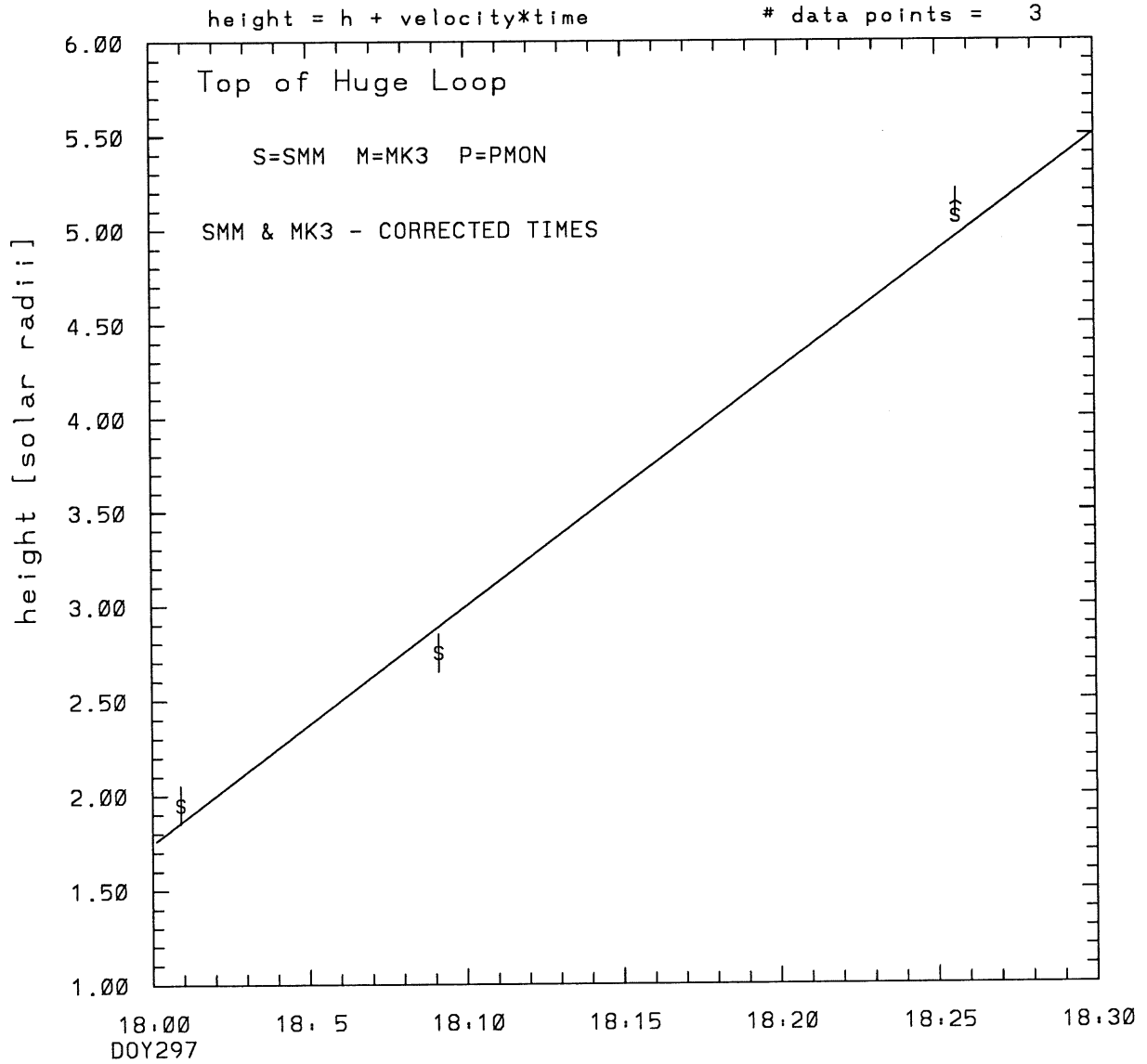
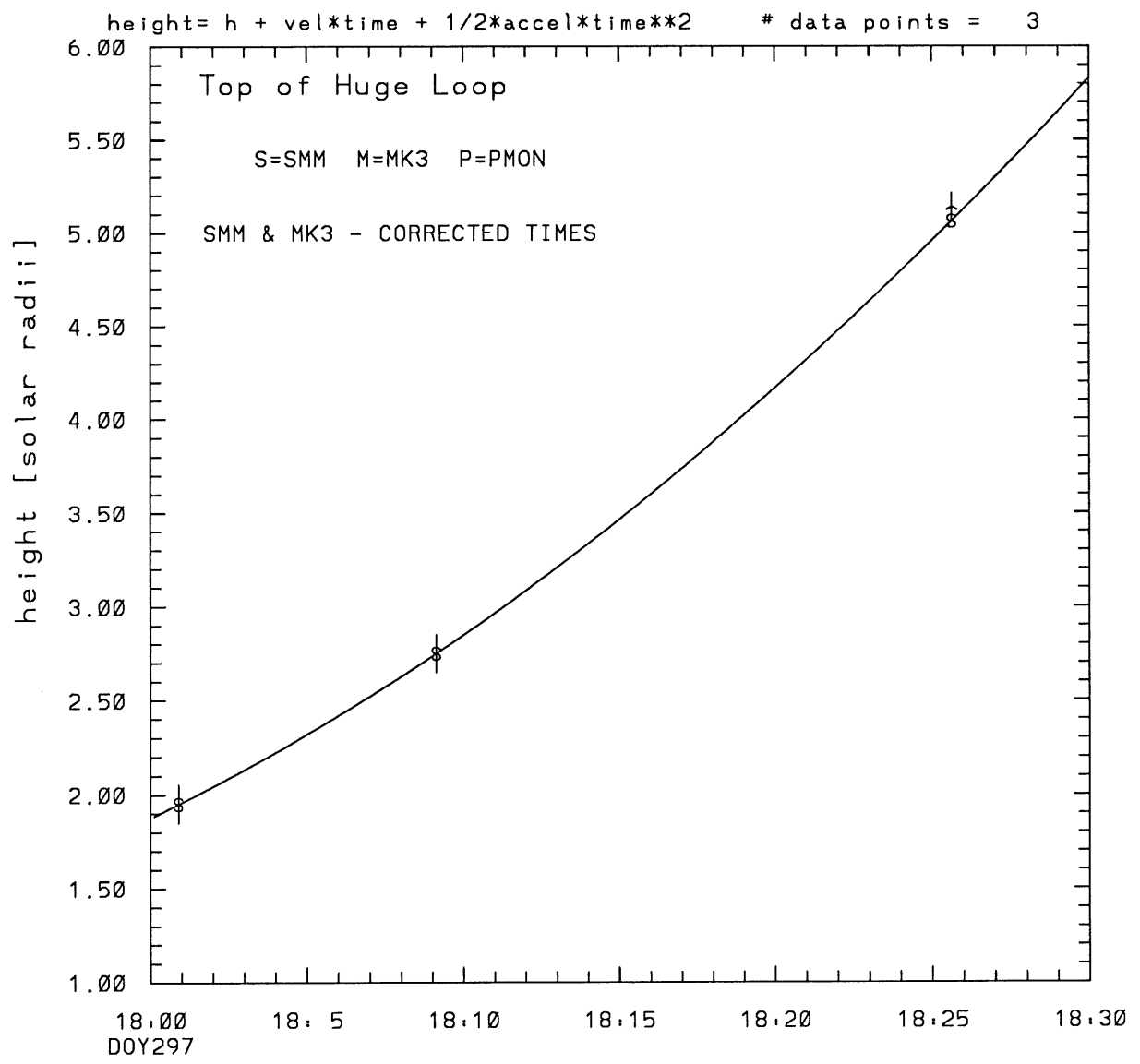


SMM C/P 1989 DOY297 245 +/- 0 degrees



tstart=DOY297 17:56 +/- 0.4 [min.]  
radial velocity= 1453. +/- 108. [km/sec]

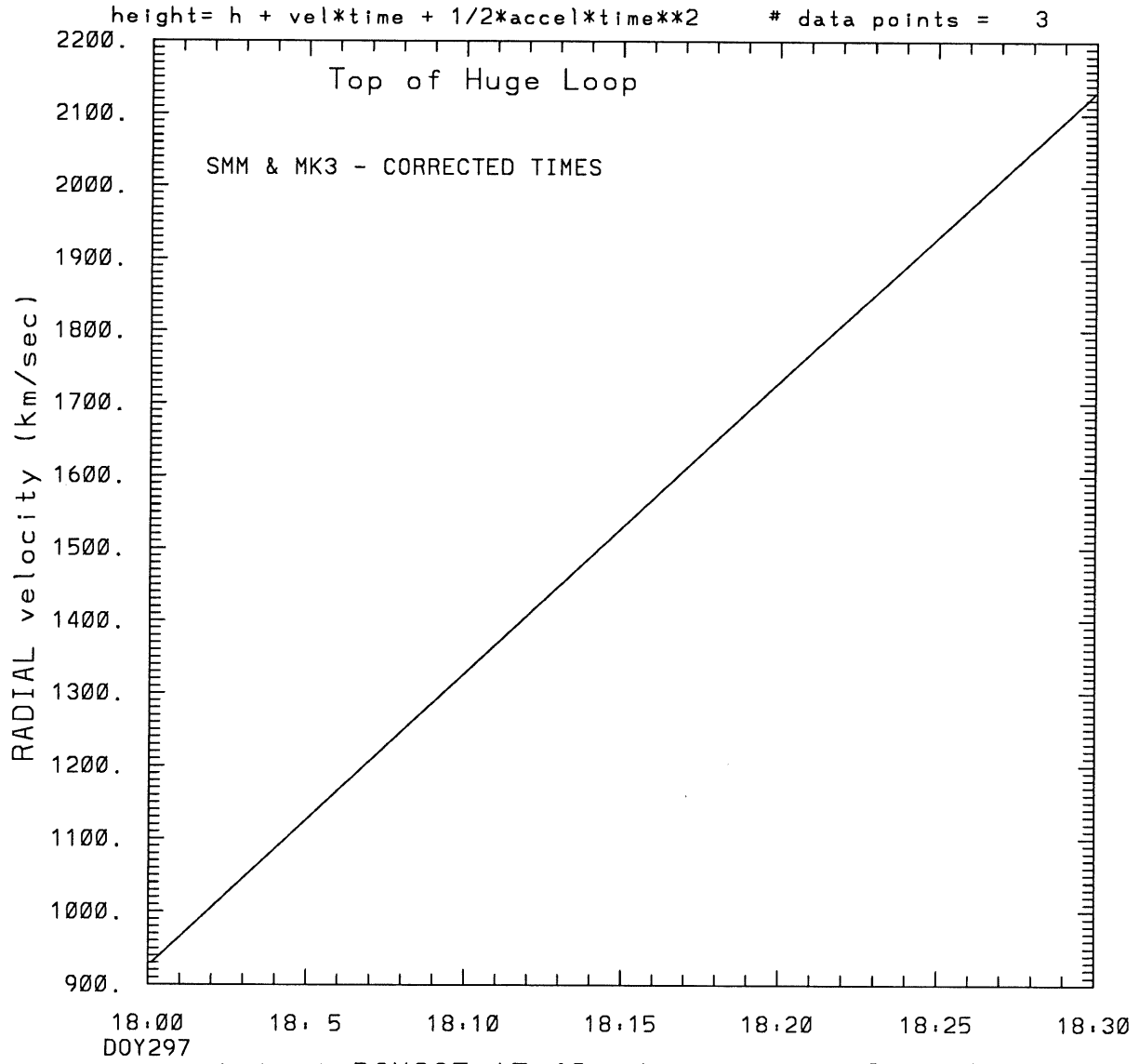
SMM C/P 1989 DOY297 245 +/- 0 degrees



tstart=DOY297 17:42 +/- 0.0 [min.]

radial acceleration = 0.6697 +/- 0.0000 [km/sec\*\*2]

SMM C/P 1989 DOY297 245 +/- 0 degrees



tstart=DOY297 17:42 +/- 0.0 [min.]

radial acceleration=0.670E+00 km/sec\*\*2

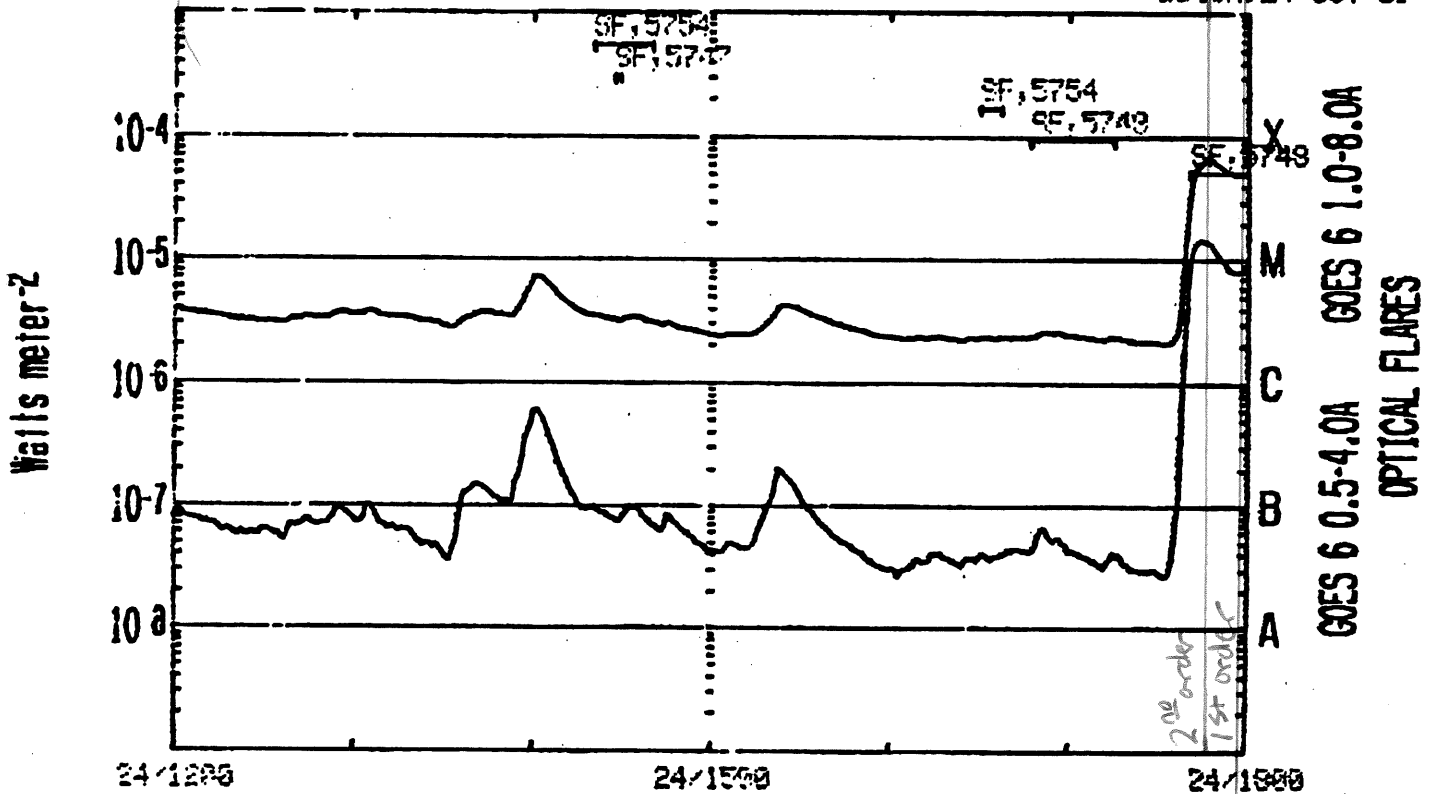
1989 Oct 297

Top of Huge Loop, center = 256°  
[17:59] 1<sup>st</sup> order  
[17:46] 2<sup>nd</sup> order

RAY AND OPTICAL DATA TOGETHER

STOP  
KUT.

24 OCT 89



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

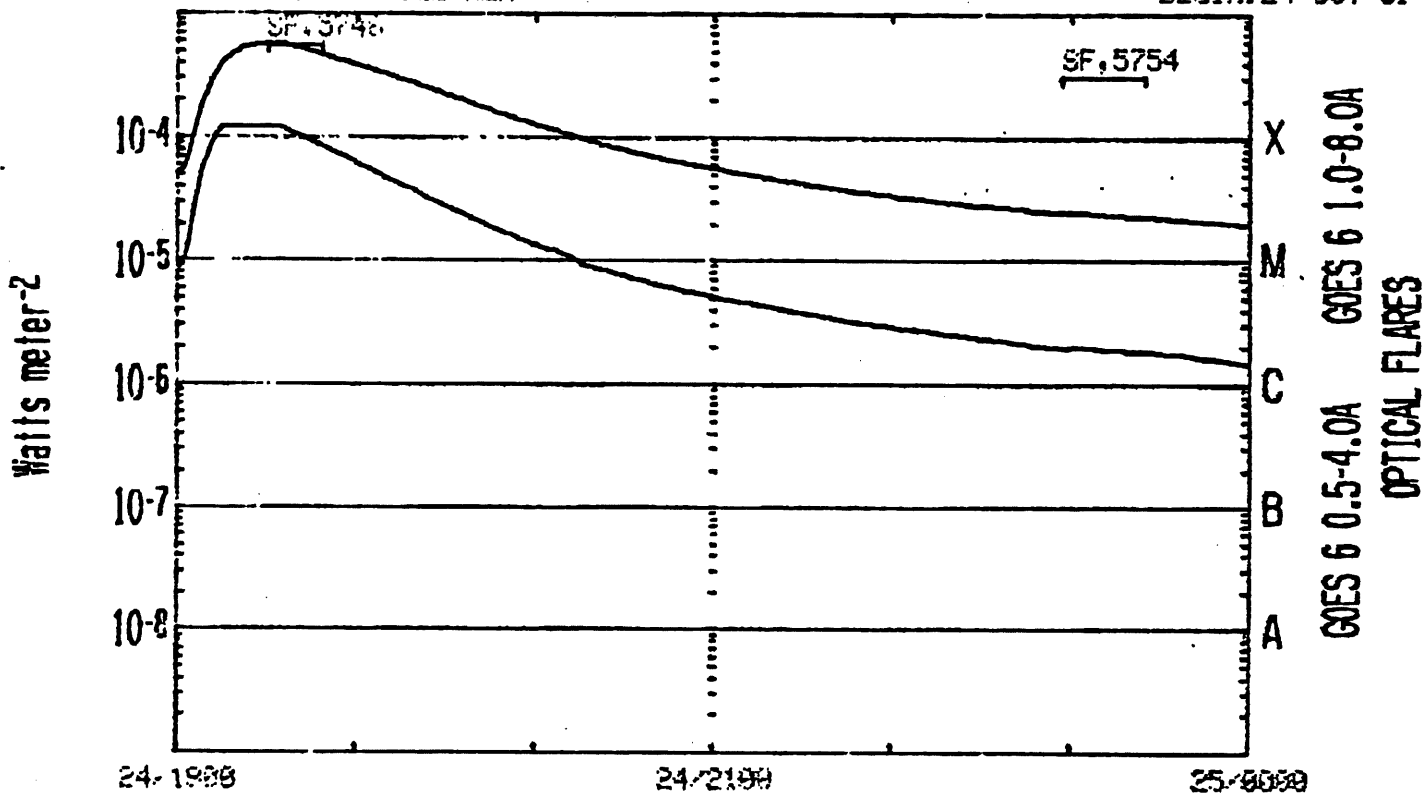
SAA's  
NIGHT

2057UT  
27 OCT 89

STOP  
Ret..

and OPTICAL DATA TOGETHER

BEGIN: 24 OCT 89



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

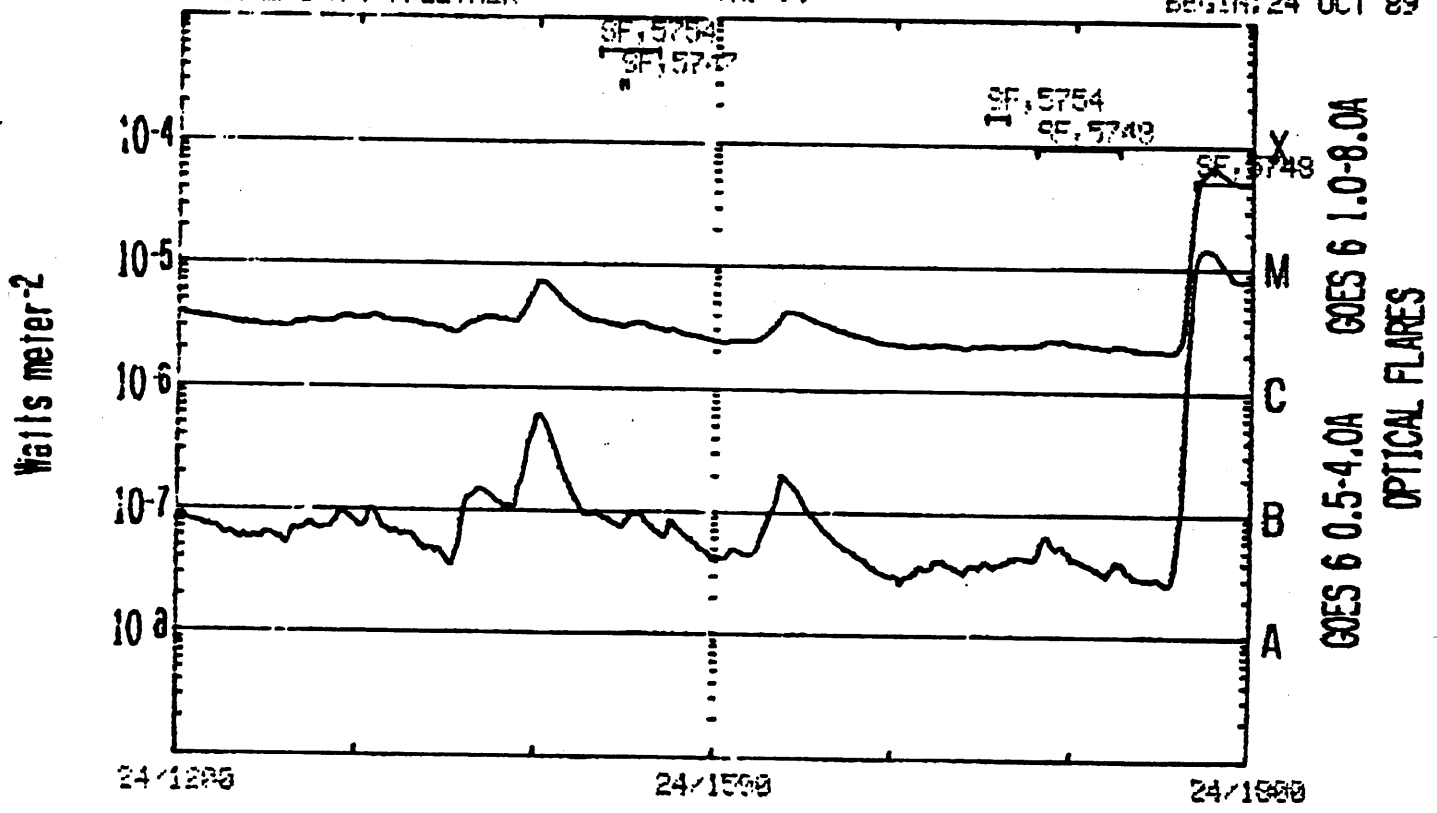
SAA's  
NIGHT

RUN: 2101UT  
27 OCT 89

DATA AND OPTICAL DATA TOGETHER

STOP  
Kell.

BEGIN: 24 OCT 89



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

SAA's  
NIGHT  
EUN: 2057UT  
27 OCT 89

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

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

year	day	time	radii	radius	error in angle	error in angle	datatype	
1989	297	18: 0:54	1.95 +/-	0.10	245.0 +/-	1.0	SMM	
1989	297	18: 9: 8	2.75 +/-	0.10	245.0 +/-	1.0	SMM	
1989	297	18:25:38	5.06 +/-	0.15	245.0 +/-	1.0	SMM	THIS POINT IS A LO

*Lower LIMIT*

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

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

START TIME:

Event began at  $t = 0 + -0.594E+01 +/- 0.402E+00$  [minutes]  
In more convenient units:  
Event began at DOY 297 17:56 +/- 0.402E+00 [minutes]

Origin defined at DOY297 18: 0

RADIAL INFORMATION:

RADIAL VELOCITY = 1453. +/- 108. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.174E+01 +/- 0.116E+00 [solar radii]  
c(2) = 0.125E+00 +/- 0.931E-02 [radii/min]  
c(2) = 0.145E+04 +/- 0.108E+03 [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)= 0.17356E+00 [radii] see Bevington pg. 114  
error in c(2)= 0.11041E-01 [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) = 245. +/- 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 18: 0 = 1453. km/sec

The RADIAL velocity at 18: 9 = 1453. km/sec

The RADIAL velocity at 18:25 = 1453. km/sec

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

Fit is ok [ier=1]

Standard Deviation in the height = 1.61  
Standard Deviation in start time measurement = 0.103E+02  
Error in time = 0.15698E+01 using best fit method  
See Taylor Error Analysis [Univ of Colorado] pg.78

Value of reduced Chi Squared returned from nllst2 = 0.200E-01  
Reduced Chi Squared = 0.796E-01  
Chi Squared = 0.796E-01  
The probability for exceeding chi square = 0.887E+00

The correlation coefficient = 0.997E+00  
The probability that no LINEAR correlation exists between the variables = 0.52631  
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	
1989	297	18: 0:54	1.95 +/-	0.10	245.0 +/-	1.0	SMM	
1989	297	18: 9: 8	2.75 +/-	0.10	245.0 +/-	1.0	SMM	
1989	297	18:25:38	5.06 +/-	0.15	245.0 +/-	1.0	SMM	THIS POINT IS A LOI

*Lower limit*

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

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

START TIME:

Event began at t = 0 + -0.181E+02 +/- 0.000E+00 [minutes]  
In more convenient units:  
Event began at DOY 297 17:42 +/- 0.000E+00 [minutes]

Origin defined at DOY297 18: 0

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.670E+00 +/- 0.441E-04 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

- c(1) = 0.188E+01 +/- 0.138E-04 [solar radii]
- c(2) = 0.798E-01 +/- 0.312E-05 [radii/min]
- c(2) = 0.926E+03 +/- 0.362E-01 [km/sec]
- c(3) = 0.173E-02 +/- 0.114E-06 [radii/min\*\*2]
- c(3) = 0.670E+00 +/- 0.441E-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) = 245. +/- 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 18: 0 = 962. km/sec

The RADIAL velocity at 18: 9 = 1293. km/sec

The RADIAL velocity at 18:25 = 1956. 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!