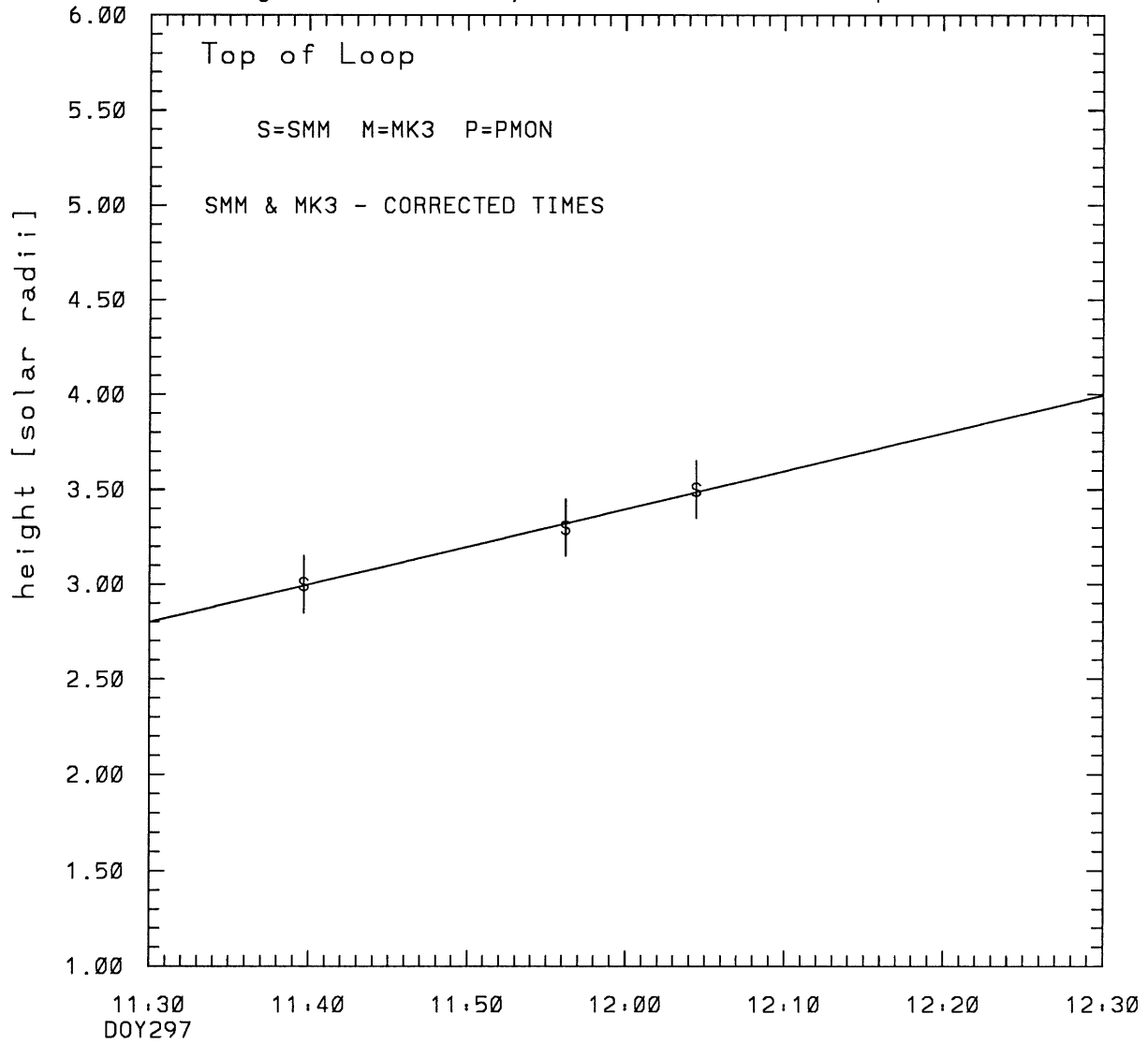


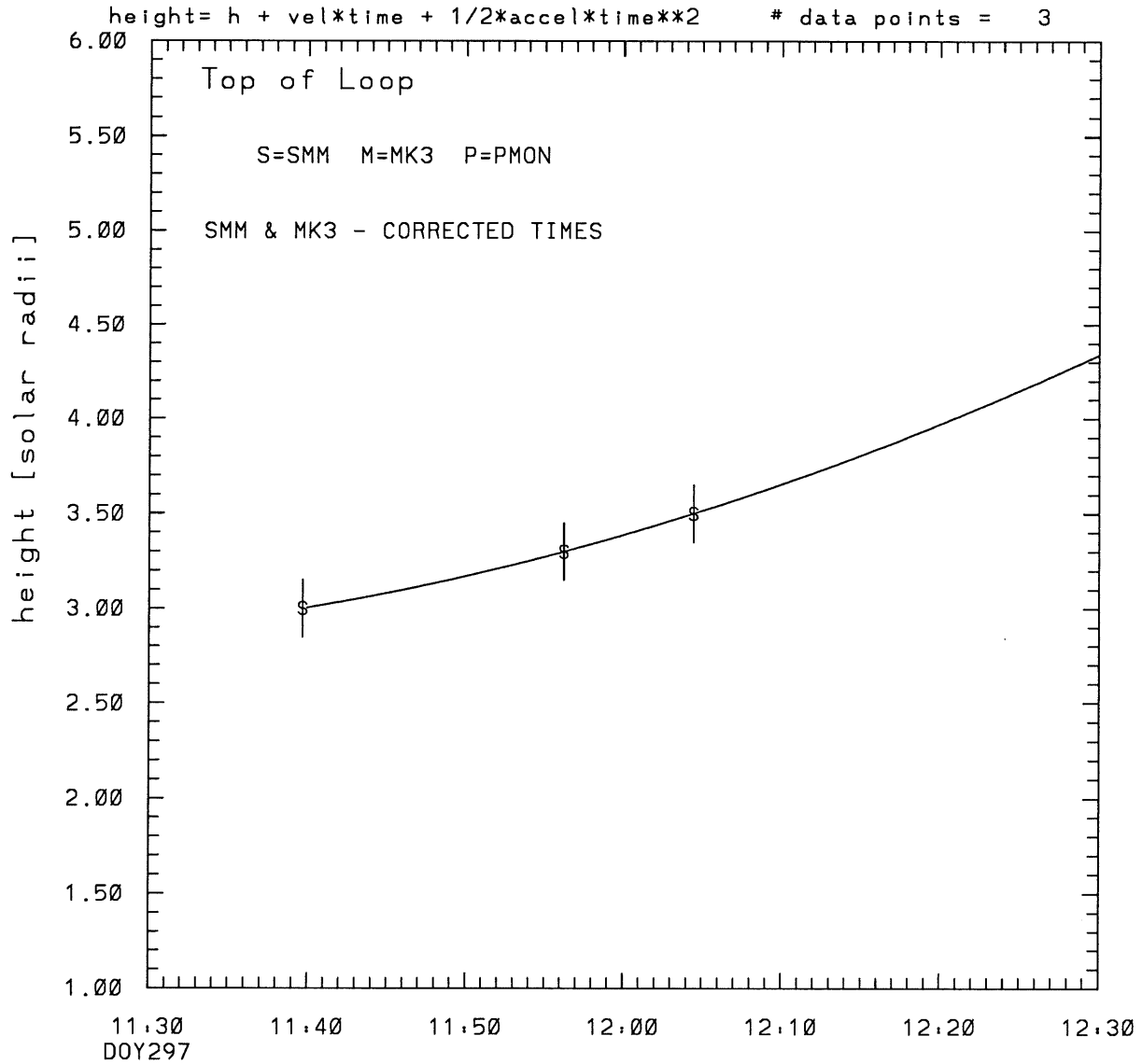
SMM C/P 1989 DOY297 241 +/- 0 degrees

height = h + velocity\*time # data points = 3



tstart=DOY297 10: 1 +/- 2.9 [min.]  
radial velocity= 231. +/- 13. [km/sec]

SMM C/P 1989 DOY297 241 +/- 0 degrees

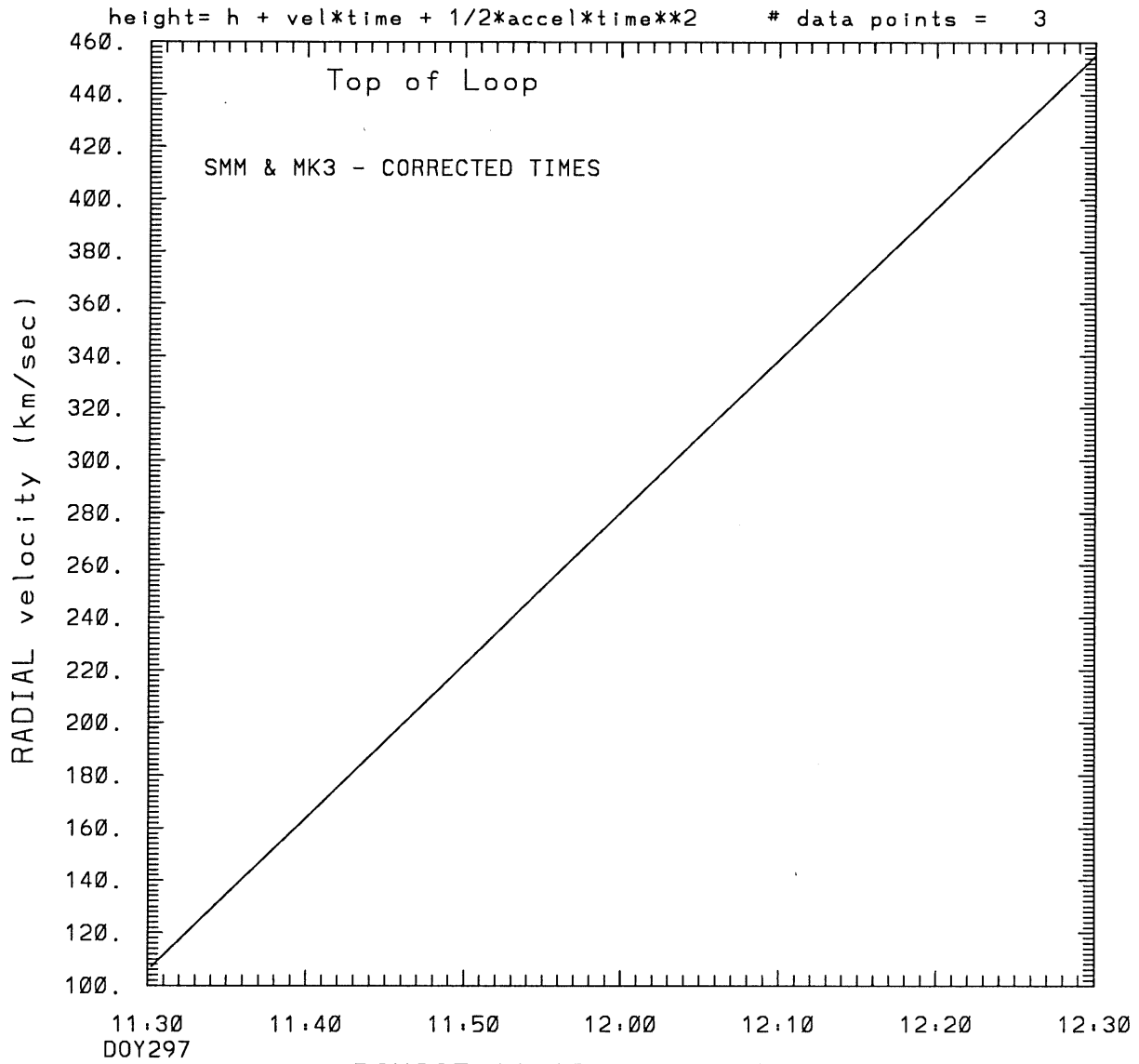


tstart=DOY297 11.12 from derivative=0

Event begins at 2.81 Solar Radii

radial acceleration = 0.0970 +/- 0.0000 [km/sec\*\*2]

SMM C/P 1989 DOY297 241 +/- 0 degrees



tstart=DOY297 11:12 from derivative=0  
Event begins at 2.81 Solar Radii  
radial acceleration=0.970E-01 km/sec\*\*2

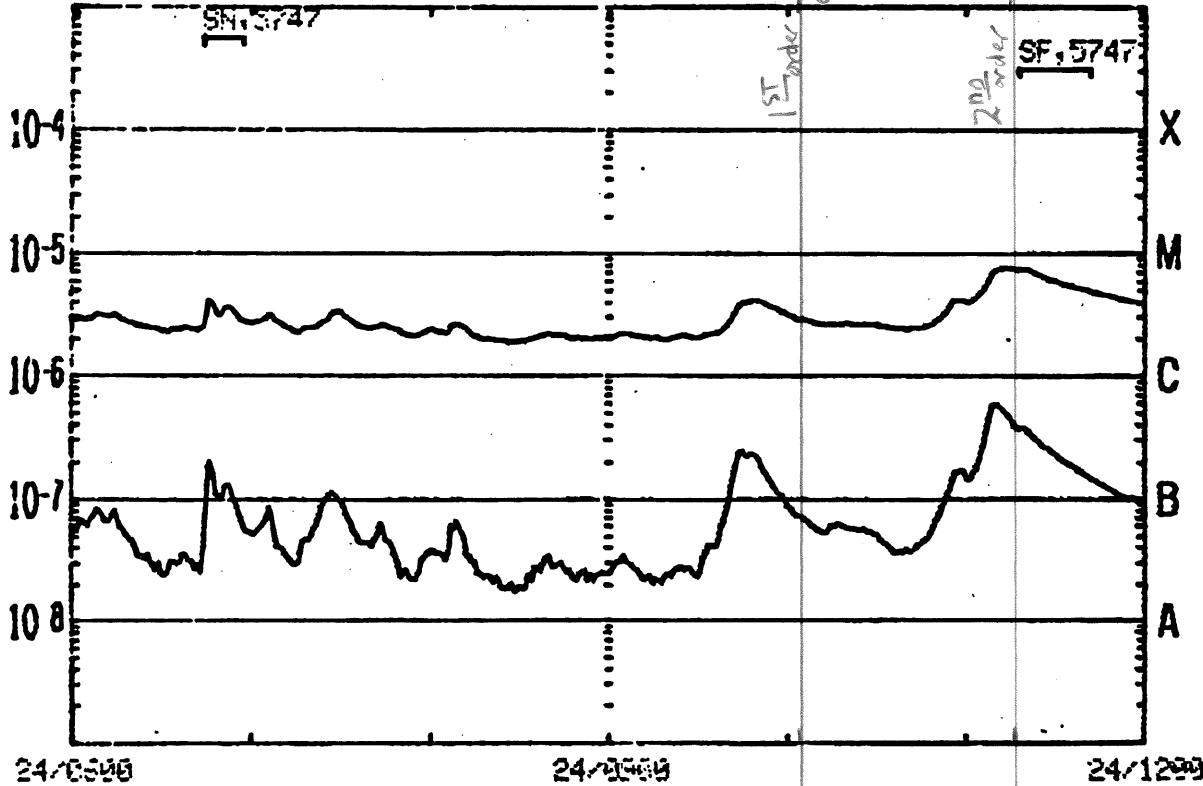
1989 004 297

DO NOT MIX OPTICAL DATA TOGETHER

TOP  
Rat.

BEGIN: 24 OCT 89

Watts meter<sup>2</sup>



GOES 6 0.5-4.0A GOES 6 1.0-8.0A  
OPTICAL FLARES

SAA's  
NIGHT

GOES-6 1 MIN DATA; OPTICAL FLARE DUR. IMP. REGION

ELN: 2042UT  
27 OCT 89

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

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

year	doy	time	radii	radius	error in angle	error in angle	datatype
1989	297	11:39:41	3.00 +/-	0.15	241.0 +/-	1.0	SMM
1989	297	11:56:14	3.30 +/-	0.15	241.0 +/-	1.0	SMM
1989	297	12: 4:27	3.50 +/-	0.15	241.0 +/-	1.0	SMM

\*\*\*\*\*  
Structure being measured:  
Top of Loop  
\*\*\*\*\*

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

START TIME:

Event began at t = 0 + -0.905E+02 +/- 0.287E+01 [minutes]  
In more convenient units:  
Event began at DOY 297 10: 1 +/- 0.287E+01 [minutes]

Origin defined at DOY297 11:30

RADIAL INFORMATION:

RADIAL VELOCITY = 231. +/- 13. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.280E+01 +/- 0.278E-01 [solar radii]  
c(2) = 0.199E-01 +/- 0.108E-02 [radii/min]  
c(2) = 0.231E+03 +/- 0.126E+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)= 0.39268E-01 [radii] see Bevington pg. 114  
error in c(2)= 0.15329E-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) = 241. +/- 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 RADIAL velocity at 11:39 = 231. km/sec

The RADIAL velocity at 11:56 = 231. km/sec

The RADIAL velocity at 12: 4 = 231. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 0.25  
Standard Deviation in start time measurement = 0.103E+02  
Error in time = 0.13748E+01 using best fit method  
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.374E-03  
Reduced Chi Squared = 0.166E-02  
Chi Squared = 0.166E-02  
The probability for exceeding chi square = 0.985E+00

The correlation coefficient = 0.997E+00  
The probability that no LINEAR correlation exists between the variables = 0.4895]  
SEE BEVINGTON "Data Reduction and Error Analysis" [1969]

\*\*\*\*\*  
This is a 2 order run  
\*\*\*\*\*

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

year	doy	time	radii	radius	error in angle	error in angle	datatype
1989	297	11:39:41	3.00 +/- 0.15	241.0 +/- 1.0			SMM
1989	297	11:56:14	3.30 +/- 0.15	241.0 +/- 1.0			SMM
1989	297	12: 4:27	3.50 +/- 0.15	241.0 +/- 1.0			SMM

\*\*\*\*\*  
Structure being measured:  
Top of Loop  
\*\*\*\*\*

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

START TIME:

tstart=DOY297 11:12 from derivative = 0  
Event begins at 2.81 Solar Radii  
Origin defined at DOY297 11:30

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.970E-01 +/- 0.871E-05 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.289E+01 +/- 0.866E-05 [solar radii]  
c(2) = 0.912E-02 +/- 0.977E-06 [radii/min]  
c(2) = 0.106E+03 +/- 0.113E-01 [km/sec]  
c(3) = 0.251E-03 +/- 0.225E-07 [radii/min\*\*2]  
c(3) = 0.970E-01 +/- 0.871E-05 [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) = 241. +/- 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 RADIAL velocity at 11:39 = 162. km/sec

The RADIAL velocity at 11:56 = 258. km/sec

The RADIAL velocity at 12: 4 = 306. 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!