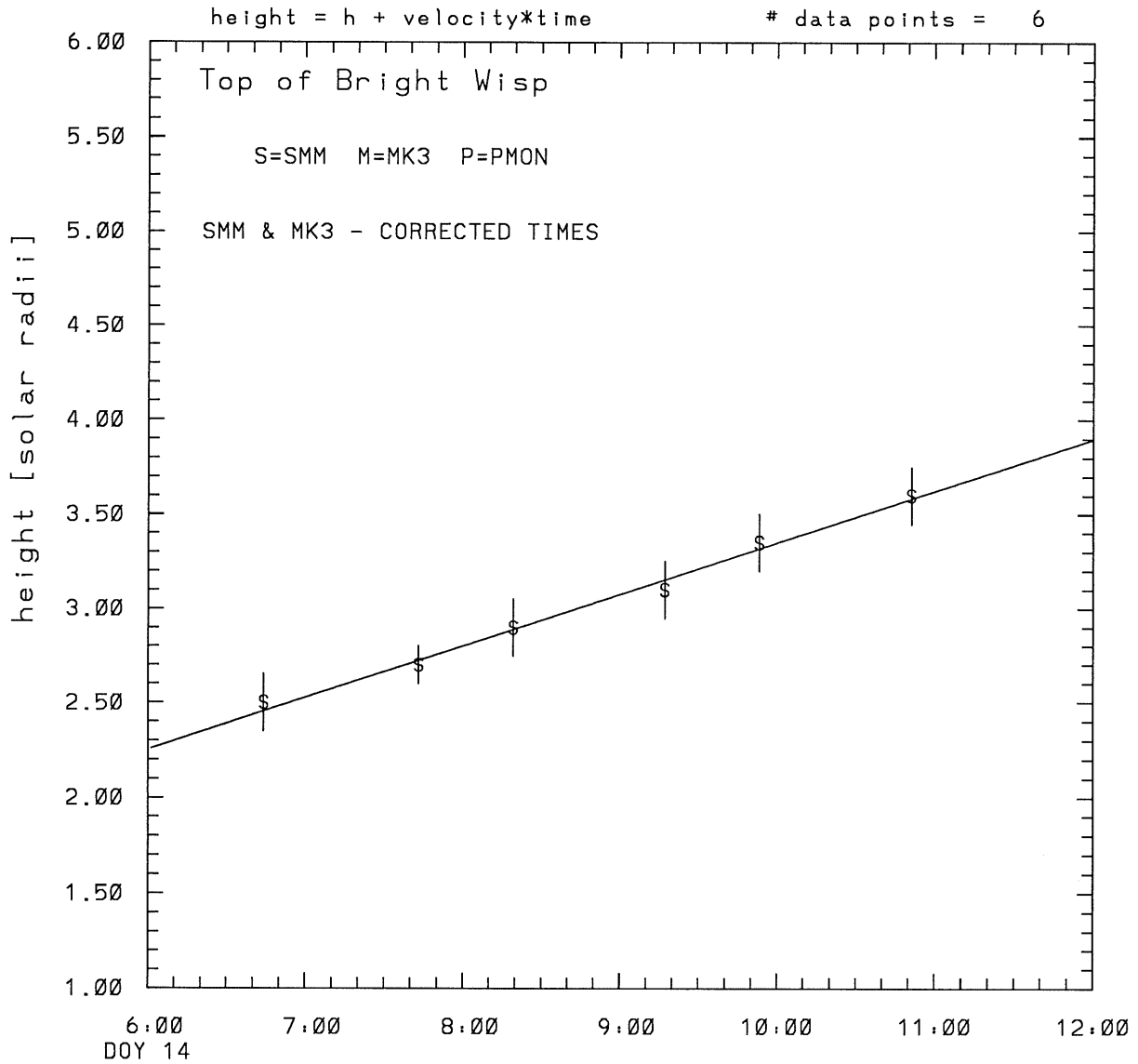
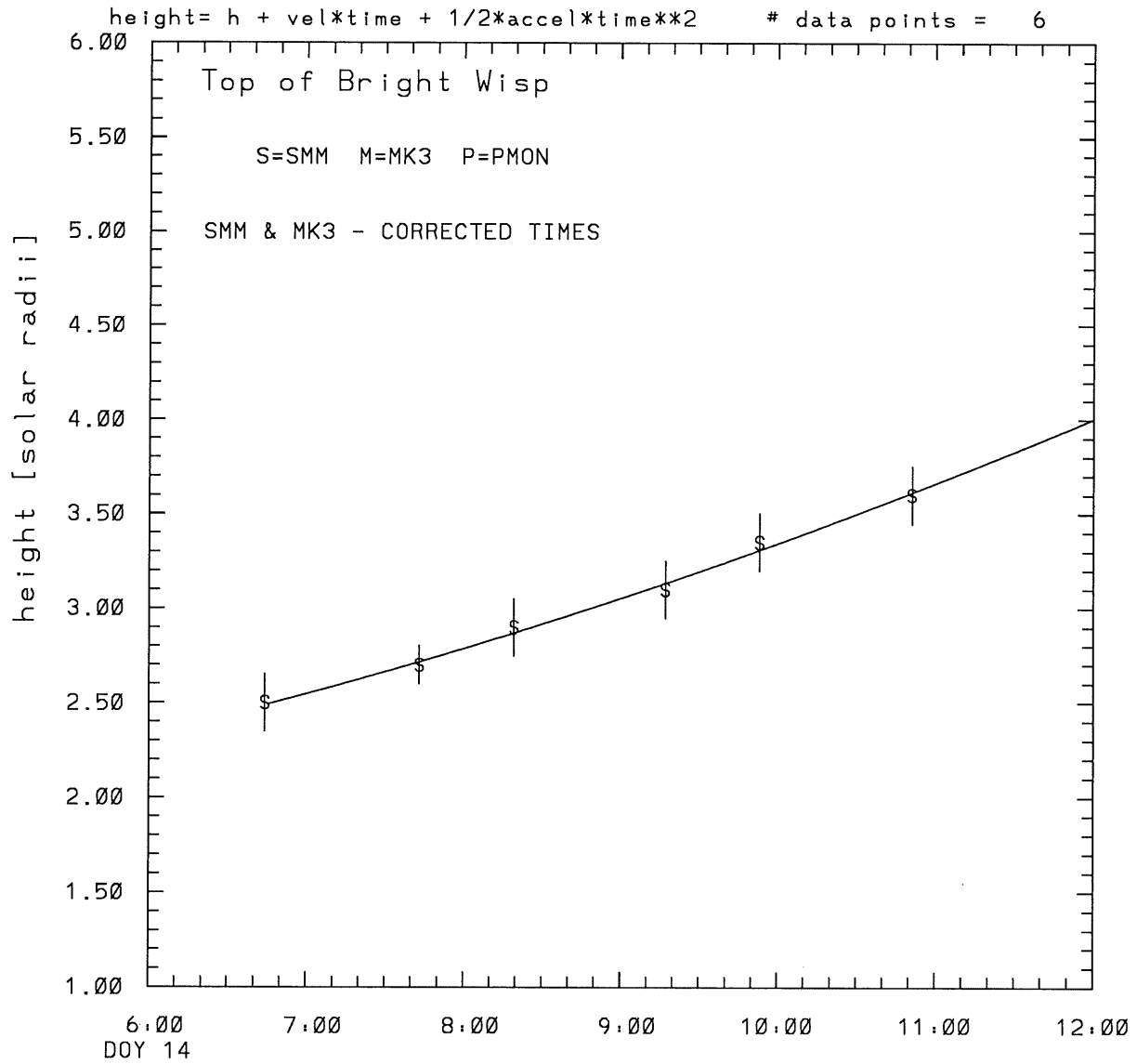


SMM C/P 1985 DOY 14 285 +/- 0 degrees



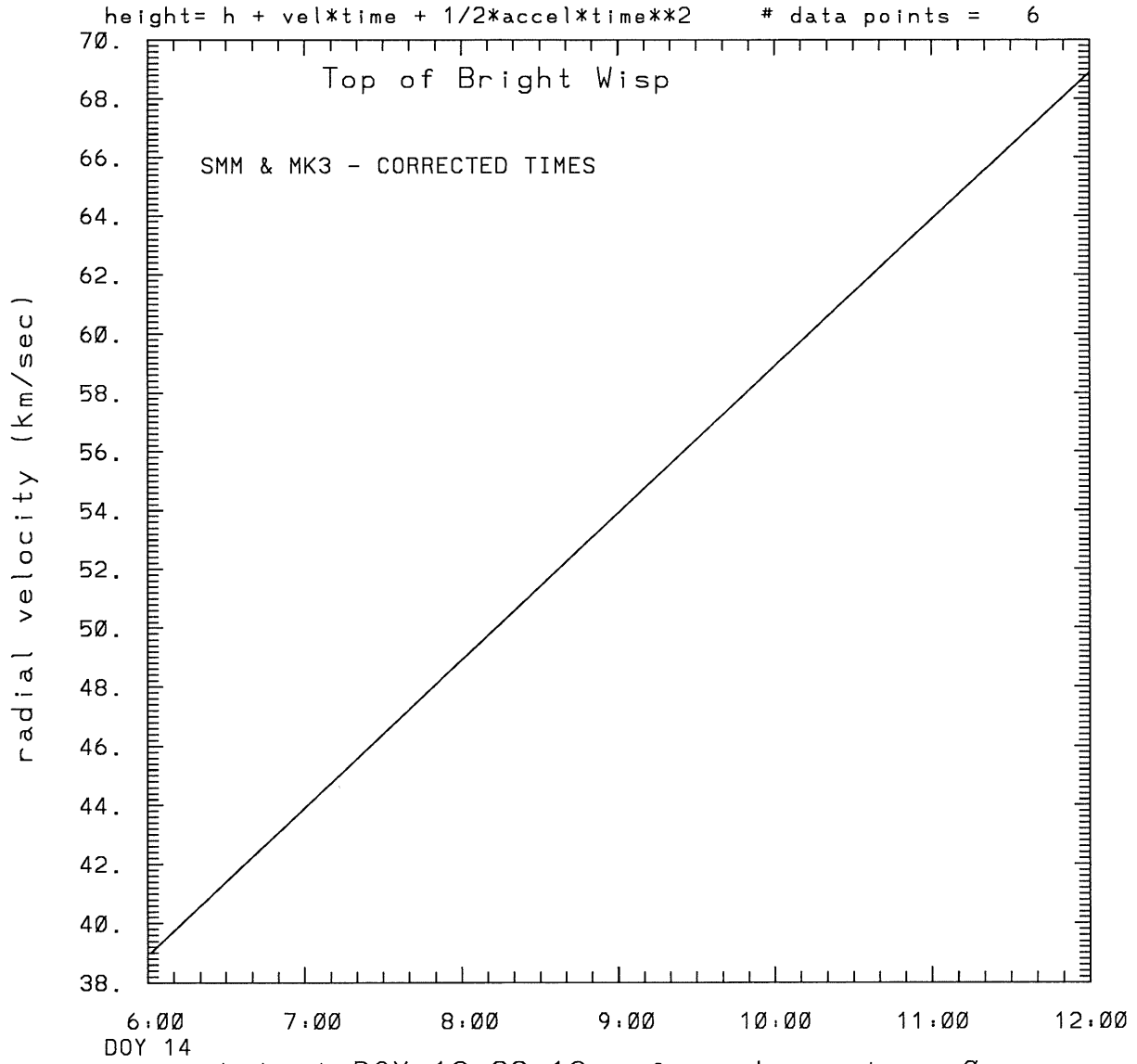
tstart=DOY 14 1:28 +/- 3.6 [min.]
radial velocity= 53. +/- 2. [km/sec]

SMM C/P 1985 DOY 14 285 +/- 0 degrees



tstart=DOY 13 22:13 from derivative=0
Event begins at 1.55 Solar Radii
radial acceleration = 0.0014 ± 0.0009 [km/sec**2]

SMM C/P 1985 DOY 14 285 +/- 0 degrees



DOY 14
tstart=DOY 13 22:13 from derivative=0
Event begins at 1.55 Solar Radii
radial acceleration=0.139E-02 km/sec**2

This is a 1 order run

INPUT:

year	day	time	radii	radius	error in	angle	error in	datatype
1985	14	6:44:14	2.50	+/- 0.15	285.0	+/- 0.5	SMM	
1985	14	7:43:12	2.70	+/- 0.10	285.0	+/- 0.5	SMM	
1985	14	8:19:14	2.90	+/- 0.15	285.0	+/- 0.5	SMM	
1985	14	9:17:12	3.10	+/- 0.15	285.0	+/- 1.0	SMM	
1985	14	9:53:14	3.35	+/- 0.15	285.0	+/- 1.0	SMM	
1985	14	10:51:12	3.60	+/- 0.15	285.0	+/- 1.0	SMM	

Structure being measured:

Top of Bright Wisp

OUTPUT:

START TIME:

Event began at $t = 0 + -0.274E+03 +/- 0.364E+01$ [minutes]

In more convenient units:

Event began at DOY 14 1:28 +/- 0.364E+01 [minutes]

Origin defined at DOY 14 6: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 53. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.225E+01 +/- 0.324E-01 [solar radii]
c(2) = 0.457E-02 +/- 0.184E-03 [radii/min]
c(2) = 0.530E+02 +/- 0.214E+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)= 0.38720E-01 [radii] see Bevington pg. 114

error in c(2)= 0.20693E-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) = 285. +/- 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 6:44 = 0.000E+00 km/sec

The TOTAL velocity at 6:44 = 53. km/sec

The TANGENTIAL velocity at 7:43 = 0.000E+00 km/sec

The TOTAL velocity at 7:43 = 53. km/sec

The TANGENTIAL velocity at 8:19 = 0.000E+00 km/sec

The TOTAL velocity at 8:19 = 53. km/sec

The TANGENTIAL velocity at 9:17 = 0.000E+00 km/sec

The TOTAL velocity at 9:17 = 53. km/sec

The TANGENTIAL velocity at 9:53 = 0.000E+00 km/sec

The TOTAL velocity at 9:53 = 53. km/sec

The TANGENTIAL velocity at 10:51 = 0.000E+00 km/sec

The TOTAL velocity at 10:51 = 53. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.41

Standard Deviation in start time measurement = 0.823E+02

Error in time = 0.18245E+02 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.127E-02

Reduced Chi Squared = 0.545E-02

Chi Squared = 0.218E-01

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.996E+00

The probability that no LINEAR correlation exists between the variables = 0.2413E-04

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

This is a 2 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	angle	datatype
1985	14	6:44:14	2.50	+/- 0.15	285.0	+/- 0.5	SMM
1985	14	7:43:12	2.70	+/- 0.10	285.0	+/- 0.5	SMM
1985	14	8:19:14	2.90	+/- 0.15	285.0	+/- 0.5	SMM
1985	14	9:17:12	3.10	+/- 0.15	285.0	+/- 1.0	SMM
1985	14	9:53:14	3.35	+/- 0.15	285.0	+/- 1.0	SMM
1985	14	10:51:12	3.60	+/- 0.15	285.0	+/- 1.0	SMM

Structure being measured:
Top of Bright Wisp

OUTPUT:

START TIME:

tstart=DOY 13 22:13 from derivative = 0
Event begins at 1.55 Solar Radii
Origin defined at DOY 14 6: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.139E-02 +/- 0.863E-03 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.233E+01 +/- 0.574E-01 [solar radii]
c(2) = 0.335E-02 +/- 0.774E-03 [radii/min]
c(2) = 0.389E+02 +/- 0.898E+01 [km/sec]
c(3) = 0.359E-05 +/- 0.223E-05 [radii/min**2]
c(3) = 0.139E-02 +/- 0.863E-03 [km/sec**2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.64183E-01 [radii] Bevington pg 154 (8-30)
Exact error in c(1) = 0.15067E-01 [radii] Bevington pg 154 (8-28)
Approximate error in c(2) = 0.86390E-03 [radii/min] Bevington pg 154 (8-30)
Exact error in c(2) = 0.25450E-03 [radii/min] Bevington pg 154 (8-28)
Approximate error in c(3) = 0.25135E-05 [radii/min**] Bevington pg 154 (8-30)
Exact error in c(3) = 0.73830E-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) = 285. +/- 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 6:44 = 0.000E+00 km/sec

The TOTAL velocity at 6:44 = 43. km/sec

The TANGENTIAL velocity at 7:43 = 0.000E+00 km/sec

The TOTAL velocity at 7:43 = 48. km/sec

The TANGENTIAL velocity at 8:19 = 0.000E+00 km/sec

The TOTAL velocity at 8:19 = 51. km/sec

The TANGENTIAL velocity at 9:17 = 0.000E+00 km/sec

The TOTAL velocity at 9:17 = 55. km/sec

The TANGENTIAL velocity at 9:53 = 0.000E+00 km/sec

The TOTAL velocity at 9:53 = 58. km/sec

The TANGENTIAL velocity at 10:51 = 0.000E+00 km/sec

The TOTAL velocity at 10:51 = 63. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.41

Standard Deviation in start time measurement = 0.823E+02

Value of reduced Chi Squared returned from nllst2 = 0.961E-03

Reduced Chi Squared = 0.573E-02

Chi Squared = 0.172E-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 = 0.9629E+00

The correlation between the data and the time**2 term = 0.9641E+00

The correlation between the data and the complete equation of motion = 0.9938E+00

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