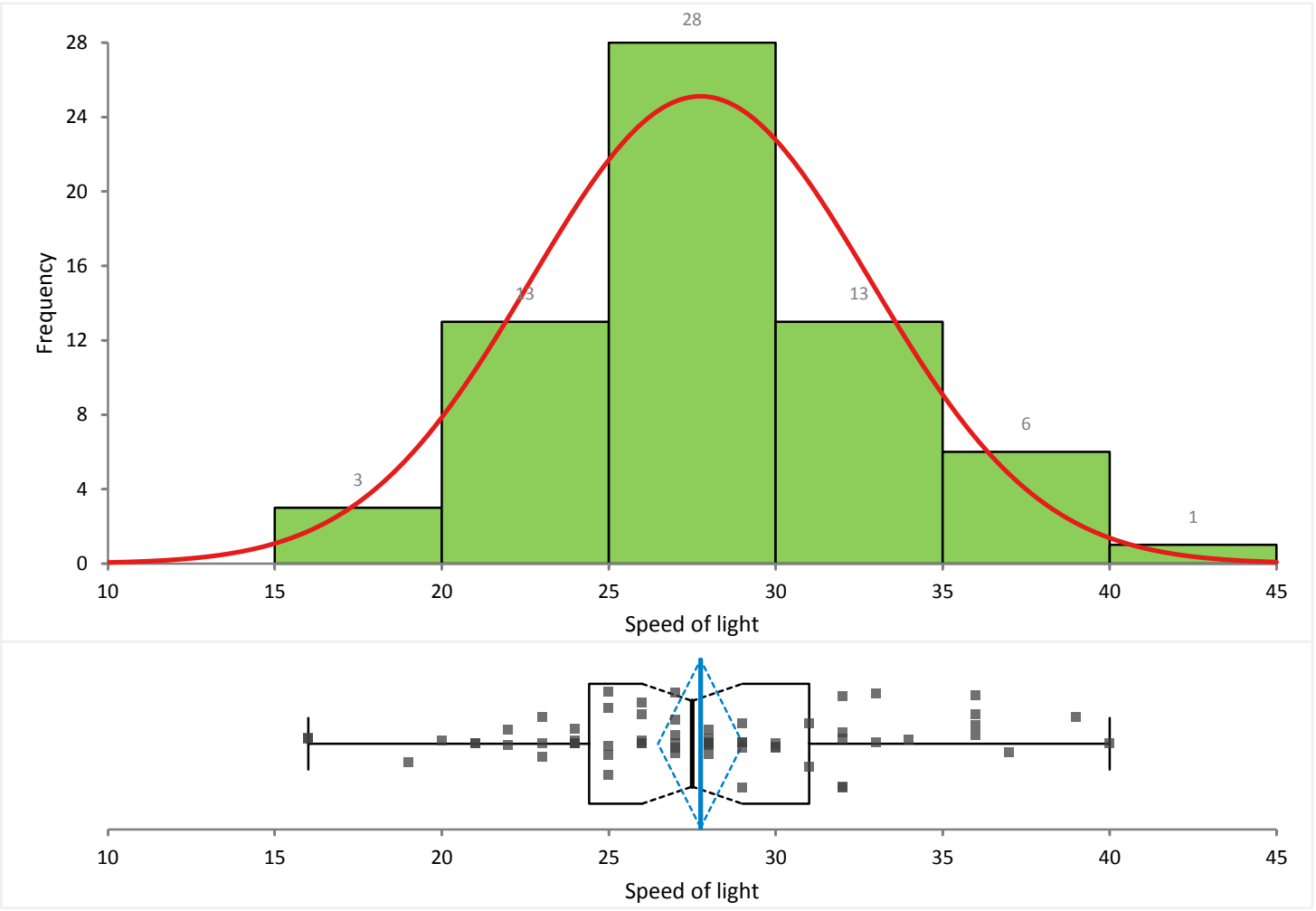
Distribution: Speed of light

Analyse-it v4.60

Data A1:A67

Last updated 2 February 2016 at 11:21 by Analyse-it Software, Ltd.

Descriptives



N	64

	Mean	Mean SE	SD	Variance	Skewness	Kurtosis
Speed of light	27.8	0.64	5.1	25.8	0.2	0.15

	Minimum	1st quartile	Median	3rd quartile	Maximum	IQR
Speed of light	16	24.4	27.5	31.0	40	6.6

Quantile	Speed of light
0.100	21.8
0.200	24.0
0.300	25.0
0.400	26.1
0.500	27.5
0.600	28.0
0.700	30.0
0.800	32.0
0.900	36.0

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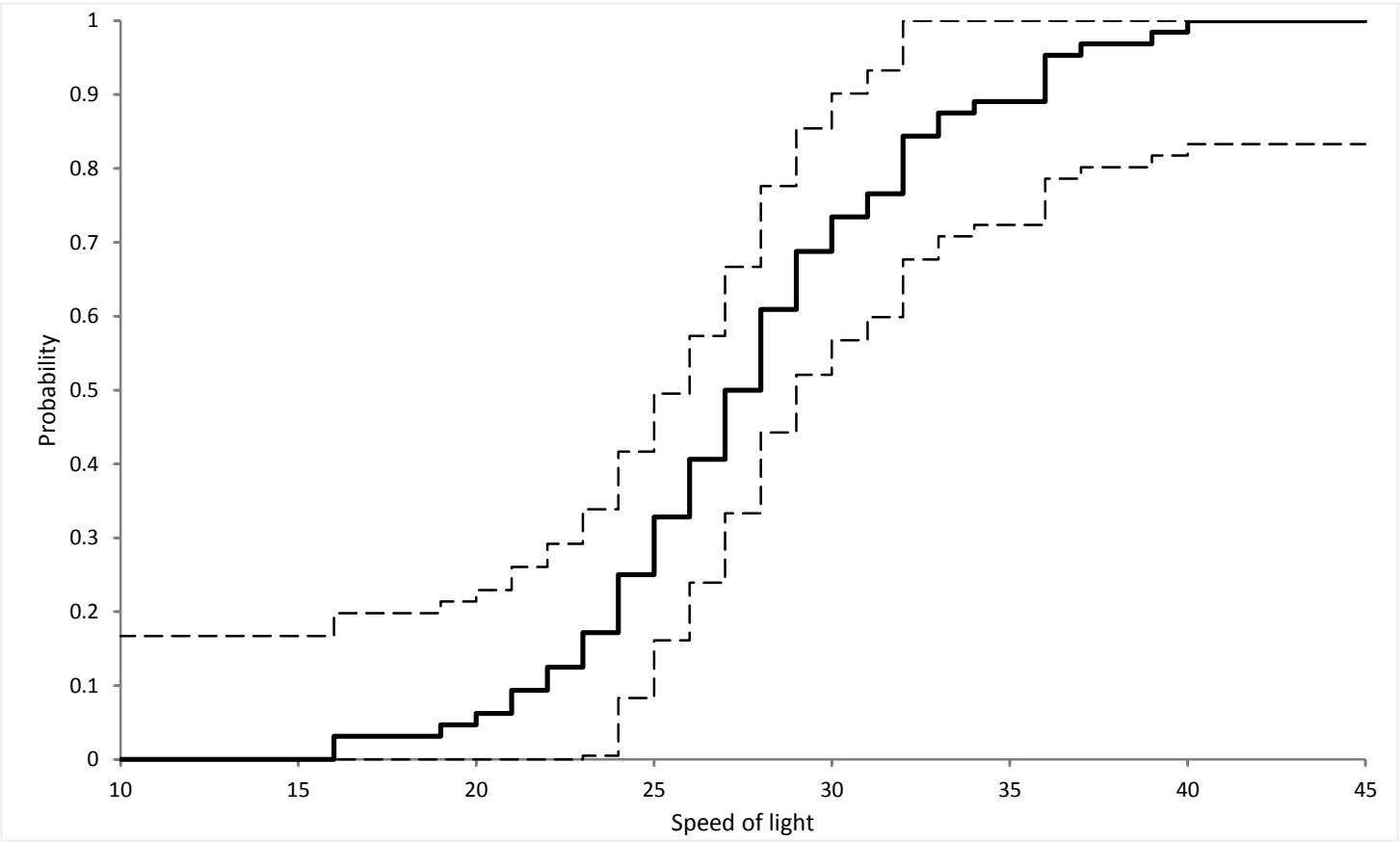
Frequency Distribution

Class	Frequency	Relative frequency	Density	Cumulative frequency	Cumulative relative frequency
≥15 to <20	3	0.047	0.0094	3	0.047
≥20 to <25	13	0.203	0.0406	16	0.250
≥25 to <30	28	0.438	0.0875	44	0.688
≥30 to <35	13	0.203	0.0406	57	0.891
≥35 to <40	6	0.094	0.0188	63	0.984
≥40 to <45	1	0.016	0.0031	64	1.000

Cumulative Distribution Function



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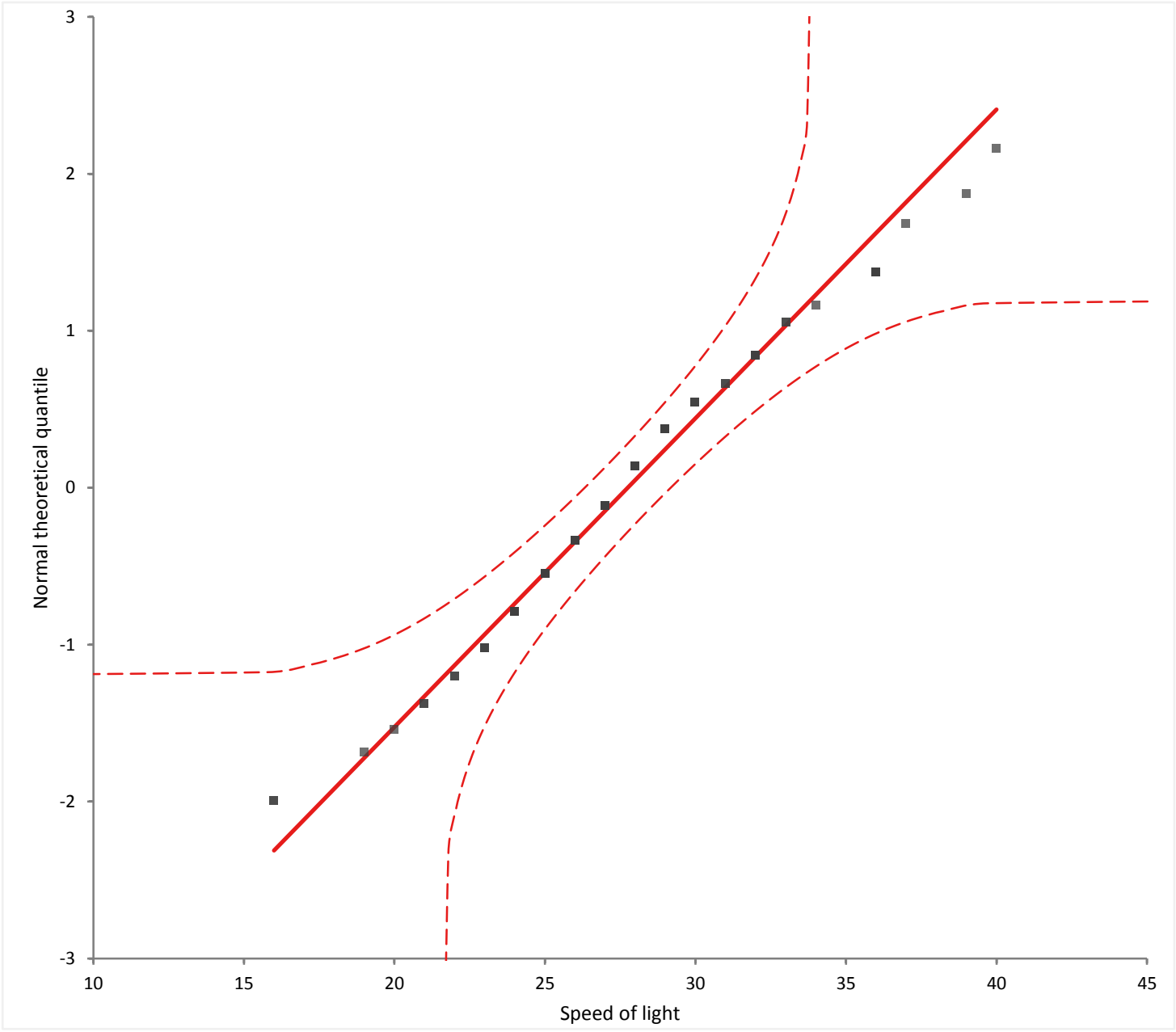
Normality



Shapiro-Wilk test

W statistic	0.98
p-value	0.6082[1]

H0: F(Y) = N(μ, σ)
The distribution of the population is normal with unspecified mean and standard deviation.
H1: F(Y) ≠ N(μ, σ)
The distribution of the population is not normal.

[1] Do not reject the null hypothesis at the 10% significance level.

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Location

Mean	27.8
95% CI	26.5 to 29.0
SE	0.64

Student's t test

Hypothesized value	29.97
t statistic	-3.49
DF	63
p-value	0.0009[1]

H0: μ = 29.97
The mean of the population is equal to 29.97.
H1: μ ≠ 29.97
The mean of the population is not equal to 29.97.
[1] Reject the null hypothesis in favour of the alternative hypothesis at the 10% significance level.

Distribution: Eye

Hair -Eye Color
http://www.datavis.ca/papers/asa92.html

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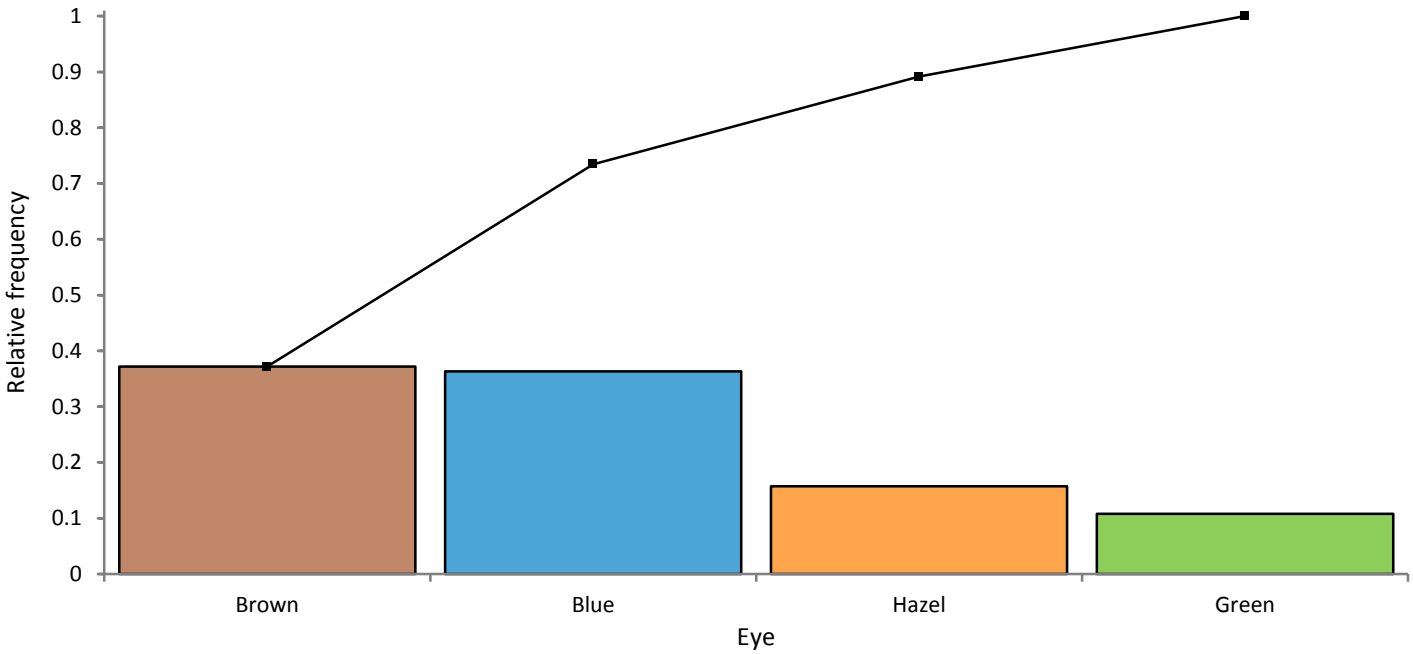
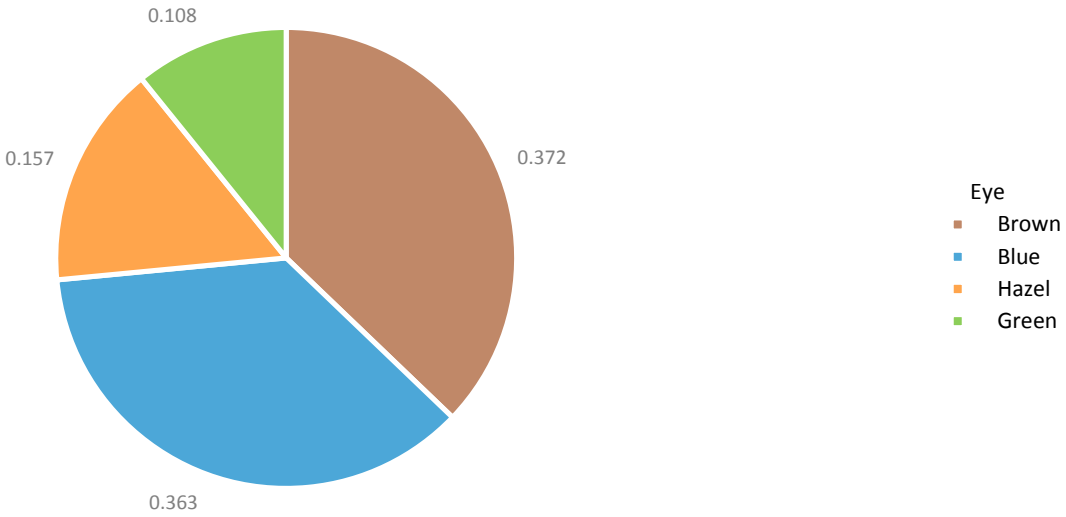
Frequencies





N	592

Eye	Frequency	Relative frequency
Brown	220	0.372
Blue	215	0.363
Hazel	93	0.157
Green	64	0.108

Distribution: Eye

Hair -Eye Color
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Proportions / Odds

Pearson's chi-squared test

Category	Proportion	Hypothesized proportion
Blue	0.363	0.286
Brown	0.372	0.429
Green	0.108	0.143
Hazel	0.157	0.143

X^2 statistic	22.76
DF	3
Asymptotic p-value	<0.0001 [1]

H0: π_i = Hypothesized π_i, for all i
The proportion of occurrences of events in the population the sample represents are equal to the hypothesized proportions.
H1: $\pi_i \neq$ Hypothesized π_i, for at least one i
The proportion of occurrences of the events in the population the sample represent are not equal to the hypothesized proportions.

[1] Reject the null hypothesis in favour of the alternative hypothesis at the 5% significance level.