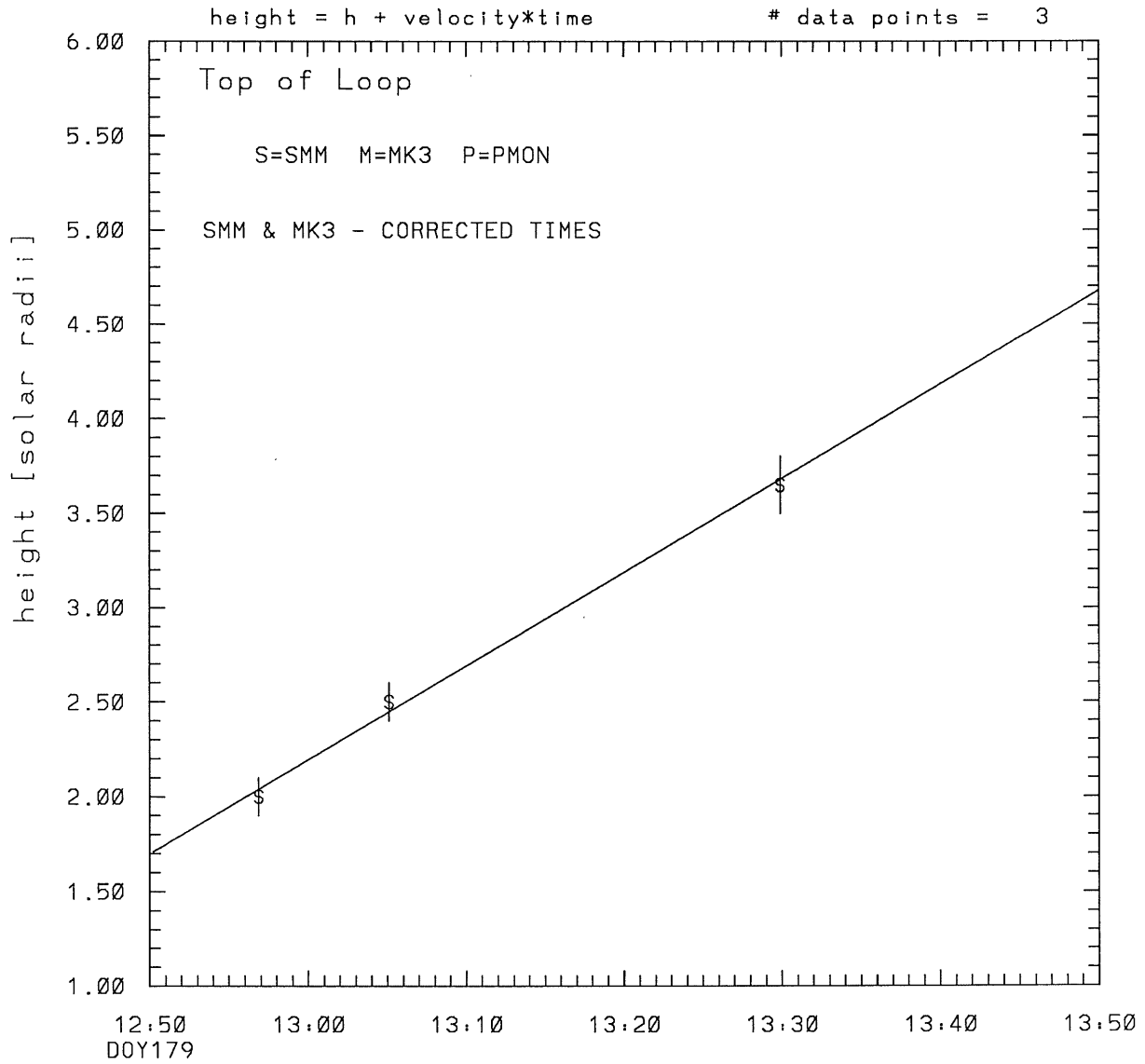
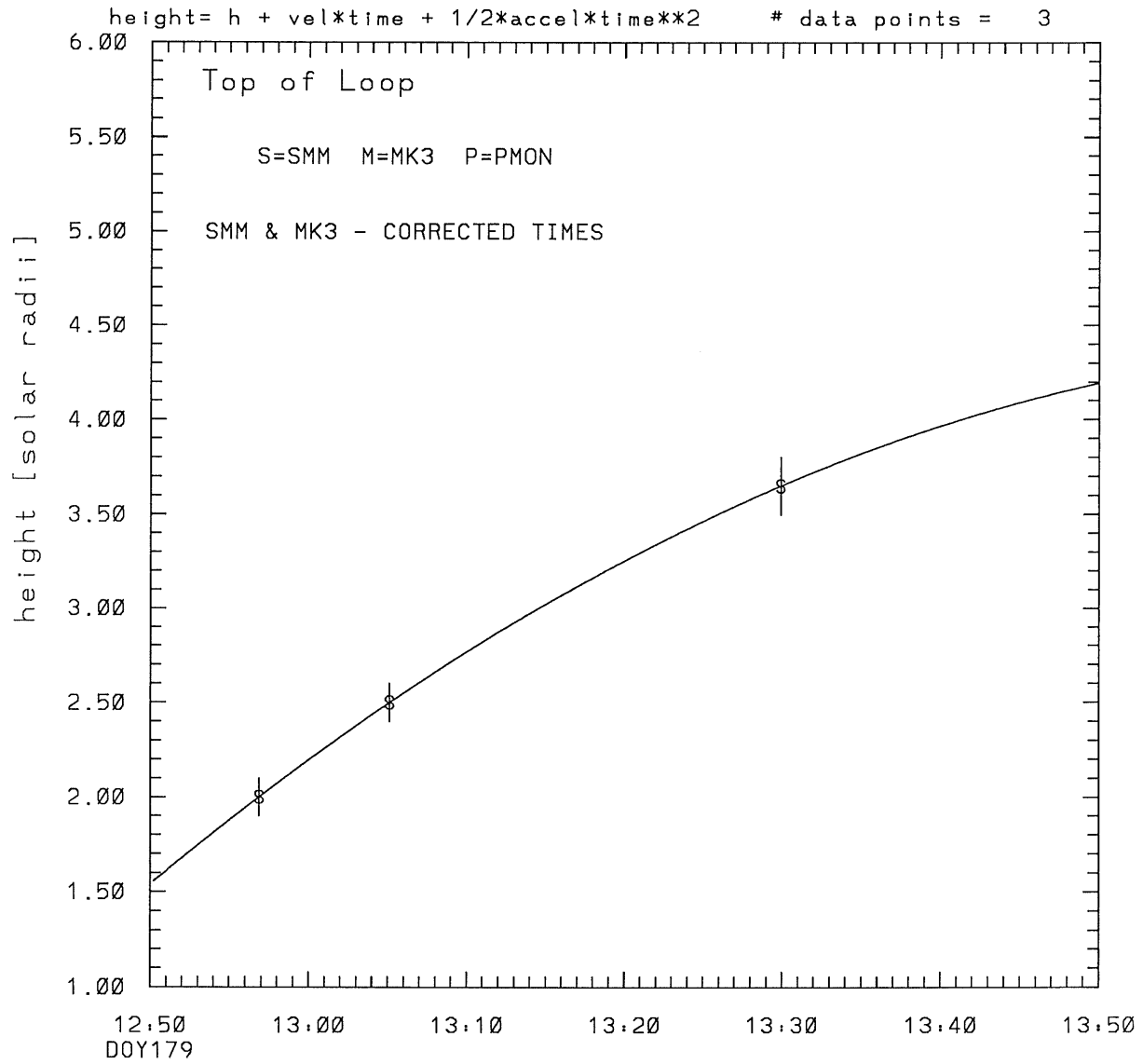


SMM C/P 1989 DOY179 78 +/- 0 degrees



tstart=DOY179 12:36 +/- 0.5 [min.]
radial velocity= 576. +/- 30. [km/sec]

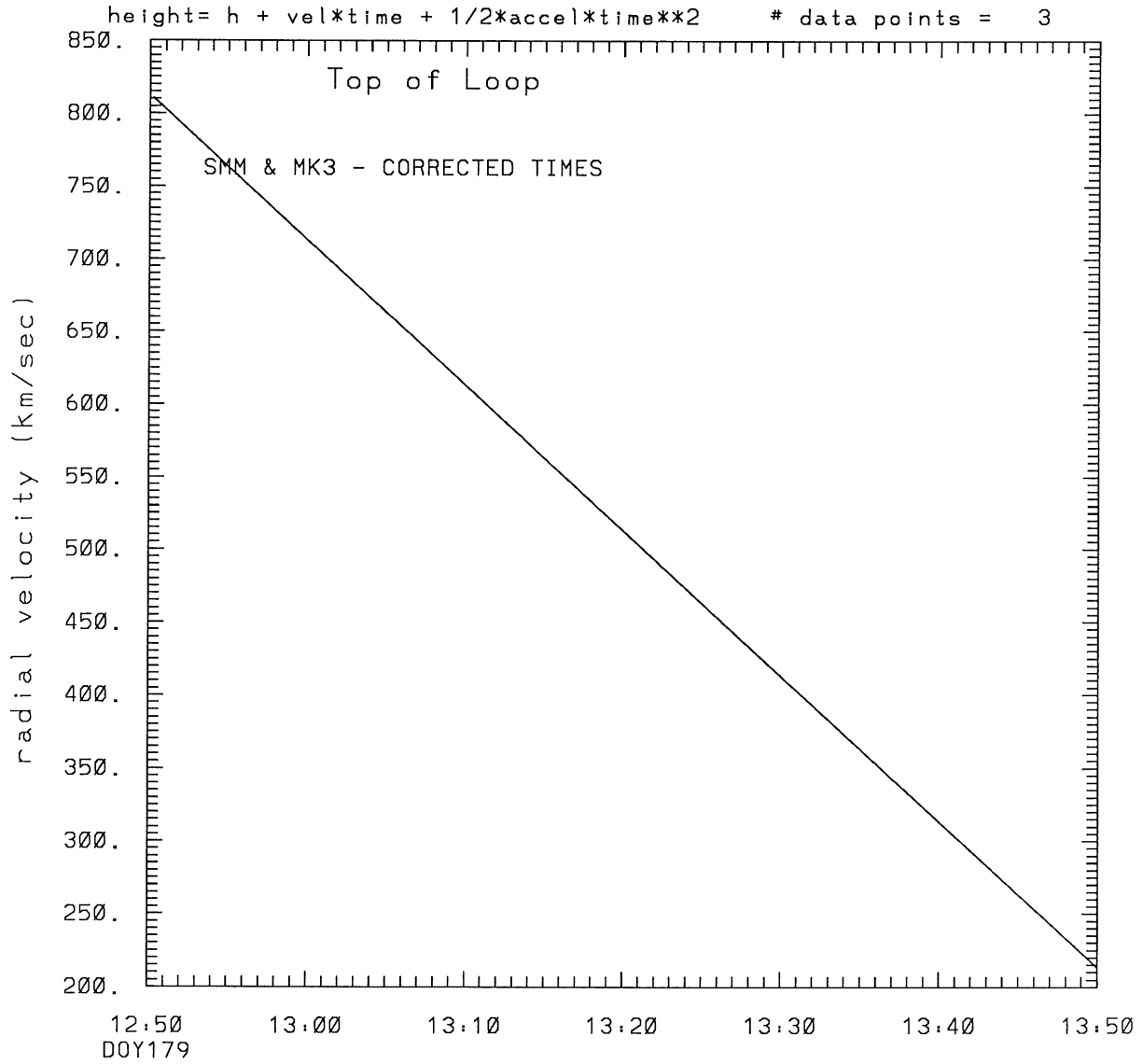
SMM C/P 1989 DOY179 78 +/- 0 degrees



tstart=DOY179 12:43 +/- 0.0 [min.]

radial acceleration = -0.1665 +/- 0.0000 [km/sec**2]

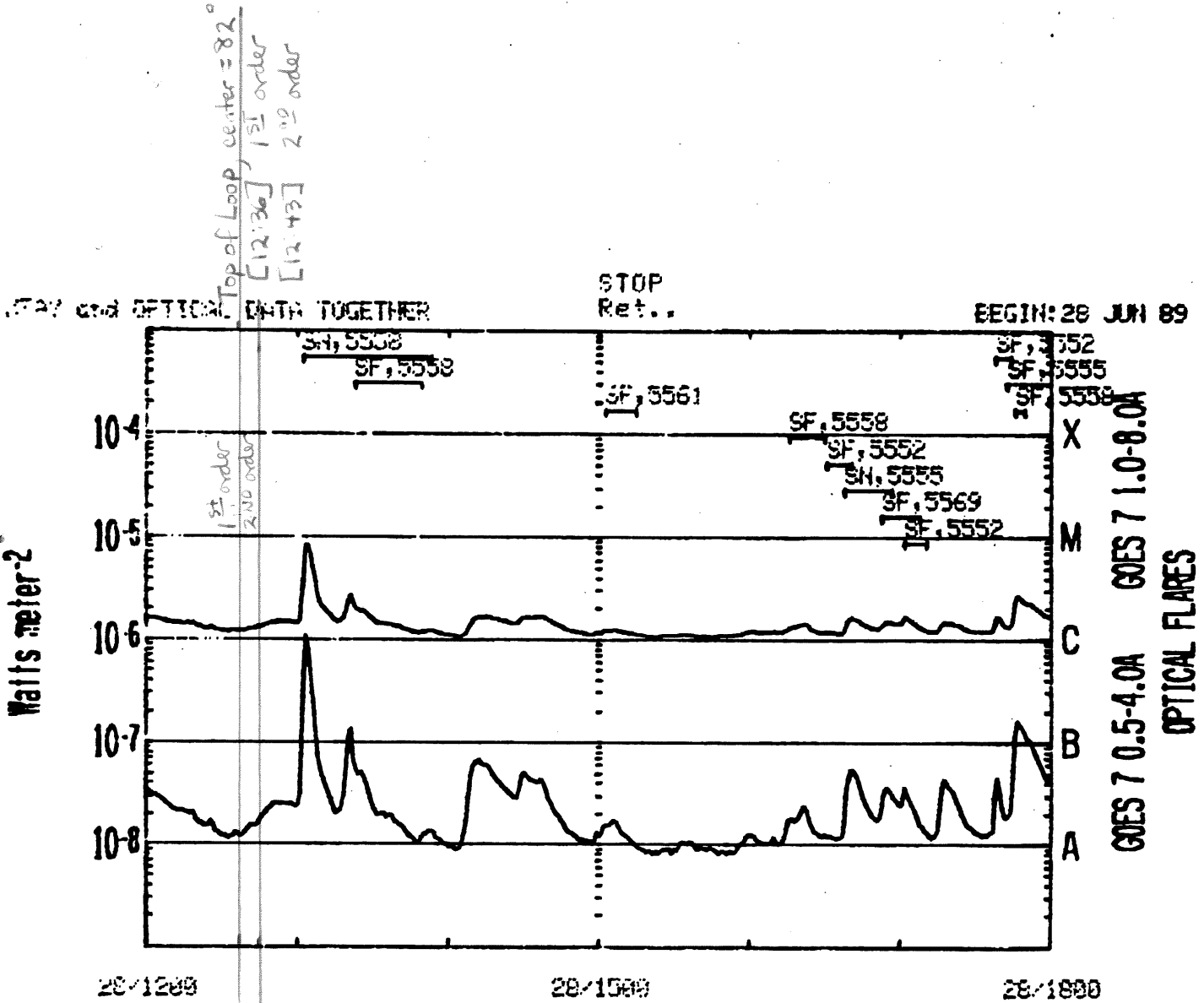
SMM C/P 1989 DOY179 78 +/- 0 degrees



tstart=DOY179 12:43 +/- 0.0 [min.]

radial acceleration=-.167E+00 km/sec**2

1989 201 179



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

— SAA's NIGHT

RUN: 1837UT
28 JUN 89

This is a 1 order run

INPUT:

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1989	179	12:56:52	2.00 +/- 0.10	78.0 +/- 0.5			SMM
1989	179	13: 5: 7	2.50 +/- 0.10	78.0 +/- 0.5			SMM
1989	179	13:29:55	3.65 +/- 0.15	78.0 +/- 1.0			SMM

Structure being measured:

Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.141E+02 +/- 0.525E+00$ [minutes]

In more convenient units:

Event began at DOY 179 12:36 +/- 0.525E+00 [minutes]

Origin defined at DOY179 12:50

RADIAL INFORMATION:

RADIAL VELOCITY = 576. +/- 30. km/sec

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = 0.170E+01 +/- 0.521E-01 [solar radii]
c(2) = 0.496E-01 +/- 0.260E-02 [radii/min]
c(2) = 0.576E+03 +/- 0.301E+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)= 0.72757E-01 [radii] see Bevington pg. 114

error in c(2)= 0.29150E-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) = 78. +/- 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 12:56 = 0. km/sec

The TOTAL velocity at 12:56 = 576. km/sec

The TANGENTIAL velocity at 13: 5 = 0. km/sec

The TOTAL velocity at 13: 5 = 576. km/sec

The TANGENTIAL velocity at 13:29 = 0. km/sec

The TOTAL velocity at 13:29 = 576. km/sec

The following info is for estimating goodness of the fit

Fit is ok [ier=1]

Standard Deviation in the height = 0.85

Standard Deviation in start time measurement = 0.140E+02

Error in time = 0.14288E+01 using best fit method

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

Value of reduced Chi Squared returned from nllst2 = 0.280E-02

Reduced Chi Squared = 0.939E-02

Chi Squared = 0.939E-02

The probability for exceeding chi square = 0.958E+00

The correlation coefficient = 0.998E+00

The probability that no LINEAR correlation exists between the variables = 0.3679E-01

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

This is a 2 order run

INPUT:

year	doy	time	error in radii	error in radius	error in angle	error in angle	datatype
1989	179	12:56:52	2.00 +/- 0.10	78.0 +/- 0.5			SMM
1989	179	13: 5: 7	2.50 +/- 0.10	78.0 +/- 0.5			SMM
1989	179	13:29:55	3.65 +/- 0.15	78.0 +/- 1.0			SMM

Structure being measured:

Top of Loop

OUTPUT:

START TIME:

Event began at $t = 0 + -0.736E+01 +/- 0.000E+00$ [minutes]

In more convenient units:

Event began at DOY 179 12:43 +/- 0.000E+00 [minutes]

Origin defined at DOY179 12:50

RADIAL INFORMATION:

RADIAL ACCELERATION = $-0.167E+00 +/- 0.531E-06$ km/sec**2

The computed RADIAL coefficients and errors FROM NLLST2 are:

c(1) = $0.154E+01 +/- 0.558E-06$ [solar radii]
c(2) = $0.701E-01 +/- 0.662E-07$ [radii/min]
c(2) = $0.813E+03 +/- 0.768E-03$ [km/sec]
c(3) = $-0.431E-03 +/- 0.137E-08$ [radii/min**2]
c(3) = $-0.167E+00 +/- 0.531E-06$ [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) = $78. +/- 0.$ [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]

$$a(3) = 0.000E+00 \pm 0.000E+00 \text{ [rad/sec**2]}$$

THE TANGENTIAL AND TOTAL VELOCITIES AT EACH DATA POINT ARE:

The TANGENTIAL velocity at 12:56 = 0. km/sec

The TOTAL velocity at 12:56 = 744. km/sec

The TANGENTIAL velocity at 13: 5 = 0. km/sec

The TOTAL velocity at 13: 5 = 662. km/sec

The TANGENTIAL velocity at 13:29 = 0. km/sec

The TOTAL velocity at 13:29 = 414. 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!