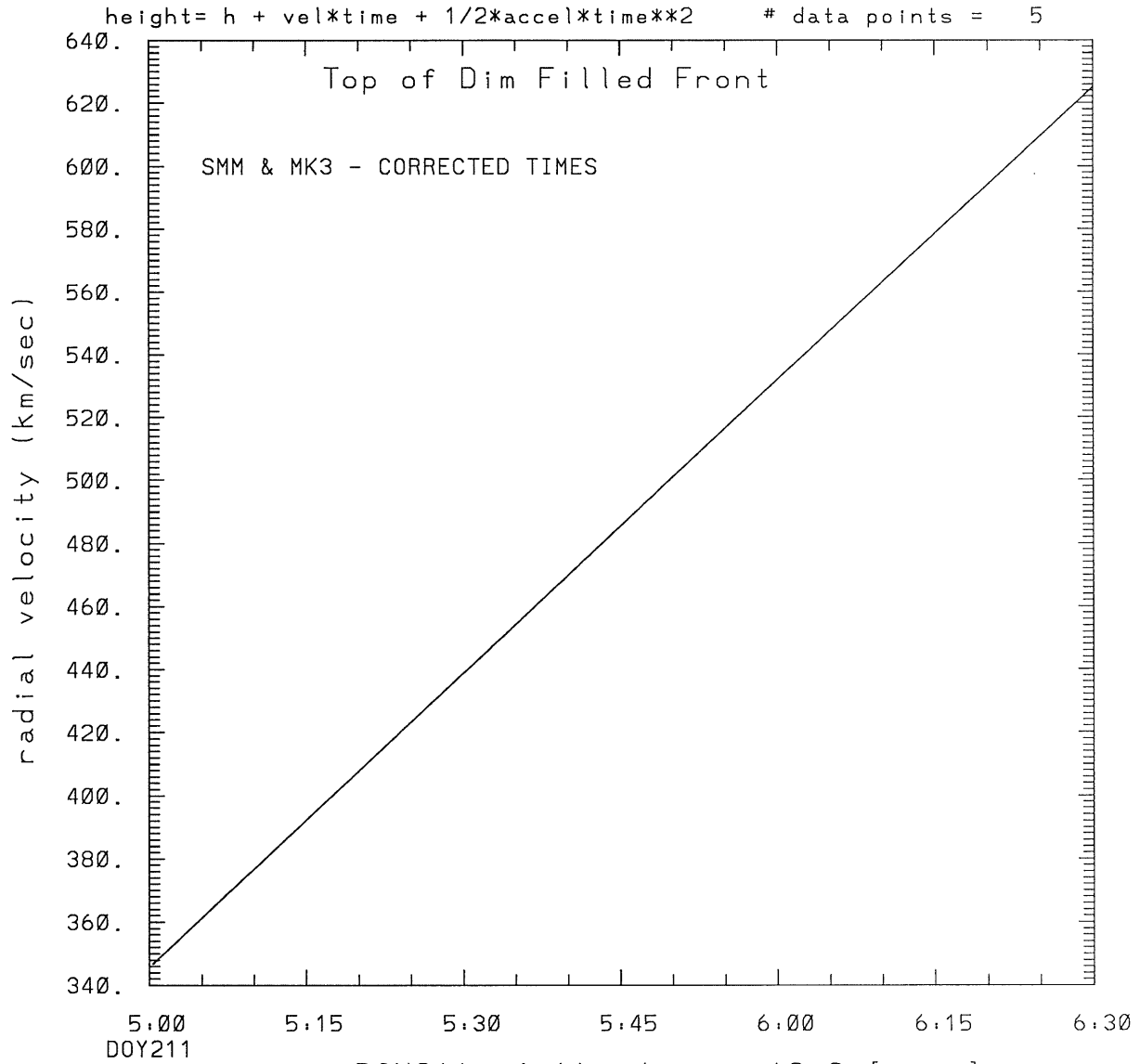
SMM C/P 1980 DOY211 275 +/- 0 degrees



tstart=DOY211 4:11 +/- 18.2 [min.]

radial acceleration = 0.0517 +/- 0.0378 [km/sec**2]

SMM C/P 1980 DOY211 275 +/- 0 degrees



tstart=DOY211 4:11 +/- 18.2 [min.]

radial acceleration=0.517E-01 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in angle	error in angle	datatype
1980	211	5: 6:19	2.35	+/- 0.10	275.0	+/- 0.5	SMM
1980	211	5: 8: 4	2.40	+/- 0.10	275.0	+/- 0.5	SMM
1980	211	5: 9:48	2.50	+/- 0.10	275.0	+/- 0.5	SMM
1980	211	5:59:37	4.40	+/- 0.15	275.0	+/- 1.0	SMM
1980	211	6: 9: 4	4.90	+/- 0.25	275.0	+/- 1.0	SMM

Structure being measured:
Top of Dim Filled Front

OUTPUT:

START TIME:

Event began at $t = 0 + -0.280E+02 +/- 0.271E+00$ [minutes]

In more convenient units:

Event began at DOY 211 4:32 +/- 0.271E+00 [minutes]

Origin defined at DOY211 5: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 455. +/- 8. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.210E+01 +/- 0.172E-01 [solar radii]
- c(2) = 0.393E-01 +/- 0.648E-03 [radii/min]
- c(2) = 0.455E+03 +/- 0.751E+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)= 0.38656E-01 [radii] see Bevington pg. 114

error in c(2)= 0.93615E-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) = 275. +/- 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 5: 6 = 0.000E+00 km/sec

The TOTAL velocity at 5: 6 = 455. km/sec

The TANGENTIAL velocity at 5: 8 = 0.000E+00 km/sec

The TOTAL velocity at 5: 8 = 455. km/sec

The TANGENTIAL velocity at 5: 9 = 0.000E+00 km/sec

The TOTAL velocity at 5: 9 = 455. km/sec

The TANGENTIAL velocity at 5:59 = 0.000E+00 km/sec

The TOTAL velocity at 5:59 = 455. km/sec

The TANGENTIAL velocity at 6: 9 = 0.000E+00 km/sec

The TOTAL velocity at 6: 9 = 455. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 1.24

Standard Deviation in start time measurement = 0.278E+02

Error in time = 0.25638E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.865E-03

Reduced Chi Squared = 0.159E-01

Chi Squared = 0.478E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.999E+00

The probability that no LINEAR correlation exists between the variables = 0.2090E-04

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
1980	211	5: 6:19	2.35	+/- 0.10	275.0	+/- 0.5	SMM
1980	211	5: 8: 4	2.40	+/- 0.10	275.0	+/- 0.5	SMM
1980	211	5: 9:48	2.50	+/- 0.10	275.0	+/- 0.5	SMM
1980	211	5:59:37	4.40	+/- 0.15	275.0	+/- 1.0	SMM
1980	211	6: 9: 4	4.90	+/- 0.25	275.0	+/- 1.0	SMM

Structure being measured:
Top of Dim Filled Front

OUTPUT:

START TIME:

Event began at $t = 0 + -0.507E+02 \pm 0.182E+02$ [minutes]
In more convenient units:
Event began at DOY 211 4:11 $\pm 0.182E+02$ [minutes]

Origin defined at DOY211 5: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = $0.517E-01 \pm 0.378E-01$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.217E+01 \pm 0.518E-01$ [solar radii]
c(2) = $0.298E-01 \pm 0.694E-02$ [radii/min]
c(2) = $0.346E+03 \pm 0.805E+02$ [km/sec]
c(3) = $0.134E-03 \pm 0.979E-04$ [radii/min**2]
c(3) = $0.517E-01 \pm 0.378E-01$ [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = $0.57138E-01$ [radii] Bevington pg 154 (8-30)
Exact error in c(1) = $0.21284E-01$ [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = $0.70298E-02$ [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = $0.31737E-02$ [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = $0.95511E-04$ [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = $0.45789E-04$ [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) = 275. +/- 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 5: 6 = 0.000E+00 km/sec

The TOTAL velocity at 5: 6 = 365. km/sec

The TANGENTIAL velocity at 5: 8 = 0.000E+00 km/sec

The TOTAL velocity at 5: 8 = 371. km/sec

The TANGENTIAL velocity at 5: 9 = 0.000E+00 km/sec

The TOTAL velocity at 5: 9 = 376. km/sec

The TANGENTIAL velocity at 5:59 = 0.000E+00 km/sec

The TOTAL velocity at 5:59 = 531. km/sec

The TANGENTIAL velocity at 6: 9 = 0.000E+00 km/sec

The TOTAL velocity at 6: 9 = 560. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 1.24

Standard Deviation in start time measurement = 0.278E+02

Value of reduced Chi Squared returned from nllst2 = 0.711E-03

Reduced Chi Squared = 0.563E-02

Chi Squared = 0.113E-01

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 = 0.8772E+00

The correlation between the data and the time**2 term = 0.8566E+00

The correlation between the data and the complete equation of motion = 0.9971E+00

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