

-----  
 Descriptive Statistics

D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\ICF.DBF  
 -----

Variable Name is AREA

N	= 31	Missing or Deleted	= 0
Mean	= 5.98387	St. Dev (n-1)	= 11.6492
Median	= 1.75	St. Dev (n)	= 11.45977
Minimum	= 0.25	S.E.M.	= 2.09226
Maximum	= 63.75	Variance	= 135.7039
Sum	= 185.50	Coef. Var.	= 1.94677

-----  
 Percentiles:

0.0%	= 0.25	Minimum
0.5%	= 0.25	
2.5%	= 0.25	
10.0%	= 0.25	
25.0%	= 0.25	Quartile
50.0%	= 1.75	Median
75.0%	= 7.50	Quartile
90.0%	= 14.00	
97.5%	= 63.75	
99.5%	= 63.75	
100.0%	= 63.75	Maximum

Tukey Five Number Summary:

Minimum	= 0.25
Fourth	= 0.375
Median	= 1.75
Fourth	= 7.00
Maximum	= 63.75

Test for normality results:  
 D = .311      p <= 0.001

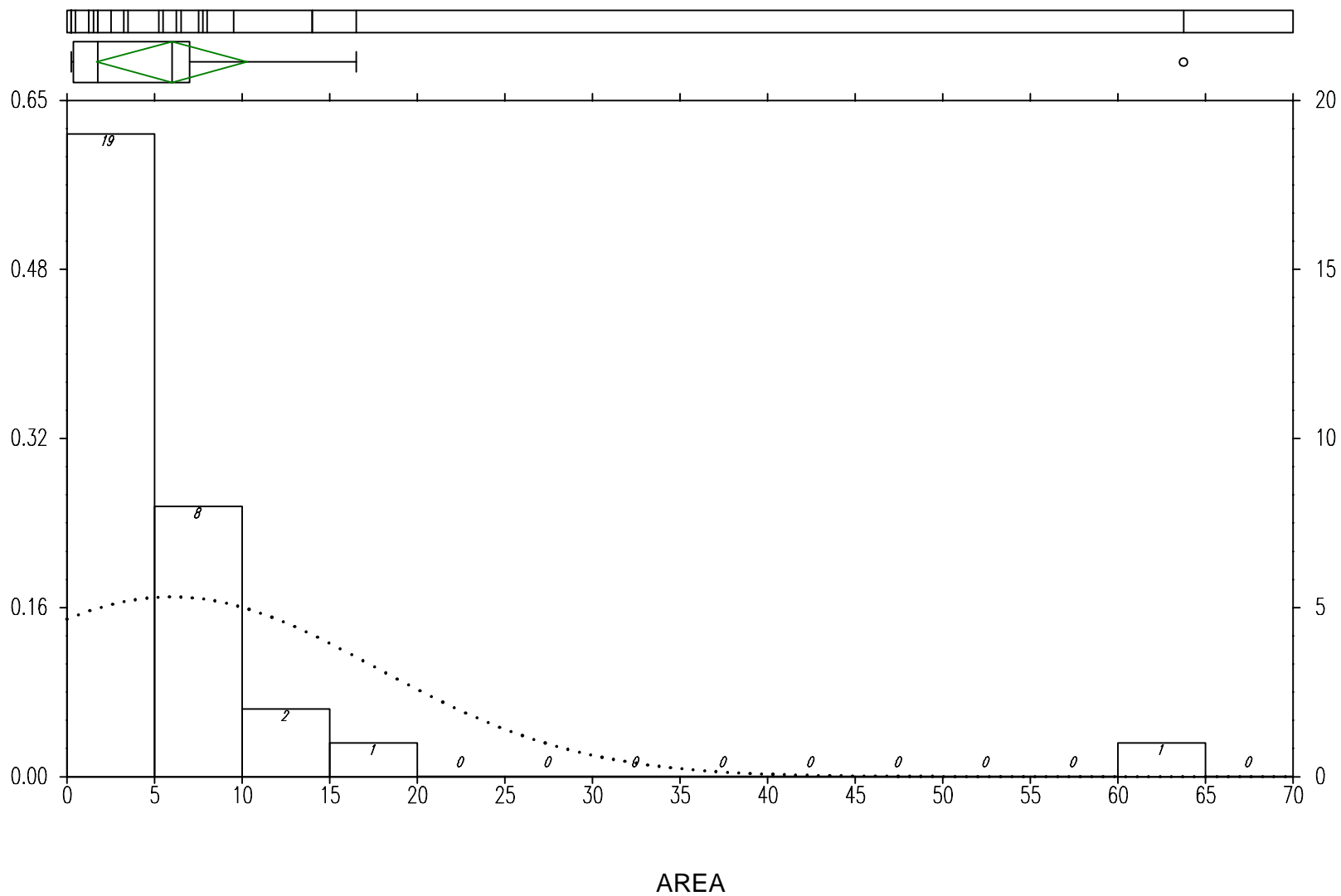
Five number summary was calculated using the technique from UNDERSTANDING ROBUST AND EXPLORATORY DATA ANALYSIS by Hoaglin, Mosteller And Tukey. See complete reference in WINKS manual.

Confidence Intervals about the mean:  
 -----

80 % C.I. based on a t(30) critical value of 1.32 is (3.22209, 8.74565)
90 % C.I. based on a t(30) critical value of 1.7 is (2.42703, 9.54071)
95 % C.I. based on a t(30) critical value of 2.05 is (1.69474, 10.273)
98 % C.I. based on a t(30) critical value of 2.46 is (0.83692, 11.13083)
99 % C.I. based on a t(30) critical value of 2.75 is (0.23016, 11.73758)

The normality test suggests that the data are not normally distributed. The test for normality is a modified Kolmogorov-Smirnov test based on papers by Lilliefors and Dallal & Wilkinson. References in latenews.txt.

# ICF - Area statistics



-----  
 Descriptive Statistics

D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\ICF.DBF  
 -----

Variable Name is HEIGHT

N	= 31	Missing or Deleted	= 0
Mean	= 448.78065	St. Dev (n-1)	= 428.82547
Median	= 322.00	St. Dev (n)	= 421.85223
Minimum	= 3.20	S.E.M.	= 77.01933
Maximum	= 1755.30	Variance	= 183,891
Sum	= 13912.20017	Coef. Var.	= 0.95553

-----  
 Percentiles:

0.0%	= 3.20	Minimum
0.5%	= 3.20	
2.5%	= 3.20	
10.0%	= 50.68	
25.0%	= 83.30	Quartile
50.0%	= 322.00	Median
75.0%	= 715.00	Quartile
90.0%	= 1001.36	
97.5%	= 1755.30	
99.5%	= 1755.30	
100.0%	= 1755.30	Maximum

Tukey Five Number Summary:

Minimum	= 3.20
Fourth	= 106.35
Median	= 322.00
Fourth	= 691.45
Maximum	= 1755.30

Test for normality results:

D = .188      p = 0.007

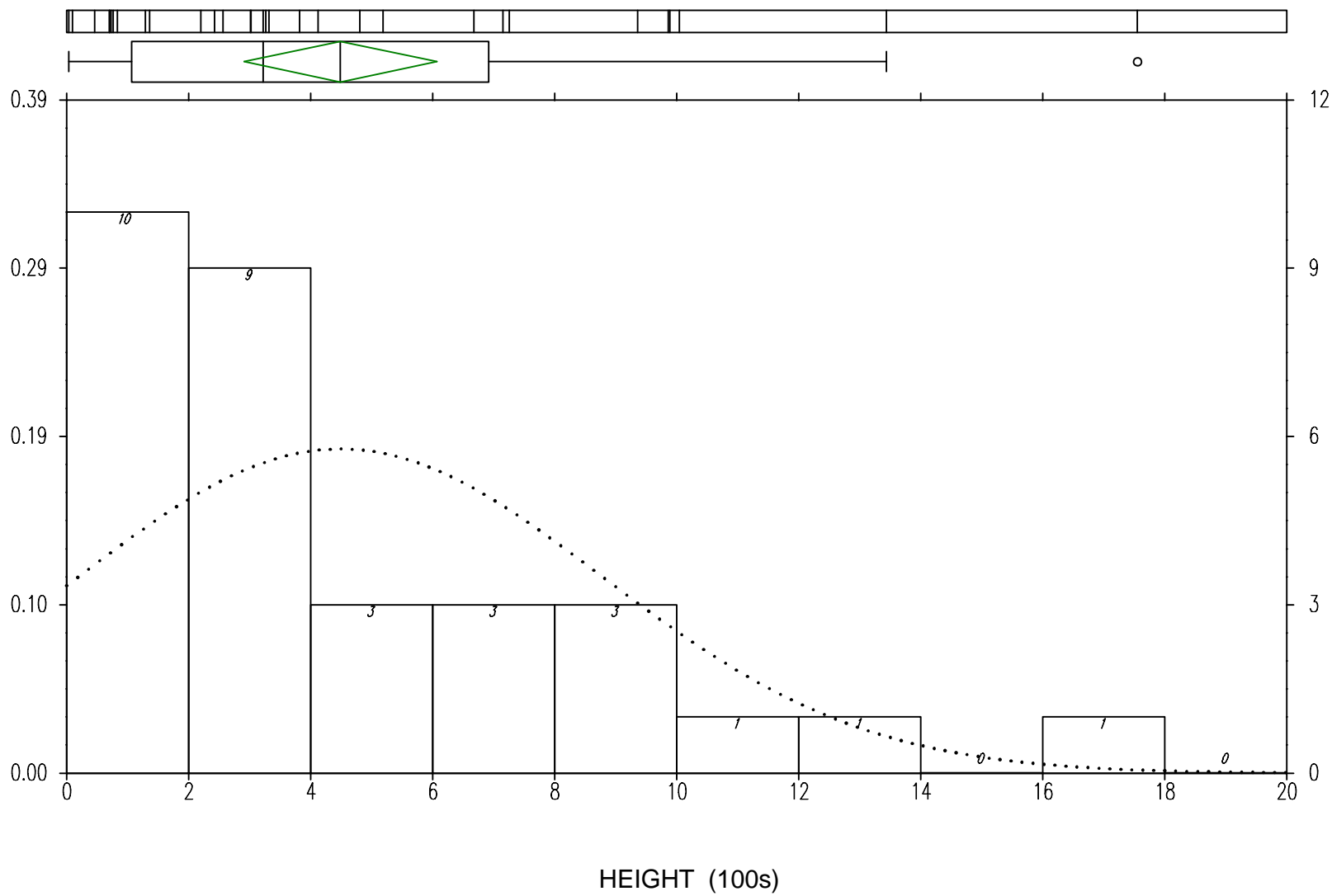
Five number summary was calculated using the technique from UNDERSTANDING ROBUST AND EXPLORATORY DATA ANALYSIS by Hoaglin, Mosteller And Tukey. See complete reference in WINKS manual.

Confidence Intervals about the mean:

-----  
 80 % C.I. based on a t(30) critical value of 1.32 is (347.11514, 550.44616)  
 90 % C.I. based on a t(30) critical value of 1.7 is (317.84779, 579.71351)  
 95 % C.I. based on a t(30) critical value of 2.05 is (290.89103, 606.67027)  
 98 % C.I. based on a t(30) critical value of 2.46 is (259.3131, 638.2482)  
 99 % C.I. based on a t(30) critical value of 2.75 is (236.9775, 660.5838)

The normality test suggests that the data are not normally distributed. The test for normality is a modified Kolmogorov-Smirnov test based on papers by Lilliefors and Dallal & Wilkinson. References in latenews.txt.

# ICF - height statistics



-----  
 Linear Regression and Correlation

D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\ICF.DBF  
 -----

Dependent variable is HEIGHT, 1 independent variables, 30 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	208.06506	69.802772	2.9807564	0.006
AREA	48.582738	11.439171	4.2470505	<.001

R-Square = 0.3918                      Adjusted R-Square = 0.3701

Analysis of Variance to Test Regression Relation

Source	Sum of Sqs	df	Mean Sq	F	p-value
Regression	1470362.50046	1	1470362.50046	18.037438	<.001
Error	2282483.3	28	81517.259		
Total	3752845.75203	29			

A low p-value suggests that the dependent variable HEIGHT may be linearly related to independent variable(s).

MEAN X =	4.058	S.D. X =	4.635	CORR XSS =	622.96
MEAN Y =	405.23	S.D. Y =	359.734	CORR YSS =	3752847.0
REGRESSION MS=	1470362.5	RESIDUAL MS=	81517.259		

Pearson's r (Correlation Coefficient)= 0.6259

The linear regression equation is:

$$\text{HEIGHT} = 208.0651 + 48.58274 * \text{AREA}$$

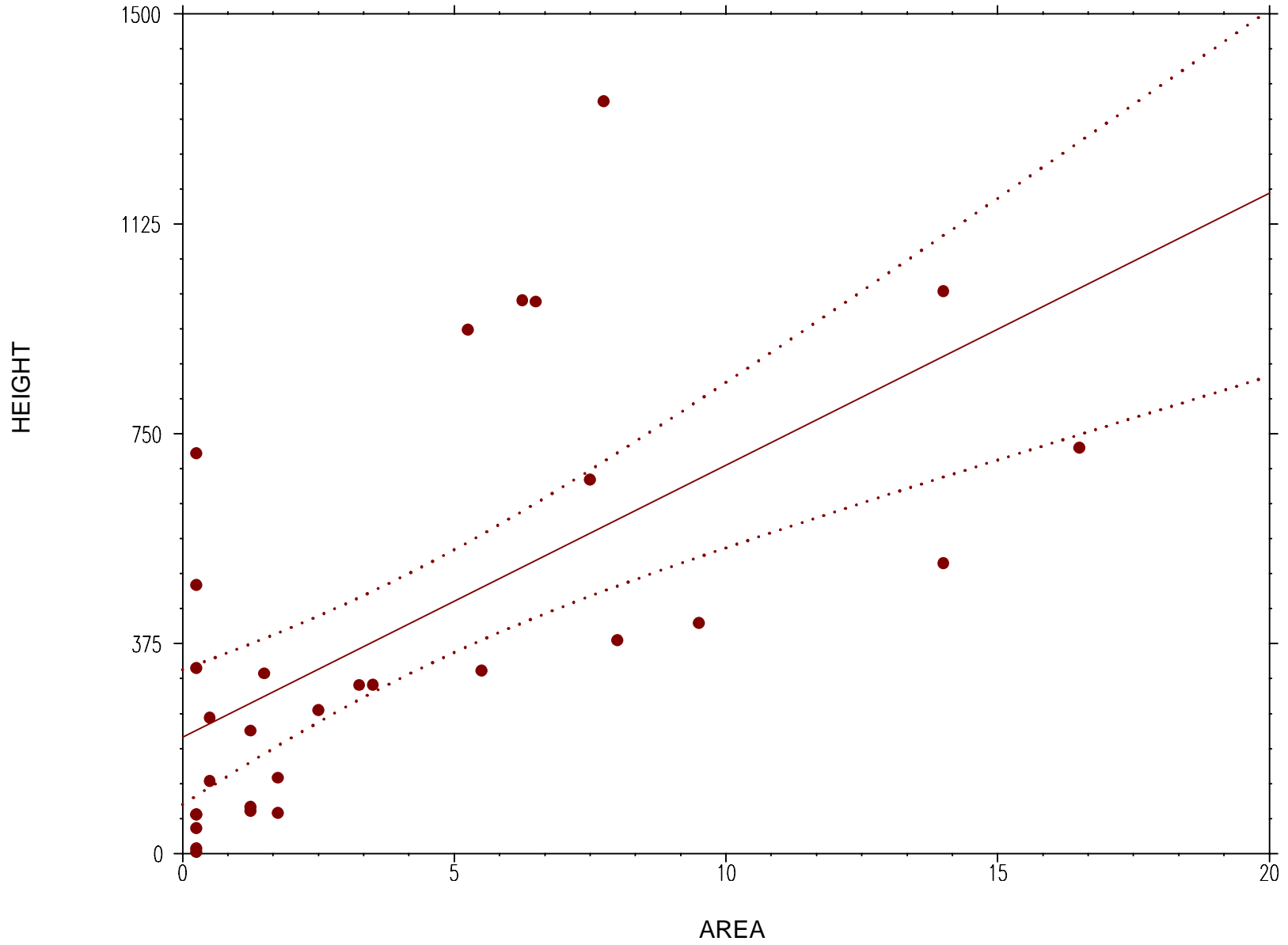
Test of hypothesis to determine significance of relationship:

H(null): Slope = 0 or H(null): r = 0 (two-tailed test)

t = 4.25 with 28 degrees of freedom p <= .001

Note: A low p-value implies that the slope does not = 0.

ICF – Area vs Height with one point deleted



---

Correlation Coefficients                    D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\ICF.DBF

---

Variables used : AREA and HEIGHT

Number of cases used: 31

Pearson's r (Correlations Coefficient) = 0.7223            R-Square = 0.5218

Test of hypothesis to determine significance of relationship:

H(null): Slope = 0    or    H(null): r = 0

(Pearson's) t = 5.625082 with 29 d.f.    p < 0.001  
(A low p-value implies that the slope does not = 0.)

Spearman's Rank Correlation Coefficient = 0.7208

(Spearman's) t = 5.600488 with 29 d.f.    p < 0.001

-----  
 Linear Regression and Correlation

D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\ICF.DBF  
 -----

Dependent variable is LOGHEIGHT, 1 independent variables, 31 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	5.0816751	.2061511	24.650244	<.001
LOGAREA	.600293	.1208041	4.9691426	<.001

R-Square = 0.4599                      Adjusted R-Square = 0.4413

Analysis of Variance to Test Regression Relation

Source	Sum of Sqs	df	Mean Sq	F	p-value
Regression	27.540388	1	27.540388	24.692378	<.001
Error	32.34485	29	1.1153396		
Total	59.885238	30			

A low p-value suggests that the dependent variable LOGHEIGHT may be linearly related to independent variable(s).

MEAN X =	.668	S.D. X =	1.596	CORR XSS =	76.426
MEAN Y =	5.483	S.D. Y =	1.413	CORR YSS =	59.885
REGRESSION MS=	27.54	RESIDUAL MS=	1.115		

Pearson's r (Correlation Coefficient)= 0.6781

The linear regression equation is:

$$\text{LOGHEIGHT} = 5.081675 + .600293 * \text{LOGAREA}$$

Test of hypothesis to determine significance of relationship:

H(null): Slope = 0 or H(null): r = 0 (two-tailed test)

t = 4.97 with 29 degrees of freedom p <= .001

Note: A low p-value implies that the slope does not = 0.



ICF - log correlation

