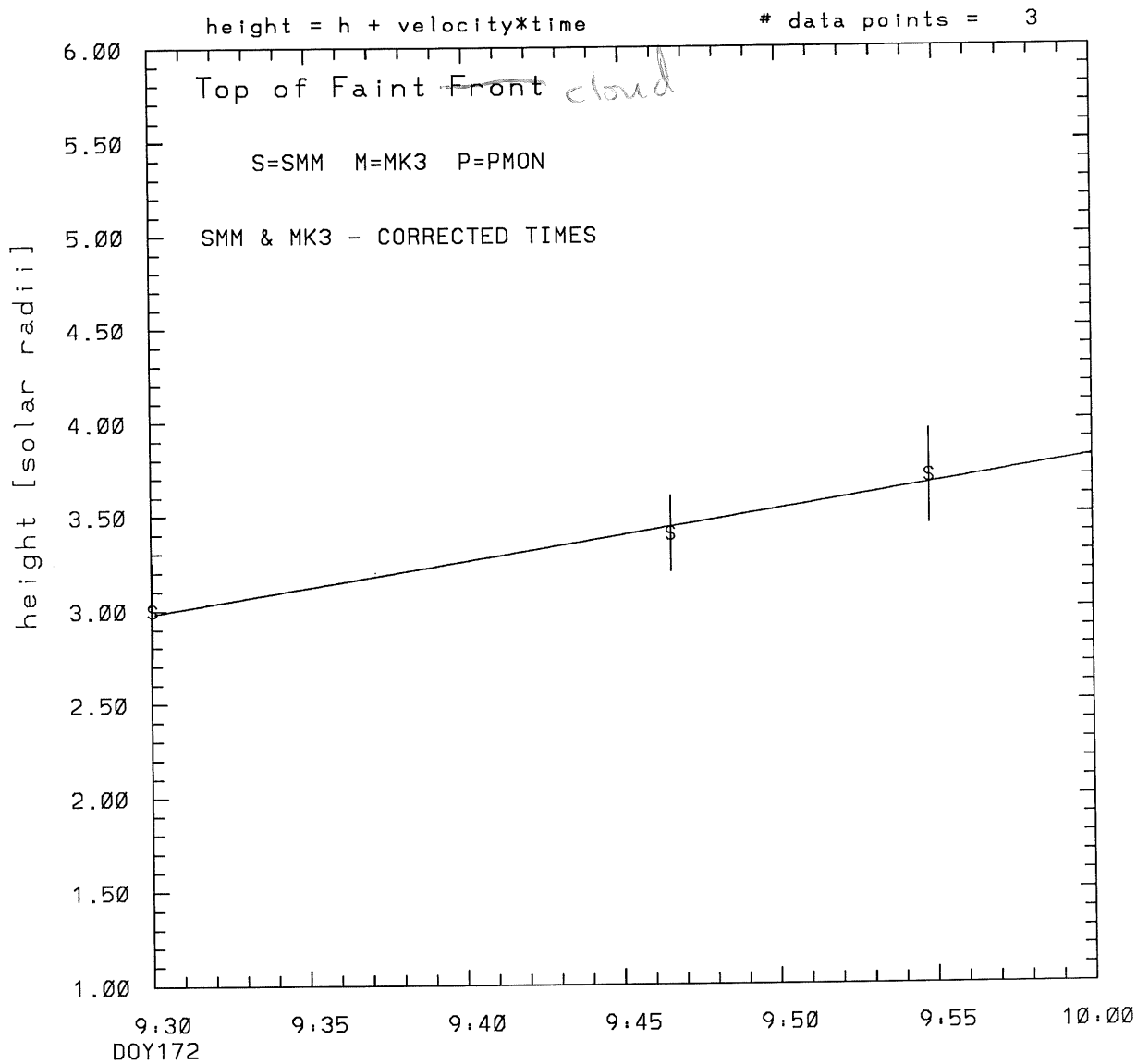
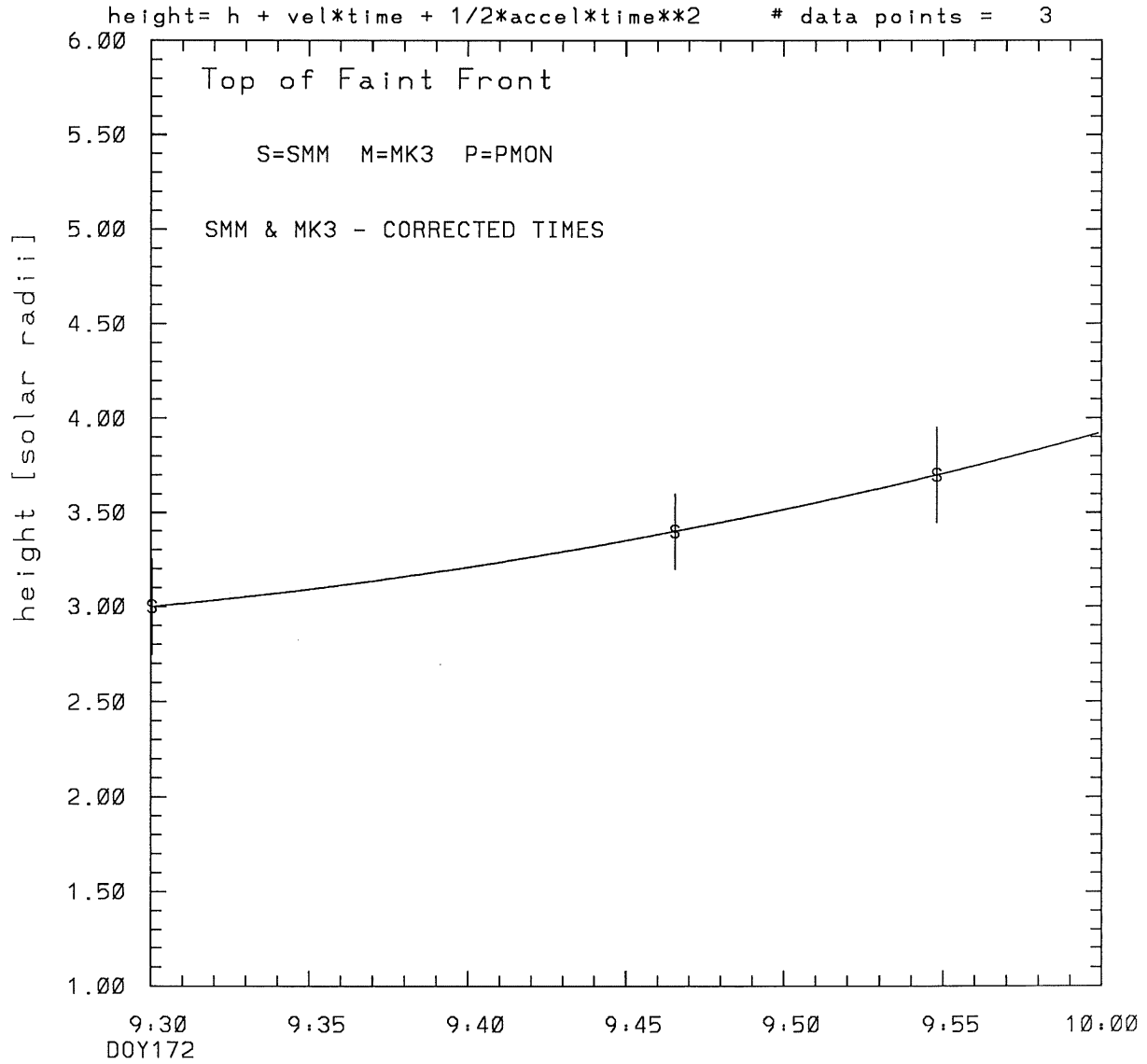


SMM C/P 1989 DOY172 255 +/- 0 degrees



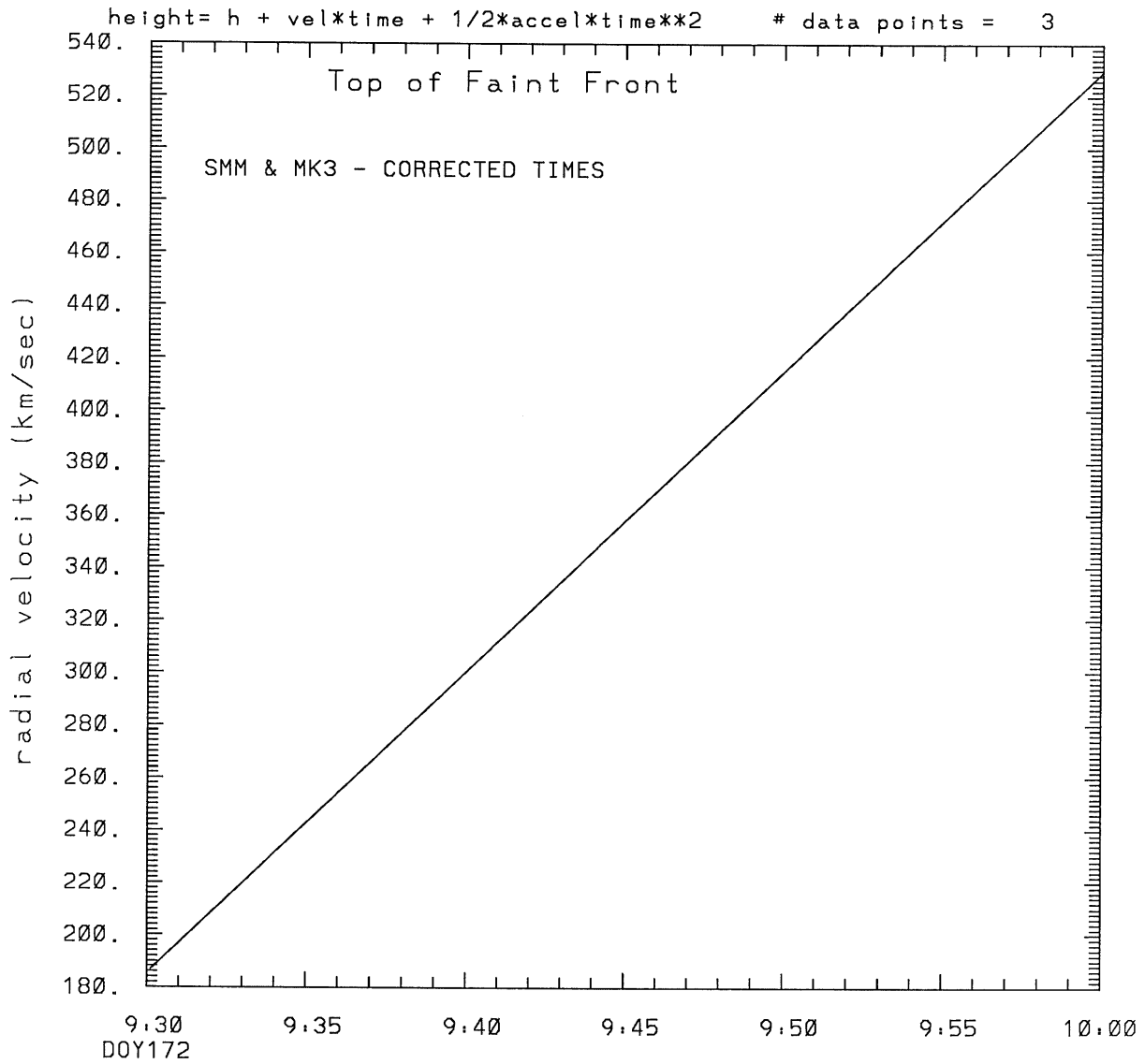
tstart=DOY172 8:18 +/- 4.0 [min.]
radial velocity= 319. +/- 28. [km/sec]

SMM C/P 1989 DOY172 255 +/- 0 degrees



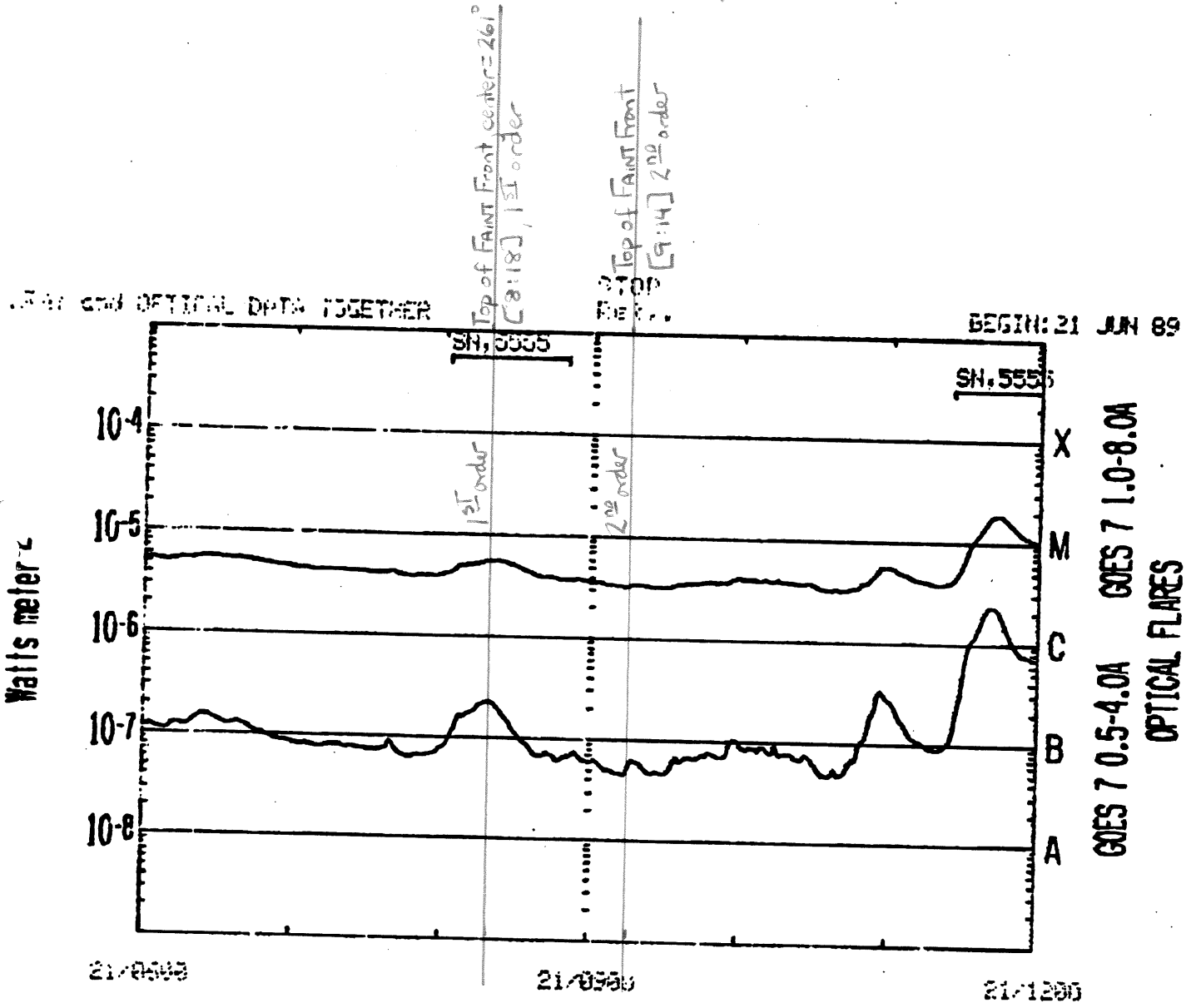
tstart=DOY172 9:14 from derivative=0
Event begins at 2.87 Solar Radii
radial acceleration = 0.1912 +/- 0.0000 [km/sec**2]

SMM C/P 1989 DOY172 255 +/- 0 degrees



tstart=DOY172 9.14 from derivative=0
Event begins at 2.87 Solar Radii
radial acceleration=0.191E+00 km/sec**2

1989 Day 172



GOES-7 1 MIN DATA; OPTICAL FLARE DUR. IMP. REGION

SAA's
NIGHT
RUN: 1718UT
24 JUN 89

This is a 1 order run

INPUT:

year	doy	time	radii	error in radius	error in angle	angle	datatype
1989	172	9:30: 2	3.00	+/- 0.25	255.0 +/- 1.0	SMM	
1989	172	9:46:34	3.40	+/- 0.20	255.0 +/- 1.0	SMM	
1989	172	9:54:48	3.70	+/- 0.25	255.0 +/- 1.0	SMM	

Structure being measured:
Top of Faint Front *cloud*

OUTPUT:

START TIME:

Event began at $t = 0 + -0.720E+02 +/- 0.400E+01$ [minutes]
In more convenient units:
Event began at DOY 172 8:18 +/- 0.400E+01 [minutes]

Origin defined at DOY172 9:30

RADIAL INFORMATION:

RADIAL VELOCITY = 319. +/- 28. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.298E+01 +/- 0.415E-01 [solar radii]
c(2) = 0.275E-01 +/- 0.243E-02 [radii/min]
c(2) = 0.319E+03 +/- 0.281E+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)= 0.53371E-01 [radii] see Bevington pg. 114
error in c(2)= 0.30995E-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) = 255. +/- 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 9:30 = 0. km/sec

The TOTAL velocity at 9:30 = 319. km/sec

The TANGENTIAL velocity at 9:46 = 0. km/sec

The TOTAL velocity at 9:46 = 319. km/sec

The TANGENTIAL velocity at 9:54 = 0. km/sec

The TOTAL velocity at 9:54 = 319. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.35

Standard Deviation in start time measurement = 0.103E+02

Error in time = 0.20103E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.159E-02

Reduced Chi Squared = 0.717E-02

Chi Squared = 0.717E-02

The probability for exceeding chi square = 0.968E+00

The correlation coefficient = 0.994E+00

The probability that no LINEAR correlation exists between the variables = 0.6925E-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	172	9:30: 2	3.00	+/- 0.25	255.0	+/- 1.0	SMM
1989	172	9:46:34	3.40	+/- 0.20	255.0	+/- 1.0	SMM
1989	172	9:54:48	3.70	+/- 0.25	255.0	+/- 1.0	SMM

Structure being measured:
Top of Faint Front

OUTPUT:

START TIME:

tstart=DOY172 9:14 from derivative = 0
Event begins at 2.87 Solar Radii
Origin defined at DOY172 9:30

RADIAL INFORMATION:

RADIAL ACCELERATION = 0.191E+00 +/- 0.807E-06 km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.300E+01 +/- 0.261E-06 [solar radii]
c(2) = 0.160E-01 +/- 0.507E-07 [radii/min]
c(2) = 0.185E+03 +/- 0.589E-03 [km/sec]
c(3) = 0.494E-03 +/- 0.209E-08 [radii/min**2]
c(3) = 0.191E+00 +/- 0.807E-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) = 255. +/- 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 9:30 = 0. km/sec

The TOTAL velocity at 9:30 = 186. km/sec

The TANGENTIAL velocity at 9:46 = 0. km/sec

The TOTAL velocity at 9:46 = 375. km/sec

The TANGENTIAL velocity at 9:54 = 0. km/sec

The TOTAL velocity at 9:54 = 470. 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!