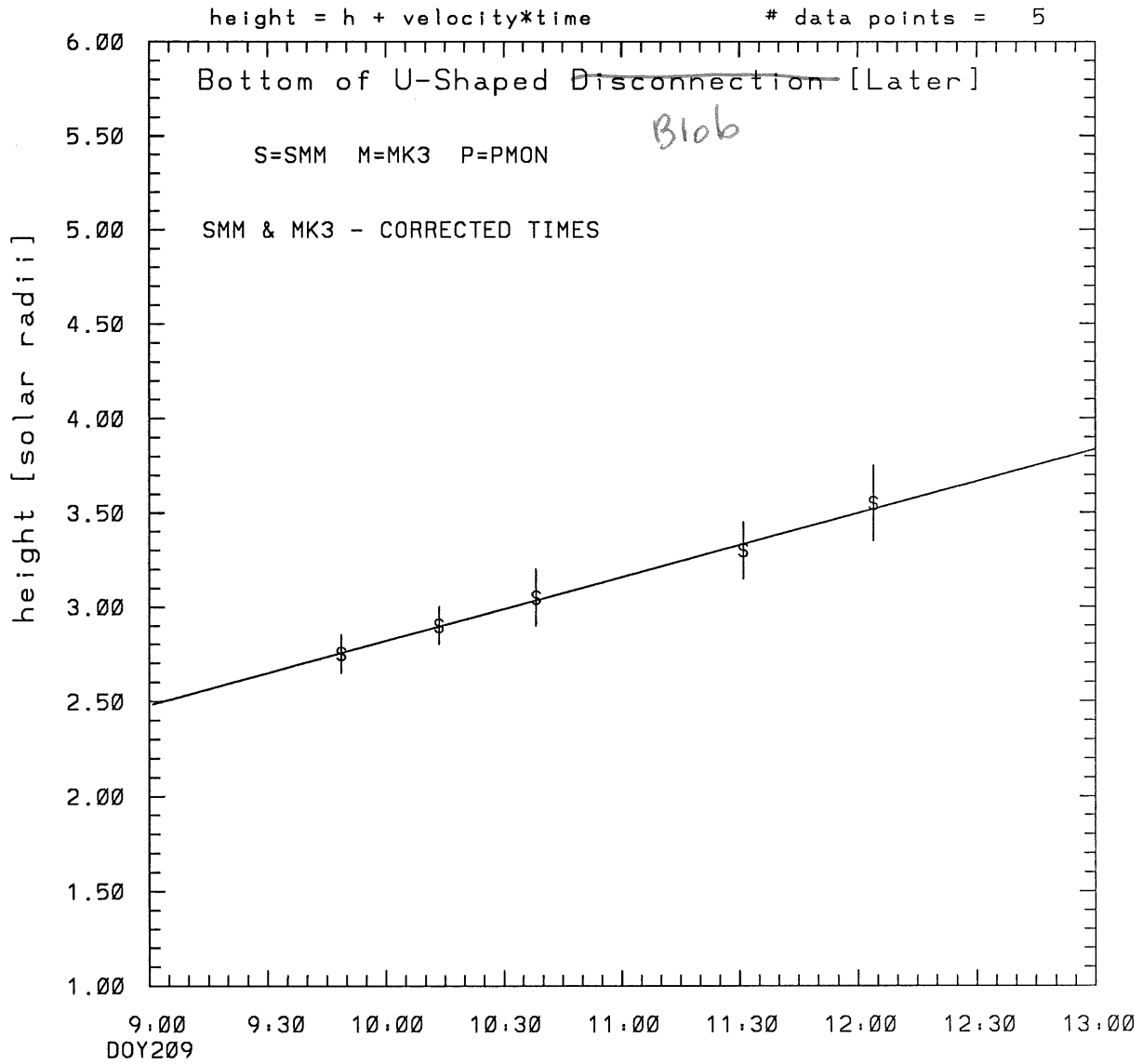
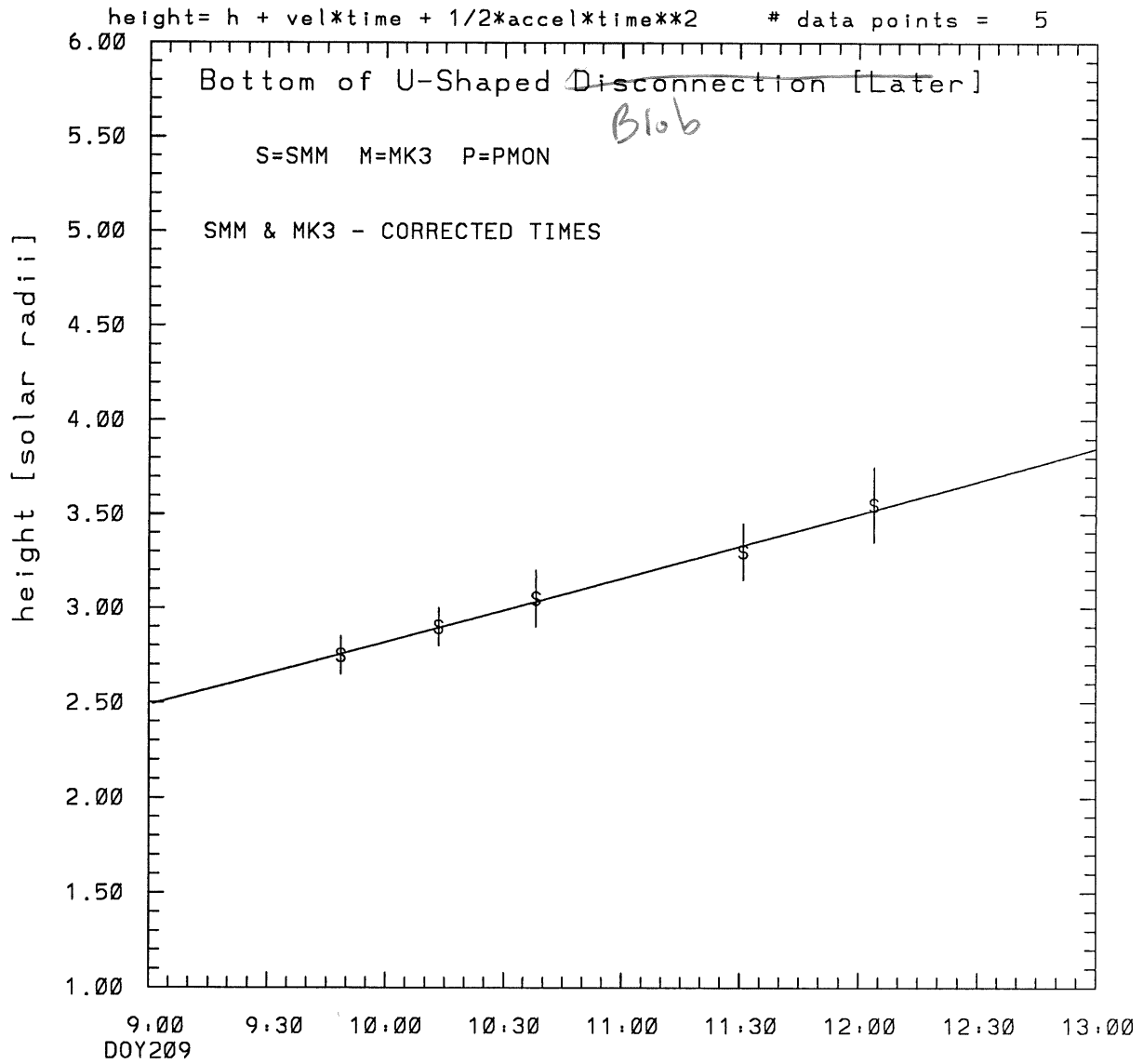


SMM C/P 1988 DOY209 259 +/- 0 degrees



tstart=DOY209 4:40 +/- 4.2 [min.]  
radial velocity= 66. +/- 2. [km/sec]

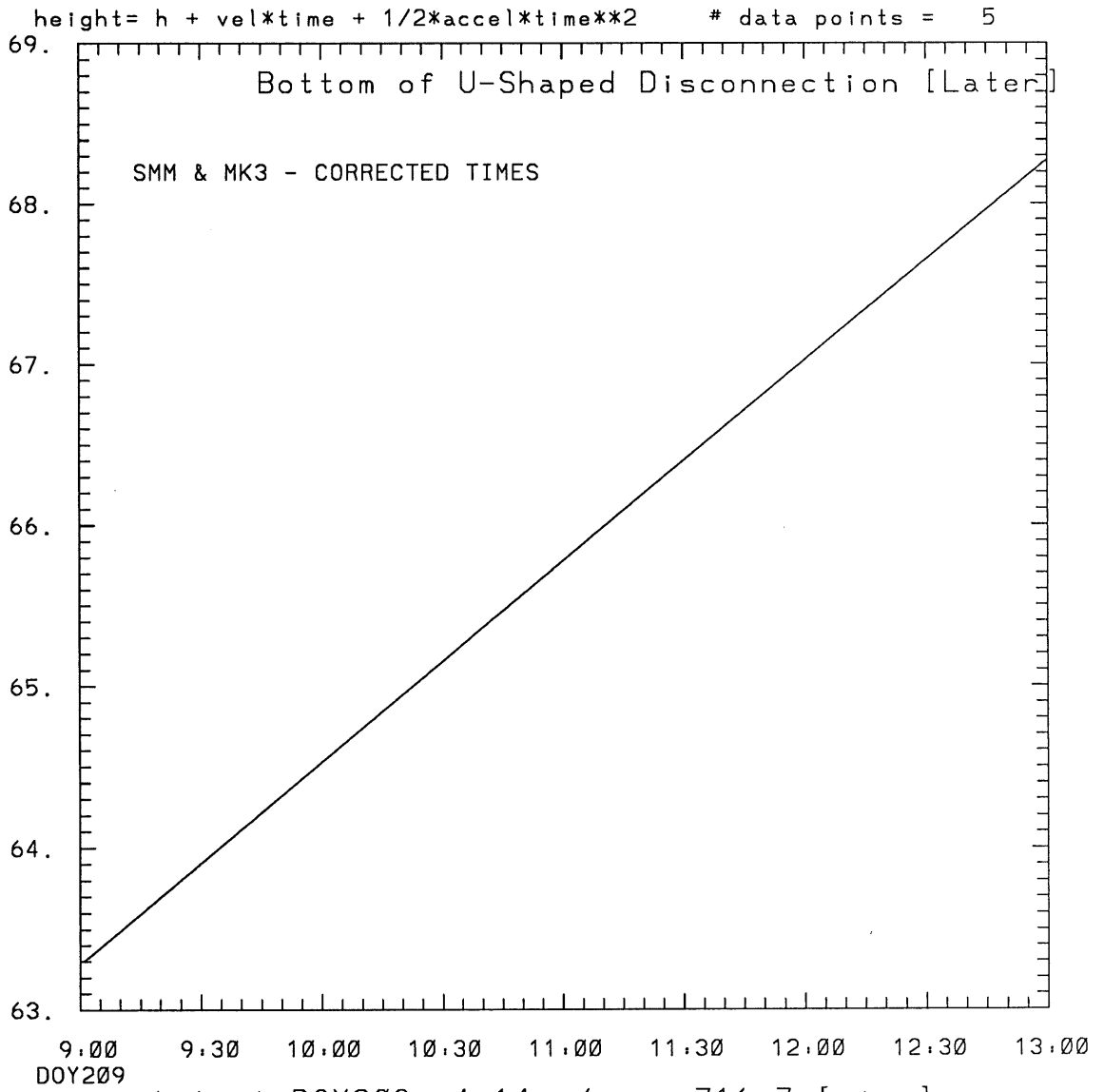
SMM C/P 1988 DOY209 259 +/- 0 degrees



tstart=DOY209 4:14 +/- 716.7 [min.]

radial acceleration = 0.0003 +/- 0.0023 [km/sec\*\*2]

SMM C/P 1988 DOY209 259 +/- 0 degrees



DOY209 tstart=DOY209 4:14 +/- 716.7 [min.]

radial acceleration=0.347E-03 km/sec\*\*2

\*\*\*\*\*  
This is a 1 order run  
\*\*\*\*\*

\*\*\*\*\*  
INPUT:  
\*\*\*\*\*

year	day	time	radii	radius	error in angle	error in angle	datatype
1988	209	9:48:41	2.75 +/- 0.10	259.0 +/- 0.5			SMM
1988	209	10:13:29	2.90 +/- 0.10	259.0 +/- 0.5			SMM
1988	209	10:38:14	3.05 +/- 0.15	259.0 +/- 1.0			SMM
1988	209	11:30:56	3.30 +/- 0.15	259.0 +/- 1.0			SMM
1988	209	12: 3:56	3.55 +/- 0.20	259.0 +/- 1.0			SMM

\*\*\*\*\*  
Structure being measured:  
Bottom of U-Shaped Disconnection [Later]  
\*\*\*\*\*

\*\*\*\*\*  
OUTPUT:  
\*\*\*\*\*

START TIME:

Event began at  $t = 0 + -0.262E+03 +/- 0.421E+01$  [minutes]  
In more convenient units:  
Event began at DOY 209 4:40 +/- 0.421E+01 [minutes]

Origin defined at DOY209 9: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 66. +/- 2. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.248E+01 +/- 0.190E-01 [solar radii]  
c(2) = 0.565E-02 +/- 0.192E-03 [radii/min]  
c(2) = 0.656E+02 +/- 0.222E+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)= 0.30236E-01 [radii] see Bevington pg. 114  
error in c(2)= 0.24848E-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) = 259. +/- 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, RADIAL AND TOTAL SPEEDS AT EACH DATA POINT ARE:  
The TANGENTIAL speed at 9:48 = 0.000E+00 km/sec  
The RADIAL speed at 9:48 = 66. km/sec

The TOTAL speed at 9:48 = 66. km/sec

The TANGENTIAL speed at 10:13 = 0.000E+00 km/sec

The RADIAL speed at 10:13 = 66. km/sec

The TOTAL speed at 10:13 = 66. km/sec

The TANGENTIAL speed at 10:38 = 0.000E+00 km/sec

The RADIAL speed at 10:38 = 66. km/sec

The TOTAL speed at 10:38 = 66. km/sec

The TANGENTIAL speed at 11:30 = 0.000E+00 km/sec

The RADIAL speed at 11:30 = 66. km/sec

The TOTAL speed at 11:30 = 66. km/sec

The TANGENTIAL speed at 12: 3 = 0.000E+00 km/sec

The RADIAL speed at 12: 3 = 66. km/sec

The TOTAL speed at 12: 3 = 66. km/sec

\*\*\*\*\*  
The following info is for estimating goodness of the fit  
\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.32

Standard Deviation in start time measurement = 0.497E+02

Error in time = 0.84665E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.344E-03

Reduced Chi Squared = 0.325E-02

Chi Squared = 0.975E-02

The probability for exceeding chi square = 0.100E+01

The correlation coefficient = 0.997E+00

The probability that no LINEAR correlation exists between the variables = 0.16911

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 angle	datatype
1988	209	9:48:41	2.75 +/- 0.10	259.0 +/- 0.5			SMM
1988	209	10:13:29	2.90 +/- 0.10	259.0 +/- 0.5			SMM
1988	209	10:38:14	3.05 +/- 0.15	259.0 +/- 1.0			SMM
1988	209	11:30:56	3.30 +/- 0.15	259.0 +/- 1.0			SMM
1988	209	12: 3:56	3.55 +/- 0.20	259.0 +/- 1.0			SMM

\*\*\*\*\*  
Structure being measured:  
Bottom of U-Shaped Disconnection [Later]  
\*\*\*\*\*

\*\*\*\*\*  
OUTPUT:  
\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.286E+03 +/- 0.717E+03 [minutes]  
In more convenient units:  
Event began at DOY 209 4:14 +/- 0.717E+03 [minutes]

Origin defined at DOY209 9: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.347E-03 +/- 0.234E-02 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.249E+01 +/- 0.635E-01 [solar radii]  
c(2) = 0.546E-02 +/- 0.135E-02 [radii/min]  
c(2) = 0.633E+02 +/- 0.157E+02 [km/sec]  
c(3) = 0.897E-06 +/- 0.604E-05 [radii/min\*\*2]  
c(3) = 0.347E-03 +/- 0.234E-02 [km/sec\*\*2]

The computed ERRORS in coefficients [BEVINGTON] are:

Approximate error in c(1) = 0.10104E+00 [radii] Bevington pg 154 (8-30)  
Exact error in c(1) = 0.20627E-01 [radii] Bevington pg 154 (8-28)  
Approximate error in c(2) = 0.19923E-02 [radii/min] Bevington pg 154 (8-30)  
Exact error in c(2) = 0.46608E-03 [radii/min] Bevington pg 154 (8-28)  
Approximate error in c(3) = 0.84028E-05 [radii/min\*\*] Bevington pg 154 (8-30)  
Exact error in c(3) = 0.22432E-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) = 259. +/- 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, RADIAL AND TOTAL SPEEDS AT EACH DATA POINT ARE:

The TANGENTIAL speed at 9:48 = 0.000E+00 km/sec

The RADIAL speed at 9:48 = 64. km/sec

The TOTAL speed at 9:48 = 64. km/sec

The TANGENTIAL speed at 10:13 = 0.000E+00 km/sec

The RADIAL speed at 10:13 = 65. km/sec

The TOTAL speed at 10:13 = 65. km/sec

The TANGENTIAL speed at 10:38 = 0.000E+00 km/sec

The RADIAL speed at 10:38 = 65. km/sec

The TOTAL speed at 10:38 = 65. km/sec

The TANGENTIAL speed at 11:30 = 0.000E+00 km/sec

The RADIAL speed at 11:30 = 66. km/sec

The TOTAL speed at 11:30 = 66. km/sec

The TANGENTIAL speed at 12: 3 = 0.000E+00 km/sec

The RADIAL speed at 12: 3 = 67. km/sec

The TOTAL speed at 12: 3 = 67. km/sec

\*\*\*\*\*  
The following info is for estimating goodness of the fit  
\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.32

Standard Deviation in start time measurement = 0.497E+02

Value of reduced Chi Squared returned from nllst2 = 0.455E-03

Reduced Chi Squared = 0.451E-02

Chi Squared = 0.901E-02

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 = 0.9751E+00

The correlation between the data and the time\*\*2 term = 0.9146E+00

The correlation between the data and the complete equation of motion = 0.9922E+00

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