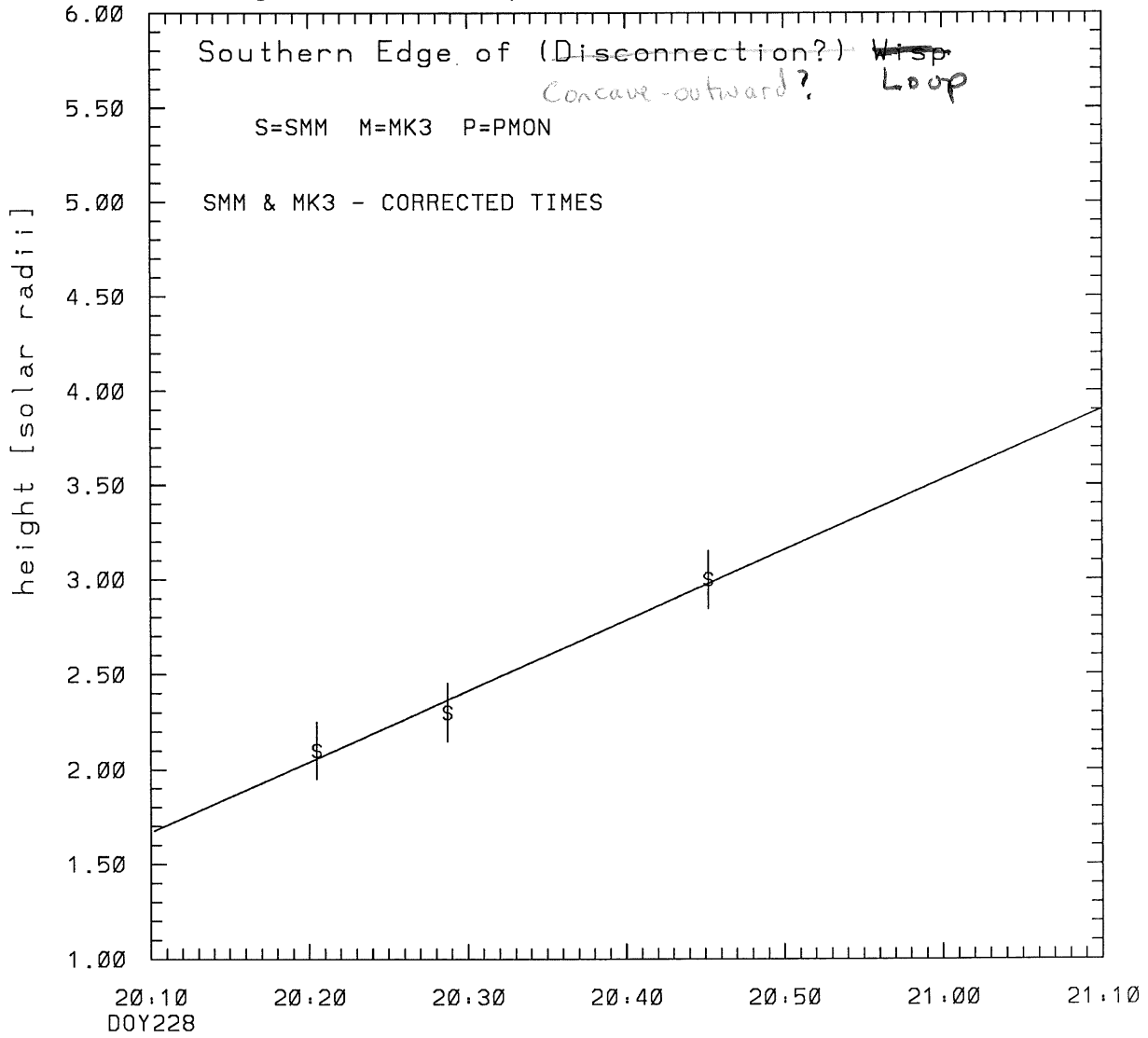


SMM C/P 1989 DOY228 210 +/- 0 degrees

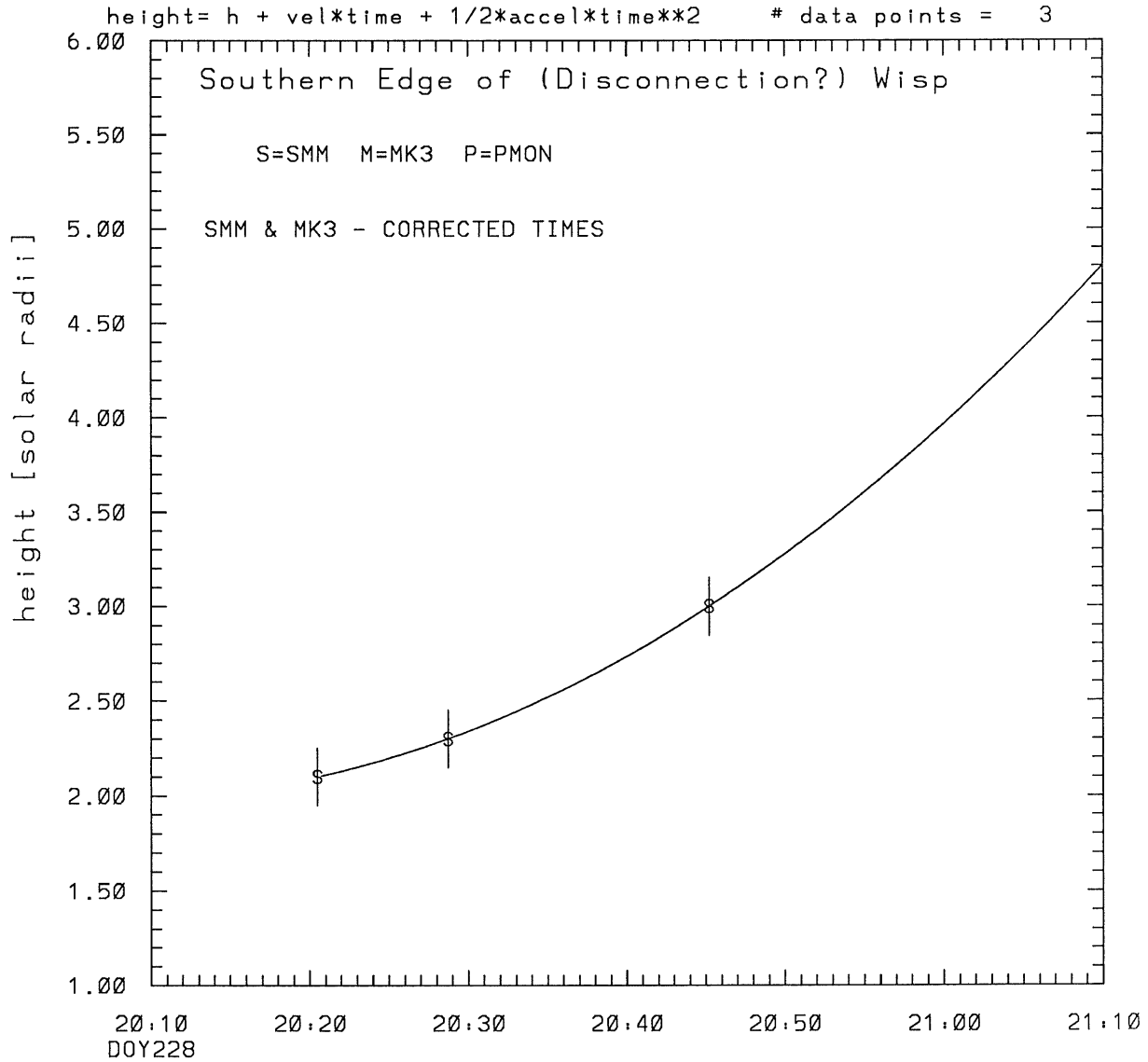
height = h + velocity*time

data points = 3



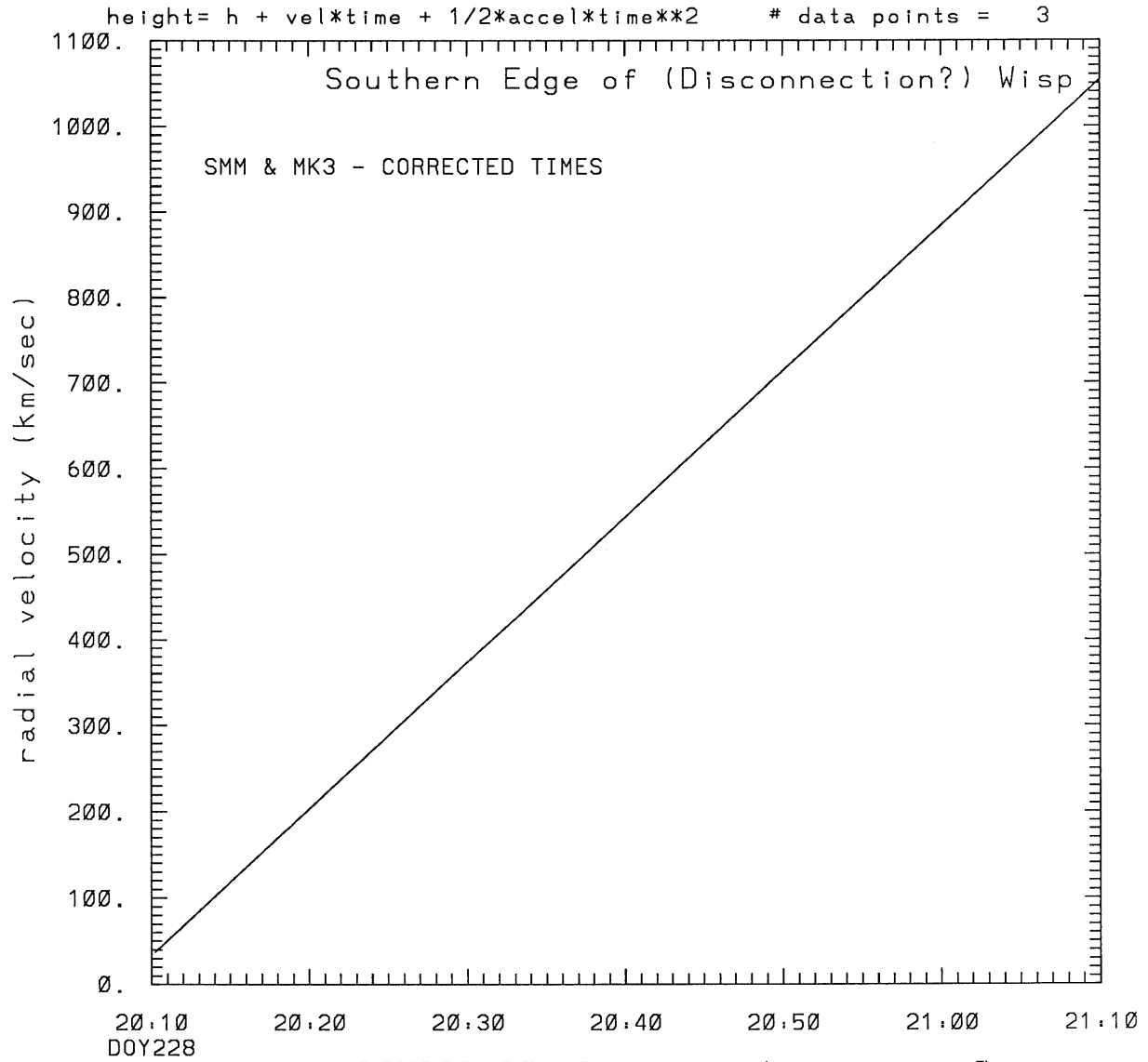
tstart=DOY228 19:54 +/- 1.1 [min.]
radial velocity= 432. +/- 37. [km/sec]

SMM C/P 1989 DOY228 210 +/- 0 degrees



tstart=DOY228 20: 9 from derivative=0
Event begins at 1.99 Solar Radii
radial acceleration= 0.2835 +/- 0.0000 [km/sec**2]

SMM C/P 1989 DOY228 210 +/- 0 degrees



tstart=DOY228 20: 9 from derivative=0
Event begins at 1.99 Solar Radii
radial acceleration=0.283E+00 km/sec**2

1989 DOY 228

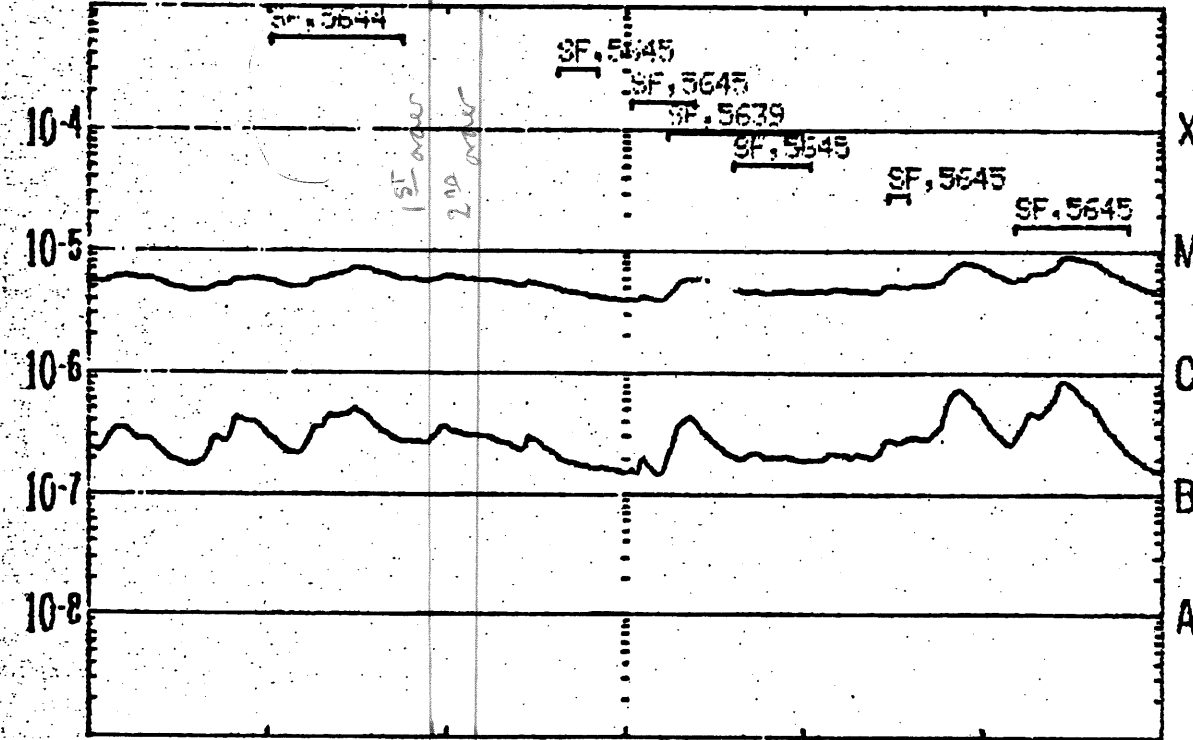
Southern Edge of Disconnection?
Wise, center @ 230°
measured @ 210°
[19:54] 1st order
[20:00] 2nd order

GOES OPTICAL DATA TOGETHER

STOP
Per...

BEGIN: 16 AUG 89

Watts meter²



GOES 7 1.0-8.0A
OPTICAL FLARES

15/1800

16/2100

17/0000

SAA's
NIGHT

GOES-7 1 MIN DATA: OPTICAL FLARE DUR, IMP, REGION

RUN: 2007UT
21 AUG 89

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	angle	datatype
1989	228	20:20:29	2.10	+/- 0.15	210.0	+/- 0.5	SMM
1989	228	20:28:43	2.30	+/- 0.15	210.0	+/- 0.5	SMM
1989	228	20:45:13	3.00	+/- 0.15	210.0	+/- 0.5	SMM

Structure being measured:

Southern Edge of (Disconnection?) ~~Wisp~~ Loop

OUTPUT:

START TIME:

Event began at t = 0 + -0.179E+02 +/- 0.107E+01 [minutes]

In more convenient units:

Event began at DOY 228 19:54 +/- 0.107E+01 [minutes]

Origin defined at DOY228 20:10

RADIAL INFORMATION:

RADIAL VELOCITY = 432. +/- 37. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.167E+01 +/- 0.755E-01 [solar radii]
 c(2) = 0.373E-01 +/- 0.317E-02 [radii/min]
 c(2) = 0.432E+03 +/- 0.368E+02 [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)= 0.10673E+00 [radii] see Bevington pg. 114

error in c(2)= 0.44828E-02 [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) = 210. +/- 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 20:20 = 0. km/sec

The TOTAL velocity at 20:20 = 432. km/sec

The TANGENTIAL velocity at 20:28 = 0. km/sec

The TOTAL velocity at 20:28 = 432. km/sec

The TANGENTIAL velocity at 20:45 = 0. km/sec

The TOTAL velocity at 20:45 = 432. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.47

Standard Deviation in start time measurement = 0.103E+02

Error in time = 0.21434E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.319E-02

Reduced Chi Squared = 0.114E-01

Chi Squared = 0.114E-01

The probability for exceeding chi square = 0.955E+00

The correlation coefficient = 0.993E+00

The probability that no LINEAR correlation exists between the variables = 0.7624E-01

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

This is a 2 order run

INPUT:

year	doy	time	radii	error in radius	angle	error in angle	datatype
1989	228	20:20:29	2.10	+/- 0.15	210.0	+/- 0.5	SMM
1989	228	20:28:43	2.30	+/- 0.15	210.0	+/- 0.5	SMM
1989	228	20:45:13	3.00	+/- 0.15	210.0	+/- 0.5	SMM

Structure being measured:

Southern Edge of (Disconnection?) Wisp

OUTPUT:

START TIME:

tstart=DOY228 20: 9 from derivative = 0

Event begins at 1.99 Solar Radii

Origin defined at DOY228 20:10

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.283E+00 +/- 0.117E-04 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.199E+01 +/- 0.140E-04 [solar radii]
c(2) = 0.289E-02 +/- 0.143E-05 [radii/min]
c(2) = 0.335E+02 +/- 0.165E-01 [km/sec]
c(3) = 0.733E-03 +/- 0.302E-07 [radii/min**2]
c(3) = 0.283E+00 +/- 0.117E-04 [km/sec**2]

ANGULAR INFORMATION:

ANGULAR ACCELERATION= 0.0000E+00 +/- 0.0000E+00[radians/sec**2]

The computed ANGULAR coefficients and errors FROM NLLST2 are:

a(1) = 210. +/- 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 20:20 = 0. km/sec

The TOTAL velocity at 20:20 = 212. km/sec

The TANGENTIAL velocity at 20:28 = 0. km/sec

The TOTAL velocity at 20:28 = 352. km/sec

The TANGENTIAL velocity at 20:45 = 0. km/sec

The TOTAL velocity at 20:45 = 632. 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!