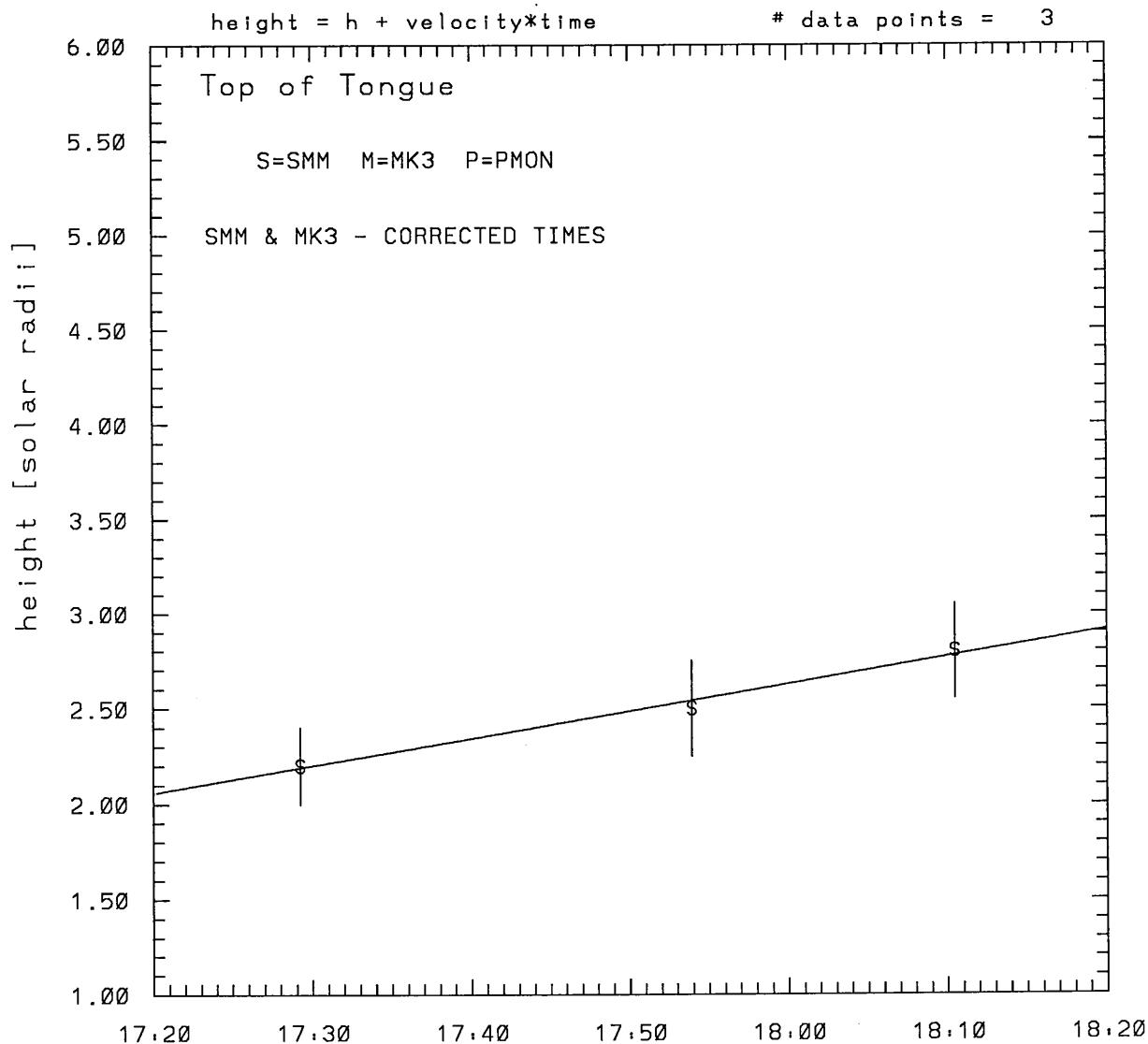


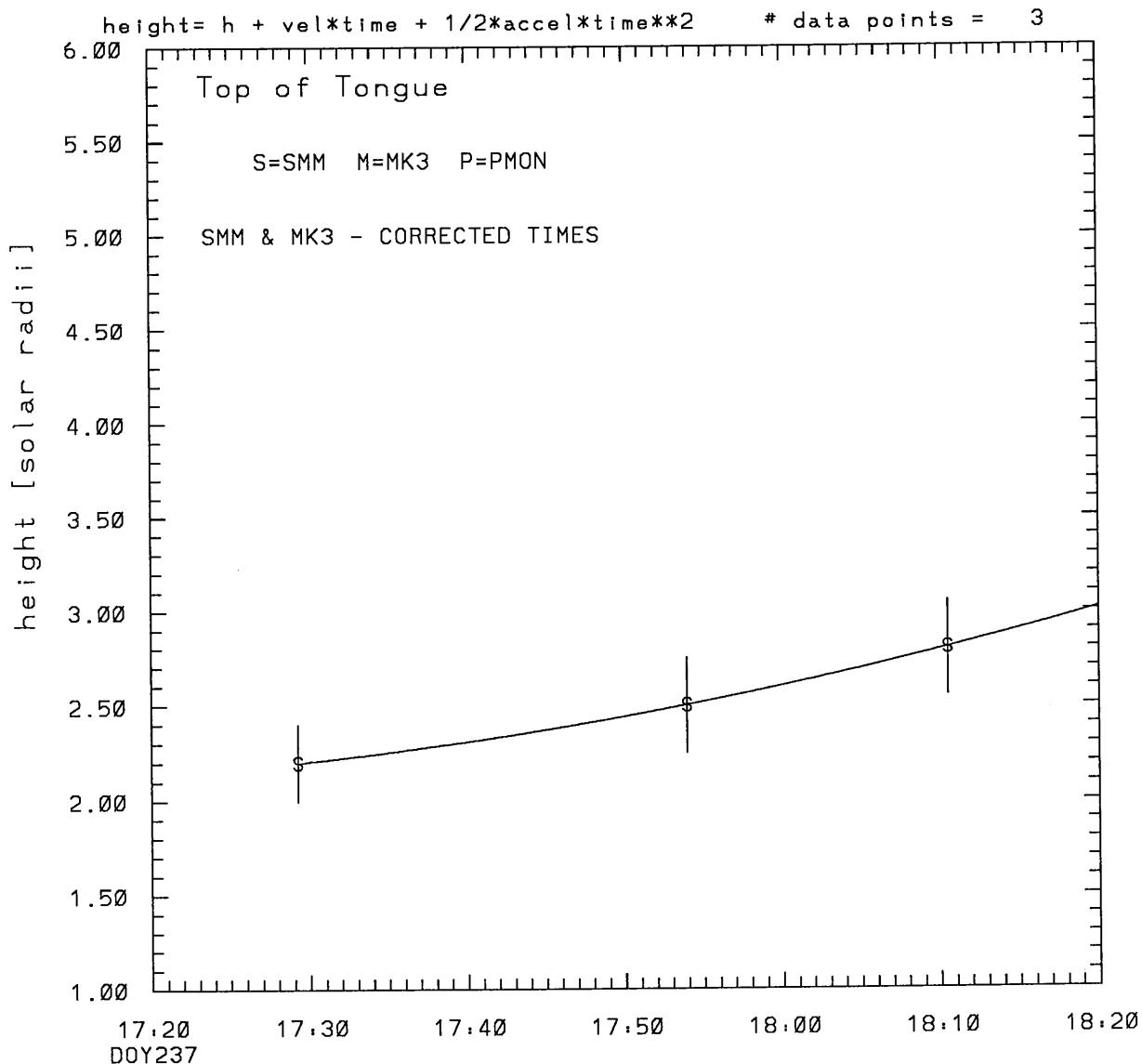
SMM C/P 1989 DOY237 318 +/- 0 degrees



tstart=DOY237 16: 6 +/- 3.3 [min.]

radial velocity= 165. +/- 12. [km/sec]

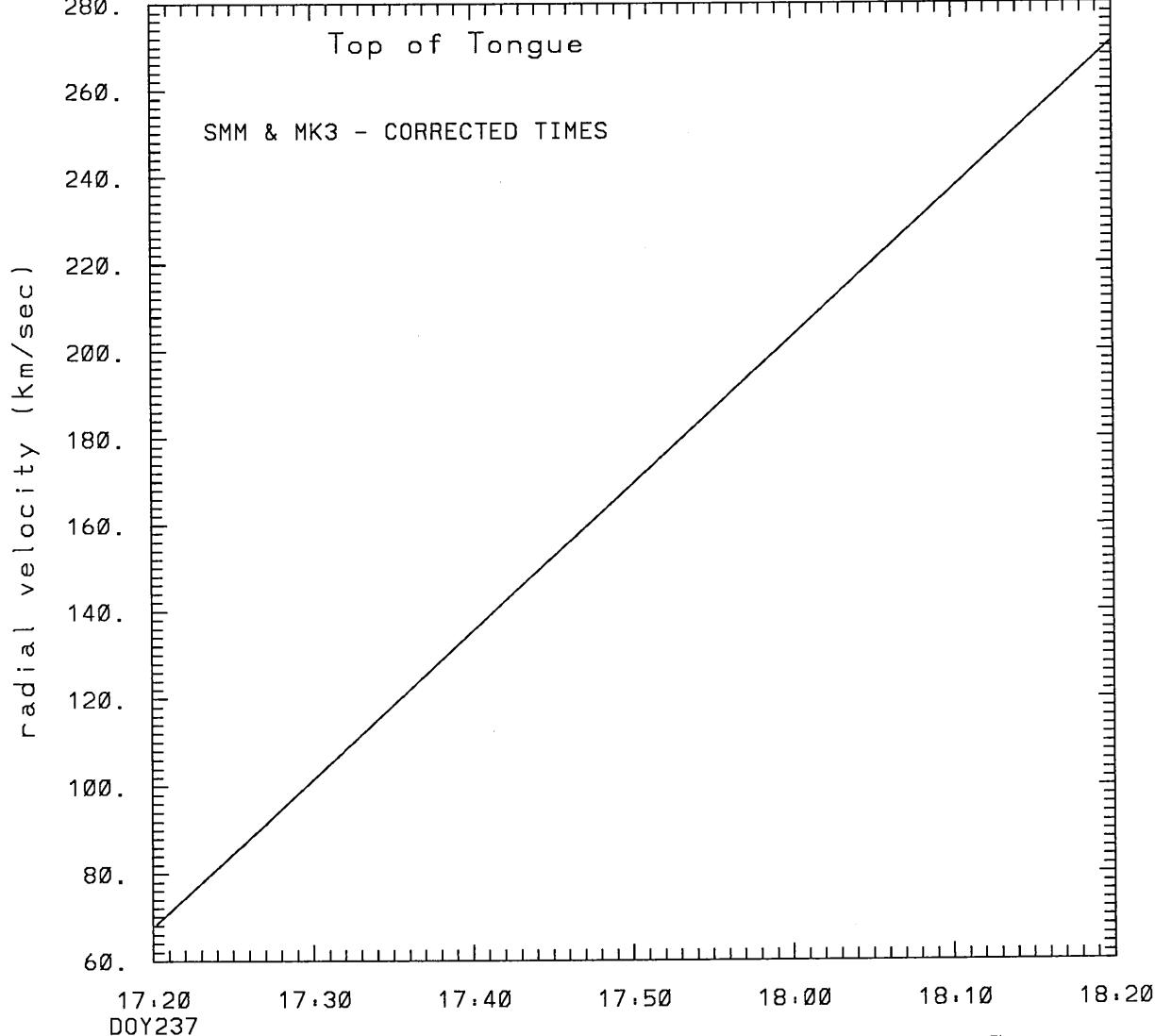
SMM C/P 1989 DOY237 318 +/- 0 degrees



tstart=DOY237 17: 1 from derivative=0  
Event begins at 2.08 Solar Radii  
radial acceleration= 0.0565 +/- 0.0000 [km/sec\*\*2]

SMM C/P 1989 DOY237 318 +/- 0 degrees

height= h + vel\*time + 1/2\*accel\*time\*\*2 \* data points = 3  
280.



tstart=DOY237 17: 1 from derivative=0

Event begins at 2.08 Solar Radii

radial acceleration=0.565E-01 km/sec\*\*2

1989 day 237

SAA AND OPTICAL DATA TOGETHER

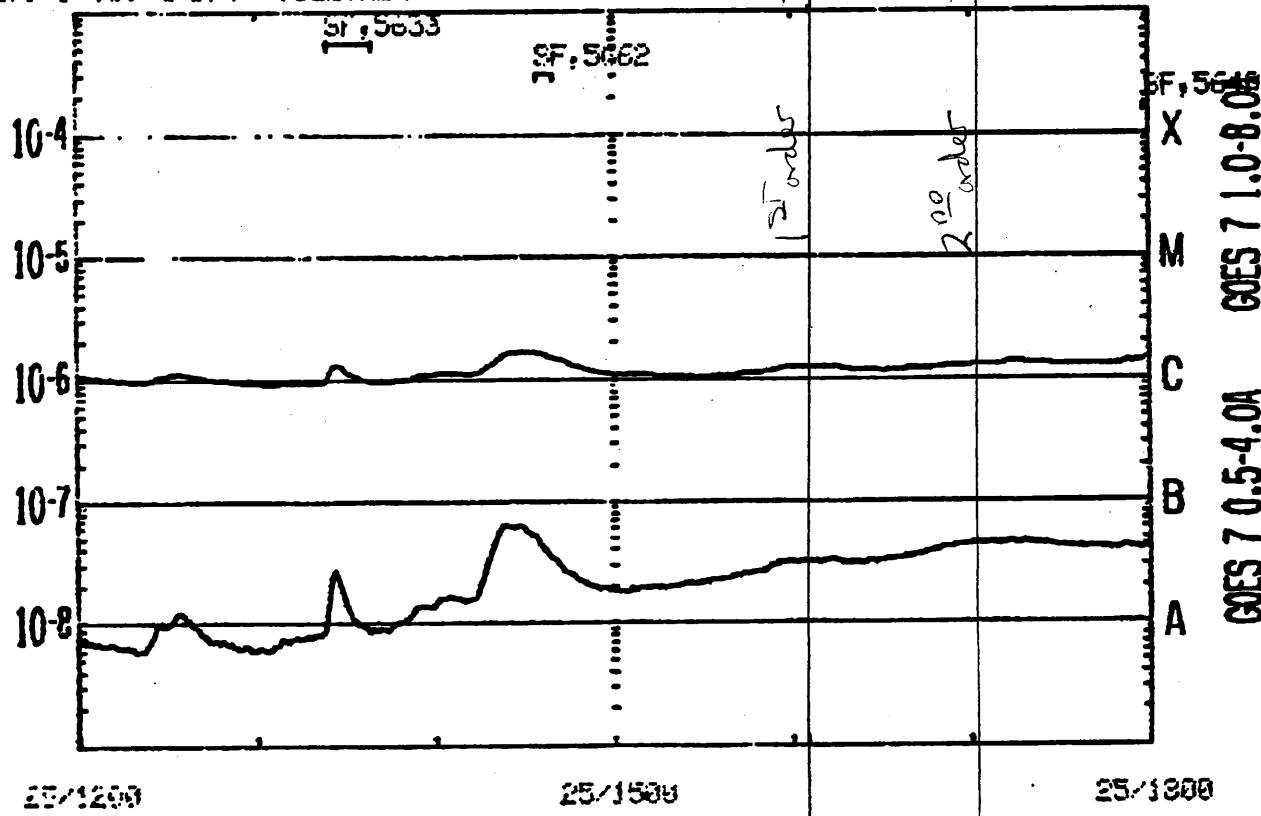
STOP  
Rev..

Top of Tongue center = 319°  
[16:00] 1<sup>st</sup> order

Top of Tongue  
[17:01] 2<sup>nd</sup> order

BEGIN: 25 AUG 89

Watts meter -



GOES-7 0.5-4.0A GOES 7 1.0-8.0A  
OPTICAL FLARES

SAA'S  
NIGHT

RUN: 1441UT  
25 AUG 89

\*\*\*\*\*

This is a 1 order run

\*\*\*\*\*

\*\*\*\*\*

INPUT:

\*\*\*\*\*

year	doy	time	radii	radius	angle	angle	datatype
1989	237	17:29:14	2.20	+/- 0.20	318.0	+/- 0.5	SMM
1989	237	17:53:57	2.50	+/- 0.25	318.0	+/- 0.5	SMM
1989	237	18:10:28	2.80	+/- 0.25	318.0	+/- 0.5	SMM

\*\*\*\*\*

Structure being measured:

Top of Tongue

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

Event began at t = 0 + -0.745E+02 +/- 0.329E+01 [minutes]

In more convenient units:

Event began at DOY 237 16: 6 +/- 0.329E+01 [minutes]

Origin defined at DOY237 17:20

RADIAL INFORMATION:

RADIAL VELOCITY = 165. +/- 12. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.206E+01 +/- 0.347E-01 [solar radii]

c(2) = 0.142E-01 +/- 0.106E-02 [radii/min]

c(2) = 0.165E+03 +/- 0.123E+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)= 0.58956E-01 [radii] see Bevington pg. 114

error in c(2)= 0.16599E-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) = 318. +/- 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 17:29 = 0. km/sec

The TOTAL velocity at 17:29 = 165. km/sec

The TANGENTIAL velocity at 17:53 = 0. km/sec

The TOTAL velocity at 17:53 = 165. km/sec

The TANGENTIAL velocity at 18:10 = 0. km/sec

The TOTAL velocity at 18:10 = 165. km/sec

\*\*\*\*\*

The following info is for estimating goodness of the fit

\*\*\*\*\*

Fit is ok [ier=1]

Standard Deviation in the height = 0.30

Standard Deviation in start time measurement = 0.169E+02

Error in time = 0.34277E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.103E-02

Reduced Chi Squared = 0.523E-02

Chi Squared = 0.523E-02

The probability for exceeding chi square = 0.974E+00

The correlation coefficient = 0.993E+00

The probability that no LINEAR correlation exists between the variables = 0.7278E-01

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	237	17:29:14	2.20	+/- 0.20	318.0	+/- 0.5	SMM
1989	237	17:53:57	2.50	+/- 0.25	318.0	+/- 0.5	SMM
1989	237	18:10:28	2.80	+/- 0.25	318.0	+/- 0.5	SMM

\*\*\*\*\*

Structure being measured:

Top of Tongue

\*\*\*\*\*

\*\*\*\*\*

OUTPUT:

\*\*\*\*\*

START TIME:

tstart=DOY237 17: 1 from derivative = 0

Event begins at 2.08 Solar Radii

Origin defined at DOY237 17:20

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.565E-01 +/- 0.729E-06 km/sec\*\*2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.213E+01 +/- 0.116E-05 [solar radii]  
c(2) = 0.583E-02 +/- 0.110E-06 [radii/min]  
c(2) = 0.676E+02 +/- 0.127E-02 [km/sec]  
c(3) = 0.146E-03 +/- 0.188E-08 [radii/min\*\*2]  
c(3) = 0.565E-01 +/- 0.729E-06 [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) = 318. +/- 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 17:29 = 0. km/sec

The TOTAL velocity at 17:29 = 99. km/sec

The TANGENTIAL velocity at 17:53 = 0. km/sec

The TOTAL velocity at 17:53 = 183. km/sec

The TANGENTIAL velocity at 18:10 = 0. km/sec

The TOTAL velocity at 18:10 = 239. 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!